

CH475-D240066

Naqeeb Ur Rehman
JK Williams Pty Ltd
39-53 Jack Williams Drive,
Penrith NSW 2750

iwilliam@jkw.com.au

Re: Dust Monitoring February 2024 - Westlink

Dear Sir,

Compliance Health & Environmental Consulting (CHEC) were engaged by JK Williams Pty Ltd to undertake monthly Depositional Dust Monitoring for the site located at 63 Abbotts Road, Kemps Creek, identified as Lot 11 in DP252503.

Six Dust Deposition Gauges (DDG1-DDG6) were initially installed at representative locations along the Site boundary nearest to sensitive receptors, in accordance with the guidelines provided by AS/NZS 3580.1.1:2016. DDG2 and DDG3 were removed at the end of the October 2023 monitoring period as works were completed in this area. Refer to **Figure 1-Site layout with sample locations**.

The gauges were constructed in accordance with AS/NZ3580.1.1:2016-Methods for sampling and analysis of ambient air. Method 10.1: Determination of particulate matter-deposited matter-Gravimetric method.

A 150mm diameter glass funnel was placed within a 4L glass collection bottle using a rubber stopper with a drain. Each DDG was then placed within a PVC casing for protection and fixed to a star picket on site. Bird protection was constructed on the PVC pipe to prevent birds perching on the funnel. Gauges were placed 2m above ground level. This dust report details results from 8th February 2024 to the 8th of March 2024.

Dust is assessed as insoluble solids as defined by AS 3580.10.1-1991 (AM-19) and is made up of both combustible and non-combustible materials. The obligation to monitor dust relates to the primary activity, being soil disturbance as a result of earthworks, therefore, the non-combustible and dissolved component (generally recognised as mineral salts) are the primary measurements of concern to determine compliance.

The sampling method does not provide real time data, but provides an estimate of the mean surface concentration of deposited matter settling from the air over a period of one month.

The gauges were analysed at a NATA certified laboratory where the collected sediment was weighed and dried to measure particles in the air, less the combustible matter to give total non-combustible material collected in the deposition gauges. The resultant data represents the potential exposure to dust for those receptors, being local residences.

The depositional dust monitoring criteria are as follows:

- Annual average total deposited dust level is 4g/m²/month.
- Maximum monthly increase in deposited dust level is 2g/m²/month



Table 1 indicates that the highest recorded dust concentration was observed at DDG6, having a total solids concentration of 10g/m² that included 6.4g/m² of insoluble solids. The insoluble solids contained 6.2g/m² of combustible solids, and 0.3g/m² of non-combustible solids (mineral dust). Refer to **Attachment 1** – NATA Certified Results.

Table 1 –February Dust Deposition Analysis (g/m²/month)

Gauge	Insoluble	Combustible	Non-Combustible	Soluble	Total
DDG1	2	1.8	0.2	4.5	6.5
DDG4	1.5	1.4	0.2	4.1	5.6
DDG5	3.7	3.5	0.2	5.3	8.9
DDG6	6.4	6.2	0.3	3.8	10

Table 2 indicates that dust concentrations have generally reduced since last month and no monthly change of insoluble solids or non-combustible solids exceeded the monthly change criteria.

The rolling averages for DDG4 and DDG6 exceeded the criteria of 4 g/m² with average concentrations of 5.6 and 6.3 g/m² respectively. The rolling averages for mineral dust remains compliant at all locations.

Table 2 –Monthly Changes and Rolling Averages (g/m²/month)

Gauge	Total Dust (AS3580.10.1-2016)		Non-Combustible Solids	
	Monthly Δ	Rolling Avg	Monthly Δ	Rolling Avg
DDG1	0.5	2.2	0.1	0.8
DDG4	-3.7	5.6	-0.2	3.5
DDG5	-0.8	2.3	0	0.6
DDG6	-3	6.3	-0.1	2.6
Criteria	2	4	--	--

Whilst dust concentrations generally decreased over the month, it is noted that the average dust concentrations at DDG4 and DDG6 continue to exceed the monthly average criteria. The averages are primarily attributed to significant concentrations reported in October 2023 and have continued to decrease since. It is expected that if compliant concentrations continue to be measured, the rolling average will eventually become compliant.

The prevailing wind for this month was from the north-west as shown on **Figure 2**. The average wind speed for the month was 3.1km/hr with a maximum of 35.4km/h occurring from the north east.

If any further information is required regarding this matter, please feel free to contact the undersigned during business hours.

Regards,

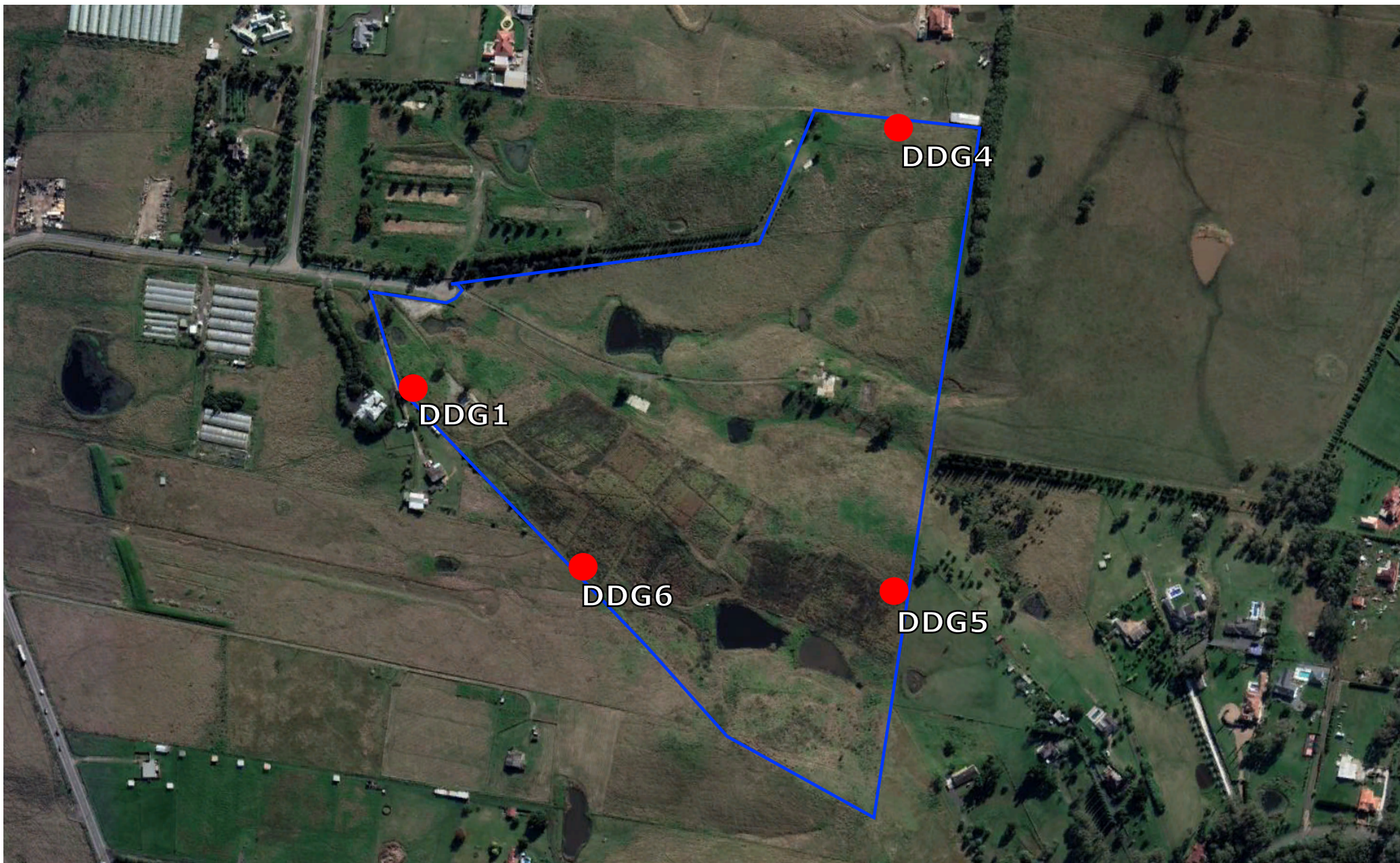
Jayden Gross

Environmental Consultant


Compliance Health & Environmental Consulting Pty Ltd



Figure 1 – Site Layout



 Dust Deposition Gauge Location

 Site Area

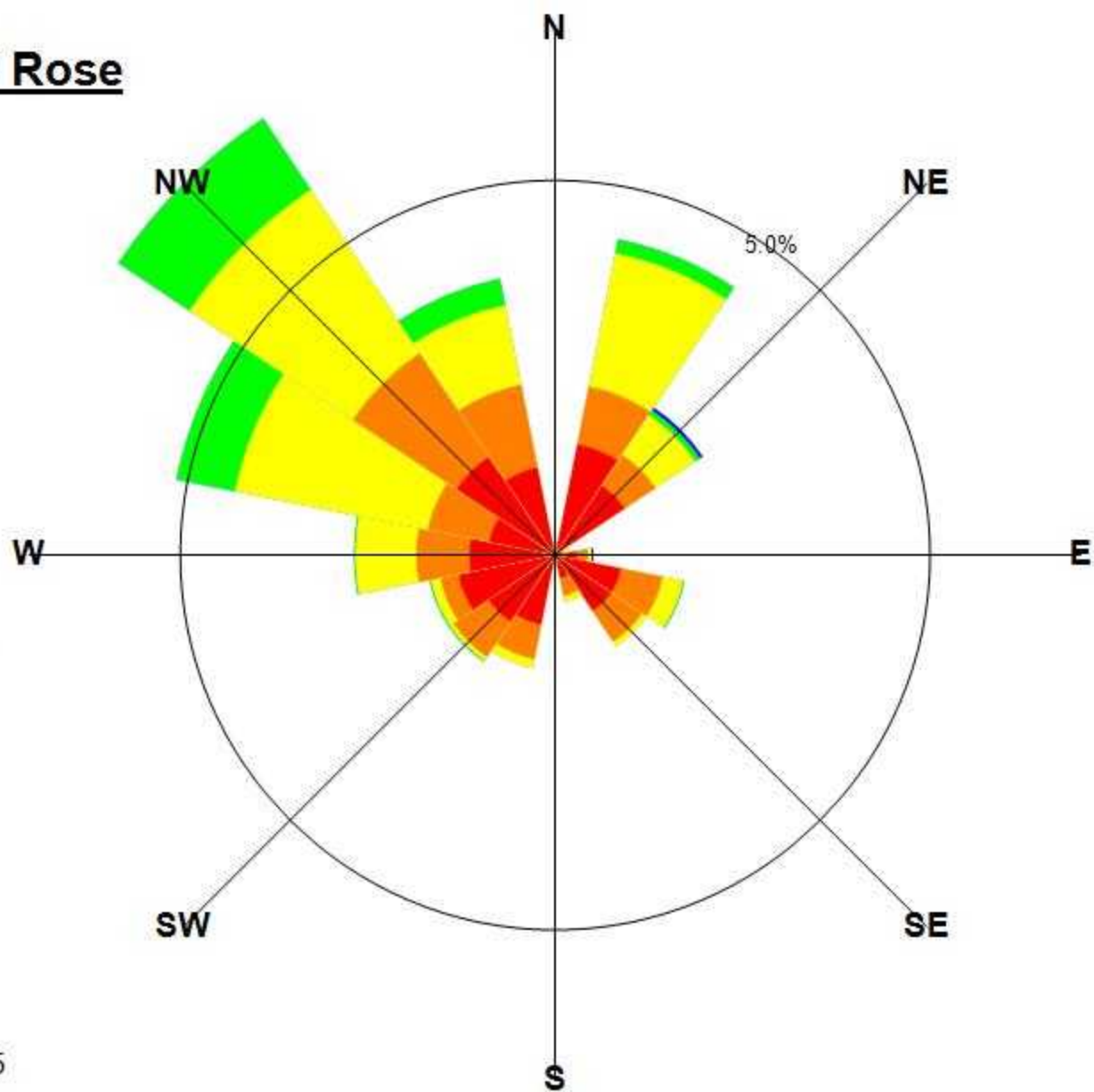


Title		Dust Deposition Gauge Locations					
Site Address	63 Abbotts Road, Kemps Creek	Project No.	CH1475	Figure No.	1	Date	23/08/2023
Client	JK Williams Pty Ltd	Scale	NTS	Compiled	CV	Revision	Rev. 1



Figure 2 – Wind Rose Diagram

February Wind Rose



Wind Speed (km/hr)



Average value: 3.1
Maximum value: 35.4
Prevailing direction: 315



Attachment 1 – NATA Certified Laboratory Results

CHAIN OF CUSTODY RECORD

1075935

Laboratory	CHBC	Project No	1475	Project Manager	J. Gross	Email for Invoice	accounts@ccomplianceenviro.com.au	
Laboratory Address		Project Name	Kemps Creek	Sampled by	J. Gross	Email for Results	ops@complianceenviro.com.au	
Contact Name		Analysis Required				Containers		
Phone No							Required Turnaround Time (TAT)	
Special Directions							Standard	
Purchase Order							Sample Comments / Dangerous Goods Hazard Warning	
Quote ID No	210427HEN					500mL Plastic		
						250mL Plastic		
						125mL Plastic		
						200mL Amber Glass		
						40mL VOA Vial		
						500mL PFAS Bottle		
						Jar (Glass or HDPE)		
						Other (Abbreviate as per WA Guideline)		

No	Sample ID	Sample Date	Sample Type	Analysis Required	500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA Vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Abbreviate as per WA Guideline)	Sample Comments / Dangerous Goods Hazard Warning
1	DP G1	9/2-7/3	Soil	X									
2	DP G4	↓	↓	X									
3	DP G5	↓	↓	X									
4	DP G6	↓	↓	X									
5													
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25													

Deliverie Laboratory	Name	Signature	Date	Temp	20.8
	Received By	Signature	Date		

2:40

Compliance Health & Environmental Consulting P/L
 PO Box 275
 Gosford
 NSW 2250



NATA Accredited
 Accreditation Number 1261
 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
 NATA is a signatory to the ILAC Mutual Recognition
 Arrangement for the mutual recognition of the
 equivalence of testing, medical testing, calibration,
 inspection, proficiency testing scheme providers and
 reference materials producers reports and certificates.

Attention: RESULTS - ALL SRAS HERE ONLY - NO INVOICES

Report 1075935-A
 Project name KEMPS CREEK
 Project ID 1475
 Received Date Mar 07, 2024

Client Sample ID			DDG 1	DDG 4	DDG 5	DDG 6
Sample Matrix			Dust Deposition	Dust Deposition	Dust Deposition	Dust Deposition
Eurofins Sample No.			S24-Ma0016661	S24-Ma0016662	S24-Ma0016663	S24-Ma0016664
Date Sampled			Mar 07, 2024	Mar 07, 2024	Mar 07, 2024	Mar 07, 2024
Test/Reference	LOR	Unit				
Dust Deposition						
Combustible Solids	0.1	g/m2.mth	1.8	1.4	3.5	6.2
Soluble Solids	0.1	g/m2.mth	4.5	4.1	5.3	3.8
Total Solids Dried at 103 °C to 105 °C	0.1	g/m2.mth	6.5	5.6	8.9	10
Volume (total)*	0.1	mL	650	630	600	600
Ash*	0.1	g/m2.mth	0.2	0.2	0.2	0.3
Insoluble Solids	0.1	g/m2.mth	2.0	1.5	3.7	6.4

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description

Dust Deposition

Testing Site

Sydney

Extracted

Mar 07, 2024

Holding Time

5 Days

- Method: LTM-INO-4160 Determination of Dust Deposition of Ambient Air

Melbourne 6 Monterey Road Dandenong South VIC 3175 +61 3 8564 5000 NATA# 1261 Site# 1254	Geelong 19/8 Lewalan Street Grovedale VIC 3216 +61 3 8564 5000 NATA# 1261 Site# 25403	Sydney 179 Magowar Road Girraween NSW 2145 +61 2 9900 8400 NATA# 1261 Site# 18217	Canberra Unit 1,2 Dacre Street Mitchell ACT 2911 +61 2 6113 8091 NATA# 1261 Site# 25466	Brisbane 1/21 Smallwood Place Murarie QLD 4172 T: +61 7 3902 4600 NATA# 1261 Site# 20794	Newcastle 1/2 Frost Drive Mayfield West NSW 2304 +61 2 4968 8448 NATA# 1261 Site# 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 +61 8 6253 4444 NATA# 2377 Site# 2370	Auckland 35 O'Rorke Road Penrose, Auckland 1061 +64 9 526 4551 IANZ# 1327	Auckland (Asb) Unit C1/4 Pacific Rise, Mount Wellington, Auckland 1061 +64 9 525 0568 IANZ# 1308	Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 +64 3 343 5201 IANZ# 1290	Tauranga 1277 Cameron Road, Gate Pa, Tauranga 3112 +64 9 525 0568 IANZ# 1402
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Company Name:	Compliance Health & Environmental Consulting P/L	Order No.:		Received:	Mar 7, 2024 3:40 PM
Address:	PO Box 275 Gosford NSW 2250	Report #:	1075935	Due:	Mar 14, 2024
		Phone:	02 4304 0091	Priority:	5 Day
		Fax:		Contact Name:	RESULTS - ALL SRAS HERE
Project Name:	KEMPS CREEK				
Project ID:	1475				
Eurofins Analytical Services Manager : Bonnie Pu					

Sample Detail						Dust Deposition	Moisture Set
Sydney Laboratory - NATA # 1261 Site # 18217						X	X
External Laboratory							
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID		
1	DDG 1	Mar 07, 2024		Soil	S24-Ma0016661	X	X
2	DDG 4	Mar 07, 2024		Soil	S24-Ma0016662	X	X
3	DDG 5	Mar 07, 2024		Soil	S24-Ma0016663	X	X
4	DDG 6	Mar 07, 2024		Soil	S24-Ma0016664	X	X
Test Counts						4	4

Internal Quality Control Review and Glossary

General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follow guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013. They are included in this QC report where applicable. Additional QC data may be available on request.
- Unless otherwise stated, all soil/sediment/solid results are reported on a dry weight basis.
- Unless otherwise stated, all biota/food results are reported on a wet weight basis on the edible portion.
- For CEC results where the sample's origin is unknown or environmentally contaminated, the results should be used advisedly.
- Actual LORs are matrix dependent. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
- SVOC analysis on waters is performed on homogenised, unfiltered samples unless noted otherwise.
- Samples were analysed on an 'as received' basis.
- Information identified in this report with **blue** colour indicates data provided by customers that may have an impact on the results.
- This report replaces any interim results previously issued.

Holding Times

Please refer to the 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours before sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and despite any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling; therefore, compliance with these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether, the holding time is seven days; however, for all other VOCs, such as BTEX or C6-10 TRH, the holding time is 14 days.

Units

mg/kg: milligrams per kilogram	mg/L: milligrams per litre	ppm: parts per million
µg/L: micrograms per litre	ppb: parts per billion	%: Percentage
org/100 mL: Organisms per 100 millilitres	NTU: Nephelometric Turbidity Units	MPN/100 mL: Most Probable Number of organisms per 100 millilitres
CFU: Colony forming unit	Colour: Pt-Co Units	

Terms

APHA	American Public Health Association
CEC	Cation Exchange Capacity
COC	Chain of Custody
CP	Client Parent - QC was performed on samples pertaining to this report
CRM	Certified Reference Material (ISO17034) - reported as percent recovery.
Dry	Where moisture has been determined on a solid sample, the result is expressed on a dry weight basis.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
LOR	Limit of Reporting.
LCS	Laboratory Control Sample - reported as percent recovery.
Method Blank	In the case of solid samples, these are performed on laboratory-certified clean sands and in the case of water samples, these are performed on de-ionised water.
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC represents the sequence or batch that client samples were analysed within.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
SRA	Sample Receipt Advice
Surr - Surrogate	The addition of a similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
TBTO	Tributyltin oxide (<i>bis</i> -tributyltin oxide) - individual tributyltin compounds cannot be identified separately in the environment; however, free tributyltin was measured, and its values were converted stoichiometrically into tributyltin oxide for comparison with regulatory limits.
TCLP	Toxicity Characteristic Leaching Procedure
TEQ	Toxic Equivalency Quotient or Total Equivalence
QSM	US Department of Defense Quality Systems Manual Version 6.0
US EPA	United States Environmental Protection Agency
WA DWER	Sum of PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC - Acceptance Criteria

The acceptance criteria should only be used as a guide and may be different when site-specific Sampling Analysis and Quality Plan (SAQP) have been implemented.

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is ≤30%; however, the following acceptance guidelines are equally applicable:

Results <10 times the LOR:	No Limit
Results between 10-20 times the LOR:	RPD must lie between 0-50%
Results >20 times the LOR:	RPD must lie between 0-30%

NOTE: pH duplicates are reported as a range, not as RPD

Surrogate Recoveries: Recoveries must lie between 20-130% for Speciated Phenols & 50-150% for PFAS. SVOCs recoveries 20 – 150%, VOC recoveries 70 – 130%

PFAS field samples containing surrogate recoveries above the QC limit designated in QSM 6.0, where no positive PFAS results have been reported or reviewed, and no data was affected.

QC Data General Comments

- Where a result is reported as less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown are not data from your samples.
- pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore, laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
- Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of recovery, the term "INT" appears against that analyte.
- For Matrix Spikes and LCS results, a dash "-" in the report means that the specific analyte was not added to the QC sample.
- Duplicate RPDs are calculated from raw analytical data; thus, it is possible to have two sets of data.

Comments
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	N/A
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Authorised by:

Nileshni Goundar	Analytical Services Manager
Ryan Phillips	Senior Analyst-Inorganic



Glenn Jackson
Managing Director

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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