DALRADIAN
GOLD

Discharge Consent (068/12/2) Reporting

December 2021 – February 2022

Author
[redacted] – Dalradian Gold Ltd

Date
30th March 2022

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1.0 INTRODUCTION

This report has been prepared by Dalradian Gold Ltd. (DGL) in response to Condition 1.l. of Discharge Consent 068/12/2, which requires quarterly water quality reporting. The consent relates to discharge of site drainage water (at Irish Grid Reference H 5707 8690) arising from the DGL advanced exploration project at Curraghinalt. The site is situated approximately 8 km to the east of the village of Gortin, County Tyrone, Northern Ireland, BT79 7SF.

2.0 SUMMARY OF OPERATIONS DURING THE REPORTING PERIOD

DGL have progressed advanced exploration at the Curraghinalt site. The work progressed under Planning Permission K/2014/0246/F, and has been aimed at collecting information that will support a Feasibility Study and an Environmental Impact Assessment to allow for development of a full mine.

Water discharged via the consent during the reporting period has derived from natural groundwater drainage to the exploration adit and runoff water from various components of the site that has resulted from incident rainfall. Following capture and management of these sources, treatment prior to discharge at the consent location has included passage through a settlement tank, oil interceptor, lamella clarifier (for further sediment removal), and a pH adjustment tank.

DGL informed the Northern Ireland Environment Agency (NIEA) of the intention to commence the site discharge on 3rd December 2014. This document represents the 29th quarterly discharge consent report.

3.0 SAMPLING LOCATIONS, PROTOCOL AND LABORATORIES

Five surface water sample locations are required to be sampled monthly as part of the Discharge Consent. These have been listed below as Discharge Consent Sample 1 (DCS1) to Discharge Consent Sample 5 (DCS5) and are also presented on Figure 1.

- DCS1 - Immediately upstream of the confluence of the site discharge point and Curraghinalt Burn;
- DCS2 - Site discharge point;
- DCS3 - 5 m downstream of the confluence of the site discharge point and Curraghinalt Burn;
- DCS4 - Immediately upstream of the confluence of Curraghinalt Burn and the Owenkillew River; and
- DCS5 - 5 m downstream of the confluence of the Curraghinalt Burn and the Owenkillew River.

DGL has also added 2 more samples as part of QA/QC. The sample ID's are:

- DCS6 – a blank sample consisting of deionised water; and
- DCS7 – a duplicate of any sample between DCS1 and DCS5.

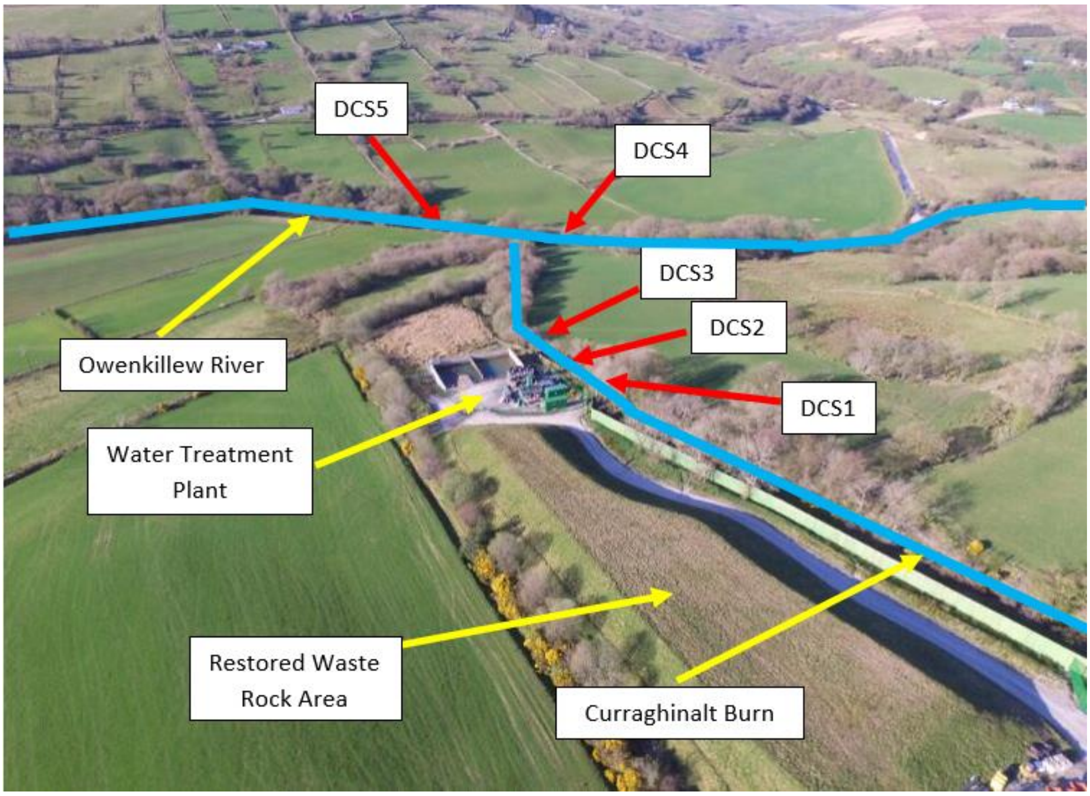

Figure 1:
Site map showing discharge consent sample locations

All surface water samples are collected according to protocols described in the DGL Surface Water Sampling Procedure[1]. To help ensure quality results, care is taken not to disturb stream bed sediments upstream of the sampling point and prior to sampling. Samples are collected at all locations by a DGL Field Technician wearing a fresh pair of vinyl gloves and from the flowing stream of water to minimise any risks of contamination. All sample bottles are laboratory supplied and are filled to capacity at source.

In accordance with best practice, field filtration for dissolved parameters is undertaken on site using a syringe and attached 0.45µm filter, and these samples are associated with a nitric acid (HNO_3) preservative to thereafter stabilise dissolved metals in solution. All laboratory analytical services during the quarter, including supplementary Quality Assurance/Quality Control (QA/QC) testing, have been provided by [redacted], formally known as [redacted]

Samples are placed in a cooler with ice, secured with sample packaging and accompanied by a completed Chain of Custody (CoC) Form, and shipped directly to [redacted] for analysis. [redacted] are accredited by the United Kingdom Accreditation Service (UKAS) to 17025 standard, and UKAS monitor and externally audit the laboratory.

DGL have also been working to include the measurement of pH in the field at each sample location. Regular calibration of the instrument used is undertaken on site using both pH 4.01 and pH 7.01 buffer solutions and in accordance with DGL MultiParameter Meter Calibration Procedure[2]. During readings,

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[1] Dalradian Gold Ltd. 2020. Surface Water Sampling Procedure.
[2] Dalradian Gold Ltd. 2020. MultiParameter Meter Calibration Procedure.

the pH probe is fully immersed at all times in the flowing stream of water and up until stabilisation occurs[3].

4.0 RESULTS

During this reporting period DGL have collected a total of 3 rounds of water samples from the discharge consent locations. This number of samples meets that required by the consent during the period. Sampling was undertaken on the 1st and 23rd of December 2021, 13th of January and the 2nd of February 2022.

QA/QC checks and factual reporting against the consent water quality thresholds for the discharge point are presented in the following sub-sections. Water quality results and thresholds are summarised in Appendix A, and all laboratory certificates are presented in Appendix B.

4.1 Quality Assurance/Quality Control

A number of QA/QC measures have been applied to water samples taken at all sites. A factory calibrated certificate for the YSI Professional Series Multiparameter probe used to measure pH in the field is provided in Appendix C.

4.1.1 Chain of Custody and confirmation of parameter analysis

A chain of custody (CoC) form was completed on each day of sampling. The CoC forms document possession of the samples from the time of sample collection to reception at the lab; provide primary instruction to the lab on the parameters to be analysed; and provide sample information relevant to the lab, such as sample name and sample date and time. Following each sampling event and prior to submission to the lab, the CoC was reviewed and checked for errors. In the events covered within the period there are no issues to report in this respect.

4.1.2 Holding times

In order to ensure holding times were not exceeded, DGL shipped samples directly to the laboratory. Certificates presented in Appendix B demonstrate that all samples were received by [redacted] between 1 and 2 days following sampling. Testing is recorded on CoC forms to have been scheduled for a standard 10 day turnaround time on all occasions.

4.1.3 Field Blanks

A total of three field blanks have been collected during the reporting period to assess potential contamination due to the sampling environment (e.g., dust getting into the sample bottle). Analysis of field blanks was undertaken by the laboratory alongside the specified water chemical analysis. Field blank results include total ambient conditions during sampling, but can also potentially incorporate bias due to laboratory methods (e.g., low-level constituents remaining in analytical equipment from a prior highly contaminated sample from another site) that are assessed by laboratory method blanks. The field blanks incorporated deionised water which theoretically should return no measurable values throughout the parameters analysed (with the omission of pH) unless there has been a source of contamination during sampling. Dissolved nickel on the 2nd of February was found to be present at 0.4 µg/L which is slightly above the detection limit (0.2 µg/L). All other parameters during this sampling period were determined to be less than the limit of detection. The above observations are considered to be acceptable in terms of QA/QC.

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[3] Dalradian Gold Ltd. 2020. MultiParameter Meter Sampling Procedure.

4.1.4 Duplicate Samples

Three duplicate samples were collected during the reporting period, and all from the discharge point (DCS2). Analysis of all duplicate samples was undertaken by [redacted] and therefore alongside the remaining batch.

The measure of the reproducibility or precision of the chemical analysis has been quantified by calculating the Relative Percentage Difference (RPD) between parameter concentrations on the split sample submitted as a blind duplicate. The RPD has been calculated as follows:

$$RPD\% = \frac{|\,\mathrm{S} - \mathrm{D}|}{\frac{1}{2}(\mathrm{S} + \mathrm{D})} \text{ x } 100$$

Where:

RPD = Relative Percentage Difference

S = Sample value of parameter; and

D = Duplicate value of parameter

Theoretically, duplicate samples should have identical chemical concentrations (i.e., RPD = 0). However, due to factors such as sample matrix heterogeneity, natural variations or variations due to sample collection, handling or analysis, a variation in chemical concentration may occur (i.e., RPD greater than 0).

It should be noted that the reproducibility of replicate analyses at concentrations near the method detection limit (MDL) can be poor, resulting in RPD values of greater than the desirable limits. Therefore, for duplicate concentrations greater than five times the detection limit, a relative percent difference value of ±20% is considered acceptable[4]. Given these considerations, for duplicate concentrations less than five times the detection limit, RPD has not been calculated.

An RPD value greater than the above project objectives can suggest variability has been introduced through sample collection, sample handling, or sample analysis.

No samples were found to be outside the acceptable relative percentage difference in these sampling rounds.

4.1.5 Laboratory internal QA/QC

[redacted] report data only if the laboratory is confident that the results are a true reflection of the samples analysed, and data is only reported as accredited when all the requirements of their Quality System have been met. Any failure in the Quality System is fully investigated and documented as deviating samples on certificates issued. If samples are received in a condition inappropriate to the requested analyses, for example if they are dispatched in inappropriate containers or at a temperature not commensurate with the requested analysis, any test results that may be compromised will be highlighted in a deviating samples report.

On all laboratory certificates returned, all samples sent for analysis were scheduled upon receipt. No deviating samples were found during these sampling rounds.

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[4] Zeiner, S.T. 1994. Realistic Criteria for the Evaluation of Field Duplicate Field Results. Proceedings of Superfund XV, November 29-December 1, 1994. Sheraton Washington Hotel, Washington, D.C.

4.1.6 Summary

As detailed above, there are no major QA/QC concerns regarding the dataset presented that are considered to compromise the overall results findings. Duplicate samples collected also indicate a high level of data quality.

4.2 Factual Presentation of Data

All water quality results are presented in summary for each location in Appendix A. This includes a comparison of concentrations from the discharge point location (DCS2) against specific threshold values detailed within the consent.

During the reporting period, all three sample results from DCS2 are below the threshold values presented within the consent for all parameters.

Water quality obtained from the Curraghinalt Burn during the period can be summarised as follows:

- Total suspended solids were below detection (<10 mg/L) in all cases;
- BOD concentrations were below detection (<1 mg/L) in all cases;
- Laboratory measured pH varies between a minimum of 6.17 pH units (recorded at the upstream location) and a maximum of 8.18 pH units (recorded at the downstream location);
- Dissolved zinc concentrations varied between 6.6 µg/L at the downstream location and 11.6 µg/L at the upstream location;
- Dissolved arsenic concentration ranged from below detection (0.9 µg/L) at the downstream location to a maximum of 2.8 µg/L at the upstream location;
- Dissolved lead concentrations were below detection (<0.4 µg/L) in all cases;
- Oil or grease has not been visible at the sample locations;
- The maximum dissolved iron concentration has been determined at 0.8682 mg/L at the upstream location; and
- The maximum total hardness has been recorded as 54 mg/L at the downstream location.

Water quality obtained from the Owenkillew River during the period can be summarised as follows:

- Total suspended solids varied between below detection (<10 mg/L) at both the upstream and downstream locations to 12 mg/L at the upstream location;
- BOD concentrations varied between below detection (<1 mg/L) at both the upstream and downstream locations to 2 mg/L at the downstream location;
- Laboratory measured pH varies between a minimum of 6.51 pH units (recorded at the downstream location) and a maximum of 7.74 pH units (recorded at the downstream location);
- Oil or grease has not been visible at the sample locations;
- The maximum dissolved iron concentration has been determined at 0.7828 mg/L at the upstream location; and
- Dissolved zinc concentrations varied from 5.8 µg/L at the upstream location to 14.9 µg/L at the downstream location;
- The maximum total hardness has been recorded as 28 mg/L at the downstream location.

Appendix A

Presentation of Water Quality Results

DCS2 - Discharge Point

Parameter	Discharge Consent Threshold	[redacted] Detection limit (typical)	[redacted] 01/12/2021	[redacted] Duplicate	[redacted] 13/01/2022	[redacted] Duplicate	[redacted] 02/02/2022	[redacted] Duplicate
Total Suspended Solids	50	10	<10	<10	<10	<10	<10	<10
Biochemical Oxygen Demand	10	1	<1	<1	<1	<1	<1	<1
pH	>6 & <9	-	8.01 (6.7)	8.19	8.2 (8.28)	8.32	8.32 (8.2)	8.36
Dissolved mercury[4]	1.7	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dissolved cadmium[4]	0.7	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Dissolved iron[4]	3.9	0.0047	0.0052	<0.0047	<0.0047	<0.0047	0.0049	<0.0047
Dissolved copper[4]	16.2	3	5	3	<3	3	<3	<3
Dissolved chromium[2]	8.1	0.2	<0.2	0.4	<0.2	<0.2	<0.2	<0.2
Chromium VI	N/A	2	<6	<6	<6	<6	<6	<6
Chromium III	N/A	2	<6	<6	<6	<6	<6	<6
Dissolved nickel[3]	20	0.2	2.5	2.3	2.5	2.4	3.7	3.4
Dissolved arsenic[1]	50	0.9	<0.9	2.6	<0.9	<0.9	<0.9	<0.9
Dissolved lead[3]	7.2	0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Total hardness as CaCO3	N/A	1	148	149	169	162	157	155
Dissolved zinc	490	1.5	4.5	2.7	7.3	6.8	9.4	9.5
Total zinc[4]	33.8	1.5	2	1.8	9.2	8	5.8	6.1
Visible oil or grease	N/A	N/A	-	-	-	-	-	-

Notes:

pH values presented in pH units. Values in brackets are field pH measurements. Total Suspended Solids, Biochemical Oxygen Demand, Total hardness & Dissolved iron concentrations are presented in mg/L, all other parameters are in µg/L.

[1,2&3] Threshold from The Water Framework Directive (Priority Substances and Classification) Regulations (Northern Ireland) 2011

[1] Annual mean value presented for 'Good Standard for rivers and freshwater lakes'

[2] Annual mean environmental standard for chromium III (4.7µg/L) plus annual mean environmental standard for chromium VI (3.4µg/L) presented for 'Good Standard for rivers and freshwater lakes'

[3] Annual mean environmental standard (AA-EQS) value presented for priority substance and its compounds for all rivers and lakes

[4] Department Specific

[#] BOD over diluted, therefore result indicative only [Δ] Container with headspace

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DCS1 - Curraghinalt Burn upstream

	[redacted]	[redacted]	[redacted]	[redacted]
Parameter	**Detection limit (typical)**	**01/12/2021**	**13/01/2022**	**02/02/2022**
Total Suspended Solids	10	<10	<10	<10
Biochemical Oxygen Demand	1	<1	<1	<1
pH	-	6.18 (4.69)	7.28 (7.68)	6.17 (7.55)
Dissolved mercury	0.5	<0.5	<0.5	<0.5
Dissolved cadmium	0.03	<0.03	<0.03	<0.03
Dissolved iron	0.0047	0.7295	0.8104	0.8682
Dissolved copper	3	<3	4	<3
Dissolved chromium	0.2	<0.2	<0.2	<0.2
Chromium VI	2	<6	<6	<6
Chromium III	2	<6	<6	<6
Dissolved nickel	0.2	<0.2	1.9	<0.2
Dissolved arsenic	0.9	1.5	2.8	1
Dissolved lead	0.4	<0.4	<0.4	<0.4
Total hardness as CaCO3	1	11	17	12
Dissolved zinc	1.5	11.6	10.7	7
Total zinc	1.5	9.2	8.1	5.6
Visible oil or grease	N/A	-	-	-

Notes:

pH values presented in pH units. Values in brackets are field pH measurements. Total Suspended Solids, Biochemical Oxygen Demand, Total hardness & Dissolved iron concentrations are presented in mg/L, all other parameters are in µg/L.

[#] BOD over diluted, therefore result indicative only

[Δ] Container with headspace

DCS3 - Curraghinalt Burn downstream

	[redacted]	[redacted]	[redacted]	[redacted]
Parameter	**Detection limit (typical)**	**01/12/2021**	**13/01/2022**	**02/02/2022**
Total Suspended Solids	10	<10	<10	<10
Biochemical Oxygen Demand	1	<1	<1	<1
pH	-	7.56 (5.99)	7.81 (7.82)	8.18 (7.76)
Dissolved mercury	0.5	<0.5	<0.5	<0.5
Dissolved cadmium	0.03	<0.03	<0.03	<0.03
Dissolved iron	0.0047	0.714	0.5683	0.734
Dissolved copper	3	<3	<3	<3
Dissolved chromium	0.2	0.8	<0.2	<0.2
Chromium VI	2	<6	<6	<6
Chromium III	2	<6	<6	<6
Dissolved nickel	0.2	0.9	0.4	<0.2
Dissolved arsenic	0.9	<0.9	<0.9	<0.9
Dissolved lead	0.4	<0.4	<0.4	<0.4
Total hardness as CaCO3	1	15	54	29
Dissolved zinc	1.5	11.2	11.3	6.6
Total zinc	1.5	9.5	14.1	5.6
Visible oil or grease	NA	-	-	-

Notes:

pH values presented in pH units. Values in brackets are field pH measurements. Total Suspended Solids, Biochemical Oxygen Demand, Total hardness & Dissolved iron concentrations are presented in mg/L, all other parameters are in µg/L.
BOD over diluted, therefore result indicative only
[Δ] Container with headspace

DCS4 - Owenkillew River upstream

	[redacted]	[redacted]	[redacted]	[redacted]
Parameter	**Detection limit (typical)**	**23/12/2021**	**13/01/2022**	**02/02/2022**
Total Suspended Solids	10	<10	<10	12
Biochemical Oxygen Demand	1	<1	<1	<1
pH	-	7.64 (7.42)	7.57 (7.14)	7.66 (7.17)
Dissolved mercury	0.5	<0.5	<0.5	<0.5
Dissolved cadmium	0.03	<0.03	<0.03	<0.03
Dissolved iron	0.0047	0.7828	0.657	0.6459
Dissolved copper	3	<3	<3	<3
Dissolved chromium	0.2	<0.2	0.3	<0.2
Chromium VI	2	<6	<6	<6
Chromium III	2	<6	<6	<6
Dissolved nickel	0.2	1.1	0.3	1.3
Dissolved arsenic	0.9	1	<0.9	<0.9
Dissolved lead	0.4	<0.4	<0.4	<0.4
Total hardness as CaCO3	1	20	26	22
Dissolved zinc	1.5	5.8	6.3	14.3
Total zinc	1.5	4.6	5.8	8.4
Visible oil or grease	N/A	-	-	-

Notes:

pH values presented in pH units. Values in brackets are field pH measurements. Total Suspended Solids, Biochemical Oxygen Demand, Total hardness & Dissolved iron concentrations are presented in mg/L, all other parameters are in µg/L.

[#] BOD over diluted, therefore result indicative only

[Δ] Container with headspace

DCS5 - Owenkillew River downstream

		[redacted]	[redacted]	[redacted]
Parameter	**Detection limit (typical)**	**01/12/2021**	**13/01/2022**	**02/02/2022**
Total Suspended Solids	10	<10	<10	10
Biochemical Oxygen Demand	1	<1	2	<1
pH	-	7.74 (6.9)	6.51 (7.13)	6.6 (7.07)
Dissolved mercury	0.5	<0.5	<0.5	<0.5
Dissolved cadmium	0.03	<0.03	<0.03	<0.03
Dissolved iron	0.0047	0.5725	0.6447	0.6641
Dissolved copper	3	<3	<3	<3
Dissolved chromium	0.2	0.3	<0.2	0.4
Chromium VI	2	<6	<6	<6
Chromium III	2	<6	<6	<6
Dissolved nickel	0.2	0.3	0.4	1.4
Dissolved arsenic	0.9	1.7	<0.9	<0.9
Dissolved lead	0.4	<0.4	<0.4	<0.4
Total hardness as CaCO3	1	18	28	23
Dissolved zinc	1.5	10.1	14.9	11.5
Total zinc	1.5	9.1	12.9	10.9
Visible oil or grease	N/A	-	-	-

pH values presented in pH units. Values in brackets are field pH measurements. Total Suspended Solids, Biochemical Oxygen Demand, Total hardness & Dissolved iron concentrations are presented in mg/L, all other parameters are in µg/L.

[#] BOD over diluted, therefore result indicative only

[Δ] Container with headspace

Appendix B

Laboratory Certificates

[redacted]

[redacted]

Dalradian Gold Ltd
[redacted]

Attention : [redacted]

Date : 18th January, 2021

Your reference : [redacted]

Our reference : [redacted]

Location : Curraghinalt

Date samples received :

Status : Final report

Issue : 1

Authorised By:

[redacted]

[redacted]
Senior Project Manager

Please include all sections of this report if it is reproduced

[redacted]

Client Name: Dalradian Gold Ltd
Reference: [redacted]
Location: Curraghinalt
Contact: [redacted]

Report : **Liquid**

Liquids/products V=40ml vial, G=glass bottle, P=plastic bottle
H=H_2SO_4, Z=ZnAc, N=NaOH, HN=HNO_3

Please see attached notes for all abbreviations and acronyms

[redacted] Job No.	21/19201	21/19201	21/19201	21/20634	21/19200	21/19200	21/19201							
[redacted] Sample No.	1-6	7-12	13-18	1-10	1-10	11-20	19-24							
Sample ID	DCS1	DCS2	DCS3	DCS4	DCS5	DCS6	DCS7							
Depth														
COC No / misc														
Containers	HN HNUF NB P BOD G	HN HNUF NB P BOD G	HN HNUF NB P BOD G	V H HN HNU N NB BOD G	V H HN HNU N NB BOD G	V H HN HNU N NB BOD G	HN HNUF NB P BOD G							
Sample Date	01/12/2021	01/12/2021	01/12/2021	23/12/2021	01/12/2021	01/12/2021	01/12/2021							
Sample Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water							
Batch Number	1	1	1	1	1	1	1					LOD/LOR	Units	Method No.
Date of Receipt	03/12/2021	03/12/2021	03/12/2021	24/12/2021	03/12/2021	03/12/2021	03/12/2021							
Dissolved Arsenic #	1.5	<0.9	<0.9	1.0	1.7	<0.9	2.6					<0.9	ug/l	TM30/PM14
Dissolved Cadmium #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03					<0.03	ug/l	TM30/PM14
Total Dissolved Chromium #	<0.2	<0.2	0.8	<0.2	0.3	<0.2	0.4					<0.2	ug/l	TM30/PM14
Dissolved Copper #	<3	5	<3	<3	<3	<3	3					<3	ug/l	TM30/PM14
Total Dissolved Iron #	0.7295	0.0052	0.7140	0.7828	0.5725	<0.0047	<0.0047					<0.0047	mg/l	TM30/PM14
Dissolved Lead #	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4					<0.4	ug/l	TM30/PM14
Dissolved Mercury #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5					<0.5	ug/l	TM30/PM14
Dissolved Nickel #	<0.2	2.5	0.9	1.1	0.3	<0.2	2.3					<0.2	ug/l	TM30/PM14
Dissolved Zinc #	11.6	4.5	11.2	5.8	10.1	<1.5	2.7					<1.5	ug/l	TM170/PM14
Total Zinc	9.2	2.0	9.5	4.6	9.1	<1.5	1.8					<1.5	ug/l	TM170/PM14
Total Hardness Dissolved (as CaCO3)	11	148	15	20	18	<1	149					<1	mg/l	TM30/PM14
Hexavalent Chromium #	<6	<6	<6	<6	<6	<6	<6					<6	ug/l	TM38/PM0
Total Dissolved Chromium III	<6	<6	<6	<6	<6	<6	<6					<6	ug/l	TM0/PM0
BOD (Settled) #	<1	<1	<1	<1	<1	<1	<1					<1	mg/l	TM58/PM0
pH #	6.18	8.01	7.56	7.64	7.74	7.04	8.19					<0.01	pH units	TM73/PM0
Total Suspended Solids #	<10	<10	<10	<10	<10	<10	<10					<10	mg/l	TM37/PM0

Notification of Deviating Samples

Client Name: Dalradian Gold Ltd
Reference: [redacted]
Location: Curraghinalt
Contact: [redacted]

[redacted] Job No.	Batch	Sample ID	Depth	[redacted] Sample No.	Analysis	Reason
No deviating sample report results for jobs 21/19200,21/19201						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

[redacted] [redacted]

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

[redacted] **Job No:** [redacted]

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM0	Not available	PM0	No preparation is required.				
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCF D. For waters the solvent extracts dissolved phase plus a sheen if present.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes			
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev 2, Dec 1996; Modified BS EN ISO 11885:2009: SO LS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified				
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev 2, Dec 1996; Modified BS EN ISO 11885:2009: SO LS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified	Yes			
TM37	2540D:1999 22nd Edition; VSS: USEPA 1684 (Jan 2001), USEPA 160.4 (1971) and SMEWW 2540E:1999 22nd Edition. Gravimetric determination of Total Suspended Solids (TSS) and Volatile Suspended Solids (VSS). Sample is filtered through a 1.5um pore size glass fibre filter and the resulting residue is dried and weighed at 105°C for	PM0	No preparation is required.	Yes			
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365 2 (Rev.2 1993), TON 353.1 (Rev 2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013l	PM0	No preparation is required.				
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365 2 (Rev.2 1993), TON 353.1 (Rev 2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013l	PM0	No preparation is required.	Yes			
TM57	Modified US EPA Method 410.4. (Rev. 2.0 1993) Comparable with ISO 15705:2002. Chemical Oxygen Demand is determined by hot digestion with Potassium Dichromate and measured spectrophotometerically.	PM0	No preparation is required.	Yes			
TM58	APHA SMEWW 5210B:1999 22nd Edition. Comparible with ISO 5815:1989. Measurement of Biochemical Oxygen Demand. When cBOD (Carbonaceous BOD) is requested a nitrification inhibitor is added which prevents the oxidation of reduced forms of nitrogen, such as am	PM0	No preparation is required.	Yes			

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.	Yes			
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.				
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes			
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.	Yes			
TM75	Modified US EPA method 310.1 (1978). Determination of Alkalinity by Metrohm automated titration analyser.	PM0	No preparation is required.	Yes			
TM76	Modified US EPA method 120.1 (1982). Determination of Specific Conductance by Metrohm automated probe analyser.	PM0	No preparation is required.	Yes			
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM0	No preparation is required.				
TM170	Determination of Trace Metals by ICP-MS (Inductively Coupled Plasma – Mass Spectrometry): Modified USEPA Method 200 8, Rev. 5.4, 1994; Modified EPA Method 6020A, Rev.1, Feb 2007; Modified BS EN ISO 17294-2:2016	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified				
TM170	Determination of Trace Metals by ICP-MS (Inductively Coupled Plasma – Mass Spectrometry): Modified USEPA Method 200 8, Rev. 5.4, 1994; Modified EPA Method 6020A, Rev.1, Feb 2007; Modified BS EN ISO 17294-2:2016	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified	Yes			
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.				

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
Subcontracted	See attached subcontractor report for accreditation status and provider.						

[redacted]

[redacted]

Dalradian Gold Ltd
[redacted]

4225

Attention :	[redacted]
Date :	8th February, 2022
Your reference :	[redacted]
Our reference :	[redacted]
Location :	Curringhinalt
Date samples received :	
Status :	Final report
Issue :	1

Authorised By:

[redacted]

[redacted]

Senior Project Manager

Please include all sections of this report if it is reproduced

Client Name:	Dalradian Gold Ltd
Reference:	[redacted]
Location:	Curringhinalt
Contact:	[redacted]

Report : Liquid

Liquids/products V=40ml vial, G=glass bottle, P=plastic bottle
H=H_2SO_4, Z=ZnAc, N=NaOH, HN=$HN0_3$

Please see attached notes for all abbreviations and acronyms

[redacted] Job No.	22/412	22/412	22/412	22/410	22/410	22/410	22/412						
[redacted] Sample No.	1-6	7-12	13-18	1-10	11-20	21-30	19-24						
Sample ID	DCS1	DCS2	DCS3	DCS4	DCS5	DCS6	DCS7						
Depth													
COC No / misc													
Containers	HN HNUF NB P BOD G	HN HNUF NB P BOD G	HN HNUF NB P BOD G	V H HN HNU NNB BOD G	V H HN HNU NNB BOD G	V H HN HNU NNB BOD G	HN HNUF NB P BOD G						
Sample Date	13/01/2022	13/01/2022	13/01/2022	13/01/2022	13/01/2022	13/01/2022	13/01/2022						
Sample Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water						
Batch Number	1	1	1	1	1	1	1				LOD/LOR	Units	Method No.
Date of Receipt	14/01/2022	14/01/2022	14/01/2022	15/01/2022	15/01/2022	15/01/2022	14/01/2022						
Dissolved Arsenic #	2.8	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9				<0.9	ug/l	TM30/PM14
Dissolved Cadmium #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03				<0.03	ug/l	TM30/PM14
Total Dissolved Chromium #	<0.2	<0.2	<0.2	0.3	<0.2	<0.2	<0.2				<0.2	ug/l	TM30/PM14
Dissolved Copper #	4	<3	<3	<3	<3	<3	3				<3	ug/l	TM30/PM14
Total Dissolved Iron #	0.8104	<0.0047	0.5683	0.6570	0.6447	<0.0047	<0.0047				<0.0047	mg/l	TM30/PM14
Dissolved Lead #	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4				<0.4	ug/l	TM30/PM14
Dissolved Mercury #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.5	ug/l	TM30/PM14
Dissolved Nickel #	1.9	2.5	0.4	0.3	0.4	<0.2	2.4				<0.2	ug/l	TM30/PM14
Dissolved Zinc #	10.7	7.3	11 3	6.3	14 9	<1.5	6.8				<1.5	ug/l	TM170/PM14
Total Zinc	8.1	9.2	14.1	5.8	12 9	<1.5	8.0				<1.5	ug/l	TM170/PM14
Total Hardness Dissolved (as CaCO3)	17	169	54	26	28	<1	162				<1	mg/l	TM30/PM14
Hexavalent Chromium #	<6	<6	<6	<6	<6	<6	<6				<6	ug/l	TM38/PM0
Total Dissolved Chromium III	<6	<6	<6	<6	<6	<6	<6				<6	ug/l	TM0/PM0
BOD (Settled) #	<1	<1	<1	<1	2	<1	<1				<1	mg/l	TM58/PM0
pH #	7 28	8 20	7 81	7 57	6 51	6 88	8 32				<0.01	pH units	TM73/PM0
Total Suspended Solids #	<10	<10	<10	<10	<10	<10	<10				<10	mg/l	TM37/PM0

[redacted]

Notification of Deviating Samples

Client Name: Dalradian Gold Ltd
Reference: [redacted]
Location: Curringhinalt
Contact: [redacted]

[redacted] Job No.	Batch	Sample ID	Depth	[redacted] Sample No.	Analysis	Reason
No deviating sample report results for jobs 22/410,22/412						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.

Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

[redacted] [redacted]

SOILS and ASH

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary. Asbestos samples are retained for 6 months.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C. Ash samples are dried at 37°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

STACK EMISSIONS

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation for Dioxins and Furans and Dioxin like PCBs has been performed on XAD-2 Resin, only samples which use this resin will be within our MCERTS scope.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

[redacted] [redacted]

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM0	Not available	PM0	No preparation is required.				
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes			
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev 2, Dec 1996; Modified BS EN ISO 11885:2009: SOLS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified				
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev 2, Dec 1996; Modified BS EN ISO 11885:2009: SOLS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified	Yes			
TM37	2540D:1999 22nd Edition; VSS: USEPA 1684 (Jan 2001), USEPA 160.4 (1971) and SMEWW 2540E:1999 22nd Edition. Gravimetric determination of Total Suspended Solids (TSS) and Volatile Suspended Solids (VSS). Sample is filtered through a 1.5um pore size glass fibre filter and the resulting residue is dried and weighed at 105°C for	PM0	No preparation is required.	Yes			
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365 2 (Rev.2 1993), TON 353.1 (Rev 2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013l	PM0	No preparation is required.				
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365 2 (Rev.2 1993), TON 353.1 (Rev 2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013l	PM0	No preparation is required.	Yes			
TM57	Modified US EPA Method 410.4. (Rev. 2.0 1993) Comparable with ISO 15705:2002. Chemical Oxygen Demand is determined by hot digestion with Potassium Dichromate and measured spectrophotometerically.	PM0	No preparation is required.	Yes			
TM58	APHA SMEWW 5210B:1999 22nd Edition. Comparible with ISO 5815:1989. Measurement of Biochemical Oxygen Demand. When cBOD (Carbonaceous BOD) is requested a nitrification inhibitor is added which prevents the oxidation of reduced forms of nitrogen, such as am	PM0	No preparation is required.	Yes			

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.	Yes			
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.				
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes			
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.	Yes			
TM75	Modified US EPA method 310.1 (1978). Determination of Alkalinity by Metrohm automated titration analyser.	PM0	No preparation is required.	Yes			
TM76	Modified US EPA method 120.1 (1982). Determination of Specific Conductance by Metrohm automated probe analyser.	PM0	No preparation is required.	Yes			
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM0	No preparation is required.				
TM170	Determination of Trace Metals by ICP-MS (Inductively Coupled Plasma – Mass Spectrometry): Modified USEPA Method 200 8, Rev. 5.4, 1994; Modified EPA Method 6020A, Rev.1, Feb 2007; Modified BS EN ISO 17294-2:2016	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified				
TM170	Determination of Trace Metals by ICP-MS (Inductively Coupled Plasma – Mass Spectrometry): Modified USEPA Method 200 8, Rev. 5.4, 1994; Modified EPA Method 6020A, Rev.1, Feb 2007; Modified BS EN ISO 17294-2:2016	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified	Yes			
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.				

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
Subcontracted	See attached subcontractor report for accreditation status and provider.						

[redacted]

[redacted]

Dalradian Gold Ltd
[redacted]

Attention :	[redacted]
Date :	18th February, 2022
Your reference :	[redacted]
Our reference :	[redacted]
Location :	Curraghinalt
Date samples received :	
Status :	Final report
Issue :	1

Authorised By:

[redacted]

[redacted]
Senior Project Manager

Client Name: Dalradian Gold Ltd
Reference: [redacted]
Location: Curraghinalt
Contact: [redacted]

Report : **Liquid**

Liquids/products V=40ml vial, G=glass bottle, P=plastic bottle
$H=H_2SO_4$, Z=ZnAc, N=NaOH, $HN=HN0_3$

Please see attached notes for all abbreviations and acronyms

[redacted] **Job No.**	22/1671	22/1671	22/1671	22/1670	22/1670	22/1670	22/1671						
[redacted] **Sample No.**	1-6	7-12	13-18	1-10	11-20	21-30	19-24						
Sample ID	DCS1	DCS2	DCS3	DCS4	DCS5	DCS6	DCS7						
Depth													
COC No / misc													
Containers	HN HNUF NB P BOD G	HN HNUF NB P BOD G	HN HNUF NB P BOD G	V H HN HNU N NB BOD G	V H HN HNU N NB BOD G	V H HN HNU N NB BOD G	HN HNUF NB P BOD G						
Sample Date	02/02/2022	02/02/2022	02/02/2022	02/02/2022	02/02/2022	02/02/2022	02/02/2022						
Sample Type	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water						
Batch Number	1	1	1	1	1	1	1				LOD/LOR	Units	Method No.
Date of Receipt	03/02/2022	03/02/2022	03/02/2022	03/02/2022	03/02/2022	03/02/2022	03/02/2022						
Dissolved Arsenic #	1.0	<0.9	<0.9	<0.9	<0.9	<0.9	<0.9				<0.9	ug/l	TM30/PM14
Dissolved Cadmium #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03				<0.03	ug/l	TM30/PM14
Total Dissolved Chromium #	<0.2	<0.2	<0.2	<0.2	0.4	<0.2	<0.2				<0.2	ug/l	TM30/PM14
Dissolved Copper #	<3	<3	<3	<3	<3	<3	<3				<3	ug/l	TM30/PM14
Total Dissolved Iron #	0.8682	0.0049	0.7340	0.6459	0.6641	<0.0047	<0.0047				<0.0047	mg/l	TM30/PM14
Dissolved Lead #	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4				<0.4	ug/l	TM30/PM14
Dissolved Mercury #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5				<0.5	ug/l	TM30/PM14
Dissolved Nickel #	<0.2	3.7	<0.2	1.3	1.4	0.4	3.4				<0.2	ug/l	TM30/PM14
Dissolved Zinc #	7.0	9.4	6.6	14 3	11 5	<1.5	9.5				<1.5	ug/l	TM170/PM14
Total Zinc	5.6	5.8	5.6	8.4	10 9	<1.5	6.1				<1.5	ug/l	TM170/PM14
Hexavalent Chromium #	<6	<6	<6	<6	<6	<6	<6				<6	ug/l	TM38/PM0
Total Dissolved Chromium III	<6	<6	<6	<6	<6	<6	<6				<6	ug/l	TM0/PM0
BOD (Settled) #	<1	<1	<1	<1	<1	<1	<1				<1	mg/l	TM58/PM0
pH #	6.17	8 32	8.18	7 66	6 60	5 83	8 36				<0.01	pH units	TM73/PM0
Total Suspended Solids #	<10	<10	<10	12	10	<10	<10				<10	mg/l	TM37/PM0

Notification of Deviating Samples

Client Name: Dalradian Gold Ltd
Reference: [redacted]
Location: Curraghinalt
Contact: [redacted]

[redacted] Job No.	Batch	Sample ID	Depth	[redacted] Sample No.	Analysis	Reason
No deviating sample report results for jobs 22/1670,22/1671						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

[redacted] [redacted]

SOILS and ASH

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary. Asbestos samples are retained for 6 months.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C. Ash samples are dried at 37°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

STACK EMISSIONS

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation for Dioxins and Furans and Dioxin like PCBs has been performed on XAD-2 Resin, only samples which use this resin will be within our MCERTS scope.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.
Laboratory records are kept for a period of no less than 6 years.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

Customer Provided Information

Sample ID and depth is information provided by the customer.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

[redacted] **Job No:** [redacted]

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM0	Not available	PM0	No preparation is required.				
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCF D. For waters the solvent extracts dissolved phase plus a sheen if present.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes			
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev 2, Dec 1996; Modified BS EN ISO 11885:2009: SO LS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified				
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev 2, Dec 1996; Modified BS EN ISO 11885:2009: SO LS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified	Yes			
TM37	2540D:1999 22nd Edition; VSS: USEPA 1684 (Jan 2001), USEPA 160.4 (1971) and SMEWW 2540E:1999 22nd Edition. Gravimetric determination of Total Suspended Solids (TSS) and Volatile Suspended Solids (VSS). Sample is filtered through a 1.5um pore size glass fibre filter and the resulting residue is dried and weighed at 105°C for	PM0	No preparation is required.	Yes			
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365 2 (Rev.2 1993), TON 353.1 (Rev 2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013l	PM0	No preparation is required.				
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365 2 (Rev.2 1993), TON 353.1 (Rev 2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013l	PM0	No preparation is required.	Yes			
TM57	Modified US EPA Method 410.4. (Rev. 2.0 1993) Comparable with ISO 15705:2002. Chemical Oxygen Demand is determined by hot digestion with Potassium Dichromate and measured spectrophotometerically.	PM0	No preparation is required.	Yes			
TM58	APHA SMEWW 5210B:1999 22nd Edition. Comparible with ISO 5815:1989. Measurement of Biochemical Oxygen Demand. When cBOD (Carbonaceous BOD) is requested a nitrification inhibitor is added which prevents the oxidation of reduced forms of nitrogen, such as am	PM0	No preparation is required.	Yes			

[redacted] **Job No:** [redacted]

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.	Yes			
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.				
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes			
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.	Yes			
TM75	Modified US EPA method 310.1 (1978). Determination of Alkalinity by Metrohm automated titration analyser.	PM0	No preparation is required.	Yes			
TM76	Modified US EPA method 120.1 (1982). Determination of Specific Conductance by Metrohm automated probe analyser.	PM0	No preparation is required.	Yes			
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM0	No preparation is required.				
TM170	Determination of Trace Metals by ICP-MS (Inductively Coupled Plasma – Mass Spectrometry): Modified USEPA Method 200 8, Rev. 5.4, 1994; Modified EPA Method 6020A, Rev.1, Feb 2007; Modified BS EN ISO 17294-2:2016	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified				
TM170	Determination of Trace Metals by ICP-MS (Inductively Coupled Plasma – Mass Spectrometry): Modified USEPA Method 200 8, Rev. 5.4, 1994; Modified EPA Method 6020A, Rev.1, Feb 2007; Modified BS EN ISO 17294-2:2016	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified	Yes			
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.				

[redacted] **Job No:** [redacted]

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
Subcontracted	See attached subcontractor report for accreditation status and provider.						

Appendix C

YSI MultiParameter Meter Calibration Certificate

[redacted]

OUTWARDS CHECKLIST

YSI Pro Calibration

MS & Cable Serial Numbers: 15F100788 / 15D100374

	Reading	Target	Acceptable	Pass	Lot No:
Temp	19.1	Ref: 19.0	± 1°C	✓	N/A
pH7mV	-27.7	0.0	0 ± 50	✓	20K1
pH4mV	148.3	177	177 ± 50	✓	20M1
pH Slope	176.0	177	162 - 180	✓	N/A
Cond. Cell Constant	4.8	5	4.6 - 5.4	✓	21A1
Redox Offset	32.9	0.0	±50.0	✓	20H1
DO Cal	Pass or fail determined by the meter			✓	N/A

All parameters were within acceptable range on the day of despatch; however we do recommend that the instrument is calibrated daily to ensure accurate readings.

* Calibrated to manufacturers standards

Signed: [redacted]

Name:

Date: 20/5/21

Cross checked contents initials: [redacted]

[redacted]

[redacted]

OUTWARDS CHECKLIST

YSI Pro Calibration

YSI & Cable Serial Numbers: 17L 101825 – 19H 100078

	Reading	Target	Acceptable	Pass	Lot No:
Temp	16.3	Ref: 16.7	± 1°C	✓	N/A
pH7mv	-10.2	0.0	0 ± 50	✓	21C1
pH4mv	163.3	177	177 ± 50	✓	20M1
pH Slope	173.5	177	162 - 180	✓	N/A
Cond. Cell Constant	4.86	5	4.6 - 5.4	✓	21D1
Redox Offset	11.6	0.0	±50.0	✓	20H1
DO Gain	Pass or fail determined by the meter			✓	N/A

All parameters were within acceptable range on the day of despatch; however we do recommend that the instrument is calibrated daily to ensure accurate readings.

* Calibrated to manufacturers standards

Signed: [redacted]

Name:

Date: 13/10/21

Cross checked contents initials:

[redacted]