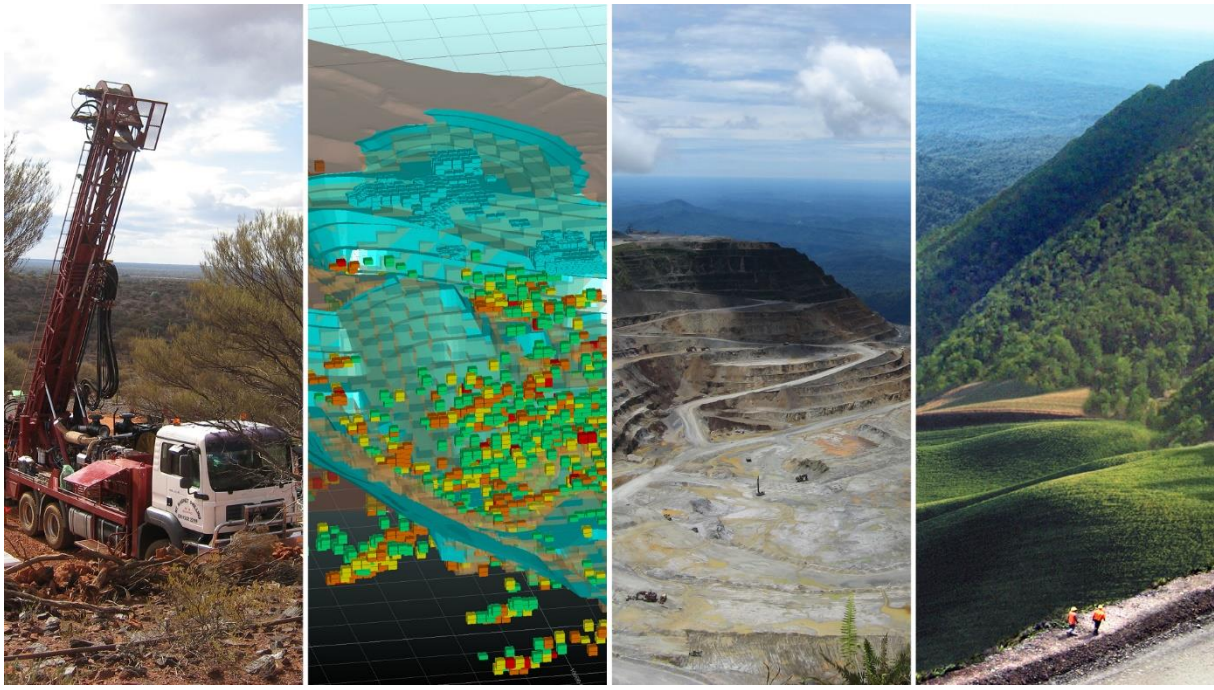
Final

Round Hill Geochemical Assessment

Round Hill, Western Australia
Hancock Prospecting Pty Ltd



SRK Consulting (Australasia) Pty Ltd ▪ HCK017 ▪ May 2025

srk consulting

Final

Round Hill Geochemical Assessment

Round Hill, Western Australia

Prepared for:
Hancock Prospecting Pty Ltd
28–42 Ventnor Avenue
Perth, WA, 6005
Australia

+61 8 9429 8222
www.hancockprospecting.com.au

Prepared by:
SRK Consulting (Australasia) Pty Ltd
Level 3, 18–32 Parliament Place
West Perth, WA, 6005
Australia

+61 8 9288 2000
www.srk.com

ABN. 56 074 271 720

Lead Author: Mia Saini **Initials:** MS
Reviewer: Claire Linklater **Initials:** CL

File Name:
HCK017_Round Hill - Geochemical Assessment_Rev1.docx

Suggested Citation:
SRK Consulting (Australasia) Pty Ltd. 2025. Round Hill Geochemical Assessment. Final. Prepared for Hancock Prospecting Pty Ltd: Perth, WA. Project number: HCK017. Issued May 2025.

Disclaimer: The opinions expressed in this Report have been based on the information supplied to SRK Consulting (Australasia) Pty Ltd (SRK) by Hancock Prospecting Pty Ltd (HPPL). The opinions in this Report are provided in response to a specific request from HPPL to do so. SRK has exercised all due care in reviewing the supplied information. While SRK has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. SRK does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. Opinions presented in this Report apply to the site conditions and features as they existed at the time of SRK's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this Report, about which SRK had no prior knowledge nor had the opportunity to evaluate.

Contents

Useful Definitions vi

Executive Summary viii

1 Introduction 1

2 Background 2
2.1 Project geology 2
2.2 Previous geochemical assessments 2

3 Work program 4
3.1 Sample selection 4
3.2 Laboratory program 6

4 Geochemical assessment 7
4.1 Mineralogy 7
4.2 Multi-element chemical assays 9
4.3 Paste pH and EC 11
4.4 Acid base accounting 12
4.4.1 Acid generating potential 12
4.4.2 Acid neutralising capacity 16
4.4.3 Net acid producing potential 17
4.5 Net acid generation 17
4.6 Sample classification 18
4.7 Element leachability 21
4.8 Other geochemical risks 24

5 Conclusions and recommendations 25
5.1 Conclusions 25
5.2 Recommendations 25

References 28

Tables

Table 2.1: Estimated mass of waste rock for each stratigraphic unit at Round Hill 2
Table 3.1: Sample details 4
Table 3.2: Sample counts per stratigraphy for each laboratory test 6
Table 4.1: Mineralogical assessment results 8
Table 4.2: Summary statistics of bulk chemistry for selected parameters per stratigraphy 10
Table 4.3: Summary statistics of ABA and NAG results per stratigraphy 15
Table 4.4: Waste rock classification schemes 19
Table 4.5: Sample counts in each AMD class, per stratigraphy 19
Table 4.6: Summary of deionised water leach data per stratigraphy 23

Figures

Figure 2.1: Round Hill stratigraphic cross section 2
Figure 2.2: Theoretical model for acid generation potential of material at Round Hill 3
Figure 3.1: Selected drill holes for geochemical sampling at Round Hill 5
Figure 4.1: Total sulfur as a function of paste pH, differentiated by stratigraphy 11
Figure 4.2: Total sulfur as a function of paste EC, differentiated by stratigraphy 12
Figure 4.3: Total sulfur by XRF as a function of total sulfur by combustion, differentiated by stratigraphy 13
Figure 4.4: Box-and-whisker plot showing sulfur content as a function of stratigraphy 14
Figure 4.5: Surrogate ANC from calcium content plotted as a function of total ANC 17
Figure 4.6: Classification according to AMIRA, differentiated by stratigraphy 20
Figure 4.7: Classification according to MEND, differentiated by stratigraphy (top) and AMIRA classification (bottom) 21

Appendices

Appendix A Static geochemical results
Appendix B Laboratory reports

Useful Definitions

This list contains definitions of symbols, units, abbreviations, and terminology that may be unfamiliar to the reader.

ABA	acid base accounting
ALU	stratigraphy code for Alluvium
AMD	acid and/or metalliferous drainage
ANC	acid neutralising capacity
Bq/g	becquerels per gram
CarbNP	carbonate-neutralising potential
DG	stratigraphy code for Dales Gorge Member
DI	deionised
EC	electrical conductivity
GAI	geochemical Abundance Index
HCl	hydrochloric acid
HPPL	Hancock Prospecting Pty Ltd
JOF	stratigraphy code for Joffre Formation
kg H_2SO_4/t	kilograms of sulfuric acid per tonne
LC	low capacity
LOR	limit of reporting
LOI	loss on ignition
m	metres
MCS	stratigraphy code for Mt McRae Shale Formation
MEND	Mine Environment Neutral Drainage
mg/L	milligrams per litre
MPA	maximum potential acidity
NAF	non-acid forming
NAG	net acid generation
NAPP	net acid production potential
NPR	neutralisation potential ratio
OoM	Order of Magnitude
PAF	potentially acid-forming
ppm	parts per million
SCR	stratigraphy code for Scree
S_{CR}	chromium reducible sulfur
S_{HCl}	hydrochloric acid extractable sulfur
SD	saline drainage
SRK	SRK Consulting (Australasia) Pty Ltd
TDS	total dissolved solids

TIC	total inorganic carbon
UC	uncertain
UC(NAF)	uncertain (non-acid forming)
UC(PAF)	uncertain (potentially acid forming)
WS	stratigraphy code for Whaleback Shale Member
wt%	per cent by weight
XRD	x-ray diffraction
XRF	x-ray fluorescence
µS/cm	microsiemens per centimetre
°C	degrees Celsius

Executive Summary

Hancock Prospecting Pty Ltd (HPPL) is conducting an Order of Magnitude (OoM) Study to evaluate the potential of the Round Hill Project. This report describes the outcomes of a static geochemical assessment to assess the potential of acid, metalliferous or saline drainage (AMD or SD) from rock that could be disturbed during mining.

A geochemical assessment was based on geochemical characterisation of 100 samples from recent drilling at Round Hill. The samples represented six stratigraphic units at the project site. The key findings of the assessment are as follows:

- The potential for AMD was low; the material contained low sulfur (ranging from <0.01% to 0.14% with 84 of 100 samples containing less than 0.05%).
- Acid neutralising capacity (ANC) was also low across all stratigraphic units, ranging from <0.5 kg H_2SO_4/t to 11 kg H_2SO_4/t,
- Most samples (99 of 100) would be considered low risk based on low sulfur content, largely corroborated by the AMIRA classification scheme which classed 91 of 100 samples as non-acid forming (NAF), 9 as uncertain (UC) and only 1 as potentially acid forming low capacity (PAF-LC). A greater number of samples were classed as either UC or PAF (36 and 9, respectively) using the Mine Environment Neutral Drainage (MEND) scheme, but is should be acknowledged that this is largely due to low sulfur and ANC in the samples.
- Based on deionised (DI) water leach testing (1:5 solid:liquid ratio), contaminant leaching potential was low:
  - Leachate pH ranged from pH 5.6 to 8.1 and the solute content was typically low.
  - Dissolved concentrations for most of the analysed minor/trace metal(loid)s were low and predominately near or below their respective limit of detections. Of the trace/minor metal(loid)s that were readily detectable (Al, As, B, Ba, Co, Cr, Cu, Fe, Li, Mn, Mo, Ni, Pb, Sb, Se, Si, Sr, V, W and Zn), higher concentrations were coincident with samples from the Joffre Member stratigraphy.

  Supplemental testing is recommended to extend the leaching dataset to a wider range of conditions (acidic pH, higher salinities). There would also be value in generating data for a range of solid:liquid contact ratios. Such supplemental leach data would help support evaluation of seepage quality that could be expected under field conditions.

Geochemical characterisation should continue as the project evolves and mine planning matures to ensure that sufficient samples are tested to continue providing spatial and lithological representation of the materials that could be disturbed by mining.

1 Introduction

HPPL is conducting an OoM Study to evaluate the potential of the Round Hill Project, west of Newman in the Pilbara region.

HPPL has engaged SRK Consulting (Australasia) Pty Ltd (SRK) to:

- assess the potential of the rock to be mined at the site to generate AMD or SD
- recommend any supplemental testing, including kinetic testing, that might be warranted to better understand AMD or evaluate other environmental risks such as fibrous minerals and/or erosion potential.

This report documents the outcomes of the SRK assessment.

2 Background

2.1 Project geology

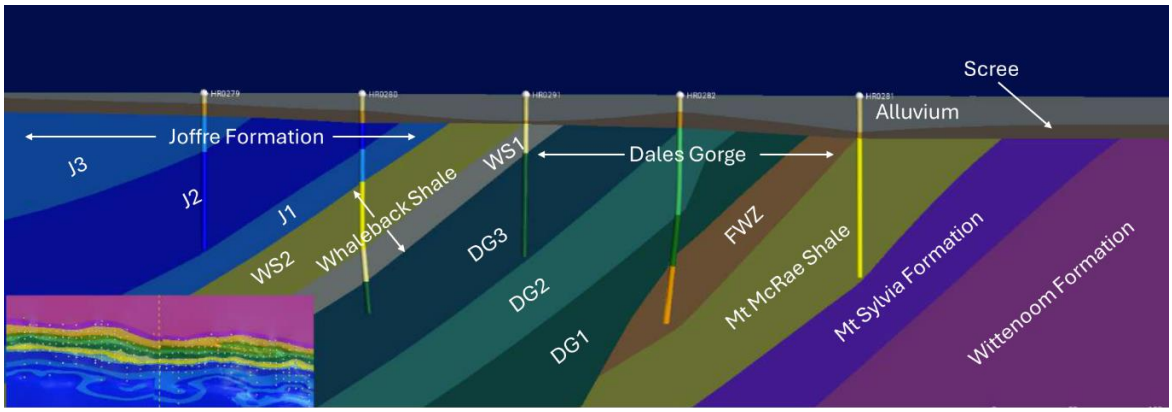
The Round Hill deposit is hosted within the stratigraphic units summarised in Table 2.1, which also presents preliminary estimates of the mass of waste rock that could be disturbed by mining.
A geological cross section is illustrated in Figure 2.1. The deposit is located on the south limb of the Parmelia anticline in the Brockman Iron Formation, that conformably overlies the barren Mt McRae Shale Formation (HPPL, 2024a).

Table 2.1: Estimated mass of waste rock for each stratigraphic unit at Round Hill

Stratigraphy	Stratigraphy code	Mass (Mt)	Proportion
Alluvium	ALU	11	57%
Scree	SCR		
Joffre Formation	JOF	1.4	7%
Whaleback Shale Member	WS	5.9	30%
Dales Gorge Member	DG	1.1	6%
Mt McRae Shale Formation	MCS	0.04	0.2%

Source: HPPL (2024a); Round Hill – Phase 0 Waste Rock Assay Assessment_Rev0.

Figure 2.1: Round Hill stratigraphic cross section



Source: HPPL (2023); Round Hill Mine – Conceptual Study Report.

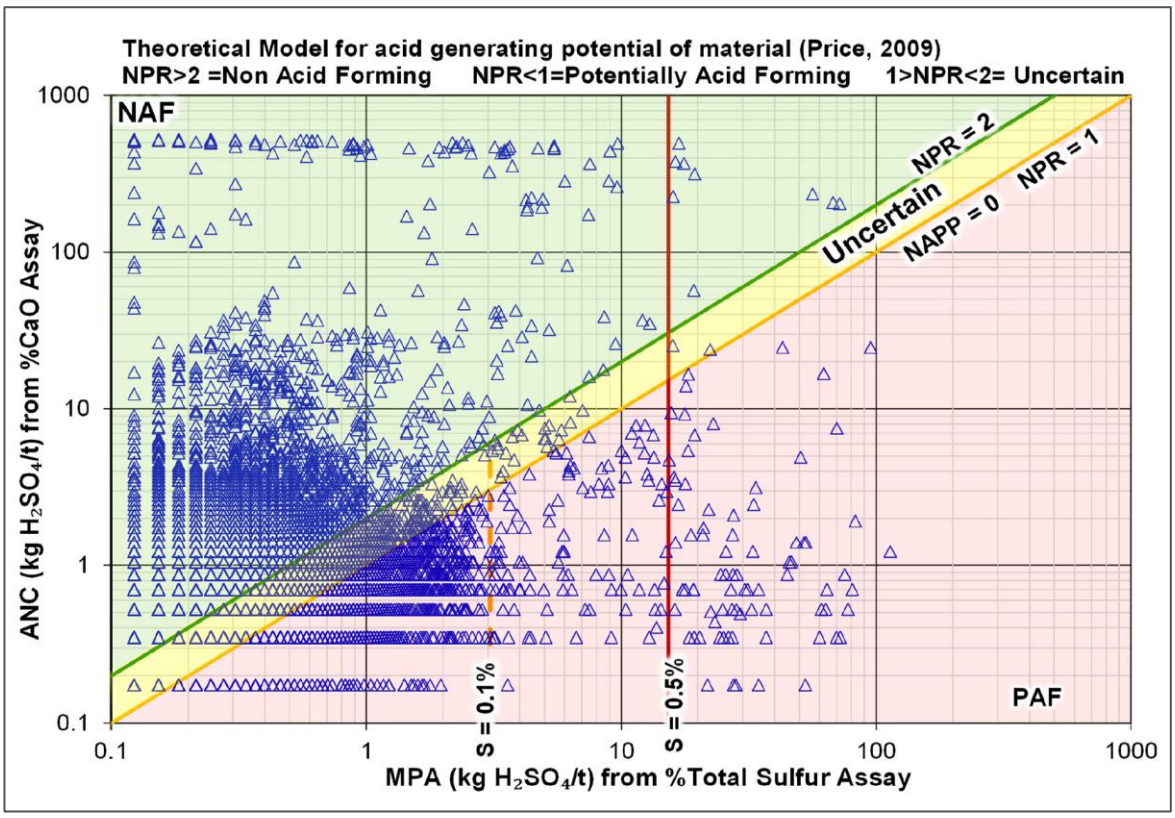
2.2 Previous geochemical assessments

A preliminary geochemical assessment was undertaken by HPPL using the drill hole assay database to determine potential geochemical hazards. The key findings of the preliminary assessment are as follows:

- The sulfur content was found to be below 0.1% in 97% of waste rock assays and 100% of ore assays, suggesting a low risk of acid drainage.

- To evaluate the ANC from the assay data, CaO% and % loss on ignition (LOI) at the carbonate combustion temperature of 1,000°C were used as proxies for carbonate minerals. For high CaO% samples (>10%), usually within the Wittenoom Formation, correlations between CaO% and LOI% were used to infer that dolomite is the dominant carbonate mineral present. Significant CaO% values were also observed in surficial, weathered units (CzD3) which are likely to be gypsum and, therefore, offer minimal neutralising capacity.
- By using CaO% as a proxy for ANC and sulfur as a proxy for maximum potential acidity (MPA), the neutralisation potential ratio (NPR) was calculated to develop a theoretical model for acid generation potential (Figure 2.2). The NPR results classified the majority of the material as NAF (65% of assays), with 33% of assays classified as UC and 2% as PAF.
- Elements identified as enriched relative to the average crustal abundance included arsenic (As), iron (Fe), sulfur (S), selenium (Se), and tin (Sn).

Figure 2.2: Theoretical model for acid generation potential of material at Round Hill



Source: HPPL (2024a); Round Hill – Phase 0 Waste Rock Assay Assessment_Rev0

3 Work program

3.1 Sample selection

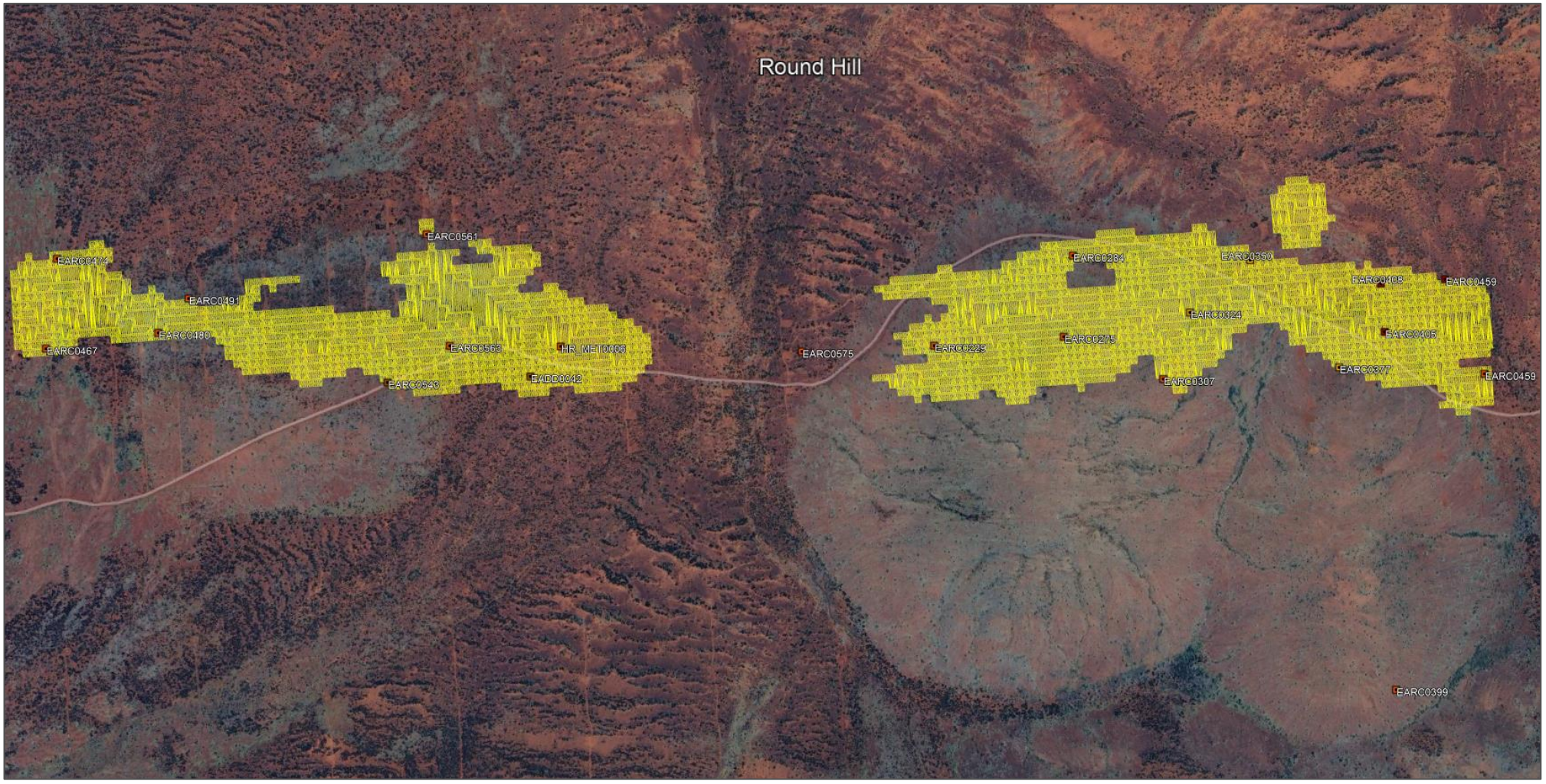
The sample selection and drilling program was conducted by the HPPL team, and 100 rock samples were sourced from 12 stratigraphic units at the project site. A summary of the number of samples collected per stratigraphy is shown in Table 3.1.

The spatial distribution of the drill holes sampled is illustrated in Figure 3.1, and demonstrates that samples will provide representation across the proposed pit shell footprints.

Table 3.1: Sample details

Member	Stratigraphy	Stratigraphy code	Number of samples
Tertiary detritals (CzD3)	Alluvium	ALU	11
	Scree	SCR	7
Joffre Member (JOF)	Joffre Member Unit 1	J1	4
	Joffre Member Unit 2	J2	8
	Joffre Member Unit 3	J3	1
Whaleback Shale Member (WS)	Whaleback Shale Member Unit 1	WS1	9
	Whaleback Shale Member Unit 2	WS2	12
Dales Gorge Member (DG)	Dales Gorge Member Unit 1	DG1	6
	Dales Gorge Member Unit 2	DG2	10
	Dales Gorge Member Unit 3	DG3	19
Footwall Zone (FWZ)	Footwall Zone	FWZ	7
Mount McRae Shale Formation (MCS)	Mount McRae Shale Formation	MCS	6
	All samples		**100**

Figure 3.1: Selected drill holes for geochemical sampling at Round Hill



3.2 Laboratory program

The static testwork was carried out by ChemCentre in Perth, with the mineralogical assessment undertaken by Microanalysis. The static test methods are generally consistent with those outlined in AMIRA (2002) and MEND (Price, 2009). The suite of laboratory analyses conducted, and number of samples tested per stratigraphical unit, are presented in Table 3.2.

Table 3.2: Sample counts per stratigraphy for each laboratory test

Laboratory test	CzD3	JOF	WS	DG	FWZ	MCS
Paste pH and EC (1:2 – solid:liquid ratio)	18	13	21	35	7	6
Total S	18	13	21	35	7	6
S_{CR}	9	8	13	14	3	3
S_{HCl}	18	13	21	35	7	6
ANC	18	13	21	35	7	6
Single addition NAG tests (NAG pH, NAG acidity to pH 4.5 and pH 7.0)	18	13	21	35	7	6
Multi-element chemical assay (4-acid digest)[1]	18	13	21	35	7	6
Mineralogical assessment	3	3	6	7	1	2
DI water leach (1:5 – solid:liquid ratio)[2]	18	13	21	35	7	6

Notes: EC – electrical conductivity; NAG – net acid generation; S_{CR} – chromium reducible sulfur; S_{HCl} – hydrochloric acid extractable sulfur.

[1] The multi-element analytical suite included the following: Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cl, Cr, Cr (III), Cr (VI), Cu, F, Fe, Hg, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, SO_4_S, Sb, Se, Si, Sn, Sr, Ta, Th, Tl, U, V, W, Zn.

[2] Analysis of the leachate solutions included the following parameters: pH, EC, total dissolved solids – TDS (calculated), alkalinity (including carbonate and bicarbonate alkalinity), Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Cl, Co, Cr, Cr (III), Cr (VI), Cu, F, Fe, Hg, K, La, Li, Mg, Mn, Mo, Ni, Total N, Total P, Pb, SO_4, Sb, Se, Si, Sn, Sr, Ta, Tl, U, W, Zn.

4 Geochemical assessment

Test results are collated and presented in Appendix A (excluding the mineralogical assessment data, discussed below). All laboratory reports are included in Appendix B.

4.1 Mineralogy

A total of 22 samples were selected for mineralogical assessment, semi-quantitative x-ray diffraction (XRD). The results are presented in Table 4.1.

The major mineral phases identified in the samples are quartz (SiO_2), phyllosilicate clay minerals (dominated by kaolin) and iron oxides (goethite, hematite, and minor magnetite) with minor quantities of titanium oxides (anatase, rutile).

Sulfide, sulfate and carbonate minerals were not detected in any of the analysed samples. This does not preclude the presence of such minerals in trace amounts not detectable by XRD, given the relatively high detection limit for this method (<1 wt%).

Table 4.1: Mineralogical assessment results

Sample ID	Mineral	Quartz	Kaolin	Mica	Smectite	Goethite	Hematite	Magnetite	Anatase	Rutile
	Formula	SiO_2	$Al_2Si_2O_5(OH)_4$	$(K,Ca,Na,Li)(Al,Mg,Fe)_2(Si,Al)_4O_{10}(OH)_2$	–	$FeO(OH)$	Fe_2O_3	Fe_3O_4	TiO_2	TiO_2
	Mineral group	Silicates and aluminosilicates				Oxides and oxyhydroxides				
	Strat	Wt%								
EARC0408_02-04	CzD3	64	6	7		6	13	1	2	1
EARC0474_04-06	CzD3	68	4	2		4	19	3	1	
EADD0042_1-1.25	CzD3	70	4	2		5	17	1	<1	<1
EARC0307_46-48	JOF	70	2			7	19	3		
EARC0399_20-22	JOF	75	2			7	16	<1		
EARC0459_24-26	JOF	14	11			26	50			
EARC0275_04-06	WS	7	17	9		49	18			
EARC0405_12-14	WS	3	8			70	16		2	2
EARC0467_36-38	WS	83	2	1		13	1			
EARC0543_68-70	WS	78	4	17			1	<1		
EADD0041_0-0.4	WS	14	20			16	48			1
EADD0042_33.1-33.69	WS	74	3	8		12	1	1		1
EARC0229_28-30	DG		5			19	76			
EARC0229_50-52	DG	71	1			8	19			
EARC0324_46-48	DG	39	2			19	40			
EARC0350_12-14	DG	21	3			59	12	4		
EARC0480_04-06	DG	4	3			54	38			
EARC0575_20-22	DG	55	1			9	36			
HR_MET0006_48-50	DG	74				2	23	2		
EARC0408_46-48	FWZ	79				12	9	<1		
EARC0350_46-48	MCS	61	5	17		7	9	1		1
EARC0561_24-26	MCS	93	3	3	<1		1		<1	

4.2 Multi-element chemical assays

For selected parameters, Table 4.2 presents the summary statistics of elemental concentrations for the lithologies present at Round Hill. Of the elements assayed, the highest concentrations were recorded for Fe (0.4–39%) and Al (0.06–3.2%).

Geochemical Abundance Index (GAI) values are a measure of how the elemental content compares to average 'crustal' abundance – calculated using the following formula:

$$GAI = Int\ (log2(\frac{Measured\ Concentration}{1.5 \times Average\ Abundance})$$

Zero or positive GAI values indicate enrichment of the element in the sample when compared to average crustal abundances. As a general rule, a GAI of 3 or higher signifies enrichment that warrants further evaluation. GAI 3 threshold concentrations are included for reference (along with average crustal abundance concentrations) in Table 4.2 with concentrations above the threshold values highlighted.

Elements enriched in one or more samples were As, B, Bi, Sb, Se and W. Of these elements, As had the most samples indicating enrichment (34 of 100) followed by Se (28 of 100) and then W (25 of 100).

The greatest range of elemental enrichment occurs in the DG with enrichment in six elements, followed by the FWZ with five elements.

It should be noted that an elevated GAI for an element does not necessarily mean that the element is readily leachable. The potential for leaching is discussed in Section 4.7.

Table 4.2: Summary statistics of bulk chemistry for selected parameters per stratigraphy

Stratigraphy	Statistic	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Cu	Fe	K	Mg	Mn	Mo	Na	Ni	P	Se	Si	Sr	W	Zn
	Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg
Average crustal abundance (Bowen, 1979)		82,000	1.5	10	500	2.6	0.048	41,000	20	100	50	41,000	21,000	23,000	950	1.5	23,000	80	1,000	0.05	27.7	370	1	75
GAI = 3 threshold values		984,000	18	120	6,000	31.2	0.576	492,000	240	1,200	600	492,000	252,000	276,000	11,400	18	276,000	960	12,000	0.6	332.4	4,440	12	900
CzD3	Count	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
	Minimum	9,700	6.1	50	15	0.20	0.16	230	2.7	60	2	150,000	50	150	63	0.78	100	2.5	110	0.25	7.9	2.9	90	1.6
	Average	20,850	13.5	57	144	0.79	0.29	727	7.5	127	20	221,667	576	712	345	1.30	147	14.1	230	0.66	16.7	11.3	206	20
	Median	20,150	13.0	50	79	0.77	0.27	685	6.8	120	21	225,000	580	600	335	0.92	140	15.0	225	0.58	17.5	9.9	195	20
	Maximum	32,000	24	133	780	1.5	0.54	1,500	15	220	36	300,000	1,400	1,900	1,000	3.5	270	26	370	1.5	25.6	33	450	39
JOF	Count	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	Minimum	1,270	1.5	50	6.1	0.49	0.05	100	2.9	5.1	2.6	180,000	50	130	23	0.37	100	2.2	170	0.05	4.8	2	4.8	3.7
	Average	7,538	5	50	58	1.2	0.09	400	6.3	15	4.8	246,923	167	473	288	0.9	123	5.8	423	0.34	17.9	4.9	19	8
	Median	8,210	3.0	50	13	0.74	0.07	200	6.5	14	4.3	240,000	59	240	77	1	100	3.5	410	0.28	22.2	3.8	15	6.4
	Maximum	14,700	27	50	230	3.2	0.3	1,500	13	31	12	310,000	1,200	2,500	2,600	1.5	220	12	660	1.1	26.7	11	60	20
WS	Count	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
	Minimum	3,760	2.7	50	12	0.44	0.06	100	1.9	11	6.3	4,000	66	130	11	0.64	100	2.7	50	0.07	3.4	2	11	4
	Average	14,750	31	109	69	1.2	0.33	415	6.8	52	16	202,524	578	540	246	1.7	151	9.6	442	0.5	18.0	7.2	71	19
	Median	12,600	27	92	48	1.1	0.34	340	5.8	51	11	200,000	250	400	190	1.7	100	9.2	410	0.44	14.1	5.9	62	14.0
	Maximum	31,500	62	255	240	3.9	0.59	1,200	20	150	51	380,000	2,900	1,900	1,300	3	320	15	1100	1.4	39.4	16	260	43
DG	Count	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
	Minimum	635	2.5	50	5.6	0.25	0.05	100	1.7	0.5	0.8	180,000	50	130	13	0.16	100	0.7	160	0.05	0.6	2	2	2.8
	Average	6,552	15	68	58	1.2	0.11	218	7.4	14	6.0	279,143	80	267	232	1.0	114	7.7	534	0.23	9.4	3.4	17	19
	Median	5,580	12	50	15	0.92	0.06	170	5.0	9.6	5.5	280,000	50	260	140	0.87	100	6.3	500	0.09	5.7	2.6	14	10
	Maximum	20,000	110	340	770	5.3	0.47	720	43	54	16	390,000	300	410	2,400	2.7	230	37	1100	1.3	27.4	8.8	72	140
FWZ	Count	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	Minimum	986	6.7	50	15	0.39	0.05	100	3.5	5.6	1.9	110,000	50	140	16	0.92	100	2.7	210	0.05	4.3	2	3	4.8
	Average	8,862	16	73	40	0.82	0.10	194	6.9	20	10	244,286	109	300	153	1.5	123	11	367	0.66	16.5	3.2	26	22.6
	Median	8,780	14	50	35	0.69	0.10	200	7.1	22	7.6	260,000	80	290	49	1.2	100	11	340	0.57	10.9	2.4	19	7.6
	Maximum	22,400	32	198	75	1.3	0.18	320	14	27	26	350,000	220	550	450	3.1	240	21	620	1.4	36.5	4.7	54	88
MCS	Count	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	Minimum	5,950	1.6	50	19	0.30	0.26	200	6.2	16	7	10,000	440	610	40	0.85	100	4.6	50	0.09	5.4	3.7	9.8	2.9
	Average	14,562	70	100	44	0.85	0.59	393	7.4	34	41	100,667	3,648	1,755	212	3.3	128	25	147	2.6	28.4	5.3	31	60
	Median	16,500	18	89	33	0.88	0.62	350	7.5	29	23	51,500	4,000	1,750	115	2.45	105	14	85	0.55	29.7	4.9	26	14
	Maximum	21,400	200	157	77	1.6	0.81	600	8.6	70	140	300,000	6,400	2,900	570	7.5	200	66	370	13	40.9	7.9	61	190

Source: Average crustal abundance values from Bowen (1979).

Notes: Values highlighted in orange are concentrations indicative of 'enrichment' relative to average crustal abundance (GAIs greater than 3, see main text).

4.3 Paste pH and EC

The paste tests were carried out at a 1:2 solid:liquid ratio. An acidic paste pH (pH <5) may indicate the presence of acidic reaction products generated by sulfide oxidation. A neutral or alkaline pH (pH 7 or above) suggests the presence of reactive neutralising minerals or, if categorised as PAF, that the sample has not yet oxidised sufficiently to become acidic.

Paste EC provides an indication of the readily soluble oxidation products and salts that may be dissolved when the material is contacted by water. The results may also be used to infer the state of oxidation or weathering (higher EC values usually suggests a more advanced state of oxidation/weathering), provided the sampling method, sample storage and geochemical properties are known. For example, when the sample originates from naturally saline environment, an elevated paste EC may simply indicate the presence of residual salts in the sample.

Paste pH and EC are plotted as a function of total sulfur content in Figure 4.1 and Figure 4.2, respectively. The complete results are available in Appendix A.

The paste pH values ranged from pH 6.0 (CzD3 sample) to pH 8.2 (DG sample) with majority of the samples within the circumneutral range. The sulfur content is generally low, and there were no apparent trends of decreasing pH with increasing sulfur content.

The paste EC values ranged from 2 mS/m (JOF, WS and DG samples) to 51 mS/m (WS sample). Similar to paste pH, there are no apparent trends of increasing EC with increasing sulfur content.

Figure 4.1: Total sulfur as a function of paste pH, differentiated by stratigraphy

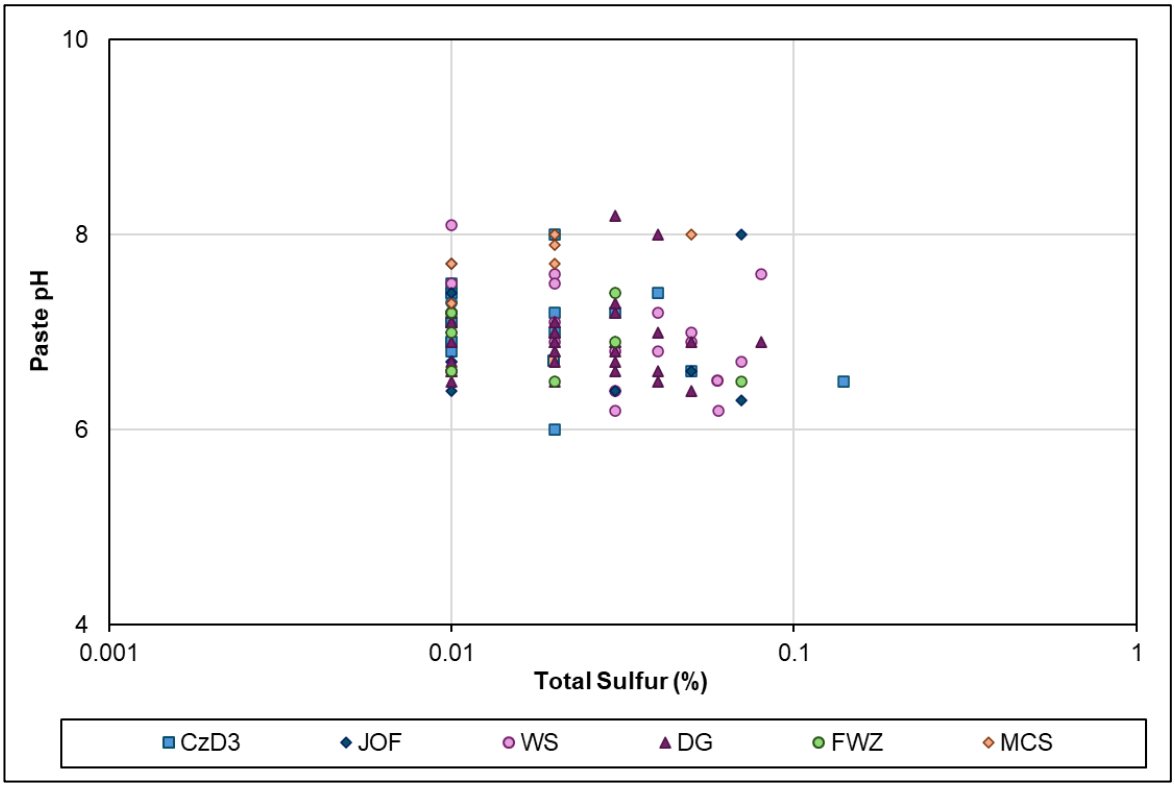
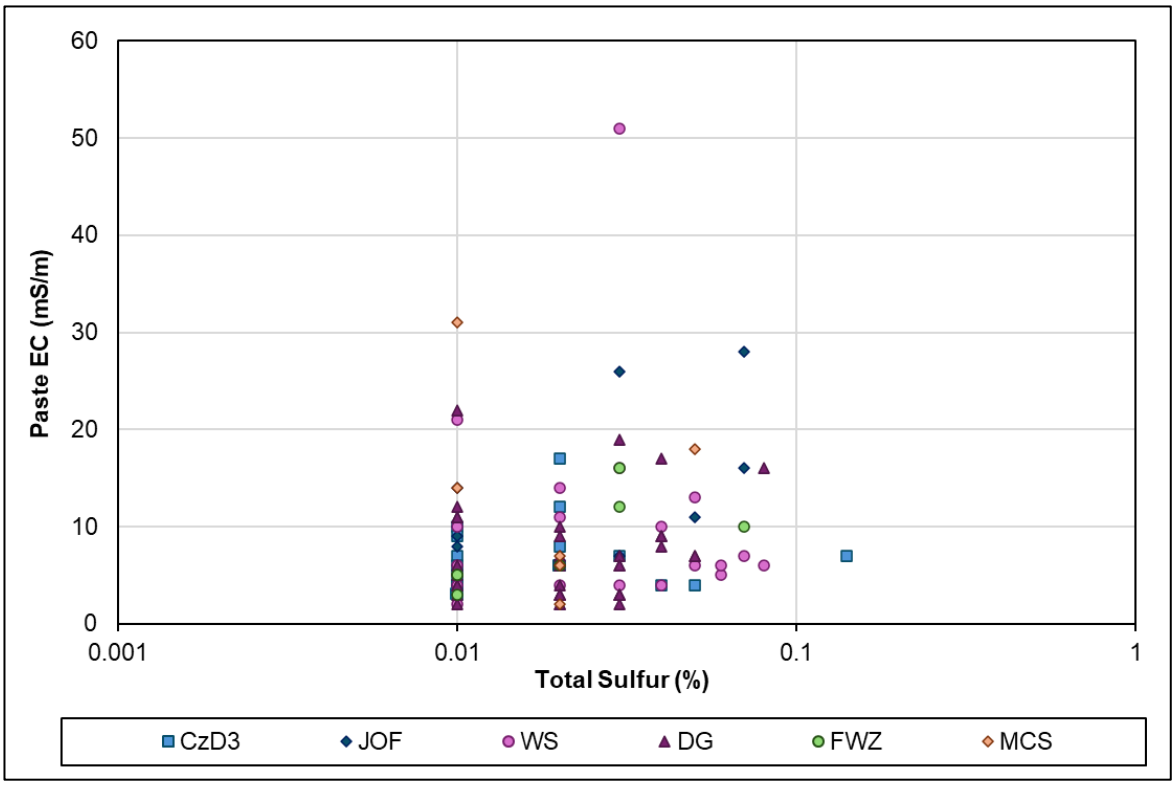


Figure 4.2: Total sulfur as a function of paste EC, differentiated by stratigraphy



4.4 Acid base accounting

A summary of the results from acid base accounting (ABA) testwork is presented in Table 4.3.

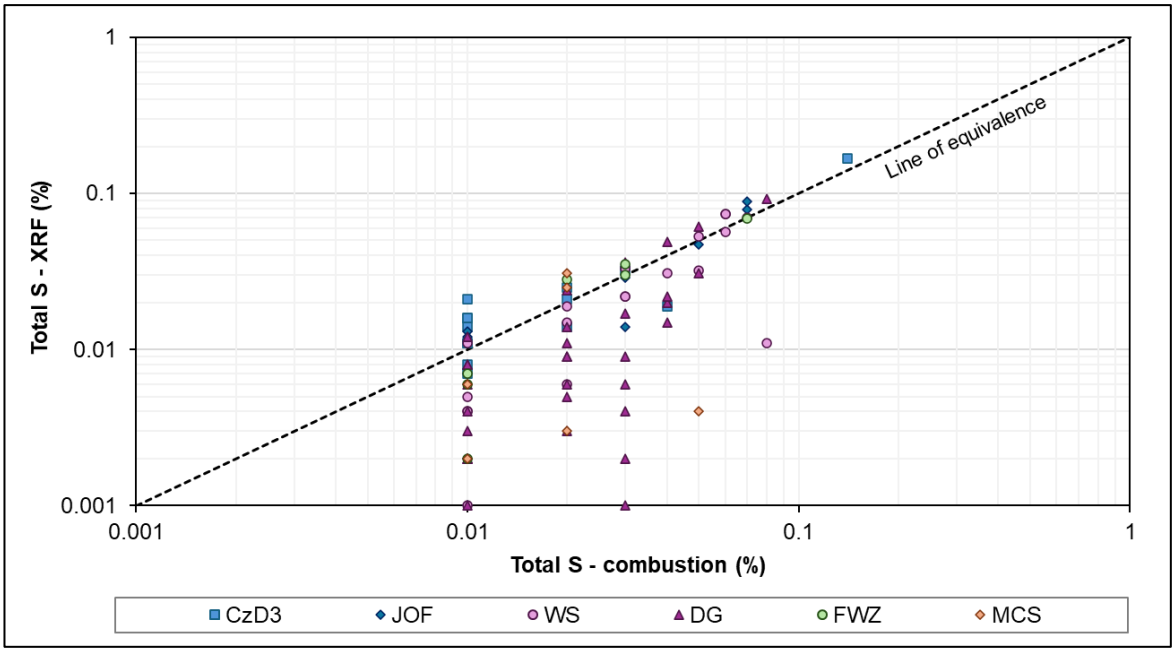
4.4.1 Acid generating potential

The MPA can be calculated from the total sulfur content, conservatively assuming that all sulfur is present as pyrite. The acid potential is calculated based on the oxidisable sulfide sulfur (either measured directly using the chromium reducible sulfur test or based on estimates from the difference between the total sulfur and acid soluble sulfur content). Other forms of sulfur may not generate acidity; for example, sulfate sulfur in a mineral such as gypsum does not contribute to acidity (although it may contribute to salinity).

The total sulfur content (measured by a combustion method similar to LECO) ranged from <0.01% to 0.14% (in a CzD3 sample). Overall, the total sulfur is low across all units with 84 of 100 samples tested being less than 0.05%.

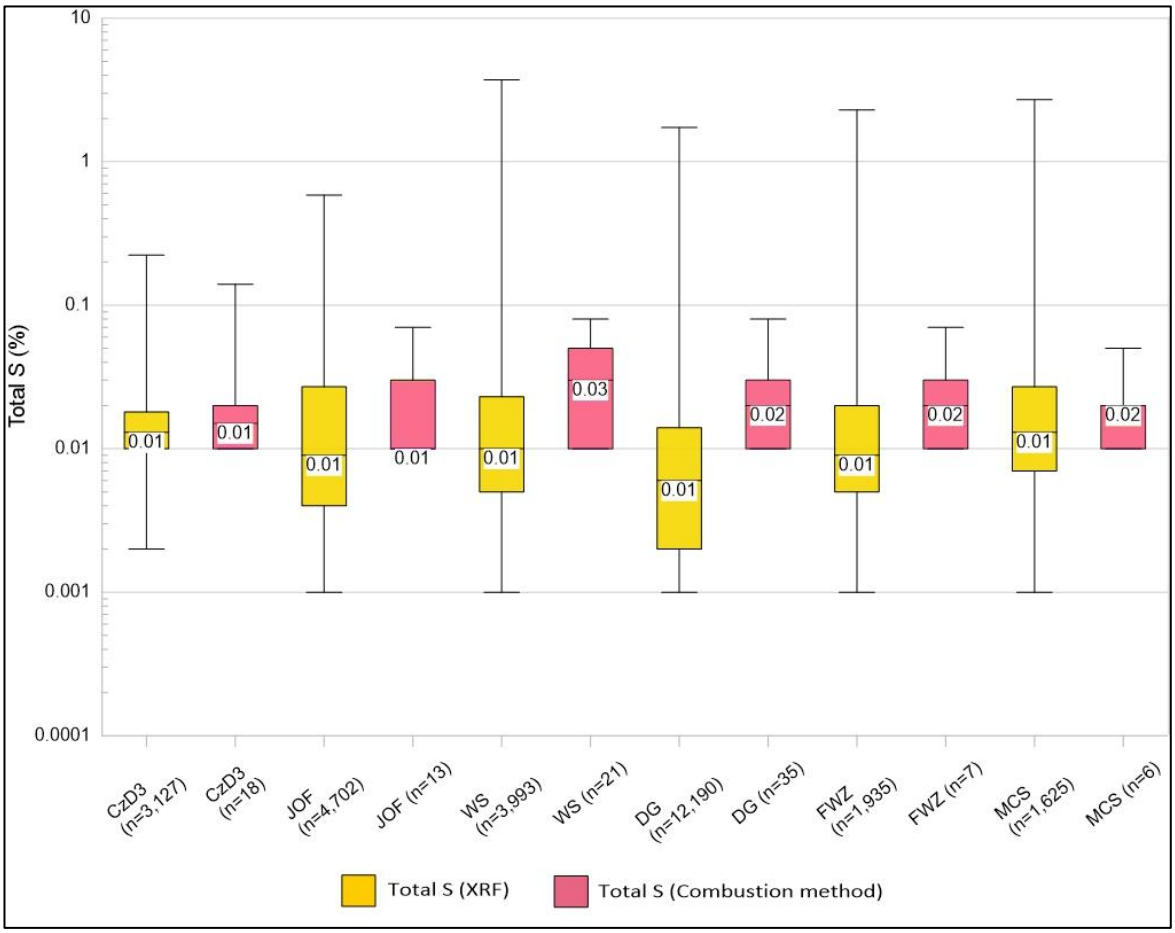
The drill hole dataset includes sulfur content measured by x-ray fluorescence (XRF). For the 100 samples included in the current geochemical assessment, Figure 4.3 shows total sulfur measured by XRF plotted as a function of total sulfur by the combustion method. Many samples plot close to the equivalence line, demonstrating good agreement between the two methods. There is a degree of scatter, not unexpected given the low sulfur content in many samples (close to the limits of reporting for both methods – 0.001% for XRF and 0.01% for the combustion method).

Figure 4.3: Total sulfur by XRF as a function of total sulfur by combustion, differentiated by stratigraphy



Box-and-whisker plots showing the range of total sulfur content as a function of stratigraphy are presented in Figure 4.4. For comparison, the ranges calculated for the drill hole assay dataset (XRF) are also shown (acknowledging that samples outside the proposed pit shells are represented). As would be expected based on larger sample counts, a larger range of sulfur content is indicated for the drill hole dataset. The ‘boxes’ defined for the samples included in the current study are displaced to slightly higher sulfur contents than displayed by the larger drill hole dataset, but the median values are similarly low, 0.01–0.02%.

Figure 4.4: Box-and-whisker plot showing sulfur content as a function of stratigraphy



Notes: The horizontal line equates to the median value within the dataset, and the upper and lower limits of the boxes equate to the 75th and 25th percentiles of the data, respectively. The whiskers (lines that extend from the box) show the minimum and maximum values.

Sulfur speciation testwork included:

- chromium reducible sulfur (S_{CR}) – designed to quantify oxidisable sulfur content, i.e. sulfide (50 samples)
- hydrochloric acid (HCl) extractable sulfur testing (S_{HCl}) (all samples) – to target sulfate sulfur content.

The results from all tests showed concentrations at or below the detection limit indicating that the samples contain negligible sulfide, and that any leachable sulfate present was also at very low levels. In the case of the small number of samples with readily measurable total sulfur content, i.e. between 0.05% and 0.14%, the lack of leachable sulfate may suggest the presence of sparingly soluble hydroxysulfate minerals, such as alunite, that may not have been effectively digested by the HCl.

Table 4.3: Summary statistics of ABA and NAG results per stratigraphy

Stratigraphy	Statistic	Paste pH[1]	Paste EC	Total S	S_{CR}	S_{HCl}	Total C	TIC	ANC	NAG pH[1]	NAG to pH 4.5	NAG to pH 7.0	MPA	CarbNP	NAPP[2]	NPR[2]
	Unit	s.u.	mS/m	%	%	%	%	%	kg H_2SO_4/t	s.u.	kg H_2SO_4/t	kg H_2SO_4/t	kg H_2SO_4/t	kg H_2SO_4/t	kg H_2SO_4/t	
CzD3	Count	18	18	18	9	18	18	18	18	18	18	18	18	18		
	Minimum	8.0	3.0	*0.01*	*0.01*	*0.01*	0.05	*0.05*	0.9	6.9	0.5	0.5	*0.31*	*4.08*		
	Average	6.8	6.8	0.03	*0.01*	*0.01*	0.11	*0.05*	2.8	5.3	0.5	0.5	0.77	4.13	-2.01	3.6
	Median	7.1	6.0	0.015	*0.01*	*0.01*	0.06	*0.05*	2.6	5.7	0.5	0.5	0.46	*4.08*		
	Maximum	6	17	0.14	*0.01*	0.01	0.59	0.06	6.3	4.3	0.5	0.5	4.28	4.90		
JOF	Count	13	13	13	8	13	13	13	13	13	13	13	13	13		
	Minimum	8	3	*0.01*	*0.01*	*0.01*	0.05	*0.05*	0.9	7.7	0.5	0.5	*0.31*	*4.08*		
	Average	6.7	11	0.03	*0.01*	*0.01*	0.16	0.07	2.8	5.1	0.5	0.5	0.78	5.72	-1.98	3.6
	Median	7.0	9.0	0.01	*0.01*	*0.01*	0.12	0.05	2.0	5.5	0.5	0.5	0.31	*4.08*		
	Maximum	6.3	28	0.07	*0.01*	0.01	0.73	0.22	11	4.2	0.5	0.5	2.14	18.0		
WS	Count	21	21	21	13	21	21	21	21	21	21	21	21	21		
	Minimum	8.1	2	*0.01*	*0.01*	*0.01*	0.05	*0.05*	1.1	7.1	0.5	0.5	*0.31*	*4.08*		
	Average	6.7	10.0	0.03	*0.01*	*0.01*	0.09	*0.05*	2.0	5.6	0.5	0.5	0.99	4.47	-1.06	2.1
	Median	6.9	6.0	0.03	*0.01*	*0.01*	0.06	*0.05*	1.9	5.6	0.5	0.5	0.92	*4.08*		
	Maximum	6.2	51	0.08	*0.01*	*0.01*	0.36	0.1	4.6	5.2	0.5	0.5	2.45	8.2		
DG	Count	35	35	35	14	35	35	35	35	35	35	35	35	35		
	Minimum	8.2	2	*0.01*	*0.01*	*0.01*	0.05	*0.05*	0.5	7.1	0.5	0.5	*0.31*	*4.08*		
	Average	6.8	7.2	0.03	*0.01*	*0.01*	0.09	*0.05*	1.8	5.5	0.5	0.5	0.77	4.13	-0.99	2.3
	Median	6.9	6.0	0.02	*0.01*	*0.01*	0.05	*0.05*	1.7	5.5	0.5	0.5	0.61	*4.08*		
	Maximum	6.4	22	0.08	*0.01*	0.01	0.36	0.07	3.5	5.1	0.5	0.5	2.45	5.7		
FWZ	Count	7	7	7	3	7	7	7	7	7	7	7	7	7		
	Minimum	7.4	3	*0.01*	*0.01*	*0.01*	0.05	*0.05*	1.1	6.1	0.5	0.5	*0.31*	*4.08*		
	Average	6.8	8.1	0.03	*0.01*	*0.01*	0.16	*0.05*	2.0	5.5	0.5	0.5	0.79	*4.08*	-1.23	2.6
	Median	6.9	6.0	0.02	*0.01*	*0.01*	0.16	*0.05*	1.7	5.7	0.5	0.5	0.61	*4.08*		
	Maximum	6.5	16	0.07	*0.01*	*0.01*	0.27	*0.05*	3.4	5	0.5	0.5	2.14	*4.08*		
MCS	Count	6	6	6	3	6	6	6	6	6	6	6	6	6		
	Minimum	8	2	*0.01*	*0.01*	*0.01*	0.05	*0.05*	1.7	6.5	0.5	0.5	*0.31*	*4.08*		
	Average	7.7	13.0	0.02	*0.01*	*0.01*	0.13	*0.05*	2.6	5.7	0.5	0.5	0.66	*4.08*	-1.89	3.8
	Median	7.8	10.5	0.02	*0.01*	*0.01*	0.08	*0.05*	2.8	5.8	0.5	0.5	0.61	*4.08*		
	Maximum	7.3	31	0.05	*0.01*	*0.01*	0.39	*0.05*	2.9	5.3	0.5	0.5	1.53	*4.08*		

Notes: AMD – acid and metalliferous drainage; EC – electrical conductivity; C – carbon; CarbNP – carbonate-neutralising potential; MPA – maximum potential acidity; NAPP – net acid production potential; NPR – neutralising potential ratio; S – sulfur; S_{CR} – chromium reducible sulfur; S_{HCl} – HCl extractable sulfur; TIC – total inorganic carbon.

[1] Paste pH and NAG pH minimum and maximum values are inversely displayed to demonstrate the minimum as the highest pH and maximum as lowest pH to correspond to EC values and NAG acidities.

[2] NAPP and NPR values calculated from average ANC and MPA values.

[3] Where LOR values were reported, these values were adopted for the statistical calculations.

4.4.2 Acid neutralising capacity

Some minerals react readily to neutralise acidity, particularly calcium-bearing and magnesium-bearing carbonates such as calcite and dolomite. Total ANC is measured under aggressive acidic conditions (addition of excess strong acid to achieve low pH) (AMIRA, 2002). The solution is then titrated with a strong base to a pH of 8.3 to measure the total acid consumed by the sample. The measurement provides a measure of the total neutralising capacity (i.e. all minerals that may react with a strong acid within the timeframe of the test). It should be noted that, due to the aggressive test conditions, ANC may include contributions from minerals that are less readily available under field conditions.

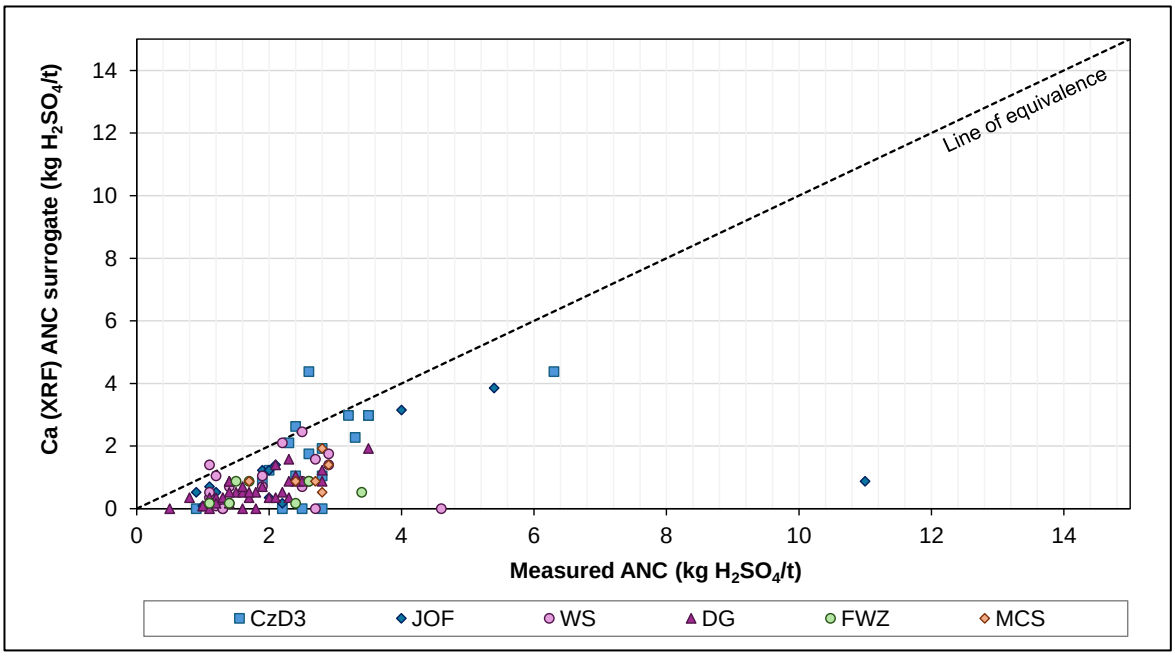
The ANC ranged from less than the LOR (<0.5 kg H_2SO_4/t) to 11 kg H_2SO_4/t – the average ANC was 2.2 kg H_2SO_4/t. In general, ANC was low, with 97 of the 100 samples tested being less than 5 kg H_2SO_4/t.

Speciated carbon testwork indicated that the total carbon content was generally low, ranging between <0.05% and 0.73%. The higher carbon contents were often observed in the near-surface unit (CzD3), and carbon speciation testing indicated that organic carbon was dominant.

The total inorganic carbon (TIC) content may be used to infer the carbonate mineral content and estimate the carbonate-based neutralisation potential (CarbNP). However, as TIC contents are low (a maximum of 0.22%) and only 9 of 100 samples have TIC contents above the LOR, it is unlikely that carbonate minerals are contributing significantly to the ANC.

Figure 4.5 shows the calculated surrogate ANC using calcium content (based on XRF), plotted as a function of total ANC. While there is an approximate positive correlation, many samples plot below the line of equivalence, indicating that the surrogate ANC would be conservative, i.e. would underestimate the ANC. Some samples with readily detectable ANC contain very little calcium (or magnesium), including the sample with the highest ANC in the sample batch (JOF sample). For such samples, it is not currently clear which key mineral may be contributing towards the modest ANC observed.

Figure 4.5: Surrogate ANC from calcium content plotted as a function of total ANC



4.4.3 Net acid producing potential

The NAPP of the samples is a balance of MPA and ANC (i.e. NAPP = MPA - ANC). A negative NAPP indicates an overall excess of neutralising capacity, while a positive NAPP indicates an excess of acidity.

The calculated NAPP values ranged from -10.1 kg H_2SO_4/t to 1.1 kg H_2SO_4/t, with most samples (91 of 100) giving negative NAPP values. The nine samples that indicated positive NAPP values ranged from 0.02 kg H_2SO_4/t to 1.1 kg H_2SO_4/t which suggests that there is negligible excess acidity.

4.5 Net acid generation

During the NAG test, the samples are contacted with the strong oxidant, hydrogen peroxide, to oxidise the sulfide minerals contained in the sample. Concurrently, neutralising minerals present in the sample consume the acidity generated until either the ANC or sulfide is depleted. Should the ANC be depleted first, the excess acidity is generated and the sample pH decreases. Following a predetermined contact time, the solution pH (NAG pH) is recorded, and the acidity of the sample is quantified by titration with a base (sodium hydroxide). The acidity generated at pH 4.5 and below is generally attributed to free sulfuric acid and ferric iron resulting from the oxidation of sulfide minerals after the consumption of any neutralising minerals. The acidity generated between pH 4.5 and pH 7 includes a contribution from metals, such as copper, that are soluble at pH 4.5 but insoluble at pH 7.

Single-addition NAG tests were conducted on all samples to assess the net amount of acid generated by the samples. In general, the results supported the findings of the ABA testwork, with good agreement between the NAG and the NAPP for most samples. In summary:

- None of the samples tested generated acidity in the tests. This is consistent with the NAPP values calculated for most samples which were invariably negative or low (Section 4.4.3).
- The majority of tests (98 of 100) reported NAG pH values above pH 4.5.
- Two samples reported NAG pH values less than pH 4.5. However, the NAG acidity generated to pH 7 was <0.5 kg H_2SO_4/t. These samples are from the CzD3 and JOF units.

4.6 Sample classification

The most commonly adopted waste classification criteria to identify materials at risk of generating AMD are those proposed by AMIRA (AMIRA, 2002) and MEND (Price, 2009) – both sets of criteria are based on geochemical characteristics determined from static laboratory tests as shown in Table 4.4. The AMIRA approach, using a combination of ABA and NAG results (with both conditions to be satisfied) to classify the material type, is widely adopted in Australia and is included in the key regulatory guidance documents (DMP, 2016; DITR, 2016). Both approaches classify materials into PAF, NAF and UC categories.

The results for the AMIRA and MEND classification approaches are illustrated in Figure 4.6 and Figure 4.7, respectively. For interest, potential sulfur screening values[1] at 0.1% and 0.2% have been included on the MEND plots. Table 4.5 summarises the sample counts in each class according to the different schemes. Of the 100 samples tested:

- 90 samples were classed as NAF by the AMIRA approach and 55 samples by the MEND approach. Most of the samples have ANC less than or equal to 5 kg H_2SO_4/t which suggests that the material is barren (no value in terms of excess ANC that could mitigate the effects of acid generation in other materials).
- One sample was classed as PAF by the AMIRA approach. The sample plotted only very slightly into the PAF region, with a very low positive NAPP, 0.04 kg H_2SO_4/t (i.e. would be considered a low capacity PAF sample, PAF-LC). Nine samples were classed as PAF by the MEND approach.
- One sample was classed as UC(PAF) and 8 samples as UC(NAF) by the AMIRA approach. The MEND approach classifies 36 samples as UC which is likely due to low sulfur contents coupled with low ANC.

It is notable that although a small number of samples are classed as PAF or UC using the AMIRA or MEND schemes, all but one sample contain less than 0.1% S and would therefore be considered as posing a low risk of generating AMD.

[1] Where sufficient site-specific data are available, sulfur content can be used for rapid screening of material considered to be at low risk of generating AMD.

Table 4.4: Waste rock classification schemes

Category		AMIRA (2002)		MEND (Price, 2009)
		NAPP	NAG pH	NPR
NAF		<0	≥4.5	>2 or >3
PAF		>10	<4.5	<1
PAF-LC		0–10	<4.5	–
UC	NAF	>0	≥4.5	Between 1 and 3 (or 2 as above)
	PAF	<0	<4.5	

Notes:

[1] In the MEND approach, materials are classified as net neutralising if the NPR is greater than 2. Values of up to 3 can be adopted for greater conservatism.

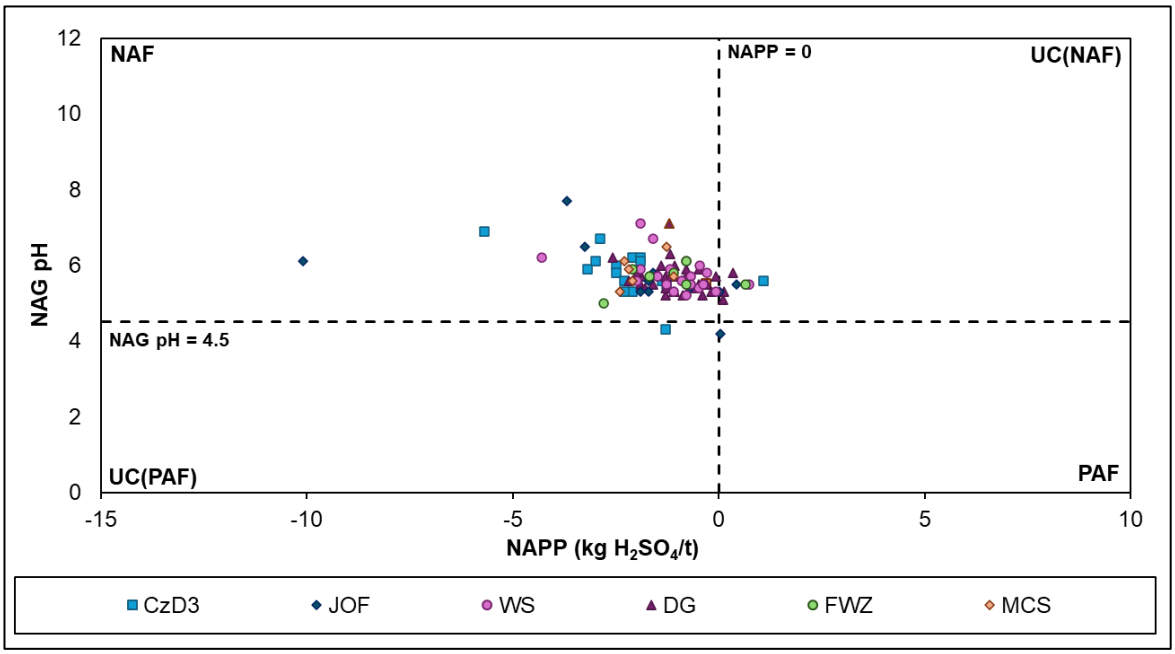
Table 4.5: Sample counts in each AMD class, per stratigraphy

Stratigraphy	AMIRA				MEND		
	NAF	PAF	UC(NAF)	UC(PAF)	NAF	PAF	UC
CzD3	16	0	1	1	13	1	4
JOF	10	1	2	0	9	3	1
WS	20	0	1	0	9	1	11
DG	32	0	3	0	16	3	16
FWZ	6	0	1	0	4	1	2
MCS	6	0	0	0	4	0	2
Total	**90**	**1**[1]	**8**	**1**	**55**	**9**	**36**

Notes:

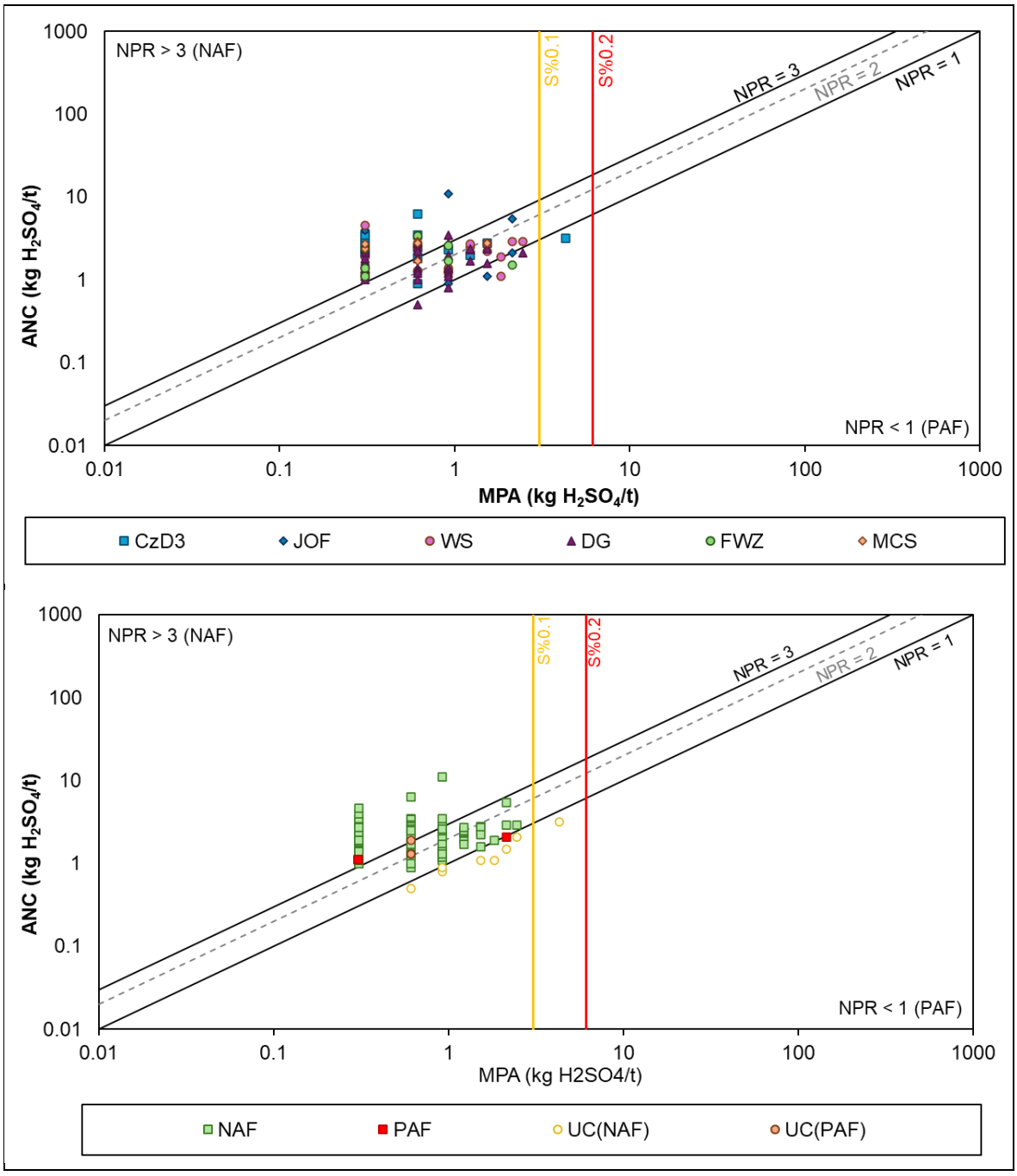
[1] This sample is low capacity PAF (PAF-LC).

Figure 4.6: Classification according to AMIRA, differentiated by stratigraphy



Note: Typical AMIRA plots involve wider x-axis ranges (i.e. NAPP values from -200 kg H_2SO_4/t to +200 kg H_2SO_4/t). In the plot above, the x-axis range is smaller to reflect the relatively small range of NAPP values calculated for the current sample set.

Figure 4.7: Classification according to MEND, differentiated by stratigraphy (top) and AMIRA classification (bottom)



4.7 Element leachability

Static DI water leach extraction tests were undertaken to provide an indication of the readily leachable elements that may be present within the waste rock. This was carried out on all samples (100 samples) at a 1:5 solid-to-liquid ratio. Test results are dependent on the test conditions, and factors such as sample handling and storage. It should be noted that the laboratory results cannot be used to directly represent the leachate quality expected in the field-scale system.

The results from the individual leach tests are provided in Appendix A. A summary of the leach extraction laboratory results for each parameter per stratigraphy is presented in Table 4.6.

The final pH of the leachates ranged from pH 5.6 to 8.1. For most samples, the final leachate pH was in the circumneutral range (98 of 100 samples above pH 6.0).

The average concentrations of major cations (Ca, Mg, Na and K) and anions (SO_4, Cl and F) for each stratigraphy are shown in Table 4.6. The highest average major cation and anion concentrations were typically in the JOF. Average concentrations of sodium, chloride and potassium were highest in MCS.

Dissolved concentrations for most of the analysed minor/trace metal(loid)s were low and predominantly near or below their respective LORs. Exceptions are Al, As, B, Ba, Co, Cr, Cu, Fe, Li, Mn, Mo, Ni, Pb, Sb, Se, Si, Sr, V, W and Zn; these elements are readily detectable in leachates for most stratigraphies. Cr speciation testing was conducted and where individual species were detectable – less than 20 of the leachates – speciation was generally dominated by Cr (VI).

The following general comments can be made:

- Dissolved metal(loid)s concentrations range to higher values in the JOF stratigraphy.
- Dissolved Al and Fe concentrations were highest in the CzD3 stratigraphy.
- Where minor/trace elements are detectable in both the solids and the leachates, the percentage leached is typically very low, less than 1%. However, sulfate and sodium concentrations often leached above 5%.

Total nitrogen was detected at low concentrations for all samples tested; concentrations ranged from 0.03 mg/L to 1.8 mg/L. Total phosphorus was typically very low (<LOR) with concentrations ranging from <0.005 mg/L to 0.065 mg/L.

Table 4.6: Summary of deionised water leach data per stratigraphy

Parameter	Unit	CzD3 (n = 18)		JOF (n = 13)		WS (n = 21)		DG (n = 35)		FWZ (n = 7)		MCS (n = 6)	
		Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum
pH[1,2]	s.u.	6.6	6.0	6.3	5.6	6.5	6.1	8.1	6.5	6.5	6.2	6.8	6.5
EC	µS/cm	43	130	61	175	58	222	8	29	40	71	71	150
Total Alkalinity	mg $CaCO_3$/L	6.4	55	7.3	56.0	5.6	65	*1.0*	2.0	3.1	5.0	5.7	12
TDS[3]	mg/L	24	72	34	96	32	120	*5*	16	22	39	39	82
Ca	mg/L	1.6	16	3.3	27	1.3	11.6	*0.1*	0.7	0.91	1.7	0.6	1.5
Mg	mg/L	0.49	2.3	0.93	2.1	0.72	4.1	*0.1*	0.40	0.73	1	0.82	2.1
Na	mg/L	4.7	11	6.1	18	6.9	24	0.8	3.1	4.5	12	7.9	18
K	mg/L	1.8	4.9	1.1	1.7	2.2	7.8	0.2	0.6	1.4	2.6	4.2	6.8
SO_4	mg/L	6.5	26	9.8	26.5	5.7	14.8	*0.1*	2.8	8.4	19	3.9	7.9
Cl	mg/L	2.2	4.4	3.6	11.0	8.0	49	*0.5*	1.6	2.5	7.3	9.9	27
F	mg/L	0.35	0.8	0.23	0.50	0.27	0.6	*0.1*	*0.10*	0.2	0.5	0.9	1.5
Ag	mg/L	*0.00001*	*0.00001*	0.000016	0.00009	0.00001	0.00004	*0.00001*	*0.00001*	*0.00001*	*0.00001*	*0.00001*	*0.00001*
Al	mg/L	0.24	1.2	0.037	0.3	0.03	0.32	*0.01*	*0.0*	0.01	0.031	0.04	0.1
As	mg/L	0.00048	0.0015	0.000082	0.0003	0.0004	0.0017	*0.00005*	0.00006	0.00007	0.00013	0.0069	0.021
B	mg/L	0.081	0.13	0.045	0.10	0.063	0.11	0.009	0.04	0.035	0.06	0.053	0.09
Ba	mg/L	0.03	0.19	0.041	0.13	0.03	0.14	0.00	0.004	0.039	0.1	0.0018	0.0045
Be	mg/L	*0.00002*	*0.00002*	0.000025	0.00008	*0.00002*	*0.00002*	*0.00002*	*0.00002*	*0.00002*	*0.00002*	*0.00002*	*0.00002*
Bi	mg/L	0.000013	0.00005	0.000012	0.00003	0.000011	0.00003	*0.00001*	*0.00001*	*0.000010*	*0.00001*	0.00002	0.00006
Cd	mg/L	*0.00005*	*0.00005*	*0.00005*	*0.00005*	*0.00005*	*0.00005*	*0.00005*	*0.00005*	*0.00005*	*0.00005*	*0.00005*	*0.00005*
Co	mg/L	0.00033	0.0025	0.0044	0.025	0.00057	0.0068	*0.00005*	0.00019	0.0011	0.0036	0.00025	0.00049
Cr	mg/L	0.0019	0.0047	0.00017	0.0005	0.001	0.0044	*0.0001*	0.00023	0.00016	0.00031	0.0012	0.002
Cr^{3+}	mg/L	0.0011	0.002	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	*0.001*	0.0012	0.002
Cr^{6+}	mg/L	0.0018	0.005	*0.001*	*0.001*	0.0014	0.004	*0.001*	*0.001*	*0.001*	*0.001*	0.0012	0.002
Cu	mg/L	0.00059	0.0024	0.00027	0.0011	0.0038	0.071	*0.0001*	*0.0001*	0.00013	0.0003	0.00028	0.0007
Fe	mg/L	0.20	0.87	0.068	0.36	0.05	0.43	*0.01*	0.008	0.045	0.28	0.05	0.1
Hg	mg/L	0.00002	0.00004	0.000024	0.00007	0.000026	0.00007	*0.00002*	*0.00002*	0.000023	0.00004	0.000027	0.00003
La	mg/L	0.00017	*0.00004*	*0.00004*	*0.00004*	*0.00004*	*0.00004*	*0.00004*	*0.00004*	*0.00004*	*0.00004*	*0.00004*	
Li	mg/L	0.0025	0.01	0.0035	0.0100	0.0037	0.019	0.001	0.0056	0.01	0.026	0.0064	0.011
Mn	mg/L	0.0039	0.038	0.011	0.12	0.0016	0.012	*0.0001*	0.0006	0.0026	0.0067	0.001	0.0034
Mo	mg/L	0.0015	0.0049	0.0021	0.019	0.0011	0.0039	*0.0001*	0.0002	0.0008	0.0034	0.0055	0.012
Ni	mg/L	0.00052	0.0022	0.00096	0.005	0.00042	0.0029	0.00009	0.00022	0.00035	0.00068	0.00029	0.00043
Pb	mg/L	0.00052	0.0051	0.0005	0.0038	0.001	0.015	*0.00005*	*0.00005*	0.000063	0.00011	0.00018	0.0006
Sb	mg/L	0.00027	0.00054	0.00017	0.00037	0.00035	0.0013	*0.00002*	0.00009	0.00014	0.00028	0.0011	0.0017
Se	mg/L	0.00059	0.0031	0.00074	0.0022	0.00022	0.00061	*0.00005*	0.00011	0.001	0.0033	0.00046	0.0011
Si	mg/L	17	27	9.1	14	10	19	3.2	7.9	7.3	7.8	10	15
Sn	mg/L	*0.0001*	*0.0001*	*0.0001*	*0.0001*	0.00012	0.0004	*0.0001*	*0.0001*	*0.0001*	*0.0001*	0.00015	0.0003
Sr	mg/L	0.010	0.087	0.02	0.11	0.01	0.075	0.0002	0.004	0.008	0.022	0.003	0.006
Ta	mg/L	*0.00001*	*0.00001*	*0.00001*	*0.00001*	*0.00001*	*0.00001*	*0.00001*	*0.00001*	*0.00001*	*0.00001*	*0.00001*	*0.00001*
Th	mg/L	0.000026	0.00005	*0.00002*	*0.00002*	0.000022	0.00007	*0.00002*	*0.00002*	*0.00002*	*0.00002*	*0.00002*	*0.00002*
Tl	mg/L	*0.00002*	*0.00002*	0.000022	0.00004	*0.00002*	*0.000020*	*0.00002*	*0.00002*	0.000023	0.00003	*0.00002*	*0.00002*
U	mg/L	0.000021	0.00003	0.000028	0.00012	*0.00002*	*0.000020*	*0.00002*	*0.00002*	*0.00002*	*0.00002*	*0.00002*	*0.00002*
V	mg/L	0.0019	0.006	0.0002	0.0011	0.0004	0.0019	*0.0001*	*0.0001*	*0.0001*	*0.0001*	0.0012	0.0024
W	mg/L	0.0017	0.0071	0.0022	0.02	0.0023	0.013	*0.00002*	0.0001	0.001	0.0057	0.031	0.084
Zn	mg/L	0.0073	0.025	0.0063	0.022	0.012	0.13	*0.001*	0.002	0.004	0.015	0.0043	0.01
Total N	mg/L	0.43	0.78	0.28	1.3	0.35	1.8	0.06	0.14	0.12	0.17	0.54	1.8
Total P	mg/L	0.006	0.009	0.009	0.055	0.0057	0.012	*0.005*	*0.005*	*0.005*	*0.005*	0.012	0.038

Notes: n = number of samples. Cells highlighted in blue represent the stratigraphic unit with the highest average value for the corresponding parameter, while cells highlighted in orange indicate the maximum concentration observed in the dataset for that parameter. Less than detection values are indicated in *grey* italics. 3 Where LOR values were reported, these values were adopted for the statistical calculations.

[1] Minimum rather than maximum pH values are presented.

[2] Average pH values have been calculated using H^+ values.

[3] TDS values are calculated by the laboratory where EC is multiplied by a factor of 5.5.

4.8 Other geochemical risks

Other geochemical risks include the presence of fibrous minerals or radioactive substrates in the materials to be mined. These risks were not assessed directly. However, the following comments can be made:

- A subset of samples (22 of 100) were submitted for mineralogical assessment; the assessment did not identify any minerals known to be asbestiform.
- Exploration and resource evaluation drilling activities to-date have not identified any intersections with fibrous materials (HPPL, 2024b).
- Total U content ranged from 0.07 ppm to 5.5 ppm and total Th content ranged from <0.05 to 22 ppm. Mass-based U and Th content can be combined with specific activities (Bq/g) to calculate U-238 and Th-232 activity (the most abundant radionuclides in natural materials). The calculated U-238 and Th-232 activities range to a maximum of 0.07 Bq/g and 0.09 Bq/g, respectively – well below the definition of a radioactive material as given in Department of Mines and Petroleum (now Department of Energy, Mines, Industry Regulation and Safety) guidance (2010), i.e. material containing more than 1 Bq/g U-238.

5 Conclusions and recommendations

5.1 Conclusions

Based on information reviewed as part of the current assessment, it is concluded that the risk of poor-quality drainage from waste rock to be excavated at Round Hill is low. This conclusion is supported by the following:

AMD potential:

- The total sulfur content was low, ranging from <0.01% to 0.14%. The sulfur content was less than 0.05% for 84 of the 100 samples tested.
- The ANC ranged from <0.5 kg H_2SO_4/t. to 11 kg H_2SO_4/t and is unlikely to be present as readily available carbonate minerals due to low CarbNP contents.
- Calculated NAPP values were either negative or very low, and no acidity was generated in NAG testing.
- Most samples (99 of 100) would be considered low risk based on sulfur cut-off screening, largely corroborated by the AMIRA classification scheme which classed 91 of 100 samples as NAF, 9 as UC and only 1 as PAF-LC. A greater number of samples were classed as either UC or PAF (36 and 9, respectively) using the MEND scheme, but it should be acknowledged that this is largely due to low sulfur and ANC in the samples.

Contaminant leaching potential:

- Elements with GAI values indicative of enrichment in more than one sample were As, B, Bi, Sb, Se and W.
- In DI water leach testing (1:5 solid:liquid ratio), the leachate pH ranged from pH 5.6 to 8.1 and the solute content was typically low.
- Dissolved concentrations for most of the analysed minor/trace metal(loid)s were low and predominantly near or below their respective limit of detections. Of the trace/minor metal(loid)s that were readily detectable (Al, As, B, Ba, Co, Cr, Cu, Fe, Li, Mn, Mo, Ni, Pb, Sb, Se, Si, Sr, V, W and Zn), maximum (though still low) concentrations were often coincident with samples from the JOF stratigraphy.
- The observed leaching behaviour is consistent with expectation for near-neutral pH conditions.

5.2 Recommendations

While risk of poor quality drainage has been assessed as low based on current datasets, this conclusion should continue to be tested going forward. Geochemical characterisation should continue as the project evolves and mine planning matures to ensure that sufficient samples are tested to continue providing spatial and lithological representation of the materials that could be disturbed by mining.

Given the low sulfur and ANC content of the current sample set, there is no strong case to undertake supplemental testing to evaluate the reactivity of either sulfides or ANC (e.g. kinetic [free-draining] columns or acid buffering characteristic curves, respectively). However, some

supplemental testing to extend the static leaching dataset to a wider range of conditions could be of value – for example, to include leaching at acidic pH, or at higher salinities. There would also be value in generating data for a range of solid:liquid contact ratios. Such supplemental leach data would help support evaluation of seepage quality that could be expected under field conditions.

Closure

This report, Round Hill Geochemical Assessment, was prepared by

Mia Saini
Consultant Geochemist

and reviewed by

Claire Linklater
Principal Geochemist

All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional engineering and environmental practices.

References

AMIRA, 2002. ARD Test Handbook: Project P387A Prediction and Kinetic Control of Acid Mine Drainage, May 2002.

Bowen, H J M, 1979. Environmental Chemistry of the Elements, 333p (Academic Press: London).

Department of Industry, Tourism and Resources (DITR), 2016. Preventing Acid and Metalliferous Drainage – Leading Practice Sustainable Development Program for the Mining Industry, September 2016. Department of Trade and Tourism, Australian Government.

DMP, 2010. Managing naturally occurring radioactive material (NORM) in mining and mineral processing – guideline.

DMP, 2016. Materials Characterisation Baseline Data Requirements for Mining Proposals, March 2016, Department of Mines and Petroleum (DMP) (now Department of Energy, Mines, Industry Regulation and Safety [DEMIRS]), Government of Western Australia.

HPPL, 2024a. Round Hill – Phase 0 Waste Characterisation Assay Assessment_Rev0. Internal memorandum dated 24 April 2024.

HPPL, 2024b. Round Hill Modelling and Resource Report.

INAP, 2009. International Network for Acid Prevention. Global Acid Rock Drainage (GARD) Guide.

Mine Earth, 2024. Round Hill Project – Waste Rock Assessment. Stage 1 – Information review, 18 April 2024.

Price, WA, 2009. Prediction Manual for Drainage Chemistry from Sulfidic Geologic Materials, Natural Resources Canada. MEND Report 1.20.1.

Appendix A Static geochemical results

Table A.1: Acid base accounting and net acid generation results

Sample ID	Lab ID	Depth		Interpreted STRAND	Member	LOD	0.5	1	0.01	0.01	0.01	0.5	0.1	0.5	0.5
		m	m			Unit	pH units	mS/m	%	%	%	kg H_2SO/t	-	kg H_2SO/t	kg H_2SO/t
		From	To			Weathering	pH	EC	S	S_{CR}	S_{HCl}	ANC	NAG pH	NAG acidity to pH 7.0	NAG acidity to pH 4.5
EARC0350_06-08	24S1311/024	6	8	SCR	CzD3	Det	6.8	4	*0.01*	*0.01*	*0.01*	2.4	5.3	*0.5*	*0.5*
EARC0405_06-08	24S1311/039	6	8	SCR	CzD3	Det	6.5	7	0.14		0.01	3.2	5.6	*0.5*	*0.5*
EARC0408_02-04	24S1311/045	2	4	ALU	CzD3	Det	7.2	12	0.02	*0.01*	*0.01*	6.3	6.9	*0.5*	*0.5*
EARC0408_06-08	24S1311/046	6	8	ALU	CzD3	Det	7.1	7	0.01		*0.01*	2.8	6	*0.5*	*0.5*
EARC0459_02-04	24S1311/049	2	4	ALU	CzD3	Det	6.9	10	*0.01*	*0.01*	*0.01*	2.6	5.3	*0.5*	*0.5*
EARC0459_08-10	24S1311/050	8	10	ALU	CzD3	Det	7.1	6	0.01	*0.01*	*0.01*	2.4	6.2	*0.5*	*0.5*
EARC0459_16-18	24S1311/051	16	18	SCR	CzD3	Det	7.4	3	*0.01*		*0.01*	3.5	5.9	*0.5*	*0.5*
EARC0467_02-04	24S1311/055	2	4	ALU	CzD3	Det	7.4	9	*0.01*	*0.01*	*0.01*	3.3	6.1	*0.5*	*0.5*
EARC0467_06-08	24S1311/056	6	8	ALU	CzD3	Det	7.5	4	0.01		*0.01*	2.8	5.8	*0.5*	*0.5*
EARC0474_04-06	24S1311/060	4	6	ALU	CzD3	Det	7.3	3	*0.01*	*0.01*	*0.01*	2.6	5.6	*0.5*	*0.5*
EARC0474_12-14	24S1311/061	12	14	SCR	CzD3	Det	7.4	4	0.04		*0.01*	2	5.6	*0.5*	*0.5*
EARC0543_02-04	24S1311/078	2	4	SCR	CzD3	Det	7.2	7	0.03		*0.01*	2.3	5.6	*0.5*	*0.5*
EARC0561_02-04	24S1311/081	2	4	SCR	CzD3	Det	8	17	0.02	*0.01*	*0.01*	3.5	6.7	*0.5*	*0.5*
EARC0575_06-08	24S1311/087	6	8	ALU	CzD3	Det	6	8	0.02	*0.01*	*0.01*	1.9	4.3	*0.5*	*0.5*
HR_MET0006_3-3.1	24S1311/091	3	3.1	ALU	CzD3	Det	6.6	4	0.05		*0.01*	2.8	5.5	*0.5*	*0.5*
EADD0042_1-1.25	24S1311/097	1	1.25	ALU	CzD3	Det	6.9	5	0.01	*0.01*	*0.01*	2.2	6.2	*0.5*	*0.5*
EADD0042_3.9-4.4	24S1311/098	3.9	4.4	ALU	CzD3	Det	7	6	0.02		*0.01*	2.5	6.1	*0.5*	*0.5*
EADD0042_16-16.5	24S1311/099	16	16.5	SCR	CzD3	Det	6.7	6	0.02		*0.01*	0.9	5.5	*0.5*	*0.5*
EARC0229_28-30	24S1311/004	28	30	DG3	DG	Ox	6.5	22	0.01	*0.01*	*0.01*	1.7	6	*0.5*	*0.5*
EARC0229_42-44	24S1311/005	42	44	DG3	DG	Ox	6.7	11	0.01		*0.01*	1.5	7.1	*0.5*	*0.5*
EARC0229_50-52	24S1311/006	50	52	DG3	DG	Ox	6.9	11	*0.01*	*0.01*	*0.01*	1.1	5.7	*0.5*	*0.5*
EARC0275_66-68	24S1311/008	66	68	DG2	DG	Ox	6.6	12	*0.01*		*0.01*	1.6	5.2	*0.5*	*0.5*
EARC0324_04-06	24S1311/018	4	6	DG2	DG	Hyd	6.9	10	0.02		*0.01*	2.5	5.5	*0.5*	*0.5*
EARC0324_10-12	24S1311/019	10	12	DG2	DG	Hyd	6.8	7	0.02		*0.01*	2.8	5.6	*0.5*	*0.5*
EARC0324_16-18	24S1311/020	16	18	DG2	DG	Hyd	6.7	7	0.03		0.01	2.8	5.7	*0.5*	*0.5*
EARC0324_32-34	24S1311/021	32	34	DG1	DG	Ox	6.9	3	0.03		*0.01*	2	5.7	*0.5*	*0.5*
EARC0324_46-48	24S1311/022	46	48	DG1	DG	Ox	7.2	2	0.01	*0.01*	*0.01*	2.3	5.8	*0.5*	*0.5*
EARC0324_62-64	24S1311/023	62	64	DG1	DG	Ox	7.1	3	*0.01*		*0.01*	2.1	5.4	*0.5*	*0.5*
EARC0350_12-14	24S1311/025	12	14	DG1	DG	Hyd	6.4	7	0.05	*0.01*	*0.01*	2.4	5.2	*0.5*	*0.5*
EARC0350_18-20	24S1311/026	18	20	DG1	DG	Hyd	6.5	9	0.04		*0.01*	2.3	5.3	*0.5*	*0.5*
EARC0405_36-38	24S1311/043	36	38	DG3	DG	Ox	7.1	6	*0.01*	*0.01*	*0.01*	1.6	5.7	*0.5*	*0.5*
EARC0405_60-62	24S1311/044	60	62	DG3	DG	Ox	7.1	4	*0.01*		*0.01*	1.8	5.8	*0.5*	*0.5*
EARC0408_36-38	24S1311/047	36	38	DG1	DG		6.6	5	0.01	*0.01*	*0.01*	1.4	5.3	*0.5*	*0.5*

Sample ID	Lab ID	Depth		Interpreted STRAND	Member	LOD	0.5	1	0.01	0.01	0.01	0.5	0.1	0.5	0.5
		m	m			Unit	pH units	mS/m	%	%	%	kg H_2SO/t	-	kg H_2SO/t	kg H_2SO/t
		From	To			Weathering	pH	EC	S	S_{CR}	S_{HCl}	ANC	NAG pH	NAG acidity to pH 7.0	NAG acidity to pH 4.5
EARC0467_56-58	24S1311/059	56	58	DG3	DG	Ox	7.1	4	*0.01*		*0.01*	1	5.4	*0.5*	*0.5*
EARC0480_04-06	24S1311/064	4	6	DG3	DG	Hyd	8	17	0.04	*0.01*	*0.01*	2.3	6	*0.5*	*0.5*
EARC0480_10-12	24S1311/065	10	12	DG3	DG	Hyd	8.2	19	0.03		*0.01*	3.5	6.2	*0.5*	*0.5*
EARC0480_16-18	24S1311/066	16	18	DG3	DG	Hyd	7	8	0.04		*0.01*	2.4	5.7	*0.5*	*0.5*
EARC0480_24-26	24S1311/067	24	26	DG3	DG	Ox	6.8	3	0.03		*0.01*	1.4	5.5	*0.5*	*0.5*
EARC0480_32-34	24S1311/068	32	34	DG3	DG	Ox	6.9	2	0.03	*0.01*	*0.01*	0.8	5.3	*0.5*	*0.5*
EARC0480_64-66	24S1311/069	64	66	DG2	DG	Ox	7.3	3	0.03	*0.01*	*0.01*	1.4	5.9	*0.5*	*0.5*
EARC0491_02-04	24S1311/070	2	4	DG2	DG	Hyd	6.9	16	0.08		*0.01*	2.1	5.8	*0.5*	*0.5*
EARC0491_08-10	24S1311/071	8	10	DG2	DG	Hyd	7.2	6	0.03		*0.01*	1.2	5.5	*0.5*	*0.5*
EARC0491_16-18	24S1311/072	16	18	DG2	DG	Hyd	6.9	7	0.05		*0.01*	*1.6*	5.7	*0.5*	*0.5*
EARC0491_22-24	24S1311/073	22	24	DG2	DG	Hyd	6.6	9	0.04	*0.01*	*0.01*	1.7	5.5	*0.5*	*0.5*
EARC0493_28-30	24S1311/076	28	30	DG3	DG	Ox	7.1	3	0.02	*0.01*	*0.01*	1.9	5.4	*0.5*	*0.5*
EARC0493_38-40	24S1311/077	38	40	DG3	DG	Ox	6.7	2	0.02		*0.01*	1.4	5.9	*0.5*	*0.5*
EARC0563_30-32	24S1311/085	30	32	DG3	DG	Ox	7	4	0.02	*0.01*	*0.01*	1.3	5.4	*0.5*	*0.5*
EARC0563_46-48	24S1311/086	46	48	DG3	DG	Ox	6.8	9	0.02		*0.01*	1.2	5.4	*0.5*	*0.5*
EARC0575_20-22	24S1311/089	20	22	DG3	DG	Ox	6.5	3	0.02	*0.01*	*0.01*	1	5.2	*0.5*	*0.5*
EARC0575_36-38	24S1311/090	36	38	DG3	DG	Ox	6.9	2	0.02		*0.01*	2.2	5.5	*0.5*	*0.5*
HR_MET0006_48-50	24S1311/092	48	50	DG3	DG	Ox	7.1	3	0.02	*0.01*	*0.01*	0.5	5.1	*0.5*	*0.5*
EADD0041_7.5-7.7	24S1311/095	7.5	7.7	DG2	DG	Ox	7	6	0.02		*0.01*	1.8	6.3	*0.5*	*0.5*
EADD0041_48-48.3	24S1311/096	48	48.3	DG3	DG	Ox	6.6	6	0.03		*0.01*	1.1	5.3	*0.5*	*0.5*
EARC0284_04-06	24S1311/009	4	6	FWZ	FWZ	Hyd	6.9	12	0.03	*0.01*	*0.01*	1.7	5.5	*0.5*	*0.5*
EARC0284_14-16	24S1311/010	14	16	FWZ	FWZ	Hyd	7.4	16	0.03		*0.01*	2.6	5.7	*0.5*	*0.5*
EARC0350_24-26	24S1311/027	24	26	FWZ	FWZ	Hyd	6.5	6	0.02		*0.01*	3.4	5	*0.5*	*0.5*
EARC0350_32-34	24S1311/028	32	34	FWZ	FWZ	Ox	7	5	*0.01*		*0.01*	2.4	5.9	*0.5*	*0.5*
EARC0350_38-40	24S1311/029	38	40	FWZ	FWZ	Ox	7.2	3	*0.01*	*0.01*	*0.01*	1.4	5.8	*0.5*	*0.5*
EARC0408_46-48	24S1311/048	46	48	FWZ	FWZ		6.6	5	*0.01*	*0.01*	*0.01*	1.1	6.1	*0.5*	*0.5*
EARC0474_18-20	24S1311/062	18	20	FWZ	FWZ	Hyd	6.5	10	0.07		*0.01*	1.5	5.5	*0.5*	*0.5*
EARC0307_06-08	24S1311/013	6	8	J2	JOF	Ox	7.4	10	0.01		*0.01*	1.2	5.6	*0.5*	*0.5*
EARC0307_14-16	24S1311/014	14	16	J2	JOF	Ox	7.4	26	0.03		*0.01*	11	6.1	*0.5*	*0.5*
EARC0307_22-24	24S1311/015	22	24	J2	JOF	Ox	6.7	14	0.01		*0.01*	2.2	5.3	*0.5*	*0.5*
EARC0307_46-48	24S1311/016	46	48	J1	JOF	Ox	7	9	*0.01*	*0.01*	*0.01*	2	5.6	*0.5*	*0.5*
EARC0307_56-58	24S1311/017	56	58	J1	JOF	Ox	7.7	4	*0.01*	*0.01*	*0.01*	4	7.7	*0.5*	*0.5*
EARC0377_02-04	24S1311/031	2	4	J1	JOF	Hyd	8	28	0.07	*0.01*	*0.01*	5.4	6.5	*0.5*	*0.5*
EARC0399_04-06	24S1311/035	4	6	J3	JOF	Det	6.3	16	0.07	*0.01*	0.01	2.1	4.2	*0.5*	*0.5*

Sample ID	Lab ID	Depth		Interpreted STRAND	Member	LOD	0.5	1	0.01	0.01	0.01	0.5	0.1	0.5	0.5
		m	m			Unit	pH units	mS/m	%	%	%	kg H_2SO /t	-	kg H_2SO /t	kg H_2SO /t
		From	To			Weathering	pH	EC	S	S_{CR}	S_{HCl}	ANC	NAG pH	NAG acidity to pH 7.0	NAG acidity to pH 4.5
EARC0399_20-22	24S1311/036	20	22	J2	JOF	Ox	6.4	7	0.03	*0.01*	*0.01*	0.9	5.3	*0.5*	*0.5*
EARC0399_36-38	24S1311/037	36	38	J2	JOF	Ox	6.7	5	*0.01*		*0.01*	1	5.4	*0.5*	*0.5*
EARC0399_52-54	24S1311/038	52	54	J2	JOF	Ox	6.4	6	*0.01*		*0.01*	1.1	5.2	*0.5*	*0.5*
EARC0459_24-26	24S1311/052	24	26	J2	JOF	Hyd	7.2	3	*0.01*	*0.01*	*0.01*	1.9	5.8	*0.5*	*0.5*
EARC0459_32-34	24S1311/053	32	34	J1	JOF	Ox	7	8	0.01	*0.01*	*0.01*	2	5.3	*0.5*	*0.5*
EARC0543_10-12	24S1311/079	10	12	J2	JOF	Hyd	6.6	11	0.05	*0.01*	*0.01*	1.1	5.5	*0.5*	*0.5*
EARC0284_28-30	24S1311/011	28	30	MCS	MCS	Ox	7.7	14	*0.01*	*0.01*	*0.01*	2.4	5.6	*0.5*	*0.5*
EARC0284_34-36	24S1311/012	34	36	MCS	MCS	Ox	7.3	31	*0.01*		*0.01*	2.7	5.3	*0.5*	*0.5*
EARC0350_46-48	24S1311/030	46	48	MCS	MCS	Ox	7.9	7	0.02	*0.01*	*0.01*	2.9	6.1	*0.5*	*0.5*
EARC0474_30-32	24S1311/063	30	32	MCS	MCS	Hyd	8	18	0.05		*0.01*	2.8	6.5	*0.5*	*0.5*
EARC0561_12-14	24S1311/082	12	14	MCS	MCS	Hyd	7.7	2	0.02		*0.01*	2.8	5.9	*0.5*	*0.5*
EARC0561_24-26	24S1311/083	24	26	MCS	MCS	Hyd	8	6	0.02	*0.01*	*0.01*	1.7	5.7	*0.5*	*0.5*
EARC0229_02-04	24S1311/001	2	4	WS2	WS	Hyd	6.5	5	0.06	*0.01*	*0.01*	1.1	5.5	*0.5*	*0.5*
EARC0229_10-12	24S1311/002	10	12	WS2	WS	Hyd	6.2	16	0.03		*0.01*	1.4	5.4	*0.5*	*0.5*
EARC0229_22-24	24S1311/003	22	24	WS1	WS	Ox	6.4	51	0.03	*0.01*	*0.01*	1.2	5.8	*0.5*	*0.5*
EARC0275_04-06	24S1311/007	4	6	WS2	WS	Ox	8.1	10	0.01	*0.01*	*0.01*	4.6	6.2	*0.5*	*0.5*
EARC0377_12-14	24S1311/032	12	14	WS2	WS	Ox	7.6	11	0.02		*0.01*	2.5	5.9	*0.5*	*0.5*
EARC0377_20-22	24S1311/033	20	22	WS2	WS	Ox	7.2	21	0.01	*0.01*	*0.01*	1.1	6.1	*0.5*	*0.5*
EARC0377_30-32	24S1311/034	30	32	WS2	WS	Ox	7.5	5	*0.01*		*0.01*	1.2	5.6	*0.5*	*0.5*
EARC0405_12-14	24S1311/040	12	14	WS2	WS	Hyd	6.9	6	0.05	*0.01*	*0.01*	2.7	5.9	*0.5*	*0.5*
EARC0405_22-24	24S1311/041	22	24	WS1	WS	Ox	7.6	6	0.08		*0.01*	2.9	6	*0.5*	*0.5*
EARC0405_30-32	24S1311/042	30	32	WS1	WS	Ox	7.1	14	0.02		*0.01*	2.6	5.6	*0.5*	*0.5*
EARC0459_48-50	24S1311/054	48	50	WS2	WS	Ox	7.2	6	*0.01*	*0.01*	*0.01*	1.9	6.7	*0.5*	*0.5*
EARC0467_20-22	24S1311/057	20	22	WS2	WS	Hyd	6.6	4	*0.01*	*0.01*	*0.01*	1.1	5.2	*0.5*	*0.5*
EARC0467_36-38	24S1311/058	36	38	WS1	WS	Ox	6.6	2	0.01	*0.01*	*0.01*	1.4	5.3	*0.5*	*0.5*
EARC0493_06-08	24S1311/074	6	8	WS1	WS	Det	6.7	7	0.07	*0.01*	*0.01*	2.9	5.5	*0.5*	*0.5*
EARC0493_10-12	24S1311/075	10	12	WS1	WS	Hyd	7.2	4	0.04		*0.01*	2.5	5.5	*0.5*	*0.5*
EARC0543_68-70	24S1311/080	68	70	WS2	WS	Ox	7.5	6	0.02	*0.01*	*0.01*	2.5	7.1	*0.5*	*0.5*
EARC0563_08-10	24S1311/084	8	10	WS2	WS	Hyd	7	13	0.05	*0.01*	*0.01*	2.2	5.7	*0.5*	*0.5*
EARC0575_14-16	24S1311/088	14	16	WS1	WS	Det	6.2	6	0.06		*0.01*	1.9	5.3	*0.5*	*0.5*
EADD0041_0-0.4	24S1311/093	0	0.4	WS1	WS	Det	6.8	4	0.03	*0.01*	*0.01*	1.3	5.5	*0.5*	*0.5*
EADD0041_3-5	24S1311/094	3	5	WS1	WS	Det	6.8	10	0.04	*0.01*	*0.01*	2.7	5.7	*0.5*	*0.5*
EADD0042_33.1-33.69	24S1311/100	33.1	33.69	WS2	WS		6.9	4	0.02		*0.01*	1.3	5.5	*0.5*	*0.5*

Notes: ANC – acid neutralising capacity; EC – electrical conductivity; NAG – net acid generation; S – sulfur; S_{CR} – chromium reducible sulfur; S_{HCl} – hydrochloric acid extractable sulfur.

Table A.2: Carbon species, calculated acid base accounting parameters and classification

Sample ID	Lab ID	Depth		Interpreted STRAND	STRAT	LOD	0.05	0.05	0.05	0.005	-	-	-	-	-	-
		m	m			Unit	%	%	%	%	kg H_2SO/t	kg H_2SO/t	kg H_2SO/t	-	Classification	
		From	To			Weathering	C	TIC	TOC	N	MPA	Carb-NP	NAPP	NPR	MEND	AMIRA
EARC0350_06-08	24S1311/024	6	8	SCR	CzD3	Det	0.2	*0.05*	0.2	0.005	0.3	4.1	-2.1	7.8	NAF	NAF
EARC0405_06-08	24S1311/039	6	8	SCR	CzD3	Det	0.14	0.06	0.08	*0.005*	4.3	4.9	1.1	0.7	PAF	UC(NAF)
EARC0408_02-04	24S1311/045	2	4	ALU	CzD3	Det	0.06	*0.05*	*0.05*	*0.009*	0.6	4.1	-5.69	10.3	NAF	NAF
EARC0408_06-08	24S1311/046	6	8	ALU	CzD3	Det	0.05	*0.05*	*0.05*	*0.005*	0.3	4.1	-2.5	9.2	NAF	NAF
EARC0459_02-04	24S1311/049	2	4	ALU	CzD3	Det	0.31	*0.05*	0.27	*0.005*	0.3	4.1	-2.3	8.5	NAF	NAF
EARC0459_08-10	24S1311/050	8	10	ALU	CzD3	Det	0.05	*0.05*	*0.05*	*0.005*	0.3	4.1	-2.1	7.8	NAF	NAF
EARC0459_16-18	24S1311/051	16	18	SCR	CzD3	Det	*0.05*	*0.05*	*0.05*	*0.005*	0.3	4.1	-3.2	11.4	NAF	NAF
EARC0467_02-04	24S1311/055	2	4	ALU	CzD3	Det	*0.05*	*0.05*	*0.05*	*0.005*	0.3	4.1	-3.0	10.8	NAF	NAF
EARC0467_06-08	24S1311/056	6	8	ALU	CzD3	Det	0.05	*0.05*	*0.05*	0.005	0.3	4.1	-2.5	9.2	NAF	NAF
EARC0474_04-06	24S1311/060	4	6	ALU	CzD3	Det	*0.05*	*0.05*	*0.05*	0.005	0.3	4.1	-2.3	8.5	NAF	NAF
EARC0474_12-14	24S1311/061	12	14	SCR	CzD3	Det	*0.05*	*0.05*	*0.05*	*0.005*	1.2	4.1	-0.8	1.6	UC	NAF
EARC0543_02-04	24S1311/078	2	4	SCR	CzD3	Det	0.08	*0.05*	0.06	*0.005*	0.9	4.1	-1.4	2.5	UC	NAF
EARC0561_02-04	24S1311/081	2	4	SCR	CzD3	Det	0.06	*0.05*	*0.05*	0.006	0.6	4.1	-2.9	5.7	NAF	NAF
EARC0575_06-08	24S1311/087	6	8	ALU	CzD3	Det	0.59	*0.05*	0.58	*0.006*	0.6	4.1	-1.3	3.1	NAF	UC(PAF)
HR_MET0006_3-3.1	24S1311/091	3	3.1	ALU	CzD3	Det	0.05	*0.05*	*0.05*	*0.007*	1.5	4.1	-1.3	1.8	UC	NAF
EADD0042_1-1.25	24S1311/097	1	1.25	ALU	CzD3	Det	0.07	*0.05*	0.06	*0.007*	0.3	4.1	-1.9	7.2	NAF	NAF
EADD0042_3.9-4.4	24S1311/098	3.9	4.4	ALU	CzD3	Det	*0.05*	*0.05*	*0.05*	*0.005*	0.6	4.1	-1.9	4.1	NAF	NAF
EADD0042_16-16.5	24S1311/099	16	16.5	SCR	CzD3	Det	0.09	*0.05*	0.07	*0.005*	0.6	4.1	-0.3	1.5	UC	NAF
EARC0229_28-30	24S1311/004	28	30	DG3	DG	Ox	0.08	*0.05*	0.06	*0.005*	0.3	4.1	-1.4	5.6	NAF	NAF
EARC0229_42-44	24S1311/005	42	44	DG3	DG	Ox	0.13	*0.05*	0.12	0.005	0.3	4.1	-1.2	4.9	NAF	NAF
EARC0229_50-52	24S1311/006	50	52	DG3	DG	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.3	4.1	-0.8	3.6	NAF	NAF
EARC0275_66-68	24S1311/008	66	68	DG2	DG	Ox	0.15	*0.05*	0.15	*0.005*	0.3	4.1	-1.3	5.2	NAF	NAF
EARC0324_04-06	24S1311/018	4	6	DG2	DG	Hyd	*0.05*	*0.05*	*0.05*	*0.005*	0.6	4.1	-1.9	4.1	NAF	NAF
EARC0324_10-12	24S1311/019	10	12	DG2	DG	Hyd	*0.05*	*0.05*	*0.05*	*0.005*	0.6	4.1	-2.2	4.6	NAF	NAF
EARC0324_16-18	24S1311/020	16	18	DG2	DG	Hyd	*0.05*	*0.05*	*0.05*	0.005	0.9	4.1	-1.9	3.1	NAF	NAF
EARC0324_32-34	24S1311/021	32	34	DG1	DG	Ox	0.05	*0.05*	0.05	0.005	0.9	4.1	-1.1	2.2	UC	NAF
EARC0324_46-48	24S1311/022	46	48	DG1	DG	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.3	4.1	-2.0	7.5	NAF	NAF
EARC0324_62-64	24S1311/023	62	64	DG1	DG	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.3	4.1	-1.8	6.9	NAF	NAF
EARC0350_12-14	24S1311/025	12	14	DG1	DG	Hyd	0.36	*0.05*	0.35	*0.005*	1.5	4.1	-0.870	1.6	UC	NAF
EARC0350_18-20	24S1311/026	18	20	DG1	DG	Hyd	0.23	*0.05*	0.2	*0.005*	1.2	4.1	-1.1	1.9	UC	NAF
EARC0405_36-38	24S1311/043	36	38	DG3	DG	Ox	0.05	*0.05*	*0.05*	*0.005*	0.3	4.1	-1.3	5.2	NAF	NAF
EARC0405_60-62	24S1311/044	60	62	DG3	DG	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.3	4.1	-1.5	5.9	NAF	NAF
EARC0408_36-38	24S1311/047	36	38	DG1	DG		0.11	*0.05*	0.09	*0.005*	0.3	4.1	-1.1	4.6	NAF	NAF

Sample ID	Lab ID	Depth		Interpreted STRAND	STRAT	LOD	0.05	0.05	0.05	0.005	-	-	-	-	-	-
		m	m			Unit	%	%	%	%	kg H_2SO/t	kg H_2SO/t	kg H_2SO/t	-	Classification	
		From	To			Weathering	C	TIC	TOC	N	MPA	Carb-NP	NAPP	NPR	MEND	AMIRA
EARC0467_56-58	24S1311/059	56	58	DG3	DG	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.3	4.1	-0.7	3.3	NAF	NAF
EARC0480_04-06	24S1311/064	4	6	DG3	DG	Hyd	*0.05*	*0.05*	*0.05*	*0.005*	1.2	4.1	-1.1	1.9	UC	NAF
EARC0480_10-12	24S1311/065	10	12	DG3	DG	Hyd	0.05	*0.05*	*0.05*	0.005	0.9	4.1	-2.6	3.8	NAF	NAF
EARC0480_16-18	24S1311/066	16	18	DG3	DG	Hyd	*0.05*	*0.05*	*0.05*	*0.005*	1.2	4.1	-1.2	2.0	UC	NAF
EARC0480_24-26	24S1311/067	24	26	DG3	DG	Ox	*0.05*	*0.05*	*0.05*	0.005	0.9	4.1	-0.5	1.5	UC	NAF
EARC0480_32-34	24S1311/068	32	34	DG3	DG	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.9	4.1	0.1	0.9	PAF	UC(NAF)
EARC0480_64-66	24S1311/069	64	66	DG2	DG	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.9	4.1	-0.5	1.5	UC	NAF
EARC0491_02-04	24S1311/070	2	4	DG2	DG	Hyd	0.29	*0.05*	0.26	*0.006*	2.4	4.1	0.3	0.9	PAF	UC(NAF)
EARC0491_08-10	24S1311/071	8	10	DG2	DG	Hyd	0.06	*0.05*	*0.05*	0.005	0.9	4.1	-0.3	1.3	UC	NAF
EARC0491_16-18	24S1311/072	16	18	DG2	DG	Hyd	0.14	*0.05*	0.11	*0.005*	1.5	4.1	-0.1	1.0	UC	NAF
EARC0491_22-24	24S1311/073	22	24	DG2	DG	Hyd	0.15	*0.05*	0.12	*0.005*	1.2	4.1	-0.5	1.4	UC	NAF
EARC0493_28-30	24S1311/076	28	30	DG3	DG	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.6	4.1	-1.3	3.1	NAF	NAF
EARC0493_38-40	24S1311/077	38	40	DG3	DG	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.6	4.1	-0.8	2.3	UC	NAF
EARC0563_30-32	24S1311/085	30	32	DG3	DG	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.6	4.1	-0.7	2.1	UC	NAF
EARC0563_46-48	24S1311/086	46	48	DG3	DG	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.6	4.1	-0.6	2.0	UC	NAF
EARC0575_20-22	24S1311/089	20	22	DG3	DG	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.6	4.1	-0.4	1.6	UC	NAF
EARC0575_36-38	24S1311/090	36	38	DG3	DG	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.6	4.1	-1.6	3.6	NAF	NAF
HR_MET0006_48-50	24S1311/092	48	50	DG3	DG	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.6	4.1	0.1	0.8	PAF	UC(NAF)
EADD0041_7.5-7.7	24S1311/095	7.5	7.7	DG2	DG	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.6	4.1	-1.2	2.9	UC	NAF
EADD0041_48-48.3	24S1311/096	48	48.3	DG3	DG	Ox	0.15	0.07	0.08	*0.005*	0.9	5.7	-0.2	1.2	UC	NAF
EARC0284_04-06	24S1311/009	4	6	FWZ	FWZ	Hyd	0.27	*0.05*	0.25	*0.005*	0.9	4.1	-0.8	1.9	UC	NAF
EARC0284_14-16	24S1311/010	14	16	FWZ	FWZ	Hyd	0.26	*0.05*	0.24	*0.005*	0.9	4.1	-1.7	2.8	UC	NAF
EARC0350_24-26	24S1311/027	24	26	FWZ	FWZ	Hyd	0.24	*0.05*	0.22	*0.005*	0.6	4.1	-2.8	5.6	NAF	NAF
EARC0350_32-34	24S1311/028	32	34	FWZ	FWZ	Ox	0.08	*0.05*	0.07	*0.005*	0.3	4.1	-2.1	7.8	NAF	NAF
EARC0350_38-40	24S1311/029	38	40	FWZ	FWZ	Ox	0.09	*0.05*	0.09	*0.005*	0.3	4.1	-1.1	4.6	NAF	NAF
EARC0408_46-48	24S1311/048	46	48	FWZ	FWZ		*0.05*	*0.05*	*0.05*	*0.005*	0.3	4.1	-0.8	3.6	NAF	NAF
EARC0474_18-20	24S1311/062	18	20	FWZ	FWZ	Hyd	0.16	*0.05*	0.12	0.005	2.1	4.1	0.6	0.7	PAF	UC(NAF)
EARC0307_06-08	24S1311/013	6	8	J2	JOF	Ox	0.07	*0.05*	0.07	*0.005*	0.3	4.1	-0.9	3.9	NAF	NAF
EARC0307_14-16	24S1311/014	14	16	J2	JOF	Ox	0.14	*0.05*	0.13	*0.005*	0.9	4.1	-10.1	12.0	NAF	NAF
EARC0307_22-24	24S1311/015	22	24	J2	JOF	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.3	4.1	-1.9	7.2	NAF	NAF
EARC0307_46-48	24S1311/016	46	48	J1	JOF	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.3	4.1	-1.7	6.5	NAF	NAF
EARC0307_56-58	24S1311/017	56	58	J1	JOF	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.3	4.1	-3.7	13.1	NAF	NAF
EARC0377_02-04	24S1311/031	2	4	J1	JOF	Hyd	0.21	0.14	0.07	0.005	2.1	11.4	-3.3	2.5	UC	NAF
EARC0399_04-06	24S1311/035	4	6	J3	JOF	Det	0.73	0.22	0.51	*0.005*	2.1	18.0	0.0	1.0	PAF	PAF

Sample ID	Lab ID	Depth		Interpreted STRAND	STRAT	LOD	0.05	0.05	0.05	0.005	-	-	-	-	-	-
		m	m			Unit	%	%	%	%	kg H_2SO/t	kg H_2SO/t	kg H_2SO/t	-	Classification	
		From	To			Weathering	C	TIC	TOC	N	MPA	Carb-NP	NAPP	NPR	MEND	AMIRA
EARC0399_20-22	24S1311/036	20	22	J2	JOF	Ox	0.12	*0.05*	0.09	*0.005*	0.9	4.1	0.0	1.0	PAF	UC(NAF)
EARC0399_36-38	24S1311/037	36	38	J2	JOF	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.3	4.1	-0.7	3.3	NAF	NAF
EARC0399_52-54	24S1311/038	52	54	J2	JOF	Ox	0.19	*0.05*	0.19	*0.005*	0.3	4.1	-0.8	3.6	NAF	NAF
EARC0459_24-26	24S1311/052	24	26	J2	JOF	Hyd	0.1	*0.05*	0.05	*0.005*	0.3	4.1	-1.6	6.2	NAF	NAF
EARC0459_32-34	24S1311/053	32	34	J1	JOF	Ox	0.2	*0.05*	0.15	*0.005*	0.3	4.1	-1.7	6.5	NAF	NAF
EARC0543_10-12	24S1311/079	10	12	J2	JOF	Hyd	0.12	*0.05*	0.1	*0.005*	1.5	4.1	0.4	0.7	PAF	UC(NAF)
EARC0284_28-30	24S1311/011	28	30	MCS	MCS	Ox	0.1	*0.05*	0.1	*0.062*	0.3	4.1	-2.1	7.8	NAF	NAF
EARC0284_34-36	24S1311/012	34	36	MCS	MCS	Ox	0.39	*0.05*	0.38	*0.069*	0.3	4.1	-2.4	8.8	NAF	NAF
EARC0350_46-48	24S1311/030	46	48	MCS	MCS	Ox	*0.05*	*0.05*	*0.05*	*0.049*	0.6	4.1	-2.3	4.7	NAF	NAF
EARC0474_30-32	24S1311/063	30	32	MCS	MCS	Hyd	*0.05*	*0.05*	*0.05*	*0.038*	1.5	4.1	-1.3	1.8	UC	NAF
EARC0561_12-14	24S1311/082	12	14	MCS	MCS	Hyd	0.16	*0.05*	0.12	0.008	0.6	4.1	-2.2	4.6	NAF	NAF
EARC0561_24-26	24S1311/083	24	26	MCS	MCS	Hyd	*0.05*	*0.05*	*0.05*	*0.008*	0.6	4.1	-1.1	2.8	UC	NAF
EARC0229_02-04	24S1311/001	2	4	WS2	WS	Hyd	0.11	*0.05*	0.1	*0.005*	1.8	4.1	0.7	0.6	PAF	UC(NAF)
EARC0229_10-12	24S1311/002	10	12	WS2	WS	Hyd	0.1	*0.05*	0.08	*0.005*	0.9	4.1	-0.5	1.5	UC	NAF
EARC0229_22-24	24S1311/003	22	24	WS1	WS	Ox	0.12	*0.05*	0.12	*0.005*	0.9	4.1	-0.3	1.3	UC	NAF
EARC0275_04-06	24S1311/007	4	6	WS2	WS	Ox	0.07	*0.05*	0.06	*0.005*	0.3	4.1	-4.3	15.0	NAF	NAF
EARC0377_12-14	24S1311/032	12	14	WS2	WS	Ox	0.06	0.06	*0.05*	*0.005*	0.6	4.9	-1.9	4.1	NAF	NAF
EARC0377_20-22	24S1311/033	20	22	WS2	WS	Ox	*0.05*	0.06	*0.05*	*0.005*	0.3	4.9	-0.8	3.6	NAF	NAF
EARC0377_30-32	24S1311/034	30	32	WS2	WS	Ox	*0.05*	*0.05*	*0.05*	*0.008*	0.3	4.1	-0.9	3.9	NAF	NAF
EARC0405_12-14	24S1311/040	12	14	WS2	WS	Hyd	0.36	0.1	0.26	0.005	1.5	8.2	-1.2	1.8	UC	NAF
EARC0405_22-24	24S1311/041	22	24	WS1	WS	Ox	0.1	0.07	*0.05*	0.005	2.4	5.7	-0.5	1.2	UC	NAF
EARC0405_30-32	24S1311/042	30	32	WS1	WS	Ox	0.16	0.06	0.1	0.005	0.6	4.9	-2.0	4.2	NAF	NAF
EARC0459_48-50	24S1311/054	48	50	WS2	WS	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.3	4.1	-1.6	6.2	NAF	NAF
EARC0467_20-22	24S1311/057	20	22	WS2	WS	Hyd	*0.05*	*0.05*	*0.05*	*0.016*	0.3	4.1	-0.8	3.6	NAF	NAF
EARC0467_36-38	24S1311/058	36	38	WS1	WS	Ox	*0.05*	*0.05*	*0.05*	*0.005*	0.3	4.1	-1.1	4.6	NAF	NAF
EARC0493_06-08	24S1311/074	6	8	WS1	WS	Det	0.12	*0.05*	0.09	*0.005*	2.1	4.1	-0.8	1.4	UC	NAF
EARC0493_10-12	24S1311/075	10	12	WS1	WS	Hyd	0.06	*0.05*	0.05	*0.005*	1.2	4.1	-1.3	2.0	UC	NAF
EARC0543_68-70	24S1311/080	68	70	WS2	WS	Ox	*0.05*	*0.05*	*0.05*	*0.028*	0.6	4.1	-1.9	4.1	NAF	NAF
EARC0563_08-10	24S1311/084	8	10	WS2	WS	Hyd	*0.05*	*0.05*	*0.05*	*0.005*	1.5	4.1	-0.7	1.4	UC	NAF
EARC0575_14-16	24S1311/088	14	16	WS1	WS	Det	0.1	*0.05*	0.08	*0.005*	1.8	4.1	-0.1	1.0	UC	NAF
EADD0041_0-0.4	24S1311/093	0	0.4	WS1	WS	Det	0.13	*0.05*	0.11	*0.006*	0.9	4.1	-0.4	1.4	UC	NAF
EADD0041_3-5	24S1311/094	3	5	WS1	WS	Det	*0.05*	*0.05*	*0.05*	0.005	1.2	4.1	-1.5	2.2	UC	NAF
EADD0042_33.1-33.69	24S1311/100	33.1	33.69	WS2	WS		*0.05*	*0.05*	*0.05*	*0.006*	0.6	4.1	-0.7	2.1	UC	NAF

Notes: C – carbon (total); TIC – total inorganic carbon; TOC – total organic carbon; Carb-NP – carbonate neutralising potential; MPA – maximum potential acidity; N – nitrogen; NAPP – net acid production potential; NPR – neutralisation potential ratio.

Table A.3: Multi-elemental analysis results (1 of 3)

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.05	10	0.2	50	0.1	0.05	0.05	10	0.05	0.5	0.02	0.05	1	0.5
		m	m		Unit	mg/kg	mg/kg	mg/kg	ppm	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg
		From	To		Member	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cl	Cr	CrIII	CrVI
EARC0350_06-08	24S1311/024	6	8	SCR	CzD3	*0.05*	23900	27	73	240	0.55	0.48	480	*0.05*	4.3	*0.02*	77	76	1.3
EARC0405_06-08	24S1311/039	6	8	SCR	CzD3	*0.05*	14100	42	52	35	0.67	0.27	290	*0.05*	8.5	*0.02*	34	33	1.1
EARC0408_02-04	24S1311/045	2	4	ALU	CzD3	0.07	12600	41	199	73	1.4	0.27	410	*0.05*	11	0.03	51	49	1.7
EARC0408_06-08	24S1311/046	6	8	ALU	CzD3	*0.05*	4820	13	*50*	44	0.66	*0.05*	130	*0.05*	8.1	*0.02*	4.8	4	1.2
EARC0459_02-04	24S1311/049	2	4	ALU	CzD3	0.07	8030	16	64	380	1.8	0.06	170	0.06	31	*0.02*	9.6	8	1.8
EARC0459_08-10	24S1311/050	8	10	ALU	CzD3	*0.05*	1300	4	*50*	27	0.59	*0.05*	*100*	*0.05*	9.8	*0.02*	6.4	5	1.6
EARC0459_16-18	24S1311/051	16	18	SCR	CzD3	*0.05*	14100	46	124	210	1.2	0.59	1200	*0.05*	1.9	*0.02*	59	58	0.8
EARC0467_02-04	24S1311/055	2	4	ALU	CzD3	*0.05*	8550	14	*50*	15	1.5	0.06	150	0.06	5.1	*0.02*	8.4	7	1.2
EARC0467_06-08	24S1311/056	6	8	ALU	CzD3	*0.05*	14200	7.5	*50*	75	0.39	0.16	300	*0.05*	5	*0.02*	17	16	1.1
EARC0474_04-06	24S1311/060	4	6	ALU	CzD3	*0.05*	22400	14	52	15	0.57	0.18	320	*0.05*	7.1	*0.02*	26	25	1.2
EARC0474_12-14	24S1311/061	12	14	SCR	CzD3	0.08	16300	13	142	34	0.92	0.5	330	*0.05*	7.4	*0.02*	32	31	1.3
EARC0543_02-04	24S1311/078	2	4	SCR	CzD3	0.13	21400	200	157	32	1.1	0.81	340	0.11	7.1	0.02	36	35	1.2
EARC0561_02-04	24S1311/081	2	4	SCR	CzD3	*0.05*	3370	1.5	*50*	38	0.49	*0.05*	160	*0.05*	9.1	*0.02*	11	9	1.4
EARC0575_06-08	24S1311/087	6	8	ALU	CzD3	*0.05*	6940	2.4	*50*	7.5	0.57	0.07	260	*0.05*	7.1	*0.02*	14	12	1.5
HR_MET0006_3-3.1	24S1311/091	3	3.1	ALU	CzD3	*0.05*	1270	3	*50*	8.3	0.61	*0.05*	*100*	*0.05*	7.7	*0.02*	16	13	2.5
EADD0042_1-1.25	24S1311/097	1	1.25	ALU	CzD3	*0.05*	3450	2	*50*	13	1.2	0.05	140	*0.05*	6.4	*0.02*	8.5	7	1.1
EADD0042_3.9-4.4	24S1311/098	3.9	4.4	ALU	CzD3	*0.05*	9250	6.7	*50*	230	2.4	0.11	1200	*0.05*	6.9	*0.02*	14	14	0.8
EADD0042_16-16.5	24S1311/099	16	16.5	SCR	CzD3	*0.05*	7160	13	*50*	84	0.88	0.06	230	*0.05*	3.2	*0.02*	17	16	0.8
EARC0229_28-30	24S1311/004	28	30	DG3	DG	*0.05*	7610	12	*50*	50	0.99	*0.05*	250	*0.05*	2.9	*0.02*	5.6	5	0.8
EARC0229_42-44	24S1311/005	42	44	DG3	DG	*0.05*	14300	33	51	770	2.1	0.37	380	0.11	43	*0.02*	26	25	0.9
EARC0229_50-52	24S1311/006	50	52	DG3	DG	*0.05*	4030	3.4	*50*	26	1.2	*0.05*	*100*	*0.05*	5	*0.02*	1.3	*1*	0.9
EARC0275_66-68	24S1311/008	66	68	DG2	DG	*0.05*	3350	2.5	*50*	27	0.91	*0.05*	*100*	*0.05*	2.7	*0.02*	7.4	6	1.1
EARC0324_04-06	24S1311/018	4	6	DG2	DG	*0.05*	1170	4.5	*50*	5.6	0.56	*0.05*	*100*	*0.05*	3.4	*0.02*	4.6	3	1.2
EARC0324_10-12	24S1311/019	10	12	DG2	DG	*0.05*	20300	15	*50*	57	0.87	0.35	390	0.06	5.5	*0.02*	130	130	1.5
EARC0324_16-18	24S1311/020	16	18	DG2	DG	*0.05*	20000	14	53	23	0.54	0.37	330	*0.05*	4.7	*0.02*	42	40	1.9
EARC0324_32-34	24S1311/021	32	34	DG1	DG	*0.05*	13500	11	*50*	33	0.68	0.1	320	*0.05*	7.8	*0.02*	24	22	1.4
EARC0324_46-48	24S1311/022	46	48	DG1	DG	*0.05*	8780	16	198	16	1.3	0.1	200	*0.05*	3.9	*0.02*	27	23	3.7
EARC0324_62-64	24S1311/023	62	64	DG1	DG	*0.05*	3730	22	*50*	60	1.3	0.06	*100*	*0.05*	7.8	*0.02*	21	19	1.8
EARC0350_12-14	24S1311/025	12	14	DG1	DG	*0.05*	2410	32	*50*	35	0.84	0.07	100	0.07	14	*0.02*	22	20	1.9
EARC0350_18-20	24S1311/026	18	20	DG1	DG	*0.05*	16700	170	101	74	1.6	0.76	530	0.21	7.5	*0.02*	26	25	1.2
EARC0405_36-38	24S1311/043	36	38	DG3	DG	*0.05*	11900	4.7	*50*	190	0.49	0.08	1500	*0.05*	2.9	*0.02*	12	11	0.5
EARC0405_60-62	24S1311/044	60	62	DG3	DG	*0.05*	8290	8.4	*50*	48	1.2	0.1	260	0.06	8.1	*0.02*	17	17	*0.5*
EARC0408_36-38	24S1311/047	36	38	DG1	DG	*0.05*	11300	3.2	*50*	67	0.8	0.36	190	*0.05*	20	*0.02*	55	51	4.4

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.05	10	0.2	50	0.1	0.05	0.05	10	0.05	0.5	0.02	0.05	1	0.5
		m	m		Unit	mg/kg	mg/kg	mg/kg	ppm	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg
		From	To		Member	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cl	Cr	CrIII	CrVI
EARC0467_56-58	24S1311/059	56	58	DG3	DG	0.08	8640	8.9	93	22	1.3	0.16	110	*0.05*	5.2	*0.02*	29	26	3
EARC0480_04-06	24S1311/064	4	6	DG3	DG	*0.05*	14700	27	*50*	190	0.63	0.3	400	*0.05*	3.8	*0.02*	31	29	1.3
EARC0480_10-12	24S1311/065	10	12	DG3	DG	*0.05*	8210	3	*50*	16	0.91	0.09	170	*0.05*	6.5	*0.02*	7.5	6	1.3
EARC0480_16-18	24S1311/066	16	18	DG3	DG	*0.05*	1980	1.7	*50*	6.7	0.74	*0.05*	*100*	*0.05*	7.5	*0.02*	5.1	4	0.8
EARC0480_24-26	24S1311/067	24	26	DG3	DG	*0.05*	1980	2	*50*	27	3.2	*0.05*	130	0.06	13	*0.02*	14	13	0.9
EARC0480_32-34	24S1311/068	32	34	DG3	DG	*0.05*	21300	24	133	340	0.36	0.54	910	*0.05*	4.6	*0.02*	72	71	0.8
EARC0480_64-66	24S1311/069	64	66	DG2	DG	*0.05*	19500	25	53	15	0.71	0.35	480	0.08	7.5	*0.02*	37	36	0.8
EARC0491_02-04	24S1311/070	2	4	DG2	DG	*0.05*	13000	48	79	15	0.82	0.23	500	*0.05*	6.3	*0.02*	21	20	1.5
EARC0491_08-10	24S1311/071	8	10	DG2	DG	*0.05*	10600	62	92	25	1.1	0.4	310	*0.05*	6.5	*0.02*	85	82	3.7
EARC0491_16-18	24S1311/072	16	18	DG2	DG	*0.05*	5570	16	*50*	8.2	0.52	0.08	150	*0.05*	2.4	*0.02*	24	22	2
EARC0491_22-24	24S1311/073	22	24	DG2	DG	*0.05*	8910	8.9	*50*	7.3	0.76	0.08	180	*0.05*	2.4	*0.02*	9.6	9	0.8
EARC0493_28-30	24S1311/076	28	30	DG3	DG	0.06	26600	17	*50*	780	1.1	0.26	1500	0.06	15	*0.02*	130	130	0.8
EARC0493_38-40	24S1311/077	38	40	DG3	DG	0.06	26000	13	*50*	88	0.69	0.28	610	*0.05*	6.3	*0.02*	150	150	1.2
EARC0563_30-32	24S1311/085	30	32	DG3	DG	*0.05*	4610	4.7	*50*	12	0.82	*0.05*	110	*0.05*	6	*0.02*	8.1	7	0.7
EARC0563_46-48	24S1311/086	46	48	DG3	DG	*0.05*	986	6.7	*50*	17	0.69	*0.05*	*100*	*0.05*	7.1	*0.02*	5.6	5	0.8
EARC0575_20-22	24S1311/089	20	22	DG3	DG	0.07	20000	13	*50*	280	0.95	0.23	1200	0.05	13	*0.02*	140	140	0.8
EARC0575_36-38	24S1311/090	36	38	DG3	DG	*0.05*	27500	10	*50*	120	0.59	0.32	880	*0.05*	12	*0.02*	150	150	0.7
HR_MET0006_48-50	24S1311/092	48	50	DG3	DG	*0.05*	32000	6.1	57	47	0.76	0.25	1100	*0.05*	5.4	*0.02*	110	110	0.7
EADD0041_7.5-7.7	24S1311/095	7.5	7.7	DG2	DG	*0.05*	14500	4.9	*50*	13	1.4	0.12	430	*0.05*	3.8	*0.02*	24	23	0.9
EADD0041_48-48.3	24S1311/096	48	48.3	DG3	DG	*0.05*	12200	5.3	*50*	9.4	2.8	0.09	410	*0.05*	3.8	*0.02*	20	20	0.9
EARC0284_04-06	24S1311/009	4	6	FWZ	FWZ	*0.05*	9750	29	*50*	70	1	0.25	400	*0.05*	2.5	*0.02*	38	37	0.9
EARC0284_14-16	24S1311/010	14	16	FWZ	FWZ	*0.05*	19600	11	*50*	98	0.76	0.21	730	*0.05*	7.3	*0.02*	110	110	0.7
EARC0350_24-26	24S1311/027	24	26	FWZ	FWZ	*0.05*	18500	21	*50*	38	0.4	0.33	390	*0.05*	3.7	*0.02*	220	220	1.1
EARC0350_32-34	24S1311/028	32	34	FWZ	FWZ	*0.05*	8560	2.7	222	22	0.44	0.18	200	*0.05*	3.5	*0.02*	11	10	0.6
EARC0350_38-40	24S1311/029	38	40	FWZ	FWZ	*0.05*	3760	26	*50*	21	3.9	0.06	*100*	*0.05*	11	*0.02*	22	19	3.1
EARC0408_46-48	24S1311/048	46	48	FWZ	FWZ	*0.05*	1030	4.7	*50*	7.6	0.75	*0.05*	*100*	*0.05*	5	*0.02*	8.6	7	1.8
EARC0474_18-20	24S1311/062	18	20	FWZ	FWZ	*0.05*	10900	8.4	*50*	54	0.87	0.19	570	*0.05*	8.8	*0.02*	100	100	1
EARC0307_06-08	24S1311/013	6	8	J2	JOF	*0.05*	16800	15	*50*	17	0.61	0.25	380	*0.05*	3.7	*0.02*	140	140	1.2
EARC0307_14-16	24S1311/014	14	16	J2	JOF	*0.05*	9530	12	58	64	0.67	0.1	240	*0.05*	3.5	*0.02*	22	21	0.8
EARC0307_22-24	24S1311/015	22	24	J2	JOF	*0.05*	6220	1.6	77	77	0.3	0.74	200	*0.05*	8.6	*0.02*	16	14	1.9
EARC0307_46-48	24S1311/016	46	48	J1	JOF	*0.05*	4600	16	*50*	60	0.72	0.09	480	*0.05*	4.9	*0.02*	15	14	0.9
EARC0307_56-58	24S1311/017	56	58	J1	JOF	*0.05*	5580	9.3	*50*	54	0.72	*0.05*	720	*0.05*	3.8	*0.02*	16	15	0.6
EARC0377_02-04	24S1311/031	2	4	J1	JOF	*0.05*	11800	20	*50*	7.2	2.3	0.07	320	*0.05*	7.3	*0.02*	20	19	0.5
EARC0399_04-06	24S1311/035	4	6	J3	JOF	*0.05*	8310	15	*50*	7.5	1.4	0.16	230	*0.05*	3.8	*0.02*	19	18	0.7
EARC0399_20-22	24S1311/036	20	22	J2	JOF	*0.05*	2050	7.3	*50*	9.5	1	*0.05*	*100*	*0.05*	7.9	*0.02*	15	13	1.4

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.05	10	0.2	50	0.1	0.05	0.05	10	0.05	0.5	0.02	0.05	1	0.5
		m	m		Unit	mg/kg	mg/kg	mg/kg	ppm	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg
		From	To		Member	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cl	Cr	CrIII	CrVI
EARC0399_36-38	24S1311/037	36	38	J2	JOF	*0.05*	5220	34	58	43	2.2	0.16	320	0.09	4.6	*0.02*	18	16	1.5
EARC0399_52-54	24S1311/038	52	54	J2	JOF	*0.05*	13600	23	136	79	0.93	0.23	460	0.07	5.7	*0.02*	20	19	0.8
EARC0459_24-26	24S1311/052	24	26	J2	JOF	*0.05*	3980	13	*50*	7.2	0.72	*0.05*	130	*0.05*	2.3	*0.02*	9	7	1.7
EARC0459_32-34	24S1311/053	32	34	J1	JOF	*0.05*	7450	11	*50*	9.8	0.75	0.28	230	*0.05*	4.7	*0.02*	15	14	0.9
EARC0543_10-12	24S1311/079	10	12	J2	JOF	*0.05*	9010	8.2	144	10	1.4	0.13	200	*0.05*	7.4	*0.02*	30	28	1.7
EARC0284_28-30	24S1311/011	28	30	MCS	MCS	*0.05*	26400	20	197	110	0.74	0.44	560	*0.05*	3	*0.02*	55	54	0.6
EARC0284_34-36	24S1311/012	34	36	MCS	MCS	*0.05*	17300	26	116	38	1.8	0.33	830	*0.05*	4.5	*0.02*	69	68	0.8
EARC0350_46-48	24S1311/030	46	48	MCS	MCS	*0.05*	5660	8	*50*	9	1.2	0.06	170	*0.05*	3.4	*0.02*	6.8	6	0.6
EARC0474_30-32	24S1311/063	30	32	MCS	MCS	*0.05*	5580	3.8	*50*	80	1.2	*0.05*	140	*0.05*	12	*0.02*	*0.5*	*1*	*0.5*
EARC0561_12-14	24S1311/082	12	14	MCS	MCS	0.06	28500	12	*50*	100	0.34	0.28	690	*0.05*	2.7	*0.02*	110	110	0.8
EARC0561_24-26	24S1311/083	24	26	MCS	MCS	*0.05*	8240	1.6	*50*	6.1	0.63	0.05	200	*0.05*	3.9	*0.02*	17	16	0.7
EARC0229_02-04	24S1311/001	2	4	WS2	WS	0.05	9450	18	255	90	1.1	0.55	340	0.09	9.3	*0.02*	15	14	0.8
EARC0229_10-12	24S1311/002	10	12	WS2	WS	0.06	14100	14	*50*	210	1.1	0.2	1000	0.06	8.8	*0.02*	99	98	0.7
EARC0229_22-24	24S1311/003	22	24	WS1	WS	0.12	20800	18	75	19	0.83	0.49	600	*0.05*	6.2	*0.02*	70	69	0.7
EARC0275_04-06	24S1311/007	4	6	WS2	WS	*0.05*	5950	18	*50*	27	0.33	0.26	360	*0.05*	7.7	*0.02*	25	24	0.7
EARC0377_12-14	24S1311/032	12	14	WS2	WS	*0.05*	10900	47	116	78	0.74	0.52	580	*0.05*	2.9	*0.02*	72	72	*0.5*
EARC0377_20-22	24S1311/033	20	22	WS2	WS	*0.05*	5770	18	51	6	0.92	0.09	120	*0.05*	12	*0.02*	9.4	8	1
EARC0377_30-32	24S1311/034	30	32	WS2	WS	*0.05*	2150	5.3	*50*	12	0.96	*0.05*	*100*	*0.05*	3	*0.02*	1.8	1	0.6
EARC0405_12-14	24S1311/040	12	14	WS2	WS	0.08	19600	12	*50*	42	0.77	0.35	330	0.05	8	*0.02*	180	180	1.2
EARC0405_22-24	24S1311/041	22	24	WS1	WS	*0.05*	31500	26	54	76	1.4	0.35	260	*0.05*	5.8	*0.02*	96	95	1.4
EARC0405_30-32	24S1311/042	30	32	WS1	WS	*0.05*	3390	4.4	*50*	8.8	0.98	*0.05*	*100*	*0.05*	5.6	*0.02*	15	14	1.2
EARC0459_48-50	24S1311/054	48	50	WS2	WS	*0.05*	6910	14	167	18	2.1	0.05	180	*0.05*	6.9	*0.02*	8.7	7	1.5
EARC0467_20-22	24S1311/057	20	22	WS2	WS	0.12	21900	14	*50*	61	1.5	0.28	680	*0.05*	4.7	*0.02*	180	180	1.1
EARC0467_36-38	24S1311/058	36	38	WS1	WS	0.35	635	3	*50*	15	0.89	*0.05*	*100*	*0.05*	6.4	*0.02*	8.7	9	*0.5*
EARC0493_06-08	24S1311/074	6	8	WS1	WS	0.15	18100	55	103	29	1.4	0.38	240	*0.05*	5.7	*0.02*	150	150	1.1
EARC0493_10-12	24S1311/075	10	12	WS1	WS	*0.05*	25900	55	173	160	1.2	0.34	810	*0.05*	9.4	*0.02*	69	69	*0.5*
EARC0543_68-70	24S1311/080	68	70	WS2	WS	*0.05*	10000	42	340	66	5.3	0.47	490	0.16	13	*0.02*	54	53	0.5
EARC0563_08-10	24S1311/084	8	10	WS2	WS	*0.05*	3700	110	*50*	6.9	0.25	*0.05*	130	*0.05*	1.7	*0.02*	4.7	5	*0.5*
EARC0575_14-16	24S1311/088	14	16	WS1	WS	0.11	22200	11	*50*	70	1.5	0.16	630	*0.05*	14	*0.02*	100	100	1.2
EADD0041_0-0.4	24S1311/093	0	0.4	WS1	WS	0.1	19800	7.8	*50*	180	0.92	0.2	860	*0.05*	8.3	*0.02*	100	100	0.6
EADD0041_3-5	24S1311/094	3	5	WS1	WS	0.05	9700	19	80	15	0.2	0.49	230	*0.05*	3.7	*0.02*	60	59	0.9
EADD0042_33.1-33.69	24S1311/100	33.1	33.69	WS2	WS	*0.05*	12100	33	90	12	2.3	0.33	170	*0.05*	5	*0.02*	39	39	0.7

Table A.4: Multi-elemental analysis results (2 of 3)

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.5	50	5	0.02	5	0.1	0.2	5	0.2	0.05	10	0.1	5
		m	m		Unit	mg/kg	ppm	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		From	To		Member	Cu	F	Fe	Hg	K	La	Li	Mg	Mn	Mo	Na	Ni	P
EARC0350_06-08	24S1311/024	6	8	SCR	CzD3	9.1	*80*	200000	0.02	240	5.2	6.4	340	75	1.6	160	5	260
EARC0405_06-08	24S1311/039	6	8	SCR	CzD3	11	*110*	310000	0.03	170	3.3	*2*	400	260	1.9	170	6.6	450
EARC0408_02-04	24S1311/045	2	4	ALU	CzD3	19	161	310000	0.05	130	6.3	3.8	440	490	1.8	220	14	770
EARC0408_06-08	24S1311/046	6	8	ALU	CzD3	3.2	50	250000	0.03	*50*	3	*2*	220	310	0.49	*100*	6.2	500
EARC0459_02-04	24S1311/049	2	4	ALU	CzD3	10	*53*	310000	0.13	82	21	2.5	340	2400	0.92	120	15	680
EARC0459_08-10	24S1311/050	8	10	ALU	CzD3	2.4	50	220000	0.02	*50*	2	*2*	180	260	0.89	*100*	4.5	380
EARC0459_16-18	24S1311/051	16	18	SCR	CzD3	7.5	90	220000	*0.02*	570	3.6	*2*	480	190	1.4	320	6.9	620
EARC0467_02-04	24S1311/055	2	4	ALU	CzD3	14	50	350000	0.03	*50*	2.9	2.2	410	260	0.61	*100*	14	1100
EARC0467_06-08	24S1311/056	6	8	ALU	CzD3	7.6	152	300000	0.14	190	4	*2*	310	38	1.2	120	11	220
EARC0474_04-06	24S1311/060	4	6	ALU	CzD3	12	151	350000	0.2	220	6.7	*2*	550	16	1.1	240	18	240
EARC0474_12-14	24S1311/061	12	14	SCR	CzD3	22	1709	21000	0.1	6000	35	10	2600	110	2.3	160	14	*50*
EARC0543_02-04	24S1311/078	2	4	SCR	CzD3	140	1588	68000	0.48	6100	31	15	2400	120	7.5	200	66	120
EARC0561_02-04	24S1311/081	2	4	SCR	CzD3	3.4	54	180000	0.02	60	*1*	*2*	170	50	1	*100*	2.7	270
EARC0575_06-08	24S1311/087	6	8	ALU	CzD3	2.7	*180*	230000	*0.02*	59	*1*	*2*	240	78	1.1	180	3.4	480
HR_MET0006_3-3.1	24S1311/091	3	3.1	ALU	CzD3	5.9	50	200000	*0.02*	*50*	2	*2*	140	38	1.5	*100*	2.9	170
EADD0042_1-1.25	24S1311/097	1	1.25	ALU	CzD3	2.6	50	270000	0.03	56	3.7	*2*	310	220	1	*100*	9.5	350
EADD0042_3.9-4.4	24S1311/098	3.9	4.4	ALU	CzD3	4.8	144	240000	0.03	1200	9.4	*2*	2500	2600	1.4	*100*	8.1	480
EADD0042_16-16.5	24S1311/099	16	16.5	SCR	CzD3	5.6	55	290000	*0.02*	300	3.2	*2*	290	190	0.76	210	5	540
EARC0229_28-30	24S1311/004	28	30	DG3	DG	3.5	64	310000	*0.02*	220	8.2	*2*	360	190	0.56	180	6.3	520
EARC0229_42-44	24S1311/005	42	44	DG3	DG	5.5	73	270000	*0.02*	170	18	4.6	340	380	1.9	230	16	640
EARC0229_50-52	24S1311/006	50	52	DG3	DG	3.8	*50*	280000	*0.02*	*50*	2.5	*2*	200	200	0.22	*100*	7.7	430
EARC0275_66-68	24S1311/008	66	68	DG2	DG	6.7	*50*	260000	0.03	*50*	3.6	*2*	240	280	0.38	*100*	7.1	500
EARC0324_04-06	24S1311/018	4	6	DG2	DG	2.9	50	260000	*0.02*	*50*	1.9	*2*	160	100	0.64	*100*	3.2	370
EARC0324_10-12	24S1311/019	10	12	DG2	DG	17	85	250000	*0.02*	550	5.2	12	430	340	1.3	*100*	13	280
EARC0324_16-18	24S1311/020	16	18	DG2	DG	7.7	107	390000	0.06	150	2.9	*2*	350	45	2	*100*	7.9	410
EARC0324_32-34	24S1311/021	32	34	DG1	DG	7.9	*74*	350000	0.08	150	3.6	2.4	370	95	1.2	*100*	12	490
EARC0324_46-48	24S1311/022	46	48	DG1	DG	26	55	290000	0.07	56	3.2	3	330	49	1.6	*100*	8.7	620
EARC0324_62-64	24S1311/023	62	64	DG1	DG	7.1	50	170000	0.14	80	14	*2*	290	450	1.3	*100*	13	350
EARC0350_12-14	24S1311/025	12	14	DG1	DG	10	60	110000	0.2	71	8.1	*2*	290	260	3.1	*100*	21	210
EARC0350_18-20	24S1311/026	18	20	DG1	DG	37	1307	170000	0.17	6400	57	10	2900	350	5.2	*100*	48	370
EARC0405_36-38	24S1311/043	36	38	DG3	DG	4.3	76	300000	*0.02*	210	2.1	*2*	270	130	0.57	200	2.8	580
EARC0405_60-62	24S1311/044	60	62	DG3	DG	6.3	107	200000	*0.02*	140	3.6	*2*	320	110	0.64	160	13	500
EARC0408_36-38	24S1311/047	36	38	DG1	DG	10	85	45000	*0.02*	280	32	4.9	400	340	0.73	140	11	160

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.5	50	5	0.02	5	0.1	0.2	5	0.2	0.05	10	0.1	5
		m	m		Unit	mg/kg	ppm	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		From	To		Member	Cu	F	Fe	Hg	K	La	Li	Mg	Mn	Mo	Na	Ni	P
EARC0467_56-58	24S1311/059	56	58	DG3	DG	17	881	67000	0.03	1800	33	7.6	360	59	2.1	*100*	6.2	220
EARC0480_04-06	24S1311/064	4	6	DG3	DG	6	109	310000	*0.02*	150	3.2	2.1	270	70	1.2	220	5.2	400
EARC0480_10-12	24S1311/065	10	12	DG3	DG	4.8	*50*	190000	0.03	*50*	5.2	*2*	190	23	0.37	*100*	3.5	390
EARC0480_16-18	24S1311/066	16	18	DG3	DG	2.6	50	200000	*0.02*	*50*	11	*2*	130	40	0.37	*100*	2.7	230
EARC0480_24-26	24S1311/067	24	26	DG3	DG	3	50	200000	0.04	*50*	7.5	*2*	230	240	1.1	*100*	10	660
EARC0480_32-34	24S1311/068	32	34	DG3	DG	2.7	*52*	270000	*0.02*	760	3.3	*2*	310	330	3.5	130	5.2	180
EARC0480_64-66	24S1311/069	64	66	DG2	DG	8.5	104	380000	0.05	120	2.8	3.5	780	35	1.7	*100*	13	650
EARC0491_02-04	24S1311/070	2	4	DG2	DG	51	180	320000	*0.02*	240	3.4	2.8	970	390	0.98	*100*	8.5	440
EARC0491_08-10	24S1311/071	8	10	DG2	DG	36	*172*	280000	0.05	66	7.8	2.3	500	200	3	*100*	12	870
EARC0491_16-18	24S1311/072	16	18	DG2	DG	7.9	84	330000	*0.02*	*50*	2.5	2.2	280	180	0.6	*100*	7.3	560
EARC0491_22-24	24S1311/073	22	24	DG2	DG	5.9	50	340000	0.02	*50*	4.6	8.5	410	180	0.42	*100*	6	600
EARC0493_28-30	24S1311/076	28	30	DG3	DG	36	*143*	180000	*0.02*	1400	20	9.3	1900	1000	0.81	270	26	260
EARC0493_38-40	24S1311/077	38	40	DG3	DG	28	77	240000	*0.02*	390	7.3	6.2	620	340	0.83	150	11	210
EARC0563_30-32	24S1311/085	30	32	DG3	DG	3.2	50	180000	0.05	*50*	4.6	2.8	260	55	0.49	*100*	6.3	160
EARC0563_46-48	24S1311/086	46	48	DG3	DG	1.9	*50*	230000	0.04	*50*	3.6	*2*	140	220	0.93	*100*	2.7	590
EARC0575_20-22	24S1311/089	20	22	DG3	DG	27	52	240000	*0.02*	780	14	6.3	1300	650	0.9	190	17	270
EARC0575_36-38	24S1311/090	36	38	DG3	DG	28	75	170000	*0.02*	670	14	6.9	1100	530	0.78	220	15	180
HR_MET0006_48-50	24S1311/092	48	50	DG3	DG	14	86	250000	*0.02*	340	13	5.6	1200	110	1	180	14	110
EADD0041_7.5-7.7	24S1311/095	7.5	7.7	DG2	DG	7.9	55	310000	0.06	130	3	7.4	530	120	0.79	*100*	12	530
EADD0041_48-48.3	24S1311/096	48	48.3	DG3	DG	12	*57*	300000	0.04	60	9.3	3.1	960	77	0.71	*100*	11	550
EARC0284_04-06	24S1311/009	4	6	FWZ	FWZ	8.1	*135*	190000	*0.02*	540	11	4.4	380	640	1.7	*100*	7.2	1100
EARC0284_14-16	24S1311/010	14	16	FWZ	FWZ	28	103	210000	*0.02*	620	11	5.5	660	250	0.93	160	18	230
EARC0350_24-26	24S1311/027	24	26	FWZ	FWZ	19	83	190000	*0.02*	420	6.4	6.1	420	190	1.7	180	8.9	220
EARC0350_32-34	24S1311/028	32	34	FWZ	FWZ	6.4	616	4000	*0.02*	1900	16	3.7	400	11	0.72	*100*	2.7	*50*
EARC0350_38-40	24S1311/029	38	40	FWZ	FWZ	28	*77*	120000	*0.02*	100	4.9	*2*	130	190	2.7	*100*	15	500
EARC0408_46-48	24S1311/048	46	48	FWZ	FWZ	1.6	*50*	230000	*0.02*	*50*	1.6	*2*	170	120	2.1	*100*	5.3	520
EARC0474_18-20	24S1311/062	18	20	FWZ	FWZ	18	88	190000	*0.02*	470	9.9	3.4	580	120	0.87	*100*	15	200
EARC0307_06-08	24S1311/013	6	8	J2	JOF	14	83	190000	*0.02*	310	2.6	4	360	230	1.1	150	8.5	210
EARC0307_14-16	24S1311/014	14	16	J2	JOF	5.9	78	260000	0.07	96	1.7	*2*	190	40	0.92	*100*	4.5	340
EARC0307_22-24	24S1311/015	22	24	J2	JOF	7	*1390*	10000	*0.02*	2000	9.3	6	1100	570	0.85	*100*	4.6	*50*
EARC0307_46-48	24S1311/016	46	48	J1	JOF	9.9	84	250000	*0.02*	130	1.5	*2*	370	110	0.97	*100*	5.6	370
EARC0307_56-58	24S1311/017	56	58	J1	JOF	6	*70*	240000	*0.02*	66	3	2.1	350	81	0.52	110	5.4	470
EARC0377_02-04	24S1311/031	2	4	J1	JOF	16	115	260000	*0.02*	84	2.2	*2*	380	170	1	170	9.2	850
EARC0399_04-06	24S1311/035	4	6	J3	JOF	6	50	260000	*0.02*	*50*	*1*	2.3	240	96	1.3	*100*	11	1100
EARC0399_20-22	24S1311/036	20	22	J2	JOF	2.8	50	210000	*0.02*	*50*	2.1	*2*	160	72	1.4	*100*	3.6	440

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.5	50	5	0.02	5	0.1	0.2	5	0.2	0.05	10	0.1	5
		m	m		Unit	mg/kg	ppm	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		From	To		Member	Cu	F	Fe	Hg	K	La	Li	Mg	Mn	Mo	Na	Ni	P
EARC0399_36-38	24S1311/037	36	38	J2	JOF	16	50	200000	0.03	*50*	8.2	2.2	260	280	2.2	*100*	7.1	850
EARC0399_52-54	24S1311/038	52	54	J2	JOF	7.6	*134*	340000	0.05	160	3.2	*2*	270	56	1.8	160	7.5	390
EARC0459_24-26	24S1311/052	24	26	J2	JOF	3.1	50	320000	0.02	*50*	*1*	*2*	190	120	1.2	*100*	3.8	430
EARC0459_32-34	24S1311/053	32	34	J1	JOF	4.2	50	280000	0.03	56	*1*	*2*	220	32	1.4	*100*	5.1	310
EARC0543_10-12	24S1311/079	10	12	J2	JOF	14	60	330000	*0.02*	*50*	2.3	*2*	280	330	1.9	*100*	12	560
EARC0284_28-30	24S1311/011	28	30	MCS	MCS	16	191	250000	*0.02*	250	3.4	3	850	100	1.7	200	5.8	410
EARC0284_34-36	24S1311/012	34	36	MCS	MCS	29	*303*	180000	*0.02*	270	5.5	*2*	1900	110	2.2	240	9.2	410
EARC0350_46-48	24S1311/030	46	48	MCS	MCS	4.6	56	360000	*0.02*	*50*	1.6	2.4	380	140	0.67	*100*	4.4	620
EARC0474_30-32	24S1311/063	30	32	MCS	MCS	2.8	*50*	310000	*0.02*	*50*	1.7	4.6	240	490	0.34	*100*	5.1	350
EARC0561_12-14	24S1311/082	12	14	MCS	MCS	12	72	300000	*0.02*	300	3.4	3.9	460	63	2	200	7.4	200
EARC0561_24-26	24S1311/083	24	26	MCS	MCS	2.8	61	280000	0.04	*50*	*1*	*2*	210	53	0.47	*100*	2.2	410
EARC0229_02-04	24S1311/001	2	4	WS2	WS	13	*819*	47000	0.02	2900	43	7.6	1100	1300	2.3	*100*	12	120
EARC0229_10-12	24S1311/002	10	12	WS2	WS	14	66	260000	*0.02*	600	6.1	9.3	500	530	0.8	*100*	17	370
EARC0229_22-24	24S1311/003	22	24	WS1	WS	17	338	300000	0.13	440	3.4	5.5	610	40	1.6	110	14	240
EARC0275_04-06	24S1311/007	4	6	WS2	WS	24	439	35000	0.03	950	7.6	3.9	920	81	2.6	*100*	5.8	*50*
EARC0377_12-14	24S1311/032	12	14	WS2	WS	7.9	146	230000	*0.02*	450	2.3	*2*	370	80	1.7	280	7.7	220
EARC0377_20-22	24S1311/033	20	22	WS2	WS	2.8	50	280000	0.02	*50*	3.8	*2*	170	110	0.74	*100*	6.9	490
EARC0377_30-32	24S1311/034	30	32	WS2	WS	1.6	77	320000	*0.02*	*50*	1.5	*2*	200	180	0.16	*100*	1.7	720
EARC0405_12-14	24S1311/040	12	14	WS2	WS	27	133	170000	*0.02*	560	7.1	7.5	480	340	1.1	*100*	18	240
EARC0405_22-24	24S1311/041	22	24	WS1	WS	8.6	153	280000	*0.02*	120	2.5	18	260	52	1.8	*100*	11	220
EARC0405_30-32	24S1311/042	30	32	WS1	WS	1.9	*50*	200000	*0.02*	*50*	1.7	*2*	150	45	1.1	*100*	5.3	310
EARC0459_48-50	24S1311/054	48	50	WS2	WS	5.5	51	190000	*0.02*	*50*	3.3	*2*	240	61	0.87	*100*	7.7	880
EARC0467_20-22	24S1311/057	20	22	WS2	WS	23	86	220000	*0.02*	610	5.8	6.8	850	150	0.78	100	16	260
EARC0467_36-38	24S1311/058	36	38	WS1	WS	0.8	*50*	180000	*0.02*	*50*	2.3	*2*	130	13	0.83	*100*	0.8	180
EARC0493_06-08	24S1311/074	6	8	WS1	WS	21	*91*	280000	0.03	200	7.5	7	270	220	2.6	*100*	14	330
EARC0493_10-12	24S1311/075	10	12	WS1	WS	8.8	129	190000	0.03	450	7	3.7	390	110	2.3	180	7	180
EARC0543_68-70	24S1311/080	68	70	WS2	WS	8.9	89	320000	0.03	65	20	3	400	390	2.7	*100*	37	700
EARC0563_08-10	24S1311/084	8	10	WS2	WS	3.5	50	300000	*0.02*	54	*1*	*2*	140	87	0.18	*100*	0.7	280
EARC0575_14-16	24S1311/088	14	16	WS1	WS	33	*73*	230000	*0.02*	710	9.4	7.6	750	440	0.78	*100*	26	250
EADD0041_0-0.4	24S1311/093	0	0.4	WS1	WS	25	100	150000	*0.02*	830	12	5.8	750	480	0.79	110	16	200
EADD0041_3-5	24S1311/094	3	5	WS1	WS	2	50	280000	*0.02*	*50*	*1*	*2*	150	120	3.5	*100*	2.5	270
EADD0042_33.1-33.69	24S1311/100	33.1	33.69	WS2	WS	19	366	150000	0.02	1200	4.5	4.4	290	210	1.1	*100*	14	800

Table A.5: Multi-elemental analysis results (3 of 3)

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.5	10	0.05	0.05	0.1	0.5	0.2	0.05	0.5	0.05	0.01	0.2	0.5	0.25
		m	m		Unit	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		From	To		Member	Pb	SO4_S	Sb	Se	Si	Sn	Sr	Ta	Th	Tl	U	V	W	Zn
EARC0350_06-08	24S1311/024	6	8	SCR	CzD3	15	1000	0.86	1.4	14.1	1.8	10	*0.05*	22	*0.05*	1.3	66	2.2	10
EARC0405_06-08	24S1311/039	6	8	SCR	CzD3	22	660	0.82	0.44	7.8	0.7	4.8	*0.05*	7.4	*0.05*	0.86	40	1.8	15
EARC0408_02-04	24S1311/045	2	4	ALU	CzD3	10	500	0.7	1.4	7	0.9	9.9	*0.05*	7.6	0.1	2.4	60	1	34
EARC0408_06-08	24S1311/046	6	8	ALU	CzD3	1.9	200	0.26	0.2	1.7	*0.5*	2.1	*0.05*	1.3	0.1	0.54	6.6	2.2	11
EARC0459_02-04	24S1311/049	2	4	ALU	CzD3	1.5	170	0.22	0.36	2.6	*0.5*	3.2	*0.05*	1.7	0.81	1.6	18	3.7	28
EARC0459_08-10	24S1311/050	8	10	ALU	CzD3	*0.5*	*100*	0.15	0.06	24.4	*0.5*	*2*	*0.05*	*0.5*	*0.05*	0.26	4.4	49	7.5
EARC0459_16-18	24S1311/051	16	18	SCR	CzD3	22	380	1.3	0.33	13.8	2.3	16	*0.05*	11	*0.05*	0.67	84	0.8	21
EARC0467_02-04	24S1311/055	2	4	ALU	CzD3	3	*100*	0.31	0.08	3.8	*0.5*	*2*	*0.05*	1.4	0.06	3.2	12	3.7	61
EARC0467_06-08	24S1311/056	6	8	ALU	CzD3	6	740	0.51	1.1	4.3	0.6	4.6	*0.05*	3.3	*0.05*	1.1	32	4.3	4.8
EARC0474_04-06	24S1311/060	4	6	ALU	CzD3	7.2	660	0.52	1.4	5.1	0.8	4.5	*0.05*	5.9	*0.05*	2.2	43	3.9	6.2
EARC0474_12-14	24S1311/061	12	14	SCR	CzD3	62	*100*	1.5	0.65	33.3	0.7	3.7	*0.05*	11	0.27	0.49	25	1.8	19
EARC0543_02-04	24S1311/078	2	4	SCR	CzD3	56	190	1.7	13	24.4	0.7	4.5	*0.05*	16	0.32	1.5	42	1.4	130
EARC0561_02-04	24S1311/081	2	4	SCR	CzD3	2	300	0.49	0.3	19.8	*0.5*	2.9	*0.05*	1.4	*0.05*	0.22	5	41	4.6
EARC0575_06-08	24S1311/087	6	8	ALU	CzD3	2.4	630	0.4	0.67	22.2	*0.5*	3.7	*0.05*	1.6	*0.05*	0.45	15	31	5.9
HR_MET0006_3-3.1	24S1311/091	3	3.1	ALU	CzD3	1	140	0.41	0.08	23.4	*0.5*	*2*	*0.05*	*0.5*	*0.05*	0.09	4.8	45	3.7
EADD0042_1-1.25	24S1311/097	1	1.25	ALU	CzD3	4.4	*100*	0.2	*0.05*	22.8	*0.5*	*2*	*0.05*	2.7	*0.05*	0.73	16	30	8.2
EADD0042_3.9-4.4	24S1311/098	3.9	4.4	ALU	CzD3	5.3	*100*	0.36	0.09	23.7	*0.5*	11	*0.05*	3.2	0.36	0.94	13	22	20
EADD0042_16-16.5	24S1311/099	16	16.5	SCR	CzD3	4.5	390	0.38	0.36	7.4	*0.5*	6.6	*0.05*	2	0.06	0.57	20	4.8	9
EARC0229_28-30	24S1311/004	28	30	DG3	DG	6.3	250	0.3	0.2	5.7	*0.5*	5	*0.05*	1.2	*0.05*	1.2	9.6	4.4	11
EARC0229_42-44	24S1311/005	42	44	DG3	DG	8	780	0.57	0.42	11.1	0.8	7.8	*0.05*	5	0.1	1.2	39	2.5	100
EARC0229_50-52	24S1311/006	50	52	DG3	DG	0.8	130	0.17	0.08	1	*0.5*	*2*	*0.05*	0.6	0.07	0.47	12	1.2	11
EARC0275_66-68	24S1311/008	66	68	DG2	DG	1.7	*100*	0.11	0.07	9.5	*0.5*	2.3	*0.05*	1	*0.05*	0.63	14	3.5	10
EARC0324_04-06	24S1311/018	4	6	DG2	DG	6.6	*100*	0.12	*0.05*	11.9	*0.5*	*2*	*0.05*	*0.5*	*0.05*	0.27	3.9	12	10
EARC0324_10-12	24S1311/019	10	12	DG2	DG	16	270	0.37	0.96	18.2	1.6	7.2	*0.05*	13	0.19	1.2	150	*0.5*	27
EARC0324_16-18	24S1311/020	16	18	DG2	DG	9.1	1100	0.58	1.3	4.1	1.7	4.3	*0.05*	5.4	*0.05*	1.4	72	1	6.7
EARC0324_32-34	24S1311/021	32	34	DG1	DG	8.2	890	0.47	1.2	4.5	*0.5*	5.2	*0.05*	4.2	*0.05*	0.86	37	3.6	16
EARC0324_46-48	24S1311/022	46	48	DG1	DG	5.5	520	0.88	1	10.9	*0.5*	2.4	*0.05*	3.2	*0.05*	0.75	54	3.7	21
EARC0324_62-64	24S1311/023	62	64	DG1	DG	2.7	*100*	0.49	0.21	30.1	*0.5*	*2*	*0.05*	1.4	0.18	1	13	26	23
EARC0350_12-14	24S1311/025	12	14	DG1	DG	4.9	150	0.83	0.32	36.5	*0.5*	*2*	*0.05*	1.3	0.17	1.5	17	76	88
EARC0350_18-20	24S1311/026	18	20	DG1	DG	63	550	1.5	0.44	26	0.6	6.6	*0.05*	9.2	0.63	0.96	27	1.6	190
EARC0405_36-38	24S1311/043	36	38	DG3	DG	4.3	1300	0.28	0.53	6.3	*0.5*	10	*0.05*	3.7	*0.05*	0.52	16	3.1	6.8
EARC0405_60-62	24S1311/044	60	62	DG3	DG	7.8	300	0.4	0.26	22.3	*0.5*	5.1	*0.05*	3.6	*0.05*	0.7	14	9.8	11
EARC0408_36-38	24S1311/047	36	38	DG1	DG	23	*100*	0.94	0.13	36.3	1.5	5.1	*0.05*	11	0.05	0.86	57	7	8.3

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.5	10	0.05	0.05	0.1	0.5	0.2	0.05	0.5	0.05	0.01	0.2	0.5	0.25
		m	m		Unit	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		From	To		Member	Pb	SO4_S	Sb	Se	Si	Sn	Sr	Ta	Th	Tl	U	V	W	Zn
EARC0467_56-58	24S1311/059	56	58	DG3	DG	17	*100*	1.2	0.24	34.5	*0.5*	4	*0.05*	9.7	0.06	2.5	30	14	13
EARC0480_04-06	24S1311/064	4	6	DG3	DG	9.6	1700	0.41	1.1	6.6	1.3	9.3	*0.05*	5.4	0.06	0.74	60	3	6.4
EARC0480_10-12	24S1311/065	10	12	DG3	DG	3.3	300	0.28	0.11	23.2	*0.5*	5.1	*0.05*	1.7	*0.05*	0.44	6.3	26	4.1
EARC0480_16-18	24S1311/066	16	18	DG3	DG	1.4	*100*	0.33	*0.05*	26.7	*0.5*	*2*	*0.05*	0.8	*0.05*	0.48	4.8	38	4.7
EARC0480_24-26	24S1311/067	24	26	DG3	DG	1.1	*100*	0.26	*0.05*	23.2	*0.5*	4.6	*0.05*	0.6	*0.05*	0.41	5.1	59	14
EARC0480_32-34	24S1311/068	32	34	DG3	DG	15	1600	0.53	0.99	12	4.5	33	*0.05*	12	*0.05*	0.93	93	0.6	3.5
EARC0480_64-66	24S1311/069	64	66	DG2	DG	10	610	0.41	0.97	3.4	2	6	*0.05*	5.8	*0.05*	2.2	81	*0.5*	19
EARC0491_02-04	24S1311/070	2	4	DG2	DG	16	210	0.43	0.14	5.5	0.7	4.8	*0.05*	5	0.08	2.5	32	1.1	35
EARC0491_08-10	24S1311/071	8	10	DG2	DG	26	380	1.3	0.56	7.1	0.6	5.9	*0.05*	6.8	*0.05*	1.9	82	1.2	43
EARC0491_16-18	24S1311/072	16	18	DG2	DG	3.7	*100*	0.31	0.08	2.1	*0.5*	2.6	*0.05*	2.2	*0.05*	0.79	23	2	10
EARC0491_22-24	24S1311/073	22	24	DG2	DG	1.7	*100*	0.12	0.06	2.9	*0.5*	4.2	*0.05*	1.2	*0.05*	0.72	15	1.4	8.2
EARC0493_28-30	24S1311/076	28	30	DG3	DG	21	500	0.34	0.59	21.5	1.4	23	*0.05*	10	0.35	0.98	240	*0.5*	37
EARC0493_38-40	24S1311/077	38	40	DG3	DG	19	260	0.51	0.56	15.3	1.8	8.2	*0.05*	15	0.15	1.1	450	*0.5*	25
EARC0563_30-32	24S1311/085	30	32	DG3	DG	1.5	170	0.17	0.19	23.2	*0.5*	*2*	*0.05*	0.9	*0.05*	0.39	10	17	7.5
EARC0563_46-48	24S1311/086	46	48	DG3	DG	0.7	*100*	0.13	*0.05*	23.4	*0.5*	*2*	*0.05*	*0.5*	*0.05*	0.21	3	39	7.5
EARC0575_20-22	24S1311/089	20	22	DG3	DG	17	260	0.61	0.5	16.8	1.3	14	*0.05*	10	0.19	0.99	340	*0.5*	28
EARC0575_36-38	24S1311/090	36	38	DG3	DG	18	180	0.32	0.48	19.9	1.9	9.8	*0.05*	14	0.14	1.1	320	*0.5*	25
HR_MET0006_48-50	24S1311/092	48	50	DG3	DG	21	110	0.13	0.25	12.5	2.2	10	*0.05*	12	0.1	1.7	160	*0.5*	7.9
EADD0041_7.5-7.7	24S1311/095	7.5	7.7	DG2	DG	6	300	0.18	0.44	4.8	0.7	3.9	*0.05*	4.9	*0.05*	1	52	1.2	11
EADD0041_48-48.3	24S1311/096	48	48.3	DG3	DG	4.4	180	0.22	0.28	15.2	*0.5*	3.8	*0.05*	3.7	*0.05*	1.3	33	3.5	11
EARC0284_04-06	24S1311/009	4	6	FWZ	FWZ	11	*100*	0.56	0.11	26.6	*0.5*	5.7	*0.05*	4.9	0.09	1.4	39	4	15
EARC0284_14-16	24S1311/010	14	16	FWZ	FWZ	12	230	0.34	0.63	21.3	1.2	12	*0.05*	8.8	0.12	0.91	210	0.7	38
EARC0350_24-26	24S1311/027	24	26	FWZ	FWZ	14	390	0.53	1.3	24.3	1	5.9	*0.05*	15	0.09	1.3	240	*0.5*	14
EARC0350_32-34	24S1311/028	32	34	FWZ	FWZ	7.4	*100*	1.4	0.07	39.4	*0.5*	3.2	*0.05*	7.2	0.08	0.37	12	9.4	4
EARC0350_38-40	24S1311/029	38	40	FWZ	FWZ	2.7	180	2.1	0.16	30.8	*0.5*	*2*	*0.05*	1.9	0.08	1.7	97	35	41
EARC0408_46-48	24S1311/048	46	48	FWZ	FWZ	*0.5*	*100*	0.19	*0.05*	19	*0.5*	*2*	*0.05*	*0.5*	*0.05*	0.43	*2*	21	9.1
EARC0474_18-20	24S1311/062	18	20	FWZ	FWZ	9.7	170	0.66	0.33	19.8	0.9	9.5	*0.05*	7.1	0.07	0.7	190	4.1	21
EARC0307_06-08	24S1311/013	6	8	J2	JOF	14	240	0.33	0.33	8.5	1	5.2	*0.05*	15	0.07	1.5	120	0.5	10
EARC0307_14-16	24S1311/014	14	16	J2	JOF	5.7	1000	0.38	0.57	5.4	*0.5*	4.7	*0.05*	2.5	*0.05*	0.88	19	3.9	7.6
EARC0307_22-24	24S1311/015	22	24	J2	JOF	25	*100*	0.9	0.09	40.3	1.5	5.3	*0.05*	4.2	0.24	0.39	9.8	17	2.9
EARC0307_46-48	24S1311/016	46	48	J1	JOF	5.8	290	0.33	0.11	4.4	*0.5*	5.3	*0.05*	2.4	*0.05*	0.64	15	2.4	13
EARC0307_56-58	24S1311/017	56	58	J1	JOF	5.4	160	0.17	0.09	4.5	*0.5*	6.4	*0.05*	2.8	*0.05*	0.68	7.4	3.9	5.2
EARC0377_02-04	24S1311/031	2	4	J1	JOF	5	320	0.27	0.16	10.6	*0.5*	4.3	*0.05*	5.1	*0.05*	4.2	18	3.6	22
EARC0399_04-06	24S1311/035	4	6	J3	JOF	2	*100*	0.23	0.07	8.9	0.6	2.7	*0.05*	2.9	*0.05*	1	17	2.9	21
EARC0399_20-22	24S1311/036	20	22	J2	JOF	1	*100*	0.31	0.06	21.7	*0.5*	2.2	*0.05*	*0.5*	*0.05*	0.63	5	22	9

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.5	10	0.05	0.05	0.1	0.5	0.2	0.05	0.5	0.05	0.01	0.2	0.5	0.25
		m	m		Unit	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
		From	To		Member	Pb	SO4_S	Sb	Se	Si	Sn	Sr	Ta	Th	Tl	U	V	W	Zn
EARC0399_36-38	24S1311/037	36	38	J2	JOF	9.7	*100*	0.92	0.15	27.4	*0.5*	4.4	*0.05*	3.1	*0.05*	1	19	17	31
EARC0399_52-54	24S1311/038	52	54	J2	JOF	6.9	1600	0.96	0.72	4.3	0.8	8.8	*0.05*	2.9	*0.05*	0.92	33	3.3	13
EARC0459_24-26	24S1311/052	24	26	J2	JOF	2.4	270	0.22	0.16	1.1	*0.5*	2.1	*0.05*	0.6	*0.05*	0.33	2.6	5.8	7.1
EARC0459_32-34	24S1311/053	32	34	J1	JOF	4.4	670	0.74	0.71	14.9	*0.5*	2.4	*0.05*	2.6	*0.05*	0.72	17	14	7.3
EARC0543_10-12	24S1311/079	10	12	J2	JOF	8.4	370	0.39	0.17	13.7	*0.5*	2.5	*0.05*	3.7	*0.05*	1.2	34	4.3	33
EARC0284_28-30	24S1311/011	28	30	MCS	MCS	18	1200	0.81	0.91	11.3	1.5	10	*0.05*	13	*0.05*	1.2	62	0.7	7.6
EARC0284_34-36	24S1311/012	34	36	MCS	MCS	11	570	1.4	0.44	15	0.8	11	*0.05*	8.5	*0.05*	1.6	120	0.8	14
EARC0350_46-48	24S1311/030	46	48	MCS	MCS	1.8	*100*	0.23	*0.05*	4.1	*0.5*	2.9	*0.05*	1.3	*0.05*	0.87	10	1.5	10
EARC0474_30-32	24S1311/063	30	32	MCS	MCS	*0.5*	*100*	0.22	*0.05*	4.9	*0.5*	2.7	*0.05*	*0.5*	0.26	0.76	2.9	3.3	7.9
EARC0561_12-14	24S1311/082	12	14	MCS	MCS	16	640	0.33	1.5	10.9	1.8	15	*0.05*	12	0.08	1.1	130	*0.5*	6.1
EARC0561_24-26	24S1311/083	24	26	MCS	MCS	3.8	900	0.62	0.64	15.2	*0.5*	3	*0.05*	2.3	*0.05*	0.62	15	14	4.2
EARC0229_02-04	24S1311/001	2	4	WS2	WS	28	100	1.1	0.21	34.6	*0.5*	9.2	*0.05*	17	0.28	2.2	11	11	28
EARC0229_10-12	24S1311/002	10	12	WS2	WS	14	310	0.31	0.45	7.9	0.8	12	*0.05*	11	0.2	1	90	0.9	16
EARC0229_22-24	24S1311/003	22	24	WS1	WS	28	430	1.1	1.1	5.4	1.4	7.9	*0.05*	15	*0.05*	2.6	61	1.4	9.7
EARC0275_04-06	24S1311/007	4	6	WS2	WS	10	*100*	2.7	0.32	40.9	*0.5*	3.9	*0.05*	3.6	*0.05*	0.34	21	44	6.4
EARC0377_12-14	24S1311/032	12	14	WS2	WS	24	910	1.5	0.62	11.9	1.3	13	*0.05*	11	*0.05*	0.79	75	1.6	11
EARC0377_20-22	24S1311/033	20	22	WS2	WS	4.6	180	0.29	0.06	2.4	*0.5*	*2*	*0.05*	2.3	*0.05*	0.8	16	1.7	7.9
EARC0377_30-32	24S1311/034	30	32	WS2	WS	*0.5*	*100*	0.28	*0.05*	0.6	*0.5*	2.1	*0.05*	*0.5*	0.07	0.54	3.7	4.1	5.1
EARC0405_12-14	24S1311/040	12	14	WS2	WS	16	210	0.46	0.85	21.2	1.7	5.4	*0.05*	17	0.16	1.6	230	*0.5*	39
EARC0405_22-24	24S1311/041	22	24	WS1	WS	17	1300	0.79	0.57	7.1	1.8	6.4	*0.05*	16	0.06	1.8	120	0.6	11
EARC0405_30-32	24S1311/042	30	32	WS1	WS	3	120	0.36	0.09	17	*0.5*	*2*	*0.05*	1.1	*0.05*	0.33	13	21	7.8
EARC0459_48-50	24S1311/054	48	50	WS2	WS	3.8	110	0.14	0.08	21.1	*0.5*	2.4	*0.05*	1.9	*0.05*	0.85	15	14	15
EARC0467_20-22	24S1311/057	20	22	WS2	WS	19	160	0.33	0.53	12.3	1.5	11	*0.05*	15	0.11	1.1	310	*0.5*	17
EARC0467_36-38	24S1311/058	36	38	WS1	WS	*0.5*	*100*	0.2	*0.05*	20.9	*0.5*	2.7	*0.05*	*0.5*	*0.05*	0.07	2.7	33	2.8
EARC0493_06-08	24S1311/074	6	8	WS1	WS	19	480	1.9	1.3	8.6	0.7	3.5	*0.05*	11	0.08	1.3	260	0.7	11
EARC0493_10-12	24S1311/075	10	12	WS1	WS	16	630	1.4	0.6	15	0.8	13	*0.05*	8.1	*0.05*	0.87	120	*0.5*	14
EARC0543_68-70	24S1311/080	68	70	WS2	WS	18	*100*	0.98	0.2	9.7	1.3	5	*0.05*	10	0.06	5.5	68	0.6	140
EARC0563_08-10	24S1311/084	8	10	WS2	WS	7.3	410	0.36	0.26	2.4	*0.5*	*2*	*0.05*	1	*0.05*	0.54	5.8	3.6	4.2
EARC0575_14-16	24S1311/088	14	16	WS1	WS	13	160	0.36	0.74	19.7	1	6.7	*0.05*	7.6	0.18	1.1	200	0.5	18
EADD0041_0-0.4	24S1311/093	0	0.4	WS1	WS	13	220	0.34	0.6	25.6	1.1	12	*0.05*	9.5	0.27	1.2	140	1.3	31
EADD0041_3-5	24S1311/094	3	5	WS1	WS	7.5	480	1.6	0.35	13.5	3.3	2.9	*0.05*	7.9	*0.05*	0.92	94	1.9	1.6
EADD0042_33.1-33.69	24S1311/100	33.1	33.69	WS2	WS	11	*100*	1.8	0.13	26.8	*0.5*	*2*	*0.05*	7.7	0.05	2.1	38	3.8	38

Table A.6: Deionised water leach results (1 of 4)

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD			1	1	1	5	0.00001	0.005	0.00005	0.005	0.0001	0.00002
		m	m		Unit		µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		From	To		Member	pH	EC	Total Alkalinity	CO_3	HCO_3	Calculated TDS	Ag	Al	As	B	Ba	Be
EARC0350_06-08	24S1311/024	6	8	SCR	CzD3	6.6	20	3	*1*	3	11	*0.00001*	0.12	0.0001	0.05	0.0015	*0.00002*
EARC0405_06-08	24S1311/039	6	8	SCR	CzD3	6.3	53	2	*1*	2	29	*0.00001*	*0.005*	0.00009	0.09	0.13	*0.00002*
EARC0408_02-04	24S1311/045	2	4	ALU	CzD3	6.9	92	5	*1*	5	51	*0.00001*	0.57	0.00062	0.13	0.072	*0.00002*
EARC0408_06-08	24S1311/046	6	8	ALU	CzD3	6.5	33	2	*1*	2	18	*0.00001*	0.11	0.0005	0.11	0.0042	*0.00002*
EARC0459_02-04	24S1311/049	2	4	ALU	CzD3	6.6	59	4	*1*	4	32	*0.00001*	0.35	0.00032	0.09	0.032	*0.00002*
EARC0459_08-10	24S1311/050	8	10	ALU	CzD3	6.7	40	3	*1*	3	22	*0.00001*	0.13	0.00093	0.12	0.0034	*0.00002*
EARC0459_16-18	24S1311/051	16	18	SCR	CzD3	7	26	4	*1*	4	14	*0.00001*	1.2	0.00089	0.12	0.0012	*0.00002*
EARC0467_02-04	24S1311/055	2	4	ALU	CzD3	7.4	56	16	*1*	16	31	*0.00001*	0.052	0.00048	0.09	0.02	*0.00002*
EARC0467_06-08	24S1311/056	6	8	ALU	CzD3	6.6	22	2	*1*	2	12	*0.00001*	0.27	0.0015	0.08	0.0015	*0.00002*
EARC0474_04-06	24S1311/060	4	6	ALU	CzD3	6.7	14	3	*1*	3	8	*0.00001*	0.14	0.00044	0.05	0.002	*0.00002*
EARC0474_12-14	24S1311/061	12	14	SCR	CzD3	6.6	24	3	*1*	3	13	*0.00001*	0.76	0.0013	0.08	0.0009	*0.00002*
EARC0543_02-04	24S1311/078	2	4	SCR	CzD3	6.7	46	3	*1*	3	25	*0.00001*	0.027	0.00016	0.1	0.019	*0.00002*
EARC0561_02-04	24S1311/081	2	4	SCR	CzD3	7.9	130	55	*1*	55	72	*0.00001*	0.035	0.0005	0.06	0.19	*0.00002*
EARC0575_06-08	24S1311/087	6	8	ALU	CzD3	6	42	4	*1*	4	23	*0.00001*	0.16	0.00011	0.05	0.0095	*0.00002*
HR_MET0006_3-3.1	24S1311/091	3	3.1	ALU	CzD3	6.4	19	1	*1*	1	10	*0.00001*	0.099	0.00011	0.05	0.0017	*0.00002*
EADD0042_1-1.25	24S1311/097	1	1.25	ALU	CzD3	6.6	25	2	*1*	2	14	*0.00001*	0.12	0.00022	0.06	0.003	*0.00002*
EADD0042_3.9-4.4	24S1311/098	3.9	4.4	ALU	CzD3	6.6	40	2	*1*	2	22	*0.00001*	0.19	0.00029	0.06	0.036	*0.00002*
EADD0042_16-16.5	24S1311/099	16	16.5	SCR	CzD3	6.6	34	2	*1*	2	19	*0.00001*	*0.005*	0.00006	0.06	0.0096	*0.00002*
EARC0229_28-30	24S1311/004	28	30	DG3	DG	6.2	90	1	*1*	1	50	*0.00001*	*0.005*	*0.00005*	0.04	0.021	*0.00002*
EARC0229_42-44	24S1311/005	42	44	DG3	DG	6.5	48	4	*1*	4	26	*0.00001*	*0.005*	*0.00005*	0.03	0.0097	*0.00002*
EARC0229_50-52	24S1311/006	50	52	DG3	DG	6.5	47	3	*1*	3	26	*0.00001*	*0.005*	*0.00005*	0.011	0.0085	*0.00002*
EARC0275_66-68	24S1311/008	66	68	DG2	DG	6.6	50	8	*1*	8	28	*0.00001*	*0.005*	0.00006	0.015	0.0047	*0.00002*
EARC0324_04-06	24S1311/018	4	6	DG2	DG	6.6	57	2	*1*	2	31	*0.00001*	*0.005*	0.0001	0.06	0.08	*0.00002*
EARC0324_10-12	24S1311/019	10	12	DG2	DG	6.5	36	2	*1*	2	20	*0.00001*	0.008	0.00008	0.07	0.012	*0.00002*
EARC0324_16-18	24S1311/020	16	18	DG2	DG	6.5	59	2	*1*	2	32	*0.00001*	*0.005*	0.00008	0.06	0.074	*0.00002*
EARC0324_32-34	24S1311/021	32	34	DG1	DG	6.5	15	2	*1*	2	8	*0.00001*	*0.005*	*0.00005*	0.013	0.0032	*0.00002*
EARC0324_46-48	24S1311/022	46	48	DG1	DG	6.5	9	2	*1*	2	*5*	*0.00001*	*0.005*	*0.00005*	0.011	0.0006	*0.00002*
EARC0324_62-64	24S1311/023	62	64	DG1	DG	6.7	13	3	*1*	3	7	*0.00001*	0.007	*0.00005*	0.009	0.0014	*0.00002*
EARC0350_12-14	24S1311/025	12	14	DG1	DG	6.3	42	2	*1*	2	23	*0.00001*	*0.005*	*0.00005*	0.06	0.026	*0.00002*
EARC0350_18-20	24S1311/026	18	20	DG1	DG	6.4	46	3	*1*	3	25	*0.00001*	*0.005*	*0.00005*	0.04	0.048	*0.00002*
EARC0405_36-38	24S1311/043	36	38	DG3	DG	6.6	24	3	*1*	3	13	*0.00001*	0.007	0.00014	0.04	0.0032	*0.00002*
EARC0405_60-62	24S1311/044	60	62	DG3	DG	6.6	19	3	*1*	3	11	*0.00001*	0.023	0.0002	0.04	0.0005	*0.00002*
EARC0408_36-38	24S1311/047	36	38	DG1	DG	6.5	23	3	*1*	3	12	*0.00001*	*0.005*	*0.00005*	0.02	0.017	*0.00002*

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD			1	1	1	5	0.00001	0.005	0.00005	0.005	0.0001	0.00002
		m	m		Unit		µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		From	To		Member	pH	EC	Total Alkalinity	CO_3	HCO_3	Calculated TDS	Ag	Al	As	B	Ba	Be
EARC0467_56-58	24S1311/059	56	58	DG3	DG	6.6	15	2	*1*	2	8	*0.00001*	*0.005*	0.00006	0.014	0.004	*0.00002*
EARC0480_04-06	24S1311/064	4	6	DG3	DG	7.8	97	35	*1*	35	53	*0.00001*	0.015	0.00022	0.05	0.16	*0.00002*
EARC0480_10-12	24S1311/065	10	12	DG3	DG	8.1	140	59	*1*	59	77	*0.00001*	0.021	0.00045	0.09	0.16	*0.00002*
EARC0480_16-18	24S1311/066	16	18	DG3	DG	6.7	37	2	*1*	2	20	*0.00001*	0.049	0.0002	0.07	0.002	*0.00002*
EARC0480_24-26	24S1311/067	24	26	DG3	DG	6.7	15	2	*1*	2	8	*0.00001*	0.023	0.00015	0.04	0.0002	*0.00002*
EARC0480_32-34	24S1311/068	32	34	DG3	DG	6.5	10	2	*1*	2	5	*0.00001*	*0.005*	0.00007	0.02	0.0015	*0.00002*
EARC0480_64-66	24S1311/069	64	66	DG2	DG	6.7	13	3	*1*	3	7	*0.00001*	0.052	0.001	0.06	0.0034	0.00002
EARC0491_02-04	24S1311/070	2	4	DG2	DG	6.6	87	2	*1*	2	48	*0.00001*	*0.005*	*0.00005*	0.06	0.11	*0.00002*
EARC0491_08-10	24S1311/071	8	10	DG2	DG	6.7	29	3	*1*	3	16	*0.00001*	*0.005*	*0.00005*	0.04	0.0072	*0.00002*
EARC0491_16-18	24S1311/072	16	18	DG2	DG	6.6	37	2	*1*	2	20	*0.00001*	0.007	0.00006	0.04	0.0086	*0.00002*
EARC0491_22-24	24S1311/073	22	24	DG2	DG	6.4	39	1	*1*	1	22	*0.00001*	*0.005*	*0.00005*	0.06	0.0025	*0.00002*
EARC0493_28-30	24S1311/076	28	30	DG3	DG	6.5	14	2	*1*	2	8	*0.00001*	0.13	0.00012	0.03	0.0004	*0.00002*
EARC0493_38-40	24S1311/077	38	40	DG3	DG	6.3	8	1	*1*	1	*5*	*0.00001*	0.006	0.00006	0.018	0.0008	*0.00002*
EARC0563_30-32	24S1311/085	30	32	DG3	DG	6.5	18	2	*1*	2	10	*0.00001*	0.006	0.00015	0.06	0.0005	*0.00002*
EARC0563_46-48	24S1311/086	46	48	DG3	DG	6.3	40	1	*1*	1	22	*0.00001*	*0.005*	*0.00005*	0.014	0.0039	*0.00002*
EARC0575_20-22	24S1311/089	20	22	DG3	DG	6.3	13	1	*1*	1	7	*0.00001*	*0.005*	*0.00005*	0.02	0.013	*0.00002*
EARC0575_36-38	24S1311/090	36	38	DG3	DG	6.7	9	3	*1*	3	*5*	*0.00001*	0.015	0.00013	0.05	0.0039	*0.00002*
HR_MET0006_48-50	24S1311/092	48	50	DG3	DG	6.6	11	2	*1*	2	6	*0.00001*	*0.005*	*0.00005*	0.03	0.0023	*0.00002*
EADD0041_7.5-7.7	24S1311/095	7.5	7.7	DG2	DG	7.1	35	7	*1*	7	19	*0.00001*	0.049	0.00019	0.07	0.0022	0.00012
EADD0041_48-48.3	24S1311/096	48	48.3	DG3	DG	6.4	29	1	*1*	1	16	*0.00001*	*0.005*	0.00006	0.02	0.011	*0.00002*
EARC0284_04-06	24S1311/009	4	6	FWZ	FWZ	6.5	64	2	*1*	2	35	*0.00001*	*0.005*	*0.00005*	0.04	0.1	*0.00002*
EARC0284_14-16	24S1311/010	14	16	FWZ	FWZ	6.7	71	4	*1*	4	39	*0.00001*	0.031	0.0001	0.05	0.0041	*0.00002*
EARC0350_24-26	24S1311/027	24	26	FWZ	FWZ	6.3	30	2	*1*	2	17	*0.00001*	0.009	*0.00005*	0.03	0.022	*0.00002*
EARC0350_32-34	24S1311/028	32	34	FWZ	FWZ	6.6	21	4	*1*	4	12	*0.00001*	0.008	0.00005	0.017	0.035	*0.00002*
EARC0350_38-40	24S1311/029	38	40	FWZ	FWZ	6.7	18	5	*1*	5	10	*0.00001*	0.005	0.00013	0.016	0.0091	*0.00002*
EARC0408_46-48	24S1311/048	46	48	FWZ	FWZ	6.6	22	4	*1*	4	12	*0.00001*	*0.005*	*0.00005*	0.03	0.0046	*0.00002*
EARC0474_18-20	24S1311/062	18	20	FWZ	FWZ	6.2	57	*1*	*1*	*1*	31	*0.00001*	*0.005*	*0.00005*	0.06	0.1	*0.00002*
EARC0307_06-08	24S1311/013	6	8	J2	JOF	5.6	53	*1*	*1*	*1*	29	*0.00001*	0.014	*0.00005*	0.07	0.12	*0.00002*
EARC0307_14-16	24S1311/014	14	16	J2	JOF	6.8	117	4	*1*	4	64	*0.00001*	*0.005*	*0.00005*	0.08	0.008	*0.00002*
EARC0307_22-24	24S1311/015	22	24	J2	JOF	6.5	63	2	*1*	2	35	*0.00001*	*0.005*	*0.00005*	0.03	0.053	*0.00002*
EARC0307_46-48	24S1311/016	46	48	J1	JOF	6.6	37	2	*1*	2	21	*0.00001*	*0.005*	0.00008	0.03	0.0015	*0.00002*
EARC0307_56-58	24S1311/017	56	58	J1	JOF	7	18	5	*1*	5	10	*0.00001*	0.055	0.00025	0.02	0.0006	*0.00002*
EARC0377_02-04	24S1311/031	2	4	J1	JOF	8	175	56	*1*	56	96	*0.00001*	0.016	0.00014	0.04	0.13	*0.00002*
EARC0399_04-06	24S1311/035	4	6	J3	JOF	6.3	112	6	*1*	6	61	*0.00001*	*0.005*	0.00007	0.1	0.12	*0.00002*

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD			1	1	1	5	0.00001	0.005	0.00005	0.005	0.0001	0.00002
		m	m		Unit		µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		From	To		Member	pH	EC	Total Alkalinity	CO_3	HCO_3	Calculated TDS	Ag	Al	As	B	Ba	Be
EARC0399_20-22	24S1311/036	20	22	J2	JOF	6.3	39	3	*1*	3	22	0.00009	*0.005*	0.00006	0.04	0.018	*0.00002*
EARC0399_36-38	24S1311/037	36	38	J2	JOF	6.5	22	2	*1*	2	12	*0.00001*	*0.005*	*0.00005*	0.018	0.0066	*0.00002*
EARC0399_52-54	24S1311/038	52	54	J2	JOF	6.4	45	6	*1*	6	25	*0.00001*	*0.005*	*0.00005*	0.017	0.039	0.00008
EARC0459_24-26	24S1311/052	24	26	J2	JOF	6.6	19	2	*1*	2	10	*0.00001*	0.33	0.00011	0.07	0.001	*0.00002*
EARC0459_32-34	24S1311/053	32	34	J1	JOF	6.6	39	4	*1*	4	22	*0.00001*	0.026	*0.00005*	0.04	0.0014	*0.00002*
EARC0543_10-12	24S1311/079	10	12	J2	JOF	6.3	60	2	*1*	2	33	*0.00001*	*0.005*	*0.00005*	0.03	0.034	*0.00002*
EARC0284_28-30	24S1311/011	28	30	MCS	MCS	6.8	80	*1*	*1*	*1*	44	*0.00001*	0.074	0.021	0.04	*0.0001*	*0.00002*
EARC0284_34-36	24S1311/012	34	36	MCS	MCS	6.5	150	6	*1*	6	82	*0.00001*	0.008	0.0071	0.05	0.003	*0.00002*
EARC0350_46-48	24S1311/030	46	48	MCS	MCS	6.8	35	5	*1*	5	19	*0.00001*	0.024	0.0092	0.06	0.0018	*0.00002*
EARC0474_30-32	24S1311/063	30	32	MCS	MCS	6.7	85	3	*1*	3	47	*0.00001*	0.044	0.0011	0.04	0.0007	*0.00002*
EARC0561_12-14	24S1311/082	12	14	MCS	MCS	7.1	34	7	*1*	7	19	*0.00001*	0.05	0.00041	0.09	0.0008	*0.00002*
EARC0561_24-26	24S1311/083	24	26	MCS	MCS	7.3	39	12	*1*	12	22	*0.00001*	0.044	0.0025	0.04	0.0045	*0.00002*
EARC0229_02-04	24S1311/001	2	4	WS2	WS	6.3	36	2	*1*	2	20	*0.00001*	*0.005*	*0.00005*	0.05	0.14	*0.00002*
EARC0229_10-12	24S1311/002	10	12	WS2	WS	6.1	72	1	*1*	1	40	*0.00001*	*0.005*	*0.00005*	0.05	0.02	*0.00002*
EARC0229_22-24	24S1311/003	22	24	WS1	WS	6.3	222	3	*1*	3	120	*0.00001*	*0.005*	*0.00005*	0.09	0.037	*0.00002*
EARC0275_04-06	24S1311/007	4	6	WS2	WS	7.9	210	65	*1*	65	120	*0.00001*	0.035	0.0017	0.11	0.12	*0.00002*
EARC0377_12-14	24S1311/032	12	14	WS2	WS	6.8	64	6	*1*	6	35	*0.00001*	0.021	0.00039	0.1	0.012	*0.00002*
EARC0377_20-22	24S1311/033	20	22	WS2	WS	6.6	118	2	*1*	2	65	*0.00001*	0.013	0.00008	0.05	0.0071	*0.00002*
EARC0377_30-32	24S1311/034	30	32	WS2	WS	6.6	26	2	*1*	2	14	*0.00001*	0.033	0.0007	0.02	0.0003	*0.00002*
EARC0405_12-14	24S1311/040	12	14	WS2	WS	6.8	32	3	*1*	3	18	*0.00001*	*0.005*	*0.00005*	0.08	0.0019	*0.00002*
EARC0405_22-24	24S1311/041	22	24	WS1	WS	6.8	29	4	*1*	4	16	*0.00001*	0.084	0.001	0.08	0.0015	*0.00002*
EARC0405_30-32	24S1311/042	30	32	WS1	WS	6.5	64	6	*1*	6	35	*0.00001*	0.007	0.0004	0.06	0.002	*0.00002*
EARC0459_48-50	24S1311/054	48	50	WS2	WS	6.8	29	3	*1*	3	16	0.00004	0.014	0.0006	0.09	0.0013	*0.00002*
EARC0467_20-22	24S1311/057	20	22	WS2	WS	6.3	16	1	*1*	1	9	*0.00001*	0.029	0.0003	0.03	0.0003	*0.00002*
EARC0467_36-38	24S1311/058	36	38	WS1	WS	6.4	10	1	*1*	1	6	*0.00001*	0.005	0.00029	0.018	0.0019	*0.00002*
EARC0493_06-08	24S1311/074	6	8	WS1	WS	6.4	44	1	*1*	1	24	*0.00001*	0.054	0.00009	0.1	0.018	*0.00002*
EARC0493_10-12	24S1311/075	10	12	WS1	WS	6.5	26	2	*1*	2	14	*0.00001*	0.32	0.0004	0.05	0.0009	*0.00002*
EARC0543_68-70	24S1311/080	68	70	WS2	WS	6.5	27	2	*1*	2	15	*0.00001*	0.031	0.00057	0.03	0.0033	*0.00002*
EARC0563_08-10	24S1311/084	8	10	WS2	WS	6.6	65	2	*1*	2	36	*0.00001*	0.016	0.00027	0.08	0.0073	*0.00002*
EARC0575_14-16	24S1311/088	14	16	WS1	WS	6.1	31	*1*	*1*	*1*	17	*0.00001*	*0.005*	*0.00005*	0.04	0.083	*0.00002*
EADD0041_0-0.4	24S1311/093	0	0.4	WS1	WS	6.8	23	4	*1*	4	13	*0.00001*	*0.005*	0.00007	0.06	0.0048	*0.00002*
EADD0041_3-5	24S1311/094	3	5	WS1	WS	6.7	60	3	*1*	3	33	*0.00001*	0.008	0.00025	0.1	0.065	*0.00002*
EADD0042_33.1-33.69	24S1311/100	33.1	33.69	WS2	WS	6.8	20	3	*1*	3	11	*0.00001*	0.014	0.0011	0.03	0.0006	*0.00002*

Table A.7: Deionised water leach results (2 of 4)

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.00001	0.1	0.00005	0.5	0.00005	0.0001	0.001	0.001	0.0001	0.1	0.005	0.00002
		m	m		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		From	To		Member	Bi	Ca	Cd	Cl	Co	Cr	CrIII	CrVI	Cu	F	Fe	Hg
EARC0350_06-08	24S1311/024	6	8	SCR	CzD3	*0.00001*	0.1	*0.00005*	1.3	0.0001	0.00085	*0.001*	*0.001*	0.0002	0.1	0.075	*0.00002*
EARC0405_06-08	24S1311/039	6	8	SCR	CzD3	*0.00001*	2.3	*0.00005*	3.3	0.00075	0.0016	*0.001*	0.001	0.0003	*0.1*	*0.005*	*0.00002*
EARC0408_02-04	24S1311/045	2	4	ALU	CzD3	*0.00001*	1.7	*0.00005*	3.4	0.00027	0.0028	*0.001*	0.003	0.0005	0.4	0.73	*0.00002*
EARC0408_06-08	24S1311/046	6	8	ALU	CzD3	0.00005	0.3	*0.00005*	3.8	0.00005	0.0013	*0.001*	0.001	0.0024	0.5	0.068	*0.00002*
EARC0459_02-04	24S1311/049	2	4	ALU	CzD3	*0.00001*	0.7	*0.00005*	1.7	0.00027	0.0016	0.002	*0.001*	0.0005	0.4	0.44	*0.00002*
EARC0459_08-10	24S1311/050	8	10	ALU	CzD3	0.00001	0.8	*0.00005*	4.4	0.0002	0.0013	*0.001*	0.001	0.0004	0.7	0.081	*0.00002*
EARC0459_16-18	24S1311/051	16	18	SCR	CzD3	0.00003	0.1	*0.00005*	1.5	0.00005	0.00064	*0.001*	*0.001*	0.0003	0.6	0.87	*0.00002*
EARC0467_02-04	24S1311/055	2	4	ALU	CzD3	*0.00001*	1.2	*0.00005*	2	0.00006	0.0016	*0.001*	0.001	0.0008	0.5	0.037	0.00003
EARC0467_06-08	24S1311/056	6	8	ALU	CzD3	*0.00001*	*0.1*	*0.00005*	2	0.00014	0.003	*0.001*	0.003	0.0007	0.7	0.11	0.00003
EARC0474_04-06	24S1311/060	4	6	ALU	CzD3	*0.00001*	0.1	*0.00005*	0.7	0.00017	0.0014	*0.001*	0.001	0.0004	0.3	0.072	0.00004
EARC0474_12-14	24S1311/061	12	14	SCR	CzD3	*0.00001*	*0.1*	*0.00005*	2.3	0.00007	0.0047	*0.001*	0.005	0.0003	0.8	0.58	0.00002
EARC0543_02-04	24S1311/078	2	4	SCR	CzD3	*0.00001*	0.6	*0.00005*	1.9	*0.00005*	0.0029	*0.001*	0.003	0.0003	0.3	0.016	*0.00002*
EARC0561_02-04	24S1311/081	2	4	SCR	CzD3	*0.00001*	15.8	*0.00005*	0.7	0.00006	0.0034	*0.001*	0.003	0.0004	0.2	*0.005*	0.00002
EARC0575_06-08	24S1311/087	6	8	ALU	CzD3	*0.00001*	1.3	*0.00005*	1.9	0.0025	0.00037	*0.001*	*0.001*	0.0006	*0.1*	0.036	*0.00002*
HR_MET0006_3-3.1	24S1311/091	3	3.1	ALU	CzD3	*0.00001*	0.2	*0.00005*	2.2	0.00006	0.0007	*0.001*	*0.001*	0.0002	0.1	0.13	*0.00002*
EADD0042_1-1.25	24S1311/097	1	1.25	ALU	CzD3	*0.00001*	0.5	*0.00005*	2.7	0.00039	0.002	*0.001*	0.002	0.0012	*0.1*	0.13	*0.00002*
EADD0042_3.9-4.4	24S1311/098	3.9	4.4	ALU	CzD3	*0.00001*	1.3	*0.00005*	2.7	0.00033	0.0033	*0.001*	0.003	0.0011	0.3	0.14	*0.00002*
EADD0042_16-16.5	24S1311/099	16	16.5	SCR	CzD3	*0.00001*	1.3	*0.00005*	1.1	0.00036	0.00026	*0.001*	*0.001*	0.0001	0.1	*0.005*	*0.00002*
EARC0229_28-30	24S1311/004	28	30	DG3	DG	*0.00001*	2.4	*0.00005*	18	0.0004	*0.0001*	*0.001*	*0.001*	*0.0001*	*0.1*	*0.005*	*0.00002*
EARC0229_42-44	24S1311/005	42	44	DG3	DG	*0.00001*	1.4	*0.00005*	6.5	0.00054	0.00027	*0.001*	*0.001*	*0.0001*	*0.1*	*0.005*	0.00006
EARC0229_50-52	24S1311/006	50	52	DG3	DG	*0.00001*	1.6	*0.00005*	6.9	0.0069	*0.0001*	*0.001*	*0.001*	*0.0001*	*0.1*	*0.005*	*0.00002*
EARC0275_66-68	24S1311/008	66	68	DG2	DG	*0.00001*	1.9	*0.00005*	3.8	0.00016	*0.0001*	*0.001*	*0.001*	*0.0001*	*0.1*	*0.005*	*0.00002*
EARC0324_04-06	24S1311/018	4	6	DG2	DG	*0.00001*	0.7	*0.00005*	3.4	0.00027	*0.0001*	*0.001*	*0.001*	0.0001	0.1	*0.005*	*0.00002*
EARC0324_10-12	24S1311/019	10	12	DG2	DG	*0.00001*	0.2	*0.00005*	4.5	0.00006	*0.0001*	*0.001*	*0.001*	0.0001	0.2	0.012	*0.00002*
EARC0324_16-18	24S1311/020	16	18	DG2	DG	*0.00001*	0.4	*0.00005*	2.4	0.0002	0.0012	*0.001*	0.001	*0.0001*	*0.1*	*0.005*	*0.00002*
EARC0324_32-34	24S1311/021	32	34	DG1	DG	*0.00001*	0.5	*0.00005*	1.3	*0.00005*	0.00023	*0.001*	*0.001*	*0.0001*	*0.1*	*0.005*	*0.00002*
EARC0324_46-48	24S1311/022	46	48	DG1	DG	*0.00001*	0.3	*0.00005*	0.6	*0.00005*	0.00018	*0.001*	*0.001*	*0.0001*	0.1	0.006	*0.00002*
EARC0324_62-64	24S1311/023	62	64	DG1	DG	*0.00001*	0.7	*0.00005*	0.9	0.0018	0.0001	*0.001*	*0.001*	0.0001	*0.1*	0.016	*0.00002*
EARC0350_12-14	24S1311/025	12	14	DG1	DG	*0.00001*	1.8	*0.00005*	1	0.0003	0.00014	*0.001*	*0.001*	*0.0001*	*0.1*	0.013	*0.00002*
EARC0350_18-20	24S1311/026	18	20	DG1	DG	*0.00001*	2.2	*0.00005*	0.7	0.00037	*0.0001*	*0.001*	*0.001*	*0.0001*	*0.1*	*0.005*	*0.00002*
EARC0405_36-38	24S1311/043	36	38	DG3	DG	*0.00001*	0.5	*0.00005*	3.2	0.00012	0.00053	*0.001*	*0.001*	0.0004	0.1	0.009	*0.00002*
EARC0405_60-62	24S1311/044	60	62	DG3	DG	0.00003	0.3	*0.00005*	3.2	0.00007	0.00016	*0.001*	*0.001*	0.0003	0.2	0.078	*0.00002*
EARC0408_36-38	24S1311/047	36	38	DG1	DG	*0.00001*	0.9	*0.00005*	0.9	0.0025	*0.0001*	*0.001*	*0.001*	0.0002	*0.1*	*0.005*	*0.00002*

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.00001	0.1	0.00005	0.5	0.00005	0.0001	0.001	0.001	0.0001	0.1	0.005	0.00002
		m	m		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		From	To		Member	Bi	Ca	Cd	Cl	Co	Cr	CrIII	CrVI	Cu	F	Fe	Hg
EARC0467_56-58	24S1311/059	56	58	DG3	DG	0.00001	0.5	*0.00005*	1.6	0.00019	0.00054	*0.001*	*0.001*	0.0004	*0.1*	0.039	*0.00002*
EARC0480_04-06	24S1311/064	4	6	DG3	DG	*0.00001*	10.1	*0.00005*	1.5	0.00009	0.001	*0.001*	0.001	0.0002	0.5	*0.005*	*0.00002*
EARC0480_10-12	24S1311/065	10	12	DG3	DG	0.00001	13.5	*0.00005*	1.6	0.00005	0.0007	*0.001*	*0.001*	0.0002	0.8	*0.005*	0.00003
EARC0480_16-18	24S1311/066	16	18	DG3	DG	*0.00001*	0.1	*0.00005*	3.4	0.00009	0.002	*0.001*	0.002	0.0005	0.6	0.075	*0.00002*
EARC0480_24-26	24S1311/067	24	26	DG3	DG	*0.00001*	*0.1*	*0.00005*	1.1	0.00023	0.0018	*0.001*	0.002	0.0001	0.2	0.046	0.00007
EARC0480_32-34	24S1311/068	32	34	DG3	DG	*0.00001*	0.4	*0.00005*	0.9	0.00045	0.00015	*0.001*	*0.001*	*0.0001*	*0.1*	0.013	*0.00002*
EARC0480_64-66	24S1311/069	64	66	DG2	DG	0.00002	0.6	*0.00005*	0.9	0.00051	0.0014	*0.001*	0.001	0.01	0.2	0.33	*0.00002*
EARC0491_02-04	24S1311/070	2	4	DG2	DG	*0.00001*	3.3	*0.00005*	1.7	0.00013	*0.0001*	*0.001*	*0.001*	*0.0001*	0.2	*0.005*	*0.00002*
EARC0491_08-10	24S1311/071	8	10	DG2	DG	*0.00001*	0.7	*0.00005*	0.8	*0.00005*	0.00014	*0.001*	*0.001*	*0.0001*	0.2	0.015	*0.00002*
EARC0491_16-18	24S1311/072	16	18	DG2	DG	*0.00001*	0.8	*0.00005*	1	0.00014	*0.0001*	*0.001*	*0.001*	*0.0001*	0.2	0.087	*0.00002*
EARC0491_22-24	24S1311/073	22	24	DG2	DG	*0.00001*	0.7	*0.00005*	7.6	0.0001	0.0013	*0.001*	0.001	0.0002	*0.1*	*0.005*	*0.00002*
EARC0493_28-30	24S1311/076	28	30	DG3	DG	*0.00001*	*0.1*	*0.00005*	1.2	0.00065	0.00079	*0.001*	0.002	*0.0001*	0.2	0.45	*0.00002*
EARC0493_38-40	24S1311/077	38	40	DG3	DG	*0.00001*	*0.1*	*0.00005*	1.3	0.00007	0.0002	*0.001*	*0.001*	0.0002	*0.1*	0.008	*0.00002*
EARC0563_30-32	24S1311/085	30	32	DG3	DG	*0.00001*	0.1	*0.00005*	3.5	0.00011	0.0006	*0.001*	*0.001*	*0.0001*	0.1	0.017	*0.00002*
EARC0563_46-48	24S1311/086	46	48	DG3	DG	*0.00001*	0.9	*0.00005*	6.9	0.00012	*0.0001*	*0.001*	*0.001*	0.0001	*0.1*	*0.005*	*0.00002*
EARC0575_20-22	24S1311/089	20	22	DG3	DG	*0.00001*	0.5	*0.00005*	*0.5*	0.0027	0.00045	*0.001*	*0.001*	0.0001	*0.1*	*0.005*	*0.00002*
EARC0575_36-38	24S1311/090	36	38	DG3	DG	*0.00001*	0.3	*0.00005*	*0.5*	0.00026	0.0017	*0.001*	0.002	*0.0001*	0.1	0.022	*0.00002*
HR_MET0006_48-50	24S1311/092	48	50	DG3	DG	*0.00001*	0.4	*0.00005*	0.6	0.0019	0.0003	*0.001*	*0.001*	0.0001	*0.1*	0.072	*0.00002*
EADD0041_7.5-7.7	24S1311/095	7.5	7.7	DG2	DG	*0.00001*	0.9	*0.00005*	4.9	*0.00005*	0.00029	*0.001*	*0.001*	0.0003	0.3	0.23	*0.00002*
EADD0041_48-48.3	24S1311/096	48	48.3	DG3	DG	*0.00001*	1.1	*0.00005*	2	0.00027	0.00024	*0.001*	*0.001*	0.0003	*0.1*	*0.005*	*0.00002*
EARC0284_04-06	24S1311/009	4	6	FWZ	FWZ	*0.00001*	1	*0.00005*	4.3	0.00015	*0.0001*	*0.001*	*0.001*	*0.0001*	0.3	*0.005*	*0.00002*
EARC0284_14-16	24S1311/010	14	16	FWZ	FWZ	*0.00001*	0.1	*0.00005*	7.3	0.00006	*0.0001*	*0.001*	*0.001*	*0.0001*	0.5	0.28	*0.00002*
EARC0350_24-26	24S1311/027	24	26	FWZ	FWZ	*0.00001*	1.2	*0.00005*	1.2	0.00055	*0.0001*	*0.001*	*0.001*	*0.0001*	*0.1*	0.012	*0.00002*
EARC0350_32-34	24S1311/028	32	34	FWZ	FWZ	*0.00001*	0.7	*0.00005*	1.4	0.0012	0.00031	*0.001*	*0.001*	*0.0001*	0.1	*0.005*	*0.00002*
EARC0350_38-40	24S1311/029	38	40	FWZ	FWZ	0.00001	0.6	*0.00005*	0.7	0.0036	0.00023	*0.001*	*0.001*	0.0001	0.2	0.006	0.00004
EARC0408_46-48	24S1311/048	46	48	FWZ	FWZ	*0.00001*	1.1	*0.00005*	1.5	0.0017	*0.0001*	*0.001*	*0.001*	*0.0001*	*0.1*	*0.005*	*0.00002*
EARC0474_18-20	24S1311/062	18	20	FWZ	FWZ	*0.00001*	1.7	*0.00005*	1	0.00067	0.00018	*0.001*	*0.001*	0.0003	*0.1*	*0.005*	*0.00002*
EARC0307_06-08	24S1311/013	6	8	J2	JOF	*0.00001*	1.2	*0.00005*	2.4	0.0019	*0.0001*	*0.001*	*0.001*	0.0003	0.5	0.1	*0.00002*
EARC0307_14-16	24S1311/014	14	16	J2	JOF	*0.00001*	1.1	*0.00005*	11	0.00023	*0.0001*	*0.001*	*0.001*	*0.0001*	0.5	0.031	*0.00002*
EARC0307_22-24	24S1311/015	22	24	J2	JOF	*0.00001*	2.2	*0.00005*	8.1	0.0046	*0.0001*	*0.001*	*0.001*	*0.0001*	*0.1*	*0.005*	*0.00002*
EARC0307_46-48	24S1311/016	46	48	J1	JOF	*0.00001*	0.5	*0.00005*	7.2	0.00034	*0.0001*	*0.001*	*0.001*	*0.0001*	0.1	*0.005*	*0.00002*
EARC0307_56-58	24S1311/017	56	58	J1	JOF	*0.00001*	0.2	*0.00005*	0.6	0.00017	0.0005	*0.001*	0.001	*0.0001*	0.4	0.28	*0.00002*
EARC0377_02-04	24S1311/031	2	4	J1	JOF	*0.00001*	26.8	*0.00005*	1.1	0.00005	0.0002	*0.001*	*0.001*	0.0003	0.5	*0.005*	*0.00002*
EARC0399_04-06	24S1311/035	4	6	J3	JOF	*0.00001*	2.7	*0.00005*	3.6	0.017	*0.0001*	*0.001*	*0.001*	0.0011	*0.1*	0.024	*0.00002*

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.00001	0.1	0.00005	0.5	0.00005	0.0001	0.001	0.001	0.0001	0.1	0.005	0.00002
		m	m		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		From	To		Member	Bi	Ca	Cd	Cl	Co	Cr	CrIII	CrVI	Cu	F	Fe	Hg
EARC0399_20-22	24S1311/036	20	22	J2	JOF	0.00003	0.9	*0.00005*	2.7	0.0053	0.00022	*0.001*	*0.001*	0.0006	*0.1*	0.006	*0.00002*
EARC0399_36-38	24S1311/037	36	38	J2	JOF	*0.00001*	0.7	*0.00005*	2.1	0.0021	*0.0001*	*0.001*	*0.001*	0.0002	*0.1*	*0.005*	*0.00002*
EARC0399_52-54	24S1311/038	52	54	J2	JOF	*0.00001*	2.7	*0.00005*	2	0.025	*0.0001*	*0.001*	*0.001*	0.0001	*0.1*	*0.005*	*0.00002*
EARC0459_24-26	24S1311/052	24	26	J2	JOF	*0.00001*	0.2	*0.00005*	1.3	0.00006	0.00032	*0.001*	*0.001*	0.0002	0.3	0.36	0.00007
EARC0459_32-34	24S1311/053	32	34	J1	JOF	*0.00001*	1.1	*0.00005*	4.3	0.0001	0.00015	*0.001*	*0.001*	0.0002	0.1	0.059	*0.00002*
EARC0543_10-12	24S1311/079	10	12	J2	JOF	*0.00001*	3	*0.00005*	0.9	0.00081	*0.0001*	*0.001*	*0.001*	0.0001	*0.1*	*0.005*	*0.00002*
EARC0284_28-30	24S1311/011	28	30	MCS	MCS	0.00002	0.3	*0.00005*	11	0.00009	0.00077	*0.001*	*0.001*	0.0002	1.4	0.04	*0.00002*
EARC0284_34-36	24S1311/012	34	36	MCS	MCS	*0.00001*	1.5	*0.00005*	27	0.00012	0.001	*0.001*	0.001	0.0001	0.3	0.006	0.00002
EARC0350_46-48	24S1311/030	46	48	MCS	MCS	0.00006	0.3	*0.00005*	2.9	0.00049	0.00034	*0.001*	*0.001*	0.0004	1.5	0.052	0.00003
EARC0474_30-32	24S1311/063	30	32	MCS	MCS	*0.00001*	0.8	*0.00005*	14	0.00035	0.002	*0.001*	0.002	0.0002	0.8	0.008	0.00003
EARC0561_12-14	24S1311/082	12	14	MCS	MCS	*0.00001*	0.2	*0.00005*	2.2	*0.00005*	0.00098	0.001	*0.001*	0.0001	0.7	0.066	0.00003
EARC0561_24-26	24S1311/083	24	26	MCS	MCS	*0.00001*	0.7	*0.00005*	2.3	0.00039	0.0019	0.002	*0.001*	0.0007	0.7	0.098	0.00003
EARC0229_02-04	24S1311/001	2	4	WS2	WS	*0.00001*	0.8	*0.00005*	2.1	0.0011	0.00068	*0.001*	*0.001*	*0.0001*	*0.1*	*0.005*	*0.00002*
EARC0229_10-12	24S1311/002	10	12	WS2	WS	*0.00001*	0.4	*0.00005*	14	0.00018	0.00011	*0.001*	*0.001*	*0.0001*	*0.1*	*0.005*	*0.00002*
EARC0229_22-24	24S1311/003	22	24	WS1	WS	*0.00001*	4.9	*0.00005*	49	0.00037	0.00028	*0.001*	*0.001*	*0.0001*	*0.1*	*0.005*	*0.00002*
EARC0275_04-06	24S1311/007	4	6	WS2	WS	*0.00001*	11.6	*0.00005*	14	0.00021	*0.0001*	*0.001*	*0.001*	*0.0001*	0.4	*0.005*	*0.00002*
EARC0377_12-14	24S1311/032	12	14	WS2	WS	0.00003	0.3	*0.00005*	3.3	*0.00005*	0.00065	*0.001*	*0.001*	0.071	0.6	0.025	0.00003
EARC0377_20-22	24S1311/033	20	22	WS2	WS	*0.00001*	1.3	*0.00005*	24	0.00042	0.0034	*0.001*	0.003	0.0003	0.3	0.008	0.00003
EARC0377_30-32	24S1311/034	30	32	WS2	WS	0.00001	*0.1*	*0.00005*	3.9	0.00007	0.00033	*0.001*	*0.001*	0.0015	0.5	*0.005*	0.00007
EARC0405_12-14	24S1311/040	12	14	WS2	WS	*0.00001*	0.8	*0.00005*	2.5	0.00006	0.00044	*0.001*	*0.001*	0.0001	0.2	0.007	*0.00002*
EARC0405_22-24	24S1311/041	22	24	WS1	WS	0.00002	0.4	*0.00005*	3.4	0.00006	0.0028	*0.001*	0.003	0.0013	0.5	0.43	*0.00002*
EARC0405_30-32	24S1311/042	30	32	WS1	WS	*0.00001*	1	*0.00005*	7.2	0.0068	0.0015	*0.001*	0.002	0.0022	0.2	0.031	*0.00002*
EARC0459_48-50	24S1311/054	48	50	WS2	WS	*0.00001*	0.4	*0.00005*	5.2	0.00007	0.00032	*0.001*	*0.001*	0.0001	0.2	0.045	*0.00002*
EARC0467_20-22	24S1311/057	20	22	WS2	WS	*0.00001*	*0.1*	*0.00005*	2.7	0.00009	0.00043	*0.001*	*0.001*	0.0002	0.2	0.01	0.00003
EARC0467_36-38	24S1311/058	36	38	WS1	WS	*0.00001*	*0.1*	*0.00005*	1.5	0.0009	0.0013	*0.001*	0.001	0.0003	*0.1*	*0.005*	*0.00002*
EARC0493_06-08	24S1311/074	6	8	WS1	WS	*0.00001*	0.3	*0.00005*	1.6	0.00009	0.00095	*0.001*	*0.001*	*0.0001*	0.3	0.03	*0.00002*
EARC0493_10-12	24S1311/075	10	12	WS1	WS	*0.00001*	0.2	*0.00005*	1.8	0.0001	0.0044	0.001	0.004	0.0007	0.6	0.33	*0.00002*
EARC0543_68-70	24S1311/080	68	70	WS2	WS	*0.00001*	0.5	*0.00005*	2.8	0.00019	0.00044	*0.001*	*0.001*	0.0004	0.4	0.022	0.00007
EARC0563_08-10	24S1311/084	8	10	WS2	WS	*0.00001*	0.3	*0.00005*	9.2	*0.00005*	0.00066	*0.001*	*0.001*	0.0002	0.2	0.007	*0.00002*
EARC0575_14-16	24S1311/088	14	16	WS1	WS	*0.00001*	0.7	*0.00005*	3.5	0.00077	0.0003	*0.001*	*0.001*	0.0002	*0.1*	*0.005*	*0.00002*
EADD0041_0-0.4	24S1311/093	0	0.4	WS1	WS	*0.00001*	0.7	*0.00005*	2.2	0.00013	0.00092	0.001	*0.001*	0.0003	0.1	0.01	*0.00002*
EADD0041_3-5	24S1311/094	3	5	WS1	WS	*0.00001*	1.3	*0.00005*	12	0.00029	0.0004	*0.001*	*0.001*	0.0005	0.2	*0.005*	*0.00002*
EADD0042_33.1-33.69	24S1311/100	33.1	33.69	WS2	WS	*0.00001*	*0.1*	*0.00005*	2.2	0.00007	0.00037	*0.001*	*0.001*	0.0003	0.2	0.011	*0.00002*

Table A.8: Deionised water leach results (3 of 4)

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.1	0.00004	0.00005	0.1	0.0001	0.0001	0.01	0.1	0.00005	0.005	0.00005	0.1
		m	m		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		From	To		Member	K	La	Li	Mg	Mn	Mo	N_total	Na	Ni	P_total	Pb	SO4
EARC0350_06-08	24S1311/024	6	8	SCR	CzD3	1.3	*0.00004*	0.0029	*0.1*	0.0017	0.00078	0.31	3.1	0.00035	*0.005*	0.0051	1.1
EARC0405_06-08	24S1311/039	6	8	SCR	CzD3	4.5	*0.00004*	0.00027	0.6	0.003	0.00042	0.27	3.2	0.0003	*0.005*	0.00078	12.3
EARC0408_02-04	24S1311/045	2	4	ALU	CzD3	2.4	0.00017	0.0028	1.2	0.0078	0.0013	0.77	11.4	0.00081	0.009	0.00028	26.1
EARC0408_06-08	24S1311/046	6	8	ALU	CzD3	0.9	*0.00004*	0.00073	0.1	0.0009	0.0012	0.78	5	0.00041	0.006	0.00069	3.2
EARC0459_02-04	24S1311/049	2	4	ALU	CzD3	1.5	*0.00004*	0.0026	0.6	0.0045	0.0018	0.39	8.7	0.00087	*0.005*	0.00011	14.1
EARC0459_08-10	24S1311/050	8	10	ALU	CzD3	0.8	0.00009	0.0003	0.2	0.0021	0.0029	0.71	6.4	0.00035	*0.005*	0.00016	5.7
EARC0459_16-18	24S1311/051	16	18	SCR	CzD3	0.3	0.00005	0.00022	*0.1*	0.0007	0.0027	0.34	3.6	0.00033	0.008	0.00008	1
EARC0467_02-04	24S1311/055	2	4	ALU	CzD3	2.6	*0.00004*	0.0016	0.7	0.0005	0.0036	0.36	7.5	0.00048	*0.005*	0.00018	5.6
EARC0467_06-08	24S1311/056	6	8	ALU	CzD3	0.5	0.00008	0.00054	*0.1*	0.0011	0.0031	0.4	4	0.00026	0.006	0.00036	2.3
EARC0474_04-06	24S1311/060	4	6	ALU	CzD3	1.4	0.00008	0.0024	*0.1*	0.0003	0.0011	0.27	1.9	0.00021	*0.005*	0.00017	0.9
EARC0474_12-14	24S1311/061	12	14	SCR	CzD3	0.8	*0.00004*	0.00036	*0.1*	0.0006	0.0049	0.28	4.2	0.00034	0.009	0.00011	1.8
EARC0543_02-04	24S1311/078	2	4	SCR	CzD3	1.8	*0.00004*	0.00039	0.3	0.0002	0.0012	0.21	6.2	0.0002	*0.005*	0.0001	11.3
EARC0561_02-04	24S1311/081	2	4	SCR	CzD3	4.9	*0.00004*	0.01	2.3	0.0004	0.002	0.15	4	0.00025	*0.005*	0.00011	7.7
EARC0575_06-08	24S1311/087	6	8	ALU	CzD3	2.5	*0.00004*	0.0038	1.1	0.038	0.00011	0.41	4.7	0.0022	*0.005*	0.00014	1.2
HR_MET0006_3-3.1	24S1311/091	3	3.1	ALU	CzD3	0.6	*0.00004*	0.0026	*0.1*	0.0002	*0.0001*	0.44	2.9	0.00047	*0.005*	0.00006	1.8
EADD0042_1-1.25	24S1311/097	1	1.25	ALU	CzD3	2.1	0.00006	0.0014	0.2	0.0041	0.00027	0.66	2.4	0.00074	0.005	0.00059	1.5
EADD0042_3.9-4.4	24S1311/098	3.9	4.4	ALU	CzD3	2.4	0.00005	0.0025	0.5	0.0031	0.00021	0.65	3.3	0.00049	*0.005*	0.0003	8.6
EADD0042_16-16.5	24S1311/099	16	16.5	SCR	CzD3	1.4	*0.00004*	0.0089	0.5	0.0003	*0.0001*	0.33	2.8	0.00025	*0.005*	*0.00005*	10.2
EARC0229_28-30	24S1311/004	28	30	DG3	DG	1.2	*0.00004*	0.01	2.1	0.0064	*0.0001*	0.17	9	0.00065	*0.005*	*0.00005*	7.4
EARC0229_42-44	24S1311/005	42	44	DG3	DG	0.8	*0.00004*	0.0097	1.3	0.014	*0.0001*	0.21	5.4	0.00045	*0.005*	*0.00005*	2.8
EARC0229_50-52	24S1311/006	50	52	DG3	DG	0.7	*0.00004*	0.006	1.3	0.017	0.0003	0.13	4.1	0.00064	*0.005*	*0.00005*	5.8
EARC0275_66-68	24S1311/008	66	68	DG2	DG	0.8	*0.00004*	0.014	2.1	0.0019	*0.0001*	0.08	4.9	0.00016	*0.005*	*0.00005*	2.2
EARC0324_04-06	24S1311/018	4	6	DG2	DG	2.2	*0.00004*	0.0026	0.6	0.0009	0.00016	0.19	6.9	0.00015	*0.005*	*0.00005*	14.6
EARC0324_10-12	24S1311/019	10	12	DG2	DG	1.3	*0.00004*	0.0032	0.2	0.0002	0.00039	0.16	5.2	0.00012	*0.005*	*0.00005*	6.1
EARC0324_16-18	24S1311/020	16	18	DG2	DG	2	*0.00004*	0.0063	0.3	0.001	0.00015	0.07	8.1	0.00011	*0.005*	*0.00005*	18.9
EARC0324_32-34	24S1311/021	32	34	DG1	DG	0.3	*0.00004*	0.013	0.4	0.0003	*0.0001*	0.09	1.5	0.0001	*0.005*	*0.00005*	1.6
EARC0324_46-48	24S1311/022	46	48	DG1	DG	0.2	*0.00004*	0.0049	0.3	*0.0001*	0.00035	0.16	0.8	0.00009	*0.005*	*0.00005*	0.2
EARC0324_62-64	24S1311/023	62	64	DG1	DG	0.2	*0.00004*	0.0037	0.4	0.0008	0.00019	0.09	1.1	0.00034	*0.005*	*0.00005*	1.1
EARC0350_12-14	24S1311/025	12	14	DG1	DG	1.9	*0.00004*	0.0041	0.9	0.0015	*0.0001*	0.09	3.1	0.00028	*0.005*	*0.00005*	11.5
EARC0350_18-20	24S1311/026	18	20	DG1	DG	1.9	*0.00004*	0.021	1.3	0.0019	*0.0001*	0.11	2.8	0.00035	*0.005*	*0.00005*	13.8
EARC0405_36-38	24S1311/043	36	38	DG3	DG	0.5	*0.00004*	0.0059	0.4	0.0002	0.00032	0.16	3.2	0.00034	*0.005*	0.0004	0.6
EARC0405_60-62	24S1311/044	60	62	DG3	DG	0.3	*0.00004*	0.023	0.3	0.0003	0.00025	0.2	2.7	0.00018	0.007	0.00007	0.2
EARC0408_36-38	24S1311/047	36	38	DG1	DG	0.5	*0.00004*	0.032	0.9	0.01	0.00013	0.16	1.6	0.00057	*0.005*	0.00033	3.3

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.1	0.00004	0.00005	0.1	0.0001	0.0001	0.01	0.1	0.00005	0.005	0.00005	0.1
		m	m		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		From	To		Member	K	La	Li	Mg	Mn	Mo	N_total	Na	Ni	P_total	Pb	SO4
EARC0467_56-58	24S1311/059	56	58	DG3	DG	0.4	*0.00004*	0.0056	0.3	0.0007	0.0016	0.1	1.7	0.00021	*0.005*	0.00026	0.7
EARC0480_04-06	24S1311/064	4	6	DG3	DG	1.9	*0.00004*	0.0042	2.3	0.0001	0.0067	0.14	4.5	0.00019	0.005	0.00009	10.4
EARC0480_10-12	24S1311/065	10	12	DG3	DG	1.7	*0.00004*	0.011	3.2	0.0001	0.016	0.15	9.5	0.00013	0.014	0.00012	7.8
EARC0480_16-18	24S1311/066	16	18	DG3	DG	0.4	*0.00004*	0.001	*0.1*	0.0002	0.002	0.32	6.3	0.0004	0.007	0.00017	6.5
EARC0480_24-26	24S1311/067	24	26	DG3	DG	0.3	*0.00004*	0.0035	*0.1*	*0.0001*	0.001	0.14	2.7	0.001	0.01	*0.00005*	1.3
EARC0480_32-34	24S1311/068	32	34	DG3	DG	0.3	*0.00004*	0.004	0.3	0.0016	0.0023	0.07	1.1	0.00035	*0.005*	*0.00005*	0.5
EARC0480_64-66	24S1311/069	64	66	DG2	DG	0.5	*0.00004*	0.0074	0.1	0.0017	0.0011	0.36	2.2	0.0013	0.065	0.0016	0.4
EARC0491_02-04	24S1311/070	2	4	DG2	DG	2.3	*0.00004*	0.013	1	0.0005	*0.0001*	0.09	8.6	0.00021	*0.005*	*0.00005*	29
EARC0491_08-10	24S1311/071	8	10	DG2	DG	1.2	*0.00004*	0.0043	0.3	0.0001	0.00039	0.09	3.2	0.00012	*0.005*	*0.00005*	7
EARC0491_16-18	24S1311/072	16	18	DG2	DG	1.2	*0.00004*	0.0048	0.4	0.0002	0.00011	0.08	4.3	0.00014	*0.005*	*0.00005*	10.1
EARC0491_22-24	24S1311/073	22	24	DG2	DG	0.6	*0.00004*	0.0048	0.6	0.0006	0.00019	0.09	4.8	0.00034	*0.005*	0.00015	3.4
EARC0493_28-30	24S1311/076	28	30	DG3	DG	0.2	*0.00004*	0.005	*0.1*	0.0003	0.0012	0.2	2.7	0.0011	0.006	*0.00005*	1.6
EARC0493_38-40	24S1311/077	38	40	DG3	DG	0.2	*0.00004*	0.016	*0.1*	0.0013	0.0002	0.14	1.4	0.00022	*0.005*	0.00043	0.1
EARC0563_30-32	24S1311/085	30	32	DG3	DG	0.5	*0.00004*	0.0014	*0.1*	*0.0001*	0.00029	0.15	2.9	0.00013	*0.005*	*0.00005*	0.6
EARC0563_46-48	24S1311/086	46	48	DG3	DG	0.6	*0.00004*	0.012	0.7	0.0006	*0.0001*	0.06	4.5	0.00012	*0.005*	0.00006	4.8
EARC0575_20-22	24S1311/089	20	22	DG3	DG	0.5	*0.00004*	0.015	0.4	0.0028	*0.0001*	0.11	0.9	0.00097	*0.005*	0.0001	1.9
EARC0575_36-38	24S1311/090	36	38	DG3	DG	0.2	*0.00004*	0.0025	0.3	0.0005	0.00075	0.06	1.1	0.00021	*0.005*	*0.00005*	0.4
HR_MET0006_48-50	24S1311/092	48	50	DG3	DG	0.4	*0.00004*	0.0029	0.3	0.0003	*0.0001*	0.22	0.9	0.00028	*0.005*	0.00007	0.8
EADD0041_7.5-7.7	24S1311/095	7.5	7.7	DG2	DG	1.2	*0.00004*	0.0061	0.6	0.0012	*0.0001*	0.31	4.4	0.00085	0.033	*0.00005*	0.2
EADD0041_48-48.3	24S1311/096	48	48.3	DG3	DG	1.5	*0.00004*	0.005	0.5	0.0004	*0.0001*	0.14	2	0.00022	*0.005*	0.00012	6.9
EARC0284_04-06	24S1311/009	4	6	FWZ	FWZ	2.6	*0.00004*	0.0051	0.7	0.0005	0.00011	0.12	7.3	0.0001	*0.005*	*0.00005*	16
EARC0284_14-16	24S1311/010	14	16	FWZ	FWZ	1.9	*0.00004*	0.0045	0.1	*0.0001*	0.00052	0.17	11.6	0.00015	*0.005*	*0.00005*	12.9
EARC0350_24-26	24S1311/027	24	26	FWZ	FWZ	0.8	*0.00004*	0.013	0.9	0.0009	*0.0001*	0.09	2.5	0.00068	*0.005*	*0.00005*	6.2
EARC0350_32-34	24S1311/028	32	34	FWZ	FWZ	0.7	*0.00004*	0.01	0.8	0.0058	0.0014	0.09	2	0.00066	*0.005*	*0.00005*	2.7
EARC0350_38-40	24S1311/029	38	40	FWZ	FWZ	0.8	*0.00004*	0.0056	0.8	0.0067	0.0034	0.16	1.5	0.00031	*0.005*	*0.00005*	1.4
EARC0408_46-48	24S1311/048	46	48	FWZ	FWZ	0.7	*0.00004*	0.0066	1	0.0035	0.00011	0.08	1.6	0.00017	*0.005*	0.00008	0.9
EARC0474_18-20	24S1311/062	18	20	FWZ	FWZ	2	*0.00004*	0.026	0.8	0.0007	*0.0001*	0.14	5.2	0.00036	*0.005*	0.00011	18.5
EARC0307_06-08	24S1311/013	6	8	J2	JOF	1.7	*0.00004*	0.0012	0.7	0.0013	0.0012	1.3	5.8	0.00031	*0.005*	0.00006	11.4
EARC0307_14-16	24S1311/014	14	16	J2	JOF	1.7	*0.00004*	0.001	0.5	*0.0001*	0.00069	0.24	17.7	0.00008	*0.005*	*0.00005*	25.1
EARC0307_22-24	24S1311/015	22	24	J2	JOF	1	*0.00004*	0.0032	1.3	0.003	0.00013	0.15	5.8	0.00056	*0.005*	*0.00005*	6
EARC0307_46-48	24S1311/016	46	48	J1	JOF	0.7	*0.00004*	0.0054	0.6	0.0011	0.0013	0.09	4.7	0.00009	*0.005*	*0.00005*	1.8
EARC0307_56-58	24S1311/017	56	58	J1	JOF	0.8	*0.00004*	0.001	0.2	0.0042	0.019	0.36	3	0.00045	0.055	*0.00005*	0.5
EARC0377_02-04	24S1311/031	2	4	J1	JOF	1	*0.00004*	0.0029	1.4	0.0002	0.0014	0.14	5.1	0.00015	*0.005*	0.0038	26.5
EARC0399_04-06	24S1311/035	4	6	J3	JOF	1.6	*0.00004*	0.0054	1.6	0.014	*0.0001*	0.22	15	0.0035	*0.005*	0.00054	23.5

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.1	0.00004	0.00005	0.1	0.0001	0.0001	0.01	0.1	0.00005	0.005	0.00005	0.1
		m	m		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		From	To		Member	K	La	Li	Mg	Mn	Mo	N_total	Na	Ni	P_total	Pb	SO4
EARC0399_20-22	24S1311/036	20	22	J2	JOF	1.2	*0.00004*	0.00057	0.5	0.0014	0.00012	0.15	5.2	0.001	*0.005*	0.00059	4.8
EARC0399_36-38	24S1311/037	36	38	J2	JOF	0.5	*0.00004*	0.0028	0.6	0.0008	0.00054	0.03	2.3	0.00026	*0.005*	0.00032	1.8
EARC0399_52-54	24S1311/038	52	54	J2	JOF	0.9	*0.00004*	0.0034	2.1	0.12	0.00018	0.1	2.7	0.005	*0.005*	0.00022	1.6
EARC0459_24-26	24S1311/052	24	26	J2	JOF	0.5	*0.00004*	0.0069	0.2	0.0005	0.002	0.44	3	0.00037	0.01	0.00061	2.5
EARC0459_32-34	24S1311/053	32	34	J1	JOF	0.6	*0.00004*	0.01	1.2	0.0004	0.001	0.32	4.7	0.00058	*0.005*	0.00006	3
EARC0543_10-12	24S1311/079	10	12	J2	JOF	1.6	*0.00004*	0.0012	1.2	0.0007	*0.0001*	0.07	4.5	0.00016	*0.005*	0.00007	19
EARC0284_28-30	24S1311/011	28	30	MCS	MCS	4.7	*0.00004*	0.0019	0.4	0.0003	0.0023	1.8	8.2	0.00027	0.006	*0.00005*	3.5
EARC0284_34-36	24S1311/012	34	36	MCS	MCS	6.8	*0.00004*	0.0037	2.1	0.0003	0.0031	0.34	17.6	0.00028	*0.005*	*0.00005*	7.9
EARC0350_46-48	24S1311/030	46	48	MCS	MCS	3.9	*0.00004*	0.0036	0.3	0.0009	0.0042	0.29	3.5	0.00029	0.038	0.0006	1.2
EARC0474_30-32	24S1311/063	30	32	MCS	MCS	5.7	*0.00004*	0.011	1.4	0.0034	0.012	0.21	7.8	0.00027	0.01	0.00006	7.4
EARC0561_12-14	24S1311/082	12	14	MCS	MCS	1.6	*0.00004*	0.011	0.1	0.0003	0.0023	0.25	5.2	0.00021	*0.005*	0.00006	2.4
EARC0561_24-26	24S1311/083	24	26	MCS	MCS	2.2	*0.00004*	0.007	0.6	0.0009	0.009	0.33	5	0.00043	0.008	0.00023	1.1
EARC0229_02-04	24S1311/001	2	4	WS2	WS	1.7	*0.00004*	0.0033	0.5	0.004	*0.0001*	0.09	3.7	0.00027	*0.005*	*0.00005*	8.9
EARC0229_10-12	24S1311/002	10	12	WS2	WS	2	*0.00004*	0.00063	0.3	0.0006	*0.0001*	0.16	10.6	0.00016	*0.005*	*0.00005*	8.4
EARC0229_22-24	24S1311/003	22	24	WS1	WS	4.8	*0.00004*	0.0076	4.1	0.012	*0.0001*	0.22	24.4	0.00046	*0.005*	*0.00005*	13.1
EARC0275_04-06	24S1311/007	4	6	WS2	WS	7.8	*0.00004*	0.00068	3.3	0.0006	0.0012	0.15	20.7	0.00008	0.005	*0.00005*	14.8
EARC0377_12-14	24S1311/032	12	14	WS2	WS	1.7	*0.00004*	0.0024	0.2	0.0003	0.0035	1.8	10	0.00062	*0.005*	0.015	9.3
EARC0377_20-22	24S1311/033	20	22	WS2	WS	2.2	*0.00004*	0.0031	1.7	0.0018	0.002	0.19	14.6	0.00018	*0.005*	0.0021	6.9
EARC0377_30-32	24S1311/034	30	32	WS2	WS	3.1	*0.00004*	0.00074	*0.1*	*0.0001*	0.0015	0.15	2.5	0.00007	*0.005*	0.00042	0.6
EARC0405_12-14	24S1311/040	12	14	WS2	WS	1.7	*0.00004*	0.016	0.6	0.0002	0.00023	0.15	3.1	0.00015	*0.005*	0.00015	5.7
EARC0405_22-24	24S1311/041	22	24	WS1	WS	0.9	*0.00004*	0.0021	0.2	0.0012	0.0013	0.55	4.8	0.00036	0.008	0.0015	1.4
EARC0405_30-32	24S1311/042	30	32	WS1	WS	0.9	*0.00004*	0.0041	1.1	0.0029	0.00048	0.39	9.3	0.0029	0.006	0.0011	7.3
EARC0459_48-50	24S1311/054	48	50	WS2	WS	1.2	*0.00004*	0.0056	0.3	0.0005	0.00072	0.11	4	0.00023	0.012	*0.00005*	0.5
EARC0467_20-22	24S1311/057	20	22	WS2	WS	1.2	*0.00004*	0.00087	*0.1*	0.0001	0.0016	0.2	2.3	0.00007	*0.005*	0.00012	0.9
EARC0467_36-38	24S1311/058	36	38	WS1	WS	0.5	*0.00004*	0.0012	*0.1*	0.0009	0.0012	0.04	1.6	0.00021	*0.005*	0.00012	0.3
EARC0493_06-08	24S1311/074	6	8	WS1	WS	1.6	*0.00004*	0.00094	0.3	0.0006	0.001	0.29	5.7	0.00038	*0.005*	*0.00005*	13.2
EARC0493_10-12	24S1311/075	10	12	WS1	WS	0.7	*0.00004*	0.00016	*0.1*	0.0003	0.0039	0.78	4.3	0.00056	*0.005*	0.00032	3.3
EARC0543_68-70	24S1311/080	68	70	WS2	WS	2.4	*0.00004*	0.0038	0.5	0.0021	0.0038	0.16	2.2	0.00037	0.007	0.00011	2.9
EARC0563_08-10	24S1311/084	8	10	WS2	WS	2.1	*0.00004*	0.00084	0.1	*0.0001*	0.00051	0.19	9.5	0.00015	*0.005*	0.00006	10.4
EARC0575_14-16	24S1311/088	14	16	WS1	WS	1.4	*0.00004*	0.019	0.6	0.0014	*0.0001*	0.21	2.7	0.00072	*0.005*	0.00007	6.9
EADD0041_0-0.4	24S1311/093	0	0.4	WS1	WS	2.2	*0.00004*	0.001	0.3	0.0024	*0.0001*	0.5	1.8	0.00018	*0.005*	*0.00005*	1.6
EADD0041_3-5	24S1311/094	3	5	WS1	WS	3.3	*0.00004*	0.0015	0.5	0.0006	*0.0001*	0.54	6	0.00049	*0.005*	0.00009	2.4
EADD0042_33.1-33.69	24S1311/100	33.1	33.69	WS2	WS	2.8	*0.00004*	0.0016	*0.1*	*0.0001*	0.00014	0.55	1.9	0.00025	0.006	0.00008	0.2

Table A.9: Deionised water leach results (4 of 4)

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.00002	0.00005	0.05	0.0001	0.0001	0.00001	0.00002	0.00002	0.00002	0.0001	0.00002	0.001
		m	m		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		From	To		Member	Sb	Se	Si	Sn	Sr	Ta	Th	Tl	U	V	W	Zn
EARC0350_06-08	24S1311/024	6	8	SCR	CzD3	0.00018	0.00026	14	0.0001	0.0011	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0004	0.00009	0.003
EARC0405_06-08	24S1311/039	6	8	SCR	CzD3	0.00014	0.00081	12	*0.0001*	0.028	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00017	0.021
EARC0408_02-04	24S1311/045	2	4	ALU	CzD3	0.00037	0.00028	21	*0.0001*	0.013	*0.00001*	0.00004	*0.00002*	*0.00002*	0.0029	0.00074	0.004
EARC0408_06-08	24S1311/046	6	8	ALU	CzD3	0.00024	0.00015	16	*0.0001*	0.0019	*0.00001*	0.00002	*0.00002*	*0.00002*	0.0034	0.0007	0.025
EARC0459_02-04	24S1311/049	2	4	ALU	CzD3	0.00054	0.00033	20	*0.0001*	0.0053	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0021	0.0017	0.001
EARC0459_08-10	24S1311/050	8	10	ALU	CzD3	0.0005	0.00016	24	*0.0001*	0.0016	*0.00001*	0.00005	*0.00002*	*0.00002*	0.006	0.0015	0.003
EARC0459_16-18	24S1311/051	16	18	SCR	CzD3	0.00031	0.00008	27	*0.0001*	0.0005	*0.00001*	0.00003	*0.00002*	*0.00002*	0.0034	0.0031	0.007
EARC0467_02-04	24S1311/055	2	4	ALU	CzD3	0.00029	0.0003	14	*0.0001*	0.0094	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0018	0.0042	0.021
EARC0467_06-08	24S1311/056	6	8	ALU	CzD3	0.00035	0.00051	13	*0.0001*	0.0003	*0.00001*	0.00004	*0.00002*	*0.00002*	0.0036	0.003	0.007
EARC0474_04-06	24S1311/060	4	6	ALU	CzD3	0.00031	0.00026	13	*0.0001*	0.0008	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.002	0.0071	0.002
EARC0474_12-14	24S1311/061	12	14	SCR	CzD3	0.00035	0.0005	14	*0.0001*	0.0004	*0.00001*	0.00005	*0.00002*	*0.00002*	0.003	0.0022	0.003
EARC0543_02-04	24S1311/078	2	4	SCR	CzD3	0.00017	0.0022	10	*0.0001*	0.0065	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0003	0.0007	0.003
EARC0561_02-04	24S1311/081	2	4	SCR	CzD3	0.00029	0.00068	9.2	0.0001	0.087	*0.00001*	*0.00002*	*0.00002*	0.00003	0.0008	0.0024	0.004
EARC0575_06-08	24S1311/087	6	8	ALU	CzD3	0.00017	0.00013	19	*0.0001*	0.01	*0.00001*	*0.00002*	0.00002	*0.00002*	0.0004	0.00004	0.007
HR_MET0006_3-3.1	24S1311/091	3	3.1	ALU	CzD3	0.00007	0.00019	25	*0.0001*	0.0009	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0007	0.00019	0.003
EADD0042_1-1.25	24S1311/097	1	1.25	ALU	CzD3	0.00016	0.00031	19	*0.0001*	0.0022	*0.00001*	*0.00002*	*0.00002*	0.00002	0.0015	0.00013	0.006
EADD0042_3.9-4.4	24S1311/098	3.9	4.4	ALU	CzD3	0.00026	0.00037	19	*0.0001*	0.0079	*0.00001*	0.00002	*0.00002*	*0.00002*	0.0021	0.002	0.007
EADD0042_16-16.5	24S1311/099	16	16.5	SCR	CzD3	0.00009	0.0031	8.5	*0.0001*	0.0075	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00006	0.004
EARC0229_28-30	24S1311/004	28	30	DG3	DG	0.00003	0.00061	5.5	*0.0001*	0.018	*0.00001*	*0.00002*	0.00003	*0.00002*	*0.0001*	*0.00002*	*0.001*
EARC0229_42-44	24S1311/005	42	44	DG3	DG	0.00006	0.00034	6.2	*0.0001*	0.0072	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	*0.00002*	*0.001*
EARC0229_50-52	24S1311/006	50	52	DG3	DG	0.00008	0.00022	4.5	*0.0001*	0.0078	*0.00001*	*0.00002*	0.00002	*0.00002*	*0.0001*	0.0003	*0.001*
EARC0275_66-68	24S1311/008	66	68	DG2	DG	0.00012	0.0001	7.9	*0.0001*	0.0088	*0.00001*	*0.00002*	0.00003	*0.00002*	*0.0001*	*0.00002*	*0.001*
EARC0324_04-06	24S1311/018	4	6	DG2	DG	0.00015	0.001	6.7	*0.0001*	0.011	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00011	0.002
EARC0324_10-12	24S1311/019	10	12	DG2	DG	0.00015	0.00034	9.3	*0.0001*	0.003	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.0001	*0.001*
EARC0324_16-18	24S1311/020	16	18	DG2	DG	0.00021	0.00026	13	*0.0001*	0.0043	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00003	*0.001*
EARC0324_32-34	24S1311/021	32	34	DG1	DG	0.00019	0.00035	5.4	*0.0001*	0.0034	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	*0.00002*	*0.001*
EARC0324_46-48	24S1311/022	46	48	DG1	DG	0.00007	*0.00005*	5.8	*0.0001*	0.0018	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0001	0.00032	*0.001*
EARC0324_62-64	24S1311/023	62	64	DG1	DG	0.00006	0.00006	3.5	*0.0001*	0.0031	*0.00001*	*0.00002*	0.00002	*0.00002*	0.0001	0.00012	0.001
EARC0350_12-14	24S1311/025	12	14	DG1	DG	0.00004	0.00076	8.6	*0.0001*	0.014	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00002	0.002
EARC0350_18-20	24S1311/026	18	20	DG1	DG	0.00003	0.00089	8.7	*0.0001*	0.021	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	*0.00002*	*0.001*
EARC0405_36-38	24S1311/043	36	38	DG3	DG	0.00023	0.00006	7.4	*0.0001*	0.0038	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0001	0.00014	0.02
EARC0405_60-62	24S1311/044	60	62	DG3	DG	0.00017	*0.00005*	9.2	*0.0001*	0.0014	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0002	0.00026	0.004
EARC0408_36-38	24S1311/047	36	38	DG1	DG	0.00008	0.0001	7	*0.0001*	0.0064	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00022	0.003

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.00002	0.00005	0.05	0.0001	0.0001	0.00001	0.00002	0.00002	0.00002	0.0001	0.00002	0.001
		m	m		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		From	To		Member	Sb	Se	Si	Sn	Sr	Ta	Th	Tl	U	V	W	Zn
EARC0467_56-58	24S1311/059	56	58	DG3	DG	0.00009	*0.00005*	5.3	*0.0001*	0.0026	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00038	0.007
EARC0480_04-06	24S1311/064	4	6	DG3	DG	0.00015	0.00047	10	*0.0001*	0.053	*0.00001*	*0.00002*	*0.00002*	0.00002	*0.0001*	0.001	0.005
EARC0480_10-12	24S1311/065	10	12	DG3	DG	0.00018	0.00025	11	0.0002	0.066	*0.00001*	*0.00002*	*0.00002*	0.00004	*0.0001*	0.0048	0.003
EARC0480_16-18	24S1311/066	16	18	DG3	DG	0.00024	0.00025	15	*0.0001*	0.0005	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0002	0.00029	0.008
EARC0480_24-26	24S1311/067	24	26	DG3	DG	0.00021	*0.00005*	12	*0.0001*	0.0002	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0002	0.00013	0.004
EARC0480_32-34	24S1311/068	32	34	DG3	DG	0.00013	*0.00005*	6.6	*0.0001*	0.0025	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00053	*0.001*
EARC0480_64-66	24S1311/069	64	66	DG2	DG	0.00019	*0.00005*	14	*0.0001*	0.0008	*0.00001*	0.00003	*0.00002*	0.00002	0.0004	0.00009	0.038
EARC0491_02-04	24S1311/070	2	4	DG2	DG	0.00006	0.0011	6.9	*0.0001*	0.052	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00005	0.002
EARC0491_08-10	24S1311/071	8	10	DG2	DG	0.00004	0.00048	5.2	*0.0001*	0.0056	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00003	*0.001*
EARC0491_16-18	24S1311/072	16	18	DG2	DG	0.00007	0.00092	14	*0.0001*	0.0045	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00005	*0.001*
EARC0491_22-24	24S1311/073	22	24	DG2	DG	0.00004	0.00011	10	*0.0001*	0.0039	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00068	0.004
EARC0493_28-30	24S1311/076	28	30	DG3	DG	0.0002	0.00008	12	*0.0001*	0.0002	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0001	0.00006	0.002
EARC0493_38-40	24S1311/077	38	40	DG3	DG	0.00015	*0.00005*	9.6	*0.0001*	0.0005	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00007	0.007
EARC0563_30-32	24S1311/085	30	32	DG3	DG	0.00009	*0.00005*	8.3	*0.0001*	0.0007	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00008	*0.001*
EARC0563_46-48	24S1311/086	46	48	DG3	DG	0.00004	0.00015	3.2	*0.0001*	0.01	*0.00001*	*0.00002*	0.00003	*0.00002*	*0.0001*	0.00005	0.005
EARC0575_20-22	24S1311/089	20	22	DG3	DG	0.00006	0.00009	5.7	*0.0001*	0.0051	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00006	0.003
EARC0575_36-38	24S1311/090	36	38	DG3	DG	0.00013	*0.00005*	9.3	*0.0001*	0.0021	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0002	0.0012	0.001
HR_MET0006_48-50	24S1311/092	48	50	DG3	DG	0.00006	0.00007	7.3	*0.0001*	0.0027	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00045	0.002
EADD0041_7.5-7.7	24S1311/095	7.5	7.7	DG2	DG	0.00014	*0.00005*	22	*0.0001*	0.0028	*0.00001*	0.00007	*0.00002*	0.00011	0.0006	*0.00002*	0.004
EADD0041_48-48.3	24S1311/096	48	48.3	DG3	DG	0.00002	0.00077	5.6	*0.0001*	0.0076	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00003	0.003
EARC0284_04-06	24S1311/009	4	6	FWZ	FWZ	0.00011	0.0033	7.2	*0.0001*	0.01	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00004	*0.001*
EARC0284_14-16	24S1311/010	14	16	FWZ	FWZ	0.00025	0.0019	7.8	*0.0001*	0.001	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0001	0.00026	*0.001*
EARC0350_24-26	24S1311/027	24	26	FWZ	FWZ	0.00011	0.00035	7.7	*0.0001*	0.009	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00004	0.002
EARC0350_32-34	24S1311/028	32	34	FWZ	FWZ	0.00016	0.00008	6.5	*0.0001*	0.0046	*0.00001*	*0.00002*	0.00003	*0.00002*	*0.0001*	0.00062	*0.001*
EARC0350_38-40	24S1311/029	38	40	FWZ	FWZ	0.00028	0.00009	7.3	*0.0001*	0.0037	*0.00001*	*0.00002*	0.00003	*0.00002*	*0.0001*	0.0057	0.002
EARC0408_46-48	24S1311/048	46	48	FWZ	FWZ	0.00003	0.00006	7.1	*0.0001*	0.0062	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.0002	0.006
EARC0474_18-20	24S1311/062	18	20	FWZ	FWZ	0.00004	0.0013	7.6	*0.0001*	0.022	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	*0.00002*	0.015
EARC0307_06-08	24S1311/013	6	8	J2	JOF	0.0002	0.0017	9.7	*0.0001*	0.013	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.0018	0.022
EARC0307_14-16	24S1311/014	14	16	J2	JOF	0.00006	0.0022	6.9	*0.0001*	0.0097	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00083	0.004
EARC0307_22-24	24S1311/015	22	24	J2	JOF	0.00003	0.00027	6.4	*0.0001*	0.014	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00007	*0.001*
EARC0307_46-48	24S1311/016	46	48	J1	JOF	0.00007	0.00008	8	*0.0001*	0.0024	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0001	0.00096	*0.001*
EARC0307_56-58	24S1311/017	56	58	J1	JOF	0.00037	0.0001	14	*0.0001*	0.0006	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0001	0.02	0.003
EARC0377_02-04	24S1311/031	2	4	J1	JOF	0.00011	0.0012	7.7	*0.0001*	0.11	*0.00001*	*0.00002*	*0.00002*	0.00012	*0.0001*	0.002	0.006
EARC0399_04-06	24S1311/035	4	6	J3	JOF	0.0002	0.00082	11	*0.0001*	0.036	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00009	0.005

Sample ID	Lab ID	Depth		Interpreted STRAND	LOD	0.00002	0.00005	0.05	0.0001	0.0001	0.00001	0.00002	0.00002	0.00002	0.0001	0.00002	0.001
		m	m		Unit	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		From	To		Member	Sb	Se	Si	Sn	Sr	Ta	Th	Tl	U	V	W	Zn
EARC0399_20-22	24S1311/036	20	22	J2	JOF	0.00021	0.00021	8.9	*0.0001*	0.0071	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00035	0.02
EARC0399_36-38	24S1311/037	36	38	J2	JOF	0.00021	0.00009	5.9	*0.0001*	0.0056	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.0012	0.005
EARC0399_52-54	24S1311/038	52	54	J2	JOF	0.00023	0.00008	7.3	*0.0001*	0.021	*0.00001*	*0.00002*	0.00004	*0.00002*	*0.0001*	0.00064	0.003
EARC0459_24-26	24S1311/052	24	26	J2	JOF	0.00021	0.00036	13	*0.0001*	0.001	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0011	0.00031	0.004
EARC0459_32-34	24S1311/053	32	34	J1	JOF	0.00025	0.0004	13	*0.0001*	0.0042	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0005	0.00032	0.006
EARC0543_10-12	24S1311/079	10	12	J2	JOF	0.00002	0.0021	5.9	*0.0001*	0.035	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00009	0.002
EARC0284_28-30	24S1311/011	28	30	MCS	MCS	0.0017	0.00027	9.9	*0.0001*	0.0009	*0.00001*	0.00002	*0.00002*	*0.00002*	0.002	0.018	0.004
EARC0284_34-36	24S1311/012	34	36	MCS	MCS	0.0012	0.0011	8.2	*0.0001*	0.0064	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0003	0.0029	*0.001*
EARC0350_46-48	24S1311/030	46	48	MCS	MCS	0.00075	0.00009	15	*0.0001*	0.0012	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0005	0.0031	0.01
EARC0474_30-32	24S1311/063	30	32	MCS	MCS	0.0012	0.00009	8.9	0.0003	0.0031	*0.00001*	*0.00002*	0.00002	*0.00002*	0.0024	0.084	0.003
EARC0561_12-14	24S1311/082	12	14	MCS	MCS	0.00045	0.0011	11	*0.0001*	0.001	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0008	0.0022	0.005
EARC0561_24-26	24S1311/083	24	26	MCS	MCS	0.001	0.00011	9.4	0.0002	0.003	*0.00001*	0.00002	*0.00002*	*0.00002*	0.0013	0.074	0.003
EARC0229_02-04	24S1311/001	2	4	WS2	WS	0.00009	0.00044	11	*0.0001*	0.012	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0001	0.00005	*0.001*
EARC0229_10-12	24S1311/002	10	12	WS2	WS	0.00007	0.00027	10	*0.0001*	0.0037	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	*0.00002*	0.002
EARC0229_22-24	24S1311/003	22	24	WS1	WS	0.00005	0.00061	11	*0.0001*	0.042	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	*0.00002*	0.001
EARC0275_04-06	24S1311/007	4	6	WS2	WS	0.0004	0.00029	8.4	*0.0001*	0.075	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0005	0.0012	*0.001*
EARC0377_12-14	24S1311/032	12	14	WS2	WS	0.00022	0.00028	8.1	0.0004	0.0025	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0002	0.0043	0.13
EARC0377_20-22	24S1311/033	20	22	WS2	WS	0.00044	0.00016	7.6	0.0002	0.0092	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0004	0.0037	0.011
EARC0377_30-32	24S1311/034	30	32	WS2	WS	0.00074	*0.00005*	5.6	0.0002	0.0006	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0012	0.013	0.009
EARC0405_12-14	24S1311/040	12	14	WS2	WS	0.00018	0.00038	10	*0.0001*	0.0051	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0001	0.00008	0.006
EARC0405_22-24	24S1311/041	22	24	WS1	WS	0.00051	0.00011	11	*0.0001*	0.0019	*0.00001*	0.00007	*0.00002*	*0.00002*	0.0006	0.00026	0.023
EARC0405_30-32	24S1311/042	30	32	WS1	WS	0.00066	0.00031	11	*0.0001*	0.0047	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0003	0.00007	0.01
EARC0459_48-50	24S1311/054	48	50	WS2	WS	0.00029	*0.00005*	12	*0.0001*	0.0016	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0002	0.00049	0.003
EARC0467_20-22	24S1311/057	20	22	WS2	WS	0.0013	*0.00005*	12	*0.0001*	0.0002	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0019	0.0061	0.004
EARC0467_36-38	24S1311/058	36	38	WS1	WS	0.00026	*0.00005*	7.9	*0.0001*	0.0006	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0003	0.002	0.009
EARC0493_06-08	24S1311/074	6	8	WS1	WS	0.00015	0.00056	16	*0.0001*	0.0035	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0001	0.00011	0.002
EARC0493_10-12	24S1311/075	10	12	WS1	WS	0.00053	0.00016	19	*0.0001*	0.0005	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0008	0.0018	0.007
EARC0543_68-70	24S1311/080	68	70	WS2	WS	0.00047	0.00006	7.4	0.0001	0.0028	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0004	0.013	0.012
EARC0563_08-10	24S1311/084	8	10	WS2	WS	0.0002	0.00038	8.7	*0.0001*	0.0025	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0001	0.00044	0.002
EARC0575_14-16	24S1311/088	14	16	WS1	WS	0.00006	0.0002	11	*0.0001*	0.014	*0.00001*	*0.00002*	*0.00002*	*0.00002*	*0.0001*	0.00003	0.003
EADD0041_0-0.4	24S1311/093	0	0.4	WS1	WS	0.00008	0.00018	6.5	*0.0001*	0.0045	*0.00001*	*0.00002*	0.00002	*0.00002*	0.0002	0.00009	0.002
EADD0041_3-5	24S1311/094	3	5	WS1	WS	0.00012	0.00005	15	*0.0001*	0.013	*0.00001*	*0.00002*	*0.00002*	*0.00002*	0.0002	0.00017	0.004
EADD0042_33.1-33.69	24S1311/100	33.1	33.69	WS2	WS	0.00045	*0.00005*	10	*0.0001*	0.0004	*0.00001*	*0.00002*	*0.00002*	0.00002	0.0004	0.0013	0.002

Appendix B Laboratory reports

GOVERNMENT OF WESTERN AUSTRALIA

ChemCentre

Scientific Services Division

Amended Report

Chem Centre EXPERT SOLUTIONS

Resources and Chemistry Precinct
Cnr Manning Road and Townsing Drive
Bentley
WA 6102
T +61 8 9422 9800
F +61 8 9422 9801
www.chemcentre.wa.gov.au
ABN 40 991 885 705

Purchase Order: 9000001451
ChemCentre Reference: 24S1311 R1

HanRoy Iron Ore Projects Pty Ltd
28-42 Ventnor Avenue
West Perth WA 6005

Attention: Colleen Burgers

Report On: 100 samples received on 19/09/2024

LAB ID	Material	Client ID and Description
24S1311 / 001	rock	EARC0229_02-04 A347084
24S1311 / 002	rock	EARC0229_10-12 A347088
24S1311 / 003	rock	EARC0229_22-24 A347094
24S1311 / 004	rock	EARC0229_28-30 A347097
24S1311 / 005	rock	EARC0229_42-44 A347104
24S1311 / 006	rock	EARC0229_50-52 A347108
24S1311 / 007	rock	EARC0275_04-06 A347924
24S1311 / 008	rock	EARC0275_66-68 A347957
24S1311 / 009	rock	EARC0284_04-06 A347282
24S1311 / 010	rock	EARC0284_14-16 A347287
24S1311 / 011	rock	EARC0284_28-30 A347294
24S1311 / 012	rock	EARC0284_34-36 A347297
24S1311 / 013	rock	EARC0307_06-08 A349869
24S1311 / 014	rock	EARC0307_14-16 A349873
24S1311 / 015	rock	EARC0307_22-24 A349877
24S1311 / 016	rock	EARC0307_46-48 A349891
24S1311 / 017	rock	EARC0307_56-58 A349896
24S1311 / 018	rock	EARC0324_04-06 A346668
24S1311 / 019	rock	EARC0324_10-12 A346671
24S1311 / 020	rock	EARC0324_16-18 A346674
24S1311 / 021	rock	EARC0324_32-34 A346684
24S1311 / 022	rock	EARC0324_46-48 A346691
24S1311 / 023	rock	EARC0324_62-64 A346699
24S1311 / 024	rock	EARC0350_06-08 A345485
24S1311 / 025	rock	EARC0350_12-14 A345488
24S1311 / 026	rock	EARC0350_18-20 A345491
24S1311 / 027	rock	EARC0350_24-26 A345494
24S1311 / 028	rock	EARC0350_32-34 A345498
24S1311 / 029	rock	EARC0350_38-40 A345501
24S1311 / 030	rock	EARC0350_46-48 A345505
24S1311 / 031	rock	EARC0377_02-04 A345196
24S1311 / 032	rock	EARC0377_12-14 A345201
24S1311 / 033	rock	EARC0377_20-22 A345205
24S1311 / 034	rock	EARC0377_30-32 A345210
24S1311 / 035	rock	EARC0399_04-06 A347538
24S1311 / 036	rock	EARC0399_20-22 A347548
24S1311 / 037	rock	EARC0399_36-38 A347556
24S1311 / 038	rock	EARC0399_52-54 A347566
24S1311 / 039	rock	EARC0405_06-08 A343049
24S1311 / 040	rock	EARC0405_12-14 A343052
24S1311 / 041	rock	EARC0405_22-24 A343057
24S1311 / 042	rock	EARC0405_30-32 A343063
24S1311 / 043	rock	EARC0405_36-38 A343066
24S1311 / 044	rock	EARC0405_60-62 A343078

LAB ID	Material	Client ID and Description
24S1311 / 045	rock	EARC0408_02-04 A343908
24S1311 / 046	rock	EARC0408_06-08 A343910
24S1311 / 047	rock	EARC0408_36-38 A343927
24S1311 / 048	rock	EARC0408_46-48 A343932
24S1311 / 049	rock	EARC0459_02-04 A342375
24S1311 / 050	rock	EARC0459_08-10 A342378
24S1311 / 051	rock	EARC0459_16-18 A342384
24S1311 / 052	rock	EARC0459_24-26 A342388
24S1311 / 053	rock	EARC0459_32-34 A342392
24S1311 / 054	rock	EARC0459_48-50 A342400
24S1311 / 055	rock	EARC0467_02-04 A350491
24S1311 / 056	rock	EARC0467_06-08 A350493
24S1311 / 057	rock	EARC0467_20-22 A350500
24S1311 / 058	rock	EARC0467_36-38 A350508
24S1311 / 059	rock	EARC0467_56-58 A350518
24S1311 / 060	rock	EARC0474_04-06 A350544
24S1311 / 061	rock	EARC0474_12-14 A350548
24S1311 / 062	rock	EARC0474_18-20 A350551
24S1311 / 063	rock	EARC0474_30-32 A350557
24S1311 / 064	rock	EARC0480_04-06 A351035
24S1311 / 065	rock	EARC0480_10-12 A351038
24S1311 / 066	rock	EARC0480_16-18 A351043
24S1311 / 067	rock	EARC0480_24-26 A351047
24S1311 / 068	rock	EARC0480_32-34 A351051
24S1311 / 069	rock	EARC0480_64-66 A351069
24S1311 / 070	rock	EARC0491_02-04 A350886
24S1311 / 071	rock	EARC0491_08-10 A350889
24S1311 / 072	rock	EARC0491_16-18 A350893
24S1311 / 073	rock	EARC0491_22-24 A350896
24S1311 / 074	rock	EARC0493_06-08 A351108
24S1311 / 075	rock	EARC0493_10-12 A351110
24S1311 / 076	rock	EARC0493_28-30 A351119
24S1311 / 077	rock	EARC0493_38-40 A351126
24S1311 / 078	rock	EARC0543_02-04 A349479
24S1311 / 079	rock	EARC0543_10-12 A349485
24S1311 / 080	rock	EARC0543_68-70 A330514
24S1311 / 081	rock	EARC0561_02-04 A349116
24S1311 / 082	rock	EARC0561_12-14 A349123
24S1311 / 083	rock	EARC0561_24-26 A349129
24S1311 / 084	rock	EARC0563_08-10 A349028
24S1311 / 085	rock	EARC0563_30-32 A349039
24S1311 / 086	rock	EARC0563_46-48 A349049
24S1311 / 087	rock	EARC0575_06-08 A348547
24S1311 / 088	rock	EARC0575_14-16 A348551
24S1311 / 089	rock	EARC0575_20-22 A348554
24S1311 / 090	rock	EARC0575_36-38 A348564
24S1311 / 091	rock	HR_MET0006_3-3.1
24S1311 / 092	rock	HR_MET0006_48-50
24S1311 / 093	rock	EADD0041_0-0.4 D008635
24S1311 / 094	rock	EADD0041_3-5 D008637
24S1311 / 095	rock	EADD0041_7.5-7.7 D008640
24S1311 / 096	rock	EADD0041_48-48.3 D008638
24S1311 / 097	rock	EADD0042_1-1.25 D008641
24S1311 / 098	rock	EADD0042_3.9-4.4 D008642
24S1311 / 099	rock	EADD0042_16-16.5 D008644
24S1311 / 100	rock	EADD0042_33.1-33.69 D008646

LAB ID			001	002	003	004
Client ID^			EARC0229_02-04	EARC0229_10-12	EARC0229_22-24	EARC0229_28-30
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		6.5	6.2	6.4	6.5
EC 1 soil 2 water paste*	ARD	mS/m	5	16	51	22
Acid Neutralising Capacity*	ARD	kg H2SO4/t	1.1	1.4	1.2	1.7
NAG pH*	ARD		5.5	5.4	5.8	6.0
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.06	0.03	0.03	0.01
Chromium Reducible Sulfur	iCRS	%	<0.01		<0.01	<0.01
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	0.11	0.10	0.12	0.08
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	0.10	0.08	0.12	0.06
Nitrogen	(total)	%	<0.005	<0.005	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	36	72	222	90
pH	iPH1WASE		6.3	6.1	6.3	6.2
Alkalinity as CaCO3	iALK2WATI	mg/L	2	1	3	1
Bicarbonate as CaCO3	iALK2WATI	mg/L	2	1	3	1
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	20	40	120	50
Aluminium	iMET1WCICP	mg/L	<0.005	<0.005	<0.005	<0.005
Antimony	iMET1WCMSL	mg/L	0.00009	0.00007	0.00005	0.00003
Arsenic	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Barium	iMET1WCICP	mg/L	0.14			
Barium	iMET1WCMSL	mg/L		0.020	0.037	0.021
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.05	0.05	0.09	0.04
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	0.8	0.4	4.9	2.4
Chloride	iANIO1WAIC	mg/L	2.1	14	49	18
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.00068	0.00011	0.00028	<0.00010
Chromium(VI)	iCO1WCDAL	mg/L	<0.001	<0.001	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.0011	0.00018	0.00037	0.00040
Copper	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Fluoride	iANIO1WAIC	mg/L	<0.1	<0.1	<0.1	<0.1
Iron	iMET1WCICP	mg/L	<0.005	<0.005	<0.005	<0.005
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Lithium	iMET1WCMSL	mg/L	0.0033	0.00063	0.0076	0.010
Magnesium	iMET1WCICP	mg/L	0.5	0.3	4.1	2.1
Manganese	iMET1WCMSL	mg/L	0.0040	0.0006	0.012	0.0064
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum	iMET1WCMSL	mg/L	<0.00010	<0.00010	<0.00010	<0.00010
Nickel	iMET1WCMSL	mg/L	0.00027	0.00016	0.00046	0.00065
Potassium	iMET1WCICP	mg/L	1.7	2.0	4.8	1.2
Selenium	iMET1WCMSL	mg/L	0.00044	0.00027	0.00061	0.00061

LAB ID			001	002	003	004
Client ID^			EARC0229_02-04	EARC0229_10-12	EARC0229_22-24	EARC0229_28-30
Sampled^						
Analyte	**Method**	**Unit**				
Silicon	iMET1WCICP	mg/L	11	10	11	5.5
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	3.7	10.6	24.4	9.0
Strontium	iMET1WCMSL	mg/L	0.012	0.0037	0.042	0.018
Sulphate	iANIO1WAIC	mg/L	8.9	8.4	13.1	7.4
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	0.00003
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.09	0.16	0.22	0.17
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	<0.005	<0.005	<0.005
Tungsten	iMET1WCMSL	mg/L	0.00005	<0.00002	<0.00002	<0.00002
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	0.0001	<0.0001	<0.0001	<0.0001
Zinc	iMET1WCMSL	mg/L	<0.001	0.002	0.001	<0.001
Aluminium	iMET2SAICP	mg/kg	23900	14100	12600	4820
Antimony	iMET2SAMS	mg/kg	0.86	0.82	0.70	0.26
Arsenic	iMET2SAICP	mg/kg	27	42	41	13
Barium	iMET2SAICP	mg/kg	240	35	73	44
Beryllium	iMET2SAMS	mg/kg	0.55	0.67	1.4	0.66
Bismuth*	iMET2SAMS	mg/kg	0.48	0.27	0.27	<0.05
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Calcium	iMET2SAICP	mg/kg	480	290	410	130
Chromium	iMET2SAICP	mg/kg	77	34	51	4.8
Chromium(III)	iCr3+2SAICP	mg/kg	76	33	49	4
Chromium(VI)	iCRS1STCO	mg/kg	1.3	1.1	1.7	1.2
Cobalt	iMET2SAMS	mg/kg	4.3	8.5	11	8.1
Copper	iMET2SAMS	mg/kg	9.1	11	19	3.2
Iron	iMET2SAICP	mg/kg	200000	310000	310000	250000
Lanthanum*	iMET2SAICP	mg/kg	5.2	3.3	6.3	3.0
Lead	iMET2SAMS	mg/kg	15	22	10	1.9
Lithium	iMET2SAICP	mg/kg	6.4	<2.0	3.8	<2.0
Magnesium	iMET2SAICP	mg/kg	340	400	440	220
Manganese	iMET2SAICP	mg/kg	75	260	490	310
Mercury	iMET2SAMS	mg/kg	0.02	0.03	0.05	0.03
Molybdenum	iMET2SAMS	mg/kg	1.6	1.9	1.8	0.49
Nickel	iMET2SAICP	mg/kg			14	
Nickel	iMET2SAMS	mg/kg	5.0	6.6		6.2
Phosphorus	iMET2SAICP	mg/kg	260	450	770	500
Potassium	iMET2SAICP	mg/kg	240	170	130	<50
Selenium	iMET2SAMS	mg/kg	1.4	0.44	1.4	0.20
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	0.07	<0.05
Sodium	iMET2SAICP	mg/kg	160	170	220	<100
Strontium	iMET2SAICP	mg/kg	10	4.8	9.9	2.1
Sulphate (from S)	iMET2SAICP	mg/kg	1000	660	500	200
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	<0.05	<0.05	0.10	0.10
Thorium	iMET2SAMS	mg/kg	22	7.4	7.6	1.3
Tin	iMET2SAMS	mg/kg	1.8	0.7	0.9	<0.5

LAB ID			001	002	003	004
Client ID^			EARC0229_02-04	EARC0229_10-12	EARC0229_22-24	EARC0229_28-30
Sampled^						
Analyte	**Method**	**Unit**				
Tungsten	iMET2SAMS	mg/kg	2.2	1.8	1.0	2.2
Uranium	iMET2SAMS	mg/kg	1.3	0.86	2.4	0.54
Vanadium	iMET2SAICP	mg/kg	66	40	60	6.6
Zinc	iMET2SAMS	mg/kg	10	15	34	11
Date Analysed	(combs)		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	(total)		07/11/2024	07/11/2024	07/11/2024	07/11/2024
	ARD		08/11/2024	08/11/2024	08/11/2024	08/11/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iCO1WCDAL		04/12/2024	13/11/2024	13/11/2024	13/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iCRS		05/11/2024		05/11/2024	05/11/2024
	iCRS1STCO		30/10/2024	30/10/2024	30/10/2024	30/10/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	iMET2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iMET2SAMS		03/12/2024	03/12/2024	03/12/2024	11/11/2024
	iNP1WTFIA		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			005	006	007	008
Client ID^			EARC0229_42-44	EARC0229_50-52	EARC0275_04-06	EARC0275_66-68
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		6.7	6.9	8.1	6.6
EC 1 soil 2 water paste*	ARD	mS/m	11	11	10	12
Acid Neutralising Capacity*	ARD	kg H2SO4/t	1.5	1.1	4.6	1.6
NAG pH*	ARD		7.1	5.7	6.2	5.2
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.01	<0.01	0.01	<0.01
Chromium Reducible Sulfur	iCRS	%		<0.01	<0.01	
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	0.13	<0.05	0.07	0.15
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	0.12	<0.05	0.06	0.15
Nitrogen	(total)	%	<0.005	<0.005	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	48	47	210	50
pH	iPH1WASE		6.5	6.5	7.9	6.6
Alkalinity as CaCO3	iALK2WATI	mg/L	4	3	65	8
Bicarbonate as CaCO3	iALK2WATI	mg/L	4	3	65	8
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1

LAB ID			005	006	007	008
Client ID^			EARC0229_42-44	EARC0229_50-52	EARC0275_04-06	EARC0275_66-68
Sampled^						
Analyte	**Method**	**Unit**				
TDS (calculated)	iSOL1WDCA	mg/L	26	26	120	28
Aluminium	iMET1WCICP	mg/L	<0.005	<0.005	0.035	<0.005
Antimony	iMET1WCMSL	mg/L	0.00006	0.00008	0.00040	0.00012
Arsenic	iMET1WCMSL	mg/L	<0.00005	<0.00005	0.0017	0.00006
Barium	iMET1WCICP	mg/L			0.12	
Barium	iMET1WCMSL	mg/L	0.0097	0.0085		0.0047
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.03		0.11	
Boron	iMET1WCMSL	mg/L		0.011		0.015
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	1.4	1.6	11.6	1.9
Chloride	iANIO1WAIC	mg/L	6.5	6.9	14	3.8
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.00027	<0.00010	<0.00010	<0.00010
Chromium(VI)	iCO1WCDAL	mg/L	<0.001	<0.001	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.00054	0.0069	0.00021	0.00016
Copper	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Fluoride	iANIO1WAIC	mg/L	<0.1	<0.1	0.4	<0.1
Iron	iMET1WCICP	mg/L	<0.005	<0.005	<0.005	<0.005
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Lithium	iMET1WCMSL	mg/L	0.0097	0.0060	0.00068	0.014
Magnesium	iMET1WCICP	mg/L	1.3	1.3	3.3	2.1
Manganese	iMET1WCMSL	mg/L	0.014	0.017	0.0006	0.0019
Mercury	iMET1WCMSL	mg/L	0.00006	<0.00002	<0.00002	<0.00002
Molybdenum	iMET1WCMSL	mg/L	<0.00010	0.00030	0.0012	<0.00010
Nickel	iMET1WCMSL	mg/L	0.00045	0.00064	0.00008	0.00016
Potassium	iMET1WCICP	mg/L	0.8	0.7	7.8	0.8
Selenium	iMET1WCMSL	mg/L	0.00034	0.00022	0.00029	0.00010
Silicon	iMET1WCICP	mg/L	6.2	4.5	8.4	7.9
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	5.4	4.1	20.7	4.9
Strontium	iMET1WCICP	mg/L			0.075	
Strontium	iMET1WCMSL	mg/L	0.0072	0.0078		0.0088
Sulphate	iANIO1WAIC	mg/L	2.8	5.8	14.8	2.2
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	0.00002	<0.00002	0.00003
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.21	0.13	0.15	0.08
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	<0.005	0.005	<0.005
Tungsten	iMET1WCMSL	mg/L	<0.00002	0.00030	0.0012	<0.00002
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	<0.0001	<0.0001	0.0005	<0.0001
Zinc	iMET1WCMSL	mg/L	<0.001	<0.001	<0.001	<0.001
Aluminium	iMET2SAICP	mg/kg	8030	1300	14100	8550
Antimony	iMET2SAMS	mg/kg	0.22	0.15	1.3	0.31
Arsenic	iMET2SAICP	mg/kg	16		46	

LAB ID			005	006	007	008
Client ID^			EARC0229_42-44	EARC0229_50-52	EARC0275_04-06	EARC0275_66-68
Sampled^						
Analyte	**Method**	**Unit**				
Arsenic	iMET2SAMS	mg/kg		4.0		14
Barium	iMET2SAICP	mg/kg	380	27	210	15
Beryllium	iMET2SAMS	mg/kg	1.8	0.59	1.2	1.5
Bismuth*	iMET2SAMS	mg/kg	0.06	<0.05	0.59	0.06
Cadmium	iMET2SAMS	mg/kg	0.06	<0.05	<0.05	0.06
Calcium	iMET2SAICP	mg/kg	170	<100	1200	150
Chromium	iMET2SAICP	mg/kg	9.6	6.4	59	8.4
Chromium(III)	iCr3+2SAICP	mg/kg	8	5	58	7
Chromium(VI)	iCRS1STCO	mg/kg	1.8	1.6	0.8	1.2
Cobalt	iMET2SAICP	mg/kg	31			
Cobalt	iMET2SAMS	mg/kg		9.8	1.9	5.1
Copper	iMET2SAMS	mg/kg	10	2.4	7.5	14
Iron	iMET2SAICP	mg/kg	310000	220000	220000	350000
Lanthanum*	iMET2SAICP	mg/kg	21	2.0	3.6	2.9
Lead	iMET2SAMS	mg/kg	1.5	<0.5	22	3.0
Lithium	iMET2SAICP	mg/kg	2.5	<2.0	<2.0	2.2
Magnesium	iMET2SAICP	mg/kg	340	180	480	410
Manganese	iMET2SAICP	mg/kg	2400	260	190	260
Mercury	iMET2SAMS	mg/kg	0.13	0.02	<0.02	0.03
Molybdenum	iMET2SAMS	mg/kg	0.92	0.89	1.4	0.61
Nickel	iMET2SAICP	mg/kg	15			
Nickel	iMET2SAMS	mg/kg		4.5	6.9	14
Phosphorus	iMET2SAICP	mg/kg	680	380	620	1100
Potassium	iMET2SAICP	mg/kg	82	<50	570	<50
Selenium	iMET2SAMS	mg/kg	0.36	0.06	0.33	0.08
Silver	iMET2SAMS	mg/kg	0.07	<0.05	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	120	<100	320	<100
Strontium	iMET2SAICP	mg/kg	3.2	<2.0	16	<2.0
Sulphate (from S)	iMET2SAICP	mg/kg	170	<100	380	<100
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	0.81	<0.05	<0.05	0.06
Thorium	iMET2SAMS	mg/kg	1.7	<0.5	11	1.4
Tin	iMET2SAMS	mg/kg	<0.5	<0.5	2.3	<0.5
Tungsten	iMET2SAMS	mg/kg	3.7	49	0.8	3.7
Uranium	iMET2SAMS	mg/kg	1.6	0.26	0.67	3.2
Vanadium	iMET2SAICP	mg/kg	18	4.4	84	12
Zinc	iMET2SAMS	mg/kg	28	7.5	21	61
Date Analysed	(combs)		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	(total)		07/11/2024	07/11/2024	07/11/2024	07/11/2024
	ARD		08/11/2024	08/11/2024	08/11/2024	08/11/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iCO1WCDAL		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iCRS			05/11/2024	05/11/2024	
	iCRS1STCO		30/10/2024	30/10/2024	30/10/2024	30/10/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	iMET2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024

LAB ID			005	006	007	008
Client ID^						
Sampled^						
Analyte	**Method**	**Unit**				
Date Analysed	iMET2SAMS		03/12/2024	13/11/2024	03/12/2024	03/12/2024
	iNP1WTFIA		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			009	010	011	012
Client ID^			EARC0284_04-06	EARC0284_14-16	EARC0284_28-30	EARC0284_34-36
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		6.9	7.4	7.7	7.3
EC 1 soil 2 water paste*	ARD	mS/m	12	16	14	31
Acid Neutralising Capacity*	ARD	kg H2SO4/t	1.7	2.6	2.4	2.7
NAG pH*	ARD		5.5	5.7	5.6	5.3
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.03	0.03	<0.01	<0.01
Chromium Reducible Sulfur	iCRS	%	<0.01		<0.01	
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	0.27	0.26	0.10	0.39
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	0.25	0.24	0.10	0.38
Nitrogen	(total)	%	<0.005	<0.005	0.062	0.069
Conductivity	iEC2WASE	uS/cm	64	71	80	150
pH	iPH1WASE		6.5	6.7	6.8	6.5
Alkalinity as CaCO3	iALK2WATI	mg/L	2	4	<1	6
Bicarbonate as CaCO3	iALK2WATI	mg/L	2	4	<1	6
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	35	39	44	82
Aluminium	iMET1WCICP	mg/L	<0.005	0.031	0.074	0.008
Antimony	iMET1WCMSL	mg/L	0.00011	0.00025	0.0017	0.0012
Arsenic	iMET1WCMSL	mg/L	<0.00005	0.00010	0.021	0.0071
Barium	iMET1WCICP	mg/L	0.10			
Barium	iMET1WCMSL	mg/L		0.0041	<0.0001	0.0030
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	0.00002	<0.00001
Boron	iMET1WCICP	mg/L	0.04	0.05	0.04	0.05
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	1.0	0.1	0.3	1.5
Chloride	iANIO1WAIC	mg/L	4.3	7.3	11	27
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	<0.00010	<0.00010	0.00077	0.0010
Chromium(VI)	iCO1WCDAL	mg/L	<0.001	<0.001	<0.001	0.001

LAB ID			009	010	011	012
Client ID^			EARC0284_04-06	EARC0284_14-16	EARC0284_28-30	EARC0284_34-36
Sampled^						
Analyte	**Method**	**Unit**				
Cobalt	iMET1WCMSL	mg/L	0.00015	0.00006	0.00009	0.00012
Copper	iMET1WCMSL	mg/L	<0.0001	<0.0001	0.0002	0.0001
Fluoride	iANIO1WAIC	mg/L	0.3	0.5	1.4	0.3
Iron	iMET1WCICP	mg/L	<0.005	0.28	0.040	0.006
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Lithium	iMET1WCMSL	mg/L	0.0051	0.0045	0.0019	0.0037
Magnesium	iMET1WCICP	mg/L	0.7	0.1	0.4	2.1
Manganese	iMET1WCMSL	mg/L	0.0005	<0.0001	0.0003	0.0003
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	0.00002
Molybdenum	iMET1WCMSL	mg/L	0.00011	0.00052	0.0023	0.0031
Nickel	iMET1WCMSL	mg/L	0.00010	0.00015	0.00027	0.00028
Potassium	iMET1WCICP	mg/L	2.6	1.9	4.7	6.8
Selenium	iMET1WCMSL	mg/L	0.0033	0.0019	0.00027	0.0011
Silicon	iMET1WCICP	mg/L	7.2	7.8	9.9	8.2
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	7.3	11.6	8.2	17.6
Strontium	iMET1WCMSL	mg/L	0.010	0.0010	0.0009	0.0064
Sulphate	iANIO1WAIC	mg/L	16.0	12.9	3.5	7.9
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.12	0.17	1.8	0.34
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	<0.005	0.006	<0.005
Tungsten	iMET1WCMSL	mg/L	0.00004	0.00026	0.018	0.0029
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	<0.0001	0.0001	0.0020	0.0003
Zinc	iMET1WCMSL	mg/L	<0.001	<0.001	0.004	<0.001
Aluminium	iMET2SAICP	mg/kg	14200	22400	16300	21400
Antimony	iMET2SAMS	mg/kg	0.51	0.52	1.5	1.7
Arsenic	iMET2SAICP	mg/kg		14		200
Arsenic	iMET2SAMS	mg/kg	7.5		13	
Barium	iMET2SAICP	mg/kg	75	15	34	32
Beryllium	iMET2SAMS	mg/kg	0.39	0.57	0.92	1.1
Bismuth*	iMET2SAMS	mg/kg	0.16	0.18	0.50	0.81
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	0.11
Calcium	iMET2SAICP	mg/kg	300	320	330	340
Chromium	iMET2SAICP	mg/kg	17	26	32	36
Chromium(III)	iCr3+2SAICP	mg/kg	16	25	31	35
Chromium(VI)	iCRS1STCO	mg/kg	1.1	1.2	1.3	1.2
Cobalt	iMET2SAMS	mg/kg	5.0	7.1	7.4	7.1
Copper	iMET2SAICP	mg/kg			22	140
Copper	iMET2SAMS	mg/kg	7.6	12		
Iron	iMET2SAICP	mg/kg	300000	350000	21000	68000
Lanthanum*	iMET2SAICP	mg/kg	4.0	6.7	35	31
Lead	iMET2SAICP	mg/kg			62	56
Lead	iMET2SAMS	mg/kg	6.0	7.2		
Lithium	iMET2SAICP	mg/kg	<2.0	<2.0	10	15

LAB ID			009	010	011	012
Client ID^			EARC0284_04-06	EARC0284_14-16	EARC0284_28-30	EARC0284_34-36
Sampled^						
Analyte	**Method**	**Unit**				
Magnesium	iMET2SAICP	mg/kg	310	550	2600	2400
Manganese	iMET2SAICP	mg/kg	38	16	110	120
Mercury	iMET2SAMS	mg/kg	0.14	0.20	0.10	0.48
Molybdenum	iMET2SAMS	mg/kg	1.2	1.1	2.3	7.5
Nickel	iMET2SAICP	mg/kg		18		66
Nickel	iMET2SAMS	mg/kg	11		14	
Phosphorus	iMET2SAICP	mg/kg	220	240	<50	120
Potassium	iMET2SAICP	mg/kg	190	220	6000	6100
Selenium	iMET2SAMS	mg/kg	1.1	1.4	0.65	13
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	0.08	0.13
Sodium	iMET2SAICP	mg/kg	120	240	160	200
Strontium	iMET2SAICP	mg/kg	4.6	4.5	3.7	4.5
Sulphate (from S)	iMET2SAICP	mg/kg	740	660	<100	190
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	<0.05	<0.05	0.27	0.32
Thorium	iMET2SAMS	mg/kg	3.3	5.9	11	16
Tin	iMET2SAMS	mg/kg	0.6	0.8	0.7	0.7
Tungsten	iMET2SAMS	mg/kg	4.3	3.9	1.8	1.4
Uranium	iMET2SAMS	mg/kg	1.1	2.2	0.49	1.5
Vanadium	iMET2SAICP	mg/kg	32	43	25	42
Zinc	iMET2SAICP	mg/kg				130
Zinc	iMET2SAMS	mg/kg	4.8	6.2	19	
Date Analysed	(combs)		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	(total)		07/11/2024	07/11/2024	07/11/2024	07/11/2024
	ARD		08/11/2024	08/11/2024	08/11/2024	08/11/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iCO1WCDAL		13/11/2024	13/11/2024	04/12/2024	13/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iCRS		05/11/2024		05/11/2024	
	iCRS1STCO		30/10/2024	30/10/2024	30/10/2024	30/10/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	iMET2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iMET2SAMS		11/11/2024	11/11/2024	03/12/2024	03/12/2024
	iNP1WTFIA		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iPH1WASE		15/11/2024	15/11/2024	19/02/2025	15/11/2024
	iPP1WTFIA		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			013	014	015	016
Client ID^			EARC0307_06-08	EARC0307_14-16	EARC0307_22-24	EARC0307_46-48
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		7.4	7.4	6.7	7.0

LAB ID			013	014	015	016
Client ID^			EARC0307_06-08	EARC0307_14-16	EARC0307_22-24	EARC0307_46-48
Sampled^						
Analyte	**Method**	**Unit**				
EC 1 soil 2 water paste*	ARD	mS/m	10	26	14	9
Acid Neutralising Capacity*	ARD	kg H2SO4/t	1.2	11	2.2	2.0
NAG pH*	ARD		5.6	6.1	5.3	5.6
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.01	0.03	0.01	<0.01
Chromium Reducible Sulfur	iCRS	%				<0.01
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	0.07	0.14	<0.05	<0.05
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	0.07	0.13	<0.05	<0.05
Nitrogen	(total)	%	<0.005	<0.005	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	53	117	63	37
pH	iPH1WASE		5.6	6.8	6.5	6.6
Alkalinity as CaCO3	iALK2WATI	mg/L	<1	4	2	2
Bicarbonate as CaCO3	iALK2WATI	mg/L	<1	4	2	2
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	29	64	35	21
Aluminium	iMET1WCICP	mg/L	0.014	<0.005	<0.005	<0.005
Antimony	iMET1WCMSL	mg/L	0.00020	0.00006	0.00003	0.00007
Arsenic	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	0.00008
Barium	iMET1WCICP	mg/L	0.12			
Barium	iMET1WCMSL	mg/L		0.0080	0.053	0.0015
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.07	0.08	0.03	0.03
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	1.2	1.1	2.2	0.5
Chloride	iANIO1WAIC	mg/L	2.4	11	8.1	7.2
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	<0.00010	<0.00010	<0.00010	<0.00010
Chromium(VI)	iCO1WCDAL	mg/L	<0.001	<0.001	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.0019	0.00023	0.0046	0.00034
Copper	iMET1WCMSL	mg/L	0.0003	<0.0001	<0.0001	<0.0001
Fluoride	iANIO1WAIC	mg/L	0.5	0.5	<0.1	0.1
Iron	iMET1WCICP	mg/L	0.10	0.031	<0.005	<0.005
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	0.00006	<0.00005	<0.00005	<0.00005
Lithium	iMET1WCMSL	mg/L	0.0012	0.0010	0.0032	0.0054
Magnesium	iMET1WCICP	mg/L	0.7	0.5	1.3	0.6
Manganese	iMET1WCMSL	mg/L	0.0013	<0.0001	0.0030	0.0011
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum	iMET1WCMSL	mg/L	0.0012	0.00069	0.00013	0.0013
Nickel	iMET1WCMSL	mg/L	0.00031	0.00008	0.00056	0.00009
Potassium	iMET1WCICP	mg/L	1.7	1.7	1.0	0.7
Selenium	iMET1WCMSL	mg/L	0.0017	0.0022	0.00027	0.00008
Silicon	iMET1WCICP	mg/L	9.7	6.9	6.4	8.0

LAB ID			013	014	015	016
Client ID^			EARC0307_06-08	EARC0307_14-16	EARC0307_22-24	EARC0307_46-48
Sampled^						
Analyte	**Method**	**Unit**				
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	5.8	17.7	5.8	4.7
Strontium	iMET1WCMSL	mg/L	0.013	0.0097	0.014	0.0024
Sulphate	iANIO1WAIC	mg/L	11.4	25.1	6.0	1.8
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	1.3	0.24	0.15	0.09
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	<0.005	<0.005	<0.005
Tungsten	iMET1WCMSL	mg/L	0.0018	0.00083	0.00007	0.00096
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Zinc	iMET1WCMSL	mg/L	0.022	0.004	<0.001	<0.001
Aluminium	iMET2SAICP	mg/kg	3370	6940	1270	3450
Antimony	iMET2SAMS	mg/kg	0.49	0.40	0.41	0.20
Arsenic	iMET2SAMS	mg/kg	1.5	2.4	3.0	2.0
Barium	iMET2SAICP	mg/kg	38	7.5	8.3	13
Beryllium	iMET2SAMS	mg/kg	0.49	0.57	0.61	1.2
Bismuth*	iMET2SAMS	mg/kg	<0.05	0.07	<0.05	0.05
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Calcium	iMET2SAICP	mg/kg	160	260	<100	140
Chromium	iMET2SAICP	mg/kg	11	14	16	8.5
Chromium(III)	iCr3+2SAICP	mg/kg	9	12	13	7
Chromium(VI)	iCRS1STCO	mg/kg	1.4	1.5	2.5	1.1
Cobalt	iMET2SAMS	mg/kg	9.1	7.1	7.7	6.4
Copper	iMET2SAMS	mg/kg	3.4	2.7	5.9	2.6
Iron	iMET2SAICP	mg/kg	180000	230000	200000	270000
Lanthanum*	iMET2SAICP	mg/kg	<1.0	<1.0	2.0	3.7
Lead	iMET2SAMS	mg/kg	2.0	2.4	1.0	4.4
Lithium	iMET2SAICP	mg/kg	<2.0	<2.0	<2.0	<2.0
Magnesium	iMET2SAICP	mg/kg	170	240	140	310
Manganese	iMET2SAICP	mg/kg	50	78	38	220
Mercury	iMET2SAMS	mg/kg	0.02	<0.02	<0.02	0.03
Molybdenum	iMET2SAMS	mg/kg	1.0	1.1	1.5	1.0
Nickel	iMET2SAMS	mg/kg	2.7	3.4	2.9	9.5
Phosphorus	iMET2SAICP	mg/kg	270	480	170	350
Potassium	iMET2SAICP	mg/kg	60	59	<50	56
Selenium	iMET2SAMS	mg/kg	0.30	0.67	0.08	<0.05
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	<100	180	<100	<100
Strontium	iMET2SAICP	mg/kg	2.9	3.7	<2.0	<2.0
Sulphate (from S)	iMET2SAICP	mg/kg	300	630	140	<100
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thorium	iMET2SAMS	mg/kg	1.4	1.6	<0.5	2.7
Tin	iMET2SAMS	mg/kg	<0.5	<0.5	<0.5	<0.5
Tungsten	iMET2SAMS	mg/kg	41	31	45	30
Uranium	iMET2SAMS	mg/kg	0.22	0.45	0.09	0.73

LAB ID			013	014	015	016
Client ID^			EARC0307_06-08	EARC0307_14-16	EARC0307_22-24	EARC0307_46-48
Sampled^						
Analyte	**Method**	**Unit**				
Vanadium	iMET2SAICP	mg/kg	5.0	15	4.8	16
Zinc	iMET2SAMS	mg/kg	4.6	5.9	3.7	8.2
Date Analysed	(combs)		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	(total)		07/11/2024	07/11/2024	07/11/2024	07/11/2024
	ARD		08/11/2024	08/11/2024	08/11/2024	08/11/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iCO1WCDAL		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iCRS					05/11/2024
	iCRS1STCO		30/10/2024	30/10/2024	30/10/2024	30/10/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	iMET2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iMET2SAMS		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	iNP1WTFIA		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			017	018	019	020
Client ID^			EARC0307_56-58	EARC0324_04-06	EARC0324_10-12	EARC0324_16-18
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		7.7	6.9	6.8	6.7
EC 1 soil 2 water paste*	ARD	mS/m	4	10	7	7
Acid Neutralising Capacity*	ARD	kg H2SO4/t	4.0	2.5	2.8	2.8
NAG pH*	ARD		7.7	5.5	5.6	5.7
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	<0.01	0.02	0.02	0.03
Chromium Reducible Sulfur	iCRS	%	<0.01			
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	0.01
Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Nitrogen	(total)	%	<0.005	<0.005	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	18	57	36	59
pH	iPH1WASE		7.0	6.6	6.5	6.5
Alkalinity as CaCO3	iALK2WATI	mg/L	5	2	2	2
Bicarbonate as CaCO3	iALK2WATI	mg/L	5	2	2	2
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	10	31	20	32
Aluminium	iMET1WCICP	mg/L	0.055	<0.005	0.008	<0.005

LAB ID			017	018	019	020
Client ID^			EARC0307_56-58	EARC0324_04-06	EARC0324_10-12	EARC0324_16-18
Sampled^						
Analyte	**Method**	**Unit**				
Antimony	iMET1WCMSL	mg/L	0.00037	0.00015	0.00015	0.00021
Arsenic	iMET1WCMSL	mg/L	0.00025	0.00010	0.00008	0.00008
Barium	iMET1WCICP	mg/L		0.080		0.074
Barium	iMET1WCMSL	mg/L	0.0006		0.012	
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.02	0.06	0.07	0.06
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	0.2	0.7	0.2	0.4
Chloride	iANIO1WAIC	mg/L	0.6	3.4	4.5	2.4
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.00050	<0.00010	<0.00010	0.0012
Chromium(VI)	iCO1WCDAL	mg/L	0.001	<0.001	<0.001	0.001
Cobalt	iMET1WCMSL	mg/L	0.00017	0.00027	0.00006	0.00020
Copper	iMET1WCMSL	mg/L	<0.0001	0.0001	0.0001	<0.0001
Fluoride	iANIO1WAIC	mg/L	0.4	0.1	0.2	<0.1
Iron	iMET1WCICP	mg/L	0.28	<0.005	0.012	<0.005
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Lithium	iMET1WCMSL	mg/L	0.0010	0.0026	0.0032	0.0063
Magnesium	iMET1WCICP	mg/L	0.2	0.6	0.2	0.3
Manganese	iMET1WCMSL	mg/L	0.0042	0.0009	0.0002	0.0010
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum	iMET1WCMSL	mg/L	0.019	0.00016	0.00039	0.00015
Nickel	iMET1WCMSL	mg/L	0.00045	0.00015	0.00012	0.00011
Potassium	iMET1WCICP	mg/L	0.8	2.2	1.3	2.0
Selenium	iMET1WCMSL	mg/L	0.00010	0.0010	0.00034	0.00026
Silicon	iMET1WCICP	mg/L	14	6.7	9.3	13
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	3.0	6.9	5.2	8.1
Strontium	iMET1WCMSL	mg/L	0.0006	0.011	0.0030	0.0043
Sulphate	iANIO1WAIC	mg/L	0.5	14.6	6.1	18.9
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.36	0.19	0.16	0.07
Phosphorus, total	iPP1WTFIA	mg/L	0.055	<0.005	<0.005	<0.005
Tungsten	iMET1WCMSL	mg/L	0.020	0.00011	0.00010	0.00003
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	0.0001	<0.0001	<0.0001	<0.0001
Zinc	iMET1WCMSL	mg/L	0.003	0.002	<0.001	<0.001
Aluminium	iMET2SAICP	mg/kg	9250	7160	7610	14300
Antimony	iMET2SAMS	mg/kg	0.36	0.38	0.30	0.57
Arsenic	iMET2SAICP	mg/kg				33
Arsenic	iMET2SAMS	mg/kg	6.7	13	12	
Barium	iMET2SAICP	mg/kg	230	84	50	770
Beryllium	iMET2SAMS	mg/kg	2.4	0.88	0.99	2.1
Bismuth*	iMET2SAMS	mg/kg	0.11	0.06	<0.05	0.37

LAB ID			017	018	019	020
Client ID^			EARC0307_56-58	EARC0324_04-06	EARC0324_10-12	EARC0324_16-18
Sampled^						
Analyte	**Method**	**Unit**				
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	0.11
Calcium	iMET2SAICP	mg/kg	1200	230	250	380
Chromium	iMET2SAICP	mg/kg	14	17	5.6	26
Chromium(III)	iCr3+2SAICP	mg/kg	14	16	5	25
Chromium(VI)	iCRS1STCO	mg/kg	0.8	0.8	0.8	0.9
Cobalt	iMET2SAICP	mg/kg				43
Cobalt	iMET2SAMS	mg/kg	6.9	3.2	2.9	
Copper	iMET2SAMS	mg/kg	4.8	5.6	3.5	5.5
Iron	iMET2SAICP	mg/kg	240000	290000	310000	270000
Lanthanum*	iMET2SAICP	mg/kg	9.4	3.2	8.2	18
Lead	iMET2SAMS	mg/kg	5.3	4.5	6.3	8.0
Lithium	iMET2SAICP	mg/kg	<2.0	<2.0	<2.0	4.6
Magnesium	iMET2SAICP	mg/kg	2500	290	360	340
Manganese	iMET2SAICP	mg/kg	2600	190	190	380
Mercury	iMET2SAMS	mg/kg	0.03	<0.02	<0.02	<0.02
Molybdenum	iMET2SAMS	mg/kg	1.4	0.76	0.56	1.9
Nickel	iMET2SAICP	mg/kg				16
Nickel	iMET2SAMS	mg/kg	8.1	5.0	6.3	
Phosphorus	iMET2SAICP	mg/kg	480	540	520	640
Potassium	iMET2SAICP	mg/kg	1200	300	220	170
Selenium	iMET2SAMS	mg/kg	0.09	0.36	0.20	0.42
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	<100	210	180	230
Strontium	iMET2SAICP	mg/kg	11	6.6	5.0	7.8
Sulphate (from S)	iMET2SAICP	mg/kg	<100	390	250	780
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	0.36	0.06	<0.05	0.10
Thorium	iMET2SAMS	mg/kg	3.2	2.0	1.2	5.0
Tin	iMET2SAMS	mg/kg	<0.5	<0.5	<0.5	0.8
Tungsten	iMET2SAMS	mg/kg	22	4.8	4.4	2.5
Uranium	iMET2SAMS	mg/kg	0.94	0.57	1.2	1.2
Vanadium	iMET2SAICP	mg/kg	13	20	9.6	39
Zinc	iMET2SAICP	mg/kg				100
Zinc	iMET2SAMS	mg/kg	20	9.0	11	
Date Analysed	(combs)		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	(total)		07/11/2024	07/11/2024	07/11/2024	13/11/2024
	ARD		08/11/2024	08/11/2024	08/11/2024	08/11/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iCO1WCDAL		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iCRS		05/11/2024			
	iCRS1STCO		30/10/2024	30/10/2024	30/10/2024	30/10/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	iMET2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iMET2SAMS		13/11/2024	11/11/2024	11/11/2024	11/11/2024
	iNP1WTFIA		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		20/11/2024	20/11/2024	20/11/2024	20/11/2024

LAB ID			017	018	019	020
Client ID^						
Sampled^						
Analyte	**Method**	**Unit**				
Date Analysed	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			021	022	023	024
Client ID^			EARC0324_32-34	EARC0324_46-48	EARC0324_62-64	EARC0350_06-08
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		6.9	7.2	7.1	6.8
EC 1 soil 2 water paste*	ARD	mS/m	3	2	3	4
Acid Neutralising Capacity*	ARD	kg H2SO4/t	2.0	2.3	2.1	2.4
NAG pH*	ARD		5.7	5.8	5.4	5.3
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.03	0.01	<0.01	<0.01
Chromium Reducible Sulfur	iCRS	%		<0.01		<0.01
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	0.05	<0.05	<0.05	0.20
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	0.05	<0.05	<0.05	0.20
Nitrogen	(total)	%	<0.005	<0.005	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	15	9	13	20
pH	iPH1WASE		6.5	6.5	6.7	6.6
Alkalinity as CaCO3	iALK2WATI	mg/L	2	2	3	3
Bicarbonate as CaCO3	iALK2WATI	mg/L	2	2	3	3
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	8	<5	7	11
Aluminium	iMET1WCICP	mg/L	<0.005	<0.005	0.007	0.12
Antimony	iMET1WCMSL	mg/L	0.00019	0.00007	0.00006	0.00018
Arsenic	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	0.00010
Barium	iMET1WCMSL	mg/L	0.0032	0.0006	0.0014	0.0015
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L				0.05
Boron	iMET1WCMSL	mg/L	0.013	0.011	0.009	
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	0.5	0.3	0.7	0.1
Chloride	iANIO1WAIC	mg/L	1.3	0.6	0.9	1.3
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.00023	0.00018	0.00010	0.00085
Chromium(VI)	iCO1WCDAL	mg/L	<0.001	<0.001	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	<0.00005	<0.00005	0.0018	0.00010
Copper	iMET1WCMSL	mg/L	<0.0001	<0.0001	0.0001	0.0002
Fluoride	iANIO1WAIC	mg/L	<0.1	0.1	<0.1	0.1

LAB ID			021	022	023	024
Client ID^			EARC0324_32-34	EARC0324_46-48	EARC0324_62-64	EARC0350_06-08
Sampled^						
Analyte	**Method**	**Unit**				
Iron	iMET1WCICP	mg/L	<0.005	0.006	0.016	0.075
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	0.0051
Lithium	iMET1WCMSL	mg/L	0.013	0.0049	0.0037	0.0029
Magnesium	iMET1WCICP	mg/L	0.4	0.3	0.4	<0.1
Manganese	iMET1WCMSL	mg/L	0.0003	<0.0001	0.0008	0.0017
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum	iMET1WCMSL	mg/L	<0.00010	0.00035	0.00019	0.00078
Nickel	iMET1WCMSL	mg/L	0.00010	0.00009	0.00034	0.00035
Potassium	iMET1WCICP	mg/L	0.3	0.2	0.2	1.3
Selenium	iMET1WCMSL	mg/L	0.00035	<0.00005	0.00006	0.00026
Silicon	iMET1WCICP	mg/L	5.4	5.8	3.5	14
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	1.5	0.8	1.1	3.1
Strontium	iMET1WCMSL	mg/L	0.0034	0.0018	0.0031	0.0011
Sulphate	iANIO1WAIC	mg/L	1.6	0.2	1.1	1.1
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.09	0.16	0.09	0.31
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	<0.005	<0.005	<0.005
Tungsten	iMET1WCMSL	mg/L	<0.00002	0.00032	0.00012	0.00009
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	<0.0001	0.0001	0.0001	0.0004
Zinc	iMET1WCMSL	mg/L	<0.001	<0.001	0.001	0.003
Aluminium	iMET2SAICP	mg/kg	4030	3350	1170	20300
Antimony	iMET2SAMS	mg/kg	0.17	0.11	0.12	0.37
Arsenic	iMET2SAMS	mg/kg	3.4	2.5	4.5	15
Barium	iMET2SAICP	mg/kg	26	27	5.6	57
Beryllium	iMET2SAMS	mg/kg	1.2	0.91	0.56	0.87
Bismuth*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	0.35
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	0.06
Calcium	iMET2SAICP	mg/kg	<100	<100	<100	390
Chromium	iMET2SAICP	mg/kg	1.3	7.4	4.6	130
Chromium(III)	iCr3+2SAICP	mg/kg	<1	6	3	130
Chromium(VI)	iCRS1STCO	mg/kg	0.9	1.1	1.2	1.5
Cobalt	iMET2SAMS	mg/kg	5.0	2.7	3.4	5.5
Copper	iMET2SAMS	mg/kg	3.8	6.7	2.9	17
Iron	iMET2SAICP	mg/kg	280000	260000	260000	250000
Lanthanum*	iMET2SAICP	mg/kg	2.5	3.6	1.9	5.2
Lead	iMET2SAMS	mg/kg	0.8	1.7	6.6	16
Lithium	iMET2SAICP	mg/kg	<2.0	<2.0	<2.0	12
Magnesium	iMET2SAICP	mg/kg	200	240	160	430
Manganese	iMET2SAICP	mg/kg	200	280	100	340
Mercury	iMET2SAMS	mg/kg	<0.02	0.03	<0.02	<0.02
Molybdenum	iMET2SAMS	mg/kg	0.22	0.38	0.64	1.3
Nickel	iMET2SAMS	mg/kg	7.7	7.1	3.2	13
Phosphorus	iMET2SAICP	mg/kg	430	500	370	280

LAB ID			021	022	023	024
Client ID^			EARC0324_32-34	EARC0324_46-48	EARC0324_62-64	EARC0350_06-08
Sampled^						
Analyte	**Method**	**Unit**				
Potassium	iMET2SAICP	mg/kg	<50	<50	<50	550
Selenium	iMET2SAMS	mg/kg	0.08	0.07	<0.05	0.96
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	<100	<100	<100	<100
Strontium	iMET2SAICP	mg/kg	<2.0	2.3	<2.0	7.2
Sulphate (from S)	iMET2SAICP	mg/kg	130	<100	<100	270
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	0.07	<0.05	<0.05	0.19
Thorium	iMET2SAMS	mg/kg	0.6	1.0	<0.5	13
Tin	iMET2SAMS	mg/kg	<0.5	<0.5	<0.5	1.6
Tungsten	iMET2SAMS	mg/kg	1.2	3.5	12	<0.5
Uranium	iMET2SAMS	mg/kg	0.47	0.63	0.27	1.2
Vanadium	iMET2SAICP	mg/kg	12	14	3.9	150
Zinc	iMET2SAMS	mg/kg	11	10	10	27
Date Analysed	(combs)		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	(total)		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	ARD		08/11/2024	08/11/2024	08/11/2024	08/11/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iCO1WCDAL		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iCRS			06/11/2024		06/11/2024
	iCRS1STCO		30/10/2024	30/10/2024	30/10/2024	30/10/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		03/12/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iMET2SAMS		03/12/2024	03/12/2024	03/12/2024	03/12/2024
	iNP1WTFIA		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			025	026	027	028
Client ID^			EARC0350_12-14	EARC0350_18-20	EARC0350_24-26	EARC0350_32-34
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		6.4	6.5	6.5	7.0
EC 1 soil 2 water paste*	ARD	mS/m	7	9	6	5
Acid Neutralising Capacity*	ARD	kg H2SO4/t	2.4	2.3	3.4	2.4
NAG pH*	ARD		5.2	5.3	5.0	5.9
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.05	0.04	0.02	<0.01
Chromium Reducible Sulfur	iCRS	%	<0.01			

LAB ID			025	026	027	028
Client ID^			EARC0350_12-14	EARC0350_18-20	EARC0350_24-26	EARC0350_32-34
Sampled^						
Analyte	**Method**	**Unit**				
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	0.36	0.23	0.24	0.08
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	0.35	0.20	0.22	0.07
Nitrogen	(total)	%	<0.005	<0.005	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	42	46	30	21
pH	iPH1WASE		6.3	6.4	6.3	6.6
Alkalinity as CaCO3	iALK2WATI	mg/L	2	3	2	4
Bicarbonate as CaCO3	iALK2WATI	mg/L	2	3	2	4
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	23	25	17	12
Aluminium	iMET1WCICP	mg/L	<0.005	<0.005	0.009	0.008
Antimony	iMET1WCMSL	mg/L	0.00004	0.00003	0.00011	0.00016
Arsenic	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Barium	iMET1WCMSL	mg/L	0.026	0.048	0.022	0.035
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.06	0.04	0.03	
Boron	iMET1WCMSL	mg/L				0.017
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	1.8	2.2	1.2	0.7
Chloride	iANIO1WAIC	mg/L	1.0	0.7	1.2	1.4
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.00014	<0.00010	<0.00010	0.00031
Chromium(VI)	iCO1WCDAL	mg/L	<0.001	<0.001	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.00030	0.00037	0.00055	0.0012
Copper	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Fluoride	iANIO1WAIC	mg/L	<0.1	<0.1	<0.1	0.1
Iron	iMET1WCICP	mg/L	0.013	<0.005	0.012	<0.005
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Lithium	iMET1WCMSL	mg/L	0.0041	0.021	0.013	0.010
Magnesium	iMET1WCICP	mg/L	0.9	1.3	0.9	0.8
Manganese	iMET1WCMSL	mg/L	0.0015	0.0019	0.0009	0.0058
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum	iMET1WCMSL	mg/L	<0.00010	<0.00010	<0.00010	0.0014
Nickel	iMET1WCMSL	mg/L	0.00028	0.00035	0.00068	0.00066
Potassium	iMET1WCICP	mg/L	1.9	1.9	0.8	0.7
Selenium	iMET1WCMSL	mg/L	0.00076	0.00089	0.00035	0.00008
Silicon	iMET1WCICP	mg/L	8.6	8.7	7.7	6.5
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	3.1	2.8	2.5	2.0
Strontium	iMET1WCMSL	mg/L	0.014	0.021	0.0090	0.0046
Sulphate	iANIO1WAIC	mg/L	11.5	13.8	6.2	2.7
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	0.00003
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.09	0.11	0.09	0.09

LAB ID			025	026	027	028
Client ID^			EARC0350_12-14	EARC0350_18-20	EARC0350_24-26	EARC0350_32-34
Sampled^						
Analyte	**Method**	**Unit**				
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	<0.005	<0.005	<0.005
Tungsten	iMET1WCMSL	mg/L	0.00002	<0.00002	0.00004	0.00062
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Zinc	iMET1WCMSL	mg/L	0.002	<0.001	0.002	<0.001
Aluminium	iMET2SAICP	mg/kg	20000	13500	8780	3730
Antimony	iMET2SAMS	mg/kg	0.58	0.47	0.88	0.49
Arsenic	iMET2SAMS	mg/kg	14	11	16	22
Barium	iMET2SAICP	mg/kg	23	33	16	60
Beryllium	iMET2SAMS	mg/kg	0.54	0.68	1.3	1.3
Bismuth*	iMET2SAMS	mg/kg	0.37	0.10	0.10	0.06
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Calcium	iMET2SAICP	mg/kg	330	320	200	<100
Chromium	iMET2SAICP	mg/kg	42	24	27	21
Chromium(III)	iCr3+2SAICP	mg/kg	40	22	23	19
Chromium(VI)	iCRS1STCO	mg/kg	1.9	1.4	3.7	1.8
Cobalt	iMET2SAMS	mg/kg	4.7	7.8	3.9	7.8
Copper	iMET2SAMS	mg/kg	7.7	7.9	26	7.1
Iron	iMET2SAICP	mg/kg	390000	350000	290000	170000
Lanthanum*	iMET2SAICP	mg/kg	2.9	3.6	3.2	14
Lead	iMET2SAMS	mg/kg	9.1	8.2	5.5	2.7
Lithium	iMET2SAICP	mg/kg	<2.0	2.4	3.0	<2.0
Magnesium	iMET2SAICP	mg/kg	350	370	330	290
Manganese	iMET2SAICP	mg/kg	45	95	49	450
Mercury	iMET2SAMS	mg/kg	0.06	0.08	0.07	0.14
Molybdenum	iMET2SAMS	mg/kg	2.0	1.2	1.6	1.3
Nickel	iMET2SAMS	mg/kg	7.9	12	8.7	13
Phosphorus	iMET2SAICP	mg/kg	410	490	620	350
Potassium	iMET2SAICP	mg/kg	150	150	56	80
Selenium	iMET2SAMS	mg/kg	1.3	1.2	1.0	0.21
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	<100	<100	<100	<100
Strontium	iMET2SAICP	mg/kg	4.3	5.2	2.4	<2.0
Sulphate (from S)	iMET2SAICP	mg/kg	1100	890	520	<100
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	0.18
Thorium	iMET2SAMS	mg/kg	5.4	4.2	3.2	1.4
Tin	iMET2SAMS	mg/kg	1.7	<0.5	<0.5	<0.5
Tungsten	iMET2SAMS	mg/kg	1.0	3.6	3.7	26
Uranium	iMET2SAMS	mg/kg	1.4	0.86	0.75	1.0
Vanadium	iMET2SAICP	mg/kg	72	37	54	13
Zinc	iMET2SAMS	mg/kg	6.7	16	21	23
Date Analysed	(combs)		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	(total)		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	ARD		08/11/2024	08/11/2024	08/11/2024	08/11/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iCO1WCDAL		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024

LAB ID			025			
Client ID^						
Sampled^						
Analyte	**Method**	**Unit**				
Date Analysed	iCRS		06/11/2024			
	iCRS1STCO		30/10/2024	30/10/2024	30/10/2024	30/10/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iMET2SAMS		03/12/2024	03/12/2024	03/12/2024	03/12/2024
	iNP1WTFIA		20/11/2024	20/11/2024	20/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		20/11/2024	20/11/2024	20/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			029	030	031	032
Client ID^			EARC0350_38-40	EARC0350_46-48	EARC0377_02-04	EARC0377_12-14
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		7.2	7.9	8.0	7.6
EC 1 soil 2 water paste*	ARD	mS/m	3	7	28	11
Acid Neutralising Capacity*	ARD	kg H2SO4/t	1.4	2.9	5.4	2.5
NAG pH*	ARD		5.8	6.1	6.5	5.9
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	<0.01	0.02	0.07	0.02
Chromium Reducible Sulfur	iCRS	%	<0.01	<0.01	<0.01	
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	0.09	<0.05	0.21	0.06
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	0.14	0.06
Total Organic Carbon	(combs)	%	0.09	<0.05	0.07	<0.05
Nitrogen	(total)	%	<0.005	0.049	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	18	35	175	64
pH	iPH1WASE		6.7	6.8	8.0	6.8
Alkalinity as CaCO3	iALK2WATI	mg/L	5	5	56	6
Bicarbonate as CaCO3	iALK2WATI	mg/L	5	5	56	6
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	10	19	96	35
Aluminium	iMET1WCICP	mg/L	0.005	0.024	0.016	0.021
Antimony	iMET1WCMSL	mg/L	0.00028	0.00075	0.00011	0.00022
Arsenic	iMET1WCMSL	mg/L	0.00013	0.0092	0.00014	0.00039
Barium	iMET1WCICP	mg/L			0.13	
Barium	iMET1WCMSL	mg/L	0.0091	0.0018		0.012
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	0.00001	0.00006	<0.00001	0.00003
Boron	iMET1WCICP	mg/L		0.06	0.04	0.10
Boron	iMET1WCMSL	mg/L	0.016			

LAB ID			029	030	031	032
Client ID^			EARC0350_38-40	EARC0350_46-48	EARC0377_02-04	EARC0377_12-14
Sampled^						
Analyte	Method	Unit				
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	0.6	0.3	26.8	0.3
Chloride	iANIO1WAIC	mg/L	0.7	2.9	1.1	3.3
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.00023	0.00034	0.00020	0.00065
Chromium(VI)	iCO1WCDAL	mg/L	<0.001	<0.001	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.0036	0.00049	0.00005	<0.00005
Copper	iMET1WCICP	mg/L				0.071
Copper	iMET1WCMSL	mg/L	0.0001	0.0004	0.0003	
Fluoride	iANIO1WAIC	mg/L	0.2	1.5	0.5	0.6
Iron	iMET1WCICP	mg/L	0.006	0.052	<0.005	0.025
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	<0.00005	0.00060	0.0038	0.015
Lithium	iMET1WCMSL	mg/L	0.0056	0.0036	0.0029	0.0024
Magnesium	iMET1WCICP	mg/L	0.8	0.3	1.4	0.2
Manganese	iMET1WCMSL	mg/L	0.0067	0.0009	0.0002	0.0003
Mercury	iMET1WCMSL	mg/L	0.00004	0.00003	<0.00002	0.00003
Molybdenum	iMET1WCMSL	mg/L	0.0034	0.0042	0.0014	0.0035
Nickel	iMET1WCMSL	mg/L	0.00031	0.00029	0.00015	0.00062
Potassium	iMET1WCICP	mg/L	0.8	3.9	1.0	1.7
Selenium	iMET1WCMSL	mg/L	0.00009	0.00009	0.0012	0.00028
Silicon	iMET1WCICP	mg/L	7.3	15	7.7	8.1
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	1.5	3.5	5.1	10.0
Strontium	iMET1WCICP	mg/L			0.11	
Strontium	iMET1WCMSL	mg/L	0.0037	0.0012		0.0025
Sulphate	iANIO1WAIC	mg/L	1.4	1.2	26.5	9.3
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	0.00003	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	0.0004
Nitrogen, total	iNP1WTFIA	mg/L	0.16	0.29	0.14	1.8
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	0.038	<0.005	<0.005
Tungsten	iMET1WCMSL	mg/L	0.0057	0.0031	0.0020	0.0043
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	0.00012	<0.00002
Vanadium	iMET1WCMSL	mg/L	<0.0001	0.0005	<0.0001	0.0002
Zinc	iMET1WCICP	mg/L				0.13
Zinc	iMET1WCMSL	mg/L	0.002	0.010	0.006	
Aluminium	iMET2SAICP	mg/kg	2410	16700	11900	8290
Antimony	iMET2SAMS	mg/kg	0.83	1.5	0.28	0.40
Arsenic	iMET2SAICP	mg/kg		170		
Arsenic	iMET2SAMS	mg/kg	32		4.7	8.4
Barium	iMET2SAICP	mg/kg	35	74	190	48
Beryllium	iMET2SAMS	mg/kg	0.84	1.6	0.49	1.2
Bismuth*	iMET2SAMS	mg/kg	0.07	0.76	0.08	0.10
Cadmium	iMET2SAMS	mg/kg	0.07	0.21	<0.05	0.06
Calcium	iMET2SAICP	mg/kg	100	530	1500	260
Chromium	iMET2SAICP	mg/kg	22	26	12	17
Chromium(III)	iCr3+2SAICP	mg/kg	20	25	11	17

LAB ID			029	030	031	032
Client ID^			EARC0350_38-40	EARC0350_46-48	EARC0377_02-04	EARC0377_12-14
Sampled^						
Analyte	**Method**	**Unit**				
Chromium(VI)	iCRS1STCO	mg/kg	1.9	1.2	0.5	<0.5
Cobalt	iMET2SAMS	mg/kg	14	7.5	2.9	8.1
Copper	iMET2SAMS	mg/kg	10	37	4.3	6.3
Iron	iMET2SAICP	mg/kg	110000	170000	300000	200000
Lanthanum*	iMET2SAICP	mg/kg	8.1	57	2.1	3.6
Lead	iMET2SAMS	mg/kg	4.9	63	4.3	7.8
Lithium	iMET2SAICP	mg/kg	<2.0	10	<2.0	<2.0
Magnesium	iMET2SAICP	mg/kg	290	2900	270	320
Manganese	iMET2SAICP	mg/kg	260	350	130	110
Mercury	iMET2SAMS	mg/kg	0.20	0.17	<0.02	<0.02
Molybdenum	iMET2SAMS	mg/kg	3.1	5.2	0.57	0.64
Nickel	iMET2SAMS	mg/kg	21	48	2.8	13
Phosphorus	iMET2SAICP	mg/kg	210	370	580	500
Potassium	iMET2SAICP	mg/kg	71	6400	210	140
Selenium	iMET2SAMS	mg/kg	0.32	0.44	0.53	0.26
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	<100	<100	200	160
Strontium	iMET2SAICP	mg/kg	<2.0	6.6	10	5.1
Sulphate (from S)	iMET2SAICP	mg/kg	150	550	1300	300
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	0.17	0.63	<0.05	<0.05
Thorium	iMET2SAMS	mg/kg	1.3	9.2	3.7	3.6
Tin	iMET2SAMS	mg/kg	<0.5	0.6	<0.5	<0.5
Tungsten	iMET2SAMS	mg/kg	76	1.6	3.1	9.8
Uranium	iMET2SAMS	mg/kg	1.5	0.96	0.52	0.70
Vanadium	iMET2SAICP	mg/kg	17	27	16	14
Zinc	iMET2SAICP	mg/kg	88	190		
Zinc	iMET2SAMS	mg/kg			6.8	11
Date Analysed	(combs)		20/11/2024	20/11/2024	26/11/2024	26/11/2024
	(total)		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	ARD		08/11/2024	08/11/2024	08/11/2024	18/11/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		15/11/2024	15/11/2024	19/11/2024	15/11/2024
	iCO1WCDAL		13/11/2024	13/11/2024	13/11/2024	04/12/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iCRS		06/11/2024	06/11/2024	06/11/2024	
	iCRS1STCO		30/10/2024	30/10/2024	05/11/2024	05/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iMET2SAMS		03/12/2024	03/12/2024	03/12/2024	03/12/2024
	iNP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			033	034	035	036
Client ID^			EARC0377_20-22	EARC0377_30-32	EARC0399_04-06	EARC0399_20-22
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		7.2	7.5	6.3	6.4
EC 1 soil 2 water paste*	ARD	mS/m	21	5	16	7
Acid Neutralising Capacity*	ARD	kg H2SO4/t	1.1	1.2	2.1	0.9
NAG pH*	ARD		6.1	5.6	4.2	5.3
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.01	<0.01	0.07	0.03
Chromium Reducible Sulfur	iCRS	%	<0.01		<0.01	<0.01
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	0.01	<0.01
Carbon	(combs)	%	<0.05	<0.05	0.73	0.12
Total Inorganic Carbon	(combs)	%	0.06	<0.05	0.22	<0.05
Total Organic Carbon	(combs)	%	<0.05	<0.05	0.51	0.09
Nitrogen	(total)	%	<0.005	0.008	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	118	26	112	39
pH	iPH1WASE		6.6	6.6	6.3	6.3
Alkalinity as CaCO3	iALK2WATI	mg/L	2	2	6	3
Bicarbonate as CaCO3	iALK2WATI	mg/L	2	2	6	3
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	65	14	61	22
Aluminium	iMET1WCICP	mg/L	0.013	0.033	<0.005	<0.005
Antimony	iMET1WCMSL	mg/L	0.00044	0.00074	0.00020	0.00021
Arsenic	iMET1WCMSL	mg/L	0.00008	0.00070	0.00007	0.00006
Barium	iMET1WCICP	mg/L			0.12	
Barium	iMET1WCMSL	mg/L	0.0071	0.0003		0.018
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	0.00001	<0.00001	0.00003
Boron	iMET1WCICP	mg/L	0.05	0.02	0.10	0.04
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	1.3	<0.1	2.7	0.9
Chloride	iANIO1WAIC	mg/L	24	3.9	3.6	2.7
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.0034	0.00033	<0.00010	0.00022
Chromium(VI)	iCO1WCDAL	mg/L	0.003	<0.001	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.00042	0.00007	0.017	0.0053
Copper	iMET1WCMSL	mg/L	0.0003	0.0015	0.0011	0.0006
Fluoride	iANIO1WAIC	mg/L	0.3	0.5	<0.1	<0.1
Iron	iMET1WCICP	mg/L	0.008	<0.005	0.024	0.006
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	0.0021	0.00042	0.00054	0.00059
Lithium	iMET1WCMSL	mg/L	0.0031	0.00074	0.0054	0.00057
Magnesium	iMET1WCICP	mg/L	1.7	<0.1	1.6	0.5
Manganese	iMET1WCMSL	mg/L	0.0018	<0.0001	0.014	0.0014
Mercury	iMET1WCMSL	mg/L	0.00003	0.00007	<0.00002	<0.00002
Molybdenum	iMET1WCMSL	mg/L	0.0020	0.0015	<0.00010	0.00012
Nickel	iMET1WCMSL	mg/L	0.00018	0.00007	0.0035	0.0010
Potassium	iMET1WCICP	mg/L	2.2	3.1	1.6	1.2
Selenium	iMET1WCMSL	mg/L	0.00016	<0.00005	0.00082	0.00021

LAB ID			033	034	035	036
Client ID^			EARC0377_20-22	EARC0377_30-32	EARC0399_04-06	EARC0399_20-22
Sampled^						
Analyte	**Method**	**Unit**				
Silicon	iMET1WCICP	mg/L	7.6	5.6	11	8.9
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	0.00009
Sodium	iMET1WCICP	mg/L	14.6	2.5	15.0	5.2
Strontium	iMET1WCMSL	mg/L	0.0092	0.0006	0.036	0.0071
Sulphate	iANIO1WAIC	mg/L	6.9	0.6	23.5	4.8
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	0.0002	0.0002	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.19	0.15	0.22	0.15
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	<0.005	<0.005	<0.005
Tungsten	iMET1WCMSL	mg/L	0.0037	0.013	0.00009	0.00035
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	0.0004	0.0012	<0.0001	<0.0001
Zinc	iMET1WCMSL	mg/L	0.011	0.009	0.005	0.020
Aluminium	iMET2SAICP	mg/kg	11300	8640	14700	8210
Antimony	iMET2SAMS	mg/kg	0.94	1.2	0.41	0.28
Arsenic	iMET2SAMS	mg/kg	3.2	8.9	27	3.0
Barium	iMET2SAICP	mg/kg	67	22	190	16
Beryllium	iMET2SAMS	mg/kg	0.80	1.3	0.63	0.91
Bismuth*	iMET2SAMS	mg/kg	0.36	0.16	0.30	0.09
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Calcium	iMET2SAICP	mg/kg	190	110	400	170
Chromium	iMET2SAICP	mg/kg	55	29	31	7.5
Chromium(III)	iCr3+2SAICP	mg/kg	51	26	29	6
Chromium(VI)	iCRS1STCO	mg/kg	4.4	3.0	1.3	1.3
Cobalt	iMET2SAMS	mg/kg	20	5.2	3.8	6.5
Copper	iMET2SAMS	mg/kg	10	17	6.0	4.8
Iron	iMET2SAICP	mg/kg	45000	67000	310000	190000
Lanthanum*	iMET2SAICP	mg/kg	32	33	3.2	5.2
Lead	iMET2SAMS	mg/kg	23	17	9.6	3.3
Lithium	iMET2SAICP	mg/kg	4.9	7.6	2.1	<2.0
Magnesium	iMET2SAICP	mg/kg	400	360	270	190
Manganese	iMET2SAICP	mg/kg	340	59	70	23
Mercury	iMET2SAMS	mg/kg	<0.02	0.03	<0.02	0.03
Molybdenum	iMET2SAMS	mg/kg	0.73	2.1	1.2	0.37
Nickel	iMET2SAMS	mg/kg	11	6.2	5.2	3.5
Phosphorus	iMET2SAICP	mg/kg	160	220	400	390
Potassium	iMET2SAICP	mg/kg	280	1800	150	<50
Selenium	iMET2SAMS	mg/kg	0.13	0.24	1.1	0.11
Silver	iMET2SAMS	mg/kg	<0.05	0.08	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	140	<100	220	<100
Strontium	iMET2SAICP	mg/kg	5.1	4.0	9.3	5.1
Sulphate (from S)	iMET2SAICP	mg/kg	<100	<100	1700	300
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	0.05	0.06	0.06	<0.05
Thorium	iMET2SAMS	mg/kg	11	9.7	5.4	1.7
Tin	iMET2SAMS	mg/kg	1.5	<0.5	1.3	<0.5
Tungsten	iMET2SAMS	mg/kg	7.0	14	3.0	26

LAB ID			033	034	035	036
Client ID^			EARC0377_20-22	EARC0377_30-32	EARC0399_04-06	EARC0399_20-22
Sampled^						
Analyte	**Method**	**Unit**				
Uranium	iMET2SAMS	mg/kg	0.86	2.5	0.74	0.44
Vanadium	iMET2SAICP	mg/kg	57	30	60	6.3
Zinc	iMET2SAMS	mg/kg	8.3	13	6.4	4.1
Date Analysed	(combs)		26/11/2024	26/11/2024	26/11/2024	26/11/2024
	(total)		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	ARD		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		19/11/2024	15/11/2024	19/11/2024	15/11/2024
	iCO1WCDAL		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iCRS		06/11/2024		06/11/2024	06/11/2024
	iCRS1STCO		05/11/2024	05/11/2024	05/11/2024	05/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iMET2SAMS		03/12/2024	03/12/2024	03/12/2024	03/12/2024
	iNP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			037	038	039	040
Client ID^			EARC0399_36-38	EARC0399_52-54	EARC0405_06-08	EARC0405_12-14
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		6.7	6.4	6.5	6.9
EC 1 soil 2 water paste*	ARD	mS/m	5	6	7	6
Acid Neutralising Capacity*	ARD	kg H2SO4/t	1.0	1.1	3.2	2.7
NAG pH*	ARD		5.4	5.2	5.6	5.9
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	<0.01	<0.01	0.14	0.05
Chromium Reducible Sulfur	iCRS	%				<0.01
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	0.01	<0.01
Carbon	(combs)	%	<0.05	0.19	0.14	0.36
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	0.06	0.10
Total Organic Carbon	(combs)	%	<0.05	0.19	0.08	0.26
Nitrogen	(total)	%	<0.005	<0.005	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	22	45	53	32
pH	iPH1WASE		6.5	6.4	6.3	6.8
Alkalinity as CaCO3	iALK2WATI	mg/L	2	6	2	3
Bicarbonate as CaCO3	iALK2WATI	mg/L	2	6	2	3
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	12	25	29	18

LAB ID			037	038	039	040
Client ID^			EARC0399_36-38	EARC0399_52-54	EARC0405_06-08	EARC0405_12-14
Sampled^						
Analyte	Method	Unit				
Aluminium	iMET1WCICP	mg/L	<0.005	<0.005	<0.005	<0.005
Antimony	iMET1WCMSL	mg/L	0.00021	0.00023	0.00014	0.00018
Arsenic	iMET1WCMSL	mg/L	<0.00005	<0.00005	0.00009	<0.00005
Barium	iMET1WCICP	mg/L			0.13	
Barium	iMET1WCMSL	mg/L	0.0066	0.039		0.0019
Beryllium	iMET1WCMSL	mg/L	<0.00002	0.00008	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L			0.09	0.08
Boron	iMET1WCMSL	mg/L	0.018	0.017		
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	0.7	2.7	2.3	0.8
Chloride	iANIO1WAIC	mg/L	2.1	2.0	3.3	2.5
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	<0.00010	<0.00010	0.0016	0.00044
Chromium(VI)	iCO1WCDAL	mg/L	<0.001	<0.001	0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.0021	0.025	0.00075	0.00006
Copper	iMET1WCMSL	mg/L	0.0002	0.0001	0.0003	0.0001
Fluoride	iANIO1WAIC	mg/L	<0.1	<0.1	<0.1	0.2
Iron	iMET1WCICP	mg/L	<0.005	<0.005	<0.005	0.007
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	0.00032	0.00022	0.00078	0.00015
Lithium	iMET1WCMSL	mg/L	0.0028	0.0034	0.00027	0.016
Magnesium	iMET1WCICP	mg/L	0.6	2.1	0.6	0.6
Manganese	iMET1WCICP	mg/L		0.12		
Manganese	iMET1WCMSL	mg/L	0.0008		0.0030	0.0002
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum	iMET1WCMSL	mg/L	0.00054	0.00018	0.00042	0.00023
Nickel	iMET1WCMSL	mg/L	0.00026	0.0050	0.00030	0.00015
Potassium	iMET1WCICP	mg/L	0.5	0.9	4.5	1.7
Selenium	iMET1WCMSL	mg/L	0.00009	0.00008	0.00081	0.00038
Silicon	iMET1WCICP	mg/L	5.9	7.3	12	10
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	2.3	2.7	3.2	3.1
Strontium	iMET1WCMSL	mg/L	0.0056	0.021	0.028	0.0051
Sulphate	iANIO1WAIC	mg/L	1.8	1.6	12.3	5.7
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	0.00004	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.03	0.10	0.27	0.15
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	<0.005	<0.005	<0.005
Tungsten	iMET1WCMSL	mg/L	0.0012	0.00064	0.00017	0.00008
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Zinc	iMET1WCMSL	mg/L	0.005	0.003	0.021	0.006
Aluminium	iMET2SAICP	mg/kg	1980	1980	21300	19500
Antimony	iMET2SAMS	mg/kg	0.33	0.26	0.53	0.41
Arsenic	iMET2SAMS	mg/kg	1.7	2.0	24	25
Barium	iMET2SAICP	mg/kg	6.7	27	340	15

LAB ID			037	038	039	040
Client ID^			EARC0399_36-38	EARC0399_52-54	EARC0405_06-08	EARC0405_12-14
Sampled^						
Analyte	**Method**	**Unit**				
Beryllium	iMET2SAMS	mg/kg	0.74	3.2	0.36	0.71
Bismuth*	iMET2SAMS	mg/kg	<0.05	<0.05	0.54	0.35
Cadmium	iMET2SAMS	mg/kg	<0.05	0.06	<0.05	0.08
Calcium	iMET2SAICP	mg/kg	<100	130	910	480
Chromium	iMET2SAICP	mg/kg	5.1	14	72	37
Chromium(III)	iCr3+2SAICP	mg/kg	4	13	71	36
Chromium(VI)	iCRS1STCO	mg/kg	0.8	0.9	0.8	0.8
Cobalt	iMET2SAMS	mg/kg	7.5	13	4.6	7.5
Copper	iMET2SAMS	mg/kg	2.6	3.0	2.7	8.5
Iron	iMET2SAICP	mg/kg	200000	200000	270000	380000
Lanthanum*	iMET2SAICP	mg/kg	11	7.5	3.3	2.8
Lead	iMET2SAMS	mg/kg	1.4	1.1	15	10
Lithium	iMET2SAICP	mg/kg	<2.0	<2.0	<2.0	3.5
Magnesium	iMET2SAICP	mg/kg	130	230	310	780
Manganese	iMET2SAICP	mg/kg	40	240	330	35
Mercury	iMET2SAMS	mg/kg	<0.02	0.04	<0.02	0.05
Molybdenum	iMET2SAMS	mg/kg	0.37	1.1	3.5	1.7
Nickel	iMET2SAMS	mg/kg	2.7	10	5.2	13
Phosphorus	iMET2SAICP	mg/kg	230	660	180	650
Potassium	iMET2SAICP	mg/kg	<50	<50	760	120
Selenium	iMET2SAMS	mg/kg	<0.05	<0.05	0.99	0.97
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	<100	<100	130	<100
Strontium	iMET2SAICP	mg/kg	<2.0	4.6	33	6.0
Sulphate (from S)	iMET2SAICP	mg/kg	<100	<100	1600	610
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thorium	iMET2SAMS	mg/kg	0.8	0.6	12	5.8
Tin	iMET2SAMS	mg/kg	<0.5	<0.5	4.5	2.0
Tungsten	iMET2SAMS	mg/kg	38	59	0.6	<0.5
Uranium	iMET2SAMS	mg/kg	0.48	0.41	0.93	2.2
Vanadium	iMET2SAICP	mg/kg	4.8	5.1	93	81
Zinc	iMET2SAMS	mg/kg	4.7	14	3.5	19
Date Analysed	(combs)		26/11/2024	26/11/2024	26/11/2024	26/11/2024
	(total)		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	ARD		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iCO1WCDAL		13/11/2024	13/11/2024	13/11/2024	13/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iCRS					06/11/2024
	iCRS1STCO		05/11/2024	05/11/2024	05/11/2024	05/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iMET2SAMS		03/12/2024	03/12/2024	03/12/2024	03/12/2024
	iNP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024

LAB ID			037	038	039	040
Client ID^						
Sampled^						
Analyte	**Method**	**Unit**				
Date Analysed	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			041	042	043	044
Client ID^			EARC0405_22-24	EARC0405_30-32	EARC0405_36-38	EARC0405_60-62
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		7.6	7.1	7.1	7.1
EC 1 soil 2 water paste*	ARD	mS/m	6	14	6	4
Acid Neutralising Capacity*	ARD	kg H2SO4/t	2.9	2.6	1.6	1.8
NAG pH*	ARD		6.0	5.6	5.7	5.8
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.08	0.02	<0.01	<0.01
Chromium Reducible Sulfur	iCRS	%			<0.01	
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	0.10	0.16	0.05	<0.05
Total Inorganic Carbon	(combs)	%	0.07	0.06	<0.05	<0.05
Total Organic Carbon	(combs)	%	<0.05	0.10	<0.05	<0.05
Nitrogen	(total)	%	<0.005	<0.005	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	29	64	24	19
pH	iPH1WASE		6.8	6.5	6.6	6.6
Alkalinity as CaCO3	iALK2WATI	mg/L	4	6	3	3
Bicarbonate as CaCO3	iALK2WATI	mg/L	4	6	3	3
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	16	35	13	11
Aluminium	iMET1WCICP	mg/L	0.084	0.007	0.007	0.023
Antimony	iMET1WCMSL	mg/L	0.00051	0.00066	0.00023	0.00017
Arsenic	iMET1WCMSL	mg/L	0.0010	0.00040	0.00014	0.00020
Barium	iMET1WCMSL	mg/L	0.0015	0.0020	0.0032	0.0005
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	0.00002	<0.00001	<0.00001	0.00003
Boron	iMET1WCICP	mg/L	0.08	0.06	0.04	0.04
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	0.4	1.0	0.5	0.3
Chloride	iANIO1WAIC	mg/L	3.4	7.2	3.2	3.2
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.0028	0.0015	0.00053	0.00016
Chromium(VI)	iCO1WCDAL	mg/L	0.003	0.002	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.00006	0.0068	0.00012	0.00007
Copper	iMET1WCMSL	mg/L	0.0013	0.0022	0.0004	0.0003
Fluoride	iANIO1WAIC	mg/L	0.5	0.2	0.1	0.2
Iron	iMET1WCICP	mg/L	0.43	0.031	0.009	0.078
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004

LAB ID			041	042	043	044
Client ID^			EARC0405_22-24	EARC0405_30-32	EARC0405_36-38	EARC0405_60-62
Sampled^						
Analyte	**Method**	**Unit**				
Lead	iMET1WCMSL	mg/L	0.0015	0.0011	0.00040	0.00007
Lithium	iMET1WCMSL	mg/L	0.0021	0.0041	0.0059	0.023
Magnesium	iMET1WCICP	mg/L	0.2	1.1	0.4	0.3
Manganese	iMET1WCMSL	mg/L	0.0012	0.0029	0.0002	0.0003
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum	iMET1WCMSL	mg/L	0.0013	0.00048	0.00032	0.00025
Nickel	iMET1WCMSL	mg/L	0.00036	0.0029	0.00034	0.00018
Potassium	iMET1WCICP	mg/L	0.9	0.9	0.5	0.3
Selenium	iMET1WCMSL	mg/L	0.00011	0.00031	0.00006	<0.00005
Silicon	iMET1WCICP	mg/L	11	11	7.4	9.2
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	4.8	9.3	3.2	2.7
Strontium	iMET1WCMSL	mg/L	0.0019	0.0047	0.0038	0.0014
Sulphate	iANIO1WAIC	mg/L	1.4	7.3	0.6	0.2
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	0.00007	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.55	0.39	0.16	0.20
Phosphorus, total	iPP1WTFIA	mg/L	0.008	0.006	<0.005	0.007
Tungsten	iMET1WCMSL	mg/L	0.00026	0.00007	0.00014	0.00026
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	0.0006	0.0003	0.0001	0.0002
Zinc	iMET1WCMSL	mg/L	0.023	0.010	0.020	0.004
Aluminium	iMET2SAICP	mg/kg	13000	10600	5570	8910
Antimony	iMET2SAMS	mg/kg	0.43	1.3	0.31	0.12
Arsenic	iMET2SAMS	mg/kg	48	62	16	8.9
Barium	iMET2SAICP	mg/kg	15	25	8.2	7.3
Beryllium	iMET2SAMS	mg/kg	0.82	1.1	0.52	0.76
Bismuth*	iMET2SAMS	mg/kg	0.23	0.40	0.08	0.08
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Calcium	iMET2SAICP	mg/kg	500	310	150	180
Chromium	iMET2SAICP	mg/kg	21	85	24	9.6
Chromium(III)	iCr3+2SAICP	mg/kg	20	82	22	9
Chromium(VI)	iCRS1STCO	mg/kg	1.5	3.7	2.0	0.8
Cobalt	iMET2SAMS	mg/kg	6.3	6.5	2.4	2.4
Copper	iMET2SAMS	mg/kg	51	36	7.9	5.9
Iron	iMET2SAICP	mg/kg	320000	280000	330000	340000
Lanthanum*	iMET2SAICP	mg/kg	3.4	7.8	2.5	4.6
Lead	iMET2SAMS	mg/kg	16	26	3.7	1.7
Lithium	iMET2SAICP	mg/kg	2.8	2.3	2.2	8.5
Magnesium	iMET2SAICP	mg/kg	970	500	280	410
Manganese	iMET2SAICP	mg/kg	390	200	180	180
Mercury	iMET2SAMS	mg/kg	<0.02	0.05	<0.02	0.02
Molybdenum	iMET2SAMS	mg/kg	0.98	3.0	0.60	0.42
Nickel	iMET2SAMS	mg/kg	8.5	12	7.3	6.0
Phosphorus	iMET2SAICP	mg/kg	440	870	560	600
Potassium	iMET2SAICP	mg/kg	240	66	<50	<50
Selenium	iMET2SAMS	mg/kg	0.14	0.56	0.08	0.06

LAB ID			041	042	043	044
Client ID^			EARC0405_22-24	EARC0405_30-32	EARC0405_36-38	EARC0405_60-62
Sampled^						
Analyte	**Method**	**Unit**				
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	<100	<100	<100	<100
Strontium	iMET2SAICP	mg/kg	4.8	5.9	2.6	4.2
Sulphate (from S)	iMET2SAICP	mg/kg	210	380	<100	<100
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	0.08	<0.05	<0.05	<0.05
Thorium	iMET2SAMS	mg/kg	5.0	6.8	2.2	1.2
Tin	iMET2SAMS	mg/kg	0.7	0.6	<0.5	<0.5
Tungsten	iMET2SAMS	mg/kg	1.1	1.2	2.0	1.4
Uranium	iMET2SAMS	mg/kg	2.5	1.9	0.79	0.72
Vanadium	iMET2SAICP	mg/kg	32	82	23	15
Zinc	iMET2SAMS	mg/kg	35	43	10	8.2
Date Analysed	(combs)		26/11/2024	26/11/2024	26/11/2024	26/11/2024
	(total)		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	ARD		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iCO1WCDAL		13/11/2024	13/11/2024	04/12/2024	04/12/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iCRS				06/11/2024	
	iCRS1STCO		05/11/2024	05/11/2024	05/11/2024	05/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iMET2SAMS		03/12/2024	03/12/2024	03/12/2024	03/12/2024
	iNP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		26/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			045	046	047	048
Client ID^			EARC0408_02-04	EARC0408_06-08	EARC0408_36-38	EARC0408_46-48
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		7.2	7.1	6.6	6.6
EC 1 soil 2 water paste*	ARD	mS/m	12	7	5	5
Acid Neutralising Capacity*	ARD	kg H2SO4/t	6.3	2.8	1.4	1.1
NAG pH*	ARD		6.9	6.0	5.3	6.1
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.02	0.01	0.01	<0.01
Chromium Reducible Sulfur	iCRS	%	<0.01		<0.01	<0.01
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	0.06	0.05	0.11	<0.05

LAB ID			045	046	047	048
Client ID^			EARC0408_02-04	EARC0408_06-08	EARC0408_36-38	EARC0408_46-48
Sampled^						
Analyte	Method	Unit				
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	<0.05	<0.05	0.09	<0.05
Nitrogen	(total)	%	0.009	<0.005	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	92	33	23	22
pH	iPH1WASE		6.9	6.5	6.5	6.6
Alkalinity as CaCO3	iALK2WATI	mg/L	5	2	3	4
Bicarbonate as CaCO3	iALK2WATI	mg/L	5	2	3	4
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	51	18	12	12
Aluminium	iMET1WCICP	mg/L	0.57	0.11	<0.005	<0.005
Antimony	iMET1WCMSL	mg/L	0.00037	0.00024	0.00008	0.00003
Arsenic	iMET1WCMSL	mg/L	0.00062	0.00050	<0.00005	<0.00005
Barium	iMET1WCICP	mg/L	0.072			
Barium	iMET1WCMSL	mg/L		0.0042	0.017	0.0046
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	0.00005	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.13	0.11	0.02	0.03
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	1.7	0.3	0.9	1.1
Chloride	iANIO1WAIC	mg/L	3.4	3.8	0.9	1.5
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.0028	0.0013	<0.00010	<0.00010
Chromium(VI)	iCO1WCDAL	mg/L	0.003	0.001	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.00027	0.00005	0.0025	0.0017
Copper	iMET1WCMSL	mg/L	0.0005	0.0024	0.0002	<0.0001
Fluoride	iANIO1WAIC	mg/L	0.4	0.5	<0.1	<0.1
Iron	iMET1WCICP	mg/L	0.73	0.068	<0.005	<0.005
Lanthanum	iMET1WCMSL	mg/L	0.00017	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	0.00028	0.00069	0.00033	0.00008
Lithium	iMET1WCMSL	mg/L	0.0028	0.00073	0.032	0.0066
Magnesium	iMET1WCICP	mg/L	1.2	0.1	0.9	1.0
Manganese	iMET1WCMSL	mg/L	0.0078	0.0009	0.010	0.0035
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum	iMET1WCMSL	mg/L	0.0013	0.0012	0.00013	0.00011
Nickel	iMET1WCMSL	mg/L	0.00081	0.00041	0.00057	0.00017
Potassium	iMET1WCICP	mg/L	2.4	0.9	0.5	0.7
Selenium	iMET1WCMSL	mg/L	0.00028	0.00015	0.00010	0.00006
Silicon	iMET1WCICP	mg/L	21	16	7.0	7.1
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	11.4	5.0	1.6	1.6
Strontium	iMET1WCMSL	mg/L	0.013	0.0019	0.0064	0.0062
Sulphate	iANIO1WAIC	mg/L	26.1	3.2	3.3	0.9
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	0.00004	0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.77	0.78	0.16	0.08
Phosphorus, total	iPP1WTFIA	mg/L	0.009	0.006	<0.005	<0.005
Tungsten	iMET1WCMSL	mg/L	0.00074	0.00070	0.00022	0.00020

LAB ID			045	046	047	048
Client ID^			EARC0408_02-04	EARC0408_06-08	EARC0408_36-38	EARC0408_46-48
Sampled^						
Analyte	**Method**	**Unit**				
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	0.0029	0.0034	<0.0001	<0.0001
Zinc	iMET1WCMSL	mg/L	0.004	0.025	0.003	0.006
Aluminium	iMET2SAICP	mg/kg	26600	26000	4610	986
Antimony	iMET2SAMS	mg/kg	0.34	0.51	0.17	0.13
Arsenic	iMET2SAMS	mg/kg	17	13	4.7	6.7
Barium	iMET2SAICP	mg/kg	780	88	12	17
Beryllium	iMET2SAMS	mg/kg	1.1	0.69	0.82	0.69
Bismuth*	iMET2SAMS	mg/kg	0.26	0.28	<0.05	<0.05
Cadmium	iMET2SAMS	mg/kg	0.06	<0.05	<0.05	<0.05
Calcium	iMET2SAICP	mg/kg	1500	610	110	<100
Chromium	iMET2SAICP	mg/kg	130	150	8.1	5.6
Chromium(III)	iCr3+2SAICP	mg/kg	130	150	7	5
Chromium(VI)	iCRS1STCO	mg/kg	0.8	1.2	0.7	0.8
Cobalt	iMET2SAMS	mg/kg	15	6.3	6.0	7.1
Copper	iMET2SAMS	mg/kg	36	28	3.2	1.9
Iron	iMET2SAICP	mg/kg	180000	240000	180000	230000
Lanthanum*	iMET2SAICP	mg/kg	20	7.3	4.6	3.6
Lead	iMET2SAMS	mg/kg	21	19	1.5	0.7
Lithium	iMET2SAICP	mg/kg	9.3	6.2	2.8	<2.0
Magnesium	iMET2SAICP	mg/kg	1900	620	260	140
Manganese	iMET2SAICP	mg/kg	1000	340	55	220
Mercury	iMET2SAMS	mg/kg	<0.02	<0.02	0.05	0.04
Molybdenum	iMET2SAMS	mg/kg	0.81	0.83	0.49	0.93
Nickel	iMET2SAMS	mg/kg	26	11	6.3	2.7
Phosphorus	iMET2SAICP	mg/kg	260	210	160	590
Potassium	iMET2SAICP	mg/kg	1400	390	<50	<50
Selenium	iMET2SAMS	mg/kg	0.59	0.56	0.19	<0.05
Silver	iMET2SAMS	mg/kg	0.06	0.06	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	270	150	<100	<100
Strontium	iMET2SAICP	mg/kg	23	8.2	<2.0	<2.0
Sulphate (from S)	iMET2SAICP	mg/kg	500	260	170	<100
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	0.35	0.15	<0.05	<0.05
Thorium	iMET2SAMS	mg/kg	10	15	0.9	<0.5
Tin	iMET2SAMS	mg/kg	1.4	1.8	<0.5	<0.5
Tungsten	iMET2SAMS	mg/kg	<0.5	<0.5	17	39
Uranium	iMET2SAMS	mg/kg	0.98	1.1	0.39	0.21
Vanadium	iMET2SAICP	mg/kg	240	450	10	3.0
Zinc	iMET2SAMS	mg/kg	37	25	7.5	7.5
Date Analysed	(combs)		26/11/2024	26/11/2024	26/11/2024	26/11/2024
	(total)		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	ARD		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		19/11/2024	15/11/2024	15/11/2024	15/11/2024
	iCO1WCDAL		13/11/2024	18/11/2024	18/11/2024	18/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iCRS		06/11/2024		06/11/2024	06/11/2024
	iCRS1STCO		05/11/2024	05/11/2024	05/11/2024	05/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024

LAB ID			045	046	047	048
Client ID^						
Sampled^						
Analyte	**Method**	**Unit**				
Date Analysed	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iMET2SAMS		03/12/2024	03/12/2024	03/12/2024	03/12/2024
	iNP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			049	050	051	052
Client ID^			EARC0459_02-04	EARC0459_08-10	EARC0459_16-18	EARC0459_24-26
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		6.9	7.1	7.4	7.2
EC 1 soil 2 water paste*	ARD	mS/m	10	6	3	3
Acid Neutralising Capacity*	ARD	kg H2SO4/t	2.6	2.4	3.5	1.9
NAG pH*	ARD		5.3	6.2	5.9	5.8
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	<0.01	0.01	<0.01	<0.01
Chromium Reducible Sulfur	iCRS	%	<0.01	<0.01		<0.01
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	0.31	0.05	<0.05	0.10
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	0.27	<0.05	<0.05	0.05
Nitrogen	(total)	%	<0.005	<0.005	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	59	40	26	19
pH	iPH1WASE		6.6	6.7	7.0	6.6
Alkalinity as CaCO3	iALK2WATI	mg/L	4	3	4	2
Bicarbonate as CaCO3	iALK2WATI	mg/L	4	3	4	2
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	32	22	14	10
Aluminium	iMET1WCICP	mg/L	0.35	0.13	1.2	0.33
Antimony	iMET1WCMSL	mg/L	0.00054	0.00050	0.00031	0.00021
Arsenic	iMET1WCMSL	mg/L	0.00032	0.00093	0.00089	0.00011
Barium	iMET1WCMSL	mg/L	0.032	0.0034	0.0012	0.0010
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	0.00001	0.00003	<0.00001
Boron	iMET1WCICP	mg/L	0.09	0.12	0.12	0.07
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	0.7	0.8	0.1	0.2
Chloride	iANIO1WAIC	mg/L	1.7	4.4	1.5	1.3
Chromium(III)*	iCR3+1WCCAL	mg/L	0.002	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.0016	0.0013	0.00064	0.00032

LAB ID			049	050	051	052
Client ID^			EARC0459_02-04	EARC0459_08-10	EARC0459_16-18	EARC0459_24-26
Sampled^						
Analyte	**Method**	**Unit**				
Chromium(VI)	iCO1WCDAL	mg/L	<0.001	0.001	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.00027	0.00020	0.00005	0.00006
Copper	iMET1WCMSL	mg/L	0.0005	0.0004	0.0003	0.0002
Fluoride	iANIO1WAIC	mg/L	0.4	0.7	0.6	0.3
Iron	iMET1WCICP	mg/L	0.44	0.081	0.87	0.36
Lanthanum	iMET1WCMSL	mg/L	<0.00004	0.00009	0.00005	<0.00004
Lead	iMET1WCMSL	mg/L	0.00011	0.00016	0.00008	0.00061
Lithium	iMET1WCMSL	mg/L	0.0026	0.00030	0.00022	0.0069
Magnesium	iMET1WCICP	mg/L	0.6	0.2	<0.1	0.2
Manganese	iMET1WCMSL	mg/L	0.0045	0.0021	0.0007	0.0005
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	0.00007
Molybdenum	iMET1WCMSL	mg/L	0.0018	0.0029	0.0027	0.0020
Nickel	iMET1WCMSL	mg/L	0.00087	0.00035	0.00033	0.00037
Potassium	iMET1WCICP	mg/L	1.5	0.8	0.3	0.5
Selenium	iMET1WCMSL	mg/L	0.00033	0.00016	0.00008	0.00036
Silicon	iMET1WCICP	mg/L	20	24	27	13
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	8.7	6.4	3.6	3.0
Strontium	iMET1WCMSL	mg/L	0.0053	0.0016	0.0005	0.0010
Sulphate	iANIO1WAIC	mg/L	14.1	5.7	1.0	2.5
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	0.00005	0.00003	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.39	0.71	0.34	0.44
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	<0.005	0.008	0.010
Tungsten	iMET1WCMSL	mg/L	0.0017	0.0015	0.0031	0.00031
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	0.0021	0.0060	0.0034	0.0011
Zinc	iMET1WCMSL	mg/L	0.001	0.003	0.007	0.004
Aluminium	iMET2SAICP	mg/kg	20000	27500	32000	14500
Antimony	iMET2SAMS	mg/kg	0.61	0.32	0.13	0.18
Arsenic	iMET2SAMS	mg/kg	13	10	6.1	4.9
Barium	iMET2SAICP	mg/kg	280	120	47	13
Beryllium	iMET2SAMS	mg/kg	0.95	0.59	0.76	1.4
Bismuth*	iMET2SAMS	mg/kg	0.23	0.32	0.25	0.12
Cadmium	iMET2SAMS	mg/kg	0.05	<0.05	<0.05	<0.05
Calcium	iMET2SAICP	mg/kg	1200	880	1100	430
Chromium	iMET2SAICP	mg/kg	140	150	110	24
Chromium(III)	iCr3+2SAICP	mg/kg	140	150	110	23
Chromium(VI)	iCRS1STCO	mg/kg	0.8	0.7	0.7	0.9
Cobalt	iMET2SAMS	mg/kg	13	12	5.4	3.8
Copper	iMET2SAMS	mg/kg	27	28	14	7.9
Iron	iMET2SAICP	mg/kg	240000	170000	250000	310000
Lanthanum*	iMET2SAICP	mg/kg	14	14	13	3.0
Lead	iMET2SAMS	mg/kg	17	18	21	6.0
Lithium	iMET2SAICP	mg/kg	6.3	6.9	5.6	7.4
Magnesium	iMET2SAICP	mg/kg	1300	1100	1200	530
Manganese	iMET2SAICP	mg/kg	650	530	110	120

LAB ID			049	050	051	052
Client ID^			EARC0459_02-04	EARC0459_08-10	EARC0459_16-18	EARC0459_24-26
Sampled^						
Analyte	**Method**	**Unit**				
Mercury	iMET2SAMS	mg/kg	<0.02	<0.02	<0.02	0.06
Molybdenum	iMET2SAMS	mg/kg	0.90	0.78	1.0	0.79
Nickel	iMET2SAMS	mg/kg	17	15	14	12
Phosphorus	iMET2SAICP	mg/kg	270	180	110	530
Potassium	iMET2SAICP	mg/kg	780	670	340	130
Selenium	iMET2SAMS	mg/kg	0.50	0.48	0.25	0.44
Silver	iMET2SAMS	mg/kg	0.07	<0.05	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	190	220	180	<100
Strontium	iMET2SAICP	mg/kg	14	9.8	10	3.9
Sulphate (from S)	iMET2SAICP	mg/kg	260	180	110	300
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	0.19	0.14	0.10	<0.05
Thorium	iMET2SAMS	mg/kg	10	14	12	4.9
Tin	iMET2SAMS	mg/kg	1.3	1.9	2.2	0.7
Tungsten	iMET2SAMS	mg/kg	<0.5	<0.5	<0.5	1.2
Uranium	iMET2SAMS	mg/kg	0.99	1.1	1.7	1.0
Vanadium	iMET2SAICP	mg/kg	340	320	160	52
Zinc	iMET2SAMS	mg/kg	28	25	7.9	11
Date Analysed	(combs)		26/11/2024	26/11/2024	26/11/2024	26/11/2024
	(total)		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	ARD		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iALK2WATI		15/11/2024	15/11/2024	21/11/2024	15/11/2024
	iANIO1WAIC		15/11/2024	15/11/2024	19/11/2024	19/11/2024
	iCO1WCDAL		18/11/2024	04/12/2024	04/12/2024	18/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iCRS		06/11/2024	06/11/2024		06/11/2024
	iCRS1STCO		05/11/2024	05/11/2024	05/11/2024	05/11/2024
	iEC2WASE		18/11/2024	18/11/2024	21/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iMET2SAMS		03/12/2024	03/12/2024	03/12/2024	03/12/2024
	iNP1WTFIA		22/11/2024	22/11/2024	26/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	20/11/2024	15/11/2024
	iPP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	21/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			053	054	055	056
Client ID^			EARC0459_32-34	EARC0459_48-50	EARC0467_02-04	EARC0467_06-08
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		7.0	7.2	7.4	7.5
EC 1 soil 2 water paste*	ARD	mS/m	8	6	9	4
Acid Neutralising Capacity*	ARD	kg H2SO4/t	2.0	1.9	3.3	2.8
NAG pH*	ARD		5.3	6.7	6.1	5.8
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5

LAB ID			053	054	055	056
Client ID^			EARC0459_32-34	EARC0459_48-50	EARC0467_02-04	EARC0467_06-08
Sampled^						
Analyte	**Method**	**Unit**				
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.01	<0.01	<0.01	0.01
Chromium Reducible Sulfur	iCRS	%	<0.01	<0.01	<0.01	
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	0.20	<0.05	<0.05	0.05
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	0.15	<0.05	<0.05	<0.05
Nitrogen	(total)	%	<0.005	<0.005	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	39	29	56	22
pH	iPH1WASE		6.6	6.8	7.4	6.6
Alkalinity as CaCO3	iALK2WATI	mg/L	4	3	16	2
Bicarbonate as CaCO3	iALK2WATI	mg/L	4	3	16	2
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	22	16	31	12
Aluminium	iMET1WCICP	mg/L	0.026	0.014	0.052	0.27
Antimony	iMET1WCMSL	mg/L	0.00025	0.00029	0.00029	0.00035
Arsenic	iMET1WCMSL	mg/L	<0.00005	0.00060	0.00048	0.0015
Barium	iMET1WCMSL	mg/L	0.0014	0.0013	0.020	0.0015
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.04	0.09	0.09	0.08
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	1.1	0.4	1.2	<0.1
Chloride	iANIO1WAIC	mg/L	4.3	5.2	2.0	2.0
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.00015	0.00032	0.0016	0.0030
Chromium(VI)	iCO1WCDAL	mg/L	<0.001	<0.001	0.001	0.003
Cobalt	iMET1WCMSL	mg/L	0.00010	0.00007	0.00006	0.00014
Copper	iMET1WCMSL	mg/L	0.0002	0.0001	0.0008	0.0007
Fluoride	iANIO1WAIC	mg/L	0.1	0.2	0.5	0.7
Iron	iMET1WCICP	mg/L	0.059	0.045	0.037	0.11
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	0.00008
Lead	iMET1WCMSL	mg/L	0.00006	<0.00005	0.00018	0.00036
Lithium	iMET1WCMSL	mg/L	0.010	0.0056	0.0016	0.00054
Magnesium	iMET1WCICP	mg/L	1.2	0.3	0.7	<0.1
Manganese	iMET1WCMSL	mg/L	0.0004	0.0005	0.0005	0.0011
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	0.00003	0.00003
Molybdenum	iMET1WCMSL	mg/L	0.0010	0.00072	0.0036	0.0031
Nickel	iMET1WCMSL	mg/L	0.00058	0.00023	0.00048	0.00026
Potassium	iMET1WCICP	mg/L	0.6	1.2	2.6	0.5
Selenium	iMET1WCMSL	mg/L	0.00040	<0.00005	0.00030	0.00051
Silicon	iMET1WCICP	mg/L	13	12	14	13
Silver	iMET1WCMSL	mg/L	<0.00001	0.00004	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	4.7	4.0	7.5	4.0
Strontium	iMET1WCMSL	mg/L	0.0042	0.0016	0.0094	0.0003
Sulphate	iANIO1WAIC	mg/L	3.0	0.5	5.6	2.3
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001

LAB ID			053	054	055	056
Client ID^			EARC0459_32-34	EARC0459_48-50	EARC0467_02-04	EARC0467_06-08
Sampled^						
Analyte	**Method**	**Unit**				
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	0.00004
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.32	0.11	0.36	0.40
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	0.012	<0.005	0.006
Tungsten	iMET1WCMSL	mg/L	0.00032	0.00049	0.0042	0.0030
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	0.0005	0.0002	0.0018	0.0036
Zinc	iMET1WCMSL	mg/L	0.006	0.003	0.021	0.007
Aluminium	iMET2SAICP	mg/kg	12200	9750	19600	18500
Antimony	iMET2SAMS	mg/kg	0.22	0.56	0.34	0.53
Arsenic	iMET2SAMS	mg/kg	5.3	29	11	21
Barium	iMET2SAICP	mg/kg	9.4	70	98	38
Beryllium	iMET2SAMS	mg/kg	2.8	1.0	0.76	0.40
Bismuth*	iMET2SAMS	mg/kg	0.09	0.25	0.21	0.33
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Calcium	iMET2SAICP	mg/kg	410	400	730	390
Chromium	iMET2SAICP	mg/kg	20	38	110	220
Chromium(III)	iCr3+2SAICP	mg/kg	20	37	110	220
Chromium(VI)	iCRS1STCO	mg/kg	0.9	0.9	0.7	1.1
Cobalt	iMET2SAMS	mg/kg	3.8	2.5	7.3	3.7
Copper	iMET2SAMS	mg/kg	12	8.1	28	19
Iron	iMET2SAICP	mg/kg	300000	190000	210000	190000
Lanthanum*	iMET2SAICP	mg/kg	9.3	11	11	6.4
Lead	iMET2SAMS	mg/kg	4.4	11	12	14
Lithium	iMET2SAICP	mg/kg	3.1	4.4	5.5	6.1
Magnesium	iMET2SAICP	mg/kg	960	380	660	420
Manganese	iMET2SAICP	mg/kg	77	640	250	190
Mercury	iMET2SAMS	mg/kg	0.04	<0.02	<0.02	<0.02
Molybdenum	iMET2SAMS	mg/kg	0.71	1.7	0.93	1.7
Nickel	iMET2SAMS	mg/kg	11	7.2	18	8.9
Phosphorus	iMET2SAICP	mg/kg	550	1100	230	220
Potassium	iMET2SAICP	mg/kg	60	540	620	420
Selenium	iMET2SAMS	mg/kg	0.28	0.11	0.63	1.3
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	<100	<100	160	180
Strontium	iMET2SAICP	mg/kg	3.8	5.7	12	5.9
Sulphate (from S)	iMET2SAICP	mg/kg	180	<100	230	390
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	<0.05	0.09	0.12	0.09
Thorium	iMET2SAMS	mg/kg	3.7	4.9	8.8	15
Tin	iMET2SAMS	mg/kg	<0.5	<0.5	1.2	1.0
Tungsten	iMET2SAMS	mg/kg	3.5	4.0	0.7	<0.5
Uranium	iMET2SAMS	mg/kg	1.3	1.4	0.91	1.3
Vanadium	iMET2SAICP	mg/kg	33	39	210	240
Zinc	iMET2SAMS	mg/kg	11	15	38	14
Date Analysed	(combs)		26/11/2024	26/11/2024	26/11/2024	26/11/2024
	(total)		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	ARD		18/11/2024	18/11/2024	18/11/2024	18/11/2024

LAB ID			053	054	055	056
Client ID^						
Sampled^						
Analyte	**Method**	**Unit**				
Date Analysed	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		19/11/2024	19/11/2024	19/11/2024	19/11/2024
	iCO1WCDAL		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iCRS		06/11/2024	06/11/2024	06/11/2024	
	iCRS1STCO		05/11/2024	05/11/2024	05/11/2024	05/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		02/12/2024	02/12/2024	02/12/2024	02/12/2024
	iMET2SAMS		03/12/2024	03/12/2024	03/12/2024	03/12/2024
	iNP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			057	058	059	060
Client ID^			EARC0467_20-22	EARC0467_36-38	EARC0467_56-58	EARC0474_04-06
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		6.6	6.6	7.1	7.3
EC 1 soil 2 water paste*	ARD	mS/m	4	2	4	3
Acid Neutralising Capacity*	ARD	kg H2SO4/t	1.1	1.4	1.0	2.6
NAG pH*	ARD		5.2	5.3	5.4	5.6
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	<0.01	0.01	<0.01	<0.01
Chromium Reducible Sulfur	iCRS	%	<0.01	<0.01		<0.01
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Nitrogen	(total)	%	0.016	<0.005	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	16	10	15	14
pH	iPH1WASE		6.3	6.4	6.6	6.7
Alkalinity as CaCO3	iALK2WATI	mg/L	1	1	2	3
Bicarbonate as CaCO3	iALK2WATI	mg/L	1	1	2	3
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	9	6	8	8
Aluminium	iMET1WCICP	mg/L	0.029	0.005	<0.005	0.14
Antimony	iMET1WCMSL	mg/L	0.0013	0.00026	0.00009	0.00031
Arsenic	iMET1WCMSL	mg/L	0.00030	0.00029	0.00006	0.00044
Barium	iMET1WCMSL	mg/L	0.0003	0.0019	0.0040	0.0020
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002

LAB ID			057	058	059	060
Client ID^			EARC0467_20-22	EARC0467_36-38	EARC0467_56-58	EARC0474_04-06
Sampled^						
Analyte	**Method**	**Unit**				
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.03			0.05
Boron	iMET1WCMSL	mg/L		0.018	0.014	
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	<0.1	<0.1	0.5	0.1
Chloride	iANIO1WAIC	mg/L	2.7	1.5	1.6	0.7
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.00043	0.0013	0.00054	0.0014
Chromium(VI)	iCO1WCDAL	mg/L	<0.001	0.001	<0.001	0.001
Cobalt	iMET1WCMSL	mg/L	0.00009	0.00090	0.00019	0.00017
Copper	iMET1WCMSL	mg/L	0.0002	0.0003	0.0004	0.0004
Fluoride	iANIO1WAIC	mg/L	0.2	<0.1	<0.1	0.3
Iron	iMET1WCICP	mg/L	0.010	<0.005	0.039	0.072
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	0.00008
Lead	iMET1WCMSL	mg/L	0.00012	0.00012	0.00026	0.00017
Lithium	iMET1WCMSL	mg/L	0.00087	0.0012	0.0056	0.0024
Magnesium	iMET1WCICP	mg/L	<0.1	<0.1	0.3	<0.1
Manganese	iMET1WCMSL	mg/L	0.0001	0.0009	0.0007	0.0003
Mercury	iMET1WCMSL	mg/L	0.00003	<0.00002	<0.00002	0.00004
Molybdenum	iMET1WCMSL	mg/L	0.0016	0.0012	0.0016	0.0011
Nickel	iMET1WCMSL	mg/L	0.00007	0.00021	0.00021	0.00021
Potassium	iMET1WCICP	mg/L	1.2	0.5	0.4	1.4
Selenium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	0.00026
Silicon	iMET1WCICP	mg/L	12	7.9	5.3	13
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	2.3	1.6	1.7	1.9
Strontium	iMET1WCMSL	mg/L	0.0002	0.0006	0.0026	0.0008
Sulphate	iANIO1WAIC	mg/L	0.9	0.3	0.7	0.9
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.20	0.04	0.10	0.27
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	<0.005	<0.005	<0.005
Tungsten	iMET1WCMSL	mg/L	0.0061	0.0020	0.00038	0.0071
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	0.0019	0.0003	<0.0001	0.0020
Zinc	iMET1WCMSL	mg/L	0.004	0.009	0.007	0.002
Aluminium	iMET2SAICP	mg/kg	8560	3760	1030	10900
Antimony	iMET2SAMS	mg/kg	1.4	2.1	0.19	0.66
Arsenic	iMET2SAMS	mg/kg	2.7	26	4.7	8.4
Barium	iMET2SAICP	mg/kg	22	21	7.6	54
Beryllium	iMET2SAMS	mg/kg	0.44	3.9	0.75	0.87
Bismuth*	iMET2SAMS	mg/kg	0.18	0.06	<0.05	0.19
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Calcium	iMET2SAICP	mg/kg	200	<100	<100	570
Chromium	iMET2SAICP	mg/kg	11	22	8.6	100
Chromium(III)	iCr3+2SAICP	mg/kg	10	19	7	100
Chromium(VI)	iCRS1STCO	mg/kg	0.6	3.1	1.8	1.0

LAB ID			057	058	059	060
Client ID^			EARC0467_20-22	EARC0467_36-38	EARC0467_56-58	EARC0474_04-06
Sampled^						
Analyte	**Method**	**Unit**				
Cobalt	iMET2SAMS	mg/kg	3.5	11	5.0	8.8
Copper	iMET2SAMS	mg/kg	6.4	28	1.6	18
Iron	iMET2SAICP	mg/kg	4000	120000	230000	190000
Lanthanum*	iMET2SAICP	mg/kg	16	4.9	1.6	9.9
Lead	iMET2SAMS	mg/kg	7.4	2.7	<0.5	9.7
Lithium	iMET2SAICP	mg/kg	3.7	<2.0	<2.0	3.4
Magnesium	iMET2SAICP	mg/kg	400	130	170	580
Manganese	iMET2SAICP	mg/kg	11	190	120	120
Mercury	iMET2SAMS	mg/kg	<0.02	<0.02	<0.02	<0.02
Molybdenum	iMET2SAMS	mg/kg	0.72	2.7	2.1	0.87
Nickel	iMET2SAMS	mg/kg	2.7	15	5.3	15
Phosphorus	iMET2SAICP	mg/kg	<50	500	520	200
Potassium	iMET2SAICP	mg/kg	1900	100	<50	470
Selenium	iMET2SAMS	mg/kg	0.07	0.16	<0.05	0.33
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	<100	<100	<100	<100
Strontium	iMET2SAICP	mg/kg	3.2	<2.0	<2.0	9.5
Sulphate (from S)	iMET2SAICP	mg/kg	<100	180	<100	170
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	0.08	0.08	<0.05	0.07
Thorium	iMET2SAMS	mg/kg	7.2	1.9	<0.5	7.1
Tin	iMET2SAMS	mg/kg	<0.5	<0.5	<0.5	0.9
Tungsten	iMET2SAMS	mg/kg	9.4	35	21	4.1
Uranium	iMET2SAMS	mg/kg	0.37	1.7	0.43	0.70
Vanadium	iMET2SAICP	mg/kg	12	97	<2.0	190
Zinc	iMET2SAMS	mg/kg	4.0	41	9.1	21
Date Analysed	(combs)		26/11/2024	26/11/2024	26/11/2024	26/11/2024
	(total)		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	ARD		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		19/11/2024	19/11/2024	19/11/2024	19/11/2024
	iCO1WCDAL		18/11/2024	18/11/2024	18/11/2024	04/12/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		02/12/2024	14/11/2024	14/11/2024	14/11/2024
	iCRS		06/11/2024	06/11/2024		07/11/2024
	iCRS1STCO		05/11/2024	05/11/2024	05/11/2024	05/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		02/12/2024	14/11/2024	14/11/2024	14/11/2024
	iMET2SAMS		03/12/2024	18/11/2024	18/11/2024	18/11/2024
	iNP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			061	062	063	064
Client ID^			EARC0474_12-14	EARC0474_18-20	EARC0474_30-32	EARC0480_04-06
Sampled^						
Analyte	Method	Unit				
pH, 1:2 soil:water*	ARD		7.4	6.5	8.0	8.0
EC 1 soil 2 water paste*	ARD	mS/m	4	10	18	17
Acid Neutralising Capacity*	ARD	kg H2SO4/t	2.0	1.5	2.8	2.3
NAG pH*	ARD		5.6	5.5	6.5	6.0
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.04	0.07	0.05	0.04
Chromium Reducible Sulfur	iCRS	%				<0.01
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	<0.05	0.16	<0.05	<0.05
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	<0.05	0.12	<0.05	<0.05
Nitrogen	(total)	%	<0.005	<0.005	0.038	<0.005
Conductivity	iEC2WASE	uS/cm	24	57	85	97
pH	iPH1WASE		6.6	6.2	6.7	7.8
Alkalinity as CaCO3	iALK2WATI	mg/L	3	<1	3	35
Bicarbonate as CaCO3	iALK2WATI	mg/L	3	<1	3	35
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	13	31	47	53
Aluminium	iMET1WCICP	mg/L	0.76	<0.005	0.044	0.015
Antimony	iMET1WCMSL	mg/L	0.00035	0.00004	0.0012	0.00015
Arsenic	iMET1WCMSL	mg/L	0.0013	<0.00005	0.0011	0.00022
Barium	iMET1WCICP	mg/L		0.10		0.16
Barium	iMET1WCMSL	mg/L	0.0009		0.0007	
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.08	0.06	0.04	0.05
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	<0.1	1.7	0.8	10.1
Chloride	iANIO1WAIC	mg/L	2.3	1.0	14	1.5
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.0047	0.00018	0.0020	0.0010
Chromium(VI)	iCO1WCDAL	mg/L	0.005	<0.001	0.002	0.001
Cobalt	iMET1WCMSL	mg/L	0.00007	0.00067	0.00035	0.00009
Copper	iMET1WCMSL	mg/L	0.0003	0.0003	0.0002	0.0002
Fluoride	iANIO1WAIC	mg/L	0.8	<0.1	0.8	0.5
Iron	iMET1WCICP	mg/L	0.58	<0.005	0.008	<0.005
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	0.00011	0.00011	0.00006	0.00009
Lithium	iMET1WCMSL	mg/L	0.00036	0.026	0.011	0.0042
Magnesium	iMET1WCICP	mg/L	<0.1	0.8	1.4	2.3
Manganese	iMET1WCMSL	mg/L	0.0006	0.0007	0.0034	0.0001
Mercury	iMET1WCMSL	mg/L	0.00002	<0.00002	0.00003	<0.00002
Molybdenum	iMET1WCMSL	mg/L	0.0049	<0.00010	0.012	0.0067
Nickel	iMET1WCMSL	mg/L	0.00034	0.00036	0.00027	0.00019
Potassium	iMET1WCICP	mg/L	0.8	2.0	5.7	1.9
Selenium	iMET1WCMSL	mg/L	0.00050	0.0013	0.00009	0.00047

LAB ID			061	062	063	064
Client ID^			EARC0474_12-14	EARC0474_18-20	EARC0474_30-32	EARC0480_04-06
Sampled^						
Analyte	**Method**	**Unit**				
Silicon	iMET1WCICP	mg/L	14	7.6	8.9	10
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	4.2	5.2	7.8	4.5
Strontium	iMET1WCMSL	mg/L	0.0004	0.022	0.0031	0.053
Sulphate	iANIO1WAIC	mg/L	1.8	18.5	7.4	10.4
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	0.00005	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	0.0003	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.28	0.14	0.21	0.14
Phosphorus, total	iPP1WTFIA	mg/L	0.009	<0.005	0.010	0.005
Tungsten	iMET1WCMSL	mg/L	0.0022	<0.00002	0.084	0.0010
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	0.00002
Vanadium	iMET1WCMSL	mg/L	0.0030	<0.0001	0.0024	<0.0001
Zinc	iMET1WCMSL	mg/L	0.003	0.015	0.003	0.005
Aluminium	iMET2SAICP	mg/kg	16800	9530	6220	4600
Antimony	iMET2SAMS	mg/kg	0.33	0.38	0.90	0.33
Arsenic	iMET2SAMS	mg/kg	15	12	1.6	16
Barium	iMET2SAICP	mg/kg	17	64	77	60
Beryllium	iMET2SAMS	mg/kg	0.61	0.67	0.30	0.72
Bismuth*	iMET2SAMS	mg/kg	0.25	0.10	0.74	0.09
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Calcium	iMET2SAICP	mg/kg	380	240	200	480
Chromium	iMET2SAICP	mg/kg	140	22	16	15
Chromium(III)	iCr3+2SAICP	mg/kg	140	21	14	14
Chromium(VI)	iCRS1STCO	mg/kg	1.2	0.8	1.9	0.9
Cobalt	iMET2SAMS	mg/kg	3.7	3.5	8.6	4.9
Copper	iMET2SAMS	mg/kg	14	5.9	7.0	9.9
Iron	iMET2SAICP	mg/kg	190000	260000	10000	250000
Lanthanum*	iMET2SAICP	mg/kg	2.6	1.7	9.3	1.5
Lead	iMET2SAMS	mg/kg	14	5.7	25	5.8
Lithium	iMET2SAICP	mg/kg	4.0	<2.0	6.0	<2.0
Magnesium	iMET2SAICP	mg/kg	360	190	1100	370
Manganese	iMET2SAICP	mg/kg	230	40	570	110
Mercury	iMET2SAMS	mg/kg	<0.02	0.07	<0.02	<0.02
Molybdenum	iMET2SAMS	mg/kg	1.1	0.92	0.85	0.97
Nickel	iMET2SAMS	mg/kg	8.5	4.5	4.6	5.6
Phosphorus	iMET2SAICP	mg/kg	210	340	<50	370
Potassium	iMET2SAICP	mg/kg	310	96	2000	130
Selenium	iMET2SAMS	mg/kg	0.33	0.57	0.09	0.11
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	150	<100	<100	<100
Strontium	iMET2SAICP	mg/kg	5.2	4.7	5.3	5.3
Sulphate (from S)	iMET2SAICP	mg/kg	240	1000	<100	290
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	0.07	<0.05	0.24	<0.05
Thorium	iMET2SAMS	mg/kg	15	2.5	4.2	2.4
Tin	iMET2SAMS	mg/kg	1.0	<0.5	1.5	<0.5
Tungsten	iMET2SAMS	mg/kg	0.5	3.9	17	2.4

LAB ID			061	062	063	064
Client ID^			EARC0474_12-14	EARC0474_18-20	EARC0474_30-32	EARC0480_04-06
Sampled^						
Analyte	**Method**	**Unit**				
Uranium	iMET2SAMS	mg/kg	1.5	0.88	0.39	0.64
Vanadium	iMET2SAICP	mg/kg	120	19	9.8	15
Zinc	iMET2SAMS	mg/kg	10	7.6	2.9	13
Date Analysed	(combs)		26/11/2024	26/11/2024	26/11/2024	26/11/2024
	(total)		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	ARD		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		19/11/2024	19/11/2024	19/11/2024	19/11/2024
	iCO1WCDAL		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iCRS					07/11/2024
	iCRS1STCO		05/11/2024	05/11/2024	05/11/2024	05/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	21/11/2024	20/11/2024
	iMET2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iMET2SAMS		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iNP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			065	066	067	068
Client ID^			EARC0480_10-12	EARC0480_16-18	EARC0480_24-26	EARC0480_32-34
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		8.2	7.0	6.8	6.9
EC 1 soil 2 water paste*	ARD	mS/m	19	8	3	2
Acid Neutralising Capacity*	ARD	kg H2SO4/t	3.5	2.4	1.4	0.8
NAG pH*	ARD		6.2	5.7	5.5	5.3
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.03	0.04	0.03	0.03
Chromium Reducible Sulfur	iCRS	%				<0.01
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	0.05	<0.05	<0.05	<0.05
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Nitrogen	(total)	%	<0.005	<0.005	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	140	37	15	10
pH	iPH1WASE		8.1	6.7	6.7	6.5
Alkalinity as CaCO3	iALK2WATI	mg/L	59	2	2	2
Bicarbonate as CaCO3	iALK2WATI	mg/L	59	2	2	2
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	77	20	8	5

LAB ID			065	066	067	068
Client ID^			EARC0480_10-12	EARC0480_16-18	EARC0480_24-26	EARC0480_32-34
Sampled^						
Analyte	**Method**	**Unit**				
Aluminium	iMET1WCICP	mg/L	0.021	0.049	0.023	<0.005
Antimony	iMET1WCMSL	mg/L	0.00018	0.00024	0.00021	0.00013
Arsenic	iMET1WCMSL	mg/L	0.00045	0.00020	0.00015	0.00007
Barium	iMET1WCICP	mg/L	0.16			
Barium	iMET1WCMSL	mg/L		0.0020	0.0002	0.0015
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.09	0.07	0.04	0.02
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	13.5	0.1	<0.1	0.4
Chloride	iANIO1WAIC	mg/L	1.6	3.4	1.1	0.9
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.00070	0.0020	0.0018	0.00015
Chromium(VI)	iCO1WCDAL	mg/L	<0.001	0.002	0.002	<0.001
Cobalt	iMET1WCMSL	mg/L	0.00005	0.00009	0.00023	0.00045
Copper	iMET1WCMSL	mg/L	0.0002	0.0005	0.0001	<0.0001
Fluoride	iANIO1WAIC	mg/L	0.8	0.6	0.2	<0.1
Iron	iMET1WCICP	mg/L	<0.005	0.075	0.046	0.013
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	0.00012	0.00017	<0.00005	<0.00005
Lithium	iMET1WCMSL	mg/L	0.011	0.0010	0.0035	0.0040
Magnesium	iMET1WCICP	mg/L	3.2	<0.1	<0.1	0.3
Manganese	iMET1WCMSL	mg/L	0.0001	0.0002	<0.0001	0.0016
Mercury	iMET1WCMSL	mg/L	0.00003	<0.00002	0.00007	<0.00002
Molybdenum	iMET1WCMSL	mg/L	0.016	0.0020	0.0010	0.0023
Nickel	iMET1WCMSL	mg/L	0.00013	0.00040	0.0010	0.00035
Potassium	iMET1WCICP	mg/L	1.7	0.4	0.3	0.3
Selenium	iMET1WCMSL	mg/L	0.00025	0.00025	<0.00005	<0.00005
Silicon	iMET1WCICP	mg/L	11	15	12	6.6
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	9.5	6.3	2.7	1.1
Strontium	iMET1WCICP	mg/L	0.066			
Strontium	iMET1WCMSL	mg/L		0.0005	0.0002	0.0025
Sulphate	iANIO1WAIC	mg/L	7.8	6.5	1.3	0.5
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	0.0002	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.15	0.32	0.14	0.07
Phosphorus, total	iPP1WTFIA	mg/L	0.014	0.007	0.010	<0.005
Tungsten	iMET1WCMSL	mg/L	0.0048	0.00029	0.00013	0.00053
Uranium	iMET1WCMSL	mg/L	0.00004	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	<0.0001	0.0002	0.0002	<0.0001
Zinc	iMET1WCMSL	mg/L	0.003	0.008	0.004	<0.001
Aluminium	iMET2SAICP	mg/kg	5580	11800	8310	2050
Antimony	iMET2SAMS	mg/kg	0.17	0.27	0.23	0.31
Arsenic	iMET2SAMS	mg/kg	9.3	20	15	7.3
Barium	iMET2SAICP	mg/kg	54	7.2	7.5	9.5
Beryllium	iMET2SAMS	mg/kg	0.72	2.3	1.4	1.0

LAB ID			065	066	067	068
Client ID^			EARC0480_10-12	EARC0480_16-18	EARC0480_24-26	EARC0480_32-34
Sampled^						
Analyte	**Method**	**Unit**				
Bismuth*	iMET2SAMS	mg/kg	<0.05	0.07	0.16	<0.05
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Calcium	iMET2SAICP	mg/kg	720	320	230	<100
Chromium	iMET2SAICP	mg/kg	16	20	19	15
Chromium(III)	iCr3+2SAICP	mg/kg	15	19	18	13
Chromium(VI)	iCRS1STCO	mg/kg	0.6	0.5	0.7	1.4
Cobalt	iMET2SAMS	mg/kg	3.8	7.3	3.8	7.9
Copper	iMET2SAMS	mg/kg	6.0	16	6.0	2.8
Iron	iMET2SAICP	mg/kg	240000	260000	260000	210000
Lanthanum*	iMET2SAICP	mg/kg	3.0	2.2	<1.0	2.1
Lead	iMET2SAMS	mg/kg	5.4	5.0	2.0	1.0
Lithium	iMET2SAICP	mg/kg	2.1	<2.0	2.3	<2.0
Magnesium	iMET2SAICP	mg/kg	350	380	240	160
Manganese	iMET2SAICP	mg/kg	81	170	96	72
Mercury	iMET2SAMS	mg/kg	<0.02	<0.02	<0.02	<0.02
Molybdenum	iMET2SAMS	mg/kg	0.52	1.0	1.3	1.4
Nickel	iMET2SAMS	mg/kg	5.4	9.2	11	3.6
Phosphorus	iMET2SAICP	mg/kg	470	850	1100	440
Potassium	iMET2SAICP	mg/kg	66	84	<50	<50
Selenium	iMET2SAMS	mg/kg	0.09	0.16	0.07	0.06
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	110	170	<100	<100
Strontium	iMET2SAICP	mg/kg	6.4	4.3	2.7	2.2
Sulphate (from S)	iMET2SAICP	mg/kg	160	320	<100	<100
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thorium	iMET2SAMS	mg/kg	2.8	5.1	2.9	<0.5
Tin	iMET2SAMS	mg/kg	<0.5	<0.5	0.6	<0.5
Tungsten	iMET2SAMS	mg/kg	3.9	3.6	2.9	22
Uranium	iMET2SAMS	mg/kg	0.68	4.2	1.0	0.63
Vanadium	iMET2SAICP	mg/kg	7.4	18	17	5.0
Zinc	iMET2SAMS	mg/kg	5.2	22	21	9.0
Date Analysed	(combs)		26/11/2024	26/11/2024	26/11/2024	26/11/2024
	(total)		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	ARD		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		19/11/2024	19/11/2024	19/11/2024	19/11/2024
	iCO1WCDAL		04/12/2024	18/11/2024	18/11/2024	18/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iCRS					07/11/2024
	iCRS1STCO		05/11/2024	05/11/2024	05/11/2024	05/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iMET2SAMS		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iNP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			069	070	071	072
Client ID^			EARC0480_64-66	EARC0491_02-04	EARC0491_08-10	EARC0491_16-18
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		7.3	6.9	7.2	6.9
EC 1 soil 2 water paste*	ARD	mS/m	3	16	6	7
Acid Neutralising Capacity*	ARD	kg H2SO4/t	1.4	2.1	1.2	1.6
NAG pH*	ARD		5.9	5.8	5.5	5.7
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.03	0.08	0.03	0.05
Chromium Reducible Sulfur	iCRS	%	<0.01			
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	<0.05	0.29	0.06	0.14
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	<0.05	0.26	<0.05	0.11
Nitrogen	(total)	%	<0.005	0.006	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	13	87	29	37
pH	iPH1WASE		6.7	6.6	6.7	6.6
Alkalinity as CaCO3	iALK2WATI	mg/L	3	2	3	2
Bicarbonate as CaCO3	iALK2WATI	mg/L	3	2	3	2
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	7	48	16	20
Aluminium	iMET1WCICP	mg/L	0.052	<0.005	<0.005	0.007
Antimony	iMET1WCMSL	mg/L	0.00019	0.00006	0.00004	0.00007
Arsenic	iMET1WCMSL	mg/L	0.0010	<0.00005	<0.00005	0.00006
Barium	iMET1WCICP	mg/L		0.11		
Barium	iMET1WCMSL	mg/L	0.0034		0.0072	0.0086
Beryllium	iMET1WCMSL	mg/L	0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	0.00002	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.06	0.06	0.04	0.04
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	0.6	3.3	0.7	0.8
Chloride	iANIO1WAIC	mg/L	0.9	1.7	0.8	1.0
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.0014	<0.00010	0.00014	<0.00010
Chromium(VI)	iCO1WCDAL	mg/L	0.001	<0.001	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.00051	0.00013	<0.00005	0.00014
Copper	iMET1WCMSL	mg/L	0.010	<0.0001	<0.0001	<0.0001
Fluoride	iANIO1WAIC	mg/L	0.2	0.2	0.2	0.2
Iron	iMET1WCICP	mg/L	0.33	<0.005	0.015	0.087
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	0.0016	<0.00005	<0.00005	<0.00005
Lithium	iMET1WCMSL	mg/L	0.0074	0.013	0.0043	0.0048
Magnesium	iMET1WCICP	mg/L	0.1	1.0	0.3	0.4
Manganese	iMET1WCMSL	mg/L	0.0017	0.0005	0.0001	0.0002
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum	iMET1WCMSL	mg/L	0.0011	<0.00010	0.00039	0.00011
Nickel	iMET1WCMSL	mg/L	0.0013	0.00021	0.00012	0.00014

LAB ID			069	070	071	072
Client ID^			EARC0480_64-66	EARC0491_02-04	EARC0491_08-10	EARC0491_16-18
Sampled^						
Analyte	**Method**	**Unit**				
Potassium	iMET1WCICP	mg/L	0.5	2.3	1.2	1.2
Selenium	iMET1WCMSL	mg/L	<0.00005	0.0011	0.00048	0.00092
Silicon	iMET1WCICP	mg/L	14	6.9	5.2	14
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	2.2	8.6	3.2	4.3
Strontium	iMET1WCMSL	mg/L	0.0008	0.052	0.0056	0.0045
Sulphate	iANIO1WAIC	mg/L	0.4	29.0	7.0	10.1
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	0.00003	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.36	0.09	0.09	0.08
Phosphorus, total	iPP1WTFIA	mg/L	0.065	<0.005	<0.005	<0.005
Tungsten	iMET1WCMSL	mg/L	0.00009	0.00005	0.00003	0.00005
Uranium	iMET1WCMSL	mg/L	0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	0.0004	<0.0001	<0.0001	<0.0001
Zinc	iMET1WCMSL	mg/L	0.038	0.002	<0.001	<0.001
Aluminium	iMET2SAICP	mg/kg	5220	13600	3980	7450
Antimony	iMET2SAMS	mg/kg	0.92	0.96	0.22	0.74
Arsenic	iMET2SAMS	mg/kg	34	23	13	11
Barium	iMET2SAICP	mg/kg	43	79	7.2	9.8
Beryllium	iMET2SAMS	mg/kg	2.2	0.93	0.72	0.75
Bismuth*	iMET2SAMS	mg/kg	0.16	0.23	<0.05	0.28
Cadmium	iMET2SAMS	mg/kg	0.09	0.07	<0.05	<0.05
Calcium	iMET2SAICP	mg/kg	320	460	130	230
Chromium	iMET2SAICP	mg/kg	18	20	9.0	15
Chromium(III)	iCr3+2SAICP	mg/kg	16	19	7	14
Chromium(VI)	iCRS1STCO	mg/kg	1.5	0.8	1.7	0.9
Cobalt	iMET2SAMS	mg/kg	4.6	5.7	2.3	4.7
Copper	iMET2SAMS	mg/kg	16	7.6	3.1	4.2
Iron	iMET2SAICP	mg/kg	200000	340000	320000	280000
Lanthanum*	iMET2SAICP	mg/kg	8.2	3.2	<1.0	<1.0
Lead	iMET2SAMS	mg/kg	9.7	6.9	2.4	4.4
Lithium	iMET2SAICP	mg/kg	2.2	<2.0	<2.0	<2.0
Magnesium	iMET2SAICP	mg/kg	260	270	190	220
Manganese	iMET2SAICP	mg/kg	280	56	120	32
Mercury	iMET2SAMS	mg/kg	0.03	0.05	0.02	0.03
Molybdenum	iMET2SAMS	mg/kg	2.2	1.8	1.2	1.4
Nickel	iMET2SAMS	mg/kg	7.1	7.5	3.8	5.1
Phosphorus	iMET2SAICP	mg/kg	850	390	430	310
Potassium	iMET2SAICP	mg/kg	<50	160	<50	56
Selenium	iMET2SAMS	mg/kg	0.15	0.72	0.16	0.71
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	<100	160	<100	<100
Strontium	iMET2SAICP	mg/kg	4.4	8.8	2.1	2.4
Sulphate (from S)	iMET2SAICP	mg/kg	<100	1600	270	670
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thorium	iMET2SAMS	mg/kg	3.1	2.9	0.6	2.6

LAB ID			069	070	071	072
Client ID^			EARC0480_64-66	EARC0491_02-04	EARC0491_08-10	EARC0491_16-18
Sampled^						
Analyte	**Method**	**Unit**				
Tin	iMET2SAMS	mg/kg	<0.5	0.8	<0.5	<0.5
Tungsten	iMET2SAMS	mg/kg	17	3.3	5.8	14
Uranium	iMET2SAMS	mg/kg	1.0	0.92	0.33	0.72
Vanadium	iMET2SAICP	mg/kg	19	33	2.6	17
Zinc	iMET2SAMS	mg/kg	31	13	7.1	7.3
Date Analysed	(combs)		26/11/2024	26/11/2024	27/11/2024	27/11/2024
	(total)		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	ARD		18/11/2024	19/11/2024	19/11/2024	19/11/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		19/11/2024	19/11/2024	19/11/2024	19/11/2024
	iCO1WCDAL		04/12/2024	18/11/2024	18/11/2024	18/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iCRS		07/11/2024			
	iCRS1STCO		05/11/2024	05/11/2024	05/11/2024	05/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iMET2SAMS		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iNP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			073	074	075	076
Client ID^			EARC0491_22-24	EARC0493_06-08	EARC0493_10-12	EARC0493_28-30
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		6.6	6.7	7.2	7.1
EC 1 soil 2 water paste*	ARD	mS/m	9	7	4	3
Acid Neutralising Capacity*	ARD	kg H2SO4/t	1.7	2.9	2.5	1.9
NAG pH*	ARD		5.5	5.5	5.5	5.4
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.04	0.07	0.04	0.02
Chromium Reducible Sulfur	iCRS	%	<0.01	<0.01		<0.01
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	0.15	0.12	0.06	<0.05
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	0.12	0.09	0.05	<0.05
Nitrogen	(total)	%	<0.005	<0.005	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	39	44	26	14
pH	iPH1WASE		6.4	6.4	6.5	6.5
Alkalinity as CaCO3	iALK2WATI	mg/L	1	1	2	2
Bicarbonate as CaCO3	iALK2WATI	mg/L	1	1	2	2

LAB ID			073	074	075	076
Client ID^			EARC0491_22-24	EARC0493_06-08	EARC0493_10-12	EARC0493_28-30
Sampled^						
Analyte	**Method**	**Unit**				
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	22	24	14	8
Aluminium	iMET1WCICP	mg/L	<0.005	0.054	0.32	0.13
Antimony	iMET1WCMSL	mg/L	0.00004	0.00015	0.00053	0.00020
Arsenic	iMET1WCMSL	mg/L	<0.00005	0.00009	0.00040	0.00012
Barium	iMET1WCMSL	mg/L	0.0025	0.018	0.0009	0.0004
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.06	0.10	0.05	0.03
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	0.7	0.3	0.2	<0.1
Chloride	iANIO1WAIC	mg/L	7.6	1.6	1.8	1.2
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.0013	0.00095	0.0044	0.00079
Chromium(VI)	iCO1WCDAL	mg/L	0.001	<0.001	0.004	0.002
Cobalt	iMET1WCMSL	mg/L	0.00010	0.00009	0.00010	0.00065
Copper	iMET1WCMSL	mg/L	0.0002	<0.0001	0.0007	<0.0001
Fluoride	iANIO1WAIC	mg/L	<0.1	0.3	0.6	0.2
Iron	iMET1WCICP	mg/L	<0.005	0.030	0.33	0.45
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	0.00015	<0.00005	0.00032	<0.00005
Lithium	iMET1WCMSL	mg/L	0.0048	0.00094	0.00016	0.0050
Magnesium	iMET1WCICP	mg/L	0.6	0.3	<0.1	<0.1
Manganese	iMET1WCMSL	mg/L	0.0006	0.0006	0.0003	0.0003
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum	iMET1WCMSL	mg/L	0.00019	0.0010	0.0039	0.0012
Nickel	iMET1WCMSL	mg/L	0.00034	0.00038	0.00056	0.0011
Potassium	iMET1WCICP	mg/L	0.6	1.6	0.7	0.2
Selenium	iMET1WCMSL	mg/L	0.00011	0.00056	0.00016	0.00008
Silicon	iMET1WCICP	mg/L	10	16	19	12
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	4.8	5.7	4.3	2.7
Strontium	iMET1WCMSL	mg/L	0.0039	0.0035	0.0005	0.0002
Sulphate	iANIO1WAIC	mg/L	3.4	13.2	3.3	1.6
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.09	0.29	0.78	0.20
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	<0.005	<0.005	0.006
Tungsten	iMET1WCMSL	mg/L	0.00068	0.00011	0.0018	0.00006
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	<0.0001	0.0001	0.0008	0.0001
Zinc	iMET1WCMSL	mg/L	0.004	0.002	0.007	0.002
Aluminium	iMET2SAICP	mg/kg	9010	26400	17300	5660
Antimony	iMET2SAMS	mg/kg	0.39	0.81	1.4	0.23
Arsenic	iMET2SAMS	mg/kg	8.2	20	26	8.0
Barium	iMET2SAICP	mg/kg	10	110	38	9.0
Beryllium	iMET2SAMS	mg/kg	1.4	0.74	1.8	1.2

LAB ID			073	074	075	076
Client ID^			EARC0491_22-24	EARC0493_06-08	EARC0493_10-12	EARC0493_28-30
Sampled^						
Analyte	**Method**	**Unit**				
Bismuth*	iMET2SAMS	mg/kg	0.13	0.44	0.33	0.06
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Calcium	iMET2SAICP	mg/kg	200	560	830	170
Chromium	iMET2SAICP	mg/kg	30	55	69	6.8
Chromium(III)	iCr3+2SAICP	mg/kg	28	54	68	6
Chromium(VI)	iCRS1STCO	mg/kg	1.7	0.6	0.8	0.6
Cobalt	iMET2SAMS	mg/kg	7.4	3.0	4.5	3.4
Copper	iMET2SAMS	mg/kg	14	16	29	4.6
Iron	iMET2SAICP	mg/kg	330000	250000	180000	360000
Lanthanum*	iMET2SAICP	mg/kg	2.3	3.4	5.5	1.6
Lead	iMET2SAMS	mg/kg	8.4	18	11	1.8
Lithium	iMET2SAICP	mg/kg	<2.0	3.0	<2.0	2.4
Magnesium	iMET2SAICP	mg/kg	280	850	1900	380
Manganese	iMET2SAICP	mg/kg	330	100	110	140
Mercury	iMET2SAMS	mg/kg	<0.02	<0.02	<0.02	<0.02
Molybdenum	iMET2SAMS	mg/kg	1.9	1.7	2.2	0.67
Nickel	iMET2SAMS	mg/kg	12	5.8	9.2	4.4
Phosphorus	iMET2SAICP	mg/kg	560	410	410	620
Potassium	iMET2SAICP	mg/kg	<50	250	270	<50
Selenium	iMET2SAMS	mg/kg	0.17	0.91	0.44	<0.05
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	<100	200	240	<100
Strontium	iMET2SAICP	mg/kg	2.5	10	11	2.9
Sulphate (from S)	iMET2SAICP	mg/kg	370	1200	570	<100
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thorium	iMET2SAMS	mg/kg	3.7	13	8.5	1.3
Tin	iMET2SAMS	mg/kg	<0.5	1.5	0.8	<0.5
Tungsten	iMET2SAMS	mg/kg	4.3	0.7	0.8	1.5
Uranium	iMET2SAMS	mg/kg	1.2	1.2	1.6	0.87
Vanadium	iMET2SAICP	mg/kg	34	62	120	10
Zinc	iMET2SAMS	mg/kg	33	7.6	14	10
Date Analysed	(combs)		27/11/2024	27/11/2024	27/11/2024	27/11/2024
	(total)		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	ARD		19/11/2024	19/11/2024	03/12/2024	03/12/2024
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		19/11/2024	19/11/2024	19/11/2024	19/11/2024
	iCO1WCDAL		04/12/2024	04/12/2024	18/11/2024	18/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iCRS		07/11/2024	07/11/2024		07/11/2024
	iCRS1STCO		05/11/2024	05/11/2024	05/11/2024	05/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iMET2SAMS		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iNP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			077	078	079	080
Client ID^			EARC0493_38-40	EARC0543_02-04	EARC0543_10-12	EARC0543_68-70
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		6.7	7.2	6.6	7.5
EC 1 soil 2 water paste*	ARD	mS/m	2	7	11	6
Acid Neutralising Capacity*	ARD	kg H2SO4/t	1.4	2.3	1.1	2.5
NAG pH*	ARD		5.9	5.6	5.5	7.1
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.02	0.03	0.05	0.02
Chromium Reducible Sulfur	iCRS	%			<0.01	<0.01
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	<0.05	0.08	0.12	<0.05
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	<0.05	0.06	0.10	<0.05
Nitrogen	(total)	%	<0.005	<0.005	<0.005	0.028
Conductivity	iEC2WASE	uS/cm	8	46	60	27
pH	iPH1WASE		6.3	6.7	6.3	6.5
Alkalinity as CaCO3	iALK2WATI	mg/L	1	3	2	2
Bicarbonate as CaCO3	iALK2WATI	mg/L	1	3	2	2
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	<5	25	33	15
Aluminium	iMET1WCICP	mg/L	0.006	0.027	<0.005	0.031
Antimony	iMET1WCMSL	mg/L	0.00015	0.00017	0.00002	0.00047
Arsenic	iMET1WCMSL	mg/L	0.00006	0.00016	<0.00005	0.00057
Barium	iMET1WCMSL	mg/L	0.0008	0.019	0.034	0.0033
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L		0.10	0.03	0.03
Boron	iMET1WCMSL	mg/L	0.018			
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	<0.1	0.6	3.0	0.5
Chloride	iANIO1WAIC	mg/L	1.3	1.9	0.9	2.8
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.00020	0.0029	<0.00010	0.00044
Chromium(VI)	iCO1WCDAL	mg/L	<0.001	0.003	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.00007	<0.00005	0.00081	0.00019
Copper	iMET1WCMSL	mg/L	0.0002	0.0003	0.0001	0.0004
Fluoride	iANIO1WAIC	mg/L	<0.1	0.3	<0.1	0.4
Iron	iMET1WCICP	mg/L	0.008	0.016	<0.005	0.022
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	0.00043	0.00010	0.00007	0.00011
Lithium	iMET1WCMSL	mg/L	0.016	0.00039	0.0012	0.0038
Magnesium	iMET1WCICP	mg/L	<0.1	0.3	1.2	0.5
Manganese	iMET1WCMSL	mg/L	0.0013	0.0002	0.0007	0.0021
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	0.00007
Molybdenum	iMET1WCMSL	mg/L	0.00020	0.0012	<0.00010	0.0038
Nickel	iMET1WCMSL	mg/L	0.00022	0.00020	0.00016	0.00037

LAB ID			077	078	079	080
Client ID^			EARC0493_38-40	EARC0543_02-04	EARC0543_10-12	EARC0543_68-70
Sampled^						
Analyte	**Method**	**Unit**				
Potassium	iMET1WCICP	mg/L	0.2	1.8	1.6	2.4
Selenium	iMET1WCMSL	mg/L	<0.00005	0.0022	0.0021	0.00006
Silicon	iMET1WCICP	mg/L	9.6	10	5.9	7.4
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	1.4	6.2	4.5	2.2
Strontium	iMET1WCMSL	mg/L	0.0005	0.0065	0.035	0.0028
Sulphate	iANIO1WAIC	mg/L	0.1	11.3	19.0	2.9
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.14	0.21	0.07	0.16
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	<0.005	<0.005	0.007
Tungsten	iMET1WCMSL	mg/L	0.00007	0.00070	0.00009	0.013
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	<0.0001	0.0003	<0.0001	0.0004
Zinc	iMET1WCMSL	mg/L	0.007	0.003	0.002	0.012
Aluminium	iMET2SAICP	mg/kg	5580	28500	8240	9450
Antimony	iMET2SAMS	mg/kg	0.22	0.33	0.62	1.1
Arsenic	iMET2SAMS	mg/kg	3.8	12	1.6	18
Barium	iMET2SAICP	mg/kg	80	100	6.1	90
Beryllium	iMET2SAMS	mg/kg	1.2	0.34	0.63	1.1
Bismuth*	iMET2SAMS	mg/kg	<0.05	0.28	0.05	0.55
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	0.09
Calcium	iMET2SAICP	mg/kg	140	690	200	340
Chromium	iMET2SAICP	mg/kg	<0.50	110	17	15
Chromium(III)	iCr3+2SAICP	mg/kg	<1	110	16	14
Chromium(VI)	iCRS1STCO	mg/kg	<0.5	0.8	0.7	0.8
Cobalt	iMET2SAMS	mg/kg	12	2.7	3.9	9.3
Copper	iMET2SAMS	mg/kg	2.8	12	2.8	13
Iron	iMET2SAICP	mg/kg	310000	300000	280000	47000
Lanthanum*	iMET2SAICP	mg/kg	1.7	3.4	<1.0	43
Lead	iMET2SAMS	mg/kg	<0.5	16	3.8	28
Lithium	iMET2SAICP	mg/kg	4.6	3.9	<2.0	7.6
Magnesium	iMET2SAICP	mg/kg	240	460	210	1100
Manganese	iMET2SAICP	mg/kg	490	63	53	1300
Mercury	iMET2SAMS	mg/kg	<0.02	<0.02	0.04	0.02
Molybdenum	iMET2SAMS	mg/kg	0.34	2.0	0.47	2.3
Nickel	iMET2SAMS	mg/kg	5.1	7.4	2.2	12
Phosphorus	iMET2SAICP	mg/kg	350	200	410	120
Potassium	iMET2SAICP	mg/kg	<50	300	<50	2900
Selenium	iMET2SAMS	mg/kg	<0.05	1.5	0.64	0.21
Silver	iMET2SAMS	mg/kg	<0.05	0.06	<0.05	0.05
Sodium	iMET2SAICP	mg/kg	<100	200	<100	<100
Strontium	iMET2SAICP	mg/kg	2.7	15	3.0	9.2
Sulphate (from S)	iMET2SAICP	mg/kg	<100	640	900	100
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	0.26	0.08	<0.05	0.28
Thorium	iMET2SAMS	mg/kg	<0.5	12	2.3	17

LAB ID			077	078	079	080
Client ID^			EARC0493_38-40	EARC0543_02-04	EARC0543_10-12	EARC0543_68-70
Sampled^						
Analyte	**Method**	**Unit**				
Tin	iMET2SAMS	mg/kg	<0.5	1.8	<0.5	<0.5
Tungsten	iMET2SAMS	mg/kg	3.3	<0.5	14	11
Uranium	iMET2SAMS	mg/kg	0.76	1.1	0.62	2.2
Vanadium	iMET2SAICP	mg/kg	2.9	130	15	11
Zinc	iMET2SAMS	mg/kg	7.9	6.1	4.2	28
Date Analysed	(combs)		27/11/2024	27/11/2024	27/11/2024	27/11/2024
	(total)		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	ARD		19/11/2024	18/02/2025	18/02/2025	18/02/2025
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		19/11/2024	19/11/2024	19/11/2024	19/11/2024
	iCO1WCDAL		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iCRS				07/11/2024	07/11/2024
	iCRS1STCO		05/11/2024	05/11/2024	05/11/2024	05/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iMET2SAMS		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iNP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			081	082	083	084
Client ID^			EARC0561_02-04	EARC0561_12-14	EARC0561_24-26	EARC0563_08-10
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		8.0	7.7	8.0	7.0
EC 1 soil 2 water paste*	ARD	mS/m	17	2	6	13
Acid Neutralising Capacity*	ARD	kg H2SO4/t	3.5	2.8	1.7	2.2
NAG pH*	ARD		6.7	5.9	5.7	5.7
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.02	0.02	0.02	0.05
Chromium Reducible Sulfur	iCRS	%	<0.01		<0.01	<0.01
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	0.06	0.16	<0.05	<0.05
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	<0.05	0.12	<0.05	<0.05
Nitrogen	(total)	%	0.006	0.008	0.008	<0.005
Conductivity	iEC2WASE	uS/cm	130	34	39	65
pH	iPH1WASE		7.9	7.1	7.3	6.6
Alkalinity as CaCO3	iALK2WATI	mg/L	55	7	12	2
Bicarbonate as CaCO3	iALK2WATI	mg/L	55	7	12	2

LAB ID			081	082	083	084
Client ID^			EARC0561_02-04	EARC0561_12-14	EARC0561_24-26	EARC0563_08-10
Sampled^						
Analyte	Method	Unit				
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	72	19	22	36
Aluminium	iMET1WCICP	mg/L	0.035	0.050	0.044	0.016
Antimony	iMET1WCMSL	mg/L	0.00029	0.00045	0.0010	0.00020
Arsenic	iMET1WCMSL	mg/L	0.00050	0.00041	0.0025	0.00027
Barium	iMET1WCICP	mg/L	0.19			
Barium	iMET1WCMSL	mg/L		0.0008	0.0045	0.0073
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.06	0.09	0.04	0.08
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	15.8	0.2	0.7	0.3
Chloride	iANIO1WAIC	mg/L	0.7	2.2	2.3	9.2
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	0.001	0.002	<0.001
Chromium	iMET1WCMSL	mg/L	0.0034	0.00098	0.0019	0.00066
Chromium(VI)	iCO1WCDAL	mg/L	0.003	<0.001	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.00006	<0.00005	0.00039	<0.00005
Copper	iMET1WCMSL	mg/L	0.0004	0.0001	0.0007	0.0002
Fluoride	iANIO1WAIC	mg/L	0.2	0.7	0.7	0.2
Iron	iMET1WCICP	mg/L	<0.005	0.066	0.098	0.007
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	0.00011	0.00006	0.00023	0.00006
Lithium	iMET1WCMSL	mg/L	0.010	0.011	0.0070	0.00084
Magnesium	iMET1WCICP	mg/L	2.3	0.1	0.6	0.1
Manganese	iMET1WCMSL	mg/L	0.0004	0.0003	0.0009	<0.0001
Mercury	iMET1WCMSL	mg/L	0.00002	0.00003	0.00003	<0.00002
Molybdenum	iMET1WCMSL	mg/L	0.0020	0.0023	0.0090	0.00051
Nickel	iMET1WCMSL	mg/L	0.00025	0.00021	0.00043	0.00015
Potassium	iMET1WCICP	mg/L	4.9	1.6	2.2	2.1
Selenium	iMET1WCMSL	mg/L	0.00068	0.0011	0.00011	0.00038
Silicon	iMET1WCICP	mg/L	9.2	11	9.4	8.7
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	4.0	5.2	5.0	9.5
Strontium	iMET1WCICP	mg/L	0.087			
Strontium	iMET1WCMSL	mg/L		0.0010	0.0030	0.0025
Sulphate	iANIO1WAIC	mg/L	7.7	2.4	1.1	10.4
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	0.0001	<0.0001	0.0002	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.15	0.25	0.33	0.19
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	<0.005	0.008	<0.005
Tungsten	iMET1WCMSL	mg/L	0.0024	0.0022	0.074	0.00044
Uranium	iMET1WCMSL	mg/L	0.00003	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	0.0008	0.0008	0.0013	0.0001
Zinc	iMET1WCMSL	mg/L	0.004	0.005	0.003	0.002
Aluminium	iMET2SAICP	mg/kg	14100	20800	5950	10900
Antimony	iMET2SAMS	mg/kg	0.31	1.1	2.7	1.5
Arsenic	iMET2SAMS	mg/kg	14	18	18	47

LAB ID			081	082	083	084
Client ID^			EARC0561_02-04	EARC0561_12-14	EARC0561_24-26	EARC0563_08-10
Sampled^						
Analyte	**Method**	**Unit**				
Barium	iMET2SAICP	mg/kg	210	19	27	78
Beryllium	iMET2SAMS	mg/kg	1.1	0.83	0.33	0.74
Bismuth*	iMET2SAMS	mg/kg	0.20	0.49	0.26	0.52
Cadmium	iMET2SAMS	mg/kg	0.06	<0.05	<0.05	<0.05
Calcium	iMET2SAICP	mg/kg	1000	600	360	580
Chromium	iMET2SAICP	mg/kg	99	70	25	72
Chromium(III)	iCr3+2SAICP	mg/kg	98	69	24	72
Chromium(VI)	iCRS1STCO	mg/kg	0.7	0.7	0.7	<0.5
Cobalt	iMET2SAMS	mg/kg	8.8	6.2	7.7	2.9
Copper	iMET2SAMS	mg/kg	14	17	24	7.9
Iron	iMET2SAICP	mg/kg	260000	300000	35000	230000
Lanthanum*	iMET2SAICP	mg/kg	6.1	3.4	7.6	2.3
Lead	iMET2SAMS	mg/kg	14	28	10	24
Lithium	iMET2SAICP	mg/kg	9.3	5.5	3.9	<2.0
Magnesium	iMET2SAICP	mg/kg	500	610	920	370
Manganese	iMET2SAICP	mg/kg	530	40	81	80
Mercury	iMET2SAMS	mg/kg	<0.02	0.13	0.03	<0.02
Molybdenum	iMET2SAMS	mg/kg	0.80	1.6	2.6	1.7
Nickel	iMET2SAMS	mg/kg	17	14	5.8	7.7
Phosphorus	iMET2SAICP	mg/kg	370	240	<50	220
Potassium	iMET2SAICP	mg/kg	600	440	950	450
Selenium	iMET2SAMS	mg/kg	0.45	1.1	0.32	0.62
Silver	iMET2SAMS	mg/kg	0.06	0.12	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	<100	110	<100	280
Strontium	iMET2SAICP	mg/kg	12	7.9	3.9	13
Sulphate (from S)	iMET2SAICP	mg/kg	310	430	<100	910
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	0.20	<0.05	<0.05	<0.05
Thorium	iMET2SAMS	mg/kg	11	15	3.6	11
Tin	iMET2SAMS	mg/kg	0.8	1.4	<0.5	1.3
Tungsten	iMET2SAMS	mg/kg	0.9	1.4	44	1.6
Uranium	iMET2SAMS	mg/kg	1.0	2.6	0.34	0.79
Vanadium	iMET2SAICP	mg/kg	90	61	21	75
Zinc	iMET2SAMS	mg/kg	16	9.7	6.4	11
Date Analysed	(combs)		27/11/2024	27/11/2024	27/11/2024	27/11/2024
	(total)		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	ARD		18/02/2025	18/02/2025	18/02/2025	18/02/2025
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		19/11/2024	19/11/2024	19/11/2024	19/11/2024
	iCO1WCDAL		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iCRS		07/11/2024		07/11/2024	07/11/2024
	iCRS1STCO		05/11/2024	05/11/2024	05/11/2024	05/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	21/11/2024	20/11/2024
	iMET2SAICP		14/11/2024	14/11/2024	14/11/2024	14/11/2024
	iMET2SAMS		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iNP1WTFIA		26/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		26/11/2024	22/11/2024	22/11/2024	22/11/2024

LAB ID			081	082	083	084
Client ID^						
Sampled^						
Analyte	**Method**	**Unit**				
Date Analysed	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			085	086	087	088
Client ID^			EARC0563_30-32	EARC0563_46-48	EARC0575_06-08	EARC0575_14-16
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		7.0	6.8	6.0	6.2
EC 1 soil 2 water paste*	ARD	mS/m	4	9	8	6
Acid Neutralising Capacity*	ARD	kg H2SO4/t	1.3	1.2	1.9	1.9
NAG pH*	ARD		5.4	5.4	4.3	5.3
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.02	0.02	0.02	0.06
Chromium Reducible Sulfur	iCRS	%	<0.01		<0.01	
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	<0.05	<0.05	0.59	0.10
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	<0.05	<0.05	0.58	0.08
Nitrogen	(total)	%	<0.005	<0.005	0.006	<0.005
Conductivity	iEC2WASE	uS/cm	18	40	42	31
pH	iPH1WASE		6.5	6.3	6.0	6.1
Alkalinity as CaCO3	iALK2WATI	mg/L	2	1	4	<1
Bicarbonate as CaCO3	iALK2WATI	mg/L	2	1	4	<1
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	10	22	23	17
Aluminium	iMET1WCICP	mg/L	0.006	<0.005	0.16	<0.005
Antimony	iMET1WCMSL	mg/L	0.00009	0.00004	0.00017	0.00006
Arsenic	iMET1WCMSL	mg/L	0.00015	<0.00005	0.00011	<0.00005
Barium	iMET1WCICP	mg/L				0.083
Barium	iMET1WCMSL	mg/L	0.0005	0.0039	0.0095	
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.06		0.05	0.04
Boron	iMET1WCMSL	mg/L		0.014		
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	0.1	0.9	1.3	0.7
Chloride	iANIO1WAIC	mg/L	3.5	6.9	1.9	3.5
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.00060	<0.00010	0.00037	0.00030
Chromium(VI)	iCO1WCDAL	mg/L	<0.001	<0.001	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.00011	0.00012	0.0025	0.00077
Copper	iMET1WCMSL	mg/L	<0.0001	0.0001	0.0006	0.0002

LAB ID			085	086	087	088
Client ID^			EARC0563_30-32	EARC0563_46-48	EARC0575_06-08	EARC0575_14-16
Sampled^						
Analyte	Method	Unit				
Fluoride	iANIO1WAIC	mg/L	0.1	<0.1	<0.1	<0.1
Iron	iMET1WCICP	mg/L	0.017	<0.005	0.036	<0.005
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	<0.00005	0.00006	0.00014	0.00007
Lithium	iMET1WCMSL	mg/L	0.0014	0.012	0.0038	0.019
Magnesium	iMET1WCICP	mg/L	<0.1	0.7	1.1	0.6
Manganese	iMET1WCMSL	mg/L	<0.0001	0.0006	0.038	0.0014
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum	iMET1WCMSL	mg/L	0.00029	<0.00010	0.00011	<0.00010
Nickel	iMET1WCMSL	mg/L	0.00013	0.00012	0.0022	0.00072
Potassium	iMET1WCICP	mg/L	0.5	0.6	2.5	1.4
Selenium	iMET1WCMSL	mg/L	<0.00005	0.00015	0.00013	0.00020
Silicon	iMET1WCICP	mg/L	8.3	3.2	19	11
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	2.9	4.5	4.7	2.7
Strontium	iMET1WCMSL	mg/L	0.0007	0.010	0.010	0.014
Sulphate	iANIO1WAIC	mg/L	0.6	4.8	1.2	6.9
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	0.00003	0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.15	0.06	0.41	0.21
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	<0.005	<0.005	<0.005
Tungsten	iMET1WCMSL	mg/L	0.00008	0.00005	0.00004	0.00003
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	<0.0001	<0.0001	0.0004	<0.0001
Zinc	iMET1WCMSL	mg/L	<0.001	0.005	0.007	0.003
Aluminium	iMET2SAICP	mg/kg	5770	2150	19600	31500
Antimony	iMET2SAMS	mg/kg	0.29	0.28	0.46	0.79
Arsenic	iMET2SAMS	mg/kg	18	5.3	12	26
Barium	iMET2SAICP	mg/kg	6.0	12	42	76
Beryllium	iMET2SAMS	mg/kg	0.92	0.96	0.77	1.4
Bismuth*	iMET2SAMS	mg/kg	0.09	<0.05	0.35	0.35
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	0.05	<0.05
Calcium	iMET2SAICP	mg/kg	120	<100	330	260
Chromium	iMET2SAICP	mg/kg	9.4	1.8	180	96
Chromium(III)	iCr3+2SAICP	mg/kg	8	1	180	95
Chromium(VI)	iCRS1STCO	mg/kg	1.0	0.6	1.2	1.4
Cobalt	iMET2SAMS	mg/kg	12	3.0	8.0	5.8
Copper	iMET2SAMS	mg/kg	2.8	1.6	27	8.6
Iron	iMET2SAICP	mg/kg	280000	320000	170000	280000
Lanthanum*	iMET2SAICP	mg/kg	3.8	1.5	7.1	2.5
Lead	iMET2SAMS	mg/kg	4.6	<0.5	16	17
Lithium	iMET2SAICP	mg/kg	<2.0	<2.0	7.5	18
Magnesium	iMET2SAICP	mg/kg	170	200	480	260
Manganese	iMET2SAICP	mg/kg	110	180	340	52
Mercury	iMET2SAMS	mg/kg	0.02	<0.02	<0.02	<0.02
Molybdenum	iMET2SAMS	mg/kg	0.74	0.16	1.1	1.8
Nickel	iMET2SAMS	mg/kg	6.9	1.7	18	11

LAB ID			085	086	087	088
Client ID^			EARC0563_30-32	EARC0563_46-48	EARC0575_06-08	EARC0575_14-16
Sampled^						
Analyte	**Method**	**Unit**				
Phosphorus	iMET2SAICP	mg/kg	490	720	240	220
Potassium	iMET2SAICP	mg/kg	<50	<50	560	120
Selenium	iMET2SAMS	mg/kg	0.06	<0.05	0.85	0.57
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	0.08	<0.05
Sodium	iMET2SAICP	mg/kg	<100	<100	<100	<100
Strontium	iMET2SAICP	mg/kg	<2.0	2.1	5.4	6.4
Sulphate (from S)	iMET2SAICP	mg/kg	180	<100	210	1300
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	<0.05	0.07	0.16	0.06
Thorium	iMET2SAMS	mg/kg	2.3	<0.5	17	16
Tin	iMET2SAMS	mg/kg	<0.5	<0.5	1.7	1.8
Tungsten	iMET2SAMS	mg/kg	1.7	4.1	<0.5	0.6
Uranium	iMET2SAMS	mg/kg	0.80	0.54	1.6	1.8
Vanadium	iMET2SAICP	mg/kg	16	3.7	230	120
Zinc	iMET2SAMS	mg/kg	7.9	5.1	39	11
Date Analysed	(combs)		27/11/2024	27/11/2024	27/11/2024	27/11/2024
	(total)		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	ARD		18/02/2025	18/02/2025	18/02/2025	18/02/2025
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		19/11/2024	19/11/2024	19/11/2024	19/11/2024
	iCO1WCDAL		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		14/11/2024	14/11/2024	22/11/2024	22/11/2024
	iCRS		07/11/2024		07/11/2024	
	iCRS1STCO		05/11/2024	05/11/2024	05/11/2024	05/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		14/11/2024	14/11/2024	22/11/2024	22/11/2024
	iMET2SAMS		18/11/2024	18/11/2024	03/12/2024	20/11/2024
	iNP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			089	090	091	092
Client ID^			EARC0575_20-22	EARC0575_36-38	HR_MET0006_3-3.1	HR_MET0006_48-50
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		6.5	6.9	6.6	7.1
EC 1 soil 2 water paste*	ARD	mS/m	3	2	4	3
Acid Neutralising Capacity*	ARD	kg H2SO4/t	1.0	2.2	2.8	<0.5
NAG pH*	ARD		5.2	5.5	5.5	5.1
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.02	0.02	0.05	0.02

LAB ID			089	090	091	092
Client ID^			EARC0575_20-22	EARC0575_36-38	HR_MET0006_3-3.1	HR_MET0006_48-50
Sampled^						
Analyte	**Method**	**Unit**				
Chromium Reducible Sulfur	iCRS	%	<0.01			<0.01
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	<0.05	<0.05	0.05	<0.05
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Nitrogen	(total)	%	<0.005	<0.005	0.007	<0.005
Conductivity	iEC2WASE	uS/cm	13	9	19	11
pH	iPH1WASE		6.3	6.7	6.4	6.6
Alkalinity as CaCO3	iALK2WATI	mg/L	1	3	1	2
Bicarbonate as CaCO3	iALK2WATI	mg/L	1	3	1	2
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	7	<5	10	6
Aluminium	iMET1WCICP	mg/L	<0.005	0.015	0.099	<0.005
Antimony	iMET1WCMSL	mg/L	0.00006	0.00013	0.00007	0.00006
Arsenic	iMET1WCMSL	mg/L	<0.00005	0.00013	0.00011	<0.00005
Barium	iMET1WCMSL	mg/L	0.013	0.0039	0.0017	0.0023
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.02	0.05	0.05	0.03
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	0.5	0.3	0.2	0.4
Chloride	iANIO1WAIC	mg/L	<0.5	<0.5	2.2	0.6
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.00045	0.0017	0.00070	0.00030
Chromium(VI)	iCO1WCDAL	mg/L	<0.001	0.002	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.0027	0.00026	0.00006	0.0019
Copper	iMET1WCMSL	mg/L	0.0001	<0.0001	0.0002	0.0001
Fluoride	iANIO1WAIC	mg/L	<0.1	0.1	0.1	<0.1
Iron	iMET1WCICP	mg/L	<0.005	0.022	0.13	0.072
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	0.00010	<0.00005	0.00006	0.00007
Lithium	iMET1WCMSL	mg/L	0.015	0.0025	0.0026	0.0029
Magnesium	iMET1WCICP	mg/L	0.4	0.3	<0.1	0.3
Manganese	iMET1WCMSL	mg/L	0.0028	0.0005	0.0002	0.0003
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum	iMET1WCMSL	mg/L	<0.00010	0.00075	<0.00010	<0.00010
Nickel	iMET1WCMSL	mg/L	0.00097	0.00021	0.00047	0.00028
Potassium	iMET1WCICP	mg/L	0.5	0.2	0.6	0.4
Selenium	iMET1WCMSL	mg/L	0.00009	<0.00005	0.00019	0.00007
Silicon	iMET1WCICP	mg/L	5.7	9.3	25	7.3
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	0.9	1.1	2.9	0.9
Strontium	iMET1WCMSL	mg/L	0.0051	0.0021	0.0009	0.0027
Sulphate	iANIO1WAIC	mg/L	1.9	0.4	1.8	0.8
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001

LAB ID			089	090	091	092
Client ID^			EARC0575_20-22	EARC0575_36-38	HR_MET0006_3-3.1	HR_MET0006_48-50
Sampled^						
Analyte	**Method**	**Unit**				
Nitrogen, total	iNP1WTFIA	mg/L	0.11	0.06	0.44	0.22
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	<0.005	<0.005	<0.005
Tungsten	iMET1WCMSL	mg/L	0.00006	0.0012	0.00019	0.00045
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Vanadium	iMET1WCMSL	mg/L	<0.0001	0.0002	0.0007	<0.0001
Zinc	iMET1WCMSL	mg/L	0.003	0.001	0.003	0.002
Aluminium	iMET2SAICP	mg/kg	3390	6910	21900	635
Antimony	iMET2SAMS	mg/kg	0.36	0.14	0.33	0.20
Arsenic	iMET2SAMS	mg/kg	4.4	14	14	3.0
Barium	iMET2SAICP	mg/kg	8.8	18	61	15
Beryllium	iMET2SAMS	mg/kg	0.98	2.1	1.5	0.89
Bismuth*	iMET2SAMS	mg/kg	<0.05	0.05	0.28	<0.05
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Calcium	iMET2SAICP	mg/kg	<100	180	680	<100
Chromium	iMET2SAICP	mg/kg	15	8.7	180	8.7
Chromium(III)	iCr3+2SAICP	mg/kg	14	7	180	9
Chromium(VI)	iCRS1STCO	mg/kg	1.2	1.5	1.1	<0.5
Cobalt	iMET2SAMS	mg/kg	5.6	6.9	4.7	6.4
Copper	iMET2SAMS	mg/kg	1.9	5.5	23	0.8
Iron	iMET2SAICP	mg/kg	200000	190000	220000	180000
Lanthanum*	iMET2SAICP	mg/kg	1.7	3.3	5.8	2.3
Lead	iMET2SAMS	mg/kg	3.0	3.8	19	<0.5
Lithium	iMET2SAICP	mg/kg	<2.0	<2.0	6.8	<2.0
Magnesium	iMET2SAICP	mg/kg	150	240	850	130
Manganese	iMET2SAICP	mg/kg	45	61	150	13
Mercury	iMET2SAMS	mg/kg	<0.02	<0.02	<0.02	<0.02
Molybdenum	iMET2SAMS	mg/kg	1.1	0.87	0.78	0.83
Nickel	iMET2SAMS	mg/kg	5.3	7.7	16	0.8
Phosphorus	iMET2SAICP	mg/kg	310	880	260	180
Potassium	iMET2SAICP	mg/kg	<50	<50	610	<50
Selenium	iMET2SAMS	mg/kg	0.09	0.08	0.53	<0.05
Silver	iMET2SAMS	mg/kg	<0.05	<0.05	0.12	0.35
Sodium	iMET2SAICP	mg/kg	<100	<100	100	<100
Strontium	iMET2SAICP	mg/kg	<2.0	2.4	11	2.7
Sulphate (from S)	iMET2SAICP	mg/kg	120	110	160	<100
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	<0.05	<0.05	0.11	<0.05
Thorium	iMET2SAMS	mg/kg	1.1	1.9	15	<0.5
Tin	iMET2SAMS	mg/kg	<0.5	<0.5	1.5	<0.5
Tungsten	iMET2SAMS	mg/kg	21	14	<0.5	33
Uranium	iMET2SAMS	mg/kg	0.33	0.85	1.1	0.07
Vanadium	iMET2SAICP	mg/kg	13	15	310	2.7
Zinc	iMET2SAMS	mg/kg	7.8	15	17	2.8
Date Analysed	(combs)		27/11/2024	27/11/2024	27/11/2024	27/11/2024
	(total)		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	ARD		18/02/2025	18/02/2025	18/02/2025	18/02/2025
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		19/11/2024	19/11/2024	19/11/2024	19/11/2024
	iCO1WCDAL		18/11/2024	18/11/2024	04/12/2024	18/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024

LAB ID			089	090	091	092
Client ID^						
Sampled^						
Analyte	**Method**	**Unit**				
Date Analysed	iCr3+2SAICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCRS		07/11/2024			07/11/2024
	iCRS1STCO		05/11/2024	05/11/2024	05/11/2024	08/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET2SAMS		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iNP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			093	094	095	096
Client ID^			EADD0041_0-0.4	EADD0041_3-5	EADD0041_7.5-7.7	EADD0041_48-48.3
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		6.8	6.8	7.0	6.6
EC 1 soil 2 water paste*	ARD	mS/m	4	10	6	6
Acid Neutralising Capacity*	ARD	kg H2SO4/t	1.3	2.7	1.8	1.1
NAG pH*	ARD		5.5	5.7	6.3	5.3
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.03	0.04	0.02	0.03
Chromium Reducible Sulfur	iCRS	%	<0.01	<0.01		
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	0.13	<0.05	<0.05	0.15
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	0.07
Total Organic Carbon	(combs)	%	0.11	<0.05	<0.05	0.08
Nitrogen	(total)	%	0.006	<0.005	<0.005	<0.005
Conductivity	iEC2WASE	uS/cm	23	60	35	29
pH	iPH1WASE		6.8	6.7	7.1	6.4
Alkalinity as CaCO3	iALK2WATI	mg/L	4	3	7	1
Bicarbonate as CaCO3	iALK2WATI	mg/L	4	3	7	1
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	13	33	19	16
Aluminium	iMET1WCICP	mg/L	<0.005	0.008	0.049	<0.005
Antimony	iMET1WCMSL	mg/L	0.00008	0.00012	0.00014	0.00002
Arsenic	iMET1WCMSL	mg/L	0.00007	0.00025	0.00019	0.00006
Barium	iMET1WCICP	mg/L		0.065		
Barium	iMET1WCMSL	mg/L	0.0048		0.0022	0.011
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	0.00012	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.06	0.10	0.07	0.02

LAB ID			093	094	095	096
Client ID^			EADD0041_0-0.4	EADD0041_3-5	EADD0041_7.5-7.7	EADD0041_48-48.3
Sampled^						
Analyte	**Method**	**Unit**				
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	0.7	1.3	0.9	1.1
Chloride	iANIO1WAIC	mg/L	2.2	12	4.9	2.0
Chromium(III)*	iCR3+1WCCAL	mg/L	0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.00092	0.00040	0.00029	0.00024
Chromium(VI)	iCO1WCDAL	mg/L	<0.001	<0.001	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.00013	0.00029	<0.00005	0.00027
Copper	iMET1WCMSL	mg/L	0.0003	0.0005	0.0003	0.0003
Fluoride	iANIO1WAIC	mg/L	0.1	0.2	0.3	<0.1
Iron	iMET1WCICP	mg/L	0.010	<0.005	0.23	<0.005
Lanthanum	iMET1WCMSL	mg/L	<0.00004	<0.00004	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	<0.00005	0.00009	<0.00005	0.00012
Lithium	iMET1WCMSL	mg/L	0.0010	0.0015	0.0061	0.0050
Magnesium	iMET1WCICP	mg/L	0.3	0.5	0.6	0.5
Manganese	iMET1WCMSL	mg/L	0.0024	0.0006	0.0012	0.0004
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum	iMET1WCMSL	mg/L	<0.00010	<0.00010	<0.00010	<0.00010
Nickel	iMET1WCMSL	mg/L	0.00018	0.00049	0.00085	0.00022
Potassium	iMET1WCICP	mg/L	2.2	3.3	1.2	1.5
Selenium	iMET1WCMSL	mg/L	0.00018	0.00005	<0.00005	0.00077
Silicon	iMET1WCICP	mg/L	6.5	15	22	5.6
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	1.8	6.0	4.4	2.0
Strontium	iMET1WCMSL	mg/L	0.0045	0.013	0.0028	0.0076
Sulphate	iANIO1WAIC	mg/L	1.6	2.4	0.2	6.9
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	<0.00002	0.00007	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.50	0.54	0.31	0.14
Phosphorus, total	iPP1WTFIA	mg/L	<0.005	<0.005	0.033	<0.005
Tungsten	iMET1WCMSL	mg/L	0.00009	0.00017	<0.00002	0.00003
Uranium	iMET1WCMSL	mg/L	<0.00002	<0.00002	0.00011	<0.00002
Vanadium	iMET1WCMSL	mg/L	0.0002	0.0002	0.0006	<0.0001
Zinc	iMET1WCMSL	mg/L	0.002	0.004	0.004	0.003
Aluminium	iMET2SAICP	mg/kg	18100	25900	10000	3700
Antimony	iMET2SAMS	mg/kg	1.9	1.4	0.98	0.36
Arsenic	iMET2SAICP	mg/kg				110
Arsenic	iMET2SAMS	mg/kg	55	55	42	
Barium	iMET2SAICP	mg/kg	29	160	66	6.9
Beryllium	iMET2SAMS	mg/kg	1.4	1.2	5.3	0.25
Bismuth*	iMET2SAMS	mg/kg	0.38	0.34	0.47	<0.05
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	0.16	<0.05
Calcium	iMET2SAICP	mg/kg	240	810	490	130
Chromium	iMET2SAICP	mg/kg	150	69	54	4.7
Chromium(III)	iCr3+2SAICP	mg/kg	150	69	53	5
Chromium(VI)	iCRS1STCO	mg/kg	1.1	<0.5	0.5	<0.5
Cobalt	iMET2SAMS	mg/kg	5.7	9.4	13	1.7
Copper	iMET2SAMS	mg/kg	21	8.8	8.9	3.5

LAB ID			093	094	095	096
Client ID^			EADD0041_0-0.4	EADD0041_3-5	EADD0041_7.5-7.7	EADD0041_48-48.3
Sampled^						
Analyte	**Method**	**Unit**				
Iron	iMET2SAICP	mg/kg	280000	190000	320000	300000
Lanthanum*	iMET2SAICP	mg/kg	7.5	7.0	20	<1.0
Lead	iMET2SAMS	mg/kg	19	16	18	7.3
Lithium	iMET2SAICP	mg/kg	7.0	3.7	3.0	<2.0
Magnesium	iMET2SAICP	mg/kg	270	390	400	140
Manganese	iMET2SAICP	mg/kg	220	110	390	87
Mercury	iMET2SAMS	mg/kg	0.03	0.03	0.03	<0.02
Molybdenum	iMET2SAMS	mg/kg	2.6	2.3	2.7	0.18
Nickel	iMET2SAMS	mg/kg	14	7.0	37	0.7
Phosphorus	iMET2SAICP	mg/kg	330	180	700	280
Potassium	iMET2SAICP	mg/kg	200	450	65	54
Selenium	iMET2SAMS	mg/kg	1.3	0.60	0.20	0.26
Silver	iMET2SAMS	mg/kg	0.15	<0.05	<0.05	<0.05
Sodium	iMET2SAICP	mg/kg	<100	180	<100	<100
Strontium	iMET2SAICP	mg/kg	3.5	13	5.0	<2.0
Sulphate (from S)	iMET2SAICP	mg/kg	480	630	<100	410
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	0.08	<0.05	0.06	<0.05
Thorium	iMET2SAMS	mg/kg	11	8.1	10	1.0
Tin	iMET2SAMS	mg/kg	0.7	0.8	1.3	<0.5
Tungsten	iMET2SAMS	mg/kg	0.7	<0.5	0.6	3.6
Uranium	iMET2SAMS	mg/kg	1.3	0.87	5.5	0.54
Vanadium	iMET2SAICP	mg/kg	260	120	68	5.8
Zinc	iMET2SAICP	mg/kg			140	
Zinc	iMET2SAMS	mg/kg	11	14		4.2
Date Analysed	(combs)		27/11/2024	27/11/2024	27/11/2024	27/11/2024
	(total)		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	ARD		18/02/2025	18/02/2025	18/02/2025	18/02/2025
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		19/11/2024	19/11/2024	19/11/2024	19/11/2024
	iCO1WCDAL		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCRS		07/11/2024	07/11/2024		
	iCRS1STCO		08/11/2024	08/11/2024	08/11/2024	08/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET2SAMS		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iNP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

LAB ID			097	098	099	100
Client ID^			EADD0042_1-1.25	EADD0042_3.9-4.4	EADD0042_16-16.5	EADD0042_33.1-33.69
Sampled^						
Analyte	**Method**	**Unit**				
pH, 1:2 soil:water*	ARD		6.9	7.0	6.7	6.9
EC 1 soil 2 water paste*	ARD	mS/m	5	6	6	4
Acid Neutralising Capacity*	ARD	kg H2SO4/t	2.2	2.5	0.9	1.3
NAG pH*	ARD		6.2	6.1	5.5	5.5
NAG to pH <4.5*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
NAG (Net Acid Generation)*	ARD	kgH2SO4/t	<0.5	<0.5	<0.5	<0.5
Sulfur*	(combs)	%	0.01	0.02	0.02	0.02
Chromium Reducible Sulfur	iCRS	%	<0.01			
Sulfur present as SO4*	SO4 S (ARD)	%	<0.01	<0.01	<0.01	<0.01
Carbon	(combs)	%	0.07	<0.05	0.09	<0.05
Total Inorganic Carbon	(combs)	%	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	(combs)	%	0.06	<0.05	0.07	<0.05
Nitrogen	(total)	%	0.007	<0.005	<0.005	0.006
Conductivity	iEC2WASE	uS/cm	25	40	34	20
pH	iPH1WASE		6.6	6.6	6.6	6.8
Alkalinity as CaCO3	iALK2WATI	mg/L	2	2	2	3
Bicarbonate as CaCO3	iALK2WATI	mg/L	2	2	2	3
Carbonate as CaCO3	iALK2WATI	mg/L	<1	<1	<1	<1
TDS (calculated)	iSOL1WDCA	mg/L	14	22	19	11
Aluminium	iMET1WCICP	mg/L	0.12	0.19	<0.005	0.014
Antimony	iMET1WCMSL	mg/L	0.00016	0.00026	0.00009	0.00045
Arsenic	iMET1WCMSL	mg/L	0.00022	0.00029	0.00006	0.0011
Barium	iMET1WCMSL	mg/L	0.0030	0.036	0.0096	0.0006
Beryllium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Boron	iMET1WCICP	mg/L	0.06	0.06	0.06	0.03
Cadmium	iMET1WCMSL	mg/L	<0.00005	<0.00005	<0.00005	<0.00005
Calcium	iMET1WCICP	mg/L	0.5	1.3	1.3	<0.1
Chloride	iANIO1WAIC	mg/L	2.7	2.7	1.1	2.2
Chromium(III)*	iCR3+1WCCAL	mg/L	<0.001	<0.001	<0.001	<0.001
Chromium	iMET1WCMSL	mg/L	0.0020	0.0033	0.00026	0.00037
Chromium(VI)	iCO1WCDAL	mg/L	0.002	0.003	<0.001	<0.001
Cobalt	iMET1WCMSL	mg/L	0.00039	0.00033	0.00036	0.00007
Copper	iMET1WCMSL	mg/L	0.0012	0.0011	0.0001	0.0003
Fluoride	iANIO1WAIC	mg/L	<0.1	0.3	0.1	0.2
Iron	iMET1WCICP	mg/L	0.13	0.14	<0.005	0.011
Lanthanum	iMET1WCMSL	mg/L	0.00006	0.00005	<0.00004	<0.00004
Lead	iMET1WCMSL	mg/L	0.00059	0.00030	<0.00005	0.00008
Lithium	iMET1WCMSL	mg/L	0.0014	0.0025	0.0089	0.0016
Magnesium	iMET1WCICP	mg/L	0.2	0.5	0.5	<0.1
Manganese	iMET1WCMSL	mg/L	0.0041	0.0031	0.0003	<0.0001
Mercury	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Molybdenum	iMET1WCMSL	mg/L	0.00027	0.00021	<0.00010	0.00014
Nickel	iMET1WCMSL	mg/L	0.00074	0.00049	0.00025	0.00025
Potassium	iMET1WCICP	mg/L	2.1	2.4	1.4	2.8
Selenium	iMET1WCMSL	mg/L	0.00031	0.00037	0.0031	<0.00005
Silicon	iMET1WCICP	mg/L	19	19	8.5	10

LAB ID			097	098	099	100
Client ID^			EADD0042_1-1.25	EADD0042_3.9-4.4	EADD0042_16-16.5	EADD0042_33.1-33.69
Sampled^						
Analyte	**Method**	**Unit**				
Silver	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Sodium	iMET1WCICP	mg/L	2.4	3.3	2.8	1.9
Strontium	iMET1WCMSL	mg/L	0.0022	0.0079	0.0075	0.0004
Sulphate	iANIO1WAIC	mg/L	1.5	8.6	10.2	0.2
Tantalum*	iMET1WCMSL	mg/L	<0.00001	<0.00001	<0.00001	<0.00001
Thallium	iMET1WCMSL	mg/L	<0.00002	<0.00002	<0.00002	<0.00002
Thorium	iMET1WCMSL	mg/L	<0.00002	0.00002	<0.00002	<0.00002
Tin	iMET1WCMSL	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Nitrogen, total	iNP1WTFIA	mg/L	0.66	0.65	0.33	0.55
Phosphorus, total	iPP1WTFIA	mg/L	0.005	<0.005	<0.005	0.006
Tungsten	iMET1WCMSL	mg/L	0.00013	0.0020	0.00006	0.0013
Uranium	iMET1WCMSL	mg/L	0.00002	<0.00002	<0.00002	0.00002
Vanadium	iMET1WCMSL	mg/L	0.0015	0.0021	<0.0001	0.0004
Zinc	iMET1WCMSL	mg/L	0.006	0.007	0.004	0.002
Aluminium	iMET2SAICP	mg/kg	22200	19800	9700	12100
Antimony	iMET2SAMS	mg/kg	0.36	0.34	1.6	1.8
Arsenic	iMET2SAMS	mg/kg	11	7.8	19	33
Barium	iMET2SAICP	mg/kg	70	180	15	12
Beryllium	iMET2SAMS	mg/kg	1.5	0.92	0.20	2.3
Bismuth*	iMET2SAMS	mg/kg	0.16	0.20	0.49	0.33
Cadmium	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Calcium	iMET2SAICP	mg/kg	630	860	230	170
Chromium	iMET2SAICP	mg/kg	100	100	60	39
Chromium(III)	iCr3+2SAICP	mg/kg	100	100	59	39
Chromium(VI)	iCRS1STCO	mg/kg	1.2	0.6	0.9	0.7
Cobalt	iMET2SAMS	mg/kg	14	8.3	3.7	5.0
Copper	iMET2SAMS	mg/kg	33	25	2.0	19
Iron	iMET2SAICP	mg/kg	230000	150000	280000	150000
Lanthanum*	iMET2SAICP	mg/kg	9.4	12	<1.0	4.5
Lead	iMET2SAMS	mg/kg	13	13	7.5	11
Lithium	iMET2SAICP	mg/kg	7.6	5.8	<2.0	4.4
Magnesium	iMET2SAICP	mg/kg	750	750	150	290
Manganese	iMET2SAICP	mg/kg	440	480	120	210
Mercury	iMET2SAMS	mg/kg	<0.02	<0.02	<0.02	0.02
Molybdenum	iMET2SAMS	mg/kg	0.78	0.79	3.5	1.1
Nickel	iMET2SAMS	mg/kg	26	16	2.5	14
Phosphorus	iMET2SAICP	mg/kg	250	200	270	800
Potassium	iMET2SAICP	mg/kg	710	830	<50	1200
Selenium	iMET2SAMS	mg/kg	0.74	0.60	0.35	0.13
Silver	iMET2SAMS	mg/kg	0.11	0.10	0.05	<0.05
Sodium	iMET2SAICP	mg/kg	<100	110	<100	<100
Strontium	iMET2SAICP	mg/kg	6.7	12	2.9	<2.0
Sulphate (from S)	iMET2SAICP	mg/kg	160	220	480	<100
Tantalum*	iMET2SAMS	mg/kg	<0.05	<0.05	<0.05	<0.05
Thallium	iMET2SAMS	mg/kg	0.18	0.27	<0.05	0.05
Thorium	iMET2SAMS	mg/kg	7.6	9.5	7.9	7.7
Tin	iMET2SAMS	mg/kg	1.0	1.1	3.3	<0.5
Tungsten	iMET2SAMS	mg/kg	0.5	1.3	1.9	3.8
Uranium	iMET2SAMS	mg/kg	1.1	1.2	0.92	2.1

LAB ID			097	098	099	100
Client ID^			EADD0042_1-1.25	EADD0042_3.9-4.4	EADD0042_16-16.5	EADD0042_33.1-33.69
Sampled^						
Analyte	**Method**	**Unit**				
Vanadium	iMET2SAICP	mg/kg	200	140	94	38
Zinc	iMET2SAMS	mg/kg	18	31	1.6	38
Date Analysed	(combs)		27/11/2024	27/11/2024	27/11/2024	27/11/2024
	(total)		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	ARD		18/02/2025	18/02/2025	18/02/2025	18/02/2025
	iALK2WATI		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iANIO1WAIC		19/11/2024	19/11/2024	19/11/2024	19/11/2024
	iCO1WCDAL		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iCR3+1WCCAL		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCr3+2SAICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iCRS		07/11/2024			
	iCRS1STCO		08/11/2024	08/11/2024	08/11/2024	08/11/2024
	iEC2WASE		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	iMET1WCICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET1WCMSL		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iMET2SAICP		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iMET2SAMS		20/11/2024	20/11/2024	20/11/2024	20/11/2024
	iNP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iPH1WASE		15/11/2024	15/11/2024	15/11/2024	15/11/2024
	iPP1WTFIA		22/11/2024	22/11/2024	22/11/2024	22/11/2024
	iSOL1WDCA		18/11/2024	18/11/2024	18/11/2024	18/11/2024
	SO4 S (ARD)		08/11/2024	08/11/2024	08/11/2024	08/11/2024
Sample Condition			Ambient	Ambient	Ambient	Ambient

Method	**Method Description**
(combs)	Total carbon, total organic carbon (by subtraction of total inorganic carbon from total carbon), total inorganic carbon (by residual carbon after ignition at 400oC) and Sulfur in soils by combustion, in-house method S57.
(total)	Total nitrogen, Kjeldhal digestion by in house method S10 (Method 7A2a; Rayment & Lyons (2011)).
ARD	The acid generating and acid neutralising capacities of the sample are measured. These values are used in acid/base accounting (ABA) to determine if the sample will generate acid after prolonged exposure in the environment. The methods used are based on industry conventions. A Net Acid Generation (NAG) test is often used to confirm the predictions from ABA..
iALK2WATI	Alkalinity, Bicarbonate, Carbonate, Hydroxide and Total Carbon Dioxide by acid titration. pH and Conductivity in water (compensated to 25C) by meter.
iANIO1WAIC	Anions in water by Ion Chromatography.
iCO1WCDAL	Colourimetric analysis by DA (Discrete Autoanalyser).
iCR3+1WCCAL	Chromium (III) species by calculation (Cr minus Cr(VI)).
iCr3+2SAICP	Acid extractable chromium (III) species by calculation (Cr minus Cr(VI)).
iCRS	Suspension Peroxide Oxidisable Combined Acidity and Sulphate analysis
iCRS1STCO	Chromium(VI) in soils by alkaline extraction.
iEC2WASE	Electrical conductivity in water compensated to 25 C.
iMET1WCICP	Total dissolved metals by ICPAES.
iMET1WCMSL	Low level total dissolved metals by ICPMS
iMET2SAICP	Acid digestable metals (dry wt basis) by digestion and ICPAES.
iMET2SAMS	Acid digestable metals (dry wt basis) by ICPMS.
iNP1WTFIA	Total Nitrogen by persulphate digestion and analysis by FIA.
iPH1WASE	pH in water by pH meter.
iPP1WTFIA	Total Phosphorus by persulphate digestion and FIA.
iSOL1WDCA	Total Dissolved Solids (TDS) calculated (ECond * 5.5)
SO4 S (ARD)	Sulfur present as Sulfate (HCl ext.)

Please note: This is an amended report that contains information that is different from the previous report. The previous report must be destroyed and replaced with this version. The following change(s) have been made;

24S1311/011 iPH1WASE pH has been updated, along with 24S1311/078 - 100 NAG/NAG<4.5/pH(NAG). These are highlighted in yellow in the xlsx report.

A quality assurance report is attached.

The samples were outsourced to Intertek Genalysis for B, Si, Cl and F and Microanalysis for semi-quantitative XRD.
A copy of their reports are attached.

The samples were extracted in accordance with an inhouse modified AS 4439.3-2019 using DI water as the extractant.
Results reported for these samples under method codes iPH1WASE, iEC2WASE, iALK2WATI, iMET1WCMS, iMET1WCICP, iMET1WCMSL, iCO1WCDAL, iSOL1WDCA, iCR3+1WCCAL, iANIO1WAIC, iNP1WTFIA and iPP1WTFIA are concentrations found in the 1:5 extract.

Note: some LOR's have been increased for selected aqua regia metals due to high Fe interference.

These results apply only to the sample(s) as received. Unless arrangements are made to the contrary, these samples will be disposed of after 30 days of the issue of this report.
This report may only be reproduced in full.

*Analysis not covered by scope of ChemCentre's NATA accreditation.
^Information provided by client, unless otherwise stated.

Michael Hall
Chemist and Research Officer
SSD Inorganic Chemistry
21-Feb-2025

Alex Martin
Team Leader
SSD Inorganic Chemistry

MINERALS
TEST REPORT

CLIENT

CHEMISTRY CENTRE (WA)
PO Box 1250
BENTLEY DELIVERY CENTRE, W.A. 6983
AUSTRALIA

JOB INFORMATION

JOB CODE	: 396.0/2419532
NO. SAMPLES	: 100
NO. ELEMENTS	: 4
CLIENT ORDER NO.	: 24S1311 (Job 1 of 1)
SAMPLE SUBMISSION NO.	:
PROJECT	:
SAMPLE TYPE	: Pulp
DATE RECEIVED	: 30/10/2024
DATE TESTED	: 03/11/2024 - 13/11/2024
DATE REPORTED	: 13/11/2024
DATE PRINTED	: 13/11/2024

REPORT NOTES

TESTED BY

Intertek
544 Bickley Road, Maddington 6109, Western Australia
PO Box 144, Gosnells 6990, Western Australia
Tel: +61 8 9263 0100
Email: min.aus.per@intertek.com

APPROVED SIGNATURE FOR

Andrew RILEY
Regional Manager
Geochemistry Western Australia

SIGNIFICANT FIGURES

It is common practice to report data derived from analytical instrumentation to a maximum of two or three significant figures. Some data reported herein may show more figures than this. The reporting of more than two or three figures in no way implies that figures beyond the least significant digit have significance.

For more information on the uncertainty on individual reported values, please contact the laboratory.

MEASUREMENT OF UNCERTAINTY

Measurement of uncertainty estimates are available for most tests upon request.

SAMPLE STORAGE

All solid samples (assay pulps, bulk pulps and residues) will be stored for 60 days without charge. Following this samples will be stored at a daily rate until clients written advice regarding return, collection or disposal is received. If storage information is not supplied on the submission, or arranged with the laboratory in writing the default will be to store the samples with the applicable charges. Storage is charged at $4.00 per m3 per day, expenses related to the return or disposal of samples will also be charged. Current disposal costs including packaging in a Class2 waste disposal facility is charged at $175.00 per m3.

Samples received as liquids, waters or solutions will be held for 60 days free of charge then disposed of, unless written advice for return or collection is received.

LEGEND	X	= Less than Detection Limit		NA	= Not Analysed
	SNR	= Sample Not Received		UA	= Unable to Assay
	LNR	= Lab Not Received		>	= Value beyond Limit of Method
	DTF	= Result still to come		+	= Extra Sample Received Not Listed
	I/S	= Insufficient Sample for Analysis			

UNITS	ppm for Solid Samples	= mg/Kg
	ppb for Solid Samples	= µg/Kg
	ppm for Liquid Samples	= mg/L
	ppb for Liquid Samples	= µg/L

ELEMENTS	B	Cl	F	Si
UNITS	ppm	%	ppm	%
DETECTION LIMIT	50	0.02	50	0.1
DIGEST	FP1/	CL1/	FC7/	FP1/
ANALYTICAL FINISH	OE	COL	SIE	OE
SAMPLE NUMBERS				
0001 24S1311/001	73	X	80	14.1
0002 24S1311/002	52	X	110	7.8
0003 24S1311/003	199	0.03	161	7.0
0004 24S1311/004	X	X	X	1.7
0005 24S1311/005	64	X	53	2.6
0006 24S1311/006	X	X	X	24.4
0007 24S1311/007	124	X	90	13.8
0008 24S1311/008	X	X	X	3.8
0009 24S1311/009	X	X	152	4.3
0010 24S1311/010	52	X	151	5.1
0011 24S1311/011	142	X	1709	33.3
0012 24S1311/012	157	0.02	1588	24.4
0013 24S1311/013	X	X	54	19.8
0014 24S1311/014	X	X	180	22.2
0015 24S1311/015	X	X	X	23.4
0016 24S1311/016	X	X	X	22.8
0017 24S1311/017	X	X	144	23.7
0018 24S1311/018	X	X	55	7.4
0019 24S1311/019	X	X	64	5.7
0020 24S1311/020	51	X	73	11.1
0021 24S1311/021	X	X	X	1.0
0022 24S1311/022	X	X	X	9.5
0023 24S1311/023	X	X	X	11.9
0024 24S1311/024	X	X	85	18.2
0025 24S1311/025	53	X	107	4.1
0026 24S1311/026	X	X	74	4.5
0027 24S1311/027	198	X	55	10.9
0028 24S1311/028	X	X	X	30.1
0029 24S1311/029	X	X	60	36.5
0030 24S1311/030	101	X	1307	26.0
0031 24S1311/031	X	X	76	6.3
0032 24S1311/032	X	X	107	22.3
0033 24S1311/033	X	X	85	36.3
0034 24S1311/034	93	X	881	34.5
0035 24S1311/035	X	X	109	6.6
0036 24S1311/036	X	X	X	23.2
0037 24S1311/037	X	X	X	26.7
0038 24S1311/038	X	X	X	23.2
0039 24S1311/039	133	X	52	12.0
0040 24S1311/040	53	X	104	3.4

ELEMENTS	B	Cl	F	Si
UNITS	ppm	%	ppm	%
DETECTION LIMIT	50	0.02	50	0.1
DIGEST	FP1/	CL1/	FC7/	FP1/
ANALYTICAL FINISH	OE	COL	SIE	OE
SAMPLE NUMBERS				
0041 24S1311/041	79	X	180	5.5
0042 24S1311/042	92	X	172	7.1
0043 24S1311/043	X	X	84	2.1
0044 24S1311/044	X	X	X	2.9
0045 24S1311/045	X	X	143	21.5
0046 24S1311/046	X	X	77	15.3
0047 24S1311/047	X	X	X	23.2
0048 24S1311/048	X	X	X	23.4
0049 24S1311/049	X	X	52	16.8
0050 24S1311/050	X	X	75	19.9
0051 24S1311/051	57	X	86	12.5
0052 24S1311/052	X	X	55	4.8
0053 24S1311/053	X	X	57	15.2
0054 24S1311/054	X	X	135	26.6
0055 24S1311/055	X	X	103	21.3
0056 24S1311/056	X	X	83	24.3
0057 24S1311/057	222	X	616	39.4
0058 24S1311/058	X	X	77	30.8
0059 24S1311/059	X	X	X	19.0
0060 24S1311/060	X	X	88	19.8
0061 24S1311/061	X	X	83	8.5
0062 24S1311/062	58	X	78	5.4
0063 24S1311/063	77	X	1390	40.3
0064 24S1311/064	X	X	84	4.4
0065 24S1311/065	X	X	70	4.5
0066 24S1311/066	X	X	115	10.6
0067 24S1311/067	X	X	X	8.9
0068 24S1311/068	X	X	X	21.7
0069 24S1311/069	58	X	X	27.4
0070 24S1311/070	136	X	134	4.3
0071 24S1311/071	X	X	X	1.1
0072 24S1311/072	X	X	X	14.9
0073 24S1311/073	144	X	60	13.7
0074 24S1311/074	197	X	191	11.3
0075 24S1311/075	116	X	303	15.0
0076 24S1311/076	X	X	56	4.1
0077 24S1311/077	X	X	X	4.9
0078 24S1311/078	X	X	72	10.9
0079 24S1311/079	X	X	61	15.2
0080 24S1311/080	255	X	819	34.6

ELEMENTS	B	Cl	F	Si
UNITS	ppm	%	ppm	%
DETECTION LIMIT	50	0.02	50	0.1
DIGEST	FP1/	CL1/	FC7/	FP1/
ANALYTICAL FINISH	OE	COL	SIE	OE
SAMPLE NUMBERS				
0081 24S1311/081	X	X	66	7.9
0082 24S1311/082	75	X	338	5.4
0083 24S1311/083	X	X	439	40.9
0084 24S1311/084	116	X	146	11.9
0085 24S1311/085	51	X	X	2.4
0086 24S1311/086	X	X	77	0.6
0087 24S1311/087	X	X	133	21.2
0088 24S1311/088	54	X	153	7.1
0089 24S1311/089	X	X	X	17.0
0090 24S1311/090	167	X	51	21.1
0091 24S1311/091	X	X	86	12.3
0092 24S1311/092	X	X	X	20.9
0093 24S1311/093	103	X	91	8.6
0094 24S1311/094	173	X	129	15.0
0095 24S1311/095	340	X	89	9.7
0096 24S1311/096	X	X	50	2.4
0097 24S1311/097	X	X	73	19.7
0098 24S1311/098	X	X	100	25.6
0099 24S1311/099	80	X	X	13.5
0100 24S1311/100	90	X	366	26.8
CHECKS				
0001 24S1311/013	X	X	X	19.7
0002 24S1311/045	X	X	159	21.7
0003 24S1311/071	X	X	X	1.1
STANDARDS				
0001 OREAS 551	203			29.1
0002 OREAS 556	507			29.4
0003 OREAS 315	97			27.1
0004 OREAS 551	210			29.0
0005 ECRM 683-1			204	
0006 AMIS0339			1354	
0007 ECRM 683-1			200	
0008 AMIS0339			1343	
0009 0.5%NaCl-1		0.31		
0010 0.5%NaCl-1		0.33		
0011 0.5%NaCl-1		0.32		
0012 0.5%NaCl-1		0.32		

ELEMENTS	B	Cl	F	Si
UNITS	ppm	%	ppm	%
DETECTION LIMIT	50	0.02	50	0.1
DIGEST	FP1/	CL1/	FC7/	FP1/
ANALYTICAL FINISH	OE	COL	SIE	OE
BLANKS				
0001 Control Blank	X	X	X	X
0002 Control Blank	X	X	X	X
0003 Control Blank	X	X	X	X
0004 Control Blank	X	X	X	X

METHOD CODE DESCRIPTION

Method Code Date Tested Package	Analysing Laboratory NATA Laboratory Accreditation	NATA Scope of Accreditation
CL1/COL **04/11/24 09:14** **CL1/COL**	Intertek Genalysis Perth **3244 3237** Carbonate leach specific for Chlorine. Analysed by UV-Visible Spectrometry.	**ENV_W014**
FC7/SIE **06/11/24 10:56** **FC7/SIE**	Intertek Genalysis Perth **3244 3237** Alkaline fusion (Nickel crucible) specific for Fluorine. Analysed by Specific Ion Electrode.	**ENV_W012**
FP1/OE **03/11/24 10:03** **FP1/OM**	Intertek Genalysis Perth **3244 3237** Sodium peroxide fusion (Zirconia crucibles) and Hydrochloric acid to dissolve the melt. Analysed by Inductively Coupled Plasma Optical (Atomic) Emission Spectrometry.	**MPL_W011, MS_IM_001**

* Denotes not on Scope of Accreditation

Laboratory Report

Client:	ChemCentre	**Date received:**	30/10/2024
Client address:	Resource & Chemistry Precinct, South Wing, Building 500, Curtin University Bentley, WA, 61	**Date analysed:**	15/11/2024
Job ID:	24_1993	**Date reported:**	15/11/2024
Lab ID:	See results table	**Revision no.:**	0
Client ID:	See results table		
Comments:	-		

Analysis: Semi-quantitative X-ray diffraction (XRD) analysis

Sample preparation

Representative sub-samples were removed and lightly ground. Each specimen was packed and presented as a powder mount of the total sample.

Analysis

Only crystalline material present in the sample will give peaks in the XRD scan. Amorphous (non-crystalline) material will normally add to the
No standards were used in the quantification process. The concentrations were calculated using the normalized reference intensity ratio method, where the intensity of the 100% peak divided by the published I/Ic value for each mineral phase is summed and the relative percentages of each phase calculated based on the relative contribution to the sum. This method allows for slight attention to be paid to preferred orientation but is limited in considering other factors including but not limited to; variable crystallinity, alteration, substitution, and crystallite size and microstrain.

No chemical assay data (XRF/ICP) was supplied by the client as an elemental relative abundance/concentration indicator. Phase identification and quantification is subject to change should such information be provided.

It should be noted that there is a higher level of uncertainty in the results due to preferred orientation in the platy minerals for this sample.

Results summary

The phases are listed in alphabetical order in the 'Results' tab of this spreadsheet (24_1993 Semi-quantitative XRD analysis Report [FINAL].xlsx).

The results table represents the normalised concentration, as weight percent, of each phase without considering the contribution of any amorphous, or non-crystalline, material.

The ICDD match is a subjective measure of the confidence in which the identified phase matches the peak positions and intensities in each diffraction pattern.

Analysed by:	Kate Putman, B.Sc.(Hons)
Reported by:	Kate Putman, B.Sc.(Hons)
Approved by:	Nimue Pendragon, B.Sc.(Nanotechnology)

	Phase					Quartz	Kaolin	Mica	Smectite	Goethite	Hematite	Magnetite	Anatase	Rutile	Grand Total
	Formula					SiO_2	$Al_2Si_2O_5(OH)_4$	$(K,Ca,Na,Li)\ (Al,Mg,Fe)\ (Si,Al)\ O\ (OH)$	Various	FeO(OH)	Fe_2O_3	Fe_3O_4	TiO_2	TiO_2	
Lab ID	ChemCentre ID	Client ID	Bag_ID	Strat	Member	wt%	wt%	wt%	wt%	wt%	wt%	wt%	wt%	wt%	wt%
24_1993_010	24S1311/045	ARC0408_02-04	A343908	CzD3	ALU	64	6	7		6	13	1	2	1	100
24_1993_014	24S1311/060	ARC0474_04-06	A350544	CzD3	ALU	68	4	2		4	19	3	1		101
24_1993_021	24S1311/097	ADD0042_1-1.25	D008641	CzD3	ALU	70	4	2		5	17	1	< 1	< 1	99
24_1993_004	24S1311/016	ARC0307_46-48	A349891	JOF	J1	70	2			7	19	3			101
24_1993_008	24S1311/036	ARC0399_20-22	A347548	JOF	J2	75	2			7	16	< 1			100
24_1993_012	24S1311/052	ARC0459_24-26	A342388	JOF	J2	14	11			26	50				101
24_1993_003	24S1311/007	ARC0275_04-06	A347924	WS	WS2	7	17	9		49	18				100
24_1993_009	24S1311/040	ARC0405_12-14	A343052	WS	WS2	3	8			70	16		2	2	101
24_1993_013	24S1311/058	ARC0467_36-38	A350508	WS	WS1	83	2	1		13	1				100
24_1993_016	24S1311/080	ARC0543_68-70	A330514	WS	WS2	78	4	17			1	< 1			100
24_1993_020	24S1311/093	ADD0041_0-0.4	D008635	WS	WS1	14	20			16	48			1	99
24_1993_022	24S1311/100	ADD0042_33.1-33.69	D008646	WS	WS2	74	3	8		12	1	1		1	100
24_1993_001	24S1311/004	ARC0229_28-30	A347097	DG	DG3		5			19	76				100
24_1993_002	24S1311/006	ARC0229_50-52	A347108	DG	DG3	71	1			8	19				99
24_1993_005	24S1311/022	ARC0324_46-48	A346691	DG	DG1	39	2			19	40				100
24_1993_006	24S1311/025	ARC0350_12-14	A345488	DG	DG1	21	3			59	12	4			99
24_1993_015	24S1311/064	ARC0480_04-06	A351035	DG	DG3	4	3			54	38				99
24_1993_018	24S1311/089	ARC0575_20-22	A348554	DG	DG3	55	1			9	36				101
24_1993_019	24S1311/092	HR_MET0006_48-50	-	DG	DG3	74				2	23	2			101
24_1993_011	24S1311/048	ARC0408_46-48	A343932	FWZ	FWZ	79				12	9	< 1			100
24_1993_007	24S1311/030	ARC0350_46-48	A345505	MCS	MCS	61	5	17		7	9	1		1	101
24_1993_017	24S1311/083	ARC0561_24-26	A349129	MCS	MCS	93	3	3	< 1		1		< 1		100

ICDD match confidence:

High	Medium	Low

Table 2:

	Phase					Quartz	Kaolin	Mica	Smectite	Goethite	Hematite	Magnetite	Anatase	Rutile
	Formula					SiO2	Al2Si2O5(OH)4	a,Li)(Al,Mg,Fe) (Si,Al) O	Various	FeO(OH)	Fe2O3	Fe3O4	TiO2	TiO2
Lab ID	Client ID / Units	Client ID	Bag_ID	Strat	Member	ICDD match								
24_1993_010	24S1311/045	ARC0408_02-04	A343908	CzD3	ALU	High	High	High		High	High	Medium	Medium	Medium
24_1993_014	24S1311/060	ARC0474_04-06	A350544	CzD3	ALU	High	High	High		Medium	High	Medium	Medium	
24_1993_021	24S1311/097	ADD0042_1-1.25	D008641	CzD3	ALU	High	High	Low		High	High	Medium	Low	Low
24_1993_004	24S1311/016	ARC0307_46-48	A349891	JOF	J1	High	Medium			High	High	High		
24_1993_008	24S1311/036	ARC0399_20-22	A347548	JOF	J2	High	High			High	High	Medium		
24_1993_012	24S1311/052	ARC0459_24-26	A342388	JOF	J2	High	High			High	High			
24_1993_003	24S1311/007	ARC0275_04-06	A347924	WS	WS2	High	High	Medium		High	High			
24_1993_009	24S1311/040	ARC0405_12-14	A343052	WS	WS2	High	High			High	High		Medium	Low
24_1993_013	24S1311/058	ARC0467_36-38	A350508	WS	WS1	High	High	Medium		High	Medium			
24_1993_016	24S1311/080	ARC0543_68-70	A330514	WS	WS2	High	High	High			High	Low		
24_1993_020	24S1311/093	ADD0041_0-0.4	D008635	WS	WS1	High	High			High	High			Medium
24_1993_022	24S1311/100	ADD0042_33.1-33.69	D008646	WS	WS2	High	High	High		High	Medium	Medium		Medium
24_1993_001	24S1311/004	ARC0229_28-30	A347097	DG	DG3		High			High	High			
24_1993_002	24S1311/006	ARC0229_50-52	A347108	DG	DG3	High	High			High	High			
24_1993_005	24S1311/022	ARC0324_46-48	A346691	DG	DG1	High	Medium			High	High			
24_1993_006	24S1311/025	ARC0350_12-14	A345488	DG	DG1	High	Medium			High	High	Medium		
24_1993_015	24S1311/064	ARC0480_04-06	A351035	DG	DG3	High	Medium			High	High			
24_1993_018	24S1311/089	ARC0575_20-22	A348554	DG	DG3	High	Low			High	High			
24_1993_019	24S1311/092	HR_MET0006_48-50	-	DG	DG3	High				High	High	High		
24_1993_011	24S1311/048	ARC0408_46-48	A343932	FWZ	FWZ	High				High	High	Medium		
24_1993_007	24S1311/030	ARC0350_46-48	A345505	MCS	MCS	High	High	High		Medium	High	Medium		Medium
24_1993_017	24S1311/083	ARC0561_24-26	A349129	MCS	MCS	High	High	High	Medium		High		Medium	