FINAL

Geochemical Characterization of Waste Rock and Ore from the Madrid North and Patch 7 Deposits

Hope Bay Project, Canada

Agnico Eagle Mines Ltd.

SRK Consulting (Canada) Inc. ▪ CAPR003181 ▪ December 2024

srk consulting

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File Name:
MadridNorth_Patch7_WasteRock_Ore_Characterization_CAPR003181_FINAL_20241219.docx

Suggested Citation:
SRK Consulting (Canada) Inc. 2024. Geochemical Characterization of Waste Rock and Ore from the Madrid North and Patch 7 Deposits. FINAL. Prepared for Agnico Eagle Mines Ltd.: Vancouver, BC. Project number: CAPR003181. Issued December. 2024.

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Useful Definitions

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

ABA	Acid Base Accounting
AP	Acid potential
COPC	Constituent of potential concern
DL	Detection limit
HCT	Humidity cell test
ICP-MS	Inductively coupled plasma mass spectrometry
ML/ARD	Metal leaching and acid rock drainage
Non-PAG	Non-potentially acid generating
NP	Neutralization potential
PAG	Potentially Acid Generating
QAQC	Quality Assurance/Quality Control
RPD	Relative percent difference
TIA	Tailings Impoundment Area
TIC	Total inorganic carbon

1 Introduction

1.1 Scope

The Hope Bay Project (the Project) is a gold mining project wholly owned and operated by Agnico Eagle Mines Ltd. (Agnico Eagle). The Project is located 705 km northeast of Yellowknife and 153 km southwest of Cambridge Bay in Nunavut Territory and is situated east of Bathurst Inlet. The Project comprises of three distinct areas of known mineralization plus extensive exploration potential and targets. The three areas that host mineral resources are Doris, Madrid, and Boston. The current water license 2AM-DOH1335 Amendment No.2 (the Water License, NWB 2018) approves mining in these areas. As part of the water license, geochemical characterization of waste rock and ore at the Madrid North deposit was previously conducted (SRK 2017). Agnico Eagle has updated the project description that includes an expanded mine at Madrid North to include the Patch 7 area (Agnico Eagle 2024). This report supersedes SRK (2017).

SRK was retained by Agnico Eagle to conduct a geochemical characterization program of waste rock and ore from Madrid North and Patch 7 to assess for metal leaching and/or acid rock drainage (ML/ARD) classification.

This report presents interpretations of all available acid-base accounting, trace element, mineralogy and kinetic test data for ore and waste rock samples from Madrid North and Patch 7 according to Agnico Eagle's February 2024 geology model and an ore grade cut-off of 4 gpt (TMAC 2020). The Patch 7 sample set is presented separately for the purpose of baseline reporting and to assess the geochemical and geological continuity between the mining areas. This report supports Agnico Eagle's Mine Plan Operational Update application and was prepared as part Tasks 910 and 920 of PO CAPR003181.

1.2 Geological Context

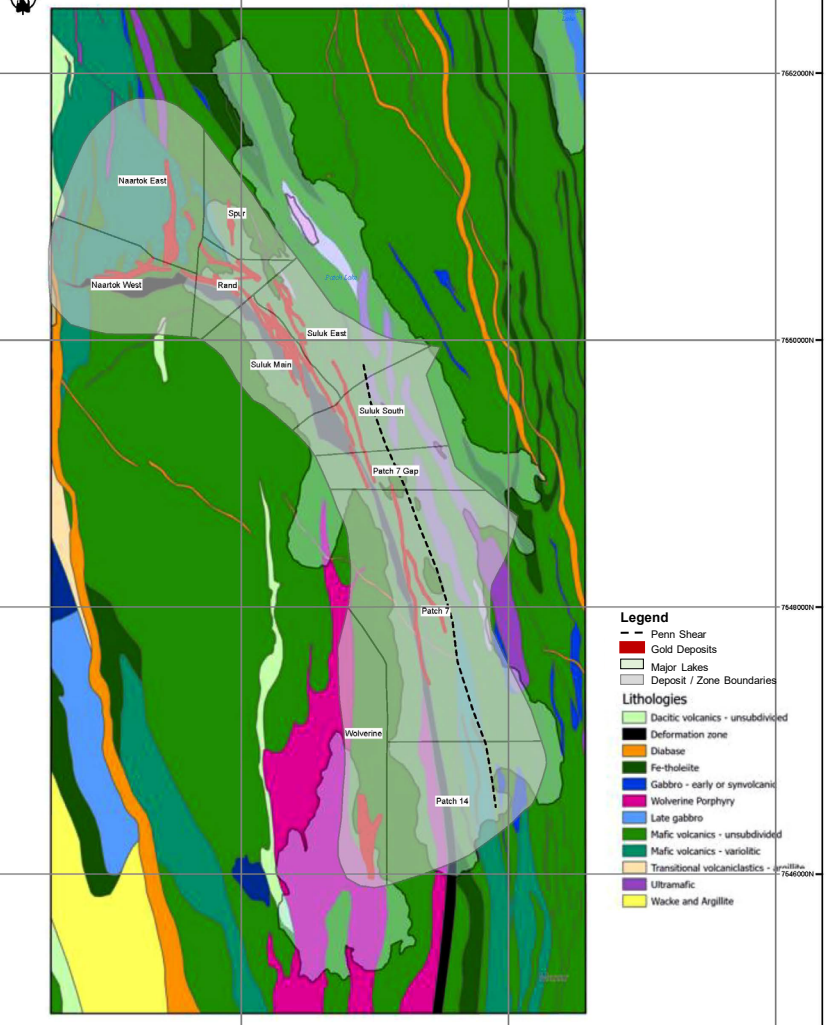
1.2.1 Regional Geology

Hope Bay lies in the northeast corner of the Archean Slave Structural Province of the Canadian Shield, a predominately granite-greenstone-metasedimentary terrane. It is host to a number of significant gold, base metals and diamond deposits. The Hope Bay greenstone belt extends over 80 km in length and is up to 20 km wide. The belt is comprised of mafic to felsic meta-volcanics (mainly meta-basalts), with localized sedimentary and ultramafic rocks, and is bounded by Archean granite intrusions and gneisses. The greenstone package has been deformed during multiple events and is transected by major north-south trending shear zones that appear to exert a significant control on the occurrence of mineralization, similar to other Archean greenstone gold camps. Overall, the metamorphic grade is lower- to mid-greenschist facies except near the contact with the marginal granitoids where the rocks are hornfelsed to a lower amphibolite-facies metamorphic grade.

1.2.2 Deposit Geology

Madrid is located between 6 to 11 km south of the Doris mine. It includes different zones of mineralization along the Wolverine-Madrid corridor (Wolverine Lake to Patch Lake). It is subdivided into 3 subsectors based on the deposit styles and relative locations along the trend from North to South; the Madrid North area, the Suluk South-Patch 7 Corridor and Madrid South areas with each hosting several gold deposits. The Madrid North deposit includes the Naartok (West and East), Rand, Spur, Suluk Main and Suluk East zones (Figure 1-1). The Suluk South-Patch corridor includes the Suluk South zone and Patch 7 deposit, as well as the Patch 7 Gap zone between the two. The deposits are generally contiguous and form large mineralized systems with changes in host rock characteristics and local structural controls defining different mineralized zones.

The Madrid North and the Suluk South – Patch 7 corridors are classified by various host lithologies. These include iron-titanium tholeiitic basalts, magnesium- tholeiitic basalts, komatiitic basalts, ultramafic flows, synvolcanic to late gabbros and ultramafic intrusives and graphitic metasediments. Rocks at Madrid North are classified based on textural and lithogeochemical similarities. The general stratigraphy of the area is composed of three major volcanic packages: Wolverine Group (C-Type, or normal tholeiitic, basalts), Patch Group (A-Type, or Fe-Ti, basalts), and a C-Type tholeiitic basalt (Pale Green Pillow). The Wolverine and Patch Group contacts have a north to northeast strike within the Naartok area, extending from the Deformation Zone. The Naartok (West and East) stratigraphy consists of a package of intercalated C-Type and A-Type basalts with interflow sediment, dipping to the north at Naartok West, and moderately westerly dipping at Naartok East. Ultramafics are also present in Naartok West and are associated with brittle vg-bearing veins. At Rand, stratigraphy consists of a steep northerly dipping package of C-Type and A-Type variolitic basalts and interbedded ultramafics. The stratigraphy gradually shifts south to Suluk as south to southeast-trending, steeply dipping, and west younging volcanic (C-Type and A-Type) and interflow sediment packages. At Patch 7, the volcanic and interflow sediment packages are south-trending and steeply dipping to the west. Patch 7 is also characterized by much more prevalent ultramafics and less prevalent graphitic sediments.



NOTES

1. Coordinate System: NAD 1983 UTM Zone 13N

REFERENCES

0 500 1000
Meters

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JOB NO: CAPR003181

LAYOUT: CAPR003316_HB_Madrid_Geology

AGNICO EAGLE

HOPE BAY

Hope Bay 2025 FEIS Amendment Application

Madrid Bedrock Geology

DATE:	APPROVED:	FIGURE:
SEP 2024	KJ	1-1

Structural control of the deposits is related to the large-scale zone of deformation between two major north-south structures referred to as the Madrid Deformation Zone (MDZ) and the Penn Shear. The MDZ is a corridor of high strain and hydrothermal alteration consisting of quartz-mica-iron-carbonate schist that is traceable for at least 11 km of open strike. The Penn Shear is another major structure of similar size with a lower degree of alteration evidenced by preserved protolith textures and mineralogy. Gold mineralization is focused within secondary brittle-ductile splays of the Penn Shear and MDZ.

The style of mineralization at Madrid North is characterized by the replacement of favorable stratigraphic units, including Fe-rich tholeiitic basalts (A-Type basalts) which are often adjacent to graphitic shales. Mineralization is associated with an early alteration assemblage of sericite and carbonate (magnesite and ankerite) with a stockwork of quartz-carbonate veinlets to major shear-hosted quartz veins. Gold is associated with secondary albite and paragonite with lesser ankerite and quartz-ankerite veining. While gold grades are moderate at Madrid North compared to Doris, ore interval thicknesses can be considerable (sometimes exceeding 60 m) and intervals can often contain localized high-grade veins. Higher gold content is associated with fine grained pyrite, intense albite flooding and hematite discolouration. Suluk South and Patch 7 are along the same mineralization trend as Madrid North, and ore is found within A-Type basalts with increasing proportions of ultramafics. Mineralization in Suluk South and Patch 7 shares some similarities with Madrid North in terms of sericite-carbonate alteration profiles of host basalts, however there is a notable increase in quartz-carbonate vein-stockwork intensities and decreased pyrite intensity. Gold is more strongly associated with early-stage shear-veins in this area rather than pervasive replacement.

1.3 Mine Plan

As outlined in the updated project description (Agnico Eagle 2024), Madrid North and Patch 7 will be mined using underground mining methods, as indicated by the underground workings and stopes in Figure 1-2 to Figure 1-5. The updated project description also includes two new portal locations at Naartok West and Patch 7 (Figure 1-3 and Figure 1-5). There are underground tunnels connecting Naartok West, Naartok East, Rand, Suluk and Patch 7 areas of Madrid North.

A summary of life of mine waste rock lithologies and volumes is presented in Table 1-1. Waste rock volumes by rock type were based on Agnico Eagle's 2022 mass balance model, with adjustments applied by SRK following discussion with an Agnico Eagle geologist. Overall, Madrid North will have a larger volume of waste rock produced compared to Patch 7. Volumetrically significant rock types at both deposits are as follows:

- Madrid North: A-Type basalt, C-Type basalt, MDZ, and sediments.
- Patch 7: A-Type basalt, C-Type basalt, MDZ, and ultramafics.

Detailed mine plans are continuously under development and modification, and given the nature of the deposit, will remain in flux throughout the mine life.

Figure 1-2: Plan View of Geochemical Drillhole Samples and Mine Plan, Madrid North and Patch 7

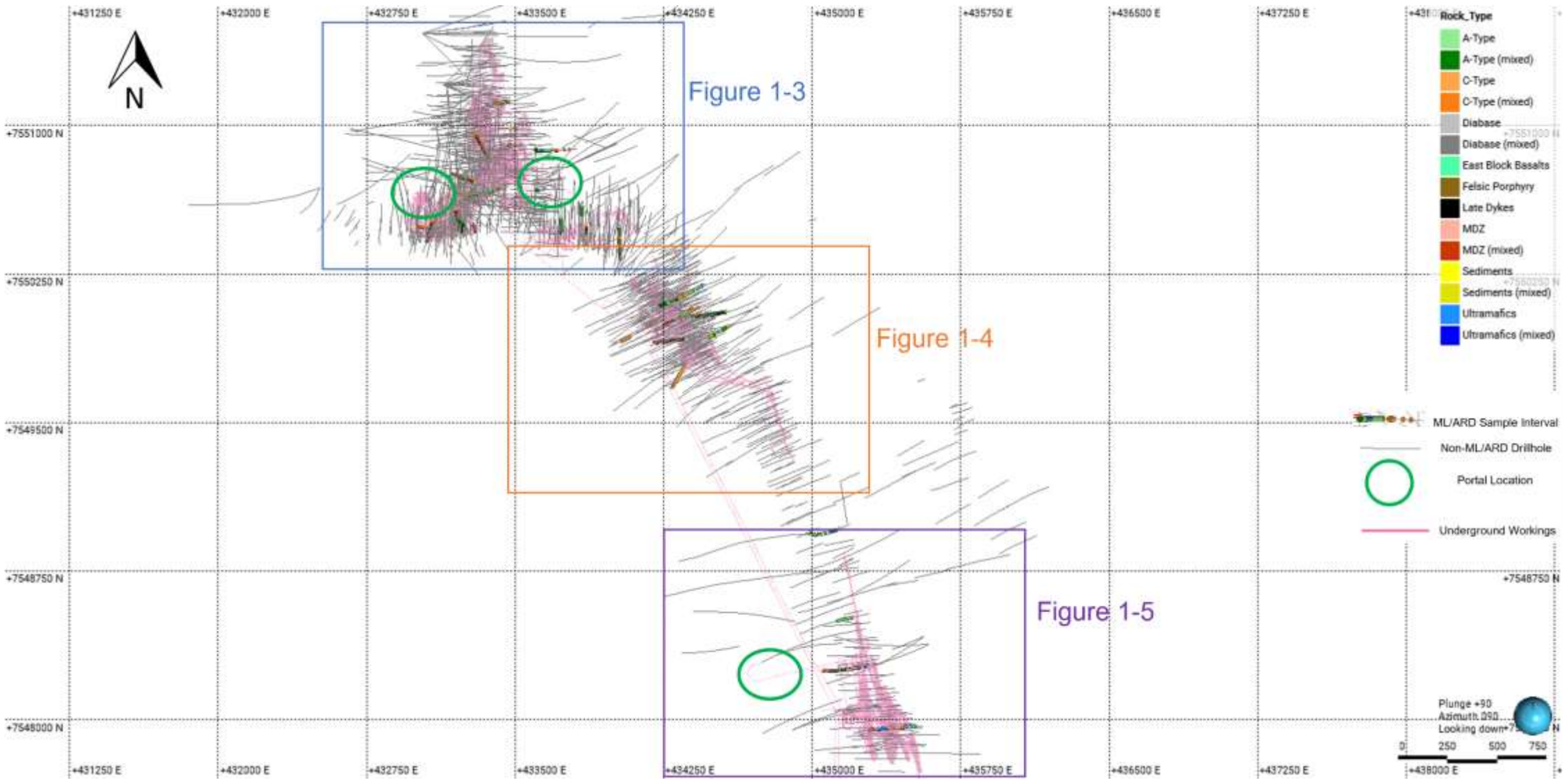

Figure 1-3: Plan View of Geochemical Drillhole Samples and Mine Plan, Madrid North (Naartok West, Naartok East, and Rand)

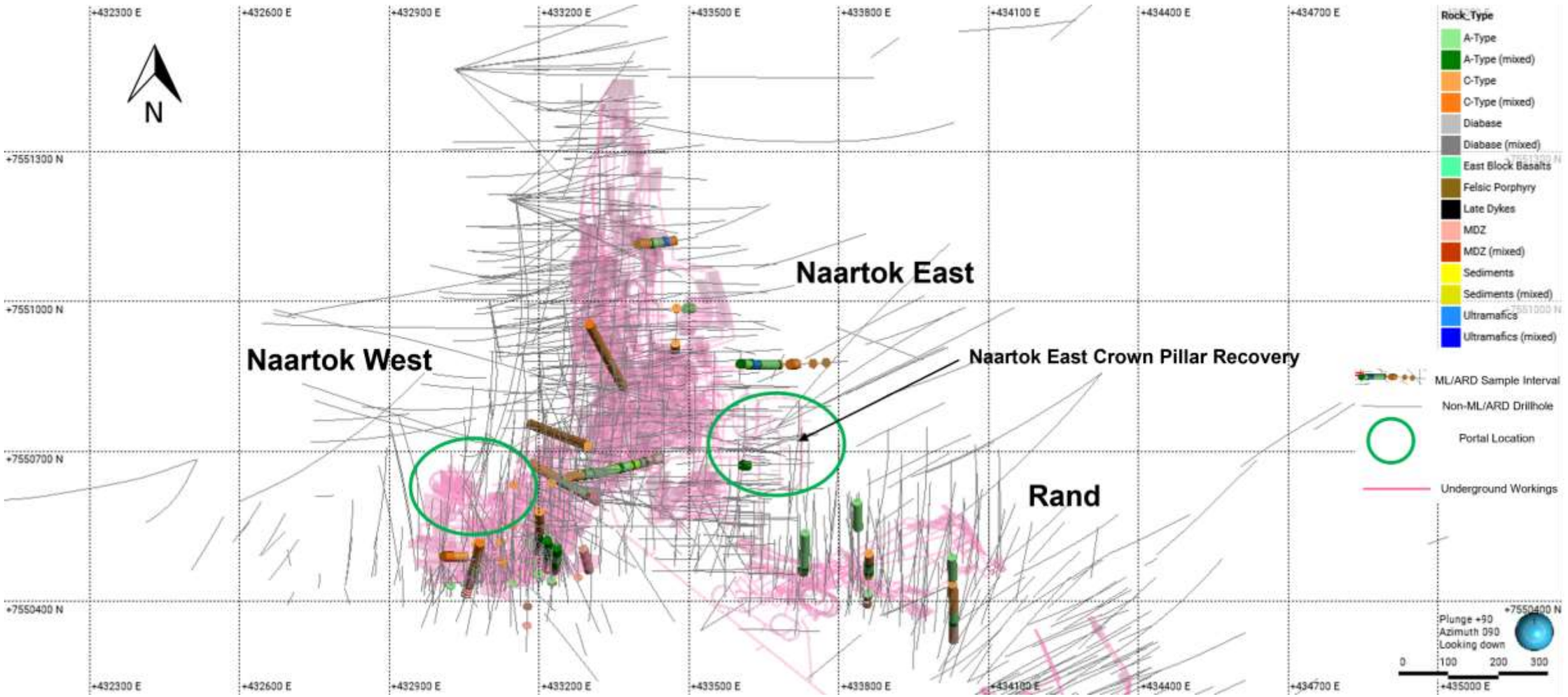

Figure 1-4: Drillhole Samples and Mine Plan, Madrid North Deposit (Suluk)

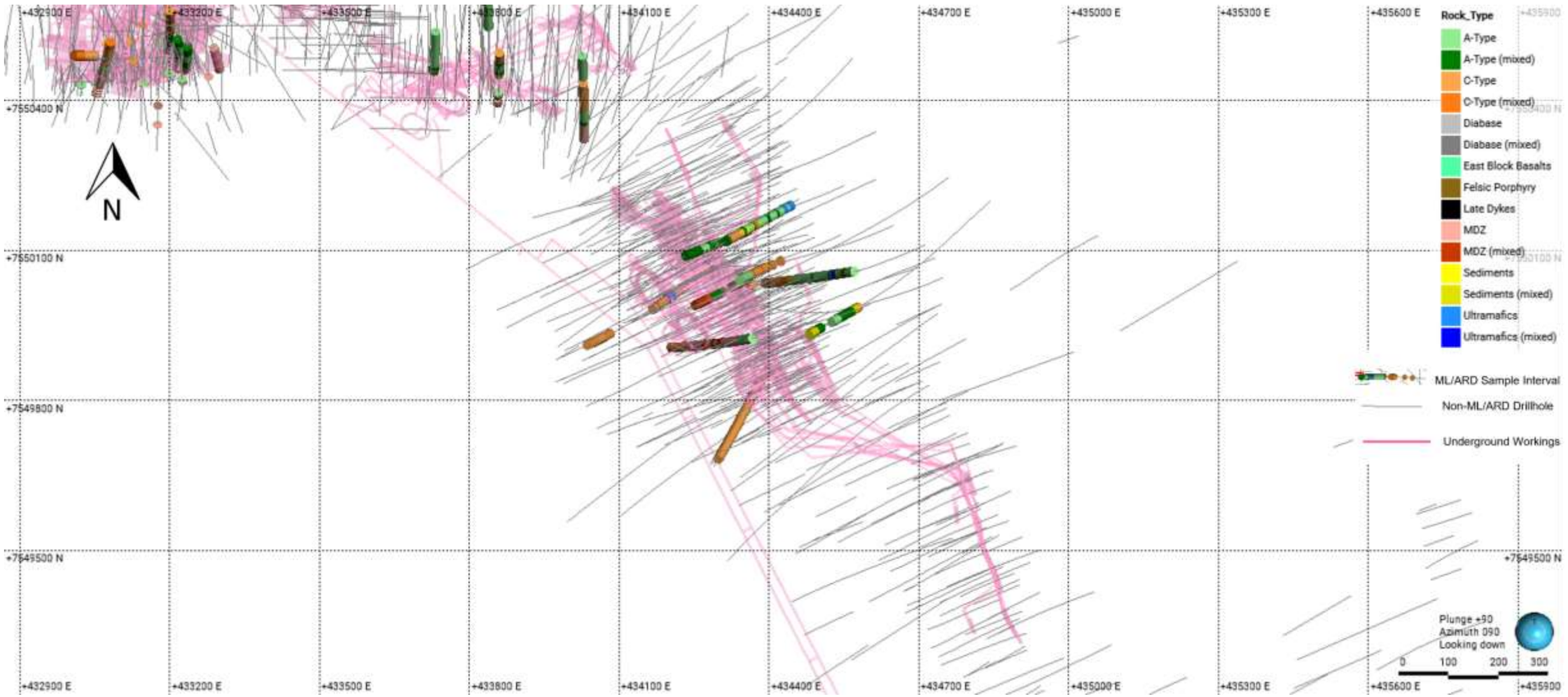

Figure 1-5: Drillhole Samples and Mine Plan, Patch 7

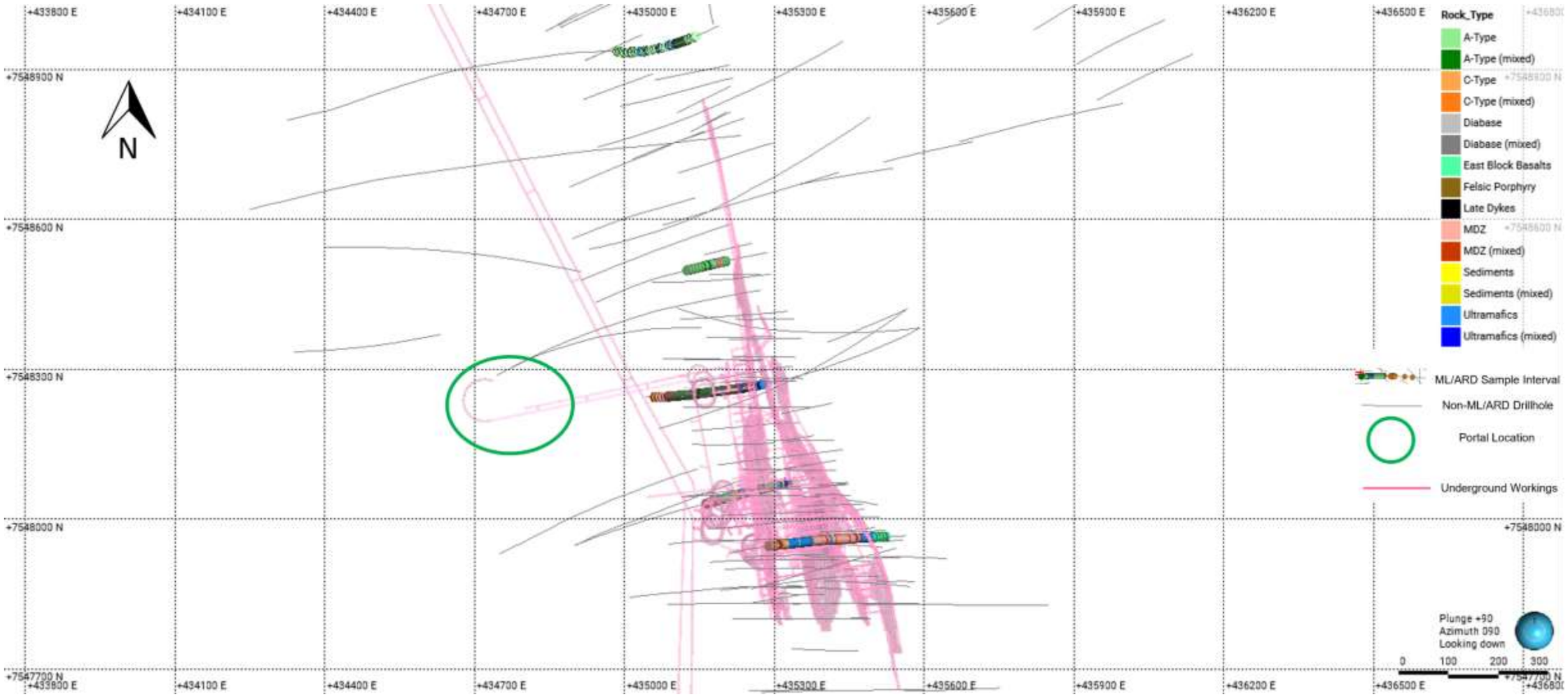

Table 1-1: Life of Mine Waste Rock Production by Rock Type, Madrid North and Patch 7

Deposit	Rock Type	Volume (tonnes)	Proportion
Madrid North	A-Type Basalt	3,934,174	53%
	C-Type Basalt	1,605,183	22%
	Diabase	49,750	0.67%
	Felsic Porphyry	18,994	0.26%
	Late Dykes	21,221	0.29%
	Madrid Deformation Zone (MDZ)	751,700	10%
	Sediments	903,780	12%
	Ultramafics	115,012	1.6%
	Wolverine Porphyry	19,199	0.26%
Patch 7	A-Type Basalt	866,808	27%
	C-Type Basalt	465,620	14%
	Diabase	26,284	0.82%
	East Block Basalts	203	0.0063%
	Felsic Porphyry	1,027	0.032%
	Late Dykes	12,771	0.4%
	Madrid Deformation Zone (MDZ)	919,770	29%
	Sediments	161,072	5%
	Ultramafics	630,406	20%
	Wolverine Porphyry	137,480	4.3%

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Plots_Tables_KWJ_Rev00.xlsm]

2 Methods

2.1 Static Sample Set and Analytical Methods

2.1.1 Madrid North

SRK (2017) Sample Set

SRK (2017) documents the Madrid North waste rock and ore sample set, and the corresponding sample selection and analytical methods for waste rock and ore from Madrid North. The sample set is comprised of 20 drill core samples collected in 2001 by Knight Piesold (KP), 69 drill core samples collected in 2006 by Newmont, and 332 drillcore samples collected in 2008 by SRK to address spatial and geological gaps. SRK selected drillholes that improved spatial coverage of Newmont's proposed open pits mine plan and samples were selected and interpreted using rock types documented in the geological logs and ore cut-off grade of 0.5 g/t. Sample lengths varied by program; the KP sample set had lengths ranging from 0.14 to 1.7 m, most Newmont samples were ~ 25 m with a minor proportion of thinner intervals (range of 5 to 26 m), and the SRK samples had a target length of ~10 m with some variability in the overall sample set (range of 0.31 to 14 m) as a result of selecting a range of rock types.

Analytical methods are documented in SRK (2017). In summary, samples were analyzed using ABA methods by KP and SRK and included paste pH, total sulphur, sulphate sulphur, total carbon, total inorganic carbon (TIC), and neutralization potential (NP) by Sobek method (KP) and modified Sobek method (SRK). Trace element content for static test samples was determined by aqua regia digestion followed by ICP-MS analysis. Newmont's geochemical test work program used net carbonate value (NCV) methods (an equivalent of ABA) and data derived using equivalent methods were merged with the ABA data set, as described in SRK (2017). Mineralogy for static test samples was indicated by quantitative x-ray diffraction (QXRD).

SRK (2017) interprets the results of 22 HCTs and 8 barrel tests. Prior to initiating kinetic tests, humidity cell test (HCT) and field barrel contents were characterized for ABA, trace elements, and additional mineralogical testing for HCT samples, including mineral liberation analysis (MLA) for expanded mineralogy and scanning electron microscope (SEM) for carbonate stoichiometry. After completion of humidity cell testing, the remaining test residues were characterized for ABA and trace element content.

After a review of quality control (QC) checks, SRK deemed all data as acceptable for the purpose of ML/ARD data interpretation (SRK, 2017).

2023 Sample Set

SRK conducted drillhole and sample selection of continuous downhole samples to assess the geochemical characteristics of rock types that were not previously characterized.

Drillhole locations were determined from an assessment of the drillhole database and current mine plan at the time (September 2022) using Leapfrog. Five drillholes were selected in areas that did not have previous continuous downhole sampling.

For areas that did not have continuous downhole sampling, using Leapfrog, SRK selected drillholes that intersected Agnico Eagle's September 2022 underground mine plan and a range of rock types, including primary waste rock and some ore lithologies. Rock types were assessed using Newmont geological logging codes and Agnico Eagle's August 2023 geological model. Samples of hematite altered basalt were selected for geochemical characterization as this rock type was not included in the SRK (2017) sample set. Intervals of hematite altered basalt were identified with the guidance of an Agnico Eagle geologist. Using geological logs and the geological model, SRK selected 198 continuous downhole samples for geochemical characterization. Each sample had a targeted sample length that approximated a blast round (~ 5 m) and represented one rock type, with a few samples containing a thin (< 1 m) interval of a second rock type. A list of selected samples is provided in Appendix A.

Samples were collected from drill core at the Hope Bay site by SRK in September 2023 with the assistance of Agnico Eagle core technicians. Agnico Eagle core technicians cut quarter rounds of the drill core and shipped samples in poly ore bags to SGS Canada Inc. (SGS) in Burnaby, BC for geochemical characterization.

Static Tests

Under the instruction of SRK, SGS analyzed all samples for the following:

- Paste pH;
- Modified NP (MEND 1991);
- Total carbon and sulphur by LECO and sulphate sulphur by HCl leach; and
- Total Inorganic Carbon (TIC) by direct measurement of CO_2 following HCl leach.
- Trace elements by aqua regia digestion followed by ICP-MS analysis.

2.1.2 Patch 7

2023 Sample Set

The SRK (2023) drillhole locations were determined from an assessment of the drillhole database and current mine plan at the time (September 2022) using Leapfrog, with the objective of addressing the lack of previous geochemical sampling in the deposit. Five spatially representative drillholes were selected for sampling.

Sample selection for Patch 7 only utilized Agnico Eagle's geological logging codes as the geological model for Patch 7 was incomplete at the time of sample selection. SRK selected 270 continuous downhole samples for geochemical characterization. A list of selected samples is provided in Appendix A.

Drill pulp samples from Patch 7 were readily available at ALS Laboratories in Yellowknife. Instead of sampling cut core from core boxes on site, drill pulp samples for the desired intervals were consolidated by ALS and shipped to SGS in Burnaby, BC.

Static Tests

As the samples were in the form of drill pulp, preparatory crushing was not required prior to testing. Static geochemical analyses were identical to Madrid North 2023 sample set (Section 2.1.1).

2.1.3 Summary of Static Database

A summary of the static test data from Madrid North and Patch 7 is provided in Table 2-1.

Table 2-1: Summary of the Madrid North and Patch 7 Geochemical Database

Test	Number of Samples
ABA or NCV	888
Elemental Analyses	888
Mineralogy (XRD)	442

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Plots_Tables_KWJ_Rev00.xlsm]

Assignment of Rock Types and Economic Classifications

The overall static test data set for Madrid North and Patch 7 has 888 samples. For each sample, SRK updated the rock type and economic classification for the purpose of data interpretation. Rock types were assigned using Leapfrog and Agnico Eagle's geological model (February 2024 version). The samples were classified as the rock types in the geological model, except for the following that were discussed with an Agnico Eagle geologist:

- As the model solids for the MDZ rock type were not completed in the February 2024 version, any samples that were geologically logged as MDZ were classified as MDZ, regardless of the modelled rock type.
- Samples that were geologically logged as sediments (lithology code 5) were classified as sediments.
- Under the instruction of Agnico Eagle, all samples intersected by the Patch 7 geological solid referred as A_C-Type basalts were interpreted to be A-Type basalts.

Using gold grade data provided by Agnico Eagle, SRK classified each sample interval as ore or waste using a gold grade cutoff of 4.0 gpt (TMAC 2020). For static test sample intervals containing assay samples classified as both ore and waste, SRK assigned the economic classification based on weight-averaged calculations of the assay data.

The rock types and economic classifications according to the updated geological model and mine plan for the overall static sample set are presented in Table 2-2 and Table 2-3. Mixed rock types represent a minor proportion of the overall sample set and are more prevalent in the SRK (2017) sample set, as the KP and Newmont samples were not selected based on geological logging codes. SRK samples in the SRK (2017) dataset and 2023 samples were classified as mixed due to the following reasons:

- rock types were assigned by the newest (February 2024) geological model, which was slightly different than the geological logs and August 2023 model used for sample selection; or
- the second rock type in the sample interval was a minor component of the interval (< 1 m).

Table 2-2: Ore Static Sample Inventory by Rock Type

Rock Type	SRK (2017) Rock Type Equivalent	Deposit	Number of Samples
A-Type, Hematite	1aj	Madrid North[1]	1
A-Type	1a, 1aj, 1p	Madrid North	20
	1a, 1aj	Patch 7	6
A-Type (mixed)	1a mixed, 1aj mixed	Madrid North	5
C-Type	1p	Madrid North	1
MDZ	13am, 13as	Patch 7	3
Sediments	5a, 5ai	Madrid North	3
Sediments (mixed)	5a mixed	Madrid North	1
Ultramafics	1u	Patch 7	2

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Plots_Tables_KWJ_Rev00.xlsm]

Notes:

1. Hematite altered A-Type basalt was present in the Naartok East zone in close proximity to ore

Table 2-3: Waste Rock Static Sample Inventory by Rock Type

Rock Type	SRK (2017) Rock Type Equivalent	Deposit	Number of Samples
A-Type, Hematite	1a, 1aj	Madrid North[1]	3
A-Type	1a, 1aj, 1p	Madrid North	175
	1a, 1aj	Patch 7	120
A-Type (mixed)	1a mixed, 1aj mixed	Madrid North	52
	1a mixed	Patch 7	3
C-Type	1a, 1aj, 1p, 2p, 2pg, 7a	Madrid North	186
C-Type (mixed)	1a mixed, 1p mixed, 2p mixed, 2pg mixed	Madrid North	22
	1a mixed	Patch 7	1
East Block Basalts	1a	Patch 7	6
MDZ	13a, 13am, 13as	Madrid North	79
	13am, 13as	Patch 7	54
MDZ (mixed)	13a mixed, 13am mixed	Madrid North	10
	13am mixed, 13as mixed	Patch 7	8
Sediments	5a, 5ai, 5aj, 5c	Madrid North	20
	5a, 5ai, 5aj, 5cu	Patch 7	12
Sediments (mixed)	5a mixed, 5ai mixed, 5c mixed	Madrid North	14
Ultramafics	1u, 7u	Madrid North	17
	1u	Patch 7	52
Ultramafics (mixed)	1u mixed	Madrid North	3
	1u mixed	Patch 7	2
Diabase	11c	Madrid North	2
Diabase (mixed)	11c mixed	Madrid North	2
Felsic Porphyry	9p	Patch 7	1
Late Dykes	1a[2]	Madrid North	2

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Plots_Tables_KWJ_Rev00.xlsm]

Notes:

1. Hematite altered A-Type basalt was present in the Naartok East zone in close proximity to ore.
2. A minor proportion of 1a lithologies were considered late dykes in the geological model.

2.2 Kinetic Sample Set and Analytical Methods

2.2.1 SRK (2017) Sample Set

Table 2-4 presents the HC and barrel tests documented in SRK (2017). SRK updated the rock type and economic classification of each sample using the methods outlined in Section 2.1.3. Analytical methods for kinetic tests are documented in SRK (2017) and a brief summary is provided below.

Humidity cell tests were initiated at Maxxam using the ASTM (2001) method. The tests operated between 57 and 155 cycles (Table 2-4) and were terminated due to non-acidic pH and/or stable sulphate and metal release rates. HCTs were analyzed weekly at Maxxam for pH, EC, SO4, alkalinity, acidity, and major elements (Al, Ca, Cu, Fe, Mg, K, Na, Zn). Other parameters were measured weekly for the first 4 weeks, then every 4 weeks afterwards, including ORP, trace elements by ICP-MS, mercury by CV, and ions and nutrients (F, Cl, P, TDS, NO_2, NO_3, and NH_3).

Field barrel tests were set-up between September 2009 and July 2010 with sample masses between 200 and 300 kg (Table 2-4). Leachate samples were collected and sent to ALS approximately once per month between the months of June and September or October during the first three years of operation. Afterwards, field barrels were sampled once per year during or after freshet, with the last sample included in this report collected in June 2023. The following field parameters were analyzed: pH, EC, ORP, and temperature, and the following lab parameters were analyzed: pH, EC, alkalinity, SO_4, Br, Cl, F, NO_2, NO_3, NH_3, and dissolved trace elements by ICP-MS.

2.2.2 2023 Sample Set

SRK selected additional HCT samples from Madrid North and Patch 7 from the static samples collected in 2023 (Sections 2.1.1 and 2.1.2) to represent volumetrically significant waste rock and ore rock types with geochemical characteristics that are not represented by the SRK (2017) HCT sample set. The selected HCT samples are presented in Table 2-5.

HCT sample intervals were collected by SRK from drill core in 2023 (Madrid North) or 2024 (Patch 7). HCTs were initiated in Q4 2024 at SGS in Burnaby, BC using the MEND (2009) method. HCT leachates are analyzed weekly for pH, EC, SO4, alkalinity, and acidity. Trace elements by ICP-MS, mercury by CV, other ions (F, Cl) and nutrients (TOC, NO_2, NO_3, and NH_3) will be analyzed weekly until week 12 and then every 4 weeks thereafter. Data were not available at the time report preparation.

Table 2-4: SRK (2017) Kinetic Sample Set by Rock Type and Economic Classification, Madrid North

Economic Classification	Rock Type	SRK (2017) Lithology	HCT ID	Barrel ID	Static Testing				Operational Period			
									Humidity Cell Tests		Barrel Tests	
					ABA	XRD	MLA	SEM	Date Initiated	Final No. of Cycles	Date Initiated	Current No. of Cycles
Waste	A-Type	1	HC-8	W6	x	x	x	x	Feb-09	57	Sep-09	22
			HC-8a		x	x	x	x	--	--	--	--
			HC-24	--	x	x	x	x	Jan-10	108	--	--
			HC-25	--	x	x	x	x	Jan-10	108	--	--
	A-Type (mixed)	1aj / 1oj mixed	--	W11	x	x	--	--	--	--	Jul-10	22
	C-Type	1	HC-3	W4	x	x	--	--	Feb-09	155	Jul-10	22
			HC-3a		x	x	--	--	--	--	--	--
		2pg	HC-4	W3	x	x	x	*	Feb-09	104	Sep-09	21
			HC-4a		x	x	x	*	--	--	--	--
		1	HC-9	W7	x	x	x	x	Feb-09	104	Sep-09	24
		7a	--	W8	x	x	--	--	--	--	Jul-10	18
		1aj	HC-17	--	x	x	x	x	Jan-10	57	--	--
		2pg	HC-18	--	x	x	x	x	Jan-10	108	--	--
		1	HC-27	--	x	x	x	x	Jan-10	57	--	--
		7a	HC-40	--	x	x	x	--	Jan-10	108	--	--
			HC-41	--	x	x	x	x	Jan-10	57	--	--
	C-Type (mixed)	2pg mixed	HC-19	--	x	x	x	--	Jan-10	57	--	--
	Diabase	11c	HC-22	--	x	x	x	*[1]	Jan-10	57	--	--
			HC-23	--	x	x	x	x	Jan-10	108	--	--
	MDZ	13a	HC-5	W2	x	x	x	--	Feb-09	57	Sep-09	23
			HC-5a		x	x	--	--	--	--	--	--
			HC-29	--	x	x	x	--	Jan-10	57	--	--
			HC-30	--	x	x	x	--	Jan-10	104	--	--
			HC-39	--	x	x	x	--	Jan-10	57	--	--
	Sediments	5	HC-20	--	x	x	x	x	Jan-10	57	--	--
			HC-21	--	x	x	x	x	Jan-10	155	--	--
	Sediments (mixed)	5a mixed	--	W14	x	x	--	--	--	--	Jul-10	21
Ore	A-Type	1	HC-26	--	x	x	x	x	Jan-10	57	--	--
	C-Type		HC-28	--	x	x	x	x	Jan-10	57	--	--

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Tables_KWJ.xlsx]

Notes:

1. SEM analyses not conducted because mineral level below detection, as indicated by XRD.

Table 2-5: 2023 Kinetic Sample Set by Rock Type and Economic Classification, Madrid North and Patch 7

Economic Classification	Rock Type	Humidity Cell ID	Sample ID	CRF[2]	Ongoing and Planned Test Work				
					ABA	Trace Metals	SFE (Non-Saline and Saline)	TIMA-X Mineralogy	HCT
Waste	Hematite Altered A-Type Basalt	HC-66	HBM-21-010-SRK-WR-125				x	x	x
	A-Type Basalt	HC-67	HBM-21-032-SRK-WR-113				x	x	x
		HC-68	HBM-22-045B-SRK-WR-182				x	x	x
		HC-69	HBM-22-045B-SRK-WR-182	x					x
	C-Type Basalt	HC-70	HBM-22-045B-SRK-WR-135				x	x	x
		HC-71	HBM-22-045B-SRK-WR-135	x					x
	MDZ (13as)[1]	HC-72	HBM-23-097A-SRK-WR-203		x	x	x	x	x
	MDZ (13am)	HC-73	HB-NWS-21-80051-SRK-WR-39				x	x	x
		HC-74	HB-NWS-21-80051-SRK-WR-39	x					x
	MDZ (13as)[1]	HC-75	HBM-23-097A-SRK-WR-187		x	x	x	x	x
		HC-76	HBM-23-097A-SRK-WR-187	x					x
	Sediments	HC-77	HBM-22-045B-SRK-WR-184				x	x	x
		HC-78	HBM-23-122-SRK-WR-242		x	x	x	x	x
		HC-79	HBM-23-086-SRK-WR-104		x	x	x	x	x
		HC-80	HBM-23-086-SRK-WR-104	x					x
	Ultramafics	HC-81	HBM-23-123-SRK-WR-34		x	x	x	x	x
		HC-82	HBM-23-122-SRK-WR-259		x	x	x	x	x
		HC-83	HBM-23-123-SRK-WR-22		x	x	x	x	x
		HC-84	HBM-23-123-SRK-WR-22	x					x
Ore	MDZ (13as)[1]	HC-85	HBM-23-097A-SRK-WR-204		x	x		x	x
	Sediments	HC-86	HBM-23-099-SRK-WR-271[3]		x	x		x	x
	Ultramafics	HC-87	HBM-23-095-SRK-WR-273[3]		x	x		x	x

Sources: https://srk.sharepoint.com/sites/NACAPR003181/Internal/500 Waste Rock and Ore Kinetic Test Program/2. Sample Selection/[HopeBay_Kinetic_Selections_CAPR003181_KWJ_Rev00.xlsx]

Notes:

1. The rock code 13as refers to rock in the MDZ that contains sediments. It was not included in the SRK (2017) sample set.
2. Development of the CRF test work program is in progress; samples are not available for testing.
3. Drillhole intervals with the desired rock type and ore classification were not available for sampling; these samples were selected on-site and are not part of the existing 2023 sample set.

2.3 Quality Assurance and Quality Control

SRK conducted data QA/QC for the 2023 static dataset. A summary of QA/QC results is presented in Appendix B.

A minor proportion of samples initially failed QC checks for total sulphur split duplicate comparisons and comparisons between sulphur concentrations by LECO and ICP-MS. After re-analysis, values were within lab tolerance limits and passed QC checks. Values of Modified NP initially failed QC checks for 56 samples due to terminal pH values that were outside the acceptable range of the method. All samples that failed were re-analyzed for Modified NP and passed QC checks. All data were deemed acceptable by SRK.

2.4 Data Interpretation

ABA data calculations are summarized as follows with rationale presented in Section 3.1.2:

- Sulphide sulphur was calculated as the difference between total sulphur and sulphate sulphur.
- Acid potential (AP) was calculated from total sulphur.
- Non-carbonate carbon was calculated as the difference between total carbon and TIC.

ARD classifications by NP/AP or TIC/AP are defined using the following criteria:

- NP/AP or TIC/AP ≥ 3 and/or total sulphur ≤ 0.1 %S is classified as non-PAG.
- NP/AP or TIC/AP between 1 and 3 is classified as uncertain.
- NP/AP or TIC/AP ≤ 1 is classified as PAG.

For some groups of samples (Section 3.1.2), Calcium and magnesium TIC ($TIC_{(Ca+Mg)}$) was calculated to account for the potential overestimation of neutralization potential from TIC due to the presence of NP-neutral iron carbonates as follows:

$$TIC_{(Ca+Mg)} = TIC*0.83.$$

The method of determining the 0.83 factor is detailed in SRK (2017). The factor of 0.83 represents the minimum stoichiometric proportion of calcium-plus-magnesium content in ferroan dolomite mineral grains in HC-21 (A-Type waste), which had the following stoichiometry: $Ca(Mg_{0.66}Fe_{0.34})CO_3$. This sample had the lowest calcium-plus-magnesium content in ferroan dolomite from any of the Madrid North samples. Therefore, the adjustment provides a conservative indication of the $TIC_{(Ca+Mg)}$ content of the samples. ARD classifications by $TIC_{(Ca+Mg)}$/AP are defined using the following criteria:

- $TIC_{(Ca+Mg)}$/AP ≥ 2 and/or total sulphur ≤ 0.1 %S is classified as non-PAG.
- $TIC_{(Ca+Mg)}$/AP ratio between 1 and 2 is classified as uncertain.
- $TIC_{(Ca+Mg)}$/AP ≤ 1 is classified as PAG.

Trace metal parameters were screened by comparing 95th percentile concentrations to ten times the average crustal abundance for basalt (Price 1997). The limit of analytical detection for bismuth and gallium was higher than the respective crustal abundance; accordingly, bismuth and gallium could not be assessed. For the historical HCT and field barrel sample sets, selenium could not be assessed as the detection limit of selenium was equal to ten times the average crustal abundance of basalt. Basalt was used as a comparison for all rock types in the overall sample set.

3 Results

3.1 Static Data

This section presents the static results for the Madrid North and Patch 7 ore bodies. Baseline data from Patch 7 are presented separately to compare static characteristics with Madrid North and to demonstrate Patch 7 is a geological and geochemical extension of Madrid North.

3.1.1 Geology and Sample Set

The overall ABA sample set for Madrid North and Patch 7 has 618 and 270 samples, respectively. Section 2.1.3 outlines the method of assigning rock types and economic classifications for each sample according to Agnico Eagle's mine plan. Table 1-1 in Section 1.3 documents the projected waste rock types at Madrid North and Patch 7 and Table 2-2 and Table 2-3 inventory the rock types for the static test sample sets for ore and waste rock, respectively.

The Madrid North and Patch 7 areas are aligned along the Madrid Deformation Zone (MDZ) and are geologically characterized by the same host and general stratigraphy. In both areas, A-Type and C-Type basalt are the host rock to the ore bodies and the most volumetrically significant waste rock lithologies at Madrid North and Patch 7. Geological differences between the two are typically related to relative abundance of specific rock types. For example, ultramafic waste rock is more volumetrically significant at Patch 7 whereas sedimentary waste rock is significant at Madrid North (Table 1-1). Variations include i) East Block basalt, which according to the geological model is present at Patch 7 but not Madrid North and ii) hematite altered A-Type basalt, which is present at the Naartok West and Naartok East zones at Madrid North.

The Madrid North sample set is spatially representative of the mine plan (Figure 1-2) and includes all volumetrically significant waste rock types (Table 1-1). The Patch 7 sample set is also spatially and geologically representative except for the following volumetrically significant waste rock types: C-Type basalt (14% of projected waste rock) and Wolverine porphyry (4.3 %). As the geological model for Patch 7 was not finalized at the time of sample selection, SRK selected samples using drillhole logs, which do not differentiate between A-Type and C-Type basalt. In the absence of other samples, there was a single C-Type (mixed) basalt sample at Patch 7 that was used for comparison with Madrid North. The sample set also does not include samples of Wolverine porphyry at Patch 7 because this rock type was not intersected by drillholes available for the geochemical test work program. Felsic porphyry and Wolverine porphyry at Madrid North and diabase and late dykes at Patch 7 are minor waste rock types (<1% by volume, Table 1-1) that have not been characterized because available drill core did not intercept these rock types or they were minor components of samples with mixed rock types (Section 2.1.3).

3.1.2 Acid-Base Accounting

Table 3-1 and Table 3-2 present a summary of ABA data for ore and waste rock sample sets, respectively from the Madrid North and Patch 7 areas. Complete ABA results for the 2023 sample set are presented in Appendix C whereas all other data are presented in the appendices of SRK (2017).

Table 3-1: Summary of ABA Data by Rock Type for Ore Samples, Madrid North and Patch 7

Rock Type	Deposit	Statistic / Sample ID	Paste pH	Total C	Carbon (Non-TIC)[1]	TIC	$TIC_{(Ca+Mg)}$	NP	Total S	Sulphate S	Sulphide S	AP	NP/AP	TIC/AP	$TIC_{(Ca+Mg)}/AP$
			pH units	%C	%C	kgCaCO3/t	kgCaCO3/t	kgCaCO3/t	%S	%S	%S	kgCaCO3/t			
A-Type, Hematite Altered	Madrid North	HBM-21-010-SRK-WR-126	9.2	2.9	0.01	250	210	200	3.2	0.02	3.2	100	2	2.5	2.1
A-Type	Madrid North	Min	8.5	3	0.01	250	210	150	0.44	0.01	0.43	14	1.6	1.8	1.5
		P50	9.1	4.8	0.096	370	310	290	2.8	0.01	2.8	87	3.7	4.4	3.6
		Max	9.4	7.4	0.95	540	450	420	5.6	0.06	5.6	180	25	35	29
		Count	20	18	18	20	20	20	20	18	20	20	20	20	20
	Patch 7	Min	8.6	3.2	0.01	280	240	220	0.54	0.01	0.53	17	4.7	5.8	4.8
		P50	8.9	6.1	0.17	480	390	370	1.5	0.01	1.5	48	6.9	8.7	7.2
		Max	9.1	7.4	1.5	530	440	440	2.5	0.01	2.5	80	22	29	24
		Count	6	6	6	6	6	6	6	6	6	6	6	6	6
A-Type (mixed)	Madrid North	HB-05PMD2916.231	8.9	4.7	0.16	380	310	150	1.2	0	1.2	39	4	9.6	8
		HB-05PMD293184205.14	8.7	5.7	0.34	450	370	160	1.1	0	1.1	33	4.8	13	11
		HB-06PMD470314.55326.64	8.5	3.7	0.24	290	240	250	2.9	0.02	2.9	90	2.8	3.2	2.6
		HB-08PMD65023.8533	8.3	3.6	0.89	220	180	190	5.8	0.03	5.8	180	1	1.2	1
		HB-PMD150130155	8.9	6.6	0.057	540	450	310	2.1	0	2.1	66	4.6	8.3	6.9
C-Type	Madrid North	HB-06PMD4708588	9.3	4.1	0.17	330	270	260	1.3	0.01	1.3	41	6.4	8.1	6.7
MDZ	Patch 7	HBM-23-097A-SRK-WR-157	9.2	5.1	0.043	420	350	330	0.91	0.01	0.9	28	12	15	12
		HBM-23-097A-SRK-WR-204	8.2	3.5	0.05	290	240	160	6.9	0.04	6.9	220	0.76	1.3	1.1
		HBM-23-097A-SRK-WR-207	8.1	3.6	0.48	260	220	200	2.1	0.03	2.1	67	3	3.9	3.2
Sediments	Madrid North	HBM-22-045B-SRK-WR-188	6.9	5.8	3.5	190	160	150	8.5	0.2	8.3	270	0.58	0.71	0.59
		HBM-22-045B-SRK-WR-191	8.3	4.5	0.81	310	260	250	7	0.07	6.9	220	1.1	1.4	1.2
		HBM-22-045B-SRK-WR-193	8.9	5.4	0.11	440	370	330	4.6	0.03	4.6	140	2.3	3.1	2.6
Sediments (mixed)	Madrid North	HB-07PMD6102223	8.6	4.2	0.092	340	290	300	5.1	0.03	5.1	160	1.9	2.2	1.8
Ultramafics	Patch 7	HBM-23-097A-SRK-WR-215	9.2	7.5	1.8	470	390	300	0.62	0.01	0.61	20	16	24	20
		HBM-23-097A-SRK-WR-217	9	6.9	1.5	450	370	310	0.58	0.01	0.57	18	17	25	21

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Plots_Tables_KWJ_Rev00.xlsm]

Notes:

1. Non-carbonate carbon was calculated as the difference between total carbon and TIC (Section 2.4)

Table 3-2: Summary of ABA Data for Waste Rock Samples by Rock Type, Madrid North and Patch 7

Rock Type	Deposit	Statistic / Sample ID	Paste pH	Total C	Carbon (Non-TIC)[1]	TIC	$TIC_{(Ca+Mg)}$	NP	Total S	Sulphate S	Sulphide S	AP	NP/AP	TIC/AP	$TIC_{(Ca+Mg)}$/AP
			pH units	%C	%C	kgCaCO3/t	kgCaCO3/t	kgCaCO3/t	%S	%S	%S	kgCaCO3/t			
A-Type, Hematite Altered	Madrid North	HBM-21-010-SRK-WR-124	8.6	3.4	0.17	270	220	230	4.4	0.06	4.3	140	1.7	2	1.7
		HBM-21-010-SRK-WR-125	8.5	3.1	0.16	240	200	200	5.4	0.08	5.3	170	1.2	1.4	1.2
		HBM-21-010-SRK-WR-127	8.7	4.1	0.35	310	260	250	4.1	0.06	4.1	130	1.9	2.4	2
A-Type	Madrid North	Min	8.1	0.39	0.01	28	24	38	0.02	0.010	0.01	0.63	0.96	1.6	1.4
		P50	9	5	0.1	400	330	320	0.32	0.01	0.31	10	26	35	29
		Max	10	8.1	2	600	490	470	5	0.05	5	160	630	920	770
		Count	175	169	169	175	175	175	175	164	175	175	175	175	175
	Patch 7	Min	8.1	1.7	0.01	130	110	57	0.064	0.01	0.054	2	6.7	8.3	6.9
		P50	8.8	4.5	0.02	370	300	290	0.23	0.01	0.22	7.2	30	37	31
		Max	10	7.5	2.9	610	500	490	2.3	0.01	2.3	72	220	230	190
		Count	120	120	120	120	120	120	120	120	120	120	120	120	120
A-Type (mixed)	Madrid North	Min	8.6	0.65	0.01	43	36	86	0.02	0.01	0.01	0.63	1.4	4.1	3.4
		P50	8.9	4.8	0.094	390	330	260	0.37	0.01	0.37	12	18	26	21
		Max	9.8	7.3	0.35	590	490	520	2.7	0.01	2.7	84	610	780	650
		Count	52	52	52	52	52	52	52	31	52	52	52	52	52
	Patch 7	HBM-23-112-SRK-WR-76	10	3.6	0.01	310	260	320	0.13	0.01	0.12	4.2	77	75	63
		HBM-23-112-SRK-WR-79	9.9	4	0.01	340	290	340	0.15	0.01	0.14	4.8	71	72	59
		HBM-23-086-SRK-WR-124	8.9	5.5	0.52	410	340	320	0.94	0.01	0.93	29	11	14	12
C-Type	Madrid North	Min	8.3	0.16	0.01	1.4	1.1	13	0.02	0.01	0.01	0.63	4.1	0.44	0.36
		P50	9	2.3	0.031	200	160	190	0.11	0.01	0.1	3.4	49	52	43
		Max	11	6.4	1.6	540	450	440	1.3	0.02	1.3	40	210	260	220
		Count	186	180	180	186	186	186	186	179	186	186	186	186	186
C-Type (mixed)	Madrid North	Min	8.4	0.76	0.01	52	43	66	0.05	0.01	0.04	1.6	6	3	2.5
		P50	9.1	2.1	0.047	170	140	190	0.19	0.01	0.18	5.9	34	43	35
		Max	9.8	5.3	0.17	440	370	330	0.88	0.01	0.88	28	100	100	85
		Count	22	22	22	22	22	22	22	14	22	22	22	22	22
	Patch 7	HBM-23-086-SRK-WR-151	8.1	2.4	0.2	180	150	190	0.092	0.05	0.042	2.9	65	64	53
East Block Basalts	Patch 7	Min	8.4	0.15	0.01	12	9.7	22	0.12	0.01	0.11	3.7	5.9	3.1	2.6
		P50	8.7	1.3	0.038	100	83	80	0.16	0.01	0.15	5	13	13	11
		Max	8.9	3.4	0.1	290	240	290	0.46	0.01	0.45	14	78	78	65
		Count	6	6	6	6	6	6	6	6	6	6	6	6	6

Rock Type	Deposit	Statistic / Sample ID	Paste pH	Total C	Carbon (Non-TIC)[1]	TIC	$TIC_{(Ca+Mg)}$	NP	Total S	Sulphate S	Sulphide S	AP	NP/AP	TIC/AP	$TIC_{(Ca+Mg)}$/AP
			pH units	%C	%C	kgCaCO3/t	kgCaCO3/t	kgCaCO3/t	%S	%S	%S	kgCaCO3/t			
MDZ	Madrid North	Min	8.8	1.3	0.01	99	82	82	0.03	0.01	0.02	0.94	3.8	7.4	6.1
		P50	9.5	3.6	0.03	270	220	210	0.23	0.01	0.22	7.2	33	43	35
		Max	10	7.3	1.9	610	510	470	1.1	0.01	1.1	36	200	230	190
		Count	79	74	74	79	79	79	79	74	79	79	79	79	79
	Patch 7	Min	7.9	1.3	0.01	86	71	73	0.077	0.01	0.067	2.4	2.4	3	2.5
		P50	9.4	5	0.3	380	320	290	0.24	0.01	0.23	7.5	38	51	42
		Max	9.7	6.3	1.6	490	410	390	2.3	0.07	2.2	70	140	180	150
		Count	55	55	55	55	55	55	55	55	55	55	55	55	55
MDZ (mixed)	Madrid North	Min	9	1.5	0.01	120	100	110	0.1	0.01	0.09	3.1	5.5	7.2	6
		P50	9.4	4.5	0.04	380	320	280	0.29	0.01	0.28	9	29	34	28
		Max	9.6	7.6	0.39	600	500	370	0.81	0.01	0.8	25	89	190	160
		Count	10	10	10	10	10	10	10	6	10	10	10	10	10
	Patch 7	Min	8.4	2.2	0.01	200	170	160	0.04	0.01	0.03	1.3	4.2	5	4.1
		P50	9	4.3	0.87	310	260	210	0.23	0.01	0.22	7.1	45	62	51
		Max	9.6	7.6	1.7	520	430	410	1.5	0.09	1.5	48	160	160	130
		Count	8	8	8	8	8	8	8	8	8	8	8	8	8
Sediments	Madrid North	Min	8.1	1.2	0.02	93	77	80	0.02	0.01	0.01	0.63	0.28	0.37	0.31
		P50	8.8	3.4	0.18	260	210	240	0.73	0.01	0.72	23	17	18	15
		Max	9.6	7.3	3.5	600	500	520	9.6	0.04	9.6	300	520	580	480
		Count	16	16	16	16	16	16	16	16	16	16	16	16	16
	Patch 7	Min	8.7	0.14	0.01	5	4.2	11	0.19	0.01	0.18	5.8	1.8	0.81	0.67
		P50	9.1	1.5	0.11	120	99	96	0.66	0.01	0.65	21	4.7	5.4	4.4
		Max	9.4	6.9	0.26	580	480	490	0.82	0.01	0.81	26	25	29	24
		Count	6	6	6	6	6	6	6	6	6	6	6	6	6
Sediments (mixed)	Madrid North	Min	8.2	2.1	0.01	160	130	110	0.05	0.01	0.04	1.6	1.5	2	1.7
		P50	8.7	3.2	0.19	250	210	240	1.3	0.01	1.3	41	5.5	6.1	5.1
		Max	9.5	8.3	0.71	650	540	560	3.2	0.06	3.2	100	110	110	92
		Count	14	14	14	14	14	14	14	10	14	14	14	14	14
Ultramafics	Madrid North	Min	8.8	0.16	0.01	13	11	20	0.059	0.01	0.049	1.8	6.1	4.1	3.4
		P50	9	3	0.01	250	210	230	0.13	0.01	0.12	4.1	38	41	34
		Max	9.8	4.9	0.56	430	350	340	0.3	0.01	0.29	9.4	110	120	100
		Count	17	17	17	17	17	17	17	17	17	17	17	17	17
	Patch 7	Min	8.4	2.7	0.01	200	160	59	0.052	0.01	0.042	1.6	5	6.9	5.7
		P50	9	6.7	1.5	400	330	250	0.19	0.01	0.18	6	50	68	56
		Max	9.7	8	3.3	560	460	480	1.4	0.01	1.4	43	140	270	220

Rock Type	Deposit	Statistic / Sample ID	Paste pH	Total C	Carbon (Non-TIC)[1]	TIC	$TIC_{(Ca+Mg)}$	NP	Total S	Sulphate S	Sulphide S	AP	NP/AP	TIC/AP	$TIC_{(Ca+Mg)}$/AP
			pH units	%C	%C	kgCaCO3/t	kgCaCO3/t	kgCaCO3/t	%S	%S	%S	kgCaCO3/t			
		Count	52	52	52	52	52	52	52	52	52	52	52	52	52
Ultramafics (mixed)	Madrid North	HBM-22-045B-SRK-WR-160	9	2.5	0.01	220	180	180	0.12	0.01	0.11	3.6	50	61	51
		HBM-22-045B-SRK-WR-181	8.9	5.8	0.33	450	380	370	0.12	0.01	0.11	3.9	96	120	97
		HB-08PSD14280.0887.5	8.9	4.8	0.03	400	330	380	0.21	0.01	0.2	6.6	58	61	51
	Patch 7	HBM-23-086-SRK-WR-90	8.4	4	0.21	310	260	270	0.18	0.01	0.17	5.7	48	55	46
		HBM-23-122-SRK-WR-269	8.3	2.9	0.38	210	170	230	0.12	0.01	0.11	3.9	58	54	45
Diabase	Madrid North	HB-06PMD470371.05376.28	9.3	0.11	0.01	11	9	22	0.02	0.01	0.01	0.63	35	17	14
		HB-07PMD54273.2877	9.7	0.39	0.01	35	29	33	0.07	0.01	0.06	2.2	15	16	13
Diabase (mixed)	Madrid North	HBM-21-004-SRK-WR-92	9.4	0.42	0.01	36	30	50	0.14	0.01	0.13	4.2	12	8.5	7
		HB-PMD150153161.4	9.6	0.15	0.09	4.5	3.8	190	0.048	0	0.048	1.5	120	3	2.5
Felsic Porphyry	Patch 7	HBM-23-097A-SRK-WR-176	9.2	5.3	1.2	340	280	240	0.46	0.01	0.45	14	16	24	20
Late Dykes	Madrid North	HBM-22-045B-SRK-WR-151	9	1.8	0.19	130	110	150	0.11	0.01	0.096	3.3	45	41	34
		HB-06PMD470331.17331.48	9.2	4.6	0.09	380	310	310	0.94	0.01	0.93	29	10	13	11

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Plots_Tables_KWJ_Rev00.xlsm]

Notes:

1. Non-carbonate carbon was calculated as the difference between total carbon and TIC (Section 2.4)

Sulphur Species

Total sulphur for ore samples was typically higher than waste rock at both Madrid North and Patch 7, as shown in Figure 3-1 and Figure 3-2, respectively. Furthermore, for ore and waste samples, total sulphur content was roughly equivalent for equivalent rock types at Madrid North and Patch 7.

For ore, most rock types had roughly equivalent total sulphur content with 25th to 75th percentile values ranging between 1.2 to 4.1 %S (Figure 3-1). Exceptions included sediments from Madrid North which had higher total sulphur (25th and 75th percentile values of 5.8 and 7.7 %S) and ultramafics from Patch 7 that had lower total sulphur (25th and 75th percentile values of 0.59 and 0.61 %S). Both rock types had limited sample sets, so the distribution of total sulphur may vary with a larger sample set.

For waste, rock types at Madrid North and Patch 7 could be categorized according to 25th to 75th total sulphur concentrations (Figure 3-2) and are summarized as follows:

- 0.03 to 0.11 %S: diabase (unmixed and mixed) from Madrid North
- 0.09 to 0.33 %S: C-Type basalts (unmixed and mixed), MDZ, ultramafics (unmixed and mixed) from Madrid North, and C-Type basalts (mixed), East Block basalts, ultramafics (unmixed and mixed) from Patch 7.
- 0.14 to 0.91 %S: A-Type basalts (unmixed and mixed), late dykes, and MDZ (mixed) from Madrid North, and A-Type basalts (unmixed and mixed), felsic porphyry, MDZ (unmixed and mixed) from Patch 7.
- 0.28 to 4.9 %S: hematite altered A-Type basalts, sediments (unmixed and mixed) from Madrid North and sediments from Patch 7. The highest sulphur concentration of 9.6% was observed in a sediment sample from Madrid North. Notably, MDZ samples at Patch 7 were primarily logged as rock type 13as (deformation zone in sediments) whereas MDZ at Madrid North was typically 13am (deformation zone in mafic metavolcanics), which may explain the higher sulphur content in MDZ samples at Patch 7.

Sulphate content was generally below or near the level of analytical detection (0.01%) for nearly all samples. Accordingly, sulphide was the dominant sulphur form and was roughly equivalent to total sulphur (Figure 3-3).

Figure 3-1: Statistical Distribution of Total Sulphur by Rock Type, Ore

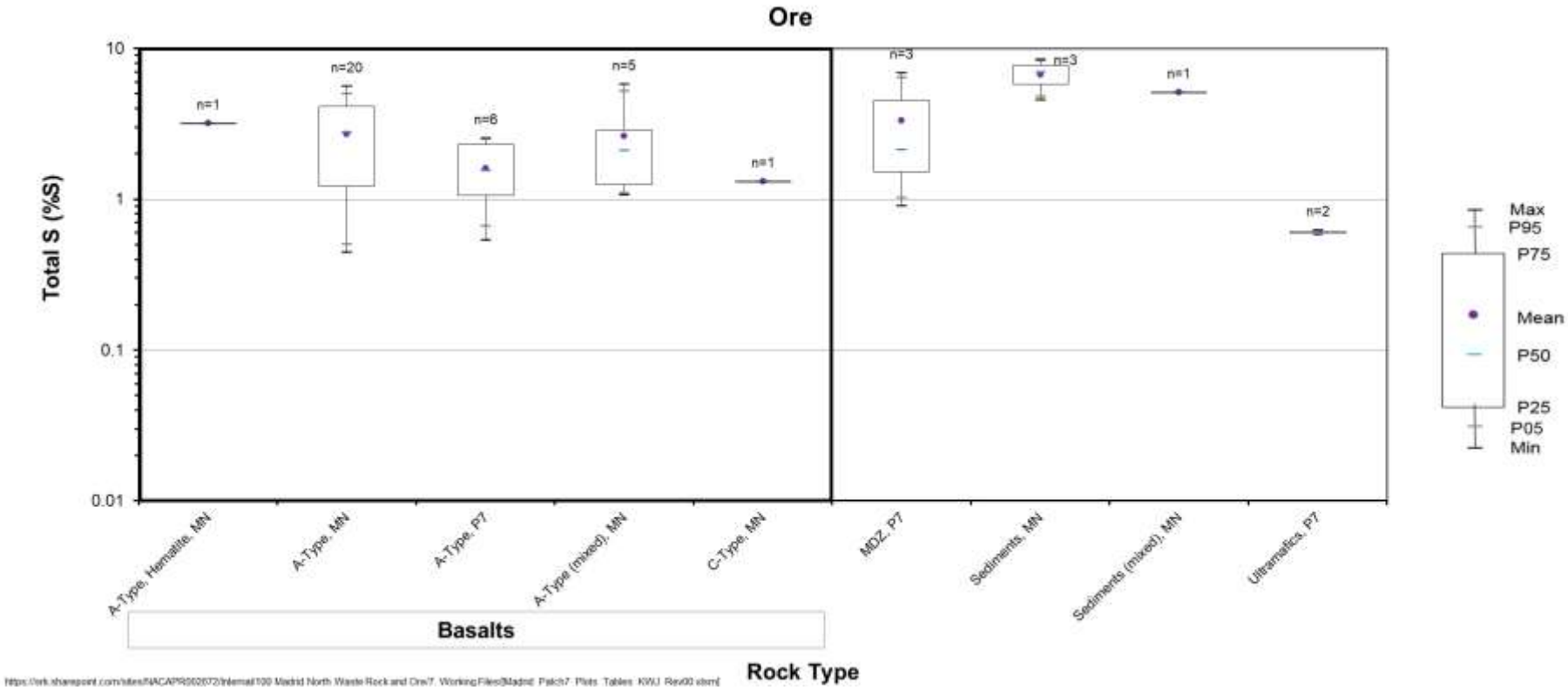

Figure 3-2: Statistical Distribution of Total Sulphur by Rock Type, Waste Rock

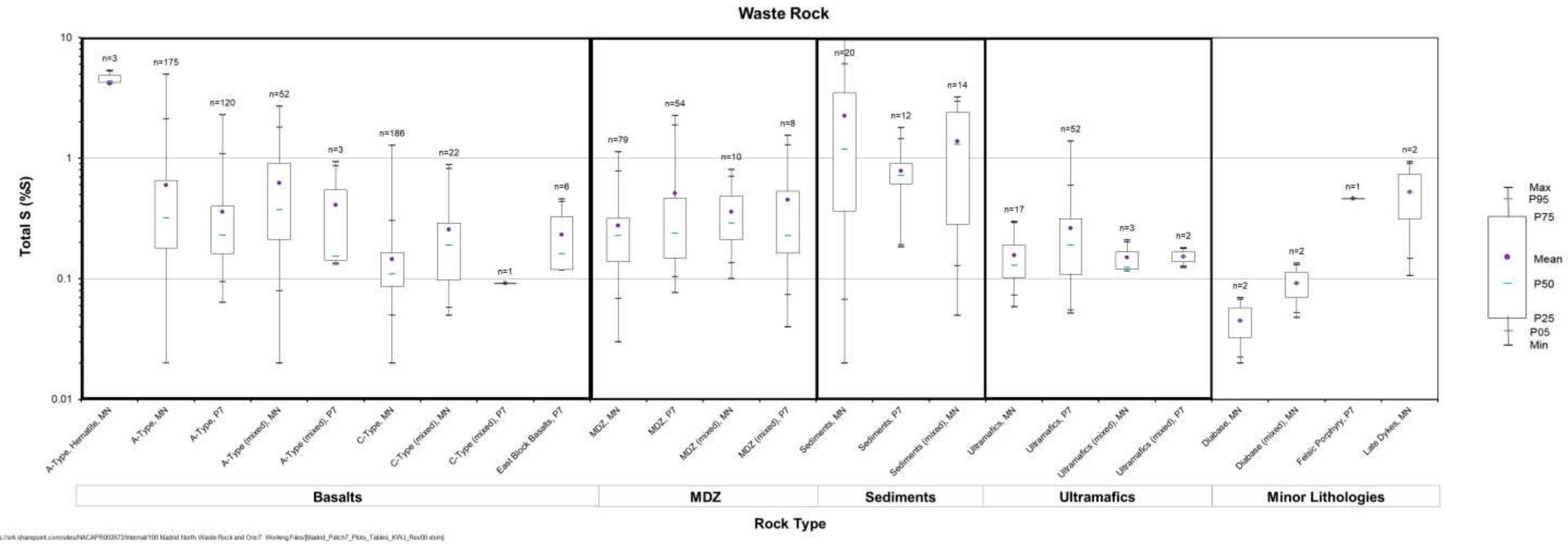

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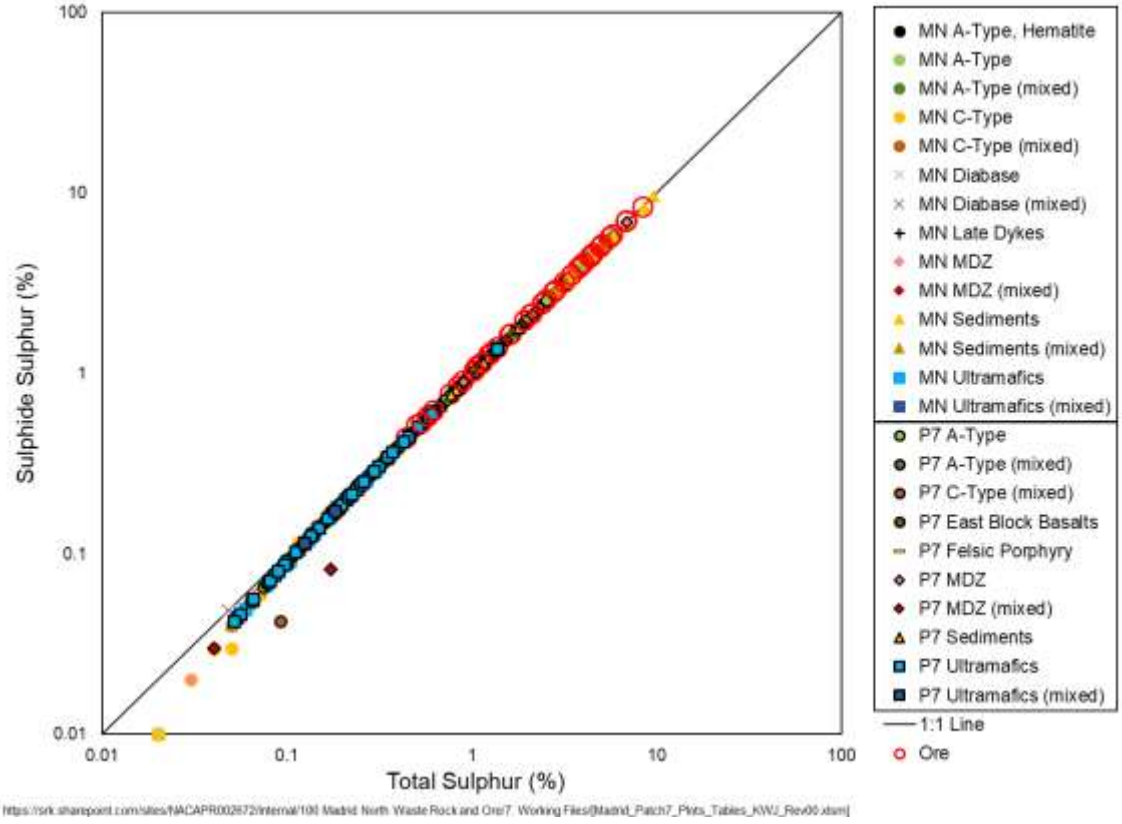
Figure 3-3: Comparison of Sulphide Sulphur and Total Sulphur, Waste Rock and Ore



Paste pH and Modified NP

Paste pH values ranged from 7.9 and 11 (Figure 3-4) except for two samples of sediment (one ore and one waste sample) from Madrid North that had pH values of 6.9 and 7.3, respectively and total sulphur contents of 8.5 and 5.9 %S, respectively. For ore and waste samples, Modified NP content was relatively uniform for equivalent rock types at Madrid North and Patch 7 (Figure 3-4 to Figure 3-6).

Modified NP was high for all ore samples with 25th to 75th percentile values ranging from 160 to 410 kg $CaCO_3$/t (Figure 3-5). Figure 3-6 presents the statistical distribution of Modified NP by rock type for waste rock samples. All rock types had high values of Modified NP with 25th to 75th percentile values ranging from 100 to 380 kg $CaCO_3$/t except diabase (unmixed and mixed) at Madrid North (25th to 75th percentile values from 25 to 30 kg $CaCO_3$/t), East Block basalts (70 to 150 kgCaCO3/t) and sediments at Patch 7 (50 to 110 kg $CaCO_3$/t).

Figure 3-4: Comparison of NP and Paste pH, Waste Rock and Ore

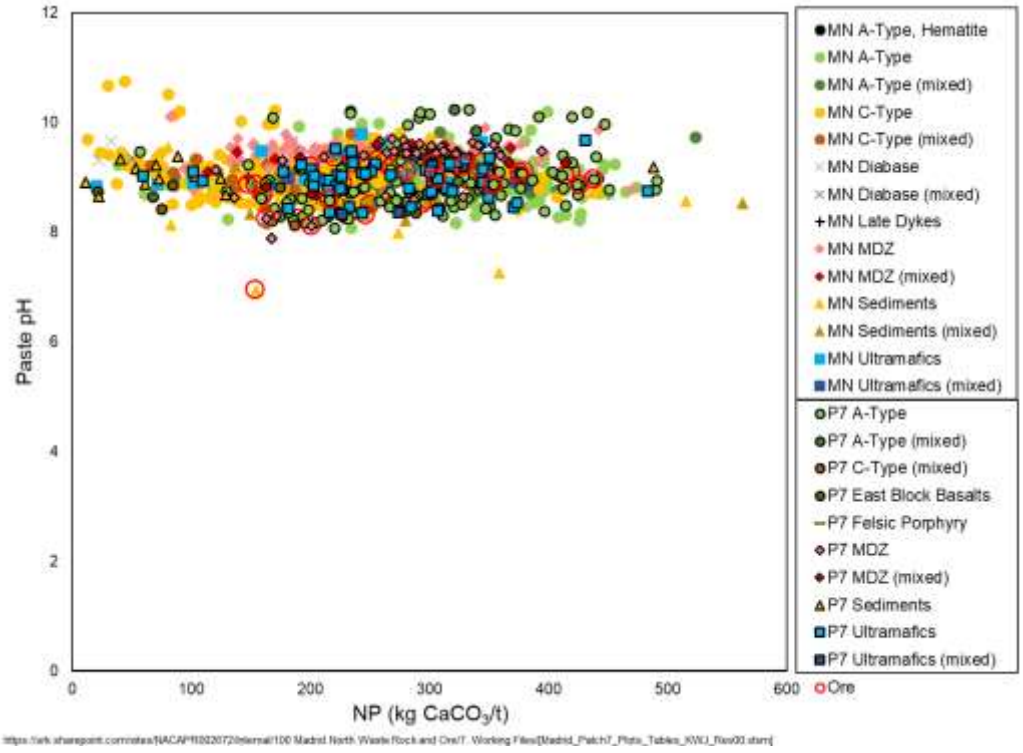


Figure 3-5: Statistical Distribution of Modified NP by Rock Type, Ore

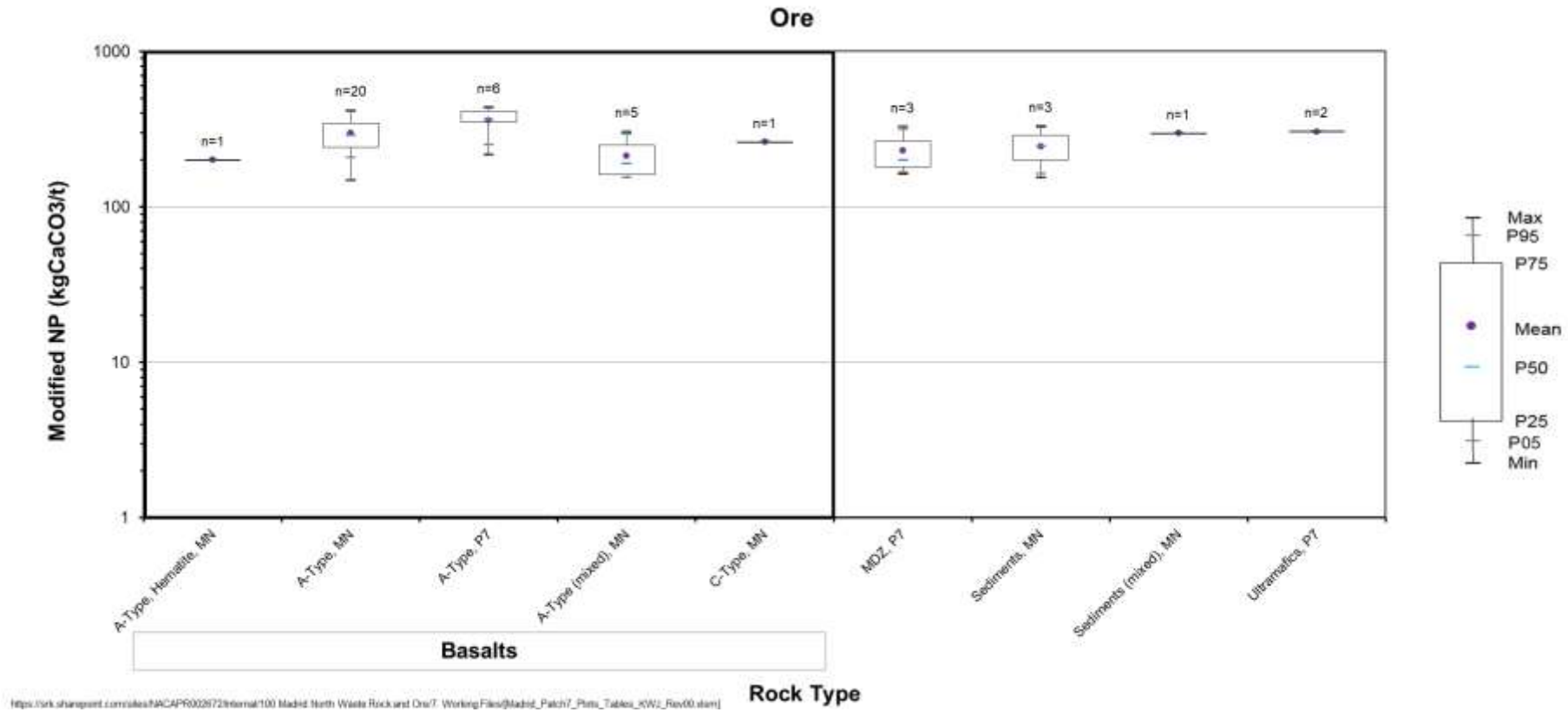
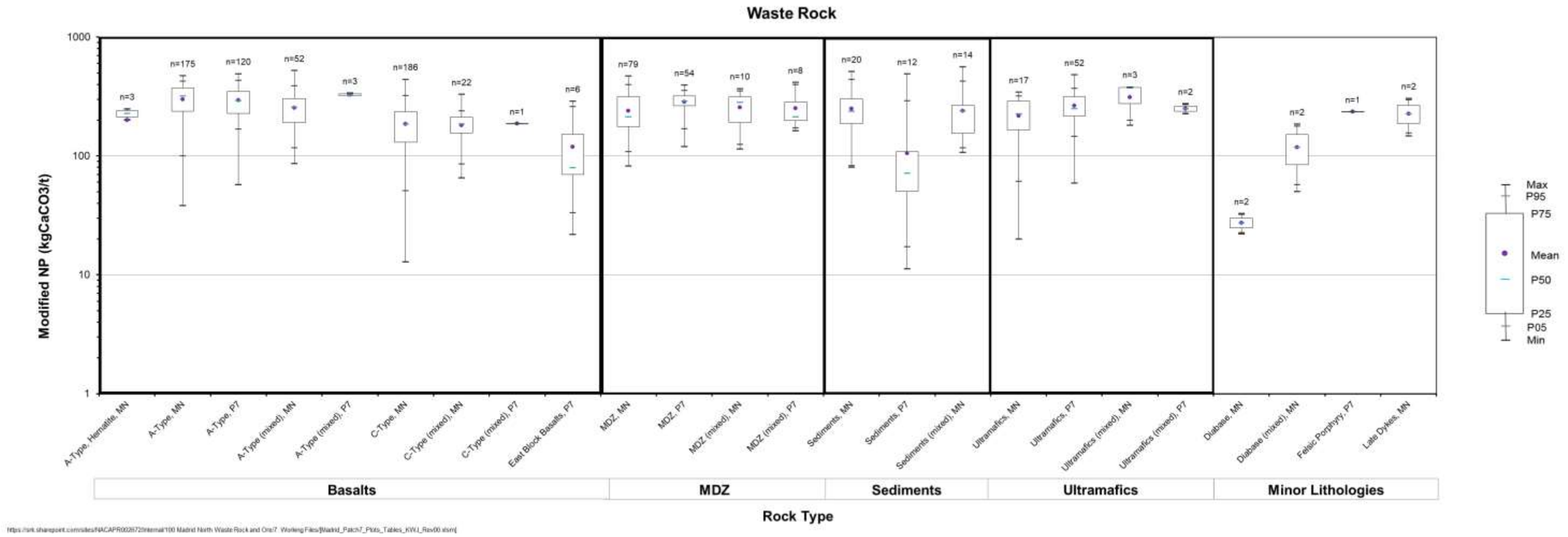


Figure 3-6: Statistical Distribution of Modified NP by Rock Type, Waste Rock



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Carbon Species

TIC

TIC content was high and relatively uniform for all ore samples and equivalent rock types from Madrid North and Patch 7, with 25th to 75th percentile values ranging from 250 to 520 kg $CaCO_3$/t (Figure 3-7).

For waste rock, 25th to 75th percentile values of TIC content was uniformly high with 25th to 75th percentile values ranging from 130 to 480 kg $CaCO_3$/t kg $CaCO_3$/t) except for diabase (12 to 29 kg $CaCO_3$/t) from Madrid North and East Block basalt (65 to 170 kg $CaCO_3$/t) and sediments (71 to 130 kg $CaCO_3$/t) at Patch 7. TIC content was equivalent for equivalent rock types at Madrid North and Patch 7, except for sedimentary rocks (Figure 3-8). For sedimentary rocks, TIC content was higher at Madrid North (190 to 370 kg $CaCO_3$/t) than Patch 7 (71 to 130 kg $CaCO_3$/t).

TIC was greater than NP for the majority of rock types, indicating the presence of iron and/or manganese carbonates which mineralogy indicates is primarily ferroan dolomite (Section 3.1.4) with lesser siderite. Iron and manganese carbonates are net neutral because iron and manganese produced during carbonate dissolution generates acidity through hydrolysis. The relationship between TIC and NP content by rock type is summarized as follows (Figure 3-9):

- TIC and NP content was roughly equivalent for late dykes and diabase (Madrid North) and East Block basalts (Patch 7) except for one diabase (mixed) sample that has much higher NP than TIC (190 and 4.5 kg $CaCO_3$/t , respectively).
- For C-Type basalts (unmixed and mixed) and ultramafics (Madrid North), TIC and NP content was roughly equivalent for samples with NP content less than ~225 kg $CaCO_3$/t whereas TIC exceeds NP for values of NP greater than ~225 kg $CaCO_3$/t .
- The majority of samples have higher TIC than NP including: A-Type basalts (unmixed, hematite altered, and mixed), MDZ (unmixed and mixed), sediments (unmixed and mixed) and ultramafics (mixed) from Madrid North, and A-Type basalts (unmixed and mixed), MDZ (unmixed and mixed), sediments, ultramafics (unmixed and mixed) from Patch 7.

Figure 3-10 presents a comparison of Modified NP and $TIC_{(Ca+Mg)}$ and indicates the following:

- For rock types that had roughly equivalent TIC and NP content, $TIC_{(Ca+Mg)}$ values were typically less than NP indicating the buffering from carbonate minerals is likely underestimated by the calculation.
- For rock types where the majority of samples have higher TIC than N (including C-Type basalt and ultramafics from Madrid North), $TIC_{(Ca+Mg)}$ values better approximated NP content.

Figure 3-7: Statistical Distribution of TIC by Rock Type, Ore

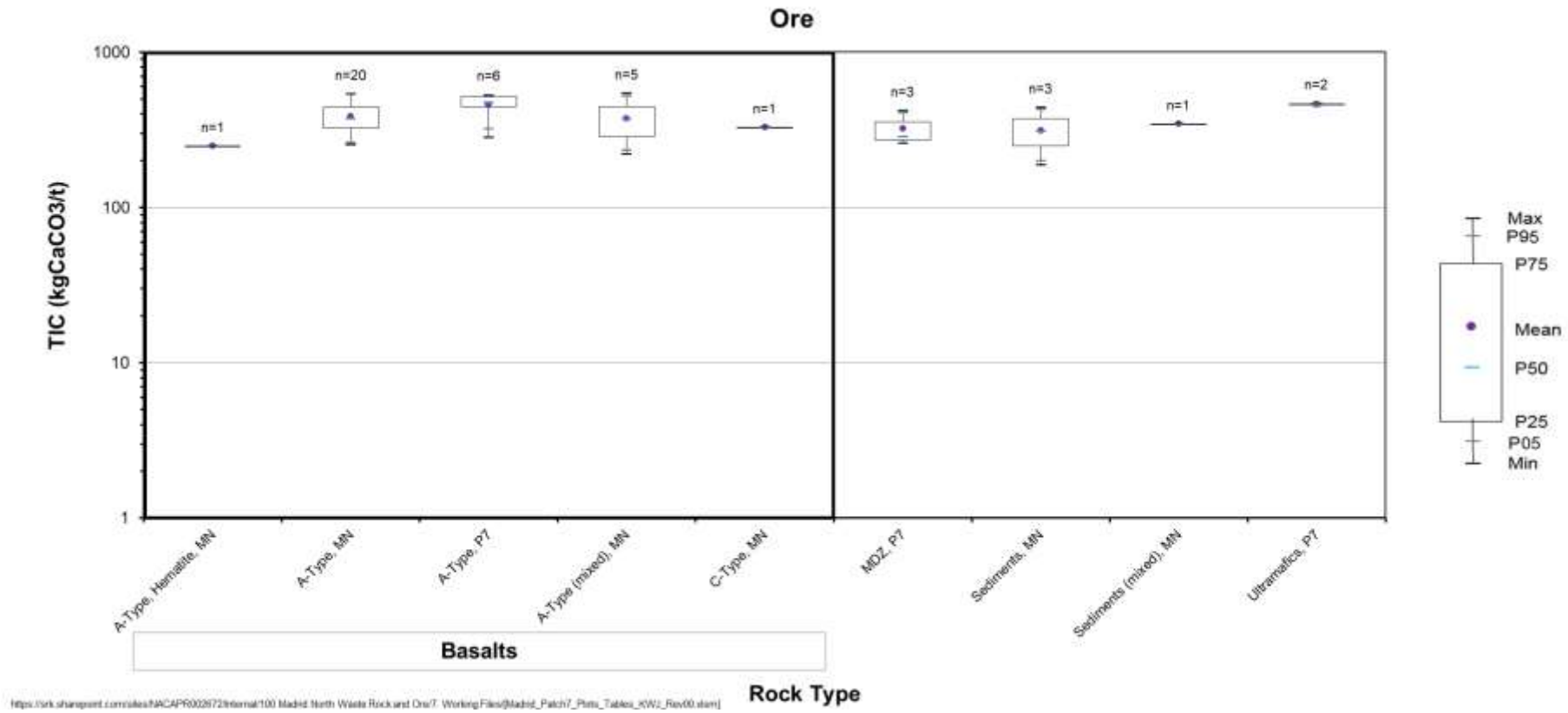

Figure 3-8: Statistical Distribution of TIC by Rock Type, Waste Rock

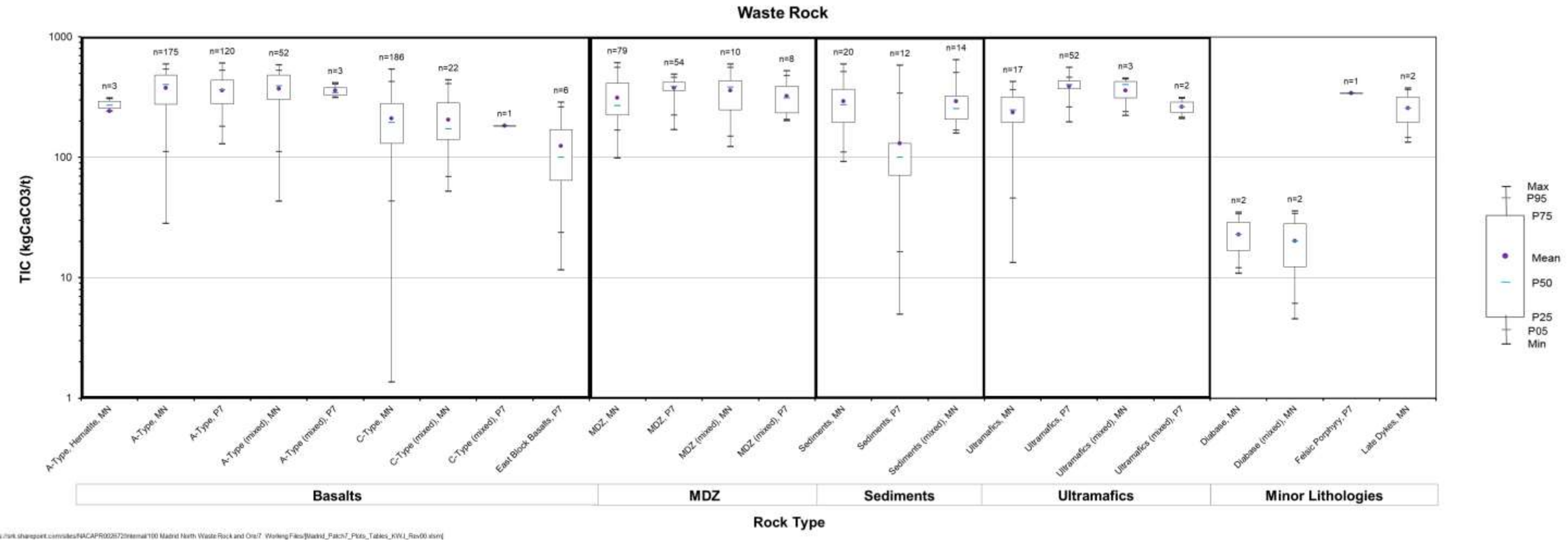

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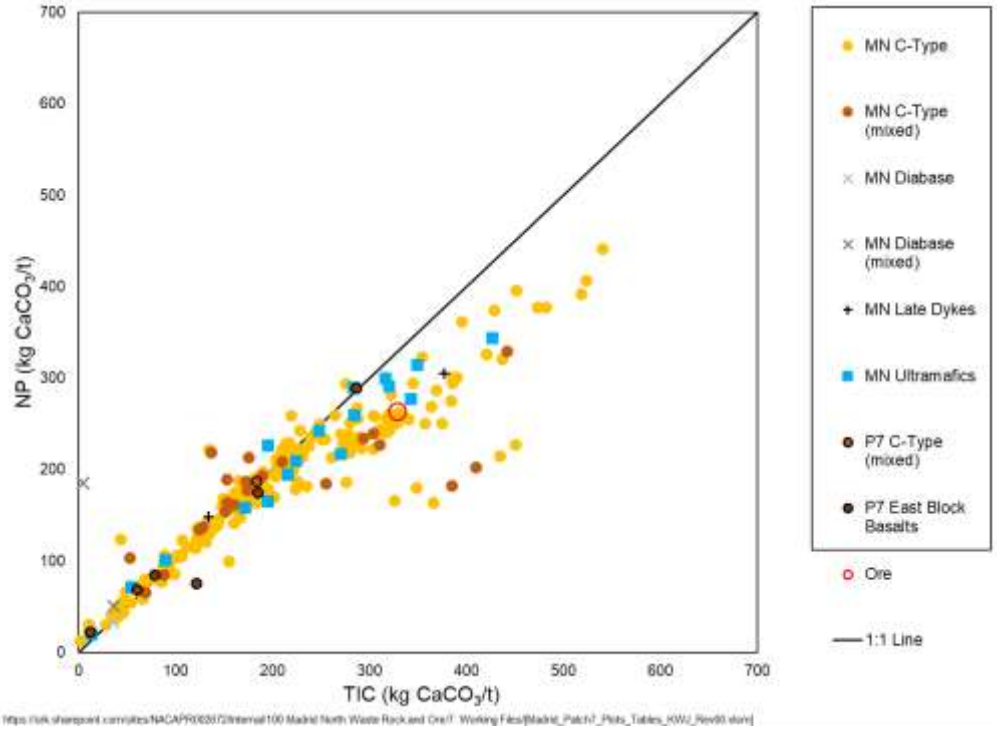
Figure 3-9: Comparison of Modified NP and TIC: a) Rock Types with Roughly Equivalent NP and TIC and b) Rock Types with Higher TIC than NP

a)



b)

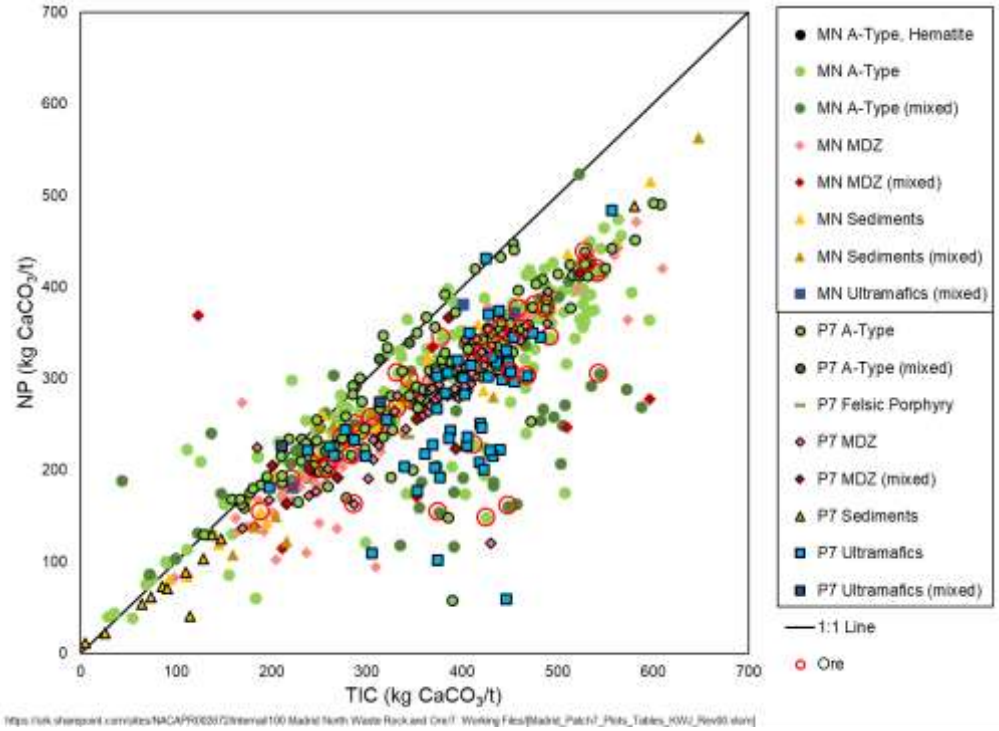
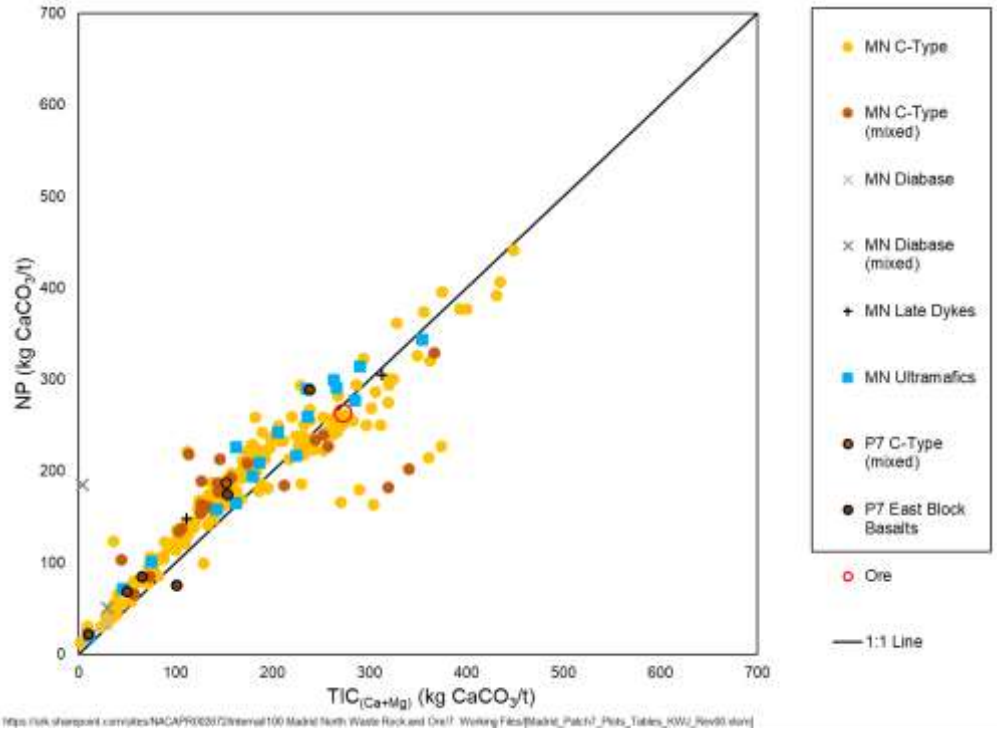
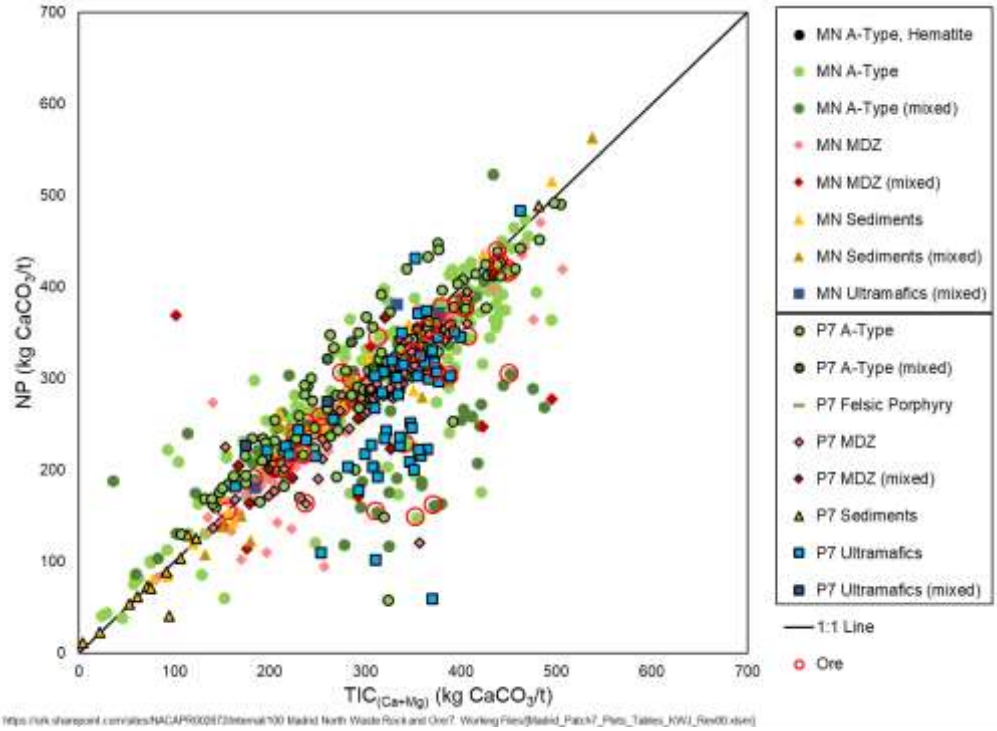


Figure 3-10: Comparison of Modified NP and TIC(Ca+Mg): a) Rock Types with Roughly Equivalent NP and TIC and b) Rock Types with Higher TIC than NP

a)



b)



Non-Carbonate Carbon

Total carbon ranged from 0.11 to 8.7 %C and was at near parity or marginally higher than TIC content indicating that TIC is the dominant form of carbonate at Madrid North and Patch 7 (Figure 3-11). Non-carbonate carbon is inferred to be graphite (Section 1.2.2) and/or organic carbon, the latter which has been indicated in previously metallurgical studies for Madrid North.

For ore samples, non-carbonate carbon content was highest in sediments and ultramafics from Madrid North and Patch 7 (25th to 75th percentile values ranging from 0.46 to 2.2 %C), which were higher than A- and C-Type basalts and MDZ from Madrid North and Patch 7 (<0.01 to 0.52 %C, Figure 3-12).

For waste rock, non-carbonate carbon was variable and is summarized according to decreasing content as follows (values are 25th to 75th percentile values; Figure 3-13):

- Ultramafics and felsic porphyry at Patch 7 (0.69 to 2.3 %C).
- Hematite altered A-Type basalt, sediments (unmixed and mixed) from Madrid North and C-Type basalt (mixed), MDZ (unmixed and mixed), and ultramafics (mixed) from Patch 7 (0.13 to 1 %C)
- A-Type basalt (unmixed and mixed), C-Type basalt (mixed), ultramafics (mixed) and late dykes from Madrid North and sediments from Patch 7 (<0.01 to 0.6 %C).
- Diabase from Madrid North and C-Type basalt, East block basalt and ultramafics from Patch 7 (below or near the level of detection of 0.01 %C)

Figure 3-11: Comparison of TIC and Total Carbon

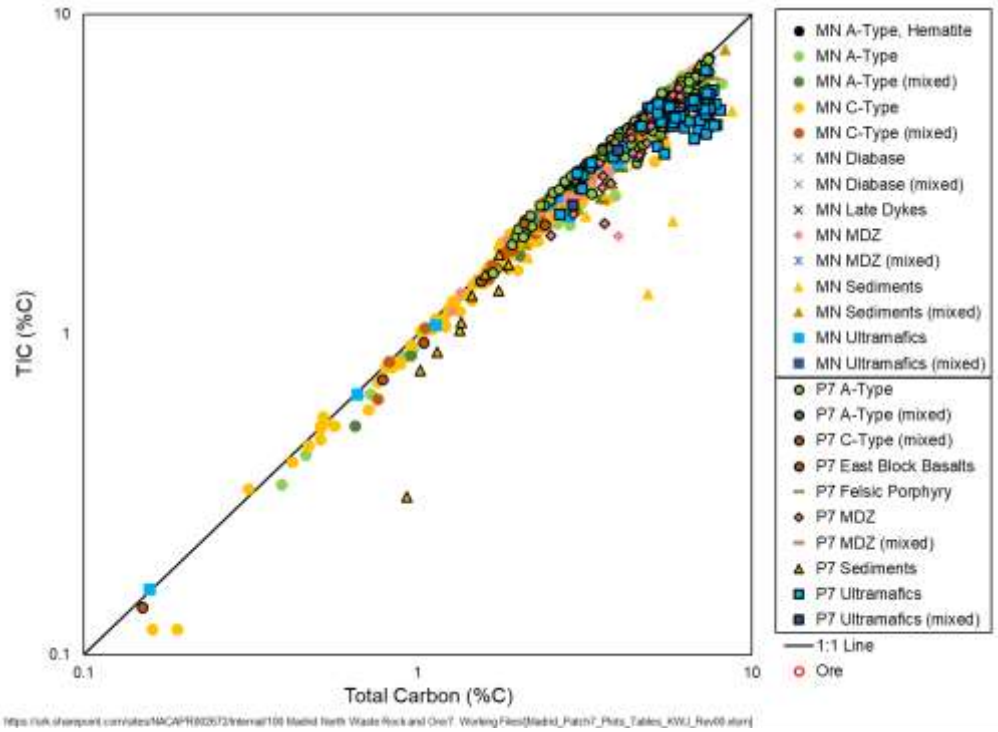


Figure 3-12: Statistical Distribution of Non-Carbonate Carbon by Rock Type, Ore

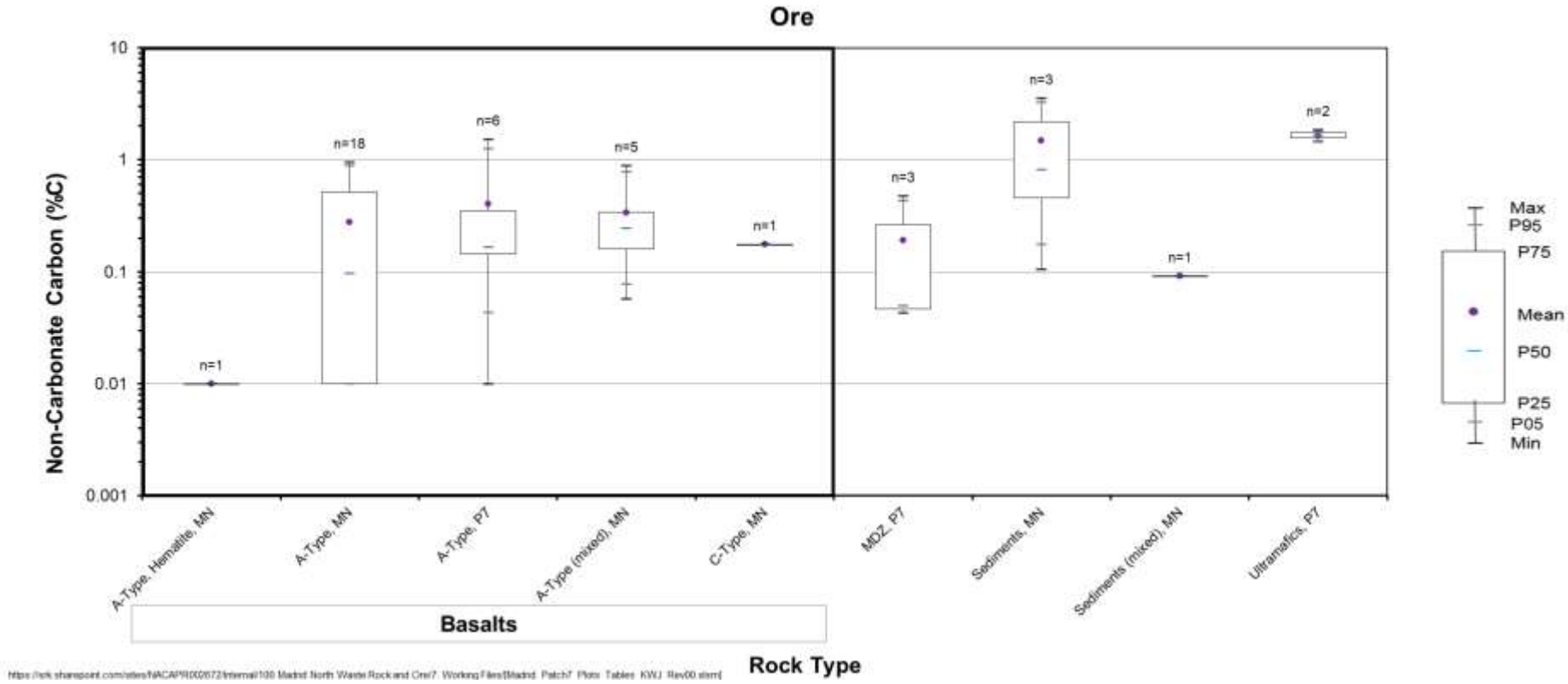
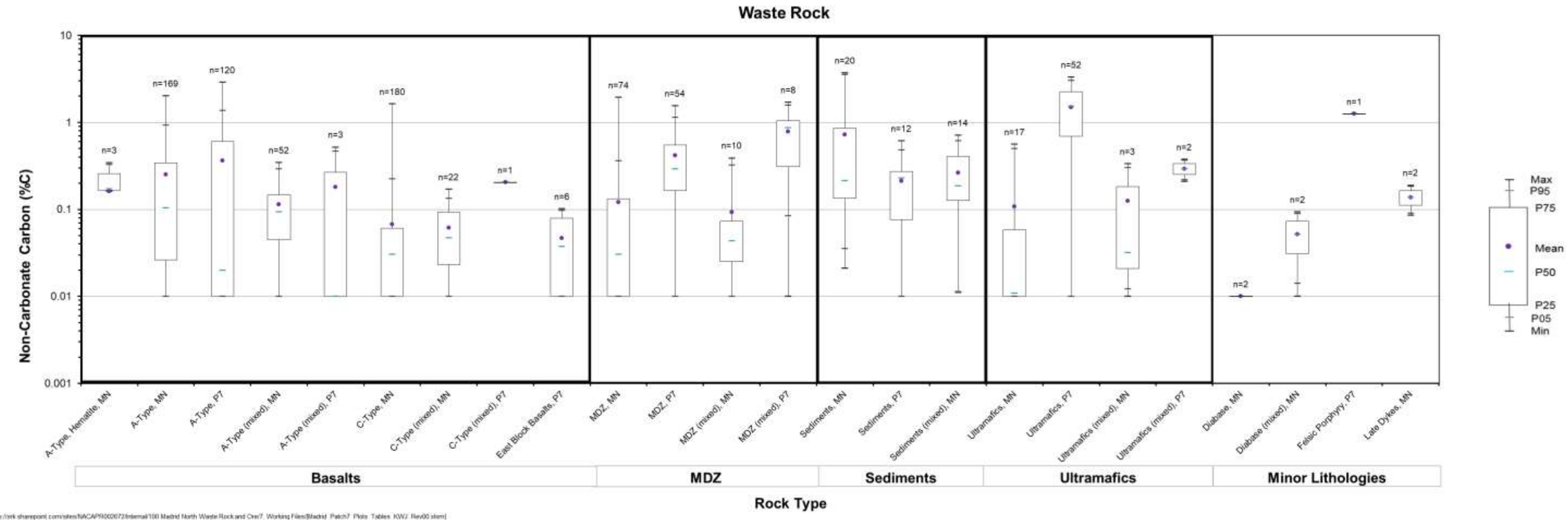


Figure 3-13: Statistical Distribution of Non-Carbonate Carbon by Rock Type, Waste Rock



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ARD Classification

Figure 3-14 to Figure 3-16, Table 3-3 and Table 3-4 show ARD classifications based on values of NP/AP, TIC/AP and $TIC_{(Ca+Mg)}$/AP.

Most ore samples were non-PAG, with 17 to 36% of samples classified as uncertain and 2 to 5 % classified as PAG due to high sulphur content (n=42). A summary of ARD classification of ore samples by rock type is as follows:

- All samples of C-Type basalts from Madrid North and A-Type basalts and ultramafics from Patch 7 were classified as non-PAG on the basis of NP/AP, TIC/AP and $TIC_{(Ca+Mg)}$/AP.
- A-Type basalt (unmixed and mixed) from Madrid North and MDZ from Patch 7 were primarily non-PAG, with a range of 15 to 45% of samples classified as uncertain or PAG on the basis of NP/AP, TIC/AP and $TIC_{(Ca+Mg)}$/AP due to high sulphur content (0.44 to 6.9 %S). Sediments (unmixed and mixed) from Madrid North were primarily uncertain or PAG (67 and 100 % of samples, respectively) on the basis of NP/AP, TIC/AP and $TIC_{(Ca+Mg)}$/AP due to high sulphur content (4.6 to 8.5 %S).
- Hematite altered A-Type basalt was non-PAG by $TIC_{(Ca+Mg)}$/AP and uncertain by NP/AP and TIC/AP.

Similarly, the majority of waste rock samples were classified as non-PAG with 2 to 3% classified as uncertain and <1% classified as PAG on the basis of all classification methods (n=846). Samples classified as uncertain or PAG was due to high sulphur or low NP and/or TIC. All samples of the following rock types were classified as non-PAG on the basis of NP/AP, TIC/AP, $TIC_{(Ca+Mg)}$/AP or the low sulphur criterion (<0.1 %S): C-Type basalt (unmixed and mixed), diabase (unmixed and mixed), late dykes, MDZ (unmixed and mixed), and ultramafics (unmixed and mixed) from Madrid North and A-Type basalt (unmixed and mixed), C-Type basalt (mixed), East Block basalt, felsic porphyry, MDZ (mixed), and ultramafics (unmixed and mixed) from Patch 7. The one sample classified as non-PAG based on the low sulphur criterion was C-Type basalt from Madrid North with TIC and NP content of 1.4 and 13 kg $CaCO_3$/t, respectively.

Waste rock lithologies classified as uncertain or PAG are summarized as follows:

- Hematite altered A-Type basalt from Madrid North (n=3) was classified as uncertain by all classification methods.
- A-Type basalt from Madrid North (n=175) had 1 to 3% of the samples classified as uncertain and <1% of samples that were classified as PAG on the basis of NP/AP only. All samples were classified as uncertain or PAG due to high sulphur (2 to 5 %S). This indicates classification by NP/AP is more conservative for A-Type basalt and is supported by ARD classifications for A-Type basalt (mixed, n=52). In contrast, all A-Type basalt samples from Patch 7 were classified as non-PAG by all methods.
- MDZ samples from Patch 7 were classified as non-PAG by all methods except for 6% of samples with ~2 %S that were classified as uncertain by NP/AP due to lower NP content (140 to 170 kg $CaCO_3$/t).

- The majority (60 to 70%) of sediments at Madrid North and Patch 7 were classified as non-PAG by all classification methods primarily due to high sulphur at Madrid North (1.4 to 9.6 %S) and low NP and/or TIC at Patch 7 (5 to 110 kg $CaCO_3$/t), respectively. More samples were classified as non-PAG by TIC/AP and ($TIC_{(Ca+Mg)}$/AP methods indicating that the NP/AP method is more conservative due to the presence of iron carbonates. At Madrid North and Patch 7, ~35% of samples were classified as uncertain by NP/AP and 5 to 8% classified as PAG by NP/AP. For samples of sediments (mixed), ARD classifications by NP/AP are similarly more conservative with no samples classified as PAG and a higher proportion of samples (86%) classified as non-PAG.

Figure 3-14: Comparison of NP and AP, Waste Rock and Ore

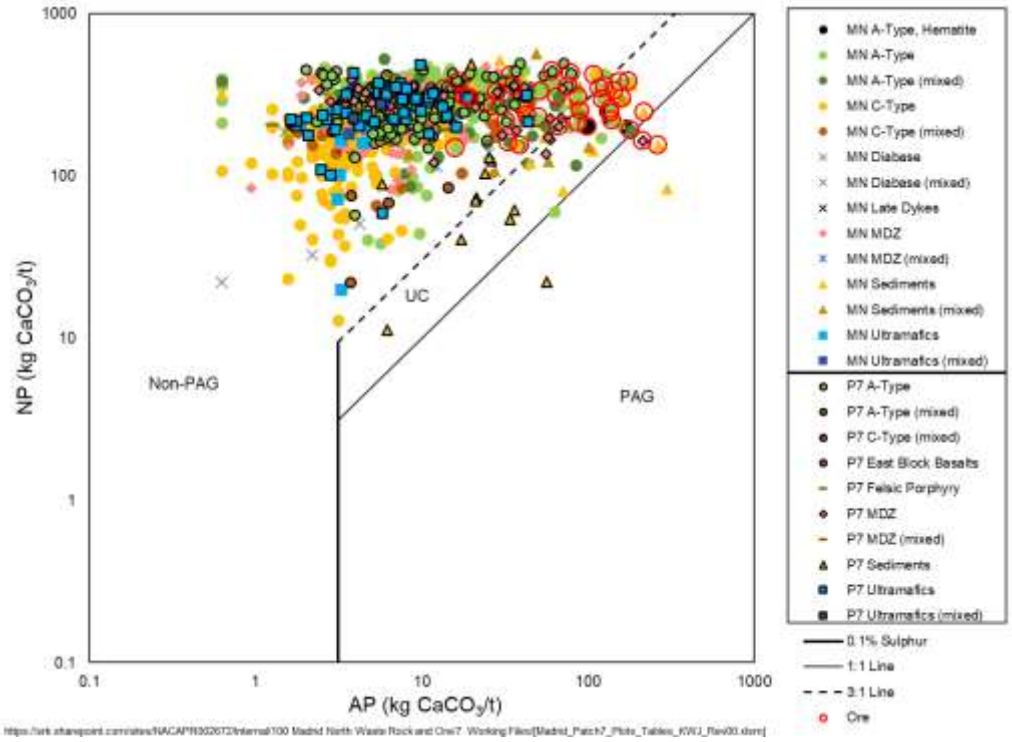


Figure 3-15: Comparison of TIC and AP, Waste Rock and Ore

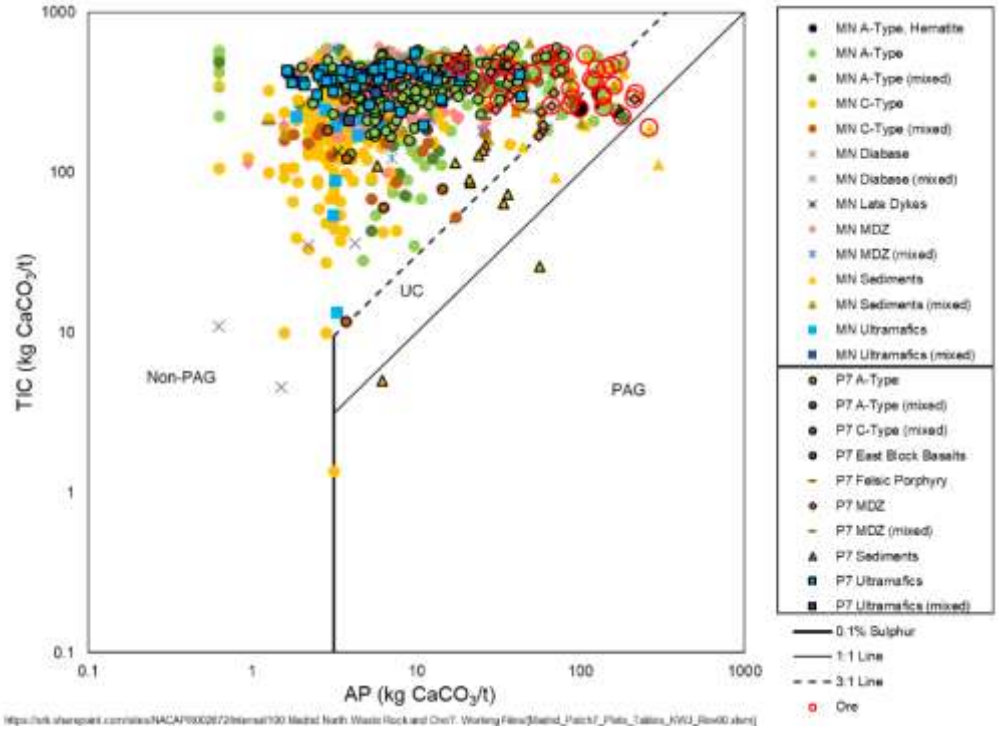


Figure 3-16: Comparison of $TIC_{(Ca+Mg)}$ and AP, Waste Rock and Ore

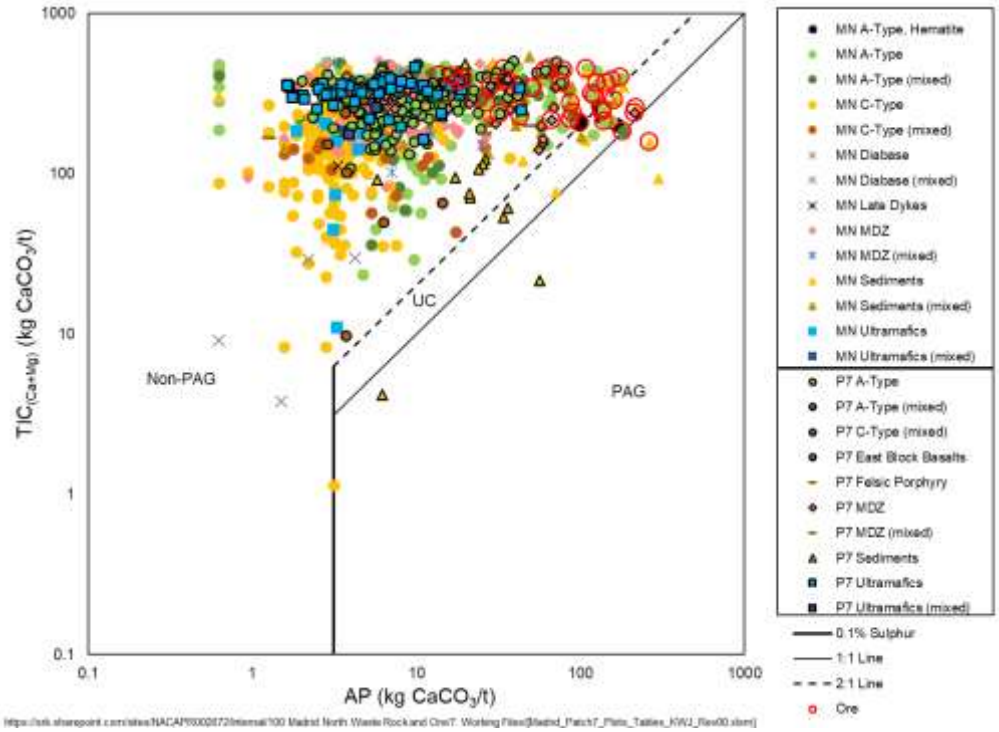


Table 3-3: ARD Classification for Ore by Rock Type and Deposit

Rock Type	Deposit	Number of Samples	ARD Classification (% of Samples)								
			Non-PAG			Uncertain			PAG		
			NP/AP	TIC/AP	$TIC_{(Ca+Mg)}$/AP	NP/AP	TIC/AP	$TIC_{(Ca+Mg)}$/AP	NP/AP	TIC/AP	$TIC_{(Ca+Mg)}$/AP
A-Type, Hematite	Madrid North	1	0%	0%	100%	100%	100%	0%	0%	0%	0%
A-Type	Madrid North	20	55%	70%	85%	45%	30%	15%	0%	0%	0%
	Patch 7	6	100%	100%	100%	0%	0%	0%	0%	0%	0%
A-Type (mixed)	Madrid North	5	60%	80%	80%	40%	20%	20%	0%	0%	0%
C-Type	Madrid North	1	100%	100%	100%	0%	0%	0%	0%	0%	0%
MDZ	Patch 7	3	67%	67%	67%	0%	33%	33%	33%	0%	0%
Sediments	Madrid North	3	0%	33%	33%	67%	33%	33%	33%	33%	33%
Sediments (mixed)	Madrid North	1	0%	0%	0%	100%	100%	100%	0%	0%	0%
Ultramafics	Patch 7	2	100%	100%	100%	0%	0%	0%	0%	0%	0%

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Plots_Tables_KWJ_Rev00.xlsm]

Notes: Orange represents uncertain ARD classification whereas red represents PAG classification (Section 2.4)

Table 3-4: ARD Classification for Waste Rock by Rock Type and Deposit

Rock Type	Deposit	Number of Samples	ARD Classification (% of Samples)								
			Non-PAG			Uncertain			PAG		
			NP/AP	TIC/AP	$TIC_{(Ca+Mg)}/AP$	NP/AP	TIC/AP	$TIC_{(Ca+Mg)}/AP$	NP/AP	TIC/AP	$TIC_{(Ca+Mg)}/AP$
A-Type, Hematite	Madrid North	3	0%	0%	0%	100%	100%	100%	0%	0%	0%
A-Type	Madrid North	175	97%	98%	99%	2.9%	2.3%	1.1%	0.57%	0%	0%
	Patch 7	120	100%	100%	100%	0.0%	0.0%	0%	0%	0%	0%
A-Type (mixed)	Madrid North	52	96%	100%	100%	3.8%	0.0%	0%	0%	0%	0%
	Patch 7	3	100%	100%	100%	0%	0%	0%	0%	0%	0%
C-Type	Madrid North	186	100%	100%	100%	0%	0%	0%	0%	0%	0%
C-Type (mixed)	Madrid North	22	100%	100%	100%	0%	0%	0%	0%	0%	0%
	Patch 7	1	100%	100%	100%	0%	0%	0%	0%	0%	0%
East Block Basalts	Patch 7	6	100%	100%	100%	0%	0%	0%	0%	0%	0%
MDZ	Madrid North	79	100%	100%	100%	0%	0%	0%	0%	0%	0%
	Patch 7	54	94%	100%	100%	5.6%	0%	0%	0%	0%	0%
MDZ (mixed)	Madrid North	10	100%	100%	100%	0%	0%	0%	0%	0%	0%
	Patch 7	8	100%	100%	100%	0%	0%	0%	0%	0%	0%
Sediments	Madrid North	20	60%	70%	70%	35%	25%	25%	5%	5%	5%
	Patch 7	12	58%	67%	67%	33%	17%	17%	8%	17%	17%
Sediments (mixed)	Madrid North	14	86%	93%	93%	14%	7.1%	7.1%	0%	0%	0%
Ultramafics	Madrid North	17	100%	100%	100%	0%	0%	0%	0%	0%	0%
	Patch 7	52	100%	100%	100%	0%	0%	0%	0%	0%	0%
Ultramafics (mixed)	Madrid North	3	100%	100%	100%	0%	0%	0%	0%	0%	0%
	Patch 7	2	100%	100%	100%	0%	0%	0%	0%	0%	0%
Diabase	Madrid North	2	100%	100%	100%	0%	0%	0%	0%	0%	0%
Diabase (mixed)	Madrid North	2	100%	100%	100%	0%	0%	0%	0%	0%	0%
Felsic Porphyry	Patch 7	1	100%	100%	100%	0%	0%	0%	0%	0%	0%
Late Dykes	Madrid North	2	100%	100%	100%	0%	0%	0%	0%	0%	0%

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Plots_Tables_KWJ_Rev00.xlsm]

3.1.3 Trace Elements

Appendix D presents a statistical summary of trace element contents for ore and waste by rock type and area (Madrid North and Patch 7). Complete trace element data for the 2023 sample set are presented in Appendix E.

All ore lithologies were enriched in sulphur and arsenic (Table 3-5). Arsenic content for ore samples had 25th to 75th percentile concentrations between 220 and 1,000 ppm (Figure 3-17). Other parameters above the screening criteria in ore samples included silver +/- cadmium, mercury, antimony, selenium, thallium and tungsten for A-Type basalts (unmixed and mixed); silver for MDZ at Patch 7; and silver and antimony for sediments at Madrid North and ultramafics at Patch 7.

All waste rock lithologies were enriched in at least one parameter as defined by the screening criteria except for the one waste rock sample of C-Type (mixed) from Patch 7 (Table 3-6). For all other rock types, arsenic was above the screening criterion for all waste rock lithologies except for East Block basalt waste rock from Patch 7. The distribution of arsenic is summarized as follows (Figure 3-18):

- Arsenic content was highest for A-Type basalts (unmixed, hematite altered and mixed), late dykes, and sediments from Madrid North and felsic porphyry and ultramafics from Patch 7 (25th to 75th percentile values ranging from 40 to 700 ppm).
- Arsenic was higher for A-Type basalt, C-Type basalt and sediments at Madrid North compared to equivalent rock types at Patch 7. Conversely, arsenic was higher for ultramafics at Patch 7.
- A-Type basalt at Madrid North and Patch 7 had higher arsenic content than C-Type basalt (unmixed and mixed), which was higher than East Block basalt (25th to 75th percentile values ranging from 2 to 68 ppm and 1 ppm for both values, respectively).
- Arsenic content was relatively uniform for MDZ (unmixed and mixed) at Madrid North and Patch 7, except for MDZ (mixed) at Patch 7 (25th to 75th percentile values ranging from 52 to 190 ppm and 8.8 to 230 ppm, respectively).

For waste rock, other parameters elevated relative to the screening criteria are summarized as follows:

- Sulphur for all rock types except C-Type basalts (mixed) and ultramafics (mixed) from Madrid North and Patch 7 and diabase (unmixed and mixed) from Madrid North.
- Antimony for all rock types except C-Type basalt, ultramafics, and diabase from Madrid North and East Block basalt, MDZ, sediments and felsic porphyry from Patch 7.
- Other parameters exhibiting enrichment included cadmium, thallium, silver, selenium, tungsten, +/- mercury for A-Type basalt, C-Type basalt, and MDZ at Madrid North.

Table 3-5: Summary of Elemental Enrichment for Ore Samples by Rock Type and Deposit

Rock Type	Deposit	No. of Samples	P95 > 10x Crustal Abundance
A-Type, Hematite	Madrid North	1	S, As
A-Type	Madrid North	20	S, Ag, As, Hg, Sb, Tl
	Patch 7	6	S, Ag, As, W
A-Type (mixed)	Madrid North	5	S, Ag, As, Cd, Sb, Se, Tl
C-Type	Madrid North	1	S, As
MDZ	Patch 7	3	S, Ag, As
Sediments	Madrid North	3	S, Ag, As, Sb
Sediments (mixed)	Madrid North	1	S, As
Ultramafics	Patch 7	2	S, Ag, As, Sb

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Plots_Tables_KWJ_Rev00.xlsm]

Table 3-6: Summary of Elemental Enrichment for Waste Rock Samples by Rock Type and Deposit

Rock Type	Deposit	No. of Samples	P95 > 10x Crustal Abundance
A-Type, Hematite	Madrid North	3	S, As, Sb
A-Type	Madrid North	175	S, As, Cd, Sb, Tl
	Patch 7	120	S, As, Sb
A-Type (mixed)	Madrid North	52	S, Ag, As, Cd, Sb, Se, Tl
	Patch 7	3	S, As, W
C-Type	Madrid North	186	S, As
C-Type (mixed)	Madrid North	22	Ag, As, Cd, Sb, Se, Tl
	Patch 7	1	
East Block Basalts	Patch 7	6	S
MDZ	Madrid North	79	S, As, Hg, Sb, Se, Tl
	Patch 7	54	S, As
MDZ (mixed)	Madrid North	10	S, As, Cd, Sb, Se, Tl
	Patch 7	8	S, As
Sediments	Madrid North	20	S, As, Sb
	Patch 7	12	S, As
Sediments (mixed)	Madrid North	14	S, Ag, As, Cd, Sb, Se, Tl
Ultramafics	Madrid North	17	S, As
	Patch 7	52	S, As, Sb
Ultramafics (mixed)	Madrid North	3	As
	Patch 7	2	As
Diabase	Madrid North	2	As
Diabase (mixed)	Madrid North	2	As, Cd, Sb, Tl
Felsic Porphyry	Patch 7	1	S, As
Late Dykes	Madrid North	2	S, As, Sb

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Plots_Tables_KWJ_Rev00.xlsm

Figure 3-17: Statistical Distribution of Arsenic by Rock Type, Ore

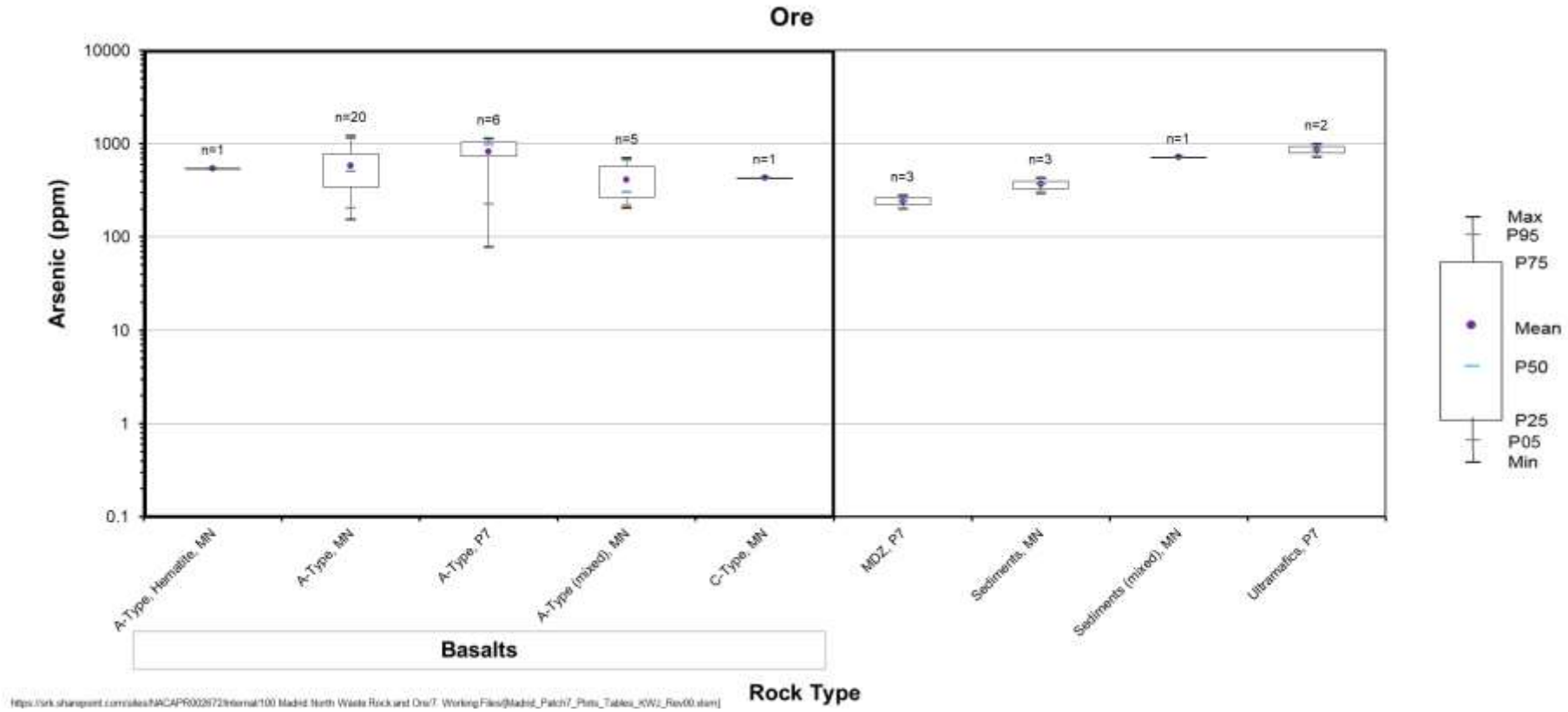
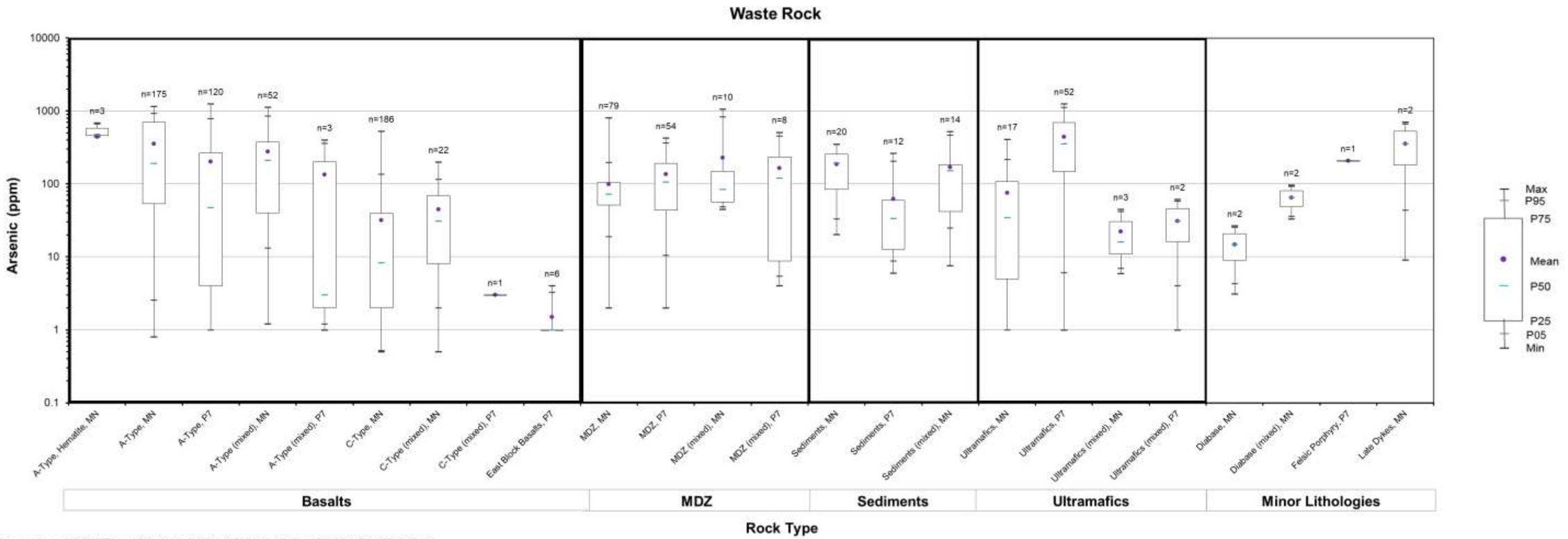


Figure 3-18: Statistical Distribution of Arsenic by Rock Type, Waste Rock



https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7 Working Files/[Madrid_Patch7_Plots_Tables_KWJ_Rev00.xlsm]

3.1.4 Mineralogy

Table 3-7 and Table 3-8 present a summary of carbonate, sulphide and silicate mineralogy data indicated by QXRD for ore and waste from Madrid North, respectively. Complete mineralogy results for the existing sample set are presented in the appendices of SRK (2017). Mineralogy results and interpretations are only for Madrid North (Section 2.1.1), as Patch 7 samples do not have existing mineralogy data. Mineralogical analysis by TIMA-X are in progress on select Patch 7 samples.

Ferroan dolomite, chlorite, muscovite-sericite, plagioclase, and quartz were typically the dominant minerals for all ore and waste rock types. From an ARD perspective, carbonate and sulphide minerals are of the greatest importance and the focus of this discussion.

Pyrite was the only sulphide mineral detected by XRD, with levels ranging from less than detection (<1 wt%) to 9 wt% and <1 wt% to 16 wt% for ore and waste rock, respectively (Figure 3-19 and Figure 3-20). Overall, most samples had pyrite levels below detection, with a minor proportion of samples (22 %) having pyrite content at or above 1 wt%. For ore, most samples had pyrite above the detection limit, with all samples of each rock type having detectable pyrite except for one sample of A-Type basalt. Pyrite was roughly equivalent for all rock types with 25th to 75th percentile values ranging from 1 to 6 wt%. For waste rock samples, sediments (mixed) had the highest pyrite content (25th to 75th percentile values ranging from <1 to 2 wt%), followed by sediments and A-Type basalts (unmixed and mixed) (25th to 75th percentile values ranging from <1 to 1.25 wt%), which were greater than C-Type basalts (unmixed and mixed), MDZ, and late dykes (all samples in this subset had 25th to 75th percentile values <1 wt%).

Carbonate mineralogy was dominated by iron carbonates present as ferroan dolomite (Ca(Fe,Mg)(CO_3)2), magnesite-siderite, and magnesite ($MgCO_3$) with lesser calcite ($CaCO_3$) and siderite ($FeCO_3$). Figure 3-21 and Figure 3-22 present the statistical distribution of ferroan dolomite by rock type for ore and waste rock, whereas Figure 3-23 and Figure 3-24 present the statistical distribution of calcite by rock type for ore and waste rock.

All ore rock types had roughly equivalent ferroan dolomite abundances (minimum of 29 to maximum of 57 wt%). Magnesite and calcite content was typically below or equal to analytical detection with two samples of A-Type basalt (mixed) containing 11 and 25 wt% magnesite. Siderite was below detection for all ore samples.

Iron carbonate content in waste rock varied by rock type with ferroan dolomite content highest for A-Type basalt (unmixed and mixed), late dykes, MDZ (unmixed and mixed), and sediments (unmixed and mixed) with 25th and 75th percentile values between 4.5 to 43 wt%, which were higher than C-Type basalt (unmixed and mixed), diabase, sediments (unmixed and mixed) and ultramafics (unmixed and mixed) with 25th and 75th percentile values between <1 to 32 wt%. A summary of other carbonate minerals in waste rock is summarized by rock type as follows:

- Calcite was highest in ultramafics (unmixed and mixed; 25th to 75th percentile values between 14 to 23 wt%, followed by A-Type basalt (unmixed and mixed), C-Type basalt (unmixed and mixed) and sediments (unmixed and mixed) with 25th and 75th percentile values between <1 to 17 wt%, which

were higher than diabase, late dykes, and MDZ (unmixed and mixed) with 25th and 75th percentile values <1 wt%).

- Magnesite-siderite was present in a low proportion (~9%) of A-Type basalt (unmixed and mixed), MDZ (unmixed and mixed), and sediment samples at 25th to 75th percentile ranges <1 wt% and a maximum of 37 wt% in A-Type basalt (mixed).
- Magnesite was present in a low proportion (~3%) of samples of A-Type basalt (unmixed and mixed), C-Type basalts, MDZ, and diabase (mixed) at 25th to 75th percentile ranges <1 wt% and a maximum of 26 wt% in A-Type basalt.
- Siderite was present in a low proportion (~2%) of A-Type basalt (unmixed and mixed), MDZ (unmixed and mixed), and sediment samples at 25th to 75th percentile ranges <1 wt% and a maximum of 4 wt% in sediments.

Table 3-7: Summary of QXRD Mineralogy Data of Ore Samples by Rock Type, Madrid North

Rock Type	Statistic / Sample ID	Carbonates					Sulphides		Silicates					
		Ferroan Dolomite	Calcite	Magnesite	Siderite	Siderite / Magnesite	Pyrite	Amphibole	Chlorite	Muscovite / Sericite	Plagioclase	Potassium Feldspar	Pyroxene	Quartz
		%	%	%	%	%	%	%	%	%	%	%	%	%
A-Type	HB-05PMD291106131	33	-	20	-	-	-	-	15	7	12	-	-	14
	HB-06PMD470291.76296	34	bd	-	bd	bd	1	bd	18	8	19	bd	bd	19
	HB-07PMD5222738	35	bd	-	bd	bd	7	bd	9	bd	23	bd	bd	24
	HB-07PMD610121125	29	bd	-	bd	bd	4	bd	3	bd	34	bd	bd	30
	HB-PMD155258265	43	-	-	-	-	1	-	13	12	3	-	-	21
A-Type (mixed)	HB-05PMD2916.231	38	-	11	-	-	1	-	10	9	14	-	-	16
	HB-05PMD293184205.14	35	-	25	-	-	1	-	4	4	4	-	-	27
	HB-06PMD470314.55326.64	31	bd	-	bd	bd	4	bd	8	6	14	5	bd	31
	HB-08PMD65023.8533	28	bd	-	bd	bd	9	bd	5	7	21	bd	bd	29
	HB-PMD150130155	57	1	-	-	-	1	-	8	9	5	-	4	13
C-Type	HB-06PMD4708588	35	bd	bd	bd	bd	3	bd	13	11	25	bd	bd	13
Sediments (mixed)	HB-07PMD6102223	37	bd	bd	bd	bd	6	bd	22	bd	13	12	bd	10

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Plots_Tables_KWJ_Rev00.xlsm]

Notes: "-" symbol indicates mineral was not detected; bd indicates mineral content is below detection limit of 1 wt%

Table 3-8: Statistical Summary of QXRD Mineralogy Data of Waste Rock Samples by Rock Type, Madrid North

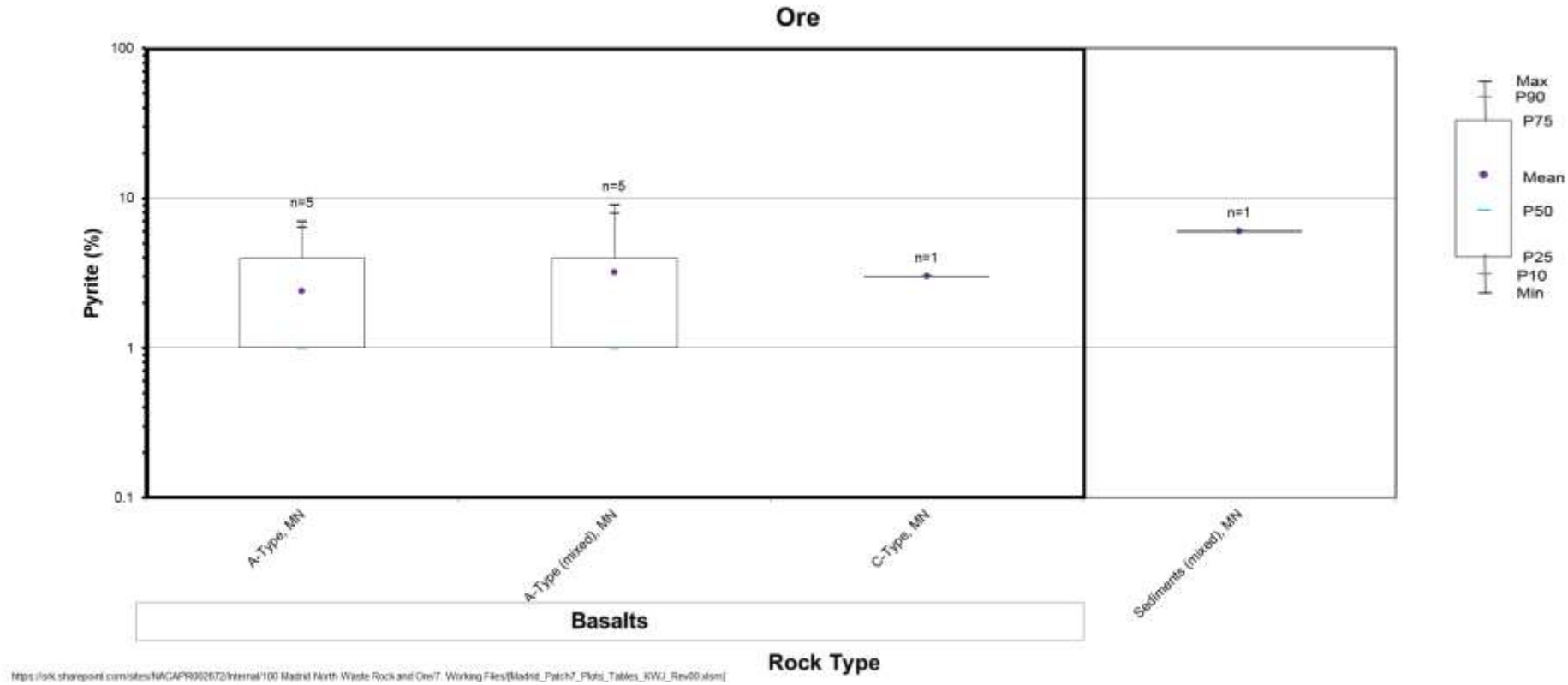
Rock Type	Statistic / Sample ID	Carbonates					Sulphides	Silicates						
		Ferroan Dolomite	Calcite	Magnesite	Siderite	Siderite / Magnesite	Pyrite	Amphibole	Chlorite	Muscovite / Sericite	Plagioclase	Potassium Feldspar	Pyroxene	Quartz
		%	%	%	%	%	%	%	%	%	%	%	%	%
A-Type	Min	bd	bd	bd	bd	bd	bd	bd	2	bd	bd	bd	bd	1
	P50	33	bd	bd	bd	bd	bd	bd	25	7	6	bd	bd	18
	Max	56	32	26	4	19	3	41	61	27	39	22	9	40
	Count	124	124	124	124	124	124	124	124	124	124	124	124	124
A-Type (mixed)	Min	bd	bd	bd	bd	bd	bd	bd	2	bd	bd	bd	bd	5
	P50	37	bd	bd	bd	bd	bd	bd	23	6	4.5	bd	bd	18
	Max	56	22	20	2	37	3	36	51	19	43	bd	4	35
	Count	48	48	48	48	48	48	48	48	48	48	48	48	48
C-Type	Min	bd	bd	bd	bd	bd	bd	bd	1	bd	bd	bd	bd	2
	P50	5	7	bd	bd	bd	bd	bd	34	bd	12	bd	bd	19
	Max	53	24	12	bd	bd	2	23	63	21	42	6	10	31
	Count	150	150	150	150	150	150	150	150	150	150	150	150	150
C-Type (mixed)	Min	bd	bd	bd	bd	bd	bd	bd	10	bd	bd	bd	bd	5
	P50	4	9	bd	bd	bd	bd	bd	29	8	11	bd	bd	16
	Max	45	17	bd	bd	bd	2	35	59	14	32	bd	6	28
	Count	19	19	19	19	19	19	19	19	19	19	19	19	19
MDZ	Min	12	bd	bd	bd	bd	bd	bd	bd	3	bd	bd	bd	19
	P50	36	bd	bd	bd	bd	bd	bd	7	11	1	bd	bd	28
	Max	59	3	5	1	7	2	bd	29	26	9	bd	bd	48
	Count	46	46	46	46	46	46	46	46	46	46	46	46	46
MDZ (mixed)	Min	14	bd	bd	bd	bd	bd	bd	8	3	bd	bd	bd	18
	P50	37	bd	bd	bd	bd	bd	bd	14	7	bd	bd	bd	22
	Max	52	3	bd	1	2	2	bd	19	21	12	bd	13	31
	Count	7	7	7	7	7	7	7	7	7	7	7	7	7
Sediments	Min	bd	bd	bd	bd	bd	bd	bd	2	bd	bd	bd	bd	16
	P50	18	bd	bd	bd	bd	bd	bd	4.5	8	14	bd	bd	22
	Max	48	25	bd	4	6	16	bd	47	24	33	13	bd	30
	Count	12	12	12	12	12	12	12	12	12	12	12	12	12

Rock Type	Statistic / Sample ID	Carbonates					Sulphides			Silicates				
		Ferroan Dolomite	Calcite	Magnesite	Siderite	Siderite / Magnesite	Pyrite	Amphibole	Chlorite	Muscovite / Sericite	Plagioclase	Potassium Feldspar	Pyroxene	Quartz
		%	%	%	%	%	%	%	%	%	%	%	%	%
Sediments (mixed)	Min	bd	bd	bd	bd	bd	bd	bd	4	bd	bd	bd	bd	14
	P50	13	12	bd	bd	bd	1	bd	38	10	9.5	bd	bd	19
	Max	31	23	bd	bd	bd	2	bd	52	15	27	bd	bd	24
	Count	10	10	10	10	10	10	10	10	10	10	10	10	10
Ultramafics	Min	bd	4	bd	bd	bd	bd	bd	27	bd	bd	bd	bd	5
	P50	6.5	18	bd	bd	bd	bd	bd	39	bd	3.5	bd	bd	12
	Max	21	29	bd	bd	bd	bd	16	49	7	6	bd	bd	16
	Count	8	8	8	8	8	8	8	8	8	8	8	8	8
Ultramafics (mixed)	HB-08PSD14280.0887.5	16	22	-	bd	bd	bd	bd	40	bd	bd	bd	bd	18
Diabase	HB-06PMD470371.05376.28	1	bd	-	bd	bd	bd	bd	8	bd	45	bd	40	5
	HB-07PMD54273.2877	4	bd	-	bd	bd	bd	bd	8	bd	63	bd	18	2
Diabase (mixed)	HB-PMD150153161.4	-	-	1	-	-	-	-	3	bd	38	-	36	6
Late Dykes	HB-06PMD470331.17331.48	40	bd	-	bd	bd	1	bd	14	14	bd	bd	bd	31

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Plots_Tables_KWJ_Rev00.xlsm]

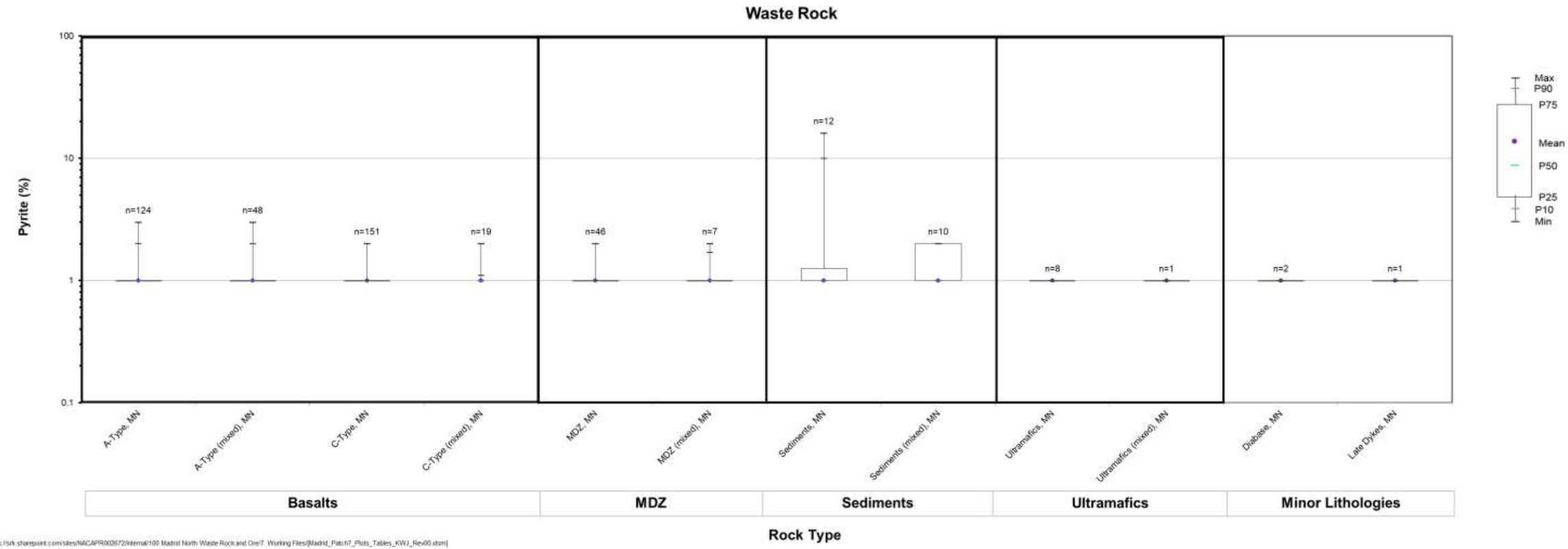
Notes: "-" symbol indicates mineral was not detected; bd indicates mineral content is below detection limit of 1 wt%

Figure 3-19: Statistical Distribution of Pyrite by Rock Type, Ore



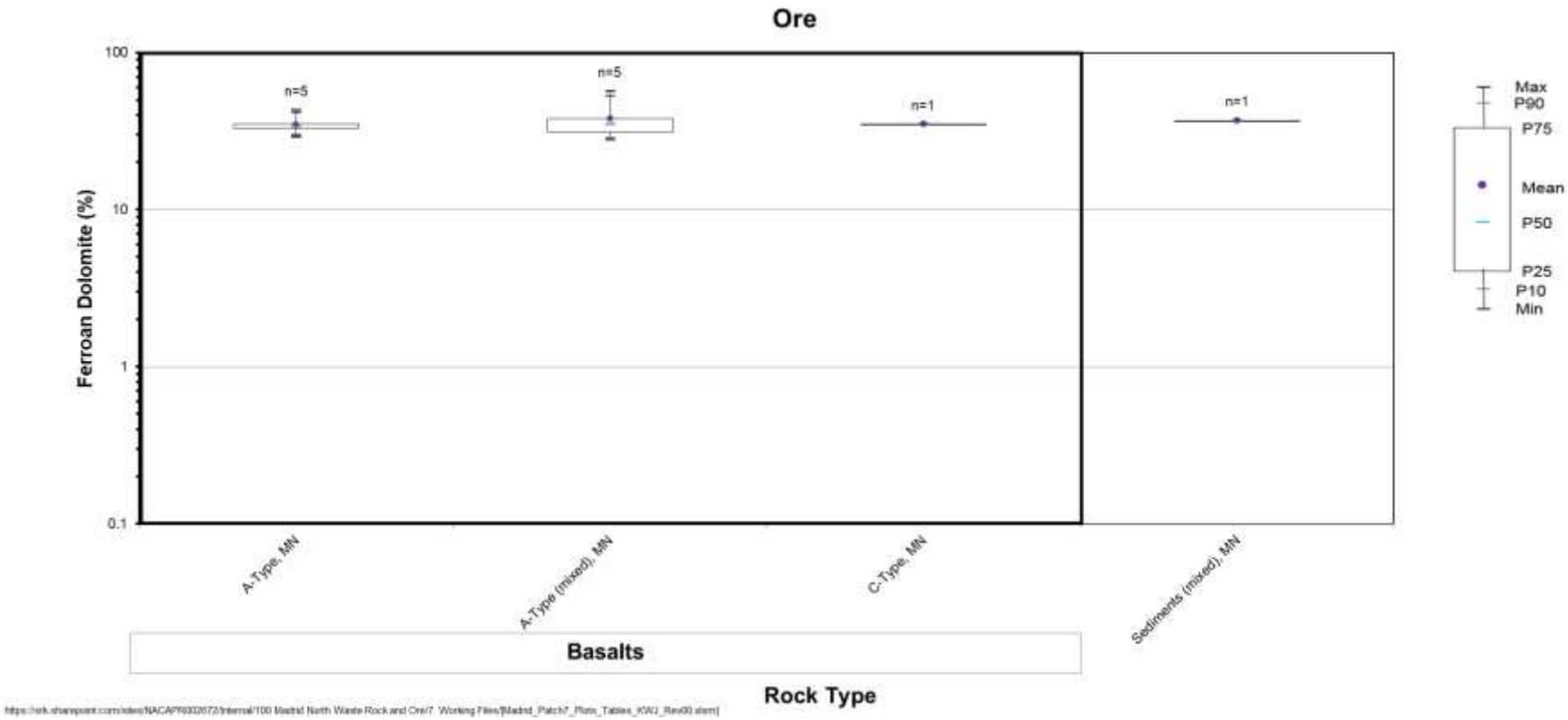
Notes: Statistics below the detection limit are shown as equal to the detection limit (1 wt%)

Figure 3-20: Statistical Distribution of Pyrite by Rock Type, Waste Rock



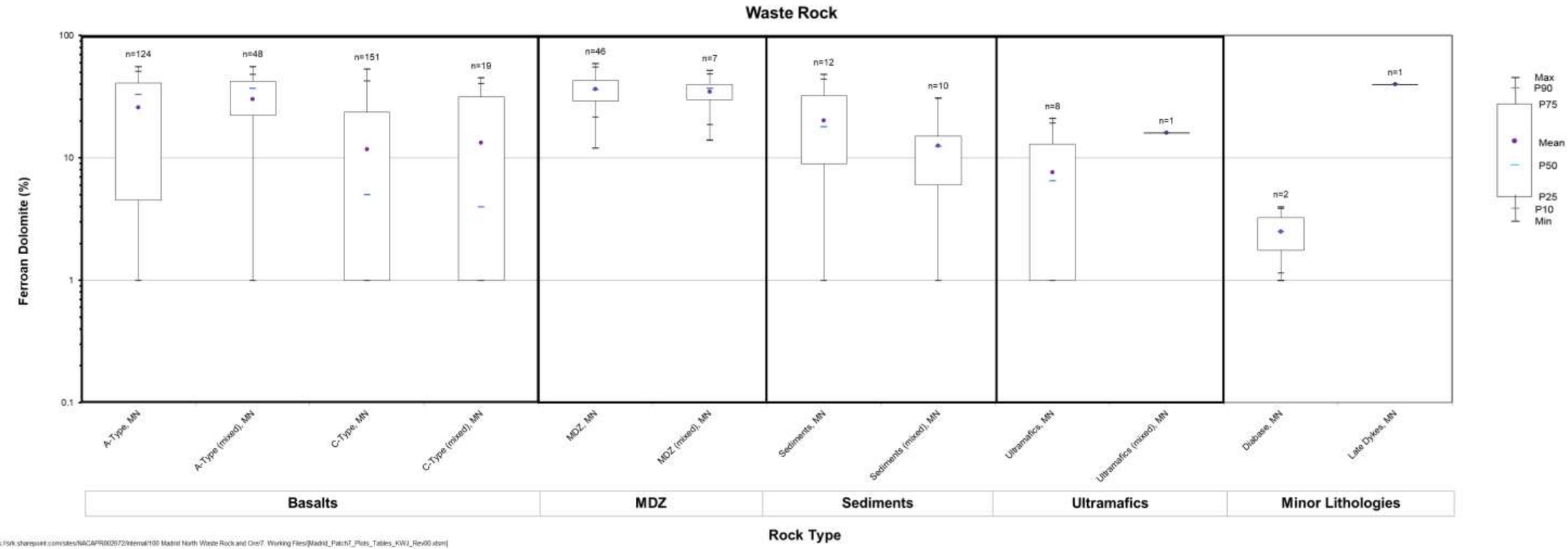
Notes: Statistics below the detection limit are shown as equal to the detection limit (1 wt%)

Figure 3-21: Statistical Distribution of Ferroan Dolomite by Rock Type, Ore



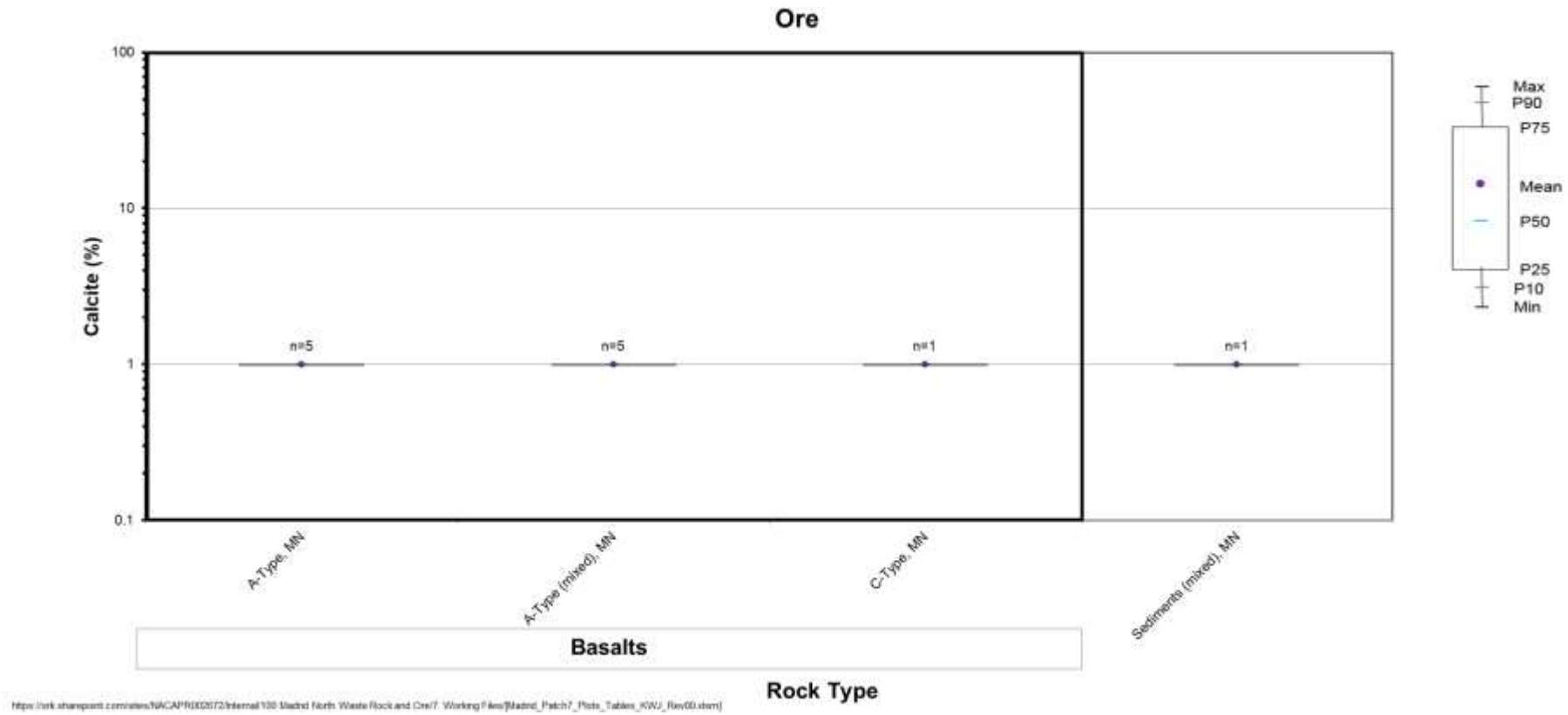
Notes: Statistics below the detection limit are shown as equal to the detection limit (1 wt%)

Figure 3-22: Statistical Distribution of Ferroan Dolomite by Rock Type, Waste Rock



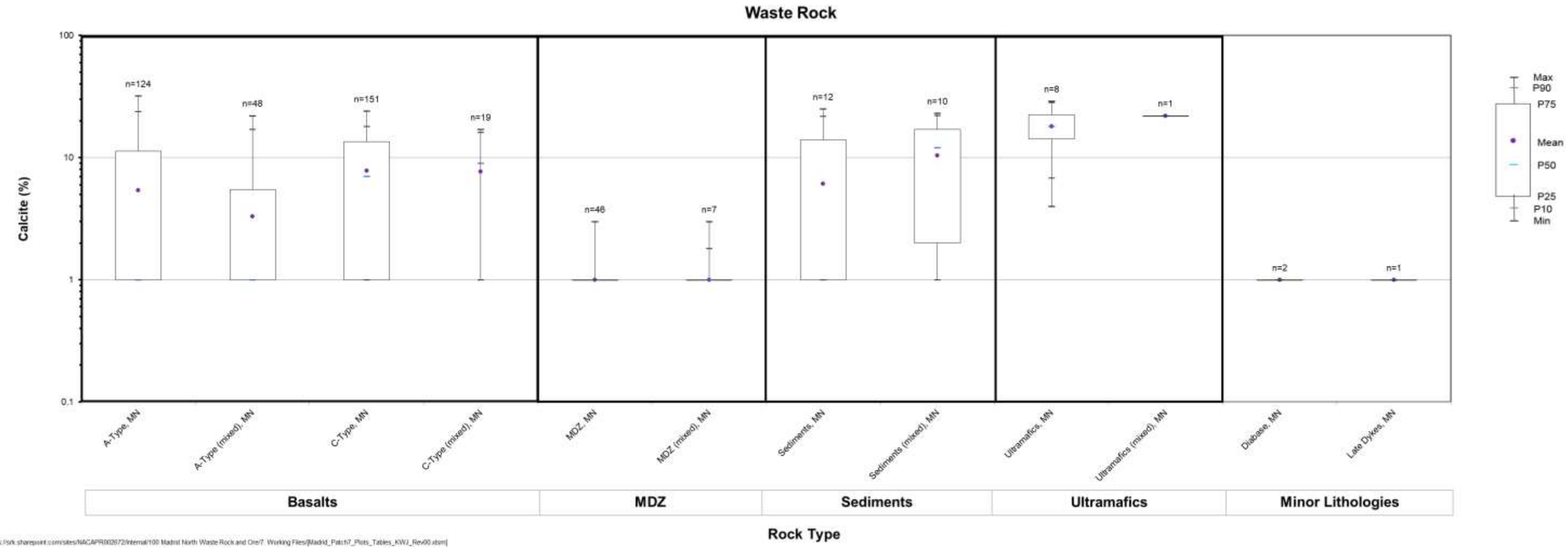
Notes: Statistics below the detection limit are shown as equal to the detection limit (1 wt%)

Figure 3-23: Statistical Distribution of Calcite by Rock Type, Ore



Notes: Statistics below the detection limit are shown as equal to the detection limit (1 wt%)

Figure 3-24: Statistical Distribution of Calcite by Rock Type, Waste Rock



Notes: Statistics below the detection limit are shown as equal to the detection limit (1 wt%)

3.1.5 Comparison of Madrid North and Patch 7 Waste Rock

Section 3.1.1 to 3.1.3 compares the geology, ABA data and trace element content for waste rock lithologies from Madrid North and Patch 7.

A comparison of ABA data by rock type indicated that ABA data are relatively uniform except for the following:

- For sedimentary rocks, TIC content was higher at Madrid North (190 to 370 kg $CaCO_3$/t) than Patch 7 (50 to 130 kg $CaCO_3$/t), however ARD classification by NP/AP was more conservative at both areas, suggesting the presence of iron and/or carbonates in sediment. This indicates while TIC content vary, the mineralogical controls on NP are the same. Mineralogical analysis in progress for Patch 7 waste rock HCT samples (Section 3.1.4) will confirm the carbonate mineralogy.
- All A-Type basalt at Patch 7 were classified as non-PAG, whereas at Madrid North, ~3% were classified as uncertain and <1% as PAG by NP/AP. The samples classified as uncertain or PAG were due to high sulphur (2 to 5 %S).

Trace element content indicated that arsenic was above the screening criterion for all waste rock lithologies except for C-Type basalt (mixed) and East Block basalt from Patch 7. The 25th to 75th percentile ranges of arsenic indicated variability between rock types and mining area and is summarized as follows (Figure 3-18):

- Overall, arsenic content was highest for A-Type basalts (unmixed, hematite altered and mixed), late dykes and sediments from Madrid North and felsic porphyry and ultramafics from Patch 7.
- Arsenic was higher for A-Type basalt, C-Type basalt and sediments at Madrid North compared to equivalent rock types at Patch 7. Conversely, arsenic was higher for ultramafics at Patch 7.
- A-Type basalt at Madrid North and Patch 7 had higher arsenic content than C-Type basalt (mixed and unmixed), which was higher than East Block basalt.
- Arsenic content was relatively uniform for MDZ at Madrid North and Patch 7.

Overall, a comparison of the ML/ARD static data by waste rock lithology indicate that Patch 7 is geochemically equivalent to Madrid North with variable arsenic content between areas and higher sulphur content at Madrid North. This indicates that HCT samples from Madrid North are geologically representative of Patch 7, but that the definition of “average” and “high” content and therefore base case and upper-case leaching rates will be specific to the mining area. Characterization of C-Type basalt from Patch 7 is in progress and the existing comparison is based on one sample of C-Type basalt (mixed), as discussed in Section 3.1.1.

3.2 Humidity Cells

The following sections summarize the results and interpretations of the SRK (2017) HCT data for waste rock and ore according to the updated rock types (Section 2.2) and within the context of Madrid North and Patch 7 (Section 3.1.5).

3.2.1 Sample Set

Table 2-4 summarizes the Madrid North waste rock and ore rock lithologies from SRK (2017) and the updated rock types that align with Agnico Eagle's geology update. The HCT sample set includes waste rock classified as A-Type basalts (unmixed and mixed), C-Type basalts (unmixed and mixed), diabase, MDZ, and sediments, and ore classified as A-Type basalts and C-Type basalts. Additional HCTs for the Madrid North and Patch 7 deposits have been initiated, however data are pending and the results will be documented in an updated version of this report (Section 2.2.2).

3.2.2 Static Data

Mineralogy

Table 3-9 and Table 3-10 present carbonate mineralogy and sulphide mineralogy for the HCT sample set, respectively. The stoichiometric formulae for carbonate minerals determined by SEM for the HCT sample set are presented in Table 3-11.

Mineralogy of the HCT samples was consistent with the static sample set for Madrid North and Patch 7 and is summarized as follows:

- Iron carbonates (ferroan dolomite with trace siderite) were the dominant carbonate minerals for ore and waste rock and all rock types except selected samples of C-Type basalt (HC-3, HC-4, HC-9, and HC-18). For these selected samples of C-Type basalt, calcite was the dominant carbonate mineral. In general, calcite was indicated in selected samples of A-Type and C-Type basalt. Magnesite was below detection except for HC-41 (C-Type basalt).
- Pyrite content as indicated by MLA was higher in ore samples than most waste rock samples (A-Type and C-Type basalt; 6.6 and 3.6 wt%, respectively).
- For waste rock, pyrite was the dominant sulphide mineral and was highest in sediments (range of 3.6 to 9.3 wt%), followed by A-Type and MDZ samples (range of 0.13 to 3.7 wt%), which were higher than C-Type (unmixed and mixed) waste rock samples except for HC-17 (all samples below 0.4 wt % other than HC-17 (2.1 wt%)) and diabase (range of below detection (<0.01 wt%) to 0.016 wt%).
- Trace sulphide minerals indicated by MLA included chalcopyrite, gersdorffite ((Fe,Co,Ni)AsS), pyrrhotite, cobaltite, and sphalerite in ore samples is summarized as follows:
  - Chalcopyrite content was 0.011 and 0.013 wt% in the A-Type and C-Type basalt ore samples (HC-26 and HC-28), respectively.

  - Gersdorffite was detected in both A-Type and C-Type basalt ore samples (0.015 and 0.02 wt%, respectively).
  - Pyrrhotite, cobaltite, and sphalerite were below detection (<0.01 wt%) in the A-Type and C-Type basalt ore samples.

- Trace sulphide minerals indicated by MLA included chalcopyrite, gersdorffite ((Fe,Co,Ni)AsS), pyrrhotite, cobaltite, and sphalerite in waste rock samples is summarized as follows:
  - Chalcopyrite content in waste rock samples ranged from <0.01 to 0.79 wt% and was indicated in all A-Type basalt, C-Type basalt (unmixed and mixed), and most sediment and MDZ samples.
  - Gersdorffite content ranged from below detection (<0.01 wt%) to 0.094 wt% in waste rock samples. Gersdorffite was indicated in all A-Type basalt HCT samples and selected samples of C-Type basalt, MDZ, and sediments (HC-27, HC-41, HC-29, and HC-20; 0.014, 0.025, 0.01, and 0.094 wt%, respectively). Gersdorffite was not detected in C-Type (mixed) and diabase HCT samples.
  - Pyrrhotite was only detected above the detection limit (0.01 wt%) in select waste rock samples of C-Type (mixed), diabase, MDZ, and sediments (range of 0.014 to 0.18 wt%).
  - Cobaltite was only above detection in a single A-Type waste rock sample (HC-25, 0.013 wt%).
  - Sphalerite was only above detection in the C-Type (mixed) sample (HC-19, 0.022 wt%).

Table 3-11 presents the stoichiometry of ferroan dolomite and siderite mineral grains for the HCT samples. Ferroan dolomite was present in all samples, except those where SEM analysis was not conducted (HC-3, HC-4, HC-19, and HC-22). Siderite was only present in HC-8 (A-Type basalt), HC-9 and HC-41 (C-Type basalt), and HC-5 and HC-29 (MDZ).

Table 3-9: Summary of Carbonate Mineralogy, SRK (2017) HCT Sample Set

Economic Classification	Rock Type	Humidity Cell ID	Carbonates							
			Ferroan Dolomite		Siderite		Magnesite	Siderite/Magnesite	Calcite	
			$Ca(Fe,Mg)CO_3$		$FeCO_3$		$MgCO_3$	$(Fe,Mg)CO_3$	$CaCO_3$	
			XRD	MLA	XRD	MLA	XRD	XRD	XRD	MLA
Waste	A-Type	HC-8	23	42	bd	0.056	bd	bd	7	3.8
		HC-8a	26	--	bd	--	bd	bd	5.9	--
		HC-24	45	41	bd	<0.01	bd	bd	bd	0.075
		HC-25	31	24	bd	<0.01	bd	bd	bd	0.075
	C-Type	HC-3	2	--	bd	--	bd	bd	13	--
		HC-3a	2	--	bd	--	bd	bd	13	--
		HC-4	bd	bd	bd	--	bd	bd	9	--
		HC-4a	bd	--	bd	--	bd	bd	8.5	--
		HC-9	bd	4.9	bd	<0.01	bd	bd	14	8.1
		HC-17	23	25	bd	0.015	bd	bd	6	3.0
		HC-18	5	12	bd	0.01	bd	bd	6	3.1
		HC-27	30	24	bd	<0.01	bd	bd	2	2.4
		HC-40	15	5.8	bd	<0.02	bd	bd	bd	0.058
		HC-41	41	33	bd	<0.03	12	bd	bd	<0.01
	C-Type (mixed)	HC-19	bd	1.2	bd	<0.01	bd	bd	9	6.4
	Diabase	HC-22	1	1	bd	<0.01	bd	bd	bd	0.89
		HC-23	4	1	bd	0.048	bd	bd	bd	0.47
	MDZ	HC-5	28	25	1	0.94	bd	bd	bd	0.045
		HC-5a	29	--	bd	--	bd	0.65	bd	--
		HC-29	39	33	bd	1.1	bd	2	bd	<0.01
		HC-30	37	52	bd	<0.01	bd	bd	1	0.32
		HC-39	36	13	1	<0.01	bd	bd	bd	0.022
	Sediments	HC-20	26	44	bd	0.036	bd	bd	bd	<0.01
		HC-21	20	14	bd	<0.01	bd	bd	bd	0.052
Ore	A-Type	HC-26	35	36	bd	0.025	bd	bd	bd	<0.01
	C-Type	HC-28	35	31	bd	<0.01	bd	bd	bd	0.039

Sources: https://srk.sharepoint.com/:x:/r/sites/NACAPR002672/Internal/100%20Madrid%20North%20Waste%20Rock%20and%20Ore/5.%20Kinetic%20Files/HCT_HB_WR_Outcomes.mc.REV14_KWJ.xlsm

Notes: "--" symbol indicates mineral was not detected; bd indicates mineral content is below detection limit of 1 wt%

Table 3-10: Summary of Sulphide Mineralogy, SRK (2017) HCT Sample Set

Economic Classification	Rock Type	Humidity Cell ID	Sulphides								Sulphide Sulphur		
			Pyrite		Chalcopyrite	Gersdorffite	Pyrrhotite	Galena	Cobaltite	Sphalerite	Tetrahedrite			
			FeS_2		$CuFeS_2$	(Fe,Co,Ni)AsS	$Fe_{(1-x)}S$	PbS	CoAsS	ZnS	Cu_3SbS	%S		
			XRD	MLA	MLA	MLA	MLA	MLA	MLA	MLA	MLA	XRD	MLA	ABA
Waste	A-Type	HC-8	bd	1.3	0.077	0.011	< 0.01	bd	< 0.01	< 0.01	bd	bd	0.73	0.26
		HC-8a	bd	--	--	--	--	--	--	--	--	bd	--	0.35
		HC-24	3	3.7	0.032	0.029	< 0.001	bd	< 0.001	< 0.001	bd	1.6	2	2.2
		HC-25	bd	0.97	0.026	0.014	< 0.001	bd	0.013	< 0.001	bd	bd	0.53	0.4
	C-Type	HC-3	bd	--	--	--	--	--	--	--	--	bd	--	0.17
		HC-3a	bd	--	--	--	--	--	--	--	--	bd	--	0.12
		HC-4	bd	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	bd	0	0.1
		HC-4a	bd	--	--	--	--	--	--	--	--	bd	0	0.14
		HC-9	bd	0.18	0.014	bd	< 0.01	bd	< 0.01	bd	bd	bd	0.11	0.07
		HC-17	bd	2.1	0.029	bd	bd	bd	< 0.01	bd	bd	bd	1.1	0.37
		HC-18	bd	0.13	0.055	bd	bd	bd	< 0.01	bd	bd	bd	0.09	0.12
		HC-27	tr	0.14	0.025	0.014	bd	bd	< 0.01	< 0.01	bd	tr	0.094	0.15
		HC-40	bd	0.26	0.02	bd	< 0.001	bd	< 0.001	bd	bd	bd	0.15	0.11
		HC-41	bd	0.4	0.015	0.035	bd	bd	< 0.001	bd	< 0.01	bd	0.23	0.27
	C-Type (mixed)	HC-19	bd	0.58	0.038	bd	0.18	bd	< 0.001	0.022	< 0.001	bd	0.4	0.24
	Diabase	HC-22	bd	0.016	0.061	bd	0.033	bd	bd	bd	< 0.001	bd	0.042	0.02
		HC-23	bd	< 0.01	0.061	bd	< 0.01	bd	bd	bd	< 0.001	bd	0.03	0.07
	MDZ	HC-5	bd	1.7	< 0.01	< 0.01	0.014	bd	< 0.01	< 0.01	bd	bd	0.93	0.16
		HC-5a	bd	--	--	--	--	--	--	--	--	bd	--	0.24
		HC-29	bd	0.13	0.011	0.01	bd	bd	< 0.001	bd	bd	bd	0.073	0.19
		HC-30	bd	0.72	0.79	bd	< 0.001	bd	bd	bd	bd	bd	0.66	0.55
		HC-39	1	1.1	0.02	< 0.01	< 0.001	bd	bd	< 0.001	bd	bd	0.59	0.54
	Sediments	HC-20	tr	6.1	< 0.01	0.094	< 0.001	bd	< 0.001	bd	bd	tr	3.3	0.43
		HC-21	5	9.3	0.022	bd	0.042	bd	< 0.001	< 0.01	bd	2.7	5	3.5
Ore	A-Type	HC-26	7	6.6	0.011	0.015	< 0.001	< 0.001	bd	bd	bd	3.7	3.5	3.9
	C-Type	HC-28	3	3.6	0.013	0.02	< 0.001	bd	< 0.001	< 0.001	bd	1.6	1.9	1.3

Sources: https://srk.sharepoint.com/:x:/r/sites/NACAPR002672/Internal/100%20Madrid%20North%20Waste%20Rock%20and%20Ore/5.%20Kinetic%20Files/HCT_HB_WR_Outcomes.mc.REV14_KWJ.xlsm

Notes: "--" symbol indicates mineral was not detected; bd indicates mineral content is below detection limit of 1 wt%

Table 3-11: Carbonate Mineral Stoichiometric Formulas for SRK (2017) HCT Samples

Economic Classification	Rock Type	Humidity Cell ID	Ferroan Dolomite	Siderite
			$Ca(Fe,Mg)CO_3$	$FeCO_3$
Waste	A-Type	HC-8	$Ca(Mg_{0.77}Fe_{0.23})CO_3$	$(Mg_{0.39}Fe_{0.61})CO_3$
		HC-24	$Ca(Mg_{0.87}Fe_{0.13})CO_3$	--
		HC-25	$Ca(Mg_{0.72}Fe_{0.28})CO_3$	--
	C-Type	HC-3	--	--
		HC-4	--	--
		HC-9	$Ca(Mg_{0.72}Fe_{0.28})CO_3$	$(Mg_{0.14}Fe_{0.86})CO_3$
		HC-17	$Ca(Mg_{0.89}Fe_{0.11})CO_3$	--
		HC-18	$Ca(Mg_{0.80}Fe_{0.20})CO_3$	--
		HC-27	$Ca(Mg_{0.67}Fe_{0.33})CO_3$	--
		HC-40	$Ca(Mg_{0.92}Fe_{0.08})CO_3$	--
		HC-41	$Ca(Mg_{0.75}Fe_{0.25})CO_3$	$(Fe_{0.43}Mg_{0.57})CO_3$
	C-Type (mixed)	HC-19	--	--
	Diabase	HC-22	--	--
		HC-23	$Ca(Mg_{0.82}Fe_{0.18})CO_3$	--
	MDZ	HC-5	$Ca(Mg_{0.67}Fe_{0.33})CO_3$	$(Mg_{0.44}Fe_{0.56})CO_3$
		HC-29	$Ca(Mg_{0.71}Fe_{0.29})CO_3$	$(Fe_{0.57}Mg_{0.43})CO_3$
		HC-30	$Ca(Mg_{0.68}Fe_{0.32})CO_3$	--
		HC-39	$Ca(Mg_{0.68}Fe_{0.32})CO_3$	--
	Sediments	HC-20	$Ca(Mg_{0.80}Fe_{0.20})CO_3$	--
		HC-21	$Ca(Mg_{0.66}Fe_{0.34})CO_3$	--
Ore	A-Type	HC-26	$Ca(Mg_{0.81}Fe_{0.19})CO_3$	--
	C-Type	HC-28	$Ca(Mg_{0.67}Fe_{0.33})CO_3$	--

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Plots_Tables_KWJ_Rev00.xlsm]

Acid-Base Accounting

Table 3-12 presents a summary of ABA data for the SRK (2017) HCT sample set by rock type. Figure 3-25 to Figure 3-30 show the percent rank of total sulphur, NP, and TIC content relative to rock type and economic classification. HCT samples are plotted relative to the source area (Madrid North in Figure 3-25 to Figure 3-30, however as discussed in Section 3.1.5, sample from Madrid North represent the equivalent rock type from Patch 7. For example, HC-8 represents ~50th percentile total sulphur content for A-Type basalt from Patch 7 (Figure 3-26).

This section discusses the ABA characteristics for the ore and waste rock HCT samples relative to the overall ABA sample for Madrid North and Patch 7. For the purpose of discussion, “typical” is defined as containing 25th to 75th percentile levels and “high” refers to ~95th percentile levels.

Ore

- A-type basalt: HC-26 contained typical sulphur levels for Madrid North whereas total sulphur was greater than the maximum for the Patch 7 sample. NP and TIC content was typical Madrid North and <25th percentile levels from Patch 7. HC-26 was classified as uncertain by NP/AP and non-PAG by other methods.
- C-type Basalt: HC-28 was the only sample of C-Type basalt (1.3 %S). HC-28 was classified as non-PAG.

Waste Rock

- A-Type basalt (n=3); total sulphur content for HC-8 and HC-25 represented typical total sulphur levels for Madrid North and Patch 7 whereas HC-24 (previously classified as ore; 2.2 %S) represented ≥ 95th percentile levels.
- C-Type basalt (n=8): HC-3, HC-4, HC-18, HC-27, and HC-40 contained typical total sulphur content whereas HC-17, HC-41 and HC-19 (mixed) had high sulphur content. HC-9 had <25th percentile content. Notably, HC-17 was logged as basalt with sediments (1aj).
- MDZ (n=4): HC-5 and HC-29 had typical sulphur content and HC-30 and HC-39 had high sulphur content.
- Diabase (n=2): the samples represented the minimum and maximum sulphur content.
- Sediment (n=2): HC-20 and HC-21 contained typical sulphur levels for Madrid North and greater than maximum levels for Patch 7.
    - As described in SRK (2017), for HC-20 the total sulphur value as determined by MLA (3.3 %S) was used for HCT data interpretation rather than the ABA value, which was significantly lower (0.43 %S).
- NP and TIC content was typical for all samples except for HC-41 (C-Type basalt) which had 95th percentile levels.
- All samples were classified as non-PAG except HC-21 (sediment) which was classified as uncertain by all methods.

Table 3-12: Summary of ABA Data, SRK (2017) HCT Sample Set

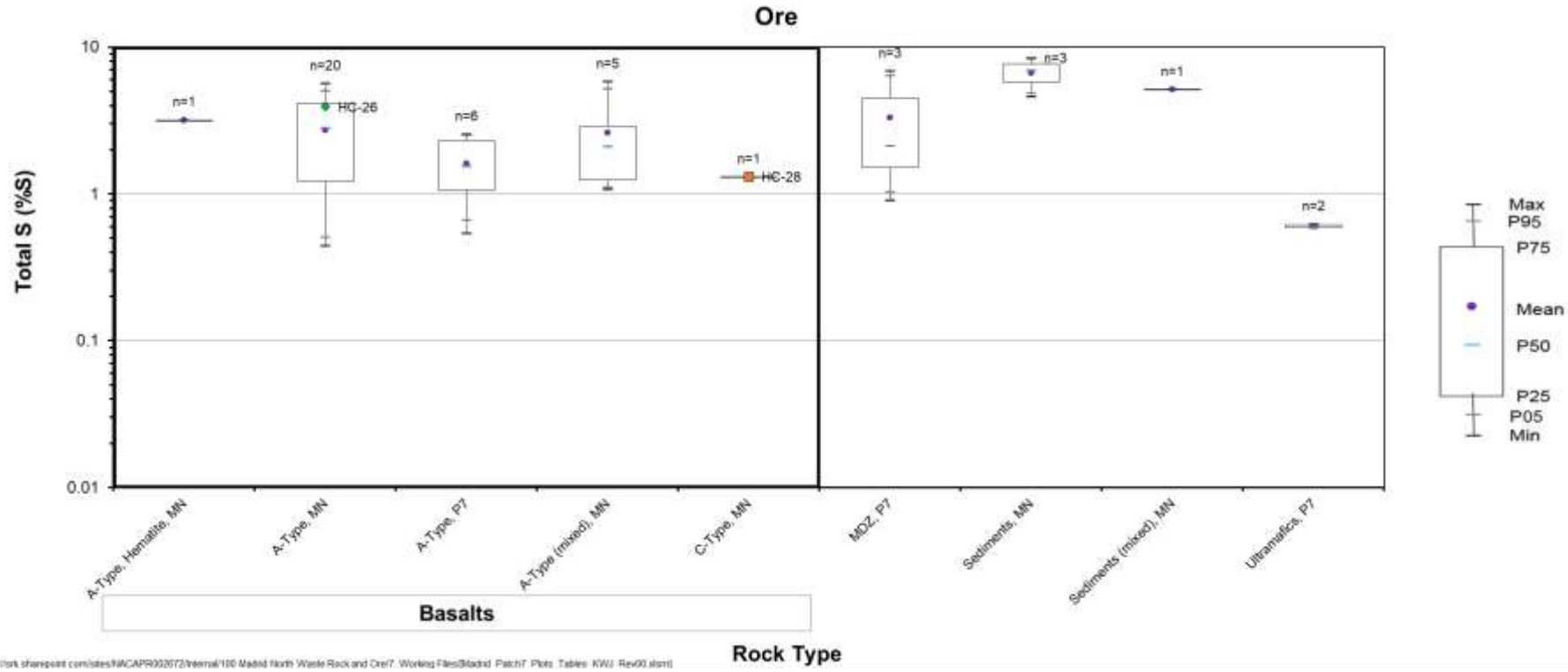
Economic Classification	Rock Type	Humidity Cell ID[1]	Sample Type	Paste pH	Total Sulphur	NP	TIC	$TIC_{(Ca+Mg)}$	NP/AP	TIC/AP	$TIC_{(Ca+Mg)}$/AP
					%S	kgCaCO3/t					
Waste	A-Type	HC-8	Barrel	9.1	0.26	250	330	280	31	41	34
		HC-8a	Pulp	8.4	0.35	270	300	250	25	28	23
		HC-24	Pulp	8.5	2.2	340	410	340	5	6	5
		HC-25	Pulp	9.6	0.4	240	320	270	19	26	21
	C-Type	HC-3	Barrel	8.5	0.17	150	160	140	27	31	26
		HC-3a	Pulp	8.7	0.12	150	150	120	38	39	32
		HC-4	Barrel	9	0.1	82	85	70	26	27	23
		HC-4a	Pulp	9.1	0.14	82	84	70	19	20	16
		HC-9	Barrel	8.9	0.07	130	150	120	60	67	55
		HC-17	Pulp[2]	8.6	0.37	270	290	240	23	25	21
		HC-18	Pulp	10	0.12	86	98	82	23	26	22
		HC-27	Pulp	9.7	0.15	240	310	260	52	66	55
		HC-40	Pulp	9	0.11	110	120	100	33	35	29
		HC-41	Pulp	9.1	0.27	320	440	360	38	52	43
	C-Type (mixed)	HC-19	Pulp	9.1	0.24	85	88	73	11	12	9.7
	Diabase	HC-22	Pulp	9.3	0.02	22	11	9	35	17	14
		HC-23	Pulp	9.7	0.07	33	35	29	15	16	13
	MDZ	HC-5	Barrel	9.4	0.16	210	240	200	43	48	40
		HC-5a	Pulp	9.4	0.24	200	270	220	27	36	30
		HC-29	Pulp	9.6	0.19	320	400	330	53	68	56
		HC-30	Pulp	8.9	0.55	300	420	350	17	24	20
		HC-39	Pulp	9	0.54	190	240	200	11	14	12
	Sediments	HC-20	Pulp	9.2	3.3[3]	210	250	200	16	18	15
		HC-21	Pulp	8.9	3.5	140	190	160	1.3	1.8	1.5
Ore	A-Type	HC-26	Pulp	8.5	3.9	290	370	300	2.4	3	2.5
	C-Type	HC-28	Pulp	9.3	1.3	260	330	270	6.4	8.1	6.7

Sources: https://srk.sharepoint.com/:x:/r/sites/NACAPR002672/Internal/100%20Madrid%20North%20Waste%20Rock%20and%20Ore/5.%20Kinetic%20Files/HCT_HB_WR_Outcomes.mc.REV14_KWJ.xlsm

Notes:

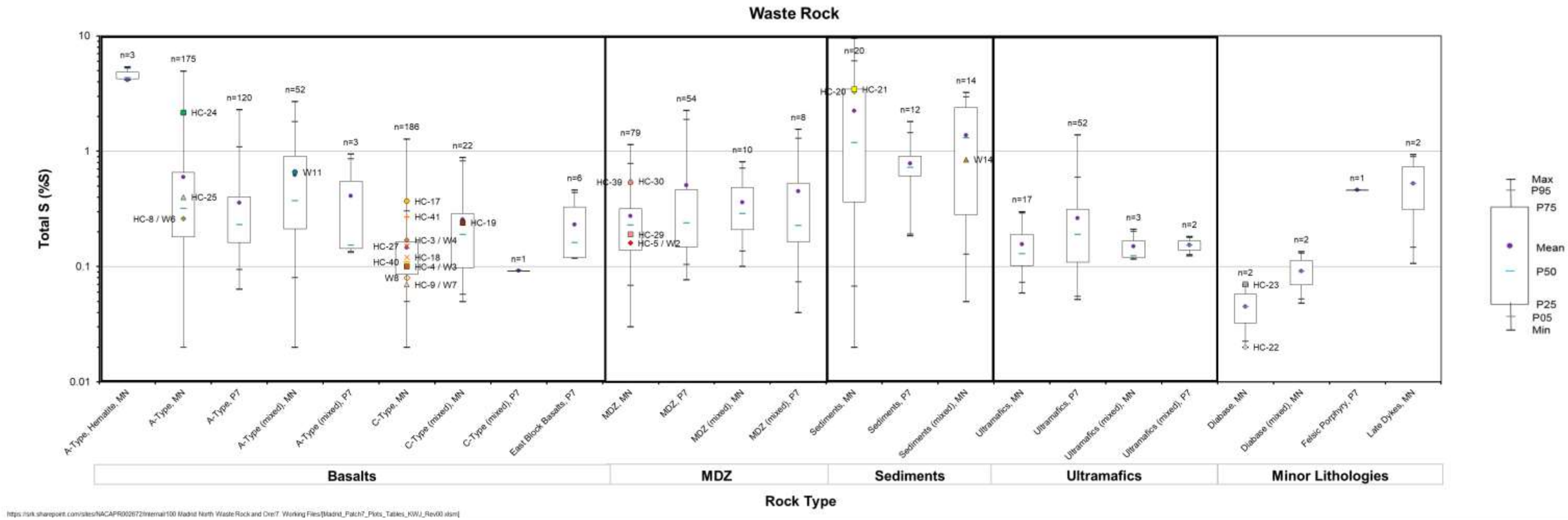
1. For samples with multiple ABA data, e.g. HC-8 and HC-8a, ABA was determined on the HCT/barrel head sample or pulp from the exploration program (Pulp).
2. Selected for typical sulphur for the original logging code (1aj).
3. Total sulphur determined by MLA was used instead, as the ABA value (0.43 %S) was lower than indicated by mineralogical analysis.

Figure 3-25: HCT Total Sulphur Percent Rank by Rock Type and Mine Area*, Ore



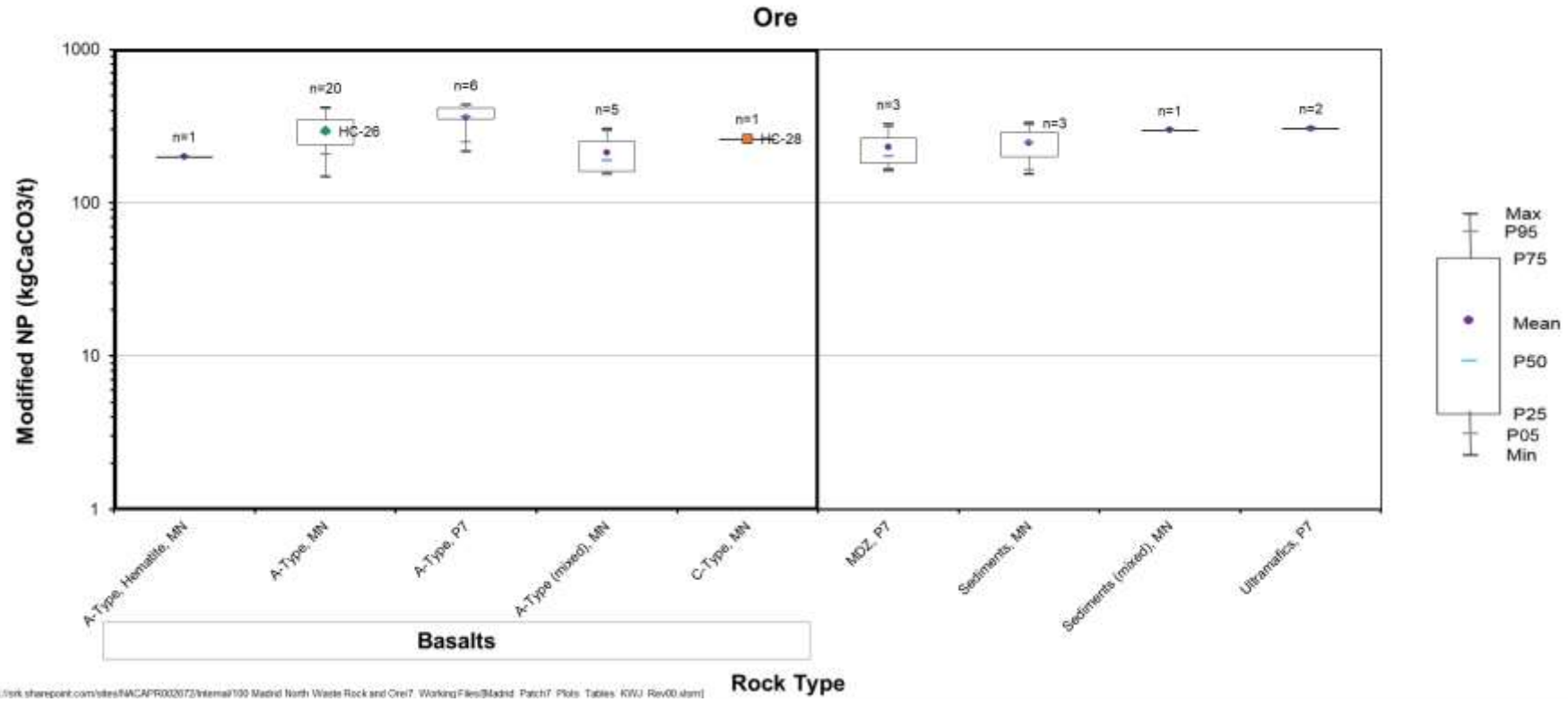
Notes: *HCT also represents equivalent rock type at Patch 7. Refer to Section 3.1.5 for details.

Figure 3-26: HCT Total Sulphur Percent Rank by Rock Type and Mine Area*, Waste Rock



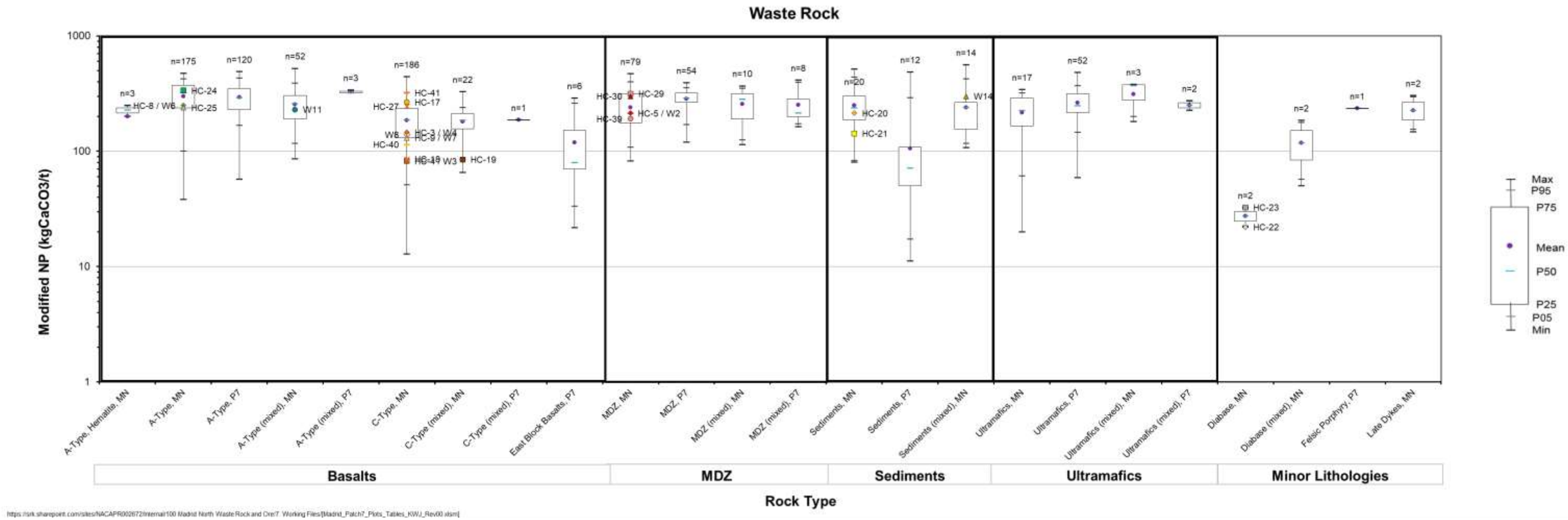
Notes: *HCT also represents equivalent rock type at Patch 7. Refer to Section 3.1.5 for details.

Figure 3-27: HCT NP Percent Rank by Rock Type and Mine Area*, Ore



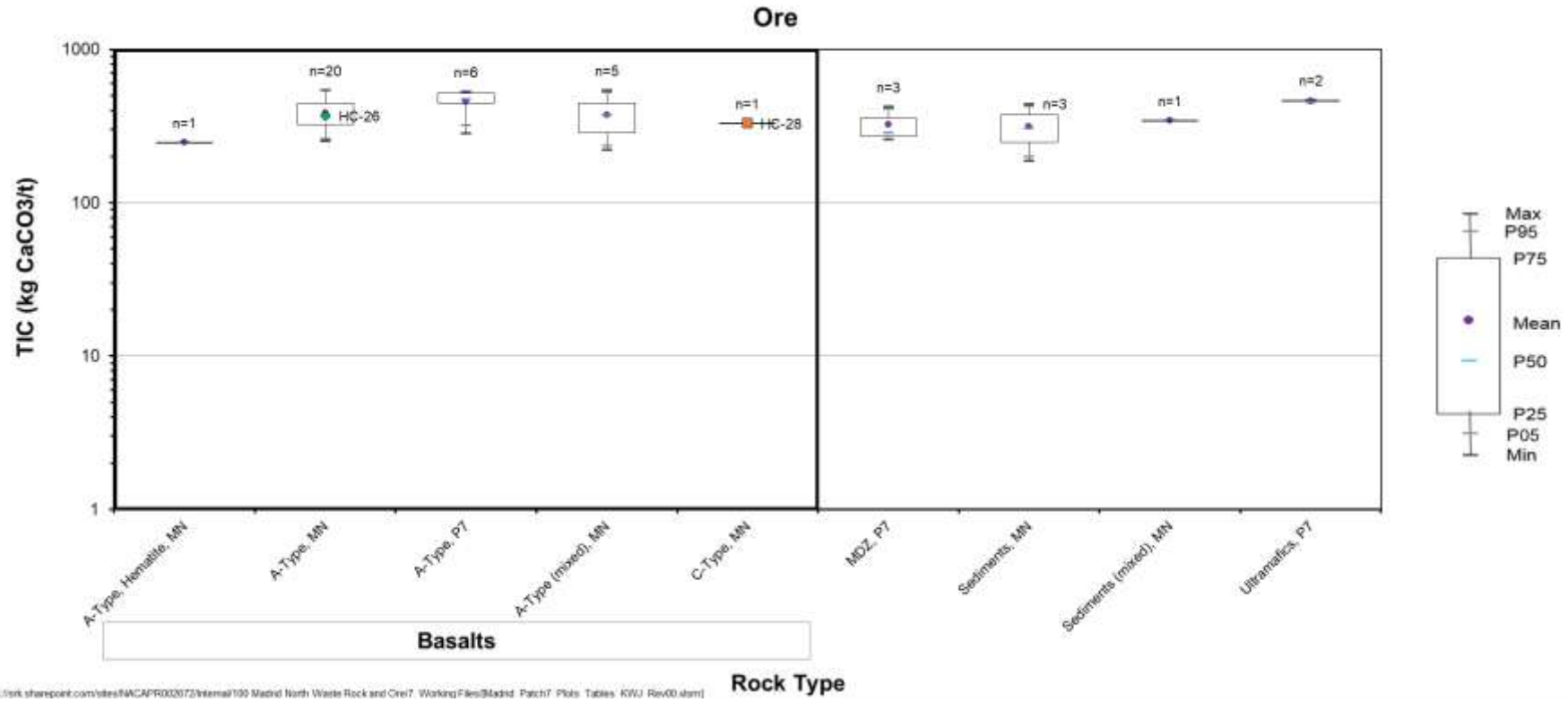
Notes: *HCT also represents equivalent rock type at Patch 7. Refer to Section 3.1.5 for details.

Figure 3-28: HCT NP Percent Rank by Rock Type and Mine Area*, Waste Rock



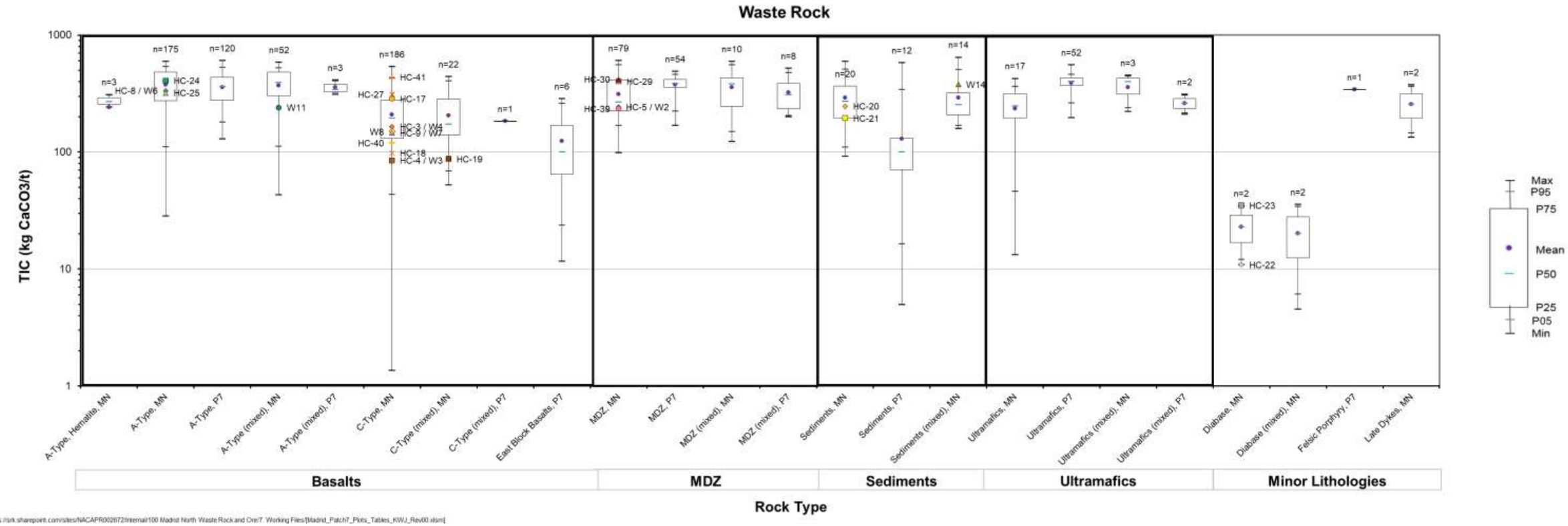
Notes: *HCT also represents equivalent rock type at Patch 7. Refer to Section 3.1.5 for details.

Figure 3-29: HCT TIC Percent Rank by Rock Type and Mine Area*, Ore



Notes: *HCT also represents equivalent rock type at Patch 7. Refer to Section 3.1.5 for details.

Figure 3-30: HCT TIC Percent Rank by Rock Type and Mine Area*, Waste Rock



Notes: *HCT also represents equivalent rock type at Patch 7. Refer to Section 3.1.5 for details.

Trace Elements

Table 3-13 presents a summary of solid-phase arsenic concentrations for the SRK (2017) HCT sample set. Statistical distributions of arsenic for ore and waste rock are presented in Figure 3-31 and Figure 3-32, respectively. For HC-3, HC-4, HC-5, and HC-8, the initial static program samples were used for data interpretation. Consistent with Section 3.2.2.2, "typical" is defined as contain 25th to 75th percentile levels and "high" refers to ~95th percentile levels.

For ore samples, HC-26 had typical arsenic content (A-Type basalt; 780 ppm), whereas HC-28 was the only sample of C-Type basalt (430 ppm).

For waste rock, all samples represented had typical or high arsenic content for the respective rock types from Madrid North and Patch 7 except for HC-9 (C-type basalt) and HC-22 (diabase) which had <25th percentile arsenic content.

Table 3-13: Summary of Arsenic Content, SRK (2017) HCT Sample Set

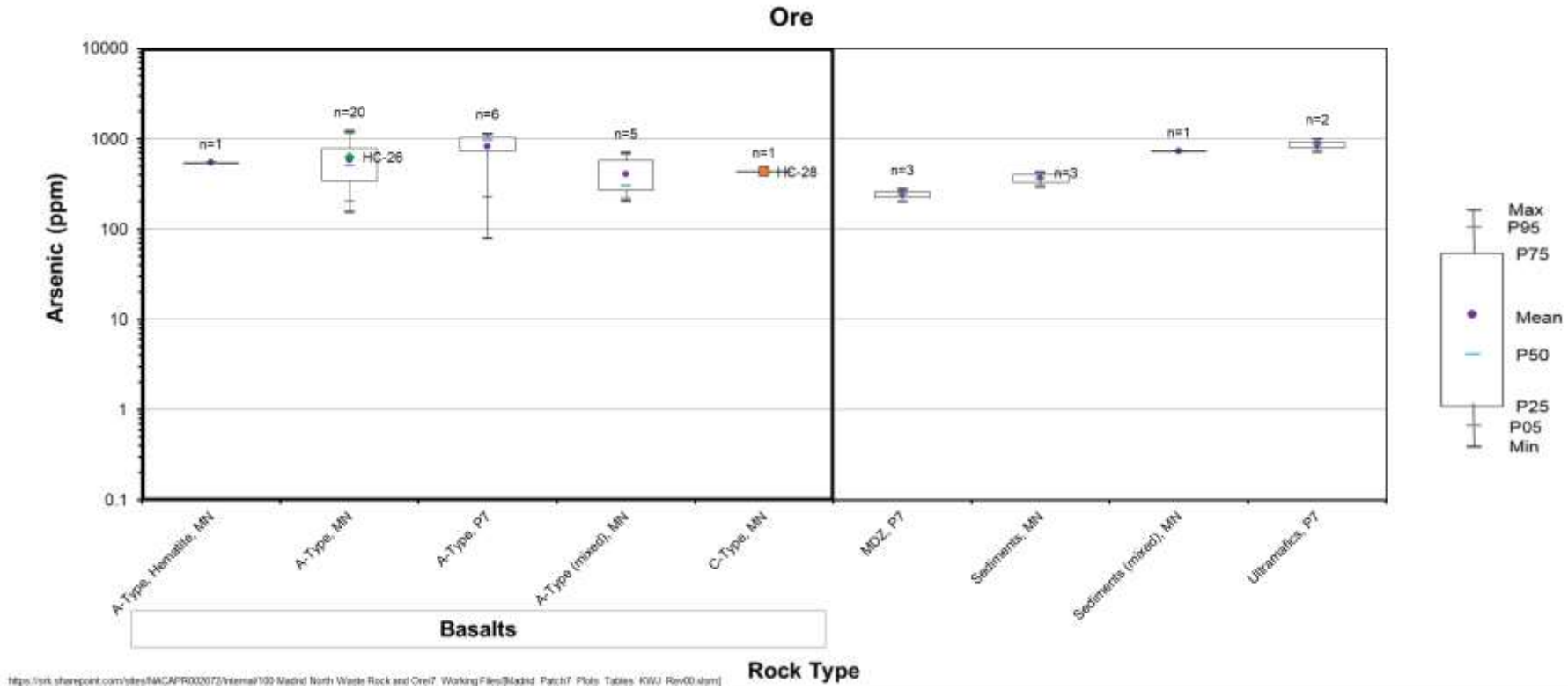
Economic Classification	Rock Type	Humidity Cell ID	Sample Type[1]	Arsenic
Waste	A-Type	HC-8	Barrel	**120**
		HC-8a	Pulp	**93**
		HC-24	Pulp	**630**
		HC-25	Pulp	**110**
	C-Type	HC-3	Barrel	6.7
		HC-3a	Pulp	4.1
		HC-4	Barrel	3.1
		HC-4a	Pulp	3.2
		HC-9	Barrel	2.6
		HC-17	Pulp[2]	11
		HC-18	Pulp	10
		HC-27	Pulp	**120**
		HC-40	Pulp	7.1
		HC-41	Pulp	**270**
	C-Type (mixed)	HC-19	Pulp	8.2
	Diabase	HC-22	Pulp	3.1
		HC-23	Pulp	**27**
	MDZ	HC-5	Barrel	**73**
		HC-5a	Pulp	**93**
		HC-29	Pulp	**77**
		HC-30	Pulp	2
		HC-39	Pulp	**64**
	Sediments	HC-20	Pulp	**160**
		HC-21	Pulp	**86**
Ore	A-Type	HC-26	Pulp	**630**
	C-Type	HC-28	Pulp	**430**

Sources:https://srk.sharepoint.com/:x:/r/sites/NACAPR002672/Internal/100%20Madrid%20North%20Waste%20Rock%20and%20Ore/5.%20Kinetic%20Files/HCT_HB_WR_Outcomes.mc.REV14_KWJ.xlsm

Notes: Bolded values denote enriched arsenic concentrations based on the screening criteria.

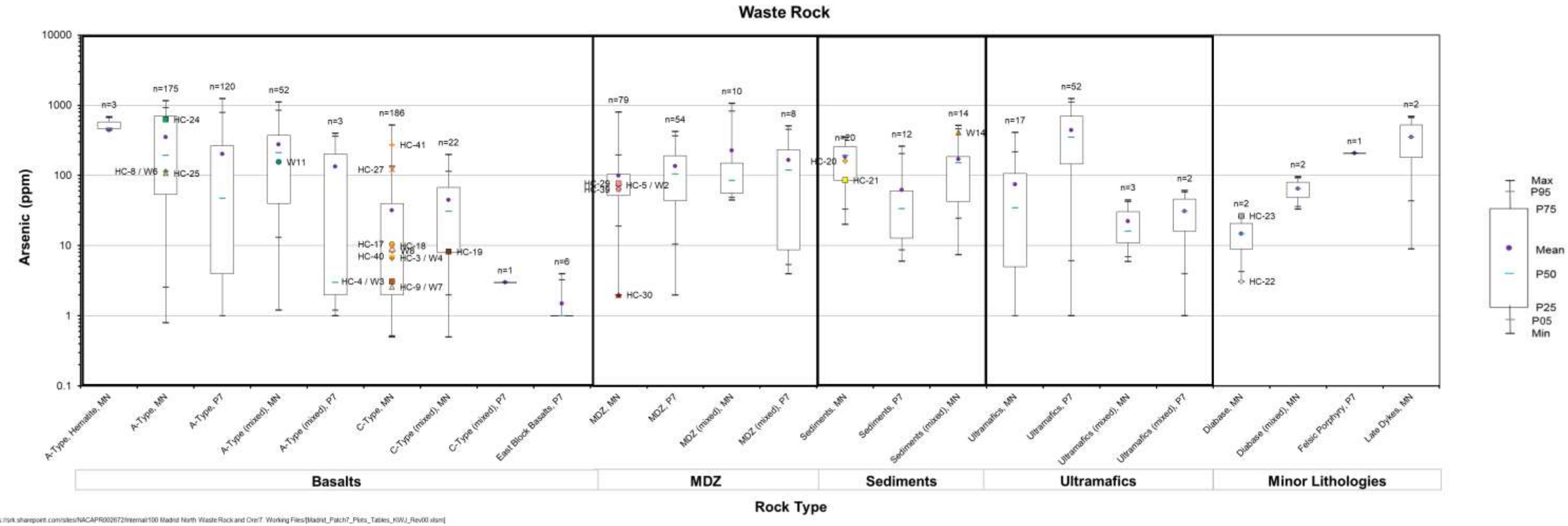
1. ABA determined on either a split of the humidity cell sample (HCT) or pulp from the exploration program (Pulp).
2. Selected for typical sulphur for the original logging code (1aj).

Figure 3-31: HCT Arsenic Percent Rank by Rock Type and Mine Area*, Ore



Notes: *HCT also represents equivalent rock type at Patch 7. Refer to Section 3.1.5 for details.

Figure 3-32: HCT Arsenic Percent Rank by Rock Type and Mine Area*, Waste Rock



Notes: *HCT also represents equivalent rock type at Patch 7. Refer to Section 3.1.5 for details.

3.2.3 Kinetic Results

Table 3-14 presents stable rates[1] and solid phase content for select elements. Figure 3-33 to Figure 3-34 present release rate timeseries plots for sulphate, antimony, arsenic, cobalt, and nickel, which were identified as key leaching parameters in SRK (2017).

For sulphate, stable rates for all HCT leachates were < 10 mg/kg/week except for HC-21 (sediment; ~40 mg/kg/week) and HC-26 (A-Type basalt ore; ~25 mg/kg/week).

Neutral pH arsenic leaching was identified as a concern in SRK (2017), with the highest rates of arsenic leaching associated with higher solid-phase content of arsenic and the presence of gersdorffite. Samples with higher rates of arsenic leaching also exhibited higher relative rates of cobalt, nickel and/or antimony leaching, which was interpreted to be a solid solution between gersdorffite ((Fe,Co,Ni)AsS) and cobaltite (CoAsS) where cobalt and nickel can substitute with iron, cobalt and/or nickel in gersdorffite.

Arsenic and antimony stable release rates were categorized as follows (presented according to arsenic rates and in descending order):

- ~0.1 to ~1 mg/kg/week included samples of A-Type basalts (waste rock; HC-24 and HC-25), C-Type basalts (ore and waste rock; HC-28, HC-41, and HC-27), sediment waste rock (HC-20) and MDZ (HC-29). For these samples, gersdorffite content was at or above the detection limit (0.01 wt%). Notably, HC-20 (sediments) had the highest arsenic and antimony leaching rates and also the highest gersdorffite content.
- ~0.01 to ~0.1 mg/kg/week, included samples of MDZ (HC-5 and HC-39), A-Type basalts (ore and waste rock; HC-26 and HC-8), and C-Type basalts (waste rock; HC-18). For this sample set, only A-Type basalt samples had gersdorffite content above the detection limit.
- ~0.0001 to ~0.01 mg/kg/week, including samples of C-Type basalts (waste rock; HC-40, HC-3, HC-19, HC-9, and HC-4), both diabase samples (HC-22 and HC-23), sediments (HC-21), and MDZ (HC-30). Gersdorffite content was below the detection limit.

Nickel stable release rates were categorized as follows (presented in descending order):

- > ~0.01 mg/kg/week for a sediment sample (HC-20);
- ~0.001 to ~0.01 mg/kg/week for A-Type basalt ore (HC-26);
- ~0.0001 to ~0.001 mg/kg/week for selected samples of A-Type basalts (waste rock; HC-24, HC-25, and HC-8), C-Type basalts (ore and waste rock; HC-28, HC-41, HC-27, and HC-19), MDZ (HC-29, HC-39, and HC-5), sediments (HC-21), and diabase (HC-22), and
- < ~0.0001 mg/kg/week for selected C-Type basalt (waste rock; HC-9, HC-4, HC-3, HC-17, HC-40, and HC-18), diabase (HC-23), and MDZ (HC-30).

[1] Assessed based on the stability of sulphate release rates

Cobalt stable release rates were categorized as follows (presented in descending order):

- > ~0.0001 mg/kg/week included both sediment samples (HC-20 and HC-21), A-Type basalts (ore and waste rock; HC-26, HC-25 and HC-24), C-Type basalts (ore and waste rock; HC-28, HC-27, and HC-41), and MDZ (HC-29 and HC-5). HC-20 (sediments) had the highest cobalt leaching rates out of all samples and also had gersdorffite content of 0.094 wt.
- < ~0.0001 mg/kg/week included samples of MDZ (HC-39 and HC-30), C-Type basalts (waste rock; HC-19, HC-9, HC-40, HC-17, HC-3, and HC-4), A-Type basalts (waste rock; HC-8), and both diabase samples (HC-22 and HC-23).

Depletion Calculations

Depletion calculations are presented in Table 3-15.

All HCT leachates were non-acidic for the duration of the tests. All HC tests are projected to be neutral based on HCT stable release rates except for HC-20 and HC-21 (waste rock classified as sediment). HC-20 and HC-21 were classified as uncertain by ABA and HCT data indicates these samples could theoretically develop acidic conditions.

Table 3-14: Selected Stable Release Rates and Static Data for the SRK (2017) Humidity Cell Sample Set

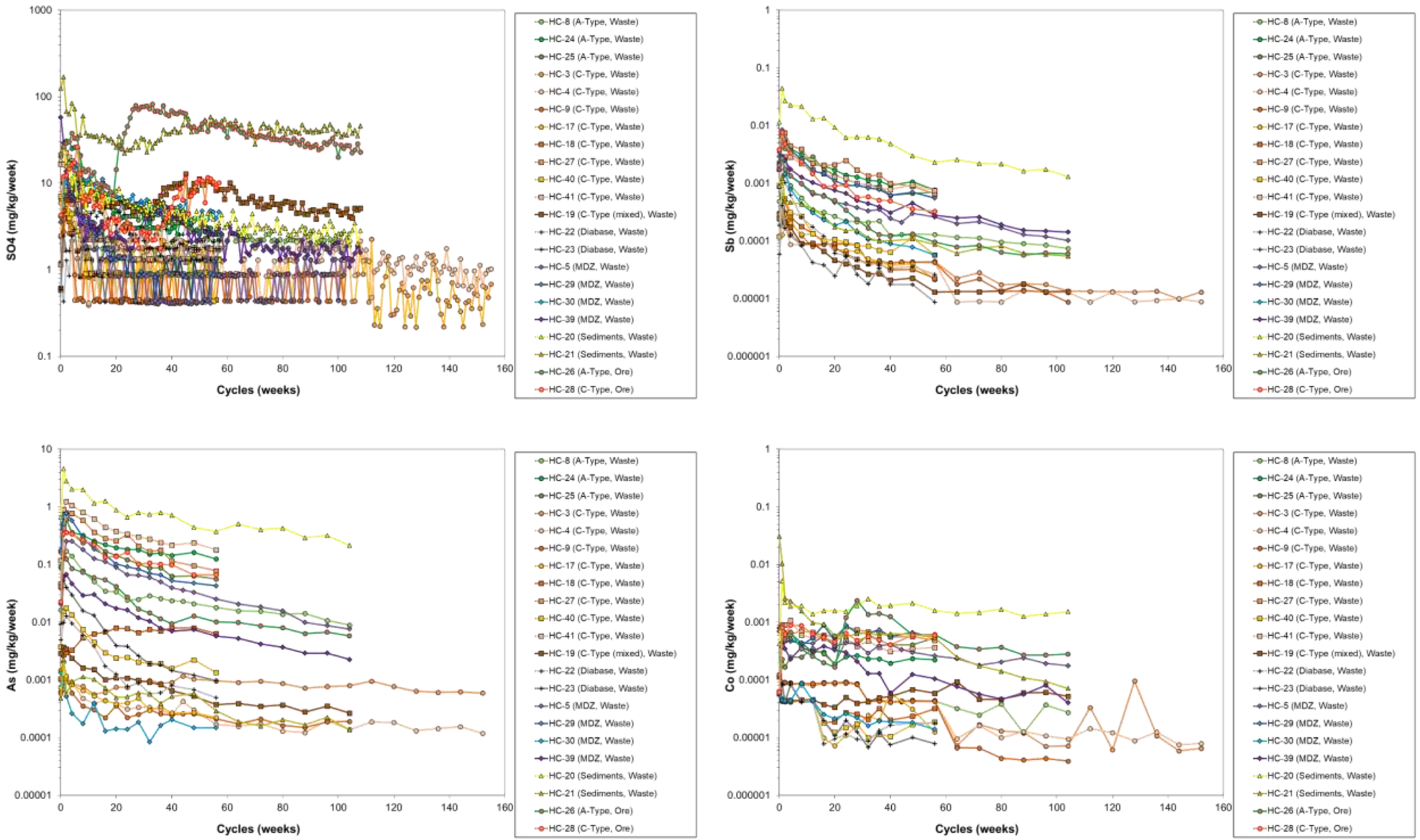
Economic Classification	Rock Type	Humidity Cell ID	Total S	Total S	Stable Rates							Solids							
					SO4	As	Sb	Co	Mn	Mo	Ni	As	As	Sb	Co	Mn	Mo	Ni	Gersdorffite (Fe,Co,Ni)AsS
			%S	% Rank	mg/kg/week	mg/kg/week	mg/kg/week	mg/kg/week	mg/kg/week	mg/kg/week	mg/kg/week	ppm	% Rank	ppm	ppm	ppm	ppm	ppm	%
Waste	A-Type	HC-8	0.20	33%	2.2	0.013	0.000097	0.000029	0.00085	0.00039	0.00012	120	50%	0.1	70	2100	0.9	480	0.011
		HC-8a	0.35	61%	2.2	0.013	0.000097	0.000029	0.00085	0.00039	0.00012	93	44%	0.15	73	1800	0.64	490	--
		HC-24	2.2	97%	3.1	0.16	0.0011	0.00025	0.0048	0.00063	0.001	630	77%	0.8	47	1700	0.4	260	0.029
		HC-25	0.40	66%	2.1	0.065	0.00071	0.00047	0.0029	0.000099	0.00076	110	48%	0.2	47	1300	0.5	150	0.014
	C-Type	HC-3	0.1	57%	0.75	0.0008	0.000031	0.000033	0.0016	0.000052	0.000055	6.7	45%	0.1	46	1700	0.4	68	--
		HC-3a	0.12	61%	0.75	0.0008	0.000031	0.000033	0.0016	0.000052	0.000055	4.1	38%	0.1	46	1600	0.17	75	--
		HC-4	0.10	42%	1.1	0.00021	0.000027	0.000028	0.0013	0.000043	0.00011	3.1	34%	0.1	42	920	1.4	140	--
		HC-4a	0.14	67%	1.1	0.00021	0.000027	0.000028	0.0013	0.000043	0.00011	3.2	34%	0.1	44	950	0.1	140	--
		HC-9	0.07	11%	0.66	0.00023	0.00004	0.000036	0.0013	0.000039	0.000065	2.6	32%	0.1	33	1200	0.5	65	bd
		HC-17	0.37	97%	1.7	0.00032	0.000046	0.000022	0.0025	0.0014	0.00003	11	56%	0.2	57	2100	0.9	190	bd
		HC-18	0.12	57%	0.8	0.0073	0.000065	0.000029	0.0032	0.000049	0.000045	10	52%	0.1	46	1100	0.7	150	bd
		HC-27	0.15	70%	1.3	0.16	0.0013	0.00062	0.0032	0.000048	0.00055	120	92%	0.3	45	1200	0.1	140	0.014
		HC-40	0.11	50%	1.1	0.0022	0.00009	0.000017	0.0016	0.00013	0.00003	7.1	46%	0.1	45	1400	0.2	110	bd
		HC-41	0.27	92%	1.6	0.27	0.00099	0.00041	0.0027	0.000076	0.00092	270	99%	0.2	52	1300	0.7	180	0.035
	C-Type (mixed)	HC-19	0.24	64%	4.8	0.00032	0.000015	0.000055	0.0018	0.00007	0.00022	8.2	32%	0.1	51	1300	0.2	140	bd
	Diabase	HC-22	0.02	0%	2.2	0.00062	0.000033	0.000017	0.0014	0.000073	0.00012	3.1	0%	0.3	20	550	0.3	25	bd
		HC-23	0.07	100%	1.5	0.0013	0.000017	0.0000093	0.00082	0.000045	0.000019	27	100%	0.1	22	510	1.2	52	bd
	MDZ	HC-5	0.30	69%	0.87	0.037	0.00027	0.00029	0.0023	0.00058	0.00019	73	46%	0.2	30	1200	3.5	45	< 0.01
		HC-5a	0.24	53%	0.87	0.037	0.00027	0.00029	0.0023	0.00058	0.00019	93	59%	0.1	31	1100	0.89	49	--
		HC-29	0.19	39%	1	0.065	0.00077	0.00064	0.0019	0.00016	0.00053	77	50%	0.3	36	1100	0.3	120	0.01
		HC-30	0.55	86%	4.1	0.00016	0.000077	0.000017	0.003	0.00022	0.00003	2	0%	0.3	80	2000	0.4	310	bd
		HC-39	0.54	85%	1.7	0.0029	0.00016	0.000056	0.00018	0.00047	0.00029	64	38%	0.1	14	750	1.7	24	< 0.01
	Sediments	HC-20	3.3	83%	2.9	0.33	0.0018	0.0015	0.0027	0.00012	0.018	160	58%	0.4	15	770	0.7	650	0.094
		HC-21	3.5	84%	41	0.00018	0.000064	0.0001	0.0027	0.00069	0.00019	86	45%	0.9	41	750	2.3	76	bd
Ore	A-Type	HC-26	3.9	76%	25	0.0067	0.000061	0.0003	0.002	0.0003	0.0021	630	52%	0.6	70	1500	0.7	390	0.015
	C-Type	HC-28	1.3	100%	10	0.077	0.00039	0.00055	0.0039	0.00018	0.00089	430	100%	0.2	44	1600	0.2	130	0.020

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Tables_KWJ.xlsx]

Notes:

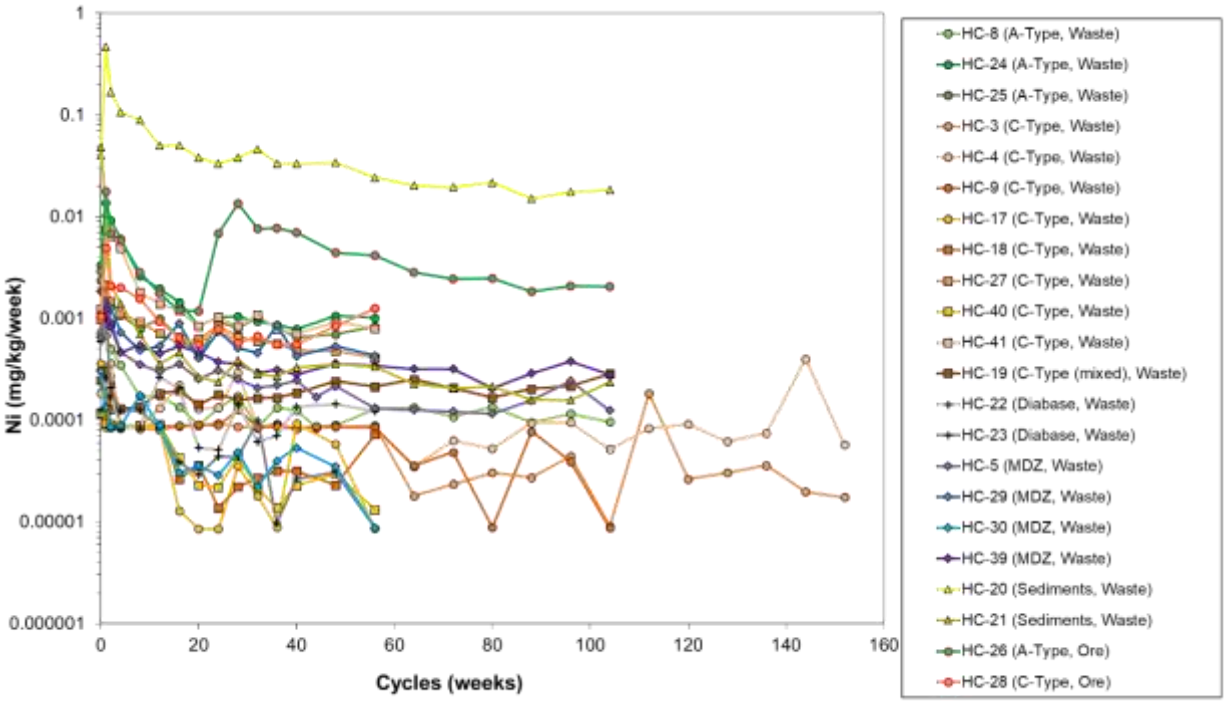
1. Total sulphur value was determined by MLA rather than ABA methods.

Figure 3-33: HCT Release Rates for Sulphate, Antimony, Arsenic, and Cobalt



Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/5. Historic Kinetic Files/[HCT_HB_WR_ConcCharts.mc.REV09_KWJ.xlsm]

Figure 3-34: HCT Release Rates for Nickel



Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/5. Historic Kinetic Files/[HCT_HB_WR_ConcCharts.mc.REV09_KWJ.xlsm]

Table 3-15: Depletion Calculations for the SRK (2017) Humidity Cell Sample Set

Economic Classification	Rock Type	Humidity Cell ID	Total S	Total S	NP/AP	TIC/AP	(Ca+Mg)/SO4	Stable SO4 Release Rate	Time to Depletion			NP Depletion > AP Depletion	TIC Depletion > AP Depletion	Ca+Mg/ SO4 < NP/AP	Ca+Mg/ SO4 < TIC/AP	Prediction	
									NP	TIC	Sulphide					Neutral	Acidic
			%S	% Rank				mg/kg/wk			years						
Waste	A-Type	HC-8	0.20	33%	31	41	3.3	2.2	630	840	65	Yes	Yes	Yes	Yes	Likely	
		HC-8a	0.35	61%	25	28	3.3	2.2	680	760	85	Yes	Yes	Yes	Yes	Likely	
		HC-24	2.2	97%	5	6	2.9	3.1	680	820	400	Yes	Yes	Yes	Yes	Likely	
		HC-25	0.40	66%	19	26	4.3	2.1	480	640	110	Yes	Yes	Yes	Yes	Likely	
	C-Type	HC-3	0.1	57%	27	31	14	0.75	260	300	130	Yes	Yes	Yes	Yes	Likely	
		HC-3a	0.12	61%	38	39	14	0.75	260	260	83	Yes	Yes	Yes	Yes	Likely	
		HC-4	0.10	42%	26	27	6.6	1.1	210	220	51	Yes	Yes	Yes	Yes	Likely	
		HC-4a	0.14	67%	19	20	6.6	1.1	210	220	65	Yes	Yes	Yes	Yes	Likely	
		HC-9	0.07	11%	60	67	16	0.66	230	260	59	Yes	Yes	Yes	Yes	Likely	
		HC-17	0.37	97%	23	25	6.4	1.7	450	480	120	Yes	Yes	Yes	Yes	Likely	
		HC-18	0.12	57%	23	26	13	0.8	150	170	85	Yes	Yes	Yes	Yes	Likely	
		HC-27	0.15	70%	52	66	6.6	1.3	520	660	65	Yes	Yes	Yes	Yes	Likely	
		HC-40	0.11	50%	33	35	6.2	1.1	300	310	54	Yes	Yes	Yes	Yes	Likely	
		HC-41	0.27	92%	38	52	5.9	1.6	630	850	97	Yes	Yes	Yes	Yes	Likely	
	C-Type (mixed)	HC-19	0.24	64%	11	12	2.7	4.8	120	120	26	Yes	Yes	Yes	Yes	Likely	
	Diabase	HC-22	0.02	0%	35	17	1.8	2.2	110	52	4.2	Yes	Yes	Yes	Yes	Likely	
		HC-23	0.07	100%	15	16	4.4	1.5	89	96	26	Yes	Yes	Yes	Yes	Likely	
	MDZ	HC-5	0.30	69%	43	48	10	0.87	430	490	100	Yes	Yes	Yes	Yes	Likely	
		HC-5a	0.24	53%	27	36	10	0.87	410	540	150	Yes	Yes	Yes	Yes	Likely	
		HC-29	0.19	39%	53	68	6.7	1	860	1100	100	Yes	Yes	Yes	Yes	Likely	
		HC-30	0.55	86%	17	24	3.5	4.1	380	540	74	Yes	Yes	Yes	Yes	Likely	
		HC-39	0.54	85%	11	14	6.2	1.7	330	410	180	Yes	Yes	Yes	Yes	Likely	
	Sediments	HC-20	3.3[1]	83%	2.1	2.4	4.4	2.9	310	360	660	No	No	No	No		Theoretically possible
		HC-21	3.5	84%	1.3	1.8	1.4	41	44	60	46	No	Yes	No	Yes		Theoretically possible
Ore	A-Type	HC-26	3.9	76%	2.4	3	1.6	25	140	170	88	Yes	Yes	Yes	Yes	Likely	
	C-Type	HC-28	1.3	100%	6.4	8.1	1.5	10	310	400	74	Yes	Yes	Yes	Yes	Likely	

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Tables_KWJ.xlsx]

Notes:

1. Total sulphur value was determined by MLA rather than ABA methods.

3.3 Field Barrel Tests

The following sections summarize the results and interpretations of the SRK (2017) field barrel data for waste rock according to the updated rock types (Section 2.2) and within the context of Madrid North and Patch 7 (Section 3.1.5).

Updated release rate timeseries plots for the field barrel sample set until the most current sampling cycle (July 2024) are presented in Appendix E with plots for select parameters shown in Section 0.

3.3.1 Sample Set

Table 2-4 summarizes the waste rock and ore rock types from SRK (2017) and the updated rock types that align with Agnico Eagle's geology update. The field barrel sample set (Table 2-4) includes samples that represent waste rock classified as A-Type basalts (unmixed and mixed), C-Type basalts, MDZ, and sediments (mixed). Gaps in the existing sample set consist of a waste rock barrel of A-Type basalts with high arsenic, an unmixed sediment waste rock barrel, and an ultramafic waste rock barrel.

3.3.2 Static Data

Mineralogy

Table 3-16 presents a summary of carbonate and sulphide mineralogy by XRD for the field barrel samples.

Pyrite content was below the detection limit (1 wt%) for all barrel samples except for W14 (waste rock sediments (mixed), which contained pyrite of 1 wt%.

A summary of carbonate mineralogy is summarized as follows:

- Iron carbonates were dominant for A-Type basalt (W6), MDZ (W2) and mixed sediment (W14) and was characterized primarily by ferroan dolomite (range of 23 to 36 wt%) with lesser siderite (<1 to 5.2 wt%).
- Calcite was dominant for A-Type basalt (mixed) (W11) and C-Type basalt (W3, W4, W7, and W8) (range of 9 to 20 wt%). These samples contained lesser iron carbonate minerals as ferroan dolomite (range of below detection (<1 wt%) to 6 wt%).

Table 3-16: Summary of Carbonate and Sulphide Mineralogy, SRK (2017) Field Barrel Sample Set

Economic Classification	Rock Type	Barrel ID	Sample Type[1]	Carbonates					Sulphides			
				Ferroan Dolomite	Calcite	Siderite	Siderite/Magnesite	Magnesite	Pyrite	Sulphide S		
				Ca(Fe,Mg)(CO3)2	CaCO3	FeCO3		MgCO3	FeS2	XRD	ABA	MLA
				mineral %					mineral %	%S		
Waste	A-Type	W6	Barrel	23	7	bd	bd	bd	bd	bd	0.26	0.7
			Pulp	26	5.9	bd	bd	bd	<1	1	0.35	--
	A-Type (mixed)	W11	Barrel	6	20	-	-	-	-	-	0.66	-
	C-Type	W3	Barrel	bd	9.0	bd	bd	bd	bd	bd	0.1	0
		W4	Barrel	2.0	13	bd	bd	bd	bd	bd	0.17	--
			Pulp	2.0	13	bd	bd	bd	bd	bd	0.12	--
		W7	Barrel	bd	14	bd	bd	bd	bd	bd	0.07	--
		W8	Barrel	3.1	11	bd	bd	bd	bd	bd	0.08	--
	MDZ	W2	Barrel	28	bd	1	bd	bd	bd	bd	0.16	0.93
			Pulp	29	bd	bd	1	bd	<1	<0.5	0.24	--
	Sediments (mixed)	W14	Barrel	32	5.2	3.7	bd	bd	bd	bd	0.85	--
			Pulp	36	2.3	bd	5.2	bd	1	1	0.55	--

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Tables_KWJ.xlsx]

Notes: "-" symbol indicates mineral was not detected; bd indicates mineral content is below detection limit of 1 wt%

1. ABA determined on either a split of the barrel sample or pulp from the exploration program (Pulp).

Acid-Base Accounting

Table 3-17 presents a summary of ABA data for the field barrel samples. Statistical distributions of total sulphur, NP, and TIC for field barrels are presented in Figure 3-26, Figure 3-28, and Figure 3-30. For barrels with additional pulp samples (W6, W3, W4, and W2), the initial splits of the barrel samples were used for data interpretation purposes.

A summary of ABA data according to the update in field barrel sample attributes and relative to the overall ABA sample set is as follows:

- For total sulphur, all barrels contained typical values (25^{th} to 75^{th} percentile levels)
- NP and TIC content for W6 (A-Type basalt) was close to the 25^{th} percentile value for both parameters, whereas W11 (A-Type (mixed) basalt) had NP that was close to the median value, but TIC was less than the 25^{th} percentile (250 to 330 kg $CaCO_3$/t and 230 to 240 kg $CaCO_3$/t, respectively). All NP and TIC values for W3, W4, W7, and W8 (C-Type basalts) were lower than the median of the overall ABA sample set (range of 82 to 160 kg $CaCO_3$/t). W2 (MDZ) was between the 25^{th} percentile and median value for NP and TIC (210 to 240 kg $CaCO_3$/t), whereas W14 (sediments (mixed)) was greater than the 75^{th} percentile values for both parameters (300 to 380 kg $CaCO_3$/t).
- All field barrel samples were classified as non-PAG based on NP/AP, TIC/AP and $TIC_{(Ca+Mg)}$/AP.

Table 3-17: Summary of ABA Data, SRK (2017) Field Barrel Sample Set

Economic Classification	Rock Type	Barrel ID	Sample Type[1]	ABA								
				Paste pH	Total S	Sulphate	NP	TIC	$TIC_{(Ca+Mg)}$	NP/AP	TIC/AP	$TIC_{(Ca+Mg)}$/AP
					%S	%S	kgCaCO3/t					
Waste	A-Type	W6	Barrel	9.1	0.26	<0.01	250	330	280	31	41	34
			Pulp	8.4	0.35	0.01	270	300	250	25	28	23
	A-Type (mixed)	W11	Barrel	9.0	0.66	<0.01	230	240	200	11	12	10
	C-Type	W3	Barrel	9.0	0.10	<0.01	82	85	70	26	27	23
			Pulp	9.1	0.14	<0.01	82	84	70	19	20	16
		W4	Barrel	8.5	0.17	<0.01	150	160	140	27	31	26
			Pulp	8.7	0.12	0.01	150	150	120	38	39	32
		W7	Barrel	8.9	0.07	<0.01	130	150	120	60	67	55
		W8	Barrel	9.1	0.08	<0.01	140	150	120	57	58	48
	MDZ	W2	Barrel	9.4	0.16	<0.01	210	240	200	43	48	40
			Pulp	9.4	0.24	0.01	200	270	220	27	36	30
	Sediments (mixed)	W14	Barrel	8.8	0.85	<0.01	300	380	310	11	14	12
			Pulp	--	0.56	0.01	310	400	330	18	23	19

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Tables_KWJ.xlsx]

Notes:

1. ABA determined on either a split of the barrel sample (Barrel) or pulp from the exploration program (Pulp).

Trace Elements

Table 3-18 presents a summary of solid-phase arsenic content for the field barrel samples. The statistical distribution of arsenic for field barrels is presented in Figure 3-32. For barrels with additional pulp samples (W6, W3, W4, and W2), the initial splits of the barrel samples were used for data interpretation purposes.

A summary of solid-phase arsenic according to the update in field barrel sample attributes and relative to the overall ABA sample set is as follows:

- Arsenic content for all barrels was typical (25^{th} to 75^{th} percentile levels) except W14 (sediments (mixed)) which had ~ 95^{th} percentile levels

Table 3-18: Summary of Arsenic Concentrations, SRK (2017) Field Barrel Sample Set

Economic Classification	Rock Type	Barrel ID	Sample Type[1]	As
				ppm
Waste	A-Type	W6	Barrel	**120**
			Pulp	**93**
	A-Type (mixed)	W11	Barrel	**160**
	C-Type	W3	Barrel	3.1
			Pulp	3.2
		W4	Barrel	6.7
			Pulp	4.1
		W7	Barrel	2.6
		W8	Barrel	8.5
	MDZ	W2	Barrel	**73**
			Pulp	**93**
	Sediments (mixed)	W14	Barrel	**410**
			Pulp	**540**

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Tables_KWJ.xlsx]

Notes:

1. ABA determined on either a split of the humidity cell sample (HCT) or pulp from the exploration program (Pulp).

3.3.3 Kinetic Results

Table 3-19 presents average release rates for the field barrel sample set and Figure 3-35 to Figure 3-36 present release rates for sulphate, antimony, arsenic, cobalt, and nickel.

Interpretation of barrel leachate data collected up to July 2024 supports the conclusions from SRK (2017). All leachates had neutral pH. Sulphate leaching rates were highest in W11 (A-Type basalt (mixed)), W14 (sediments (mixed), and W2 (MDZ) (average rates of 0.12 to 0.22 mg/kg/week). Rates were notably lower for C-Type basalt (W3, W4, W7, and W8; average rates ranging from 0.013 to 0.023 mg/kg/week). Sulphate leaching rates have been relatively uniform since 2017 except for W8 (C-Type basalt), which has had a decreasing trend (Figure 3-35).

Arsenic average leaching rates were highest in W14 (sediments (mixed)) and W2 (MDZ; average rates of 0.0087 mg/kg/week and 0.0041 mg/kg/week, respectively) which were higher than A-Type basalts (unmixed and mixed) and selected C-Type basalt barrel (W11, W6, and W3; average rates ranging from 0.00016 to 0.0017 mg/kg/week), followed by most C-Type basalt barrels (W4, W7, and W8; average rates ranging from 0.0000018 to 0.0000079 mg/kg/week). Relative antimony, cobalt and nickel average leaching rates generally showed similar groupings to arsenic leaching rates and are summarized as follows:

- Antimony: W14 and W2 had the highest average rates of 0.000013 to 0.000082 mg/kg/week, followed by W11 and W6 (average rates of 0.0000072 and 0.0000089 mg/kg/week, respectively), which were higher than all C-Type basalt barrels (average rates ranging from 0.00000065 to 0.0000017 mg/kg/week).
- Cobalt: W14 and W2 had the highest, and nearly equivalent, average rates (0.000034 and 0.000039 mg/kg/week, respectively), followed by W11 and W6 (average rates of 0.0000016 and 0.00000077 mg/kg/week, respectively), which were higher than all C-Type basalt barrels (average rates ranging from 0.00000017 to 0.00000041 mg/kg/week).
- Nickel: W14 had notably higher leaching rates than all other barrels (average rate of 0.00081 mg/kg/week). For the other barrels, W2, W6, and W11 (average rates ranging from 0.000013 to 0.000046 mg/kg/week) had higher leaching rates than all C-Type basalt barrels (average rates ranging from 0.00000098 to 0.0000029 mg/kg/week).

Table 3-19: Selected Average Release Rates and Static Data for Field Barrels

Rock Type	Barrel ID	Total S	Average Rates							Solids					
			SO4	As	Sb	Co	Mn	Mo	Ni	As	Sb	Co	Mn	Mo	Ni
		%	mg/kg/week	mg/kg/week	mg/kg/week	mg/kg/week	mg/kg/week	mg/kg/week	mg/kg/week	ppm	ppm	ppm	ppm	ppm	ppm
A-Type	W6	0.26	0.062	0.0017	0.0000089	0.00000077	0.0000028	0.000038	0.000013	120	0.1	70	2100	0.9	480
A-Type (mixed)	W11	0.66	0.22	0.00032	0.0000072	0.0000016	0.0000083	0.0000083	0.000013	160	0.2	76	1500	0.8	420
C-Type	W3	0.1	0.013	0.00016	0.00000099	0.00000041	0.0000018	0.0000018	0.0000029	3.1	0.1	42	920	1.4	140
	W4	0.17	0.023	0.0000079	0.0000017	0.00000025	0.0000015	0.0000065	0.0000012	6.7	0.1	46	1700	0.4	68
	W7	0.07	0.016	0.0000018	0.00000071	0.00000024	0.0000014	0.0000029	0.000002	2.6	0.1	33	1200	0.5	65
	W8	0.08	0.013	0.0000068	0.00000065	0.00000017	0.0000014	0.0000025	0.00000098	8.5	<0.1	33	990	0.4	70
MDZ	W2	0.16	0.12	0.0041	0.000013	0.000039	0.0000095	0.000072	0.000046	73	0.2	30	1200	3.5	45
Sediments (mixed)	W14	0.85	0.19	0.0087	0.000082	0.000034	0.000025	0.000052	0.00081	410	1	55	1500	1.1	340

Sources: https://srk.sharepoint.com/sites/NACAPR002672/Internal/100 Madrid North Waste Rock and Ore/7. Working Files/[Madrid_Patch7_Tables_KWJ.xlsx]

Figure 3-35: Release Rate Timeseries Plots for the Historical Field Barrel Sample Set: Sulphate, Antimony, Arsenic, and Cobalt

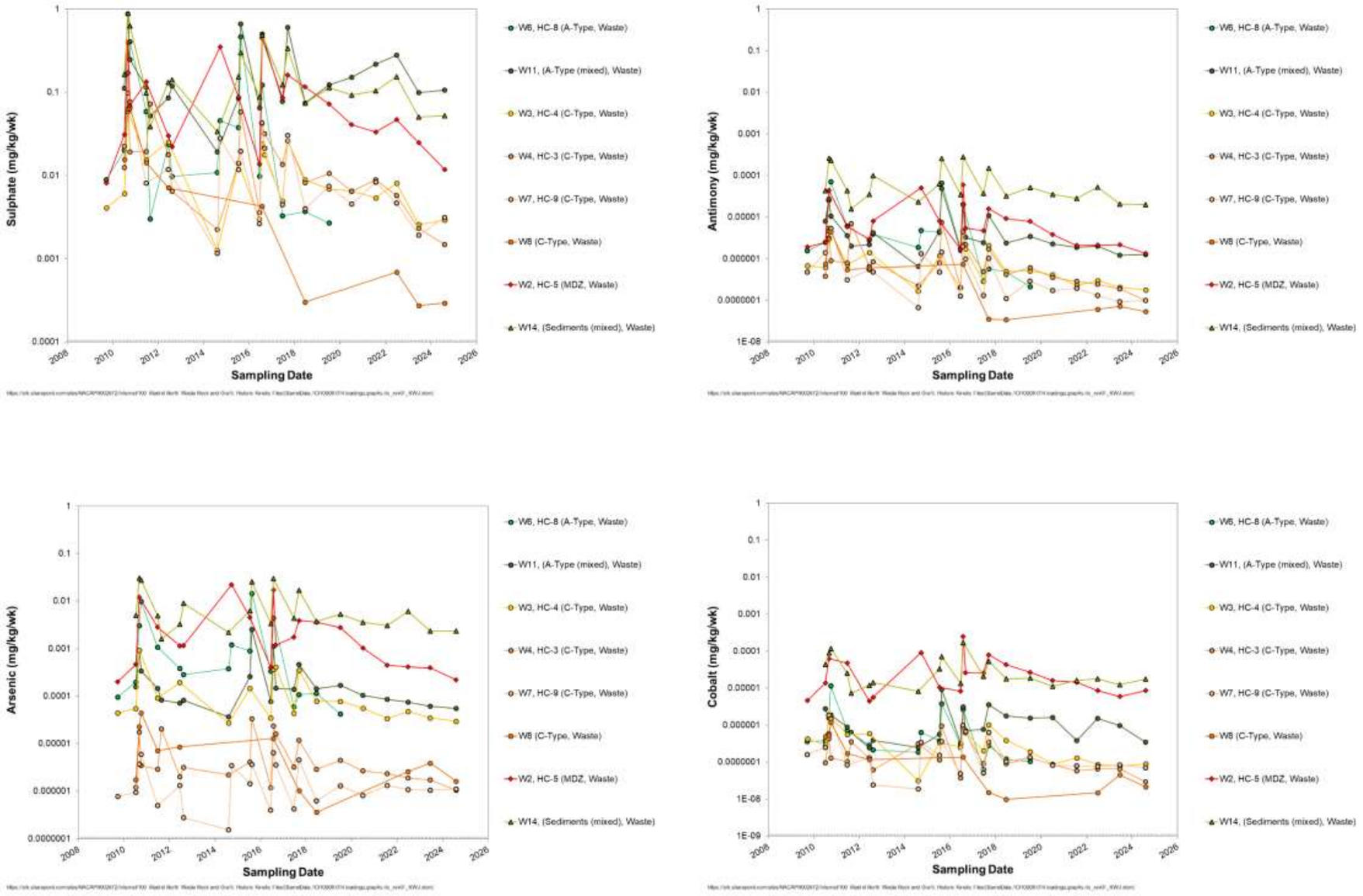
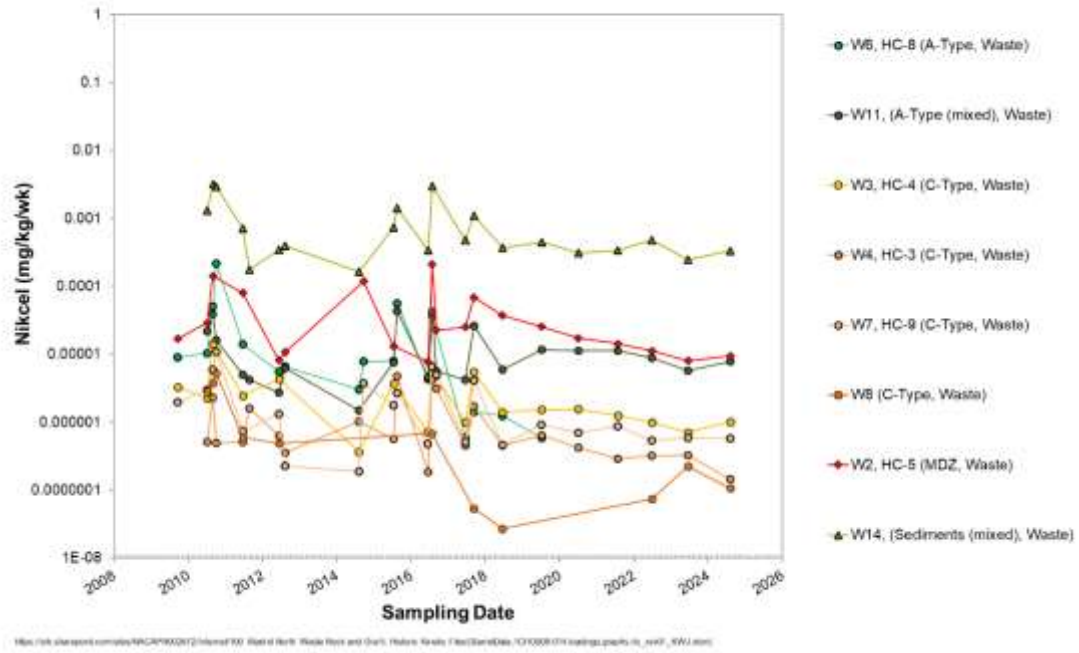


Figure 3-36: Release Rate Timeseries Plots for the Historical Field Barrel Sample Set: Nickel



4 Summary and Conclusions

This report interprets the Madrid North and Patch 7 waste rock and ore sample set, which includes the Madrid North samples from SRK (2017) and additional samples collected in 2023 from Madrid North and Patch 7. For the purposes of this report, all samples were economically and geologically re-classified as ore and waste using a cutoff of 4.0 gpt (TMAC 2020) and using rock types from Agnico Eagle's updated geological model. The most significant change to the re-classification of geology is the division of mafic metavolcanics (lithology code 1) into A-Type and C-Type basalts.

The static data for waste rock from Madrid North and Patch 7 are presented separately for the purpose of baseline reporting of the Patch 7 area. However, a review of the geology and static geochemistry data indicate that Patch 7 is an extension of Madrid North with spatial and lithological variability in arsenic content and higher sulphur content at Madrid North. This report supersedes SRK (2017) and was prepared to support Agnico Eagle's Mine Plan Operational Update application for Madrid.

The ML/ARD assessment for the waste rock and ore sample set from Madrid North and Patch 7 is summarized as follows:

- Ore generally had higher sulphur content than waste rock for all rock types at both deposits (25^{th} to 75^{th} percentile concentrations between 1.2 to 4.1 %S).
- For waste, sulphur content by rock type is summarized as follows:
  - Hematite altered A-Type basalts and sediments (unmixed and mixed) at Madrid North and sediments at Patch 7 had the highest sulphur content (25^{th} and 75^{th} percentile concentrations between 0.28 to 4.9 %S).
  - A-Type basalts, late dykes and MDZ (mixed) from Madrid North, and A-Type basalt, felsic porphyry and MDZ (unmixed and mixed) from Patch 7 had lower sulphur content (25^{th} and 75^{th} percentile concentrations between 0.14 to 0.91 %S).
  - C-Type basalt (unmixed and mixed) and ultramafics (unmixed and mixed) at Madrid North and C-Type basalts (mixed), East Block basalts, and ultramafics (unmixed and mixed) at Patch 7 had the lowest sulphur content (25^{th} and 75^{th} percentile concentrations between 0.09 to 0.33 %S).
- For ore, TIC and NP were uniformly high with 25th to 75th percentile values ranging from 250 to 520 kg CaCO3/t and 160 to 410 kg CaCO3/t, respectively.
- For waste, TIC and NP were uniformly high for all rock types (25th to 75th percentile values ranging from 130 to 480 kgCaCO3/t and 100 to 380 kg CaCO3/t, respectively) except for diabase (unmixed and mixed) at Madrid North and East Block basalts and sediments at Patch 7, all of which had values of <170 kgCaCO3/t. TIC content was typically higher than NP content owing to the presence of iron and/or manganese carbonate minerals that do not provide buffering.
- The majority of ore samples were classified as non-PAG by all methods with 40% of samples (n=17) classified as uncertain or PAG due to high sulphur content.

- A small portion of ore samples were uncertain or PAG based on at least one of NP/AP, TIC/AP, and $TIC_{(Ca+Mg)}$/AP ratios due to high sulphur content, including A-Type (unmixed, hematite altered, and mixed) basalts, sediments, (unmixed and mixed) from Madrid North, and MDZ from Patch 7.
  - C-Type basalts (unmixed and mixed) at Madrid North, and A-Type basalts and ultramafics at Patch 7 were all non-PAG.
- All waste rock samples were classified as non-PAG by all classification methods except for the following rock types:
  - Hematite altered A-Type basalt from Madrid North (n=3) was classified as uncertain by all classification methods.
  - A-Type basalt from Madrid North (n=175) had 1 to 3% of the samples classified as uncertain and <1% of samples that were classified as PAG on the basis of NP/AP only. All samples were classified as uncertain or PAG due to high sulphur (2 to 5 %S). This indicates classification by NP/AP is more conservative for A-Type. In contrast, all A-Type basalt samples from Patch 7 were classified as non-PAG by all methods.
  - MDZ samples from Patch 7 were classified as non-PAG by all methods except for 6% of samples with ~2 %S that were classified as uncertain by NP/AP due to lower NP content.
  - The majority (60 to 70%) of sediments at Madrid North and Patch 7 were classified as non-PAG by all classification methods with fewer samples classified as uncertain or PAG by NP/AP, indicating that NP/AP is more conservative due to the presence of iron carbonates. At Madrid North and Patch 7, ~35% of samples were classified as uncertain by NP/AP and 5 to 8% classified as PAG by NP/AP.
- For ore, 25^{th} to 75^{th} percentile concentrations of arsenic range from 220 and 1,000 ppm and were overall higher than waste rock.
- For waste rock, variability in arsenic content is summarized as follows:
  - Arsenic content was highest for A-Type basalts (unmixed, hematite altered and mixed), late dykes and sediments from Madrid North and felsic porphyry and ultramafics from Patch 7 (25^{th} to 75^{th} percentile values ranging from 40 to 700 ppm).
  - Arsenic content for specific rock types was variable between Madrid North and Patch 7 including A-Type basalt, C-Type basalt and sediments (higher at Madrid North) and ultramafics (higher at Patch 7).
  - Arsenic content was variable for basalt with A-Type basalt greater than C-Type basalt, which was higher than East Block basalt.
  - Arsenic content was relatively uniform for MDZ at Madrid North and Patch 7.
- Other parameters enriched relative to the screening criteria include sulphur for most rock types at both deposits, antimony for approximately half the rock types at both deposits, and cadmium, thallium, silver, selenium, tungsten, +/- mercury for A-Type basalt, C-Type basalt, and MDZ at Madrid North.

- Kinetic testing indicated neutral pH arsenic leaching. Stable rates indicated by HCTs as follows:
  - ~0.1 to ~1 mg/kg/week for A-Type basalts (waste rock; HC-24 and HC-25), C-Type basalts (ore and waste rock; HC-28, HC-41, and HC-27), sediment waste rock (HC-20) and MDZ (HC-29). For these samples, gersdorffite content was at or above the detection limit (0.01 wt%). Notably, HC-20 (sediments) had the highest arsenic and the highest gersdorffite content.,
  - ~0.01 to ~0.1 mg/kg/week, including samples of MDZ (waste rock, HC-5 and HC-39), A-Type basalts (ore and waste rock; HC-26 and HC-8), and C-Type basalts (waste rock; HC-18). Of these samples, the A-Type basalt samples had gersdorffite content above the detection limit.
  - ~0.0001 to ~0.01 mg/kg/week, including samples of C-Type basalts (waste rock; HC-40, HC-3, HC-19, HC-9, and HC-4), diabase (HC-22 and HC-23), sediments (HC-21), and MDZ (HC-30).
- Barrel tests operating at site since 2009 have maintained neutral pH and indicate lower release rates than HCTs.
- Kinetic test data for waste rock and ore are being used to derive source terms water quality estimates (SRK 2024).

Closure

This report, Geochemical Characterization of Waste Rock and Ore from the Madrid North and Patch 7 Deposits, was prepared by

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EGBC Permit to Practice Reg. No.: EGBC 1003655

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

Agnico, 2024. Hope Bay FEIS Addendum Project Description. June 2024.

MEND. 1991. Acid Rock Drainage Prediction Manual. MEND Project 1.16-1b. Report prepared by Coastech Research for CANMET. (see http://www.nrcan.gc.ca/mms/canmet-mtb/mmsllmsm/ mend/mendpubs-e.htm for publication information).

MEND. 2009. Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials. MEND Report 1.20.1. Report prepared by CANMET Mining and Mineral Sciences Laboratories.

Nunavut Water Board 2018. Water Licence No. 2AM-DOH1335 – Amendment No. 2. Issued on December 7, 2018.

Price, 1997. Draft Standards and Recommended Methods for the Prediction of Metal Leaching and Acid Rock Drainage at Mine Sites in British Columbia. Reclamation Section, British Columbia Ministry of Energy and Mines. April 1997.

SRK, 2017. Geochemical Characterization of Waste Rock and Ore, Madrid North Deposit, Hope Bay Project. November 2017.

SRK, 2024. Interim Geochemical Source Term Predictions for the 2025 FEIS Amendment Application, Hope Bay Project (in preparation).

TMAC, 2020. NI 43-101 Technical Report on the Hope Bay Property, Nunavut, Canada. March 2020.

Appendix A 2023 Sample List

Appendix A: 2023 Sample List

Deposit	Zone	Drillhole ID	Sample ID	Depth From	Depth To	Rock Type (Agnico Feb 2024 Geological Model)	Logged Rock Type (TMAC or Agnico)	Economic Classification (Agnico)
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-1	2.85	12	Basalt_C mixed	1a mixed	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-2	12	21	Basalt_C mixed	1p mixed	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-3	21	30	Basalt_C	1p	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-4	30	38.02	Basalt_C	1p	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-5	38.02	44	Basalt_C	1as	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-6	44	48.68	Basalt_C	1as	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-7	48.68	55.12	Basalt_C	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-8	55.12	57.37	Basalt_C	9n	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-9	57.37	60	Basalt_C	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-10	60	61.32	Basalt_C	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-11	61.32	67	Basalt_C	1as with sediments	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-12	67	72.9	Basalt_C	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-13	72.9	74.48	Basalt_C	9n	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-14	74.48	76.99	Basalt_A mixed	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-15	76.99	81	Sediments mixed	5a mixed	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-16	81	84.5	Sediments	5ai	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-17	84.5	85.5	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-18	85.5	87	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-19	87	88.5	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-20	88.5	90	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-21	90	91.5	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-22	91.5	93	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-23	93	94.5	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-24	94.5	96	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-25	96	97.5	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-26	97.5	99	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-27	99	100.5	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-28	100.5	102	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-29	102	103.5	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-30	103.5	105	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-31	105	106.5	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-32	106.5	107	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-33	107	107.83	Basalt_A	1aj	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-34	107.83	112	MDZ mixed	13am mixed	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-35	112	116.5	MDZ	13am	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-36	116.5	121	MDZ	13am	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-37	121	125.5	MDZ	13am	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-38	125.5	130	MDZ	13am	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-39	130	134.5	MDZ	13am	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-40	134.5	139	MDZ	13am	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-41	139	143.5	MDZ	13am	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-42	143.5	148	MDZ	13am	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-43	148	152.5	MDZ	13am	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-44	152.5	157	MDZ	13am	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-45	161.5	166	MDZ	13am	W
Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-46	170.5	176	MDZ	13am	W

Madrid N	Naartok W	HB-NWS-21-80051	HB-NWS-21-80051-SRK-WR-47	180.5	186	MDZ	13am	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-48	205	211	Basalt_C	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-49	216	221.1	Basalt_C	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-50	227	233.5	Basalt_C	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-51	239.5	245	Basalt_C	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-52	245	250.5	Basalt_C	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-53	250.5	256	Basalt_C	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-54	256	261	Basalt_C	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-55	261	266	Basalt_C	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-56	266	271	Basalt_C	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-57	271	276	Basalt_C	1aj	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-58	276	280	Basalt_C	1aj	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-59	280	285	Basalt_C	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-60	285	290	Basalt_C	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-61	290	295	Basalt_C	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-62	295	299	Basalt_C	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-63	299	304	Basalt_C	1aj	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-64	304	309.5	Basalt_C	1aj	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-65	309.5	314.5	Basalt_C	1aj	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-66	314.5	319	Basalt_A mixed	1aj mixed	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-67	319	323	Basalt_A	1aj	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-68	323	328	Basalt_A	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-69	328	333	Basalt_A	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-70	333	338	Basalt_A	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-71	338	343.6	Basalt_A	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-72	343.6	349	Basalt_A	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-73	349	355	Basalt_A	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-74	355	361	Basalt_A	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-75	361	365	Basalt_A	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-76	365	366	Basalt_A	1a	O
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-77	366.6	368	Basalt_A	1aj	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-78	368	372	Basalt_A	1aj	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-79	372	375	Basalt_A	1aj	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-80	375	377.7	Basalt_A	1aj	O
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-81	377.7	380.8	Sediments	5aj	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-82	380.8	386	Basalt_A	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-83	386	392	Basalt_A	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-84	392	398	Basalt_A	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-85	398	399	Basalt_A	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-86	399	401	Basalt_A	1a	O
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-87	401	404	Basalt_A	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-88	404	408	Basalt_A	1aj	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-89	408	410.9	Basalt_A	1aj	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-90	410.9	416	Basalt_A	1a	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-91	416	421.2	Basalt_A mixed	1a mixed	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-92	421.2	427.1	Diabase mixed	11cm	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-93	427.1	432.3	MDZ mixed	13am mixed	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-94	432.3	437.3	MDZ	13am	W

Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-95	443	448	MDZ	13am	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-96	454	459.5	MDZ	13am	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-97	464.5	470.5	MDZ	13am	W
Madrid N	Naartok W	HBM-21-004	HBM-21-004-SRK-WR-98	470.5	475	MDZ	13am	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-99	248	253.5	Basalt_C	1a	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-100	258.5	263.5	Basalt_C	1a	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-101	268.5	273.5	Basalt_C	1a	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-102	278.5	284.5	Basalt_C	1a	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-103	284.5	291.31	Basalt_A mixed	1a	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-104	291.31	292.31	Basalt_A	1a	O
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-105	292.31	298.5	Basalt_A	1a	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-106	298.5	302.18	Basalt_A	1a	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-107	302.18	304	Basalt_A	1aj	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-108	304	305	Basalt_A	1aj	O
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-109	305	306	Basalt_A	1aj	O
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-110	306	307.33	Basalt_A	1aj	O
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-111	308	309	Basalt_A	1a	O
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-112	309	314	Basalt_A	1a	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-113	314	318.96	Basalt_A	1a	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-114	318.96	323	Basalt_A	1a	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-115	323	324.79	Basalt_A	1a	O
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-116	324.79	330.6	Ultramafics	7u	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-117	330.6	336	Ultramafics	7u	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-118	336	342	Ultramafics	7u	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-119	342	346.4	Ultramafics	7u	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-120	346.4	351.4	Basalt_C	1a	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-121	356.4	361.4	Basalt_C	1a	W
Madrid N	Naartok E	HBM-21-032	HBM-21-032-SRK-WR-122	367	371.5	Basalt_C	1a	W
Madrid N	Naartok E	HBM-21-010	HBM-21-010-SRK-WR-123	247	251.8	Basalt_A	1a	W
Madrid N	Naartok E	HBM-21-010	HBM-21-010-SRK-WR-124	251.8	253.95	Basalt_A Hematite	1a	W
Madrid N	Naartok E	HBM-21-010	HBM-21-010-SRK-WR-125	253.95	257.74	Basalt_A Hematite	1aj	W
Madrid N	Naartok E	HBM-21-010	HBM-21-010-SRK-WR-126	257.74	260	Basalt_A Hematite	1aj	O
Madrid N	Naartok E	HBM-21-010	HBM-21-010-SRK-WR-127	260	261.53	Basalt_A Hematite	1aj	W
Madrid N	Naartok E	HBM-21-010	HBM-21-010-SRK-WR-128	261.53	263.25	Basalt_A	1aj	W
Madrid N	Naartok E	HBM-21-010	HBM-21-010-SRK-WR-129	263.25	267.25	Basalt_A	1aj	O
Madrid N	Naartok E	HBM-21-010	HBM-21-010-SRK-WR-130	267.25	268.25	Basalt_A	1aj	W
Madrid N	Naartok E	HBM-21-010	HBM-21-010-SRK-WR-131	268.25	270.25	Basalt_A	1aj	O
Madrid N	Naartok E	HBM-21-010	HBM-21-010-SRK-WR-132	270.25	274.75	Basalt_A	1aj	O
Madrid N	Naartok E	HBM-21-010	HBM-21-010-SRK-WR-133	274.75	276.9	Basalt_A	1a	O
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-134	150	156	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-135	162	168	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-136	174	180	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-137	186	190.5	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-138	190.5	195	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-139	195	199.5	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-140	199.5	204	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-141	204	209	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-142	209	213.5	Basalt_C	1a	W

Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-143	213.5	216.5	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-144	218.7	222	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-145	228	234	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-146	240	246	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-147	252	258	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-148	442.5	447	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-149	447	451.5	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-150	453.1	456	Basalt_C mixed	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-151	456	457.5	Late_Dykes	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-152	457.5	463	Basalt_C mixed	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-153	463	468	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-154	468	473	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-155	473	478	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-156	478	483	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-157	483	488	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-158	488.95	493	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-159	493	498	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-160	498	503.5	Ultramafics mixed	1u mixed	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-161	503.5	509.5	Ultramafics	1u	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-162	509.5	515.5	Ultramafics	1u	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-163	515.5	521.5	Ultramafics	1u	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-164	521.5	525.8	Ultramafics	1u	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-165	525.8	531	MDZ	13as	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-166	531	536	MDZ	13as	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-167	536	541	MDZ	13as	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-168	541	546	MDZ	13as	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-169	546	551	MDZ	13as	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-170	551	556	MDZ	13as	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-171	556	561	MDZ	13as	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-172	561	566	MDZ	13as	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-173	566	571	MDZ	13as	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-174	571	576	MDZ	13as	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-175	576	581	MDZ	13as	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-176	581	586	MDZ	13as	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-177	586	591	MDZ	13as	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-178	591	595.6	MDZ	13as	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-179	595.6	598.9	MDZ	13as	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-180	598.9	603	Ultramafics	1u	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-181	603	607.25	Ultramafics mixed	1u mixed	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-182	607.25	612	Basalt_A	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-183	612	616.42	Basalt_A	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-184	616.42	621.5	Sediments	5a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-185	621.5	625.35	Sediments mixed	5a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-186	626.5	630.5	Sediments	5a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-187	630.5	636	Sediments mixed	5a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-188	636	637	Sediments	5ai	O
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-189	637	640.5	Sediments	5a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-190	640.5	644.5	Sediments	5a	W

Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-191	644.5	645.5	Sediments	5a	O
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-192	645.5	647.5	Sediments	5a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-193	647.5	648.5	Sediments	5a	O
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-194	648.5	652.5	Sediments	5a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-195	652.5	656.52	Sediments mixed	5a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-196	656.52	661.5	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-197	666.5	671.5	Basalt_C	1a	W
Madrid N	Suluk	HBM-22-045B	HBM-22-045B-SRK-WR-198	676.5	681.5	Basalt_C	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-1	139.5	144	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-2	148.5	153	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-3	157.5	162.5	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-4	168	173	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-5	178	183	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-6	188	193	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-7	193	198	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-8	198	203	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-9	203	208	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-10	208	213	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-11	213	218	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-12	218	223	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-13	223	228	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-14	228	233	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-15	233	238	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-16	238	243	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-17	243	249.85	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-18	249.85	255	Ultramafics	1u	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-19	255	259	Ultramafics	1u	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-20	259	264	Ultramafics	1u	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-21	264	268.2	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-22	268.2	274	Ultramafics	1u	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-23	275	281	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-24	287	291.4	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-25	291.4	296	Ultramafics	1u	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-26	301	306	Ultramafics	1u	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-27	311	316	Ultramafics	1u	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-28	330	335	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-29	340	345	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-30	351	356.5	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-31	356.5	362	Sediments	5aj	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-32	362	367	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-33	369	374	Ultramafics	1u	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-34	376	381	Ultramafics	1u	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-35	386	391	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-36	396	401.5	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-37	406.5	412.5	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-38	418.5	424.5	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-39	430.5	436.5	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-40	442.5	448.5	Basalt_A	1a	W

Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-41	450.5	453.2	Basalt_A	12cd	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-42	453.2	458	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-43	458	463.8	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-44	463.8	465.2	Basalt_A	12cd	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-45	465.2	471	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-46	477	482	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-47	487	492	Ultramafics	1u	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-48	500	505	Ultramafics	1u	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-49	505	509	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-50	513	517	Ultramafics	1u	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-51	523	528	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-52	532.5	538.5	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-53	544	550	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-54	554.5	559	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-55	565	569.5	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-56	574	580	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-57	580	585	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-58	585	586	Basalt_A	1a	O
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-59	586	591	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-60	593	598	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-61	603	608	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-62	613	618	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-63	623	628	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-64	633	638	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-65	643	648	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-66	653	658	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-67	663	668	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-68	673	678	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-69	683	688	Basalt_A	1a	W
Patch 7	--	HBM-23-123	HBM-23-123-SRK-WR-70	693	699	Basalt_A	1a	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-71	469	474.2	Basalt_A	1a	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-72	479.5	485.5	Basalt_A	1a	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-73	491.5	497.5	Basalt_A	1a	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-74	503.5	509.5	Basalt_A	1a	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-75	515.5	521.5	Basalt_A	1a	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-76	521.5	526.5	Basalt_A mixed	1a	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-77	526.5	532.5	Basalt_A	1a	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-78	532.5	537	Basalt_A	1a	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-79	537	542.5	Basalt_A mixed	1a mixed	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-80	542.5	546.5	Ultramafics	1u	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-81	546.5	552	Basalt_A	1a	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-82	552	559	Basalt_A	1a	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-83	559	565	Basalt_A	1a	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-84	570	575	MDZ	13am	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-85	580	585	MDZ	13am	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-86	589.2	593.9	Basalt_A	1a	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-87	599	604	Basalt_A	1a	W
Patch 7	--	HBM-23-112	HBM-23-112-SRK-WR-88	609	613.9	Basalt_A	1a	W

Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-89	610.7	615.7	Ultramafics	1u	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-90	615.7	620.7	Ultramafics mixed	1u mixed	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-91	626.5	631.5	Ultramafics	1u	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-92	636.5	641.5	MDZ mixed	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-93	646.5	652.4	MDZ	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-94	652.4	656.6	Sediments	5ai	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-95	656.6	661.6	MDZ	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-96	661.6	666.9	MDZ	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-97	666.9	672	Ultramafics	1u	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-98	672	677.5	Ultramafics	1u	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-99	677.5	682.5	Ultramafics	1u	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-100	682.5	688.1	Ultramafics	1u	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-101	688.1	694.6	Ultramafics	1u	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-102	694.6	700.8	Ultramafics	1u	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-103	700.8	702.9	Basalt_A	12qd	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-104	702.9	708	Sediments	5a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-105	708	713	Sediments	5ai	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-106	713	718	Sediments	5ai	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-107	718	723.9	Sediments	5ai	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-108	723.9	729	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-109	729	734.9	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-110	734.9	740	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-111	740	746	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-112	746	752	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-113	752	757.5	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-114	757.5	763.5	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-115	763.5	769.5	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-116	775.5	781	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-117	781	787	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-118	787	793	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-119	793	798.4	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-120	798.4	805	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-121	805	806	Basalt_A	1a	O
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-122	806	812	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-123	812	817	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-124	817	823.5	Basalt_A mixed	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-125	823.5	828.5	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-126	828.5	832.5	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-127	832.5	836.5	Basalt_A	1a	O
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-128	836.5	840.5	Basalt_A	1a	O
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-129	840.5	845.5	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-130	845.5	850.1	Basalt_A	1a	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-131	850.1	855.6	Basalt_A	1aj	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-132	855.6	860.5	Basalt_A	1aj	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-133	860.5	865.5	Basalt_A	1aj	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-134	865.5	870.3	Basalt_A	1aj	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-135	870.3	874	Basalt_A	1aj	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-136	874	879	Basalt_A	1aj	W

Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-137	879	884	Basalt_A	1aj	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-138	884	885	Basalt_A	1aj	O
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-139	885	889	Basalt_A	1aj	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-140	889	894.6	Basalt_A	1aj	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-141	894.6	900	MDZ	13as	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-142	900	905	MDZ	13as	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-143	905	910	MDZ	13as	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-144	910	915	MDZ	13as	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-145	915	920	MDZ	13as	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-146	920	925	MDZ	13as	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-147	925	928.5	MDZ mixed	13as	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-148	933	937.7	MDZ	13am	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-149	943.1	948.5	MDZ	13am	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-150	952.7	958	MDZ	13am	W
Patch 7	--	HBM-23-086	HBM-23-086-SRK-WR-151	964	969.6	Basalt_C mixed	1a	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-152	144	149	MDZ	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-153	154	159	MDZ	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-154	164	169	MDZ	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-155	173	179	MDZ mixed	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-156	183	187	MDZ	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-157	187	188	MDZ	13am	O
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-158	188	193	MDZ	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-159	193	198.2	MDZ	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-160	198.2	201.8	Sediments	5ai	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-161	201.8	206.5	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-162	206.5	212.5	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-163	212.5	218.5	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-164	218.5	224.5	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-165	224.5	229	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-166	229	234	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-167	234	237	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-168	237	240	Sediments	5aj	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-169	240	245	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-170	245	250	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-171	250	255	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-172	255	260	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-173	260	265	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-174	265	270	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-175	270	272.8	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-176	272.8	277	Felsic_Porphyry	9p	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-177	277	282.4	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-178	282.4	287	MDZ	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-179	287	292	MDZ	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-180	292	297	MDZ	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-181	297	301.7	MDZ	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-182	301.7	306.5	MDZ	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-183	306.5	310.5	MDZ	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-184	311.7	317	MDZ	13as	W

Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-185	317	322	MDZ	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-186	322	327	MDZ mixed	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-187	327	333.6	MDZ	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-188	333.6	337	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-189	337	341	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-190	341	346	MDZ	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-191	346	351	MDZ	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-192	351	354	MDZ mixed	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-193	354	358	MDZ	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-194	358	361.7	MDZ	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-195	361.7	367	MDZ	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-196	367	372	MDZ	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-197	372	377.85	MDZ	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-198	377.85	380.7	MDZ	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-199	380.7	382.7	MDZ	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-200	382.7	388	MDZ	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-201	388	391	MDZ	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-202	391	395	MDZ mixed	13am	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-203	395	396	MDZ	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-204	396	397	MDZ	13as	O
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-205	397	400	MDZ	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-206	400	404	MDZ	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-207	404	405	MDZ	13as	O
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-208	405	410	MDZ	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-209	410	412.7	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-210	412.7	417.6	MDZ mixed	13as mixed	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-211	417.6	423	MDZ	13as	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-212	423	427.7	MDZ mixed	13as mixed	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-213	427.7	433	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-214	433	438	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-215	438	442	Ultramafics	1u	O
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-216	442	446	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-217	446	447	Ultramafics	1u	O
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-218	447	452.8	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-219	452.8	457	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-220	457	463	Ultramafics	1u	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-221	463	468	East_Block_Basalts	1a	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-222	473	478	East_Block_Basalts	1a	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-223	483	488	East_Block_Basalts	1a	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-224	492	497	East_Block_Basalts	1a	W
Patch 7	--	HBM-23-097A	HBM-23-097A-SRK-WR-225	503	509.6	East_Block_Basalts	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-226	568.7	574	MDZ	13am	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-227	580	585	MDZ	13am	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-228	590.5	595	MDZ	13am	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-229	599	601	Sediments	5a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-230	601	606	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-231	606	607	Basalt_A	1a	O
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-232	607	613	Basalt_A	1a	W

Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-233	616	621	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-234	621	626	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-235	626	631	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-236	631	636	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-237	636	641.5	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-238	641.5	647.2	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-239	647.2	652	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-240	652	655.1	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-241	655.1	659.5	Sediments	5cu	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-242	659.5	664	Sediments	5cu	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-243	664	668.4	Sediments	5cu	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-244	668.4	674	Ultramafics	1u	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-245	674	679	Ultramafics	1u	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-246	679	684	Ultramafics	1u	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-247	684	688	Ultramafics	1u	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-248	688	693	MDZ	13am	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-249	693	696.8	MDZ	13am	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-250	696.8	702	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-251	702	708	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-252	708	713	MDZ	13am	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-253	713	717	MDZ	13am	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-254	717	722	MDZ	13am	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-255	722	727.7	MDZ	13am	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-256	727.7	732	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-257	732	737	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-258	737	740	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-259	740	745.9	Ultramafics	1u	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-260	745.9	751	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-261	751	756.3	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-262	756.3	762	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-263	762	767	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-264	767	771.5	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-265	771.5	776.1	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-266	776.1	781	Ultramafics	1u	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-267	781	786	Ultramafics	1u	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-268	791.2	797	Basalt_A	1a	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-269	802.8	808.5	Ultramafics mixed	1u mixed	W
Patch 7	--	HBM-23-122	HBM-23-122-SRK-WR-270	814.5	820.5	East_Block_Basalts	1a	W

Appendix B QA/QC Summary for 2023 Samples

Appendix B: QA/QC Summary for 2023 Samples

QC Test	n	SRK QC Criteria	Results
paste pH			
Pulp Duplicate	(n=44)	For any samples, +/- 0.5 difference pH unit	All passed
Split duplicates	(n=42)	For any samples, +/- 0.5 difference pH unit	All passed
Standard Reference Material	(n=0)	Within specified tolerance ranges.	#N/A
Total C and TIC			
Lab Blank	(n=2) for Total C and (n=2) for TIC	<5X detection limit (DL)	All passed
Carbon balance (Total C > TIC)	(n=468)	For samples > 10X the detection limit (DL), Total Carbon should be greater than Total Inorganic Carbon, if not the % difference should be within +/-20%	All passed
Pulp Duplicate	(n=20) for Total C and (n=18) for TIC	For samples > 10X the detection limit (DL), % RPD within +/-20%	All passed
Split duplicate	(n=45) for Total C and (n=45) for TIC	For samples > 10X the detection limit (DL), % RPD within +/-30%	All passed
Standard Reference Material	(n=23) for Total C and (n=29) for TIC	Within specified tolerance ranges.	All passed
Total S & Total Sulphate			
Lab Blank	(n=2) for Total S and (n=2) for Total Sulphate	<5X detection limit (DL)	All passed
Sulphur balance (total S > sulphate S)	(n=468)	For samples > 10X the detection limit (DL), Total Sulphur should be greater than Total Sulphate, if not the % difference should be within +/-20%	All passed
Split Duplicate	(n=45) for Total S and (n=45) for Total Sulphate	For samples > 10X the detection limit (DL), % RPD within +/-30%	A few samples were outside of SRK's QC Critieria, but within lab tolerance limits. Values were accepted as is.
Pulp Duplicate	(n=20) for Total S and (n=27) for Total Sulphate	For samples > 10X the detection limit (DL), % RPD within +/-20%	All passed
Standard Reference Material	(n=22) for Total S and (n=20) for Total Sulphate	Within specified tolerance ranges.	All passed
Modified NP and Terminal pH			
Lab Blank	(n=0)	<5X detection limit (DL)	#N/A
NP consistent with paste pH	(n=468)	Negative NP has paste pH <= 5	All passed
Pulp Duplicate	(n=47) for NP, (n=47) for Terminal pH and (n=47) for Fizz Test	% RPD better than +/-15% for NP>20 kg/t, % RPD better than +/-20% for NP>10 kg/t, Difference within +/-5kg/t for NP<10 kg/t. Fizz test rating is the same.	All passed
Split duplicates	(n=45) for NP, (n=45) for Terminal pH and (n=45) for Fizz Test	For samples > 10X the detection limit (DL), % RPD within +/-30%	All passed
Terminal pH	(n=468)	Terminal pH of modified NP within method prescribed range (1.5 to 2.0 pH unit). May not apply to none fizz which can yield lower pH. It is also possible that with the lowest acid quantity will yield lower than 1.5 pH. SGS upper criteria is 2.2. Requested to be reported. No need to check for Max NP vs. Fizz test	~ 15% of samples failed initially, but tests were re-run with the minimum amount of acid as per the modified NP method. All values were within the lab tolerance limits and were accepted.
Standard Reference Material	(n=28) for NP, (n=28) for Terminal pH and (n=28) for Fizz Test	Within specified tolerance ranges.	All passed
Modified NP and TIC			
Comparison between Modified NP and TIC	(n=468)	Check for trends/correlation	TIC is generally higher than NP
Total S-Leco and S-ICP			
Comparison between Total S-Leco and S-ICP	(n=468)	For samples >10X detection limit (DL), % RPD within +/-20%	A portion of samples failed initially. After rechecks, the samples were within +/- 30% RPD. All values were within the lab tolerance limits and were accepted.
Metals - Aqua Regia Digestion with ICP-OES/MS Finish			
Lab Blank	(n=11)	<5X detection limit (DL)	All passed
Split Duplicate	(n=45)	For samples >10X detection limit (DL), % RPD within +/-30%, ok 10% of metal scan failing.	All passed
Pulp Duplicate	(n=20)	For samples >10X detection limit (DL), % RPD within +/-20%, ok 10% of metal scan failing.	All passed
Standard Reference Material	(n=29)	<10X DL, Within specified tolerance ranges.	All passed

Appendix C Complete Laboratory ABA Results for 2023 Samples

SGS proposal: 19322-PR2-R2
SGS project #: 2351

Work order date: 30-Nov-23
Report date: 10-Feb-24
Sample receipt date: 29-Nov-23
Version: Final

Customer details

Name:	Kyle Jang
Address:	SRK

Project reference: Hope Bay Madrid North

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 1

Report Distribution

Name	Email
Kyle Jang	

Special notes:

Fizz test repeated for 165383 9 Apr 24
CRMs for AR Metals updated 9 Apr 24

ICP updated with revised analytical data 15 May 2024 - S values impacted

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

SGS proposal: 19322-PR2-R2
SGS project #: 2351

Work order date: 30-Nov-23
Report date: 10-Feb-24

Version: Final

ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
Sample ID					
165201	0.229	<0.01	0.229	NA	7.2
165202	0.285	<0.01	0.285	NA	8.9
165203	0.228	<0.01	0.228	NA	7.1
165204	0.137	<0.01	0.137	NA	4.3
165205	0.572	<0.01	0.572	NA	17.9
165206	0.514	<0.01	0.514	NA	16.1
165207	0.135	<0.01	0.135	NA	4.2
165208	0.271	<0.01	0.271	NA	8.5
165209	0.207	<0.01	0.207	NA	6.5
165210	0.797	0.01	0.787	NA	24.6
165211	1.151	0.01	1.141	NA	35.7
165212	0.54	<0.01	0.54	NA	16.9
165213	0.773	<0.01	0.773	NA	24.2
165214	0.81	<0.01	0.81	NA	25.3
165215	0.659	<0.01	0.659	NA	20.6
165216	0.506	0.01	0.496	NA	15.5
165217	0.437	0.01	0.427	NA	13.3
165218	2.27	0.02	2.25	NA	70.3
165219	1.103	0.01	1.093	NA	34.2
165220	0.582	<0.01	0.582	NA	18.2
165221	0.398	0.02	0.378	NA	11.8
165222	0.301	0.01	0.291	NA	9.1
165223	0.444	<0.01	0.444	NA	13.9
165224	0.279	<0.01	0.279	NA	8.7
165225	0.282	<0.01	0.282	NA	8.8
165226	0.33	0.01	0.32	NA	10.0
165227	0.229	<0.01	0.229	NA	7.2
165228	0.126	<0.01	0.126	NA	3.9
165229	0.207	<0.01	0.207	NA	6.5
165230	0.482	<0.01	0.482	NA	15.1
165231	0.132	<0.01	0.132	NA	4.1
165232	0.338	<0.01	0.338	NA	10.6
165233	0.518	<0.01	0.518	NA	16.2
165234	0.209	<0.01	0.209	NA	6.5
165235	0.162	<0.01	0.162	NA	5.1
165236	0.174	<0.01	0.174	NA	5.4
165237	0.078	<0.01	0.078	NA	2.4
165238	0.125	<0.01	0.125	NA	3.9
165239	0.11	<0.01	0.11	NA	3.4
165240	0.196	<0.01	0.196	NA	6.1
165241	0.203	<0.01	0.203	NA	6.3
165242	0.403	<0.01	0.403	NA	12.6
165243	0.11	<0.01	0.11	NA	3.4
165244	0.087	<0.01	0.087	NA	2.7
165245	0.129	<0.01	0.129	NA	4.0
165246	0.259	<0.01	0.259	NA	8.1
165247	1.187	<0.01	1.187	NA	37.1
165248	0.079	<0.01	0.079	NA	2.5
165249	0.059	<0.01	0.059	NA	1.8
165250	0.072	<0.01	0.072	NA	2.3
165251	0.087	<0.01	0.087	NA	2.7
165252	0.057	<0.01	0.057	NA	1.8
165253	0.084	<0.01	0.084	NA	2.6
165254	0.101	<0.01	0.101	NA	3.2
165255	0.109	<0.01	0.109	NA	3.4
165256	0.136	<0.01	0.136	NA	4.3
165257	0.087	<0.01	0.087	NA	2.7
165258	0.31	<0.01	0.31	NA	9.7
165259	0.224	<0.01	0.224	NA	7.0
165260	0.409	<0.01	0.409	NA	12.8
165261	0.087	<0.01	0.087	NA	2.7

SGS proposal: 19322-PR2-R2
SGS project #: 2351

Work order date: 30-Nov-23
Report date: 10-Feb-24

Version: Final

ABA Report

Test	C(T)	TIC	CaCO3 NP	CO3 NPR	Modified Sobek terminal pH	Modified NP	Net Modified NP	Bulk NPR	Fizz Test	Paste pH
Units	%	%	kg CaCO3/t			kg CaCO3/t	kg CaCO3/t			
Method Code	CSA06V	CSB02V	Calc.	Calc.		Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01				0.5				0.2
Sample ID										
165201	2.926	3.14	261.7	36.56	1.88	201.8	194.6	28.20	Moderate	9.21
165202	3.571	3.80	316.7	35.56	1.73	258.0	249.1	28.96	Moderate	9.24
165203	2.706	2.98	248.3	34.85	1.94	231.7	224.5	32.51	Moderate	9.28
165204	1.838	1.98	165.0	38.54	1.88	133.4	129.1	31.15	Slight	9.31
165205	2.361	2.55	212.5	11.89	2.18	175.9	158.1	9.84	Slight	9.23
165206	4.306	4.42	368.3	22.93	1.59	334.4	318.3	20.82	Moderate	9.37
165207	0.415	0.43	35.8	8.49	1.94	50.4	46.2	11.95	Slight	9.35
165208	4.644	4.82	401.7	47.43	1.57	285.1	276.6	33.66	Moderate	9.17
165209	5.368	5.39	449.2	69.44	1.68	371.3	364.8	57.39	Moderate	9.14
165210	5.663	5.81	484.2	19.69	1.46	377.1	352.5	15.33	Moderate	8.86
165211	5.733	5.26	438.3	12.29	1.79	338.9	303.2	9.50	Moderate	8.89
165212	5.095	4.22	351.7	20.84	1.65	255.6	238.7	15.15	Moderate	9.25
165213	4.703	4.22	351.7	14.56	1.69	281.2	257.1	11.64	Moderate	9.11
165214	5.408	4.69	390.8	15.44	1.81	300.6	275.2	11.87	Moderate	8.90
165215	6.12	5.42	451.7	21.93	1.70	330.7	310.1	16.06	Moderate	9.09
165216	6.256	5.92	493.3	31.83	1.77	361.4	345.9	23.31	Moderate	8.91
165217	5.083	4.83	402.5	30.16	1.64	340.0	326.6	25.48	Moderate	9.10
165218	1.167	1.11	92.5	1.32	1.71	80.3	10.0	1.14	Slight	9.55
165219	7.381	6.50	541.7	15.86	1.59	414.6	380.4	12.14	Moderate	9.03
165220	6.834	5.90	491.7	27.03	1.66	373.5	355.3	20.54	Moderate	9.25
165221	6.886	5.69	474.2	40.14	1.88	312.4	300.6	26.44	Moderate	9.30
165222	6.832	5.91	492.5	54.16	1.88	385.9	376.8	42.44	Moderate	9.12
165223	6.854	5.90	491.7	35.44	1.72	345.0	331.1	24.86	Moderate	9.27
165224	6.684	5.59	465.8	53.43	1.94	290.2	281.5	33.29	Moderate	9.12
165225	6.499	5.59	465.8	52.86	1.68	335.4	326.6	38.06	Moderate	9.05
165226	6.481	5.58	465.0	46.50	1.74	321.6	311.6	32.16	Moderate	9.15
165227	6.32	5.15	429.2	59.97	1.83	339.0	331.9	47.38	Moderate	9.05
165228	6.321	5.41	450.8	114.50	1.86	332.8	328.9	84.52	Moderate	9.06
165229	6.171	5.16	430.0	66.47	1.67	319.7	313.2	49.42	Moderate	9.03
165230	6.657	5.92	493.3	32.75	1.46	383.6	368.5	25.47	Moderate	9.06
165231	5.997	5.52	460.0	111.52	1.84	360.9	356.8	87.50	Moderate	9.11
165232	6.395	5.87	489.2	46.31	1.86	366.6	356.1	34.71	Moderate	8.92
165233	5.158	5.04	420.0	25.95	1.56	311.5	295.3	19.25	Moderate	9.32
165234	4.376	4.49	374.2	57.29	1.49	250.7	244.2	38.38	Moderate	9.55
165235	4.216	4.42	368.3	72.76	1.48	286.6	281.5	56.61	Moderate	9.50
165236	3.3	3.49	290.8	53.49	1.56	223.5	218.1	41.11	Moderate	9.27
165237	2.488	2.70	225.0	92.31	1.64	215.9	213.5	88.59	Moderate	9.10
165238	2.39	2.62	218.3	55.89	1.53	208.8	204.9	53.46	Strong	8.90
165239	1.58	1.46	121.7	35.39	1.81	136.0	132.6	39.56	Moderate	9.12
165240	1.838	1.73	144.2	23.54	1.30	145.9	139.7	23.81	Strong	9.04
165241	1.783	1.94	161.7	25.48	1.34	159.5	153.2	25.15	Strong	9.01
165242	1.746	1.85	154.2	12.24	1.36	157.0	144.4	12.47	Strong	9.13
165243	1.887	1.86	155.0	45.09	1.38	167.3	163.9	48.67	Strong	8.96
165244	2.068	2.21	184.2	67.74	1.65	186.7	184.0	68.68	Strong	9.07
165245	2.491	2.53	210.8	52.30	1.44	218.1	214.0	54.10	Strong	9.25
165246	1.883	2.06	171.7	21.21	1.36	169.2	161.1	20.90	Strong	9.22
165247	1.882	1.80	150.0	4.04	1.36	153.0	115.9	4.12	Strong	9.15
165248	2.172	2.28	190.0	76.96	1.58	197.7	195.3	80.10	Strong	9.06
165249	2.507	2.51	209.2	113.45	1.75	222.0	220.2	120.42	Strong	9.01
165250	3.144	3.35	279.2	124.07	1.68	251.4	249.2	111.74	Strong	9.12
165251	2.424	2.19	182.5	67.13	1.39	189.6	186.9	69.74	Strong	9.13
165252	2.241	2.07	172.5	96.84	1.82	186.7	184.9	104.82	Strong	8.77
165253	2.364	2.27	189.2	72.06	1.84	193.1	190.5	73.56	Strong	9.02
165254	2.665	2.44	203.3	64.42	1.73	211.9	208.7	67.14	Strong	9.13
165255	3.121	3.17	264.2	77.55	1.64	259.8	256.4	76.27	Strong	9.01
165256	2.952	3.01	250.8	59.02	1.56	232.4	228.2	54.69	Strong	9.02
165257	3.451	3.66	305.0	112.18	1.54	258.4	255.7	95.04	Moderate	9.22
165258	3.529	3.64	303.3	31.31	1.42	222.8	213.1	23.00	Moderate	9.52
165259	2.477	2.42	201.7	28.81	1.62	169.7	162.7	24.24	Moderate	9.51
165260	4.238	4.28	356.7	27.91	1.71	250.2	237.4	19.58	Moderate	9.72
165261	4.552	4.61	384.2	141.30	1.64	275.2	272.5	101.22	Moderate	9.81

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
165262	0.196	<0.01	0.196	NA	6.1
165263	0.244	<0.01	0.244	NA	7.6
165264	0.23	<0.01	0.23	NA	7.2
165265	0.506	<0.01	0.506	NA	15.8
165266	2.752	0.02	2.732	NA	85.4
165267	1.434	0.01	1.424	NA	44.5
165268	0.795	<0.01	0.795	NA	24.8
165269	0.397	<0.01	0.397	NA	12.4
165270	0.276	<0.01	0.276	NA	8.6
165271	0.128	<0.01	0.128	NA	4.0
165272	0.083	<0.01	0.083	NA	2.6
165273	0.324	<0.01	0.324	NA	10.1
165274	0.246	<0.01	0.246	NA	7.7
165275	0.196	<0.01	0.196	NA	6.1
165276	0.193	<0.01	0.193	NA	6.0
165277	0.508	<0.01	0.508	NA	15.9
165278	0.698	<0.01	0.698	NA	21.8
165279	0.341	<0.01	0.341	NA	10.7
165280	0.472	<0.01	0.472	NA	14.8
165281	1.323	<0.01	1.323	NA	41.3
165282	0.658	<0.01	0.658	NA	20.6
165283	0.823	<0.01	0.823	NA	25.7
165284	1.23	<0.01	1.23	NA	38.4
165285	0.813	<0.01	0.813	NA	25.4
165286	0.211	<0.01	0.211	NA	6.6
165287	0.249	<0.01	0.249	NA	7.8
165288	0.361	<0.01	0.361	NA	11.3
165289	0.239	<0.01	0.239	NA	7.5
165290	0.233	<0.01	0.233	NA	7.3
165291	0.33	<0.01	0.33	NA	10.3
165292	0.444	<0.01	0.444	NA	13.9
165293	0.291	<0.01	0.291	NA	9.1
165294	0.325	<0.01	0.325	NA	10.2
165295	0.28	<0.01	0.28	NA	8.8
165296	0.086	<0.01	0.086	NA	2.7
165297	0.583	<0.01	0.583	NA	18.2
165298	0.251	<0.01	0.251	NA	7.8
165299	0.081	<0.01	0.081	NA	2.5
165300	0.178	<0.01	0.178	NA	5.6
165301	0.294	<0.01	0.294	NA	9.2
165302	0.149	<0.01	0.149	NA	4.7
165303	0.059	<0.01	0.059	NA	1.8
165304	0.077	<0.01	0.077	NA	2.4
165305	0.129	<0.01	0.129	NA	4.0
165306	1.382	<0.01	1.382	NA	43.2
165307	2.773	0.01	2.763	NA	86.3
165308	0.667	0.02	0.647	NA	20.2
165309	1.254	<0.01	1.254	NA	39.2
165310	4.056	0.02	4.036	NA	126.1
165311	5.638	0.04	5.598	NA	174.9
165312	3.490	0.02	3.47	NA	108.4
165313	5.008	0.06	4.948	NA	154.6
165314	4.036	0.03	4.006	NA	125.2
165315	0.415	<0.01	0.415	NA	13.0
165316	0.744	<0.01	0.744	NA	23.3
165317	1.649	0.01	1.639	NA	51.2
165318	0.062	<0.01	0.062	NA	1.9
165319	0.080	<0.01	0.08	NA	2.5
165320	0.098	<0.01	0.098	NA	3.1
165321	0.057	<0.01	0.057	NA	1.8
165322	0.056	<0.01	0.056	NA	1.8
165323	0.103	<0.01	0.103	NA	3.2

SGS proposal: 19322-PR2-R2
SGS project #: 2351

Work order date: 30-Nov-23
Report date: 10-Feb-24

Version: Final

ABA Report

Test	C(T)	TIC	CaCO3 NP	CO3 NPR	Modified Sobek terminal pH	Modified NP	Net Modified NP	Bulk NPR	Fizz Test	Paste pH
Units	%	%	kg CaCO3/t			kg CaCO3/t	kg CaCO3/t			
Method Code	CSA06V	CSB02V	Calc.	Calc.		Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01				0.5				0.2
165262	4.814	4.68	390.0	63.67	1.49	300.9	294.8	49.13	Moderate	9.71
165263	4.527	4.62	385.0	50.49	1.55	300.5	292.9	39.41	Moderate	9.56
165264	2.501	2.68	223.3	31.07	1.61	178.6	171.4	24.85	Moderate	9.17
165265	5.638	5.78	481.7	30.46	1.31	388.1	372.3	24.55	Strong	8.96
165266	4.27	3.93	327.5	3.84	1.45	267.8	182.5	3.14	Strong	8.73
165267	2.136	1.73	144.2	3.24	1.30	119.1	74.6	2.68	Strong	8.68
165268	3.326	3.26	271.7	10.94	1.61	226.5	201.7	9.12	Strong	8.99
165269	4.935	5.03	419.2	33.79	1.50	331.0	318.6	26.68	Strong	9.27
165270	6.256	6.28	523.3	60.68	1.48	425.4	416.7	49.32	Strong	9.15
165271	5.783	5.66	471.7	117.92	1.41	412.7	408.7	103.18	Strong	8.77
165272	6.537	6.58	548.3	211.41	1.37	464.8	462.2	179.21	Strong	8.74
165273	6.886	6.73	560.8	55.39	1.61	446.4	436.2	44.08	Strong	9.23
165274	6.177	6.44	536.7	69.81	1.63	412.8	405.1	53.70	Strong	9.39
165275	5.924	6.06	505.0	82.45	1.56	396.0	389.9	64.66	Strong	9.31
165276	6.416	6.35	529.2	87.74	1.45	417.9	411.9	69.29	Strong	9.19
165277	6.179	6.20	516.7	32.55	1.73	396.0	380.1	24.94	Strong	9.27
165278	5.89	5.76	480.0	22.01	1.75	387.1	365.3	17.75	Strong	9.30
165279	6.657	6.57	547.5	51.38	1.56	414.2	403.6	38.87	Strong	9.21
165280	7.106	6.79	565.8	38.36	1.71	455.9	441.2	30.91	Strong	9.24
165281	6.728	6.73	560.8	13.57	1.66	445.3	403.9	10.77	Strong	9.15
165282	6.165	6.27	522.5	25.41	1.61	400.9	380.4	19.50	Strong	9.09
165283	5.672	5.83	485.8	18.89	1.59	388.4	362.7	15.10	Strong	9.01
165284	5.774	5.84	486.7	12.66	1.90	402.7	364.2	10.48	Strong	9.05
165285	2.434	2.19	182.5	7.18	1.34	138.7	113.3	5.46	Strong	9.45
165286	2.333	2.09	174.2	26.41	1.28	138.1	131.5	20.94	Strong	9.55
165287	2.37	2.15	179.2	23.03	1.27	139.3	131.5	17.90	Strong	9.71
165288	2.986	2.66	221.7	19.65	1.56	184.7	173.4	16.37	Strong	9.64
165289	2.575	2.50	208.3	27.89	1.42	182.3	174.9	24.41	Strong	9.69
165290	2.917	3.06	255.0	35.02	1.45	221.1	213.9	30.37	Strong	9.65
165291	2.612	2.54	211.7	20.53	1.65	168.5	158.2	16.34	Strong	9.60
165292	2.939	3.09	257.5	18.56	1.38	208.7	194.8	15.04	Strong	9.31
165293	2.522	2.65	220.8	24.28	1.70	166.7	157.6	18.33	Strong	9.44
165294	3.357	3.07	255.8	25.19	1.65	184.5	174.3	18.16	Strong	9.42
165295	3.79	3.22	268.3	30.67	1.47	215.0	206.3	24.58	Strong	9.43
165296	2.723	2.83	235.8	87.75	1.31	193.1	190.4	71.85	Strong	9.48
165297	2.563	2.68	223.3	12.26	1.53	165.5	147.3	9.08	Strong	9.17
165298	3.003	3.14	261.7	33.36	1.38	201.9	194.0	25.74	Strong	9.46
165299	0.758	0.71	59.2	23.37	1.87	71.1	68.6	28.10	Moderate	9.37
165300	3.301	3.45	287.5	51.69	1.72	256.1	250.5	46.04	Strong	8.91
165301	3.242	3.24	270.0	29.39	1.63	239.2	230.1	26.04	Strong	8.94
165302	2.453	2.58	215.0	46.17	1.50	194.9	190.2	41.86	Strong	8.96
165303	2.61	2.69	224.2	121.58	1.58	209.2	207.4	113.47	Strong	8.93
165304	3.06	3.24	270.0	112.21	1.73	216.9	214.4	90.12	Strong	8.88
165305	4.162	4.19	349.2	86.61	1.66	314.3	310.3	77.97	Strong	8.90
165306	3.207	3.29	274.2	6.35	1.70	235.4	192.2	5.45	Strong	9.24
165307	4.474	3.89	324.2	3.75	1.49	256.8	170.5	2.97	Strong	9.15
165308	8.092	6.07	505.8	25.02	1.60	372.5	352.3	18.42	Strong	9.26
165309	7.007	5.49	457.5	11.67	1.69	298.6	259.4	7.62	Strong	9.21
165310	5.939	5.28	440.0	3.49	1.62	353.7	227.6	2.80	Strong	9.05
165311	5.953	5.72	476.7	2.72	1.74	379.7	204.7	2.17	Strong	9.10
165312	7.077	6.50	541.7	5.00	1.68	419.1	310.7	3.87	Strong	9.09
165313	6.031	5.50	458.3	2.96	1.81	376.6	221.9	2.44	Strong	9.01
165314	6.77	6.35	529.2	4.23	1.81	425.3	300.2	3.40	Strong	8.98
165315	4.811	4.68	390.0	30.07	1.78	347.8	334.8	26.82	Strong	9.12
165316	4.587	4.60	383.3	16.49	1.44	321.6	298.4	13.83	Strong	9.25
165317	4.908	4.93	410.8	8.02	1.41	329.1	277.9	6.43	Strong	9.28
165318	3.032	3.18	265.0	136.77	1.54	304.0	302.1	156.90	Strong	9.04
165319	1.851	1.61	134.2	53.67	1.47	222.1	219.6	88.83	Strong	9.02
165320	1.889	1.79	149.2	48.71	1.38	168.3	165.3	54.96	Moderate	8.96
165321	1.447	1.28	106.7	59.88	1.75	122.6	120.8	68.84	Moderate	9.10
165322	0.833	0.79	65.8	37.62	1.81	75.7	73.9	43.24	Moderate	9.21
165323	2.324	2.43	202.5	62.91	1.70	192.1	188.9	59.68	Moderate	8.87

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
165324	0.11	<0.01	0.11	NA	3.4
165325	0.15	<0.01	0.15	NA	4.7
165326	0.14	<0.01	0.14	NA	4.4
165327	0.14	<0.01	0.14	NA	4.4
165328	0.091	<0.01	0.091	NA	2.8
165329	0.086	<0.01	0.086	NA	2.7
165330	0.068	<0.01	0.068	NA	2.1
165331	0.097	<0.01	0.097	NA	3.0
165332	0.139	<0.01	0.139	NA	4.3
165333	0.05	<0.01	0.05	NA	1.6
165334	0.101	<0.01	0.101	NA	3.2
165335	0.103	<0.01	0.103	NA	3.2
165336	0.131	<0.01	0.131	NA	4.1
165337	0.094	<0.01	0.094	NA	2.9
165338	0.059	<0.01	0.059	NA	1.8
165339	0.124	<0.01	0.124	NA	3.9
165340	0.106	<0.01	0.106	NA	3.3
165341	0.097	<0.01	0.097	NA	3.0
165342	0.069	<0.01	0.069	NA	2.2
165343	0.108	<0.01	0.108	NA	3.4
165344	0.106	<0.01	0.106	NA	3.3
165345	0.127	<0.01	0.127	NA	4.0
165346	0.24	<0.01	0.24	NA	7.5
165347	0.136	<0.01	0.136	NA	4.3
165348	0.123	<0.01	0.123	NA	3.8
165349	0.116	<0.01	0.116	NA	3.6
165350	0.102	<0.01	0.102	NA	3.2
165351	0.104	<0.01	0.104	NA	3.3
165352	0.099	<0.01	0.099	NA	3.1
165353	0.103	<0.01	0.103	NA	3.2
165354	0.146	<0.01	0.146	NA	4.6
165355	0.155	<0.01	0.155	NA	4.8
165356	0.137	<0.01	0.137	NA	4.3
165357	0.122	<0.01	0.122	NA	3.8
165358	0.37	<0.01	0.37	NA	11.6
165359	0.154	<0.01	0.154	NA	4.8
165360	0.281	<0.01	0.281	NA	8.8
165361	1.138	<0.01	1.138	NA	35.6
165362	0.441	<0.01	0.441	NA	13.8
165363	0.308	<0.01	0.308	NA	9.6
165364	0.102	<0.01	0.102	NA	3.2
165365	0.343	<0.01	0.343	NA	10.7
165366	0.473	<0.01	0.473	NA	14.8
165367	0.352	<0.01	0.352	NA	11.0
165368	0.208	<0.01	0.208	NA	6.5
165369	0.265	<0.01	0.265	NA	8.3
165370	0.124	<0.01	0.124	NA	3.9
165371	0.326	<0.01	0.326	NA	10.2
165372	0.346	<0.01	0.346	NA	10.8
165373	0.942	<0.01	0.942	NA	29.4
165374	1.572	0.02	1.552	NA	48.5
165375	2.937	0.07	2.867	NA	89.6
165376	2.576	0.06	2.516	NA	78.6
165377	8.493	0.20	8.293	NA	259.2
165378	5.867	0.17	5.697	NA	178.0
165379	3.477	0.04	3.437	NA	107.4
165380	6.981	0.07	6.911	NA	216.0
165381	5.371	0.04	5.331	NA	166.6
165382	4.599	0.03	4.569	NA	142.8
165383	4.714	0.03	4.684	NA	146.4
165384	2.835	0.04	2.795	NA	87.3
165385	0.272	<0.01	0.272	NA	8.5

SGS proposal: 19322-PR2-R2
SGS project #: 2351

Work order date: 30-Nov-23
Report date: 10-Feb-24

Version: Final

ABA Report

Test	C(T)	TIC	CaCO3 NP	CO3 NPR	Modified Sobek terminal pH	Modified NP	Net Modified NP	Bulk NPR	Fizz Test	Paste pH
Units	%	%	kg CaCO3/t			kg CaCO3/t	kg CaCO3/t			
Method Code	CSA06V	CSB02V	Calc.	Calc.		Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01				0.5				0.2
165324	3.032	3.13	260.8	75.88	1.61	213.4	210.0	62.08	Strong	8.97
165325	5.103	3.47	289.2	61.69	1.57	235.9	231.2	50.33	Strong	9.05
165326	3.659	2.63	219.2	50.10	1.87	259.0	254.6	59.20	Strong	8.92
165327	2.681	2.78	231.7	52.95	1.83	222.0	217.7	50.75	Strong	8.81
165328	2.353	2.25	187.5	65.93	1.99	190.1	187.3	66.87	Moderate	8.93
165329	2.559	2.71	225.8	84.03	1.69	222.7	220.0	82.86	Strong	8.52
165330	2.745	2.86	238.3	112.16	1.98	235.8	233.6	110.94	Strong	8.62
165331	2.068	1.98	165.0	54.43	1.86	187.7	184.6	61.91	Strong	8.78
165332	1.976	2.01	167.5	38.56	1.52	180.2	175.8	41.48	Strong	8.82
165333	2.078	2.27	189.2	121.07	1.85	187.7	186.1	120.10	Strong	8.71
165334	0.529	0.53	44.2	13.99	1.52	55.4	52.3	17.57	Moderate	9.12
165335	0.883	0.81	67.5	20.97	1.52	74.8	71.5	23.22	Moderate	9.46
165336	1.206	1.06	88.3	21.58	1.67	106.8	102.7	26.09	Moderate	9.20
165337	0.864	0.82	68.3	23.26	1.61	80.1	77.1	27.26	Moderate	8.87
165338	0.511	0.47	39.2	21.24	1.38	50.0	48.2	27.12	Moderate	9.25
165339	1.625	1.49	124.2	32.04	1.51	134.2	130.3	34.62	Moderate	8.96
165340	1.8	1.61	134.2	40.50	1.50	147.9	144.6	44.65	Moderate	8.99
165341	1.613	1.53	127.5	42.06	1.74	137.7	134.7	45.44	Moderate	8.85
165342	1.76	1.88	156.7	72.66	1.30	164.0	161.8	76.04	Strong	8.85
165343	3.25	3.27	272.5	80.74	1.99	227.7	224.4	67.48	Strong	9.24
165344	3.193	3.35	279.2	84.28	1.67	218.4	215.1	65.93	Moderate	9.49
165345	3.359	3.35	279.2	70.34	2.00	230.3	226.3	58.02	Moderate	9.40
165346	3.701	3.80	316.7	42.22	1.98	240.3	232.8	32.04	Moderate	9.53
165347	3.35	3.46	288.3	67.84	2.02	230.6	226.4	54.26	Strong	9..26
165348	3.116	3.31	275.8	71.76	1.82	186.3	182.4	48.46	Moderate	9.25
165349	2.494	2.66	221.7	61.15	1.98	181.3	177.6	50.00	Strong	8.98
165350	1.128	1.07	89.2	27.97	1.51	101.3	98.1	31.79	Moderate	8.91
165351	0.157	0.16	13.3	4.10	1.82	20.0	16.7	6.14	Slight	8.84
165352	0.656	0.65	54.2	17.51	1.52	71.6	68.5	23.15	Moderate	8.87
165353	2.19	2.34	195.0	60.58	1.48	165.6	162.4	51.46	Strong	8.87
165354	2.773	2.96	246.7	54.06	1.39	181.3	176.7	39.73	Moderate	9.59
165355	2.169	2.26	188.3	38.88	1.72	151.6	146.8	31.30	Moderate	9.58
165356	2.337	2.44	203.3	47.49	1.32	152.5	148.2	35.62	Moderate	9.61
165357	4.022	4.05	337.5	88.52	1.46	240.6	236.8	63.11	Moderate	9.61
165358	3.828	3.61	300.8	26.02	1.52	216.3	204.7	18.70	Moderate	9.53
165359	3.776	3.86	321.7	66.84	1.69	245.0	240.2	50.91	Moderate	9.48
165360	4.735	4.73	394.2	44.89	1.59	302.5	293.7	34.45	Moderate	9.59
165361	4.921	4.92	410.0	11.53	1.87	325.6	290.1	9.16	Moderate	9.45
165362	4.961	4.97	414.2	30.05	1.52	335.6	321.8	24.35	Moderate	9.44
165363	4.961	5.03	419.2	43.55	1.54	336.9	327.3	35.00	Moderate	9.50
165364	3.971	2.03	169.2	53.07	1.41	273.8	270.6	85.88	Moderate	9.41
165365	5.227	5.20	433.3	40.43	1.48	352.0	341.3	32.84	Moderate	9.39
165366	5.044	5.05	420.8	28.47	1.80	330.2	315.4	22.34	Moderate	9.33
165367	6.122	5.63	469.2	42.65	1.95	367.1	356.1	33.38	Moderate	9.26
165368	5.45	5.31	442.5	68.08	1.64	351.9	345.4	54.14	Moderate	8.94
165369	4.19	4.11	342.5	41.36	1.90	277.7	269.5	33.54	Moderate	8.96
165370	5.784	5.45	454.2	117.20	1.62	372.0	368.1	95.99	Moderate	8.92
165371	5.414	5.33	444.2	43.60	2.09	353.4	343.2	34.69	Moderate	9.21
165372	6.896	6.75	562.5	52.02	1.66	473.9	463.1	43.83	Moderate	8.82
165373	7.336	7.16	596.7	20.27	1.83	515.1	485.7	17.50	Moderate	8.57
165374	8.296	7.77	647.5	13.35	1.89	562.8	514.3	11.60	Moderate	8.53
165375	5.548	4.01	334.2	3.73	1.60	274.1	184.6	3.06	Moderate	7.98
165376	5.331	5.19	432.5	5.50	1.64	279.7	201.1	3.56	Moderate	8.21
165377	5.801	2.26	188.3	0.73	1.40	154.3	-104.9	0.60	Moderate	6.94
165378	8.733	4.99	415.8	2.34	1.78	358.6	180.6	2.01	Moderate	7.26
165379	6.632	6.12	510.0	4.75	1.62	435.8	328.4	4.06	Moderate	8.71
165380	4.523	3.71	309.2	1.43	1.66	246.7	30.8	1.14	Moderate	8.31
165381	4.707	4.22	351.7	2.11	1.65	294.8	128.2	1.77	Moderate	8.55
165382	5.406	5.30	441.7	3.09	1.72	333.1	190.3	2.33	Moderate	8.93
165383	4.464	3.41	284.2	1.94	1.60	231.8	85.4	1.58	Moderate	8.43
165384	5.774	5.06	421.7	4.83	1.55	351.4	264.0	4.02	Moderate	8.55
165385	3.888	3.94	328.3	38.63	1.67	251.6	243.1	29.60	Moderate	9.36

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
165387	0.163	<0.01	0.163	NA	5.1
165388	0.093	<0.01	0.093	NA	2.9
165389	1.97	<0.01	1.97	NA	61.6
165390	4.352	0.06	4.292	NA	134.1
165391	5.372	0.08	5.292	NA	165.4
165392	3.188	0.02	3.168	NA	99.0
165393	4.141	0.06	4.081	NA	127.5
165394	3.818	0.05	3.768	NA	117.8
165395	4.404	0.03	4.374	NA	136.7
165396	4.971	0.02	4.951	NA	154.7
165397	4.479	0.04	4.439	NA	138.7
165398	4.407	0.04	4.367	NA	136.5
165399	0.854	0.01	0.844	NA	26.4
165209 DUP	0.228	<0.01	0.228	NA	7.1
165219 DUP	1.062	0.02	1.042	NA	32.6
165229 DUP	0.26	<0.01	0.26	NA	8.1
165239 DUP	0.133	<0.01	0.133	NA	4.2
165249 DUP	0.06	<0.01	0.06	NA	1.9
165261 DUP	0.09	<0.01	0.09	NA	2.8
165271 DUP	0.122	<0.01	0.122	NA	3.8
165281 DUP	1.296	<0.01	1.296	NA	40.5
165291 DUP	0.293	<0.01	0.293	NA	9.2
165301 DUP	0.216	<0.01	0.216	NA	6.8
165311 DUP	5.641	0.02	5.621	NA	175.7
165321 DUP	0.071	<0.01	0.071	NA	2.2
165329 DUP	0.105	<0.01	0.105	NA	3.3
165339 DUP	0.144	<0.01	0.144	NA	4.5
165349 DUP	0.107	<0.01	0.107	NA	3.3
165359 DUP	0.154	<0.01	0.154	NA	4.8
165369 DUP	0.25	<0.01	0.25	NA	7.8
165379 DUP	4.044	0.03	4.014	NA	125.4
165396 DUP	4.779	0.02	4.759	NA	148.7
Duplicates					
165339 DUP	0.135				
165335		<0.01			
165314		0.02			
165399		0.01			
165308	0.666				
165322		<0.01			
165235	0.172				
165220	0.590				
165231		0.01			
165211		0.01			
165387		<0.01			
165351	0.106				
165369 DUP	0.263				
165341		<0.01			
165364		<0.01			
165249 DUP	0.065				
165293		<0.01			
165269	0.396				
165286	0.222				
165273		<0.01			
165283		<0.01			

SGS proposal: 19322-PR2-R2
SGS project #: 2351

Work order date: 30-Nov-23
Report date: 10-Feb-24

Version: Final

ABA Report

Test	C(T)	TIC	CaCO3 NP	CO3 NPR	Modified Sobek terminal pH	Modified NP	Net Modified NP	Bulk NPR	Fizz Test	Paste pH
Units	%	%	kg CaCO3/t			kg CaCO3/t	kg CaCO3/t			
Method Code	CSA06V	CSB02V	Calc.	Calc.		Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01				0.5				0.2
165387	4.345	4.36	363.3	71.33	1.30	269.1	264.0	52.83	Moderate	9.44
165388	1.408	1.34	111.7	38.42	1.75	116.1	113.2	39.96	Slight	9.21
165389	5.505	5.43	452.5	7.35	1.80	382.9	321.3	6.22	Moderate	8.89
165390	3.422	3.25	270.8	2.02	1.66	228.1	94.0	1.70	Moderate	8.63
165391	3.061	2.90	241.7	1.46	1.39	199.9	34.5	1.21	Moderate	8.51
165392	2.918	2.98	248.3	2.51	1.49	200.6	101.6	2.03	Moderate	9.20
165393	4.075	3.73	310.8	2.44	1.64	249.2	121.7	1.95	Moderate	8.68
165394	3.03	2.53	210.8	1.79	1.44	171.9	54.2	1.46	Moderate	8.92
165395	3.452	3.53	294.2	2.15	1.42	242.3	105.6	1.77	Moderate	9.26
165396	3.008	3.06	255.0	1.65	1.46	206.8	52.1	1.34	Moderate	9.37
165397	3.014	3.04	253.3	1.83	1.41	220.6	81.8	1.59	Moderate	9.35
165398	3.599	3.66	305.0	2.23	1.30	257.2	120.8	1.88	Moderate	9.32
165399	3.98	3.98	331.7	12.58	1.78	267.3	240.9	10.14	Moderate	9.17
165209 DUP	5.377	5.45	454.2	63.74	1.78	382.5	375.3	53.68	Moderate	9.19
165219 DUP	7.329	6.45	537.5	16.51	1.80	413.6	381.0	12.70	Moderate	9.23
165229 DUP	6.267	5.10	425.0	52.31	1.72	330.3	322.2	40.65	Moderate	8.98
165239 DUP	1.535	1.61	134.2	32.28	1.88	148.8	144.6	35.80	Moderate	9.08
165249 DUP	2.538	2.63	219.2	116.89	1.50	223.0	221.1	118.91	Strong	9.01
165261 DUP	4.736	4.69	390.8	138.96	1.57	294.8	292.0	104.82	Moderate	9.79
165271 DUP	5.58	5.65	470.8	123.50	1.30	399.9	396.1	104.89	Strong	8.73
165281 DUP	6.817	6.68	556.7	13.74	1.64	449.6	409.1	11.10	Strong	9.11
165291 DUP	2.645	2.76	230.0	25.12	1.47	189.8	180.6	20.73	Strong	9.53
165301 DUP	3.141	3.22	268.3	39.75	1.66	213.7	207.0	31.67	Strong	8.95
165311 DUP	6.027	5.75	479.2	2.73	1.45	384.7	209.1	2.19	Strong	8.97
165321 DUP	1.756	1.61	134.2	60.47	1.77	144.2	142.0	65.00	Moderate	9.10
165329 DUP	2.382	2.51	209.2	63.75	1.99	205.1	201.9	62.52	Strong	8.57
165339 DUP	1.727	1.59	132.5	29.44	1.83	145.8	141.3	32.40	Moderate	8.92
165349 DUP	2.565	2.70	225.0	67.29	1.66	187.5	184.2	56.07	Strong	8.97
165359 DUP	3.684	3.77	314.2	65.28	1.51	250.0	245.2	51.95	Moderate	9.43
165369 DUP	4.119	4.12	343.3	43.95	1.42	240.0	232.1	30.71	Moderate	8.93
165379 DUP	6.4	5.77	480.8	3.83	1.88	406.0	280.5	3.24	Moderate	8.45
165396 DUP	2.951	2.97	247.5	1.66	1.42	213.1	64.4	1.43	Moderate	9.33
Duplicates										
165339 DUP	1.707									
165335		0.83								
165308	7.985									
165302		2.59								
165223		5.84								
165235	4.258									
165220	6.802									
165367		5.57								
165351	0.156									
165369 DUP	4.089									
165383		3.49								
165249 DUP	2.509									
165281		6.92								
165269	4.857									
165286	2.354									
165293		2.63								
165201					1.83	203			Moderate	9.19
165219					1.60	416.4			Moderate	9.02
165219 DUP					1.77	419.5			Moderate	9.26
165237					1.60	216.4			Moderate	9.09
165238					1.50	206.7			Strong	8.97
165255					1.64	258.6			Strong	9.01

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A

QA/QC					
Blank	<0.005	<0.01			
Certified standards					
GS-314-2	2.609				
RTS-3a		1.07			
RTS-3a		0.92			
RTS-3a		0.99			
GS-314-2	2.563				
GS915-8	0.127				
RTS-3a		1.01			
GS915-8	0.132				
GS-314-2	2.539				
GS-314-2	2.620				
RTS-3a		1.04			
GS-314-2	2.528				
GS915-8	0.124				
RTS-3a		1.02			
GS915-8	0.139				
RTS-3a		0.97			
GS915-8	0.129				
GS-314-2	2.484				
RTS-3a		0.95			

SGS proposal: 19322-PR2-R2
SGS project #: 2351

Work order date: 30-Nov-23
Report date: 10-Feb-24

Version: Final

ABA Report

Test Units	C(T) %	TIC %	CaCO3 NP kg CaCO3/t	CO3 NPR	Modified Sobek terminal pH	Modified NP kg CaCO3/t	Net Modified NP kg CaCO3/t	Bulk NPR	Fizz Test	Paste pH
Method Code	CSA06V	CSB02V	Calc.	Calc.		Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01				0.5				0.2
165256					1.54	234.9			Strong	9.06
165273					1.52	448.3			Strong	9.23
165274					1.60	404.7			Strong	9.46
165291 DUP					1.45	190.4			Strong	9.58
165292					1.3	208.1			Strong	9.36
165310					1.61	351.9			Strong	9.07
165311					1.83	387.2			Strong	9.15
165328					1.99	188.3			Moderate	9.07
165329					1.76	220.8			Strong	8.51
165346					2.00	240.9			Moderate	9.55
165347					1.90	233.1			Strong	9.28
165364					1.51	274.4			Moderate	9.43
165365					1.60	360.2			Moderate	9.43
165382					1.71	348.2			Moderate	8.91
165383					1.61	240.6			Moderate	8.38

QA/QC										
Blank	<0.005	<0.01								
Certified standards										
GS-314-2	5.134									
TIC-L1		0.13								
SX35-13		11.7								
GS-314-2	5.111									
GS915-8	0.074									
TIC-L1		0.13								
SX35-13		11.81								
TIC-L1		0.12								
SX35-13		11.75								
GS915-8	0.066									
GS-314-2	4.885									
GS-314-2	5.157									
TIC-L1		0.13								
SX35-13		11.73								
GS-314-2	5.007									
GS915-8	0.076									
TIC-L1		0.12								
GS915-8	0.065									
TIC-L1		0.13								
SX35-13		11.64								
GS915-8	0.067									
GS-314-2	5.115									
TIC-L1		0.13								
SX35-13		11.85								
NBM-1						41.4			Slight	
NBM-1						41.5			Slight	
NBM-1						41.1			Slight	
NBM-1						42.4			Slight	
NBM-1						42			Slight	
NBM-1						41.5			Slight	
NBM-1						40.8			Slight	

SGS proposal: 19322-PR3-R2
SGS project #: 2348

Work order date: 6-Nov-23
Report date: 14-Mar-24
Sample receipt date: Nov-23
Version: Final

Customer details

Name:	Hope bay (Patch 7)
Address:	SRK

Project reference: Hope bay (Patch 7)

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 1

Report Distribution

Name	Email
Kyle Jang	

Special notes:

For Assay there is 26 Duplicate

CRMs updated 9 Apr 24
Fizz tes for HBM-23-123-SRK-WR-50 DUP updated 9 Apr 24

ICP data for S revised 16 May 2024.

HBM-23-097A-SRK-WR-224 - total S -(Leco) revised 10 Jun 24)

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

SGS proposal: 19322-PR3-R2
SGS project #: 2348

Work order date: 6-Nov-23
Report date: 14-Mar-24

Version: Final

ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
Sample ID					
HBM-23-123-SRK-WR-1	0.127	<0.01	0.13	NA	4.0
HBM-23-123-SRK-WR-2	0.317	<0.01	0.32	NA	9.9
HBM-23-123-SRK-WR-3	0.375	<0.01	0.38	NA	11.7
HBM-23-123-SRK-WR-4	0.518	<0.01	0.52	NA	16.2
HBM-23-123-SRK-WR-5	0.490	<0.01	0.49	NA	15.3
HBM-23-123-SRK-WR-6	0.230	<0.01	0.23	NA	7.2
HBM-23-123-SRK-WR-7	0.218	<0.01	0.22	NA	6.8
HBM-23-123-SRK-WR-8	0.145	<0.01	0.15	NA	4.5
HBM-23-123-SRK-WR-9	0.112	<0.01	0.11	NA	3.5
HBM-23-123-SRK-WR-10	0.184	<0.01	0.18	NA	5.8
HBM-23-123-SRK-WR-10 DUP	0.177	<0.01	0.18	NA	5.5
HBM-23-123-SRK-WR-11	0.287	<0.01	0.29	NA	9.0
HBM-23-123-SRK-WR-12	0.170	<0.01	0.17	NA	5.3
HBM-23-123-SRK-WR-13	0.150	<0.01	0.15	NA	4.7
HBM-23-123-SRK-WR-14	0.131	<0.01	0.13	NA	4.1
HBM-23-123-SRK-WR-15	0.287	<0.01	0.29	NA	9.0
HBM-23-123-SRK-WR-16	0.574	<0.01	0.57	NA	17.9
HBM-23-123-SRK-WR-17	0.332	<0.01	0.33	NA	10.4
HBM-23-123-SRK-WR-18	0.606	<0.01	0.61	NA	18.9
HBM-23-123-SRK-WR-19	0.260	<0.01	0.26	NA	8.1
HBM-23-123-SRK-WR-20	0.112	<0.01	0.11	NA	3.5
HBM-23-123-SRK-WR-20 DUP	0.113	<0.01	0.11	NA	3.5
HBM-23-123-SRK-WR-21	0.382	<0.01	0.38	NA	11.9
HBM-23-123-SRK-WR-22	0.175	<0.01	0.18	NA	5.5
HBM-23-123-SRK-WR-23	0.963	<0.01	0.96	NA	30.1
HBM-23-123-SRK-WR-24	0.715	<0.01	0.72	NA	22.3
HBM-23-123-SRK-WR-25	0.191	<0.01	0.19	NA	6.0
HBM-23-123-SRK-WR-26	0.196	<0.01	0.20	NA	6.1
HBM-23-123-SRK-WR-27	0.220	<0.01	0.22	NA	6.9
HBM-23-123-SRK-WR-28	0.365	<0.01	0.37	NA	11.4
HBM-23-123-SRK-WR-29	0.147	<0.01	0.15	NA	4.6
HBM-23-123-SRK-WR-30	0.263	<0.01	0.26	NA	8.2
HBM-23-123-SRK-WR-30 DUP	0.259	<0.01	0.26	NA	8.1
HBM-23-123-SRK-WR-31	0.198	<0.01	0.20	NA	6.2
HBM-23-123-SRK-WR-32	0.167	<0.01	0.17	NA	5.2
HBM-23-123-SRK-WR-33	0.216	<0.01	0.22	NA	6.8
HBM-23-123-SRK-WR-34	0.373	<0.01	0.37	NA	11.7
HBM-23-123-SRK-WR-35	0.168	<0.01	0.17	NA	5.3
HBM-23-123-SRK-WR-36	0.212	<0.01	0.21	NA	6.6
HBM-23-123-SRK-WR-37	0.179	<0.01	0.18	NA	5.6
HBM-23-123-SRK-WR-38	0.229	<0.01	0.23	NA	7.2
HBM-23-123-SRK-WR-39	0.161	<0.01	0.16	NA	5.0
HBM-23-123-SRK-WR-40	0.177	<0.01	0.18	NA	5.5
HBM-23-123-SRK-WR-40 DUP	0.170	<0.01	0.17	NA	5.3
HBM-23-123-SRK-WR-41	0.092	<0.01	0.09	NA	2.9
HBM-23-123-SRK-WR-42	0.280	<0.01	0.28	NA	8.8
HBM-23-123-SRK-WR-43	0.179	<0.01	0.18	NA	5.6
HBM-23-123-SRK-WR-44	0.337	<0.01	0.34	NA	10.5
HBM-23-123-SRK-WR-45	0.192	<0.01	0.19	NA	6.0
HBM-23-123-SRK-WR-46	0.403	<0.01	0.40	NA	12.6
HBM-23-123-SRK-WR-47	0.223	<0.01	0.22	NA	7.0
HBM-23-123-SRK-WR-48	0.176	<0.01	0.18	NA	5.5
HBM-23-123-SRK-WR-49	0.168	<0.01	0.17	NA	5.3
HBM-23-123-SRK-WR-50	0.166	<0.01	0.17	NA	5.2
HBM-23-123-SRK-WR-50 DUP	0.171	<0.01	0.17	NA	5.3
HBM-23-123-SRK-WR-51	0.100	<0.01	0.10	NA	3.1
HBM-23-123-SRK-WR-52	0.180	<0.01	0.18	NA	5.6
HBM-23-123-SRK-WR-53	0.224	<0.01	0.22	NA	7.0
HBM-23-123-SRK-WR-54	0.209	<0.01	0.21	NA	6.5
HBM-23-123-SRK-WR-55	0.241	<0.01	0.24	NA	7.5
HBM-23-123-SRK-WR-56	0.177	<0.01	0.18	NA	5.5

SGS proposal: 19322-PR3-R2
SGS project #: 2348

Work order date: 6-Nov-23
Report date: 14-Mar-24

Version: Final

ABA Report

Test	C(T)	TIC	CaCO3 NP	CO3 NPR	Modified Sobek terminal pH	Modified NP	Net Modified NP kg CaCO3/t	Bulk NPR	Fizz Test	Paste pH
Units	%	%	kg CaCO3/t			kg CaCO3/t				
Method Code	CSA06V	CSB02V	Calc.	Calc.		Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01				0.5				0.2
Sample ID										
HBM-23-123-SRK-WR-1	1.674	1.55	129.2	32.55	1.80	129.4	125.4	32.60	Strong	8.75
HBM-23-123-SRK-WR-2	3.819	3.90	325.0	32.81	1.72	281.3	271.3	28.39	Strong	8.57
HBM-23-123-SRK-WR-3	5.029	4.87	405.8	34.63	1.87	331.9	320.2	28.32	Strong	8.62
HBM-23-123-SRK-WR-4	6.413	5.86	488.3	30.17	1.74	386.3	370.1	23.86	Strong	8.94
HBM-23-123-SRK-WR-5	6.481	6.15	512.5	33.47	1.55	424.4	409.1	27.71	Strong	8.87
HBM-23-123-SRK-WR-6	6.223	5.29	440.8	61.33	2.00	361.9	354.7	50.35	Strong	8.89
HBM-23-123-SRK-WR-7	6.497	5.22	435.0	63.85	1.93	326.9	320.1	47.98	Strong	9.06
HBM-23-123-SRK-WR-8	6.651	5.43	452.5	99.86	1.89	328.8	324.2	72.55	Strong	9.01
HBM-23-123-SRK-WR-9	6.422	5.27	439.2	125.48	1.72	304.4	300.9	86.96	Strong	8.88
HBM-23-123-SRK-WR-10	6.756	5.63	469.2	81.59	1.99	358.8	353.0	62.39	Strong	9.09
HBM-23-123-SRK-WR-10 DUP	6.784	5.72	476.7	86.18	1.97	360.6	355.1	65.20	Strong	9.11
HBM-23-123-SRK-WR-11	6.759	5.62	468.3	52.22	1.94	349.4	340.4	38.95	Strong	9.14
HBM-23-123-SRK-WR-12	6.224	5.05	420.8	79.22	1.76	301.9	296.6	56.82	Strong	8.91
HBM-23-123-SRK-WR-13	5.649	4.62	385.0	82.13	1.76	319.4	314.7	68.13	Strong	8.72
HBM-23-123-SRK-WR-14	6.291	5.05	420.8	102.80	1.92	342.5	338.4	83.66	Strong	8.86
HBM-23-123-SRK-WR-15	6.093	5.41	450.8	50.27	1.77	360.0	351.0	40.14	Strong	8.67
HBM-23-123-SRK-WR-16	4.168	3.57	297.5	16.59	1.53	245.6	227.7	13.69	Strong	8.81
HBM-23-123-SRK-WR-17	5.319	4.81	400.8	38.63	1.77	304.4	294.0	29.34	Strong	8.96
HBM-23-123-SRK-WR-18	5.791	4.81	400.8	21.17	1.64	300.6	281.7	15.87	Strong	9.10
HBM-23-123-SRK-WR-19	6.766	5.44	453.3	55.79	1.93	345.0	336.9	42.46	Strong	9.14
HBM-23-123-SRK-WR-20	6.826	5.23	435.8	124.52	1.74	317.0	313.5	90.58	Strong	9.20
HBM-23-123-SRK-WR-20 DUP	6.807	5.23	435.8	123.42	1.78	328.9	325.4	93.15	Strong	9..26
HBM-23-123-SRK-WR-21	5.733	4.86	405.0	33.93	1.71	287.0	275.0	24.04	Strong	9.45
HBM-23-123-SRK-WR-22	6.653	5.17	430.8	78.78	1.91	323.9	318.5	59.23	Strong	9.28
HBM-23-123-SRK-WR-23	5.358	5.66	471.7	15.67	1.64	253.1	223.0	8.41	Strong	9.22
HBM-23-123-SRK-WR-24	5.316	4.77	397.5	17.79	1.77	301.4	279.0	13.49	Strong	9.12
HBM-23-123-SRK-WR-25	6.546	5.35	445.8	74.69	1.90	330.2	324.2	55.32	Strong	9.33
HBM-23-123-SRK-WR-26	6.673	5.38	448.3	73.20	1.81	317.0	310.9	51.76	Strong	9.25
HBM-23-123-SRK-WR-27	7.327	5.68	473.3	68.85	1.78	350.3	343.4	50.95	Strong	9.36
HBM-23-123-SRK-WR-28	3.695	3.80	316.7	27.76	1.57	347.1	335.7	30.43	Strong	8.43
HBM-23-123-SRK-WR-29	5.247	4.54	378.3	82.36	1.78	320.8	316.2	69.83	Strong	8.45
HBM-23-123-SRK-WR-30	3.530	3.54	295.0	35.89	1.66	275.1	266.8	33.47	Strong	8.39
HBM-23-123-SRK-WR-30 DUP	3.680	3.60	300.0	37.07	1.61	270.7	262.6	33.44	Strong	8.37
HBM-23-123-SRK-WR-31	0.144	0.06	5.0	0.81	1.65	11.2	5.0	1.81	None	8.91
HBM-23-123-SRK-WR-32	2.089	2.06	171.7	32.89	1.53	159.1	153.9	30.50	Strong	8.62
HBM-23-123-SRK-WR-33	3.105	3.13	260.8	38.64	1.62	225.5	218.8	33.41	Strong	8.79
HBM-23-123-SRK-WR-34	5.874	4.74	395.0	33.89	1.69	319.5	307.9	27.41	Strong	8.75
HBM-23-123-SRK-WR-35	5.128	4.66	388.3	73.97	1.81	318.3	313.0	60.63	Strong	8.56
HBM-23-123-SRK-WR-36	4.199	4.13	344.2	51.95	1.62	281.3	274.7	42.46	Strong	8.55
HBM-23-123-SRK-WR-37	1.971	2.02	168.3	30.09	1.75	162.8	157.2	29.10	Strong	8.89
HBM-23-123-SRK-WR-38	2.171	2.34	195.0	27.25	1.78	193.1	186.0	26.99	Strong	8.62
HBM-23-123-SRK-WR-39	2.384	2.52	210.0	41.74	1.93	215.6	210.6	42.86	Strong	8.34
HBM-23-123-SRK-WR-40	1.998	2.13	177.5	32.09	1.60	175.0	169.5	31.64	Strong	8.30
HBM-23-123-SRK-WR-40 DUP	2.017	2.15	179.2	33.73	1.64	176.3	170.9	33.18	Strong	8.28
HBM-23-123-SRK-WR-41	6.092	6.00	500.0	173.91	1.68	414.4	411.5	144.13	Moderate	8.48
HBM-23-123-SRK-WR-42	2.945	3.05	254.2	29.05	1.95	206.3	197.5	23.57	Moderate	8.18
HBM-23-123-SRK-WR-43	2.392	2.53	210.8	37.69	2.00	185.6	180.0	33.18	Moderate	8.22
HBM-23-123-SRK-WR-44	4.385	4.46	371.7	35.29	1.84	311.3	300.7	29.55	Moderate	8.30
HBM-23-123-SRK-WR-45	2.795	2.93	244.2	40.69	1.63	204.6	198.6	34.10	Moderate	8.16
HBM-23-123-SRK-WR-46	4.352	4.47	372.5	29.58	1.79	307.5	294.9	24.42	Moderate	8.38
HBM-23-123-SRK-WR-47	5.205	4.89	407.5	58.48	1.65	350.0	343.0	50.22	Moderate	8.63
HBM-23-123-SRK-WR-48	5.232	5.26	438.3	79.70	1.76	373.8	368.3	67.95	Moderate	8.53
HBM-23-123-SRK-WR-49	4.591	4.58	381.7	72.70	1.70	328.1	322.9	62.50	Moderate	8.51
HBM-23-123-SRK-WR-50	2.990	3.18	265.0	51.08	1.91	216.3	211.1	41.69	Moderate	8.36
HBM-23-123-SRK-WR-50 DUP	2.890	3.07	255.8	47.88	1.95	221.9	216.5	41.52	Moderate	8.34
HBM-23-123-SRK-WR-51	2.541	2.77	230.8	73.87	1.94	210.0	206.9	67.20	Strong	8.22
HBM-23-123-SRK-WR-52	2.656	2.83	235.8	41.93	1.68	229.4	223.8	40.78	Strong	8.26
HBM-23-123-SRK-WR-53	2.070	2.01	167.5	23.93	1.62	168.1	161.1	24.02	Strong	8.20
HBM-23-123-SRK-WR-54	2.197	2.17	180.8	27.69	1.64	180.0	173.5	27.56	Strong	8.53
HBM-23-123-SRK-WR-55	2.328	2.53	210.8	27.99	1.86	193.8	186.2	25.73	Strong	8.28
HBM-23-123-SRK-WR-56	2.768	2.97	247.5	44.75	1.89	232.2	226.7	41.98	Strong	8.25

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
HBM-23-123-SRK-WR-57	0.305	<0.01	0.31	NA	9.5
HBM-23-123-SRK-WR-58	1.036	<0.01	1.04	NA	32.4
HBM-23-123-SRK-WR-59	0.468	<0.01	0.47	NA	14.6
HBM-23-123-SRK-WR-60	0.174	<0.01	0.17	NA	5.4
HBM-23-123-SRK-WR-60 DUP	0.184	<0.01	0.18	NA	5.8
HBM-23-123-SRK-WR-61	0.410	<0.01	0.41	NA	12.8
HBM-23-123-SRK-WR-62	0.201	<0.01	0.20	NA	6.3
HBM-23-123-SRK-WR-63	0.162	<0.01	0.16	NA	5.1
HBM-23-123-SRK-WR-64	0.075	<0.01	0.08	NA	2.3
HBM-23-123-SRK-WR-65	0.131	<0.01	0.13	NA	4.1
HBM-23-123-SRK-WR-66	0.162	<0.01	0.16	NA	5.1
HBM-23-123-SRK-WR-67	0.120	<0.01	0.12	NA	3.8
HBM-23-123-SRK-WR-68	0.136	<0.01	0.14	NA	4.3
HBM-23-123-SRK-WR-69	0.218	<0.01	0.22	NA	6.8
HBM-23-123-SRK-WR-70	0.107	<0.01	0.11	NA	3.3
HBM-23-123-SRK-WR-70 DUP	0.105	<0.01	0.11	NA	3.3
HBM-23-123-SRK-WR-71	0.289	<0.01	0.29	NA	9.0
HBM-23-123-SRK-WR-72	0.184	<0.01	0.18	NA	5.8
HBM-23-123-SRK-WR-73	0.202	<0.01	0.20	NA	6.3
HBM-23-123-SRK-WR-74	0.142	0.01	0.13	NA	4.1
HBM-23-112-SRK-WR-75	0.184	0.01	0.17	NA	5.4
HBM-23-112-SRK-WR-76	0.133	<0.01	0.13	NA	4.2
HBM-23-112-SRK-WR-77	0.127	<0.01	0.13	NA	4.0
HBM-23-112-SRK-WR-78	0.142	<0.01	0.14	NA	4.4
HBM-23-112-SRK-WR-79	0.154	<0.01	0.15	NA	4.8
HBM-23-112-SRK-WR-80	0.124	<0.01	0.12	NA	3.9
HBM-23-112-SRK-WR-80 DUP	0.132	<0.01	0.13	NA	4.1
HBM-23-112-SRK-WR-81	0.694	<0.01	0.69	NA	21.7
HBM-23-112-SRK-WR-82	0.195	<0.01	0.20	NA	6.1
HBM-23-112-SRK-WR-83	0.098	<0.01	0.10	NA	3.1
HBM-23-112-SRK-WR-84	0.436	<0.01	0.44	NA	13.6
HBM-23-112-SRK-WR-85	0.113	<0.01	0.11	NA	3.5
HBM-23-112-SRK-WR-86	0.246	<0.01	0.25	NA	7.7
HBM-23-112-SRK-WR-87	0.279	<0.01	0.28	NA	8.7
HBM-23-112-SRK-WR-88	0.374	<0.01	0.37	NA	11.7
HBM-23-086-SRK-WR-89	0.189	<0.01	0.19	NA	5.9
HBM-23-086-SRK-WR-90	0.182	<0.01	0.18	NA	5.7
HBM-23-086-SRK-WR-90 DUP	0.182	<0.01	0.18	NA	5.7
HBM-23-086-SRK-WR-91	0.347	<0.01	0.35	NA	10.8
HBM-23-086-SRK-WR-92	0.040	<0.01	0.04	NA	1.3
HBM-23-086-SRK-WR-93	0.170	<0.01	0.17	NA	5.3
HBM-23-086-SRK-WR-94	0.678	<0.01	0.68	NA	21.2
HBM-23-086-SRK-WR-95	0.238	<0.01	0.24	NA	7.4
HBM-23-086-SRK-WR-96	0.477	<0.01	0.48	NA	14.9
HBM-23-086-SRK-WR-97	0.086	<0.01	0.09	NA	2.7
HBM-23-086-SRK-WR-98	0.052	<0.01	0.05	NA	1.6
HBM-23-086-SRK-WR-99	0.052	<0.01	0.05	NA	1.6
HBM-23-086-SRK-WR-100	0.054	<0.01	0.05	NA	1.7
HBM-23-086-SRK-WR-100 DUP	0.056	<0.01	0.06	NA	1.8
HBM-23-086-SRK-WR-101	0.056	<0.01	0.06	NA	1.8
HBM-23-086-SRK-WR-102	0.056	<0.01	0.06	NA	1.8
HBM-23-086-SRK-WR-103	0.555	<0.01	0.56	NA	17.3
HBM-23-086-SRK-WR-104	0.843	<0.01	0.84	NA	26.3
HBM-23-086-SRK-WR-105	1.091	<0.01	1.09	NA	34.1
HBM-23-086-SRK-WR-106	1.803	<0.01	1.80	NA	56.3
HBM-23-086-SRK-WR-107	1.154	<0.01	1.15	NA	36.1
HBM-23-086-SRK-WR-108	0.212	<0.01	0.21	NA	6.6
HBM-23-086-SRK-WR-109	0.095	<0.01	0.10	NA	3.0
HBM-23-086-SRK-WR-110	0.086	<0.01	0.09	NA	2.7
HBM-23-086-SRK-WR-110 DUP	0.083	<0.01	0.08	NA	2.6
HBM-23-086-SRK-WR-111	0.079	<0.01	0.08	NA	2.5
HBM-23-086-SRK-WR-112	0.064	<0.01	0.06	NA	2.0

SGS proposal: 19322-PR3-R2
SGS project #: 2348

Work order date: 6-Nov-23
Report date: 14-Mar-24

Version: Final

ABA Report

Test	C(T)	TIC	CaCO3 NP	CO3 NPR	Modified Sobek terminal pH	Modified NP	Net Modified NP kg CaCO3/t	Bulk NPR	Fizz Test	Paste pH
Units	%	%	kg CaCO3/t			kg CaCO3/t				
Method Code	CSA06V	CSB02V	Calc.	Calc.		Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01				0.5				0.2
HBM-23-123-SRK-WR-57	2.759	3.00	250.0	26.23	1.91	198.6	189.1	20.84	Moderate	8.40
HBM-23-123-SRK-WR-58	3.212	3.40	283.3	8.75	1.74	216.2	183.9	6.68	Moderate	8.59
HBM-23-123-SRK-WR-59	4.454	4.63	385.8	26.38	1.78	283.8	269.2	19.41	Moderate	8.73
HBM-23-123-SRK-WR-60	4.157	4.31	359.2	66.05	1.65	288.1	282.7	52.99	Moderate	8.61
HBM-23-123-SRK-WR-60 DUP	4.159	4.36	363.3	63.19	1.77	304.0	298.3	52.88	Moderate	8.62
HBM-23-123-SRK-WR-61	4.052	4.26	355.0	27.71	1.58	272.6	259.8	21.27	Moderate	8.58
HBM-23-123-SRK-WR-62	3.100	3.09	257.5	41.00	1.63	196.4	190.1	31.27	Moderate	8.17
HBM-23-123-SRK-WR-63	2.879	3.11	259.2	51.19	1.92	182.0	176.9	35.94	Moderate	8.36
HBM-23-123-SRK-WR-64	3.002	3.23	269.2	114.84	1.66	216.0	213.6	92.15	Moderate	8.58
HBM-23-123-SRK-WR-65	4.109	4.24	353.3	86.31	1.58	267.0	262.9	65.22	Moderate	8.72
HBM-23-123-SRK-WR-66	4.911	4.94	411.7	81.32	1.70	341.9	336.9	67.54	Moderate	8.77
HBM-23-123-SRK-WR-67	4.007	4.24	353.3	94.22	1.60	267.5	263.8	71.34	Moderate	9.15
HBM-23-123-SRK-WR-68	3.567	3.80	316.7	74.51	1.69	236.3	232.0	55.59	Moderate	8.73
HBM-23-123-SRK-WR-69	5.223	5.24	436.7	64.10	2.00	334.5	327.6	49.09	Moderate	8.89
HBM-23-123-SRK-WR-70	4.259	4.39	365.8	109.41	1.76	288.1	284.8	86.17	Moderate	8.48
HBM-23-123-SRK-WR-70 DUP	4.221	4.34	361.7	110.22	1.83	290.0	286.7	88.38	Moderate	8.59
HBM-23-123-SRK-WR-71	1.913	1.90	158.3	17.53	1.77	168.4	159.4	18.65	Moderate	10.09
HBM-23-123-SRK-WR-72	3.742	3.86	321.7	55.94	1.51	333.5	327.7	57.99	Strong	10.23
HBM-23-123-SRK-WR-73	3.208	3.42	285.0	45.15	1.59	292.2	285.9	46.28	Strong	10.18
HBM-23-123-SRK-WR-74	3.418	3.42	285.0	69.09	1.67	282.2	278.1	68.42	Strong	9.95
HBM-23-112-SRK-WR-75	2.491	2.62	218.3	40.15	1.63	234.0	228.6	43.04	Strong	10.21
HBM-23-112-SRK-WR-76	3.574	3.76	313.3	75.39	1.68	321.0	316.8	77.23	Strong	10.23
HBM-23-112-SRK-WR-77	2.599	2.78	231.7	58.37	1.63	234.1	230.1	58.99	Strong	10.16
HBM-23-112-SRK-WR-78	3.402	3.51	292.5	65.92	1.53	300.3	295.8	67.66	Strong	10.15
HBM-23-112-SRK-WR-79	3.993	4.13	344.2	71.52	1.76	339.4	334.6	70.52	Strong	9.85
HBM-23-112-SRK-WR-80	4.984	5.09	424.2	109.46	1.69	430.9	427.0	111.20	Strong	9.68
HBM-23-112-SRK-WR-80 DUP	5.164	5.07	422.5	102.42	1.68	431.5	427.4	104.61	Strong	9.52
HBM-23-112-SRK-WR-81	3.981	4.22	351.7	16.22	1.77	290.8	269.1	13.41	Moderate	8.66
HBM-23-112-SRK-WR-82	3.160	3.34	278.3	45.68	1.66	169.7	163.6	27.85	Strong	8.43
HBM-23-112-SRK-WR-83	5.304	5.45	454.2	148.30	1.94	440.3	437.2	143.76	Strong	9.37
HBM-23-112-SRK-WR-84	4.744	4.76	396.7	29.11	1.69	311.8	298.2	22.89	Moderate	8.75
HBM-23-112-SRK-WR-85	4.923	5.04	420.0	118.94	1.96	328.7	325.2	93.08	Moderate	8.64
HBM-23-112-SRK-WR-86	2.906	3.08	256.7	33.39	1.96	220.5	212.8	28.68	Moderate	8.07
HBM-23-112-SRK-WR-87	3.662	3.79	315.8	36.22	1.99	236.2	227.5	27.10	Moderate	8.34
HBM-23-112-SRK-WR-88	4.665	4.67	389.2	33.30	1.85	307.5	295.8	26.31	Moderate	8.88
HBM-23-086-SRK-WR-89	5.339	4.61	384.2	65.04	1.74	306.9	301.0	51.96	Moderate	8.39
HBM-23-086-SRK-WR-90	3.970	3.76	313.3	55.09	1.62	274.4	268.7	48.25	Moderate	8.36
HBM-23-086-SRK-WR-90 DUP	4.004	3.75	312.5	54.95	1.63	271.3	265.6	47.70	Moderate	8.32
HBM-23-086-SRK-WR-91	5.836	4.83	402.5	37.12	1.50	282.5	271.6	26.05	Moderate	8.80
HBM-23-086-SRK-WR-92	2.210	2.41	200.8	160.67	1.88	204.8	203.5	163.82	Strong	8.69
HBM-23-086-SRK-WR-93	3.893	3.98	331.7	62.43	1.69	281.3	276.0	52.95	Moderate	8.38
HBM-23-086-SRK-WR-94	1.333	1.03	85.8	4.05	1.51	72.8	51.6	3.43	Moderate	8.97
HBM-23-086-SRK-WR-95	4.667	4.37	364.2	48.96	1.65	263.4	255.9	35.41	Moderate	8.66
HBM-23-086-SRK-WR-96	5.124	5.31	442.5	29.69	1.76	348.0	333.1	23.34	Moderate	8.75
HBM-23-086-SRK-WR-97	7.764	5.27	439.2	163.41	1.57	222.3	219.7	82.73	Moderate	9.04
HBM-23-086-SRK-WR-98	7.448	5.18	431.7	265.64	1.71	215.5	213.9	132.63	Moderate	8.95
HBM-23-086-SRK-WR-99	7.311	5.15	429.2	264.10	1.78	221.8	220.2	136.52	Moderate	8.84
HBM-23-086-SRK-WR-100	8.027	5.01	417.5	247.41	1.73	208.6	206.9	123.61	Moderate	8.96
HBM-23-086-SRK-WR-100 DUP	8.195	5.08	423.3	241.90	1.81	214.9	213.1	122.80	Moderate	8.92
HBM-23-086-SRK-WR-101	7.354	4.45	370.8	211.90	1.75	203.0	201.3	116.02	Moderate	8.85
HBM-23-086-SRK-WR-102	6.916	4.33	360.8	206.19	1.64	217.4	215.7	124.24	Moderate	8.85
HBM-23-086-SRK-WR-103	4.352	3.92	326.7	18.83	1.65	243.6	226.2	14.04	Moderate	8.80
HBM-23-086-SRK-WR-104	1.75	1.77	147.5	5.60	1.50	124.7	98.4	4.73	Moderate	8.99
HBM-23-086-SRK-WR-105	1.018	0.77	64.2	1.88	1.52	53.7	19.6	1.57	Slight	9.16
HBM-23-086-SRK-WR-106	0.925	0.31	25.8	0.46	1.55	22.2	-34.2	0.39	Slight	8.65
HBM-23-086-SRK-WR-107	1.143	0.88	73.3	2.03	1.77	61.5	25.4	1.71	Moderate	8.88
HBM-23-086-SRK-WR-108	4.512	4.45	370.8	55.97	1.93	356.2	349.6	53.76	Strong	9.72
HBM-23-086-SRK-WR-109	4.493	4.58	381.7	128.56	1.51	391.7	388.7	131.93	Strong	10.10
HBM-23-086-SRK-WR-110	4.234	4.35	362.5	134.88	1.87	366.6	363.9	136.41	Strong	9.87
HBM-23-086-SRK-WR-110 DUP	4.127	4.29	357.5	137.83	1.99	368.9	366.3	142.23	Strong	9.83
HBM-23-086-SRK-WR-111	5.269	5.28	440.0	178.23	1.76	432.5	430.0	175.19	Strong	10.18
HBM-23-086-SRK-WR-112	5.532	5.44	453.3	226.67	1.84	447.3	445.3	223.65	Strong	9.97

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
HBM-23-086-SRK-WR-113	0.082	<0.01	0.08	NA	2.6
HBM-23-086-SRK-WR-114	0.144	<0.01	0.14	NA	4.5
HBM-23-086-SRK-WR-115	0.148	<0.01	0.15	NA	4.6
HBM-23-086-SRK-WR-116	0.148	<0.01	0.15	NA	4.6
HBM-23-086-SRK-WR-117	0.231	<0.01	0.23	NA	7.2
HBM-23-086-SRK-WR-118	0.159	<0.01	0.16	NA	5.0
HBM-23-086-SRK-WR-119	0.219	<0.01	0.22	NA	6.8
HBM-23-086-SRK-WR-120	1.730	<0.01	1.73	NA	54.1
HBM-23-086-SRK-WR-120 DUP	1.744	<0.01	1.74	NA	54.5
HBM-23-086-SRK-WR-121	2.427	<0.01	2.43	NA	75.8
HBM-23-086-SRK-WR-122	1.245	<0.01	1.25	NA	38.9
HBM-23-086-SRK-WR-123	0.327	<0.01	0.33	NA	10.2
HBM-23-086-SRK-WR-124	0.942	0.01	0.93	NA	29.1
HBM-23-086-SRK-WR-125	1.179	<0.01	1.18	NA	36.8
HBM-23-086-SRK-WR-126	0.789	<0.01	0.79	NA	24.7
HBM-23-086-SRK-WR-127	2.547	<0.01	2.55	NA	79.6
HBM-23-086-SRK-WR-128	1.950	<0.01	1.95	NA	60.9
HBM-23-086-SRK-WR-129	0.601	<0.01	0.60	NA	18.8
HBM-23-086-SRK-WR-130	0.981	<0.01	0.98	NA	30.7
HBM-23-086-SRK-WR-130 DUP	0.982	<0.01	0.98	NA	30.7
HBM-23-086-SRK-WR-131	0.198	<0.01	0.20	NA	6.2
HBM-23-086-SRK-WR-132	0.197	<0.01	0.20	NA	6.2
HBM-23-086-SRK-WR-133	1.156	<0.01	1.16	NA	36.1
HBM-23-086-SRK-WR-134	1.332	<0.01	1.33	NA	41.6
HBM-23-086-SRK-WR-135	2.301	<0.01	2.30	NA	71.9
HBM-23-086-SRK-WR-136	0.862	<0.01	0.86	NA	26.9
HBM-23-086-SRK-WR-137	0.525	<0.01	0.53	NA	16.4
HBM-23-086-SRK-WR-138	0.539	<0.01	0.54	NA	16.8
HBM-23-086-SRK-WR-139	0.448	<0.01	0.45	NA	14.0
HBM-23-086-SRK-WR-140	1.087	<0.01	1.09	NA	34.0
HBM-23-086-SRK-WR-140 DUP	0.988	<0.01	0.99	NA	30.9
HBM-23-086-SRK-WR-141	1.156	<0.01	1.16	NA	36.1
HBM-23-086-SRK-WR-142	0.308	<0.01	0.31	NA	9.6
HBM-23-086-SRK-WR-143	0.101	<0.01	0.10	NA	3.2
HBM-23-086-SRK-WR-144	0.188	<0.01	0.19	NA	5.9
HBM-23-086-SRK-WR-145	0.077	<0.01	0.08	NA	2.4
HBM-23-086-SRK-WR-146	0.133	<0.01	0.13	NA	4.2
HBM-23-086-SRK-WR-147	0.137	<0.01	0.14	NA	4.3
HBM-23-086-SRK-WR-148	0.112	<0.01	0.11	NA	3.5
HBM-23-086-SRK-WR-149	0.090	0.01	0.08	NA	2.5
HBM-23-086-SRK-WR-150	0.106	<0.01	0.11	NA	3.3
HBM-23-086-SRK-WR-151	0.092	0.05	0.04	NA	1.3
HBM-23-097A-SRK-WR-152	0.154	<0.01	0.15	NA	4.8
HBM-23-097A-SRK-WR-152 DUP	0.158	<0.01	0.16	NA	4.9
HBM-23-097A-SRK-WR-153	0.287	<0.01	0.29	NA	9.0
HBM-23-097A-SRK-WR-154	0.110	<0.01	0.11	NA	3.4
HBM-23-097A-SRK-WR-155	0.172	0.09	0.08	NA	2.6
HBM-23-097A-SRK-WR-156	0.253	<0.01	0.25	NA	7.9
HBM-23-097A-SRK-WR-157	0.905	<0.01	0.91	NA	28.3
HBM-23-097A-SRK-WR-158	0.252	<0.01	0.25	NA	7.9
HBM-23-097A-SRK-WR-159	0.319	<0.01	0.32	NA	10.0
HBM-23-097A-SRK-WR-160	0.550	<0.01	0.55	NA	17.2
HBM-23-097A-SRK-WR-161	1.389	<0.01	1.39	NA	43.4
HBM-23-097A-SRK-WR-161 DUP	1.340	<0.01	1.34	NA	41.9
HBM-23-097A-SRK-WR-162	0.459	<0.01	0.46	NA	14.3
HBM-23-097A-SRK-WR-163	0.257	<0.01	0.26	NA	8.0
HBM-23-097A-SRK-WR-164	0.354	<0.01	0.35	NA	11.1
HBM-23-097A-SRK-WR-165	0.454	<0.01	0.45	NA	14.2
HBM-23-097A-SRK-WR-166	0.588	<0.01	0.59	NA	18.4
HBM-23-097A-SRK-WR-167	0.428	<0.01	0.43	NA	13.4
HBM-23-097A-SRK-WR-168	0.185	<0.01	0.19	NA	5.8
HBM-23-097A-SRK-WR-169	0.100	<0.01	0.10	NA	3.1

SGS proposal: 19322-PR3-R2
SGS project #: 2348

Work order date: 6-Nov-23
Report date: 14-Mar-24

Version: Final

ABA Report

Test	C(T)	TIC	CaCO3 NP	CO3 NPR	Modified Sobek terminal pH	Modified NP	Net Modified NP kg CaCO3/t	Bulk NPR	Fizz Test	Paste pH
Units	%	%	kg CaCO3/t			kg CaCO3/t				
Method Code	CSA06V	CSB02V	Calc.	Calc.		Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01				0.5				0.2
HBM-23-086-SRK-WR-113	5.018	4.96	413.3	161.30	1.74	419.8	417.3	163.83	Strong	10.10
HBM-23-086-SRK-WR-114	3.313	3.45	287.5	63.89	1.87	292.5	288.0	65.00	Strong	9.32
HBM-23-086-SRK-WR-115	2.86	2.97	247.5	53.51	1.77	254.4	249.8	55.01	Strong	9.23
HBM-23-086-SRK-WR-116	3.473	3.46	288.3	62.34	1.54	291.0	286.4	62.93	Strong	10.09
HBM-23-086-SRK-WR-117	4.668	4.71	392.5	54.37	1.91	372.5	365.3	51.60	Strong	9.84
HBM-23-086-SRK-WR-118	4.105	4.23	352.5	70.94	1.90	349.9	344.9	70.41	Strong	8.82
HBM-23-086-SRK-WR-119	5.62	5.50	458.3	66.97	1.82	396.6	389.8	57.95	Strong	8.38
HBM-23-086-SRK-WR-120	6.147	6.19	515.8	9.54	1.67	412.8	358.7	7.63	Moderate	8.80
HBM-23-086-SRK-WR-120 DUP	6.245	6.22	518.3	9.51	1.59	411.5	357.0	7.55	Moderate	8.81
HBM-23-086-SRK-WR-121	5.418	5.27	439.2	5.79	1.60	353.5	277.7	4.66	Moderate	8.85
HBM-23-086-SRK-WR-122	7.425	7.29	607.5	15.61	1.68	490.2	451.2	12.60	Moderate	8.77
HBM-23-086-SRK-WR-123	7.257	6.97	580.8	56.84	1.98	451.0	440.8	44.14	Moderate	8.77
HBM-23-086-SRK-WR-124	5.491	4.97	414.2	14.22	1.94	323.9	294.8	11.12	Moderate	8.92
HBM-23-086-SRK-WR-125	6.925	6.68	556.7	15.11	1.65	441.9	405.1	11.99	Moderate	8.97
HBM-23-086-SRK-WR-126	6.826	5.81	484.2	19.64	1.97	408.1	383.4	16.55	Moderate	9.02
HBM-23-086-SRK-WR-127	6.788	6.38	531.7	6.68	1.69	426.5	346.9	5.36	Moderate	8.85
HBM-23-086-SRK-WR-128	6.484	6.34	528.3	8.67	1.96	438.0	377.1	7.19	Moderate	8.96
HBM-23-086-SRK-WR-129	6.873	6.27	522.5	27.82	1.75	411.5	392.7	21.91	Moderate	9.03
HBM-23-086-SRK-WR-130	6.637	6.16	513.3	16.74	1.70	376.9	346.2	12.29	Moderate	8.80
HBM-23-086-SRK-WR-130 DUP	6.595	6.12	510.0	16.62	1.57	410.9	380.2	13.39	Moderate	9.05
HBM-23-086-SRK-WR-131	7.447	6.60	550.0	88.89	1.91	419.9	413.7	67.86	Moderate	9.27
HBM-23-086-SRK-WR-132	6.986	6.38	531.7	86.36	1.80	412.1	406.0	66.94	Moderate	9.39
HBM-23-086-SRK-WR-133	5.052	4.32	360.0	9.97	1.59	276.3	240.1	7.65	Moderate	9.31
HBM-23-086-SRK-WR-134	5.566	4.43	369.2	8.87	1.61	305.1	263.4	7.33	Moderate	9.25
HBM-23-086-SRK-WR-135	7.408	7.20	600.0	8.34	1.76	491.5	419.6	6.84	Moderate	8.93
HBM-23-086-SRK-WR-136	7.368	5.73	477.5	17.73	1.55	403.5	376.6	14.98	Moderate	9.09
HBM-23-086-SRK-WR-137	7.13	5.52	460.0	28.04	1.93	350.3	333.8	21.35	Moderate	9.14
HBM-23-086-SRK-WR-138	7.381	5.85	487.5	28.94	1.97	376.3	359.4	22.34	Moderate	9.08
HBM-23-086-SRK-WR-139	7.305	5.28	440.0	31.43	1.85	327.8	313.8	23.41	Moderate	9.15
HBM-23-086-SRK-WR-140	7.052	5.68	473.3	13.93	1.58	377.9	343.9	11.13	Moderate	9.07
HBM-23-086-SRK-WR-140 DUP	6.933	5.59	465.8	15.09	1.67	384.8	354.0	12.46	Moderate	9.05
HBM-23-086-SRK-WR-141	5.791	5.60	466.7	12.92	1.51	357.5	321.4	9.90	Moderate	9.46
HBM-23-086-SRK-WR-142	4.685	4.46	371.7	38.61	1.68	277.3	267.7	28.81	Moderate	9.53
HBM-23-086-SRK-WR-143	4.868	4.39	365.8	115.91	2.00	268.6	265.4	85.10	Moderate	9.70
HBM-23-086-SRK-WR-144	4.707	4.29	357.5	60.85	1.77	258.6	252.7	44.02	Moderate	9.65
HBM-23-086-SRK-WR-145	5.517	5.17	430.8	179.05	1.82	336.1	333.7	139.68	Moderate	9.63
HBM-23-086-SRK-WR-146	5.205	4.84	403.3	97.04	1.52	343.3	339.2	82.60	Moderate	9.57
HBM-23-086-SRK-WR-147	4.567	4.23	352.5	82.34	1.56	256.1	251.8	59.82	Moderate	9.59
HBM-23-086-SRK-WR-148	4.525	4.51	375.8	107.38	1.95	293.7	290.2	83.91	Moderate	9.40
HBM-23-086-SRK-WR-149	4.353	4.39	365.8	146.33	1.81	286.7	284.2	114.68	Moderate	8.59
HBM-23-086-SRK-WR-150	4.324	4.28	356.7	107.67	2.00	278.1	274.8	83.95	Moderate	9.44
HBM-23-086-SRK-WR-151	2.404	2.20	183.3	139.68	1.64	186.7	185.4	142.26	Moderate	8.13
HBM-23-097A-SRK-WR-152	5.166	4.91	409.2	85.02	1.56	293.8	289.0	61.06	Moderate	9.46
HBM-23-097A-SRK-WR-152 DUP	5.000	4.81	400.8	81.18	1.55	298.5	293.6	60.46	Moderate	9.43
HBM-23-097A-SRK-WR-153	5.023	5.15	429.2	47.85	1.62	310.1	301.1	34.58	Moderate	9.55
HBM-23-097A-SRK-WR-154	4.969	4.76	396.7	115.39	1.71	278.4	275.0	80.99	Moderate	9.68
HBM-23-097A-SRK-WR-155	4.943	4.72	393.3	153.50	1.71	223.2	220.6	87.10	Moderate	8.37
HBM-23-097A-SRK-WR-156	5.042	4.59	382.5	48.38	1.50	283.9	276.0	35.91	Moderate	9.43
HBM-23-097A-SRK-WR-157	5.113	5.07	422.5	14.94	1.59	328.4	300.1	11.61	Moderate	9.20
HBM-23-097A-SRK-WR-158	4.942	4.53	377.5	47.94	1.56	283.9	276.1	36.06	Moderate	9.39
HBM-23-097A-SRK-WR-159	5.470	4.92	410.0	41.13	1.59	302.0	292.0	30.30	Moderate	9.52
HBM-23-097A-SRK-WR-160	1.742	1.37	114.2	6.64	1.83	40.5	23.3	2.35	Slight	9.33
HBM-23-097A-SRK-WR-161	3.834	3.58	298.3	6.87	1.76	215.0	171.6	4.95	Moderate	8.76
HBM-23-097A-SRK-WR-161 DUP	3.562	3.52	293.3	7.00	1.77	212.8	170.9	5.08	Moderate	8.74
HBM-23-097A-SRK-WR-162	3.265	3.32	276.7	19.29	1.72	243.8	229.5	17.00	Moderate	8.35
HBM-23-097A-SRK-WR-163	3.091	2.85	237.5	29.57	2.00	221.3	213.3	27.55	Strong	9.51
HBM-23-097A-SRK-WR-164	2.660	2.37	197.5	17.85	1.55	181.4	170.3	16.39	Moderate	8.43
HBM-23-097A-SRK-WR-165	3.306	3.44	286.7	20.21	1.56	232.9	218.7	16.41	Moderate	8.46
HBM-23-097A-SRK-WR-166	4.664	4.48	373.3	20.32	1.86	302.3	283.9	16.45	Moderate	8.75
HBM-23-097A-SRK-WR-167	5.735	4.48	373.3	27.91	1.57	267.2	253.8	19.98	Moderate	9.04
HBM-23-097A-SRK-WR-168	1.451	1.32	110.0	19.03	1.69	88.6	82.8	15.33	Moderate	9.38
HBM-23-097A-SRK-WR-169	5.204	3.85	320.8	102.67	1.66	254.9	251.8	81.57	Moderate	9.25

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
HBM-23-097A-SRK-WR-170	0.138	<0.01	0.14	NA	4.3
HBM-23-097A-SRK-WR-171	0.079	<0.01	0.08	NA	2.5
HBM-23-097A-SRK-WR-171 DUP	0.076	<0.01	0.08	NA	2.4
HBM-23-097A-SRK-WR-172	0.065	<0.01	0.07	NA	2.0
HBM-23-097A-SRK-WR-173	0.112	<0.01	0.11	NA	3.5
HBM-23-097A-SRK-WR-174	0.207	<0.01	0.21	NA	6.5
HBM-23-097A-SRK-WR-175	0.313	0.01	0.30	NA	9.5
HBM-23-097A-SRK-WR-176	0.462	<0.01	0.46	NA	14.4
HBM-23-097A-SRK-WR-177	0.315	<0.01	0.32	NA	9.8
HBM-23-097A-SRK-WR-178	0.380	<0.01	0.38	NA	11.9
HBM-23-097A-SRK-WR-179	0.173	<0.01	0.17	NA	5.4
HBM-23-097A-SRK-WR-180	0.161	<0.01	0.16	NA	5.0
HBM-23-097A-SRK-WR-181	0.121	<0.01	0.12	NA	3.8
HBM-23-097A-SRK-WR-181 DUP	0.115	<0.01	0.12	NA	3.6
HBM-23-097A-SRK-WR-182	0.340	<0.01	0.34	NA	10.6
HBM-23-097A-SRK-WR-183	0.241	<0.01	0.24	NA	7.5
HBM-23-097A-SRK-WR-184	0.674	<0.01	0.67	NA	21.1
HBM-23-097A-SRK-WR-185	0.971	<0.01	0.97	NA	30.3
HBM-23-097A-SRK-WR-186	0.428	<0.01	0.43	NA	13.4
HBM-23-097A-SRK-WR-187	0.501	<0.01	0.50	NA	15.7
HBM-23-097A-SRK-WR-188	0.081	<0.01	0.08	NA	2.5
HBM-23-097A-SRK-WR-189	0.149	<0.01	0.15	NA	4.7
HBM-23-097A-SRK-WR-190	1.186	<0.01	1.19	NA	37.1
HBM-23-097A-SRK-WR-191	1.328	<0.01	1.33	NA	41.5
HBM-23-097A-SRK-WR-191 DUP	1.312	0.01	1.30	NA	40.7
HBM-23-097A-SRK-WR-192	0.210	<0.01	0.21	NA	6.6
HBM-23-097A-SRK-WR-193	0.284	<0.01	0.28	NA	8.9
HBM-23-097A-SRK-WR-194	0.142	<0.01	0.14	NA	4.4
HBM-23-097A-SRK-WR-195	0.169	<0.01	0.17	NA	5.3
HBM-23-097A-SRK-WR-196	0.250	<0.01	0.25	NA	7.8
HBM-23-097A-SRK-WR-197	1.188	<0.01	1.19	NA	37.1
HBM-23-097A-SRK-WR-198	0.283	<0.01	0.28	NA	8.8
HBM-23-097A-SRK-WR-199	1.891	0.02	1.87	NA	58.5
HBM-23-097A-SRK-WR-200	0.211	<0.01	0.21	NA	6.6
HBM-23-097A-SRK-WR-201	0.363	<0.01	0.36	NA	11.3
HBM-23-097A-SRK-WR-201 DUP	0.327	<0.01	0.33	NA	10.2
HBM-23-097A-SRK-WR-202	0.246	<0.01	0.25	NA	7.7
HBM-23-097A-SRK-WR-203	2.255	<0.01	2.26	NA	70.5
HBM-23-097A-SRK-WR-204	6.897	0.04	6.86	NA	214.3
HBM-23-097A-SRK-WR-205	2.208	0.03	2.18	NA	68.1
HBM-23-097A-SRK-WR-206	1.902	0.07	1.83	NA	57.3
HBM-23-097A-SRK-WR-207	2.131	0.03	2.10	NA	65.7
HBM-23-097A-SRK-WR-208	1.845	0.02	1.83	NA	57.0
HBM-23-097A-SRK-WR-209	0.296	<0.01	0.30	NA	9.3
HBM-23-097A-SRK-WR-210	1.545	<0.01	1.55	NA	48.3
HBM-23-097A-SRK-WR-211	1.798	<0.01	1.80	NA	56.2
HBM-23-097A-SRK-WR-211 DUP	1.823	0.01	1.81	NA	56.7
HBM-23-097A-SRK-WR-212	0.838	<0.01	0.84	NA	26.2
HBM-23-097A-SRK-WR-213	0.243	<0.01	0.24	NA	7.6
HBM-23-097A-SRK-WR-214	0.184	<0.01	0.18	NA	5.8
HBM-23-097A-SRK-WR-215	0.624	<0.01	0.62	NA	19.5
HBM-23-097A-SRK-WR-216	0.513	<0.01	0.51	NA	16.0
HBM-23-097A-SRK-WR-217	0.583	<0.01	0.58	NA	18.2
HBM-23-097A-SRK-WR-218	1.369	<0.01	1.37	NA	42.8
HBM-23-097A-SRK-WR-219	0.352	<0.01	0.35	NA	11.0
HBM-23-097A-SRK-WR-220	0.237	<0.01	0.24	NA	7.4
HBM-23-097A-SRK-WR-221	0.370	<0.01	0.37	NA	11.6
HBM-23-097A-SRK-WR-221 DUP	0.383	<0.01	0.38	NA	12.0
HBM-23-097A-SRK-WR-222	0.461	<0.01	0.46	NA	14.4
HBM-23-097A-SRK-WR-223	0.202	<0.01	0.20	NA	6.3
HBM-23-097A-SRK-WR-224	0.121	<0.01	0.12	NA	3.8
HBM-23-097A-SRK-WR-225	0.119	<0.01	0.12	NA	3.7

SGS proposal: 19322-PR3-R2 Work order date: 6-Nov-23
SGS project #: 2348 Report date: 14-Mar-24

Version: Final

ABA Report

Test	C(T)	TIC	CaCO3 NP	CO3 NPR	Modified Sobek terminal pH	Modified NP	Net Modified NP kg CaCO3/t	Bulk NPR	Fizz Test	Paste pH
Units	%	%	kg CaCO3/t			kg CaCO3/t				
Method Code	CSA06V	CSB02V	Calc.	Calc.		Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01				0.5				0.2
HBM-23-097A-SRK-WR-170	7.106	4.85	404.2	93.72	1.77	226.7	222.4	52.56	Moderate	9.02
HBM-23-097A-SRK-WR-171	5.473	3.66	305.0	123.54	1.85	109.3	106.8	44.27	Moderate	8.93
HBM-23-097A-SRK-WR-171 DUP	5.568	3.62	301.7	127.02	1.88	112.7	110.3	47.45	Moderate	8.91
HBM-23-097A-SRK-WR-172	6.262	4.43	369.2	181.74	1.73	227.3	225.3	111.90	Moderate	8.78
HBM-23-097A-SRK-WR-173	6.967	4.65	387.5	110.71	1.59	242.9	239.4	69.41	Moderate	9.08
HBM-23-097A-SRK-WR-174	7.668	5.78	481.7	74.46	1.60	344.9	338.5	53.32	Moderate	8.91
HBM-23-097A-SRK-WR-175	7.268	6.68	556.7	58.79	1.74	483.5	474.0	51.06	Moderate	8.75
HBM-23-097A-SRK-WR-176	5.348	4.10	341.7	23.67	1.70	235.6	221.1	16.32	Moderate	9.20
HBM-23-097A-SRK-WR-177	7.434	5.02	418.3	42.50	1.66	251.1	241.3	25.51	Moderate	9.11
HBM-23-097A-SRK-WR-178	5.846	5.16	430.0	36.21	1.77	120.4	108.5	10.14	Moderate	9.13
HBM-23-097A-SRK-WR-179	5.095	5.08	423.3	78.30	1.65	314.4	309.0	58.15	Moderate	9.45
HBM-23-097A-SRK-WR-180	4.570	4.52	376.7	74.87	1.73	280.5	275.5	55.75	Moderate	9.55
HBM-23-097A-SRK-WR-181	6.024	5.88	490.0	129.59	1.66	394.6	390.8	104.34	Moderate	9.48
HBM-23-097A-SRK-WR-181 DUP	5.881	5.87	489.2	136.12	1.57	388.3	384.7	108.04	Moderate	9.50
HBM-23-097A-SRK-WR-182	6.261	4.92	410.0	38.59	1.69	321.8	311.2	30.29	Moderate	9.13
HBM-23-097A-SRK-WR-183	6.134	4.57	380.8	50.57	1.71	304.3	296.8	40.40	Moderate	9.34
HBM-23-097A-SRK-WR-184	4.842	3.95	329.2	15.63	1.54	264.2	243.1	12.54	Moderate	9.45
HBM-23-097A-SRK-WR-185	3.780	2.96	246.7	8.13	1.74	176.6	146.3	5.82	Moderate	9.31
HBM-23-097A-SRK-WR-186	4.058	3.23	269.2	20.12	1.59	191.3	178.0	14.31	Moderate	9.35
HBM-23-097A-SRK-WR-187	4.656	3.68	306.7	19.59	1.66	211.4	195.8	13.50	Moderate	9.37
HBM-23-097A-SRK-WR-188	7.264	4.86	405.0	160.00	1.52	235.8	233.3	93.16	Moderate	9.26
HBM-23-097A-SRK-WR-189	6.487	4.63	385.8	82.86	1.66	234.5	229.9	50.37	Moderate	9.47
HBM-23-097A-SRK-WR-190	4.600	3.62	301.7	8.14	1.91	190.4	153.3	5.14	Moderate	9.18
HBM-23-097A-SRK-WR-191	6.161	5.43	452.5	10.90	1.89	350.1	308.6	8.44	Moderate	9.08
HBM-23-097A-SRK-WR-191 DUP	6.169	5.39	449.2	11.04	1.96	349.4	308.7	8.59	Moderate	9.12
HBM-23-097A-SRK-WR-192	7.604	6.27	522.5	79.62	1.56	414.9	408.3	63.22	Moderate	9.27
HBM-23-097A-SRK-WR-193	6.031	5.87	489.2	55.12	1.58	359.7	350.9	40.53	Moderate	9.39
HBM-23-097A-SRK-WR-194	5.175	4.96	413.3	93.15	1.53	303.0	298.5	68.27	Moderate	9.42
HBM-23-097A-SRK-WR-195	6.149	5.12	426.7	80.79	1.61	354.0	348.7	67.03	Moderate	9.60
HBM-23-097A-SRK-WR-196	6.081	5.53	460.8	58.99	1.52	341.5	333.7	43.71	Moderate	9.58
HBM-23-097A-SRK-WR-197	5.506	4.73	394.2	10.62	1.79	315.7	278.6	8.50	Moderate	9.23
HBM-23-097A-SRK-WR-198	5.102	4.83	402.5	45.51	1.56	291.7	282.9	32.98	Moderate	9.61
HBM-23-097A-SRK-WR-199	3.619	2.22	185.0	3.16	1.68	224.6	166.2	3.84	Moderate	8.36
HBM-23-097A-SRK-WR-200	4.594	4.42	368.3	55.86	1.52	288.8	282.2	43.80	Moderate	9.37
HBM-23-097A-SRK-WR-201	4.786	4.61	384.2	33.87	1.62	281.2	269.8	24.79	Moderate	9.43
HBM-23-097A-SRK-WR-201 DUP	4.725	4.57	380.8	37.27	1.57	285.6	275.3	27.94	Moderate	9.34
HBM-23-097A-SRK-WR-202	6.332	4.63	385.8	50.19	1.70	366.7	359.0	47.70	Moderate	9.27
HBM-23-097A-SRK-WR-203	5.282	4.98	415.0	5.89	1.56	342.8	272.3	4.86	Moderate	8.83
HBM-23-097A-SRK-WR-204	3.490	3.44	286.7	1.34	1.95	163.0	-51.3	0.76	Moderate	8.24
HBM-23-097A-SRK-WR-205	3.978	3.75	312.5	4.59	1.65	226.5	158.4	3.33	Moderate	8.27
HBM-23-097A-SRK-WR-206	2.917	2.37	197.5	3.45	1.76	167.7	110.5	2.93	Moderate	7.89
HBM-23-097A-SRK-WR-207	3.586	3.11	259.2	3.95	1.79	201.2	135.5	3.06	Moderate	8.11
HBM-23-097A-SRK-WR-208	3.564	2.87	239.2	4.19	1.50	171.8	114.8	3.01	Moderate	8.30
HBM-23-097A-SRK-WR-209	6.911	5.30	441.7	47.75	1.73	299.0	289.8	32.32	Moderate	8.70
HBM-23-097A-SRK-WR-210	3.778	2.87	239.2	4.95	1.68	201.1	152.8	4.17	Moderate	8.70
HBM-23-097A-SRK-WR-211	2.505	2.03	169.2	3.01	1.95	136.2	80.0	2.42	Moderate	8.63
HBM-23-097A-SRK-WR-211 DUP	2.413	1.98	165.0	2.91	1.93	134.9	78.2	2.38	Moderate	8.64
HBM-23-097A-SRK-WR-212	3.540	2.59	215.8	8.24	1.95	163.0	136.8	6.22	Moderate	8.82
HBM-23-097A-SRK-WR-213	7.371	5.45	454.2	59.81	1.85	296.5	288.9	39.04	Moderate	9.13
HBM-23-097A-SRK-WR-214	7.174	5.35	445.8	77.54	2.00	59.2	53.4	10.29	Moderate	9.03
HBM-23-097A-SRK-WR-215	7.462	5.62	468.3	24.02	2.00	302.7	283.2	15.52	Moderate	9.24
HBM-23-097A-SRK-WR-216	7.487	5.07	422.5	26.35	1.90	200.4	184.4	12.50	Moderate	9.15
HBM-23-097A-SRK-WR-217	6.873	5.41	450.8	24.75	1.98	307.1	288.9	16.86	Moderate	8.97
HBM-23-097A-SRK-WR-218	6.075	4.91	409.2	9.56	1.74	314.6	271.8	7.35	Moderate	8.80
HBM-23-097A-SRK-WR-219	6.922	5.12	426.7	38.79	1.96	302.1	291.1	27.47	Moderate	9.18
HBM-23-097A-SRK-WR-220	5.653	5.13	427.5	57.72	1.55	370.4	363.0	50.01	Moderate	8.46
HBM-23-097A-SRK-WR-221	2.081	2.22	185.0	16.00	1.50	174.6	163.0	15.10	Moderate	8.81
HBM-23-097A-SRK-WR-221 DUP	2.068	2.10	175.0	14.62	1.50	175.2	163.2	14.64	Moderate	8.95
HBM-23-097A-SRK-WR-222	1.042	0.94	78.3	5.44	1.82	84.4	70.0	5.86	Moderate	8.85
HBM-23-097A-SRK-WR-223	0.785	0.72	60.0	9.50	1.74	68.3	62.0	10.81	Moderate	8.64
HBM-23-097A-SRK-WR-224	1.544	1.46	121.7	21.28	1.84	75.3	71.5	19.92	Moderate	8.41
HBM-23-097A-SRK-WR-225	0.150	0.14	11.7	3.14	1.57	21.9	18.1	5.88	Slight	8.74

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
HBM-23-122-SRK-WR-226	0.204	<0.01	0.20	NA	6.4
HBM-23-122-SRK-WR-227	0.206	<0.01	0.21	NA	6.4
HBM-23-122-SRK-WR-228	0.125	<0.01	0.13	NA	3.9
HBM-23-122-SRK-WR-229	0.635	<0.01	0.64	NA	19.8
HBM-23-122-SRK-WR-230	0.394	<0.01	0.39	NA	12.3
HBM-23-122-SRK-WR-231	1.147	<0.01	1.15	NA	35.8
HBM-23-122-SRK-WR-232	0.251	<0.01	0.25	NA	7.8
HBM-23-122-SRK-WR-232 DUP	0.245	<0.01	0.25	NA	7.7
HBM-23-122-SRK-WR-233	0.454	<0.01	0.45	NA	14.2
HBM-23-122-SRK-WR-234	0.470	<0.01	0.47	NA	14.7
HBM-23-122-SRK-WR-235	0.278	<0.01	0.28	NA	8.7
HBM-23-122-SRK-WR-236	0.625	<0.01	0.63	NA	19.5
HBM-23-122-SRK-WR-237	0.383	<0.01	0.38	NA	12.0
HBM-23-122-SRK-WR-238	0.310	<0.01	0.31	NA	9.7
HBM-23-122-SRK-WR-239	0.341	<0.01	0.34	NA	10.7
HBM-23-122-SRK-WR-240	0.462	<0.01	0.46	NA	14.4
HBM-23-122-SRK-WR-241	0.677	<0.01	0.68	NA	21.2
HBM-23-122-SRK-WR-242	0.818	<0.01	0.82	NA	25.6
HBM-23-122-SRK-WR-242 DUP	0.803	<0.01	0.80	NA	25.1
HBM-23-122-SRK-WR-243	0.771	0.01	0.76	NA	23.8
HBM-23-122-SRK-WR-244	0.135	<0.01	0.14	NA	4.2
HBM-23-122-SRK-WR-245	0.066	<0.01	0.07	NA	2.1
HBM-23-122-SRK-WR-246	0.097	<0.01	0.10	NA	3.0
HBM-23-122-SRK-WR-247	0.090	<0.01	0.09	NA	2.8
HBM-23-122-SRK-WR-248	0.233	<0.01	0.23	NA	7.3
HBM-23-122-SRK-WR-249	0.111	<0.01	0.11	NA	3.5
HBM-23-122-SRK-WR-250	0.121	<0.01	0.12	NA	3.8
HBM-23-122-SRK-WR-251	0.126	<0.01	0.13	NA	3.9
HBM-23-122-SRK-WR-252	0.147	<0.01	0.15	NA	4.6
HBM-23-122-SRK-WR-252 DUP	0.159	<0.01	0.16	NA	5.0
HBM-23-122-SRK-WR-253	0.189	<0.01	0.19	NA	5.9
HBM-23-122-SRK-WR-254	0.112	<0.01	0.11	NA	3.5
HBM-23-122-SRK-WR-255	0.238	<0.01	0.24	NA	7.4
HBM-23-122-SRK-WR-256	0.351	<0.01	0.35	NA	11.0
HBM-23-122-SRK-WR-257	0.259	<0.01	0.26	NA	8.1
HBM-23-122-SRK-WR-258	0.790	<0.01	0.79	NA	24.7
HBM-23-122-SRK-WR-259	0.250	<0.01	0.25	NA	7.8
HBM-23-122-SRK-WR-260	0.386	<0.01	0.39	NA	12.1
HBM-23-122-SRK-WR-261	0.436	<0.01	0.44	NA	13.6
HBM-23-122-SRK-WR-262	0.758	0.01	0.75	NA	23.4
HBM-23-122-SRK-WR-262 DUP	0.763	0.01	0.75	NA	23.5
HBM-23-122-SRK-WR-263	0.319	<0.01	0.32	NA	10.0
HBM-23-122-SRK-WR-264	0.402	0.01	0.39	NA	12.3
HBM-23-122-SRK-WR-265	0.318	<0.01	0.32	NA	9.9
HBM-23-122-SRK-WR-266	0.190	<0.01	0.19	NA	5.9
HBM-23-122-SRK-WR-267	0.188	<0.01	0.19	NA	5.9
HBM-23-122-SRK-WR-268	0.129	<0.01	0.13	NA	4.0
HBM-23-122-SRK-WR-269	0.124	<0.01	0.12	NA	3.9
HBM-23-122-SRK-WR-270	0.118	<0.01	0.12	NA	3.7

SGS proposal: 19322-PR3-R2 Work order date: 6-Nov-23
SGS project #: 2348 Report date: 14-Mar-24

Version: Final

ABA Report

Test	C(T)	TIC	CaCO3 NP	CO3 NPR	Modified Sobek terminal pH	Modified NP	Net Modified NP kg CaCO3/t	Bulk NPR	Fizz Test	Paste pH
Units	%	%	kg CaCO3/t			kg CaCO3/t				
Method Code	CSA06V	CSB02V	Calc.	Calc.		Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01				0.5				0.2
HBM-23-122-SRK-WR-226	4.358	4.09	340.8	53.46	1.52	245.0	238.6	38.43	Moderate	9.39
HBM-23-122-SRK-WR-227	4.675	4.40	366.7	56.96	1.54	270.3	263.8	41.98	Moderate	9.47
HBM-23-122-SRK-WR-228	5.204	4.70	391.7	100.27	1.96	289.2	285.3	74.02	Moderate	9.43
HBM-23-122-SRK-WR-229	6.944	6.96	580.0	29.23	1.97	488.4	468.6	24.61	Moderate	9.19
HBM-23-122-SRK-WR-230	5.641	4.99	415.8	33.77	1.81	323.7	311.4	26.29	Moderate	9.17
HBM-23-122-SRK-WR-231	5.736	5.55	462.5	12.90	1.51	353.9	318.1	9.87	Moderate	8.86
HBM-23-122-SRK-WR-232	5.231	5.17	430.8	54.93	1.66	350.1	342.3	44.64	Moderate	8.45
HBM-23-122-SRK-WR-232 DUP	5.005	5.15	429.2	56.05	1.59	339.7	332.0	44.36	Moderate	8.42
HBM-23-122-SRK-WR-233	4.863	5.12	426.7	30.07	1.80	355.4	341.2	25.05	Moderate	8.31
HBM-23-122-SRK-WR-234	4.732	4.38	365.0	24.85	1.68	309.1	294.4	21.04	Moderate	8.44
HBM-23-122-SRK-WR-235	3.169	3.29	274.2	31.56	1.70	234.6	225.9	27.00	Moderate	9.35
HBM-23-122-SRK-WR-236	6.738	6.34	528.3	27.05	1.73	424.6	405.1	21.74	Moderate	8.68
HBM-23-122-SRK-WR-237	3.106	3.18	265.0	22.14	1.64	227.0	215.0	18.96	Moderate	9.19
HBM-23-122-SRK-WR-238	2.098	2.26	188.3	19.44	1.54	183.5	173.8	18.94	Moderate	8.60
HBM-23-122-SRK-WR-239	3.314	3.33	277.5	26.04	1.55	259.0	248.3	24.30	Moderate	8.56
HBM-23-122-SRK-WR-240	3.703	3.76	313.3	21.70	1.55	267.1	252.7	18.50	Moderate	8.45
HBM-23-122-SRK-WR-241	1.346	1.09	90.8	4.29	1.83	70.3	49.2	3.32	Slight	9.23
HBM-23-122-SRK-WR-242	1.863	1.65	137.5	5.38	1.85	129.1	103.5	5.05	Slight	8.68
HBM-23-122-SRK-WR-242 DUP	1.739	1.63	135.8	5.41	1.84	129.4	104.3	5.16	Slight	8.76
HBM-23-122-SRK-WR-243	1.593	1.54	128.3	5.40	1.94	103.5	79.7	4.35	Slight	9.03
HBM-23-122-SRK-WR-244	6.720	4.07	339.2	80.40	1.71	203.5	199.3	48.25	Moderate	9.03
HBM-23-122-SRK-WR-245	7.312	4.23	352.5	170.91	1.89	177.3	175.2	85.96	Moderate	9.10
HBM-23-122-SRK-WR-246	7.849	4.52	376.7	124.26	2.00	192.2	189.1	63.40	Moderate	9.22
HBM-23-122-SRK-WR-247	7.710	4.49	374.2	133.04	1.53	101.7	98.9	36.16	Moderate	9.10
HBM-23-122-SRK-WR-248	5.094	4.92	410.0	56.31	1.53	305.7	298.4	41.99	Moderate	9.44
HBM-23-122-SRK-WR-249	4.981	4.46	371.7	107.15	1.86	301.4	297.9	86.88	Moderate	9.57
HBM-23-122-SRK-WR-250	3.778	4.04	336.7	89.04	1.72	308.5	304.7	81.59	Moderate	9.46
HBM-23-122-SRK-WR-251	4.774	4.68	390.0	99.05	1.69	57.2	53.3	14.53	Moderate	9.46
HBM-23-122-SRK-WR-252	5.176	5.09	424.2	92.34	1.63	322.7	318.1	70.26	Moderate	9.46
HBM-23-122-SRK-WR-252 DUP	5.125	4.97	414.2	83.35	1.61	320.0	315.0	64.40	Moderate	9.41
HBM-23-122-SRK-WR-253	5.000	4.84	403.3	68.29	1.88	312.1	306.2	52.85	Moderate	9.47
HBM-23-122-SRK-WR-254	5.475	5.19	432.5	123.57	1.52	322.6	319.1	92.16	Moderate	9.42
HBM-23-122-SRK-WR-255	4.404	3.68	306.7	41.23	1.57	233.3	225.8	31.36	Moderate	9.49
HBM-23-122-SRK-WR-256	7.505	4.62	385.0	35.10	1.98	148.1	137.2	13.51	Moderate	9.23
HBM-23-122-SRK-WR-257	5.311	4.18	348.3	43.04	1.82	199.9	191.8	24.70	Moderate	8.90
HBM-23-122-SRK-WR-258	3.318	2.74	228.3	9.25	1.74	164.9	140.2	6.68	Moderate	8.94
HBM-23-122-SRK-WR-259	7.209	5.04	420.0	53.76	1.65	246.2	238.4	31.51	Moderate	9.07
HBM-23-122-SRK-WR-260	4.696	3.90	325.0	26.94	1.80	192.1	180.0	15.92	Moderate	9.15
HBM-23-122-SRK-WR-261	6.287	4.85	404.2	29.66	1.87	225.7	212.1	16.57	Moderate	9.15
HBM-23-122-SRK-WR-262	4.536	3.44	286.7	12.26	1.62	233.8	210.4	10.00	Moderate	8.71
HBM-23-122-SRK-WR-262 DUP	4.562	3.75	312.5	13.28	1.69	246.9	223.4	10.49	Moderate	8.71
HBM-23-122-SRK-WR-263	4.581	3.57	297.5	29.84	1.96	223.7	213.7	22.44	Moderate	8.74
HBM-23-122-SRK-WR-264	6.667	5.29	440.8	35.99	1.90	303.1	290.8	24.74	Moderate	8.73
HBM-23-122-SRK-WR-265	5.332	4.44	370.0	37.23	1.84	272.2	262.3	27.39	Moderate	8.92
HBM-23-122-SRK-WR-266	6.084	4.79	399.2	67.23	1.81	301.6	295.6	50.79	Moderate	8.73
HBM-23-122-SRK-WR-267	5.800	4.59	382.5	65.11	1.76	284.4	278.6	48.42	Moderate	8.46
HBM-23-122-SRK-WR-268	3.034	2.84	236.7	58.71	1.56	214.7	210.7	53.26	Moderate	8.29
HBM-23-122-SRK-WR-269	2.905	2.53	210.8	54.41	1.50	226.3	222.5	58.41	Moderate	8.33
HBM-23-122-SRK-WR-270	3.430	3.44	286.7	77.74	1.83	288.7	285.0	78.30	Moderate	8.35

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
Duplicates					
HBM-23-123-SRK-WR-9		<0.01			
HBM-23-123-SRK-WR-32		<0.01			
HBM-23-123-SRK-WR-50 DUP	0.167				
HBM-23-123-SRK-WR-43		<0.01			
HBM-23-123-SRK-WR-47	0.224				
HBM-23-086-SRK-WR-116		<0.01			
HBM-23-086-SRK-WR-136		<0.01			
HBM-23-086-SRK-WR-148		<0.01			
HBM-23-123-SRK-WR-102	0.055				
HBM-23-123-SRK-WR-172	0.068				
HBM-23-123-SRK-WR-187	0.496				
HBM-23-123-SRK-WR-167					
HBM-23-123-SRK-WR-201	0.358				
HBM-23-097A-SRK-WR-160		<0.01			
HBM-23-097A-SRK-WR-188		<0.01			
HBM-23-097A-SRK-WR-200		<0.01			
HBM-23-122-SRK-WR-227	0.217				
HBM-23-122-SRK-WR-250	0.126				
HBM-23-122-SRK-WR-254	0.108				
HBM-23-122-SRK-WR-247		<0.01			
HBM-23-122-SRK-WR-266		<0.01			
HBM-23-097A-SRK-WR-223		<0.01			
HBM-23-122-SRK-WR-238		<0.01			
HBM-23-123-SRK-WR-69	0.212				
HBM-23-123-SRK-WR-82	0.198				
HBM-23-123-SRK-WR-60 DUP		<0.01			
HBM-23-123-SRK-WR-80		<0.01			

SGS proposal: 19322-PR3-R2 Work order date: 6-Nov-23
SGS project #: 2348 Report date: 14-Mar-24

Version: Final

ABA Report

Test	C(T)	TIC	CaCO3 NP	CO3 NPR	Modified Sobek terminal pH	Modified NP	Net Modified NP	Bulk NPR	Fizz Test	Paste pH
Units	%	%	kg CaCO3/t			kg CaCO3/t	kg CaCO3/t			
Method Code	CSA06V	CSB02V	Calc.	Calc.		Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01				0.5				0.2
Duplicates										
HBM-23-123-SRK-WR-50 DUP	2.859									
HBM-23-123-SRK-WR-33		2.93								
HBM-23-123-SRK-WR-47	5.260	4.92								
HBM-23-123-SRK-WR-1					1.77	138.8			Strong	8.76
HBM-23-123-SRK-WR-19					1.92	333.1			Strong	9.19
HBM-23-123-SRK-WR-20					1.68	310.8			Strong	9.27
HBM-23-123-SRK-WR-37					1.64	164.6			Strong	8.95
HBM-23-123-SRK-WR-38					1.76	196.3			Strong	8.6
HBM-23-123-SRK-WR-55					1.91	191.9			Strong	8.3
HBM-23-086-SRK-WR-140		5.58								
HBM-23-123-SRK-WR-102	6.972									
HBM-23-123-SRK-WR-172	6.080									
HBM-23-123-SRK-WR-187	4.703									
HBM-23-123-SRK-WR-167		4.55								
HBM-23-123-SRK-WR-201	4.814									
HBM-23-097A-SRK-WR-194		4.94								
HBM-23-086-SRK-WR-151		2.21								
HBM-23-123-SRK-WR-56					1.90	233.5			Strong	8.32
HBM-23-123-SRK-WR-74					1.62	285.3			Strong	9.99
HBM-23-122-SRK-WR-227	4.757									
HBM-23-122-SRK-WR-250	4.010									
HBM-23-122-SRK-WR-254	5.559									
HBM-23-097A-SRK-WR-211 DUP		2.08								
HBM-23-122-SRK-WR-268		2.81								
HBM-23-122-SRK-WR-258		2.76								
HBM-23-112-SRK-WR-85		5.11								
HBM-23-123-SRK-WR-69	5.252									
HBM-23-123-SRK-WR-82	3.165									
HBM-23-112-SRK-WR-77		2.72								
HBM-23-112-SRK-WR-75					1.55	230.9			Strong	10.26
HBM-23-086-SRK-WR-92					1.89	206.0			Strong	8.69
HBM-23-086-SRK-WR-93					1.67	287.6			Moderate	8.36
HBM-23-086-SRK-WR-110 DUP					1.47	371.0			Strong	9.86
HBM-23-086-SRK-WR-111					1.51	443.4			Strong	10.2
HBM-23-086-SRK-WR-129					1.74	414.6			Moderate	9.03
HBM-23-086-SRK-WR-130					1.42	401.1			Moderate	8.99
HBM-23-086-SRK-WR-147					1.56	256.0			Moderate	9.6
HBM-23-086-SRK-WR-148					1.42	277.0			Moderate	9.37
HBM-23-097A-SRK-WR-167					1.52	276.7			Moderate	9.12
HBM-23-097A-SRK-WR-168					1.67	87.5			Moderate	9.43
HBM-23-097A-SRK-WR-185					1.75	174.8			Moderate	9.41
HBM-23-097A-SRK-WR-186					1.56	187.6			Moderate	9.44
HBM-23-097A-SRK-WR-221 DUP					1.46	174.6			Moderate	8.77
HBM-23-097A-SRK-WR-222					1.75	83.1			Moderate	8.88
HBM-23-122-SRK-WR-240					1.65	267.0			Moderate	8.39
HBM-23-122-SRK-WR-241					1.83	70.5			Slight	9.03
HBM-23-122-SRK-WR-258					1.79	166.0			Moderate	8.96

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
QA/QC					
Blank	<0.005	<0.01			
Certified standards					
RTS-3a		1.03			
RTS-3a		0.94			
GS-314-2	2.673				
RTS-3a		0.97			
GS-314-2	2.659				
GS915-8	0.127				
RTS-3a		0.99			
RTS-3a		1.00			
RTS-3a		1.04			
GS-314-2	2.672				
GS915-8	0.135				
GS-314-2	2.545				
GS915-8	0.142				
GS-314-2					
RTS-3a		1.09			
RTS-3a		0.98			
GS-314-2	2.658				
GS915-8	0.134				
RTS-3a		1.01			
RTS-3a		0.99			
RTS-3a		1.05			
GS-314-2	2.588				
GS915-8	0.138				
RTS-3a		1.00			

SGS proposal: 19322-PR3-R2
SGS project #: 2348

Work order date: 6-Nov-23
Report date: 14-Mar-24

Version: Final

ABA Report

Test Units	C(T) %	TIC %	CaCO3 NP kg CaCO3/t	CO3 NPR	Modified Sobek terminal pH	Modified NP kg CaCO3/t	Net Modified NP kg CaCO3/t	Bulk NPR	Fizz Test	Paste pH
Method Code	CSA06V	CSB02V	Calc.	Calc.		Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01				0.5				0.2
QA/QC										
Blank	<0.005	<0.01								
Certified standards										
GS-314-2	5.046									
TIC-L1		0.13								
SX35-13		11.78								
TIC-L1		0.13								
SX35-13		11.88								
GS-314-2	5.395									
GS915-8	0.067									
NBM-1						42.0			Slight	
NBM-1						41.7			Slight	
TIC-L1		0.13								
SX35-13		11.81								
GS-314-2	5.118									
GS915-8	0.062									
GS-314-2	5.061									
GS915-8	0.072									
TIC-L1		0.13								
SX35-13		11.70								
GS-314-2	4.985									
TIC-L1		0.13								
SX35-13		11.72								
NBM-1						41.5			Slight	
GS-314-2	5.044									
GS915-8	0.069									
SX35-13		11.74								
TIC-L1		0.13								
TIC-L1		0.13								
SX35-13		11.93								
GS-314-2	5.029									
GS915-8	0.061									
TIC-L1		0.13								
SX35-13		11.67								
NBM-1						41.6			Slight	
NBM-1						40.9			Slight	
NBM-1						41.6			Slight	
NBM-1						42.3			Slight	
NBM-1						42.9			Slight	
NBM-1						41.8			Slight	
NBM-1						43.8			Slight	

Appendix D Statistical Summary of Trace Element Data

Appendix D: Statistical Summary of Trace Element Data, Ore

Rock Type	Deposit	Statistic / Sample ID	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S
			%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%
A-Type, Hematite	Madrid North	HBM-21-010-SRK-WR-126	0.18	7	5	25	65	4.9	0.05	1	2.1	1100	0.09	120	0.05	3.2
A-Type	Madrid North	Min	0.13	3	5	26	30	4.6	0.01	1	2	850	0.01	38	0.01	0.51
		P50	0.44	13	6.8	97	140	7	0.085	5	3.6	1500	0.038	180	0.02	3.1
		Max	4.5	180	11	470	290	9.7	1.2	20	6.4	2000	1.6	650	0.057	5
		Count	20	20	20	20	20	20	20	13	20	20	20	20	18	16
	Patch 7	Min	0.17	7	5.9	4	44	6.9	0.05	1	2.8	1400	0.02	42	0.02	0.6
		P50	0.25	16	9.1	76	150	7.7	0.065	3.5	3.5	1600	0.025	480	0.045	1.6
		Max	2.3	23	10	110	170	9.1	0.11	21	6.3	2100	0.06	550	0.14	2.5
		Count	6	6	6	6	6	6	6	6	6	6	6	6	6	6
A-Type (mixed)	Madrid North	HB-05PMD2916.231	4.6	150	6.2	220	150	7.9	1.4	-	3.3	1600	1.7	300	-	-
		HB-05PMD293184205.14	2.4	66	6.4	600	130	8.2	0.87	-	5.1	1400	0.51	670	-	-
		HB-06PMD470314.55326.64	1.1	13	5.2	79	100	6.1	0.07	-	2.9	1000	0.026	330	0.026	2.7
		HB-08PMD65023.8533	0.74	6	4.7	64	140	7.7	0.07	-	2.3	1100	0.033	120	0.053	5.6
		HB-PMD150130155	2.6	160	12	340	150	7.1	2.1	-	6.2	2000	0.19	420	-	-
C-Type	Madrid North	HB-06PMD4708588	1.6	18	6.4	82	97	6.8	0.17	-	2.6	1600	0.068	130	0.032	1.4
MDZ	Patch 7	HBM-23-097A-SRK-WR-157	0.27	5	8.3	11	100	6.9	0.06	2	2.8	1400	0.07	64	0.02	0.99
		HBM-23-097A-SRK-WR-204	0.35	14	5.9	9	110	8.9	0.12	1	2.4	1100	0.04	140	0.07	5
		HBM-23-097A-SRK-WR-207	0.7	13	5.3	110	240	5.9	0.18	9	2.5	1000	0.03	240	0.06	2.2
Sediments	Madrid North	HBM-22-045B-SRK-WR-188	0.79	9	4.4	44	59	11	0.12	10	2.2	1200	0.05	240	0.12	5
		HBM-22-045B-SRK-WR-191	0.71	9	6.8	45	23	9.5	0.1	10	3.2	1600	0.05	250	0.13	5
		HBM-22-045B-SRK-WR-193	1.1	13	9.4	70	21	9.8	0.09	15	4.4	2400	0.04	140	0.1	4.8
Sediments (mixed)	Madrid North	HB-07PMD6102223	1.6	3	6.7	180	22	9	0.05	-	4.3	2500	0.027	190	0.15	5
Ultramafics	Patch 7	HBM-23-097A-SRK-WR-215	0.18	12	6.4	170	170	9.1	0.08	2	7.5	1500	0.01	890	0.04	0.65
		HBM-23-097A-SRK-WR-217	0.23	13	6.9	180	130	8.1	0.09	1	6.7	1400	0.02	630	0.04	0.62

Appendix D: Statistical Summary of Trace Element Data, Ore

Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb
ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
110	0.01	22	15	1.6	0.8	550	0.1	0.03	0.04	4.9	40	0.05	0.5	0.1	0.14	0.01	0.03	1.8	0.05	0.25	0.06	3
86	0.001	13	12	0.5	0.46	160	0.1	0.02	0.03	1.4	29	0.05	0.7	0.1	0.05	0.01	0.02	0.4	0.04	0.15	0.05	1.1
150	0.01	50	30	2.2	1	510	0.3	0.035	0.1	4.8	50	0.09	1.5	0.1	0.05	0.01	0.05	1.6	0.05	0.53	0.05	3.9
320	0.058	210	140	7.3	3.1	1200	2	0.5	4	14	78	0.25	6	0.1	0.16	1	0.09	4.7	0.06	4.1	0.07	11
20	20	20	20	13	20	20	15	18	20	13	20	13	18	13	13	18	13	13	13	20	13	20
93	0.01	24	21	2	0.66	79	0.2	0.02	0.03	6	50	0.19	0.8	0.1	0.06	0.01	0.03	2.2	0.04	0.72	0.05	1.3
180	0.01	33	23	3.1	0.91	980	0.3	0.02	0.09	8.8	65	0.25	1.1	0.1	0.13	0.01	0.04	3.2	0.04	0.87	0.05	2
290	0.03	170	40	6.3	4.2	1200	0.4	0.04	0.16	24	73	0.27	11	0.1	0.21	0.07	0.06	8.8	0.12	1.1	0.05	2.6
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
120	0.11	200	55	-	0.8	270	2	-	3	-	58	-	-	-	-	-	-	-	-	2	-	10
190	0.086	190	68	-	2	210	2	-	5	-	78	-	-	-	-	-	-	-	-	2	-	10
120	0.001	34	21	-	0.6	570	-	0.1	0.1	-	53	-	3	-	-	0.01	-	-	-	1.1	-	6.3
85	0.001	33	38	-	2.1	300	-	0.4	0.1	-	57	-	3	-	-	0.03	-	-	-	1.9	-	22
59	0.19	170	55	-	0.4	700	2	-	4	-	75	-	-	-	-	-	-	-	-	2	-	10
78	0.002	67	67	-	0.5	430	-	0.1	0.1	-	44	-	5	-	-	0.01	-	-	-	0.2	-	1.8
46	0.01	22	40	0.5	0.82	200	0.1	0.02	0.07	1.3	34	0.53	0.7	0.1	0.05	0.01	0.05	0.4	0.06	0.71	0.05	0.7
76	0.01	13	49	6.4	1.2	240	0.2	0.16	0.12	6.4	54	0.45	1.1	0.1	0.28	0.03	0.07	2.5	0.09	1.3	0.07	6.5
76	0.01	25	25	9.1	1.7	280	0.4	0.24	0.08	21	38	0.84	2.5	0.1	0.26	0.05	0.15	8.4	0.06	2.2	0.05	5.9
40	0.01	25	52	13	1.7	430	0.2	2.5	0.11	8.6	130	0.27	2.7	0.1	0.35	0.03	0.05	3	0.07	3.5	0.05	33
64	0.01	29	36	11	1.1	370	0.2	0.7	0.07	13	80	0.18	2.7	0.1	0.3	0.02	0.07	4.4	0.07	1.5	0.05	18
110	0.01	84	38	5.2	1.1	300	0.2	0.12	0.05	12	51	0.1	5.2	0.1	0.16	0.02	0.1	4.1	0.09	0.82	0.05	6.5
91	0.005	80	55	-	0.9	730	-	0.1	0.1	-	29	-	6	-	-	0.01	-	-	-	0.7	-	7.3
200	0.01	30	39	2.2	1.5	1000	0.2	0.14	0.25	7.4	95	0.12	0.9	0.1	0.07	0.01	0.05	2.5	0.03	0.85	0.05	2
140	0.01	37	31	1.7	3.1	720	0.1	0.17	0.18	5.4	70	0.14	1.3	0.1	0.07	0.04	0.05	1.8	0.03	1.1	0.05	1.9

Appendix D: Statistical Summary of Trace Element Data, Ore

Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
1.4	0.8	19	1	0.3	0.05	0.14	0.58	0.3	0.05	0.05	0.7	2.9	0.3
0.4	0.09	12	0.5	0.3	0.05	0.08	0.06	0.1	0.02	0.05	0.4	1.8	0.3
2.7	0.89	16	1	0.3	0.05	0.21	0.29	0.2	0.08	0.05	0.7	4.2	0.3
7.1	31	22	12	2	0.05	0.32	0.62	1	20	1	1.4	4.8	0.4
13	20	18	18	15	13	13	13	18	20	18	18	13	13
1.4	0.22	8.3	1	0.3	0.05	0.21	0.05	0.2	0.02	0.05	0.3	4	0.3
2.6	1.1	10	1	0.3	0.05	0.26	0.28	0.4	0.02	0.05	0.7	4.3	0.3
3.2	2.1	12	1	0.3	0.05	0.64	0.46	0.5	0.02	0.06	83	15	0.9
6	6	6	6	6	6	6	6	6	6	6	6	6	6
-	24	-	4	2	-	-	-	-	20	-	-	-	-
-	37	-	29	2	-	-	-	-	20	-	-	-	-
-	1.6	9.1	0.7	-	-	-	-	0.4	0.2	0.1	0.5	-	-
-	1.5	8.2	1.3	-	-	-	-	0.6	0.2	0.1	1.5	-	-
-	19	-	9	2	-	-	-	-	20	-	-	-	-
-	0.2	13	0.5	-	-	-	-	0.1	0.1	0.1	0.2	-	-
1.7	0.22	14	1	0.3	0.05	0.16	0.19	0.1	0.02	0.05	0.2	3.6	0.4
3.3	0.91	9.4	3	0.3	0.05	0.35	0.48	0.7	0.07	0.06	0.3	7.6	0.6
4.7	1.2	6.6	2	0.3	0.05	0.43	0.38	1.6	0.11	0.19	0.1	7.7	0.5
3.2	3.7	10	4	0.3	0.05	0.29	1.9	0.9	0.7	0.17	0.7	5.2	0.4
2.8	2.1	13	3	0.3	0.05	0.36	1.7	0.8	0.48	0.11	0.6	5.7	0.5
2.7	0.55	19	2	0.3	0.05	0.41	0.23	0.5	0.17	0.05	1.2	6.5	0.6
-	0.5	7.9	1.5	-	-	-	-	0.9	0.2	0.2	0.2	-	-
2.5	5	11	1	0.3	0.05	0.23	0.2	0.2	0.03	0.05	0.1	3.6	0.2
2.9	7.4	20	1	0.3	0.05	0.26	0.19	0.1	0.04	0.05	0.1	4.1	0.3

Appendix D: Statistical Summary of Trace Element Data, Waste Rock

Rock Type	Deposit	Statistic / Sample ID	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co
			%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A-Type, Hematite	Madrid North	HBM-21-010-SRK-WR-124	0.49	5	5.4	63	17	6.3	0.08	12	2.8	1000	0.02	180	0.01	4.2	100	0.01	26	13	3	0.45	480	0.1	0.1	0.03	5.8	35
		HBM-21-010-SRK-WR-125	0.82	5	4.7	96	35	7.2	0.08	13	3	1100	0.05	320	0.01	5	81	0.01	37	26	10	0.66	680	0.3	0.18	0.06	11	52
		HBM-21-010-SRK-WR-127	0.72	7	6.2	56	57	6.7	0.1	10	3.4	1600	0.04	150	0.03	4.2	130	0.01	49	39	13	0.64	440	0.3	0.15	0.09	14	35
A-Type	Madrid North	Min	0.12	4	2.2	7	12	2.4	0.01	1	1.4	700	0.007	19	0.001	0.09	19	0.001	11	10	0.7	0.02	0.8	0.1	0.02	0.04	1.8	18
		P50	1.5	19	8	200	170	7.6	0.11	11	4.1	1700	0.04	530	0.049	0.33	140	0.01	82	43	3.1	0.1	190	0.3	0.1	0.1	9.1	69
		Max	5.8	710	16	1200	270	13	1.1	32	8.3	2800	1.6	1200	0.19	4.9	1500	1.3	380	340	23	2	1200	2	1.5	5	21	140
		Count	175	175	175	175	175	175	175	48	175	175	175	175	164	158	175	175	175	175	48	175	175	59	164	175	48	175
	Patch 7	Min	0.18	5	3.7	13	54	5.1	0.01	2	1.9	1000	0.01	73	0.01	0.07	25	0.01	23	20	0.5	0.01	1	0.1	0.02	0.01	0.66	31
		P50	2.4	15	7.7	340	180	8.6	0.06	17	4.1	1700	0.03	430	0.06	0.26	140	0.01	190	58	4.8	0.07	48	0.4	0.02	0.09	16	68
		Max	5.2	440	15	1400	980	12	0.49	45	9.7	2700	0.23	920	0.11	2.3	320	0.77	340	780	16	0.62	1200	0.9	0.16	2.4	39	110
		Count	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
A-Type (mixed)	Madrid North	Min	0.33	7	4.1	50	2	4.3	0.03	10	1.4	880	0.008	75	0.015	0.06	30	0.001	23	17	0.5	0.02	1.2	0.1	0.02	0.05	5.3	32
		P50	2.7	29	7.5	340	140	7.7	0.15	15	4.1	1600	0.069	460	0.046	0.31	140	0.051	160	69	2	0.2	210	2	0.1	0.16	7.5	68
		Max	9.7	460	12	880	290	12	1.3	28	8.1	2600	2.2	900	0.13	1.7	260	1.5	390	350	5.8	2	1100	2	0.1	6	15	110
		Count	52	52	52	52	52	52	52	4	52	52	52	52	31	31	52	52	52	52	4	52	52	25	31	52	4	52
	Patch 7	HBM-23-112-SRK-WR-76	2.8	85	12.31	860	197	8.01	0.37	11	2.95	2284	0.18	528	0.07	0.14	227	0.37	198	65	11.9	0.07	3	0.5	0.02	0.06	25.96	70.4
		HBM-23-112-SRK-WR-79	2.8	56	13	700	200	7.1	0.16	13	2.9	2300	0.09	530	0.06	0.17	200	0.37	200	57	9.8	0.05	1	0.6	0.02	0.05	26	73
		HBM-23-086-SRK-WR-124	0.96	250	7.9	230	130	6.9	0.1	17	4.5	1400	0.03	450	0.07	1.1	370	0.01	51	33	8.6	0.21	400	0.3	0.07	0.1	26	63
C-Type	Madrid North	Min	0.59	1	0.61	4	3.9	2.9	0.01	8	1.4	640	0.007	20	0.011	0.05	7	0.001	13	27	0.5	0.01	0.5	0.1	0.02	0.01	1.7	19
		P50	3.6	8	6.3	180	110	6.7	0.05	25	3.2	1400	0.036	110	0.022	0.11	31	0.069	150	69	1.2	0.1	8.3	0.1	0.1	0.1	4.9	44
		Max	83	150	12	1100	210	11	2	56	7.1	2200	1.8	970	0.15	1.4	170	0.9	290	320	18	2	520	2	2.8	4	43	140
		Count	186	186	186	186	186	186	186	62	186	186	186	186	179	173	186	186	186	186	62	186	186	71	179	186	62	186
C-Type (mixed)	Madrid North	Min	1.2	2	2.9	99	32	3.7	0.01	16	1.8	780	0.01	57	0.004	0.05	15	0.001	44	34	2.2	0.01	0.5	0.2	0.02	0.04	4.2	34
		P50	4.4	51	6.6	220	120	6.9	0.065	18	3.5	1400	0.068	140	0.025	0.14	74	0.2	190	78	3.7	0.1	31	2	0.1	0.11	4.7	49
		Max	8.7	510	9	590	230	10	1	23	6.5	2100	2.1	300	0.05	0.28	210	1.4	410	330	6.3	2	200	2	0.1	5	9.4	92
		Count	22	22	22	22	22	22	22	4	22	22	22	22	14	14	22	22	22	22	4	22	22	12	14	22	4	22
	Patch 7	HBM-23-086-SRK-WR-151	3.9	28	7.2	180	100	6.3	0.07	19	2.7	1300	0.04	99	0.04	0.1	110	0.12	140	75	4.9	0.03	3	0.2	0.02	0.08	13	42
East Block Basalts	Patch 7	Min	2.6	5	1.6	61	86	4.9	0.02	15	1.9	700	0.03	28	0.03	0.11	26	0.12	130	57	0.6	0.01	1	0.1	0.02	0.01	4.5	29
		P50	3.3	7	4.4	200	120	6.7	0.025	22	2.3	1200	0.035	150	0.04	0.18	38	0.38	160	92	3.6	0.055	1	0.1	0.02	0.11	6.2	56
		Max	4.1	17	11	510	150	7.7	0.05	28	3.5	2300	0.05	370	0.06	0.41	61	0.47	210	130	6.9	0.11	4	0.3	0.02	0.24	15	66
		Count	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
MDZ	Madrid North	Min	0.2	7	2	3	23	0.71	0.04	1	0.9	190	0.015	8.6	0.008	0.05	17	0.001	2	5	0.5	0.03	2	0.1	0.02	0.01	1.8	2.1
		P50	1	21	5.3	46	74	5.1	0.1	12	2.5	1100	0.07	65	0.044	0.23	100	0.004	38	44	5.7	0.1	72	0.2	0.1	0.1	12	31
		Max	7.3	690	12	700	1600	10	2.5	29	6.2	2000	1.1	630	0.11	1.3	250	0.21	210	120	24	2	810	2	0.5	4	30	80
		Count	79	79	79	79	79	79	79	33	79	79	79	79	74	69	79	79	79	79	33	79	79	39	74	79	33	79
	Patch 7	Min	0.27	5	3.5	9	76	3.7	0.02	1	1.5	530	0.03	56	0.01	0.09	28	0.01	5	26	0.5	0.01	2	0.1	0.02	0.04	0.86	26
		P50	0.54	9	7.5	39	130	7.1	0.055	5	3	1400	0.07	120	0.03	0.27	57	0.01	38	51	0.6	0.05	110	0.1	0.02	0.08	2.5	46
		Max	3.1	390	9.6	420	570	8.6	0.18	20	6.1	1800	0.12	650	0.16	2.3	160	0.04	270	78	17	0.64	420	0.5	0.34	0.17	29	78
		Count	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
MDZ (mixed)	Madrid North	Min	0.47	10	3.9	9	25	3.4	0.05	4	1.5	720	0.016	42	0.017	0.1	34	0.001	7	17	5.6	0.1	45	0.2	0.04	0.03	13	15
		P50	1.7	27	7.4	100	110	6.7	0.16	14	2.9	1300	0.11	100	0.038	0.44	150	0.035	88	56	10	0.19	84	2	0.1	0.1	15	42
		Max	6.6	530	15	380	190	8.2	2	23	8.5	1700	9.6	960	0.07	0.93	180	0.51	260	85	15	0.8	1100	2	0.1	3	17	86
		Count	10	10	10	10	10	10	10	2	10	10	10	10	6	6	10	10	10	10	2	10	10	6	6	10	2	10
	Patch 7	Min	0.39	6	4.1	16	42	4.8	0.02	1	2.5	830	0.02	52	0.02	0.04	34	0.01	15	30	0.5	0.02	4	0.1	0.02	0.05	2.5	34
		P50	0.47	16	7.2	79	130	6.9	0.07	6.5	3	1200	0.04	170	0.055	0.25	120	0.01	38	43	4.2	0.055	120	0.2	0.02	0.075	23	45
		Max	3.8	120	9.6	310	420	8.8	0.14	13	5.8	1800	0.1	460	0.12	1.6	240	0.34	310	65	16	0.23	510	0.7	0.21	0.1	28	65
		Count	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Sediments	Madrid North	Min	0.2	5	1.9	7	11	3	0.03	5	0.91	290	0.009	51	0.01	0.1	27	0.001	5	12	3.2	0.1	20	0.1	0.07	0.05	8.7	14
		P50	0.96	13	6.9	69	75	6.6	0.1	14	3.2	1300	0.038	160	0.053	1.3	110	0.01	43	57	9	0.25	190	0.2	0.1	0.1	13	50
		Max	4.1	62	12	850	790	11	0.28	42	8.6	2400	0.09	490	0.11	9.4	250	0.32	300	120	16	1.1	350	0.5	2.5	0.3	17	120
		Count	20	20	20	20	20	20	20	8	20	20	20	20	20	20	20	20	20	20	8	20	20	8	20	20	8	20
	Patch 7	Min	0.16	8	0.28	4	35	2.5	0.01	1	0.43	170	0.03	23	0.02	0.2	8.4	0.01	3	12	3.3	0.08	6	0.1	0.02	0.01	2.9	11
		P50	0.66	27	2.2	24	89	3.1	0.11	7	1.1	420	0.05	62	0.06	0.79	41	0.01	14	38	15	0.19	34	0.2	0.12	0.03	28	19
		Max	2.2	61	13	410	180	5.8	0.19	20	5.7	1200	0.09	280	0.07	1.8	160	0.18	140	260	21	0.31	260	0.5	0.29	0.63	38	48
		Count	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Sediments (mixed)	Madrid North	Min	0.42	7	4.3	40	21	4	0.01	11	2.1	930	0.013	120	0.02	0.08	20	0.001	24	16	3.7	0.1	7.5	0.2	0.1	0.05	11	35
		P50	3.5	19	7	290	140	7.7	0.1	23	3.7	1500	0.036	200	0.081	1.3	100	0.064	150	64	7.2	0.43	150	1.2	0.1	0.1	13	60
		Max	8.5	220	13	620	290	10	2.2	31	8.1	3100	2.6	430	0.1	2.9	220	0.24	320	100	12	2	520	2	0.78	3	14	79
		Count	14	14	14	14	14	14	14	4	14	14	14	14	10	10	14	14	14	14	4	14	14	8	10	14	4	14
Ultramafics	Madrid North	Min	2.5	5	1.5	86	48	6.2	0.01	11	2.7	1100	0.02	56	0.01	0.06	42	0.01	71	31	0.5	0.01	1	0.1	0.02	0.02	3.3	40
		P50	3.3	16	7	540	160	7.7	0.07	21	4.5	1400	0.05	330	0.039	0.14	80	0.082	220	64	1.2	0.1	35	0.2	0.04	0.09	3.8	60
		Max	4.8	75	13	1000	250	8.8	0.52	36	7.3	2200	0.12	800	0.071	0.34	310	0.52	290	100	5.7	0.15	410	0.7	0.1	0.3	22	98
		Count	17	17	17	17	17	17	17	9	17	17	17	17	17	17	17	17	17	17	9	17	17	9	17	17	9	17
	Patch 7	Min	0.21	5	2.8	110	22	6.7	0.01	1	3	1100	0.01	280	0.01	0.06	24	0.01	32	18	0.5	0.01	1	0.1	0.02	0.04	3.1	58
		P50	0.96	11	6.3	460	140	8.4	0.05	12	6.9	1500	0.02	680	0.04	0.2	110	0.01	77	38	2.6	0.06	350	0.25	0.02	0.09	8.2	82
		Max	4.2	280	15	1200	280	9.9	0.15	34	12	2400	0.07	1100	0.07	1.5	280	0.3	310	120	9.5	0.61	1300	0.8	0.16	0.36	23	100
		Count	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
Ultramafics (mixed)	Madrid North	HBM-22-045B-SRK-WR-160	3.9	13	6.2	58	120	9	0.1	27	2.6	1500	0.05	45	0.04	0.14	45	0.01	220	82	0.5	0.03	16	0.1	0.02	0.07	6.3	50
		HBM-22-045B-SRK-WR-181	2.6	12	9.5	610	160	8.9	0.03	33	6.5	1900	0.02	570	0.05	0.17	120	0.01	170	48	3.4	0.01	45	0.4	0.02	0.11	16	70
		HB-08PSD14280.0887.5	2.8	44	13	930	570	8.3	0.06	-	3.6	2500	0.03	820	0.063	0.18	160	0.085	190	64	-	0.1	5.9	-	0.1	0.1	-	83
	Patch 7	HBM-23-086-SRK-WR-90	3.6	49	6.6	670	180	9.4	0.02	21	6.4	1800	0.03	450	0.06	0.2	110	0.02	250	56	5.8	0.04	61	0.6	0.02	0.06	15	69
		HBM-23-122-SRK-WR-269	3.7	24	9.4	760	140	8.5	0.04	9	3.9	2000	0.02	400	0.04	0.11	120	0.09	230	99	0.9	0.05	1	0.3	0.02	0.18	11	70
Diabase	Madrid North	HB-06PMD470371.05376.28	2	12	1.5	3	290	4.7	0.19	-	0.81	550	0.31	25	0.056	0.05	41	0.48	230	56	-	0.1	3.1	-	0.1	0.1	-	20
		HB-07PMD54273.2877	1.9	17	1.6	55	260	5.1	0.15	-	1	510	0.3	52	0.054	0.07	44	0.53	240	67	-	0.1	27	-	0.1	0.1	-	22
Diabase (mixed)	Madrid North	HBM-21-004-SRK-WR-92	2.4	28	2.1	120	310	6.5	0.25	17	1.9	730	0.31	120	0.07	0.15	61	0.71	290	66	23	0.14	96	0.2	0.03	0.03	15	31
		HB-PMD150153161.4	7.3	67	7.4	97	330	12	0.48	-	3.8	1700	1.6	76	-	-	170	1.3	500	130	-	1	33	2	-	4	-	85
Felsic Porphyry	Patch 7	HBM-23-097A-SRK-WR-176	0.62	24	5.4	34	190	9.3	0.14	8	4	1700	0.05	120	0.1	0.51	81	0.01	53	59	3.7	0.08	210	0.4	0.02	0.09	10	59
Late Dykes	Madrid North	HBM-22-045B-SRK-WR-151	4.4	5	5.9	130	120	7.6	0.01	19	3.7	1400	0.03	70	0.05	0.12	54	0.25	240	79	4.3	0.03	9	0.2	0.03	0.05	12	42
		HB-06PMD470331.17331.48	1.3	24	6.8	150	260	5.8	0.11	-	3.4	1300	0.016	450	0.065	0.87	180	0.001	64	61	-	0.2	700	-	0.1	0.1	-	72

Appendix D: Statistical Summary of Trace Element Data, Waste Rock

Cs	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
0.15	1.9	0.1	0.07	0.01	0.06	2.1	0.08	0.68	0.05	10	1	1.5	10	1	0.3	0.05	0.23	0.77	0.1	0.1	0.05	0.5	6.3	0.5
0.13	3.2	0.1	0.21	0.02	0.04	4.6	0.06	1.1	0.05	11	1.2	2.7	12	1	0.3	0.05	0.2	2.7	0.5	0.23	0.09	1.1	4.6	0.4
0.14	2.8	0.1	0.34	0.02	0.09	6	0.09	1.7	0.05	9.2	1.6	2.1	13	2	0.3	0.05	0.26	1.8	0.9	0.31	0.16	0.7	7	0.6
0.05	0.5	0.1	0.05	0.01	0.02	0.6	0.04	0.1	0.05	0.5	0.6	0.07	2.3	0.5	0.3	0.05	0.1	0.05	0.1	0.02	0.05	0.1	2.2	0.3
0.18	4.6	0.1	0.07	0.01	0.05	3.2	0.05	0.5	0.05	1.5	3.6	0.5	15	0.7	0.3	0.05	0.26	0.05	0.3	0.1	0.1	0.2	4.5	0.4
0.36	21	0.1	0.56	1	0.13	9.3	0.1	6.5	0.07	25	6.9	42	26	12	2	0.05	0.46	0.9	2.4	20	1	28	9.2	0.7
48	164	48	48	164	48	48	48	175	48	175	48	175	164	169	59	48	48	48	164	175	164	164	48	48
0.13	0.8	0.1	0.05	0.01	0.03	0.2	0.03	0.14	0.05	0.2	0.2	0.05	5.1	1	0.3	0.05	0.09	0.05	0.1	0.02	0.05	0.1	1.9	0.2
0.36	11	0.1	0.14	0.01	0.06	5.8	0.07	0.63	0.06	0.75	2.1	0.11	19	1	0.3	0.05	0.38	0.05	0.4	0.02	0.05	0.1	7.8	0.5
13	22	0.3	0.6	0.03	0.14	14	0.14	1.6	1.6	3.1	23	3.2	43	2	0.8	0.05	0.68	0.6	1.3	0.1	0.17	87	17	1
120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
0.09	1	0.1	0.05	0.01	0.04	1.8	0.05	0.1	0.05	0.3	2.5	0.05	3.3	0.5	0.3	0.05	0.2	0.05	0.1	0.02	0.05	0.1	4.2	0.4
0.26	6	0.1	0.075	0.01	0.04	2.7	0.06	1.1	0.05	2.9	3.7	1.5	14	0.95	2	0.05	0.21	0.05	0.3	0.1	0.1	0.1	4.8	0.4
0.34	17	0.1	0.09	0.01	0.05	6.1	0.07	2	0.11	10	4.2	49	23	81	2	0.05	0.27	0.05	1.5	27	0.2	79	5.2	0.5
4	31	4	4	31	4	4	4	52	4	52	4	52	31	52	25	4	4	4	31	52	31	31	4	4
8.23	13.8	0.2	0.36	0.01	0.05	11.1	0.07	0.71	0.58	0.6	15.1	0.05	11.7	1	0.5	0.05	0.3	0.05	0.7	0.02	0.11	0.1	7.78	0.5
3.6	13	0.2	0.25	0.01	0.04	11	0.08	0.53	0.47	0.5	6.5	0.05	12	1	0.4	0.05	0.38	0.05	0.5	0.02	0.09	0.1	9.2	0.6
0.27	3.5	0.1	0.25	0.01	0.04	11	0.05	0.78	0.05	2.2	3.6	0.25	11	1	0.3	0.05	0.27	0.25	1.3	0.02	0.15	15	4.7	0.3
0.05	2	0.1	0.05	0.01	0.02	0.6	0.03	0.07	0.05	0.1	0.2	0.05	2.1	0.5	0.3	0.05	0.11	0.05	0.1	0.02	0.05	0.1	1.9	0.2
0.13	9	0.1	0.05	0.01	0.04	1.8	0.08	0.14	0.05	0.6	1.5	0.1	16	0.6	0.3	0.05	0.19	0.05	0.1	0.1	0.1	0.1	5.1	0.55
0.3	15	0.3	0.32	1	0.06	20	0.16	2	0.32	32	4.3	47	38	11	2	0.05	0.39	0.34	2.2	20	1	5	12	1.1
62	179	62	62	179	62	62	62	186	62	186	62	186	179	180	71	62	62	62	179	186	179	179	62	62
0.08	3	0.2	0.05	0.01	0.03	1.6	0.07	0.1	0.05	0.2	0.2	0.05	6.8	0.5	0.3	0.05	0.15	0.05	0.1	0.02	0.05	0.1	3.7	0.4
0.095	9	0.3	0.12	0.01	0.04	1.7	0.13	0.25	0.065	0.95	0.25	0.13	17	1	2	0.05	0.31	0.05	0.1	0.1	0.1	0.1	9.6	0.95
0.14	13	0.4	0.27	0.01	0.05	3.9	0.16	2	0.14	10	0.6	67	34	49	2	0.05	0.33	0.05	0.2	63	0.1	4.7	13	1.3
4	14	4	4	14	4	4	4	22	4	22	4	22	14	22	12	4	4	4	14	22	14	14	4	4
0.35	9.7	0.1	0.1	0.01	0.03	5.9	0.09	0.2	0.05	0.9	2.9	0.05	15	1	0.3	0.05	0.22	0.05	0.5	0.02	0.07	0.1	5	0.6
0.17	7.6	0.1	0.05	0.01	0.02	1.7	0.12	0.24	0.05	0.2	0.7	0.05	5.5	1	0.3	0.05	0.21	0.05	0.1	0.02	0.05	0.1	7.6	0.9
0.23	10	0.2	0.16	0.01	0.035	2.3	0.15	0.37	0.09	1.4	0.85	0.09	16	1	0.35	0.05	0.31	0.05	0.15	0.02	0.05	0.1	11	1
0.32	13	0.2	0.21	0.01	0.05	5.4	0.19	0.5	0.15	3.1	1.7	0.15	17	1	0.5	0.05	0.46	0.05	0.3	0.03	0.05	0.1	13	1.4
6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
0.13	0.7	0.1	0.05	0.01	0.02	0.7	0.04	0.1	0.05	0.6	1.6	0.1	0.6	0.5	0.3	0.05	0.12	0.05	0.1	0.02	0.05	0.1	2.7	0.3
0.26	2.4	0.1	0.15	0.01	0.03	4.7	0.05	0.7	0.05	1.5	2.5	0.26	10	1	0.3	0.05	0.2	0.05	0.5	0.1	0.1	0.1	4	0.3
0.45	13	0.1	0.43	1	0.06	13	0.07	8.6	0.07	10	4.3	55	29	51	2	0.05	0.35	0.1	3	24	1	1	5.6	0.5
33	74	33	33	74	33	33	33	79	33	79	33	79	74	74	39	33	33	33	74	79	74	74	33	33
0.27	0.8	0.1	0.05	0.01	0.04	0.2	0.03	0.14	0.05	0.2	0.8	0.05	2.4	1	0.3	0.05	0.08	0.05	0.1	0.02	0.05	0.1	1.7	0.2
0.57	1.8	0.1	0.055	0.01	0.05	0.75	0.05	0.52	0.05	0.5	1.8	0.22	15	1	0.3	0.05	0.21	0.05	0.2	0.02	0.05	0.1	4.2	0.3
1.4	14	0.1	0.38	0.08	0.18	13	0.12	2.6	0.12	8.8	4.7	3.2	37	2	0.4	0.05	0.51	0.47	2.5	0.16	0.35	0.6	12	0.8
54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
0.2	1.1	0.1	0.15	0.01	0.02	4.8	0.04	0.2	0.05	0.8	2.5	0.1	4.2	0.5	0.3	0.05	0.23	0.05	0.1	0.03	0.05	0.1	3.9	0.3
0.35	3.5	0.1	0.23	0.01	0.035	6.1	0.06	0.88	0.075	2.6	5.2	0.84	14	1	2	0.05	0.28	0.055	0.25	0.1	0.1	0.15	5.8	0.45
0.5	6	0.1	0.31	0.01	0.05	7.3	0.08	2	0.1	10	7.9	38	21	20	2	0.05	0.33	0.06	1.5	20	0.26	4.9	7.6	0.6
2	6	2	2	6	2	2	2	10	2	10	2	10	6	10	6	2	2	2	6	10	6	6	2	2
0.24	1.2	0.1	0.05	0.01	0.04	0.9	0.04	0.4	0.05	0.3	1.2	0.07	3.9	1	0.3	0.05	0.11	0.05	0.2	0.02	0.05	0.1	2.5	0.3
0.45	1.6	0.1	0.18	0.01	0.055	8.9	0.05	0.74	0.05	0.95	2.2	0.56	13	1	0.3	0.05	0.27	0.05	0.95	0.02	0.08	0.1	5.1	0.4
1.2	17	0.4	0.37	0.03	0.07	12	0.12	2.1	0.32	5.4	3.7	1.9	20	1	0.6	0.05	0.5	0.23	2.7	0.22	0.38	0.2	13	0.9
8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
0.06	0.6	0.1	0.12	0.01	0.02	2.7	0.03	0.1	0.05	0.5	0.6	0.1	2.8	0.5	0.3	0.05	0.09	0.13	0.1	0.03	0.05	0.1	2.2	0.2
0.18	3.3	0.1	0.23	0.01	0.085	4.8	0.09	0.82	0.05	3.5	3	1	10	0.95	0.3	0.05	0.39	0.72	0.7	0.1	0.1	0.3	7.2	0.6
1	16	0.1	0.38	0.09	0.13	7.7	0.1	4.8	0.05	33	4.7	4.3	26	11	0.3	0.05	0.5	2.9	1.4	1	0.3	1.9	10	0.8
8	20	8	8	20	8	8	8	20	8	20	8	20	20	20	8	8	8	8	20	20	20	20	8	8
0.25	0.5	0.1	0.12	0.01	0.02	1.1	0.03	0.83	0.05	1.1	0.2	0.13	0.9	1	0.3	0.05	0.15	0.05	0.2	0.02	0.05	0.1	2.6	0.2
0.32	2.5	0.1	0.38	0.01	0.04	12	0.04	1.2	0.05	3.2	3.2	0.44	3.3	1	0.3	0.05	0.24	0.085	1.7	0.11	0.2	0.1	4	0.3
0.95	9.8	0.1	0.46	0.01	0.06	18	0.07	2.6	0.14	8.8	5.2	1.4	13	1	0.4	0.05	0.38	0.21	2	0.26	0.3	0.3	7.5	0.5
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
0.18	2	0.1	0.12	0.01	0.06	3.7	0.06	0.2	0.05	0.4	2.5	0.1	4.8	0.5	0.3	0.05	0.26	0.19	0.1	0.09	0.05	0.1	4.6	0.4
0.23	9	0.1	0.21	0.01	0.085	4.5	0.11	1.2	0.05	6.4	3.4	0.72	18	1.5	1.2	0.05	0.44	0.25	0.6	0.15	0.1	0.3	8.2	0.75
0.35	18	0.1	0.27	0.01	0.15	4.7	0.14	2	0.05	11	5.6	45	23	23	2	0.05	0.66	0.77	1	20	0.2	0.6	15	1.1
4	10	4	4	10	4	4	4	14	4	14	4	14	10	14	8	4	4	4	10	14	10	10	4	4
0.09	5.3	0.1	0.05	0.01	0.02	1.2	0.05	0.1	0.05	0.2	0.2	0.05	6.2	0.5	0.3	0.05	0.14	0.05	0.1	0.02	0.05	0.1	3.3	0.3
0.14	11	0.2	0.05	0.01	0.04	1.4	0.07	0.3	0.05	0.8	0.3	0.1	21	1	0.3	0.05	0.16	0.05	0.2	0.02	0.07	0.1	4.1	0.4
0.28	14	0.2	0.22	0.01	0.06	8.5	0.14	0.7	0.23	4	4.1	0.37	33	1	0.3	0.05	0.3	0.07	0.7	0.2	0.1	1.3	11	1.1
9	17	9	9	17	9	9	9	17	9	17	9	17	17	17	9	9	9	9	17	17	17	17	9	9
0.06	1.1	0.1	0.05	0.01	0.03	1.1	0.03	0.33	0.05	0.4	0.3	0.05	8.2	1	0.3	0.05	0.13	0.05	0.1	0.02	0.05	0.1	2.5	0.2
0.21	3.8	0.1	0.1	0.01	0.05	2.9	0.05	0.61	0.05	0.7	1.7	0.99	14	1	0.3	0.05	0.28	0.05	0.2	0.02	0.05	0.1	4.9	0.4
3.3	15	0.3	0.39	0.03	0.16	8.4	0.12	1.2	0.28	3.7	7.4	8.9	36	1	0.4	0.05	0.52	0.3	2	0.06	0.12	11	11	0.8
52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
0.14	13	0.1	0.05	0.01	0.05	2.3	0.06	0.13	0.05	0.5	2.6	0.08	27	1	0.3	0.05	0.19	0.05	0.1	0.02	0.05	0.1	4.3	0.4
0.11	10	0.1	0.14	0.01	0.05	5.5	0.04	0.38	0.07	0.8	1	0.07	21	1	0.3	0.05	0.25	0.05	0.3	0.02	0.05	0.1	4	0.3
-	13	-	-	0.01	-	-	-	0.6	-	0.9	-	0.1	18	0.5	-	-	-	-	0.3	0.1	0.1	0.1	-	-
0.73	15	0.2	0.18	0.01	0.06	5.7	0.09	0.48	0.05	0.3	1	0.11	29	1	0.3	0.05	0.41	0.05	0.2	0.02	0.05	0.1	10	0.6
0.62	13	0.2	0.05	0.01	0.06	4.2	0.13	0.24	0.05	0.4	1.4	0.05	23	1	0.4	0.05	0.33	0.05	0.1	0.02	0.05	0.1	7.5	0.8
-	9	-	-	0.01	-	-	-	0.3	-	1.1	-	0.3	3.1	0.5	-	-	-	-	0.4	0.1	0.1	0.1	-	-
-	8	-	-	0.01	-	-	-	1.2	-	1.6	-	0.1	4.6	0.8	-	-	-	-	0.5	0.1	0.1	0.1	-	-
0.68	11	0.1	0.53	0.01	0.03	5.1	0.16	0.44	0.61	2.1	9.6	0.19	9.2	1	0.7	0.05	0.54	0.05	0.5	0.06	0.08	3	17	1.2
-	-	-	-	-	-	-	-	2	-	10	-	51	-	6	2	-	-	-	-	20	-	-	-	-
0.46	2.6	0.1	0.49	0.01	0.08	3.2	0.06	0.92	0.23	0.9	4.6	0.39	10	1	0.3	0.05	0.45	0.05	2	0.04	0.05	0.3	6.8	0.5
0.18	15	0.2	0.19	0.01	0.05	5	0.13	0.16	0.11	1	0.2	0.1	34	1	0.3	0.05	0.32	0.05	0.5	0.02	0.05	0.1	11	1
-	5	-	-	0.01	-	-	-	1	-	2.5	-	3.4	12	0.5	-	-	-	-	0.4	0.1	0.1	0.3	-	-

Appendix E Complete Laboratory Trace Element Results for 2023 Samples

SGS proposal: 19322-PR2-R2
SGS project #: 2351

Work order date: 30-Nov-23
Report date: 10-Feb-24
Sample receipt date: 29-Nov-23
Version: Final

Customer details

Name:	Kyle Jang
Address:	SRK

Project reference: Hope Bay Madrid North

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 1

Report Distribution

Name	Email
Kyle Jang	

Special notes:

Fizz test repeated for 165383 9 Apr 24
CRMs for AR Metals updated 9 Apr 24

ICP updated with revised analytical data 15 May 2024 - S values impacted

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

SGS proposal: 19322-PR2-R2
SGS project #: 2351

Work order date: 30-Nov-23
Report date: 10-Feb-24

Version: Final

ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

SGS proposal: 19322-PR2-R2
SGS project #: 2351

Work order date: 30-Nov-23
Report date: 10-Feb-24

Version: Final

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
Sample ID																	
165201	2.29	15	5.38	71	106	7.68	0.1	21	3.07	1278	0.06	68	0.04	0.25	101	<0.01	96
165202	1.85	10	6.31	136	124	6.2	0.08	21	3.49	1349	0.05	105	0.04	0.30	121	<0.01	73
165203	1.58	13	4.92	44	101	5.59	0.09	15	2.74	1101	0.05	61	0.03	0.24	102	<0.01	50
165204	0.34	23	3.54	4	27	2.65	0.11	2	1.15	594	0.04	20	0.06	0.16	63.6	<0.01	4
165205	0.63	27	4.45	42	44	3.43	0.14	6	1.88	744	0.05	68	0.08	0.64	88.8	<0.01	14
165206	2.00	32	8.6	290	190	7.21	0.22	23	4.78	1460	0.08	393	0.05	0.59	144	0.12	105
165207	2.41	28	2.1	119	310	6.45	0.25	17	1.93	726	0.31	115	0.07	0.15	60.9	0.71	286
165208	1.72	13	8.15	129	125	7.1	0.11	19	4.22	1531	0.06	236	0.03	0.31	130	0.01	60
165209	1.42	13	9.26	231	103	6.35	0.11	19	4.73	1480	0.06	230	0.02	0.25	163	0.01	53
165210	0.51	16	10.3	93	232	6.91	0.13	13	3.89	1731	0.05	604	0.06	0.89	142	<0.01	38
165211	0.40	16	8.91	68	181	8.12	0.12	7	3.35	1705	0.06	559	0.07	1.21	132	<0.01	34
165212	0.25	13	6.57	23	175	8.08	0.09	2	3.48	1684	0.05	115	0.05	0.61	119	<0.01	28
165213	0.55	13	7.18	29	175	6.84	0.11	17	3.52	1426	0.06	122	0.04	0.87	124	<0.01	24
165214	0.26	16	7.5	75	170	7.68	0.1	2	4.09	1619	0.05	407	0.03	0.90	163	<0.01	27
165215	0.35	21	7.46	128	119	7.87	0.11	2	4.87	1575	0.05	585	0.01	0.75	168	<0.01	34
165216	0.57	43	8.03	168	133	7.75	0.19	3	4.95	1681	0.06	572	0.01	0.57	183	<0.01	44
165217	0.39	21	8.03	120	117	5.44	0.1	4	3.81	1431	0.03	517	<0.01	0.49	167	<0.01	31
165218	0.20	5	1.87	7	21	3.02	0.03	5	0.91	293	0.09	51	<0.01	2.30	53.7	<0.01	5
165219	0.44	23	9.21	125	154	8.4	0.13	12	6.37	1715	0.01	651	<0.01	1.20	322	<0.01	46
165220	0.45	25	7.72	131	162	7.66	0.13	8	5.95	1548	0.02	565	0.02	0.63	234	<0.01	42
165221	0.32	25	6.88	145	137	8.91	0.13	3	6.65	1657	0.02	715	0.02	0.41	230	<0.01	42
165222	0.51	22	8.74	117	112	8.09	0.11	18	5.65	1816	0.03	590	0.03	0.32	204	<0.01	40
165223	0.31	20	7.79	127	129	8.16	0.12	5	5.91	1749	0.02	591	0.02	0.51	198	<0.01	40
165224	0.52	28	6.45	188	140	8.55	0.15	5	6.19	1664	0.03	650	0.04	0.32	156	<0.01	47
165225	0.40	22	8.1	160	150	8.87	0.12	4	4.67	2142	0.04	646	0.06	0.31	144	<0.01	39
165226	0.56	30	8.29	161	160	9.45	0.17	10	4.45	2351	0.03	722	0.11	0.37	161	<0.01	42
165227	0.76	17	8.06	251	156	8.54	0.1	12	5.00	2118	0.04	629	0.07	0.28	191	<0.01	57
165228	0.86	24	7.72	291	141	8.29	0.13	15	5.35	2009	0.02	659	0.05	0.14	169	<0.01	56
165229	0.75	26	8.15	217	141	8.54	0.16	10	4.91	1962	0.03	500	0.19	0.26	178	<0.01	57
165230	0.67	14	9.55	266	162	9.06	0.11	9	4.27	2398	0.05	677	0.04	0.52	150	<0.01	46
165231	0.79	18	8.87	259	185	8.01	0.13	10	4.01	2147	0.04	703	0.05	0.15	133	<0.01	55
165232	0.75	19	9.46	235	220	9.63	0.12	7	3.87	2772	0.04	650	0.04	0.37	157	<0.01	52
165233	1.15	21	8.35	190	145	8.64	0.15	10	2.86	2329	0.07	421	0.07	0.59	76.8	<0.01	55
165234	1.21	11	7.57	63	100	7.91	0.13	11	2.08	2200	0.10	179	0.04	0.24	53.9	<0.01	47
165235	1.71	10	7.71	97	106	7.58	0.13	15	2.76	2112	0.10	150	0.04	0.20	34.5	<0.01	64
165236	2.84	9	7.26	151	118	7.45	0.12	25	2.49	1994	0.07	153	0.04	0.20	30.8	<0.01	111
165237	4.00	<5	7.71	158	86	6.91	0.06	35	2.65	1687	0.05	119	0.04	0.10	36.5	<0.01	154
165238	3.93	<5	7.43	167	89	6.89	0.04	35	2.70	1710	0.04	119	0.05	0.14	24.6	0.05	172
165239	4.65	<5	5.46	156	85	7.38	0.03	53	3.07	1526	0.04	124	0.05	0.13	28.6	0.21	141
165240	4.28	<5	5.97	195	101	7.53	0.03	32	2.48	1776	0.07	127	0.05	0.19	20.2	0.15	196
165241	4.74	<5	6.41	171	97	8.44	0.03	47	2.72	1891	0.06	133	0.05	0.22	18.6	0.15	193
165242	4.09	10	6.42	177	108	7.57	0.05	29	2.43	1689	0.04	137	0.05	0.45	15.9	0.18	174
165243	4.45	<5	6.58	177	105	7.45	0.03	38	2.95	1595	0.06	132	0.04	0.12	19.4	0.13	180
165244	4.41	<5	7.51	178	87	7.47	0.02	24	2.80	1522	0.04	125	0.04	0.10	21.9	0.18	185
165245	3.73	9	8.69	153	89	6.47	0.08	18	2.12	1448	0.03	122	0.04	0.15	32.3	0.09	134
165246	3.83	18	6.69	164	93	6.4	0.12	19	2.25	1468	0.04	140	0.04	0.29	32.4	0.02	135
165247	4.09	20	5.99	189	111	7.71	0.09	20	2.60	1462	0.04	161	0.04	1.24	21.9	0.18	163
165248	4.10	<5	8.17	289	108	6.43	<0.01	14	3.74	1489	0.02	86	0.02	0.08	29.1	0.27	187
165249	3.96	<5	8.6	269	97	6.23	<0.01	17	3.58	1494	0.02	88	0.02	0.08	38.7	0.10	202
165250	3.13	11	7.99	206	101	6.57	0.05	19	3.36	1458	0.05	89	0.02	0.07	46.1	<0.01	146
165251	3.59	<5	7.61	251	107	6.24	<0.01	12	3.53	1453	0.02	88	0.02	0.09	28.2	0.31	180
165252	4.74	505	7.02	591	89	7.62	<0.01	16	6.45	1344	<0.01	304	0.03	0.06	141	0.02	182
165253	3.97	364	7.54	297	100	6.79	<0.01	23	4.13	1377	0.03	123	0.03	0.09	83.7	0.19	218
165254	3.81	8	8.16	256	104	6.67	<0.01	22	3.57	1484	0.03	92	0.02	0.10	56	0.24	211
165255	3.83	29	9.03	215	104	6.72	0.05	33	3.64	1583	0.02	81	0.02	0.11	82	0.01	173
165256	3.65	14	7.94	220	107	6.6	0.04	40	3.47	1429	0.02	89	0.02	0.13	68.3	<0.01	168
165257	2.72	10	6.47	185	105	6.86	0.06	33	3.80	1473	0.04	85	0.02	0.08	40.6	<0.01	125
165258	1.38	14	6.25	52	97	7.14	0.12	14	2.00	1844	0.09	121	0.04	0.34	40.9	<0.01	47
165259	1.25	25	4.6	4	50	5.02	0.15	13	1.71	865	0.06	20	0.13	0.23	55.1	<0.01	33
165260	0.90	11	7.23	32	170	6.84	0.09	8	2.19	1612	0.10	133	0.04	0.45	56.4	<0.01	35
165261	1.08	12	7.66	39	87	6.52	0.08	9	2.61	1400	0.13	110	0.04	0.08	67.1	<0.01	45
165262	1.36	8	7.79	55	103	6.78	0.05	15	3.11	1370	0.10	105	0.04	0.20	58	<0.01	57
165263	1.34	7	7.6	47	80	6.44	0.05	17	3.28	1281	0.09	111	0.04	0.27	69.3	<0.01	53

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Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
Sample ID																	
165201	67	1.5	0.10	99	0.3	<0.02	0.08	4.57	42.6	0.45	6.3	<0.1	<0.05	<0.01	0.06	1.5	0.05
165202	52	7.1	0.05	149	0.2	0.0	0.06	8.79	39.8	0.34	4.9	<0.1	0.18	<0.01	0.06	3.4	0.06
165203	44	3.0	0.04	107	0.2	0.0	0.07	4.26	34.2	0.36	4.2	<0.1	0.07	<0.01	0.05	1.6	0.05
165204	17	23.8	0.05	40	0.2	0.1	0.03	21.53	10.2	0.33	0.7	<0.1	0.43	<0.01	<0.02	8.7	0.04
165205	17	18.6	0.11	119	0.2	0.1	0.02	30.12	22.1	0.36	1.5	<0.1	0.35	<0.01	0.02	11.7	0.05
165206	38	5.6	0.19	549	0.3	0.0	0.05	13	58.5	0.50	6.0	<0.1	0.15	<0.01	0.05	4.8	0.08
165207	66	22.8	0.14	96	0.2	0.0	0.03	14.63	30.9	0.68	11.0	0.1	0.53	<0.01	0.03	5.1	0.16
165208	34	<0.5	0.10	349	0.3	<0.02	0.05	5.3	52.5	0.34	3.6	<0.1	<0.05	<0.01	0.04	1.8	0.06
165209	43	1.0	0.07	338	0.2	<0.02	0.07	1.82	46.8	0.25	2.9	<0.1	<0.05	<0.01	0.04	0.6	0.06
165210	28	3.2	0.43	922	0.2	0.0	0.09	4.38	78.2	0.20	1.4	<0.1	<0.05	<0.01	0.06	1.4	0.04
165211	44	3.7	0.29	819	0.2	0.0	0.11	5.07	74.9	0.25	1.1	<0.1	0.06	<0.01	0.05	1.7	0.04
165212	49	1.2	0.34	196	0.2	<0.02	0.09	2.7	44.9	0.22	0.8	<0.1	<0.05	<0.01	0.05	0.9	0.05
165213	28	0.9	0.57	220	0.2	0.0	0.06	1.38	41.3	0.19	1.1	<0.1	<0.05	<0.01	0.04	0.4	0.04
165214	31	2.2	0.08	634	0.1	0.0	0.09	2.75	55.8	0.18	0.8	<0.1	<0.05	<0.01	0.05	0.8	0.04
165215	28	2.4	0.10	775	0.1	0.0	0.09	3.7	69	0.22	1.3	<0.1	<0.05	<0.01	0.04	1.2	0.04
165216	23	3.1	0.09	735	0.2	0.0	0.09	5.43	67	0.27	2.2	<0.1	<0.05	<0.01	0.04	1.7	0.04
165217	16	2.1	0.08	745	0.1	0.0	0.07	5.03	60	0.15	1.5	<0.1	<0.05	<0.01	0.04	1.5	0.04
165218	20	16.3	0.38	242	<0.1	0.1	0.06	17.17	14.2	0.06	0.6	<0.1	0.33	<0.01	<0.02	7.7	0.03
165219	34	2.2	0.89	1063	0.3	0.1	0.1	4.84	76.9	0.13	1.5	<0.1	<0.05	<0.01	0.05	1.5	0.05
165220	34	2.1	0.21	854	0.3	0.0	0.11	7.37	69	0.15	1.7	<0.1	<0.05	<0.01	0.05	2.3	0.05
165221	33	1.9	0.19	912	0.3	<0.02	0.11	8.28	80.1	0.19	1.2	<0.1	0.07	0.0	0.05	2.8	0.05
165222	22	2.3	0.09	745	0.3	<0.02	0.1	8.82	73.9	0.19	1.4	<0.1	0.14	0.0	0.05	3	0.06
165223	26	2.3	1.99	817	0.2	<0.02	0.14	7.64	70.5	0.20	1.2	<0.1	<0.05	<0.01	0.05	2.5	0.05
165224	27	3.6	0.05	728	0.2	0.0	0.12	10.15	74.2	0.26	1.9	<0.1	0.05	0.0	0.05	3.4	0.05
165225	28	3.6	0.10	828	0.2	0.0	0.12	9.86	78.2	0.22	1.5	<0.1	<0.05	<0.01	0.05	3.3	0.04
165226	26	4.1	0.08	925	0.2	0.0	0.1	10.26	81.7	0.24	1.8	<0.1	0.06	<0.01	0.05	3.3	0.05
165227	26	4.6	0.07	622	0.2	0.0	0.12	9.48	72.5	0.20	2.8	<0.1	0.08	<0.01	0.04	3.2	0.04
165228	23	3.6	0.08	757	0.3	<0.02	0.1	10.45	76.4	0.22	3.0	<0.1	0.06	<0.01	0.05	3.5	0.04
165229	33	5.6	0.04	570	0.2	<0.02	0.11	12.93	64.4	0.25	2.9	<0.1	0.13	<0.01	0.05	4.3	0.05
165230	42	2.7	0.07	822	0.3	0.0	0.11	8.99	82.1	0.21	2.6	<0.1	<0.05	<0.01	0.05	3	0.04
165231	33	2.3	0.06	921	0.3	<0.02	0.12	13.93	86.6	0.24	3.0	<0.1	<0.05	<0.01	0.05	4.6	0.04
165232	58	2.0	0.11	877	0.3	0.0	0.27	11.23	79.4	0.22	2.9	<0.1	<0.05	<0.01	0.05	3.8	0.04
165233	66	5.8	0.21	544	0.2	0.0	0.12	14.94	65.9	0.34	3.7	<0.1	0.09	<0.01	0.05	6.1	0.06
165234	72	0.7	0.05	142	<0.1	<0.02	0.11	7.24	48.9	0.24	3.0	<0.1	<0.05	<0.01	0.04	2.6	0.04
165235	110	0.9	0.06	10	<0.1	<0.02	0.23	8.36	47.8	0.25	4.7	<0.1	<0.05	<0.01	0.05	3	0.05
165236	123	1.5	0.09	3	<0.1	<0.02	0.2	8.53	56.6	0.15	8.3	<0.1	<0.05	<0.01	0.06	3.2	0.07
165237	131	0.9	0.05	<1	0.1	<0.02	0.29	10.25	46.1	0.10	11.5	<0.1	<0.05	<0.01	0.06	3.7	0.09
165238	80	1.4	0.03	<1	<0.1	<0.02	0.07	11.79	47.8	0.11	12.3	<0.1	<0.05	<0.01	0.05	4.3	0.13
165239	84	2.6	0.03	<1	0.1	<0.02	0.06	8.59	46.1	0.27	8.8	0.2	0.12	<0.01	<0.02	3.1	0.15
165240	296	2.0	0.08	<1	<0.1	<0.02	0.93	9.16	50.4	0.16	12.8	0.1	0.07	<0.01	0.05	3.3	0.15
165241	320	1.5	0.33	<1	<0.1	<0.02	1.21	9.85	47.8	0.15	13.0	0.2	0.07	<0.01	0.05	3.7	0.16
165242	154	2.4	0.07	<1	<0.1	0.0	0.47	9.48	54.6	0.10	12.4	<0.1	0.10	<0.01	0.06	3.5	0.15
165243	196	1.6	0.14	2	<0.1	<0.02	0.49	8.62	48.6	0.12	11.6	0.1	0.07	<0.01	0.04	3	0.14
165244	81	1.7	0.03	<1	<0.1	<0.02	0.08	7.42	45.5	0.08	12.4	0.1	0.11	<0.01	0.05	2.6	0.15
165245	90	1.7	0.04	<1	<0.1	<0.02	0.1	10.94	46.4	0.07	10.2	<0.1	0.09	<0.01	0.04	4.1	0.16
165246	100	2.4	0.04	2	<0.1	<0.02	0.12	12.05	51.7	0.09	10.9	<0.1	0.10	<0.01	0.05	4.4	0.1
165247	120	3.2	0.07	4	0.1	<0.02	0.15	8.96	71.2	0.07	12.1	<0.1	0.15	<0.01	0.06	3.3	0.12
165248	70	2.1	0.03	<1	0.1	<0.02	0.07	3.26	42.1	<0.05	10.6	0.3	0.15	<0.01	0.03	1	0.09
165249	69	1.2	0.02	<1	0.1	<0.02	0.04	4.87	39.7	<0.05	11.6	0.2	0.06	<0.01	0.03	1.8	0.08
165250	69	0.7	0.04	15	<0.1	<0.02	0.08	5.49	39.5	0.11	9.4	<0.1	<0.05	<0.01	0.04	2.1	0.04
165251	72	2.6	0.02	<1	0.1	<0.02	0.02	3.13	38.8	<0.05	10.7	0.2	0.11	<0.01	<0.02	1	0.11
165252	58	2.2	<0.01	2	0.2	<0.02	0.11	4.15	65.7	0.08	11.9	0.4	<0.05	<0.01	0.03	1.6	0.07
165253	69	2.5	0.01	9	0.2	<0.02	0.07	4.96	45.9	0.08	12.8	0.3	0.11	<0.01	0.04	1.7	0.12
165254	69	2.2	0.02	9	0.2	<0.02	0.07	5.14	42.3	0.08	12.4	0.3	0.12	<0.01	0.04	1.9	0.13
165255	70	1.0	0.03	10	0.2	<0.02	0.09	4.91	38.5	0.08	11.2	<0.1	<0.05	<0.01	0.04	1.8	0.06
165256	69	0.9	0.03	14	0.1	<0.02	0.08	4.84	40	0.07	10.9	<0.1	<0.05	<0.01	0.04	1.8	0.05
165257	75	0.8	0.06	40	<0.1	<0.02	0.06	5.67	39.3	0.11	8.6	<0.1	<0.05	<0.01	0.04	2.1	0.05
165258	108	1.2	0.13	89	<0.1	<0.02	0.19	9.17	46.5	0.18	4.2	<0.1	<0.05	<0.01	0.05	3.5	0.04
165259	55	17.1	0.09	23	0.1	0.1	0.05	43.46	20.5	0.18	4.3	<0.1	0.32	<0.01	0.03	19.9	0.08
165260	48	0.8	0.09	183	<0.1	<0.02	0.06	6.81	50.1	0.19	2.6	<0.1	<0.05	<0.01	0.04	2.4	0.05
165261	50	<0.5	0.03	139	<0.1	<0.02	0.05	8.2	43.1	0.22	3.0	<0.1	<0.05	<0.01	0.04	2.9	0.06
165262	61	<0.5	0.05	66	<0.1	<0.02	0.07	7.32	39.7	0.19	3.9	<0.1	<0.05	<0.01	0.05	2.6	0.07
165263	55	0.6	0.15	129	<0.1	<0.02	0.06	6.14	42	0.18	3.6	<0.1	<0.05	<0.01	0.05	2.1	0.07

Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
Sample ID																	
165201	0.42	<0.05	1.3	2.7	0.7	25.8	<1	<0.3	<0.05	0.2	<0.05	0.1	0.03	<0.05	<0.1	3.70	0.4
165202	0.60	<0.05	1.2	2.3	0.6	22.9	<1	<0.3	<0.05	0.2	<0.05	0.6	<0.02	0.12	<0.1	4.36	0.4
165203	0.41	<0.05	0.9	2.4	0.4	18.7	<1	0.5	<0.05	0.1	<0.05	0.3	<0.02	<0.05	<0.1	3.05	0.3
165204	1.25	<0.05	1.9	2.9	0.3	3.1	<1	0.3	<0.05	0.2	<0.05	2.0	0.02	0.50	0.1	4.04	0.3
165205	1.08	<0.05	2	3.7	0.4	6.8	<1	0.3	<0.05	0.2	<0.05	1.9	0.03	0.31	0.3	4.66	0.3
165206	0.43	0.10	2.9	7.9	0.6	20.7	<1	<0.3	<0.05	0.3	0.06	0.3	0.05	<0.05	4.9	7.64	0.6
165207	0.44	0.61	2.1	9.6	0.2	9.2	<1	0.7	<0.05	0.5	<0.05	0.5	0.06	0.08	3	16.69	1.2
165208	0.28	0.05	1.5	3.2	0.5	22	<1	<0.3	<0.05	0.2	<0.05	0.2	0.02	<0.05	0.6	4.97	0.4
165209	0.25	<0.05	1	3.2	0.3	20.5	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	0.2	4.02	0.4
165210	0.92	<0.05	2.1	4.1	1.5	17.4	<1	<0.3	<0.05	0.3	0.07	0.2	0.05	<0.05	0.4	4.29	0.3
165211	0.50	<0.05	2.9	3.8	1.9	17	<1	<0.3	<0.05	0.3	0.08	0.3	0.06	<0.05	0.3	4.05	0.3
165212	0.47	<0.05	1.4	3	0.3	20.5	<1	<0.3	<0.05	0.2	0.05	0.2	0.02	<0.05	0.8	3.34	0.3
165213	0.34	<0.05	1.6	3.2	0.4	20.6	<1	<0.3	<0.05	0.1	0.07	<0.1	0.02	<0.05	0.9	2.80	0.3
165214	0.40	<0.05	1.6	3.3	0.6	16.6	<1	<0.3	<0.05	0.2	0.06	0.2	<0.02	<0.05	1.3	3.28	0.3
165215	0.38	<0.05	1.3	4	0.9	16	<1	<0.3	<0.05	0.2	0.05	0.2	0.02	<0.05	0.5	3.19	0.3
165216	0.40	<0.05	1.2	6.9	0.8	16.4	<1	<0.3	<0.05	0.2	<0.05	0.2	0.04	<0.05	0.4	3.41	0.3
165217	0.39	<0.05	1.3	3.6	0.9	14	<1	<0.3	<0.05	0.2	<0.05	0.2	0.03	<0.05	0.3	3.60	0.3
165218	0.75	<0.05	5.3	0.6	1.2	4.1	<1	<0.3	<0.05	0.1	0.13	1.3	0.06	0.18	0.5	2.19	0.2
165219	0.54	<0.05	3.1	4	1.8	17.2	<1	<0.3	<0.05	0.2	0.16	0.2	0.02	<0.05	1.1	4.75	0.4
165220	0.49	<0.05	2.1	4.5	1.8	15.8	<1	<0.3	<0.05	0.2	0.12	0.2	0.03	<0.05	0.9	4.73	0.4
165221	0.41	<0.05	1.5	5.1	2.4	14.1	<1	<0.3	<0.05	0.2	0.08	0.4	0.02	<0.05	1.2	4.34	0.3
165222	0.43	<0.05	1.3	4.8	1.5	16.2	<1	<0.3	<0.05	0.2	0.06	0.4	0.03	<0.05	0.9	5.05	0.4
165223	0.41	<0.05	1.3	4.4	0.9	18.8	<1	<0.3	<0.05	0.2	0.06	0.2	0.03	<0.05	0.4	4.24	0.3
165224	0.38	<0.05	1.2	5.7	1.3	18.5	<1	<0.3	<0.05	0.2	<0.05	0.2	0.04	<0.05	3.8	4.25	0.3
165225	0.42	<0.05	1.1	4.1	1.3	18	<1	<0.3	<0.05	0.2	<0.05	0.2	0.02	<0.05	0.1	3.75	0.3
165226	0.47	<0.05	1.2	5.7	1.1	18.4	<1	<0.3	<0.05	0.2	<0.05	0.2	0.04	<0.05	0.2	4.17	0.3
165227	0.42	<0.05	1	3.3	0.9	18.3	<1	<0.3	<0.05	0.2	<0.05	0.2	0.02	<0.05	<0.1	3.98	0.3
165228	0.42	<0.05	1.1	4.5	1.0	18.1	<1	<0.3	<0.05	0.2	<0.05	0.2	0.03	<0.05	0.1	4.38	0.3
165229	0.60	<0.05	1.3	5.9	0.9	17.2	<1	<0.3	<0.05	0.3	<0.05	0.2	0.04	<0.05	<0.1	5.55	0.4
165230	0.52	<0.05	1.3	3.6	1.4	17.9	<1	<0.3	<0.05	0.2	<0.05	0.2	0.03	<0.05	<0.1	3.60	0.3
165231	0.39	<0.05	1	4.2	1.5	18.2	<1	<0.3	<0.05	0.2	<0.05	0.2	0.03	<0.05	<0.1	3.63	0.3
165232	0.39	0.07	1.5	3.7	1.5	16.9	<1	<0.3	<0.05	0.2	<0.05	0.2	0.03	<0.05	0.1	3.22	0.3
165233	0.44	<0.05	1	4.2	1.1	15.9	<1	<0.3	<0.05	0.2	<0.05	0.5	0.03	0.06	0.1	4.21	0.4
165234	0.24	<0.05	0.6	3.2	0.4	14.8	<1	<0.3	<0.05	0.1	<0.05	0.2	0.02	<0.05	<0.1	1.95	0.2
165235	0.21	<0.05	0.6	3.2	0.3	15.8	<1	<0.3	<0.05	0.1	<0.05	0.2	0.02	<0.05	<0.1	2.63	0.3
165236	0.25	<0.05	0.7	2.7	0.4	17.8	<1	<0.3	<0.05	0.1	<0.05	0.2	0.04	<0.05	<0.1	3.10	0.4
165237	0.14	0.05	0.6	1.5	0.1	22.6	<1	<0.3	<0.05	0.2	<0.05	0.1	<0.02	<0.05	<0.1	5.37	0.5
165238	0.17	0.07	0.5	1	<0.05	23.3	<1	<0.3	<0.05	0.3	<0.05	0.1	<0.02	<0.05	<0.1	8.39	0.9
165239	0.13	0.12	1	1.3	<0.05	13.4	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	10.26	1
165240	0.21	0.13	7.4	0.8	<0.05	19.5	<1	<0.3	<0.05	0.3	<0.05	0.2	0.02	<0.05	<0.1	10.28	1
165241	0.15	0.13	31.5	0.6	<0.05	21.6	<1	<0.3	<0.05	0.3	<0.05	0.2	0.02	<0.05	<0.1	10.98	1.1
165242	0.26	0.16	2.2	1.2	<0.05	20.4	<1	<0.3	<0.05	0.3	0.06	0.3	0.02	<0.05	<0.1	10.53	1.1
165243	0.12	0.14	16.8	0.6	<0.05	18	<1	<0.3	<0.05	0.3	<0.05	0.2	0.03	<0.05	<0.1	9.78	1
165244	0.09	0.17	0.5	0.5	<0.05	22.3	<1	<0.3	<0.05	0.3	<0.05	0.3	<0.02	<0.05	<0.1	9.85	1
165245	0.12	0.14	2.4	1.9	<0.05	15.2	<1	<0.3	<0.05	0.3	<0.05	0.3	0.02	<0.05	<0.1	9.59	1
165246	0.30	0.14	1.1	2.6	0.1	16	<1	<0.3	<0.05	0.2	<0.05	0.4	0.05	<0.05	<0.1	6.03	0.6
165247	0.29	0.24	3.3	2	0.1	20.9	1	<0.3	<0.05	0.2	<0.05	0.6	0.06	<0.05	<0.1	8.45	0.9
165248	0.18	0.32	0.4	<0.2	<0.05	20.1	<1	<0.3	<0.05	0.2	<0.05	0.9	<0.02	<0.05	<0.1	7.53	0.7
165249	0.13	<0.05	<0.2	<0.2	<0.05	21.2	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	4.93	0.6
165250	0.14	<0.05	0.3	1.5	0.1	20	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	2.50	0.3
165251	0.12	<0.05	<0.2	<0.2	<0.05	12.7	<1	<0.3	<0.05	0.3	<0.05	0.1	<0.02	<0.05	<0.1	7.55	0.8
165252	0.21	<0.05	0.5	<0.2	<0.05	25.9	<1	<0.3	<0.05	0.2	<0.05	0.2	<0.02	<0.05	<0.1	3.69	0.4
165253	0.25	<0.05	0.4	0.2	<0.05	28.5	<1	0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	9.11	0.9
165254	0.15	<0.05	0.4	0.3	0.1	29.4	<1	0.3	<0.05	0.3	<0.05	0.1	<0.02	<0.05	<0.1	9.22	1
165255	0.15	<0.05	0.4	1.7	<0.05	23.2	<1	<0.3	<0.05	0.2	<0.05	0.1	<0.02	<0.05	0.4	3.15	0.4
165256	0.15	<0.05	0.5	1.1	<0.05	21.4	<1	<0.3	<0.05	0.1	<0.05	0.1	<0.02	<0.05	0.1	2.42	0.3
165257	0.15	<0.05	0.3	1.6	0.1	19	<1	<0.3	<0.05	0.1	<0.05	0.1	<0.02	<0.05	0.2	2.46	0.3
165258	0.53	<0.05	1.4	2.8	0.7	13.5	<1	<0.3	<0.05	0.1	<0.05	0.2	0.09	<0.05	0.2	2.12	0.3
165259	0.21	<0.05	1.6	4.1	0.2	7.7	<1	<0.3	<0.05	0.4	<0.05	2.2	0.03	0.25	<0.1	6.38	0.6
165260	0.62	<0.05	1	2.2	0.5	14.3	<1	<0.3	<0.05	0.2	<0.05	0.2	0.04	<0.05	0.1	2.66	0.3
165261	0.13	<0.05	0.6	1.9	0.2	15.9	<1	<0.3	<0.05	0.2	<0.05	0.2	<0.02	<0.05	<0.1	3.76	0.4
165262	0.16	<0.05	0.6	1.4	0.3	16.5	<1	<0.3	<0.05	0.2	<0.05	0.1	0.03	<0.05	<0.1	4.23	0.4
165263	0.23	<0.05	1	1.4	0.3	16.7	<1	<0.3	<0.05	0.2	<0.05	0.1	0.03	<0.05	0.2	4.03	0.4

SGS proposal: 19322-PR2-R2
SGS project #: 2351

Work order date: 30-Nov-23
Report date: 10-Feb-24

Version: Final

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
165264	1.20	26	4.79	8	60	4.65	0.16	25	1.94	741	0.09	25	0.15	0.25	71.8	<0.01	26
165265	1.03	22	9.59	212	152	6.88	0.11	10	3.96	1455	0.04	545	0.06	0.56	155	<0.01	74
165266	0.92	18	6.65	130	163	7.24	0.13	11	2.86	1166	0.04	327	0.08	2.93	99.2	<0.01	47
165267	0.77	13	3.1	15	46	3.84	0.15	14	1.54	629	0.04	120	0.06	1.59	33.1	<0.01	9
165268	1.60	27	5.92	121	249	7.1	0.15	16	2.71	1249	0.05	489	0.07	0.87	82.1	<0.01	76
165269	1.52	24	8.4	197	229	8.22	0.07	16	3.38	1583	0.07	580	0.05	0.44	108	<0.01	98
165270	1.40	12	10.54	265	160	8	0.03	16	4.62	1776	0.05	565	0.04	0.30	181	<0.01	94
165271	2.26	8	9.52	592	151	7.17	0.01	30	5.95	1494	0.03	797	0.03	0.14	238	<0.01	132
165272	1.94	7	10.7	639	124	7.19	0.02	27	6.30	1437	0.02	716	0.03	0.09	224	<0.01	118
165273	0.64	24	11.41	147	153	7.73	0.05	7	4.26	2019	0.05	719	0.04	0.37	160	<0.01	44
165274	0.63	21	10.74	89	152	7.92	0.07	10	3.39	2120	0.08	512	0.04	0.29	135	<0.01	43
165275	1.11	25	10.01	155	193	7.83	0.06	12	3.95	1697	0.06	544	0.05	0.23	153	<0.01	67
165276	0.83	18	10.71	131	160	7.61	0.07	11	4.05	1643	0.05	590	0.05	0.21	143	<0.01	55
165277	0.88	22	10.28	117	175	7.93	0.08	14	3.60	1795	0.09	575	0.04	0.58	128	<0.01	49
165278	1.04	16	10.02	156	170	7.84	0.06	18	4.03	1699	0.06	642	0.05	0.75	146	<0.01	69
165279	0.76	30	11.04	123	166	7.11	0.14	8	4.32	1590	0.07	674	0.04	0.38	157	<0.01	52
165280	0.45	17	11.48	49	168	7.27	0.11	12	4.25	1935	0.04	597	0.04	0.51	117	<0.01	29
165281	0.35	19	11.21	51	166	7.7	0.12	8	4.12	1922	0.03	627	0.04	1.46	141	<0.01	29
165282	1.02	17	10.31	79	175	8.01	0.11	21	4.26	1743	0.03	489	0.05	0.76	145	<0.01	40
165283	1.07	19	9.63	174	180	7.68	0.09	14	4.08	1686	0.02	465	0.08	0.93	164	<0.01	62
165284	1.56	31	9.87	287	194	8.46	0.14	19	4.62	1588	0.03	502	0.05	1.34	184	<0.01	87
165285	0.47	21	3.89	9	57	3.43	0.1	4	1.46	718	0.05	50	0.07	0.93	76	<0.01	7
165286	0.48	25	3.75	4	31	2.82	0.12	4	1.34	673	0.05	30	0.08	0.25	75.4	<0.01	7
165287	0.71	37	3.87	16	48	2.99	0.17	5	1.46	640	0.09	66	0.08	0.28	91.9	<0.01	12
165288	0.33	23	4.7	3	59	2.27	0.11	1	2.01	783	0.06	28	0.07	0.42	73.8	<0.01	5
165289	0.46	38	4.85	5	56	2.26	0.17	1	2.07	575	0.08	35	0.07	0.27	78	<0.01	9
165290	0.35	24	5.33	4	34	1.81	0.12	2	2.62	723	0.05	40	0.07	0.26	57.8	<0.01	6
165291	0.67	37	4.48	5	35	2.64	0.18	5	2.05	751	0.07	39	0.07	0.38	63.5	<0.01	8
165292	1.45	30	5.24	51	97	5.05	0.15	16	2.66	1039	0.07	83	0.05	0.50	132	<0.01	45
165293	1.75	11	4.43	36	70	5.81	0.07	26	2.35	982	0.06	45	0.04	0.32	92.3	<0.01	58
165294	2.41	18	5.18	61	99	7.74	0.1	28	2.58	1360	0.10	52	0.04	0.36	99.1	<0.01	111
165295	2.15	12	5.58	75	94	7.43	0.07	26	2.77	1458	0.07	62	0.04	0.32	113	<0.01	97
165296	1.20	17	4.93	27	61	4.65	0.1	14	2.23	1043	0.07	54	0.06	0.08	118	<0.01	30
165297	1.04	13	4.55	16	60	5.03	0.1	15	1.91	938	0.05	45	0.05	0.63	111	<0.01	32
165298	1.82	18	5.25	87	84	6.31	0.1	24	2.48	1250	0.07	71	0.05	0.27	162	<0.01	72
165299	2.60	<5	3.49	194	113	4.37	<0.01	12	1.91	854	0.09	56	0.02	0.09	27.1	0.36	106
165300	3.61	17	8.17	189	102	7.35	0.11	38	3.79	1721	0.02	73	0.02	0.21	68	0.01	149
165301	3.12	<5	5.96	234	124	7.36	0.04	38	4.50	1851	0.04	83	0.03	0.23	30.5	0.01	183
165302	3.65	<5	5.03	589	90	7.15	<0.01	21	6.58	1324	0.04	245	0.02	0.14	41.8	0.02	193
165303	3.35	<5	4.83	505	80	6.95	<0.01	17	6.26	1322	0.05	205	0.02	0.06	51.6	0.02	196
165304	3.65	<5	5.29	968	93	6.88	<0.01	28	7.28	1280	0.03	325	0.02	0.09	75.1	<0.01	179
165305	2.68	16	6.97	399	48	6.29	0.13	36	5.94	1314	0.02	312	<0.01	0.14	114	<0.01	71
165306	0.58	<5	5.55	40	30	4.63	0.01	10	2.83	963	0.06	105	<0.01	1.44	99.5	<0.01	23
165307	0.39	<5	6.44	77	54	5.3	0.03	7	3.03	1067	0.06	137	<0.01	2.54	135	<0.01	37
165308	0.50	18	7.03	189	51	9.19	0.09	14	8.25	1783	0.01	783	0.02	0.70	173	<0.01	81
165309	0.60	21	6.06	154	147	9.94	0.14	11	6.63	1562	0.02	516	0.05	1.30	130	0.01	82
165310	0.16	8	7.89	65	241	9.45	0.06	3	4.66	1535	0.03	359	0.03	3.96	232	<0.01	61
165311	0.37	22	9.22	99	195	9.67	0.15	5	3.97	1593	0.02	455	0.03	>5.00	204	<0.01	60
165312	0.30	16	10.61	101	180	8.42	0.11	4	4.68	1968	0.02	453	0.02	3.40	243	<0.01	63
165313	0.71	33	8.83	94	142	9.66	0.2	7	4.31	1533	0.04	288	0.03	4.82	210	<0.01	80
165314	0.36	15	10.62	93	185	8.85	0.11	5	4.24	1698	0.02	363	0.08	3.96	183	<0.01	48
165315	1.91	10	8.07	163	135	7.34	0.12	30	4.00	1373	0.04	171	0.03	0.45	74.7	<0.01	92
165316	1.45	14	7.55	108	93	6.41	0.16	20	3.70	1208	0.05	83	0.02	0.79	104	<0.01	70
165317	0.79	9	8.14	80	98	6.25	0.08	9	3.75	1285	0.04	84	<0.01	1.63	156	<0.01	63
165318	3.40	13	7.14	212	105	6.84	0.1	28	4.06	1262	0.03	85	0.02	0.07	54.1	0.08	151
165319	3.96	<5	6.02	266	104	6.43	<0.01	17	3.84	1176	0.03	88	0.02	0.08	32.9	0.30	181
165320	4.31	7	6.82	282	105	7.13	0.02	23	4.01	1257	0.04	90	0.02	0.10	26.2	0.29	211
165321	3.73	<5	5	252	107	6.2	<0.01	19	3.36	1141	0.04	84	0.02	0.06	18.9	0.32	152
165322	3.57	<5	3.24	298	118	5.92	0.01	18	3.74	1009	0.05	95	0.03	0.06	19.1	0.34	147
165323	4.75	152	7.08	167	133	7.27	0.09	38	3.85	1180	0.01	111	0.02	0.11	61.5	0.01	150
165324	3.93	20	5.81	163	132	7.68	0.08	35	4.28	1337	0.05	103	0.02	0.12	34.6	<0.01	158
165325	3.51	9	6.27	143	120	7.94	0.1	30	3.85	1444	0.07	103	0.03	0.13	44.7	<0.01	146
165326	3.13	13	7.98	128	135	7.05	0.17	28	3.22	1658	0.06	109	0.02	0.17	40.4	<0.01	112
165327	4.50	10	8.19	166	133	7.65	0.11	44	3.00	1374	0.03	118	0.02	0.16	53.4	0.01	157

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Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
165264	27	18.0	0.05	34	0.2	0.1	0.05	28.57	19.3	0.30	2.9	<0.1	0.32	<0.01	0.04	11.5	0.09
165265	35	2.9	0.10	823	0.1	0.0	0.09	9.37	66.3	0.17	4.5	<0.1	0.09	<0.01	0.04	3.2	0.05
165266	41	12.1	0.80	518	0.2	0.2	0.08	11.13	57.3	0.35	3.4	<0.1	0.27	<0.01	0.06	4.5	0.06
165267	23	9.6	1.14	209	0.2	0.1	0.05	12.5	22.5	1.03	1.7	<0.1	0.22	<0.01	0.04	5.5	0.04
165268	50	4.5	0.24	677	0.3	0.1	0.05	14.47	77	0.36	5.5	<0.1	0.12	<0.01	0.06	5.4	0.04
165269	55	2.8	0.14	398	0.3	0.0	0.08	14.93	83.9	0.14	6.0	<0.1	0.09	<0.01	0.05	5.3	0.05
165270	55	3.3	0.16	83	0.2	0.0	0.17	11.29	67.9	0.10	5.8	<0.1	0.16	<0.01	0.05	4.1	0.05
165271	34	3.9	0.12	367	0.3	<0.02	0.09	10.16	74.8	0.11	8.6	<0.1	0.15	<0.01	0.04	3.6	0.06
165272	35	3.4	0.11	237	0.3	<0.02	0.08	9.23	70.1	0.07	8.0	<0.1	0.13	<0.01	0.04	3.3	0.06
165273	33	2.4	0.15	675	0.3	0.0	0.11	8.97	75.9	0.13	2.3	<0.1	0.08	<0.01	0.05	3	0.05
165274	46	3.0	0.15	85	0.2	0.0	0.15	11.2	63.3	0.16	2.4	<0.1	0.09	<0.01	0.06	4.1	0.05
165275	39	2.8	0.16	180	0.3	0.0	0.12	13.05	71.8	0.15	4.1	<0.1	0.09	<0.01	0.05	4.7	0.06
165276	32	3.6	0.13	135	0.2	<0.02	0.12	12.39	72.2	0.16	3.2	<0.1	0.10	<0.01	0.05	4.4	0.06
165277	71	5.6	0.18	351	0.3	0.1	0.22	12.36	64.3	0.18	3.0	<0.1	0.13	<0.01	0.07	4.6	0.06
165278	34	4.6	0.17	937	0.2	0.0	0.12	9.8	75.9	0.17	4.0	<0.1	0.11	<0.01	0.05	3.4	0.06
165279	21	3.1	0.10	916	0.2	<0.02	0.1	6.63	76.2	0.23	2.7	<0.1	0.08	<0.01	0.05	2.2	0.07
165280	28	2.4	1.11	835	0.3	0.0	0.12	8.75	72.4	0.29	1.3	<0.1	0.07	<0.01	0.05	2.8	0.07
165281	26	2.7	0.35	1120	0.2	<0.02	0.12	6.16	75.5	0.21	1.1	<0.1	0.07	<0.01	0.05	1.9	0.07
165282	29	2.8	0.22	797	0.3	0.0	0.09	5.13	66.9	0.21	2.7	<0.1	0.08	<0.01	0.05	1.7	0.06
165283	32	3.7	0.16	747	0.3	<0.02	0.11	6.84	63.5	0.13	3.8	<0.1	0.10	<0.01	0.05	2.3	0.06
165284	43	5.3	0.20	828	0.2	<0.02	0.1	5.78	66.4	0.16	6.1	<0.1	0.12	<0.01	0.05	1.9	0.06
165285	17	15.1	0.19	160	0.2	0.1	0.03	17.27	14.8	0.20	1.1	<0.1	0.31	<0.01	0.02	7.3	0.04
165286	15	20.5	0.09	48	0.2	0.1	0.02	27.07	14	0.22	1.3	<0.1	0.40	<0.01	<0.02	11.3	0.05
165287	18	21.3	0.14	103	0.2	0.1	0.02	29.26	16.1	0.26	2.0	<0.1	0.39	<0.01	<0.02	12.3	0.05
165288	10	17.6	0.11	61	0.2	0.1	0.02	24.41	16.2	0.26	0.8	<0.1	0.36	<0.01	<0.02	10.4	0.06
165289	8	20.0	0.06	59	0.1	0.1	0.01	26.5	15.1	0.26	1.1	<0.1	0.38	<0.01	<0.02	11.1	0.07
165290	5	18.0	0.11	72	0.1	0.1	0.01	19.73	18.2	0.26	0.8	<0.1	0.36	<0.01	0.02	8.3	0.06
165291	12	19.8	0.08	52	0.2	0.1	0.01	20.21	15.4	0.23	1.5	<0.1	0.39	<0.01	<0.02	8.4	0.06
165292	37	7.6	0.09	122	0.2	0.1	0.03	9.71	32.1	0.21	3.8	<0.1	0.17	<0.01	0.03	3.9	0.07
165293	55	4.1	0.11	55	0.1	0.0	0.03	5.51	29.1	0.29	5.6	<0.1	0.11	<0.01	0.04	2.2	0.05
165294	85	1.7	0.07	64	0.1	<0.02	0.05	3.66	40.4	0.17	8.1	<0.1	0.06	<0.01	0.05	1.2	0.06
165295	84	2.0	0.09	84	0.1	<0.02	0.05	4.9	40.7	0.17	7.2	<0.1	0.06	<0.01	0.05	1.7	0.07
165296	39	7.8	0.06	63	0.2	0.0	0.02	19.14	23.8	0.17	3.4	<0.1	0.18	<0.01	0.04	8.1	0.05
165297	26	6.5	0.12	74	0.2	0.0	0.02	7.82	26.4	0.22	2.8	<0.1	0.16	<0.01	0.03	3.1	0.06
165298	77	7.2	0.09	69	0.1	0.0	0.04	11.73	35	0.18	6.3	<0.1	0.15	<0.01	0.04	4.7	0.06
165299	50	6.7	0.04	2	0.1	<0.02	0.22	2.78	30.1	0.16	5.9	0.2	0.22	<0.01	<0.02	1	0.08
165300	66	1.0	0.03	40	0.2	<0.02	0.09	4.91	38.5	0.14	9.2	<0.1	<0.05	<0.01	0.03	1.8	0.06
165301	70	1.1	0.06	41	0.3	<0.02	0.05	4.92	38.1	0.08	9.9	0.1	<0.05	<0.01	0.04	1.8	0.06
165302	52	1.2	0.03	8	0.2	<0.02	0.07	3.76	57.2	0.27	10.3	0.2	<0.05	<0.01	0.05	1.4	0.08
165303	44	1.1	<0.01	5	0.2	<0.02	0.07	3.72	48.3	0.28	9.8	0.2	<0.05	<0.01	0.04	1.3	0.07
165304	64	0.8	0.02	68	0.3	<0.02	0.07	4.02	59.6	0.14	8.9	0.2	<0.05	<0.01	0.04	1.4	0.07
165305	33	<0.5	0.15	409	0.7	<0.02	0.05	3.54	55.5	0.15	5.3	<0.1	<0.05	<0.01	0.04	1.3	0.06
165306	14	<0.5	1.07	255	0.4	0.0	0.03	2.01	29.3	<0.05	1.3	<0.1	<0.05	<0.01	0.02	0.7	0.04
165307	17	1.5	0.53	357	0.2	0.0	0.04	4.16	35	0.07	1.4	<0.1	<0.05	0.0	0.03	1.5	0.04
165308	28	1.8	0.19	936	0.5	<0.02	0.09	16.43	85.7	0.10	2.2	<0.1	<0.05	<0.01	0.06	5.8	0.05
165309	35	3.2	0.44	617	0.5	0.0	0.09	20.57	75.1	0.13	2.9	<0.1	0.06	<0.01	0.07	7.3	0.05
165310	25	2.5	1.25	765	0.3	0.0	0.1	13.88	62.6	0.06	0.7	<0.1	0.07	<0.01	0.06	4.7	0.05
165311	81	7.3	0.85	1149	0.3	0.1	0.23	10.1	77.8	0.11	2.0	<0.1	0.16	0.0	0.08	3.5	0.04
165312	43	4.1	0.49	1224	0.3	0.0	0.12	10.17	76.4	0.09	1.7	<0.1	0.10	0.0	0.07	3.6	0.04
165313	142	5.8	0.78	938	0.4	0.1	0.37	10.64	56.9	0.15	3.5	<0.1	0.15	0.0	0.09	3.8	0.05
165314	338	6.0	0.44	755	0.4	0.1	1	8.29	62.7	0.10	1.7	<0.1	0.17	0.1	0.13	3.1	0.04
165315	52	1.6	0.08	155	0.2	0.0	0.09	8.19	49.3	0.11	5.7	<0.1	0.06	<0.01	0.04	2.9	0.04
165316	41	0.7	0.22	138	0.2	<0.02	0.07	3.98	38.8	0.10	4.1	<0.1	<0.05	<0.01	0.04	1.4	0.05
165317	32	0.7	0.46	281	0.1	<0.02	0.06	2.95	39.2	0.05	2.6	<0.1	<0.05	<0.01	0.03	1	0.05
165318	63	1.1	0.02	24	0.2	<0.02	0.06	5.72	40.8	0.09	9.0	<0.1	0.06	<0.01	0.04	2.1	0.07
165319	67	2.0	0.03	1	0.2	<0.02	0.04	4.09	43.6	0.06	9.9	0.3	0.14	<0.01	0.02	1.4	0.11
165320	72	3.3	0.03	12	0.2	<0.02	0.12	4.62	43.1	0.09	11.7	0.3	0.18	<0.01	0.04	1.6	0.13
165321	67	2.6	0.03	<1	<0.1	<0.02	0.09	3.43	41.2	0.08	9.6	0.2	0.10	<0.01	<0.02	1.1	0.09
165322	64	7.2	0.09	2	<0.1	<0.02	0.01	4.72	40.4	0.10	9.8	0.2	0.19	<0.01	<0.02	1.6	0.12
165323	70	1.1	0.04	27	<0.1	<0.02	0.06	4.3	40.6	0.13	9.9	<0.1	<0.05	<0.01	0.04	1.6	0.08
165324	72	0.6	0.03	10	<0.1	<0.02	0.09	4.58	44.8	0.14	10.5	<0.1	<0.05	<0.01	0.05	1.6	0.08
165325	70	<0.5	0.04	62	<0.1	<0.02	0.06	4.16	45.3	0.19	8.9	<0.1	<0.05	<0.01	0.04	1.4	0.05
165326	68	0.6	0.03	90	0.1	<0.02	0.05	3.9	44.8	0.20	7.6	<0.1	<0.05	<0.01	0.04	1.5	0.06
165327	77	1.1	0.03	56	0.1	<0.02	0.05	4.82	47.3	0.15	10.5	<0.1	<0.05	<0.01	0.05	1.7	0.08

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SGS

Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
165264	0.62	<0.05	1.3	4.3	0.2	9.3	<1	<0.3	<0.05	0.4	<0.05	1.9	0.03	0.30	0.2	7.41	0.6
165265	0.97	<0.05	2.1	4.1	1.5	15.5	<1	<0.3	<0.05	0.3	<0.05	0.3	0.04	<0.05	0.2	4.60	0.4
165266	1.36	<0.05	10.9	3.8	2.3	10.5	2	<0.3	<0.05	0.3	0.19	1.0	0.30	0.20	0.3	4.64	0.4
165267	1.55	<0.05	8.5	4.7	1.4	4	1	<0.3	<0.05	0.2	0.40	1.0	0.27	0.17	1.4	3.61	0.3
165268	1.08	<0.05	3.3	4.9	1.7	16.3	<1	<0.3	<0.05	0.3	0.05	0.7	0.12	0.08	0.2	3.83	0.3
165269	0.77	<0.05	1.8	3.3	2.7	19.3	<1	<0.3	<0.05	0.3	<0.05	0.5	0.04	<0.05	0.1	3.83	0.3
165270	0.40	<0.05	1.6	1.1	1.3	16.7	<1	<0.3	<0.05	0.3	<0.05	0.5	<0.02	<0.05	<0.1	4.77	0.4
165271	0.35	<0.05	0.9	0.6	7.4	16.5	<1	<0.3	<0.05	0.3	<0.05	0.3	<0.02	<0.05	<0.1	5.13	0.4
165272	0.37	<0.05	0.9	0.8	3.9	15.6	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	5.08	0.4
165273	0.49	<0.05	1.3	2.3	3.8	16.2	<1	<0.3	<0.05	0.3	<0.05	0.3	0.02	<0.05	0.1	5.18	0.4
165274	0.43	<0.05	1.3	2.3	0.2	15	<1	<0.3	<0.05	0.3	<0.05	0.4	0.02	<0.05	<0.1	4.54	0.4
165275	0.51	<0.05	1.3	2.6	0.7	18.5	<1	<0.3	<0.05	0.3	<0.05	0.3	0.02	<0.05	0.1	5.26	0.4
165276	0.46	<0.05	1.1	2.4	0.7	16.6	<1	<0.3	<0.05	0.3	<0.05	0.3	0.02	<0.05	0.2	5.33	0.4
165277	0.61	<0.05	3	2.8	3.2	14.1	<1	<0.3	<0.05	0.3	0.06	0.5	0.02	0.07	<0.1	5.13	0.4
165278	0.48	<0.05	1.8	1.9	3.1	18.2	<1	<0.3	<0.05	0.3	<0.05	0.4	<0.02	<0.05	0.2	5.01	0.4
165279	0.41	<0.05	1.4	4.8	6.9	16.7	<1	<0.3	<0.05	0.3	<0.05	0.3	0.04	<0.05	0.2	5.71	0.5
165280	0.48	<0.05	1.5	3.6	4.6	15.2	1	<0.3	<0.05	0.4	<0.05	0.3	0.03	<0.05	0.3	6.46	0.5
165281	0.47	<0.05	2.6	3.8	1.9	14.9	1	<0.3	<0.05	0.3	0.05	0.3	0.03	<0.05	0.5	5.75	0.5
165282	0.43	<0.05	1.4	3.4	1.1	16.8	<1	<0.3	<0.05	0.3	<0.05	0.3	0.02	<0.05	0.3	4.98	0.4
165283	0.44	<0.05	1.3	3.2	1.0	17	<1	<0.3	<0.05	0.3	<0.05	0.3	0.02	<0.05	0.3	5.53	0.4
165284	0.49	<0.05	1.7	4.5	0.9	18.1	1	<0.3	<0.05	0.3	0.11	0.3	0.04	<0.05	0.5	5.25	0.5
165285	0.75	<0.05	2.2	2.5	0.3	4.2	<1	<0.3	<0.05	0.2	0.05	1.5	0.03	0.26	0.2	3.90	0.3
165286	0.71	<0.05	1.2	2.8	0.2	3.7	<1	<0.3	<0.05	0.3	<0.05	2.0	0.02	0.38	0.2	4.54	0.3
165287	0.96	<0.05	1.5	3.9	0.2	4.3	<1	<0.3	<0.05	0.3	<0.05	2.1	0.03	0.39	0.3	4.46	0.4
165288	1.06	<0.05	1.9	2.5	0.3	3.9	<1	<0.3	<0.05	0.3	0.06	1.9	0.05	0.32	0.3	5.26	0.4
165289	1.02	<0.05	1.5	3.8	0.2	5.2	<1	<0.3	<0.05	0.3	<0.05	2.5	0.04	0.50	0.1	5.29	0.4
165290	1.85	<0.05	1.7	2.9	0.2	4.4	<1	0.5	<0.05	0.3	0.05	1.7	0.03	0.39	0.1	5.56	0.4
165291	1.19	<0.05	1.7	4	0.3	4.2	<1	0.6	<0.05	0.3	0.05	2.2	0.04	0.48	0.2	4.98	0.4
165292	0.72	<0.05	1.5	3.4	0.3	12.3	<1	0.4	<0.05	0.2	<0.05	1.0	0.04	0.20	0.2	4.75	0.5
165293	0.40	<0.05	2.5	1.8	0.7	14.5	<1	<0.3	<0.05	0.2	<0.05	0.3	0.04	0.05	<0.1	3.54	0.4
165294	0.43	<0.05	1.2	2.2	0.3	22.6	<1	<0.3	<0.05	0.2	<0.05	0.2	0.03	<0.05	0.1	4.07	0.4
165295	0.77	<0.05	1.5	1.6	0.4	20.9	<1	<0.3	<0.05	0.2	<0.05	0.2	0.04	<0.05	<0.1	4.49	0.5
165296	0.75	<0.05	0.9	2.1	0.2	9.8	<1	<0.3	<0.05	0.2	<0.05	1.1	0.02	0.16	<0.1	4.19	0.4
165297	0.61	<0.05	1.4	2.2	0.3	10.5	<1	0.6	<0.05	0.2	<0.05	0.6	0.02	0.11	0.1	4.00	0.4
165298	0.89	<0.05	1.8	2.2	0.4	14	<1	<0.3	<0.05	0.2	<0.05	0.8	0.03	0.14	<0.1	3.93	0.4
165299	0.20	0.22	0.9	0.3	<0.05	7.1	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	5.94	0.6
165300	0.14	<0.05	0.3	3.4	<0.05	19	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	0.2	3.74	0.4
165301	0.14	<0.05	0.3	1.2	<0.05	27.1	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	0.2	3.92	0.4
165302	0.10	<0.05	0.4	0.3	<0.05	31.3	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	3.52	0.4
165303	0.10	<0.05	0.2	0.4	<0.05	30.8	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	3.30	0.4
165304	0.11	<0.05	0.3	<0.2	<0.05	28.2	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	0.1	4.06	0.4
165305	0.15	<0.05	0.6	4.1	0.4	18.4	<1	<0.3	<0.05	0.2	0.07	<0.1	<0.02	<0.05	0.3	4.11	0.4
165306	0.50	<0.05	3.1	0.4	0.6	14.7	<1	<0.3	<0.05	0.1	0.29	<0.1	<0.02	<0.05	0.5	2.27	0.3
165307	0.26	<0.05	3.9	0.9	0.7	18.1	<1	<0.3	<0.05	0.1	0.37	<0.1	0.02	<0.05	0.9	2.71	0.3
165308	0.44	<0.05	1.3	3.4	1.4	15.1	<1	<0.3	<0.05	0.3	0.17	0.2	0.02	<0.05	0.7	5.62	0.4
165309	0.50	0.05	1.3	4.9	0.9	17.9	<1	<0.3	<0.05	0.4	0.11	0.4	0.03	<0.05	0.8	5.31	0.4
165310	0.65	<0.05	2.7	1.9	0.7	20.1	1	<0.3	<0.05	0.3	0.23	0.3	<0.02	<0.05	1.4	4.47	0.3
165311	0.63	0.06	7.3	4.9	1.9	16.1	2	<0.3	<0.05	0.3	0.56	0.4	0.40	<0.05	0.6	4.17	0.3
165312	0.52	<0.05	4	3.7	1.0	16.2	1	<0.3	<0.05	0.3	0.30	0.3	0.23	<0.05	0.8	4.24	0.3
165313	0.61	0.05	8.2	7.1	1.7	15.5	2	<0.3	<0.05	0.3	0.32	0.3	0.35	<0.05	0.6	4.67	0.4
165314	1.32	0.06	9.1	3.6	3.1	9.4	2	<0.3	<0.05	0.3	0.44	0.3	0.80	0.06	0.3	4.41	0.3
165315	0.22	<0.05	0.9	3.5	0.4	15.9	<1	<0.3	<0.05	0.2	<0.05	0.1	0.06	<0.05	<0.1	3.03	0.3
165316	0.14	0.05	0.6	4.4	0.1	17.1	<1	<0.3	<0.05	0.1	<0.05	<0.1	0.03	<0.05	0.2	2.88	0.3
165317	0.15	0.07	1.1	2.3	0.1	20	<1	<0.3	<0.05	0.1	0.07	0.1	<0.02	<0.05	0.5	2.92	0.3
165318	0.12	0.11	0.3	2.5	<0.05	22.1	<1	<0.3	<0.05	0.2	<0.05	0.1	<0.02	<0.05	<0.1	5.15	0.5
165319	0.11	0.21	0.3	<0.2	<0.05	17.1	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	8.44	0.8
165320	0.14	0.24	0.3	0.5	<0.05	27.4	<1	<0.3	<0.05	0.3	<0.05	0.6	<0.02	<0.05	0.3	10.59	1
165321	0.14	0.13	<0.2	0.2	<0.05	9.4	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	7.46	0.7
165322	0.15	0.15	0.6	0.5	<0.05	9.2	<1	<0.3	<0.05	0.3	0.34	<0.1	<0.02	<0.05	<0.1	9.49	0.9
165323	0.09	<0.05	0.2	2.3	<0.05	17	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	3.65	0.4
165324	0.11	<0.05	0.2	1.9	<0.05	23.2	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	3.75	0.4
165325	0.13	<0.05	<0.2	2.2	<0.05	23.2	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	0.1	3.30	0.3
165326	0.07	<0.05	0.2	4	<0.05	15.8	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	3.90	0.4
165327	0.09	<0.05	0.2	2.5	<0.05	18.9	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	5.26	0.6

3260 Production Way
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SGS proposal: 19322-PR2-R2
SGS project #: 2351

Work order date: 30-Nov-23
Report date: 10-Feb-24

Version: Final

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
165328	5.14	8	7.23	192	135	8.08	0.06	49	3.40	1410	0.03	118	0.02	0.11	46.1	0.01	216
165329	4.89	8	7.29	187	137	7.84	0.07	47	4.12	1605	0.03	115	0.02	0.09	31.9	0.01	197
165330	4.30	8	8.48	172	108	7.06	0.06	43	3.40	1618	0.02	107	0.02	0.08	39.8	0.01	180
165331	5.05	11	7.19	200	145	8.06	0.07	48	3.44	1397	0.03	125	0.03	0.11	30.5	0.01	202
165332	4.25	8	7	187	123	7.08	0.06	39	2.96	1346	0.03	113	0.02	0.19	24.7	0.06	213
165333	4.90	20	7.24	180	146	7.42	0.08	56	3.79	1387	0.02	110	0.02	0.05	20.1	0.14	191
165334	3.53	<5	2.64	156	155	6.09	<0.01	22	2.73	1046	0.05	113	0.02	0.11	22.4	0.36	116
165335	2.70	<5	3.5	134	148	5.14	<0.01	14	1.91	1017	0.04	103	0.02	0.12	17.5	0.32	94
165336	3.49	<5	4.51	172	151	6.13	0.02	35	2.92	1143	0.05	109	0.02	0.15	24.8	0.37	154
165337	3.66	<5	3.66	110	154	6.74	<0.01	14	2.99	1369	0.03	72	0.03	0.12	34.1	0.41	136
165338	3.06	14	2.48	109	138	5.69	<0.01	9	2.45	1195	0.05	66	0.03	0.05	41.9	0.41	121
165339	4.34	7	5.31	135	134	7.7	<0.01	19	3.51	1441	0.04	75	0.05	0.17	59.2	0.25	231
165340	4.39	<5	5.85	125	117	7.63	<0.01	19	3.71	1369	0.03	70	0.05	0.12	54.4	0.25	243
165341	4.47	<5	5.7	138	134	7.87	0.01	16	3.95	1401	0.03	79	0.03	0.12	41	0.43	241
165342	4.86	<5	6.41	147	136	8.57	<0.01	23	3.76	1484	0.03	79	0.03	0.07	37.2	0.16	257
165343	3.28	24	7.42	90	132	7.85	0.11	24	3.29	1404	0.07	74	0.03	0.13	44.4	<0.01	136
165344	2.62	8	6.07	83	137	7.98	0.05	20	2.93	1378	0.08	79	0.03	0.12	32.3	<0.01	124
165345	3.15	10	6.84	95	133	8.32	0.05	23	3.19	1591	0.12	77	0.03	0.15	39.5	<0.01	152
165346	1.80	10	6.71	55	151	7.37	0.05	13	2.72	1497	0.09	69	0.04	0.25	44.8	<0.01	83
165347	3.64	16	7.04	81	129	9.02	0.09	27	3.16	2188	0.10	66	0.03	0.15	33.7	<0.01	152
165348	3.58	10	6.06	92	133	9.4	0.05	28	3.40	2028	0.06	73	0.03	0.13	34.6	<0.01	158
165349	3.85	13	6.15	58	115	9.04	0.1	27	2.61	1542	0.05	45	0.04	0.14	44.9	<0.01	223
165350	3.94	6	4.09	94	155	8.06	<0.01	16	3.53	1289	0.04	56	0.03	0.12	56.5	0.39	236
165351	2.92	7	1.51	86	147	6.21	<0.01	11	2.73	1065	0.04	57	0.03	0.14	50.6	0.52	153
165352	3.62	37	3.05	90	146	7.73	<0.01	12	3.64	1293	0.05	69	0.03	0.10	58.3	0.50	215
165353	4.82	8	5.13	134	135	8.74	0.02	33	5.35	1393	0.03	101	0.03	0.09	77.2	0.02	226
165354	1.19	29	5.26	49	72	5.11	0.16	9	2.00	936	0.08	86	0.04	0.17	130	<0.01	30
165355	0.92	37	4.09	15	47	3.29	0.19	6	1.67	667	0.09	39	0.05	0.18	120	<0.01	12
165356	0.66	19	4.49	7	46	3.65	0.12	5	1.64	710	0.07	37	0.06	0.17	120	<0.01	9
165357	0.78	16	6.98	27	84	6.44	0.1	6	2.38	1313	0.09	86	0.03	0.15	94.8	<0.01	26
165358	1.51	15	6.45	60	121	7.69	0.09	16	3.17	1371	0.07	88	0.05	0.44	102	<0.01	65
165359	1.98	21	6.61	132	115	6.09	0.1	19	3.75	1089	0.07	129	0.06	0.18	110	<0.01	55
165360	1.04	22	8.24	34	89	5.61	0.13	8	3.55	1062	0.10	90	0.07	0.34	94.6	<0.01	37
165361	0.95	10	8.61	37	124	7.03	0.07	9	3.60	1320	0.07	109	0.03	1.29	83	<0.01	38
165362	1.25	10	8.49	46	100	6.99	0.08	12	3.53	1365	0.08	90	0.02	0.51	66.7	<0.01	55
165363	1.25	8	8.79	45	102	7.07	0.07	12	3.63	1427	0.07	83	0.02	0.36	65.2	<0.01	56
165364	1.83	16	7.43	107	224	6.91	0.09	16	3.70	1253	0.08	169	0.04	0.13	73.8	<0.01	83
165365	0.83	18	9.38	83	155	6.46	0.1	7	4.06	1481	0.05	212	0.04	0.42	145	<0.01	37
165366	1.78	41	9.16	108	244	9.02	0.15	12	3.96	1904	0.07	273	0.08	0.56	132	<0.01	99
165367	0.92	21	9.72	162	208	8.42	0.11	8	4.71	1874	0.02	533	0.06	0.42	148	<0.01	59
165368	2.79	16	9.29	697	172	8.95	0.05	29	6.16	1676	0.02	610	0.06	0.24	159	<0.01	171
165369	2.61	25	7.55	267	191	8.79	0.07	33	4.28	1599	0.05	243	0.07	0.30	80.4	<0.01	154
165370	2.63	12	9.47	606	155	8.88	0.03	33	6.45	1852	0.02	569	0.05	0.17	118	<0.01	169
165371	2.21	26	9.46	318	217	8.58	0.08	32	5.06	1708	0.06	291	0.07	0.36	101	<0.01	146
165372	3.15	<5	11.41	689	15	10.15	0.02	32	7.40	2083	0.02	355	0.05	0.41	191	<0.01	216
165373	3.69	6	12.04	845	14	10.38	0.03	42	8.63	2418	0.02	493	0.05	1.01	185	<0.01	232
165374	2.49	13	13.15	470	22	9.37	0.09	31	8.11	3066	0.03	304	0.04	1.72	147	<0.01	136
165375	1.81	14	7.37	96	46	9.28	0.11	21	3.79	1574	0.03	189	0.09	3.09	101	<0.01	77
165376	1.38	15	7.35	48	53	7.82	0.11	17	3.68	1685	0.04	136	0.10	2.73	81.5	<0.01	55
165377	0.79	9	4.4	44	59	10.5	0.12	10	2.20	1243	0.05	243	0.12	>5.00	39.6	<0.01	25
165378	2.06	8	9.01	108	62	11.33	0.11	33	5.32	2116	0.03	307	0.06	>5.00	111	<0.01	52
165379	0.91	9	10.54	110	11	8.14	0.07	13	5.28	2390	0.04	180	0.05	3.57	137	<0.01	55
165380	0.71	9	6.8	45	23	9.53	0.1	10	3.22	1596	0.05	247	0.13	>5.00	63.7	<0.01	29
165381	0.98	13	7.53	38	24	9.36	0.1	12	3.52	1921	0.04	153	0.11	>5.00	82.9	<0.01	54
165382	1.11	13	9.44	70	21	9.77	0.09	15	4.42	2398	0.04	144	0.10	4.77	105	<0.01	84
165383	1.00	19	6.25	48	34	8	0.13	12	3.07	1512	0.03	111	0.10	4.66	92.7	<0.01	34
165384	2.61	31	8.77	349	21	10	0.19	29	5.16	2236	0.03	284	0.09	2.94	134	<0.01	136
165385	2.79	8	6.9	142	4	8.47	0.11	35	4.03	1662	0.06	251	0.03	0.31	34.7	<0.01	86
165387	2.25	12	7.88	113	29	7.76	0.14	27	3.52	1850	0.12	225	0.03	0.18	31	<0.01	74
165388	3.87	10	4.62	323	72	6.71	0.06	36	2.64	1276	0.05	199	0.02	0.11	14.8	0.16	229
165389	1.35	<5	8.93	346	28	6.97	0.05	27	5.16	1434	0.02	476	0.01	2.04	191	0.01	100
165390	0.49	<5	5.43	63	17	6.33	0.08	12	2.79	1031	0.02	175	<0.01	4.19	102	<0.01	26
165391	0.82	5	4.72	96	35	7.2	0.08	13	2.99	1050	0.05	319	<0.01	>5.00	81.3	<0.01	37
165392	0.18	7	5.04	25	65	4.92	0.05	<1	2.09	1111	0.09	122	0.05	3.18	107	<0.01	22

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Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
165328	78	1.5	0.02	12	0.1	<0.02	0.04	3.86	46.4	0.10	12.8	<0.1	<0.05	<0.01	0.04	1.4	0.07
165329	75	0.8	0.04	55	0.1	<0.02	0.03	5.31	46	0.13	11.8	<0.1	<0.05	<0.01	0.05	1.9	0.1
165330	68	1.1	0.03	37	<0.1	<0.02	0.03	4.71	41.8	0.08	10.7	<0.1	<0.05	<0.01	0.05	1.6	0.11
165331	79	0.8	0.06	32	<0.1	<0.02	0.05	4	47.7	0.09	12.4	<0.1	<0.05	<0.01	0.04	1.4	0.08
165332	77	1.2	0.08	24	0.1	<0.02	0.11	3.7	45.1	0.14	11.1	0.1	<0.05	<0.01	0.04	1.3	0.13
165333	187	0.8	0.14	28	<0.1	<0.02	0.69	3.96	44.6	0.10	11.7	<0.1	<0.05	<0.01	0.05	1.5	0.15
165334	79	6.5	0.06	2	0.1	<0.02	0.18	2.53	43.2	0.07	5.8	0.2	0.20	<0.01	<0.02	0.9	0.08
165335	62	4.5	0.06	1	<0.1	<0.02	0.13	1.7	37	0.06	4.8	0.1	0.16	<0.01	<0.02	0.6	0.06
165336	58	6.0	0.08	4	0.1	<0.02	0.06	3.49	42.2	0.11	8.0	0.2	0.20	<0.01	0.02	1.3	0.11
165337	75	8.1	0.04	3	0.1	<0.02	0.02	2.37	38.1	0.11	6.8	0.2	0.22	<0.01	<0.02	0.9	0.08
165338	66	6.4	0.04	2	0.1	<0.02	0.02	2.11	34.8	0.08	5.7	0.2	0.19	<0.01	<0.02	0.8	0.07
165339	85	4.8	0.06	8	0.2	0.0	0.05	9.4	46.3	0.11	13.3	0.3	0.13	<0.01	0.05	3.9	0.13
165340	79	4.3	0.03	9	0.2	0.0	0.05	12	41.9	0.18	14.6	0.2	0.19	<0.01	0.05	5	0.13
165341	77	6.3	0.02	2	0.2	<0.02	0.04	4.35	44.5	0.14	13.0	0.2	0.27	<0.01	0.04	1.7	0.16
165342	81	<0.5	0.04	11	0.1	<0.02	0.04	4.33	47.8	0.08	14.5	0.2	0.08	<0.01	0.05	1.6	0.1
165343	72	<0.5	0.03	45	0.1	<0.02	0.08	4.34	40.5	0.19	8.7	<0.1	<0.05	<0.01	0.04	1.6	0.04
165344	72	<0.5	0.04	50	<0.1	<0.02	0.07	4.34	44.1	0.21	8.1	<0.1	<0.05	<0.01	0.04	1.5	0.03
165345	76	<0.5	0.04	52	<0.1	<0.02	0.08	2.73	47.5	0.16	9.8	<0.1	0.06	<0.01	0.05	0.9	0.04
165346	58	<0.5	0.06	68	<0.1	<0.02	0.08	4.19	43.3	0.21	5.7	<0.1	0.05	<0.01	0.04	1.6	0.03
165347	79	<0.5	0.05	26	<0.1	<0.02	0.06	4.9	45.6	0.17	10.8	<0.1	0.06	<0.01	0.05	1.8	0.06
165348	79	<0.5	0.11	7	<0.1	<0.02	0.08	4.45	44.4	0.16	10.8	<0.1	<0.05	<0.01	0.05	1.6	0.05
165349	82	<0.5	0.03	16	0.1	<0.02	0.07	6.28	49.8	0.14	13.3	<0.1	0.05	<0.01	0.05	2.3	0.06
165350	84	2.7	0.03	5	0.2	<0.02	0.04	4.21	43.5	0.10	12.6	0.2	0.16	<0.01	0.04	1.5	0.14
165351	73	3.6	0.06	1	0.1	<0.02	0.02	3.34	40.1	0.09	8.5	0.1	0.22	<0.01	<0.02	1.2	0.1
165352	83	2.7	0.04	1	0.2	<0.02	0.03	4.08	45.8	0.10	11.3	0.2	0.19	<0.01	0.03	1.5	0.14
165353	96	<0.5	0.04	5	0.1	<0.02	0.06	3.71	46.3	0.11	13.5	<0.1	<0.05	<0.01	0.05	1.3	0.06
165354	47	10.0	0.07	31	0.2	0.1	0.04	16.91	27.8	0.31	3.1	<0.1	0.25	<0.01	0.02	7.2	0.04
165355	28	15.4	0.06	19	0.2	0.1	0.02	29.38	15.4	0.32	2.2	<0.1	0.35	<0.01	0.02	13	0.04
165356	32	15.5	0.06	22	0.2	0.1	0.03	19.95	17.2	0.31	1.5	<0.1	0.35	<0.01	0.02	8.5	0.05
165357	47	3.5	0.04	87	<0.1	0.0	0.04	5.42	31.2	0.25	2.0	<0.1	0.12	<0.01	0.03	2.2	0.04
165358	75	4.0	0.16	115	0.1	0.0	0.07	10.28	39.1	0.24	4.7	<0.1	0.13	<0.01	0.05	4.2	0.05
165359	85	5.7	0.07	162	0.2	0.1	0.07	17.65	36.2	0.26	5.6	<0.1	0.15	<0.01	0.03	7.4	0.05
165360	56	5.1	0.04	100	0.2	0.0	0.07	12.46	31	0.29	2.8	<0.1	0.17	<0.01	0.03	5.1	0.04
165361	56	0.8	0.12	164	0.2	<0.02	0.06	3.03	42.5	0.26	2.5	<0.1	0.07	<0.01	0.04	1.1	0.05
165362	60	0.5	0.06	91	0.2	<0.02	0.07	1.82	38.3	0.31	3.3	<0.1	<0.05	<0.01	0.03	0.7	0.04
165363	62	0.6	0.03	72	0.1	<0.02	0.07	1.85	34.9	0.28	3.3	<0.1	0.05	<0.01	0.03	0.7	0.04
165364	79	1.4	0.06	113	0.2	<0.02	0.07	5.96	47.4	0.32	5.0	<0.1	0.07	<0.01	0.05	2.3	0.05
165365	48	4.0	0.08	214	0.3	0.1	0.08	6.71	44.6	0.25	2.3	<0.1	0.14	<0.01	0.04	2.6	0.05
165366	62	3.0	0.07	147	0.6	0.0	0.1	18.5	59.8	0.25	6.2	<0.1	0.10	<0.01	0.06	6.7	0.05
165367	44	2.2	0.06	74	0.3	<0.02	0.13	11.31	74.8	0.17	3.1	<0.1	0.09	<0.01	0.05	3.9	0.04
165368	77	4.2	0.03	168	0.5	0.0	0.12	18.22	77.1	0.13	10.3	<0.1	0.14	<0.01	0.05	6.8	0.05
165369	77	5.7	0.04	94	0.5	0.0	0.09	21.77	54.2	0.18	10.3	<0.1	0.17	<0.01	0.06	8.5	0.05
165370	48	3.4	0.01	45	0.4	<0.02	0.11	16.17	69.6	0.11	10.1	<0.1	0.14	<0.01	0.05	5.5	0.04
165371	51	4.0	0.02	104	0.4	<0.02	0.13	17.44	55.3	0.19	8.9	<0.1	0.13	<0.01	0.07	6.5	0.05
165372	81	3.4	0.04	58	0.2	<0.02	0.1	14.17	27.8	0.12	12.8	<0.1	0.14	<0.01	0.08	4.4	0.1
165373	90	3.2	0.11	350	0.3	0.4	0.08	14.06	72.7	0.16	15.5	<0.1	0.12	<0.01	0.11	4.9	0.1
165374	69	3.7	0.21	287	0.4	0.8	0.06	13.27	58.9	0.22	8.6	<0.1	0.12	<0.01	0.15	4.5	0.14
165375	54	6.2	0.57	269	0.4	1.0	0.07	11.61	89.7	0.25	6.8	<0.1	0.21	0.0	0.06	3.7	0.09
165376	41	6.0	0.45	174	0.2	0.7	0.05	11.74	64.7	0.18	4.5	<0.1	0.18	0.0	0.07	3.7	0.09
165377	52	12.6	1.73	429	0.2	2.5	0.11	8.58	132	0.27	2.7	<0.1	0.35	0.0	0.05	3	0.07
165378	71	8.9	1.03	289	0.5	2.5	0.11	8.73	119	0.39	6.3	<0.1	0.29	0.0	0.13	2.7	0.1
165379	34	4.7	0.39	223	0.2	0.3	0.05	9.13	52.1	0.10	3.3	<0.1	0.15	<0.01	0.12	2.8	0.1
165380	36	10.6	1.05	369	0.2	0.7	0.07	12.93	80.1	0.18	2.7	<0.1	0.30	0.0	0.07	4.4	0.07
165381	45	9.0	0.65	252	0.2	0.5	0.07	13.12	51.8	0.13	4.3	<0.1	0.24	0.0	0.08	4.6	0.07
165382	38	5.2	1.07	296	0.2	0.1	0.05	12.31	50.9	0.10	5.2	<0.1	0.16	0.0	0.10	4.1	0.09
165383	59	15.5	0.45	172	0.2	0.6	0.08	17.1	54.1	0.19	3.3	<0.1	0.38	0.0	0.09	6.2	0.09
165384	73	8.4	0.47	133	0.3	0.4	0.06	13.54	46.9	0.24	9.4	<0.1	0.24	<0.01	0.10	4.7	0.12
165385	65	<0.5	0.03	53	0.2	0.0	0.04	3.83	33.7	0.26	6.7	<0.1	<0.05	<0.01	0.04	1.3	0.06
165387	53	<0.5	<0.01	64	0.2	<0.02	0.04	4.89	54.2	0.27	5.3	<0.1	<0.05	<0.01	0.04	1.8	0.06
165388	88	1.5	<0.01	2	0.1	<0.02	<0.01	3.25	51.9	0.15	12.1	<0.1	0.10	<0.01	0.03	1.2	0.13
165389	31	2.5	0.27	865	0.3	0.0	0.06	10.69	66.3	0.13	5.3	<0.1	<0.05	<0.01	0.06	3.8	0.06
165390	13	3.0	0.45	476	0.1	0.1	0.03	5.81	34.7	0.15	1.9	<0.1	0.07	0.0	0.06	2.1	0.08
165391	26	10.0	0.66	684	0.3	0.2	0.06	11.22	51.7	0.13	3.2	<0.1	0.21	0.0	0.04	4.6	0.06
165392	15	1.6	0.80	547	<0.1	0.0	0.04	4.94	40	<0.05	0.5	<0.1	0.14	<0.01	0.03	1.8	0.05

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Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
165328	0.10	<0.05	0.2	1.5	<0.05	27.4	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	4.35	0.5
165329	0.10	<0.05	<0.2	1.9	<0.05	23.9	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	6.73	0.7
165330	0.13	<0.05	0.2	1.5	<0.05	21.1	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	7.35	0.8
165331	0.08	<0.05	0.4	1.8	<0.05	22.8	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	4.71	0.5
165332	0.14	<0.05	1.3	1.8	<0.05	27.3	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	8.46	0.9
165333	0.10	<0.05	14.1	2	<0.05	22.3	<1	<0.3	<0.05	0.3	<0.05	<0.1	<0.02	<0.05	<0.1	11.92	1.1
165334	0.10	0.11	2	<0.2	<0.05	8.8	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	5.92	0.6
165335	0.11	0.13	0.7	<0.2	<0.05	4.9	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	4.04	0.5
165336	0.10	0.10	1	0.5	<0.05	11.7	<1	<0.3	<0.05	0.2	<0.05	<0.1	0.03	<0.05	<0.1	8.29	0.8
165337	0.13	0.14	0.4	<0.2	<0.05	8.8	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	5.75	0.7
165338	0.14	0.16	0.5	<0.2	<0.05	5.7	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	4.54	0.5
165339	0.37	0.08	1.1	0.3	0.1	30.7	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	10.06	1
165340	0.16	0.11	1	<0.2	0.1	34.1	<1	<0.3	<0.05	0.3	<0.05	0.5	<0.02	<0.05	<0.1	11.02	1
165341	0.24	0.14	0.3	0.6	0.2	34.1	<1	0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	12.53	1.3
165342	0.12	<0.05	0.2	<0.2	<0.05	37.9	<1	<0.3	<0.05	0.2	<0.05	0.1	<0.02	<0.05	<0.1	7.60	0.8
165343	0.17	<0.05	0.3	3.1	0.1	21.1	<1	<0.3	<0.05	0.1	<0.05	0.1	0.02	<0.05	<0.1	2.08	0.2
165344	0.11	<0.05	0.4	1.4	0.1	23.3	<1	<0.3	<0.05	0.1	<0.05	0.1	<0.02	<0.05	<0.1	1.91	0.2
165345	0.11	<0.05	0.4	1.4	0.1	28.9	<1	<0.3	<0.05	0.1	<0.05	0.1	<0.02	<0.05	<0.1	2.44	0.3
165346	0.73	<0.05	0.5	1.5	0.1	20.8	<1	<0.3	<0.05	0.1	<0.05	0.2	<0.02	<0.05	<0.1	2.18	0.2
165347	0.16	<0.05	0.4	2.6	0.2	23	<1	<0.3	<0.05	0.2	<0.05	0.1	<0.02	<0.05	<0.1	4.07	0.4
165348	0.15	<0.05	0.5	1.4	0.1	23.6	<1	<0.3	<0.05	0.1	<0.05	0.1	<0.02	<0.05	<0.1	2.75	0.3
165349	0.13	<0.05	0.5	2.6	0.1	26.7	<1	<0.3	<0.05	0.2	<0.05	0.1	<0.02	<0.05	<0.1	4.32	0.4
165350	0.14	0.13	0.5	<0.2	0.1	26.3	<1	<0.3	<0.05	0.3	<0.05	0.1	<0.02	<0.05	<0.1	9.95	1.1
165351	0.12	0.23	0.9	<0.2	0.1	6.2	<1	<0.3	<0.05	0.2	<0.05	0.1	<0.02	<0.05	<0.1	7.47	0.8
165352	0.12	0.17	0.7	<0.2	0.1	19	<1	<0.3	<0.05	0.3	<0.05	0.1	<0.02	<0.05	<0.1	10.71	1.1
165353	0.14	<0.05	0.4	0.6	<0.05	33.4	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	4.10	0.4
165354	0.83	<0.05	1.2	3.6	0.1	7	<1	<0.3	<0.05	0.2	<0.05	1.3	0.03	0.24	<0.1	3.60	0.3
165355	1.36	<0.05	1.5	4.2	0.1	3.5	<1	<0.3	<0.05	0.2	<0.05	2.4	0.04	0.40	<0.1	4.02	0.3
165356	1.09	<0.05	1.5	2.7	0.1	3.5	<1	<0.3	<0.05	0.2	<0.05	1.6	0.03	0.39	<0.1	4.01	0.3
165357	0.45	<0.05	0.8	2.3	0.1	10.7	<1	<0.3	<0.05	0.1	<0.05	0.5	<0.02	0.09	<0.1	2.67	0.3
165358	0.42	<0.05	1	2.2	0.3	15.3	<1	<0.3	<0.05	0.2	0.05	0.6	0.03	0.09	<0.1	3.40	0.3
165359	0.60	<0.05	1.1	2.5	0.3	11.5	<1	<0.3	<0.05	0.2	<0.05	0.9	0.03	0.11	<0.1	3.64	0.3
165360	0.51	<0.05	1.1	3.2	0.3	8.5	<1	<0.3	<0.05	0.2	<0.05	0.9	0.04	0.11	<0.1	3.57	0.3
165361	0.23	<0.05	1.1	1.8	0.2	12.9	<1	<0.3	<0.05	0.1	0.10	0.3	<0.02	<0.05	0.1	3.30	0.3
165362	0.21	<0.05	0.6	1.9	0.1	13.8	<1	<0.3	<0.05	0.1	<0.05	0.1	<0.02	<0.05	<0.1	2.98	0.3
165363	0.19	<0.05	0.6	1.6	0.1	14.5	<1	<0.3	<0.05	0.1	<0.05	0.1	<0.02	<0.05	<0.1	3.00	0.3
165364	0.28	<0.05	0.7	2.2	0.4	15.9	<1	<0.3	<0.05	0.2	<0.05	0.2	0.02	<0.05	<0.1	3.52	0.3
165365	0.44	<0.05	1.1	2.6	0.7	13.1	<1	<0.3	<0.05	0.2	<0.05	0.5	0.03	0.07	0.2	4.42	0.4
165366	0.59	<0.05	0.9	4.3	0.6	20.3	<1	<0.3	<0.05	0.4	<0.05	0.6	0.05	0.06	0.5	5.04	0.4
165367	0.51	<0.05	1	3.1	0.3	14.2	<1	<0.3	<0.05	0.3	<0.05	0.4	0.04	<0.05	0.2	4.49	0.3
165368	0.48	0.07	1	1.7	0.4	21.6	<1	<0.3	<0.05	0.3	<0.05	0.5	<0.02	<0.05	0.2	4.52	0.3
165369	0.69	<0.05	1.1	2.2	0.2	20.8	<1	<0.3	<0.05	0.3	<0.05	0.6	0.02	0.07	<0.1	4.40	0.3
165370	0.38	0.07	0.8	1	0.1	20.8	<1	<0.3	<0.05	0.3	<0.05	0.3	<0.02	<0.05	<0.1	3.95	0.3
165371	0.51	<0.05	1	2.5	0.2	23	<1	<0.3	<0.05	0.4	<0.05	0.4	0.02	<0.05	<0.1	5.32	0.4
165372	0.56	0.07	1.4	0.6	0.1	25.7	<1	<0.3	<0.05	0.5	<0.05	0.4	<0.02	<0.05	0.3	9.15	0.7
165373	0.77	<0.05	3	1.2	0.3	25.7	1	<0.3	<0.05	0.5	0.14	0.4	0.03	<0.05	0.4	10.16	0.7
165374	0.74	<0.05	4.7	2.5	0.4	20.6	1	<0.3	<0.05	0.7	0.22	0.4	0.09	<0.05	0.4	14.62	1.1
165375	2.30	<0.05	12.4	3.3	1.4	13.7	3	<0.3	<0.05	0.5	0.80	0.6	0.37	0.09	0.5	7.90	0.6
165376	1.70	<0.05	10	2.9	1.1	12.3	2	<0.3	<0.05	0.4	0.77	0.6	0.32	0.08	0.5	7.64	0.6
165377	3.53	<0.05	33.2	3.2	3.7	10.4	4	<0.3	<0.05	0.3	1.90	0.9	0.70	0.17	0.7	5.17	0.4
165378	3.53	<0.05	28.9	3	2.8	13.8	3	0.3	<0.05	0.4	2.91	0.7	0.68	0.13	0.6	8.60	0.8
165379	0.87	<0.05	7.2	2.1	0.7	18.6	1	<0.3	<0.05	0.4	0.80	0.5	0.17	0.06	1	7.83	0.7
165380	1.53	<0.05	17.7	2.8	2.1	12.8	3	<0.3	<0.05	0.4	1.68	0.8	0.48	0.11	0.6	5.68	0.5
165381	1.26	<0.05	14.3	2.9	1.6	13.4	2	<0.3	<0.05	0.3	0.75	0.7	0.48	0.08	0.6	5.33	0.5
165382	0.82	<0.05	6.5	2.7	0.6	18.6	2	<0.3	<0.05	0.4	0.23	0.5	0.17	<0.05	1.2	6.54	0.6
165383	1.69	<0.05	15.2	3.7	1.3	7.7	3	<0.3	<0.05	0.4	0.69	1.0	0.43	0.16	0.3	6.51	0.6
165384	1.46	<0.05	8	5.6	0.6	17.6	2	<0.3	<0.05	0.5	0.28	0.8	0.20	0.10	0.6	8.71	0.9
165385	0.35	<0.05	0.6	3.3	0.1	21.5	<1	<0.3	<0.05	0.2	0.08	0.1	0.03	<0.05	0.1	3.17	0.4
165387	0.28	<0.05	0.2	3.9	0.1	22.3	<1	<0.3	<0.05	0.2	<0.05	<0.1	0.03	<0.05	<0.1	3.04	0.4
165388	0.11	<0.05	<0.2	2.4	<0.05	22	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	6.26	0.9
165389	0.51	<0.05	2.4	1	0.8	18.4	<1	<0.3	<0.05	0.3	0.30	0.1	<0.02	<0.05	1.2	6.57	0.5
165390	0.68	<0.05	10.1	1	1.5	10	1	<0.3	<0.05	0.2	0.77	0.1	0.10	<0.05	0.5	6.34	0.5
165391	1.09	<0.05	11	1.2	2.7	11.5	1	<0.3	<0.05	0.2	2.71	0.5	0.23	0.09	1.1	4.56	0.4
165392	0.25	0.06	3	1.4	0.8	18.5	<1	<0.3	<0.05	0.1	0.58	0.3	0.05	<0.05	0.7	2.88	0.3

SGS proposal: 19322-PR2-R2
SGS project #: 2351

Work order date: 30-Nov-23
Report date: 10-Feb-24

Version: Final

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
165393	0.72	7	6.2	56	57	6.7	0.1	10	3.40	1604	0.04	152	0.03	4.20	134	<0.01	49
165394	0.24	7	4.39	7	37	5.26	0.07	2	2.01	1036	0.08	58	0.02	3.92	91.8	<0.01	15
165395	0.43	12	5.79	38	205	6.81	0.08	4	2.61	1325	0.07	138	0.01	4.38	114	<0.01	32
165396	0.15	<5	5.24	19	15	6.43	0.03	<1	2.22	1248	0.11	139	0.04	4.89	105	<0.01	14
165397	0.19	<5	5.31	26	55	6.1	0.05	2	2.35	1221	0.10	133	0.01	4.54	102	<0.01	18
165398	0.16	6	6.13	28	133	6.34	0.05	1	2.64	1366	0.08	129	0.02	4.42	123	<0.01	22
165399	1.16	13	6.74	137	143	5.84	0.11	20	3.43	1275	0.02	199	0.02	0.97	119	<0.01	73
165209 DUP	1.27	12	8.58	207	90	5.82	0.1	18	4.35	1378	0.06	218	0.02	0.25	150	<0.01	47
165219 DUP	0.48	26	9.02	138	156	8.57	0.14	11	6.43	1740	0.01	672	<0.01	1.17	316	<0.01	49
165229 DUP	0.71	22	8.28	223	152	8.8	0.14	10	5.02	2020	0.03	531	0.17	0.31	179	<0.01	55
165239 DUP	4.57	<5	5.91	154	90	7.31	0.03	50	3.02	1546	0.04	124	0.05	0.15	29.8	0.21	140
165249 DUP	4.00	<5	8.6	302	97	6.22	<0.01	18	3.59	1504	0.02	89	0.02	0.06	39.2	0.10	202
165261 DUP	1.05	11	7.93	39	88	6.75	0.07	9	2.70	1446	0.11	113	0.04	0.09	67.8	<0.01	45
165271 DUP	2.33	6	9.48	622	157	7.3	<0.01	31	5.99	1488	0.03	842	0.04	0.12	236	<0.01	138
165281 DUP	0.49	30	11.3	69	177	7.8	0.18	7	4.13	1910	0.04	630	0.04	1.50	144	<0.01	38
165291 DUP	0.52	21	4.76	3	31	2.78	0.1	5	2.17	803	0.04	32	0.06	0.30	62.9	<0.01	6
165301 DUP	3.24	<5	5.8	241	112	7.5	0.04	38	4.54	1843	0.05	84	0.03	0.24	29.9	0.01	191
165311 DUP	0.38	23	9.44	104	199	9.89	0.15	4	4.05	1624	0.02	490	0.03	>5.00	209	<0.01	63
165321 DUP	3.60	<5	5.81	242	104	6.06	<0.01	18	3.29	1140	0.03	82	0.02	0.11	16.8	0.28	143
165329 DUP	4.87	6	6.91	190	109	7.84	0.06	48	4.02	1527	0.02	115	0.02	0.11	30.1	<0.01	199
165339 DUP	4.32	9	5.73	135	142	7.73	0.01	19	3.51	1471	0.06	75	0.04	0.14	62.9	0.26	231
165349 DUP	3.82	9	6.22	60	120	9.21	0.07	28	2.74	1585	0.04	46	0.04	0.14	44.1	<0.01	215
165359 DUP	1.97	15	6.52	134	115	6.15	0.08	20	3.77	1071	0.05	135	0.07	0.18	107	<0.01	56
165369 DUP	2.47	15	7.36	253	202	8.56	0.05	34	4.12	1559	0.03	239	0.07	0.29	77.2	<0.01	145
165379 DUP	0.95	6	10.16	112	14	8.64	0.05	15	5.11	2283	0.03	208	0.05	4.22	130	<0.01	54
165396 DUP	0.15	<5	5.13	19	16	6.25	0.03	<1	2.18	1227	0.10	134	0.04	4.78	103	<0.01	13
Duplicates																	
*Rep 165241	4.72	<5	6.33	171	98	8.4	0.02	47	2.71	1885	0.06	134	0.05	0.22	18.2	0.15	192
*Rep 165300	3.66	17	7.99	188	104	7.45	0.12	38	3.79	1691	0.02	73	0.02	0.22	66.7	0.01	152
*Rep 165339 DUP	4.27	9	5.64	134	140	7.6	0.01	18	3.45	1450	0.06	75	0.04	0.14	62.4	0.27	229
*Rep 165345	3.14	10	6.79	94	132	8.25	0.05	24	3.16	1570	0.12	77	0.03	0.13	39.5	<0.01	151
*Rep 165374	2.53	13	13.33	475	23	9.49	0.09	32	8.21	3111	0.03	307	0.04	1.74	150	<0.01	136
*Rep 165396 DUP	0.15	<5	5.12	19	16	6.21	0.03	<1	2.17	1224	0.10	133	0.03	4.77	102	<0.01	13
*Rep 165249 DUP	3.96	<5	8.59	301	95	6.22	<0.01	18	3.56	1506	0.02	89	0.02	0.06	39.1	0.10	201
*Rep 165271 DUP	2.35	6	9.52	626	157	7.35	0.01	31	6.05	1503	0.02	850	0.04	0.13	237	<0.01	139
*Rep 165283	1.08	20	9.68	177	176	7.71	0.1	14	4.10	1693	0.02	477	0.09	0.95	165	<0.01	63
QA/QC																	
Blank	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Blank	<0.01	<5	<0.01	<1	1	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Blank	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Blank	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Blank	<0.01	<5	<0.01	<1	1	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Certified standards																	
*Std OREAS 261		1	169	1.19	50	64.4	3.82	0.31	22.00	1	474.00	0	75.00	0.04	0.11	17.10	<0.01
*Std OREAS 261	1.30	162	1.16	48	64	3.64	0.29	21	0.66	466	0.08	73	0.04	0.11	16.7	<0.01	21
*Std OREAS 502c	2.02	420	1.08	67	7766	4.46	1.12	31	1.24	384	0.18	35	0.10	0.83	65.3	0.36	114
*Std OREAS 601b	0.62	670	0.56	25	1019	1.98	0.25	7	0.04	194	0.06	7	0.02	0.87	32.8	0.03	4
*Std OREAS 601c	0.71	432	0.81	15	1202	2.01	0.27	8	0.09	219	0.06	6	0.03	0.93	37.5	0.01	5
*Std OREAS 601c	0.66	530	0.78	15	1176	1.9	0.26	8	0.09	213	0.05	7	0.02	0.91	36.7	0.01	4
*Std OREAS 607b	0.62	430	0.85	15	561	1.6	0.26	8	0.08	238	0.06	5	0.03	0.48	33.9	0.01	3
*Std OREAS 610	0.90	129	0.12	35	>10000	2.35	0.23	9	0.11	68	0.04	25	0.03	2.68	40.7	<0.01	11
*Std OREAS 905	0.85	253	0.33	16	1572	3.47	0.35	5	0.16	351	0.09	9	0.02	0.06	12.5	0.02	6
*Std OREAS 235	2.40	92	0.19	105	25	3.36	0.99	33	1.29	221	0.07	59	0.05	0.08	14.8	0.15	68
*Std OREAS 261	1.32	166	1.17	44	65	3.68	0.28	22	0.67	484	0.08	77	0.04	0.11	16.9	<0.01	22
*Std OREAS 601b	0.62	656	0.58	27	1053	2.02	0.24	8	0.04	202	0.06	7	0.02	0.80	33.2	0.02	4

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SGS

Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
165393	39	12.9	0.64	444	0.3	0.2	0.09	13.99	35.1	0.14	2.8	<0.1	0.34	0.0	0.09	6	0.09
165394	28	22.6	0.74	235	0.1	0.2	0.08	20.38	26.4	0.09	0.9	<0.1	0.56	0.0	0.06	9.3	0.08
165395	23	1.3	1.55	490	0.1	0.0	0.04	4.11	43.3	0.06	1.5	<0.1	0.07	<0.01	0.04	1.6	0.05
165396	13	1.0	0.61	587	<0.1	0.0	0.04	3.69	43.1	<0.05	0.5	<0.1	0.06	<0.01	<0.02	1.4	0.04
165397	12	0.9	1.44	520	<0.1	0.0	0.03	3.63	41.7	<0.05	0.8	<0.1	<0.05	<0.01	0.02	1.3	0.04
165398	14	1.1	1.77	459	<0.1	0.0	0.04	4.07	42.8	0.05	0.7	<0.1	<0.05	<0.01	0.03	1.6	0.06
165399	31	2.8	2.62	388	0.3	0.0	0.03	8.83	40.9	0.25	5.3	<0.1	0.06	<0.01	0.05	3.3	0.05
165209 DUP	39	0.5	0.04	325	0.2	<0.02	0.06	1.42	45.4	0.24	2.7	<0.1	<0.05	<0.01	0.04	0.4	0.05
165219 DUP	35	2.3	0.45	1066	0.3	0.1	0.09	5.04	76.7	0.14	1.6	<0.1	<0.05	<0.01	0.05	1.6	0.05
165229 DUP	33	5.6	0.14	589	0.2	<0.02	0.11	11.54	66.4	0.22	2.7	<0.1	0.11	<0.01	0.05	3.9	0.06
165239 DUP	84	2.8	0.03	<1	0.1	<0.02	0.09	8.43	47.7	0.25	8.7	0.2	0.13	<0.01	<0.02	3	0.14
165249 DUP	69	1.2	0.02	<1	0.1	<0.02	0.04	4.61	41.7	<0.05	12.0	0.2	0.11	<0.01	0.03	1.7	0.07
165261 DUP	52	<0.5	0.03	140	<0.1	<0.02	0.06	8.18	43.6	0.21	3.0	<0.1	<0.05	<0.01	0.04	2.9	0.06
165271 DUP	35	4.1	0.11	365	0.3	0.0	0.08	10.65	75.4	0.11	8.9	0.1	0.15	<0.01	0.04	3.8	0.06
165281 DUP	26	3.2	0.36	1112	0.2	<0.02	0.12	6.39	77.3	0.24	1.7	<0.1	0.08	<0.01	0.05	2	0.07
165291 DUP	12	15.4	0.07	44	0.2	0.1	<0.01	15.6	12.8	0.17	1.1	<0.1	0.32	<0.01	<0.02	6.5	0.05
165301 DUP	71	1.3	0.09	40	0.3	<0.02	0.05	4.98	40.5	0.09	10.2	0.1	<0.05	<0.01	0.04	1.9	0.06
165311 DUP	73	7.2	1.03	1181	0.3	0.1	0.21	10.03	76.4	0.11	2.0	<0.1	0.15	0.0	0.08	3.5	0.04
165321 DUP	66	2.5	0.03	<1	<0.1	<0.02	0.09	2.86	39.9	0.08	9.2	0.2	0.10	<0.01	<0.02	1	0.08
165329 DUP	75	0.5	0.03	53	0.1	<0.02	0.02	4.66	45	0.11	11.6	<0.1	<0.05	<0.01	0.04	1.7	0.09
165339 DUP	84	5.6	0.04	7	0.2	<0.02	0.05	7.68	42.4	0.11	12.7	0.2	0.20	<0.01	0.04	3.2	0.12
165349 DUP	83	<0.5	0.04	14	0.1	<0.02	0.07	6.2	47.9	0.14	13.5	<0.1	<0.05	<0.01	0.05	2.2	0.07
165359 DUP	88	5.6	0.09	172	0.2	0.1	0.06	17.77	38.5	0.26	5.5	<0.1	0.15	<0.01	0.03	7.3	0.04
165369 DUP	70	4.9	0.03	109	0.5	0.0	0.09	21.16	60.3	0.16	9.7	<0.1	0.16	<0.01	0.05	8.2	0.04
165379 DUP	35	4.5	0.65	263	0.2	0.4	0.06	8.81	63.1	0.11	3.5	<0.1	0.16	0.0	0.11	2.7	0.1
165396 DUP	14	0.9	0.54	552	<0.1	0.0	0.03	3.39	41.9	<0.05	0.5	<0.1	0.05	<0.01	0.02	1.3	0.04
Duplicates																	
*Rep 165241	326	1.3	0.36	<1	<0.1	<0.02	1.25	9.71	46.9	0.14	12.9	0.2	<0.05	<0.01	0.05	3.5	0.16
*Rep 165300	66	1.0	0.04	43	0.2	<0.02	0.09	4.84	40.6	0.15	9.3	<0.1	<0.05	<0.01	0.04	1.8	0.06
*Rep 165339 DUP	83	6.0	0.04	7	0.2	<0.02	0.05	8.05	43.3	0.11	13.1	0.2	0.19	<0.01	0.04	3.4	0.12
*Rep 165345	76	<0.5	0.07	52	<0.1	<0.02	0.07	2.83	46.3	0.16	9.8	<0.1	<0.05	<0.01	0.05	1	0.04
*Rep 165374	70	3.7	0.21	292	0.3	0.8	0.07	13.43	59.1	0.22	8.7	<0.1	0.13	<0.01	0.15	4.6	0.14
*Rep 165396 DUP	13	1.0	0.50	583	<0.1	0.0	0.03	3.56	41.6	<0.05	0.5	<0.1	<0.05	<0.01	<0.02	1.3	0.04
*Rep 165249 DUP	69	1.0	0.01	<1	0.1	<0.02	0.04	4.63	42	<0.05	12.0	0.2	0.10	<0.01	0.03	1.7	0.07
*Rep 165271 DUP	35	4.1	0.11	366	0.3	0.0	0.08	10.52	78.9	0.11	9.0	0.1	0.13	<0.01	0.05	3.8	0.06
*Rep 165283	32	3.8	0.28	752	0.2	<0.02	0.1	7.05	63.8	0.13	3.8	<0.1	0.10	<0.01	0.05	2.4	0.06
QA/QC																	
Blank	<1	<0.5	0.01	1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01
Blank	<1	<0.5	<0.01	2	<0.1	<0.02	<0.01	<0.05	0.1	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01
Blank	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01
Blank	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01
Blank	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01
Certified standards																	
*Std OREAS 261	22	128.0	13.50	0.19	18	1.2	0.56	0.26	54.99	32.90	2.8	4.7	<0.1	0.4	0.06	0.03	27.7
*Std OREAS 261	125	15.5	0.19	17	1	0.6	0.26	52.52	29.7	2.66	4.3	<0.1	0.35	0.1	0.03	25	0.13
*Std OREAS 502c	98	9.2	0.82	60	0.5	0.7	0.35	60.05	12.7	9.11	8.4	0.2	0.42	0.1	0.06	29.3	0.22
*Std OREAS 601b	266	41.1	48.16	263	0.4	18.0	1.96	39.41	2.5	1.16	4.0	<0.1	1.07	0.2	0.42	20.7	0.03
*Std OREAS 601c	393	37.0	50.24	381	0.6	20.9	2.59	36.86	4.5	1.24	3.9	<0.1	0.98	0.2	0.50	18.6	0.03
*Std OREAS 601c	380	36.6	49.00	347	0.5	21.2	2.66	36.83	4.3	1.23	3.7	<0.1	0.91	0.2	0.52	18	0.03
*Std OREAS 607b	633	38.9	5.79	159	0.6	12.9	2.97	40.01	2.1	1.37	3.2	<0.1	0.92	0.1	0.36	21.3	0.02
*Std OREAS 610	1782	11.5	48.71	2712	0.3	220.0	11.77	14.41	7.6	0.74	6.8	0.7	0.33	0.7	3.83	7.2	0.03
*Std OREAS 905	64	50.8	0.51	31	1	5.7	0.35	80.96	13.6	1.35	6.1	<0.1	1.18	0.0	0.61	41.3	0.03
*Std OREAS 235	76	28.7	0.12	349	1.2	0.3	0.03	57.3	13	6.88	8.6	<0.1	0.81	<0.01	0.02	29.3	0.11
*Std OREAS 261	128	15.5	0.20	19	1.1	0.6	0.24	57.92	31.6	2.71	4.7	<0.1	0.36	0.1	0.03	28.5	0.14
*Std OREAS 601b	274	40.6	50.28	271	0.4	18.5	2	40.51	2.4	1.11	3.9	<0.1	1.07	0.2	0.41	20	0.03

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Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
165393	1.69	<0.05	9.2	1.6	2.1	13.2	2	<0.3	<0.05	0.3	1.78	0.9	0.31	0.16	0.7	7.03	0.6
165394	1.80	<0.05	10.5	1.5	2.2	8.5	1	<0.3	<0.05	0.2	0.90	1.6	0.48	0.26	0.5	5.26	0.5
165395	0.21	<0.05	3.8	2.3	0.7	20.4	1	<0.3	<0.05	0.1	0.40	<0.1	0.06	<0.05	0.6	2.09	0.3
165396	0.19	<0.05	4.1	0.6	0.8	21.5	1	<0.3	<0.05	0.1	0.48	<0.1	0.02	<0.05	1	2.22	0.3
165397	0.35	<0.05	3.8	0.8	0.9	20.1	1	<0.3	<0.05	0.1	0.62	<0.1	<0.02	<0.05	1	1.83	0.3
165398	0.19	<0.05	4	1.2	1.0	21.6	2	<0.3	<0.05	0.1	0.52	<0.1	0.04	<0.05	1.1	2.62	0.4
165399	0.63	<0.05	1.6	2.7	0.5	16.3	<1	<0.3	<0.05	0.2	0.17	0.2	0.04	<0.05	0.6	4.55	0.4
165209 DUP	0.30	0.07	0.9	3	0.4	19.5	<1	<0.3	<0.05	0.1	<0.05	0.2	<0.02	<0.05	0.1	3.60	0.3
165219 DUP	0.56	<0.05	3.2	4.3	1.8	16.8	<1	<0.3	<0.05	0.2	0.14	0.2	0.03	<0.05	1.5	4.70	0.4
165229 DUP	0.64	<0.05	1.4	4.8	0.9	17.3	<1	<0.3	<0.05	0.3	<0.05	0.2	0.03	<0.05	<0.1	5.20	0.4
165239 DUP	0.15	0.12	1	1.2	<0.05	12.9	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	10.43	1
165249 DUP	0.13	0.10	<0.2	<0.2	<0.05	23.5	<1	<0.3	<0.05	0.2	<0.05	0.3	<0.02	<0.05	<0.1	5.06	0.5
165261 DUP	0.14	<0.05	0.6	1.7	0.2	16.1	<1	<0.3	<0.05	0.2	<0.05	0.2	<0.02	<0.05	<0.1	3.83	0.4
165271 DUP	0.37	<0.05	0.9	0.5	6.6	17.1	<1	<0.3	<0.05	0.3	<0.05	0.3	<0.02	<0.05	<0.1	5.15	0.4
165281 DUP	0.47	<0.05	2.7	5.8	1.9	15.3	<1	<0.3	<0.05	0.3	0.05	0.3	0.03	<0.05	0.8	5.84	0.5
165291 DUP	0.88	<0.05	1.3	2.4	0.2	4	<1	<0.3	<0.05	0.3	<0.05	1.6	0.03	0.34	0.1	4.47	0.3
165301 DUP	0.14	<0.05	0.3	1.5	<0.05	28	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	0.2	3.91	0.4
165311 DUP	0.63	0.05	6.9	5	1.7	15.7	2	<0.3	<0.05	0.3	0.46	0.3	0.34	<0.05	0.7	4.23	0.3
165321 DUP	0.13	0.12	0.2	<0.2	<0.05	8	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	6.53	0.6
165329 DUP	0.13	<0.05	<0.2	1.4	<0.05	23.8	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	5.93	0.6
165339 DUP	0.24	0.11	1.1	0.4	0.1	31.4	<1	<0.3	<0.05	0.3	<0.05	0.3	<0.02	<0.05	<0.1	9.38	0.9
165349 DUP	0.12	<0.05	0.4	2	0.1	26.6	<1	<0.3	<0.05	0.2	<0.05	0.1	<0.02	<0.05	<0.1	4.37	0.5
165359 DUP	0.63	<0.05	1.1	1.9	0.3	11.3	<1	<0.3	<0.05	0.2	<0.05	0.9	0.02	0.11	<0.1	3.51	0.3
165369 DUP	0.68	<0.05	1	1.6	0.2	21.1	<1	<0.3	<0.05	0.3	<0.05	0.5	<0.02	0.06	<0.1	4.37	0.3
165379 DUP	1.10	<0.05	9.1	1.6	0.8	17.9	2	<0.3	<0.05	0.4	0.95	0.4	0.18	0.05	1	7.42	0.7
165396 DUP	0.19	<0.05	4	0.6	0.8	20.8	1	<0.3	<0.05	0.1	0.46	<0.1	0.02	<0.05	1	1.96	0.3
Duplicates																	
*Rep 165241	0.15	0.13	36.1	0.6	<0.05	21.3	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	10.81	1.1
*Rep 165300	0.14	<0.05	0.3	3.4	<0.05	19.1	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	0.3	3.65	0.4
*Rep 165339 DUP	0.25	0.10	1	0.4	0.1	32	<1	<0.3	<0.05	0.3	<0.05	0.3	<0.02	<0.05	<0.1	9.75	0.9
*Rep 165345	0.12	<0.05	0.4	1.5	0.1	28.3	<1	<0.3	<0.05	0.1	<0.05	0.1	<0.02	<0.05	<0.1	2.44	0.3
*Rep 165374	0.77	<0.05	4.7	2.6	0.4	20.7	1	<0.3	<0.05	0.7	0.21	0.4	0.09	<0.05	0.9	14.75	1
*Rep 165396 DUP	0.20	<0.05	3.8	0.6	0.8	21.5	1	<0.3	<0.05	0.1	0.44	<0.1	0.02	<0.05	1.1	2.00	0.3
*Rep 165249 DUP	0.14	0.07	<0.2	<0.2	<0.05	23.3	<1	<0.3	<0.05	0.2	<0.05	0.2	<0.02	<0.05	<0.1	5.08	0.5
*Rep 165271 DUP	0.37	<0.05	0.9	0.5	6.6	16.9	<1	<0.3	<0.05	0.3	<0.05	0.3	<0.02	<0.05	<0.1	5.21	0.4
*Rep 165283	0.45	<0.05	1.3	3.3	1.0	17.2	<1	<0.3	<0.05	0.3	0.05	0.3	0.02	<0.05	0.3	5.59	0.4
QA/QC																	
Blank	<0.05	<0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Blank	0.05	<0.05	<0.2	<0.2	0.1	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Blank	<0.05	<0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Blank	<0.05	<0.05	<0.2	<0.2	<0.05	0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Blank	<0.05	<0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Certified standards																	
*Std OREAS 261	0	0.46	<0.05	32.8	19.2	2.4	3.3	<1	0.50	<0.05	0.47	0.1	10.10	0.27	1.18	0.10	11.39
*Std OREAS 261	0	0.06	32.5	18.6	2.1	3.2	<1	0.5	<0.05	0.5	0.09	10.3	0.27	1.20	0.3	11.42	0.9
*Std OREAS 502c	236	1.82	10.4	123	4.3	7.6	3	2.8	<0.05	0.6	0.43	16.8	0.65	4.23	3.6	17.17	1.5
*Std OREAS 601b	4.59	1.51	244	12.5	16.8	0.9	9	1.2	<0.05	0.3	13.42	7.1	1.09	2.23	1.9	5.53	0.2
*Std OREAS 601c	3.25	0.55	245	12.2	28.7	1.2	7	1.4	<0.05	0.3	6.84	5.8	1.16	1.92	1.1	5.04	0.2
*Std OREAS 601c	3.13	0.48	238	12	27.3	1	8	1.4	<0.05	0.3	7.12	5.9	1.18	1.96	1.1	5.19	0.2
*Std OREAS 607b	2.88	0.52	1648	13.5	9.3	0.9	3	1	<0.05	0.3	2.21	6.3	0.41	2.10	0.5	5.78	0.2
*Std OREAS 610	4.83	0.21	528	8.2	245.0	0.7	26	24.7	<0.05	0.2	43.79	3.1	1.51	1.04	3.4	3.06	0.2
*Std OREAS 905	2.78	0.62	15.8	20.1	1.2	1.9	2	1.3	<0.05	0.4	<0.05	8.3	0.12	2.21	0.6	7.48	0.3
*Std OREAS 235	0.57	0.43	8.7	91.4	173.0	6.1	<1	1.2	<0.05	0.4	<0.05	12.5	0.59	1.43	0.4	9.00	0.8
*Std OREAS 261	0.44	<0.05	34.7	18.2	2.2	3.3	<1	0.5	<0.05	0.5	0.08	11.2	0.28	1.32	0.1	11.37	1
*Std OREAS 601b	4.64	1.13	240	11.8	17.5	1.1	9	1.2	<0.05	0.3	12.71	7.0	1.08	2.32	1.5	5.14	0.2

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

SGS proposal: 19322-PR3-R2
SGS project #: 2348

Work order date: 6-Nov-23
Report date: 14-Mar-24
Sample receipt date: Nov-23
Version: Final

Customer details

Name:	Hope bay (Patch 7)
Address:	SRK

Project reference: Hope bay (Patch 7)

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 1

Report Distribution

Name	Email
Kyle Jang	

Special notes:

For Assay there is 26 Duplicate

CRMs updated 9 Apr 24
Fizz tes for HBM-23-123-SRK-WR-50 DUP updated 9 Apr 24

ICP data for S revised 16 May 2024.

HBM-23-097A-SRK-WR-224 - total S -(Leco) revised 10 Jun 24)

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ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

SGS proposal: 19322-PR3-R2
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Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Note: Revised data highlighted in orange.

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
Sample ID																	
HBM-23-123-SRK-WR-1	4.00	<5	5.58	910	197	8.56	<0.01	7	4.75	1319	0.02	402	0.05	0.14	79.5	0.60	242
HBM-23-123-SRK-WR-2	3.77	<5	6.59	850	134	9.79	<0.01	14	6.55	1665	0.02	511	0.05	0.35	132	0.02	266
HBM-23-123-SRK-WR-3	3.06	<5	8.22	1014	119	8.61	0.01	31	6.20	1703	0.02	621	0.04	0.43	177	<0.01	187
HBM-23-123-SRK-WR-4	1.38	11	9.48	348	143	8.46	0.08	18	5.20	1824	0.04	615	0.04	0.59	165	<0.01	94
HBM-23-123-SRK-WR-5	1.48	9	10.05	391	148	7.44	0.06	20	5.60	1934	0.04	645	0.03	0.55	143	<0.01	97
HBM-23-123-SRK-WR-6	1.54	10	8.21	406	150	8.81	0.07	20	5.76	1882	0.03	637	0.03	0.27	145	<0.01	109
HBM-23-123-SRK-WR-7	1.13	9	7.25	340	112	8.66	0.07	15	6.44	1687	0.03	604	0.02	0.25	126	<0.01	86
HBM-23-123-SRK-WR-8	1.11	11	7.38	402	97	8.79	0.06	13	6.98	1608	0.03	674	0.03	0.19	137	<0.01	88
HBM-23-123-SRK-WR-9	1.67	8	7.28	568	140	8.76	0.06	23	6.97	1642	0.03	690	0.04	0.13	114	<0.01	116
HBM-23-123-SRK-WR-10	0.87	9	7.94	294	142	8.52	0.07	11	6.34	1756	0.04	666	0.04	0.22	132	<0.01	67
HBM-23-123-SRK-WR-10 DUP	0.80	10	7.9	270	145	8.42	0.07	11	6.18	1765	0.04	651	0.04	0.21	130	<0.01	62
HBM-23-123-SRK-WR-11	0.81	9	7.92	299	154	8.95	0.07	11	5.96	2025	0.04	674	0.04	0.34	140	<0.01	76
HBM-23-123-SRK-WR-12	1.79	6	7.23	547	154	9.19	0.04	23	6.25	1868	0.03	664	0.04	0.19	156	<0.01	139
HBM-23-123-SRK-WR-13	2.66	<5	7.19	832	146	9.27	0.03	38	6.55	1713	0.02	711	0.04	0.17	164	<0.01	176
HBM-23-123-SRK-WR-14	1.82	9	7.55	594	141	8.81	0.05	29	6.40	1662	0.03	657	0.04	0.15	149	<0.01	121
HBM-23-123-SRK-WR-15	1.48	7	8.74	368	139	7.24	0.07	23	5.70	1611	0.04	559	0.04	0.34	111	<0.01	87
HBM-23-123-SRK-WR-16	1.82	12	5.75	224	347	7.72	0.09	29	4.02	1194	0.04	247	0.07	0.65	92.7	<0.01	117
HBM-23-123-SRK-WR-17	1.33	12	7.82	259	249	6.71	0.11	18	4.78	1501	0.05	400	0.05	0.38	105	<0.01	78
HBM-23-123-SRK-WR-18	0.65	10	6.43	162	191	7.91	0.08	8	5.25	1527	0.04	497	0.04	0.68	108	<0.01	42
HBM-23-123-SRK-WR-19	0.98	11	7.42	320	159	8.78	0.07	14	6.37	1637	0.04	674	0.04	0.30	117	<0.01	74
HBM-23-123-SRK-WR-20	1.04	10	6.86	365	136	8.89	0.07	14	7.24	1569	0.05	633	0.04	0.13	108	<0.01	82
HBM-23-123-SRK-WR-20 DUP	0.99	9	6.6	353	136	8.57	0.06	13	6.97	1514	0.04	621	0.04	0.13	104	<0.01	79
HBM-23-123-SRK-WR-21	0.55	14	6.99	48	206	9.45	0.08	4	3.78	1757	0.08	153	0.08	0.44	95.2	<0.01	50
HBM-23-123-SRK-WR-22	0.98	11	6.88	375	155	8.85	0.07	13	6.44	1582	0.05	591	0.04	0.20	115	<0.01	73
HBM-23-123-SRK-WR-23	0.47	18	6.02	33	266	9.14	0.12	5	3.67	1537	0.07	142	0.08	1.03	86	<0.01	41
HBM-23-123-SRK-WR-24	0.83	14	7.6	46	240	7.74	0.15	11	3.44	1509	0.06	174	0.08	0.80	82.8	<0.01	52
HBM-23-123-SRK-WR-25	0.69	6	7.7	250	162	8.51	0.07	8	5.67	1547	0.06	546	0.04	0.20	96.3	<0.01	65
HBM-23-123-SRK-WR-26	0.93	6	6.97	388	173	9.1	0.06	12	6.26	1625	0.05	644	0.04	0.22	98.7	<0.01	80
HBM-23-123-SRK-WR-27	0.54	10	7.35	213	157	8.45	0.07	6	6.88	1581	0.05	661	0.04	0.25	138	<0.01	55
HBM-23-123-SRK-WR-28	2.94	<5	6.44	204	191	9.96	0.03	26	4.02	1571	0.03	136	0.08	0.41	94.6	0.01	269
HBM-23-123-SRK-WR-29	2.91	5	7.43	855	149	8.85	<0.01	23	7.08	1798	0.02	667	0.05	0.17	162	0.01	198
HBM-23-123-SRK-WR-30	3.68	5	6.12	877	141	9.35	<0.01	45	6.44	1760	0.03	481	0.06	0.29	102	0.02	206
HBM-23-123-SRK-WR-30 DUP	3.69	6	6.4	933	142	9.42	<0.01	42	6.62	1833	0.03	494	0.06	0.29	106	0.02	209
HBM-23-123-SRK-WR-31	1.89	8	0.28	38	71	3.96	<0.01	20	1.67	288	0.09	69	0.07	0.22	8.4	<0.01	61
HBM-23-123-SRK-WR-32	3.68	<5	3.69	680	132	8.2	0.02	32	5.73	1207	0.04	445	0.06	0.20	29.8	0.04	195
HBM-23-123-SRK-WR-33	2.75	276	5.34	759	148	7.37	0.02	12	5.53	1265	0.05	481	0.05	0.25	129	0.05	175
HBM-23-123-SRK-WR-34	2.35	8	7.59	727	139	8.52	0.04	34	7.26	1566	0.02	700	0.04	0.42	144	<0.01	152
HBM-23-123-SRK-WR-35	3.13	8	7.56	927	123	9.15	<0.01	22	6.86	1835	0.01	670	0.04	0.20	171	<0.01	206
HBM-23-123-SRK-WR-36	2.96	8	6.98	417	168	9.28	0.02	19	5.31	1555	0.03	306	0.06	0.25	163	0.02	238
HBM-23-123-SRK-WR-37	4.24	7	6.79	583	213	10.66	0.03	17	4.79	1654	0.04	287	0.08	0.19	120	0.45	305
HBM-23-123-SRK-WR-38	4.13	208	7.99	317	216	10.28	0.02	19	4.31	1698	0.04	214	0.07	0.26	150	0.55	308
HBM-23-123-SRK-WR-39	4.29	10	8.21	300	251	9.85	0.01	18	4.60	1682	0.02	179	0.07	0.19	217	0.31	305
HBM-23-123-SRK-WR-40	4.81	7	6.18	263	214	10.74	0.02	24	5.73	1613	0.02	170	0.08	0.20	180	0.12	318
HBM-23-123-SRK-WR-40 DUP	4.77	7	6.24	262	208	10.64	0.02	23	5.71	1605	0.02	168	0.08	0.20	185	0.12	316
HBM-23-123-SRK-WR-41	1.06	11	10.25	202	54	7.42	<0.01	6	4.66	2510	0.05	100	0.08	0.12	243	<0.01	121
HBM-23-123-SRK-WR-42	4.22	<5	5.24	133	978	11.5	<0.01	21	5.58	1867	0.03	151	0.08	0.32	55.8	0.02	311
HBM-23-123-SRK-WR-43	4.48	<5	4.37	295	302	10.32	<0.01	17	6.53	1668	0.02	187	0.07	0.20	34.9	0.02	326
HBM-23-123-SRK-WR-44	2.70	6	7.59	323	277	8.85	<0.01	11	5.58	2343	0.04	178	0.06	0.38	120	0.02	208
HBM-23-123-SRK-WR-45	4.28	<5	5.05	615	310	9.79	<0.01	16	7.10	1667	0.02	269	0.06	0.23	57.4	0.03	319
HBM-23-123-SRK-WR-46	3.18	<5	7.36	682	233	9.32	<0.01	25	5.91	1490	0.02	343	0.05	0.45	146	0.02	260
HBM-23-123-SRK-WR-47	2.47	13	7.95	985	183	7.74	0.04	30	6.41	1475	0.01	437	0.05	0.25	154	<0.01	174
HBM-23-123-SRK-WR-48	2.87	6	8.56	1157	212	8.47	0.02	23	6.55	1431	0.01	440	0.04	0.20	168	0.01	216
HBM-23-123-SRK-WR-49	3.35	5	7.61	1413	261	8.91	<0.01	9	7.39	1548	0.01	555	0.04	0.18	184	0.02	248
HBM-23-123-SRK-WR-50	4.22	<5	6.11	629	213	9.83	<0.01	12	6.70	1615	0.02	283	0.06	0.19	111	0.03	286
HBM-23-123-SRK-WR-50 DUP	4.18	<5	6.27	627	214	10.13	<0.01	13	6.85	1647	0.02	285	0.06	0.20	104	0.03	292
HBM-23-123-SRK-WR-51	4.61	<5	7.34	564	174	9.35	<0.01	12	4.92	1854	0.02	277	0.06	0.10	117	0.03	278
HBM-23-123-SRK-WR-52	4.95	<5	8.95	341	218	9.71	<0.01	14	4.45	1460	0.02	217	0.07	0.20	185	0.03	314
HBM-23-123-SRK-WR-53	4.99	<5	6.24	71	184	10.89	<0.01	20	3.84	1170	0.03	90	0.10	0.24	144	0.04	335
HBM-23-123-SRK-WR-54	4.45	34	6.96	84	202	10.22	0.03	16	3.69	1376	0.04	110	0.10	0.21	170	0.13	340
HBM-23-123-SRK-WR-55	5.24	<5	6.75	96	297	11.1	<0.01	23	4.49	1616	0.03	130	0.10	0.26	94.2	0.02	327
HBM-23-123-SRK-WR-56	4.98	<5	8.17	425	283	9.87	<0.01	21	4.99	1576	0.02	249	0.08	0.18	178	0.02	312
HBM-23-123-SRK-WR-57	4.11	6	5.57	80	179	10.56	0.02	31	4.04	1699	0.04	91	0.11	0.31	111	0.02	259
HBM-23-123-SRK-WR-58	2.27	7	5.91	4	44	9.1	0.05	21	3.00	1534	0.06	42	0.14	1.14	92.8	0.03	170

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SGS

Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
Sample ID																	
HBM-23-123-SRK-WR-1	60	9.1	0.04	1	0.5	<0.02	0.05	16.21	63.2	0.27	13.9	0.2	0.38	<0.01	0.05	5.7	0.09
HBM-23-123-SRK-WR-2	80	4.8	0.02	3	0.4	<0.02	0.1	10.64	78.1	0.17	14.2	0.2	0.18	<0.01	0.06	3.7	0.06
HBM-23-123-SRK-WR-3	61	2.9	0.11	257	0.4	<0.02	0.1	7.76	82.1	0.16	10.8	0.1	0.16	<0.01	0.06	2.5	0.07
HBM-23-123-SRK-WR-4	35	2.2	0.16	756	0.4	<0.02	0.1	6.59	77.3	0.33	4.8	<0.1	0.08	0.0	0.05	2	0.07
HBM-23-123-SRK-WR-5	27	2.2	0.13	778	0.4	<0.02	0.1	5.43	86.2	0.26	5.2	<0.1	0.12	0.0	0.06	1.6	0.07
HBM-23-123-SRK-WR-6	30	2.3	0.09	748	0.3	<0.02	0.08	5.26	81.2	0.29	5.6	<0.1	0.10	<0.01	0.05	1.6	0.07
HBM-23-123-SRK-WR-7	29	2.1	0.12	673	0.3	<0.02	0.1	5.29	73.1	0.29	4.3	<0.1	0.07	<0.01	0.05	1.6	0.07
HBM-23-123-SRK-WR-8	34	2.2	0.03	776	0.3	<0.02	0.11	5.77	81.7	0.26	4.2	<0.1	0.09	<0.01	0.05	1.8	0.06
HBM-23-123-SRK-WR-9	29	2.1	0.02	674	0.3	<0.02	0.09	5.19	81.1	0.29	6.1	<0.1	0.10	<0.01	0.06	1.7	0.07
HBM-23-123-SRK-WR-10	24	2.3	0.03	553	0.2	<0.02	0.1	5.01	79.9	0.26	3.1	<0.1	0.08	<0.01	0.06	1.5	0.07
HBM-23-123-SRK-WR-10 DUP	23	2.3	0.03	564	0.2	<0.02	0.1	4.68	79.3	0.26	2.9	<0.1	0.07	<0.01	0.06	1.4	0.09
HBM-23-123-SRK-WR-11	23	2.5	0.09	370	0.3	<0.02	0.1	5.85	83.7	0.30	3.5	<0.1	0.10	<0.01	0.05	1.8	0.07
HBM-23-123-SRK-WR-12	29	3.7	0.03	234	0.3	<0.02	0.09	10.16	87.9	0.28	7.6	<0.1	0.11	<0.01	0.05	3.3	0.06
HBM-23-123-SRK-WR-13	36	3.6	0.02	46	0.3	<0.02	0.1	8.34	76.5	0.20	9.6	0.1	0.12	<0.01	0.05	2.9	0.05
HBM-23-123-SRK-WR-14	34	2.8	0.01	215	0.3	<0.02	0.11	7.99	75.9	0.24	6.8	<0.1	0.09	<0.01	0.05	2.6	0.06
HBM-23-123-SRK-WR-15	28	3.1	0.06	344	0.3	0.0	0.09	5.64	70.6	0.25	5.0	<0.1	0.11	<0.01	0.05	1.7	0.06
HBM-23-123-SRK-WR-16	51	7.8	0.15	87	0.3	0.2	0.08	15.65	53	0.36	7.5	<0.1	0.25	<0.01	0.07	5.7	0.07
HBM-23-123-SRK-WR-17	32	6.6	0.09	292	0.3	0.1	0.08	8.8	59.2	0.39	4.6	<0.1	0.26	<0.01	0.06	3.2	0.08
HBM-23-123-SRK-WR-18	36	4.6	0.17	606	0.4	0.1	0.1	5.24	71.6	0.28	2.3	<0.1	0.16	<0.01	0.06	1.8	0.06
HBM-23-123-SRK-WR-19	35	2.6	0.03	724	0.2	<0.02	0.11	5.25	79.7	0.31	3.6	<0.1	0.15	<0.01	0.05	1.6	0.06
HBM-23-123-SRK-WR-20	39	2.6	0.03	507	0.2	<0.02	0.13	5.6	76.3	0.32	4.0	<0.1	0.10	<0.01	0.05	1.8	0.06
HBM-23-123-SRK-WR-20 DUP	38	2.5	0.03	505	0.2	<0.02	0.12	5.36	75.2	0.31	3.9	<0.1	0.09	<0.01	0.05	1.8	0.06
HBM-23-123-SRK-WR-21	58	3.8	0.30	106	0.3	<0.02	0.12	11.74	54	0.33	2.0	<0.1	0.12	<0.01	0.07	3.8	0.06
HBM-23-123-SRK-WR-22	45	3.0	0.03	276	0.2	<0.02	0.13	7.82	74.3	0.26	3.7	<0.1	0.15	<0.01	0.05	2.5	0.05
HBM-23-123-SRK-WR-23	67	4.9	0.12	103	0.3	0.1	0.15	11.3	51.7	0.34	1.8	<0.1	0.16	<0.01	0.09	3.8	0.05
HBM-23-123-SRK-WR-24	36	3.5	0.18	66	0.4	0.0	0.06	11.61	51.3	0.51	2.9	<0.1	0.11	<0.01	0.07	3.1	0.1
HBM-23-123-SRK-WR-25	29	3.0	0.03	169	0.2	<0.02	0.11	5.03	78	0.30	2.7	<0.1	0.11	<0.01	0.05	1.5	0.05
HBM-23-123-SRK-WR-26	30	3.9	0.05	15	0.3	<0.02	0.1	6.62	83.9	0.28	3.8	<0.1	0.11	<0.01	0.05	2	0.05
HBM-23-123-SRK-WR-27	24	2.5	0.03	476	0.2	<0.02	0.12	4.97	80.4	0.27	2.0	<0.1	0.09	<0.01	0.04	1.6	0.05
HBM-23-123-SRK-WR-28	101	5.8	0.03	44	0.4	<0.02	0.13	21.31	55.5	0.18	14.5	0.2	0.19	<0.01	0.07	7.5	0.08
HBM-23-123-SRK-WR-29	49	4.0	0.03	40	0.4	<0.02	0.07	15.26	78.9	0.23	10.3	0.2	0.12	<0.01	0.05	5.3	0.07
HBM-23-123-SRK-WR-30	65	8.9	0.06	43	0.8	<0.02	0.05	20.48	66.6	0.60	12.4	0.1	0.26	<0.01	0.06	7.8	0.08
HBM-23-123-SRK-WR-30 DUP	65	8.2	0.07	38	0.8	<0.02	0.04	19.8	69.5	0.59	12.7	0.1	0.25	<0.01	0.07	7.5	0.08
HBM-23-123-SRK-WR-31	55	18.5	0.11	6	0.3	0.1	0.03	38.08	18.5	0.25	9.8	<0.1	0.39	<0.01	<0.02	17.9	0.04
HBM-23-123-SRK-WR-32	56	6.5	0.05	6	0.6	0.0	<0.01	24.36	56.6	0.94	13.0	0.1	0.16	<0.01	0.05	9.9	0.06
HBM-23-123-SRK-WR-33	53	7.5	0.03	56	0.4	0.0	0.07	19.62	59.8	0.51	10.3	0.1	0.21	<0.01	0.04	8.2	0.05
HBM-23-123-SRK-WR-34	39	2.9	0.12	334	0.4	<0.02	0.09	11.32	74.6	0.17	8.2	<0.1	0.15	0.0	0.06	3.9	0.09
HBM-23-123-SRK-WR-35	50	3.7	0.01	7	0.4	<0.02	0.09	13.3	74.5	0.23	11.1	0.2	0.13	<0.01	0.06	4.7	0.08
HBM-23-123-SRK-WR-36	71	4.0	0.03	151	0.4	<0.02	0.08	19.72	62.8	0.28	12.4	0.2	0.15	<0.01	0.07	7	0.1
HBM-23-123-SRK-WR-37	77	7.3	0.04	5	0.7	<0.02	0.04	22.65	67.7	1.05	16.1	0.2	0.30	<0.01	0.08	8.1	0.11
HBM-23-123-SRK-WR-38	83	7.7	0.05	3	0.8	<0.02	0.06	24.83	66.8	1.24	16.7	0.2	0.32	<0.01	0.08	9	0.12
HBM-23-123-SRK-WR-39	92	5.5	0.04	3	0.7	<0.02	0.08	20.93	59.6	0.91	16.5	0.2	0.21	<0.01	0.08	7.3	0.11
HBM-23-123-SRK-WR-40	100	5.4	0.03	2	0.7	<0.02	0.06	20.22	59.6	1.00	16.9	0.2	0.15	<0.01	0.07	6.9	0.12
HBM-23-123-SRK-WR-40 DUP	100	5.9	0.02	2	0.7	<0.02	0.06	20.19	62.1	1.06	17.4	0.2	0.19	<0.01	0.07	7.1	0.12
HBM-23-123-SRK-WR-41	36	3.0	0.01	4	0.1	<0.02	0.11	13.21	30.7	0.13	5.0	<0.1	0.09	<0.01	0.08	4.3	0.14
HBM-23-123-SRK-WR-42	95	5.0	0.05	4	0.5	0.0	0.02	19.72	84.5	0.49	17.0	0.2	0.17	<0.01	0.09	6.8	0.11
HBM-23-123-SRK-WR-43	95	5.9	0.02	2	0.6	<0.02	<0.01	18.57	62.4	0.53	16.9	0.2	0.14	<0.01	0.09	6.5	0.12
HBM-23-123-SRK-WR-44	68	3.9	0.03	9	0.3	<0.02	0.1	13.44	49.2	0.32	10.3	0.1	0.15	<0.01	0.08	4.3	0.12
HBM-23-123-SRK-WR-45	89	5.2	0.02	2	0.6	<0.02	0.03	16.27	63.6	0.64	15.5	0.2	0.19	<0.01	0.09	5.7	0.11
HBM-23-123-SRK-WR-46	58	3.7	0.03	76	0.4	<0.02	0.08	12.1	58.9	0.20	11.8	0.2	0.15	<0.01	0.07	4.2	0.07
HBM-23-123-SRK-WR-47	35	3.1	0.02	155	0.3	<0.02	0.09	14.95	65.7	0.15	8.6	<0.1	0.12	<0.01	0.06	5.2	0.08
HBM-23-123-SRK-WR-48	43	2.3	0.02	158	0.3	<0.02	0.11	12.9	66.7	0.06	10.1	0.1	0.08	<0.01	0.05	4.4	0.1
HBM-23-123-SRK-WR-49	44	3.5	0.01	49	0.4	<0.02	0.1	11.87	76	0.23	11.7	0.2	0.12	<0.01	0.06	4.2	0.08
HBM-23-123-SRK-WR-50	76	5.7	0.01	5	0.7	<0.02	0.04	14.85	65.4	0.45	14.7	0.2	0.35	<0.01	0.08	5.2	0.12
HBM-23-123-SRK-WR-50 DUP	78	5.7	0.01	5	0.8	<0.02	0.04	13.89	66.9	0.42	14.6	0.3	0.40	<0.01	0.08	5	0.11
HBM-23-123-SRK-WR-51	75	5.1	0.01	1	0.4	<0.02	0.04	17.65	59	0.19	17.2	0.2	0.32	<0.01	0.10	6.6	0.1
HBM-23-123-SRK-WR-52	97	6.8	0.03	4	0.6	0.0	0.07	16.15	62	0.36	19.0	0.2	0.30	<0.01	0.08	6.2	0.11
HBM-23-123-SRK-WR-53	109	7.9	0.02	4	0.6	0.0	0.05	21.3	57.9	0.32	22.1	0.3	0.21	<0.01	0.08	8	0.13
HBM-23-123-SRK-WR-54	112	6.9	0.06	4	0.6	0.0	0.07	20.44	57.3	0.51	20.3	0.2	0.20	<0.01	0.07	7.6	0.13
HBM-23-123-SRK-WR-55	101	6.9	0.03	2	0.6	0.0	0.03	23.97	60.5	0.26	21.2	0.3	0.14	<0.01	0.08	8.9	0.11
HBM-23-123-SRK-WR-56	89	6.4	0.03	3	0.7	<0.02	0.03	25.76	60.3	0.47	18.9	0.3	0.12	<0.01	0.08	9.4	0.13
HBM-23-123-SRK-WR-57	75	6.3	0.08	28	0.6	<0.02	0.03	25.7	53.5	0.30	19.3	0.2	0.14	<0.01	0.08	9.3	0.12
HBM-23-123-SRK-WR-58	39	3.1	0.96	79	0.4	0.0	0.03	23.63	50	0.25	10.7	<0.1	0.06	<0.01	0.06	8.8	0.12

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SGS

Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
Sample ID																	
HBM-23-123-SRK-WR-1	0.43	0.69	0.5	0.3	0.2	12.1	<1	0.6	<0.05	0.4	<0.05	0.5	<0.02	0.10	<0.1	10.72	0.8
HBM-23-123-SRK-WR-2	0.52	0.12	0.6	<0.2	0.1	28.4	<1	<0.3	<0.05	0.3	<0.05	0.3	<0.02	<0.05	<0.1	5.82	0.5
HBM-23-123-SRK-WR-3	0.52	0.10	1.1	0.5	0.5	23.5	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	0.6	7.04	0.5
HBM-23-123-SRK-WR-4	0.65	<0.05	1	2.4	2.1	17.5	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	0.5	6.42	0.5
HBM-23-123-SRK-WR-5	0.58	0.09	0.9	2.1	2.1	18.8	<1	<0.3	<0.05	0.4	<0.05	0.2	<0.02	<0.05	0.5	7.95	0.6
HBM-23-123-SRK-WR-6	0.49	<0.05	0.7	2.4	1.7	19.7	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	0.6	6.62	0.5
HBM-23-123-SRK-WR-7	0.49	<0.05	0.7	2.2	2.1	16.7	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	0.9	5.67	0.5
HBM-23-123-SRK-WR-8	0.81	0.06	0.9	2	2.6	18	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	0.5	5.23	0.4
HBM-23-123-SRK-WR-9	0.43	<0.05	0.7	1.9	2.7	18.9	<1	<0.3	<0.05	0.4	<0.05	0.2	<0.02	<0.05	0.2	7.83	0.5
HBM-23-123-SRK-WR-10	0.48	<0.05	0.7	2.5	2.2	16.9	<1	<0.3	<0.05	0.4	<0.05	0.2	<0.02	<0.05	0.2	6.51	0.5
HBM-23-123-SRK-WR-10 DUP	0.46	<0.05	0.6	2.5	2.3	16	<1	<0.3	<0.05	0.4	<0.05	0.2	<0.02	<0.05	0.2	6.78	0.5
HBM-23-123-SRK-WR-11	0.57	<0.05	0.6	2.6	1.2	17.4	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	0.1	6.86	0.5
HBM-23-123-SRK-WR-12	0.42	0.11	0.6	1.6	0.9	22.3	<1	<0.3	<0.05	0.3	<0.05	0.3	<0.02	<0.05	<0.1	5.91	0.4
HBM-23-123-SRK-WR-13	0.37	0.11	0.5	0.9	0.2	21.5	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	4.94	0.4
HBM-23-123-SRK-WR-14	0.47	<0.05	0.6	1.8	0.6	18.4	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	0.2	4.98	0.4
HBM-23-123-SRK-WR-15	0.51	0.08	0.7	2.1	1.0	17	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	0.4	6.80	0.5
HBM-23-123-SRK-WR-16	0.96	<0.05	1.1	2.8	0.4	17.1	2	<0.3	<0.05	0.4	0.07	0.6	<0.02	0.08	0.3	7.29	0.5
HBM-23-123-SRK-WR-17	0.91	0.09	1	3.4	0.9	16.5	1	<0.3	<0.05	0.4	0.07	0.6	0.02	0.07	0.3	8.22	0.6
HBM-23-123-SRK-WR-18	0.89	<0.05	1.1	2.5	2.6	14.3	<1	<0.3	<0.05	0.3	<0.05	0.4	<0.02	<0.05	0.2	6.20	0.4
HBM-23-123-SRK-WR-19	0.49	<0.05	0.8	2.4	4.2	16.3	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	0.1	5.14	0.4
HBM-23-123-SRK-WR-20	0.48	<0.05	0.7	2	2.8	15.8	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	5.39	0.4
HBM-23-123-SRK-WR-20 DUP	0.46	<0.05	0.6	2	2.6	15.5	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	5.20	0.4
HBM-23-123-SRK-WR-21	0.73	0.06	0.8	2.4	0.5	16.7	<1	<0.3	<0.05	0.4	<0.05	0.4	<0.02	<0.05	0.1	5.30	0.4
HBM-23-123-SRK-WR-22	0.47	<0.05	0.7	2.1	1.0	16	<1	<0.3	<0.05	0.3	<0.05	0.3	<0.02	<0.05	<0.1	4.90	0.4
HBM-23-123-SRK-WR-23	0.75	<0.05	1.6	3.3	0.6	14.5	1	<0.3	<0.05	0.3	<0.05	0.4	0.02	<0.05	0.3	4.59	0.4
HBM-23-123-SRK-WR-24	0.73	0.10	1.1	4.3	0.4	14.6	<1	<0.3	<0.05	0.5	<0.05	0.4	0.02	<0.05	0.2	10.50	0.7
HBM-23-123-SRK-WR-25	0.47	<0.05	0.5	2.1	0.5	17.8	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	4.67	0.3
HBM-23-123-SRK-WR-26	0.42	<0.05	0.5	1.9	0.3	18.4	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	4.85	0.4
HBM-23-123-SRK-WR-27	0.43	<0.05	0.7	2.2	2.0	15.4	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	0.1	4.57	0.4
HBM-23-123-SRK-WR-28	0.58	0.10	1	0.9	0.1	30.2	<1	<0.3	<0.05	0.4	<0.05	0.4	<0.02	<0.05	<0.1	7.20	0.6
HBM-23-123-SRK-WR-29	0.43	0.22	0.6	0.4	0.1	23.5	<1	<0.3	<0.05	0.4	<0.05	0.2	<0.02	<0.05	<0.1	7.19	0.6
HBM-23-123-SRK-WR-30	0.65	0.10	1	0.7	0.2	19.8	<1	<0.3	<0.05	0.4	<0.05	0.6	<0.02	0.08	<0.1	9.68	0.6
HBM-23-123-SRK-WR-30 DUP	0.63	<0.05	1	0.6	0.2	20	<1	<0.3	<0.05	0.4	<0.05	0.5	<0.02	0.09	<0.1	10.13	0.7
HBM-23-123-SRK-WR-31	0.90	<0.05	1.8	<0.2	0.3	6.2	<1	0.3	<0.05	0.2	0.06	1.7	<0.02	0.25	<0.1	3.85	0.3
HBM-23-123-SRK-WR-32	0.68	0.05	0.6	1.3	0.2	20.2	<1	0.4	<0.05	0.3	<0.05	0.7	<0.02	0.09	<0.1	5.82	0.5
HBM-23-123-SRK-WR-33	0.83	0.09	1	0.9	0.2	18.6	<1	<0.3	<0.05	0.3	<0.05	0.7	<0.02	0.08	0.1	5.33	0.4
HBM-23-123-SRK-WR-34	0.58	0.12	1	1.7	0.5	19.5	<1	<0.3	<0.05	0.4	<0.05	0.3	<0.02	<0.05	4.4	7.58	0.6
HBM-23-123-SRK-WR-35	0.55	<0.05	0.5	0.3	<0.05	24.1	<1	<0.3	<0.05	0.4	<0.05	0.3	<0.02	<0.05	<0.1	7.93	0.6
HBM-23-123-SRK-WR-36	0.65	0.16	0.6	0.8	0.2	25.4	<1	<0.3	<0.05	0.5	<0.05	0.4	<0.02	<0.05	0.2	10.31	0.8
HBM-23-123-SRK-WR-37	0.61	0.47	0.6	1.5	0.1	20.7	<1	0.5	<0.05	0.5	<0.05	0.4	<0.02	0.07	<0.1	11.62	0.9
HBM-23-123-SRK-WR-38	0.63	0.70	0.6	1.4	0.1	23	<1	0.7	<0.05	0.6	<0.05	0.5	<0.02	0.08	<0.1	13.52	1
HBM-23-123-SRK-WR-39	0.59	0.36	0.7	1.2	<0.05	29.8	<1	0.4	<0.05	0.5	<0.05	0.4	<0.02	0.05	<0.1	11.64	0.9
HBM-23-123-SRK-WR-40	0.57	0.20	0.6	1.2	0.1	24.2	<1	<0.3	<0.05	0.5	<0.05	0.3	<0.02	<0.05	<0.1	12.37	0.9
HBM-23-123-SRK-WR-40 DUP	0.56	0.21	0.7	1.2	0.1	25.3	<1	<0.3	<0.05	0.5	<0.05	0.3	<0.02	<0.05	<0.1	12.54	1
HBM-23-123-SRK-WR-41	0.78	0.07	0.6	<0.2	<0.05	21.2	<1	<0.3	<0.05	0.7	<0.05	0.2	<0.02	<0.05	<0.1	15.34	1
HBM-23-123-SRK-WR-42	0.71	0.09	0.5	0.3	0.1	28.5	<1	<0.3	<0.05	0.6	<0.05	0.3	<0.02	<0.05	<0.1	12.71	0.9
HBM-23-123-SRK-WR-43	0.63	0.11	0.4	0.5	0.1	40.1	<1	<0.3	<0.05	0.6	<0.05	0.2	<0.02	<0.05	<0.1	12.88	0.9
HBM-23-123-SRK-WR-44	0.84	0.10	0.6	0.3	0.1	30.6	<1	<0.3	<0.05	0.6	<0.05	0.2	<0.02	<0.05	0.1	13.45	0.9
HBM-23-123-SRK-WR-45	0.63	0.14	0.5	0.6	0.1	43.1	<1	<0.3	<0.05	0.5	<0.05	0.2	<0.02	<0.05	<0.1	11.10	0.8
HBM-23-123-SRK-WR-46	0.49	0.25	0.7	0.3	0.1	31.1	<1	<0.3	<0.05	0.4	<0.05	0.3	<0.02	<0.05	0.2	7.19	0.5
HBM-23-123-SRK-WR-47	0.45	0.11	0.6	1.1	0.2	26	<1	<0.3	<0.05	0.4	<0.05	0.3	<0.02	<0.05	0.3	7.44	0.6
HBM-23-123-SRK-WR-48	0.45	0.12	0.7	0.4	0.2	31.8	<1	<0.3	<0.05	0.4	<0.05	0.2	<0.02	<0.05	0.7	9.03	0.7
HBM-23-123-SRK-WR-49	0.45	0.13	0.6	0.2	0.1	33.3	<1	<0.3	<0.05	0.4	<0.05	0.2	<0.02	<0.05	0.3	7.60	0.6
HBM-23-123-SRK-WR-50	0.45	0.17	0.4	0.3	0.1	36.2	<1	<0.3	<0.05	0.5	<0.05	0.2	<0.02	<0.05	<0.1	11.04	0.8
HBM-23-123-SRK-WR-50 DUP	0.44	0.47	0.5	0.3	0.1	37.7	<1	<0.3	<0.05	0.5	<0.05	1.1	<0.02	<0.05	<0.1	10.99	0.8
HBM-23-123-SRK-WR-51	0.83	0.22	0.4	0.2	<0.05	25.6	<1	<0.3	<0.05	0.5	<0.05	1.3	<0.02	<0.05	<0.1	14.07	0.8
HBM-23-123-SRK-WR-52	0.63	0.22	0.6	0.3	<0.05	32.7	<1	<0.3	<0.05	0.4	<0.05	0.6	<0.02	<0.05	<0.1	11.64	0.7
HBM-23-123-SRK-WR-53	0.85	0.18	0.4	0.3	0.1	23.8	<1	<0.3	<0.05	0.6	<0.05	0.6	<0.02	<0.05	<0.1	15.23	0.9
HBM-23-123-SRK-WR-54	0.63	0.16	0.5	1.1	0.1	23	<1	0.4	<0.05	0.6	<0.05	0.6	<0.02	0.06	<0.1	15.09	0.9
HBM-23-123-SRK-WR-55	0.70	0.07	0.3	0.2	0.1	25.4	<1	<0.3	<0.05	0.6	<0.05	0.4	<0.02	<0.05	<0.1	14.77	0.9
HBM-23-123-SRK-WR-56	0.60	0.09	0.2	0.4	<0.05	35.4	<1	<0.3	<0.05	0.6	<0.05	0.3	<0.02	<0.05	<0.1	16.68	0.9
HBM-23-123-SRK-WR-57	0.89	0.05	0.4	0.7	0.1	22.9	<1	<0.3	<0.05	0.7	<0.05	0.4	<0.02	<0.05	<0.1	17.01	0.9
HBM-23-123-SRK-WR-58	0.93	<0.05	1.9	1.4	0.2	10.5	1	<0.3	<0.05	0.6	<0.05	0.5	<0.02	<0.05	0.3	14.77	0.9

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SGS proposal: 19322-PR3-R2
SGS project #: 2348

Work order date: 6-Nov-23
Report date: 14-Mar-24

Version: Final

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Note: Revised data highlighted in orange.

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
HBM-23-123-SRK-WR-59	1.90	6	7.52	224	88	8.71	0.04	19	3.50	1939	0.03	137	0.09	0.50	117	<0.01	201
HBM-23-123-SRK-WR-60	2.98	5	7.15	444	187	8.58	0.02	35	5.05	1605	0.02	195	0.06	0.19	135	<0.01	239
HBM-23-123-SRK-WR-60 DUP	2.97	5	7.17	441	187	8.55	0.02	36	5.05	1596	0.02	195	0.06	0.19	135	<0.01	237
HBM-23-123-SRK-WR-61	3.03	14	6.96	301	220	10.18	0.05	27	4.28	1934	0.02	181	0.07	0.42	128	<0.01	214
HBM-23-123-SRK-WR-62	3.77	<5	5.09	165	266	10.95	<0.01	20	4.18	2135	0.02	135	0.08	0.21	51.8	0.01	289
HBM-23-123-SRK-WR-63	3.67	<5	5.22	13	161	10.97	<0.01	19	4.08	1773	0.03	75	0.10	0.17	83.7	0.01	317
HBM-23-123-SRK-WR-64	3.82	<5	5.22	736	96	7.71	<0.01	33	6.18	1415	0.02	245	0.02	0.08	182	<0.01	201
HBM-23-123-SRK-WR-65	2.47	18	7.12	70	154	8.77	0.05	22	3.99	1656	0.02	100	0.08	0.14	134	<0.01	190
HBM-23-123-SRK-WR-66	2.52	9	8.16	625	222	8.4	0.04	28	5.08	1435	0.02	257	0.05	0.17	152	<0.01	209
HBM-23-123-SRK-WR-67	1.97	13	6.9	362	122	7.08	0.11	19	3.34	1377	0.04	247	0.02	0.13	94.6	<0.01	84
HBM-23-123-SRK-WR-68	3.46	11	6.15	217	145	8.23	0.08	39	4.63	1347	0.03	132	0.05	0.14	96.1	<0.01	133
HBM-23-123-SRK-WR-69	1.99	15	8.63	293	195	8.66	0.08	19	3.79	1806	0.03	239	0.06	0.24	115	<0.01	133
HBM-23-123-SRK-WR-70	3.47	5	7.15	635	135	8.43	0.04	40	5.24	1500	0.03	263	0.04	0.12	139	<0.01	184
HBM-23-123-SRK-WR-70 DUP	3.44	6	7.08	630	134	8.37	0.04	40	5.22	1489	0.03	262	0.04	0.11	138	<0.01	182
HBM-23-112-SRK-WR-71	3.17	47	6.65	460	277	8.11	0.22	12	2.87	1652	0.12	264	0.07	0.30	97.6	0.45	258
HBM-23-112-SRK-WR-72	2.90	52	12.39	875	191	8.25	0.36	9	2.72	2748	0.16	580	0.06	0.20	193	0.30	195
HBM-23-112-SRK-WR-73	2.77	110	10.91	773	200	7.86	0.28	13	2.63	2427	0.14	486	0.06	0.22	175	0.28	176
HBM-23-112-SRK-WR-74	2.70	438	11.14	832	218	7.27	0.21	20	3.12	2288	0.12	510	0.06	0.15	156	0.43	191
HBM-23-112-SRK-WR-75	3.61	420	8.71	630	228	10.48	0.49	19	3.88	2300	0.23	498	0.07	0.20	116	0.25	275
HBM-23-112-SRK-WR-76	2.80	85	12.31	860	197	8.01	0.37	11	2.95	2284	0.18	528	0.07	0.14	227	0.37	198
HBM-23-112-SRK-WR-77	2.70	38	9.24	797	217	7.27	0.29	13	3.26	1844	0.15	527	0.07	0.14	196	0.43	171
HBM-23-112-SRK-WR-78	2.89	26	10.8	916	197	7.81	0.3	24	3.70	2059	0.16	529	0.06	0.15	155	0.43	193
HBM-23-112-SRK-WR-79	2.79	56	13.24	696	199	7.14	0.16	13	2.85	2250	0.09	531	0.06	0.17	197	0.37	196
HBM-23-112-SRK-WR-80	2.92	87	>15.00	398	185	7.6	0.11	10	3.00	2388	0.06	540	0.06	0.14	235	0.10	222
HBM-23-112-SRK-WR-80 DUP	2.87	82	>15.00	393	185	7.44	0.11	10	2.95	2343	0.06	533	0.06	0.15	231	0.09	217
HBM-23-112-SRK-WR-81	1.96	14	8.28	358	138	6.93	0.11	25	3.03	1754	0.04	319	0.04	0.74	100	<0.01	118
HBM-23-112-SRK-WR-82	3.21	175	10.06	700	196	6.79	0.04	24	2.62	1871	0.04	443	0.06	0.21	116	0.31	205
HBM-23-112-SRK-WR-83	2.79	136	14.44	860	179	8.05	0.13	7	3.76	2377	0.07	451	0.05	0.11	182	0.22	195
HBM-23-112-SRK-WR-84	1.20	11	8.11	44	129	6.99	0.11	12	3.04	1496	0.06	123	0.07	0.47	58.7	<0.01	49
HBM-23-112-SRK-WR-85	1.25	6	8.5	58	111	7.04	0.08	13	3.06	1501	0.08	101	0.02	0.13	37.4	<0.01	63
HBM-23-112-SRK-WR-86	4.44	<5	5.22	290	144	10.21	<0.01	24	6.06	1545	0.03	234	0.08	0.27	74.4	0.02	327
HBM-23-112-SRK-WR-87	2.92	10	6.33	121	154	9.03	0.07	27	3.82	1478	0.04	140	0.10	0.30	104	<0.01	186
HBM-23-112-SRK-WR-88	2.02	15	7.7	150	198	7.7	0.11	19	3.69	1531	0.03	199	0.07	0.40	112	<0.01	100
HBM-23-086-SRK-WR-89	2.96	112	7	1078	139	8.4	0.02	25	7.02	1555	0.02	671	0.04	0.19	136	<0.01	183
HBM-23-086-SRK-WR-90	3.56	49	6.61	666	176	9.39	0.02	21	6.42	1761	0.03	453	0.06	0.20	114	0.02	245
HBM-23-086-SRK-WR-90 DUP	3.56	49	6.65	668	174	9.43	0.01	21	6.43	1770	0.03	450	0.06	0.19	115	0.02	249
HBM-23-086-SRK-WR-91	1.64	32	6.34	667	121	8.39	0.06	17	6.88	1484	0.02	686	0.03	0.39	159	<0.01	109
HBM-23-086-SRK-WR-92	3.78	49	7.88	305	42	8.23	0.02	13	4.34	1075	0.04	137	0.08	0.04	235	0.34	306
HBM-23-086-SRK-WR-93	3.11	241	7.48	419	250	8.45	0.05	16	5.06	1491	0.03	211	0.07	0.18	152	0.04	265
HBM-23-086-SRK-WR-94	0.71	12	1.83	22	92	2.96	0.09	7	1.11	384	0.06	54	0.07	0.73	43.8	<0.01	13
HBM-23-086-SRK-WR-95	2.22	13	7.09	387	151	8.4	0.07	20	4.74	1597	0.03	405	0.07	0.27	162	<0.01	148
HBM-23-086-SRK-WR-96	1.65	12	8.57	181	126	7.63	0.1	14	4.00	1534	0.04	218	0.06	0.52	122	<0.01	92
HBM-23-086-SRK-WR-97	0.34	5	3.47	232	56	8.25	0.04	5	10.74	1379	0.02	950	0.01	0.10	45.5	<0.01	35
HBM-23-086-SRK-WR-98	0.38	6	3.29	310	29	8.17	0.04	5	10.62	1360	0.02	967	<0.01	0.06	39.7	<0.01	35
HBM-23-086-SRK-WR-99	0.55	<5	3.71	441	59	8.21	0.03	8	10.44	1414	0.02	957	0.02	0.06	44.1	<0.01	45
HBM-23-086-SRK-WR-100	0.48	<5	3.31	404	26	8.66	0.03	6	11.30	1468	0.02	1009	0.01	0.06	44.5	<0.01	44
HBM-23-086-SRK-WR-100 DUP	0.48	<5	3.34	406	26	8.77	0.03	6	11.44	1487	0.02	1004	0.01	0.06	45	<0.01	45
HBM-23-086-SRK-WR-101	0.68	8	3.48	510	27	8.44	0.04	9	10.22	1369	0.02	944	0.02	0.06	52.5	<0.01	53
HBM-23-086-SRK-WR-102	0.79	7	3.48	556	28	8.05	0.04	12	9.49	1344	0.02	841	0.02	0.06	50.3	<0.01	56
HBM-23-086-SRK-WR-103	0.58	14	4.76	263	111	5.13	0.06	8	4.73	1005	0.02	454	0.02	0.50	77.4	<0.01	38
HBM-23-086-SRK-WR-104	0.56	20	3.06	54	171	3.14	0.1	7	1.46	530	0.05	133	0.06	0.86	66.4	<0.01	15
HBM-23-086-SRK-WR-105	0.53	24	1.39	5	85	2.52	0.13	6	0.73	272	0.05	24	0.06	1.09	43.3	<0.01	5
HBM-23-086-SRK-WR-106	0.60	27	0.61	6	114	2.87	0.19	7	0.43	168	0.04	35	0.04	1.75	18.2	<0.01	3
HBM-23-086-SRK-WR-107	0.96	61	1.61	118	119	3.46	0.19	9	1.05	515	0.04	103	0.05	1.17	30.1	<0.01	29
HBM-23-086-SRK-WR-108	2.86	174	13.13	837	177	8.35	0.18	10	2.84	2111	0.11	493	0.05	0.23	167	0.15	196
HBM-23-086-SRK-WR-109	2.64	100	14.27	817	176	8.01	0.28	10	2.92	2056	0.17	455	0.05	0.10	312	0.39	203
HBM-23-086-SRK-WR-110	2.49	132	13.22	641	161	6.85	0.17	16	2.54	1932	0.12	379	0.07	0.09	277	0.16	205
HBM-23-086-SRK-WR-110 DUP	2.49	134	13.32	648	166	6.87	0.17	15	2.54	1946	0.12	382	0.07	0.09	278	0.17	206
HBM-23-086-SRK-WR-111	2.30	89	>15.00	565	185	7.24	0.19	15	2.42	2227	0.11	446	0.06	0.09	241	0.18	212
HBM-23-086-SRK-WR-112	2.35	189	>15.00	499	182	7.21	0.32	18	2.36	2092	0.08	403	0.05	0.07	268	0.13	194
HBM-23-086-SRK-WR-113	2.46	197	>15.00	540	177	7.63	0.34	19	2.64	1914	0.12	404	0.05	0.08	275	0.17	200
HBM-23-086-SRK-WR-114	2.23	62	11.35	625	237	6.54	0.09	14	1.92	2110	0.06	342	0.07	0.15	150	0.77	206
HBM-23-086-SRK-WR-115	2.49	47	9.93	625	246	7.42	0.09	15	2.36	1851	0.07	415	0.07	0.15	129	0.69	214
HBM-23-086-SRK-WR-116	2.94	194	11.22	659	231	8.89	0.33	17	3.61	2150	0.15	566	0.07	0.15	208	0.47	261

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SGS

Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
HBM-23-123-SRK-WR-59	44	2.8	0.09	61	0.4	<0.02	0.04	18.2	53.9	0.17	10.4	<0.1	0.09	<0.01	0.06	6.4	0.11
HBM-23-123-SRK-WR-60	65	2.7	<0.01	46	0.4	<0.02	0.08	17.44	55.6	0.15	13.1	0.2	0.08	<0.01	0.06	6.3	0.08
HBM-23-123-SRK-WR-60 DUP	65	2.6	<0.01	47	0.4	<0.02	0.07	16.83	55.1	0.16	13.3	0.2	0.07	<0.01	0.07	6.2	0.09
HBM-23-123-SRK-WR-61	73	2.4	0.02	31	0.4	0.1	0.07	15.95	60	0.17	13.4	0.1	0.07	<0.01	0.06	5.8	0.08
HBM-23-123-SRK-WR-62	93	2.5	0.03	12	0.7	<0.02	0.03	21.46	62	0.23	18.6	0.3	0.07	<0.01	0.10	8.1	0.12
HBM-23-123-SRK-WR-63	100	3.9	0.05	5	0.6	<0.02	0.06	21.55	56.8	0.19	18.5	0.3	0.10	<0.01	0.08	8.1	0.09
HBM-23-123-SRK-WR-64	77	0.6	0.05	13	0.4	<0.02	0.06	6.06	57.8	0.23	11.5	0.3	<0.05	<0.01	0.05	2.2	0.07
HBM-23-123-SRK-WR-65	64	2.8	<0.01	22	0.4	<0.02	0.08	21.25	53.3	0.17	11.8	<0.1	0.07	<0.01	0.07	7.7	0.08
HBM-23-123-SRK-WR-66	55	1.8	0.01	108	0.4	<0.02	0.09	13.81	68.7	0.16	10.8	0.1	0.06	<0.01	0.05	5	0.06
HBM-23-123-SRK-WR-67	48	1.1	0.03	35	0.4	<0.02	0.07	4.06	60.4	0.30	5.9	<0.1	<0.05	<0.01	0.03	1.5	0.05
HBM-23-123-SRK-WR-68	62	2.0	0.04	27	0.5	<0.02	0.06	13.24	50.2	0.37	10.1	<0.1	<0.05	<0.01	0.06	4.8	0.07
HBM-23-123-SRK-WR-69	45	2.9	0.03	31	0.4	<0.02	0.1	16.98	58.7	0.21	8.4	<0.1	<0.05	<0.01	0.06	6.4	0.07
HBM-23-123-SRK-WR-70	64	2.6	0.02	102	0.5	<0.02	0.06	11.1	59.5	0.40	12.1	0.1	<0.05	<0.01	0.06	3.9	0.09
HBM-23-123-SRK-WR-70 DUP	64	2.4	0.02	101	0.5	<0.02	0.06	10.92	59.1	0.39	11.9	0.1	<0.05	<0.01	0.06	3.9	0.09
HBM-23-112-SRK-WR-71	89	11.2	0.14	29	0.6	0.0	0.12	25.25	63.8	4.69	16.8	0.2	0.30	<0.01	0.06	10.5	0.08
HBM-23-112-SRK-WR-72	64	8.4	0.08	9	0.5	<0.02	0.09	18.07	75.2	7.72	12.8	0.2	0.20	<0.01	0.05	7.7	0.06
HBM-23-112-SRK-WR-73	63	9.0	0.08	<1	0.5	0.0	0.07	21.38	64.7	6.62	12.9	0.1	0.20	<0.01	0.05	9.2	0.06
HBM-23-112-SRK-WR-74	49	11.9	0.07	<1	0.7	<0.02	0.03	31.04	69.6	5.20	13.2	0.1	0.39	<0.01	0.05	13.6	0.07
HBM-23-112-SRK-WR-75	73	11.8	0.10	11	0.8	<0.02	0.05	23.19	74.8	11.67	16.0	0.2	0.35	<0.01	0.07	9.5	0.08
HBM-23-112-SRK-WR-76	65	11.9	0.07	3	0.5	<0.02	0.06	25.96	70.4	8.23	13.8	0.2	0.36	<0.01	0.05	11.1	0.07
HBM-23-112-SRK-WR-77	66	13.6	0.07	<1	0.3	<0.02	0.04	25.05	66.7	6.76	13.8	0.1	0.35	<0.01	0.04	10.8	0.07
HBM-23-112-SRK-WR-78	70	11.2	0.05	<1	0.7	<0.02	0.05	26.09	68.8	6.60	13.5	0.2	0.31	<0.01	0.06	11.1	0.06
HBM-23-112-SRK-WR-79	57	9.8	0.05	1	0.6	<0.02	0.05	26.24	72.6	3.62	13.3	0.2	0.25	<0.01	0.04	10.7	0.08
HBM-23-112-SRK-WR-80	44	6.9	0.02	3	0.8	<0.02	0.07	19.53	75	2.37	12.9	0.2	0.15	<0.01	0.06	8.2	0.09
HBM-23-112-SRK-WR-80 DUP	43	6.6	0.03	3	0.8	<0.02	0.07	19.11	73.4	2.33	12.9	0.2	0.14	<0.01	0.06	7.7	0.09
HBM-23-112-SRK-WR-81	51	3.8	0.28	142	0.4	<0.02	0.06	10.64	58	0.45	7.4	<0.1	0.07	0.0	0.04	4.4	0.11
HBM-23-112-SRK-WR-82	92	8.9	0.06	21	0.5	<0.02	0.04	25.47	71.7	0.36	13.4	0.1	0.24	<0.01	0.05	10.6	0.1
HBM-23-112-SRK-WR-83	62	7.4	0.03	2	0.6	<0.02	0.03	19.07	71.9	2.31	12.2	0.2	0.17	<0.01	0.05	7.5	0.08
HBM-23-112-SRK-WR-84	48	1.8	0.06	202	0.3	<0.02	0.06	6.94	41.9	0.95	3.0	<0.1	<0.05	<0.01	0.04	2.3	0.08
HBM-23-112-SRK-WR-85	50	0.7	0.02	53	0.2	<0.02	0.07	2.08	40.3	0.62	3.5	<0.1	<0.05	<0.01	0.05	0.6	0.07
HBM-23-112-SRK-WR-86	93	7.1	0.08	19	0.7	<0.02	0.03	25.21	59.9	0.52	18.2	0.3	0.08	<0.01	0.07	9.4	0.11
HBM-23-112-SRK-WR-87	64	4.8	0.04	55	0.6	<0.02	0.05	27.13	53.3	0.42	12.9	<0.1	0.11	<0.01	0.08	10.3	0.09
HBM-23-112-SRK-WR-88	49	5.2	0.04	128	0.3	0.0	0.07	15.58	55.2	0.32	6.9	<0.1	0.07	<0.01	0.06	5.7	0.07
HBM-23-086-SRK-WR-89	53	3.6	0.05	101	0.4	<0.02	0.08	11.46	80.9	0.25	11.0	0.1	0.05	<0.01	0.05	4.2	0.06
HBM-23-086-SRK-WR-90	56	5.8	0.04	61	0.6	<0.02	0.06	15.44	69.1	0.73	14.5	0.2	0.18	<0.01	0.06	5.7	0.09
HBM-23-086-SRK-WR-90 DUP	57	5.9	0.04	60	0.6	<0.02	0.06	15.56	71	0.74	14.5	0.2	0.07	<0.01	0.07	5.8	0.09
HBM-23-086-SRK-WR-91	37	3.1	0.11	460	0.4	<0.02	0.1	9.95	80.3	0.21	6.5	<0.1	0.05	<0.01	0.05	3.7	0.05
HBM-23-086-SRK-WR-92	42	9.5	0.03	4	0.7	<0.02	0.05	24.98	46.9	1.15	16.9	0.4	0.18	<0.01	0.06	9.5	0.12
HBM-23-086-SRK-WR-93	63	5.3	0.04	27	0.4	<0.02	0.04	18.03	51.5	0.57	13.7	0.1	0.07	<0.01	0.07	6.7	0.1
HBM-23-086-SRK-WR-94	23	20.7	0.15	47	0.2	0.1	0.03	27.15	15.3	0.32	2.6	<0.1	0.41	<0.01	0.04	12.9	0.05
HBM-23-086-SRK-WR-95	55	4.9	0.04	259	0.4	<0.02	0.07	20.15	64.6	0.27	10.0	<0.1	0.07	<0.01	0.07	7.6	0.1
HBM-23-086-SRK-WR-96	40	2.8	0.14	358	0.5	<0.02	0.05	14.43	47.8	0.73	6.5	<0.1	<0.05	<0.01	0.06	5.3	0.11
HBM-23-086-SRK-WR-97	22	1.4	0.02	929	0.2	<0.02	0.08	6.95	91.6	0.18	1.2	<0.1	<0.05	<0.01	0.03	2.5	0.04
HBM-23-086-SRK-WR-98	25	1.3	<0.01	1146	0.2	<0.02	0.06	6.96	93.3	0.18	1.4	<0.1	<0.05	<0.01	0.03	2.4	0.04
HBM-23-086-SRK-WR-99	26	1.5	0.01	1076	0.2	<0.02	0.06	6.7	92.4	0.15	2.0	<0.1	<0.05	<0.01	0.03	2.3	0.04
HBM-23-086-SRK-WR-100	30	1.6	<0.01	1250	0.2	<0.02	0.07	7.01	98.6	0.15	1.7	<0.1	<0.05	<0.01	0.04	2.5	0.04
HBM-23-086-SRK-WR-100 DUP	29	1.7	<0.01	1261	0.2	<0.02	0.08	6.89	97.5	0.16	1.7	<0.1	<0.05	<0.01	0.04	2.4	0.05
HBM-23-086-SRK-WR-101	31	<0.5	0.03	1141	0.2	<0.02	0.06	7.08	97.4	0.15	2.3	<0.1	0.39	<0.01	0.04	2.3	0.05
HBM-23-086-SRK-WR-102	27	0.8	0.02	893	0.2	<0.02	0.05	7.88	89.8	0.14	2.7	<0.1	0.29	<0.01	0.04	2.6	0.04
HBM-23-086-SRK-WR-103	24	8.8	0.62	660	0.2	0.0	0.06	13.93	56.3	0.21	2.2	<0.1	0.34	<0.01	0.07	5.5	0.05
HBM-23-086-SRK-WR-104	17	12.8	0.18	159	0.2	0.1	0.02	22.72	25	0.51	2.0	<0.1	0.39	<0.01	0.04	9.8	0.04
HBM-23-086-SRK-WR-105	12	16.8	0.21	35	0.2	0.1	<0.01	28.47	14	0.60	2.0	<0.1	0.46	<0.01	0.05	12.4	0.03
HBM-23-086-SRK-WR-106	15	15.9	0.31	26	0.3	0.3	0.02	25.32	19.8	0.95	1.9	<0.1	0.45	0.0	0.03	11.5	0.03
HBM-23-086-SRK-WR-107	35	14.9	0.22	13	0.2	0.2	0.02	29.57	22.3	0.69	3.1	<0.1	0.41	<0.01	0.05	13.6	0.04
HBM-23-086-SRK-WR-108	93	5.1	0.09	4	0.6	0.0	0.11	18.74	78.3	6.32	11.9	0.2	0.27	<0.01	0.06	7.2	0.07
HBM-23-086-SRK-WR-109	59	6.7	0.06	<1	0.7	<0.02	0.1	38.76	74.2	11.07	11.6	0.2	0.32	<0.01	0.06	8.5	0.07
HBM-23-086-SRK-WR-110	57	7.1	0.06	<1	0.7	0.0	0.08	26.36	70.6	6.69	12.3	0.2	0.27	<0.01	0.06	10.6	0.09
HBM-23-086-SRK-WR-110 DUP	56	7.2	0.06	<1	0.7	0.0	0.08	26.07	71	6.61	11.9	0.2	0.28	<0.01	0.05	10.4	0.09
HBM-23-086-SRK-WR-111	41	5.4	0.07	<1	0.7	<0.02	0.1	21.72	80.8	7.59	11.3	0.2	0.19	<0.01	0.06	8	0.1
HBM-23-086-SRK-WR-112	37	5.2	0.05	<1	0.7	<0.02	0.09	21.43	74.4	6.88	11.0	0.1	0.20	<0.01	0.05	7.9	0.1
HBM-23-086-SRK-WR-113	45	5.7	0.08	<1	0.7	<0.02	0.09	21.52	75.8	9.71	11.3	0.2	0.22	<0.01	0.05	7.9	0.09
HBM-23-086-SRK-WR-114	40	16.1	0.11	<1	0.5	<0.02	0.08	27.25	71.5	2.99	13.3	0.2	0.60	<0.01	0.04	10.1	0.09
HBM-23-086-SRK-WR-115	43	13.5	0.12	<1	0.6	0.0	0.1	26.71	72.6	3.36	14.4	0.2	0.52	<0.01	0.04	9.8	0.09
HBM-23-086-SRK-WR-116	51	8.6	0.10	<1	0.9	<0.02	0.12	28.83	92.9	12.50	15.0	0.3	0.36	<0.01	0.07	11	0.09

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Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
HBM-23-123-SRK-WR-59	0.85	<0.05	0.7	1.1	0.1	20.6	<1	<0.3	<0.05	0.6	<0.05	0.4	<0.02	<0.05	0.2	12.44	0.8
HBM-23-123-SRK-WR-60	0.83	<0.05	<0.2	0.6	<0.05	33.9	<1	<0.3	<0.05	0.4	<0.05	0.3	<0.02	<0.05	<0.1	9.11	0.6
HBM-23-123-SRK-WR-60 DUP	0.88	<0.05	<0.2	0.6	<0.05	34.8	<1	<0.3	<0.05	0.4	<0.05	0.3	<0.02	<0.05	<0.1	9.08	0.6
HBM-23-123-SRK-WR-61	0.82	<0.05	0.4	1.4	0.1	23.7	<1	<0.3	<0.05	0.4	<0.05	0.3	<0.02	<0.05	<0.1	7.81	0.6
HBM-23-123-SRK-WR-62	0.75	<0.05	0.4	0.3	<0.05	25.2	<1	<0.3	<0.05	0.7	<0.05	0.4	<0.02	<0.05	<0.1	13.10	0.9
HBM-23-123-SRK-WR-63	0.81	0.08	<0.2	<0.2	<0.05	19.7	<1	<0.3	<0.05	0.5	<0.05	0.3	<0.02	<0.05	<0.1	10.26	0.7
HBM-23-123-SRK-WR-64	0.30	<0.05	<0.2	<0.2	<0.05	33	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	4.45	0.4
HBM-23-123-SRK-WR-65	0.74	<0.05	<0.2	1.3	0.1	19.7	<1	<0.3	<0.05	0.5	<0.05	0.4	<0.02	<0.05	<0.1	8.87	0.6
HBM-23-123-SRK-WR-66	0.45	<0.05	0.3	1.1	0.1	32.4	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	6.63	0.5
HBM-23-123-SRK-WR-67	0.40	<0.05	<0.2	2.8	0.1	19.7	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	3.18	0.3
HBM-23-123-SRK-WR-68	0.57	<0.05	0.3	2.4	0.1	19.8	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	6.57	0.5
HBM-23-123-SRK-WR-69	0.62	<0.05	0.3	2.4	0.1	21.4	<1	<0.3	<0.05	0.4	<0.05	0.3	<0.02	<0.05	<0.1	7.40	0.5
HBM-23-123-SRK-WR-70	0.58	<0.05	0.4	1.3	0.1	27.5	<1	<0.3	<0.05	0.3	<0.05	0.1	<0.02	<0.05	<0.1	8.95	0.6
HBM-23-123-SRK-WR-70 DUP	0.55	<0.05	0.4	1.3	0.1	27.2	<1	<0.3	<0.05	0.4	<0.05	0.1	<0.02	<0.05	<0.1	8.80	0.6
HBM-23-112-SRK-WR-71	0.69	0.43	1.4	8.8	<0.05	19.6	<1	0.5	<0.05	0.4	<0.05	0.7	<0.02	0.11	8.7	9.66	0.6
HBM-23-112-SRK-WR-72	0.48	0.36	0.7	14.8	<0.05	14.6	<1	0.4	<0.05	0.3	<0.05	0.5	0.02	0.08	0.1	6.42	0.5
HBM-23-112-SRK-WR-73	0.52	0.31	1.3	12.2	<0.05	8.1	<1	0.3	<0.05	0.3	<0.05	0.6	0.02	0.08	<0.1	6.62	0.4
HBM-23-112-SRK-WR-74	0.55	0.57	0.6	9.3	<0.05	10.3	<1	0.5	<0.05	0.4	<0.05	0.8	<0.02	0.10	<0.1	8.97	0.5
HBM-23-112-SRK-WR-75	0.65	0.29	0.7	20.4	<0.05	25.6	<1	0.6	<0.05	0.4	<0.05	0.7	0.02	0.09	<0.1	9.11	0.6
HBM-23-112-SRK-WR-76	0.71	0.58	0.6	15.1	<0.05	11.7	<1	0.5	<0.05	0.3	<0.05	0.7	<0.02	0.11	<0.1	7.78	0.5
HBM-23-112-SRK-WR-77	0.56	0.56	0.5	12.7	<0.05	5.1	<1	0.5	<0.05	0.3	<0.05	0.6	0.02	0.11	<0.1	7.73	0.5
HBM-23-112-SRK-WR-78	0.61	0.53	0.4	12	<0.05	8.9	<1	0.5	<0.05	0.3	<0.05	0.5	<0.02	0.10	<0.1	8.12	0.5
HBM-23-112-SRK-WR-79	0.53	0.47	0.5	6.5	<0.05	11.9	<1	0.4	<0.05	0.4	<0.05	0.5	<0.02	0.09	<0.1	9.18	0.6
HBM-23-112-SRK-WR-80	0.33	0.11	0.6	4.7	<0.05	21.6	<1	<0.3	<0.05	0.4	<0.05	0.3	<0.02	<0.05	<0.1	10.06	0.6
HBM-23-112-SRK-WR-80 DUP	0.32	0.10	0.6	4.6	<0.05	21.2	<1	<0.3	<0.05	0.4	<0.05	0.3	<0.02	<0.05	<0.1	9.77	0.6
HBM-23-112-SRK-WR-81	0.68	<0.05	0.9	3.3	0.1	15.9	<1	<0.3	<0.05	0.3	0.09	0.2	0.03	<0.05	7.9	10.04	0.7
HBM-23-112-SRK-WR-82	0.60	0.39	0.6	1.2	0.1	16.5	<1	0.3	<0.05	0.4	<0.05	0.7	<0.02	0.12	4.9	11.89	0.7
HBM-23-112-SRK-WR-83	0.52	0.24	0.3	5.4	<0.05	15.4	<1	0.3	<0.05	0.4	<0.05	0.3	<0.02	0.07	<0.1	9.84	0.6
HBM-23-112-SRK-WR-84	0.46	<0.05	0.4	3.6	0.1	15.9	<1	<0.3	<0.05	0.2	0.07	0.2	<0.02	<0.05	0.1	6.64	0.5
HBM-23-112-SRK-WR-85	0.20	<0.05	<0.2	2.5	0.1	20.2	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	0.2	5.12	0.5
HBM-23-112-SRK-WR-86	0.58	0.06	0.4	0.5	<0.05	24.1	<1	0.3	<0.05	0.6	<0.05	0.4	<0.02	0.06	0.1	14.53	0.8
HBM-23-112-SRK-WR-87	0.81	<0.05	0.4	2.2	0.1	18	<1	<0.3	<0.05	0.6	<0.05	0.5	<0.02	<0.05	<0.1	12.11	0.7
HBM-23-112-SRK-WR-88	0.91	<0.05	0.5	3.1	0.3	16.6	<1	<0.3	<0.05	0.4	<0.05	0.4	0.02	<0.05	<0.1	8.99	0.5
HBM-23-086-SRK-WR-89	0.56	<0.05	0.4	0.7	0.1	22.5	<1	<0.3	<0.05	0.3	<0.05	0.1	<0.02	<0.05	<0.1	7.05	0.4
HBM-23-086-SRK-WR-90	0.48	<0.05	0.3	1	0.1	29.3	<1	<0.3	<0.05	0.4	<0.05	0.2	<0.02	<0.05	<0.1	10.04	0.6
HBM-23-086-SRK-WR-90 DUP	0.51	<0.05	0.4	1	0.1	29.1	<1	<0.3	<0.05	0.4	<0.05	0.2	<0.02	<0.05	<0.1	10.01	0.6
HBM-23-086-SRK-WR-91	0.59	<0.05	0.7	2.1	0.8	17	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	0.2	5.83	0.4
HBM-23-086-SRK-WR-92	0.84	0.32	0.6	1.8	0.1	19.5	<1	0.6	<0.05	0.5	<0.05	0.4	0.02	0.07	<0.1	12.94	0.9
HBM-23-086-SRK-WR-93	0.67	<0.05	0.4	1.6	0.1	37.2	<1	<0.3	<0.05	0.5	<0.05	0.3	<0.02	<0.05	<0.1	11.25	0.7
HBM-23-086-SRK-WR-94	1.34	<0.05	2.5	2.4	0.4	3.3	<1	<0.3	<0.05	0.2	0.10	1.8	0.10	0.30	<0.1	5.22	0.3
HBM-23-086-SRK-WR-95	0.73	<0.05	0.4	2.1	0.6	17.1	<1	<0.3	<0.05	0.5	<0.05	0.4	<0.02	<0.05	<0.1	12.46	0.7
HBM-23-086-SRK-WR-96	0.46	<0.05	0.9	3.5	0.3	14.9	<1	<0.3	<0.05	0.4	<0.05	0.3	0.03	<0.05	<0.1	11.11	0.7
HBM-23-086-SRK-WR-97	0.98	<0.05	0.4	1.6	1.7	13.1	<1	<0.3	<0.05	0.2	0.11	<0.1	<0.02	<0.05	0.2	3.09	0.2
HBM-23-086-SRK-WR-98	1.04	<0.05	0.4	1.7	2.2	12.7	<1	<0.3	<0.05	0.2	0.13	<0.1	<0.02	<0.05	0.1	3.21	0.3
HBM-23-086-SRK-WR-99	1.17	<0.05	0.4	1.3	2.4	13.2	<1	<0.3	<0.05	0.2	0.10	<0.1	<0.02	<0.05	<0.1	3.83	0.3
HBM-23-086-SRK-WR-100	0.82	<0.05	0.4	1.2	2.4	14.1	<1	<0.3	<0.05	0.2	0.12	<0.1	<0.02	<0.05	0.1	3.59	0.3
HBM-23-086-SRK-WR-100 DUP	0.82	<0.05	0.4	1.2	2.4	14	<1	<0.3	<0.05	0.2	0.12	<0.1	<0.02	<0.05	0.1	3.60	0.3
HBM-23-086-SRK-WR-101	0.94	0.28	0.5	1.1	2.7	12.1	<1	<0.3	<0.05	0.2	0.17	2.0	<0.02	<0.05	0.2	3.73	0.3
HBM-23-086-SRK-WR-102	0.75	0.20	0.4	1.2	2.7	12.7	<1	<0.3	<0.05	0.2	0.10	0.9	<0.02	<0.05	0.1	3.57	0.3
HBM-23-086-SRK-WR-103	1.50	0.10	1.1	1.7	1.0	8.8	<1	<0.3	<0.05	0.2	0.60	1.0	0.03	0.11	0.2	4.56	0.4
HBM-23-086-SRK-WR-104	1.71	0.07	2.2	2.9	1.4	3.8	<1	<0.3	<0.05	0.2	0.13	1.3	0.09	0.17	0.1	4.30	0.3
HBM-23-086-SRK-WR-105	1.50	0.07	4.3	3.4	0.9	1.6	<1	<0.3	<0.05	0.2	0.11	1.7	0.19	0.21	0.2	3.81	0.2
HBM-23-086-SRK-WR-106	2.58	0.06	8.8	5.2	1.3	0.9	1	<0.3	<0.05	0.2	0.21	1.8	0.26	0.22	<0.1	2.55	0.2
HBM-23-086-SRK-WR-107	1.33	<0.05	4.5	4.9	0.6	3.2	1	<0.3	<0.05	0.2	0.12	1.7	0.12	0.19	<0.1	4.06	0.3
HBM-23-086-SRK-WR-108	0.55	0.26	0.8	9.7	0.1	17.7	<1	<0.3	<0.05	0.4	<0.05	0.6	0.02	0.05	<0.1	7.82	0.5
HBM-23-086-SRK-WR-109	0.51	0.73	0.8	15.7	<0.05	15.3	<1	0.5	<0.05	0.3	<0.05	0.6	0.02	0.07	<0.1	7.20	0.6
HBM-23-086-SRK-WR-110	0.44	0.30	1.2	10	<0.05	18.7	<1	0.4	<0.05	0.4	<0.05	0.8	0.03	0.09	<0.1	9.07	0.7
HBM-23-086-SRK-WR-110 DUP	0.44	0.31	1.4	9.7	<0.05	18.8	<1	0.4	<0.05	0.4	<0.05	0.8	0.03	0.08	<0.1	8.92	0.7
HBM-23-086-SRK-WR-111	0.37	0.38	1	11.2	<0.05	20.9	2	0.4	<0.05	0.5	<0.05	0.5	0.02	<0.05	<0.1	10.00	0.7
HBM-23-086-SRK-WR-112	0.42	0.17	1	19.7	<0.05	19.4	<1	<0.3	<0.05	0.4	<0.05	0.4	0.09	<0.05	<0.1	8.67	0.7
HBM-23-086-SRK-WR-113	0.29	0.33	1	21.4	<0.05	18.9	<1	0.3	<0.05	0.4	<0.05	0.5	0.07	<0.05	0.2	8.11	0.6
HBM-23-086-SRK-WR-114	0.63	1.58	1.8	6.8	<0.05	6.3	<1	0.8	<0.05	0.5	<0.05	0.9	0.04	0.15	0.1	11.11	0.8
HBM-23-086-SRK-WR-115	0.69	1.42	2	6.6	<0.05	6.2	<1	0.7	<0.05	0.5	<0.05	0.8	0.04	0.13	<0.1	10.42	0.7
HBM-23-086-SRK-WR-116	0.65	0.81	1	22.3	<0.05	20.8	<1	0.7	<0.05	0.5	<0.05	0.6	0.08	0.08	<0.1	10.29	0.7

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SGS proposal: 19322-PR3-R2
SGS project #: 2348

Work order date: 6-Nov-23
Report date: 14-Mar-24

Version: Final

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Note: Revised data highlighted in orange.

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
HBM-23-086-SRK-WR-117	2.41	124	12.67	556	228	8.03	0.33	17	3.39	2049	0.10	562	0.06	0.26	317	0.10	220
HBM-23-086-SRK-WR-118	2.89	91	11.95	411	219	8.09	0.15	21	3.40	1880	0.05	633	0.07	0.17	240	0.19	261
HBM-23-086-SRK-WR-119	2.13	142	11.99	569	209	8.15	0.03	19	3.55	2318	0.02	675	0.06	0.24	213	0.08	208
HBM-23-086-SRK-WR-120	0.24	43	10.06	83	125	7.63	0.13	3	3.42	1977	0.02	455	0.06	1.76	144	<0.01	23
HBM-23-086-SRK-WR-120 DUP	0.25	43	10.08	83	127	7.65	0.13	3	3.44	1979	0.02	455	0.06	1.76	145	<0.01	24
HBM-23-086-SRK-WR-121	0.32	17	8.57	93	131	6.91	0.11	5	3.27	1386	0.02	546	0.02	2.41	163	<0.01	27
HBM-23-086-SRK-WR-122	0.26	23	13.33	71	154	7.72	0.13	3	3.02	2288	0.02	422	0.05	1.29	249	<0.01	28
HBM-23-086-SRK-WR-123	0.53	22	13.38	141	169	7.64	0.11	7	2.61	2245	0.03	522	0.05	0.36	234	<0.01	40
HBM-23-086-SRK-WR-124	0.96	246	7.93	228	132	6.88	0.1	17	4.53	1429	0.03	445	0.07	1.05	367	<0.01	51
HBM-23-086-SRK-WR-125	0.41	15	11.18	108	178	8	0.07	5	3.45	2138	0.05	596	0.06	1.22	158	<0.01	38
HBM-23-086-SRK-WR-126	0.67	21	9.31	194	185	8.91	0.07	11	5.03	1993	0.04	565	0.06	0.89	165	<0.01	54
HBM-23-086-SRK-WR-127	0.23	14	10.26	84	166	8.11	0.06	4	3.99	2094	0.03	554	0.06	2.52	206	<0.01	34
HBM-23-086-SRK-WR-128	0.17	11	10.25	67	162	7.51	0.06	3	3.80	1890	0.03	481	0.03	1.94	194	<0.01	32
HBM-23-086-SRK-WR-129	0.64	16	10.1	182	244	8.2	0.06	12	4.34	1841	0.03	529	0.05	0.61	184	<0.01	56
HBM-23-086-SRK-WR-130	0.25	16	10	83	142	7.86	0.06	4	3.92	1783	0.03	487	0.05	1.00	201	<0.01	33
HBM-23-086-SRK-WR-130 DUP	0.26	16	9.94	84	144	7.94	0.06	4	3.94	1786	0.03	492	0.05	1.02	201	<0.01	34
HBM-23-086-SRK-WR-131	0.36	13	10.51	64	151	8.02	0.05	5	4.56	1734	0.05	350	0.04	0.23	119	<0.01	34
HBM-23-086-SRK-WR-132	0.27	17	10.63	43	160	7.81	0.05	3	3.64	1771	0.05	301	0.04	0.24	127	<0.01	31
HBM-23-086-SRK-WR-133	0.46	16	6.81	110	227	7.34	0.06	5	3.41	1266	0.06	655	0.05	1.26	145	<0.01	42
HBM-23-086-SRK-WR-134	0.35	22	7.34	104	232	8.06	0.08	4	4.18	1292	0.05	813	0.05	1.39	181	<0.01	42
HBM-23-086-SRK-WR-135	0.18	16	11.39	63	148	8.01	0.07	2	4.55	1772	0.03	651	0.01	2.34	247	<0.01	29
HBM-23-086-SRK-WR-136	0.38	16	8.63	132	169	8.58	0.07	4	5.71	1801	0.03	551	0.04	0.84	213	<0.01	49
HBM-23-086-SRK-WR-137	0.36	17	7.45	135	146	7.96	0.07	4	6.41	1471	0.02	534	0.03	0.56	226	<0.01	51
HBM-23-086-SRK-WR-138	0.27	18	8.42	106	170	7.81	0.07	3	6.26	1656	0.02	485	0.02	0.60	291	<0.01	46
HBM-23-086-SRK-WR-139	0.37	27	6.66	156	166	8.99	0.08	3	6.83	1471	0.02	583	0.04	0.50	245	<0.01	50
HBM-23-086-SRK-WR-140	0.59	20	8.86	180	187	8.59	0.07	5	5.22	1716	0.03	629	0.05	1.13	182	<0.01	58
HBM-23-086-SRK-WR-140 DUP	0.56	20	8.78	176	182	8.54	0.07	5	5.26	1706	0.03	633	0.05	1.10	182	<0.01	57
HBM-23-086-SRK-WR-141	0.45	7	9.13	23	113	7.4	0.04	4	3.20	1486	0.06	100	0.01	1.18	62.2	<0.01	28
HBM-23-086-SRK-WR-142	0.65	5	7.09	39	141	6.92	0.04	5	2.55	1308	0.08	98	0.02	0.36	37.3	<0.01	41
HBM-23-086-SRK-WR-143	0.37	<5	6.89	29	135	7.13	0.03	2	2.59	1378	0.08	91	0.02	0.11	30.2	<0.01	44
HBM-23-086-SRK-WR-144	0.31	<5	6.63	26	144	6.81	0.03	2	2.63	1304	0.07	83	0.02	0.21	38.6	<0.01	39
HBM-23-086-SRK-WR-145	0.27	6	8.01	24	117	6.83	0.03	2	3.09	1523	0.07	67	0.02	0.09	40.9	<0.01	40
HBM-23-086-SRK-WR-146	0.35	<5	7.24	24	123	7.61	0.02	3	3.00	1389	0.07	74	0.02	0.14	36.3	<0.01	49
HBM-23-086-SRK-WR-147	0.40	6	6.42	16	95	7.09	0.03	3	2.55	1208	0.07	52	0.02	0.15	33.5	<0.01	40
HBM-23-086-SRK-WR-148	1.84	12	7.5	92	133	7.31	0.03	11	3.19	1306	0.08	77	0.02	0.12	37	<0.01	102
HBM-23-086-SRK-WR-149	1.92	6	7.36	111	131	7	0.02	11	3.12	1337	0.08	85	0.02	0.10	27.9	<0.01	104
HBM-23-086-SRK-WR-150	2.40	7	7.94	133	112	6.91	0.04	16	2.89	1407	0.12	108	0.02	0.11	32.2	<0.01	109
HBM-23-086-SRK-WR-151	3.87	28	7.2	182	104	6.29	0.07	19	2.73	1294	0.04	99	0.04	0.10	108	0.12	139
HBM-23-097A-SRK-WR-152	0.76	6	7.87	25	129	7.75	0.04	4	2.93	1523	0.09	61	0.02	0.17	28.6	<0.01	56
HBM-23-097A-SRK-WR-152 DUP	0.75	6	7.71	25	127	7.63	0.04	4	2.86	1490	0.09	61	0.02	0.17	27.9	<0.01	54
HBM-23-097A-SRK-WR-153	0.39	<5	8.28	23	136	6.28	0.04	2	2.76	1157	0.09	121	0.02	0.32	33.3	<0.01	35
HBM-23-097A-SRK-WR-154	0.55	<5	7.55	27	128	6.84	0.04	4	2.70	1365	0.08	93	0.02	0.10	36.4	<0.01	43
HBM-23-097A-SRK-WR-155	1.15	119	7.91	53	111	6.79	0.05	11	3.37	1364	0.08	80	0.05	0.19	139	<0.01	57
HBM-23-097A-SRK-WR-156	0.32	5	7.01	15	126	7.31	0.05	2	2.89	1424	0.08	66	0.02	0.27	37.9	<0.01	33
HBM-23-097A-SRK-WR-157	0.27	<5	8.29	11	104	6.85	0.06	2	2.84	1416	0.07	64	0.02	0.99	46.4	<0.01	22
HBM-23-097A-SRK-WR-158	0.34	6	7.26	15	122	7.59	0.05	2	2.65	1471	0.08	86	0.03	0.26	48.4	<0.01	29
HBM-23-097A-SRK-WR-159	0.29	8	7.76	33	145	7.37	0.05	3	3.09	1303	0.07	211	0.04	0.34	65.4	<0.01	33
HBM-23-097A-SRK-WR-160	0.30	15	2.39	4	71	2.72	0.12	6	0.87	354	0.05	36	0.06	0.61	39.2	<0.01	3
HBM-23-097A-SRK-WR-161	1.21	24	5.9	272	201	7.36	0.1	14	3.17	1157	0.03	569	0.07	1.45	137	<0.01	90
HBM-23-097A-SRK-WR-161 DUP	1.43	26	5.8	327	201	7.42	0.1	15	3.27	1156	0.03	567	0.08	1.45	141	<0.01	109
HBM-23-097A-SRK-WR-162	3.32	11	5.93	1127	239	8.96	0.01	29	5.52	1458	0.03	762	0.07	0.53	112	0.03	294
HBM-23-097A-SRK-WR-163	3.38	48	7.84	810	276	8.15	0.15	24	4.19	1443	0.07	561	0.07	0.26	284	0.10	313
HBM-23-097A-SRK-WR-164	3.42	25	6.8	1029	260	7.67	0.05	34	3.78	1332	0.03	790	0.07	0.37	161	0.30	290
HBM-23-097A-SRK-WR-165	2.79	20	6.47	562	226	8.38	0.04	20	4.08	1460	0.03	456	0.07	0.48	145	0.08	248
HBM-23-097A-SRK-WR-166	1.59	15	7.36	478	202	7.77	0.08	21	3.95	1354	0.03	564	0.06	0.66	156	<0.01	117
HBM-23-097A-SRK-WR-167	0.66	16	5.99	224	110	7.57	0.11	9	5.44	1293	0.03	554	0.06	0.50	114	<0.01	46
HBM-23-097A-SRK-WR-168	0.90	27	2.34	11	39	2.78	0.18	8	1.18	446	0.05	30	0.07	0.20	28.4	<0.01	12
HBM-23-097A-SRK-WR-169	0.57	19	5.6	163	91	6.72	0.12	7	5.10	1206	0.04	464	0.06	0.12	102	<0.01	32
HBM-23-097A-SRK-WR-170	0.83	7	4.37	455	112	8.29	0.05	12	9.67	1419	0.02	843	0.03	0.15	76.7	<0.01	60
HBM-23-097A-SRK-WR-171	0.36	5	2.79	274	22	6.75	0.02	5	7.56	1097	0.02	695	<0.01	0.09	41.8	<0.01	35
HBM-23-097A-SRK-WR-171 DUP	0.37	5	2.82	284	23	6.83	0.03	5	7.65	1111	0.02	722	<0.01	0.08	42.2	<0.01	36
HBM-23-097A-SRK-WR-172	1.22	82	4.47	669	99	7.64	0.02	13	8.83	1380	0.01	849	0.02	0.08	46.8	<0.01	87
HBM-23-097A-SRK-WR-173	1.40	5	4.35	884	128	8.16	0.02	20	10.47	1314	0.01	907	0.03	0.12	41.1	<0.01	99
HBM-23-097A-SRK-WR-174	0.75	7	6.71	465	53	7.42	0.05	9	9.15	1629	0.02	979	0.03	0.20	60.6	<0.01	54

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Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
HBM-23-086-SRK-WR-117	44	5.3	0.09	86	0.7	<0.02	0.09	17.19	85.2	9.33	12.0	0.2	0.19	<0.01	0.06	6.5	0.09
HBM-23-086-SRK-WR-118	41	5.8	0.06	4	0.9	0.0	0.11	21.25	93.6	4.39	14.2	0.2	0.20	<0.01	0.07	7.8	0.1
HBM-23-086-SRK-WR-119	52	6.0	0.05	120	0.6	<0.02	0.12	15.96	85.3	0.58	11.1	0.2	0.21	<0.01	0.06	5.9	0.09
HBM-23-086-SRK-WR-120	28	2.0	0.27	871	0.3	0.0	0.07	7.77	67.7	0.21	1.1	<0.1	0.12	<0.01	0.03	2.7	0.06
HBM-23-086-SRK-WR-120 DUP	28	2.1	0.31	918	0.3	0.0	0.08	8.13	71.1	0.22	1.2	<0.1	0.12	<0.01	0.03	2.9	0.06
HBM-23-086-SRK-WR-121	22	2.0	0.66	1017	0.2	0.0	0.06	5.97	66.7	0.25	1.2	<0.1	0.08	0.0	0.03	2.2	0.04
HBM-23-086-SRK-WR-122	41	2.0	0.29	771	0.4	<0.02	0.16	9.1	62.2	0.25	1.0	<0.1	0.10	0.0	0.04	3.4	0.05
HBM-23-086-SRK-WR-123	33	2.8	0.14	471	0.3	<0.02	0.1	11.79	68.1	0.25	2.0	<0.1	0.11	<0.01	0.04	4.3	0.05
HBM-23-086-SRK-WR-124	33	8.6	0.21	399	0.3	0.1	0.1	26.43	63	0.27	3.5	<0.1	0.25	<0.01	0.04	10.8	0.05
HBM-23-086-SRK-WR-125	20	4.2	0.14	718	0.2	0.0	0.12	9.43	75.7	0.27	1.8	<0.1	0.26	<0.01	0.05	3.3	0.04
HBM-23-086-SRK-WR-126	25	6.1	0.14	643	0.3	<0.02	0.13	12.42	78.3	0.30	3.0	<0.1	0.28	<0.01	0.04	4.3	0.05
HBM-23-086-SRK-WR-127	22	3.3	1.86	1151	0.3	<0.02	0.09	8.68	73.3	0.21	1.0	<0.1	0.18	0.1	0.04	3	0.04
HBM-23-086-SRK-WR-128	24	2.0	4.16	1044	0.3	<0.02	0.09	7.77	66	0.27	0.8	<0.1	0.13	0.0	0.04	2.6	0.04
HBM-23-086-SRK-WR-129	25	2.9	0.09	473	0.3	<0.02	0.1	12.84	71.6	0.28	3.0	<0.1	0.14	<0.01	0.05	4.5	0.05
HBM-23-086-SRK-WR-130	24	2.2	0.17	765	0.3	<0.02	0.09	10.25	68.2	0.28	1.1	<0.1	0.12	<0.01	0.04	3.6	0.04
HBM-23-086-SRK-WR-130 DUP	25	2.3	0.35	776	0.3	<0.02	0.1	10.77	68.3	0.29	1.1	<0.1	0.13	0.1	0.04	3.7	0.04
HBM-23-086-SRK-WR-131	47	1.8	0.06	180	0.2	<0.02	0.11	8.68	60.4	0.50	1.3	<0.1	0.10	<0.01	0.05	2.9	0.05
HBM-23-086-SRK-WR-132	47	1.2	0.16	141	0.2	<0.02	0.1	9.07	60.4	0.54	1.0	<0.1	0.08	<0.01	0.05	3	0.05
HBM-23-086-SRK-WR-133	84	3.5	0.22	613	0.2	0.1	0.22	7.76	93.5	0.73	1.9	<0.1	0.14	<0.01	0.08	2.7	0.04
HBM-23-086-SRK-WR-134	44	2.6	0.26	806	0.3	0.0	0.17	8.12	104	0.73	1.4	<0.1	0.11	<0.01	0.07	2.8	0.04
HBM-23-086-SRK-WR-135	33	1.6	0.49	1246	0.3	<0.02	0.13	4.53	82.8	0.47	0.8	<0.1	0.08	<0.01	0.04	1.5	0.05
HBM-23-086-SRK-WR-136	36	4.1	0.14	638	0.4	<0.02	0.12	8.48	73.1	0.33	1.7	<0.1	0.15	<0.01	0.05	2.9	0.05
HBM-23-086-SRK-WR-137	47	7.0	0.21	686	0.4	<0.02	0.15	10.54	73.6	0.30	1.7	<0.1	0.22	<0.01	0.05	3.8	0.06
HBM-23-086-SRK-WR-138	40	6.3	0.86	665	0.3	<0.02	0.16	8.86	63.3	0.25	1.3	<0.1	0.21	<0.01	0.05	3.3	0.06
HBM-23-086-SRK-WR-139	41	5.9	0.16	785	0.3	<0.02	0.14	12.03	78.8	0.28	1.7	<0.1	0.19	<0.01	0.06	4.5	0.06
HBM-23-086-SRK-WR-140	48	4.0	0.27	939	0.4	<0.02	0.14	9.16	82	0.36	2.4	<0.1	0.14	<0.01	0.05	3.3	0.05
HBM-23-086-SRK-WR-140 DUP	49	4.0	0.26	944	0.4	<0.02	0.14	9.29	83.2	0.35	2.4	<0.1	0.13	<0.01	0.05	3.4	0.05
HBM-23-086-SRK-WR-141	57	<0.5	0.26	241	0.1	0.0	0.08	1.08	39.5	0.82	1.2	<0.1	<0.05	<0.01	0.04	0.3	0.05
HBM-23-086-SRK-WR-142	69	<0.5	0.10	129	<0.1	<0.02	0.09	0.95	47.7	0.87	2.0	<0.1	<0.05	<0.01	0.04	0.3	0.04
HBM-23-086-SRK-WR-143	67	<0.5	0.03	40	<0.1	<0.02	0.09	1.11	46.6	0.95	1.2	<0.1	<0.05	<0.01	0.04	0.3	0.03
HBM-23-086-SRK-WR-144	69	<0.5	0.10	46	<0.1	<0.02	0.09	1.38	47.2	0.87	1.1	<0.1	<0.05	<0.01	0.04	0.5	0.04
HBM-23-086-SRK-WR-145	69	<0.5	0.04	29	<0.1	<0.02	0.09	1.29	43.9	0.78	0.9	<0.1	<0.05	<0.01	0.04	0.4	0.04
HBM-23-086-SRK-WR-146	78	<0.5	0.04	14	<0.1	<0.02	0.09	1.91	44.9	0.91	1.3	<0.1	<0.05	<0.01	0.05	0.6	0.04
HBM-23-086-SRK-WR-147	65	<0.5	0.04	9	<0.1	<0.02	0.07	2.53	40.2	1.16	1.5	<0.1	<0.05	<0.01	0.04	0.9	0.04
HBM-23-086-SRK-WR-148	70	<0.5	0.03	2	<0.1	<0.02	0.08	1.08	44	0.89	5.7	<0.1	<0.05	<0.01	0.04	0.3	0.03
HBM-23-086-SRK-WR-149	62	<0.5	0.02	2	<0.1	<0.02	0.09	1.05	43.3	0.59	6.1	<0.1	<0.05	<0.01	0.04	0.3	0.03
HBM-23-086-SRK-WR-150	69	<0.5	0.02	4	<0.1	<0.02	0.09	2.14	46.1	0.71	7.4	<0.1	<0.05	<0.01	0.04	0.7	0.04
HBM-23-086-SRK-WR-151	75	4.9	0.03	3	0.2	<0.02	0.08	12.64	42	0.35	9.7	<0.1	0.10	<0.01	0.03	5.9	0.09
HBM-23-097A-SRK-WR-152	70	<0.5	0.02	40	<0.1	<0.02	0.1	1.01	39.3	0.37	2.3	<0.1	0.06	<0.01	0.06	0.3	0.05
HBM-23-097A-SRK-WR-152 DUP	68	<0.5	0.03	40	<0.1	<0.02	0.1	1.04	38.4	0.37	2.2	<0.1	<0.05	<0.01	0.05	0.3	0.05
HBM-23-097A-SRK-WR-153	51	<0.5	0.02	189	<0.1	<0.02	0.08	0.87	48	0.56	1.0	<0.1	<0.05	<0.01	0.04	0.3	0.06
HBM-23-097A-SRK-WR-154	63	<0.5	0.02	89	<0.1	<0.02	0.09	1.04	41.8	0.59	1.6	<0.1	<0.05	<0.01	0.04	0.3	0.05
HBM-23-097A-SRK-WR-155	62	3.6	0.02	8	<0.1	<0.02	0.1	28.38	34.6	0.52	3.5	<0.1	0.08	<0.01	0.04	11.8	0.05
HBM-23-097A-SRK-WR-156	49	<0.5	0.04	105	<0.1	<0.02	0.06	0.97	38.4	0.48	0.8	<0.1	<0.05	<0.01	0.05	0.3	0.04
HBM-23-097A-SRK-WR-157	40	<0.5	0.82	202	<0.1	<0.02	0.07	1.27	34	0.53	0.7	<0.1	<0.05	<0.01	0.05	0.4	0.06
HBM-23-097A-SRK-WR-158	50	<0.5	0.06	154	<0.1	0.1	0.07	1.51	40.9	0.55	0.9	<0.1	<0.05	<0.01	0.05	0.5	0.05
HBM-23-097A-SRK-WR-159	45	1.2	0.16	165	0.1	0.0	0.1	4.1	50	0.53	0.8	<0.1	<0.05	<0.01	0.05	1.4	0.05
HBM-23-097A-SRK-WR-160	16	16.8	0.20	43	0.2	0.1	0.03	20.81	11.2	0.28	0.7	<0.1	0.31	<0.01	0.03	8.8	0.04
HBM-23-097A-SRK-WR-161	51	5.7	0.34	607	0.4	0.1	0.08	16.94	76.1	0.27	5.1	<0.1	0.15	0.0	0.06	6.4	0.06
HBM-23-097A-SRK-WR-161 DUP	56	6.8	0.42	596	0.3	0.1	0.08	19.43	79.7	0.27	6.3	<0.1	0.16	0.0	0.06	7.3	0.07
HBM-23-097A-SRK-WR-162	115	7.4	0.22	1	0.6	0.0	0.19	17.16	99.3	0.76	14.5	0.3	0.15	<0.01	0.08	6.2	0.1
HBM-23-097A-SRK-WR-163	86	7.1	0.09	7	0.6	0.0	0.1	21.46	84.7	3.27	14.7	0.3	0.14	<0.01	0.08	7.6	0.11
HBM-23-097A-SRK-WR-164	73	8.3	0.15	31	0.7	0.0	0.08	23.13	104	1.31	15.3	0.3	0.17	<0.01	0.07	8.4	0.1
HBM-23-097A-SRK-WR-165	82	7.5	0.13	48	0.5	0.0	0.12	22.28	77.9	0.43	12.4	0.1	0.17	<0.01	0.07	7.9	0.09
HBM-23-097A-SRK-WR-166	58	6.8	0.18	318	0.4	0.0	0.15	18.49	82.7	0.27	6.5	<0.1	0.15	<0.01	0.07	6.4	0.07
HBM-23-097A-SRK-WR-167	40	9.5	0.23	686	0.3	0.1	0.1	16.48	70	0.27	2.4	<0.1	0.20	<0.01	0.06	6.1	0.07
HBM-23-097A-SRK-WR-168	40	15.1	0.08	11	0.2	0.1	0.04	36.96	11.4	0.29	2.9	<0.1	0.26	<0.01	<0.02	16.7	0.05
HBM-23-097A-SRK-WR-169	28	9.4	0.11	472	0.2	0.0	0.06	20.9	57.5	0.20	1.9	<0.1	0.21	<0.01	0.04	8.1	0.06
HBM-23-097A-SRK-WR-170	24	1.3	0.15	679	0.2	<0.02	0.09	7.56	85.3	0.15	2.8	<0.1	0.06	<0.01	0.04	2.5	0.05
HBM-23-097A-SRK-WR-171	27	<0.5	0.10	859	0.2	<0.02	0.07	3.44	68.2	0.10	1.4	<0.1	<0.05	<0.01	0.05	1.1	0.04
HBM-23-097A-SRK-WR-171 DUP	27	<0.5	0.20	904	0.2	<0.02	0.07	3.53	68.1	0.11	1.4	<0.1	<0.05	<0.01	0.04	1.2	0.04
HBM-23-097A-SRK-WR-172	30	0.8	0.06	435	0.2	<0.02	0.08	6.95	80.3	0.09	4.5	<0.1	<0.05	<0.01	0.04	2.3	0.05
HBM-23-097A-SRK-WR-173	25	1.5	0.09	321	0.2	<0.02	0.09	9.04	85.8	0.12	4.9	<0.1	<0.05	<0.01	0.03	3	0.04
HBM-23-097A-SRK-WR-174	23	0.7	0.06	982	0.2	<0.02	0.09	5.75	93.3	0.16	2.5	<0.1	<0.05	<0.01	0.06	1.8	0.05

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SGS

Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
HBM-23-086-SRK-WR-117	0.57	0.24	1.1	22.7	0.1	21.5	<1	<0.3	<0.05	0.4	<0.05	0.4	0.10	<0.05	1.4	8.60	0.6
HBM-23-086-SRK-WR-118	0.55	0.28	1.2	11	<0.05	25.2	<1	0.5	<0.05	0.5	<0.05	0.6	0.06	0.05	<0.1	10.08	0.7
HBM-23-086-SRK-WR-119	0.79	0.21	1.3	1.6	0.2	20.8	<1	<0.3	<0.05	0.5	<0.05	0.4	<0.02	<0.05	0.2	9.25	0.6
HBM-23-086-SRK-WR-120	0.77	<0.05	1.9	3.8	0.7	8.7	<1	<0.3	<0.05	0.3	0.28	0.3	<0.02	<0.05	0.7	5.71	0.4
HBM-23-086-SRK-WR-120 DUP	0.76	<0.05	1.9	4	0.8	9.2	1	<0.3	<0.05	0.3	0.34	0.3	<0.02	<0.05	0.7	6.17	0.4
HBM-23-086-SRK-WR-121	0.76	<0.05	2.1	3.2	1.1	8.3	<1	<0.3	<0.05	0.2	0.46	0.2	<0.02	<0.05	0.8	4.41	0.3
HBM-23-086-SRK-WR-122	0.58	<0.05	2	4	0.8	8.6	<1	<0.3	<0.05	0.3	0.15	0.3	0.02	<0.05	1.8	5.76	0.4
HBM-23-086-SRK-WR-123	0.39	<0.05	1.4	3.5	1.5	9.4	<1	<0.3	<0.05	0.3	<0.05	0.3	<0.02	<0.05	0.3	5.72	0.4
HBM-23-086-SRK-WR-124	0.78	<0.05	2.2	3.6	0.3	11.4	<1	<0.3	<0.05	0.3	0.25	1.3	<0.02	0.15	14.7	4.73	0.3
HBM-23-086-SRK-WR-125	0.74	0.12	1.8	2.9	1.4	12.6	1	<0.3	<0.05	0.3	0.23	0.7	<0.02	<0.05	0.5	4.54	0.3
HBM-23-086-SRK-WR-126	0.66	0.09	1.7	3.1	1.5	13.7	<1	<0.3	<0.05	0.3	0.13	0.6	0.02	0.05	0.4	4.82	0.3
HBM-23-086-SRK-WR-127	0.81	<0.05	2.6	2.4	1.1	11	<1	<0.3	<0.05	0.3	0.46	0.4	<0.02	<0.05	82.8	4.18	0.3
HBM-23-086-SRK-WR-128	1.08	<0.05	2.4	2.2	1.1	10.2	<1	<0.3	<0.05	0.2	0.36	0.4	<0.02	<0.05	13.2	3.99	0.3
HBM-23-086-SRK-WR-129	0.60	0.06	1.1	2.4	1.2	13.7	<1	<0.3	<0.05	0.3	0.06	0.5	<0.02	<0.05	0.9	5.44	0.4
HBM-23-086-SRK-WR-130	0.89	<0.05	1.3	2.3	1.4	11.1	<1	<0.3	<0.05	0.3	0.11	0.4	<0.02	<0.05	86.8	4.43	0.3
HBM-23-086-SRK-WR-130 DUP	0.82	<0.05	1.3	2.4	1.5	11.2	<1	<0.3	<0.05	0.3	0.13	0.4	<0.02	<0.05	75.9	4.41	0.3
HBM-23-086-SRK-WR-131	0.55	<0.05	0.7	2	0.7	12.3	<1	<0.3	<0.05	0.3	<0.05	0.4	<0.02	<0.05	1.1	5.01	0.4
HBM-23-086-SRK-WR-132	0.55	<0.05	0.8	2	0.5	12	<1	<0.3	<0.05	0.3	<0.05	0.4	<0.02	<0.05	0.4	4.66	0.3
HBM-23-086-SRK-WR-133	0.96	<0.05	2.3	2.6	3.0	14.2	<1	<0.3	<0.05	0.3	0.08	0.5	0.06	<0.05	0.3	4.09	0.3
HBM-23-086-SRK-WR-134	0.68	<0.05	2	3.3	3.2	15.8	<1	<0.3	<0.05	0.3	0.11	0.4	0.04	<0.05	0.3	4.36	0.3
HBM-23-086-SRK-WR-135	0.90	<0.05	3	2.8	3.2	12.5	<1	<0.3	<0.05	0.3	0.43	0.2	0.04	<0.05	0.4	4.83	0.3
HBM-23-086-SRK-WR-136	0.66	<0.05	1.4	2.6	2.8	12.1	<1	<0.3	<0.05	0.3	0.06	0.4	<0.02	0.05	0.2	4.90	0.4
HBM-23-086-SRK-WR-137	0.72	<0.05	1.5	2.7	2.8	12.6	<1	<0.3	<0.05	0.3	0.11	0.5	<0.02	0.07	0.2	5.31	0.4
HBM-23-086-SRK-WR-138	0.72	<0.05	1.6	2.8	2.1	11.6	<1	<0.3	<0.05	0.3	0.19	0.4	<0.02	0.06	0.3	5.00	0.4
HBM-23-086-SRK-WR-139	0.64	<0.05	1.6	2.9	2.4	13.7	<1	<0.3	<0.05	0.3	0.17	0.5	<0.02	0.07	0.3	5.20	0.4
HBM-23-086-SRK-WR-140	0.77	<0.05	1.9	2.5	2.3	12.4	<1	<0.3	<0.05	0.3	0.16	0.5	0.02	0.05	0.4	4.62	0.3
HBM-23-086-SRK-WR-140 DUP	0.75	<0.05	1.9	2.5	2.3	12.4	<1	<0.3	<0.05	0.3	0.15	0.5	<0.02	<0.05	0.4	4.63	0.3
HBM-23-086-SRK-WR-141	0.45	<0.05	1.1	1.7	0.3	13.1	<1	<0.3	<0.05	0.1	0.26	<0.1	<0.02	<0.05	0.6	3.35	0.3
HBM-23-086-SRK-WR-142	0.46	<0.05	0.4	1.4	0.2	16.8	<1	<0.3	<0.05	0.1	0.10	<0.1	<0.02	<0.05	0.2	2.23	0.2
HBM-23-086-SRK-WR-143	0.34	<0.05	0.3	1.2	0.2	19.6	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	1.70	0.2
HBM-23-086-SRK-WR-144	0.51	<0.05	0.5	1.1	0.1	18.6	<1	<0.3	<0.05	0.1	0.06	<0.1	<0.02	<0.05	<0.1	2.31	0.2
HBM-23-086-SRK-WR-145	0.43	<0.05	0.6	1.1	0.1	20	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	2.64	0.3
HBM-23-086-SRK-WR-146	0.29	<0.05	0.5	1.1	0.1	23	<1	<0.3	<0.05	0.1	<0.05	0.1	<0.02	<0.05	<0.1	2.37	0.3
HBM-23-086-SRK-WR-147	0.64	<0.05	0.3	1.2	0.1	20	<1	<0.3	<0.05	0.1	<0.05	0.2	<0.02	<0.05	<0.1	2.45	0.3
HBM-23-086-SRK-WR-148	0.20	<0.05	<0.2	1.3	<0.05	20.2	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	1.72	0.2
HBM-23-086-SRK-WR-149	0.20	<0.05	<0.2	0.8	<0.05	18.9	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	1.76	0.2
HBM-23-086-SRK-WR-150	0.14	<0.05	0.2	1.3	<0.05	20.2	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	1.85	0.2
HBM-23-086-SRK-WR-151	0.20	<0.05	0.9	2.9	<0.05	15.2	<1	<0.3	<0.05	0.2	<0.05	0.5	<0.02	0.07	<0.1	5.02	0.6
HBM-23-097A-SRK-WR-152	0.24	<0.05	0.3	1	0.1	18.1	<1	<0.3	<0.05	0.1	<0.05	0.3	<0.02	<0.05	<0.1	2.93	0.3
HBM-23-097A-SRK-WR-152 DUP	0.21	<0.05	0.3	1	0.1	17.9	<1	<0.3	<0.05	0.1	<0.05	0.2	<0.02	<0.05	<0.1	2.87	0.3
HBM-23-097A-SRK-WR-153	0.33	<0.05	0.2	1.1	0.1	15.6	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	3.10	0.4
HBM-23-097A-SRK-WR-154	0.34	<0.05	0.3	1.1	0.1	15.3	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	2.80	0.3
HBM-23-097A-SRK-WR-155	0.40	<0.05	1	1.6	0.1	15	<1	<0.3	<0.05	0.2	<0.05	1.4	<0.02	0.14	<0.1	3.66	0.3
HBM-23-097A-SRK-WR-156	0.36	<0.05	0.3	1.3	0.1	15.1	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	2.51	0.3
HBM-23-097A-SRK-WR-157	0.71	<0.05	0.7	1.7	0.2	13.5	<1	<0.3	<0.05	0.2	0.19	<0.1	<0.02	<0.05	0.2	3.55	0.4
HBM-23-097A-SRK-WR-158	0.54	<0.05	0.4	1.5	0.3	13.9	<1	<0.3	<0.05	0.2	0.05	0.2	<0.02	<0.05	0.1	2.97	0.3
HBM-23-097A-SRK-WR-159	0.53	<0.05	0.7	1.7	0.4	11.9	<1	<0.3	<0.05	0.2	0.06	0.2	0.02	<0.05	<0.1	3.58	0.3
HBM-23-097A-SRK-WR-160	1.80	<0.05	3.1	3.4	0.7	1.8	<1	<0.3	<0.05	0.2	0.08	1.7	0.11	0.23	<0.1	3.84	0.3
HBM-23-097A-SRK-WR-161	1.16	<0.05	3.7	3.3	1.1	11.6	<1	<0.3	<0.05	0.3	0.15	0.7	0.06	0.08	11.4	5.34	0.4
HBM-23-097A-SRK-WR-161 DUP	1.20	<0.05	3.5	3.2	1.0	12.5	<1	<0.3	<0.05	0.4	0.14	0.8	0.05	0.09	14.9	5.78	0.5
HBM-23-097A-SRK-WR-162	0.61	<0.05	1.5	0.9	0.1	22.9	<1	<0.3	<0.05	0.5	<0.05	0.4	0.02	0.07	0.2	9.42	0.7
HBM-23-097A-SRK-WR-163	0.72	<0.05	1	7.4	<0.05	24.5	<1	0.3	<0.05	0.5	<0.05	0.4	0.06	0.06	0.5	9.31	0.8
HBM-23-097A-SRK-WR-164	0.67	0.11	1.1	3.5	0.1	18.2	<1	0.4	<0.05	0.5	<0.05	0.6	0.03	0.09	0.1	9.87	0.8
HBM-23-097A-SRK-WR-165	0.68	<0.05	1.3	1.6	0.2	19.7	<1	<0.3	<0.05	0.4	<0.05	0.5	<0.02	0.07	<0.1	7.19	0.6
HBM-23-097A-SRK-WR-166	0.87	<0.05	1.3	2.5	0.9	14.6	<1	<0.3	<0.05	0.4	<0.05	0.6	<0.02	0.06	0.2	5.82	0.5
HBM-23-097A-SRK-WR-167	0.96	<0.05	1.9	3.3	1.6	10	<1	<0.3	<0.05	0.4	0.10	0.9	0.04	0.12	1.1	6.73	0.5
HBM-23-097A-SRK-WR-168	0.95	<0.05	1.4	4.4	0.1	2.2	<1	<0.3	<0.05	0.3	<0.05	1.8	0.03	0.24	<0.1	4.45	0.4
HBM-23-097A-SRK-WR-169	0.79	<0.05	1.1	3.4	1.0	8.6	<1	<0.3	<0.05	0.4	0.07	0.9	0.02	0.12	<0.1	5.74	0.4
HBM-23-097A-SRK-WR-170	0.61	<0.05	0.7	1.8	2.9	11.3	<1	<0.3	<0.05	0.2	0.07	0.2	<0.02	<0.05	<0.1	4.02	0.4
HBM-23-097A-SRK-WR-171	1.21	<0.05	0.6	1.1	1.8	8.2	<1	<0.3	<0.05	0.1	0.10	<0.1	<0.02	<0.05	<0.1	2.53	0.3
HBM-23-097A-SRK-WR-171 DUP	1.36	<0.05	0.6	1.1	1.9	8.2	<1	<0.3	<0.05	0.1	0.14	<0.1	<0.02	<0.05	<0.1	2.54	0.3
HBM-23-097A-SRK-WR-172	1.00	<0.05	0.6	0.7	0.6	11.5	<1	<0.3	<0.05	0.2	0.06	0.1	<0.02	<0.05	<0.1	3.73	0.3
HBM-23-097A-SRK-WR-173	0.42	<0.05	0.6	0.7	1.5	13.9	<1	<0.3	<0.05	0.2	<0.05	0.2	<0.02	<0.05	<0.1	2.80	0.3
HBM-23-097A-SRK-WR-174	0.52	<0.05	0.7	1.7	4.3	10.3	<1	<0.3	<0.05	0.3	<0.05	0.1	<0.02	<0.05	0.1	4.54	0.3

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SGS proposal: 19322-PR3-R2
SGS project #: 2348

Work order date: 6-Nov-23
Report date: 14-Mar-24

Version: Final

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Note: Revised data highlighted in orange.

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
HBM-23-097A-SRK-WR-175	0.57	10	10.42	267	91	6.76	0.07	7	6.06	2071	0.03	792	0.03	0.36	89.9	<0.01	45
HBM-23-097A-SRK-WR-176	0.62	24	5.43	34	186	9.33	0.14	8	4.01	1731	0.05	119	0.10	0.51	80.7	<0.01	53
HBM-23-097A-SRK-WR-177	0.56	12	4.68	319	119	8.61	0.07	7	9.34	1554	0.03	847	0.03	0.35	74.1	<0.01	48
HBM-23-097A-SRK-WR-178	0.46	11	8.3	78	108	7.25	0.07	4	4.01	1533	0.06	217	0.06	0.42	77.7	<0.01	34
HBM-23-097A-SRK-WR-179	0.56	7	8.16	28	122	6.57	0.05	5	2.78	1330	0.08	94	0.03	0.18	41.5	<0.01	36
HBM-23-097A-SRK-WR-180	0.75	6	7.28	33	137	6.74	0.05	6	2.53	1165	0.08	104	0.02	0.17	31	<0.01	45
HBM-23-097A-SRK-WR-181	0.47	7	9.59	20	113	6.54	0.05	4	3.66	1652	0.08	71	0.05	0.14	47.8	<0.01	34
HBM-23-097A-SRK-WR-181 DUP	0.49	7	9.47	20	111	6.65	0.05	4	3.58	1621	0.08	72	0.04	0.13	45.7	<0.01	35
HBM-23-097A-SRK-WR-182	0.70	7	6.7	360	94	7.6	0.04	7	6.12	1458	0.05	645	0.05	0.37	76.1	<0.01	58
HBM-23-097A-SRK-WR-183	0.93	6	6.36	379	81	7.89	0.04	9	6.08	1289	0.06	556	0.05	0.26	103	<0.01	67
HBM-23-097A-SRK-WR-184	0.43	10	6.24	61	109	6.74	0.06	3	3.63	1165	0.08	192	0.13	0.73	79.8	<0.01	31
HBM-23-097A-SRK-WR-185	0.38	14	4.81	22	139	6.92	0.07	1	2.37	1219	0.10	140	0.10	1.04	60.4	<0.01	22
HBM-23-097A-SRK-WR-186	0.39	16	5.28	23	173	6.48	0.08	1	2.46	1210	0.10	153	0.12	0.46	77.7	<0.01	24
HBM-23-097A-SRK-WR-187	0.40	17	5.4	21	173	8.07	0.1	2	3.07	1476	0.08	166	0.16	0.54	102	<0.01	35
HBM-23-097A-SRK-WR-188	0.34	8	4.53	308	73	7.69	0.06	3	8.91	1428	0.04	650	0.02	0.09	65.4	<0.01	32
HBM-23-097A-SRK-WR-189	0.33	8	4.7	180	106	7.67	0.06	3	6.85	1319	0.05	552	0.04	0.17	72.2	<0.01	34
HBM-23-097A-SRK-WR-190	0.31	14	4.71	58	105	6.55	0.1	2	4.16	1110	0.05	299	0.05	1.26	94.5	<0.01	20
HBM-23-097A-SRK-WR-191	0.35	11	8.1	62	107	8.61	0.08	3	4.45	1762	0.05	249	0.03	1.41	106	<0.01	25
HBM-23-097A-SRK-WR-191 DUP	0.35	11	8.07	62	108	8.58	0.08	3	4.44	1755	0.05	251	0.03	1.39	106	<0.01	25
HBM-23-097A-SRK-WR-192	0.44	35	9.5	173	87	8.77	0.06	5	5.80	1808	0.04	458	0.03	0.23	127	<0.01	36
HBM-23-097A-SRK-WR-193	0.37	13	9.35	33	107	7.71	0.1	3	3.57	1775	0.06	143	0.02	0.33	68.3	<0.01	25
HBM-23-097A-SRK-WR-194	0.34	14	7.97	13	120	7.55	0.1	2	2.70	1752	0.07	110	0.02	0.16	43.6	<0.01	20
HBM-23-097A-SRK-WR-195	0.53	11	7.97	142	114	6.72	0.07	5	4.97	1373	0.07	323	0.06	0.18	114	<0.01	39
HBM-23-097A-SRK-WR-196	0.52	9	8.8	86	107	7.13	0.07	5	4.09	1663	0.07	256	0.06	0.28	103	<0.01	31
HBM-23-097A-SRK-WR-197	0.42	8	7.48	82	113	7.12	0.06	4	4.04	1449	0.06	296	0.04	1.31	105	<0.01	27
HBM-23-097A-SRK-WR-198	0.49	8	7.78	59	111	6.86	0.07	6	3.01	1655	0.07	201	0.04	0.32	75.9	<0.01	27
HBM-23-097A-SRK-WR-199	0.63	14	3.77	52	271	5.2	0.12	7	1.84	763	0.04	140	0.06	2.01	61.8	<0.01	20
HBM-23-097A-SRK-WR-200	0.84	8	7.15	28	141	7.71	0.07	10	2.70	1478	0.06	93	0.03	0.23	51	<0.01	43
HBM-23-097A-SRK-WR-201	0.63	10	7.42	15	104	7.26	0.08	7	2.74	1407	0.07	109	0.02	0.40	54	<0.01	27
HBM-23-097A-SRK-WR-201 DUP	0.63	10	7.49	15	106	7.36	0.08	7	2.76	1420	0.07	109	0.02	0.39	54.7	<0.01	27
HBM-23-097A-SRK-WR-202	0.66	11	9.58	103	161	7.52	0.08	8	4.41	1563	0.04	279	0.03	0.27	124	<0.01	42
HBM-23-097A-SRK-WR-203	0.61	12	8.14	99	174	7.15	0.09	6	3.89	1400	0.03	293	0.04	2.32	118	<0.01	28
HBM-23-097A-SRK-WR-204	0.35	14	5.93	9	113	8.89	0.12	1	2.44	1093	0.04	139	0.07	>5.00	76.2	<0.01	13
HBM-23-097A-SRK-WR-205	0.48	10	6.44	29	76	5.5	0.11	7	2.77	1016	0.03	106	0.04	2.23	80.8	<0.01	14
HBM-23-097A-SRK-WR-206	0.64	9	4.3	56	278	4.56	0.16	12	1.90	698	0.03	125	0.07	1.95	55.4	<0.01	13
HBM-23-097A-SRK-WR-207	0.70	13	5.25	109	235	5.86	0.18	9	2.45	1004	0.03	236	0.06	2.24	75.8	<0.01	25
HBM-23-097A-SRK-WR-208	0.52	18	4.98	38	203	4.92	0.18	9	2.24	850	0.03	139	0.06	1.87	87	<0.01	14
HBM-23-097A-SRK-WR-209	1.00	14	6.64	655	107	9.44	0.05	14	7.30	1801	0.02	926	0.05	0.33	191	<0.01	85
HBM-23-097A-SRK-WR-210	0.43	15	4.92	120	152	4.77	0.14	4	2.70	827	0.02	237	0.06	1.63	117	<0.01	17
HBM-23-097A-SRK-WR-211	0.41	17	3.54	9	573	3.7	0.14	4	1.48	526	0.04	56	0.07	1.88	63.6	<0.01	5
HBM-23-097A-SRK-WR-211 DUP	0.41	18	3.54	8	561	3.71	0.15	4	1.49	528	0.04	57	0.07	1.88	64.2	<0.01	5
HBM-23-097A-SRK-WR-212	0.50	16	4.08	55	418	5.79	0.13	10	2.63	884	0.03	178	0.07	0.86	72.1	<0.01	15
HBM-23-097A-SRK-WR-213	0.67	11	6.48	420	142	9.68	0.05	13	7.92	1852	0.02	885	0.05	0.28	184	<0.01	56
HBM-23-097A-SRK-WR-214	0.87	14	6.17	599	146	9.85	0.07	14	7.76	1725	0.02	953	0.05	0.20	178	<0.01	79
HBM-23-097A-SRK-WR-215	0.18	12	6.37	172	171	9.09	0.08	2	7.52	1502	0.01	887	0.04	0.65	203	<0.01	30
HBM-23-097A-SRK-WR-216	0.21	11	4.58	168	104	9.26	0.07	1	9.35	1485	0.02	837	0.03	0.55	168	<0.01	33
HBM-23-097A-SRK-WR-217	0.23	13	6.92	178	125	8.09	0.09	1	6.71	1406	0.02	625	0.04	0.62	137	<0.01	37
HBM-23-097A-SRK-WR-218	0.25	10	7.27	105	210	7.93	0.08	1	5.17	1368	0.03	470	0.04	1.35	113	<0.01	33
HBM-23-097A-SRK-WR-219	0.55	11	6.97	213	154	8.78	0.08	7	6.22	1444	0.05	531	0.05	0.36	93.7	<0.01	50
HBM-23-097A-SRK-WR-220	2.60	7	9.07	647	163	9.18	0.02	27	5.93	1752	0.01	518	0.05	0.26	82.8	<0.01	199
HBM-23-097A-SRK-WR-221	3.29	9	6.46	506	151	7.1	0.02	17	3.49	1302	0.03	373	0.06	0.41	48.6	0.39	207
HBM-23-097A-SRK-WR-221 DUP	3.29	10	6.5	501	153	7.15	0.03	18	3.48	1297	0.03	372	0.06	0.41	48.6	0.38	207
HBM-23-097A-SRK-WR-222	3.32	12	3.53	217	141	6.39	0.05	27	2.72	1182	0.05	153	0.05	0.40	32.5	0.33	180
HBM-23-097A-SRK-WR-223	3.20	<5	3.28	213	140	6.16	0.03	28	2.08	1176	0.05	159	0.04	0.22	25.8	0.40	176
HBM-23-097A-SRK-WR-224	4.05	<5	5.32	180	107	7.31	0.02	23	2.48	1843	0.03	152	0.04	0.13	43.9	0.37	139
HBM-23-097A-SRK-WR-225	2.61	<5	1.56	61	95	4.92	0.02	15	2.05	700	0.04	28	0.03	0.14	27.7	0.47	126
HBM-23-122-SRK-WR-226	0.90	9	6.68	51	142	7.08	0.06	7	2.71	1548	0.09	130	0.02	0.21	36.4	<0.01	57
HBM-23-122-SRK-WR-227	0.43	6	7.54	23	171	6.53	0.05	2	2.58	1241	0.09	95	0.02	0.22	54.2	<0.01	34
HBM-23-122-SRK-WR-228	0.31	9	8.06	20	130	7.54	0.05	1	2.78	1419	0.09	93	0.02	0.14	66.2	<0.01	33
HBM-23-122-SRK-WR-229	0.16	42	12.94	25	35	5.65	0.04	1	5.71	1228	0.04	164	0.02	0.77	162	<0.01	22
HBM-23-122-SRK-WR-230	0.46	27	8.47	99	183	7.35	0.1	3	3.30	1269	0.06	451	0.06	0.42	168	<0.01	43
HBM-23-122-SRK-WR-231	0.19	23	9.57	59	139	7.37	0.1	1	2.83	1608	0.02	471	0.06	1.18	172	<0.01	24
HBM-23-122-SRK-WR-232	1.84	17	9.49	459	214	8.51	0.05	21	3.75	1813	0.02	403	0.06	0.27	186	0.02	158
HBM-23-122-SRK-WR-232 DUP	1.82	16	9.48	453	206	8.47	0.05	21	3.72	1803	0.02	400	0.06	0.27	186	0.02	155

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Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
HBM-23-097A-SRK-WR-175	18	1.5	0.06	1094	0.3	0.0	0.08	5.75	81.9	0.18	1.9	<0.1	<0.05	<0.01	0.09	1.8	0.08
HBM-23-097A-SRK-WR-176	59	3.7	0.08	207	0.4	0.0	0.09	10.39	58.7	0.46	2.6	<0.1	0.49	<0.01	0.08	3.2	0.06
HBM-23-097A-SRK-WR-177	29	1.6	0.02	863	0.4	<0.02	0.07	3.6	94.6	0.23	2.2	<0.1	0.34	<0.01	0.05	1.2	0.05
HBM-23-097A-SRK-WR-178	37	1.5	0.04	290	0.2	<0.02	0.08	8.5	45.9	0.49	1.5	<0.1	0.24	<0.01	0.05	3	0.07
HBM-23-097A-SRK-WR-179	46	<0.5	0.02	59	<0.1	<0.02	0.07	2.16	41.9	0.57	1.8	<0.1	0.15	<0.01	0.04	0.7	0.07
HBM-23-097A-SRK-WR-180	54	<0.5	0.02	63	<0.1	<0.02	0.07	0.87	49.7	0.63	2.4	<0.1	0.13	<0.01	0.04	0.3	0.05
HBM-23-097A-SRK-WR-181	39	0.7	0.02	56	<0.1	0.1	0.06	7.54	36.4	0.48	1.5	<0.1	0.16	<0.01	0.05	2.7	0.07
HBM-23-097A-SRK-WR-181 DUP	41	<0.5	0.02	59	<0.1	0.0	0.07	6.3	38.1	0.49	1.6	<0.1	0.13	<0.01	0.05	2.2	0.06
HBM-23-097A-SRK-WR-182	33	3.7	0.10	241	0.2	0.1	0.09	8.57	77.6	0.31	2.6	<0.1	0.24	<0.01	0.05	3.2	0.05
HBM-23-097A-SRK-WR-183	64	5.4	0.02	390	0.1	0.1	0.11	10.65	69.8	0.33	3.5	<0.1	0.24	<0.01	0.05	4.2	0.05
HBM-23-097A-SRK-WR-184	52	6.0	0.10	236	0.2	0.1	0.1	26.62	48.4	0.53	1.5	<0.1	0.29	0.0	0.06	10.2	0.05
HBM-23-097A-SRK-WR-185	44	4.4	0.11	192	0.2	0.1	0.07	16.06	48.2	0.58	1.2	<0.1	0.23	<0.01	0.06	6.1	0.04
HBM-23-097A-SRK-WR-186	40	4.8	0.08	194	0.2	0.1	0.07	22.09	53	0.51	1.2	<0.1	0.23	<0.01	0.05	8.3	0.04
HBM-23-097A-SRK-WR-187	47	7.1	0.07	178	0.2	0.0	0.05	28.77	59.7	0.52	1.6	<0.1	0.31	<0.01	0.09	10.5	0.06
HBM-23-097A-SRK-WR-188	39	0.9	0.01	121	0.1	<0.02	0.13	3.07	81.6	0.26	1.2	<0.1	0.11	<0.01	0.04	1.1	0.05
HBM-23-097A-SRK-WR-189	43	3.7	<0.01	223	0.2	0.0	0.09	6.85	73.2	0.28	1.3	<0.1	0.18	<0.01	0.05	2.5	0.05
HBM-23-097A-SRK-WR-190	48	7.5	0.12	422	0.2	0.0	0.08	10.54	49.1	0.37	1.0	<0.1	0.27	0.0	0.04	4.3	0.04
HBM-23-097A-SRK-WR-191	51	1.0	0.19	349	0.2	<0.02	0.08	3.49	51.5	0.32	1.2	<0.1	0.13	<0.01	0.05	1.2	0.06
HBM-23-097A-SRK-WR-191 DUP	51	1.0	0.19	355	0.2	<0.02	0.1	3.54	52	0.32	1.2	<0.1	0.10	<0.01	0.05	1.2	0.05
HBM-23-097A-SRK-WR-192	42	1.4	0.06	509	0.2	<0.02	0.1	4.57	65.2	0.24	1.6	<0.1	0.11	<0.01	0.07	1.5	0.07
HBM-23-097A-SRK-WR-193	45	<0.5	0.09	167	0.2	<0.02	0.1	1.75	44.1	0.40	1.0	<0.1	0.06	<0.01	0.04	0.5	0.09
HBM-23-097A-SRK-WR-194	42	<0.5	0.01	86	0.1	<0.02	0.07	1.08	47.5	0.48	0.9	<0.1	<0.05	<0.01	0.04	0.3	0.07
HBM-23-097A-SRK-WR-195	49	3.4	0.06	168	0.2	<0.02	0.1	8.53	50.1	0.30	1.9	<0.1	0.14	<0.01	0.04	3.1	0.05
HBM-23-097A-SRK-WR-196	45	1.2	0.03	250	0.2	<0.02	0.07	5.79	52.2	0.34	1.7	<0.1	0.08	<0.01	0.06	2	0.09
HBM-23-097A-SRK-WR-197	47	2.5	0.17	359	0.3	0.0	0.09	3.99	53.4	0.30	1.4	<0.1	0.11	<0.01	0.05	1.4	0.07
HBM-23-097A-SRK-WR-198	42	<0.5	0.02	145	0.2	<0.02	0.08	2.84	53.9	0.33	1.6	<0.1	0.07	<0.01	0.05	0.8	0.09
HBM-23-097A-SRK-WR-199	38	9.3	0.28	125	0.3	0.3	0.06	14.66	35.2	0.53	2.2	<0.1	0.27	0.0	0.18	5.8	0.06
HBM-23-097A-SRK-WR-200	44	<0.5	0.04	106	0.2	<0.02	0.06	1.17	43.7	0.39	2.4	<0.1	0.05	<0.01	0.08	0.2	0.12
HBM-23-097A-SRK-WR-201	50	<0.5	0.07	128	0.2	<0.02	0.07	2.14	48.3	0.50	1.8	<0.1	0.07	<0.01	0.06	0.7	0.1
HBM-23-097A-SRK-WR-201 DUP	52	0.5	0.15	128	0.2	<0.02	0.08	2.07	46.9	0.50	1.7	<0.1	0.06	<0.01	0.06	0.7	0.09
HBM-23-097A-SRK-WR-202	44	1.4	0.05	356	0.2	<0.02	0.08	4.43	59.1	0.36	2.1	<0.1	0.18	<0.01	0.06	1.6	0.09
HBM-23-097A-SRK-WR-203	46	3.5	0.33	379	0.3	0.1	0.07	4.83	52.5	0.30	2.1	<0.1	0.21	<0.01	0.06	1.7	0.08
HBM-23-097A-SRK-WR-204	49	6.4	1.23	244	0.2	0.2	0.12	6.36	54	0.45	1.1	<0.1	0.28	0.0	0.07	2.5	0.09
HBM-23-097A-SRK-WR-205	29	5.9	0.54	109	0.3	0.2	0.08	9.84	30.7	0.49	1.5	<0.1	0.21	0.0	0.11	4.3	0.07
HBM-23-097A-SRK-WR-206	48	7.0	0.64	79	0.4	0.3	0.17	18.31	26.4	0.82	2.0	<0.1	0.22	0.1	0.15	7.8	0.04
HBM-23-097A-SRK-WR-207	25	9.1	1.66	280	0.4	0.2	0.08	21	38.4	0.84	2.5	<0.1	0.26	0.1	0.15	8.4	0.06
HBM-23-097A-SRK-WR-208	36	9.0	0.52	61	0.4	0.3	0.1	15.58	35.1	0.69	1.5	<0.1	0.24	0.1	0.14	6.7	0.05
HBM-23-097A-SRK-WR-209	60	1.8	0.05	81	0.3	0.0	0.18	7.68	78.2	0.18	4.7	<0.1	0.10	<0.01	0.16	2.5	0.05
HBM-23-097A-SRK-WR-210	30	15.8	0.23	190	0.3	0.2	0.06	25.38	34.2	0.38	1.3	<0.1	0.37	0.0	0.07	11.6	0.05
HBM-23-097A-SRK-WR-211	26	16.7	0.32	43	0.3	0.2	0.05	27.08	27.6	0.42	1.1	<0.1	0.38	0.0	0.06	13	0.05
HBM-23-097A-SRK-WR-211 DUP	25	16.9	0.32	44	0.3	0.2	0.05	27.18	27.5	0.41	1.1	<0.1	0.40	0.0	0.06	12.7	0.05
HBM-23-097A-SRK-WR-212	50	14.0	0.21	50	0.2	0.1	0.09	23.1	44	0.35	1.5	<0.1	0.35	0.0	0.05	10.2	0.05
HBM-23-097A-SRK-WR-213	75	3.3	0.15	217	0.3	0.0	0.36	11.78	96.6	0.19	3.4	<0.1	0.13	<0.01	0.05	4.2	0.04
HBM-23-097A-SRK-WR-214	89	2.4	0.09	296	0.3	0.0	0.28	14.06	99.9	0.14	4.4	<0.1	0.09	<0.01	0.05	4.8	0.04
HBM-23-097A-SRK-WR-215	39	2.2	1.48	1003	0.2	0.1	0.25	7.39	94.9	0.12	0.9	<0.1	0.07	<0.01	0.05	2.5	0.03
HBM-23-097A-SRK-WR-216	44	1.7	0.54	724	0.2	0.1	0.19	6.81	90.6	0.15	1.1	<0.1	0.06	0.0	0.04	2.3	0.03
HBM-23-097A-SRK-WR-217	31	1.7	3.14	723	0.1	0.2	0.18	5.43	70.4	0.14	1.3	<0.1	0.07	0.0	0.05	1.8	0.03
HBM-23-097A-SRK-WR-218	33	3.0	0.61	435	0.2	0.2	0.14	6.88	63.2	0.17	1.2	<0.1	0.09	<0.01	0.06	2.4	0.04
HBM-23-097A-SRK-WR-219	46	6.0	0.11	253	0.2	0.0	0.12	14.26	73.2	0.21	2.5	<0.1	0.14	<0.01	0.06	5	0.05
HBM-23-097A-SRK-WR-220	107	3.6	0.13	45	0.4	<0.02	0.31	14.46	69.4	0.11	11.5	0.2	0.10	<0.01	0.06	5.1	0.06
HBM-23-097A-SRK-WR-221	94	6.9	0.08	4	0.3	0.0	0.13	15.04	65.9	0.22	12.9	0.2	0.21	<0.01	0.05	5.4	0.14
HBM-23-097A-SRK-WR-221 DUP	96	6.7	0.08	4	0.3	0.0	0.14	15.26	63.6	0.22	12.9	0.2	0.21	<0.01	0.05	5.4	0.14
HBM-23-097A-SRK-WR-222	122	3.6	0.07	1	0.1	<0.02	0.24	8.46	57.3	0.23	11.3	0.1	0.16	<0.01	0.05	3.1	0.19
HBM-23-097A-SRK-WR-223	128	4.0	0.11	<1	0.1	<0.02	0.21	6.93	55.9	0.32	10.0	0.2	0.18	0.0	0.04	2.5	0.19
HBM-23-097A-SRK-WR-224	89	3.5	0.04	<1	0.1	<0.02	0.08	4.47	56.5	0.17	7.9	0.2	0.16	<0.01	0.02	1.7	0.14
HBM-23-097A-SRK-WR-225	57	3.4	0.01	<1	0.1	<0.02	0.01	5.26	29.1	0.23	7.6	0.2	0.15	<0.01	<0.02	2	0.12
HBM-23-122-SRK-WR-226	72	<0.5	0.04	37	<0.1	0.0	0.09	0.86	48.8	0.92	3.2	<0.1	<0.05	<0.01	0.04	0.3	0.04
HBM-23-122-SRK-WR-227	53	<0.5	0.09	74	<0.1	<0.02	0.09	1.51	44.8	0.92	1.4	<0.1	<0.05	<0.01	0.05	0.5	0.05
HBM-23-122-SRK-WR-228	57	<0.5	0.02	119	<0.1	<0.02	0.08	1.62	40.9	0.91	0.8	<0.1	0.06	<0.01	0.04	0.6	0.05
HBM-23-122-SRK-WR-229	45	3.3	0.10	261	0.1	0.0	0.13	2.93	25.7	0.29	0.5	<0.1	0.12	<0.01	0.02	1.1	0.05
HBM-23-122-SRK-WR-230	32	6.6	0.15	312	0.3	0.0	0.11	18.38	69	0.37	1.9	<0.1	0.20	<0.01	0.05	7	0.05
HBM-23-122-SRK-WR-231	21	3.0	0.77	943	0.3	<0.02	0.12	10.62	64	0.19	0.9	<0.1	0.12	<0.01	0.04	3.9	0.04
HBM-23-122-SRK-WR-232	56	3.4	0.07	91	0.4	0.0	0.11	16.99	64.1	0.22	8.9	0.1	0.11	<0.01	0.05	6.3	0.06
HBM-23-122-SRK-WR-232 DUP	55	3.3	0.07	91	0.4	0.0	0.11	16.76	63.2	0.22	8.8	<0.1	0.10	<0.01	0.06	6.2	0.06

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Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
HBM-23-097A-SRK-WR-175	0.58	<0.05	0.9	2.6	3.4	9.4	<1	<0.3	<0.05	0.4	<0.05	0.2	0.03	<0.05	0.2	8.05	0.6
HBM-23-097A-SRK-WR-176	0.92	0.23	0.9	4.6	0.4	10.4	<1	<0.3	<0.05	0.5	<0.05	2.0	0.04	<0.05	0.3	6.83	0.5
HBM-23-097A-SRK-WR-177	0.43	0.16	0.8	2.7	2.4	11.4	<1	<0.3	<0.05	0.2	<0.05	0.8	0.03	<0.05	0.3	4.80	0.4
HBM-23-097A-SRK-WR-178	0.56	0.12	0.8	2.2	0.7	13.1	<1	<0.3	<0.05	0.3	<0.05	0.7	0.02	<0.05	0.1	5.83	0.5
HBM-23-097A-SRK-WR-179	0.53	0.09	0.3	1.4	0.2	15.7	<1	<0.3	<0.05	0.2	<0.05	0.3	<0.02	<0.05	0.1	4.31	0.5
HBM-23-097A-SRK-WR-180	0.33	0.09	<0.2	1.4	0.3	16.1	<1	<0.3	<0.05	0.1	<0.05	0.2	<0.02	<0.05	<0.1	2.95	0.3
HBM-23-097A-SRK-WR-181	0.47	0.08	0.4	1.3	0.3	15.8	<1	<0.3	<0.05	0.2	<0.05	0.4	<0.02	<0.05	<0.1	5.62	0.4
HBM-23-097A-SRK-WR-181 DUP	0.44	0.07	0.3	1.4	0.2	15.9	<1	<0.3	<0.05	0.2	<0.05	0.4	<0.02	<0.05	<0.1	5.29	0.5
HBM-23-097A-SRK-WR-182	0.63	0.06	0.8	1.2	3.2	10.8	<1	<0.3	<0.05	0.3	<0.05	0.6	0.02	0.06	<0.1	5.27	0.4
HBM-23-097A-SRK-WR-183	0.64	0.05	0.9	1.1	1.7	10.5	<1	<0.3	<0.05	0.2	<0.05	0.7	<0.02	0.08	<0.1	4.04	0.3
HBM-23-097A-SRK-WR-184	0.80	0.05	1.5	1.8	1.3	11.7	<1	<0.3	<0.05	0.3	<0.05	1.2	0.06	0.10	0.3	4.33	0.3
HBM-23-097A-SRK-WR-185	1.02	0.05	1.3	2.2	0.9	10.5	<1	<0.3	<0.05	0.2	<0.05	0.9	0.05	0.07	0.4	3.74	0.3
HBM-23-097A-SRK-WR-186	0.94	<0.05	1	2.4	0.8	10.3	<1	<0.3	<0.05	0.3	<0.05	1.1	0.03	0.09	0.2	4.03	0.3
HBM-23-097A-SRK-WR-187	1.03	0.06	1.2	3.3	0.9	11	<1	<0.3	<0.05	0.4	<0.05	1.2	0.03	0.10	0.2	6.51	0.4
HBM-23-097A-SRK-WR-188	0.44	<0.05	0.6	2	0.7	10.9	<1	<0.3	<0.05	0.2	<0.05	0.2	<0.02	<0.05	<0.1	3.91	0.4
HBM-23-097A-SRK-WR-189	0.61	<0.05	0.6	2	0.9	11.2	<1	<0.3	<0.05	0.2	<0.05	0.4	<0.02	0.05	<0.1	4.06	0.3
HBM-23-097A-SRK-WR-190	1.13	<0.05	1.9	3	1.2	8.7	1	<0.3	<0.05	0.2	0.13	0.8	0.04	0.10	0.4	3.77	0.3
HBM-23-097A-SRK-WR-191	0.59	<0.05	1.8	2.5	0.8	11.5	<1	<0.3	<0.05	0.2	0.08	0.2	0.03	<0.05	0.3	4.38	0.4
HBM-23-097A-SRK-WR-191 DUP	0.63	<0.05	1.8	2.5	0.8	11.4	<1	<0.3	<0.05	0.2	0.07	0.2	0.02	<0.05	0.3	4.32	0.4
HBM-23-097A-SRK-WR-192	0.48	<0.05	0.9	1.9	1.9	10.9	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	6.69	0.5
HBM-23-097A-SRK-WR-193	0.36	<0.05	0.5	2.8	0.3	11.7	<1	<0.3	<0.05	0.2	<0.05	<0.1	0.02	<0.05	0.1	6.01	0.6
HBM-23-097A-SRK-WR-194	0.39	<0.05	0.3	3.1	0.1	10.7	<1	<0.3	<0.05	0.2	<0.05	<0.1	0.02	<0.05	<0.1	4.82	0.5
HBM-23-097A-SRK-WR-195	0.54	<0.05	0.7	2.2	0.4	11.1	<1	<0.3	<0.05	0.3	<0.05	0.4	0.02	<0.05	<0.1	5.40	0.4
HBM-23-097A-SRK-WR-196	0.52	<0.05	0.7	2.2	0.7	12.4	1	<0.3	<0.05	0.3	<0.05	0.2	0.02	<0.05	<0.1	6.53	0.6
HBM-23-097A-SRK-WR-197	0.87	<0.05	1.3	1.8	0.7	11.5	1	<0.3	<0.05	0.3	0.17	0.2	<0.02	<0.05	0.2	5.35	0.5
HBM-23-097A-SRK-WR-198	0.64	<0.05	0.6	1.9	0.4	13.3	<1	<0.3	<0.05	0.2	<0.05	<0.1	0.02	<0.05	<0.1	5.67	0.6
HBM-23-097A-SRK-WR-199	2.51	<0.05	6	3.4	1.1	5.1	2	0.4	<0.05	0.3	0.26	1.3	0.14	0.17	<0.1	6.34	0.4
HBM-23-097A-SRK-WR-200	0.65	<0.05	0.4	1.8	0.1	17.3	<1	<0.3	<0.05	0.3	<0.05	<0.1	<0.02	<0.05	<0.1	7.61	0.8
HBM-23-097A-SRK-WR-201	0.50	<0.05	0.4	2.5	0.2	16.4	<1	<0.3	<0.05	0.3	<0.05	0.4	0.02	<0.05	<0.1	7.15	0.6
HBM-23-097A-SRK-WR-201 DUP	0.48	<0.05	0.4	2.4	0.2	16.1	<1	<0.3	<0.05	0.3	<0.05	0.3	0.02	<0.05	<0.1	6.98	0.6
HBM-23-097A-SRK-WR-202	0.62	0.14	0.8	2.4	0.5	16.4	<1	<0.3	<0.05	0.3	<0.05	0.8	0.02	<0.05	0.2	7.91	0.6
HBM-23-097A-SRK-WR-203	0.99	0.10	2.6	2.6	0.7	11.7	1	<0.3	<0.05	0.3	0.17	0.7	0.04	<0.05	0.2	7.20	0.6
HBM-23-097A-SRK-WR-204	1.29	0.07	6.5	3.3	0.9	9.4	3	<0.3	<0.05	0.4	0.48	0.7	0.07	0.06	0.3	7.55	0.6
HBM-23-097A-SRK-WR-205	2.05	<0.05	4.9	3	0.8	6.5	1	0.3	<0.05	0.3	0.41	1.0	0.09	0.10	0.1	6.82	0.5
HBM-23-097A-SRK-WR-206	2.61	<0.05	8.8	4.1	1.4	4.9	2	0.4	<0.05	0.3	0.37	1.6	0.13	0.16	<0.1	5.62	0.3
HBM-23-097A-SRK-WR-207	2.18	<0.05	5.9	4.7	1.2	6.6	2	<0.3	<0.05	0.4	0.38	1.6	0.11	0.19	0.1	7.66	0.5
HBM-23-097A-SRK-WR-208	2.21	<0.05	6	4.7	1.1	4.6	2	0.4	<0.05	0.3	0.34	1.6	0.13	0.20	<0.1	5.86	0.3
HBM-23-097A-SRK-WR-209	0.50	<0.05	1.3	1.7	0.4	12.7	<1	<0.3	<0.05	0.4	<0.05	0.3	0.02	<0.05	<0.1	6.30	0.4
HBM-23-097A-SRK-WR-210	2.09	<0.05	5.4	3.7	1.8	3.9	1	0.5	<0.05	0.3	0.23	2.7	0.22	0.38	<0.1	5.28	0.4
HBM-23-097A-SRK-WR-211	2.10	<0.05	4.8	3.8	1.3	2.4	2	<0.3	<0.05	0.3	0.47	2.5	0.16	0.35	<0.1	5.18	0.4
HBM-23-097A-SRK-WR-211 DUP	2.09	<0.05	4.9	3.8	1.4	2.4	2	<0.3	<0.05	0.3	0.46	2.5	0.18	0.36	<0.1	5.10	0.4
HBM-23-097A-SRK-WR-212	1.77	<0.05	2.1	3.3	0.6	4.4	<1	<0.3	<0.05	0.3	0.14	2.1	0.05	0.34	<0.1	4.97	0.4
HBM-23-097A-SRK-WR-213	0.66	<0.05	1.7	1.8	1.3	12.2	<1	<0.3	<0.05	0.3	<0.05	0.4	0.02	0.05	<0.1	4.92	0.3
HBM-23-097A-SRK-WR-214	0.48	<0.05	1.5	2.2	1.5	13.9	<1	<0.3	<0.05	0.3	<0.05	0.4	0.03	<0.05	<0.1	4.11	0.3
HBM-23-097A-SRK-WR-215	0.85	<0.05	2	2.5	5.0	10.7	<1	<0.3	<0.05	0.2	0.20	0.2	0.03	<0.05	0.1	3.58	0.2
HBM-23-097A-SRK-WR-216	0.86	<0.05	1.6	2.5	8.9	15.6	<1	<0.3	<0.05	0.2	0.15	0.1	0.03	<0.05	<0.1	3.39	0.2
HBM-23-097A-SRK-WR-217	1.11	<0.05	1.9	2.9	7.4	20.4	<1	<0.3	<0.05	0.3	0.19	0.1	0.04	<0.05	0.1	4.06	0.3
HBM-23-097A-SRK-WR-218	0.99	<0.05	2.3	2.6	6.2	14.2	<1	<0.3	<0.05	0.3	0.30	0.3	0.03	<0.05	0.2	4.85	0.3
HBM-23-097A-SRK-WR-219	0.63	<0.05	1.4	2.5	1.8	14	<1	<0.3	<0.05	0.3	<0.05	0.4	0.03	0.07	0.1	4.38	0.3
HBM-23-097A-SRK-WR-220	0.57	<0.05	1.2	0.7	0.3	20.1	<1	<0.3	<0.05	0.4	<0.05	0.2	<0.02	<0.05	<0.1	6.36	0.4
HBM-23-097A-SRK-WR-221	0.50	0.15	2.1	0.8	0.1	16.4	<1	0.5	<0.05	0.5	<0.05	0.3	0.03	<0.05	<0.1	11.98	1
HBM-23-097A-SRK-WR-221 DUP	0.50	0.17	2.3	0.9	0.1	16.5	<1	0.4	<0.05	0.5	<0.05	0.3	0.04	<0.05	<0.1	11.88	1.1
HBM-23-097A-SRK-WR-222	0.37	0.06	3.1	1.7	0.1	15.8	<1	0.4	<0.05	0.3	<0.05	0.2	0.02	<0.05	<0.1	12.08	1.4
HBM-23-097A-SRK-WR-223	0.42	0.09	2.2	1.4	0.2	17	<1	0.4	<0.05	0.3	<0.05	0.2	0.03	<0.05	<0.1	12.59	1.4
HBM-23-097A-SRK-WR-224	0.27	0.09	0.6	0.7	0.1	12.3	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	7.88	1
HBM-23-097A-SRK-WR-225	0.37	0.15	0.4	0.7	<0.05	5.5	<1	<0.3	<0.05	0.3	<0.05	0.1	<0.02	<0.05	<0.1	9.29	0.9
HBM-23-122-SRK-WR-226	0.52	<0.05	0.9	2.1	0.1	19.1	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	2.14	0.2
HBM-23-122-SRK-WR-227	0.87	<0.05	0.5	1.6	0.1	17.3	<1	<0.3	<0.05	0.1	0.10	<0.1	<0.02	<0.05	<0.1	3.18	0.3
HBM-23-122-SRK-WR-228	0.53	<0.05	0.4	1.8	0.1	16.8	<1	<0.3	<0.05	0.1	<0.05	0.3	<0.02	<0.05	<0.1	2.75	0.3
HBM-23-122-SRK-WR-229	0.83	<0.05	1.1	1.4	0.4	6.4	<1	<0.3	<0.05	0.2	0.09	0.2	<0.02	<0.05	0.3	3.75	0.3
HBM-23-122-SRK-WR-230	0.55	<0.05	1.3	3.6	0.7	12.3	<1	<0.3	<0.05	0.4	<0.05	0.9	0.02	0.09	0.2	5.30	0.4
HBM-23-122-SRK-WR-231	0.94	<0.05	1.3	3.2	1.1	10	<1	<0.3	<0.05	0.3	<0.05	0.4	0.02	<0.05	0.6	3.97	0.3
HBM-23-122-SRK-WR-232	0.46	<0.05	1	1.8	0.2	20.2	<1	<0.3	<0.05	0.4	<0.05	0.5	<0.02	<0.05	0.1	6.49	0.5
HBM-23-122-SRK-WR-232 DUP	0.49	<0.05	0.9	1.7	0.2	19.8	<1	<0.3	<0.05	0.4	<0.05	0.4	<0.02	<0.05	0.1	6.39	0.5

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Note: Revised data highlighted in orange.

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
HBM-23-122-SRK-WR-233	2.03	14	9.21	725	187	9.03	0.01	25	4.08	2239	0.02	690	0.06	0.50	173	0.02	210
HBM-23-122-SRK-WR-234	2.12	35	8.14	774	240	9.25	0.07	25	4.38	1764	0.01	869	0.06	0.53	153	0.02	197
HBM-23-122-SRK-WR-235	3.29	42	8.64	925	236	9.77	0.14	27	4.08	1866	0.07	811	0.07	0.31	146	0.18	279
HBM-23-122-SRK-WR-236	0.55	59	11.22	177	195	8.33	0.14	7	3.60	2515	0.01	504	0.05	0.70	125	<0.01	39
HBM-23-122-SRK-WR-237	2.86	49	8.21	1134	234	8.36	0.09	19	3.61	1762	0.05	839	0.06	0.44	158	0.16	257
HBM-23-122-SRK-WR-238	3.51	81	6.72	1357	269	7.88	0.05	26	3.89	1188	0.03	838	0.07	0.35	137	0.21	343
HBM-23-122-SRK-WR-239	3.28	74	9	909	224	8.48	0.04	25	4.01	1687	0.03	571	0.07	0.39	182	0.12	275
HBM-23-122-SRK-WR-240	3.02	207	8.53	822	228	8.45	0.06	25	4.04	1746	0.02	642	0.06	0.51	188	0.04	221
HBM-23-122-SRK-WR-241	0.60	34	2.05	8	86	2.67	0.16	4	0.70	341	0.05	23	0.07	0.72	36.9	<0.01	8
HBM-23-122-SRK-WR-242	2.19	32	4.45	407	175	5.76	0.08	8	2.39	841	0.03	278	0.07	0.85	124	0.18	137
HBM-23-122-SRK-WR-242 DUP	2.20	32	4.48	407	176	5.8	0.08	8	2.41	850	0.03	278	0.07	0.86	126	0.18	137
HBM-23-122-SRK-WR-243	0.73	34	2.71	107	115	3.34	0.1	6	1.36	530	0.05	133	0.05	0.81	65.2	<0.01	35
HBM-23-122-SRK-WR-244	1.46	15	4.41	702	132	9.12	0.04	21	9.36	1448	0.01	782	0.04	0.15	63.6	<0.01	110
HBM-23-122-SRK-WR-245	1.37	33	3.08	798	103	8.82	0.01	17	11.30	1364	<0.01	1038	0.03	0.07	30.3	<0.01	93
HBM-23-122-SRK-WR-246	0.81	16	3.32	574	94	8.73	0.04	10	11.19	1337	0.01	1004	0.03	0.10	23.9	<0.01	62
HBM-23-122-SRK-WR-247	1.30	97	3.61	932	91	9.24	<0.01	10	11.65	1435	<0.01	1068	0.02	0.10	40.7	<0.01	95
HBM-23-122-SRK-WR-248	0.76	16	8.47	73	107	6.46	0.06	4	3.19	1253	0.11	142	0.13	0.27	62.6	<0.01	44
HBM-23-122-SRK-WR-249	0.71	26	7.48	39	143	7.52	0.05	4	2.68	1482	0.10	110	0.02	0.12	33.9	<0.01	51
HBM-23-122-SRK-WR-250	1.81	10	6.9	93	138	7.68	0.03	11	2.47	1446	0.10	121	0.02	0.14	25.1	<0.01	103
HBM-23-122-SRK-WR-251	1.38	20	8.06	68	125	7.35	0.03	9	2.86	1411	0.11	114	0.02	0.14	34.7	<0.01	81
HBM-23-122-SRK-WR-252	0.83	10	8.47	47	107	6.98	0.03	6	2.72	1423	0.10	108	0.03	0.16	33.6	<0.01	58
HBM-23-122-SRK-WR-252 DUP	0.87	10	8.73	50	111	7.24	0.04	6	2.81	1477	0.10	112	0.03	0.18	34.6	<0.01	61
HBM-23-122-SRK-WR-253	0.94	394	8.25	83	114	6.9	0.04	7	2.96	1378	0.11	136	0.10	0.22	81.9	<0.01	59
HBM-23-122-SRK-WR-254	0.94	11	8.79	49	120	7.15	0.03	8	2.96	1503	0.10	103	0.02	0.11	33.4	<0.01	64
HBM-23-122-SRK-WR-255	0.67	17	6.32	39	132	6.84	0.06	5	2.69	1165	0.10	140	0.06	0.26	49.5	<0.01	40
HBM-23-122-SRK-WR-256	0.22	13	3.76	167	102	8.92	0.06	3	9.67	1393	0.03	916	0.03	0.39	77.4	<0.01	37
HBM-23-122-SRK-WR-257	0.97	76	6.94	35	156	9.4	0.09	8	3.87	1382	0.03	144	0.08	0.29	131	<0.01	142
HBM-23-122-SRK-WR-258	1.05	16	4.82	23	124	7.3	0.05	12	2.26	1095	0.06	73	0.08	0.84	93.6	<0.01	98
HBM-23-122-SRK-WR-259	0.37	21	5.08	194	132	8.94	0.05	5	7.70	1444	0.05	744	0.03	0.28	67.5	<0.01	53
HBM-23-122-SRK-WR-260	0.78	19	5.58	36	99	9.59	0.06	9	2.93	1499	0.07	115	0.09	0.42	89.7	<0.01	55
HBM-23-122-SRK-WR-261	0.37	34	5.73	118	132	9.47	0.07	4	5.29	1569	0.05	474	0.06	0.48	96	<0.01	41
HBM-23-122-SRK-WR-262	1.25	19	6.13	94	175	9.35	0.06	11	3.48	1393	0.04	220	0.08	0.82	105	<0.01	172
HBM-23-122-SRK-WR-262 DUP	1.27	19	6.18	95	177	9.41	0.06	11	3.51	1399	0.04	221	0.08	0.83	106	<0.01	175
HBM-23-122-SRK-WR-263	1.34	15	5.9	81	185	9.12	0.06	13	3.69	1418	0.05	194	0.08	0.34	86.7	<0.01	130
HBM-23-122-SRK-WR-264	0.84	18	6.7	428	101	8.86	0.03	12	6.60	1566	0.04	759	0.03	0.44	117	<0.01	83
HBM-23-122-SRK-WR-265	1.09	17	6.98	179	199	8.63	0.07	14	4.30	1428	0.06	288	0.07	0.35	109	<0.01	94
HBM-23-122-SRK-WR-266	1.57	8	7.5	563	156	8.74	0.05	20	5.77	1655	0.03	614	0.04	0.20	135	<0.01	114
HBM-23-122-SRK-WR-267	2.23	10	6.89	895	166	9.42	0.03	26	6.77	1730	0.01	650	0.04	0.20	126	<0.01	163
HBM-23-122-SRK-WR-268	3.25	<5	8.51	254	94	7.93	0.01	22	2.63	2053	0.03	167	0.04	0.13	126	<0.01	205
HBM-23-122-SRK-WR-269	3.73	24	9.36	762	136	8.45	0.04	9	3.91	1989	0.02	398	0.04	0.11	120	0.09	226
HBM-23-122-SRK-WR-270	3.56	17	11.24	183	86	7.74	0.03	21	1.92	2257	0.03	154	0.03	0.11	60.6	0.12	153
Duplicates																	
HBM-23-123-SRK-WR-6	1.50	10	8.06	402	148	8.7	0.07	20	5.69	1864	0.03	631	0.03	0.27	143	<0.01	107
HBM-23-123-SRK-WR-32	3.66	<5	3.7	677	127	8.19	0.02	31	5.73	1210	0.04	448	0.06	0.20	29.9	0.05	194
HBM-23-123-SRK-WR-50 DUP	4.14	<5	6.2	616	215	10.05	<0.01	13	6.76	1622	0.02	282	0.06	0.19	103	0.03	291
HBM-23-123-SRK-WR-102	0.79	7	3.46	562	27	8.02	0.04	12	9.46	1333	0.01	838	0.02	0.06	49.8	<0.01	57
HBM-23-123-SRK-WR-145	0.28	6	8.11	24	124	6.91	0.03	2	3.12	1526	0.07	67	0.02	0.08	41.5	<0.01	41
HBM-23-123-SRK-WR-172	1.25	83	4.5	673	96	7.64	0.02	13	8.85	1388	0.01	855	0.02	0.07	47.1	<0.01	88
HBM-23-123-SRK-WR-194	0.34	14	7.98	14	112	7.55	0.11	2	2.69	1752	0.07	103	0.02	0.16	43.6	<0.01	20
HBM-23-123-SRK-WR-201 DUP	0.63	10	7.38	16	100	7.25	0.08	7	2.72	1398	0.07	109	0.02	0.38	53.8	<0.01	27
HBM-23-123-SRK-WR-62	3.87	<5	5.24	170	259	11.23	<0.01	21	4.29	2204	0.02	138	0.08	0.22	53.4	0.01	297
HBM-23-122-SRK-WR-265	1.08	16	6.93	177	197	8.55	0.07	14	4.28	1415	0.06	283	0.07	0.34	108	<0.01	93
HBM-23-097A-SRK-WR-220	2.61	6	9.14	647	166	9.21	0.02	27	5.95	1760	0.01	516	0.05	0.27	82.9	<0.01	198
HBM-23-122-SRK-WR-236	0.57	60	11.44	183	202	8.49	0.15	7	3.67	2568	0.01	511	0.05	0.72	128	<0.01	41
HBM-23-123-SRK-WR-63	3.79	<5	5.36	12	163	11.29	<0.01	20	4.20	1822	0.03	75	0.10	0.16	85.8	0.01	319
HBM-23-123-SRK-WR-99	0.55	<5	3.75	443	60	8.29	0.03	7	10.55	1428	0.02	967	0.02	0.06	44.6	<0.01	46
QA/QC																	
Blank	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Blank	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Blank	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Blank	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Blank	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Blank	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<1

SGS

Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
HBM-23-122-SRK-WR-233	57	4.4	0.09	8	0.5	0.0	0.14	14.63	84.2	0.18	11.2	0.2	0.14	<0.01	0.05	5.5	0.07
HBM-23-122-SRK-WR-234	62	5.0	0.13	193	0.4	0.0	0.13	18.06	101	0.28	10.9	0.1	0.16	<0.01	0.06	6.6	0.07
HBM-23-122-SRK-WR-235	68	4.6	0.05	3	0.8	0.0	0.1	22.99	100	3.86	15.7	0.2	0.13	<0.01	0.08	8.7	0.09
HBM-23-122-SRK-WR-236	38	3.5	0.25	410	0.3	0.0	0.09	13.64	73.6	0.28	2.5	<0.1	0.10	<0.01	0.05	5	0.07
HBM-23-122-SRK-WR-237	110	7.5	0.18	116	0.7	0.0	0.14	22.16	104	2.01	13.9	0.2	0.17	<0.01	0.07	8.5	0.09
HBM-23-122-SRK-WR-238	120	6.4	0.11	38	0.7	0.0	0.1	26.36	114	2.05	18.2	0.3	0.14	<0.01	0.09	10.2	0.09
HBM-23-122-SRK-WR-239	257	6.6	0.23	51	0.5	0.0	0.67	21.35	82.1	1.12	15.5	0.2	0.15	<0.01	0.09	8.4	0.09
HBM-23-122-SRK-WR-240	778	4.8	0.47	94	0.5	0.0	2.42	17.47	86.4	0.71	13.5	0.2	0.11	0.0	0.14	6.7	0.09
HBM-23-122-SRK-WR-241	82	14.4	0.20	12	0.2	0.1	0.15	35.03	11.9	0.39	2.3	<0.1	0.27	<0.01	0.04	16.6	0.04
HBM-23-122-SRK-WR-242	263	14.6	0.30	32	0.5	0.1	0.63	28.38	47.6	0.31	9.5	<0.1	0.36	0.0	0.06	12.5	0.07
HBM-23-122-SRK-WR-242 DUP	267	14.4	0.23	29	0.5	0.1	0.63	27.68	45.6	0.31	9.5	<0.1	0.36	0.0	0.07	12.2	0.07
HBM-23-122-SRK-WR-243	71	14.1	0.18	99	0.2	0.1	0.13	21.4	23.5	0.29	3.1	<0.1	0.29	0.0	0.06	9.5	0.04
HBM-23-122-SRK-WR-244	43	1.8	0.06	512	0.3	<0.02	0.11	14.86	87.2	0.21	6.2	<0.1	0.06	<0.01	0.05	5.2	0.04
HBM-23-122-SRK-WR-245	24	0.9	0.04	464	0.2	<0.02	0.08	9.94	97	0.15	5.4	0.1	<0.05	<0.01	0.03	3.5	0.04
HBM-23-122-SRK-WR-246	23	0.8	0.06	325	0.2	<0.02	0.07	8.45	92.4	0.21	3.3	<0.1	<0.05	<0.01	0.03	3	0.04
HBM-23-122-SRK-WR-247	29	1.0	0.04	374	0.2	<0.02	0.08	7.94	100	0.20	5.0	0.1	<0.05	<0.01	0.04	2.8	0.04
HBM-23-122-SRK-WR-248	59	3.5	0.04	40	0.1	<0.02	0.09	18.16	41.7	1.36	2.3	<0.1	0.05	<0.01	0.04	6.9	0.06
HBM-23-122-SRK-WR-249	65	<0.5	0.03	24	<0.1	<0.02	0.11	1.09	46.3	1.18	2.4	<0.1	<0.05	<0.01	0.04	0.3	0.04
HBM-23-122-SRK-WR-250	81	<0.5	0.03	2	<0.1	<0.02	0.09	0.66	46.7	0.73	6.1	<0.1	<0.05	<0.01	0.04	0.2	0.03
HBM-23-122-SRK-WR-251	70	<0.5	0.04	28	<0.1	<0.02	0.1	0.83	45.2	0.69	4.5	<0.1	<0.05	<0.01	0.04	0.3	0.05
HBM-23-122-SRK-WR-252	62	<0.5	0.08	66	<0.1	<0.02	0.1	1.55	40.6	0.64	2.7	<0.1	<0.05	<0.01	0.04	0.6	0.05
HBM-23-122-SRK-WR-252 DUP	64	<0.5	0.08	67	<0.1	<0.02	0.09	1.74	43.3	0.66	2.8	<0.1	<0.05	<0.01	0.04	0.6	0.05
HBM-23-122-SRK-WR-253	68	2.2	0.07	41	<0.1	<0.02	0.09	17.83	44	0.63	3.1	<0.1	<0.05	<0.01	0.04	6.4	0.04
HBM-23-122-SRK-WR-254	66	<0.5	0.04	14	<0.1	<0.02	0.1	0.87	40.8	0.66	3.1	<0.1	<0.05	<0.01	0.04	0.3	0.05
HBM-23-122-SRK-WR-255	75	2.4	0.08	83	<0.1	<0.02	0.11	10.61	45.7	0.94	2.0	<0.1	<0.05	<0.01	0.04	4.3	0.05
HBM-23-122-SRK-WR-256	26	1.6	0.07	802	0.3	<0.02	0.08	4.72	95.6	0.34	0.9	<0.1	<0.05	<0.01	0.03	1.6	0.04
HBM-23-122-SRK-WR-257	66	3.0	0.07	84	0.3	<0.02	0.1	23.8	54.2	0.31	6.5	<0.1	0.06	<0.01	0.07	8.7	0.07
HBM-23-122-SRK-WR-258	152	12.8	0.24	41	0.3	0.1	0.31	21.24	36.1	0.40	6.9	<0.1	0.26	0.0	0.06	8.7	0.06
HBM-23-122-SRK-WR-259	29	2.0	0.04	741	0.2	<0.02	0.09	6.22	86.5	0.40	1.6	<0.1	<0.05	<0.01	0.05	2.1	0.05
HBM-23-122-SRK-WR-260	88	5.2	0.10	137	0.2	0.0	0.12	20.45	50.1	0.61	4.5	<0.1	0.10	<0.01	0.07	7.4	0.06
HBM-23-122-SRK-WR-261	49	3.1	0.32	423	0.2	<0.02	0.07	8.62	71.9	0.49	1.7	<0.1	0.05	<0.01	0.06	3	0.05
HBM-23-122-SRK-WR-262	67	5.9	0.19	190	0.3	0.0	0.08	17.1	60.8	0.35	8.0	<0.1	0.12	<0.01	0.08	6.4	0.08
HBM-23-122-SRK-WR-262 DUP	67	5.9	0.14	190	0.3	0.0	0.08	17.13	62	0.35	8.0	<0.1	0.11	<0.01	0.08	6.3	0.08
HBM-23-122-SRK-WR-263	65	4.9	0.06	97	0.3	0.0	0.07	18.56	55.4	0.40	8.4	<0.1	0.09	<0.01	0.07	6.6	0.08
HBM-23-122-SRK-WR-264	58	6.0	0.10	854	0.2	0.1	0.11	8.43	85.2	0.25	4.5	<0.1	0.12	<0.01	0.07	3.4	0.05
HBM-23-122-SRK-WR-265	108	6.4	0.15	190	0.3	0.0	0.22	12.7	61.8	0.61	5.6	<0.1	0.13	<0.01	0.06	4.7	0.07
HBM-23-122-SRK-WR-266	51	2.7	0.08	193	0.3	0.0	0.12	10.01	81.7	0.40	6.8	<0.1	<0.05	<0.01	0.06	3.5	0.07
HBM-23-122-SRK-WR-267	65	2.1	0.07	63	0.3	<0.02	0.14	11.26	82.5	0.16	9.6	0.1	<0.05	<0.01	0.06	4.1	0.05
HBM-23-122-SRK-WR-268	93	<0.5	0.10	2	<0.1	<0.02	0.1	7.58	53.1	0.19	12.0	0.2	<0.05	<0.01	0.06	3	0.11
HBM-23-122-SRK-WR-269	99	0.9	0.05	<1	0.3	<0.02	0.18	11.17	69.9	0.62	13.0	0.2	<0.05	<0.01	0.06	4.2	0.13
HBM-23-122-SRK-WR-270	83	0.6	0.01	1	<0.1	<0.02	0.09	5.55	49.5	0.22	10.7	<0.1	<0.05	<0.01	0.03	2.1	0.16
Duplicates																	
HBM-23-123-SRK-WR-6	30	2.3	0.09	736	0.3	<0.02	0.09	5.67	80.5	0.31	5.6	<0.1	0.11	<0.01	0.05	1.7	0.07
HBM-23-123-SRK-WR-32	56	6.2	0.05	6	0.6	0.0	<0.01	23.96	57.4	0.90	12.7	0.1	0.18	<0.01	0.05	9.8	0.07
HBM-23-123-SRK-WR-50 DUP	78	6.0	0.02	5	0.8	<0.02	0.04	15.44	67.9	0.44	15.4	0.3	0.29	<0.01	0.08	5.5	0.12
HBM-23-123-SRK-WR-102	27	0.7	0.01	856	0.2	<0.02	0.05	8.11	86.9	0.14	2.7	<0.1	0.24	<0.01	0.05	2.6	0.04
HBM-23-123-SRK-WR-145	70	<0.5	0.03	24	<0.1	<0.02	0.09	1.28	39.2	0.77	0.9	<0.1	<0.05	<0.01	0.04	0.4	0.04
HBM-23-123-SRK-WR-172	28	0.7	0.04	428	0.2	<0.02	0.08	7.16	80.4	0.09	4.4	<0.1	<0.05	<0.01	0.04	2.4	0.05
HBM-23-123-SRK-WR-194	42	<0.5	0.02	79	0.1	<0.02	0.06	1.1	44.3	0.46	0.9	<0.1	<0.05	<0.01	0.04	0.3	0.07
HBM-23-123-SRK-WR-201 DUP	50	0.5	0.05	126	0.2	<0.02	0.07	2.09	45.9	0.49	1.7	<0.1	0.05	<0.01	0.06	0.7	0.09
HBM-23-123-SRK-WR-62	98	2.6	0.02	11	0.7	<0.02	0.03	21.8	61.6	0.23	18.5	0.3	0.05	<0.01	0.10	8.2	0.12
HBM-23-122-SRK-WR-265	108	6.4	0.13	188	0.3	0.0	0.22	12.41	60.4	0.59	5.5	<0.1	0.12	<0.01	0.06	4.6	0.07
HBM-23-097A-SRK-WR-220	110	3.4	0.15	44	0.4	<0.02	0.32	13.74	69.8	0.10	11.4	0.2	0.09	<0.01	0.06	4.8	0.05
HBM-23-122-SRK-WR-236	38	3.7	0.27	420	0.3	0.0	0.08	14.36	72.9	0.29	2.6	<0.1	0.10	<0.01	0.06	5.2	0.07
HBM-23-123-SRK-WR-63	103	4.0	<0.01	5	0.6	<0.02	0.06	22.1	59.2	0.19	19.5	0.3	0.10	<0.01	0.08	8.3	0.1
HBM-23-123-SRK-WR-99	26	1.6	<0.01	1104	0.2	<0.02	0.06	6.75	95.3	0.15	2.1	<0.1	<0.05	<0.01	0.03	2.4	0.04
QA/QC																	
Blank	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01
Blank	<1	<0.5	0.01	1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	<0.1	0.06	<0.01	<0.02	<0.1	<0.01
Blank	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01
Blank	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01
Blank	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01
Blank	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01

SGS

Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
HBM-23-122-SRK-WR-233	0.66	0.06	1.3	0.6	<0.05	21	<1	<0.3	<0.05	0.4	0.07	0.4	<0.02	<0.05	<0.1	7.83	0.5
HBM-23-122-SRK-WR-234	0.87	<0.05	1.1	2.1	0.2	20.5	<1	<0.3	<0.05	0.5	0.10	0.6	<0.02	<0.05	<0.1	7.83	0.5
HBM-23-122-SRK-WR-235	0.68	0.06	1	7.9	<0.05	26.2	<1	0.4	<0.05	0.5	<0.05	0.5	0.03	<0.05	<0.1	9.02	0.6
HBM-23-122-SRK-WR-236	1.60	<0.05	1.5	4.2	0.5	9.1	<1	<0.3	<0.05	0.4	0.05	0.4	0.02	<0.05	0.3	7.60	0.5
HBM-23-122-SRK-WR-237	0.92	0.08	1.7	4.4	0.1	24.2	<1	0.4	<0.05	0.5	0.05	0.7	0.03	0.08	2.8	8.03	0.6
HBM-23-122-SRK-WR-238	0.78	0.09	1.3	4.6	0.1	31	<1	0.4	<0.05	0.5	<0.05	0.7	0.05	0.08	<0.1	8.75	0.6
HBM-23-122-SRK-WR-239	0.87	<0.05	2.3	2.1	0.1	24.4	<1	<0.3	<0.05	0.5	<0.05	0.6	0.05	0.07	<0.1	9.19	0.7
HBM-23-122-SRK-WR-240	0.78	<0.05	2.4	2.2	1.0	21.1	1	<0.3	<0.05	0.4	<0.05	0.5	0.08	0.05	<0.1	8.49	0.6
HBM-23-122-SRK-WR-241	1.14	<0.05	3.6	3.7	0.3	1.5	<1	<0.3	<0.05	0.3	0.07	2.0	0.11	0.19	<0.1	3.96	0.3
HBM-23-122-SRK-WR-242	0.87	0.14	5.9	1.8	0.3	12.5	<1	0.4	<0.05	0.4	0.06	1.4	0.13	0.16	<0.1	7.45	0.5
HBM-23-122-SRK-WR-242 DUP	0.86	0.15	6	1.8	0.3	12.1	<1	0.4	<0.05	0.4	0.07	1.4	0.13	0.16	<0.1	7.28	0.5
HBM-23-122-SRK-WR-243	1.03	<0.05	3.2	2.4	0.4	4.7	<1	<0.3	<0.05	0.3	0.06	1.2	0.09	0.17	<0.1	4.08	0.3
HBM-23-122-SRK-WR-244	0.62	<0.05	0.8	1.5	0.6	15.1	<1	<0.3	<0.05	0.3	<0.05	0.3	<0.02	<0.05	<0.1	4.18	0.3
HBM-23-122-SRK-WR-245	0.49	<0.05	0.5	0.7	1.0	13.8	<1	<0.3	<0.05	0.2	0.06	0.2	<0.02	<0.05	<0.1	2.77	0.2
HBM-23-122-SRK-WR-246	0.57	<0.05	0.5	1.7	0.4	12.3	<1	<0.3	<0.05	0.2	<0.05	0.1	<0.02	<0.05	<0.1	3.02	0.3
HBM-23-122-SRK-WR-247	0.65	<0.05	0.6	0.3	0.5	14.1	<1	<0.3	<0.05	0.2	<0.05	0.1	<0.02	<0.05	<0.1	2.77	0.3
HBM-23-122-SRK-WR-248	0.56	<0.05	0.5	2.2	0.1	16	<1	<0.3	<0.05	0.3	<0.05	0.5	<0.02	<0.05	<0.1	5.17	0.4
HBM-23-122-SRK-WR-249	0.32	<0.05	0.3	1.8	0.1	18.6	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	2.78	0.3
HBM-23-122-SRK-WR-250	0.36	<0.05	0.2	1	<0.05	18.7	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	1.94	0.2
HBM-23-122-SRK-WR-251	0.20	<0.05	0.2	1.2	<0.05	19.2	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	2.70	0.3
HBM-23-122-SRK-WR-252	0.22	<0.05	0.2	0.9	0.1	19	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	2.69	0.3
HBM-23-122-SRK-WR-252 DUP	0.22	<0.05	0.3	1	0.1	19.7	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	2.71	0.3
HBM-23-122-SRK-WR-253	0.25	<0.05	0.4	1.1	0.1	16.6	<1	<0.3	<0.05	0.2	<0.05	0.4	<0.02	<0.05	<0.1	3.08	0.3
HBM-23-122-SRK-WR-254	0.18	<0.05	0.3	1	0.1	16.9	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	2.75	0.3
HBM-23-122-SRK-WR-255	0.47	<0.05	0.6	2	0.2	13.7	<1	<0.3	<0.05	0.2	<0.05	0.4	0.02	0.05	<0.1	3.22	0.3
HBM-23-122-SRK-WR-256	0.44	<0.05	1.1	2.1	2.6	11.5	<1	<0.3	<0.05	0.2	<0.05	0.2	0.02	<0.05	0.2	3.00	0.3
HBM-23-122-SRK-WR-257	0.49	<0.05	0.6	2.4	0.3	17.8	1	<0.3	<0.05	0.5	<0.05	0.5	<0.02	<0.05	<0.1	6.77	0.5
HBM-23-122-SRK-WR-258	1.24	<0.05	3.1	1.5	0.3	11.1	<1	<0.3	<0.05	0.4	0.06	1.0	0.06	0.17	<0.1	6.06	0.5
HBM-23-122-SRK-WR-259	0.49	<0.05	0.9	1.5	1.2	13.5	<1	<0.3	<0.05	0.2	<0.05	0.2	<0.02	<0.05	<0.1	3.89	0.3
HBM-23-122-SRK-WR-260	0.86	<0.05	1.1	2	0.4	9.3	<1	<0.3	<0.05	0.5	<0.05	0.6	0.03	0.08	<0.1	6.44	0.5
HBM-23-122-SRK-WR-261	0.71	<0.05	1.1	2	1.1	10.3	<1	<0.3	<0.05	0.3	<0.05	0.3	0.03	<0.05	0.1	4.68	0.4
HBM-23-122-SRK-WR-262	0.90	<0.05	1.2	1.8	0.4	17	<1	<0.3	<0.05	0.5	<0.05	0.5	0.02	0.08	0.1	6.98	0.5
HBM-23-122-SRK-WR-262 DUP	0.82	<0.05	1.2	1.9	0.4	16.9	1	<0.3	<0.05	0.5	<0.05	0.5	0.02	0.08	0.1	7.10	0.6
HBM-23-122-SRK-WR-263	0.79	<0.05	0.8	1.8	0.3	14.5	2	<0.3	<0.05	0.5	<0.05	0.5	0.03	0.07	<0.1	8.16	0.6
HBM-23-122-SRK-WR-264	0.59	<0.05	1.4	1	1.7	13	<1	<0.3	<0.05	0.3	0.16	0.4	0.03	0.08	<0.1	5.00	0.4
HBM-23-122-SRK-WR-265	0.94	<0.05	1.1	2	0.4	14.6	<1	<0.3	<0.05	0.4	<0.05	0.5	0.02	0.07	<0.1	6.67	0.5
HBM-23-122-SRK-WR-266	0.63	<0.05	0.7	1.4	0.6	15.6	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	5.57	0.5
HBM-23-122-SRK-WR-267	0.61	<0.05	0.9	0.7	0.3	17.6	<1	<0.3	<0.05	0.3	<0.05	0.2	<0.02	<0.05	<0.1	3.91	0.3
HBM-23-122-SRK-WR-268	0.14	<0.05	0.5	0.4	<0.05	25.9	<1	<0.3	<0.05	0.2	<0.05	<0.1	<0.02	<0.05	<0.1	4.53	0.6
HBM-23-122-SRK-WR-269	0.24	<0.05	0.4	1.4	<0.05	23.2	<1	0.4	<0.05	0.3	<0.05	0.1	<0.02	<0.05	<0.1	7.48	0.8
HBM-23-122-SRK-WR-270	0.24	<0.05	0.2	0.9	<0.05	16.6	<1	<0.3	<0.05	0.3	<0.05	<0.1	<0.02	<0.05	<0.1	7.56	1
Duplicates																	
HBM-23-123-SRK-WR-6	0.51	<0.05	0.7	2.4	1.7	18.6	<1	<0.3	<0.05	0.4	<0.05	0.2	<0.02	<0.05	0.6	6.72	0.6
HBM-23-123-SRK-WR-32	0.64	0.11	0.6	1.3	0.2	20.4	<1	0.4	<0.05	0.3	<0.05	0.7	<0.02	0.09	<0.1	5.79	0.5
HBM-23-123-SRK-WR-50 DUP	0.48	0.35	0.6	0.4	0.1	38.4	<1	<0.3	<0.05	0.5	<0.05	0.5	<0.02	<0.05	<0.1	11.20	0.8
HBM-23-123-SRK-WR-102	0.76	0.11	0.4	1.1	2.6	12.4	<1	<0.3	<0.05	0.2	0.10	0.6	<0.02	<0.05	0.2	3.49	0.3
HBM-23-123-SRK-WR-145	0.33	<0.05	0.6	1.1	0.1	19.8	<1	<0.3	<0.05	0.1	<0.05	<0.1	<0.02	<0.05	<0.1	2.58	0.3
HBM-23-123-SRK-WR-172	0.98	<0.05	0.5	0.7	0.6	11.5	<1	<0.3	<0.05	0.2	0.06	0.1	<0.02	<0.05	<0.1	3.72	0.3
HBM-23-123-SRK-WR-194	0.46	<0.05	0.3	3	0.1	10.7	<1	<0.3	<0.05	0.2	<0.05	<0.1	0.03	<0.05	<0.1	4.80	0.5
HBM-23-123-SRK-WR-201 DUP	0.54	<0.05	0.4	2.4	0.2	15.8	1	<0.3	<0.05	0.3	<0.05	0.2	0.02	<0.05	<0.1	6.93	0.6
HBM-23-123-SRK-WR-62	0.64	<0.05	0.4	0.3	<0.05	25.1	<1	<0.3	<0.05	0.7	<0.05	0.3	<0.02	<0.05	<0.1	13.51	0.9
HBM-23-122-SRK-WR-265	0.83	<0.05	1.1	1.9	0.6	14.3	<1	<0.3	<0.05	0.4	<0.05	0.5	0.02	0.07	<0.1	6.66	0.5
HBM-23-097A-SRK-WR-220	0.52	<0.05	1.3	0.7	0.3	19.9	<1	<0.3	<0.05	0.4	<0.05	0.2	0.02	<0.05	<0.1	6.25	0.4
HBM-23-122-SRK-WR-236	1.51	<0.05	1.5	4.4	0.5	9.2	<1	<0.3	<0.05	0.4	0.08	0.4	0.03	<0.05	0.3	7.68	0.5
HBM-23-123-SRK-WR-63	0.86	<0.05	<0.2	<0.2	<0.05	20.8	<1	<0.3	<0.05	0.6	<0.05	0.3	<0.02	<0.05	<0.1	10.66	0.7
HBM-23-123-SRK-WR-99	1.28	<0.05	0.4	1.3	2.5	13.5	<1	<0.3	<0.05	0.2	0.08	<0.1	<0.02	<0.05	<0.1	3.88	0.3
QA/QC																	
Blank	<0.05	<0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Blank	<0.05	0.06	<0.2	<0.2	<0.05	0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Blank	<0.05	<0.05	<0.2	<0.2	<0.05	0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Blank	<0.05	<0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Blank	<0.05	<0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Blank	<0.05	<0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1

SGS proposal: 19322-PR3-R2
SGS project #: 2348

Work order date: 6-Nov-23
Report date: 14-Mar-24

Version: Final

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

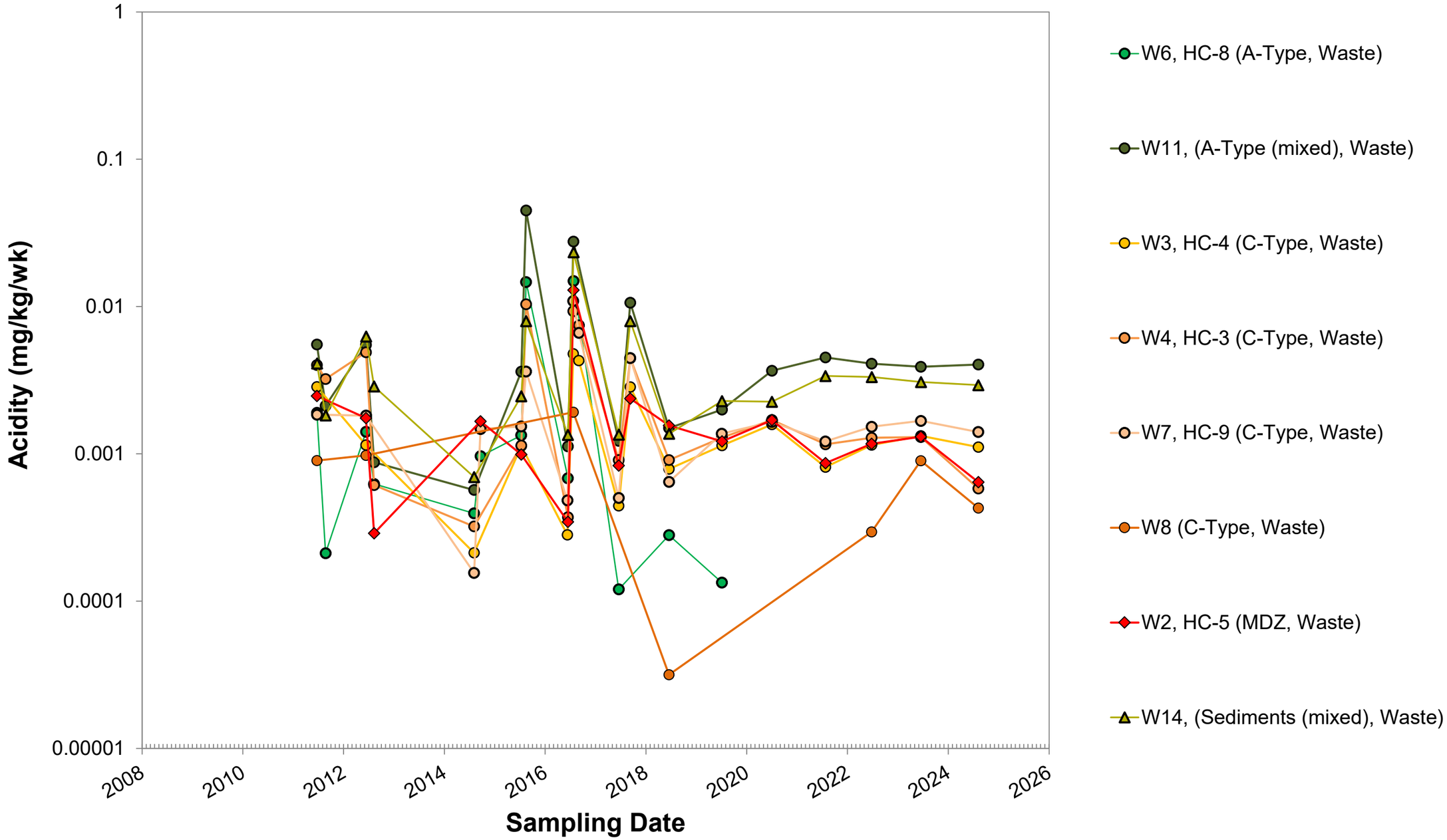
Note: Revised data highlighted in orange.

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
Certified standards																	
OREAS 501c	2.17	410	1.01	66	2665	3.99	1.18	31	1.24	380	0.21	56	0.10	0.36	64.8	0.36	111
OREAS 209	1.17	72	1.43	40	75	5.95	0.06	5	2.34	1359	0.17	112	0.16	0.89	62.7	0.14	41
OREAS 601c	0.61	472	0.76	15	1114	1.81	0.23	7	0.08	204	0.05	6	0.02	0.90	33.9	<0.01	4
OREAS 501C	2.11	418	0.99	68	2751	4.01	1.15	32	1.21	384	0.19	55	0.10	0.37	61.9	0.36	111
OREAS 209	1.18	71	1.43	40	78	6.09	0.07	6	2.37	1382	0.17	112	0.17	0.95	62.5	0.14	41
OREAS 610	0.87	107	0.11	34	>10000	2.32	0.22	8	0.11	66	0.05	24	0.03	2.60	39.8	<0.01	11
OREAS 209	1.11	70	1.42	40	77	6.02	0.07	5	2.35	1381	0.16	111	0.17	0.88	58.3	0.13	41
OREAS 607b	0.62	435	0.84	15	570	1.62	0.26	8	0.08	239	0.06	5	0.03	0.50	34	0.01	3
OREAS 609b	0.65	208	0.74	18	5057	2.35	0.26	8	0.07	205	0.06	7	0.02	1.76	35.8	<0.01	5
OREAS 607b	0.65	411	0.85	14	555	1.6	0.27	9	0.08	240	0.06	5	0.03	0.48	33.6	0.01	3
OREAS 502C	2.01	391	1.09	67	7658	4.42	1.04	30	1.21	382	0.19	36	0.1	0.82	66.7	0.34	108
OREAS 610	0.89	98	0.1	33	9675	2.26	0.22	8	0.11	67	0.05	24	0.02	2.65	40.50	0.01	12
OREAS 261	1.28	170	1.2	49	66	3.78	0.28	21	0.66	479	0.08	77	0.04	0.11	16.40	<0.01	23
OREAS 601C	0.69	495	0.78	14	1204	1.88	0.26	7	0.09	208	0.05	5	0.0	0.91	37.9	0.01	4
OREAS 261	1.40	172	1.19	52	67	3.74	0.30	22	0.68	467	0.08	75	0.0	0.11	17.4	<0.01	23
OREAS 905	0.790	239	0.33	17	1548	3.5	0.32	5	0.16	348	0.09	9.0	0.0	0.07	11.7	0.02	5
OREAS 610	0.890	105	0.12	34	9649	2.24	0.22	9	0.11	66	0.05	24.0	0.0	2.74	39.6	<0.01	11

Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
Certified standards																	
OREAS 501c	70	8.7	0.41	24	0.5	0.7	0.13	60.88	13.3	9.80	8.1	<0.1	0.36	0.0	0.04	29.7	0.22
OREAS 209	71	25.7	0.25	1003	0.3	0.1	0.08	27.65	29.5	0.92	3.6	<0.1	0.60	<0.01	<0.02	13.8	0.13
OREAS 601c	369	32.6	48.58	328	0.5	21.8	2.62	32.93	4.2	1.22	3.3	<0.1	0.93	0.2	0.50	16.7	0.03
OREAS 501C	69	8.9	0.43	24	0.5	0.7	0.12	63.49	13.8	9.68	8.8	0.2	0.65	0.0	0.04	29.5	0.23
OREAS 209	72	26.5	0.32	986	0.3	0.1	0.07	28.65	29.9	0.91	3.9	<0.1	0.75	<0.01	<0.02	13.7	0.13
OREAS 610	1748	10.8	48.17	2756	0.3	224.0	12.88	15.04	7.3	0.76	6.1	0.6	0.33	0.8	4.00	6.6	0.03
OREAS 209	71	25.8	0.24	1095	0.3	0.0	0.07	24.97	30.7	0.91	3.8	<0.1	0.62	<0.01	<0.02	12.2	0.12
OREAS 607b	631	35.2	6.09	168	0.6	13.4	3.02	42.67	2	1.51	3.4	<0.1	1.04	0.1	0.36	21.8	0.03
OREAS 609b	1246	33.1	23.83	1435	0.5	103.0	7.63	33.12	4.5	1.37	4.8	0.2	0.99	0.5	1.92	16.8	0.03
OREAS 607b	643	36.6	6.34	179	0.7	14.4	3.13	43.55	2.4	1.54	3.6	<0.1	1.02	0.1	0.41	22.7	0.03
OREAS 502C	101	9.9	0.85	63	0.6	0.8	0.34	54.43	14.2	9.55	9.3	0.30	0.4	0.1	0.07	28.4	0.24
OREAS 610	1733	11.5	48.15	2632	0.30	217	12.33	14.32	7.30	0.75	7.20	0.50	0.39	0.72	3.90	7.50	0.03
OREAS 261	131	13.8	0.18	17	1.00	0.58	0.26	54.17	29.60	2.78	4.60	<0.1	0.35	0.06	0.03	29.70	0.14
OREAS 601C	389	35.6	48.68	345	0.5	20.9	2.59	35.65	4.1	1.20	3.8	<0.1	0.9	0.2	0.50	18	0.03
OREAS 261	131	13.3	0.20	17	1.1	0.6	0.27	59.25	31.8	2.71	4.6	<0.1	0.4	0.1	0.02	29.3	0.14
OREAS 905	65	49.8	0.48	29	1	6.0	0.34	76.12	13.5	1.20	6.0	<0.1	1.2	0.0	0.56	38.6	0.03
OREAS 610	1738	11.2	48.34	2582	0.3	224.0	11.88	14.95	7.3	0.71	6.4	0.60	0.4	0.8	3.70	7	0.03

Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
Certified standards																	
OREAS 501c	92	2.02	7.8	123	1.5	7.2	2	2.4	<0.05	0.6	0.21	18.6	0.70	4.56	3.1	16.97	1.5
OREAS 209	1.81	0.90	3.3	3.6	1.3	3.4	1	0.8	<0.05	0.5	0.05	1.8	0.02	0.43	0.4	12.65	1
OREAS 601c	3.19	0.56	254	11.9	24.5	1	7	1.3	<0.05	0.3	6.71	5.9	1.16	1.88	1.2	4.85	0.2
OREAS 501C	95.95	1.78	7.8	135	1.5	7.1	2	2.6	<0.05	0.6	0.23	19.5	0.70	4.62	3.1	16.69	1.5
OREAS 209	1.91	0.83	3.2	4	1.4	3.5	1	0.8	<0.05	0.5	0.05	1.9	0.03	0.45	0.4	12.77	0.9
OREAS 610	4.40	0.10	504	7.7	239.0	0.9	26	26.1	<0.05	0.2	38.69	3.4	1.52	1.08	3.3	3.04	0.2
OREAS 209	1.89	0.93	3.1	3.9	1.3	3.2	1	0.8	<0.05	0.5	<0.05	1.6	0.04	0.42	0.4	12.97	0.9
OREAS 607b	2.97	0.55	1696	14	10.0	1.2	3	1	<0.05	0.3	2.26	6.9	0.42	2.29	0.6	5.73	0.2
OREAS 609b	4.87	0.49	384	13.7	125.0	1.1	13	8.4	<0.05	0.3	20.55	5.9	0.92	1.97	1.7	4.95	0.2
OREAS 607b	2.99	0.30	1712	14.7	8.8	1.1	4	1.2	<0.05	0.4	2.59	7.6	0.46	2.54	0.4	6.10	0.3
OREAS 502C	240.00	0.83	11.9	122	3.8	7.1	3	3	<0.05	0.6	0.53	19.4	0.7	4.88	3	16.30	1.6
OREAS 610	4.59	0.21	497.0	8.10	246.0	0.90	26	25	<0.05	0.17	46.56	3.4	1.53	1.12	3.40	3.12	0.2
OREAS 261	0.43	<0.05	32.9	18.80	2.0	3.00	<1	1	<0.05	0.49	0.12	10.7	0.27	1.27	<0.1	12.09	0.9
OREAS 601C	3.100	0.40	236	12.1	25.9	1.2	8	1.5	<0.05	0.3	7.52	5.9	1.2	2.04	0.9	5.18	0.2
OREAS 261	0.460	<0.05	32.1	19.7	2.1	3.5	<1	0.5	<0.05	0.5	0.10	10.4	0.3	1.28	<0.1	12.42	0.9
OREAS 905	2.860	0.56	16.2	18	1.2	1.9	2	1.2	<0.05	0.4	0.06	8.7	0.1	2.27	0.6	6.92	0.3
OREAS 610	4.410	0.18	504	7.5	252.0	1	26	24.6	<0.05	0.2	41.78	3.3	1.5	1.06	3.5	2.92	0.2

Appendix F Updated Field Barrel Release Rate Timeseries Plots (July 2024)



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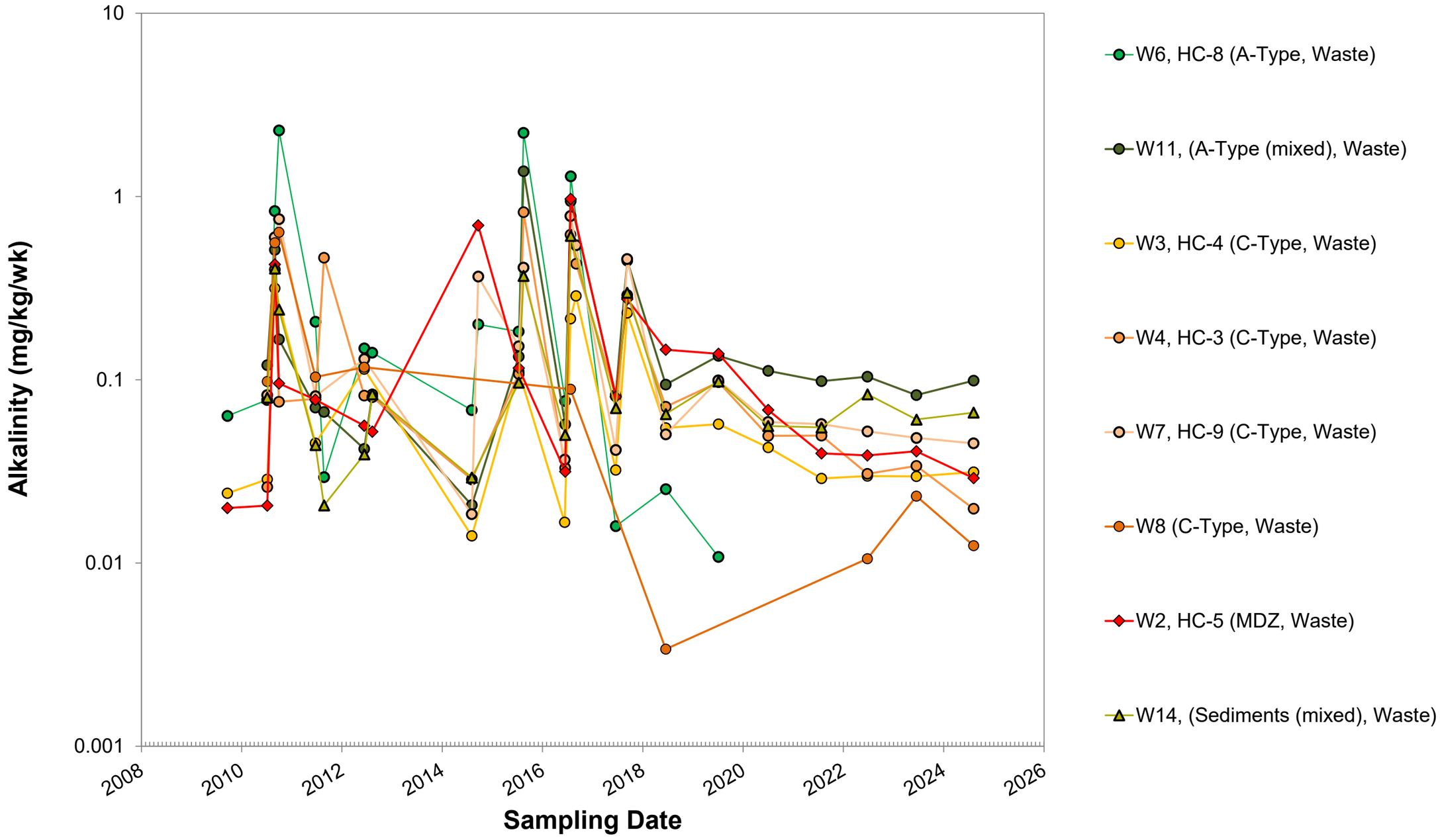

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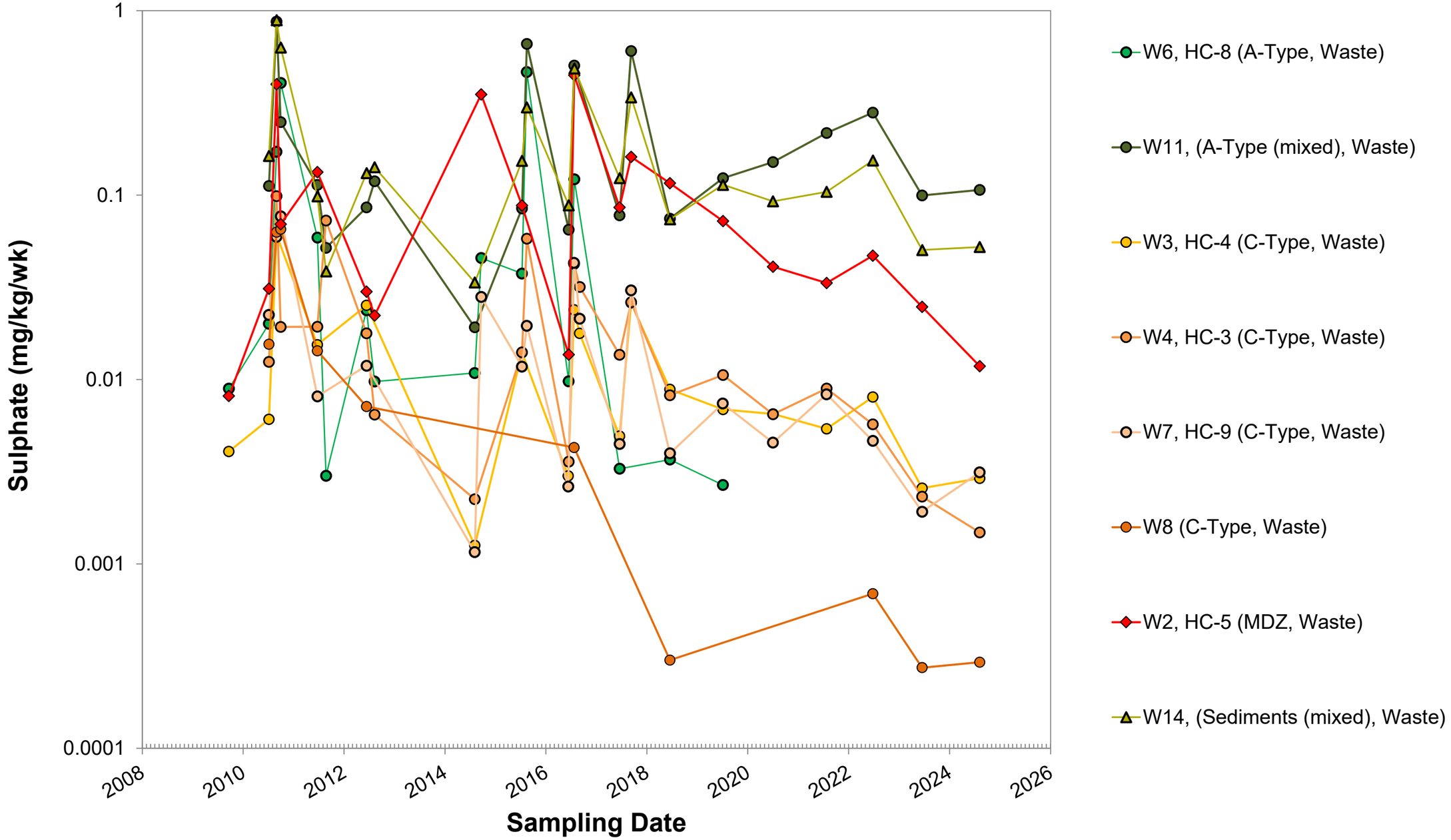

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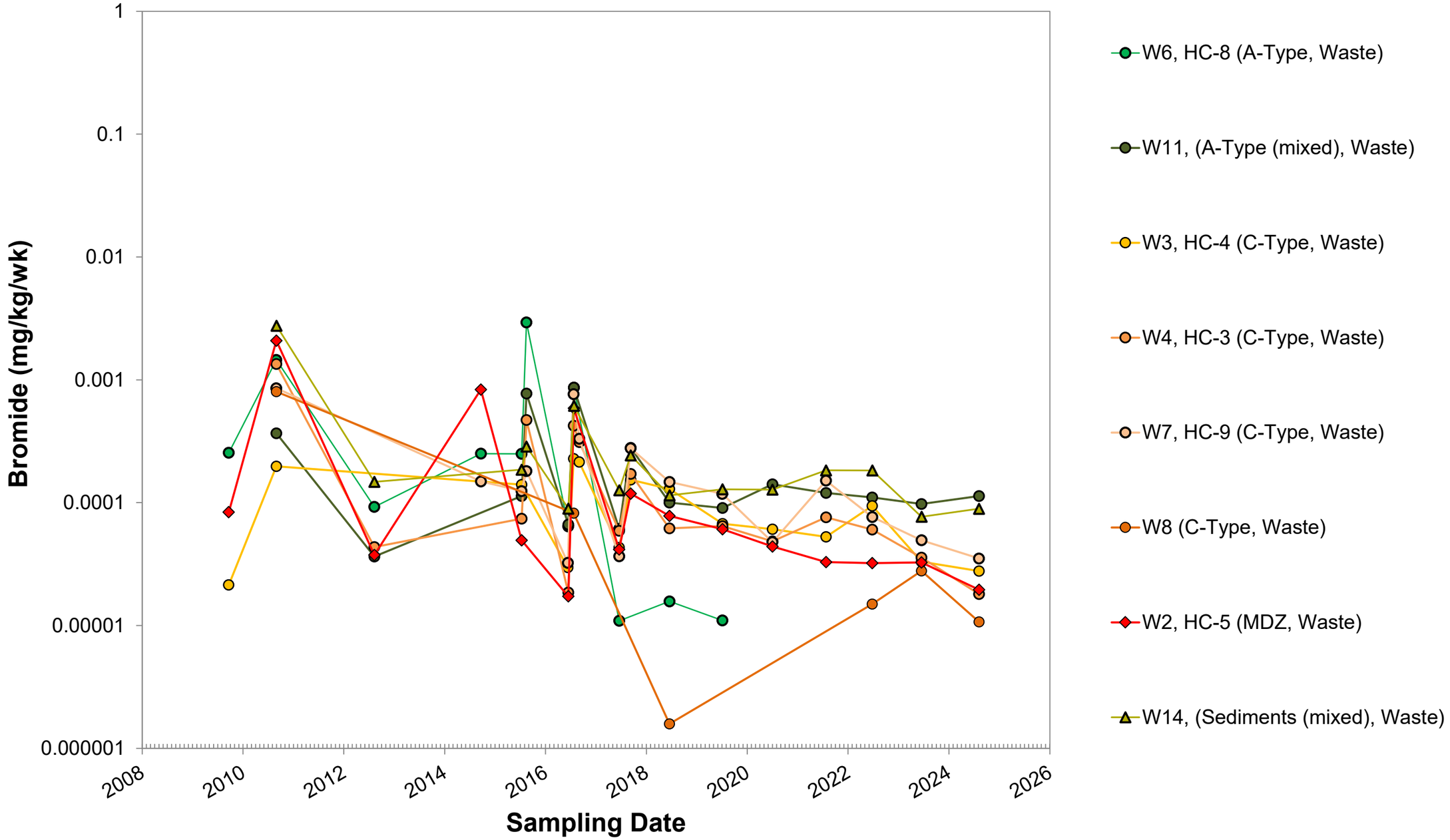

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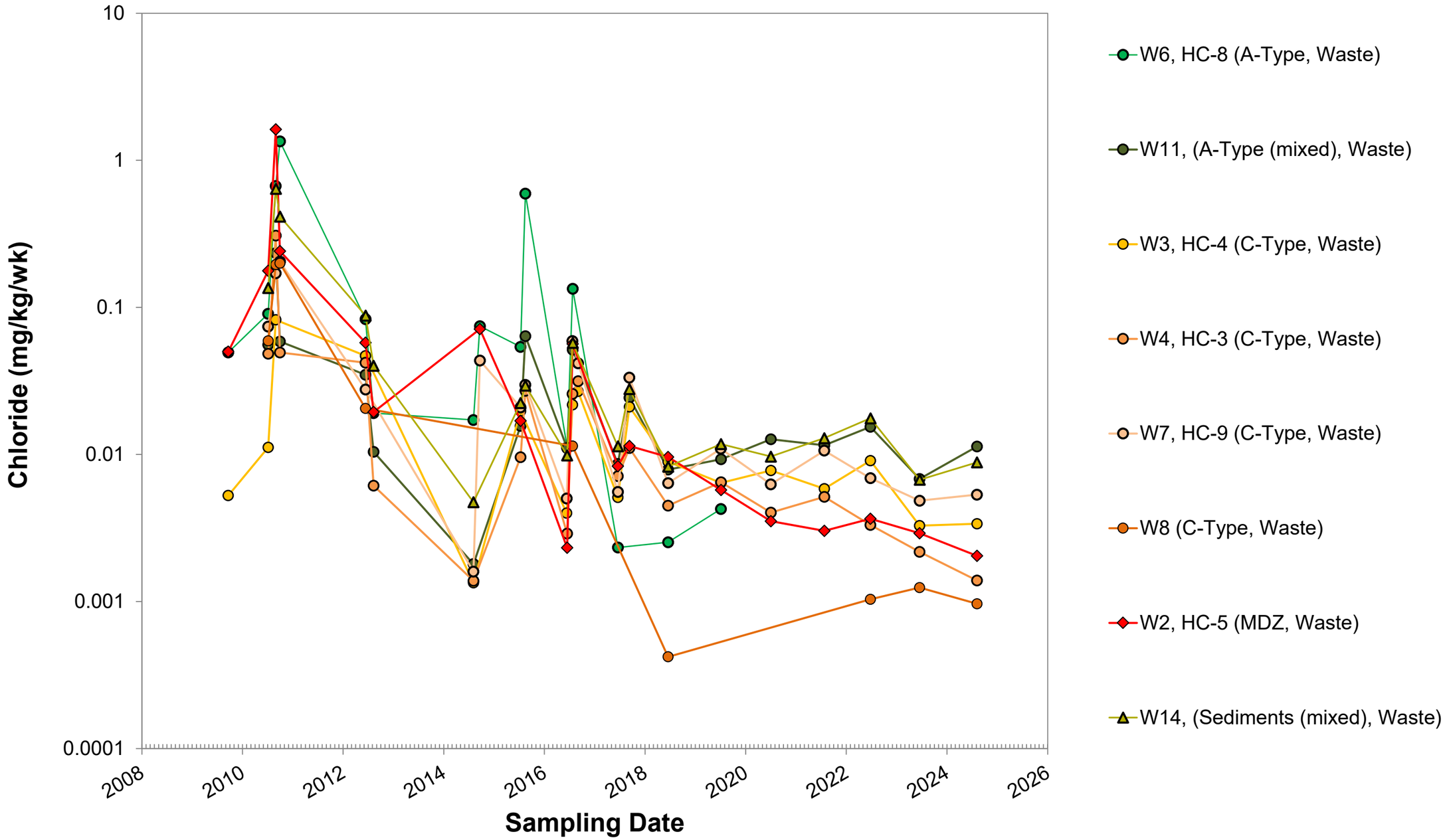

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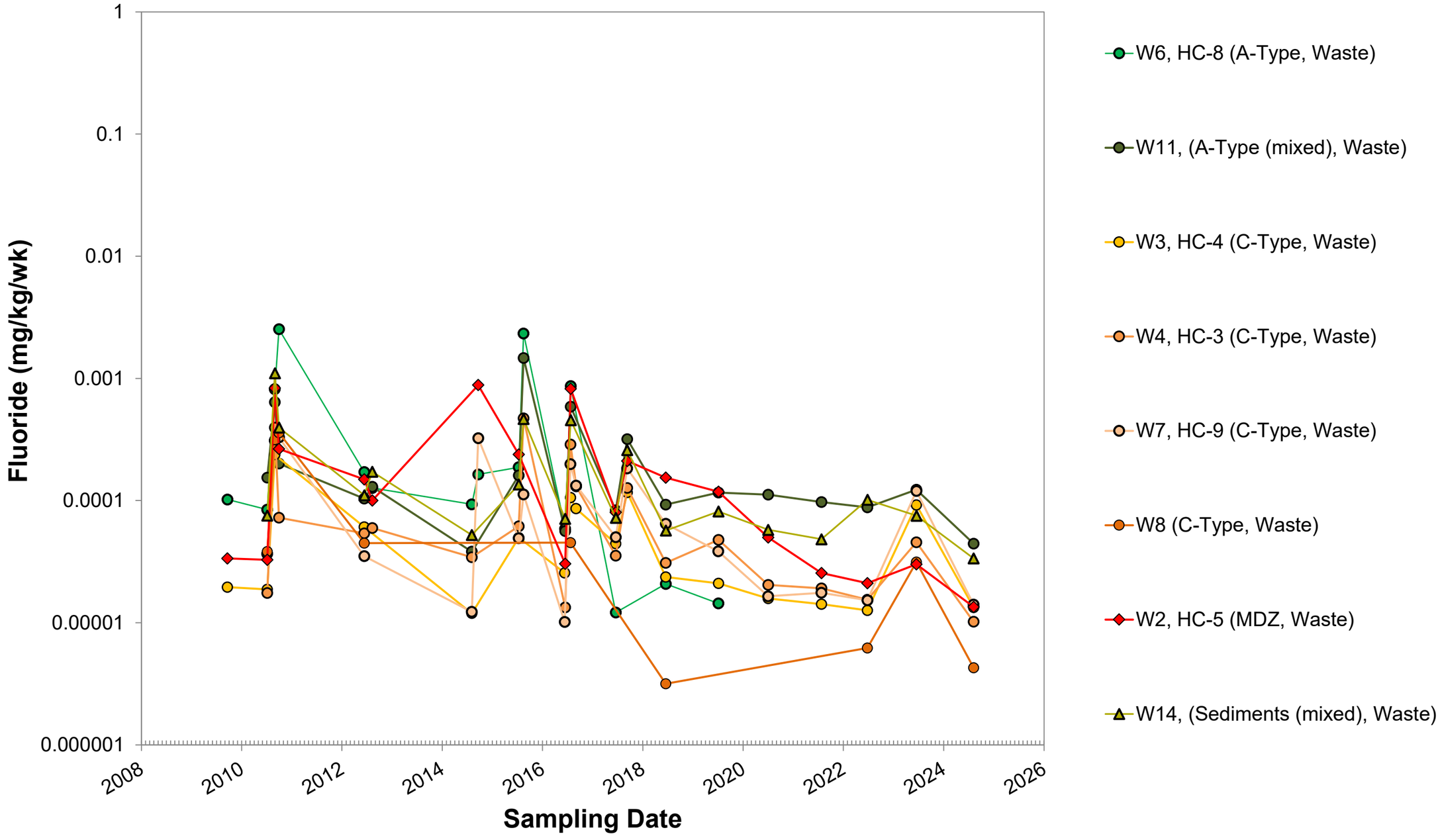

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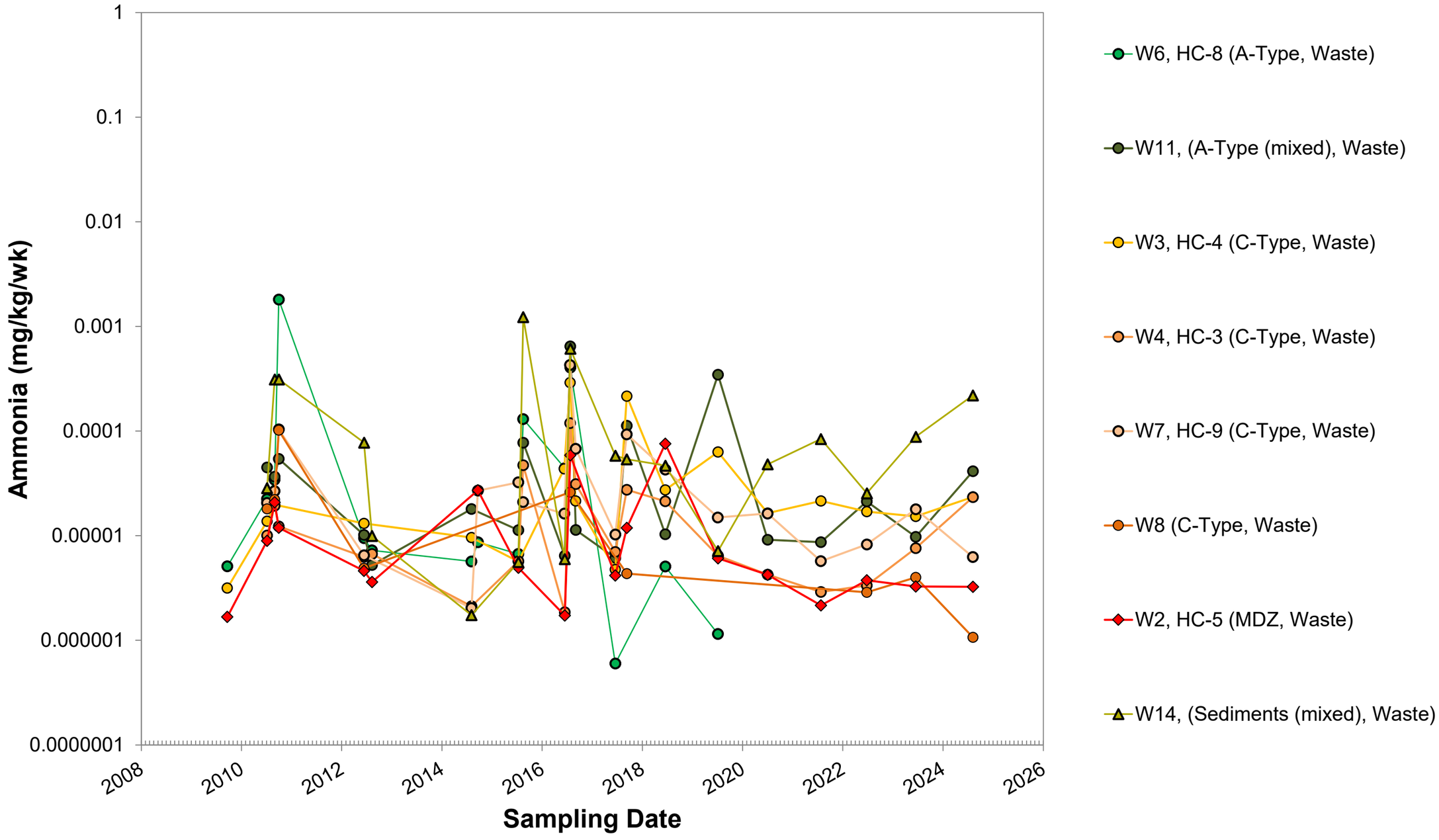

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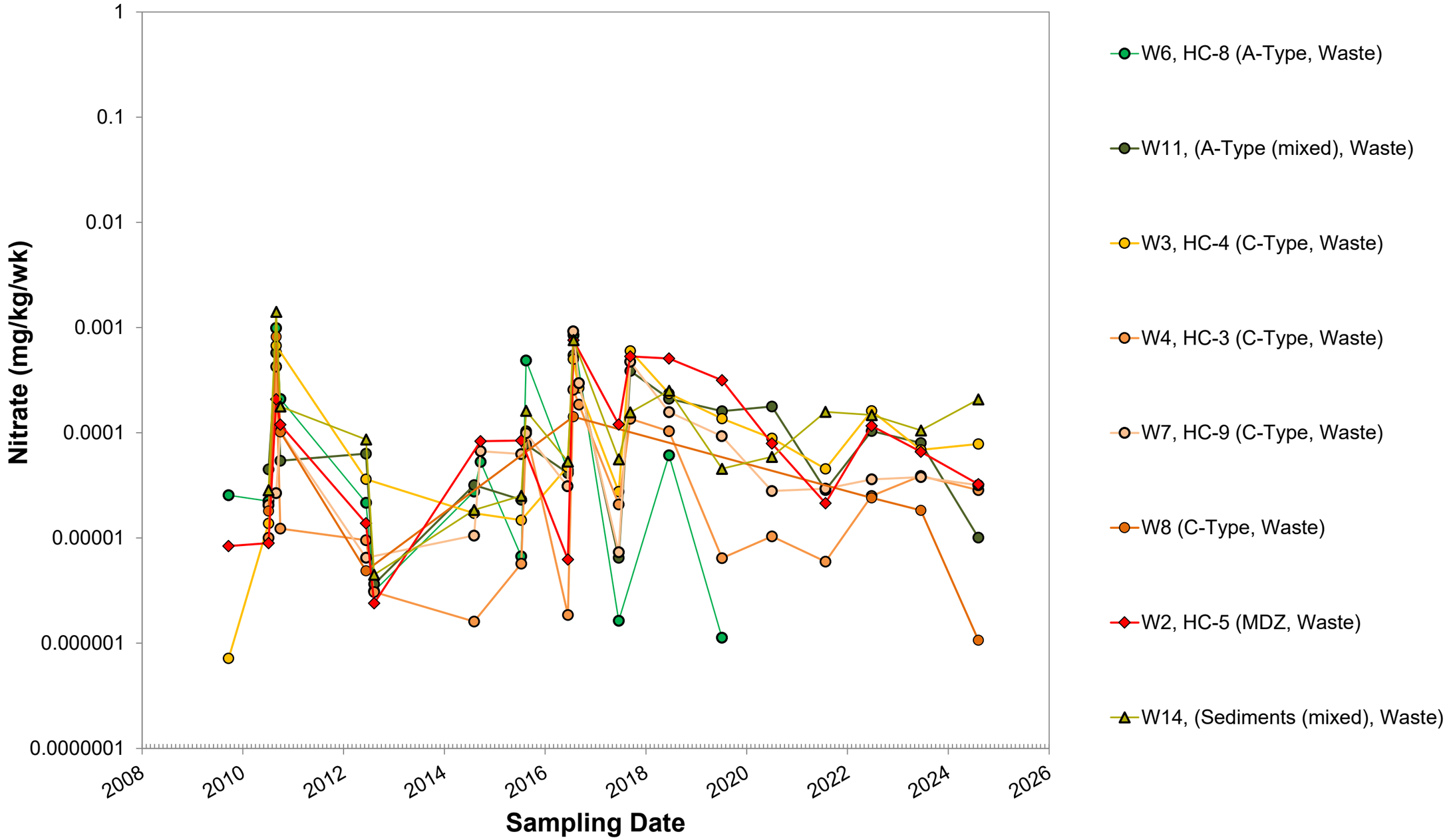

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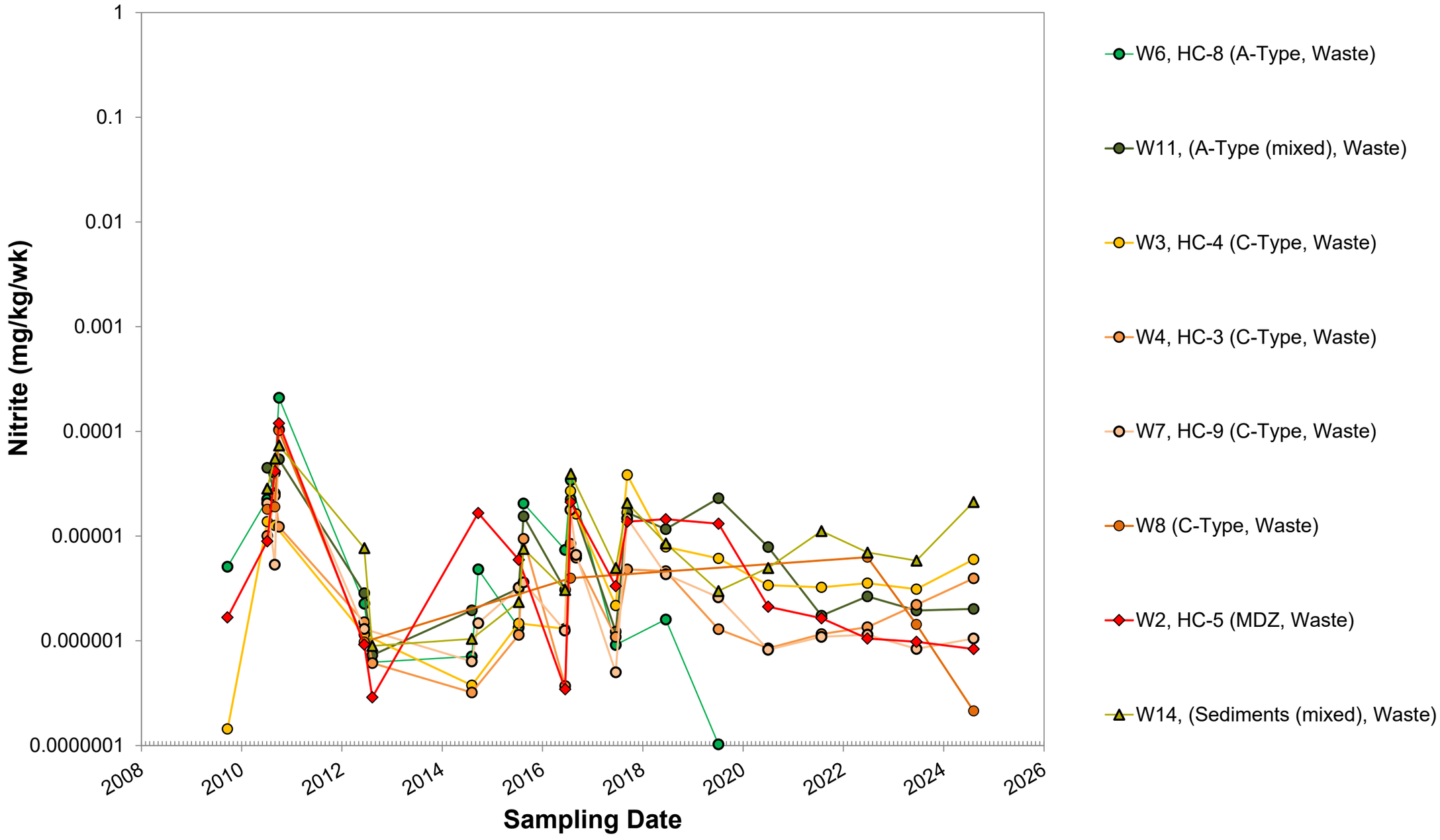

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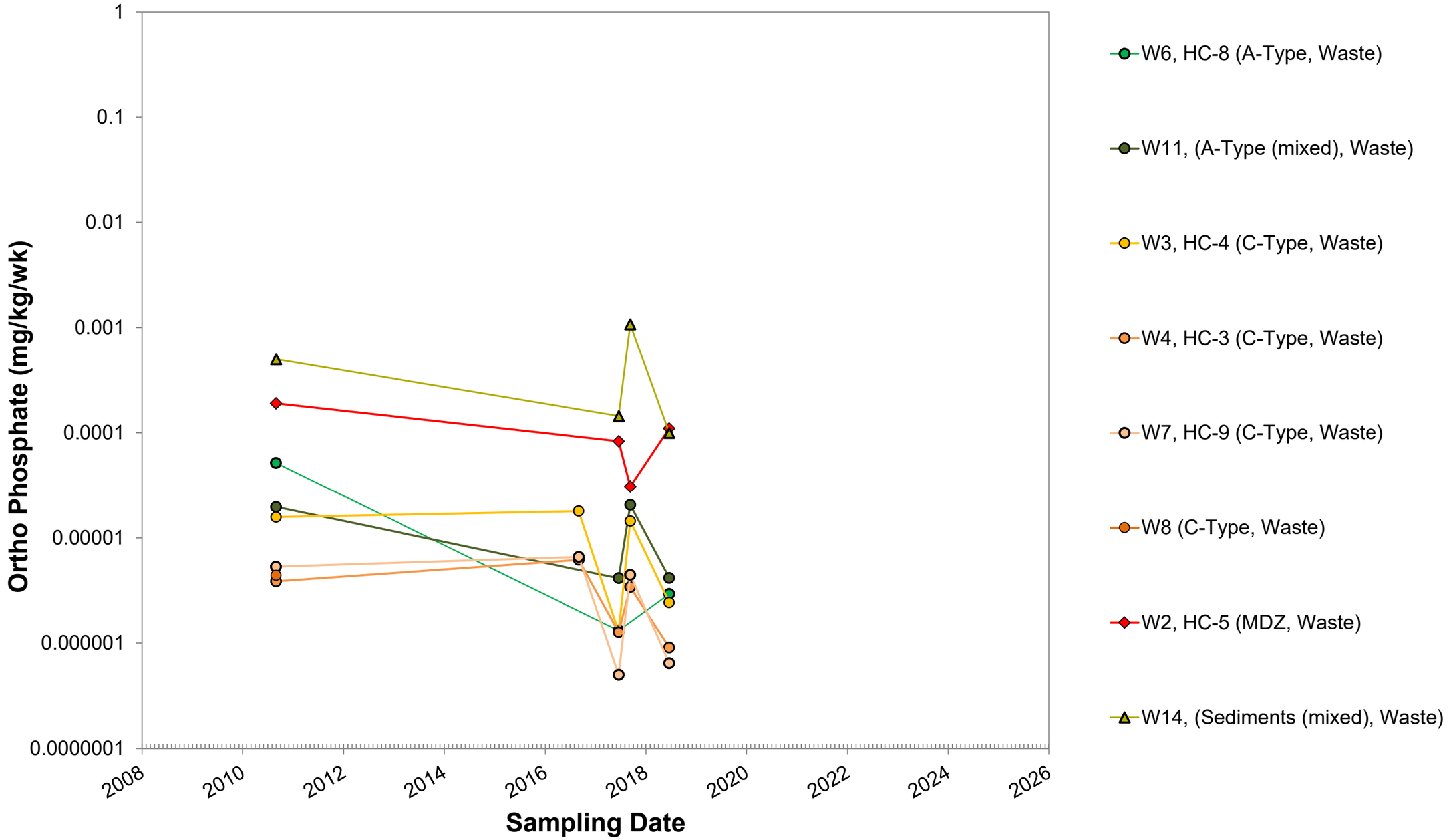

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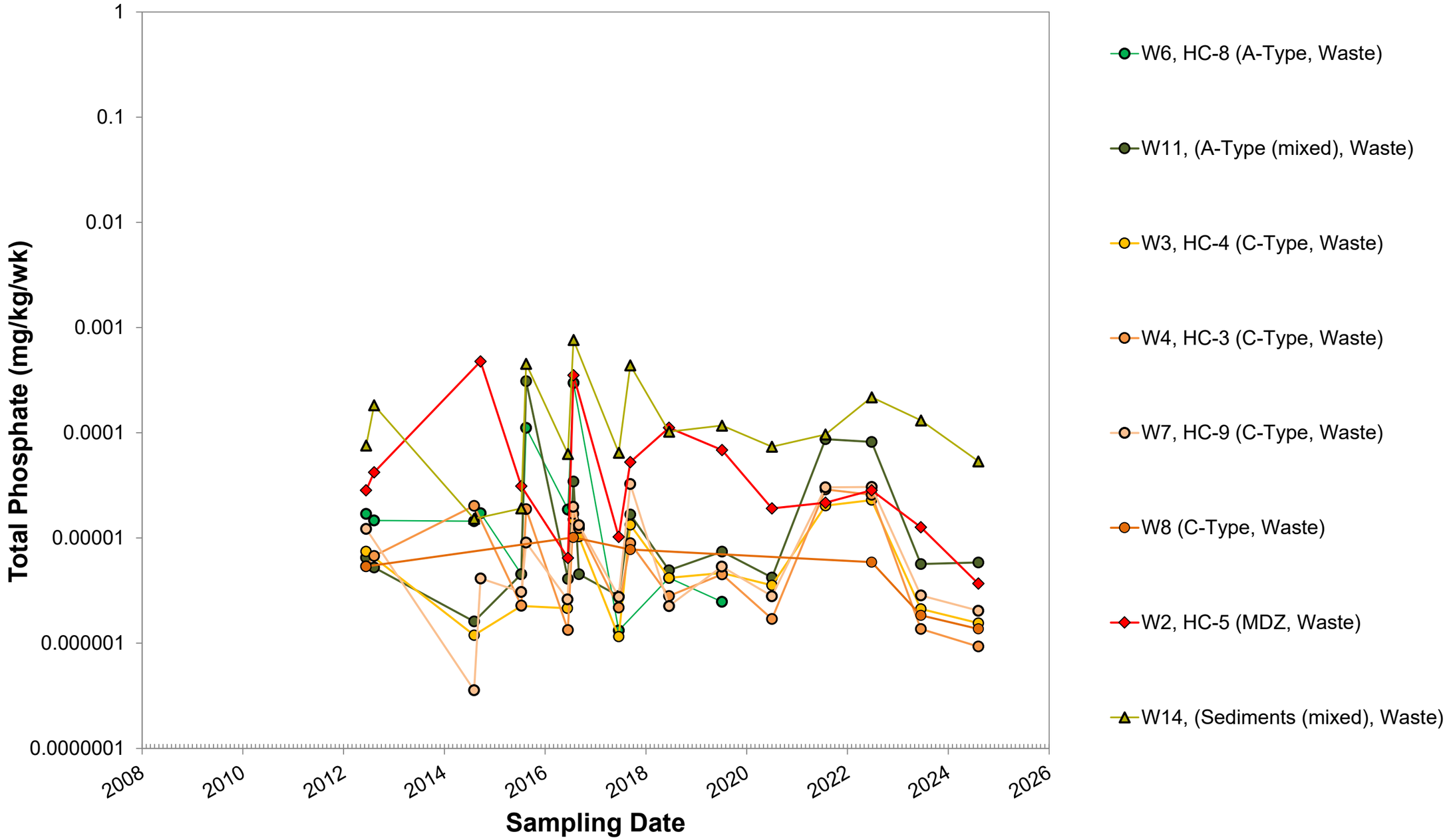

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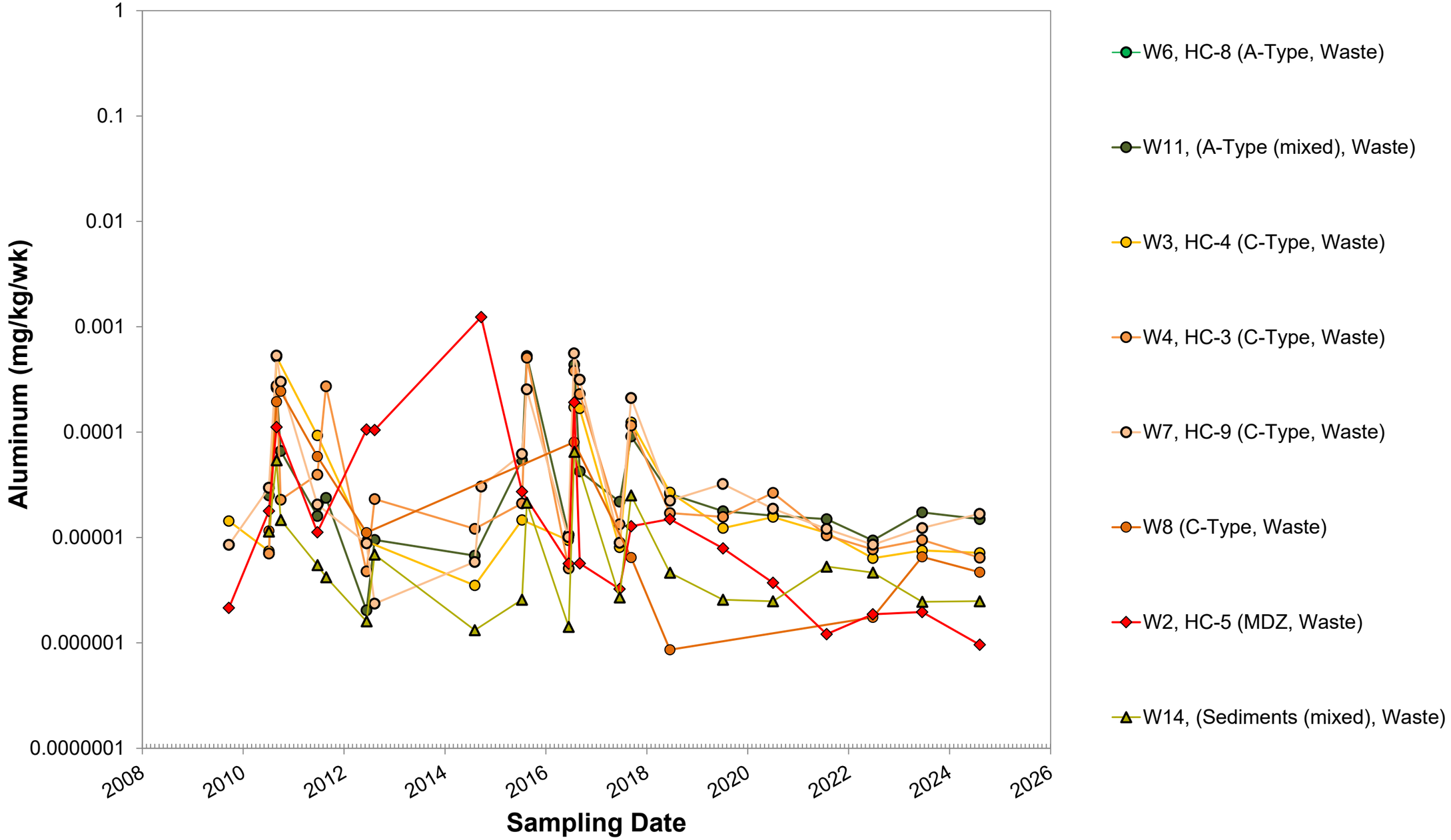

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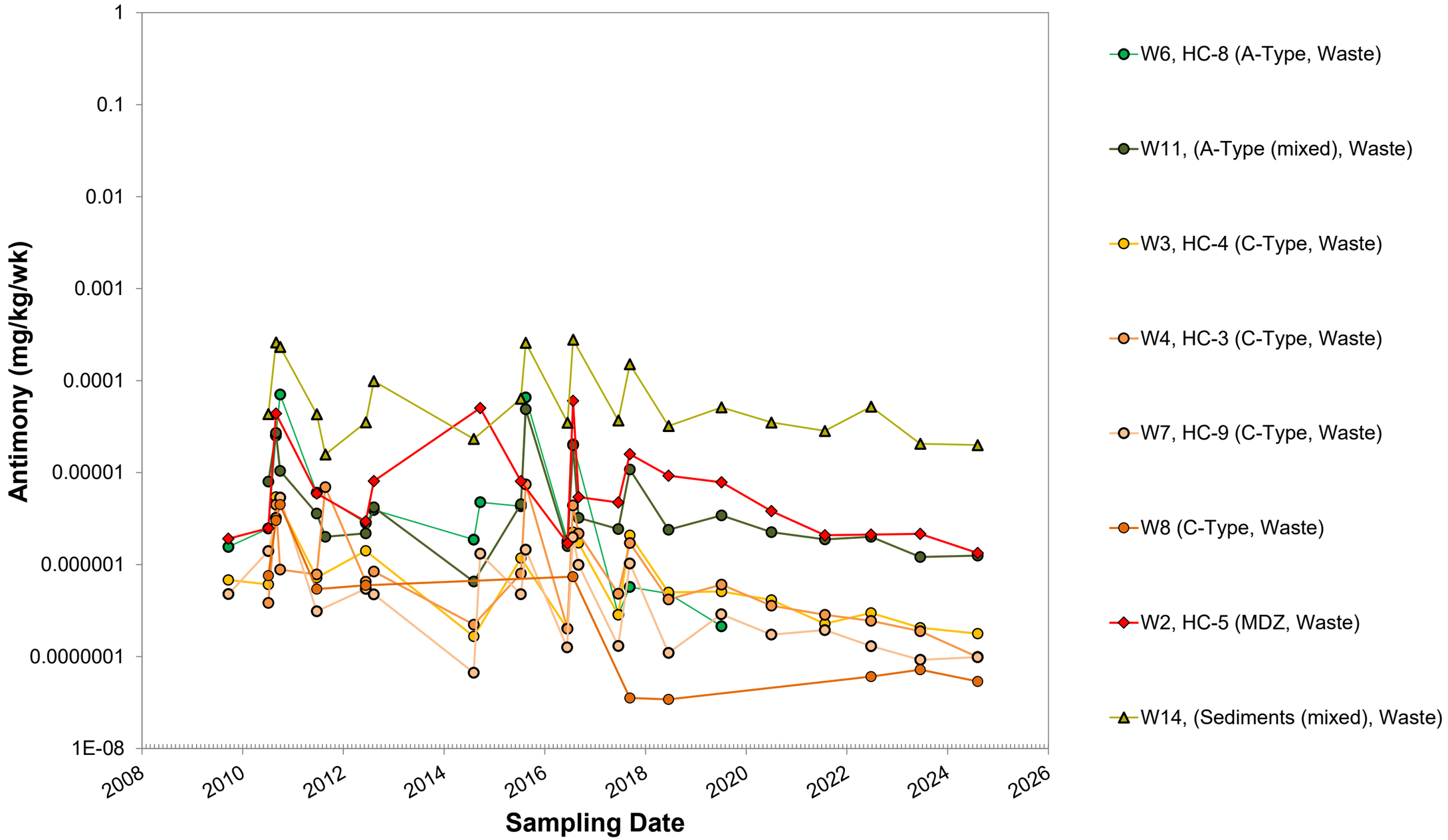

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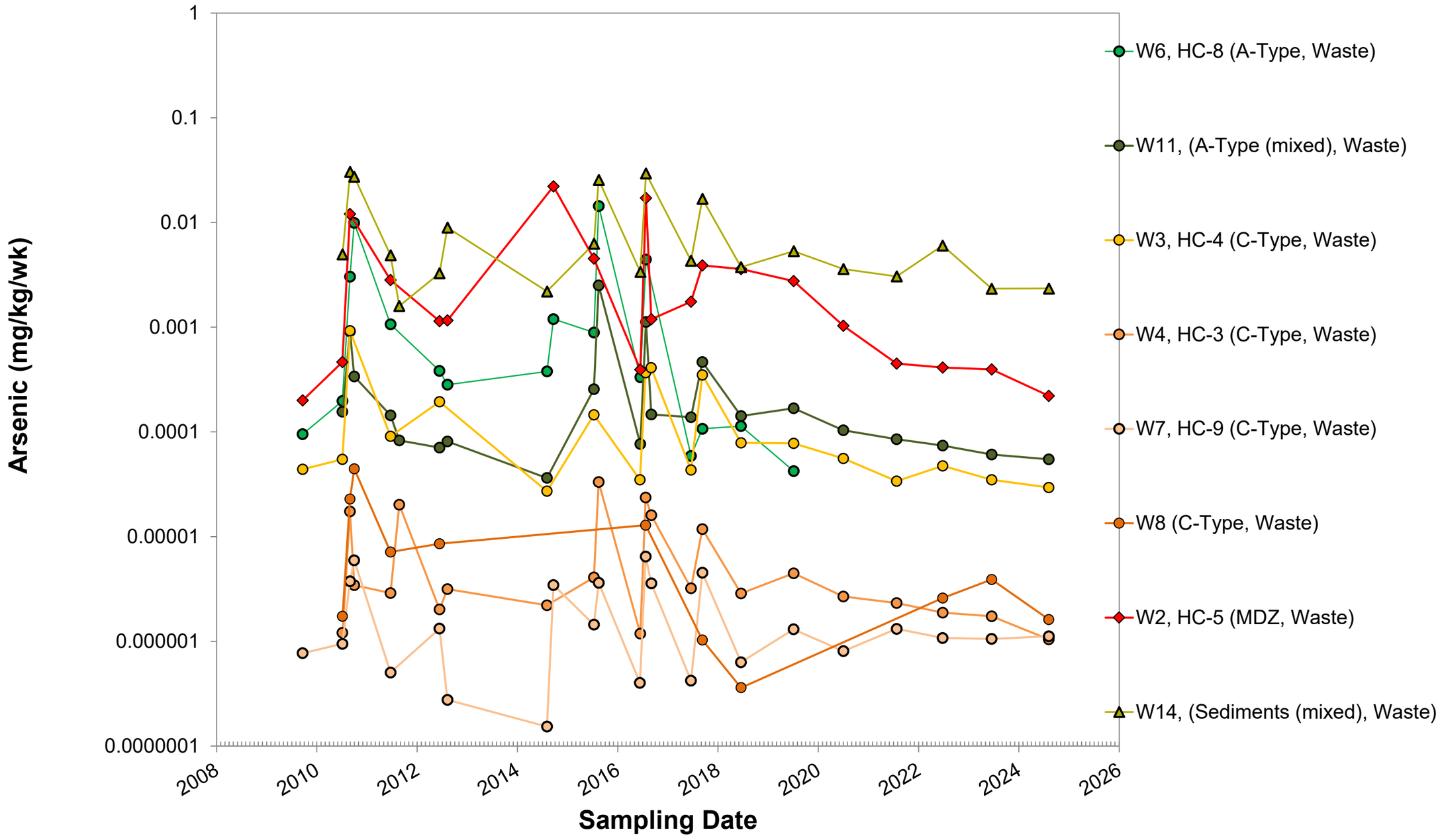

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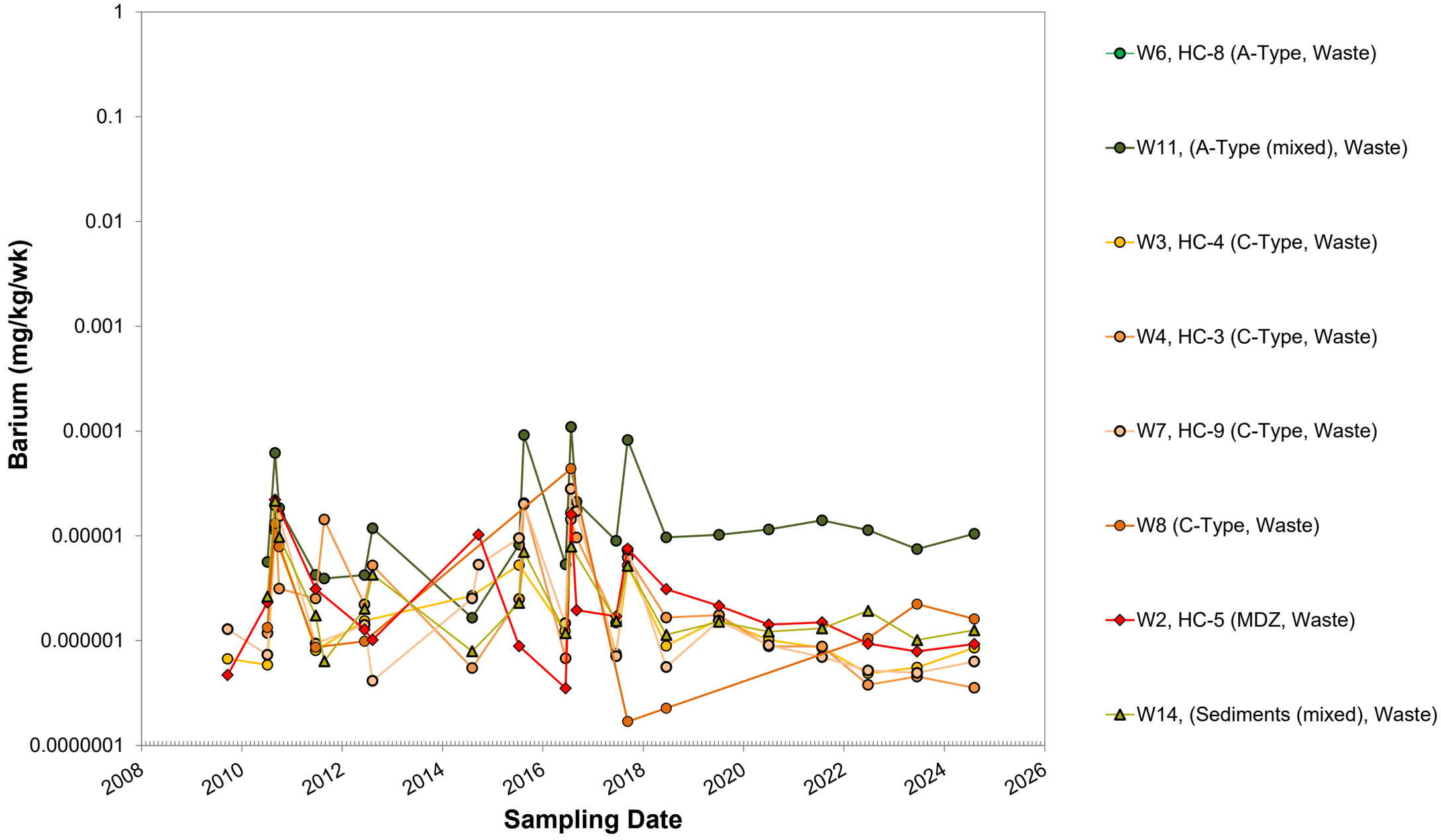

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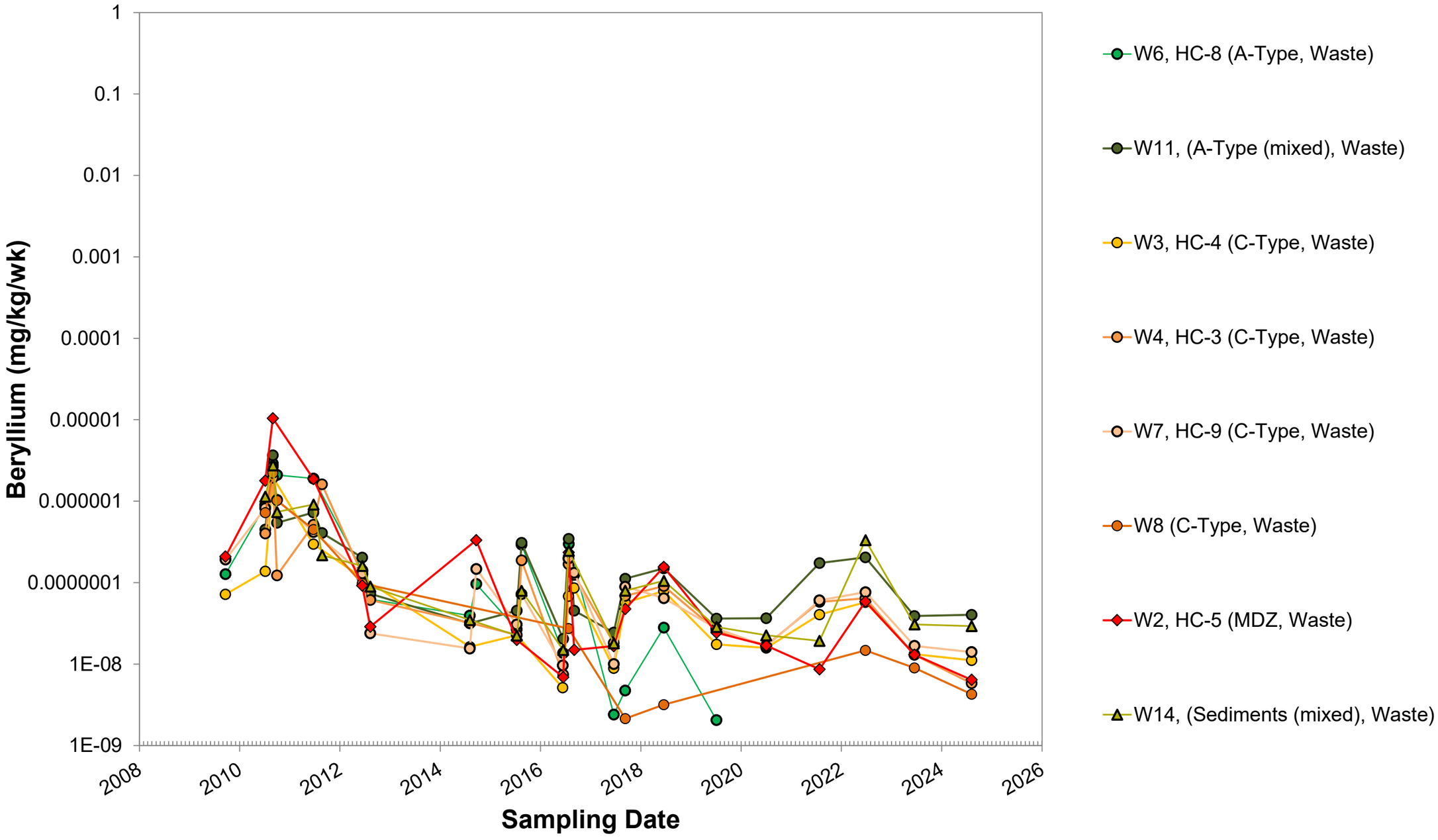

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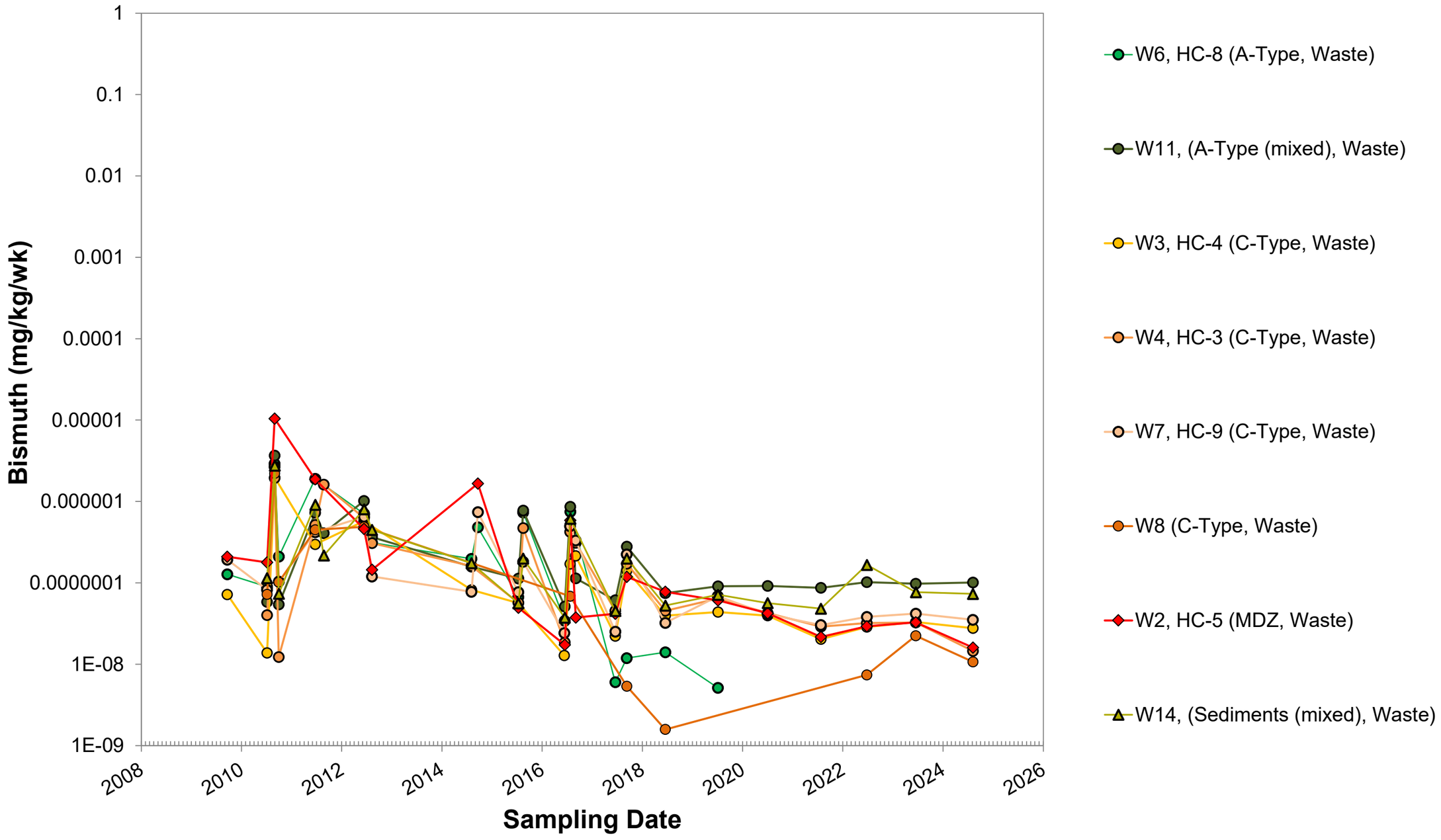

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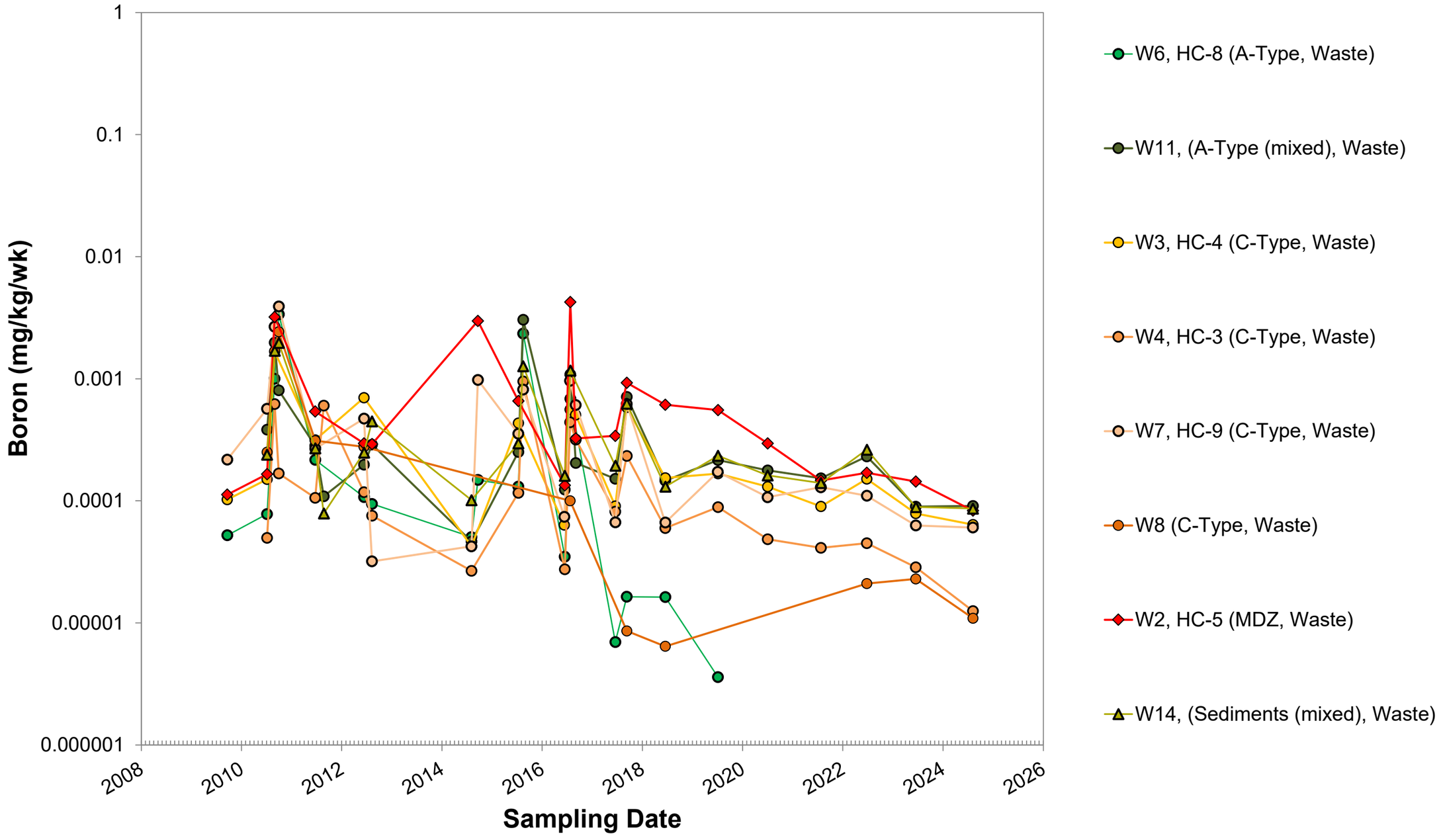

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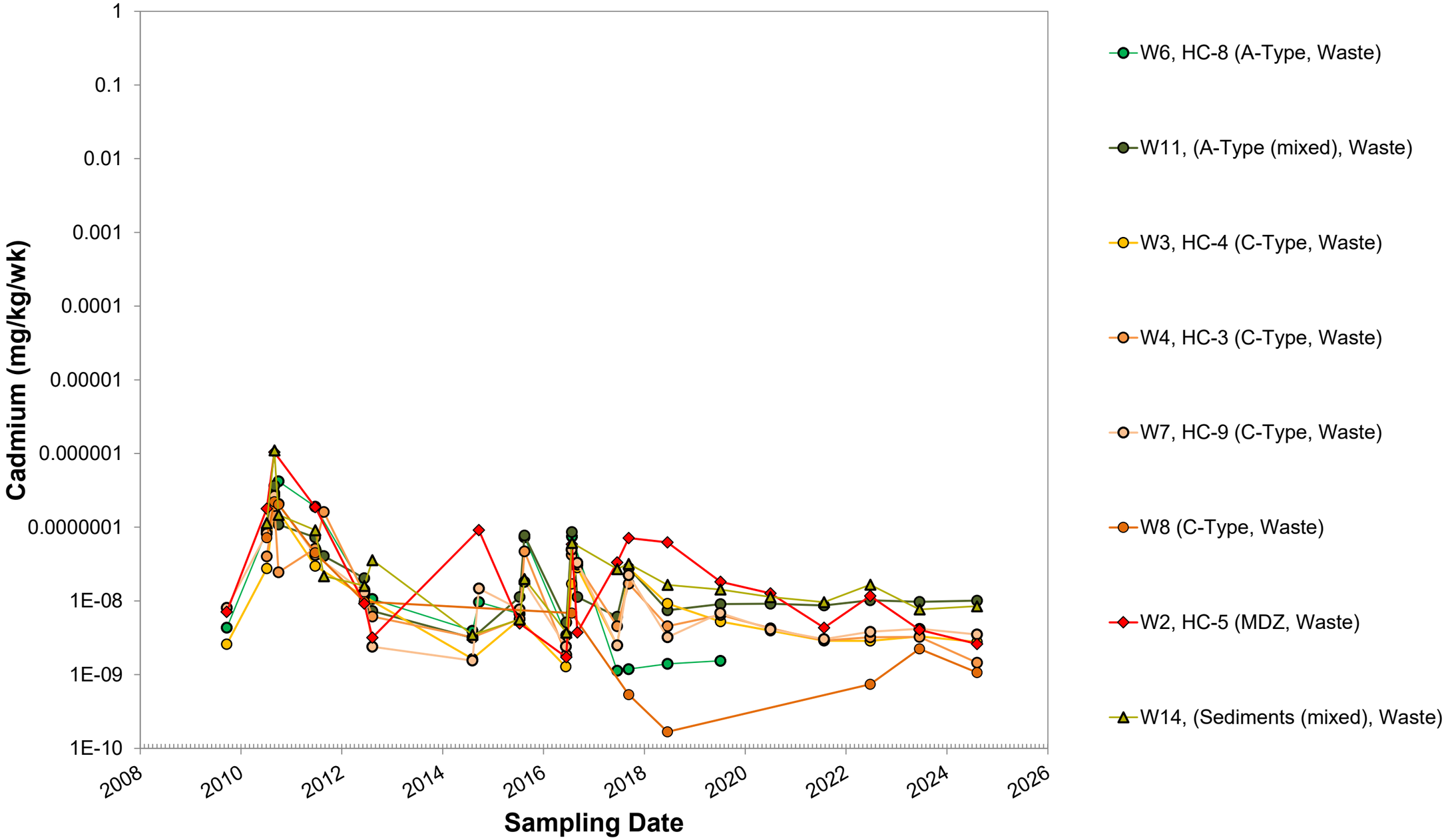

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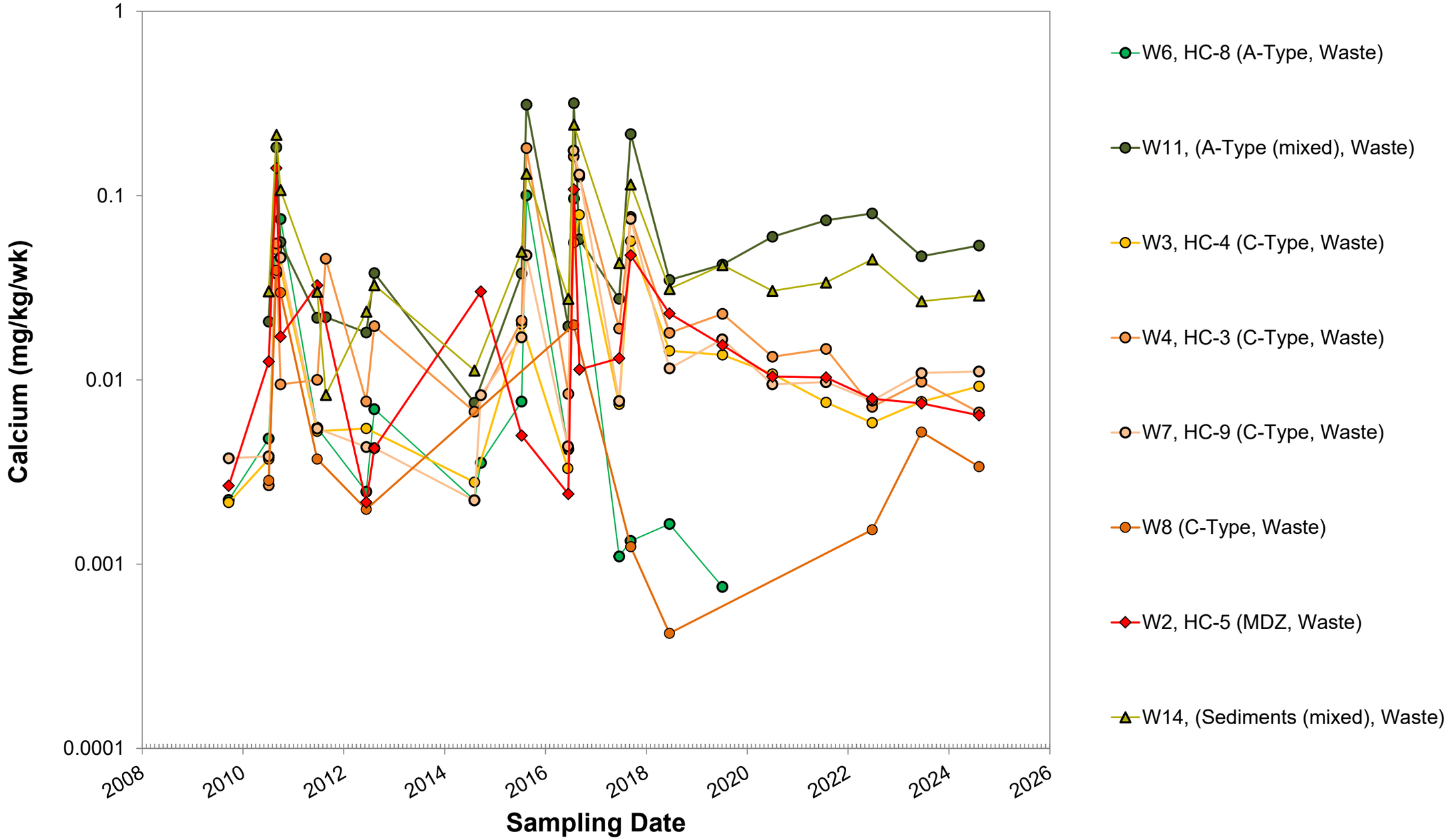

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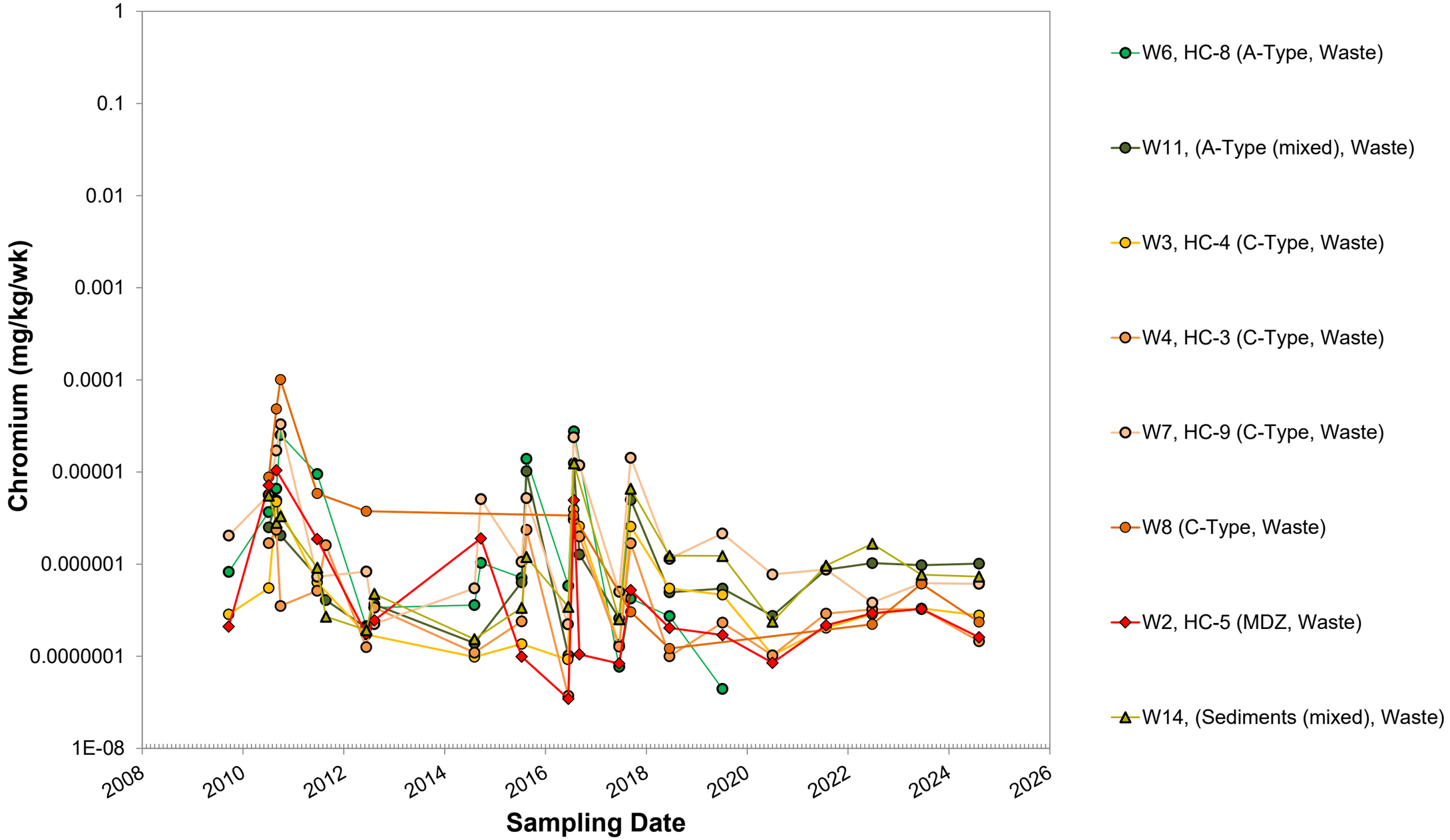

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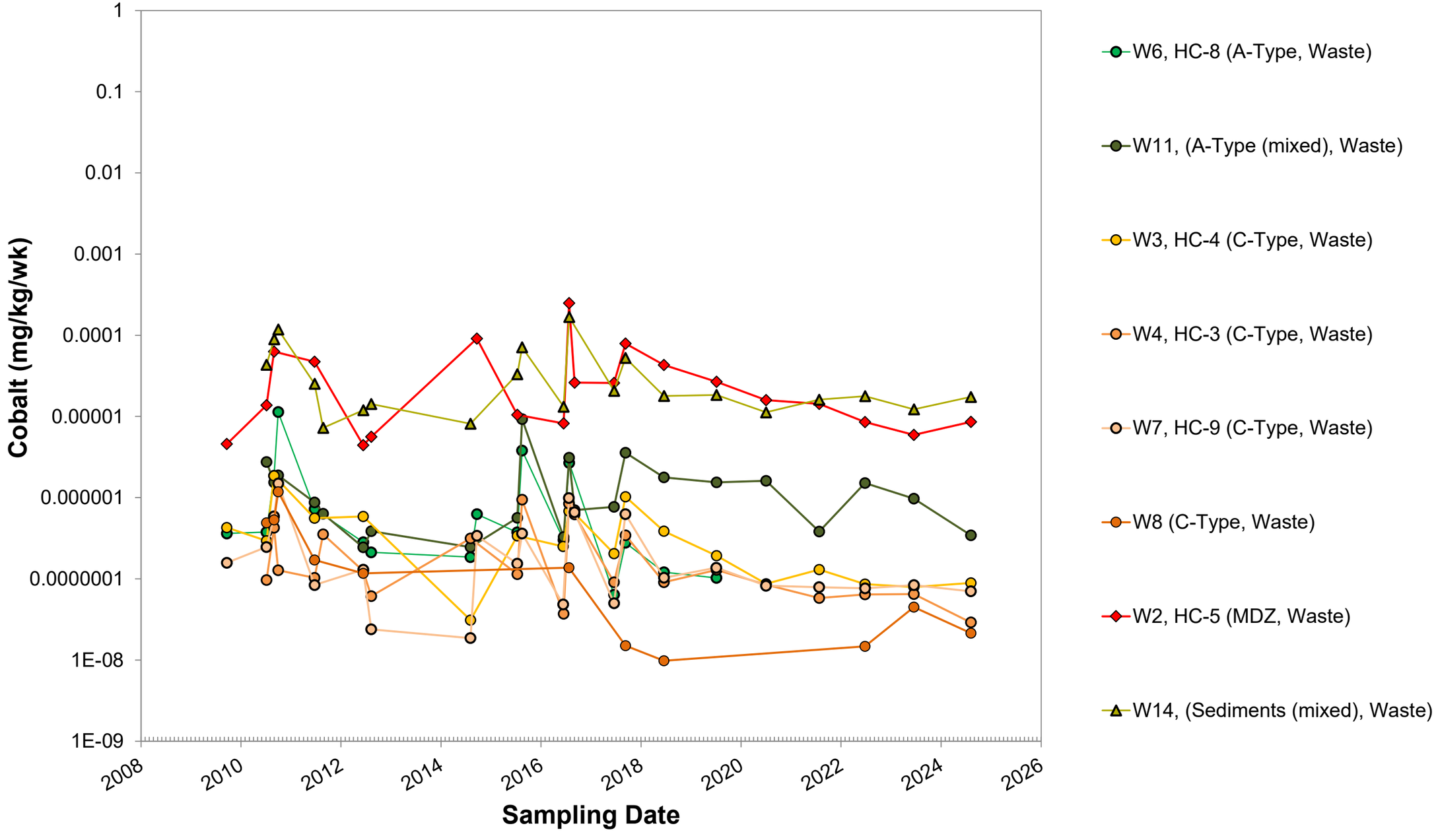

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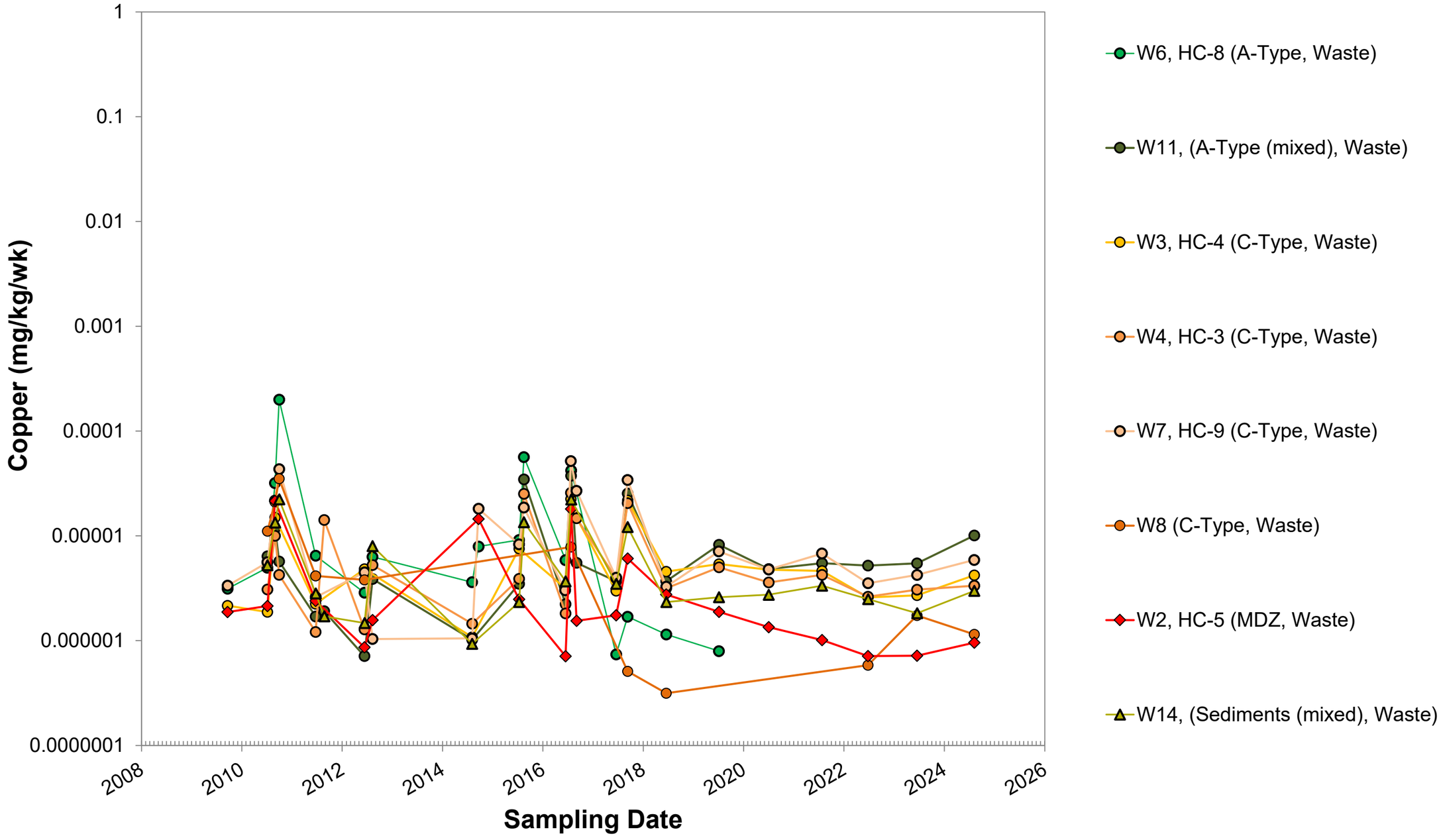

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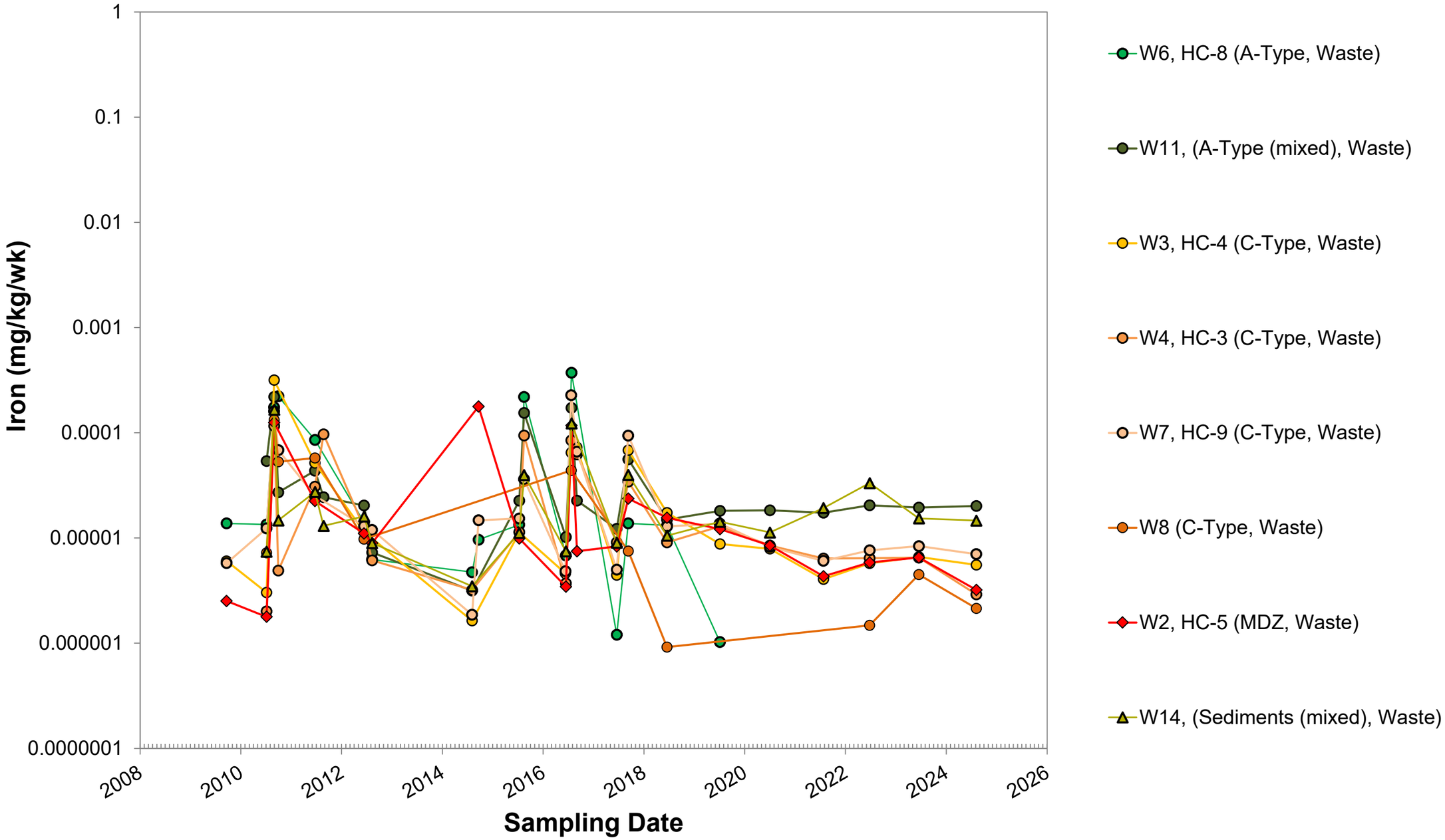

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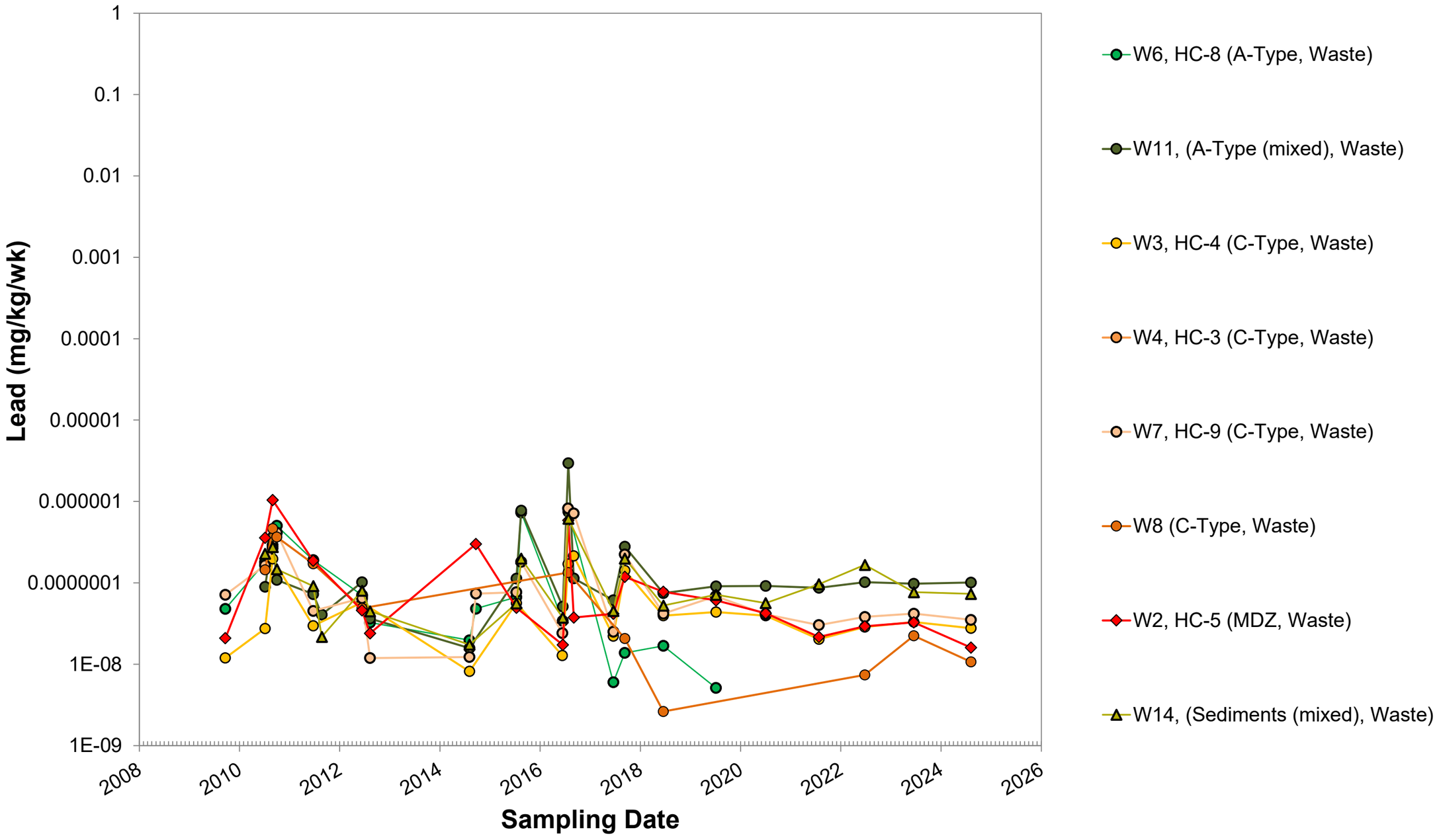

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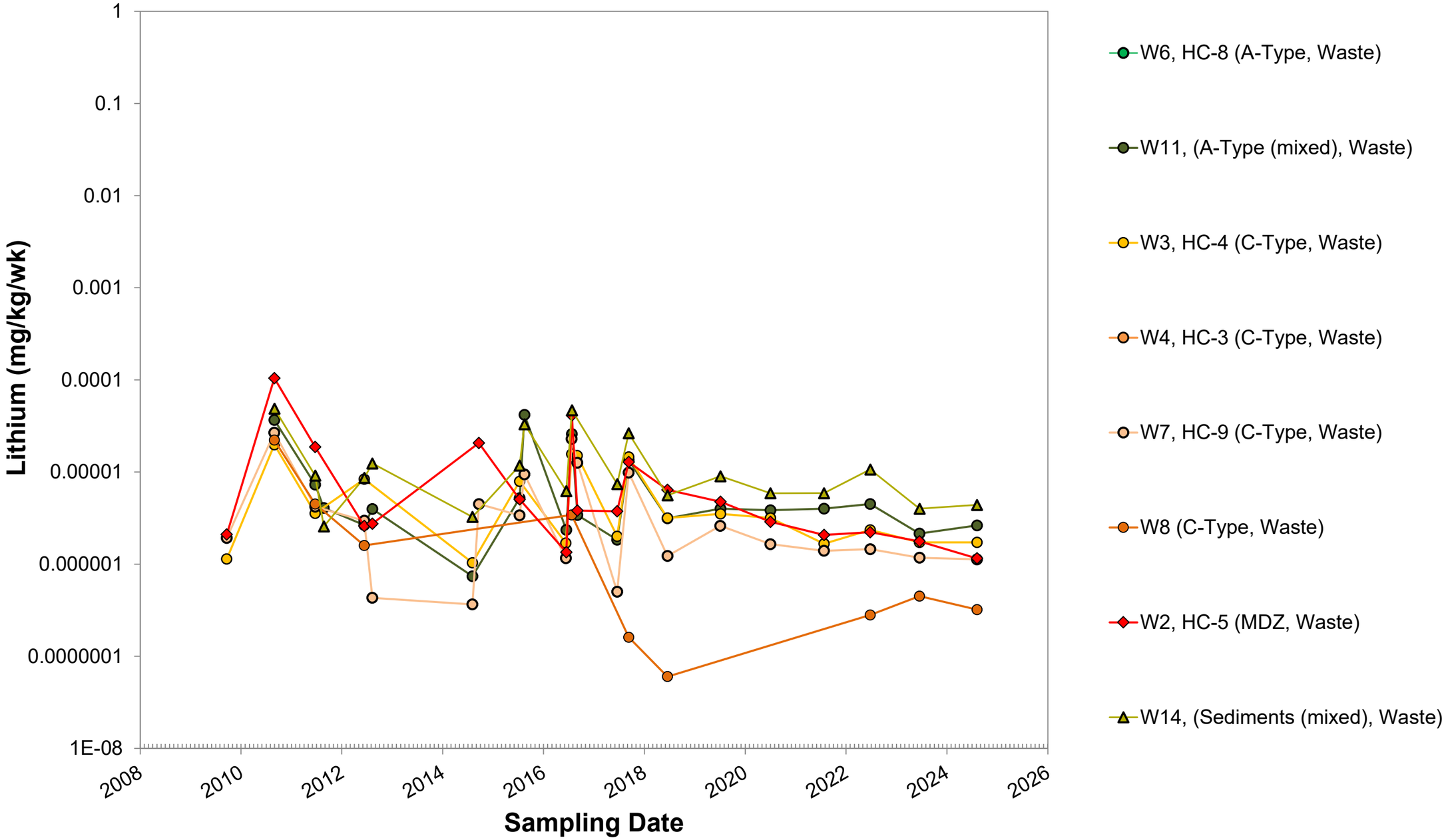

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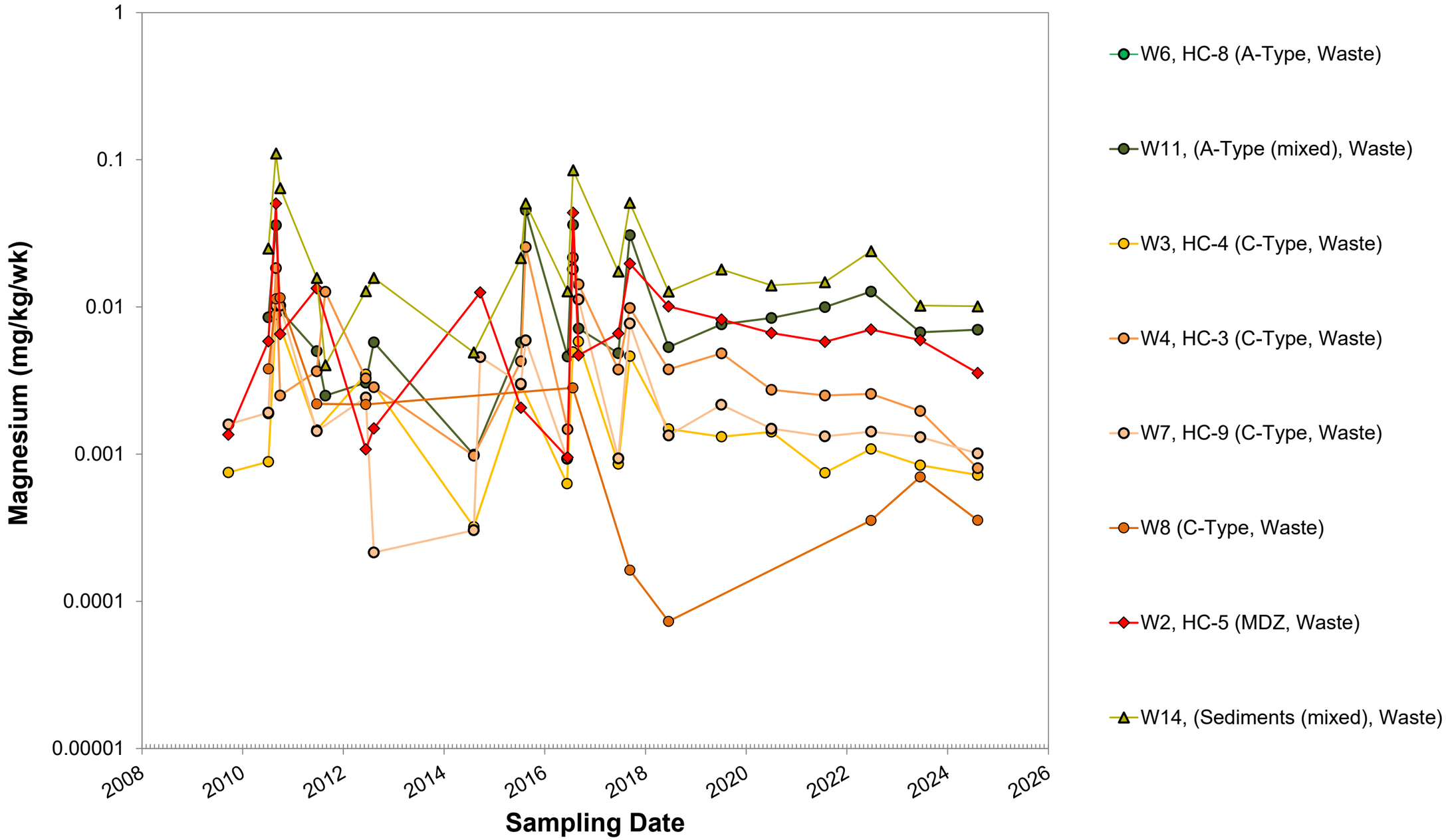

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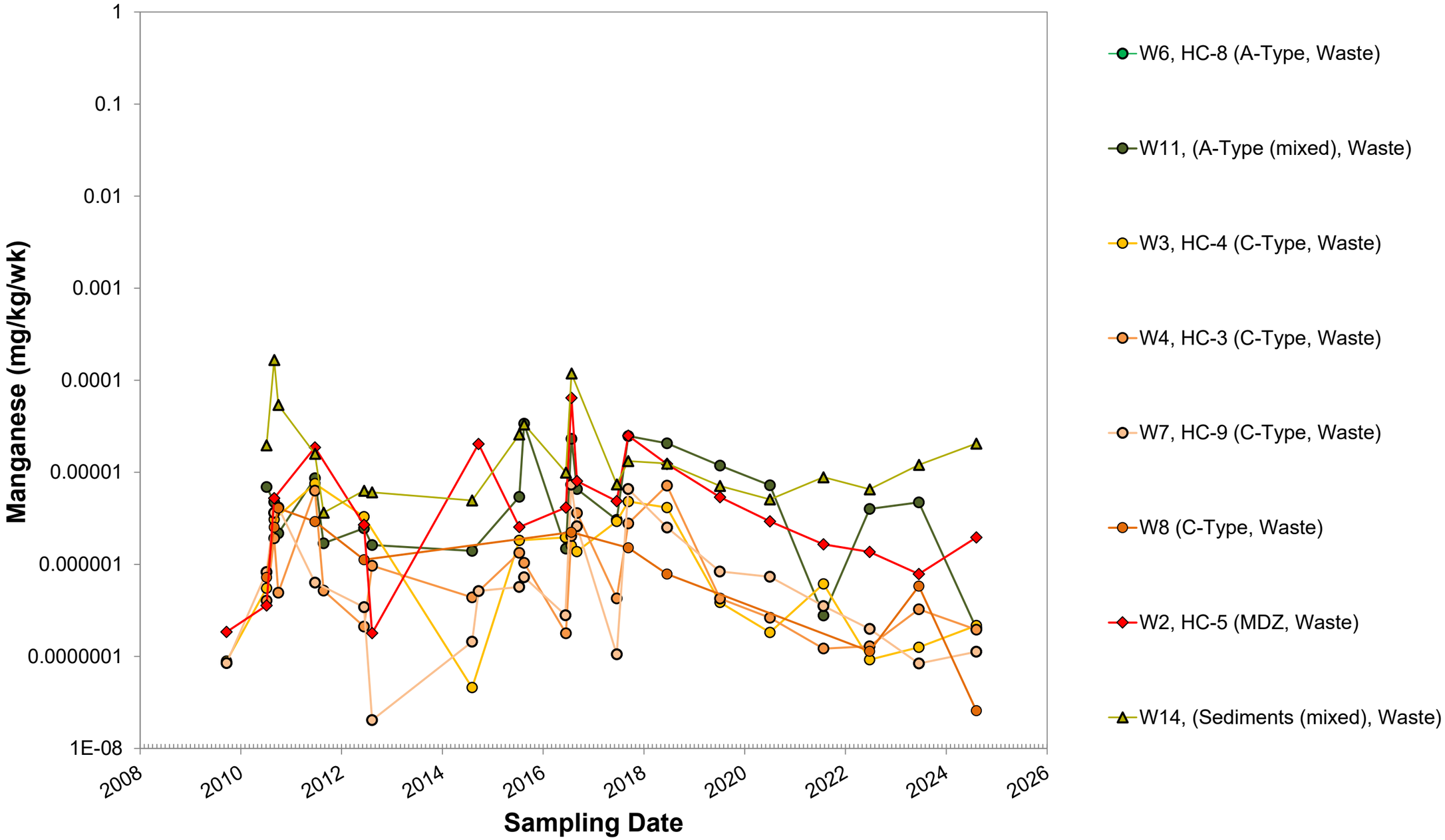

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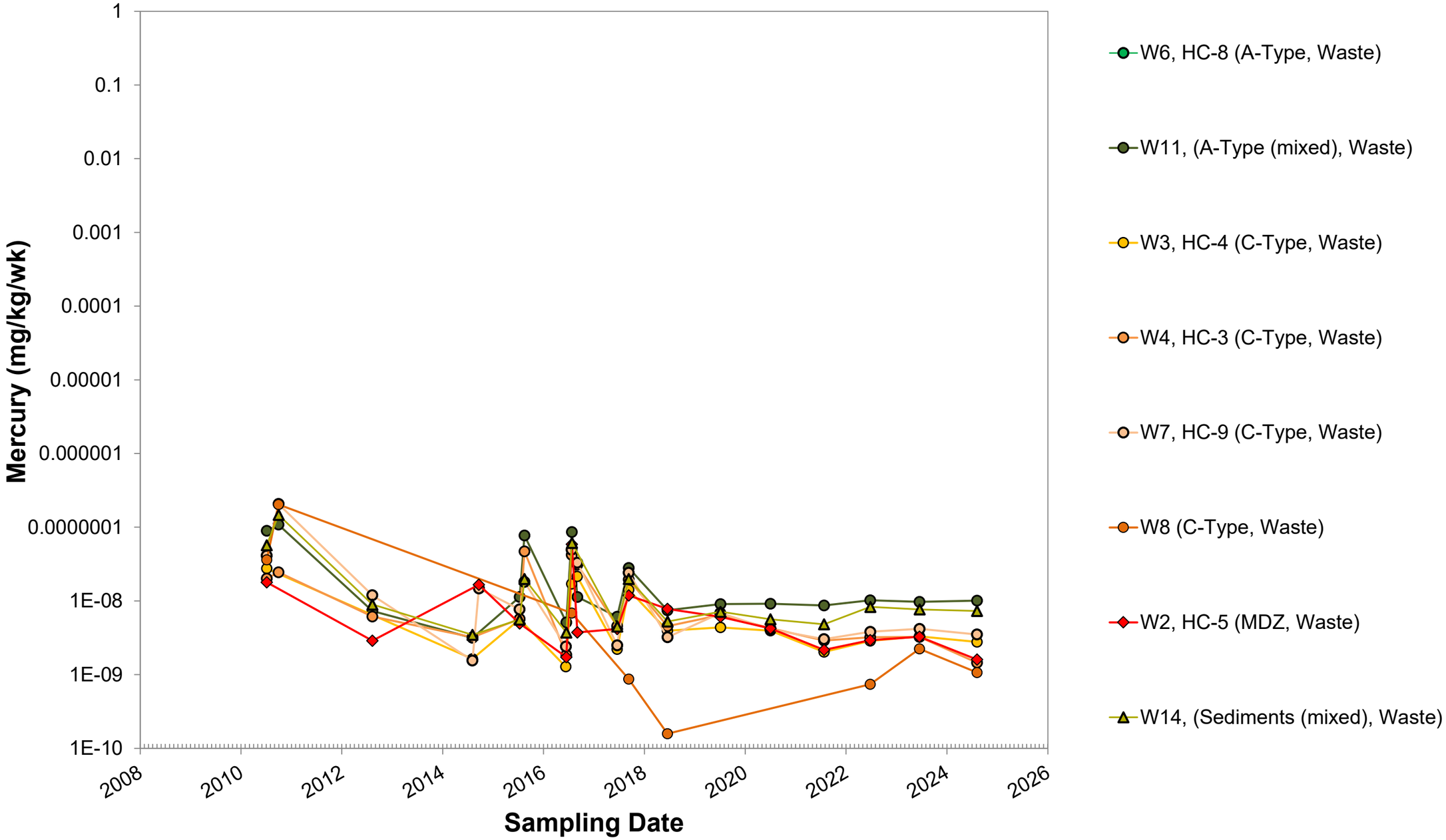

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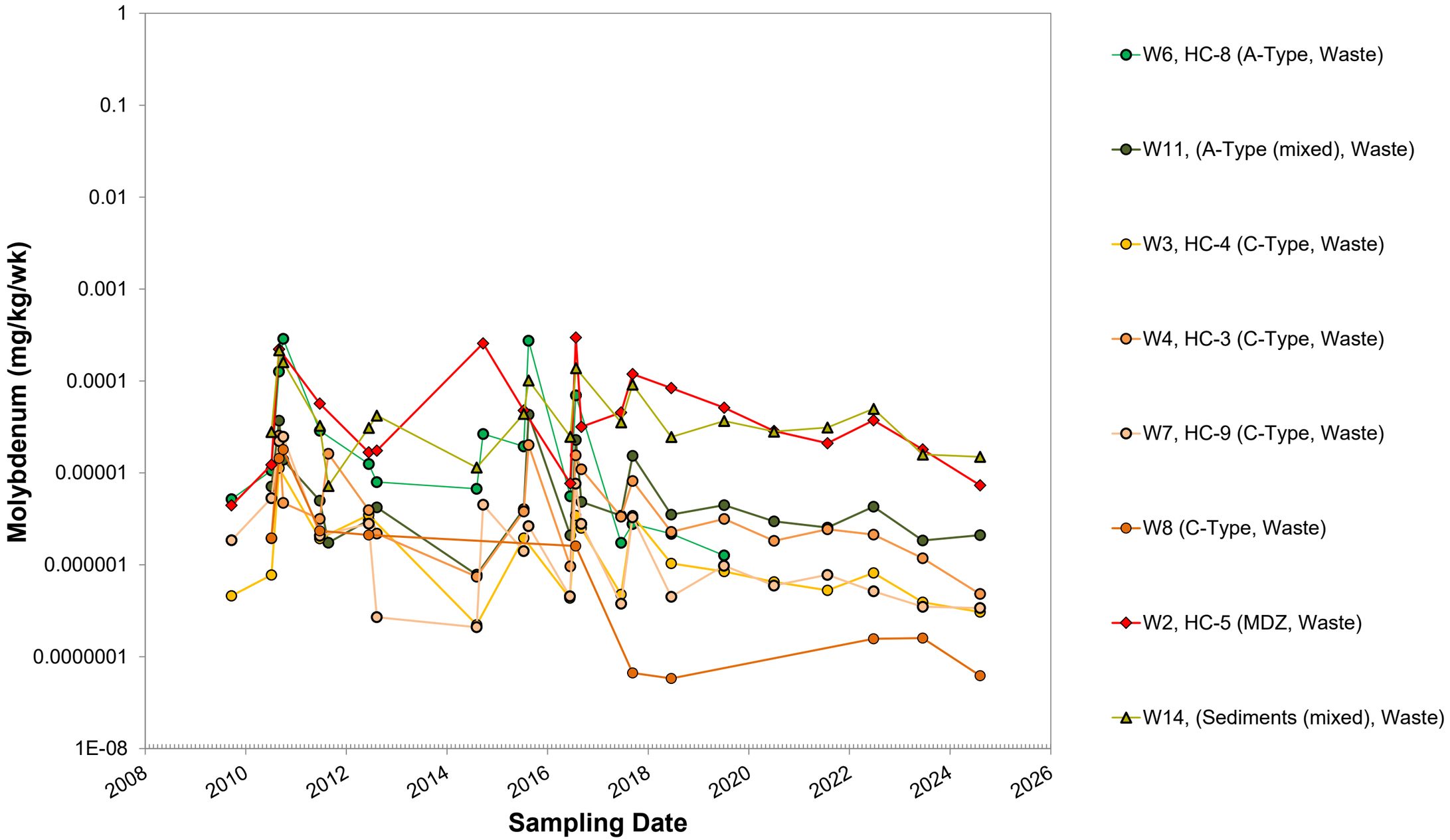

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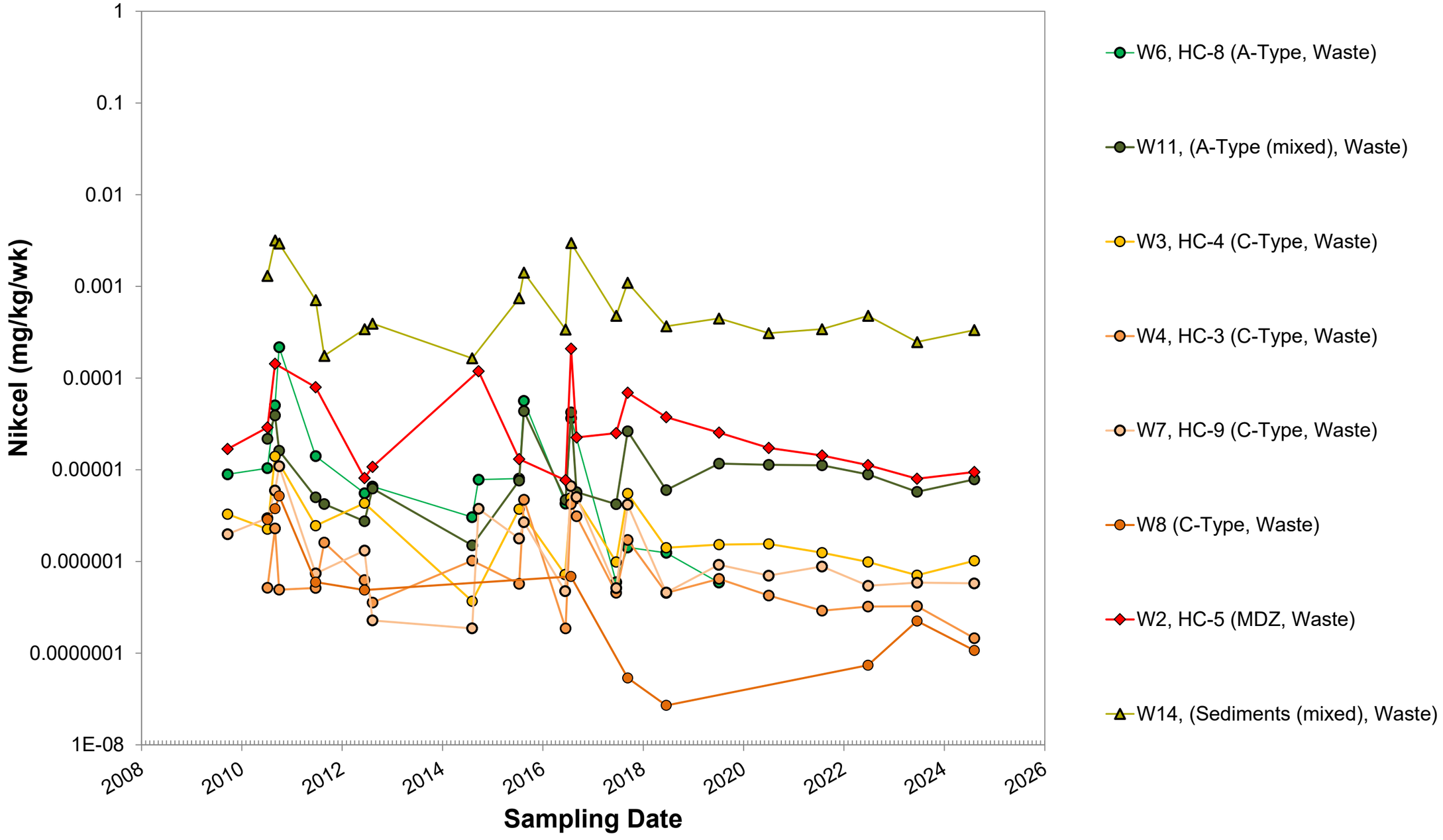

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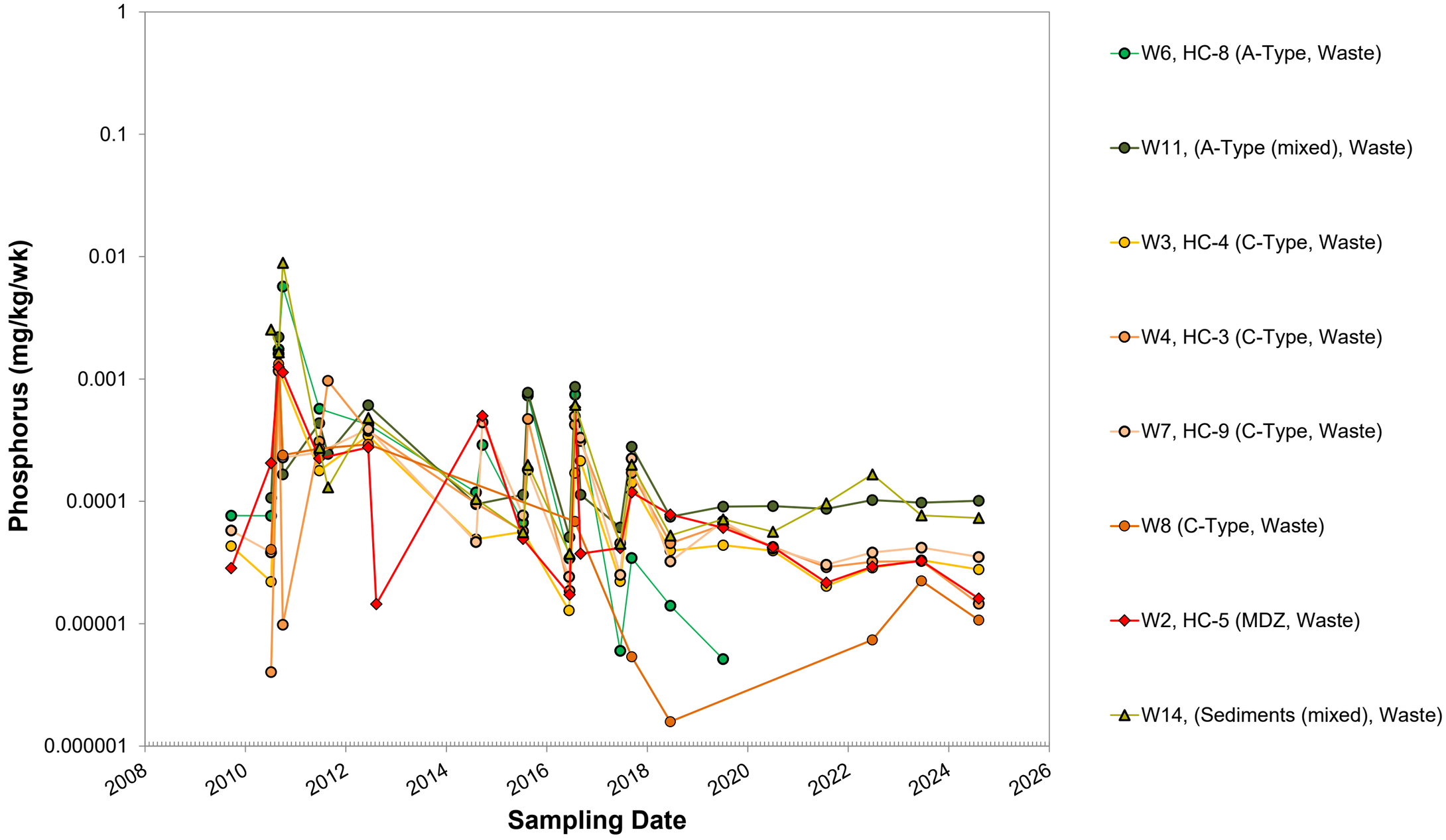

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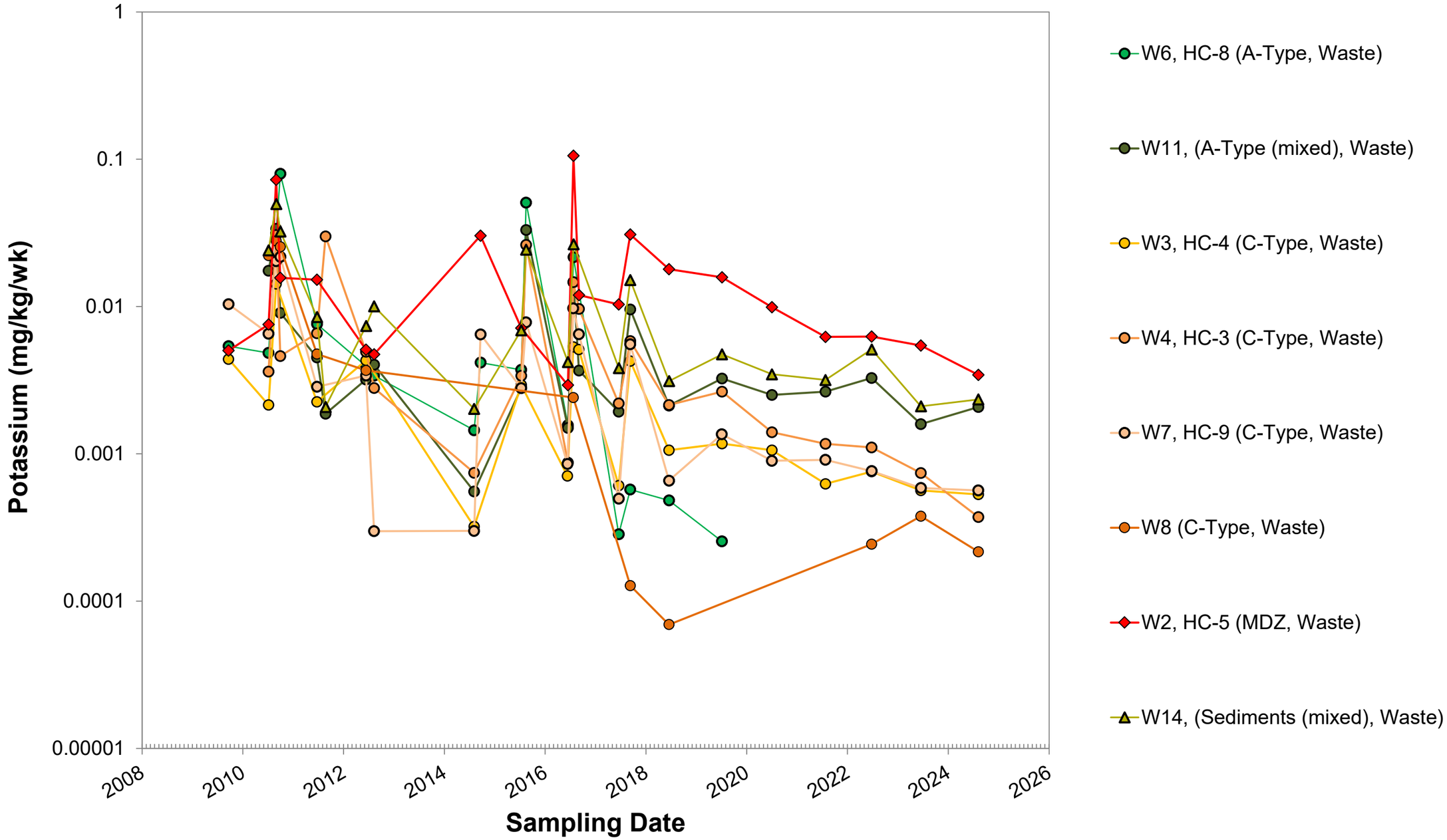

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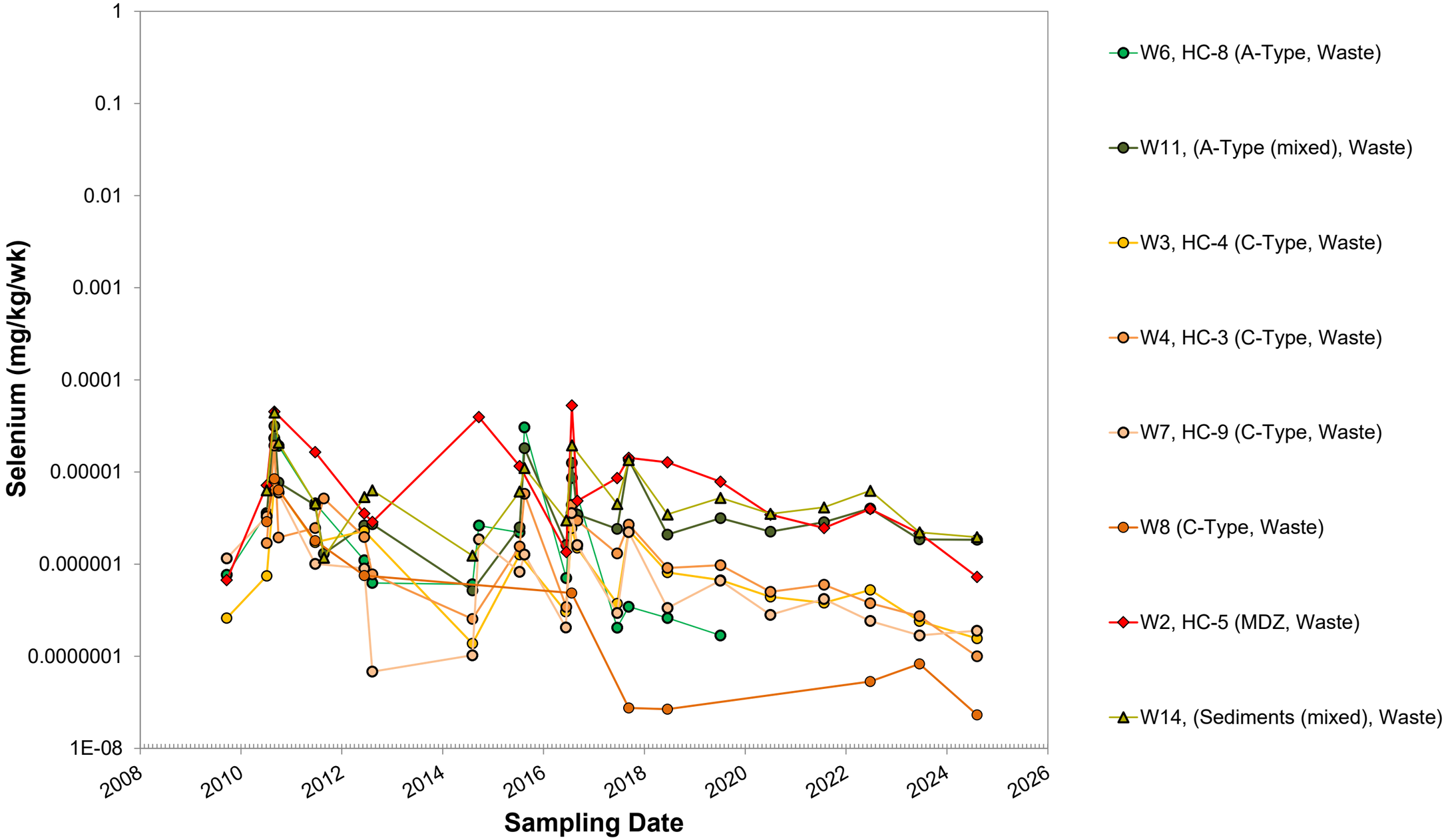

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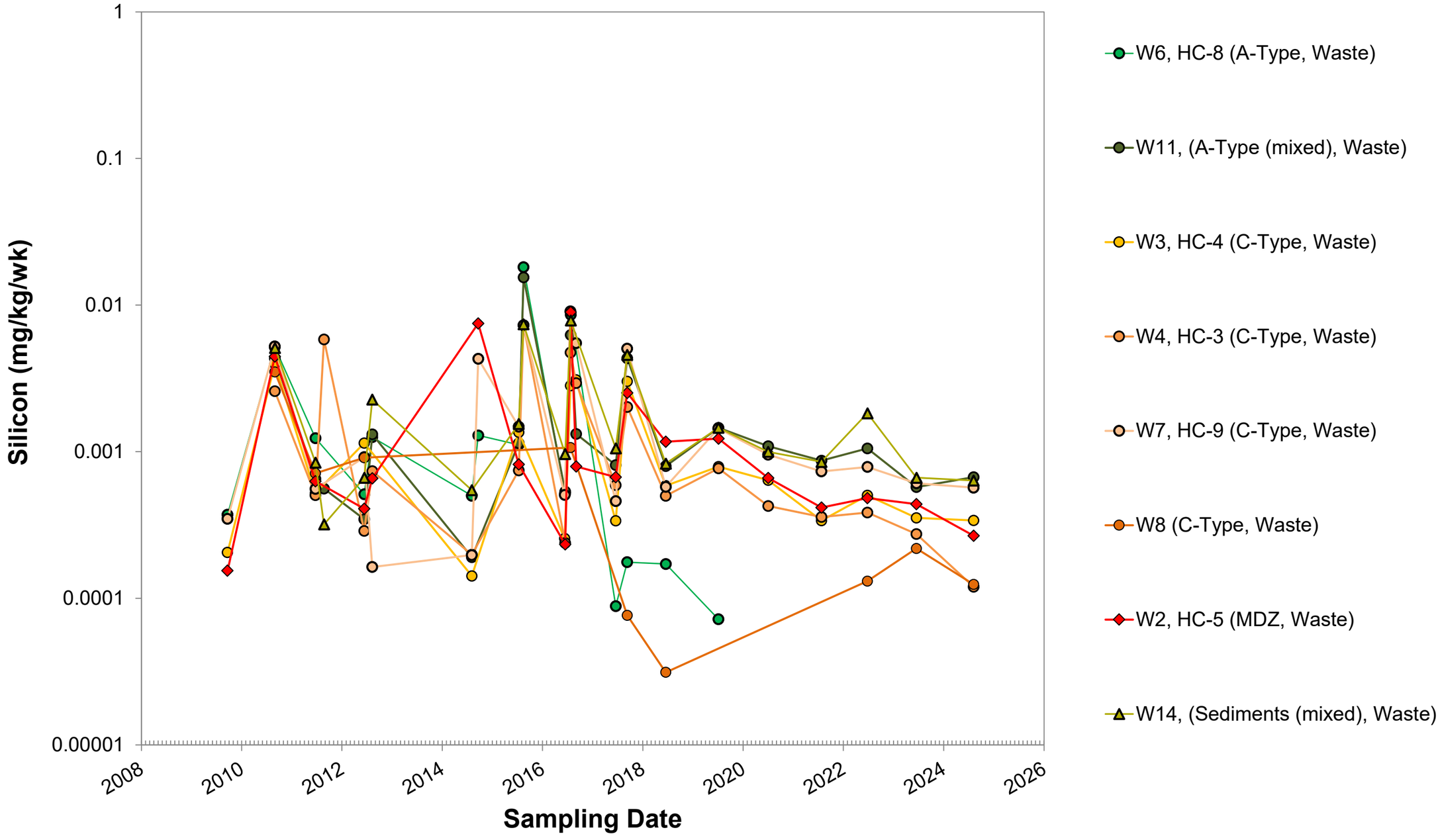

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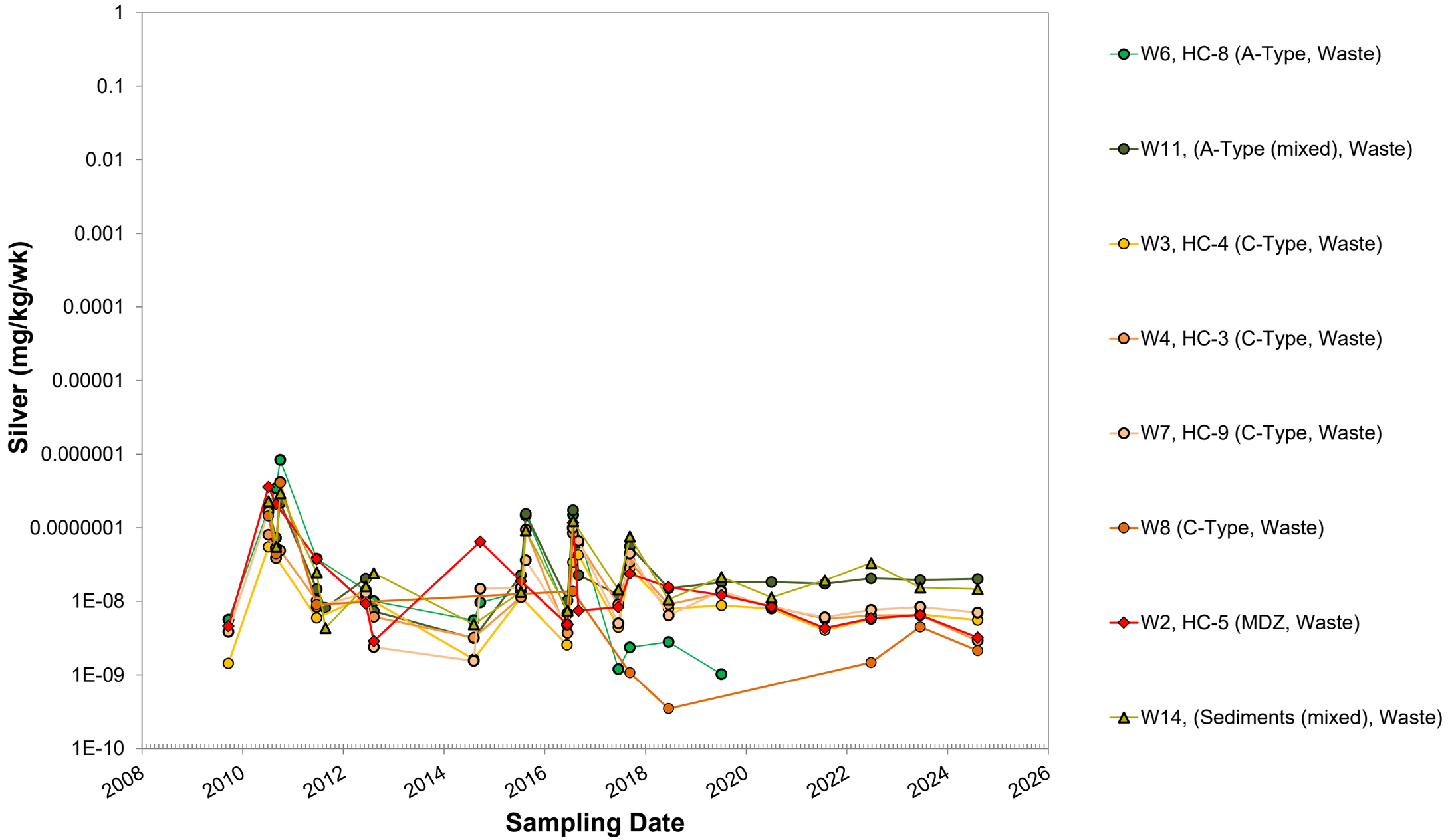

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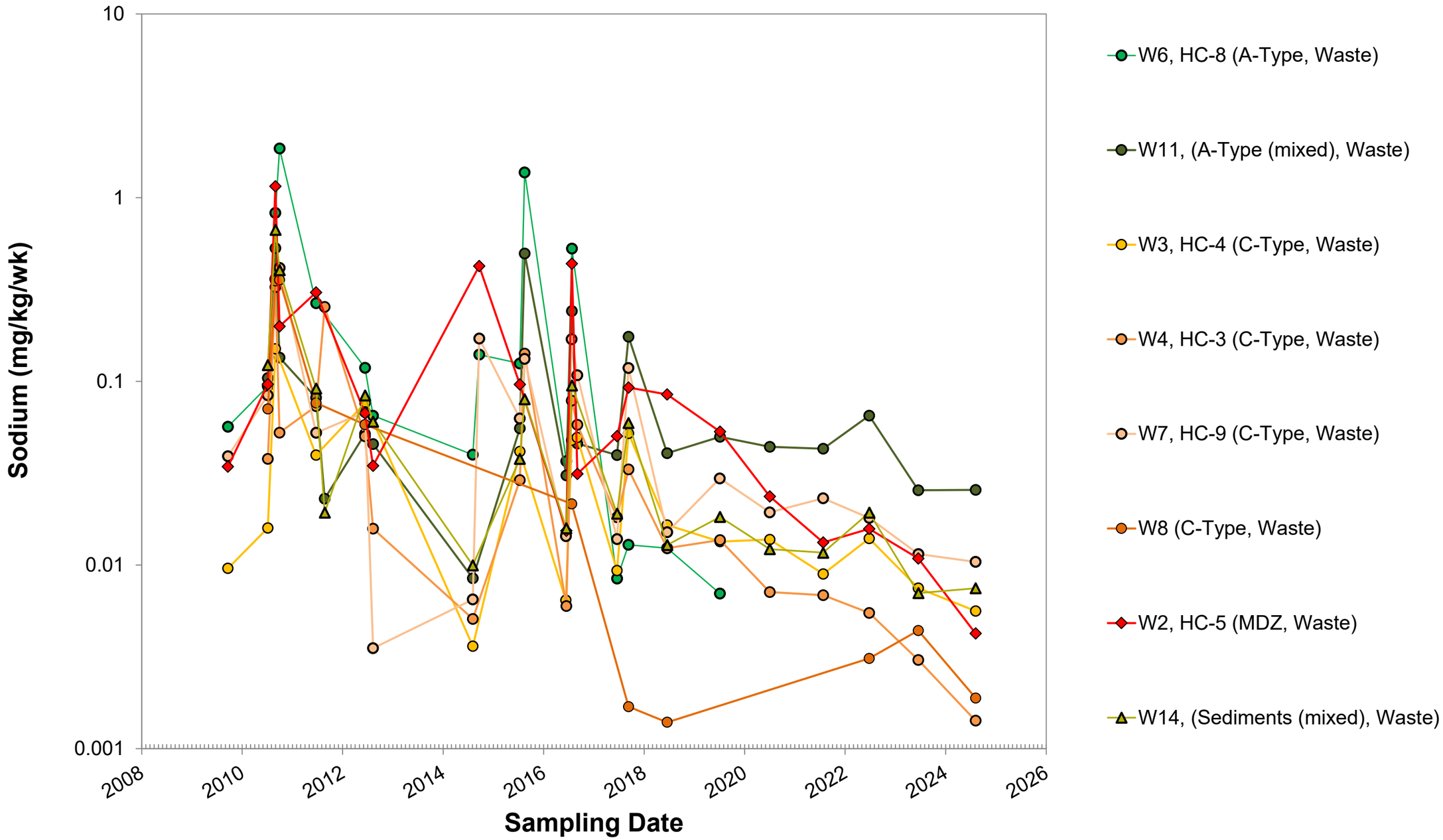

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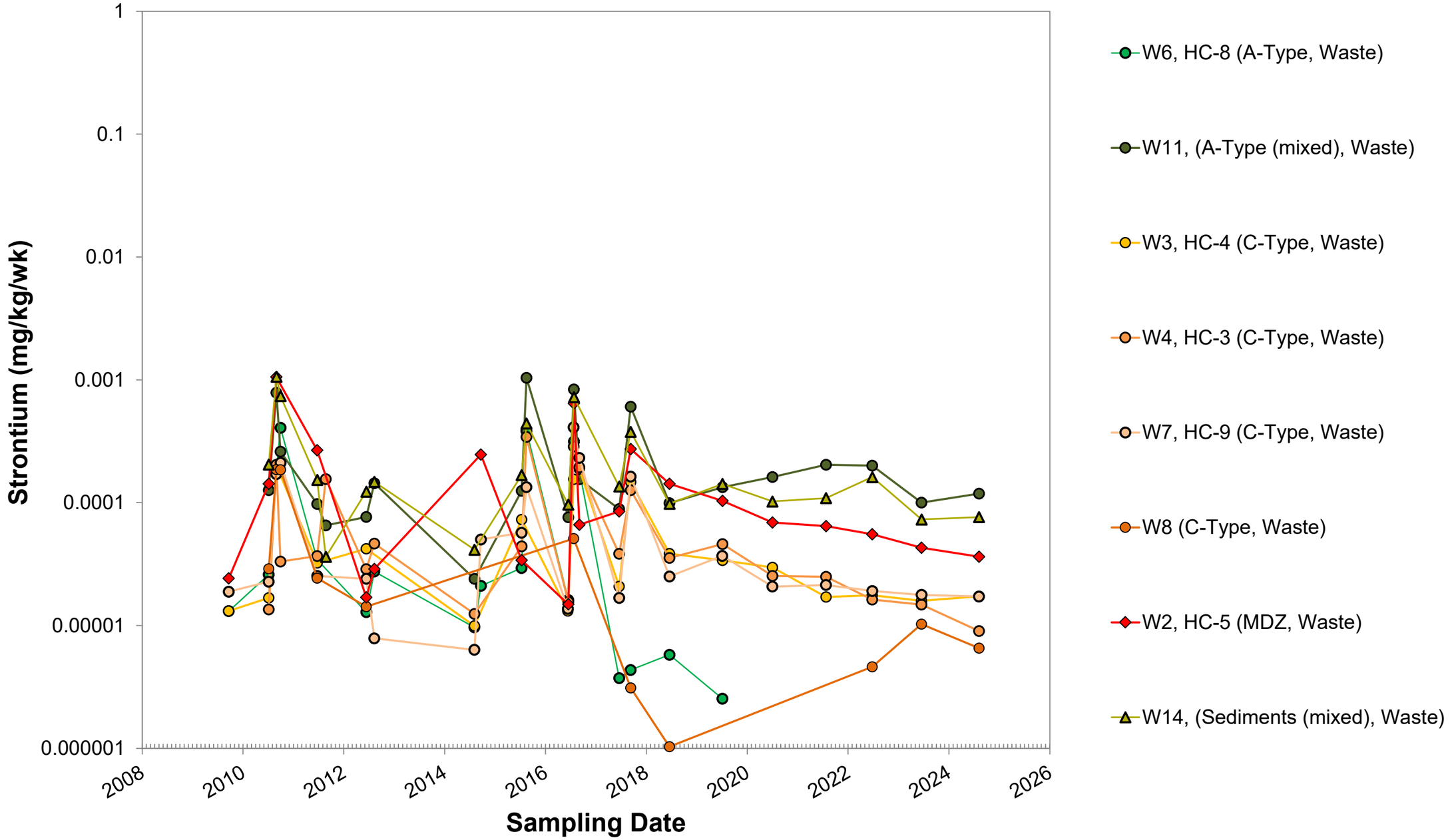

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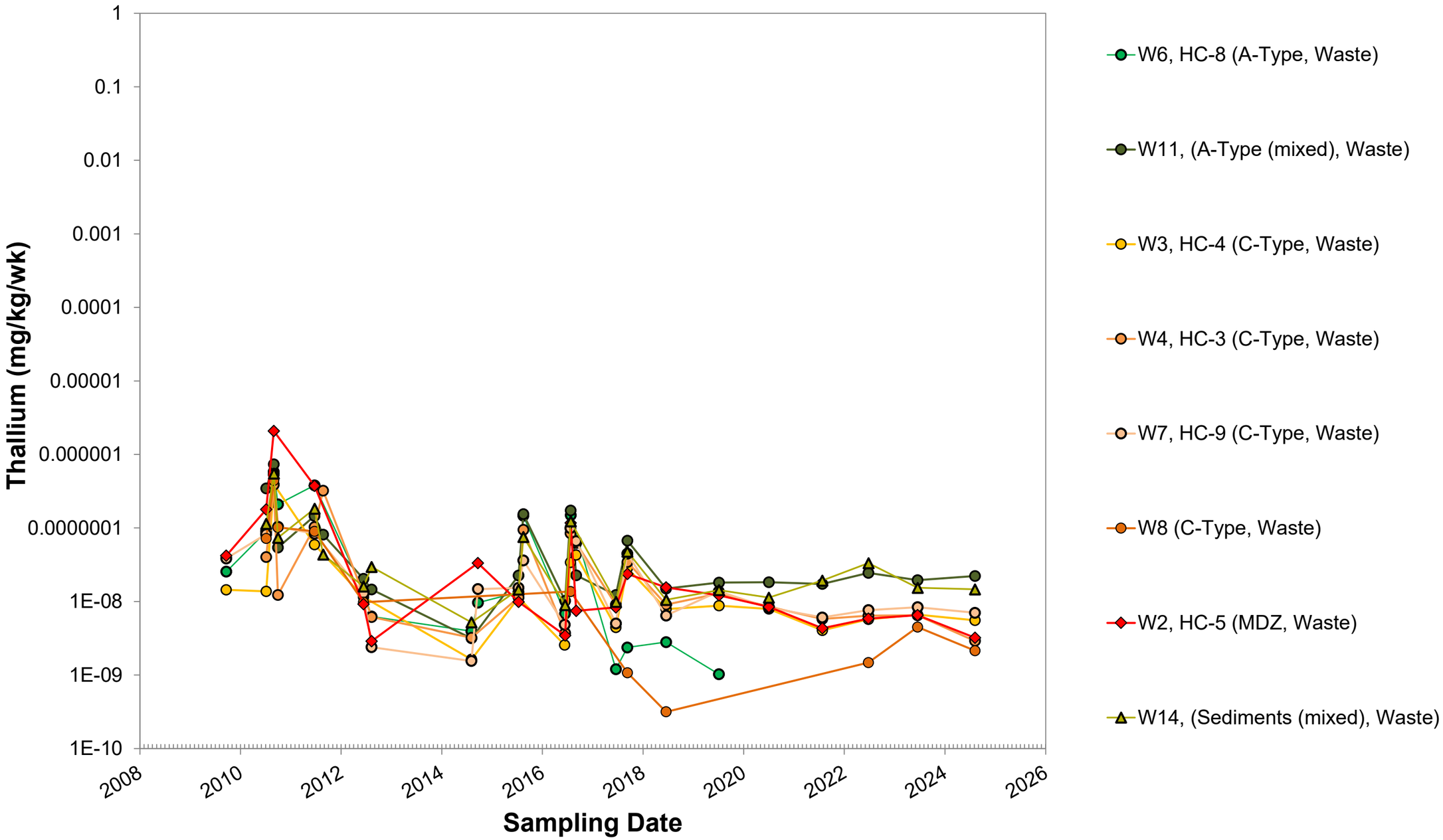

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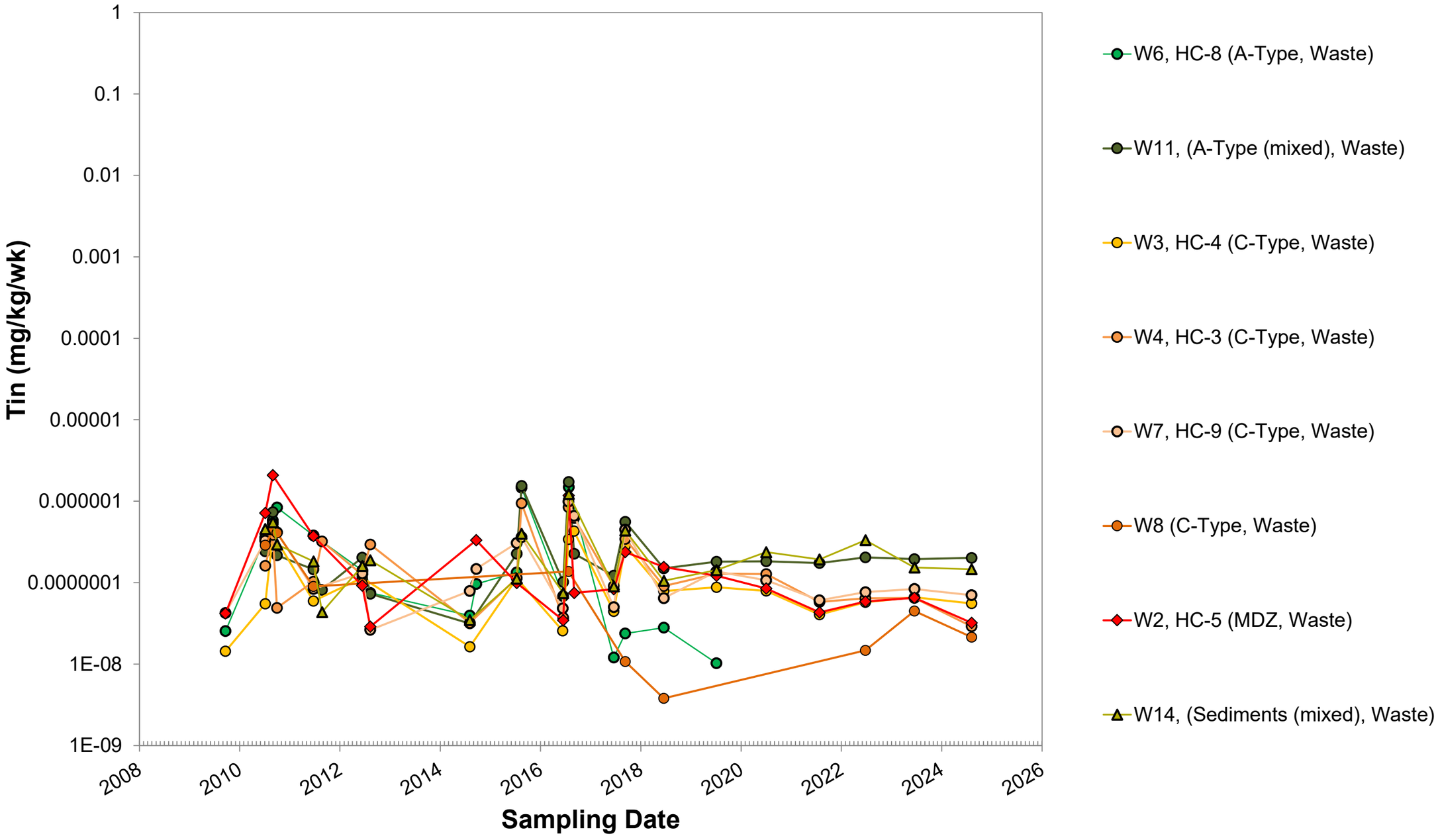

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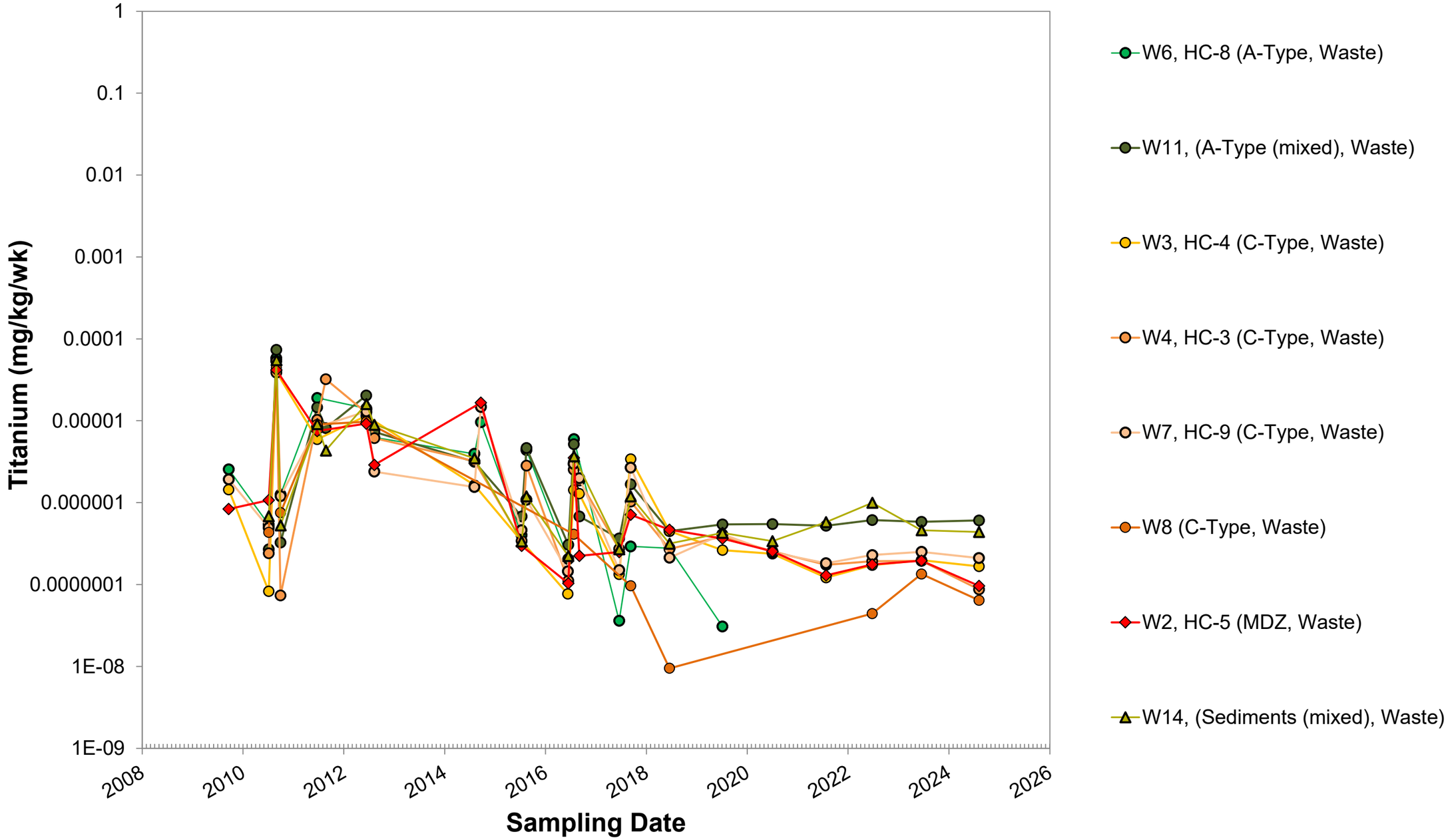

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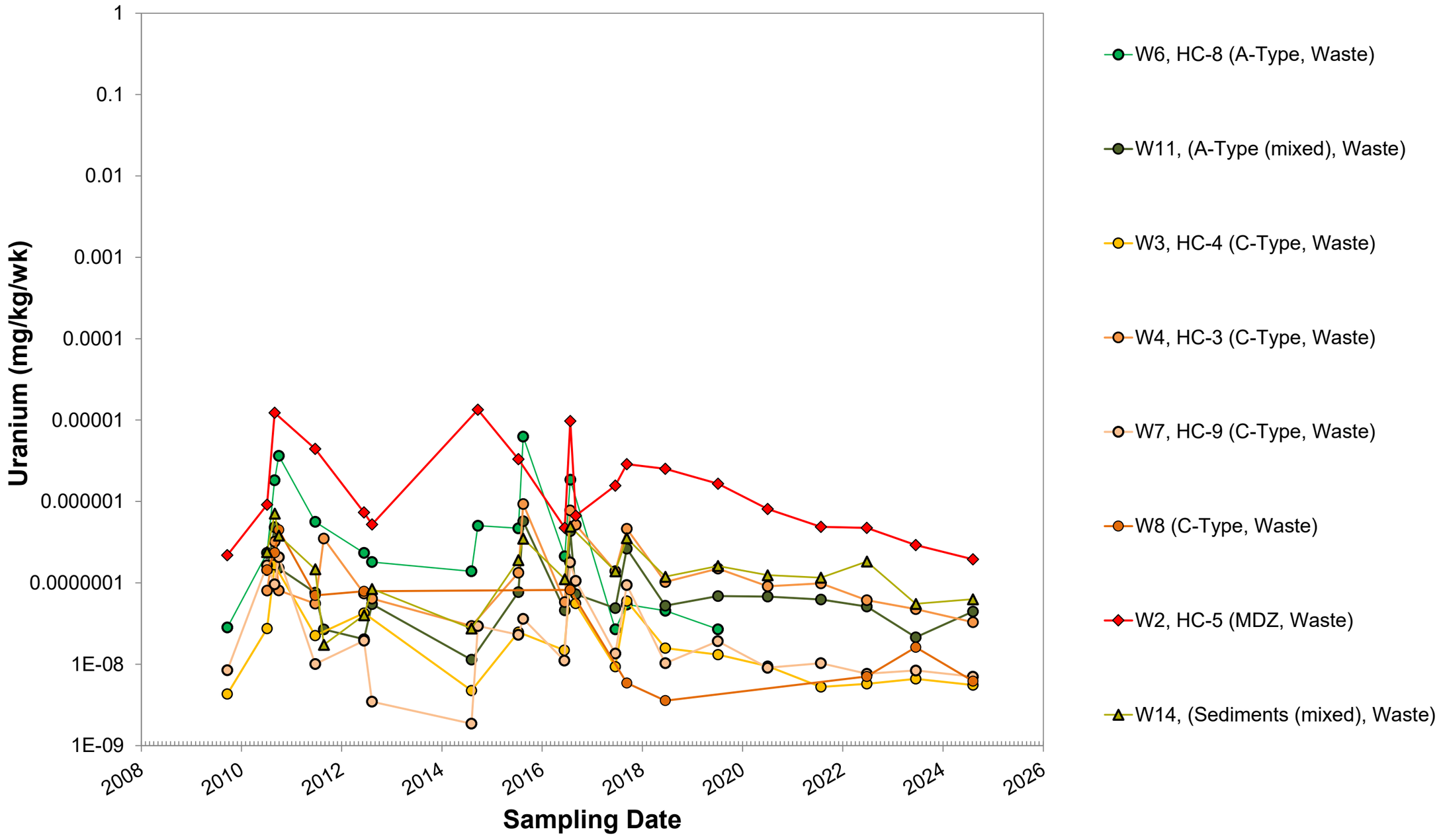

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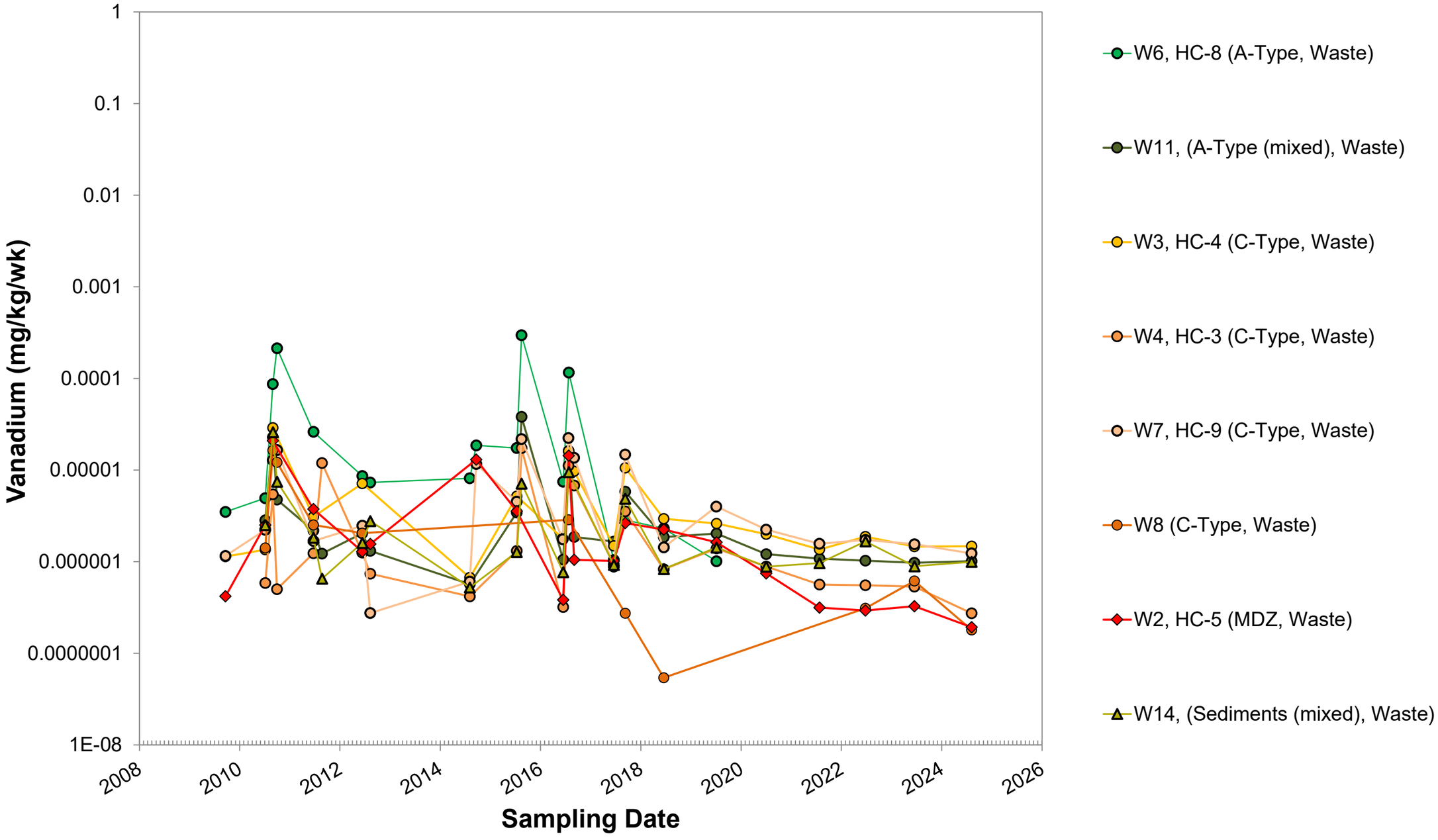

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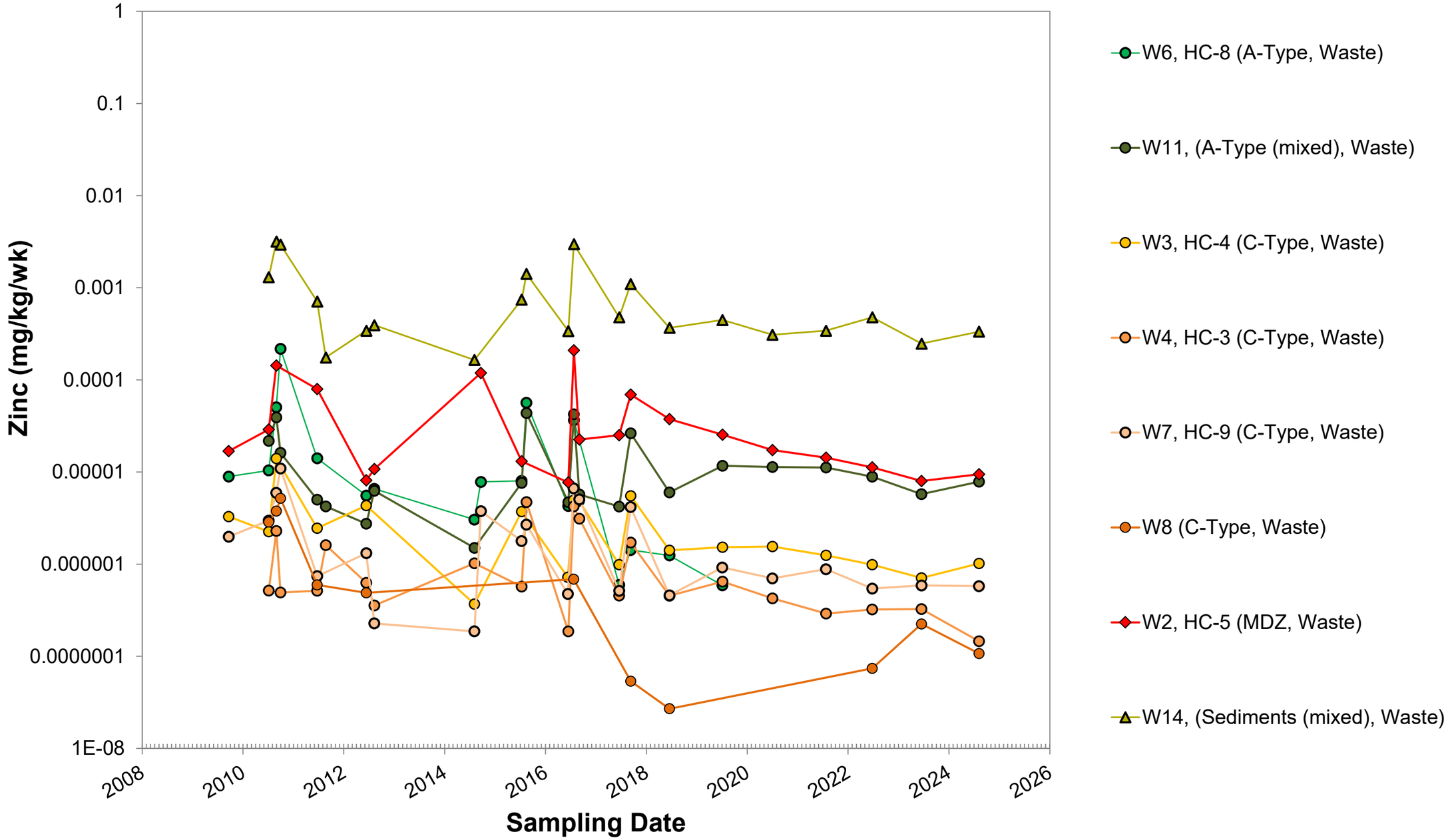

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