

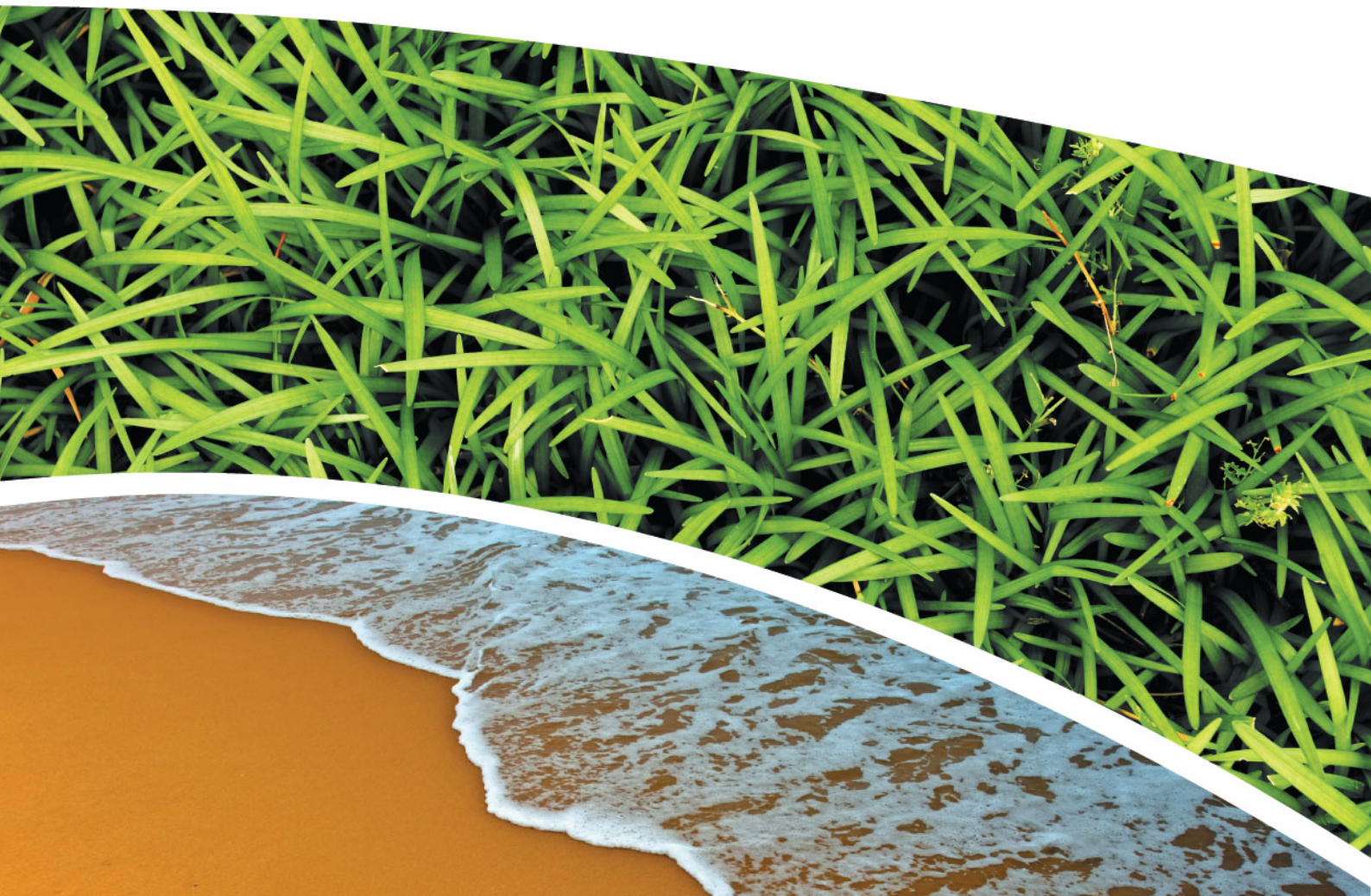
**WATER MONITORING REPORT (JANUARY TO MARCH 2026)  
CONCRUSH FACILITY, TERALBA NSW 2284**

**Prepared for CONCRUSH PTY LTD**

**Prepared by RCA Australia**

**RCA ref 13589a-280/0**

**APRIL 2026**



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## APPENDIX A

### *FIELD SHEETS*

## APPENDIX B

### *LABORATORY REPORT SHEETS*

RCA ref 13589a-280/0



20 April 2026

Concrush Pty Ltd  
21 Racecourse Road  
Teralba NSW 2284

Attention: Ross Lo Monaco

Geotechnical Engineering
Engineering Geology
Environmental Engineering
Hydrogeology
Construction Materials Testing
Environmental Monitoring
Noise & Vibration
Occupational Hygiene

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## WATER MONITORING REPORT (JANUARY TO MARCH 2026) CONCRUSH FACILITY, TERALBA

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### 1. INTRODUCTION

This report presents the findings of water monitoring conducted at the Concrush Resource Recovery Facility in Teralba, NSW, during the January, February and March 2026 monitoring periods.

The site was an operational facility over the entirety of the monitored area for the reporting period.

The site's environmental protection licence, EPL13351, specifies water monitoring be undertaken at the two (2) surface water discharge locations (refer to **Figure 2** in **Section 3**) weekly during discharge. The remainder of monitoring was initially outlined in plans submitted as part of the State Significant Development application for an increase to the facility's capacity (as referenced on the Concrush website<sup>1</sup>). There has been updates to the documentation following the completion of twelve (12) months of operation, in March 2024, and at the time of writing the guidance document is considered to be the:

- Groundwater Management Plan (GMP, Ref [1]).
  - It is noted that the ongoing monitoring requirements for groundwater will be incorporated into the Operational Environmental Management Plan for the site following the finalisation of modification arrangements currently in progress.
- Discharge Verification and Management Report (DVMR, Ref [2]).

This report was undertaken at the request of Ross Lo Monaco of Concrush Pty Ltd.

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<sup>1</sup> Concrush.com.au

## 2. SITE IDENTIFICATION AND DESCRIPTION

The site is described as 21 Racecourse Road, Teralba and part Lot 2, DP 220347. Additional site details are shown in **Table 1** and the site extent is shown in **Figure 1** below.

**Table 1** *Site Details*

<b>Current zoning<sup>2</sup></b>	E5 – Heavy Industrial.
<b>Current use</b>	Concrush resource recovery facility.
<b>Size of site</b>	Approximately 4.8ha.
<b>Surrounding land use to the:</b>	
<b>North</b>	Lot 1 DP220347. Industrial – storage yard for pre-cast concrete panels operated by others.
<b>South</b>	Part of Lot 2 DP220347. Industrial – scrap metal recycling yard operated by others.
<b>East</b>	Racecourse Road and then Cockle Creek.
<b>West</b>	Main Northern Rail line and then wetlands.
<b>Nearest sensitive receptor (human health)</b>	Residential housing, located approximately 360m southeast across Cockle Creek.
<b>Nearest sensitive receptor (environmental)</b>	Cockle Creek, located approximately 35m east and wetland approximately 30m west.



**Figure 1** *Project Site Location and Layout (aerial as of 7 February 2025)*

<sup>2</sup> <https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/address>

### 3. MONITORING DETAILS

The site's water management scheme comprises:

- Collection of runoff and seepage from the Green Waste catchment, anticipated to potentially contain nutrients, in the Leachate Pond (LP) which was lined with a flexible membrane liner with a permeability of less than  $10^{-14}$  m/s to prevent potential contamination of groundwater.
- Treatment of nutrients via a constructed Wetland (WL) which has also been lined and populated with appropriate plants to maximise the removal of nutrients. Water is pumped into the WL from the LP.
- Collection of runoff from the remainder of the site into Sediment Dam 1 (SED1) and Sediment Dam 2 (SED2). Water from the Wetland discharges into SED2.

Concrush aims to re-use all surface water on site such that none is discharged however in high rainfall events or periods, some discharge may occur from one or both of the Sediment Dams into the un-named waterway along the western border of the site. This waterway runs to the north and Cockle Creek at the northern end of the site and to the south, wetlands and eventually Cockle Creek at the southern end of the site; the location at which the flow direction changes has not been identified and may vary with seasonal conditions.

A total of eight (8) monitoring locations are situated on-site comprising four (4) surface water locations (LP, WL, SED1 and SED2), two (2) discharge points (SW1 and SW2) and two (2) groundwater locations (GW1 and GW3). Additionally, two (2) off-site background surface water locations (BSW1 and BSW2) are included in the monitoring programme. These locations are shown in **Figure 2**.



**Figure 2** Water sampling locations (aerial as of 25 May 2025)

It is noted that, due to significant vegetation growth to the south of the site, that the sampling undertaken for BSW2 has been moved to within approximately ten (10) metres of the location of SW2, estimated to be thirty (35) metres to the north of the initial sampling location.

Monitoring is undertaken on a monthly basis, typically the last working day of the month however adjusted for the compliance of dust monitoring undertaken at the site, and comprises the recording of depths of water, field readings using a calibrated water quality monitor and the collection of samples for chemical analyses as detailed in **Table 2** below.

**Table 2** *Analytical Scope*

Location	Monitored Parameters
GW1	<ul style="list-style-type: none"> <li>Depth to groundwater.</li> <li>Field readings.</li> </ul>
GW3	<ul style="list-style-type: none"> <li>Nutrients (ammonia, nitrate, nitrite, total phosphorous).</li> <li>Hydrocarbons<sup>4</sup> once a quarter.</li> </ul>
LP	<ul style="list-style-type: none"> <li>Field observation of water depth at LP.</li> <li>Field readings.</li> </ul>
WL	<ul style="list-style-type: none"> <li>pH, electrical conductivity (EC), total suspended solids (TSS).</li> <li>Nutrients (ammonia, nitrate, nitrite, total Kjeldahl nitrogen, total phosphorous).</li> </ul>
SED1	<ul style="list-style-type: none"> <li>Field readings.</li> <li>pH, EC, TSS.</li> </ul>
SED2	<ul style="list-style-type: none"> <li>Dissolved metals<sup>3</sup>.</li> <li>Hydrocarbons<sup>4</sup>.</li> </ul>
BSW1	<ul style="list-style-type: none"> <li>Hydrocarbons<sup>4</sup>.</li> </ul>
BSW2	<ul style="list-style-type: none"> <li>Nutrients (ammonia, nitrate, nitrite, total Kjeldahl nitrogen, total phosphorous).</li> </ul>

In the event of discharge from one or both of the Sediment Dams, sampling is undertaken at the discharge points and the associated background surface water locations. Analyses comprise field readings, general water quality, dissolved metals, hydrocarbons and nutrients.

Field sheets are presented in **Appendix A** and laboratory reports are included in **Appendix B**.

Results of the water monitoring are compared to criteria as specified in the GMP (Ref [1]) and / or the DVMR (Ref [2]) on a monthly basis and presented to Concrush in tables and graphs only.

<sup>3</sup> Aluminium, arsenic, cadmium, chromium, hexavalent chromium, cobalt, copper, lead, nickel, selenium, zinc, boron. Samples are 0.45µm field filtered prior to preservation for metals analyses.

<sup>4</sup> Benzene, toluene, ethylbenzene, xylene, naphthalene (BTEXN), total recoverable hydrocarbons (TRH) and polycyclic aromatic hydrocarbons (PAH).

## 4. MONITORING RESULTS

### 4.1 GROUNDWATER

Results of the groundwater monitoring undertaken in the quarter compared to the ecological criteria for fresh and marine waters (Ref [3]) are presented in **Table 3** below. In summary:

- The depth to groundwater varied between January and March at both wells. It is noted that at GW1, the depth was measured from ground level, whereas at GW3, the measurements included the length of the standpipe protruding above ground. Historical assessments indicate that the groundwater flow direction is from the western boundary of the site toward the eastern boundary.
- The temperature of the groundwater measured by the portable meter at the field slightly varied over the monitoring period and between the wells.
- The pH was generally neutral at GW1 while at GW3 it was generally slightly acidic.
- The EC obtained from the portable meter in both wells fell within the range indicative of fresh water. GW3 had the higher levels during the quarter.
- The turbidity of the groundwater obtained from the portable meter at the field was high at both wells (noting that the meter either provides a >1000 or 0 reading when the turbidity is too high to be quantified). A non-return foot valve was used to collect the water samples, as alternative methods were not feasible due to kinks in the pipes. RCA personnel took care to avoid contact between the tip of the foot valve and the sediment at the base of the wells however it is considered that the sampling methodology may have increased the turbidity.
- The dissolved oxygen in both wells obtained from the portable meter at the field was low. It is noted that the sampling method can cause higher than representative dissolved oxygen levels.
- Ammonia (as N) and total phosphorus (as P) consistently exceeded the relevant ecological criteria however align with historical data. It is noted that the site is located in the Cockle Creek Estuary catchment that forms part of the broader Lake Macquarie catchment area, an ecosystem known for natural nutrient inflows that can contribute to higher concentrations of nitrogen and phosphorus.
- Nitrate (as N) and NO<sub>x</sub> (as N) were either non-detected or at low concentrations below the relevant criteria, consistent with historical data. Low dissolved oxygen levels are considered likely to inhibit the activity of nitrifying bacteria responsible for converting ammonia to nitrite and subsequently to nitrate.
- BTEXN compounds were not detected, consistent with historical data.
- TRH was detected in both GW1 and GW3 in February (only sampling event for the quarter). It is noted that the last detection of TRH for GW3 occurred in May 2025 and was confirmed to be non-petroleum based. In the absence of any visual or olfactory indicators, it is considered likely that the detections are of a similar nature.
- PAH were non-detected, consistent with historical data.

**Table 3** Groundwater Analysis Results.

Analysis	Aquatic Ecosystem Guideline <sup>A</sup>		GW1			GW3		
	95% Fresh	95% Marine	27/01	25/02	26/03	27/01	25/02	26/03
Date Sampled			27/01	25/02	26/03	27/01	25/02	26/03
Depth to Groundwater	--	--	2.07	2.32	2.14	3.54	3.8	3.58
Temperature (°C)*	--	--	24.5	25.10	25.21	26.2	28.13	28.8
pH (pH units)*	--	--	7.35	7.48	7.51	6.36	6.29	6.45
EC (mS/cm)*	--	--	0.447	1.03	0.890	1.75	1.99	1.94
Turbidity (Nephelometric Turbidity unit)*	--	--	Not recorded	0	0	Not recorded	460	0
Dissolved Oxygen*	--	--	1.7	2.14	2.63	1.81	1.34	2.92
Ammonia	0.9	0.91	<u>1.7</u>	<u>1.9</u>	<u>1.7</u>	<u>2.1</u>	<u>3.2</u>	<u>3.6</u>
Nitrate	2.4		0.073	0.006	0.01	0.01	0.01	0.014
NO <sub>x</sub>	0.04		0.078	0.008	0.02	0.01	<0.05	0.15
Total Phosphorus	0.025		<b>0.4</b>	<b>0.96</b>	<b>0.3</b>	<b>0.09</b>	<b>0.07</b>	<b>0.2</b>
Benzene	0.95	0.5	--	<0.001	--	--	<0.001	--
Toluene	0.18		--	<0.001	--	--	<0.001	--
Ethylbenzene	0.08	0.005	--	<0.001	--	--	<0.001	--
Meta- and para-Xylene	0.275		--	<0.002	--	--	<0.002	--
Ortho-Xylene	0.35		--	<0.001	--	--	<0.001	--
TRH C <sub>6</sub> -C <sub>40</sub>	0.007		--	<b>0.2</b>	--	--	<b>0.3</b>	--
Naphthalene	0.016	0.07	--	<0.0001	--	--	<0.0001	--
Phenanthrene <sup>B</sup>	0.002	0.002	--	<0.0001	--	--	<0.0001	--
Anthracene <sup>B</sup>	0.0004	0.0004	--	<0.0001	--	--	<0.0001	--
Fluoranthene <sup>B</sup>	0.0014	0.0014	--	<0.0001	--	--	<0.0001	--
Benzo(a)pyrene <sup>B</sup>	0.0002	0.0002	--	<0.0001	--	--	<0.0001	--

All units in mg/L except where otherwise noted

<sup>A</sup> Criteria from ANZG (Ref [3]) with the exception of NO<sub>x</sub> and phosphorus for Lowland Rivers (coastal environment where available)Results shown in **bold** more than 95% freshwater guidelines/ the lowland (coastal) river guidelines

Data marked with an asterisk (\*) were obtained using a portable multiparameter meter (Horiba).

-- indicates no guidelines applicable and / or analyses not required during the specific month

<sup>B</sup> Bio-accumulative Compounds. Results with '<' below the detection limitResults shown in underline in excess of 95% marine water guidelines

## 4.2 SURFACE WATERS

Results of the surface water monitoring undertaken in the quarter compared to the criteria (Ref [2]) are presented in **Table 4** and **Table 5** below. The leachate pond was dry in February and there was no active flow observed at BSW1 in February 2026; no samples were collected.

In summary:

- pH levels at LP, WL, BSW1 and BSW2 were within the trigger range with the exception of the January LP result. In contrast, pH consistently exceeded the trigger range at both SED1 and SED2, indicating alkaline conditions.
- No EC values exceeded the trigger value at any location throughout the monitoring period except for LP in January, and WL in January and February.
- TSS were considered low to moderate in all samples.
- Ammonia concentrations were above the trigger value at WL and LP for all samples during the quarter, for the January and March sampling events at SED1 and BSW2 and for the March sampling event for SED2. BSW1 did not record concentrations above the criteria for the quarter.
  - It is noted that plant matter was difficult to exclude from the WL samples, and any elevated ammonia concentrations observed may, at least in part, reflect this material rather than the actual concentrations in the water.
- Nitrate and NO<sub>x</sub> were detected in March at LP, and in January and February at SED 1 above the trigger values. The remainder of the results for LP and SED1 as well as for WL, BSW1, SED2 and BSW2 were either not detected or detected at low concentrations in the background waters.
- Total nitrogen was consistently exceeded the trigger values at all monitoring locations for the quarter: total Kjeldahl nitrogen comprised >70% of all results with the exception of the January and March results at SED1 in which TKN comprised approximately 35% and 54% respectively.
- Total phosphorus was consistently exceeded the trigger values at all monitoring locations for the quarter with the exception of the January result at SED1.
- Aluminium exceeded the trigger value in all monitoring events at both SED1 and SED2, while it was either non detected or detected at low concentrations within the background waters in all rounds conducted throughout the quarter.
- Chromium remained below the trigger value at all locations throughout the monitoring period whereas hexavalent chromium was in excess of the trigger value in both SED1 and SED2 in January and in SED2 in March. Hexavalent chromium was not detected in the background waters in any event during the quarter.
- Zinc exceeded the trigger value at both the BSW monitoring locations in January and at BSW2 in March; all concentrations at the Sediment Dams were below the trigger value.
- The remaining metals (arsenic, cadmium, cobalt, copper, lead, nickel, selenium, boron) were either non-detected or detected at low concentrations well below the respective trigger values at all locations.
- Low concentrations were detected in February only at SED1, SED2 and BSW2 (when BSW1 had no active flow). As noted for groundwater, in the absence of any visual or olfactory indicators, it is considered likely that the detections are not related to petroleum contamination.

**Table 4** Surface Water Analysis Results – Green Waste Catchment

Analyte	Trigger Values	LP			WL		
		27/01	25/02	26/03	27/01	25/02	26/03
Date Sampled							
pH (pH units)	6.5-8.5	<b>6.4</b>	--	8.1	7	7.2	7.2
EC ( $\mu$ S/cm)	125-2200	<b>4200</b>	--	1700	<b>2400</b>	<b>2400</b>	2000
TSS	NA	50	--	10	20	46	13
Ammonia	0.0264	<b>15</b>	--	<b>0.28</b>	<b>0.094</b>	<b>2</b>	<b>0.19</b>
Nitrate	0.44	<0.005	--	<b>2</b>	<0.02	<0.02	<0.005
NO <sub>x</sub>	0.491	<0.005	--	<b>2.7</b>	<0.02	<0.02	<0.005
Total Nitrogen	0.645	<b>62</b>	--	<b>9.6</b>	<b>7.5</b>	<b>19</b>	<b>8.4</b>
Total Phosphorus	0.0168	<b>24</b>	--	<b>1.7</b>	<b>4.7</b>	<b>8.6</b>	<b>5.8</b>

All units in mg/L except where otherwise noted

NA - not applicable

"--" dry conditions, no sample analysis

Results shown in bold in excess of the trigger values (Ref [2])

Results with '<' are below the detection limit

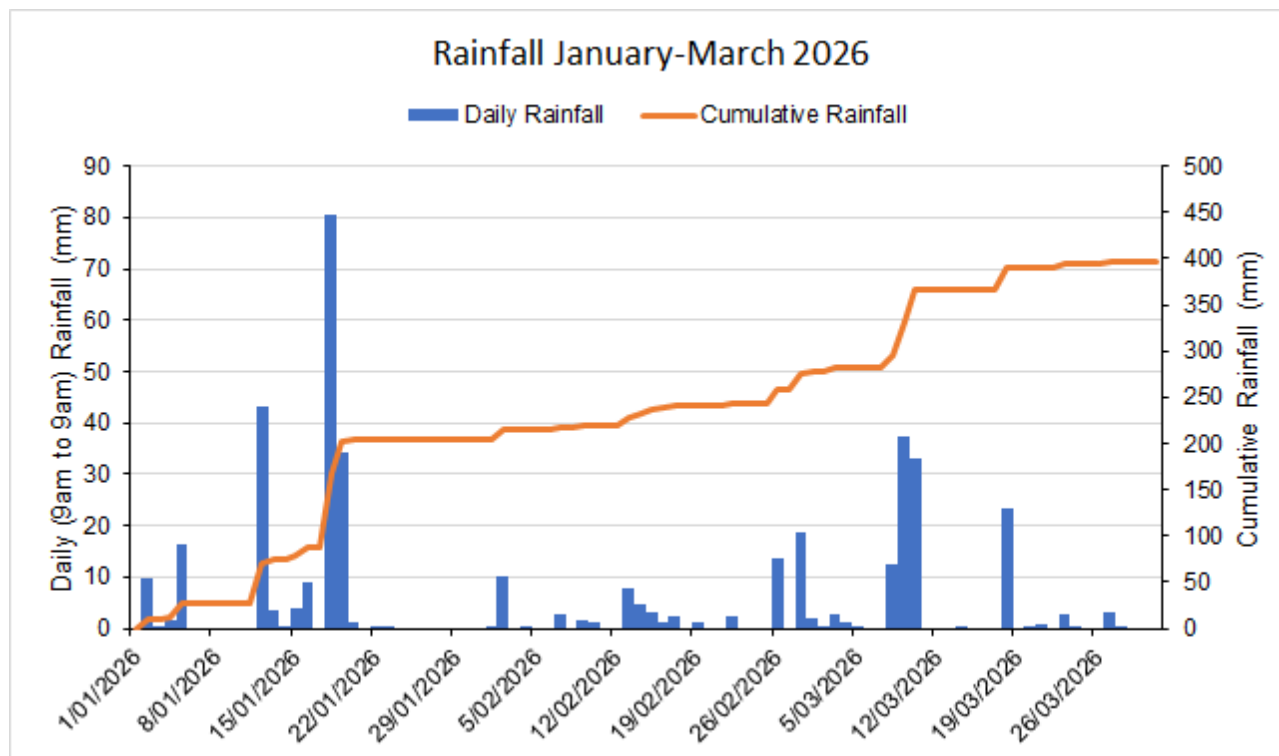
**Table 5** Surface Water Analysis Results – Remainder of Site

Analyte	Trigger Values	SED1			BSW1			SED2			BSW2		
		27/01	25/02	26/03	27/01	25/02	26/03	27/01	25/02	26/03	27/01	25/02	26/03
Date Sampled													
pH (pH units)	6.5-8.0	<b>9.3</b>	<b>8.8</b>	<b>9.1</b>	7.9	--	8.2	<b>9.8</b>	<b>8.7</b>	<b>8.7</b>	7.1	7.5	7.4
Electrical Conductivity (µS/cm)	125-2200	440	630	430	870	--	850	540	620	540	740	880	690
Total Suspended Solids	NA	8	67	19	69	--	35	12	49	19	14	36	10
Ammonia	0.0264	<b>0.05</b>	<0.005	<b>0.04</b>	0.02	--	<0.005	0.01	0.01	<b>0.22</b>	<b>0.03</b>	0.006	<b>0.01</b>
Nitrate	0.44	<b>0.55</b>	<0.005	<b>0.52</b>	0.005	--	0.02	<0.005	0.01	0.16	<0.005	<0.005	0.04
NO <sub>x</sub>	0.491	<b>0.71</b>	<0.005	<b>0.65</b>	0.005	--	0.02	0.062	0.01	0.26	<0.005	<0.005	0.04
Total Nitrogen	0.645	<b>1.1</b>	<b>1.3</b>	<b>1.4</b>	<b>1.4</b>	--	<b>0.9</b>	<b>1.7</b>	<b>2.2</b>	<b>1.9</b>	<b>1.1</b>	<b>2.3</b>	<b>1.3</b>
Total Phosphorus	0.0168	<0.05	<b>0.1</b>	<b>0.02</b>	<b>0.3</b>	--	<b>0.1</b>	<b>0.1</b>	<b>0.3</b>	<b>0.1</b>	<b>0.1</b>	<b>0.4</b>	<b>0.2</b>
Aluminium	0.08	<b>0.29</b>	<b>0.13</b>	<b>0.24</b>	<0.01	--	<0.01	<b>0.31</b>	<b>0.11</b>	<b>0.18</b>	0.02	0.02	0.03
Arsenic	0.094	0.004	0.007	0.004	0.004	--	0.004	0.01	0.012	0.011	0.007	0.029	0.01
Cadmium	0.0004	<0.0001	<0.0001	<0.0001	<0.0001	--	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	0.02	0.017	0.001	0.017	<0.001	--	<0.001	0.015	0.002	0.005	<0.001	0.001	<0.001
Hexavalent Chromium	0.0033	<b>0.01</b>	<0.005	<b>0.02</b>	<0.005	--	<0.005	<b>0.01</b>	<0.005	<0.005	<0.005	<0.005	<0.005
Cobalt	0.015	<0.001	<0.001	0.002	<0.001	--	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001
Copper	0.02	0.008	0.007	0.01	0.004	--	0.003	0.01	0.005	0.012	0.003	0.002	0.001
Lead	0.0056	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	0.013	0.001	0.002	0.002	0.002	--	0.002	0.002	0.003	0.002	0.002	0.003	0.001
Selenium	0.018	<0.001	<0.001	0.002	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	0.015	0.006	0.011	0.007	<b>0.04</b>	--	0.01	0.007	0.008	0.013	<b>0.019</b>	<b>0.011</b>	0.008
Boron	0.68	0.07	0.1	0.08	0.1	--	0.1	0.08	0.1	0.07	0.1	0.2	0.1
TRH C <sub>6</sub> -C <sub>40</sub>	10	0.13	0.2	0.13	0.13	--	0.13	0.13	0.305	0.13	0.13	0.39	0.13

All units in mg/L except where otherwise noted, Results shown in **bold** are in excess of the management triggers (Ref [2]), NA – Not applicable, Results with '<' are below the detection limit.

### 4.3 DISCHARGE

The Bureau of Meteorology weather station at Cooranbong, approximately 21 km to the southwest of the site, recorded a total rainfall of 397.8 mm during the monitoring period, distributed as 204.4 mm in January, 71.8 mm in February, and 121.6 mm in March. **Figure 3** below illustrates these monthly totals, along with the cumulative rainfall for each month.



**Figure 3** Rainfall for the Monitoring Period (sourced from Bureau of Meteorology weather station at Cooranbong)

One (1) discharge event occurred in the monitoring period from Sediment Dam 2 only: 9<sup>th</sup> March 2026 for which there was 49.8 mm in the previous forty-eight (48) hours as at 9 a.m. Samples were collected at SW2 and BSW2 during the discharge event. **Table 6** presents water quality data for the discharge at the spillways and background surface waters.

Results of note are considered to be:

- pH was more alkaline than the trigger range at both SW2 and BSW2.
- Nitrate and NO<sub>x</sub> concentrations were in excess of the respective trigger values at both SW2 and BSW2.
- Total nitrogen was in excess of the trigger value at both locations. NO<sub>x</sub> was the dominant (>72%) form at both locations.
- Total phosphorus was in excess of the trigger value at both locations.
- Metals were either not detected or at low concentrations below the relevant trigger values except for aluminium and hexavalent chromium which exceeded the relevant trigger values at both locations.
- Hydrocarbons were not detected at either location.

**Table 6** *Discharge and Background Water Quality*

Parameters	Trigger values	SW2	BSW2
		9 <sup>th</sup> March 2026	
Date Sampled		9 <sup>th</sup> March 2026	
pH (pH units)	6.5-8.5	<b>9.3</b>	<b>8.7</b>
EC ( $\mu$ S/cm)	125-2200	500	360
TSS	NA	67	51
Ammonia	0.0264	0.02	0.01
Nitrate as N	0.44	<b>0.91</b>	<b>1.1</b>
NO <sub>x</sub> as N	0.491	<b>1.3</b>	<b>1.3</b>
Total N	0.645	<b>1.8</b>	<b>1.7</b>
Total Phosphorus as P	0.0168	<b>0.2</b>	<b>0.3</b>
Aluminium	0.08	<b>0.17</b>	<b>0.11</b>
Arsenic	0.094	0.08	0.007
Cadmium	0.0004	<0.0001	<0.0001
Chromium	0.02	0.012	0.007
Hexavalent Chromium	0.0033	<b>0.01</b>	<b>0.007</b>
Cobalt	0.015	<0.001	<0.001
Copper	0.02	0.007	0.007
Lead	0.0056	<0.001	<0.001
Nickel	0.013	0.002	0.001
Selenium	0.018	<0.001	<0.001
Zinc	0.015	0.004	0.01
Boron	0.68	0.04	0.05
TRH C6-C40	10	<0.26	<0.26

All unit in mg/L where otherwise noted.

NA indicates no trigger values applied.

Results shown in **bold** are in excess of the management triggers (Ref [2]) and results with '<' are below the detection limits

## 5. CONCLUSIONS AND RECOMMENDATIONS

Water monitoring was undertaken at the Concrush Resource Recovery Facility through the January-March 2026 quarter in general compliance with the requirements of the EPL and relevant management plans (Ref [1] and Ref [2]). The absence of samples at WL, BSW1 and LP due to dry conditions is not considered to represent non-compliance.

The following conclusions have been made with respect to this quarter's monitoring events:

- Groundwater is not considered to show any impact from the site's operations. Results are generally consistent with the historical results, including those prior to the commencement of operations in the southern portion of the site, and the results are not considered to indicate any potential impact from the LP or SED2, and are rather considered to be representative of the groundwater characteristics within the former wetlands. There are no indications of hydrocarbon contamination in the groundwater.
- The leachate pond had high EC and significant concentrations of ammonia and TKN in January, potentially as the water level was very low; the NOx concentrations were significant in March. Otherwise the results are generally consistent with previous monitoring.
- The results for both Sediment Dams were generally consistent with the previous monitoring; pH was alkaline at both locations. Ammonia and phosphorous were higher at SED2, consistent with expectations associated with the leachate pond however NOx was higher, and the dominant nitrogen form in SED1 whereas TKN was the dominant form in SED2. Aluminium is present at concentrations in excess of the criterion at both locations; hexavalent chromium concentrations are generally consistent with those detected previously at SED1 however are slightly reduced at SED2. Hydrocarbons were detected at low concentrations and are not considered to be from petroleum-based sources based on absence of any visual or olfactory indications.
- Background waters do have some similar chemistry to the Sediment Dams at the site and direct comparison of the results during the quarter's discharge event from Sediment Dam 2 to the background waters does indicate potential impact to the pH, aluminium, chromium, ammonia and, to a lesser extent the NOx concentrations as these were higher than the majority of the previous concentrations. Noting that BSW2 is within 30 m of the point of discharge, significant impact to the environment is not considered likely due to the limited release during the quarter.

Water monitoring will continue during the next quarter in accordance with the GMP (Ref [1]) and the DVMR (Ref [2]). The next quarterly report will be prepared after the completion of the June 2026 sampling.

## 6. LIMITATIONS

This report has been prepared for Concrush Pty Ltd in accordance with an agreement with RCA Australia (RCA). The services performed by RCA have been conducted in a manner consistent with that generally exercised by members of its profession and consulting practice.

This report has been prepared for the sole use of Concrush Pty Ltd. The report may not contain sufficient information for purposes of other uses or for parties other than Concrush Pty Ltd. This report shall only be presented in full and may not be used to support objectives other than those stated in the report without written permission from RCA Australia.

The information in this report is considered accurate at the date of issue with regard to the current conditions of the site. Conditions can vary across any site that cannot be explicitly defined by investigation. Please contact the undersigned if you have any queries.

Environmental conditions including contaminant concentrations can change in a limited period of time. This should be considered if the report is used following a significant period of time after the date of issue.

Yours faithfully

**RCA AUSTRALIA**



Fiona Brooker  
Manager of Environmental Services  
BEng(Env)

## REFERENCES

- [1] RCA Australia, *Groundwater Management Plan, Expansion of the Concrush Resource Recovery Facility, Teralba*, RCA ref 13589-805/1, September 2020.
- [2] ENGENY, *Concrush Pty Ltd, Discharge Verification and Mitigation Report*, February 2024.
- [3] ANZG, *Australian and New Zealand Guidelines for Fresh and Marine Water Quality Australian and New Zealand Governments and Australian state and territory governments*, Canberra ACT, Australia., August 2018. Available at [www.waterquality.gov.au/anz-guidelines](http://www.waterquality.gov.au/anz-guidelines).

# Appendix A

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Field Sheets

135679  
27-1-26

**BORE OR LOCATION ID:** BSW2 (Western end, south of site boundary, down ladder). Label bottles 'BSW2' – Previously known as 'SW2'

**TIME:** 10:10:40 TO 11:10:27

**WATCH for SNAKES**  
Be careful – poor footing

**RESULTS OF WATER QUALITY CHECK:** OMU

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/	10.45 7.29	787		17.8	23.1	54.7
2/	10.48 7.23	784		15.9	23.10	56.4
3/	10.50 7.23	784		16.2	23.10	56.5
4/						
5/						
6/						

**Sample Appearance:** water clear brown tinsed,

**Duplicate Identification and Other Remarks:**

**BORE OR LOCATION ID:** BH1 (Western end – adjacent Railway) Label bottles 'GW1'

**TIME:** 9:45am TO 10:05am

**BORE DEPTH:** 4.77 **HEIGHT ABOVE GROUND LEVEL:** NA

**DEPTH TO AQUIFER:** 2.068 **VOLUME PURGED:** 3L

**RESULTS OF WATER QUALITY CHECK:**

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/	9.54 7.51	732		8.2	22.9	-98.6
2/	9.56 7.35	715		12.3	23.8	-92.3
3/	9.58 7.35	711		17.0	24.6	-88.5
4/						
5/						
6/						

**Sample Appearance:** water clear with slight white turbidity

**Duplicate Identification and Other Remarks:**

IL  
IL

**BORE OR LOCATION ID:** Sediment Dam 1 (North west corner – adjacent railway). Label bottles 'Sed1'

**TIME:** 9:10am TO 9:30am

**RESULTS OF WATER QUALITY CHECK:** clear water OMU MU

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/	9.13 7.31	459.7		55.12	24.6	41.0
2/	9.15 7.35	456.9		67.7	24.6	44.3
3/	9.17 7.34	447.1		63.9	24.5	45.3
4/						
5/						
6/						

**Sample Appearance:** water 1.3m clear

**Duplicate Identification and Other Remarks:**

**BORE OR LOCATION ID:** Surface Water 1. Label bottles 'SW1' – Previously known as 'DIS-SED1'

**TIME:** \_\_\_\_\_ **TO** \_\_\_\_\_

**BORE DEPTH:** \_\_\_\_\_ **HEIGHT ABOVE GROUND LEVEL:** \_\_\_\_\_

**DEPTH TO AQUIFER:** \_\_\_\_\_ **VOLUME PURGED:** \_\_\_\_\_

**RESULTS OF WATER QUALITY CHECK:** *015 10 5am 14*

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** BSW1 (Western side of Racecourse Road, north of rail access drive). Label bottles 'BSW1' – Previously known as 'SW1'

**TIME:** *12.40* **TO** *1.15*

**BORE DEPTH:** \_\_\_\_\_ **HEIGHT ABOVE GROUND LEVEL:** \_\_\_\_\_

**DEPTH TO AQUIFER:** \_\_\_\_\_ **VOLUME PURGED:** \_\_\_\_\_

**RESULTS OF WATER QUALITY CHECK:** *Brown hised water with 0.79 mg/L / 100L*

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
<i>1/12.42</i>	<i>8.08</i>	<i>949</i>		<i>99.7</i>	<i>24.7</i>	<i>37.3</i>
<i>2/12.45</i>	<i>8.06</i>	<i>926</i>		<i>87.3</i>	<i>24.3</i>	<i>38.3</i>
<i>3/12.47</i>	<i>8.12</i>	<i>925</i>		<i>94.9</i>	<i>24.7</i>	<i>39.1</i>
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** Wetland (Eastern end – adjacent Racecourse Road). Label bottles 'WL'

**TIME:** 11.20am TO 11.40am

**RESULTS OF WATER QUALITY CHECK:** Brown fissed water 50% turbidity 2000µS/cm

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/	11.25	1.20	3570	-0.1	21.8	-20.7
2/	11.28	1.97	2659	0.6	20.7	-19.3
3/	11.32	1.27	2365	3.1	20.5	-6.89
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** Sediment Dam 2 (Southwest corner – adjacent railway). Label bottles 'Sed2'

**TIME:** 10.05am TO 10.30am

**RESULTS OF WATER QUALITY CHECK:** \_\_\_\_\_

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/	10.06	10.02	575	109.2	25.8	11.0
2/	10.08	10.01	577	110.2	26.2	15.1
3/	10.10	10.00	577	101.2	26.0	21.9
4/						
5/						
6/						

**Sample Appearance:** clear water / brown fissed

**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** Surface Water 2. Label bottles 'SW2' – Previously known as 'SID-SED2'

**TIME:** \_\_\_\_\_ TO \_\_\_\_\_

**WATCH for SNAKES**

May have to get sample from outside fence

**RESULTS OF WATER QUALITY CHECK:** dry no sample

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** \_\_\_\_\_

EFS-WSR-0014

## ENGINEERING FIELD SHEET WATER SAMPLING RECORD

**CLIENT:** Concrush Pty Ltd  
**PROJECT:** Water Quality Monitoring  
**LOCATION:** 21 Racecourse Road, Teralba  
**PERSONNEL:** DB

**DATE:** 27-1-26  
**PROJECT No:** 13589a  
**CLIENT REF:** \_\_\_\_\_

**WATER METER USED:** Horiba

**DATE & TYPE OF LAST CALIBRATION (1PT OR FULL):** Full – refer to Environment Drive for Calibration Certified

**METHOD OF SAMPLING:** Foot valve for Groundwater, direct for Ponds, Wetland, Basins and Surface Water

**PRESERVATION & STORAGE (TICK):** Chilled (<4°C)

Get Key for side gate from weighbridge to get to SW2

**TESTS REQUIRED:**  
 Groundwater: Nutrients each month, TRH, PAH and BTEX every 3 months.  
 Leachate Pond and Wetland: , EC, TSS and Nutrients every month.  
 Sediment Basins: pH, EC, TSS, metals (dissolved) and TRH every month.  
 Spillways: , EC, TSS, metals (dissolved) and TRH when discharging.  
 Background Surface water: pH, EC, TSS, metals (dissolved) and TRH every month.

**OTHER DETAILS:** Refer to Duplicate Register – name duplicate QAMonthYear.

**BORE OR LOCATION ID:** BH3 (Eastern end – adjacent Racecourse Road) Label bottles 'GW3'

**TIME:** 12.05 TO 12.25

**BORE DEPTH:** 5.09 **HEIGHT ABOVE GROUND LEVEL:** 0.85

**DEPTH TO AQUIFER:** 3.537 **VOLUME PURGED:** 3L

**RESULTS OF WATER QUALITY CHECK:** Brown tinted water - 10 min

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/	<u>6.44</u>	<u>1952</u>		<u>8.8</u>	<u>23.6</u>	<u>-63.11</u>
2/	<u>6.34</u>	<u>1742</u>		<u>7.1</u>	<u>24.8</u>	<u>-49.5</u>
3/	<u>6.36</u>	<u>1747</u>		<u>18.1</u>	<u>26.2</u>	<u>-43.5</u>
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_



**Duplicate Identification and Other Remarks:** QA0126

**BORE OR LOCATION ID:** Leachate Pond (Eastern end – adjacent Racecourse Road). Sample at outlet to Wetland Pond. Label bottles 'LP'

**TIME:** 11.40am TO 12pm

*If discharge not running, remove the cord from time and put directly into power.  
At the completion of sampling, return the time to the system.*

**RESULTS OF WATER QUALITY CHECK:** each sensor 15/10 by water

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/	<u>6.75</u>	<u>4235</u>		<u>2.5</u>	<u>24.2</u>	<u>-157.7</u>
2/	<u>6.74</u>	<u>4277</u>		<u>8.0</u>	<u>24.0</u>	<u>-148.5</u>
3/	<u>6.76</u>	<u>4272</u>		<u>7.1</u>	<u>24.0</u>	<u>-154.0</u>
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** McPherson Smith

## ENGINEERING FIELD SHEET WATER SAMPLING RECORD

**CLIENT:** Concrush Pty Ltd  
**PROJECT:** Water Quality Monitoring  
**LOCATION:** 21 Racecourse Road, Teralba  
**PERSONNEL:** D. Mien

**DATE:** 25-2-26  
**PROJECT No:** 13589a  
**CLIENT REF:** D

**WATER METER USED:** Horiba

**DATE & TYPE OF LAST CALIBRATION (1PT OR FULL):** Full – refer to Environment Drive for Calibration Certified

**METHOD OF SAMPLING:** Foot valve for Groundwater, direct for Ponds, Wetland, Basins and Surface Water

**PRESERVATION & STORAGE (TICK):** Chilled (<4°C)

Get Key for side gate from weighbridge to get to SW2

**TESTS REQUIRED:**  
 Groundwater: Nutrients each month, TRH, PAH and BTEX every 3 months.  
 Leachate Pond and Wetland: , EC, TSS and Nutrients every month.  
 Sediment Basins: pH, EC, TSS, metals (dissolved) and TRH every month.  
 Spillways: , EC, TSS, metals (dissolved) and TRH when discharging.  
 Background Surface water: pH, EC, TSS, metals (dissolved) and TRH every month.

**OTHER DETAILS:** Refer to Duplicate Register – name duplicate QAMonthYear.

**BORE OR LOCATION ID:** BH3 (Eastern end – adjacent Racecourse Road) Label bottles 'GW3'

**TIME:** 12:15 TO 12:45

**BORE DEPTH:** \_\_\_\_\_ **HEIGHT ABOVE GROUND LEVEL:** \_\_\_\_\_

**DEPTH TO AQUIFER:** 3.803 **VOLUME PURGED:** \_\_\_\_\_

**RESULTS OF WATER QUALITY CHECK:** water below 1.2m no odor

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/	<u>12.24 6.17</u>	<u>1.97</u>	<u>513</u>	<u>2.51</u>	<u>28.74</u>	<u>0.100</u>
2/	<u>12.26 6.26</u>	<u>1.98</u>	<u>375</u>	<u>2.52</u>	<u>27.69</u>	<u>0.100</u>
3/	<u>12.29 6.29</u>	<u>1.99</u>	<u>460</u>	<u>2.34</u>	<u>28.13</u>	<u>0.101</u>
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

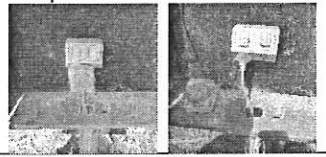
**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** Leachate Pond (Eastern end – adjacent Racecourse Road). Sample at outlet to Wetland Pond. Label bottles 'LP'

**TIME:** \_\_\_\_\_ TO \_\_\_\_\_

*If discharge not running, remove the cord from time and put directly into power.  
At the completion of sampling, return the time to the system.*

**RESULTS OF WATER QUALITY CHECK:** OK



Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** Wetland (Eastern end – adjacent Racecourse Road). Label bottles 'WL'

**TIME:** 11.50 am TO 12.05 pm

**RESULTS OF WATER QUALITY CHECK:** Water brown minor methane smell or seen

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/	7.62	2.84	36.2	1.38	26.62	0.148
2/	7.63	2.85	24.6	0.96	25.18	0.153
3/	7.72	2.82	25.6	0.48	25.24	0.146
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** Sediment Dam 2 (Southwest corner – adjacent railway). Label bottles 'Sed2'

**TIME:** 9.50 TO 10.30

**RESULTS OF WATER QUALITY CHECK:** Clear water brown tinted no odor

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/	9.39	0.644	89.7	4.45	26.93	0.031
2/	9.40	0.656	95.5	3.37	26.77	0.032
3/	7.42	0.642	91.5	3.51	26.78	0.031
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** QA 0226

**BORE OR LOCATION ID:** Surface Water 2. Label bottles 'SW2' – Previously known as 'SID-SED2'

**TIME:** \_\_\_\_\_ TO \_\_\_\_\_

**WATCH for SNAKES**

May have to get sample from outside fence

**RESULTS OF WATER QUALITY CHECK:** D/S

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** ~~QA 0226~~

**BORE OR LOCATION ID:** BSW2 (Western end, south of site boundary, down ladder). Label bottles 'BSW2' –  
Previously known as 'SW2'

**TIME:** 11,10am TO 11,35am **WATCH for SNAKES**  
Be careful – poor footing

**RESULTS OF WATER QUALITY CHECK:** clear water yellow brown tinge

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)	
1/	11.16	8.10	0.976	37	6.42	26.80	0.049
2/	11.18	8.05	1.01	13.6	8.42	26.93	0.050
3/	11.24	8.04	1.02	10.7	8.24	26.72	0.050
4/							
5/							
6/							

**Sample Appearance:** \_\_\_\_\_  
**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** BH1 (Western end – adjacent Railway) Label bottles 'GW1'

**TIME:** 10,30am TO 11,05am

**BORE DEPTH:** 0.1 **HEIGHT ABOVE GROUND LEVEL:** NA

**DEPTH TO AQUIFER:** 2232 **VOLUME PURGED:** \_\_\_\_\_

**RESULTS OF WATER QUALITY CHECK:** Turbid grey water no smell

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)	
1/	10.45	7.51	0.977	0	1.98	25.52	0.046
2/	10.47	7.48	1.03	0	8.58	25.87	0.051
3/	10.49	7.48	1.03	0	2.19	25.90	0.051
4/							
5/							
6/							

**Sample Appearance:** \_\_\_\_\_  
**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** Sediment Dam 1 (North west corner – adjacent railway). Label bottles 'Sed1'

**TIME:** 9,15 TO 9,45

**RESULTS OF WATER QUALITY CHECK:** water clear brown tinge no odour

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)	
1/	9.19	9.46	0.680	150	7.17	25.07	0.033
2/	9.21	9.33	0.657	152	4.56	25.38	0.032
3/	9.23	9.24	0.652	146	6.83	25.61	0.032
4/							
5/							
6/							

**Sample Appearance:** \_\_\_\_\_  
**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** Surface Water 1. Label bottles 'SW1' – Previously known as 'DIS-SED1'  
**TIME:** \_\_\_\_\_ **TO** \_\_\_\_\_  
**BORE DEPTH:** \_\_\_\_\_ **HEIGHT ABOVE GROUND LEVEL:** \_\_\_\_\_  
**DEPTH TO AQUIFER:** \_\_\_\_\_ **VOLUME PURGED:** \_\_\_\_\_  
**RESULTS OF WATER QUALITY CHECK:** \_\_\_\_\_

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_  
**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** BSW1 (Western side of Racecourse Road, north of rail access drive). Label bottles 'BSW1' – Previously known as 'SW1'  
**TIME:** \_\_\_\_\_ **TO** \_\_\_\_\_  
**BORE DEPTH:** \_\_\_\_\_ **HEIGHT ABOVE GROUND LEVEL:** \_\_\_\_\_  
**DEPTH TO AQUIFER:** \_\_\_\_\_ **VOLUME PURGED:** \_\_\_\_\_  
**RESULTS OF WATER QUALITY CHECK:** \_\_\_\_\_

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_  
**Duplicate Identification and Other Remarks:** \_\_\_\_\_

*02/6/24*

## ENGINEERING FIELD SHEET WATER SAMPLING RECORD

**CLIENT:** Concrush Pty Ltd  
**PROJECT:** Water Quality Monitoring  
**LOCATION:** 21 Racecourse Road, Teralba  
**PERSONNEL:** Damien

**DATE:** 9/3/24  
**PROJECT No:** 13589a  
**CLIENT REF:** \_\_\_\_\_

**WATER METER USED:** Horiba - *No instrument in use*  
**DATE & TYPE OF LAST CALIBRATION (1PT OR FULL):** Full - refer to Environment Drive for Calibration Certified  
**METHOD OF SAMPLING:** Foot valve for Groundwater, direct for Ponds, Wetland, Basins and Surface Water  
**PRESERVATION & STORAGE (TICK):** Chilled (<4°C)

Get Key for side gate from weighbridge to get to SW2

**TESTS REQUIRED:** Groundwater: Nutrients each month, TRH, PAH and BTEX every 3 months.  
 Leachate Pond and Wetland: , EC, TSS and Nutrients every month.  
 Sediment Basins: pH, EC, TSS, metals (dissolved) and TRH every month.  
 Spillways: , EC, TSS, metals (dissolved) and TRH when discharging.  
 Background Surface water: pH, EC, TSS, metals (dissolved) and TRH every month.


**OTHER DETAILS:** Refer to Duplicate Register - name duplicate QAMonthYear.

**BORE OR LOCATION ID:** BH3 (Eastern end - adjacent Racecourse Road) Label bottles 'GW3'  
**TIME:** \_\_\_\_\_ **TO** \_\_\_\_\_  
**BORE DEPTH:** \_\_\_\_\_ **HEIGHT ABOVE GROUND LEVEL:** \_\_\_\_\_  
**DEPTH TO AQUIFER:** \_\_\_\_\_ **VOLUME PURGED:** \_\_\_\_\_  
**RESULTS OF WATER QUALITY CHECK:** \_\_\_\_\_

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_  
**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** Leachate Pond (Eastern end - adjacent Racecourse Road). Sample at outlet to Wetland Pond. Label bottles 'LP'  
**TIME:** \_\_\_\_\_ **TO** \_\_\_\_\_  
*If discharge not running, remove the cord from time and put directly into power.  
 At the completion of sampling, return the time to the system.*  
**RESULTS OF WATER QUALITY CHECK:** \_\_\_\_\_



Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_  
**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** Wetland (Eastern end – adjacent Racecourse Road). Label bottles 'WL'

**TIME:** \_\_\_\_\_ **TO** \_\_\_\_\_

**RESULTS OF WATER QUALITY CHECK:** \_\_\_\_\_

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** Sediment Dam 2 (Southwest corner – adjacent railway). Label bottles 'Sed2'

**TIME:** 1.20 **TO** 1.40

**RESULTS OF WATER QUALITY CHECK:** Water clear slight brown to grey

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** Surface Water 2. Label bottles 'SW2' – Previously known as 'SID-SED2'

**TIME:** 1.20 **TO** 1.40pm **WATCH for SNAKES**

**RESULTS OF WATER QUALITY CHECK:** Water clear slight brown to grey

May have to get sample from outside fence

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** Surface Water 1. Label bottles 'SW1' – Previously known as 'DIS-SED1'

**TIME:** \_\_\_\_\_ **TO** \_\_\_\_\_

**BORE DEPTH:** \_\_\_\_\_ **HEIGHT ABOVE GROUND LEVEL:** \_\_\_\_\_

**DEPTH TO AQUIFER:** \_\_\_\_\_ **VOLUME PURGED:** \_\_\_\_\_

**RESULTS OF WATER QUALITY CHECK:** \_\_\_\_\_

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** BSW1 (Western side of Racecourse Road, north of rail access drive). Label bottles 'BSW1' – Previously known as 'SW1'

**TIME:** \_\_\_\_\_ **TO** \_\_\_\_\_

**BORE DEPTH:** \_\_\_\_\_ **HEIGHT ABOVE GROUND LEVEL:** \_\_\_\_\_

**DEPTH TO AQUIFER:** \_\_\_\_\_ **VOLUME PURGED:** \_\_\_\_\_

**RESULTS OF WATER QUALITY CHECK:** \_\_\_\_\_

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** BSW2 (Western end, south of site boundary, down ladder). Label bottles 'BSW2' –  
Previously known as 'SW2'

**TIME:** 1.40 TO 2.05

**WATCH for SNAKES**  
Be careful – poor footing

**RESULTS OF WATER QUALITY CHECK:** *clear water slight grey tinge*

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** *Sed 2 1.6m overtop*

**Duplicate Identification and Other Remarks:**

**BORE OR LOCATION ID:** BH1 (Western end – adjacent Railway) Label bottles 'GW1'

**TIME:** \_\_\_\_\_ TO \_\_\_\_\_

**BORE DEPTH:** \_\_\_\_\_ **HEIGHT ABOVE GROUND LEVEL:** \_\_\_\_\_

**DEPTH TO AQUIFER:** \_\_\_\_\_ **VOLUME PURGED:** \_\_\_\_\_

**RESULTS OF WATER QUALITY CHECK:** \_\_\_\_\_

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** Sediment Dam 1 (North west corner – adjacent railway). Label bottles 'Sed1'

**TIME:** \_\_\_\_\_ TO \_\_\_\_\_

**RESULTS OF WATER QUALITY CHECK:** *NO DISCHARGE*

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** \_\_\_\_\_

## ENGINEERING FIELD SHEET WATER SAMPLING RECORD

**CLIENT:** Concrush Pty Ltd  
**PROJECT:** Water Quality Monitoring  
**LOCATION:** 21 Racecourse Road, Teralba  
**PERSONNEL:** Damien

**DATE:** 26/3/26  
**PROJECT No:** 13589a  
**CLIENT REF:** \_\_\_\_\_

**WATER METER USED:** Horiba

**DATE & TYPE OF LAST CALIBRATION (1PT OR FULL):** Full – refer to Environment Drive for Calibration Certified

**METHOD OF SAMPLING:** Foot valve for Groundwater, direct for Ponds, Wetland, Basins and Surface Water

**PRESERVATION & STORAGE (TICK):** Chilled (<4°C)

**TESTS REQUIRED:** Groundwater: Nutrients each month, TRH, PAH and BTEX every 3 months.  
 Leachate Pond and Wetland: , EC, TSS and Nutrients every month.  
 Sediment Basins: pH, EC, TSS, metals (dissolved) and TRH every month.  
 Spillways: , EC, TSS, metals (dissolved) and TRH when discharging.  
 Background Surface water: pH, EC, TSS, metals (dissolved) and TRH every month.

Get Key for side gate from weighbridge to get to SW2

**OTHER DETAILS:** Refer to Duplicate Register – name duplicate QAMonthYear.

**BORE OR LOCATION ID:** BH3 (Eastern end – adjacent Racecourse Road) Label bottles 'GW3'

**TIME:** 12:30 TO 1 PM

**BORE DEPTH:** 5.09 **HEIGHT ABOVE GROUND LEVEL:** 0.55

**DEPTH TO AQUIFER:** 3.582

**VOLUME PURGED:** 3L

**RESULTS OF WATER QUALITY CHECK:**

1L  
1L  
1L

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/ <u>12:38</u>	<u>6.59</u>	<u>1.57</u>	<u>860</u>	<u>2.83</u>	<u>28.59</u>	<u>0.099</u>
2/ <u>12:40</u>	<u>6.63</u>	<u>1.56</u>	<u>492</u>	<u>4.31</u>	<u>28.81</u>	<u>0.099</u>
3/ <u>12:42</u>	<u>6.45</u>	<u>1.99</u>	<u>0</u>	<u>2.92</u>	<u>28.80</u>	<u>0.098</u>
4/						
5/						
6/						

**Sample Appearance:** Brown hazy water no odour turbid

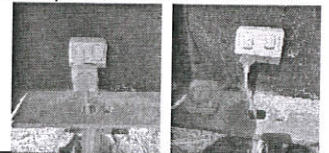
**Duplicate Identification and Other Remarks:**

**BORE OR LOCATION ID:** Leachate Pond (Eastern end – adjacent Racecourse Road). Sample at outlet to Wetland Pond. Label bottles 'LP'

**TIME:** 12:10 TO 12:25 PM

*If discharge not running, remove the cord from time and put directly into power.  
At the completion of sampling, return the time to the system.*

**RESULTS OF WATER QUALITY CHECK:**



Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/ <u>12:15</u>	<u>8.46</u>	<u>2.06</u>	<u>12.6</u>	<u>4.79</u>	<u>25.12</u>	<u>0.109</u>
2/ <u>12:17</u>	<u>8.48</u>	<u>2.09</u>	<u>12.5</u>	<u>4.50</u>	<u>25.45</u>	<u>0.106</u>
3/ <u>12:19</u>	<u>8.49</u>	<u>2.03</u>	<u>10.2</u>	<u>4.06</u>	<u>25.77</u>	<u>0.103</u>
4/						
5/						
6/						

**Sample Appearance:** yellow brown hazy water no odour

**Duplicate Identification and Other Remarks:** QA 0326

**BORE OR LOCATION ID:** Wetland (Eastern end – adjacent Racecourse Road). Label bottles 'WL'

**TIME:** 11:45 AM TO 12:05 PM

**RESULTS OF WATER QUALITY CHECK:**

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/	11:53 7.54	2.24	10.1	2.52	23.70	0.115
2/	11:55 7.51	2.35	6.6	1.73	22.5	0.120
3/	11:57 7.51	2.37	1.5	1.60	22.09	0.122
4/						
5/						
6/						

**Sample Appearance:** Brown tinged water no odour some sediment in Colours

**Duplicate Identification and Other Remarks:**

**BORE OR LOCATION ID:** Sediment Dam 2 (Southwest corner – adjacent railway). Label bottles 'Sed2'

**TIME:** 9:40 AM TO 10 AM

**RESULTS OF WATER QUALITY CHECK:** water clear slight brown tinge

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/	9.42 9.25	0.579	47.9	3.02	25.81	0.028
2/	9.44 9.29	0.578	42.5	2.91	25.49	0.028
3/	9.46 9.28	0.581	43.1	3.02	25.37	0.028
4/						
5/						
6/						

**Sample Appearance:** water clear slight brown tinge

**Duplicate Identification and Other Remarks:**

**BORE OR LOCATION ID:** Surface Water 2. Label bottles 'SW2' – Previously known as 'SID-SED2'

**TIME:** \_\_\_\_\_ TO \_\_\_\_\_

**WATCH for SNAKES**

May have to get sample from outside fence

**RESULTS OF WATER QUALITY CHECK:** Dry

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_

**Duplicate Identification and Other Remarks:** \_\_\_\_\_

2613/26

**BORE OR LOCATION ID:** BSW2 (Western end, south of site boundary, down ladder). Label bottles 'BSW2' –  
Previously known as 'SW2'

**TIME:** 11:00m TO 11:20:00m

**WATCH for SNAKES**  
Be careful – poor footing

**RESULTS OF WATER QUALITY CHECK:** water clear slight brown tinge no odor

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/	11:05am 7.84	0.765	78.7	3.05	24.54	0.037
2/	11:07 7.84	0.768	39.9	2.98	23.96	0.037
3/	11:09 7.84	0.772	26.1	2.69	23.65	0.038
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_  
**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** BH1 (Western end – adjacent Railway) Label bottles 'GW1'

**TIME:** 10:10 TO 10:50am

**BORE DEPTH:** 4.77 **HEIGHT ABOVE GROUND LEVEL:** 0

**DEPTH TO AQUIFER:** 2.136 **VOLUME PURGED:** 3L

**RESULTS OF WATER QUALITY CHECK:** Turbid grey water no smell

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/	10:32 8.36	1.56	0.0	2.24	25.80	0.078
2/	10:34 7.52	0.887	0.0	7.78	25.30	0.043
3/	10:36 7.57	0.890	0.0	2.63	25.21	0.041
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_  
**Duplicate Identification and Other Remarks:** \_\_\_\_\_

IL  
IL  
IL

**BORE OR LOCATION ID:** Sediment Dam 1 (North west corner – adjacent railway). Label bottles 'Sed1'

**TIME:** 8:50 TO 9:25am

**RESULTS OF WATER QUALITY CHECK:** water clear minor brown tinge

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/	9:08 9.53	0.492	39.4	6.13	24.26	0.023
2/	9:10 9.63	0.455	42.2	5.57	24.79	0.022
3/	9:12 9.66	0.457	39.8	4.90	24.89	0.022
4/						
5/						
6/						

**Sample Appearance:** water level 1m  
**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** Surface Water 1. Label bottles 'SW1' – Previously known as 'DIS-SED1'  
**TIME:** \_\_\_\_\_ **TO** \_\_\_\_\_  
**BORE DEPTH:** \_\_\_\_\_ **HEIGHT ABOVE GROUND LEVEL:** \_\_\_\_\_  
**DEPTH TO AQUIFER:** \_\_\_\_\_ **VOLUME PURGED:** \_\_\_\_\_  
**RESULTS OF WATER QUALITY CHECK:** dry

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)
1/						
2/						
3/						
4/						
5/						
6/						

**Sample Appearance:** \_\_\_\_\_  
**Duplicate Identification and Other Remarks:** \_\_\_\_\_

**BORE OR LOCATION ID:** BSW1 (Western side of Racecourse Road, north of rail access drive). Label bottles 'BSW1' – Previously known as 'SW1'  
**TIME:** 1:15 **TO** 1:45 PM  
**BORE DEPTH:** \_\_\_\_\_ **HEIGHT ABOVE GROUND LEVEL:** \_\_\_\_\_  
**DEPTH TO AQUIFER:** \_\_\_\_\_ **VOLUME PURGED:** \_\_\_\_\_  
**RESULTS OF WATER QUALITY CHECK:** \_\_\_\_\_

Check No.	pH	Conductivity (mS/cm)	Turbidity	Dissolved O <sub>2</sub> (mg/L)	Temperature (°C)	Salinity (%)	
1/	<u>1.29</u>	<u>5.12</u>	<u>0.997</u>	<u>68.8</u>	<u>4.78</u>	<u>27.06</u>	<u>0.049</u>
2/	<u>1.26</u>	<u>5.19</u>	<u>0.942</u>	<u>4.2</u>	<u>7.42</u>	<u>26.28</u>	<u>0.046</u>
3/	<u>1.28</u>	<u>5.16</u>	<u>0.951</u>	<u>13.2</u>	<u>4.07</u>	<u>26.8</u>	<u>0.047</u>
4/							
5/							
6/							

**Sample Appearance:** water clear yellow tinge  
**Duplicate Identification and Other Remarks:** \_\_\_\_\_

# Appendix B

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Laboratory Report Sheets



## **CERTIFICATE OF ANALYSIS 400540**

### **Client Details**

<b>Client</b>	RCA Australia
<b>Attention</b>	RCA Administrator
<b>Address</b>	PO Box 175, Carrington, NSW, 2294

### **Sample Details**

<b>Your Reference</b>	<b>13589a</b>
<b>Number of Samples</b>	9 Water
<b>Date samples received</b>	27/01/2026
<b>Date completed instructions received</b>	28/01/2026

### **Analysis Details**

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client unless as indicated below in the method summaries. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

**Please refer to the last page of this report for any comments relating to the results.**

### **Report Details**

<b>Date results requested by</b>	04/02/2026
<b>Date of Issue</b>	04/02/2026

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#### **Results Approved By**

Giovanni Agosti, Group Technical Manager  
Jenny He, Inorganic Team Leader  
Laura Schofield, Lab Manager  
Steven Luong, Senior Chemist  
Tabitha Roberts, Senior Chemist  
Timothy Toll, Senior Chemist

#### **Authorised By**

Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Water					
Our Reference		400540-5	400540-6	400540-7	400540-8
Your Reference	UNITS	Sed-2	BSW2	Sed-1	BSW1
Date Sampled		27/01/2026	27/01/2026	27/01/2026	27/01/2026
Type of sample		Water	Water	Water	Water
Date extracted	-	29/01/2026	29/01/2026	29/01/2026	29/01/2026
Date analysed	-	30/01/2026	30/01/2026	30/01/2026	30/01/2026
TRH C <sub>6</sub> - C <sub>9</sub>	µg/L	<10	<10	<10	<10
TRH C <sub>6</sub> - C <sub>10</sub>	µg/L	<10	<10	<10	<10
TRH C <sub>6</sub> - C <sub>10</sub> less BTEX (F1)	µg/L	<10	<10	<10	<10
Benzene	µg/L	<1	<1	<1	<1
Toluene	µg/L	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1
m+p-xylene	µg/L	<2	<2	<2	<2
o-xylene	µg/L	<1	<1	<1	<1
Naphthalene	µg/L	<1	<1	<1	<1
Surrogate Dibromofluoromethane	%	106	101	103	105
Surrogate Toluene-d8	%	103	100	100	103
Surrogate 4-Bromofluorobenzene	%	105	106	104	105

svTRH (C10-C40) in Water					
Our Reference		400540-5	400540-6	400540-7	400540-8
Your Reference	UNITS	Sed-2	BSW2	Sed-1	BSW1
Date Sampled		27/01/2026	27/01/2026	27/01/2026	27/01/2026
Type of sample		Water	Water	Water	Water
Date extracted	-	29/01/2026	29/01/2026	29/01/2026	29/01/2026
Date analysed	-	30/01/2026	30/01/2026	30/01/2026	30/01/2026
TRH C <sub>10</sub> - C <sub>14</sub>	µg/L	<50	<50	<50	<50
TRH C <sub>15</sub> - C <sub>28</sub>	µg/L	<100	<100	<100	<100
TRH C <sub>29</sub> - C <sub>36</sub>	µg/L	<100	<100	<100	<100
Total +ve TRH (C10-C36)	µg/L	<50	<50	<50	<50
TRH >C <sub>10</sub> - C <sub>16</sub>	µg/L	<50	<50	<50	<50
TRH >C <sub>16</sub> - C <sub>34</sub>	µg/L	<100	<100	<100	<100
TRH >C <sub>34</sub> - C <sub>40</sub>	µg/L	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	µg/L	<50	<50	<50	<50
Surrogate o-Terphenyl	%	92	87	81	77

HM in water - dissolved					
Our Reference		400540-5	400540-6	400540-7	400540-8
Your Reference	UNITS	Sed-2	BSW2	Sed-1	BSW1
Date Sampled		27/01/2026	27/01/2026	27/01/2026	27/01/2026
Type of sample		Water	Water	Water	Water
Date prepared	-	30/01/2026	30/01/2026	30/01/2026	30/01/2026
Date analysed	-	30/01/2026	30/01/2026	30/01/2026	30/01/2026
Aluminium-Dissolved	µg/L	310	20	290	<10
Arsenic-Dissolved	µg/L	10	7	4	4
Boron-Dissolved	µg/L	80	100	70	100
Cadmium-Dissolved	µg/L	<0.1	<0.1	<0.1	<0.1
Chromium-Dissolved	µg/L	15	<1	17	<1
Cobalt-Dissolved	µg/L	1	<1	<1	<1
Copper-Dissolved	µg/L	10	3	8	4
Lead-Dissolved	µg/L	<1	<1	<1	<1
Nickel-Dissolved	µg/L	2	2	1	2
Selenium-Dissolved	µg/L	<1	<1	<1	<1
Zinc-Dissolved	µg/L	7	19	6	40

Metals in Waters - Acid extractable						
Our Reference		400540-1	400540-2	400540-3	400540-4	400540-5
Your Reference	UNITS	GW1	GW3	LP	WL	Sed-2
Date Sampled		27/01/2026	27/01/2026	27/01/2026	27/01/2026	27/01/2026
Type of sample		Water	Water	Water	Water	Water
Date prepared	-	29/01/2026	29/01/2026	29/01/2026	29/01/2026	29/01/2026
Date analysed	-	29/01/2026	29/01/2026	29/01/2026	29/01/2026	29/01/2026
Phosphorus - Total	mg/L	0.4	0.09	24	4.7	0.1

Metals in Waters - Acid extractable					
Our Reference		400540-6	400540-7	400540-8	400540-9
Your Reference	UNITS	BSW2	Sed-1	BSW1	QA012026
Date Sampled		27/01/2026	27/01/2026	27/01/2026	27/01/2026
Type of sample		Water	Water	Water	Water
Date prepared	-	29/01/2026	29/01/2026	29/01/2026	29/01/2026
Date analysed	-	29/01/2026	29/01/2026	29/01/2026	29/01/2026
Phosphorus - Total	mg/L	0.1	<0.05	0.3	0.08

Miscellaneous Inorganics						
Our Reference		400540-1	400540-2	400540-3	400540-4	400540-5
Your Reference	UNITS	GW1	GW3	LP	WL	Sed-2
Date Sampled		27/01/2026	27/01/2026	27/01/2026	27/01/2026	27/01/2026
Type of sample		Water	Water	Water	Water	Water
Date prepared	-	28/01/2026	28/01/2026	28/01/2026	28/01/2026	28/01/2026
Date analysed	-	28/01/2026	28/01/2026	28/01/2026	28/01/2026	28/01/2026
Ammonia as N in water	mg/L	1.7	2.1	15	0.094	0.01
Nitrite as N in water	mg/L	0.006	<0.01	<0.01	<0.01	0.058
Nitrate as N in water	mg/L	0.073	0.01	<0.050	<0.02	<0.005
NOx as N in water	mg/L	0.078	0.01	<0.050	<0.02	0.062
TKN in water	mg/L	[NA]	[NA]	62	7.5	1.7
Total Nitrogen in water	mg/L	[NA]	[NA]	62	7.5	1.7
Hexavalent Chromium, Cr <sup>6+</sup> (dissolved)	mg/L	[NA]	[NA]	[NA]	[NA]	0.01

Miscellaneous Inorganics					
Our Reference		400540-6	400540-7	400540-8	400540-9
Your Reference	UNITS	BSW2	Sed-1	BSW1	QA012026
Date Sampled		27/01/2026	27/01/2026	27/01/2026	27/01/2026
Type of sample		Water	Water	Water	Water
Date prepared	-	28/01/2026	28/01/2026	28/01/2026	28/01/2026
Date analysed	-	28/01/2026	28/01/2026	28/01/2026	28/01/2026
Ammonia as N in water	mg/L	0.03	0.05	0.02	2.1
Nitrite as N in water	mg/L	<0.005	0.16	<0.005	<0.005
Nitrate as N in water	mg/L	<0.005	0.55	<0.005	<0.005
NOx as N in water	mg/L	<0.005	0.71	<0.005	<0.005
TKN in water	mg/L	1.1	0.4	1.4	4.2
Total Nitrogen in water	mg/L	1.1	1.1	1.4	4.2
Hexavalent Chromium, Cr <sup>6+</sup> (dissolved)	mg/L	<0.005	0.01	<0.005	[NA]

Miscellaneous Inorganics						
Our Reference		400540-3	400540-4	400540-5	400540-6	400540-7
Your Reference	UNITS	LP	WL	Sed-2	BSW2	Sed-1
Date Sampled		27/01/2026	27/01/2026	27/01/2026	27/01/2026	27/01/2026
Type of sample		Water	Water	Water	Water	Water
Date prepared	-	27/01/2026	27/01/2026	27/01/2026	27/01/2026	27/01/2026
Date analysed	-	27/01/2026	27/01/2026	27/01/2026	27/01/2026	27/01/2026
Total Suspended Solids	mg/L	50	20	12	14	8
pH	pH Units	6.4	7.0	9.8	7.1	9.3
Electrical Conductivity	µS/cm	4,200	2,400	540	740	440

Miscellaneous Inorganics			
Our Reference		400540-8	400540-9
Your Reference	UNITS	BSW1	QA012026
Date Sampled		27/01/2026	27/01/2026
Type of sample		Water	Water
Date prepared	-	27/01/2026	27/01/2026
Date analysed	-	27/01/2026	27/01/2026
Total Suspended Solids	mg/L	69	340
pH	pH Units	7.9	6.1
Electrical Conductivity	µS/cm	870	1,500

Method ID	Methodology Summary
<b>Ext-073_F</b>	Analysis of pH in Water by AS 4500 H+ B and in-house method ENV-LAB006, Analysed by Envirolab Newcastle - NATA Site No. 18077
<b>Ext-073_G</b>	Analysis of Conductivity in Water by AS 2510 B and in-house method ENV-LAB010, Analysed by Envirolab Newcastle - NATA Site No. 18077
<b>Ext-073_J</b>	Analysis of Total Suspended Solids in Water by AS 2540 D and in-house method ENV-LAB009, Analysed by Envirolab Newcastle - NATA Site No. 18077
<b>Inorg-055</b>	Nitrate - determined colourimetrically. Waters samples are filtered on receipt prior to analysis. Soils are analysed following a water extraction.
<b>Inorg-055</b>	Nitrite - determined colourimetrically based on APHA latest edition NO2- B. Waters samples are filtered on receipt prior to analysis. Soils are analysed following a water extraction.
<b>Inorg-055/062/127</b>	Total Nitrogen - Calculation sum of TKN and oxidised Nitrogen. Alternatively analysed by combustion and chemiluminescence.
<b>Inorg-057</b>	Ammonia - determined colourimetrically, based on APHA latest edition 4500-NH3 F. Waters samples are filtered on receipt prior to analysis. Soils are analysed following a KCl extraction.
<b>Inorg-062</b>	TKN - determined colourimetrically based on APHA latest edition 4500 Norg. Alternatively, TKN can be derived from calculation (Total N - NOx).
<b>Inorg-118</b>	<p>Hexavalent Chromium (Cr6+) - determined firstly by separation using ion chromatography followed by the colourimetric analytical finish.</p> <p>Water samples are ideally field filtered into alkali preserved containers prior to receipt for dissolved Cr6+ analysis. Unfiltered water samples into alkali preserved containers (or pH adjusted to pH 8-9 on receipt) can be classified as Total (unfiltered) Cr6+.</p> <p>Please note, for 'Total/Unfiltered' Trivalent Chromium in waters [calculated], these results may be exaggerated due to the digestive limitation of 'Total/Unfiltered' Hexavalent Chromium in NaOH at pH 8-9 compared to more comprehensive digestion for Total Chromium using the mineral acids HNO3 and HCl.</p> <p>Solid (includes soils, filters, paints, swabs for example) samples are extracted in a buffered catalysed solution prior to the analytical finish above. Water extractable options are available (e.g. as an option for filters) on request.</p> <p>Impingers may need pH adjusting to pH 8-9 prior to IC-colourimetric analytical finish.</p>

Method ID	Methodology Summary
<b>Metals-020</b>	<p>Determination of various metals/elements by ICP-AES.</p> <p>Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.</p> <p>Where molecular anion forms are calculated from an element (e.g. SO<sub>4</sub> from S or PO<sub>4</sub> from P stoichiometrically), the assumption is that the element is only present in that molecular anion form.</p> <p>Submission of low masses of sample e.g. for dust samples, may result in raised PQLs.</p>
<b>Metals-022</b>	<p>Determination of various metals by ICP-MS.</p> <p>Please note for Bromine and Iodine, any forms of these elements that are present are included together in the one result reported for each of these two elements.</p> <p>Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.</p>
<b>Org-020</b>	<p>Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (&gt;C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.</p>
<b>Org-023</b>	<p>Water samples are analysed directly by purge and trap GC-MS.</p>
<b>Org-023</b>	<p>Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.</p>
<b>Org-023</b>	<p>Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.</p> <p>Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.</p>

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Water					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date extracted	-			29/01/2026	[NT]	[NT]	[NT]	[NT]	29/01/2026	[NT]
Date analysed	-			30/01/2026	[NT]	[NT]	[NT]	[NT]	30/01/2026	[NT]
TRH C <sub>6</sub> - C <sub>9</sub>	µg/L	10	Org-023	<10	[NT]	[NT]	[NT]	[NT]	85	[NT]
TRH C <sub>6</sub> - C <sub>10</sub>	µg/L	10	Org-023	<10	[NT]	[NT]	[NT]	[NT]	85	[NT]
Benzene	µg/L	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	77	[NT]
Toluene	µg/L	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	83	[NT]
Ethylbenzene	µg/L	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	86	[NT]
m+p-xylene	µg/L	2	Org-023	<2	[NT]	[NT]	[NT]	[NT]	89	[NT]
o-xylene	µg/L	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	88	[NT]
Naphthalene	µg/L	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate Dibromofluoromethane	%		Org-023	102	[NT]	[NT]	[NT]	[NT]	102	[NT]
Surrogate Toluene-d8	%		Org-023	103	[NT]	[NT]	[NT]	[NT]	100	[NT]
Surrogate 4-Bromofluorobenzene	%		Org-023	104	[NT]	[NT]	[NT]	[NT]	105	[NT]

Client Reference: 13589a

QUALITY CONTROL: svTRH (C10-C40) in Water					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date extracted	-			29/01/2026	[NT]	[NT]	[NT]	[NT]	29/01/2026	[NT]
Date analysed	-			29/01/2026	[NT]	[NT]	[NT]	[NT]	29/01/2026	[NT]
TRH C <sub>10</sub> - C <sub>14</sub>	µg/L	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	99	[NT]
TRH C <sub>15</sub> - C <sub>28</sub>	µg/L	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	111	[NT]
TRH C <sub>29</sub> - C <sub>36</sub>	µg/L	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	114	[NT]
TRH >C <sub>10</sub> - C <sub>16</sub>	µg/L	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	99	[NT]
TRH >C <sub>16</sub> - C <sub>34</sub>	µg/L	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
TRH >C <sub>34</sub> - C <sub>40</sub>	µg/L	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	111	[NT]
Surrogate o-Terphenyl	%		Org-020	88	[NT]	[NT]	[NT]	[NT]	88	[NT]

Client Reference: 13589a

QUALITY CONTROL: HM in water - dissolved				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W3	[NT]
Date prepared	-			30/01/2026	[NT]	[NT]	[NT]	[NT]	30/01/2026	[NT]
Date analysed	-			30/01/2026	[NT]	[NT]	[NT]	[NT]	30/01/2026	[NT]
Aluminium-Dissolved	µg/L	10	Metals-022	<10	[NT]	[NT]	[NT]	[NT]	105	[NT]
Arsenic-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	97	[NT]
Boron-Dissolved	µg/L	20	Metals-022	<20	[NT]	[NT]	[NT]	[NT]	81	[NT]
Cadmium-Dissolved	µg/L	0.1	Metals-022	<0.1	[NT]	[NT]	[NT]	[NT]	99	[NT]
Chromium-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	103	[NT]
Cobalt-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	113	[NT]
Copper-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	97	[NT]
Lead-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	97	[NT]
Nickel-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	101	[NT]
Selenium-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Zinc-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	104	[NT]

Client Reference: 13589a

QUALITY CONTROL: Metals in Waters - Acid extractable						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	400540-2
Date prepared	-			29/01/2026	1	29/01/2026	29/01/2026		29/01/2026	29/01/2026
Date analysed	-			29/01/2026	1	29/01/2026	29/01/2026		29/01/2026	29/01/2026
Phosphorus - Total	mg/L	0.05	Metals-020	<0.05	1	0.4	0.3	29	90	93

Client Reference: 13589a

QUALITY CONTROL: Miscellaneous Inorganics				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	400540-2
Date prepared	-			28/01/2026	1	28/01/2026	28/01/2026		28/01/2026	28/01/2026
Date analysed	-			28/01/2026	1	28/01/2026	28/01/2026		28/01/2026	28/01/2026
Ammonia as N in water	mg/L	0.005	Inorg-057	<0.005	1	1.7	1.7	0	94	#
Nitrite as N in water	mg/L	0.005	Inorg-055	<0.005	1	0.006	0.005	18	93	112
Nitrate as N in water	mg/L	0.005	Inorg-055	<0.005	1	0.073	0.072	1	96	94
NOx as N in water	mg/L	0.005	Inorg-055	<0.005	1	0.078	0.078	0	93	112
TKN in water	mg/L	0.1	Inorg-062	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Total Nitrogen in water	mg/L	0.1	Inorg-055/062/127	<0.1	[NT]	[NT]	[NT]	[NT]	87	[NT]
Hexavalent Chromium, Cr <sup>6+</sup> (dissolved)	mg/L	0.005	Inorg-118	<0.005	[NT]	[NT]	[NT]	[NT]	100	[NT]

Client Reference: 13589a

QUALITY CONTROL: Miscellaneous Inorganics				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date prepared	-			27/01/2026	[NT]	[NT]	[NT]	[NT]	27/01/2026	[NT]
Date analysed	-			27/01/2026	[NT]	[NT]	[NT]	[NT]	27/01/2026	[NT]
Total Suspended Solids	mg/L	5	Ext-073_J	<5	[NT]	[NT]	[NT]	[NT]	81	[NT]
pH	pH Units		Ext-073_F	[NT]	[NT]	[NT]	[NT]	[NT]	100	[NT]
Electrical Conductivity	µS/cm	1	Ext-073_G	[NT]	[NT]	[NT]	[NT]	[NT]	102	[NT]

## Result Definitions

<b>NT</b>	Not tested
<b>NA</b>	Test not required
<b>INS</b>	Insufficient sample for this test
<b>PQL</b>	Practical Quantitation Limit
<b>&lt;</b>	Less than
<b>&gt;</b>	Greater than
<b>RPD</b>	Relative Percent Difference
<b>LCS</b>	Laboratory Control Sample
<b>NS</b>	Not specified
<b>NEPM</b>	National Environmental Protection Measure
<b>NR</b>	Not Reported

## Quality Control Definitions

<b>Blank</b>	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
<b>Duplicate</b>	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
<b>Matrix Spike</b>	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
<b>LCS (Laboratory Control Sample)</b>	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
<b>Surrogate Spike</b>	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

## Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Air volumes are typically provided by customers (often as flow rate(s) and sampling time(s) and/or simply volumes) sampled or exposure times (determines 'volume' passive badges are exposed to)). Hence in such circumstances the volume measurement is inevitably not covered by Envirolab's NATA accreditation. An exception may occur where Envirolab Newcastle does the sampling where accreditation exists for certain types of sampling and hence volume determination(s). Note air volumes are often used to determine concentrations for dust and/or analyses on filters, sorbents and in impingers. For canister sampling, the air volume is covered by Envirolab's NATA accreditation.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates can be downloaded from the [Envirolab Resources website](#) or obtained directly by contacting the laboratory.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

For Dust Deposit Gauge (DDG) analysis the sampling, sampling period and funnel exposure area do not fall under Envirolab's NATA accreditation (unless the Newcastle laboratory where responsible for the sampling), hence the annotation on the DDG units of reporting.


Urine Analysis - The BEI values listed are taken from the 2022 edition of "TLVs and BEIs Threshold Limits" by ACGIH.

## Report Comments

MISC\_INORG: # Percent recovery not reported due to the high concentration of the analyte/s in the sample/s. However, an acceptable recovery was obtained for the LCS.

MISC\_INORG: Nitrite as N in water, Nitrate as N in water, NOx as N in water PQL has been raised due to matrix interferences from analytes (other than those being tested) in the sample/s. Samples were diluted and reanalysed however same results were achieved.

# CHAIN OF CUSTODY - Client


**Envirolab Services**  
 12 Ashley St  
 Chatswood NSW 2067  
 Ph: (02) 9910 6200



Job No: **400540**  
 Date Received: **28/01/26**

## ENVIROLAB GROUP

**Company:** RCA Australia  
**Contact person:** Fiona Brooker  
**Project Mgr:** Fiona Brooker  
**Sampler:** Damien  
**Address:** 92 Hill St Carrington, NSW 2294  
**Phone:** 02 4902 9200 **Mob:** 0410 230 644  
**Email results to:** administrator@rca.com.au + enviro@rca.com.au  
**Email invoice to:**

**RCA Reference Number (i.e. report title):** 13589a  
**PO No. (if applicable):** Not applicable  
**Envirolab Quote No.:** BMB  
**Date results required:** *As*  
**Lab comments:**

**Time Received:** 1000  
**Received By:** *Ch U*  
**Temp:** Cool/Ambient  
**Cooling:** Ice Pack  
**Security:** Intact/Broken/None

**ENVIROLAB GROUP**  
 Sydney Lab - Envirolab Services  
 12 Ashley St, Chatswood, NSW 2067  
 02 9910 6200 sydney@envirolab.com.au

Sample information				# Containers	Tests Required										Sediment within container to be included in analysis if X	Comments  Provide as much information about the sample as you can	
Envirolab Sample ID	Client Sample ID	Date sampled	Type of sample		E00705-NH3, E00815-NO2, E00790-NO3, E00850-NOx, E01090-Total P	E010300 - Nutrient Suite (NH3, NO2, NO3, NOx, TKN (calc), Total N, Total P)	E07290 and E07220 TRH C6-C40	E03010 D - Dissolved (Aluminum, Arsenic, Boron, Cadmium, Chromium, Cobalt, Copper, Lead, Nickel, Selenium, Zinc)	E05360 - Hexavalent Chromium	E01450 - Electrical Conductivity	E01450 - Electrical Conductivity	E01450 - Electrical Conductivity					
400540 -1	GW1	27/01/2026	Water	4	X												
-2	GW3	27/01/2026	Water	4	X												
-3	LP	27/01/2026	Water	4	X												
-4	WL	27/01/2026	Water	4	X	X			X	X							
-5	Sed-2	27/01/2026	Water	9	X	X			X	X							
-6	BSW2	27/01/2026	Water	9	X	X	X		X	X	X						
-7	Sed-1	27/01/2026	Water	9	X	X	X		X	X	X						
-8	BSW1	27/01/2026	Water	9	X	X	X		X	X	X						
-9	QA012026	27/01/2026	Water	4	X	X	X		X	X	X						
<b>Total</b>				56	7	12	7	4	4	4	7	7		2			

<b>Relinquished by (company):</b>	RCA Australia	<b>Received by (company):</b>	Envirolab	<b>Lab use only:</b>			
<b>Print Name:</b>	<i>D Smith</i>	<b>Print Name:</b>	<i>Kylie Harawa</i>	<b>Job Number:</b>	<i>400540</i>	<b>Cooling:</b>	<input checked="" type="radio"/> Ice / Ice Pack / None
<b>Date &amp; Time:</b>	<i>27/1/26</i>	<b>Date &amp; Time:</b>	<i>27/1/26; 1:45 pm</i>	<b>Temperature:</b>	<i>10.5°C</i>	<b>Security Seal:</b>	<input checked="" type="radio"/> Intact / Broken / Not Used
<b>Signature:</b>	<i>D. Smith</i>	<b>Signature:</b>	<i>Kylie Harawa</i>	<b>TAT Req:</b>	SAME DAY / 1 / 2 / 3 / 4 / STD		

## SAMPLE RECEIPT ADVICE

### Client Details

<b>Client</b>	RCA Australia
<b>Attention</b>	RCA Administrator

### Sample Login Details

<b>Your reference</b>	13589a
<b>Envirolab Reference</b>	400540
<b>Date Sample Received</b>	27/01/2026
<b>Date Instructions Received</b>	28/01/2026
<b>Date Results Expected to be Reported</b>	04/02/2026

### Sample Condition

<b>Samples received in appropriate condition for analysis</b>	VOC vials have headspace
<b>No. of Samples Provided</b>	9 Water
<b>Turnaround Time Requested</b>	Standard
<b>Temperature on Receipt (°C)</b>	10.5
<b>Cooling Method</b>	Ice Pack
<b>Sampling Date Provided</b>	YES

### Comments

Samples received at ELS Newcastle 27/01/2026 13:45, ELS Sydney 28/01/2026 10:00

Please contact the laboratory within 24 hours if you wish to cancel the aforementioned testing. Otherwise testing will proceed as per the COC and hence invoiced accordingly.

Please direct any queries to:

#### Aileen Hie

**Phone:** 02 9910 6200  
**Fax:** 02 9910 6201  
**Email:** ahie@envirolab.com.au

#### Jacinta Hurst

**Phone:** 02 9910 6200  
**Fax:** 02 9910 6201  
**Email:** jhurst@envirolab.com.au

*Analysis Underway, details on the following page:*



Sample ID	VTRH(C6-C10)/BTEXN in Water	svTRH (C10-C40) in Water	HM in water - dissolved	Metals in Waters - Acid extractable	Ammonia as N in water	Nitrite as N in water	Nitrate as N in water	NOx as N in water	TKN in water	Total Nitrogen in water	Hexavalent Chromium, Cr6+ (dissolved)	Miscellaneous Inorganics
<b>GW1</b>				✓	✓	✓	✓	✓				
<b>GW3</b>				✓	✓	✓	✓	✓				
<b>LP</b>				✓	✓	✓	✓	✓	✓	✓		✓
<b>WL</b>				✓	✓	✓	✓	✓	✓	✓		✓
<b>Sed-2</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>BSW2</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Sed-1</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>BSW1</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>QA012026</b>				✓	✓	✓	✓	✓	✓	✓		✓

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

### Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.

Requests for longer term sample storage must be received in writing.

Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.

TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

We acknowledge receipt of your samples and Purchase Order (PO) (if provided). If a PO includes your terms & conditions, Envirolab hereby expressly rejects and will not be bound by any external or third-party terms and conditions, including those referenced or attached to a PO.

All services to be performed by Envirolab will be governed exclusively by Envirolab's General Terms and Conditions attached to this acknowledgement ( [Envirolab Terms](#) ) via hyperlink or found on our websites.

If you do not object in writing within two (2) business days of the date of this acknowledgement, you will be deemed to have accepted the Envirolab Terms. In addition, your provision of further instructions, additional samples, payment of any invoice, or acceptance of services or results from Envirolab will constitute acceptance of the Envirolab Terms. For clarity, Envirolab's commencement or continuation of work following receipt of the PO is performed solely under the Envirolab Terms and does not constitute acceptance of any external terms. All rights are expressly reserved.



## CERTIFICATE OF ANALYSIS 402917

### Client Details

Client	RCA Australia
Attention	Enviro RCA
Address	PO Box 175, Carrington, NSW, 2294

### Sample Details

Your Reference	<b>13589a</b>
Number of Samples	7 Water
Date samples received	25/02/2026
Date completed instructions received	26/02/2026

### Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client unless as indicated below in the method summaries. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

**Please refer to the last page of this report for any comments relating to the results.**

### Report Details

Date results requested by	05/03/2026
Date of Issue	05/03/2026

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#### Results Approved By

Dragana Tomas, Senior Chemist  
Jack Wallis, Senior Chemist  
Larry Ye, Senior Chemist  
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Liam Timmins, Organics Supervisor  
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Sally Chen, Metals prep team leader

#### Authorised By

Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Water						
Our Reference		402917-1	402917-2	402917-4	402917-5	402917-6
Your Reference	UNITS	GW1	GW3	Sed-2	BSW2	Sed-1
Date Sampled		25/02/2026	25/02/2026	25/02/2026	25/02/2026	25/02/2026
Type of sample		Water	Water	Water	Water	Water
Date extracted	-	27/02/2026	27/02/2026	27/02/2026	02/03/2026	02/03/2026
Date analysed	-	02/03/2026	02/03/2026	02/03/2026	03/03/2026	03/03/2026
TRH C <sub>6</sub> - C <sub>9</sub>	µg/L	<10	<10	10	<10	<10
TRH C <sub>6</sub> - C <sub>10</sub>	µg/L	<10	<10	11	<10	<10
TRH C <sub>6</sub> - C <sub>10</sub> less BTEX (F1)	µg/L	<10	<10	11	<10	<10
Benzene	µg/L	<1	<1	<1	<1	<1
Toluene	µg/L	<1	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1	<1
m+p-xylene	µg/L	<2	<2	<2	<2	<2
o-xylene	µg/L	<1	<1	<1	<1	<1
Naphthalene	µg/L	<1	<1	<1	<1	<1
Surrogate Dibromofluoromethane	%	105	102	104	100	101
Surrogate Toluene-d8	%	104	101	104	98	99
Surrogate 4-Bromofluorobenzene	%	104	102	103	100	100

vTRH(C6-C10)/BTEXN in Water		
Our Reference		402917-7
Your Reference	UNITS	QA0226
Date Sampled		25/02/2026
Type of sample		Water
Date extracted	-	27/02/2026
Date analysed	-	02/03/2026
TRH C <sub>6</sub> - C <sub>9</sub>	µg/L	<10
TRH C <sub>6</sub> - C <sub>10</sub>	µg/L	12
TRH C <sub>6</sub> - C <sub>10</sub> less BTEX (F1)	µg/L	12
Benzene	µg/L	<1
Toluene	µg/L	<1
Ethylbenzene	µg/L	<1
m+p-xylene	µg/L	<2
o-xylene	µg/L	<1
Naphthalene	µg/L	<1
Surrogate Dibromofluoromethane	%	103
Surrogate Toluene-d8	%	104
Surrogate 4-Bromofluorobenzene	%	103

svTRH (C10-C40) in Water						
Our Reference		402917-1	402917-2	402917-4	402917-5	402917-6
Your Reference	UNITS	GW1	GW3	Sed-2	BSW2	Sed-1
Date Sampled		25/02/2026	25/02/2026	25/02/2026	25/02/2026	25/02/2026
Type of sample		Water	Water	Water	Water	Water
Date extracted	-	27/02/2026	27/02/2026	27/02/2026	27/02/2026	27/02/2026
Date analysed	-	28/02/2026	28/02/2026	28/02/2026	28/02/2026	28/02/2026
TRH C <sub>10</sub> - C <sub>14</sub>	µg/L	<50	<50	<50	<50	<50
TRH C <sub>15</sub> - C <sub>28</sub>	µg/L	100	180	<100	260	<100
TRH C <sub>29</sub> - C <sub>36</sub>	µg/L	<100	<100	<100	<100	<100
Total +ve TRH (C10-C36)	µg/L	100	180	<50	260	<50
TRH >C <sub>10</sub> - C <sub>16</sub>	µg/L	<50	<50	<50	<50	<50
TRH >C <sub>16</sub> - C <sub>34</sub>	µg/L	120	220	120	310	120
TRH >C <sub>34</sub> - C <sub>40</sub>	µg/L	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	µg/L	120	220	120	310	120
Surrogate o-Terphenyl	%	79	82	90	97	94

svTRH (C10-C40) in Water		
Our Reference		402917-7
Your Reference	UNITS	QA0226
Date Sampled		25/02/2026
Type of sample		Water
Date extracted	-	27/02/2026
Date analysed	-	28/02/2026
TRH C <sub>10</sub> - C <sub>14</sub>	µg/L	<50
TRH C <sub>15</sub> - C <sub>28</sub>	µg/L	<100
TRH C <sub>29</sub> - C <sub>36</sub>	µg/L	<100
Total +ve TRH (C10-C36)	µg/L	<50
TRH >C <sub>10</sub> - C <sub>16</sub>	µg/L	<50
TRH >C <sub>16</sub> - C <sub>34</sub>	µg/L	130
TRH >C <sub>34</sub> - C <sub>40</sub>	µg/L	<100
Total +ve TRH (>C10-C40)	µg/L	130
Surrogate o-Terphenyl	%	102

PAHs in Water			
Our Reference		402917-1	402917-2
Your Reference	UNITS	GW1	GW3
Date Sampled		25/02/2026	25/02/2026
Type of sample		Water	Water
Date extracted	-	27/02/2026	27/02/2026
Date analysed	-	02/03/2026	02/03/2026
Naphthalene	µg/L	<0.1	<0.1
Acenaphthylene	µg/L	<0.1	<0.1
Acenaphthene	µg/L	<0.1	<0.1
Fluorene	µg/L	<0.1	<0.1
Phenanthrene	µg/L	<0.1	<0.1
Anthracene	µg/L	<0.1	<0.1
Fluoranthene	µg/L	<0.1	<0.1
Pyrene	µg/L	<0.1	<0.1
Benzo(a)anthracene	µg/L	<0.1	<0.1
Chrysene	µg/L	<0.1	<0.1
Benzo(b,j+k)fluoranthene	µg/L	<0.2	<0.2
Benzo(a)pyrene	µg/L	<0.1	<0.1
Indeno(1,2,3-c,d)pyrene	µg/L	<0.1	<0.1
Dibenzo(a,h)anthracene	µg/L	<0.1	<0.1
Benzo(g,h,i)perylene	µg/L	<0.1	<0.1
Total +ve PAH's	µg/L	<0.1	<0.1
Surrogate <i>p</i> -Terphenyl-d14	%	67	70

HM in water - dissolved					
Our Reference		402917-4	402917-5	402917-6	402917-7
Your Reference	UNITS	Sed-2	BSW2	Sed-1	QA0226
Date Sampled		25/02/2026	25/02/2026	25/02/2026	25/02/2026
Type of sample		Water	Water	Water	Water
Date prepared	-	03/03/2026	03/03/2026	03/03/2026	03/03/2026
Date analysed	-	03/03/2026	03/03/2026	03/03/2026	03/03/2026
Aluminium-Dissolved	µg/L	110	20	130	90
Arsenic-Dissolved	µg/L	12	29	7	12
Boron-Dissolved	µg/L	100	200	100	80
Cadmium-Dissolved	µg/L	<0.1	<0.1	<0.1	<0.1
Chromium-Dissolved	µg/L	2	1	1	2
Cobalt-Dissolved	µg/L	<1	<1	<1	<1
Copper-Dissolved	µg/L	5	2	7	5
Lead-Dissolved	µg/L	<1	<1	<1	<1
Nickel-Dissolved	µg/L	3	3	2	2
Selenium-Dissolved	µg/L	<1	<1	<1	<1
Zinc-Dissolved	µg/L	8	11	4	9

Metals in Waters - Acid extractable						
Our Reference		402917-1	402917-2	402917-3	402917-4	402917-5
Your Reference	UNITS	GW1	GW3	WL	Sed-2	BSW2
Date Sampled		25/02/2026	25/02/2026	25/02/2026	25/02/2026	25/02/2026
Type of sample		Water	Water	Water	Water	Water
Date prepared	-	27/02/2026	27/02/2026	27/02/2026	27/02/2026	27/02/2026
Date analysed	-	02/03/2026	02/03/2026	02/03/2026	02/03/2026	02/03/2026
Phosphorus - Total	mg/L	0.96	0.07	8.6	0.3	0.4

Metals in Waters - Acid extractable			
Our Reference		402917-6	402917-7
Your Reference	UNITS	Sed-1	QA0226
Date Sampled		25/02/2026	25/02/2026
Type of sample		Water	Water
Date prepared	-	27/02/2026	27/02/2026
Date analysed	-	02/03/2026	02/03/2026
Phosphorus - Total	mg/L	0.1	0.3

Miscellaneous Inorganics						
Our Reference		402917-1	402917-2	402917-3	402917-4	402917-5
Your Reference	UNITS	GW1	GW3	WL	Sed-2	BSW2
Date Sampled		25/02/2026	25/02/2026	25/02/2026	25/02/2026	25/02/2026
Type of sample		Water	Water	Water	Water	Water
Date prepared	-	27/02/2026	27/02/2026	27/02/2026	27/02/2026	27/02/2026
Date analysed	-	27/02/2026	27/02/2026	27/02/2026	27/02/2026	27/02/2026
Ammonia as N in water	mg/L	1.9	3.2	2.0	0.01	0.006
Nitrite as N in water	mg/L	<0.005	<0.005	<0.01	<0.005	<0.005
Nitrate as N in water	mg/L	0.006	0.01	<0.02	0.01	<0.005
NOx as N in water	mg/L	0.008	<0.005	<0.02	0.01	<0.005
TKN in water	mg/L	[NA]	[NA]	19	2.1	2.3
Total Nitrogen in water	mg/L	[NA]	[NA]	19	2.2	2.3
Hexavalent Chromium, Cr <sup>6+</sup> (dissolved)	mg/L	[NA]	[NA]	[NA]	<0.005	<0.005

Miscellaneous Inorganics			
Our Reference		402917-6	402917-7
Your Reference	UNITS	Sed-1	QA0226
Date Sampled		25/02/2026	25/02/2026
Type of sample		Water	Water
Date prepared	-	27/02/2026	27/02/2026
Date analysed	-	27/02/2026	27/02/2026
Ammonia as N in water	mg/L	<0.005	<0.005
Nitrite as N in water	mg/L	<0.005	<0.005
Nitrate as N in water	mg/L	<0.005	<0.005
NOx as N in water	mg/L	<0.005	<0.005
TKN in water	mg/L	1.3	2.4
Total Nitrogen in water	mg/L	1.3	2.4
Hexavalent Chromium, Cr <sup>6+</sup> (dissolved)	mg/L	<0.005	<0.005

Miscellaneous Inorganics						
Our Reference		402917-3	402917-4	402917-5	402917-6	402917-7
Your Reference	UNITS	WL	Sed-2	BSW2	Sed-1	QA0226
Date Sampled		25/02/2026	25/02/2026	25/02/2026	25/02/2026	25/02/2026
Type of sample		Water	Water	Water	Water	Water
Date prepared	-	25/02/2026	25/02/2026	25/02/2026	25/02/2026	25/02/2026
Date analysed	-	25/02/2026	25/02/2026	25/02/2026	25/02/2026	25/02/2026
Total Suspended Solids	mg/L	46	49	36	67	46
pH	pH Units	7.2	8.7	7.5	8.8	8.8
Electrical Conductivity	µS/cm	2,400	620	880	630	620

Method ID	Methodology Summary
<b>Ext-073_F</b>	Analysis of pH in Water by AS 4500 H+ B and in-house method ENV-LAB006, Analysed by Envirolab Newcastle - NATA Site No. 18077
<b>Ext-073_G</b>	Analysis of Conductivity in Water by AS 2510 B and in-house method ENV-LAB010, Analysed by Envirolab Newcastle - NATA Site No. 18077
<b>Ext-073_J</b>	Analysis of Total Suspended Solids in Water by AS 2540 D and in-house method ENV-LAB009, Analysed by Envirolab Newcastle - NATA Site No. 18077
<b>Inorg-055</b>	Nitrate - determined colourimetrically. Waters samples are filtered on receipt prior to analysis. Soils are analysed following a water extraction.
<b>Inorg-055</b>	Nitrite - determined colourimetrically based on APHA latest edition NO2- B. Waters samples are filtered on receipt prior to analysis. Soils are analysed following a water extraction.
<b>Inorg-055/062/127</b>	Total Nitrogen - Calculation sum of TKN and oxidised Nitrogen. Alternatively analysed by combustion and chemiluminescence.
<b>Inorg-057</b>	Ammonia - determined colourimetrically, based on APHA latest edition 4500-NH3 F. Waters samples are filtered on receipt prior to analysis. Soils are analysed following a KCl extraction.
<b>Inorg-062</b>	TKN - determined colourimetrically based on APHA latest edition 4500 Norg. Alternatively, TKN can be derived from calculation (Total N - NOx).
<b>Inorg-118</b>	<p>Hexavalent Chromium (Cr6+) - determined firstly by separation using ion chromatography followed by the colourimetric analytical finish.</p> <p>Water samples are ideally field filtered into alkali preserved containers prior to receipt for dissolved Cr6+ analysis. Unfiltered water samples into alkali preserved containers (or pH adjusted to pH 8-9 on receipt) can be classified as Total (unfiltered) Cr6+.</p> <p>Please note, for 'Total/Unfiltered' Trivalent Chromium in waters [calculated], these results may be exaggerated due to the digestive limitation of 'Total/Unfiltered' Hexavalent Chromium in NaOH at pH 8-9 compared to more comprehensive digestion for Total Chromium using the mineral acids HNO3 and HCl.</p> <p>Solid (includes soils, filters, paints, swabs for example) samples are extracted in a buffered catalysed solution prior to the analytical finish above. Water extractable options are available (e.g. as an option for filters) on request.</p> <p>Impingers may need pH adjusting to pH 8-9 prior to IC-colourimetric analytical finish.</p>

Method ID	Methodology Summary
<b>Metals-020</b>	<p>Determination of various metals/elements by ICP-AES.</p> <p>Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.</p> <p>Where molecular anion forms are calculated from an element (e.g. SO<sub>4</sub> from S or PO<sub>4</sub> from P stoichiometrically), the assumption is that the element is only present in that molecular anion form.</p> <p>Submission of low masses of sample e.g. for dust samples, may result in raised PQLs.</p>
<b>Metals-022</b>	<p>Determination of various metals by ICP-MS.</p> <p>Please note for Bromine and Iodine, any forms of these elements that are present are included together in the one result reported for each of these two elements.</p> <p>Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.</p>
<b>Org-020</b>	<p>Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (&gt;C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.</p>
<b>Org-022/025</b>	<p>Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013.</p>
<b>Org-023</b>	<p>Water samples are analysed directly by purge and trap GC-MS.</p>
<b>Org-023</b>	<p>Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.</p>
<b>Org-023</b>	<p>Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.</p> <p>Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.</p>

Client Reference: 13589a

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Water				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W4	[NT]
Date extracted	-			02/03/2026	1	27/02/2026	02/03/2026		27/02/2026	[NT]
Date analysed	-			03/03/2026	1	02/03/2026	03/03/2026		02/03/2026	[NT]
TRH C <sub>6</sub> - C <sub>9</sub>	µg/L	10	Org-023	<10	1	<10	<10	0	102	[NT]
TRH C <sub>6</sub> - C <sub>10</sub>	µg/L	10	Org-023	<10	1	<10	<10	0	102	[NT]
Benzene	µg/L	1	Org-023	<1	1	<1	<1	0	101	[NT]
Toluene	µg/L	1	Org-023	<1	1	<1	<1	0	101	[NT]
Ethylbenzene	µg/L	1	Org-023	<1	1	<1	<1	0	102	[NT]
m+p-xylene	µg/L	2	Org-023	<2	1	<2	<2	0	102	[NT]
o-xylene	µg/L	1	Org-023	<1	1	<1	<1	0	102	[NT]
Naphthalene	µg/L	1	Org-023	<1	1	<1	<1	0	[NT]	[NT]
Surrogate Dibromofluoromethane	%		Org-023	100	1	105	99	6	101	[NT]
Surrogate Toluene-d8	%		Org-023	99	1	104	99	5	100	[NT]
Surrogate 4-Bromofluorobenzene	%		Org-023	101	1	104	101	3	101	[NT]

Client Reference: 13589a

QUALITY CONTROL: svTRH (C10-C40) in Water					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	402917-2
Date extracted	-			27/02/2026	1	27/02/2026	27/02/2026		27/02/2026	27/02/2026
Date analysed	-			28/02/2026	1	28/02/2026	28/02/2026		28/02/2026	28/02/2026
TRH C <sub>10</sub> - C <sub>14</sub>	µg/L	50	Org-020	<50	1	<50	<50	0	120	104
TRH C <sub>15</sub> - C <sub>28</sub>	µg/L	100	Org-020	<100	1	100	<100	0	118	107
TRH C <sub>29</sub> - C <sub>36</sub>	µg/L	100	Org-020	<100	1	<100	<100	0	114	82
TRH >C <sub>10</sub> - C <sub>16</sub>	µg/L	50	Org-020	<50	1	<50	<50	0	120	104
TRH >C <sub>16</sub> - C <sub>34</sub>	µg/L	100	Org-020	<100	1	120	<100	18	118	107
TRH >C <sub>34</sub> - C <sub>40</sub>	µg/L	100	Org-020	<100	1	<100	<100	0	114	82
Surrogate o-Terphenyl	%		Org-020	87	1	79	80	1	103	92

Client Reference: 13589a

QUALITY CONTROL: PAHs in Water				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W3	402917-2
Date extracted	-			27/02/2026	1	27/02/2026	27/02/2026		27/02/2026	27/02/2026
Date analysed	-			02/03/2026	1	02/03/2026	02/03/2026		02/03/2026	02/03/2026
Naphthalene	µg/L	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	74	87
Acenaphthylene	µg/L	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	µg/L	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	88	83
Fluorene	µg/L	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	89	92
Phenanthrene	µg/L	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	98	87
Anthracene	µg/L	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	µg/L	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	92	76
Pyrene	µg/L	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	87	82
Benzo(a)anthracene	µg/L	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chrysene	µg/L	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	78	70
Benzo(b,j+k)fluoranthene	µg/L	0.2	Org-022/025	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	µg/L	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	91	86
Indeno(1,2,3-c,d)pyrene	µg/L	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	µg/L	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	µg/L	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	78	1	67	65	3	76	75

QUALITY CONTROL: HM in water - dissolved				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W3	[NT]
Date prepared	-			03/03/2026	[NT]	[NT]	[NT]	[NT]	03/03/2026	[NT]
Date analysed	-			03/03/2026	[NT]	[NT]	[NT]	[NT]	03/03/2026	[NT]
Aluminium-Dissolved	µg/L	10	Metals-022	<10	[NT]	[NT]	[NT]	[NT]	86	[NT]
Arsenic-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	97	[NT]
Boron-Dissolved	µg/L	20	Metals-022	<20	[NT]	[NT]	[NT]	[NT]	93	[NT]
Cadmium-Dissolved	µg/L	0.1	Metals-022	<0.1	[NT]	[NT]	[NT]	[NT]	91	[NT]
Chromium-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	94	[NT]
Cobalt-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	93	[NT]
Copper-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	95	[NT]
Lead-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	93	[NT]
Nickel-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	93	[NT]
Selenium-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Zinc-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	92	[NT]

Client Reference: 13589a

QUALITY CONTROL: Metals in Waters - Acid extractable						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date prepared	-			27/02/2026	4	27/02/2026	27/02/2026		27/02/2026	[NT]
Date analysed	-			02/03/2026	4	02/03/2026	02/03/2026		02/03/2026	[NT]
Phosphorus - Total	mg/L	0.05	Metals-020	<0.05	4	0.3	0.3	0	94	[NT]

Client Reference: 13589a

QUALITY CONTROL: Miscellaneous Inorganics				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W3	402917-7
Date prepared	-			27/02/2026	6	27/02/2026	27/02/2026		27/02/2026	27/02/2026
Date analysed	-			27/02/2026	6	27/02/2026	27/02/2026		27/02/2026	27/02/2026
Ammonia as N in water	mg/L	0.005	Inorg-057	<0.005	6	<0.005	<0.005	0	115	113
Nitrite as N in water	mg/L	0.005	Inorg-055	<0.005	6	<0.005	<0.005	0	103	88
Nitrate as N in water	mg/L	0.005	Inorg-055	<0.005	6	<0.005	<0.005	0	107	114
NOx as N in water	mg/L	0.005	Inorg-055	<0.005	6	<0.005	<0.005	0	107	110
TKN in water	mg/L	0.1	Inorg-062	<0.1	6	1.3	1.3	0	[NT]	[NT]
Total Nitrogen in water	mg/L	0.1	Inorg-055/062/127	<0.1	6	1.3	1.3	0	101	100
Hexavalent Chromium, Cr <sup>6+</sup> (dissolved)	mg/L	0.005	Inorg-118	<0.005	6	<0.005	[NT]		104	[NT]

QUALITY CONTROL: Miscellaneous Inorganics				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	7	27/02/2026	27/02/2026		[NT]	[NT]
Date analysed	-			[NT]	7	27/02/2026	27/02/2026		[NT]	[NT]
Ammonia as N in water	mg/L	0.005	Inorg-057	[NT]	7	<0.005	[NT]		[NT]	[NT]
Nitrite as N in water	mg/L	0.005	Inorg-055	[NT]	7	<0.005	[NT]		[NT]	[NT]
Nitrate as N in water	mg/L	0.005	Inorg-055	[NT]	7	<0.005	[NT]		[NT]	[NT]
NOx as N in water	mg/L	0.005	Inorg-055	[NT]	7	<0.005	[NT]		[NT]	[NT]
TKN in water	mg/L	0.1	Inorg-062	[NT]	7	2.4	[NT]		[NT]	[NT]
Total Nitrogen in water	mg/L	0.1	Inorg-055/062/127	[NT]	7	2.4	[NT]		[NT]	[NT]
Hexavalent Chromium, Cr <sup>6+</sup> (dissolved)	mg/L	0.005	Inorg-118	[NT]	7	<0.005	<0.005	0	[NT]	[NT]

Client Reference: 13589a

QUALITY CONTROL: Miscellaneous Inorganics				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			25/02/2026	[NT]	[NT]	[NT]	[NT]	25/02/2026	[NT]
Date analysed	-			25/02/2026	[NT]	[NT]	[NT]	[NT]	25/02/2026	[NT]
Total Suspended Solids	mg/L	5	Ext-073_J	<5	[NT]	[NT]	[NT]	[NT]	93	[NT]
pH	pH Units		Ext-073_F	[NT]	[NT]	[NT]	[NT]	[NT]	101	[NT]
Electrical Conductivity	µS/cm	1	Ext-073_G	[NT]	[NT]	[NT]	[NT]	[NT]	108	[NT]

## Result Definitions

<b>NT</b>	Not tested
<b>NA</b>	Test not required
<b>INS</b>	Insufficient sample for this test
<b>PQL</b>	Practical Quantitation Limit
<b>&lt;</b>	Less than
<b>&gt;</b>	Greater than
<b>RPD</b>	Relative Percent Difference
<b>LCS</b>	Laboratory Control Sample
<b>NS</b>	Not specified
<b>NEPM</b>	National Environmental Protection Measure
<b>NR</b>	Not Reported

## Quality Control Definitions

<b>Blank</b>	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
<b>Duplicate</b>	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
<b>Matrix Spike</b>	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
<b>LCS (Laboratory Control Sample)</b>	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
<b>Surrogate Spike</b>	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

## Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Air volumes are typically provided by customers (often as flow rate(s) and sampling time(s) and/or simply volumes) sampled or exposure times (determines 'volume' passive badges are exposed to)). Hence in such circumstances the volume measurement is inevitably not covered by Envirolab's NATA accreditation. An exception may occur where Envirolab Newcastle does the sampling where accreditation exists for certain types of sampling and hence volume determination(s). Note air volumes are often used to determine concentrations for dust and/or analyses on filters, sorbents and in impingers. For canister sampling, the air volume is covered by Envirolab's NATA accreditation.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates can be downloaded from the [Envirolab Resources website](#) or obtained directly by contacting the laboratory.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

For Dust Deposit Gauge (DDG) analysis the sampling, sampling period and funnel exposure area do not fall under Envirolab's NATA accreditation (unless the Newcastle laboratory where responsible for the sampling), hence the annotation on the DDG units of reporting.

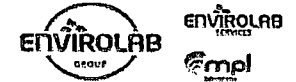
Urine Analysis - The BEI values listed are taken from the 2022 edition of "TLVs and BEIs Threshold Limits" by ACGIH.

## Report Comments

MISC\_INORG: Nitrite as N in water Nitrate as N in water NOx as N in water, PQL has been raised due to matrix interferences from analytes (other than those being tested) in the sample/s. Samples were diluted and reanalysed however same results were achieved.

# CHAIN OF CUSTODY - Client

ENVIROLAB Services  
12 Ashley St  
Chatswood NSW 2067  
Ph: (02) 9910 6200  
Job No: 402917



## ENVIROLAB GROUP

Date Received: 25/2/26  
Time Received: 0910

Company:	RCA Australia	RCA Reference Number (i.e. report title):	13589a
Contact person:	Fiona Brooker	Received By:	KHJ
Project Mgr:	Fiona Brooker	Temp:	Cool/Ambient
Sampler:	D9m; Lj	PO No. (if applicable):	Not applicable
Address:	92 Hill St Carrington, NSW 2294	Envirolab Quote No.:	BMB
Phone:	02 4902 9200	Date results required:	
Mob:	0410 230 644		
Email results to:	administrator@rca.com.au + enviro@rca.com.au	Lab comments:	
Email invoice to:			

**ENVIROLAB GROUP**  
Sydney Lab - Envirolab Services  
12 Ashley St, Chatswood, NSW 2067  
02 9910 6200 sydney@envirolab.com.au

Sample information				# Containers	Tests Required										Comments Provide as much information about the sample as you can
Envirolab Sample ID	Client Sample ID	Date sampled	Type of sample		E01560 - Total Suspended Solids (TSS)	E00705-NH3, E00815-NO2, E00790-NO3, E00850-NOx, E01090-Total P)	E010300 - Nutrient Suite (NH3, NO2, NO3, NOx, TKN (calc), Total N, Total P)	E07290 and E07220 TRH C6-C40 and BTEXN	E03010_D - Dissolved (Aluminium, Arsenic, Boron, Cadmium, Chromium, Cobalt, Copper, Lead, Nickel, Selenium, Zinc)	E05360 - Hexavalent Chromium	E08310 - PAH low level	E01370 - pH	E01150 - Electrical Conductivity	Sediment within container to be included in analysis if X	
1	GW1	25/02/2026	Water	8		X		X			X			X	
2	GW3	25/02/2026	Water	8		X		X			X			X	
	<del>LP</del>	<del>25/02/2026</del>	<del>Water</del>	<del>4</del>	<del>X</del>		<del>X</del>				<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	
3	WL	25/02/2026	Water	4	X		X				X	X	X	X	
4	Sed-2	25/02/2026	Water	9	X		X	X	X	X	X	X	X	X	
5	BSW2	25/02/2026	Water	9	X		X	X	X	X	X	X	X	X	
6	Sed-1	25/02/2026	Water	9	X		X	X	X	X	X	X	X	X	
	<del>BSW1</del>	<del>25/02/2026</del>	<del>Water</del>	<del>9</del>	<del>X</del>		<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	
7	QA10226	25/02/2026	Water	9	X		X	X	X	X	X	X	X	X	
Total:				69	7	2	7	7	5	5	2	7	7	9	

Relinquished by (company):	RCA Australia	Received by (company):	Envirolab	Lab use only:			
Print Name:	D9mieo	Print Name:	Laura Schotfeld	Job Number	402917	Cooling:	Ice / Ice Pack / None
Date & Time:	25-2-26	Date & Time:	25/2/26 14:40	Temperature	11.7°C	Security Seal:	Intact / Broken / Not Used
Signature:	P. BILLET	Signature:	WQA	TAT Req:	SAME DAY / 1 / 2 / 3 / 4 (STD)		

## SAMPLE RECEIPT ADVICE

### Client Details

<b>Client</b>	RCA Australia
<b>Attention</b>	Enviro RCA

### Sample Login Details

<b>Your reference</b>	13589a
<b>Envirolab Reference</b>	402917
<b>Date Sample Received</b>	25/02/2026
<b>Date Instructions Received</b>	26/02/2026
<b>Date Results Expected to be Reported</b>	05/03/2026

### Sample Condition

<b>Samples received in appropriate condition for analysis</b>	Yes
<b>No. of Samples Provided</b>	7 Water
<b>Turnaround Time Requested</b>	Standard
<b>Temperature on Receipt (°C)</b>	12
<b>Cooling Method</b>	Ice
<b>Sampling Date Provided</b>	YES

### Comments

Nil

Please direct any queries to:

#### Aileen Hie

**Phone:** 02 9910 6200  
**Fax:** 02 9910 6201  
**Email:** ahie@envirolab.com.au

#### Jacinta Hurst

**Phone:** 02 9910 6200  
**Fax:** 02 9910 6201  
**Email:** jhurst@envirolab.com.au

*Analysis Underway, details on the following page:*



Sample ID	VTRH(C6-C10)/BTEXN in Water	svTRH (C10-C40) in Water	PAHs in Water	HM in water - dissolved	Metals in Waters - Acid extractable	Ammonia as N in water	Nitrite as N in water	Nitrate as N in water	NOx as N in water	TKN in water	Total Nitrogen in water	Hexavalent Chromium, Cr6+ (dissolved)	Miscellaneous Inorganics
<b>GW1</b>	✓	✓	✓		✓	✓	✓	✓	✓				
<b>GW3</b>	✓	✓	✓		✓	✓	✓	✓	✓				
<b>WL</b>					✓	✓	✓	✓	✓	✓	✓		✓
<b>Sed-2</b>	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>BSW2</b>	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Sed-1</b>	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>QA0226</b>	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

### Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.

Requests for longer term sample storage must be received in writing.

Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.

TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

We acknowledge receipt of your samples and Purchase Order (PO) (if provided). If a PO includes your terms & conditions, Envirolab hereby expressly rejects and will not be bound by any external or third-party terms and conditions, including those referenced or attached to a PO.

All services to be performed by Envirolab will be governed exclusively by Envirolab's General Terms and Conditions attached to this acknowledgement ([Envirolab Terms](#)) via hyperlink or found on our websites.

If you do not object in writing within two (2) business days of the date of this acknowledgement, you will be deemed to have accepted the Envirolab Terms. In addition, your provision of further instructions, additional samples, payment of any invoice, or acceptance of services or results from Envirolab will constitute acceptance of the Envirolab Terms. For clarity, Envirolab's commencement or continuation of work following receipt of the PO is performed solely under the Envirolab Terms and does not constitute acceptance of any external terms. All rights are expressly reserved.



## **CERTIFICATE OF ANALYSIS 403766**

### **Client Details**

<b>Client</b>	RCA Australia
<b>Attention</b>	Fiona Brooker
<b>Address</b>	PO Box 175, Carrington, NSW, 2294

### **Sample Details**

<b>Your Reference</b>	<b>13589a</b>
<b>Number of Samples</b>	2 Water
<b>Date samples received</b>	10/03/2026
<b>Date completed instructions received</b>	10/03/2026

### **Analysis Details**

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client unless as indicated below in the method summaries. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

### **Report Details**

<b>Date results requested by</b>	17/03/2026
<b>Date of Issue</b>	17/03/2026

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Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with \***

#### **Results Approved By**

Jack Wallis, Senior Chemist  
Laura Schofield, Lab Manager  
Priya Samarawickrama, Senior Chemist  
Tabitha Roberts, Senior Chemist

#### **Authorised By**

Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Water			
Our Reference		403766-1	403766-2
Your Reference	UNITS	SW2	BSW2
Date Sampled		09/03/2026	09/03/2026
Type of sample		Water	Water
Date extracted	-	12/03/2026	12/03/2026
Date analysed	-	13/03/2026	13/03/2026
TRH C <sub>6</sub> - C <sub>9</sub>	µg/L	<10	<10
TRH C <sub>6</sub> - C <sub>10</sub>	µg/L	<10	<10
TRH C <sub>6</sub> - C <sub>10</sub> less BTEX (F1)	µg/L	<10	<10
Benzene	µg/L	<1	<1
Toluene	µg/L	<1	<1
Ethylbenzene	µg/L	<1	<1
m+p-xylene	µg/L	<2	<2
o-xylene	µg/L	<1	<1
Naphthalene	µg/L	<1	<1
Surrogate Dibromofluoromethane	%	106	106
Surrogate Toluene-d8	%	99	99
Surrogate 4-Bromofluorobenzene	%	96	95

svTRH (C10-C40) in Water			
Our Reference		403766-1	403766-2
Your Reference	UNITS	SW2	BSW2
Date Sampled		09/03/2026	09/03/2026
Type of sample		Water	Water
Date extracted	-	11/03/2026	11/03/2026
Date analysed	-	12/03/2026	12/03/2026
TRH C <sub>10</sub> - C <sub>14</sub>	µg/L	<50	<50
TRH C <sub>15</sub> - C <sub>28</sub>	µg/L	<100	<100
TRH C <sub>29</sub> - C <sub>36</sub>	µg/L	<100	<100
Total +ve TRH (C10-C36)	µg/L	<50	<50
TRH >C <sub>10</sub> - C <sub>16</sub>	µg/L	<50	<50
TRH >C <sub>16</sub> - C <sub>34</sub>	µg/L	<100	<100
TRH >C <sub>34</sub> - C <sub>40</sub>	µg/L	<100	<100
Total +ve TRH (>C10-C40)	µg/L	<50	<50
Surrogate o-Terphenyl	%	91	86

HM in water - dissolved			
Our Reference		403766-1	403766-2
Your Reference	UNITS	SW2	BSW2
Date Sampled		09/03/2026	09/03/2026
Type of sample		Water	Water
Date prepared	-	12/03/2026	12/03/2026
Date analysed	-	12/03/2026	12/03/2026
Aluminium-Dissolved	µg/L	170	110
Arsenic-Dissolved	µg/L	8	7
Boron-Dissolved	µg/L	40	50
Cadmium-Dissolved	µg/L	<0.1	<0.1
Chromium-Dissolved	µg/L	12	7
Cobalt-Dissolved	µg/L	<1	<1
Copper-Dissolved	µg/L	7	7
Lead-Dissolved	µg/L	<1	<1
Nickel-Dissolved	µg/L	2	1
Selenium-Dissolved	µg/L	<1	<1
Zinc-Dissolved	µg/L	4	10

Metals in Waters - Acid extractable			
Our Reference		403766-1	403766-2
Your Reference	UNITS	SW2	BSW2
Date Sampled		09/03/2026	09/03/2026
Type of sample		Water	Water
Date prepared	-	13/03/2026	13/03/2026
Date analysed	-	16/03/2026	16/03/2026
Phosphorus - Total	mg/L	0.2	0.3

Miscellaneous Inorganics			
Our Reference		403766-1	403766-2
Your Reference	UNITS	SW2	BSW2
Date Sampled		09/03/2026	09/03/2026
Type of sample		Water	Water
Date prepared	-	11/03/2026	11/03/2026
Date analysed	-	11/03/2026	11/03/2026
Ammonia as N in water	mg/L	0.02	0.01
Nitrite as N in water	mg/L	0.36	0.24
Nitrate as N in water	mg/L	0.91	1.1
NOx as N in water	mg/L	1.3	1.3
TKN in water	mg/L	0.5	0.4
Total Nitrogen in water	mg/L	1.8	1.7
Hexavalent Chromium, Cr <sup>6+</sup> (dissolved)	mg/L	0.01	0.007

Miscellaneous Inorganics			
Our Reference		403766-1	403766-2
Your Reference	UNITS	SW2	BSW2
Date Sampled		09/03/2026	09/03/2026
Type of sample		Water	Water
Date prepared	-	09/03/2026	09/03/2026
Date analysed	-	09/03/2026	09/03/2026
Total Suspended Solids	mg/L	67	51
pH	pH Units	9.3	8.7
Electrical Conductivity	µS/cm	500	360

Method ID	Methodology Summary
<b>Ext-073_F</b>	Analysis of pH in Water by AS 4500 H+ B and in-house method ENV-LAB006, Analysed by Envirolab Newcastle - NATA Site No. 18077
<b>Ext-073_G</b>	Analysis of Conductivity in Water by AS 2510 B and in-house method ENV-LAB010, Analysed by Envirolab Newcastle - NATA Site No. 18077
<b>Ext-073_J</b>	Analysis of Total Suspended Solids in Water by AS 2540 D and in-house method ENV-LAB009, Analysed by Envirolab Newcastle - NATA Site No. 18077
<b>Inorg-055</b>	Nitrate - determined colourimetrically. Waters samples are filtered on receipt prior to analysis. Soils are analysed following a water extraction.
<b>Inorg-055</b>	Nitrite - determined colourimetrically based on APHA latest edition NO2- B. Waters samples are filtered on receipt prior to analysis. Soils are analysed following a water extraction.
<b>Inorg-055/062/127</b>	Total Nitrogen - Calculation sum of TKN and oxidised Nitrogen. Alternatively analysed by combustion and chemiluminescence.
<b>Inorg-057</b>	Ammonia - determined colourimetrically, based on APHA latest edition 4500-NH3 F. Waters samples are filtered on receipt prior to analysis. Soils are analysed following a KCl extraction.
<b>Inorg-062</b>	TKN - determined colourimetrically based on APHA latest edition 4500 Norg. Alternatively, TKN can be derived from calculation (Total N - NOx).
<b>Inorg-118</b>	<p>Hexavalent Chromium (Cr6+) - determined firstly by separation using ion chromatography followed by the colourimetric analytical finish.</p> <p>Water samples are ideally field filtered into alkali preserved containers prior to receipt for dissolved Cr6+ analysis. Unfiltered water samples into alkali preserved containers (or pH adjusted to pH 8-9 on receipt) can be classified as Total (unfiltered) Cr6+.</p> <p>Please note, for 'Total/Unfiltered' Trivalent Chromium in waters [calculated], these results may be exaggerated due to the digestive limitation of 'Total/Unfiltered' Hexavalent Chromium in NaOH at pH 8-9 compared to more comprehensive digestion for Total Chromium using the mineral acids HNO3 and HCl.</p> <p>Solid (includes soils, filters, paints, swabs for example) samples are extracted in a buffered catalysed solution prior to the analytical finish above. Water extractable options are available (e.g. as an option for filters) on request.</p> <p>Impingers may need pH adjusting to pH 8-9 prior to IC-colourimetric analytical finish.</p>

Method ID	Methodology Summary
<b>Metals-020</b>	<p>Determination of various metals/elements by ICP-AES.</p> <p>Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.</p> <p>Where molecular anion forms are calculated from an element (e.g. SO<sub>4</sub> from S or PO<sub>4</sub> from P stoichiometrically), the assumption is that the element is only present in that molecular anion form.</p> <p>Submission of low masses of sample e.g. for dust samples, may result in raised PQLs.</p>
<b>Metals-022</b>	<p>Determination of various metals by ICP-MS.</p> <p>Please note for Bromine and Iodine, any forms of these elements that are present are included together in the one result reported for each of these two elements.</p> <p>Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.</p>
<b>Org-020</b>	<p>Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (&gt;C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.</p>
<b>Org-023</b>	<p>Water samples are analysed directly by purge and trap GC-MS.</p>
<b>Org-023</b>	<p>Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.</p>
<b>Org-023</b>	<p>Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.</p> <p>Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.</p>

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Water					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W3	[NT]
Date extracted	-			12/03/2026	[NT]	[NT]	[NT]	[NT]	12/03/2026	[NT]
Date analysed	-			13/03/2026	[NT]	[NT]	[NT]	[NT]	13/03/2026	[NT]
TRH C <sub>6</sub> - C <sub>9</sub>	µg/L	10	Org-023	<10	[NT]	[NT]	[NT]	[NT]	94	[NT]
TRH C <sub>6</sub> - C <sub>10</sub>	µg/L	10	Org-023	<10	[NT]	[NT]	[NT]	[NT]	94	[NT]
Benzene	µg/L	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	95	[NT]
Toluene	µg/L	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	93	[NT]
Ethylbenzene	µg/L	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	93	[NT]
m+p-xylene	µg/L	2	Org-023	<2	[NT]	[NT]	[NT]	[NT]	94	[NT]
o-xylene	µg/L	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	95	[NT]
Naphthalene	µg/L	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate Dibromofluoromethane	%		Org-023	103	[NT]	[NT]	[NT]	[NT]	105	[NT]
Surrogate Toluene-d8	%		Org-023	99	[NT]	[NT]	[NT]	[NT]	101	[NT]
Surrogate 4-Bromofluorobenzene	%		Org-023	96	[NT]	[NT]	[NT]	[NT]	104	[NT]

Client Reference: 13589a

QUALITY CONTROL: svTRH (C10-C40) in Water					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			11/03/2026	[NT]	[NT]	[NT]	[NT]	11/03/2026	[NT]
Date analysed	-			11/03/2026	[NT]	[NT]	[NT]	[NT]	11/03/2026	[NT]
TRH C <sub>10</sub> - C <sub>14</sub>	µg/L	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	101	[NT]
TRH C <sub>15</sub> - C <sub>28</sub>	µg/L	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	108	[NT]
TRH C <sub>29</sub> - C <sub>36</sub>	µg/L	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	100	[NT]
TRH >C <sub>10</sub> - C <sub>16</sub>	µg/L	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	101	[NT]
TRH >C <sub>16</sub> - C <sub>34</sub>	µg/L	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	108	[NT]
TRH >C <sub>34</sub> - C <sub>40</sub>	µg/L	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	100	[NT]
Surrogate o-Terphenyl	%		Org-020	94	[NT]	[NT]	[NT]	[NT]	89	[NT]

Client Reference: 13589a

QUALITY CONTROL: HM in water - dissolved				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date prepared	-			12/03/2026	[NT]	[NT]	[NT]	[NT]	12/03/2026	[NT]
Date analysed	-			12/03/2026	[NT]	[NT]	[NT]	[NT]	12/03/2026	[NT]
Aluminium-Dissolved	µg/L	10	Metals-022	<10	[NT]	[NT]	[NT]	[NT]	92	[NT]
Arsenic-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	97	[NT]
Boron-Dissolved	µg/L	20	Metals-022	<20	[NT]	[NT]	[NT]	[NT]	101	[NT]
Cadmium-Dissolved	µg/L	0.1	Metals-022	<0.1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Chromium-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Cobalt-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Copper-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	94	[NT]
Lead-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	99	[NT]
Nickel-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	93	[NT]
Selenium-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	97	[NT]
Zinc-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	95	[NT]

Client Reference: 13589a

QUALITY CONTROL: Metals in Waters - Acid extractable					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	403766-1
Date prepared	-			13/03/2026	[NT]	[NT]	[NT]	[NT]	13/03/2026	13/03/2026
Date analysed	-			16/03/2026	[NT]	[NT]	[NT]	[NT]	16/03/2026	16/03/2026
Phosphorus - Total	mg/L	0.05	Metals-020	<0.05	[NT]	[NT]	[NT]	[NT]	109	90

Client Reference: 13589a

QUALITY CONTROL: Miscellaneous Inorganics				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date prepared	-			11/03/2026	1	11/03/2026	11/03/2026		11/03/2026	[NT]
Date analysed	-			11/03/2026	1	11/03/2026	11/03/2026		11/03/2026	[NT]
Ammonia as N in water	mg/L	0.005	Inorg-057	<0.005	1	0.02	[NT]		103	[NT]
Nitrite as N in water	mg/L	0.005	Inorg-055	<0.005	1	0.36	[NT]		105	[NT]
Nitrate as N in water	mg/L	0.005	Inorg-055	<0.005	1	0.91	[NT]		101	[NT]
NOx as N in water	mg/L	0.005	Inorg-055	<0.005	1	1.3	[NT]		101	[NT]
TKN in water	mg/L	0.1	Inorg-062	<0.1	1	0.5	[NT]		[NT]	[NT]
Total Nitrogen in water	mg/L	0.1	Inorg-055/062/127	<0.1	1	1.8	[NT]		104	[NT]
Hexavalent Chromium, Cr <sup>6+</sup> (dissolved)	mg/L	0.005	Inorg-118	<0.005	1	0.01	0.01	0	108	[NT]

Client Reference: 13589a

QUALITY CONTROL: Miscellaneous Inorganics				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date prepared	-			09/03/2026	[NT]	[NT]	[NT]	[NT]	09/03/2026	[NT]
Date analysed	-			09/03/2026	[NT]	[NT]	[NT]	[NT]	09/03/2026	[NT]
Total Suspended Solids	mg/L	5	Ext-073_J	<5	[NT]	[NT]	[NT]	[NT]	116	[NT]
pH	pH Units		Ext-073_F	[NT]	[NT]	[NT]	[NT]	[NT]	101	[NT]
Electrical Conductivity	µS/cm	1	Ext-073_G	[NT]	[NT]	[NT]	[NT]	[NT]	100	[NT]

## Result Definitions

<b>NT</b>	Not tested
<b>NA</b>	Test not required
<b>INS</b>	Insufficient sample for this test
<b>PQL</b>	Practical Quantitation Limit
<b>&lt;</b>	Less than
<b>&gt;</b>	Greater than
<b>RPD</b>	Relative Percent Difference
<b>LCS</b>	Laboratory Control Sample
<b>NS</b>	Not specified
<b>NEPM</b>	National Environmental Protection Measure
<b>NR</b>	Not Reported

## Quality Control Definitions

<b>Blank</b>	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
<b>Duplicate</b>	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
<b>Matrix Spike</b>	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
<b>LCS (Laboratory Control Sample)</b>	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
<b>Surrogate Spike</b>	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

## Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Air volumes are typically provided by customers (often as flow rate(s) and sampling time(s) and/or simply volumes) sampled or exposure times (determines 'volume' passive badges are exposed to)). Hence in such circumstances the volume measurement is inevitably not covered by Envirolab's NATA accreditation. An exception may occur where Envirolab Newcastle does the sampling where accreditation exists for certain types of sampling and hence volume determination(s). Note air volumes are often used to determine concentrations for dust and/or analyses on filters, sorbents and in impingers. For canister sampling, the air volume is covered by Envirolab's NATA accreditation.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates can be downloaded from the [Envirolab Resources website](#) or obtained directly by contacting the laboratory.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

For Dust Deposit Gauge (DDG) analysis the sampling, sampling period and funnel exposure area do not fall under Envirolab's NATA accreditation (unless the Newcastle laboratory where responsible for the sampling), hence the annotation on the DDG units of reporting.

Urine Analysis - The BEI values listed are taken from the 2022 edition of "TLVs and BEIs Threshold Limits" by ACGIH.

# CHAIN OF CUSTODY - Client



## ENVIROLAB GROUP

<b>Company:</b>	RCA Australia	<b>RCA Reference Number (i.e. report title)</b>	
<b>Contact person:</b>	Fiona Brooker	13589a	
<b>Project Mgr:</b>	Fiona Brooker	<b>PO No. (if applicable):</b>	Not applicable
<b>Sampler:</b>	Dominic	<b>Envirolab Quote No. :</b>	BM8
<b>Address:</b>	92 Hill St Carrington, NSW 2294	<b>Date results required:</b>	STD
<b>Phone:</b>	02 4902 9200	<b>Mob:</b>	0410 230 644
<b>Email results to:</b>	administrator@rca.com.au + enviro@rca.com.au		
<b>Email invoice to:</b>	Lab comments:		

**ENVIROLAB GROUP**

Sydney Lab - Envirolab Services  
12 Ashley St, Chatswood, NSW 2067  
02 9910 6200  
sydney@envirolab.com.au

Sample information				# Containers	Tests Required										Comments  Provide as much information about the sample as you can
Envirolab Sample ID	Client Sample ID	Date sampled	Type of sample		E01580 - Total Suspended Solids (TSS)	E010300 - Nutrient Suite (NH3, NO2, NO3, NOX, TKN (calc), Total N, Total P)	E07290 and E07220 TRH C6-C40 and BTEXN	E05360 - Hexavalent Chromium	E03010_D - Dissolved (Aluminium, Arsenic, Boron, Cadmium, Chromium, Cobalt, Copper, Lead, Nickel, Selenium, Zinc)	E01140 - pH	E01150 - Electrical Conductivity	Sediment within container to be included in analysis if X			
1	SW2	9-3-26	Water	9	x	x	x	x	x	x	x	x			
2	BSW2	9-3-26	Water	9	x	x	x	x	x	x	x	x			
	<del>SW1</del>		<del>Water</del>	<del>9</del>	<del>x</del>	<del>x</del>	<del>x</del>	<del>x</del>	<del>x</del>	<del>x</del>	<del>x</del>	<del>x</del>			
	<del>BSW2</del>		<del>Water</del>	<del>9</del>	<del>x</del>	<del>x</del>	<del>x</del>	<del>x</del>	<del>x</del>	<del>x</del>	<del>x</del>	<del>x</del>			
<b>Total</b>				36	4	4	4	4	4	4	0	0	0		

**Envirolab Services**  
 12 Ashley St  
 Chatswood NSW 2067  
 Ph: (02) 9910 6200

Job No: 403766  
 Date Received: 9/3/26  
 Time Received: 09:30  
 Received By: SFWST  
 Temp: Cool Ambient 10°C  
 Cooling: Ice/Depack  
 Security: Intact/Broken/None

<b>Relinquished by (company):</b>	RCA Australia	<b>Received by (company):</b>	Envirolab
<b>Print Name:</b>	Dominic	<b>Print Name:</b>	Sambath Joseph
<b>Date &amp; Time:</b>	9-3-26	<b>Date &amp; Time:</b>	9/3/26 15:30
<b>Signature:</b>	<i>D. Brooker</i>	<b>Signature:</b>	<i>Sambath Joseph</i>
<b>Lab use only:</b>		<b>Job Number</b>	403766
		<b>Temperature</b>	21.5
		<b>Cooling:</b>	<input checked="" type="radio"/> Ice / Ice Pack / None
		<b>Security Seal:</b>	<input checked="" type="radio"/> Intact / Broken / Not Used
		<b>TAT Req:</b>	SAME DAY / 1 / 2 / 3 / 4 / <input checked="" type="radio"/> STD

## SAMPLE RECEIPT ADVICE

### Client Details

<b>Client</b>	RCA Australia
<b>Attention</b>	Fiona Brooker

### Sample Login Details

<b>Your reference</b>	13589a
<b>Envirolab Reference</b>	403766
<b>Date Sample Received</b>	10/03/2026
<b>Date Instructions Received</b>	10/03/2026
<b>Date Results Expected to be Reported</b>	17/03/2026

### Sample Condition

<b>Samples received in appropriate condition for analysis</b>	Yes
<b>No. of Samples Provided</b>	2 Water
<b>Turnaround Time Requested</b>	Standard
<b>Temperature on Receipt (°C)</b>	10
<b>Cooling Method</b>	Ice Pack
<b>Sampling Date Provided</b>	YES

### Comments

Samples received at ELS Newcastle 09/03/2026, 15:30, ELS Syd 10/03/2026 09:30

Please direct any queries to:

#### Aileen Hie

**Phone:** 02 9910 6200  
**Fax:** 02 9910 6201  
**Email:** ahie@envirolab.com.au

#### Jacinta Hurst

**Phone:** 02 9910 6200  
**Fax:** 02 9910 6201  
**Email:** jhurst@envirolab.com.au

*Analysis Underway, details on the following page:*



Sample ID	VTRH(C6-C10)/BTEXN in Water	svTRH (C10-C40) in Water	HM in water - dissolved	Metals in Waters - Acid extractable	Ammonia as N in water	Nitrite as N in water	Nitrate as N in water	NOx as N in water	TKN in water	Total Nitrogen in water	Hexavalent Chromium, Cr6+ (dissolved)	Miscellaneous Inorganics
SW2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BSW2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

### Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.

Requests for longer term sample storage must be received in writing.

Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.

TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

We acknowledge receipt of your samples and Purchase Order (PO) (if provided). If a PO includes your terms & conditions, Envirolab hereby expressly rejects and will not be bound by any external or third-party terms and conditions, including those referenced or attached to a PO.

All services to be performed by Envirolab will be governed exclusively by Envirolab's General Terms and Conditions attached to this acknowledgement ([Envirolab Terms](#)) via hyperlink or found on our websites.

If you do not object in writing within two (2) business days of the date of this acknowledgement, you will be deemed to have accepted the Envirolab Terms. In addition, your provision of further instructions, additional samples, payment of any invoice, or acceptance of services or results from Envirolab will constitute acceptance of the Envirolab Terms. For clarity, Envirolab's commencement or continuation of work following receipt of the PO is performed solely under the Envirolab Terms and does not constitute acceptance of any external terms. All rights are expressly reserved.

## CERTIFICATE OF ANALYSIS 405335

### Client Details

<b>Client</b>	RCA Australia
<b>Attention</b>	RCA Administrator
<b>Address</b>	PO Box 175, Carrington, NSW, 2294

### Sample Details

<b>Your Reference</b>	<b>13589a</b>
<b>Number of Samples</b>	9 Water
<b>Date samples received</b>	26/03/2026
<b>Date completed instructions received</b>	27/03/2026

### Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client unless as indicated below in the method summaries. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

**Please refer to the last page of this report for any comments relating to the results.**

### Report Details

<b>Date results requested by</b>	07/04/2026
<b>Date of Issue</b>	07/04/2026

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Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with \***

#### **Results Approved By**

Jenny He, Inorganic Team Leader  
 Laura Schofield, Lab Manager  
 Sally Chen, Metals prep team leader  
 Timothy Toll, Senior Chemist

#### **Authorised By**

Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Water					
Our Reference		405335-5	405335-6	405335-7	405335-8
Your Reference	UNITS	Sed-2	BSW2	Sed-1	BSW1
Date Sampled		26/03/2026	26/03/2026	26/03/2026	26/03/2026
Type of sample		Water	Water	Water	Water
Date extracted	-	31/03/2026	31/03/2026	31/03/2026	31/03/2026
Date analysed	-	01/04/2026	01/04/2026	01/04/2026	01/04/2026
TRH C <sub>6</sub> - C <sub>9</sub>	µg/L	<10	<10	<10	<10
TRH C <sub>6</sub> - C <sub>10</sub>	µg/L	<10	<10	<10	<10
TRH C <sub>6</sub> - C <sub>10</sub> less BTEX (F1)	µg/L	<10	<10	<10	<10
Benzene	µg/L	<1	<1	<1	<1
Toluene	µg/L	<1	<1	<1	<1
Ethylbenzene	µg/L	<1	<1	<1	<1
m+p-xylene	µg/L	<2	<2	<2	<2
o-xylene	µg/L	<1	<1	<1	<1
Naphthalene	µg/L	<1	<1	<1	<1
Surrogate Dibromofluoromethane	%	107	107	108	106
Surrogate Toluene-d8	%	99	99	99	97
Surrogate 4-Bromofluorobenzene	%	90	91	90	90

svTRH (C10-C40) in Water					
Our Reference		405335-5	405335-6	405335-7	405335-8
Your Reference	UNITS	Sed-2	BSW2	Sed-1	BSW1
Date Sampled		26/03/2026	26/03/2026	26/03/2026	26/03/2026
Type of sample		Water	Water	Water	Water
Date extracted	-	30/03/2026	30/03/2026	30/03/2026	30/03/2026
Date analysed	-	31/03/2026	31/03/2026	31/03/2026	31/03/2026
TRH C <sub>10</sub> - C <sub>14</sub>	µg/L	<50	<50	<50	<50
TRH C <sub>15</sub> - C <sub>28</sub>	µg/L	<100	<100	<100	<100
TRH C <sub>29</sub> - C <sub>36</sub>	µg/L	<100	<100	<100	<100
Total +ve TRH (C10-C36)	µg/L	<50	<50	<50	<50
TRH >C <sub>10</sub> - C <sub>16</sub>	µg/L	<50	<50	<50	<50
TRH >C <sub>16</sub> - C <sub>34</sub>	µg/L	<100	<100	<100	<100
TRH >C <sub>34</sub> - C <sub>40</sub>	µg/L	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	µg/L	<50	<50	<50	<50
Surrogate o-Terphenyl	%	80	74	77	79

HM in water - dissolved					
Our Reference		405335-5	405335-6	405335-7	405335-8
Your Reference	UNITS	Sed-2	BSW2	Sed-1	BSW1
Date Sampled		26/03/2026	26/03/2026	26/03/2026	26/03/2026
Type of sample		Water	Water	Water	Water
Date prepared	-	30/03/2026	30/03/2026	30/03/2026	30/03/2026
Date analysed	-	30/03/2026	30/03/2026	30/03/2026	30/03/2026
Aluminium-Dissolved	µg/L	180	30	240	<10
Arsenic-Dissolved	µg/L	11	10	4	4
Boron-Dissolved	µg/L	70	100	80	100
Cadmium-Dissolved	µg/L	<0.1	<0.1	<0.1	<0.1
Chromium-Dissolved	µg/L	5	<1	17	<1
Cobalt-Dissolved	µg/L	<1	1	2	<1
Copper-Dissolved	µg/L	12	1	10	3
Lead-Dissolved	µg/L	<1	<1	<1	<1
Nickel-Dissolved	µg/L	2	1	2	2
Selenium-Dissolved	µg/L	<1	<1	<1	<1
Zinc-Dissolved	µg/L	13	8	7	10

Metals in Waters - Acid extractable						
Our Reference		405335-1	405335-2	405335-3	405335-4	405335-5
Your Reference	UNITS	GW1	GW3	LP	WL	Sed-2
Date Sampled		26/03/2026	26/03/2026	26/03/2026	26/03/2026	26/03/2026
Type of sample		Water	Water	Water	Water	Water
Date prepared	-	30/03/2026	30/03/2026	30/03/2026	30/03/2026	30/03/2026
Date analysed	-	30/03/2026	30/03/2026	30/03/2026	30/03/2026	30/03/2026
Phosphorus - Total	mg/L	0.3	0.2	1.7	5.8	0.1

Metals in Waters - Acid extractable					
Our Reference		405335-6	405335-7	405335-8	405335-9
Your Reference	UNITS	BSW2	Sed-1	BSW1	QA032026
Date Sampled		26/03/2026	26/03/2026	26/03/2026	26/03/2026
Type of sample		Water	Water	Water	Water
Date prepared	-	30/03/2026	30/03/2026	30/03/2026	30/03/2026
Date analysed	-	30/03/2026	30/03/2026	30/03/2026	30/03/2026
Phosphorus - Total	mg/L	0.2	0.05	0.1	1.7

Miscellaneous Inorganics						
Our Reference		405335-1	405335-2	405335-3	405335-4	405335-5
Your Reference	UNITS	GW1	GW3	LP	WL	Sed-2
Date Sampled		26/03/2026	26/03/2026	26/03/2026	26/03/2026	26/03/2026
Type of sample		Water	Water	Water	Water	Water
Date prepared	-	30/03/2026	30/03/2026	30/03/2026	30/03/2026	30/03/2026
Date analysed	-	30/03/2026	30/03/2026	30/03/2026	30/03/2026	30/03/2026
Ammonia as N in water	mg/L	1.7	3.6	0.28	0.19	0.22
Nitrite as N in water	mg/L	<0.005	0.01	0.61	<0.005	0.099
Nitrate as N in water	mg/L	0.01	0.14	2.0	<0.005	0.16
NOx as N in water	mg/L	0.02	0.15	2.7	<0.005	0.26
TKN in water	mg/L	[NA]	[NA]	6.9	8.4	1.6
Total Nitrogen in water	mg/L	[NA]	[NA]	9.6	8.4	1.9
Hexavalent Chromium, Cr <sup>6+</sup> (dissolved)	mg/L	[NA]	[NA]	[NA]	[NA]	<0.005

Miscellaneous Inorganics					
Our Reference		405335-6	405335-7	405335-8	405335-9
Your Reference	UNITS	BSW2	Sed-1	BSW1	QA032026
Date Sampled		26/03/2026	26/03/2026	26/03/2026	26/03/2026
Type of sample		Water	Water	Water	Water
Date prepared	-	30/03/2026	30/03/2026	30/03/2026	30/03/2026
Date analysed	-	30/03/2026	30/03/2026	30/03/2026	30/03/2026
Ammonia as N in water	mg/L	0.01	0.04	<0.005	0.29
Nitrite as N in water	mg/L	<0.005	0.13	<0.005	0.61
Nitrate as N in water	mg/L	0.04	0.52	0.02	2.1
NOx as N in water	mg/L	0.04	0.65	0.02	2.7
TKN in water	mg/L	1.2	0.7	0.9	7.0
Total Nitrogen in water	mg/L	1.3	1.4	0.9	9.8
Hexavalent Chromium, Cr <sup>6+</sup> (dissolved)	mg/L	<0.005	0.02	<0.005	[NA]

Miscellaneous Inorganics						
Our Reference		405335-3	405335-4	405335-5	405335-6	405335-7
Your Reference	UNITS	LP	WL	Sed-2	BSW2	Sed-1
Date Sampled		26/03/2026	26/03/2026	26/03/2026	26/03/2026	26/03/2026
Type of sample		Water	Water	Water	Water	Water
Date prepared	-	26/03/2026	26/03/2026	26/03/2026	26/03/2026	26/03/2026
Date analysed	-	27/03/2026	27/03/2026	27/03/2026	27/03/2026	27/03/2026
Total Suspended Solids	mg/L	10	13	19	10	19
pH	pH Units	8.1	7.2	8.7	7.4	9.1
Electrical Conductivity	µS/cm	1,700	2,000	540	690	430

Miscellaneous Inorganics			
Our Reference		405335-8	405335-9
Your Reference	UNITS	BSW1	QA032026
Date Sampled		26/03/2026	26/03/2026
Type of sample		Water	Water
Date prepared	-	26/03/2026	26/03/2026
Date analysed	-	27/03/2026	27/03/2026
Total Suspended Solids	mg/L	35	8
pH	pH Units	7.8	8.2
Electrical Conductivity	µS/cm	850	1,700

Method ID	Methodology Summary
Ext-073_F	Analysis of pH using in-house method INORG-001, analysed by Envirolab Newcastle - NATA Site No. 18077.
Ext-073_G	Analysis of Conductivity using in-house method INORG-002, analysed by Envirolab Newcastle - NATA Site No. 18077.
Ext-073_J	Analysis of Total Suspended Solids using in-house method INORG-019, analysed by Envirolab Newcastle - NATA Site No. 18077.
Inorg-055	Nitrate - determined colourimetrically. Waters samples are filtered on receipt prior to analysis. Soils are analysed following a water extraction.
Inorg-055	Nitrite - determined colourimetrically based on APHA latest edition NO2- B. Waters samples are filtered on receipt prior to analysis. Soils are analysed following a water extraction.
Inorg-055/062/127	Total Nitrogen - Calculation sum of TKN and oxidised Nitrogen. Alternatively analysed by combustion and chemiluminescence.
Inorg-057	Ammonia - determined colourimetrically, based on APHA latest edition 4500-NH3 F. Waters samples are filtered on receipt prior to analysis. Soils are analysed following a KCl extraction.
Inorg-062	TKN - determined colourimetrically based on APHA latest edition 4500 Norg. Alternatively, TKN can be derived from calculation (Total N - NOx).
Inorg-118	Hexavalent Chromium (Cr6+) - determined firstly by separation using ion chromatography followed by the colourimetric analytical finish.  Water samples are ideally field filtered into alkali preserved containers prior to receipt for dissolved Cr6+ analysis. Unfiltered water samples into alkali preserved containers (or pH adjusted to pH 8-9 on receipt) can be classified as Total (unfiltered) Cr6+.  Please note, for 'Total/Unfiltered' Trivalent Chromium in waters [calculated], these results may be exaggerated due to the digestive limitation of 'Total/Unfiltered' Hexavalent Chromium in NaOH at pH 8-9 compared to more comprehensive digestion for Total Chromium using the mineral acids HNO3 and HCl.  Solid (includes soils, filters, paints, swabs for example) samples are extracted in a buffered catalysed solution prior to the analytical finish above. Water extractable options are available (e.g. as an option for filters) on request.  Impingers may need pH adjusting to pH 8-9 prior to IC-colourimetric analytical finish.

Method ID	Methodology Summary
<b>Metals-020</b>	<p>Determination of various metals/elements by ICP-AES.</p> <p>Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.</p> <p>Where molecular anion forms are calculated from an element (e.g. SO<sub>4</sub> from S or PO<sub>4</sub> from P stoichiometrically), the assumption is that the element is only present in that molecular anion form.</p> <p>Submission of low masses of sample e.g. for dust samples, may result in raised PQLs.</p>
<b>Metals-022</b>	<p>Determination of various metals by ICP-MS.</p> <p>Please note for Bromine and Iodine, any forms of these elements that are present are included together in the one result reported for each of these two elements.</p> <p>Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.</p>
<b>Org-020</b>	<p>Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (&gt;C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.</p>
<b>Org-023</b>	<p>Water samples are analysed directly by purge and trap GC-MS.</p>
<b>Org-023</b>	<p>Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.</p>
<b>Org-023</b>	<p>Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.</p> <p>Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.</p>

Client Reference: 13589a

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Water						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W3	[NT]
Date extracted	-			31/03/2026	5	31/03/2026	01/04/2026		31/03/2026	[NT]
Date analysed	-			01/04/2026	5	01/04/2026	02/04/2026		01/04/2026	[NT]
TRH C <sub>6</sub> - C <sub>9</sub>	µg/L	10	Org-023	<10	5	<10	<10	0	108	[NT]
TRH C <sub>6</sub> - C <sub>10</sub>	µg/L	10	Org-023	<10	5	<10	<10	0	108	[NT]
Benzene	µg/L	1	Org-023	<1	5	<1	<1	0	112	[NT]
Toluene	µg/L	1	Org-023	<1	5	<1	<1	0	105	[NT]
Ethylbenzene	µg/L	1	Org-023	<1	5	<1	<1	0	105	[NT]
m+p-xylene	µg/L	2	Org-023	<2	5	<2	<2	0	108	[NT]
o-xylene	µg/L	1	Org-023	<1	5	<1	<1	0	111	[NT]
Naphthalene	µg/L	1	Org-023	<1	5	<1	<1	0	[NT]	[NT]
Surrogate Dibromofluoromethane	%		Org-023	100	5	107	101	6	99	[NT]
Surrogate Toluene-d8	%		Org-023	98	5	99	99	0	101	[NT]
Surrogate 4-Bromofluorobenzene	%		Org-023	92	5	90	92	2	106	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Water					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W2	[NT]
Date extracted	-			30/03/2026	[NT]	[NT]	[NT]	[NT]	30/03/2026	[NT]
Date analysed	-			31/03/2026	[NT]	[NT]	[NT]	[NT]	31/03/2026	[NT]
TRH C <sub>10</sub> - C <sub>14</sub>	µg/L	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	93	[NT]
TRH C <sub>15</sub> - C <sub>28</sub>	µg/L	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	101	[NT]
TRH C <sub>29</sub> - C <sub>36</sub>	µg/L	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	100	[NT]
TRH >C <sub>10</sub> - C <sub>16</sub>	µg/L	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	93	[NT]
TRH >C <sub>16</sub> - C <sub>34</sub>	µg/L	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	101	[NT]
TRH >C <sub>34</sub> - C <sub>40</sub>	µg/L	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	100	[NT]
Surrogate o-Terphenyl	%		Org-020	81	[NT]	[NT]	[NT]	[NT]	85	[NT]

Client Reference: 13589a

QUALITY CONTROL: HM in water - dissolved				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W3	[NT]
Date prepared	-			30/03/2026	[NT]	[NT]	[NT]	[NT]	30/03/2026	[NT]
Date analysed	-			30/03/2026	[NT]	[NT]	[NT]	[NT]	30/03/2026	[NT]
Aluminium-Dissolved	µg/L	10	Metals-022	<10	[NT]	[NT]	[NT]	[NT]	100	[NT]
Arsenic-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	95	[NT]
Boron-Dissolved	µg/L	20	Metals-022	<20	[NT]	[NT]	[NT]	[NT]	93	[NT]
Cadmium-Dissolved	µg/L	0.1	Metals-022	<0.1	[NT]	[NT]	[NT]	[NT]	95	[NT]
Chromium-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	99	[NT]
Cobalt-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	99	[NT]
Copper-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	99	[NT]
Lead-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	98	[NT]
Nickel-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	95	[NT]
Selenium-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	95	[NT]
Zinc-Dissolved	µg/L	1	Metals-022	<1	[NT]	[NT]	[NT]	[NT]	96	[NT]

**Client Reference: 13589a**

QUALITY CONTROL: Metals in Waters - Acid extractable						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	405335-2
Date prepared	-			30/03/2026	1	30/03/2026	30/03/2026		30/03/2026	30/03/2026
Date analysed	-			30/03/2026	1	30/03/2026	30/03/2026		30/03/2026	30/03/2026
Phosphorus - Total	mg/L	0.05	Metals-020	<0.05	1	0.3	0.3	0	97	104

Client Reference: 13589a

QUALITY CONTROL: Miscellaneous Inorganics				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	405335-2
Date prepared	-			30/03/2026	1	30/03/2026	30/03/2026		30/03/2026	30/03/2026
Date analysed	-			30/03/2026	1	30/03/2026	30/03/2026		30/03/2026	30/03/2026
Ammonia as N in water	mg/L	0.005	Inorg-057	<0.005	1	1.7	1.7	0	106	#
Nitrite as N in water	mg/L	0.005	Inorg-055	<0.005	1	<0.005	<0.005	0	95	108
Nitrate as N in water	mg/L	0.005	Inorg-055	<0.005	1	0.01	0.006	50	92	86
NOx as N in water	mg/L	0.005	Inorg-055	<0.005	1	0.02	0.01	67	92	86
TKN in water	mg/L	0.1	Inorg-062	<0.1	3	6.9	[NT]		[NT]	[NT]
Total Nitrogen in water	mg/L	0.1	Inorg-055/062/127	<0.1	3	9.6	9.4	2	92	[NT]
Hexavalent Chromium, Cr <sup>6+</sup> (dissolved)	mg/L	0.005	Inorg-118	<0.005	[NT]	[NT]	[NT]	[NT]	113	[NT]

QUALITY CONTROL: Miscellaneous Inorganics				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	3	30/03/2026	30/03/2026		[NT]	[NT]
Date analysed	-			[NT]	3	30/03/2026	30/03/2026		[NT]	[NT]
Ammonia as N in water	mg/L	0.005	Inorg-057	[NT]	3	0.28	[NT]		[NT]	[NT]
Nitrite as N in water	mg/L	0.005	Inorg-055	[NT]	3	0.61	[NT]		[NT]	[NT]
Nitrate as N in water	mg/L	0.005	Inorg-055	[NT]	3	2.0	[NT]		[NT]	[NT]
NOx as N in water	mg/L	0.005	Inorg-055	[NT]	3	2.7	[NT]		[NT]	[NT]

Client Reference: 13589a

QUALITY CONTROL: Miscellaneous Inorganics				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date prepared	-			27/03/2026	3	26/03/2026	26/03/2026		27/03/2026	[NT]
Date analysed	-			27/03/2026	3	27/03/2026	27/03/2026		27/03/2026	[NT]
Total Suspended Solids	mg/L	5	Ext-073_J	<5	3	10	[NT]		97	[NT]
pH	pH Units		Ext-073_F	[NT]	3	8.1	8.2	1	[NT]	[NT]
Electrical Conductivity	µS/cm	1	Ext-073_G	[NT]	3	1700	1700	0	[NT]	[NT]

QUALITY CONTROL: Miscellaneous Inorganics				Duplicate				Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	5	26/03/2026	26/03/2026		[NT]	[NT]
Date analysed	-			[NT]	5	27/03/2026	27/03/2026		[NT]	[NT]
Total Suspended Solids	mg/L	5	Ext-073_J	[NT]	5	19	17	11	[NT]	[NT]
pH	pH Units		Ext-073_F	[NT]	5	8.7	[NT]		[NT]	[NT]
Electrical Conductivity	µS/cm	1	Ext-073_G	[NT]	5	540	[NT]		[NT]	[NT]

## Result Definitions

<b>NT</b>	Not tested
<b>NA</b>	Test not required
<b>INS</b>	Insufficient sample for this test
<b>PQL</b>	Practical Quantitation Limit
<b>&lt;</b>	Less than
<b>&gt;</b>	Greater than
<b>RPD</b>	Relative Percent Difference
<b>LCS</b>	Laboratory Control Sample
<b>NS</b>	Not specified
<b>NEPM</b>	National Environmental Protection Measure
<b>NR</b>	Not Reported

## Quality Control Definitions

<b>Blank</b>	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
<b>Duplicate</b>	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
<b>Matrix Spike</b>	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
<b>LCS (Laboratory Control Sample)</b>	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
<b>Surrogate Spike</b>	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

## Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Air volumes are typically provided by customers (often as flow rate(s) and sampling time(s) and/or simply volumes) sampled or exposure times (determines 'volume' passive badges are exposed to)). Hence in such circumstances the volume measurement is inevitably not covered by Envirolab's NATA accreditation. An exception may occur where Envirolab Newcastle does the sampling where accreditation exists for certain types of sampling and hence volume determination(s). Note air volumes are often used to determine concentrations for dust and/or analyses on filters, sorbents and in impingers. For canister sampling, the air volume is covered by Envirolab's NATA accreditation.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates can be downloaded from the [Envirolab Resources website](#) or obtained directly by contacting the laboratory.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

For Dust Deposit Gauge (DDG) analysis the sampling, sampling period and funnel exposure area do not fall under Envirolab's NATA accreditation (unless the Newcastle laboratory where responsible for the sampling), hence the annotation on the DDG units of reporting.

Urine Analysis - The BEI values listed are taken from the 2022 edition of "TLVs and BEIs Threshold Limits" by ACGIH.

## Report Comments

MISC\_INORG: # Percent recovery not reported due to the high concentration of the analyte/s in the sample/s. However, an acceptable recovery was obtained for the LCS.

MISC\_INORG:Sample 405335-1 RPD is accepted as <5\*PQL.

# CHAIN OF CUSTODY - Client



## ENVIROLAB GROUP

Company:	RCA Australia	RCA Reference Number (i.e. report title)
Contact person:	Fiona Brooker	13589a
Project Mgr:	Fiona Brooker	PO No. (if applicable):
Sampler:	Damien	Envirolab Quote No. :
Address:	92 Hill St Carrington, NSW 2294	Date results required:
Phone:		02 4902 9200
	Mob:	0410 230 644
Email results to:	administrator@rca.com.au + enviro@rca.com.au	
Email invoice to:		

**ENVIROLAB GROUP**

Sydney Lab - Envirolab Services  
12 Ashley St, Chatswood, NSW 2067  
02 9910 6200 sydney@envirolab.com.au

Sample Information				# Containers	Tests Required										Sediment within container to be included in analysis if X	Comments
Envirolab Sample ID	Client Sample ID	Date sampled	Type of sample		E01690 - Total Suspended Solids (TSS)	E00705-NH3, E00815-NO2, E00790-NO3, E00850-NOx, E01090-Total P)	E010300 - Nutrient Suite (NH3, NO2, NO3, NOx, TKN (calc), Total N, Total P)	E07290 and E07220 TRH C6-C40	E03010_D - Dissolved (Aluminium, Arsenic, Boron, Cadmium, Chromium, Cobalt, Copper, Lead, Nickel, Selenium, Zinc)	E05360 - Hexavalent Chromium	E01140 - pH	E01150 - Electrical Conductivity				
1 405335-1	GW1	26/03/2026	Water	4												
2 -2	GW3	26/03/2026	Water	4	X										X	
3 -3	LP	26/03/2026	Water	4	X										X	
4 -4	WL	26/03/2026	Water	4		X									X	
5 -5	Sed-2	26/03/2026	Water	4	X	X									X	
6 -6	BSW2	26/03/2026	Water	9	X	X	X	X	X	X	X	X	X	X	X	
7 -7	Sed-1	26/03/2026	Water	9	X	X	X	X	X	X	X	X	X	X	X	
8 -8	BSW1	26/03/2026	Water	9	X	X	X	X	X	X	X	X	X	X	X	
9 -9	QA1 032626	26/03/2026	Water	4	X	X	X	X	X	X	X	X	X	X	X	
<b>Total</b>				56	7	2	7	4	4	4	7	7	2			

Envirolab Service  
12 Ashley St  
Chatswood NSW 2067  
Ph: 02 9910 6200

Lab info: X  
X 405335

Date Received: 27/3/26  
Time Received: 0920  
Received By: GR  
Temp (Cool/Ambient):  
Cooling (Ice/Keepack):  
Seal (Intact/Broken/Not Used):

Relinquished by (company):	RCA Australia	Received by (company):	Envirolab	<i>Lab use only:</i>			
Print Name:	Damien	Print Name:	Thomas Laznik	Job Number:	405335	Cooling:	<input checked="" type="radio"/> Ice Pack / None
Date & Time:	26-3-26	Date & Time:	26-3-26 2:38pm	Temperature:	12°C	Security Seal:	Intact / Broken / <input checked="" type="radio"/> Not Used
Signature:	<i>D. Blatter</i>	Signature:	<i>Thomas Laznik</i>	TAT Req:	SAME DAY / 1 / 2 / 3 / 4 / <input checked="" type="radio"/> STD		

## SAMPLE RECEIPT ADVICE

### Client Details

<b>Client</b>	RCA Australia
<b>Attention</b>	RCA Administrator

### Sample Login Details

<b>Your reference</b>	13589a
<b>Envirolab Reference</b>	405335
<b>Date Sample Received</b>	26/03/2026
<b>Date Instructions Received</b>	27/03/2026
<b>Date Results Expected to be Reported</b>	07/04/2026

### Sample Condition

<b>Samples received in appropriate condition for analysis</b>	Yes
<b>No. of Samples Provided</b>	9 Water
<b>Turnaround Time Requested</b>	Standard
<b>Temperature on Receipt (°C)</b>	12
<b>Cooling Method</b>	Ice
<b>Sampling Date Provided</b>	YES

### Comments

Nil

Please direct any queries to:

#### Aileen Hie

**Phone:** 02 9910 6200  
**Fax:** 02 9910 6201  
**Email:** ahie@envirolab.com.au

#### Jacinta Hurst

**Phone:** 02 9910 6200  
**Fax:** 02 9910 6201  
**Email:** jhurst@envirolab.com.au

*Analysis Underway, details on the following page:*



Sample ID	VTRH(C6-C10)/BTEXN in Water	svTRH (C10-C40) in Water	HM in water - dissolved	Metals in Waters - Acid extractable	Ammonia as N in water	Nitrite as N in water	Nitrate as N in water	NOx as N in water	TKN in water	Total Nitrogen in water	Hexavalent Chromium, Cr6+ (dissolved)	Miscellaneous Inorganics
<b>GW1</b>				✓	✓	✓	✓	✓				
<b>GW3</b>				✓	✓	✓	✓	✓				
<b>LP</b>				✓	✓	✓	✓	✓	✓	✓		✓
<b>WL</b>				✓	✓	✓	✓	✓	✓	✓		✓
<b>Sed-2</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>BSW2</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Sed-1</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>BSW1</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>QA032026</b>				✓	✓	✓	✓	✓	✓	✓		✓

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

### Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.

Requests for longer term sample storage must be received in writing.

Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.

TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

We acknowledge receipt of your samples and Purchase Order (PO) (if provided). If a PO includes your terms & conditions, Envirolab hereby expressly rejects and will not be bound by any external or third-party terms and conditions, including those referenced or attached to a PO.

All services to be performed by Envirolab will be governed exclusively by Envirolab's General Terms and Conditions attached to this acknowledgement ( [Envirolab Terms](#) ) via hyperlink or found on our websites.

If you do not object in writing within two (2) business days of the date of this acknowledgement, you will be deemed to have accepted the Envirolab Terms. In addition, your provision of further instructions, additional samples, payment of any invoice, or acceptance of services or results from Envirolab will constitute acceptance of the Envirolab Terms. For clarity, Envirolab's commencement or continuation of work following receipt of the PO is performed solely under the Envirolab Terms and does not constitute acceptance of any external terms. All rights are expressly reserved.