

CH475-D240125

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

[iwilliam@jkw.com.au](mailto:iwilliam@jkw.com.au)

### **Re: Dust Monitoring April 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.

Works commenced in the Stage 2 area to the south of the property in mid-March 2024. As such, DDG6 was moved to the south western boundary, and two more dust gauges were installed along the new southern boundary. 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 the 8<sup>th</sup> of April to the 6<sup>th</sup> May 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/m<sup>2</sup>/month.
- Maximum monthly increase in deposited dust level is 2g/m<sup>2</sup>/month



**Table 1** indicates that the highest recorded dust concentration was observed at DDG8, having a total solids concentration of 5.1g/m<sup>2</sup> that included 1.6g/m<sup>2</sup> of insoluble solids. The insoluble solids contained 1.3g/m<sup>2</sup> of combustible solids, and 0.3g/m<sup>2</sup> of non-combustible solids (mineral dust). Refer to **Attachment 1** – NATA Certified Results.

**Table 1 –March Dust Deposition Analysis (g/m<sup>2</sup>/month)**

Gauge	Insoluble	Combustible	Non-Combustible	Soluble	Total
DDG1	1.9	1.7	0.2	1.3	3.2
DDG4	1.2	1.1	0.2	3.2	4.5
DDG5	1	0.8	0.2	2.8	3.8
DDG6	1.6	1.4	0.1	2.5	4
DDG7	0.5	0.4	0.1	3.9	4.4
DDG8	1.6	1.3	0.3	3.5	5.1

**Table 2** indicates that 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/m<sup>2</sup> with average concentrations of 5 g/m<sup>2</sup> and 5.8 g/m<sup>2</sup> respectively. The rolling averages for mineral dust remains compliant at all locations.

**Table 2 –Monthly Changes and Rolling Averages (g/m<sup>2</sup>/month)**

Gauge	Total Dust (AS3580.10.1-2016)		Non-Combustible Solids	
	Monthly Δ	Rolling Avg	Monthly Δ	Rolling Avg
DDG1	1.5	1	0.2	0.8
DDG4	0.5	4.6	0.2	2.5
DDG5	0.4	2	0.2	0.6
DDG6	-0.3	5.3	0.1	2.6
DDG7	-0.3	0.7	0.1	0.1
DDG8	1.4	0.9	0.3	0.3
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 1.5km/hr with a maximum of 22.5km/h occurring from the 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



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## Figure 1 – Site Layout

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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	17/04/2024
Client	JK Williams Pty Ltd	Scale	NTS	Compiled	CV	Revision	Rev. 1

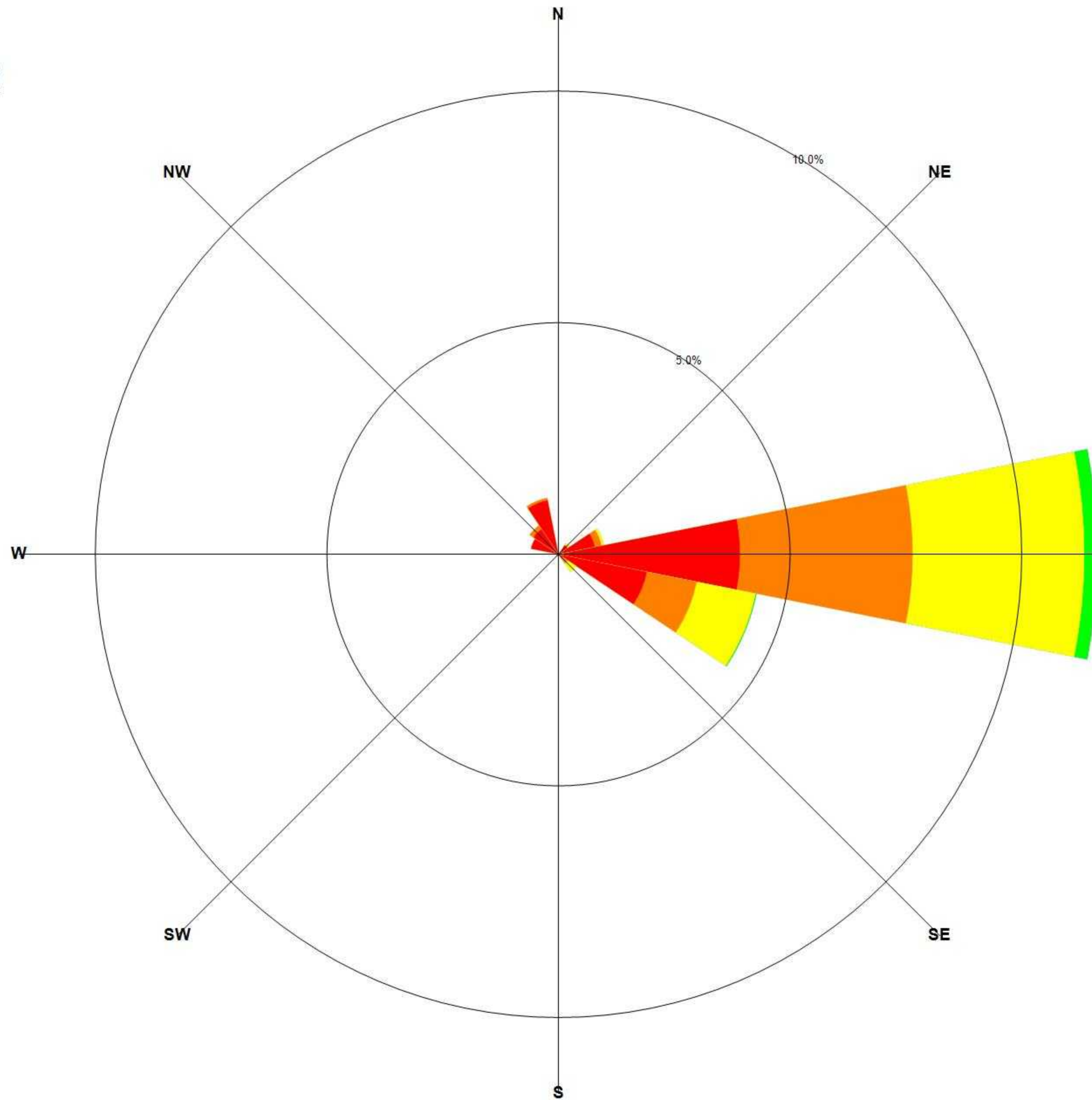


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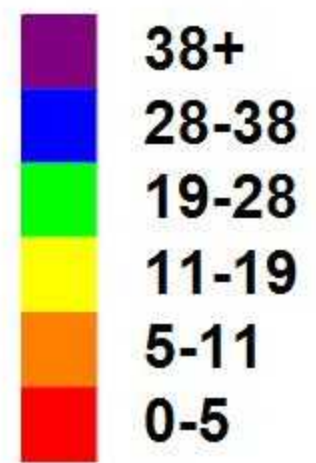
## Figure 2 – Wind Rose Diagram



# April Wind Rose



## Wind Speed (km/hr)



Average value: 1.5  
Maximum value: 22.5  
Prevailing direction: 90



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## Attachment 1 – NATA Certified Laboratory Results

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# CHAIN OF CUSTODY RECORD

Eurofins | mgt ABN 50 005 085 521

Sydney Laboratory  
Unit F3 Bld.F 16 Mars Road Lane Cove West NSW 2066  
02 9900 8400 EnviroSampleNSW@eurofins.com

Brisbane Laboratory  
Unit 1 21 Smallwood Place Murarie QLD 4172  
07 3902 4600 EnviroSampleQLD@eurofins.com

Perth Laboratory  
Unit 2 91 Leach Highway Kewdale WA 6105  
08 9251 9600 EnviroSampleWA@eurofins.com

Melbourne Laboratory  
6 Monterey Road Dandenong South VIC 3175  
03 8564 5000 EnviroSampleVic@eurofins.com

Company	CHEC	Project No	1475	Project Manager	J. Gross	Sampler(s)	
Address		Project Name	Kemps Creek	EDD Format	ESdat, EQulS etc	Handed over by	
Contact Name		Analyses Where metals are requested, please specify 'Total' or 'Filtered'. SUITE code must be used to attract SUITE pricing.	Push Reposition				
Phone No							
Special Directions							
Purchase Order							
Quote ID No	210427 CHEN						

Containers	Required Turnaround Time (TAT)
Change container type & size if necessary.	Default will be 5 days if not ticked.
<input type="checkbox"/> 500mL Plastic <input type="checkbox"/> 250mL Plastic <input type="checkbox"/> 125mL Plastic <input type="checkbox"/> 200mL Amber Glass <input type="checkbox"/> 40mL VOA vial <input type="checkbox"/> 500mL PFAS Bottle <input type="checkbox"/> Jar (Glass or HDPE) <input type="checkbox"/> Other (Asbestos AS4964, WA Guidelines)	♦ Surcharge will apply <input type="checkbox"/> Overnight (reporting by 9am) ♦ <input type="checkbox"/> Same day ♦ <input type="checkbox"/> 1 day ♦ <input type="checkbox"/> 2 days ♦ <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 5 days (Standard) <input type="checkbox"/> Other( )
Sample Comments / Dangerous Goods Hazard Warning	

No	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)												
1	DDG1	8/4-5/5	X												
2	PPG4	}	}												
3	PPG5														
4	PPG6														
5	PPG7														
6	PPG8														
7															
8															
9															
10															

Total Counts

Method of Shipment	<input type="checkbox"/> Courier (# )	<input type="checkbox"/> Hand Delivered	<input type="checkbox"/> Postal	Name	Signature	Date	Time
Eurofins   mgt Laboratory Use Only	Received By	Signature	Date	Signature	Date	Time	Temperature
	Received By	Signature	Date	Signature	Date	Time	Report No

1094076



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 **1094076-A**  
 Project name **KEMPS CREEK**  
 Project ID **1475**  
 Received Date **May 06, 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-My0014777	S24-My0014778	S24-My0014779	S24-My0014780
Date Sampled			May 06, 2024	May 06, 2024	May 06, 2024	May 06, 2024
Test/Reference	LOR	Unit				
Dust Deposition						
Combustible Solids	0.1	g/m2.mth	1.7	1.1	0.8	1.4
Soluble Solids	0.1	g/m2.mth	1.3	3.2	2.8	2.5
Total Solids Dried at 103 °C to 105 °C	0.1	g/m2.mth	3.2	4.5	3.8	4.0
Volume (total)*	0.1	mL	750	850	750	700
Ash*	0.1	g/m2.mth	0.2	0.2	0.2	0.1
Insoluble Solids	0.1	g/m2.mth	1.9	1.2	1.0	1.6

Client Sample ID			DDG 7	DDG 8
Sample Matrix			Dust Deposition	Dust Deposition
Eurofins Sample No.			S24-My0014781	S24-My0014782
Date Sampled			May 06, 2024	May 06, 2024
Test/Reference	LOR	Unit		
Dust Deposition				
Combustible Solids	0.1	g/m2.mth	0.4	1.3
Soluble Solids	0.1	g/m2.mth	3.9	3.5
Total Solids Dried at 103 °C to 105 °C	0.1	g/m2.mth	4.4	5.1
Volume (total)*	0.1	mL	800	700
Ash*	0.1	g/m2.mth	0.1	0.3
Insoluble Solids	0.1	g/m2.mth	0.5	1.6

**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**

May 06, 2024

**Holding Time**

5 Days

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

<b>Melbourne</b> 6 Monterey Road Dandenong South VIC 3175 +61 3 8564 5000 NATA# 1261 Site# 1254	<b>Geelong</b> 19/8 Lewalan Street Grovedale VIC 3216 +61 3 8564 5000 NATA# 1261 Site# 25403	<b>Sydney</b> 179 Magowar Road Girraween NSW 2145 +61 2 9900 8400 NATA# 1261 Site# 18217	<b>Canberra</b> Unit 1,2 Dacre Street Mitchell ACT 2911 +61 2 6113 8091 NATA# 1261 Site# 25466	<b>Brisbane</b> 1/21 Smallwood Place Murarrie QLD 4172 T: +61 7 3902 4600 NATA# 1261 Site# 20794	<b>Newcastle</b> 1/2 Frost Drive Mayfield West NSW 2304 +61 2 4968 8448 NATA# 1261 Site# 25079 & 25289	<b>Perth</b> 46-48 Banksia Road Welshpool WA 6106 +61 8 6253 4444 NATA# 2377 Site# 2370	<b>Perth ProMicro</b> 46-48 Banksia Road Welshpool WA 6106 +61 8 6253 4444 NATA# 2561 Site# 2554	<b>Auckland</b> 35 O'Rorke Road Penrose, Auckland 1061 +64 9 526 4551 IANZ# 1327	<b>Auckland (Focus)</b> Unit C1/4 Pacific Rise, Mount Wellington, Auckland 1061 +64 9 525 0568 IANZ# 1308	<b>Christchurch</b> 43 Detroit Drive Rolleston, Christchurch 7675 +64 3 343 5201 IANZ# 1290	<b>Tauranga</b> 1277 Cameron Road, Gate Pa, Tauranga 3112 +64 9 525 0568 IANZ# 1402
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 web: www.eurofins.com.au  
 email: EnviroSales@eurofins.com

<b>Company Name:</b>	Compliance Health & Environmental Consulting P/L	<b>Order No.:</b>		<b>Received:</b>	May 6, 2024 12:20 PM
<b>Address:</b>	PO Box 275 Gosford NSW 2250	<b>Report #:</b>	1094076	<b>Due:</b>	May 13, 2024
<b>Project Name:</b>	KEMPS CREEK	<b>Phone:</b>	02 4304 0091	<b>Priority:</b>	5 Day
<b>Project ID:</b>	1475	<b>Fax:</b>		<b>Contact Name:</b>	RESULTS - ALL SRAS HERE
<b>Eurofins Analytical Services Manager : Bonnie Pu</b>					

Sample Detail						Dust Deposition
Sydney Laboratory - NATA # 1261 Site # 18217						X
External Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	DDG 1	May 06, 2024		Water	S24-My0014777	X
2	DDG 4	May 06, 2024		Water	S24-My0014778	X
3	DDG 5	May 06, 2024		Water	S24-My0014779	X
4	DDG 6	May 06, 2024		Water	S24-My0014780	X
5	DDG 7	May 06, 2024		Water	S24-My0014781	X
6	DDG 8	May 06, 2024		Water	S24-My0014782	X
<b>Test Counts</b>						6

## 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 where annotated.
- 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 sampling date; 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

<b>mg/kg:</b> milligrams per kilogram	<b>mg/L:</b> milligrams per litre	<b>ppm:</b> parts per million
<b>µg/L:</b> micrograms per litre	<b>ppb:</b> parts per billion	<b>%:</b> Percentage
<b>org/100 mL:</b> Organisms per 100 millilitres	<b>NTU:</b> Nephelometric Turbidity Units	<b>MPN/100 mL:</b> Most Probable Number of organisms per 100 millilitres
<b>CFU:</b> Colony Forming Unit	<b>Colour:</b> Pt-Co Units (CU)	

### Terms

<b>APHA</b>	American Public Health Association
<b>CEC</b>	Cation Exchange Capacity
<b>COC</b>	Chain of Custody
<b>CP</b>	Client Parent - QC was performed on samples pertaining to this report
<b>CRM</b>	Certified Reference Material (ISO17034) - reported as percent recovery.
<b>Dry</b>	Where moisture has been determined on a solid sample, the result is expressed on a dry weight basis.
<b>Duplicate</b>	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
<b>LOR</b>	Limit of Reporting.
<b>LCS</b>	Laboratory Control Sample - reported as percent recovery.
<b>Method Blank</b>	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.
<b>NCP</b>	Non-Client Parent - QC performed on samples not pertaining to this report, QC represents the sequence or batch that client samples were analysed within.
<b>RPD</b>	Relative Percent Difference between two Duplicate pieces of analysis.
<b>SPIKE</b>	Addition of the analyte to the sample and reported as percentage recovery.
<b>SRA</b>	Sample Receipt Advice
<b>Surr - Surrogate</b>	The addition of a similar compound to the analyte target is reported as percentage recovery. See below for acceptance criteria.
<b>TBTO</b>	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.
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>TEQ</b>	Toxic Equivalency Quotient or Total Equivalence
<b>QSM</b>	US Department of Defense Quality Systems Manual Version 6.0
<b>US EPA</b>	United States Environmental Protection Agency
<b>WA DWER</b>	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 50 – 150%

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  
Ryan Phillips

Analytical Services Manager  
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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