

## Certificate of Analysis

**Client:** APEM Ltd

**Project:** 23121535

**Quote:** BEC230630619 V2.1

**Project Ref:** APEM Ltd

**Site:** St. George

**Contact:** Claire McCormack

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**No. Samples Received:** 6

**Date Received:** 14/12/2023

**Analysis Date:** 22/12/2023

**Date Issued:** 22/12/2023

**Report Type:** Final Version 01

This report supersedes any versions previously issued by the laboratory



Reported by Customer Service Co-Ordinator  
Julie Dickinson  
01283 554496



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Project No: 23121535  
Date Issued: 22/12/2023

**Samples Analysed**

<b><u>Text ID</u></b>	<b><u>Sample Reference</u></b>	<b><u>Sampling Date</u></b>	<b><u>Sample Type</u></b>	<b><u>Sample Description</u></b>
23121535-001	1	29/11/2023 09:36:00	WATER	Unclassified Liquid
23121535-002	2	29/11/2023 09:42:00	WATER	Unclassified Liquid
23121535-003	3	29/11/2023 10:03:00	WATER	Unclassified Liquid
23121535-004	4	29/11/2023 10:26:00	WATER	Unclassified Liquid
23121535-005	5	29/11/2023 10:42:00	WATER	Unclassified Liquid
23121535-006	6	29/11/2023 10:42:00	WATER	Unclassified Liquid



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Analysis Results

Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003	004	005	006
					Customer ID	1	2	3	4	5	6
					Sample Type	WATER	WATER	WATER	WATER	WATER	WATER
					Sampling Date	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023	29/11/2023
Ammoniacal Nitrogen as N	KONENS	0.01	mg/l	N		0.20	0.23	0.21	0.21	0.22	0.21
Total Suspended Solids	WSLM10	5	mg/l	N		78	89	86	92	82	79
Nitrite as N	KONENS	0.01	mg/l	N		0.14	0.15	0.17	0.13	0.14	0.14
Nitrate as N	KONENS	0.2	mg/l	N		3.8	3.8	3.7	3.8	3.8	3.8
Orthophosphate as P	KONENS	0.01	mg/l	N		0.22	0.22	0.25	0.19	0.24	0.22
Total Alkalinity	WSLM12	2	mg/l	N		122	120	121	121	124	121
Turbidity	WSLM30	1	ntu	N		26	26	33	29	22	30
BOD (5 day)	WSLM20	1	mg O2/l	N		1.1	<1.0	<1.0	<1.0	<1.0 <sub>B</sub>	<1.0 <sub>B</sub>
Iron as Fe	ICPWATVAR (Dissolved)	0.01	mg/l	N		0.01	0.01	0.01	0.01	0.01	0.01
Iron as Fe	ICPWATVART (Total)	0.01	mg/l	N		0.19	0.19	0.15	0.13	0.15	0.18
Phosphorus as P	ICPWATVART (Total)	0.1	mg/l	N		0.2	0.3	0.3	0.2	0.3	0.3



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## Deviating Sample Report

<u>Sample Reference</u>	<u>Text ID</u>	<u>Method Code</u>	Incorrect Container	Incorrect Label	Headspace	Incorrect/No Preservative	No Sampling Date	Holding Time
1	23121535-001	KONENS						✓
1	23121535-001	KONENS						✓
1	23121535-001	KONENS						✓
1	23121535-001	KONENS						✓
1	23121535-001	WSLM10						✓
1	23121535-001	WSLM12						✓
1	23121535-001	WSLM20						✓
2	23121535-002	KONENS						✓
2	23121535-002	KONENS						✓
2	23121535-002	KONENS						✓
2	23121535-002	KONENS						✓
2	23121535-002	WSLM10						✓
2	23121535-002	WSLM12						✓
2	23121535-002	WSLM20						✓
3	23121535-003	KONENS						✓
3	23121535-003	KONENS						✓
3	23121535-003	KONENS						✓
3	23121535-003	KONENS						✓
3	23121535-003	WSLM10						✓
3	23121535-003	WSLM12						✓
3	23121535-003	WSLM20						✓
4	23121535-004	KONENS						✓
4	23121535-004	KONENS						✓
4	23121535-004	KONENS						✓
4	23121535-004	KONENS						✓
4	23121535-004	WSLM10						✓
4	23121535-004	WSLM12						✓
4	23121535-004	WSLM20						✓
5	23121535-005	KONENS						✓
5	23121535-005	KONENS						✓
5	23121535-005	KONENS						✓
5	23121535-005	KONENS						✓
5	23121535-005	WSLM10						✓



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5	23121535-005	WSLM12						✓
5	23121535-005	WSLM20						✓
6	23121535-006	KONENS						✓
6	23121535-006	KONENS						✓
6	23121535-006	KONENS						✓
6	23121535-006	KONENS						✓
6	23121535-006	WSLM10						✓
6	23121535-006	WSLM12						✓
6	23121535-006	WSLM20						✓

### Analysis Method

<u>Method Code</u>	<u>Method Description</u>	<u>Analysis Method</u>
ICPWATVAR (Dissolved)	Iron (Diss.) in Water by ICPOES	Filtered
ICPWATVART (Total)	Iron (Tot.) in Water by ICPOES	Unfiltered
ICPWATVART (Total)	Phosphorus (Tot.) in Water by ICPOES	Unfiltered
KONENS	Ammoniacal Nitrogen as N	Filtered
KONENS	Nitrate as N by Colorimetry	Filtered
KONENS	Nitrite as N by Colorimetry	Filtered
KONENS	Orthophosphate as P by Colorimetry	Filtered
WSLM10	TSS: Total Suspended Solids	Unfiltered
WSLM12	Total Alkalinity as CaCO <sub>3</sub>	Unfiltered
WSLM20	BOD: Biological Oxygen Demand (Total)	Unfiltered
WSLM30	Turbidity	Unfiltered

### Result Report Notes

Letters alongside results signify that the result has associated report notes.  
 The report notes are as follows:

<u>Letter</u>	<u>Note</u>
A	Due to the matrix of the sample the laboratory has had to deviate from our standard protocols to be able to process the sample and provide a result. Where applicable the accreditation has been removed and this should be taken into consideration when utilising the data.
B	The QC associated with this result has not wholly met the QMS requirements, the accreditation has therefore been removed. However, the Laboratory has confidence in the performance of the method as a whole and that the integrity of the data has not been significantly compromised.
C	Due to matrix interference, the internal standard and/or surrogate has not met the QMS requirements. This should be taken into consideration when utilising the data.
D	A non-standard volume or mass has been used for this test which has resulted in a raised detection limit.
E	Due to the parameter value being beyond our calibration range (and following the maximum size of dilution allowed, where applicable), the result cannot be quantified and as such the result will appear as a greater than symbol (>) with the accreditation removed. This data should be used for indicative purposes only.



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- F Based on the sample history, appearance and smell a dilution was applied prior to testing. Unfortunately, the result is either above (>) or below (<) our calibration range. Results above our calibration range have accreditation removed. The data should be used for indicative purposes only.
- G The day 5 oxygen reading was below the capability of the instrument to detect, and therefore the calculated BOD has been reported unaccredited for guidance purposes only.

#### [HWOL Acronym Key](#)

<u>Acronym</u>	<u>Description</u>
HS	Headspace Analysis
EH	Extractable Hydrocarbons - i.e everything extracted by the solvent(s)
CU	Clean up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
+	Operator to indicate cumulative e.g. EH_CU+HS_1D_Total



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### Additional Information

This report refers to samples as received. SOCOTEC UK Ltd takes no responsibility for accuracy or competence of sampling by others.

Results within this report relate only to the samples tested.

The accreditation codes are as follows:

U = UKAS accredited analysis  
M = MCERT accredited analysis  
N = Unaccredited analysis

Any units marked with ^ signify results are reported on a dry weight basis of 105 ° c.

All Air Dried and Ground Samples (ADG) are oven dried at less than 35° c.

This report shall not be reproduced except in full, without written approval of the laboratory.

Opinions and interpretations given are outside the scope of our UKAS accreditation.

Any samples marked with \* are not covered by our scope of UKAS accreditation. If applicable, further report notes have been added.

Any solid samples where the Major Constituents are not one of the following (Sand, Silt, Clay, Made Ground) are not one of our accredited matrix types.

Any samples marked with ‡ have had MCERTS accreditation removed for this result

Any samples marked with a tick in the deviant table is deviant for the specific reason.

Any samples reported as IS, NA, ND mean the following:

IS = Insufficient Sample to complete analysis  
NA = Sample is not amenable for the required analysis  
ND = Results cannot be determined

Items listed with a 'SUB' method code prefix have been carried out by an external subcontracted laboratory.

Our deviating sample report does not include deviancy information for Subcontracted analysis. Please see the report from the subcontracted lab for information regarding any deviancies for this analysis.

Summaries of analysis methods are available upon request.

## **End of Certificate of Analysis**