

Surface Water Results Summary
Ecological Comparison

Sample Identification	PQL	Aquatic Ecosystem Guideline ^A	SW1	SW2			
Rainfall (mm) in preceding 24hours ^B		95% Fresh	2.8	2.8			
Time of Sample Collection			--	14:00			
Date of Sample Collection			11/12/2025				
Sample Description		--	Dirty, clear				
Laboratory Report Reference		--	EN2520975				
Sample Purpose		EPL Compliance					
Sample collected by		Toll					
Ammonia as N	0.01	0.9	--	1			
Nitrate ^C	0.01	0.04	--	2.29			
Oil and Grease	5		--	<5			
Total Suspended Solids	5		--	<5			

All results are in units of mg/L

Blank Cell indicates no criterion available

PQL = Practical Quantitation Limit.

^A % Protection Level for Receiving Water Type.

^B Based on BOM Williamtown data from 9:00am 10th December to 9:00am 12th December 2025 such that some recorded rainfall may have been after sampling. More specific data not able to be provided due to timing of sampling advisement.

^C Guidelines for Lowland (Coastal) Rivers in NSW

Results shown in **BOLD** are in excess of the guidelines

Sample Identification	PQL	Aquatic Ecosystem Guideline ^A	SW1	SW2			
Rainfall (mm) in preceding 24hours ^B		95% Fresh	2.8	2.8			
Time of Sample Collection			13:10	13:15			
Date of Sample Collection		12/12/2025					
Sample Description		Brown, odourless	Brown, odourless				
Laboratory Report Reference		ES2539883	ES2539883				
Sample Purpose		EPL Compliance					
Sample collected by		Toll - GJF					
Ammonia as N	0.01	0.9	19	8.72			
Nitrate ^C	0.01	0.04	216	20.1			
Oil and Grease	5		<5	<5			
Total Suspended Solids	5		264	83			

All results are in units of mg/L

Blank Cell indicates no criterion available

PQL = Practical Quantitation Limit.

^A % Protection Level for Receiving Water Type.

^B Based on BOM Williamtown data from 9:00am 11th December to 9:00am 12th December 2025; there was a further 18.6mm received up until 9:00am 13th December however specific data between 9:00am 12th December and time of sampling not able to be provided due to timing of sampling advisement.

^C Guidelines for Lowland (Coastal) Rivers in NSW

Results shown in **BOLD** are in excess of the guidelines

Sample Identification	PQL	Aquatic Ecosystem Guideline ^A	SW1	SW2	
Rainfall (mm) in preceding 24hours ^B		95% Fresh	0.8	0.8	
Time of Sample Collection			14:30	14:30	
Date of Sample Collection			16/12/2025		
Sample Description		Light brown, little to no odour, small amount of sediment, 7/10 clarity	Light brown, little to no odour, small amount of sediment, 7/10 clarity		
Laboratory Report Reference		ES2540142	ES2540142		
Sample Purpose		EPL Compliance			
Sample collected by		Toll - JC			
Ammonia as N	0.01	0.9	1.51	29.3	
Nitrate ^C	0.01	0.04	3.61	112	
Oil and Grease	5		<5	<5	
Total Suspended Solids	5		11	14	

All results are in units of mg/L

Blank Cell indicates no criterion available

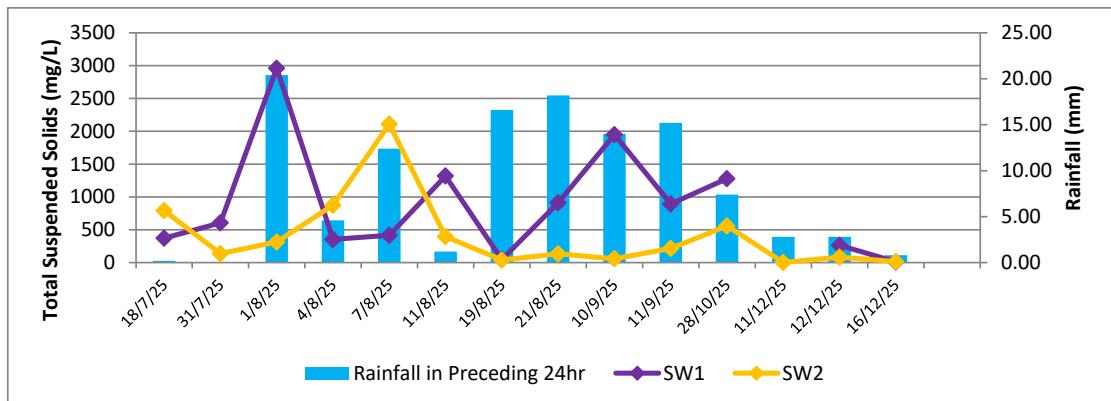
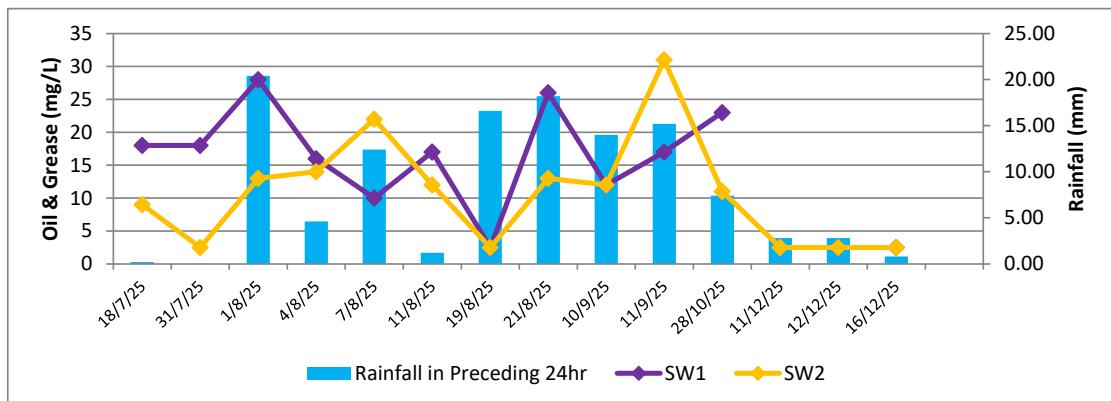
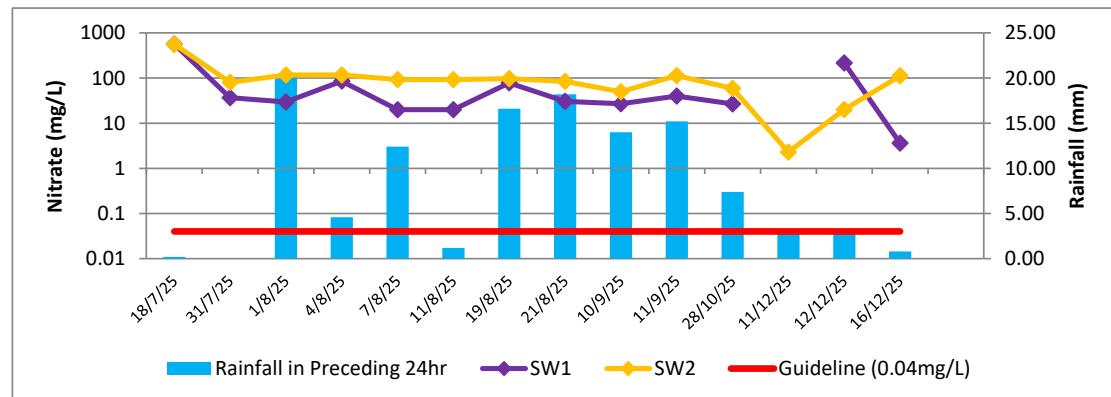
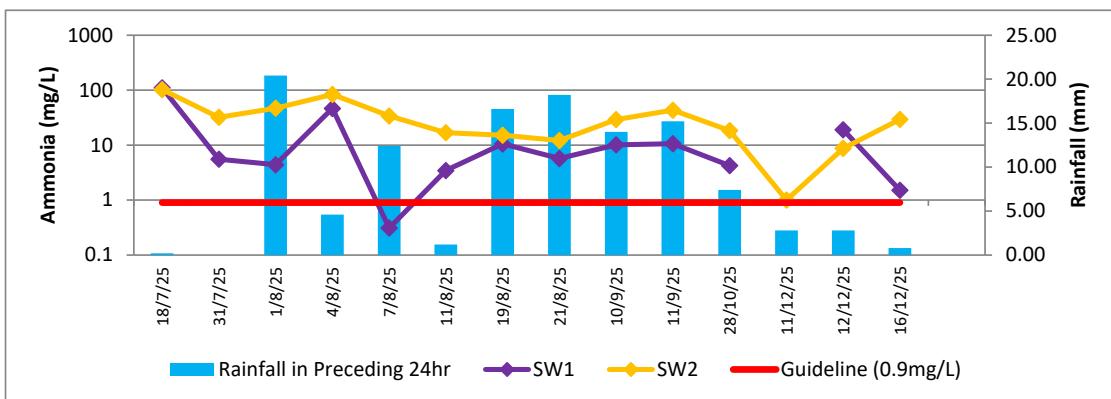
PQL = Practical Quantitation Limit.

^A % Protection Level for Receiving Water Type.

^B Based on BOM Williamtown data from 2:30pm 15th December to 2:30pm 16th December 2025.

^C Guidelines for Lowland (Coastal) Rivers in NSW

Results shown in **BOLD** are in excess of the guidelines





CERTIFICATE OF ANALYSIS

Work Order	: EN2520975	Page	: 1 of 2
Client	: ROBERT CARR & ASSOCIATES P/L	Laboratory	: Environmental Division Newcastle
Contact	: MS FIONA BROOKER	Contact	: Danae Hamby
Address	: 92 HILL STREET CARRINGTON NSW 2294	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone	: +61 02 4902 9200	Telephone	: +61 2 4014 2500
Project	: 12513e	Date Samples Received	: 12-Dec-2025 12:24
Order number	: ----	Date Analysis Commenced	: 17-Dec-2025
C-O-C number	: ----	Issue Date	: 19-Dec-2025 11:17
Sampler	: Client		
Site	: ----		
Quote number	: NSW Custom BQ 2024		
No. of samples received	: 1		
No. of samples analysed	: 1		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Gregory Towers	Laboratory Technician	Newcastle - Inorganics, Mayfield West, NSW



Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting

Ø = ALS is not NATA accredited for these tests.

~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SW2	---	---	---	---	---			
				Sampling date / time	11-Dec-2025 14:00	---	---	---	---	---			
Compound	CAS Number	LOR	Unit	EN2520975-001	-----	-----	-----	-----	-----	-----			
				Result	---	---	---	---	---	---			
EA025: Total Suspended Solids dried at 104 ± 2°C													
Suspended Solids (SS)				5	mg/L	<5	---	---	---	---			
EK055A: Ammonia as N													
Ammonia as N				7664-41-7	0.05	mg/L	1.00	---	---	---			
EK058A: Nitrate as N													
Nitrate as N				14797-55-8	0.05	mg/L	2.29	---	---	---			
EP020: Oil and Grease (O&G)													
Oil & Grease				---	5	mg/L	<5	---	---	---			

Inter-Laboratory Testing

Analysis conducted by ALS Sydney, NATA accreditation no. 825, site no. 10911 (Chemistry / Biology).

(WATER) EP020: Oil and Grease (O&G)



QUALITY CONTROL REPORT

Work Order	: EN2520975	Page	: 1 of 3
Client	: ROBERT CARR & ASSOCIATES P/L	Laboratory	: Environmental Division Newcastle
Contact	: MS FIONA BROOKER	Contact	: Danae Hambly
Address	: 92 HILL STREET CARRINGTON NSW 2294	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone	: +61 02 4902 9200	Telephone	: +61 2 4014 2500
Project	: 12513e	Date Samples Received	: 12-Dec-2025
Order number	: ----	Date Analysis Commenced	: 17-Dec-2025
C-O-C number	: ----	Issue Date	: 19-Dec-2025
Sampler	: Client		
Site	: ----		
Quote number	: NSW Custom BQ 2024		
No. of samples received	: 1		
No. of samples analysed	: 1		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Gregory Towers	Laboratory Technician	Newcastle - Inorganics, Mayfield West, NSW



Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing



General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot

CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

RPD = Relative Percentage Difference

= Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: WATER

Laboratory Duplicate (DUP) Report									
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA025: Total Suspended Solids dried at 104 ± 2°C (QC Lot: 7085240)									
EN2520781-001	Anonymous	EA025H: Suspended Solids (SS)	---	5	mg/L	135	133	1.2	0% - 20%
EN2520929-002	Anonymous	EA025H: Suspended Solids (SS)	---	5	mg/L	<5	<5	0.0	No Limit
EK055A: Ammonia as N (QC Lot: 7085141)									
EN2520975-001	SW2	EK055A: Ammonia as N	7664-41-7	0.05	mg/L	1.00	1.02	2.3	0% - 20%



Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: WATER

Method: Compound	CAS Number	LOR	Unit	Result	Method Blank (MB) Report				Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)		Acceptable Limits (%)				
						LCS	Low	High				
EA025: Total Suspended Solids dried at 104 ± 2°C (QCLot: 7085240)												
EA025H: Suspended Solids (SS)	---	5	mg/L	<5	150 mg/L	100	85.0	110				
				<5	1000 mg/L	95.9	85.0	110				
				<5	818 mg/L	111	85.0	115				
EK055A: Ammonia as N (QCLot: 7085141)												
EK055A: Ammonia as N	7664-41-7	0.05	mg/L	<0.05	2 mg/L	97.3	90.0	110				
EP020: Oil and Grease (O&G) (QCLot: 7088319)												
EP020: Oil & Grease	---	5	mg/L	<5	5000 mg/L	97.0	81.0	121				
				<5	4000 mg/L	91.6	70.0	110				

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: WATER

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report				
				Spike Concentration	Spike Recovery(%)		Acceptable Limits (%)	
					MS	Low	High	
EK055A: Ammonia as N (QCLot: 7085141)								
EN2521089-001	Anonymous	EK055A: Ammonia as N	7664-41-7	2 mg/L	99.3	80.0	120	



QA/QC Compliance Assessment to assist with Quality Review

Work Order	: EN2520975	Page	: 1 of 4
Client	: ROBERT CARR & ASSOCIATES P/L	Laboratory	: Environmental Division Newcastle
Contact	: MS FIONA BROOKER	Telephone	: +61 2 4014 2500
Project	: 12513e	Date Samples Received	: 12-Dec-2025
Site	: ----	Issue Date	: 19-Dec-2025
Sampler	: Client	No. of samples received	: 1
Order number	: ----	No. of samples analysed	: 1

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- NO Method Blank value outliers occur.
- NO Duplicate outliers occur.
- NO Laboratory Control outliers occur.
- NO Matrix Spike outliers occur.
- For all regular sample matrices, where applicable to the methodology, NO surrogate recovery outliers occur.

Outliers : Analysis Holding Time Compliance

- NO Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- NO Quality Control Sample Frequency Outliers exist.

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for VOC in soils vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: WATER

Evaluation: ✘ = Holding time breach ; ✓ = Within holding time.

Method Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA025: Total Suspended Solids dried at 104 ± 2°C							
Clear Plastic Bottle - Natural (EA025H) SW2	11-Dec-2025	---	---	---	17-Dec-2025	18-Dec-2025	✓
EK055A: Ammonia as N							
Clear Plastic Bottle - Sulfuric Acid (EK055A) SW2	11-Dec-2025	---	---	---	17-Dec-2025	08-Jan-2026	✓
EP020: Oil and Grease (O&G)							
Amber Jar - Sulfuric Acid or Sodium Bisulfate (EP020) SW2	11-Dec-2025	---	---	---	18-Dec-2025	08-Jan-2026	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: WATER

Evaluation: ✘ = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type	Analytical Methods	Method	Count		Rate (%)		Quality Control Specification
			QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)							
Ammonia as N		EK055A	1	6	16.67	10.00	✓ NEPM 2013 B3 & ALS QC Standard
Suspended Solids (High Level)		EA025H	2	14	14.29	10.00	✓ NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Ammonia as N		EK055A	1	6	16.67	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Oil and Grease		EP020	2	40	5.00	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Suspended Solids (High Level)		EA025H	3	14	21.43	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Ammonia as N		EK055A	1	6	16.67	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Oil and Grease		EP020	2	40	5.00	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Suspended Solids (High Level)		EA025H	1	14	7.14	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Ammonia as N		EK055A	1	6	16.67	5.00	✓ NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Suspended Solids (High Level)	EA025H	WATER	In house: Referenced to APHA 2540D. A gravimetric procedure employed to determine the amount of 'non-filterable' residue in an aqueous sample. The prescribed GFC (1.2um) filter is rinsed with deionised water, oven dried and weighed prior to analysis. A well-mixed sample is filtered through a glass fibre filter (1.2um). The residue on the filter paper is dried at 104+/-2C . This method is compliant with NEPM Schedule B(3)
Ammonia as N	EK055A	WATER	In house: referenced to APHA 4500 - NH3 H. This method is based on the Berthelot react. Ammonia reacts in alkaline solution with hypochlorite to form monochlormine which, in the presence of phenol, catalytic amounts of nitroprusside and excess hypochlorite, gives indophenol blue. This colour formation requires a pH between 8.0 - 11.5 and is measured @ 630nm.
Nitrate as N	EK058A	WATER	In house: referenced to APHA 4500 - NO3 I. This automated procedure for the determination of TON (NO2- + NO3-) utilises the procedure whereby (NO3-) is reduced to nitrite (NO2-) at a pH 7.5 in a copper-cadmium reductor cell. The NO2- reduced from NO3- plus any free NO2- present reacts under acidic conditions with sulfanilamide to form a diazo compound that then couples with N-(1-naphthyl)-ethylenediamine dihydrochloride to form a reddish purple azo dye which is measured at 520 nm.
Oil and Grease	EP020	WATER	In house: Referenced to APHA 5520 B. Oil & grease is a gravimetric procedure to determine the amount of dissolved or emulsified oil & grease residue in an aqueous sample. The sample is serially extracted three times n-hexane. The resultant extracts are combined, dehydrated and concentrated prior to gravimetric determination. This method is compliant with NEPM Schedule B(3)



SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order	: EN2520975		
Client	: ROBERT CARR & ASSOCIATES P/L	Laboratory	: Environmental Division Newcastle
Contact	: MS FIONA BROOKER	Contact	: Danae Hamblly
Address	: 92 HILL STREET CARRINGTON NSW 2294	Address	: 5/585 Maitland Road Mayfield West NSW Australia 2304
E-mail	: fionab@rca.com.au	E-mail	: danae.hamblly@alsglobal.com
Telephone	: +61 02 4902 9200	Telephone	: +61 2 4014 2500
Facsimile	: +61 02 4902 9299	Facsimile	: +61 2 4967 7382
Project	: 12513e	Page	: 1 of 3
Order number	: ----	Quote number	: EN2023ROBCAR0002 (NSW Custom BQ 2024)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Client		

Dates

Date Samples Received	: 12-Dec-2025 12:24	Issue Date	: 15-Dec-2025
Client Requested Due	: 19-Dec-2025	Scheduled Reporting Date	: 19-Dec-2025
Date			

Delivery Details

Mode of Delivery	: Client Drop Off	Security Seal	: Not Available
No. of coolers/boxes	: ----	Temperature	: 22.3
Receipt Detail	: ----	No. of samples received / analysed	: 1 / 1

General Comments

- This report contains the following information:
 - Sample Container(s)/Preservation Non-Compliances
 - Summary of Sample(s) and Requested Analysis
 - Proactive Holding Time Report
 - Requested Deliverables
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- Sample Disposal - Aqueous Chemistry (3 weeks), Aqueous Microbiological (1 week), Solid (2 months ± 1 week) from receipt of samples.



Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- No sample container / preservation non-compliance exists.

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.

If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: WATER

Laboratory sample ID	Sampling date / time	Sample ID	WATER EA025H Suspended Solids - Standard Level	WATER EK05A Ammonia as N by FIA	WATER EK058A Nitrate as N	WATER EP020 Oil & Grease (O&G)
EN2520975-001	11-Dec-2025 14:00	SW2	✓	✓	✓	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

Requested Deliverables

ADMINISTRATOR

- *AU Certificate of Analysis - NATA (COA) Email administrator@rca.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI) Email administrator@rca.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC) Email administrator@rca.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN) Email administrator@rca.com.au
- A4 - AU Tax Invoice (INV) Email administrator@rca.com.au
- Chain of Custody (CoC) (COC) Email administrator@rca.com.au
- EDI Format - ENMRG (ENMRG) Email administrator@rca.com.au
- EDI Format - ESDAT (ESDAT) Email administrator@rca.com.au
- EDI Format - XTab (XTAB) Email administrator@rca.com.au

ENVIRO

- *AU Certificate of Analysis - NATA (COA) Email enviro@rca.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI) Email enviro@rca.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC) Email enviro@rca.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN) Email enviro@rca.com.au
- A4 - AU Tax Invoice (INV) Email enviro@rca.com.au
- Chain of Custody (CoC) (COC) Email enviro@rca.com.au
- EDI Format - ENMRG (ENMRG) Email enviro@rca.com.au
- EDI Format - ESDAT (ESDAT) Email enviro@rca.com.au
- EDI Format - XTab (XTAB) Email enviro@rca.com.au

Gastonjeane Forget

- *AU Certificate of Analysis - NATA (COA) Email Gastonjeane.Forget@tollgroup.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI) Email Gastonjeane.Forget@tollgroup.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC) Email Gastonjeane.Forget@tollgroup.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN) Email Gastonjeane.Forget@tollgroup.com
- Chain of Custody (CoC) (COC) Email Gastonjeane.Forget@tollgroup.com
- EDI Format - ENMRG (ENMRG) Email Gastonjeane.Forget@tollgroup.com
- EDI Format - ESDAT (ESDAT) Email Gastonjeane.Forget@tollgroup.com
- EDI Format - XTab (XTAB) Email Gastonjeane.Forget@tollgroup.com



Issue Date : 15-Dec-2025
Page : 3 of 3
Work Order : EN2520975 Amendment 0
Client : ROBERT CARR & ASSOCIATES P/L

Inter-Laboratory Testing

Analysis conducted by ALS Sydney, NATA accreditation no. 825, site no. 10911 (Chemistry / Biology).
(WATER) EP020: Oil and Grease (O&G)





CERTIFICATE OF ANALYSIS

Work Order	: ES2539883	Page	: 1 of 2
Client	: ROBERT CARR & ASSOCIATES P/L	Laboratory	: Environmental Division Sydney
Contact	: MS FIONA BROOKER	Contact	: Danae Hamby
Address	: PO BOX 175 CARRINGTON NSW, AUSTRALIA 2294	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 4902 9200	Telephone	: +61-2-8784 8555
Project	: 12513e	Date Samples Received	: 15-Dec-2025 12:20
Order number	: ----	Date Analysis Commenced	: 16-Dec-2025
C-O-C number	: ----	Issue Date	: 22-Dec-2025 11:29
Sampler	: Client		
Site	: ----		
Quote number	: NSW Custom BQ 2024		
No. of samples received	: 2		
No. of samples analysed	: 2		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW



Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting

Ø = ALS is not NATA accredited for these tests.

~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SW1	SW2	---	---	---	
				Sampling date / time	12-Dec-2025 13:10	12-Dec-2025 13:15	---	---	---	
Compound	CAS Number	LOR	Unit	ES2539883-001	ES2539883-002	-----	-----	-----		
				Result	Result	---	---	---		
EA025: Total Suspended Solids dried at 104 ± 2°C										
Suspended Solids (SS)		---	5	mg/L	264	83	---	---	---	
EK055G: Ammonia as N by Discrete Analyser										
Ammonia as N		7664-41-7	0.01	mg/L	19.0	8.72	---	---	---	
EK057G: Nitrite as N by Discrete Analyser										
Nitrite as N		14797-65-0	0.01	mg/L	0.78	0.14	---	---	---	
EK058G: Nitrate as N by Discrete Analyser										
Nitrate as N		14797-55-8	0.01	mg/L	216	20.1	---	---	---	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser										
Nitrite + Nitrate as N		---	0.01	mg/L	217	20.2	---	---	---	
EP020: Oil and Grease (O&G)										
Oil & Grease		---	5	mg/L	<5	<5	---	---	---	



QUALITY CONTROL REPORT

Work Order	: ES2539883	Page	: 1 of 3
Client	: ROBERT CARR & ASSOCIATES P/L	Laboratory	: Environmental Division Sydney
Contact	: MS FIONA BROOKER	Contact	: Danae Hambly
Address	: PO BOX 175 CARRINGTON NSW, AUSTRALIA 2294	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 4902 9200	Telephone	: +61-2-8784 8555
Project	: 12513e	Date Samples Received	: 15-Dec-2025
Order number	: ----	Date Analysis Commenced	: 16-Dec-2025
C-O-C number	: ----	Issue Date	: 22-Dec-2025
Sampler	: Client		
Site	: ----		
Quote number	: NSW Custom BQ 2024		
No. of samples received	: 2		
No. of samples analysed	: 2		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW



Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot

CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

RPD = Relative Percentage Difference

= Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: WATER

Laboratory Duplicate (DUP) Report									
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA025: Total Suspended Solids dried at 104 ± 2°C (QC Lot: 7089177)									
EN2521092-001	Anonymous	EA025H: Suspended Solids (SS)	---	5	mg/L	13	13	0.0	No Limit
ES2539573-003	Anonymous	EA025H: Suspended Solids (SS)	---	5	mg/L	28	25	12.1	No Limit
ES2539883-001	SW1	EA025H: Suspended Solids (SS)	---	5	mg/L	264	260	1.5	0% - 20%
ES2540228-010	Anonymous	EA025H: Suspended Solids (SS)	---	5	mg/L	4770	4260	11.1	0% - 20%
EK055G: Ammonia as N by Discrete Analyser (QC Lot: 7088419)									
ES2539837-071	Anonymous	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0	No Limit
ES2540267-002	Anonymous	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 7081213)									
EN2520988-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.0	No Limit
ES2539890-002	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 7088420)									
ES2539860-006	Anonymous	EK059G: Nitrite + Nitrate as N	---	0.01	mg/L	0.72	0.72	0.0	0% - 20%
ES2540267-007	Anonymous	EK059G: Nitrite + Nitrate as N	---	0.01	mg/L	2.75	2.69	2.2	0% - 20%



Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: WATER

Method: Compound	CAS Number	LOR	Unit	Result	Method Blank (MB) Report				Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)		Acceptable Limits (%)				
						LCS	Low	High				
EA025: Total Suspended Solids dried at 104 ± 2°C (QC Lot: 7089177)												
EA025H: Suspended Solids (SS)	----	5	mg/L	<5	150 mg/L	100	83.0	129				
				<5	1000 mg/L	98.4	82.0	110				
				<5	825 mg/L	95.8	83.0	118				
EK055G: Ammonia as N by Discrete Analyser (QC Lot: 7088419)												
EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.5 mg/L	97.9	90.0	114				
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 7081213)												
EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	0.5 mg/L	98.8	82.0	114				
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 7088420)												
EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	0.5 mg/L	99.2	91.0	113				
EP020: Oil and Grease (O&G) (QC Lot: 7091983)												
EP020: Oil & Grease	----	5	mg/L	<5	5000 mg/L	94.1	81.0	121				
				<5	4000 mg/L	92.8	70.0	110				

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: WATER

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	Matrix Spike (MS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
					MS	Low	High	
EK055G: Ammonia as N by Discrete Analyser (QC Lot: 7088419)								
ES2539850-001	Anonymous	EK055G: Ammonia as N	7664-41-7	0.5 mg/L	# Not Determined	70.0	130	
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 7081213)								
EN2520988-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.5 mg/L	102	70.0	130	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 7088420)								
ES2539860-006	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.5 mg/L	111	70.0	130	



QA/QC Compliance Assessment to assist with Quality Review

Work Order	: ES2539883	Page	: 1 of 4
Client	: ROBERT CARR & ASSOCIATES P/L	Laboratory	: Environmental Division Sydney
Contact	: MS FIONA BROOKER	Telephone	: +61-2-8784 8555
Project	: 12513e	Date Samples Received	: 15-Dec-2025
Site	: ----	Issue Date	: 22-Dec-2025
Sampler	: Client	No. of samples received	: 2
Order number	: ----	No. of samples analysed	: 2

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- NO Method Blank value outliers occur.
- NO Duplicate outliers occur.
- NO Laboratory Control outliers occur.
- Matrix Spike outliers exist - please see following pages for full details.
- For all regular sample matrices, where applicable to the methodology, NO surrogate recovery outliers occur.

Outliers : Analysis Holding Time Compliance

- Analysis Holding Time Outliers exist - please see following pages for full details.

Outliers : Frequency of Quality Control Samples

- NO Quality Control Sample Frequency Outliers exist.



Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: WATER

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EK055G: Ammonia as N by Discrete Analyser	ES2539850--001	Anonymous	Ammonia as N	7664-41-7	Not Determined	---	MS recovery not determined, background level greater than or equal to 4x spike level.

Outliers : Analysis Holding Time Compliance

Matrix: WATER

Method	Container / Client Sample ID(s)	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Days overdue	Date analysed	Due for analysis	Days overdue
EK057G: Nitrite as N by Discrete Analyser							
Clear Plastic Bottle - Natural	SW1,	SW2	---	---	---	16-Dec-2025	14-Dec-2025

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for VOC in soils vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: WATER

Evaluation: ✘ = Holding time breach ; ✓ = Within holding time.

Method	Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA025: Total Suspended Solids dried at 104 ± 2°C								
Clear Plastic Bottle - Natural (EA025H)	SW1,	SW2	12-Dec-2025	---	---	---	18-Dec-2025	19-Dec-2025
EK055G: Ammonia as N by Discrete Analyser								
Clear Plastic Bottle - Sulfuric Acid (EK055G)	SW1,	SW2	12-Dec-2025	---	---	---	18-Dec-2025	09-Jan-2026
EK057G: Nitrite as N by Discrete Analyser								
Clear Plastic Bottle - Natural (EK057G)	SW1,	SW2	12-Dec-2025	---	---	---	16-Dec-2025	14-Dec-2025
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Clear Plastic Bottle - Sulfuric Acid (EK059G)	SW1,	SW2	12-Dec-2025	---	---	---	18-Dec-2025	09-Jan-2026
EP020: Oil and Grease (O&G)								
Amber Jar - Sulfuric Acid or Sodium Bisulfate (EP020)	SW1,	SW2	12-Dec-2025	---	---	---	19-Dec-2025	09-Jan-2026

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: WATER

Evaluation: ✘ = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type	Analytical Methods	Method	Count		Rate (%)		Quality Control Specification
			QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)							
Ammonia as N by Discrete analyser		EK055G	2	19	10.53	10.00	✓ NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser		EK059G	2	14	14.29	10.00	✓ NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser		EK057G	2	20	10.00	10.00	✓ NEPM 2013 B3 & ALS QC Standard
Suspended Solids (High Level)		EA025H	4	40	10.00	10.00	✓ NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Ammonia as N by Discrete analyser		EK055G	1	19	5.26	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser		EK059G	1	14	7.14	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser		EK057G	1	20	5.00	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Oil and Grease		EP020	2	40	5.00	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Suspended Solids (High Level)		EA025H	5	40	12.50	12.50	✓ NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Ammonia as N by Discrete analyser		EK055G	1	19	5.26	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser		EK059G	1	14	7.14	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser		EK057G	1	20	5.00	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Oil and Grease		EP020	2	40	5.00	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Suspended Solids (High Level)		EA025H	2	40	5.00	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Ammonia as N by Discrete analyser		EK055G	1	19	5.26	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser		EK059G	1	14	7.14	5.00	✓ NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser		EK057G	1	20	5.00	5.00	✓ NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Suspended Solids (High Level)	EA025H	WATER	In house: Referenced to APHA 2540D. A gravimetric procedure employed to determine the amount of 'non-filterable' residue in an aqueous sample. The prescribed GFC (1.2um) filter is rinsed with deionised water, oven dried and weighed prior to analysis. A well-mixed sample is filtered through a glass fibre filter (1.2um). The residue on the filter paper is dried at 104+-2C . This method is compliant with NEPM Schedule B(3)
Ammonia as N by Discrete analyser	EK055G	WATER	In house: Referenced to APHA 4500-NH3 G Ammonia is determined by direct colorimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrite as N by Discrete Analyser	EK057G	WATER	In house: Referenced to APHA 4500-NO2- B. Nitrite is determined by direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrate as N by Discrete Analyser	EK058G	WATER	In house: Referenced to APHA 4500-NO3- F. Nitrate is reduced to nitrite by way of a chemical reduction followed by quantification by Discrete Analyser. Nitrite is determined separately by direct colourimetry and result for Nitrate calculated as the difference between the two results. This method is compliant with NEPM Schedule B(3)
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	WATER	In house: Referenced to APHA 4500-NO3- F. Combined oxidised Nitrogen (NO2+NO3) is determined by Chemical Reduction and direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Oil and Grease	EP020	WATER	In house: Referenced to APHA 5520 B. Oil & grease is a gravimetric procedure to determine the amount of dissolved or emulsified oil & grease residue in an aqueous sample. The sample is serially extracted three times n-hexane. The resultant extracts are combined, dehydrated and concentrated prior to gravimetric determination. This method is compliant with NEPM Schedule B(3)



**CHAIN OF
CUSTODY**

ALS Laboratory
please tick →

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Work Order Reference
ES2539883



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Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic V = VOA Vial HCl Preserved; VB = VOA Vial Sulfuric Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag.



SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order	: ES2539883		
Client	: ROBERT CARR & ASSOCIATES P/L	Laboratory	: Environmental Division Sydney
Contact	: MS FIONA BROOKER	Contact	: Danae Hamblly
Address	: PO BOX 175 CARRINGTON NSW, AUSTRALIA 2294	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
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Project	: 12513e	Page	: 1 of 3
Order number	: ----	Quote number	: EN2023ROBCAR0002 (NSW Custom BQ 2024)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Client		

Dates

Date Samples Received	: 15-Dec-2025 12:20	Issue Date	: 15-Dec-2025
Client Requested Due	: 22-Dec-2025	Scheduled Reporting Date	: 22-Dec-2025
Date			

Delivery Details

Mode of Delivery	: Undefined	Security Seal	: Not Available
No. of coolers/boxes	: ----	Temperature	: 22.3°C
Receipt Detail	: ----	No. of samples received / analysed	: 2 / 2

General Comments

- This report contains the following information:
 - Sample Container(s)/Preservation Non-Compliances
 - Summary of Sample(s) and Requested Analysis
 - Proactive Holding Time Report
 - Requested Deliverables
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Unless otherwise stated, analytical work for this work order will be conducted at ALS Sydney, NATA accreditation no. 825, site no. 10911.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.



Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- No sample container / preservation non-compliance exists.

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.

If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: WATER

Laboratory sample ID	Sampling date / time	Sample ID	WATER EA025H Suspended Solids - Standard Level	WATER EK05G Ammonia as N By Discrete Analyser	WATER EK058G Nitrate as N by Discrete Analyser	WATER EP020 Oil & Grease (O&G)
ES2539883-001	12-Dec-2025 13:10	SW1	✓	✓	✓	✓
ES2539883-002	12-Dec-2025 13:15	SW2	✓	✓	✓	✓

Proactive Holding Time Report

The following table summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory.

Matrix: WATER

Evaluation: ✗ = Holding time breach ; ✓ = Within holding time.

Method Client Sample ID(s)	Container	Due for extraction	Due for analysis	Samples Received		Instructions Received	
				Date	Evaluation	Date	Evaluation
EK057G: Nitrite as N by Discrete Analyser							
SW1	Clear Plastic Bottle - Natural	----	14-Dec-2025	15-Dec-2025	✗	15-Dec-2025	✗
SW2	Clear Plastic Bottle - Natural	----	14-Dec-2025	15-Dec-2025	✗	15-Dec-2025	✗



Requested Deliverables

ADMINISTRATOR

- *AU Certificate of Analysis - NATA (COA) Email administrator@rca.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI) Email administrator@rca.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC) Email administrator@rca.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN) Email administrator@rca.com.au
- A4 - AU Tax Invoice (INV) Email administrator@rca.com.au
- Chain of Custody (CoC) (COC) Email administrator@rca.com.au
- EDI Format - ENMRG (ENMRG) Email administrator@rca.com.au
- EDI Format - ESDAT (ESDAT) Email administrator@rca.com.au

ALL INVOICES

- A4 - AU Tax Invoice (INV) Email administrator@rca.com.au

ENVIRO

- *AU Certificate of Analysis - NATA (COA) Email enviro@rca.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI) Email enviro@rca.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC) Email enviro@rca.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN) Email enviro@rca.com.au
- A4 - AU Tax Invoice (INV) Email enviro@rca.com.au
- Chain of Custody (CoC) (COC) Email enviro@rca.com.au
- EDI Format - ENMRG (ENMRG) Email enviro@rca.com.au
- EDI Format - ESDAT (ESDAT) Email enviro@rca.com.au

FIONA BROOKER

- *AU Certificate of Analysis - NATA (COA) Email fionab@rca.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI) Email fionab@rca.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC) Email fionab@rca.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN) Email fionab@rca.com.au
- Chain of Custody (CoC) (COC) Email fionab@rca.com.au
- EDI Format - ENMRG (ENMRG) Email fionab@rca.com.au
- EDI Format - ESDAT (ESDAT) Email fionab@rca.com.au

Gastonjeane Forget

- *AU Certificate of Analysis - NATA (COA) Email Gastonjeane.Forget@tollgroup.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI) Email Gastonjeane.Forget@tollgroup.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC) Email Gastonjeane.Forget@tollgroup.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN) Email Gastonjeane.Forget@tollgroup.com
- Chain of Custody (CoC) (COC) Email Gastonjeane.Forget@tollgroup.com
- EDI Format - ENMRG (ENMRG) Email Gastonjeane.Forget@tollgroup.com
- EDI Format - ESDAT (ESDAT) Email Gastonjeane.Forget@tollgroup.com



CERTIFICATE OF ANALYSIS

Work Order	: ES2540142	Page	: 1 of 2
Client	: ROBERT CARR & ASSOCIATES P/L	Laboratory	: Environmental Division Sydney
Contact	: MS FIONA BROOKER	Contact	: Danae Hambly
Address	: PO BOX 175 CARRINGTON NSW, AUSTRALIA 2294	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 4902 9200	Telephone	: +61-2-8784 8555
Project	: 12513e	Date Samples Received	: 16-Dec-2025 15:20
Order number	: ----	Date Analysis Commenced	: 17-Dec-2025
C-O-C number	: ----	Issue Date	: 23-Dec-2025 11:01
Sampler	: Client		
Site	: ----		
Quote number	: NSW Custom BQ 2024		
No. of samples received	: 2		
No. of samples analysed	: 2		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW



Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting

Ø = ALS is not NATA accredited for these tests.

~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SW1	SW2	---	---	---
				Sampling date / time	16-Dec-2025 14:30	16-Dec-2025 14:30	---	---	---
Compound	CAS Number	LOR	Unit	ES2540142-001	ES2540142-002	-----	-----	-----	
				Result	Result	-----	-----	-----	
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	---	5	mg/L	11	14	---	---	---	---
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L	1.51	29.3	---	---	---	---
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L	0.07	1.82	---	---	---	---
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L	3.61	112	---	---	---	---
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	---	0.01	mg/L	3.68	114	---	---	---	---
EP020: Oil and Grease (O&G)									
Oil & Grease	---	5	mg/L	<5	<5	---	---	---	---



QUALITY CONTROL REPORT

Work Order	: ES2540142	Page	: 1 of 3
Client	: ROBERT CARR & ASSOCIATES P/L	Laboratory	: Environmental Division Sydney
Contact	: MS FIONA BROOKER	Contact	: Danae Hambly
Address	: PO BOX 175 CARRINGTON NSW, AUSTRALIA 2294	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 4902 9200	Telephone	: +61-2-8784 8555
Project	: 12513e	Date Samples Received	: 16-Dec-2025
Order number	: ----	Date Analysis Commenced	: 17-Dec-2025
C-O-C number	: ----	Issue Date	: 23-Dec-2025
Sampler	: Client		
Site	: ----		
Quote number	: NSW Custom BQ 2024		
No. of samples received	: 2		
No. of samples analysed	: 2		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW



Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing



General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot

CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

RPD = Relative Percentage Difference

= Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: WATER

Laboratory Duplicate (DUP) Report									
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA025: Total Suspended Solids dried at 104 ± 2°C (QC Lot: 7096145)									
ES2540116-001	Anonymous	EA025H: Suspended Solids (SS)	----	5	mg/L	580	572	1.5	0% - 20%
ES2540174-001	Anonymous	EA025H: Suspended Solids (SS)	----	5	mg/L	19	13	39.4	No Limit
ES2540264-002	Anonymous	EA025H: Suspended Solids (SS)	----	5	mg/L	<5	<5	0.0	No Limit
ES2540077-001	Anonymous	EA025H: Suspended Solids (SS)	----	5	mg/L	59	58	3.0	0% - 50%
EK055G: Ammonia as N by Discrete Analyser (QC Lot: 7095216)									
ES2540201-006	Anonymous	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	0.88	0.89	1.5	0% - 20%
ES2540092-003	Anonymous	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	0.03	98.6	No Limit
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 7085742)									
ES2540158-005	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.0	No Limit
ES2540022-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	0.11	0.10	0.0	0% - 50%
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 7095217)									
ES2540092-003	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EW2506302-002	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	0.16	0.15	7.9	0% - 50%



Method Blank (MB) and Laboratory Control Sample (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: WATER

Method: Compound	CAS Number	LOR	Unit	Result	Laboratory Control Spike (LCS) Report			
					Method Blank (MB) Report	Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%) Low High
EA025: Total Suspended Solids dried at 104 ± 2°C (QCLot: 7096145)								
EA025H: Suspended Solids (SS)	---	5	mg/L	<5	150 mg/L	96.3	83.0	129
				<5	1000 mg/L	100.0	82.0	110
				<5	825 mg/L	94.9	83.0	118
EK055G: Ammonia as N by Discrete Analyser (QCLot: 7095216)								
EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	1 mg/L	100	90.0	114
EK057G: Nitrite as N by Discrete Analyser (QCLot: 7085742)								
EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	0.5 mg/L	101	82.0	114
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 7095217)								
EK059G: Nitrite + Nitrate as N	---	0.01	mg/L	<0.01	0.5 mg/L	104	91.0	113
EP020: Oil and Grease (O&G) (QCLot: 7096700)								
EP020: Oil & Grease	---	5	mg/L	<5	5000 mg/L	90.2	81.0	121
				<5	4000 mg/L	87.5	70.0	110

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: WATER

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report			
				Spike Concentration	Spike Recovery (%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High
EK055G: Ammonia as N by Discrete Analyser (QCLot: 7095216)							
ES2540092-003	Anonymous	EK055G: Ammonia as N	7664-41-7	1 mg/L	110	70.0	130
EK057G: Nitrite as N by Discrete Analyser (QCLot: 7085742)							
ES2540022-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.5 mg/L	118	70.0	130
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 7095217)							
ES2540092-003	Anonymous	EK059G: Nitrite + Nitrate as N	---	0.5 mg/L	112	70.0	130



QA/QC Compliance Assessment to assist with Quality Review

Work Order	: ES2540142	Page	: 1 of 4
Client	: ROBERT CARR & ASSOCIATES P/L	Laboratory	: Environmental Division Sydney
Contact	: MS FIONA BROOKER	Telephone	: +61-2-8784 8555
Project	: 12513e	Date Samples Received	: 16-Dec-2025
Site	: ----	Issue Date	: 23-Dec-2025
Sampler	: Client	No. of samples received	: 2
Order number	: ----	No. of samples analysed	: 2

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- NO Method Blank value outliers occur.
- NO Duplicate outliers occur.
- NO Laboratory Control outliers occur.
- NO Matrix Spike outliers occur.
- For all regular sample matrices, where applicable to the methodology, NO surrogate recovery outliers occur.

Outliers : Analysis Holding Time Compliance

- NO Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- NO Quality Control Sample Frequency Outliers exist.

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for VOC in soils vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: WATER

Evaluation: ✗ = Holding time breach ; ✓ = Within holding time.

Method	Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA025: Total Suspended Solids dried at 104 ± 2°C								
Clear Plastic Bottle - Natural (EA025H) SW1,	SW2	16-Dec-2025	---	---	---	21-Dec-2025	23-Dec-2025	✓
EK055G: Ammonia as N by Discrete Analyser								
Clear Plastic Bottle - Sulfuric Acid (EK055G) SW1,	SW2	16-Dec-2025	---	---	---	19-Dec-2025	13-Jan-2026	✓
EK057G: Nitrite as N by Discrete Analyser								
Clear Plastic Bottle - Natural (EK057G) SW1,	SW2	16-Dec-2025	---	---	---	18-Dec-2025	18-Dec-2025	✓
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Clear Plastic Bottle - Sulfuric Acid (EK059G) SW1,	SW2	16-Dec-2025	---	---	---	19-Dec-2025	13-Jan-2026	✓
EP020: Oil and Grease (O&G)								
Amber Jar - Sulfuric Acid or Sodium Bisulfate (EP020) SW1,	SW2	16-Dec-2025	---	---	---	22-Dec-2025	13-Jan-2026	✓



Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: WATER

Evaluation: ✗ = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type	Method	Count	Rate (%)	Quality Control Specification		
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation
Laboratory Duplicates (DUP)						
Ammonia as N by Discrete analyser	EK055G	2	20	10.00	10.00	✓
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	2	16	12.50	10.00	✓
Nitrite as N by Discrete Analyser	EK057G	2	20	10.00	10.00	✓
Suspended Solids (High Level)	EA025H	4	39	10.26	10.00	✓
Laboratory Control Samples (LCS)						
Ammonia as N by Discrete analyser	EK055G	1	20	5.00	5.00	✓
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	16	6.25	5.00	✓
Nitrite as N by Discrete Analyser	EK057G	1	20	5.00	5.00	✓
Oil and Grease	EP020	2	40	5.00	5.00	✓
Suspended Solids (High Level)	EA025H	5	39	12.82	12.50	✓
Method Blanks (MB)						
Ammonia as N by Discrete analyser	EK055G	1	20	5.00	5.00	✓
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	16	6.25	5.00	✓
Nitrite as N by Discrete Analyser	EK057G	1	20	5.00	5.00	✓
Oil and Grease	EP020	2	40	5.00	5.00	✓
Suspended Solids (High Level)	EA025H	2	39	5.13	5.00	✓
Matrix Spikes (MS)						
Ammonia as N by Discrete analyser	EK055G	1	20	5.00	5.00	✓
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	16	6.25	5.00	✓
Nitrite as N by Discrete Analyser	EK057G	1	20	5.00	5.00	✓

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

<i>Analytical Methods</i>	<i>Method</i>	<i>Matrix</i>	<i>Method Descriptions</i>
Suspended Solids (High Level)	EA025H	WATER	In house: Referenced to APHA 2540D. A gravimetric procedure employed to determine the amount of 'non-filterable' residue in a aqueous sample. The prescribed GFC (1.2um) filter is rinsed with deionised water, oven dried and weighed prior to analysis. A well-mixed sample is filtered through a glass fibre filter (1.2um). The residue on the filter paper is dried at 104+/-2C . This method is compliant with NEPM Schedule B(3)
Ammonia as N by Discrete analyser	EK055G	WATER	In house: Referenced to APHA 4500-NH3 G Ammonia is determined by direct colorimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrite as N by Discrete Analyser	EK057G	WATER	In house: Referenced to APHA 4500-NO2- B. Nitrite is determined by direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrate as N by Discrete Analyser	EK058G	WATER	In house: Referenced to APHA 4500-NO3- F. Nitrate is reduced to nitrite by way of a chemical reduction followed by quantification by Discrete Analyser. Nitrite is determined separately by direct colourimetry and result for Nitrate calculated as the difference between the two results. This method is compliant with NEPM Schedule B(3)
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	WATER	In house: Referenced to APHA 4500-NO3- F. Combined oxidised Nitrogen (NO2+NO3) is determined by Chemical Reduction and direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Oil and Grease	EP020	WATER	In house: Referenced to APHA 5520 B. Oil & grease is a gravimetric procedure to determine the amount of dissolved or emulsified oil & grease residue in an aqueous sample. The sample is serially extracted three times n-hexane. The resultant extracts are combined, dehydrated and concentrated prior to gravimetric determination. This method is compliant with NEPM Schedule B(3)



SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order	: ES2540142		
Client	: ROBERT CARR & ASSOCIATES P/L	Laboratory	: Environmental Division Sydney
Contact	: MS FIONA BROOKER	Contact	: Danae Hambly
Address	: PO BOX 175 CARRINGTON NSW, AUSTRALIA 2294	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: fionab@rca.com.au	E-mail	: danae.hambly@alsglobal.com
Telephone	: +61 02 4902 9200	Telephone	: +61-2-8784 8555
Facsimile	: +61 02 4902 9299	Facsimile	: +61-2-8784 8500
Project	: 12513e	Page	: 1 of 3
Order number	: ----	Quote number	: EN2023ROBCAR0002 (NSW Custom BQ 2024)
C-O-C number	: ----	QC Level	: NEPM 2013 B3 & ALS QC Standard
Site	: ----		
Sampler	: Client		

Dates

Date Samples Received	: 16-Dec-2025 15:20	Issue Date	: 16-Dec-2025
Client Requested Due	: 23-Dec-2025	Scheduled Reporting Date	: 23-Dec-2025
Date			

Delivery Details

Mode of Delivery	: Undefined	Security Seal	: Not Available
No. of coolers/boxes	: ----	Temperature	: 21.3°C
Receipt Detail	: ----	No. of samples received / analysed	: 2 / 2

General Comments

- This report contains the following information:
 - Sample Container(s)/Preservation Non-Compliances
 - Summary of Sample(s) and Requested Analysis
 - Proactive Holding Time Report
 - Requested Deliverables
- Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The laboratory will process these samples unless instructions are received from you indicating you do not wish to proceed. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Unless otherwise stated, analytical work for this work order will be conducted at ALS Sydney, NATA accreditation no. 825, site no. 10911.
- Sample Disposal - Aqueous (3 weeks), Solid (2 months ± 1 week) from receipt of samples.
- Please be aware that APHA/NEPM recommends water and soil samples be chilled to less than or equal to 6°C for chemical analysis, and less than or equal to 10°C but unfrozen for Microbiological analysis. Where samples are received above this temperature, it should be taken into consideration when interpreting results. Refer to ALS EnviroMail 85 for ALS recommendations of the best practice for chilling samples after sampling and for maintaining a cool temperature during transit.



Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- No sample container / preservation non-compliance exists.

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.

If no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component

Matrix: WATER

Laboratory sample ID	Sampling date / time	Sample ID	WATER - EA025H	Suspended Solids - Standard Level	WATER - EK056G	Ammonia as N By Discrete Analyser	WATER - EK056G	Nitrate as N by Discrete Analyser	WATER - EP020	Oil & Grease (O&G)
ES2540142-001	16-Dec-2025 14:30	SW1	✓	✓	✓	✓	✓	✓	✓	✓
ES2540142-002	16-Dec-2025 14:30	SW2	✓	✓	✓	✓	✓	✓	✓	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.



Requested Deliverables

ADMINISTRATOR

- *AU Certificate of Analysis - NATA (COA)	Email	administrator@rca.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	administrator@rca.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	administrator@rca.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	administrator@rca.com.au
- A4 - AU Tax Invoice (INV)	Email	administrator@rca.com.au
- Chain of Custody (CoC) (COC)	Email	administrator@rca.com.au
- EDI Format - ENMRG (ENMRG)	Email	administrator@rca.com.au
- EDI Format - ESDAT (ESDAT)	Email	administrator@rca.com.au

ALL INVOICES

- A4 - AU Tax Invoice (INV)	Email	administrator@rca.com.au
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ENVIRO

- *AU Certificate of Analysis - NATA (COA)	Email	enviro@rca.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	enviro@rca.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	enviro@rca.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	enviro@rca.com.au
- A4 - AU Tax Invoice (INV)	Email	enviro@rca.com.au
- Chain of Custody (CoC) (COC)	Email	enviro@rca.com.au
- EDI Format - ENMRG (ENMRG)	Email	enviro@rca.com.au
- EDI Format - ESDAT (ESDAT)	Email	enviro@rca.com.au

FIONA BROOKER

- *AU Certificate of Analysis - NATA (COA)	Email	fionab@rca.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	fionab@rca.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	fionab@rca.com.au
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	fionab@rca.com.au
- Chain of Custody (CoC) (COC)	Email	fionab@rca.com.au
- EDI Format - ENMRG (ENMRG)	Email	fionab@rca.com.au
- EDI Format - ESDAT (ESDAT)	Email	fionab@rca.com.au

Gastonjeane Forget

- *AU Certificate of Analysis - NATA (COA)	Email	Gastonjeane.Forget@tollgroup.com
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	Gastonjeane.Forget@tollgroup.com
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	Gastonjeane.Forget@tollgroup.com
- A4 - AU Sample Receipt Notification - Environmental HT (SRN)	Email	Gastonjeane.Forget@tollgroup.com
- A4 - AU Tax Invoice (INV)	Email	Gastonjeane.Forget@tollgroup.com
- Chain of Custody (CoC) (COC)	Email	Gastonjeane.Forget@tollgroup.com
- EDI Format - ENMRG (ENMRG)	Email	Gastonjeane.Forget@tollgroup.com
- EDI Format - ESDAT (ESDAT)	Email	Gastonjeane.Forget@tollgroup.com



**CHAIN OF
CUSTODY**

ALS Laboratory:
please tick →

ADELAIDE 21 Burma Road Pooraka SA 5095
Ph: 08 8359 0890 E: adelaide@alsglobal.com

BRISBANE 32 Shand Street Stafford QLD 4053
Ph: 07 3243 7222 E: samplesbrisbane@alsglobal.com

GLADSTONE 46 Callermonbah Drive Clinton QLD 4660
Ph: 07 7471 5600 E: gladstone@alsglobal.com

MACKAY 7B Harbour Road Mackay QLD 4740
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NEWCASTLE 5/585 Maitland Rd Mayfield West NSW 2304
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TOWNSVILLE 14-15 Desma Court Bohle QLD 4818
Ph: 07 4796 0600 E: townsville_environmental@alsglobal.com

MUDGEET 27 Sydney Road Mudgee NSW 2850
Ph: 02 6372 6735 E: mudgee.mail@alsglobal.com

PERTH 10 Hod Way Malaga WA 6090
Ph: 08 9209 7655 E: samples_perth@alsglobal.com

WOLLONGONG 99 Kenny Street Wollongong NSW 2500
Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT: RCA Australia	TURNAROUND REQUIREMENTS : <input type="checkbox"/> Standard TAT (List due date): (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)		FOR LABORATORY USE ONLY (Circle)	
OFFICE: 92 Hill Street, Carrington	ALS QUOTE NO.: EN/222/24	COC SEQUENCE NUMBER (Circle)	Custody Seal Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Freeze / frozen ice bricks present upon receipt? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A Random Sample Temperature on Receipt: 21.3 °C Other comment:	
RCA Ref No: 12513e	COC: 1 OF: 1			
PROJECT MANAGER: Fiona Brooker	CONTACT PH: 0408 687 529	RECEIVED BY: L.P DATE/TIME: 16.12.25 16.12.25 RELINQUISHED BY: SA DATE/TIME: 1700 1700	RELINQUISHED BY: 16.12.25 DATE/TIME: 1700	RECEIVED BY: SO/SP/BS DATE/TIME: 16/12/25/930
SAMPLER: Client	SAMPLER MOBILE: - 0475722538	RELINQUISHED BY: James Cunningham DATE/TIME: 16/12/25 2:30pm		
COC emailed to ALS? (NO)	EDD FORMAT (or default):			
Email Reports to: administrator@rca.com.au + enviro@rca.com.au	gastonjeane.forget@tollgroup.com			
Email Invoice to: as above				

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).						Additional Information		
LAB ID	Sample ID	Date / Time	Matrix	Type & Preservative (refer to codes below)	Total Containers	EK055G - Ammonia	EK058G - Nitrate	EA025H - Total Suspended Solids	EP020 - Oil and Grease					
1	SW1	16.12.25	W	Purple Glass, Purple Plastic, Green Plastic	3	x	x	x	x					Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
2	SW2	2:30pm	W	Purple Glass, Purple Plastic, Green Plastic	3	x	x	x	x					
LAB OF ORIGIN: NEWCASTLE														
TOTAL						6	2	2	2	2				

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic

V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphite Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag.

E-MAILED

Environmental Division
Sydney
Work Order Reference
ES2540142



Telephone: - 012-8784 8555

FIELD SHEET
DISCHARGE SAMPLING RECORD

CLIENT: TOLL Group

DATE: 16/12/25

PROJECT: Discharge Water Monitoring

PROJECT No.: 12513e

SAMPLER James Cunningham

light shower

Sample Location	Time of Sample	Description (clarity, colour, odour)
SW1 (northern boundary)	2:30pm	light brown, little to no odour, Small Amount of Sediment, 7/10 clarity
SW2 (southern boundary)	as above	as above

3 OF ORIGIN
NEWCASTLE

TAILE

Praterhall 1

Rec: Soffy

16/12/25 1930