REPORT TO NORTHERN TERRITORY ENVIRONMENT PROTECTION AUTHORITY

Channel Island Power Station WDL212-04 Annual Monitoring Report

Issued: 12 December 2025

TROP WATER PTY LTD
ABN: 89 638 479 080 | P:+61 (0)8 8981 8889
GPO Box 3511, Darwin, NT 0801, Australia
E: admin@tropwater.com.au
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Company Details

Company Name	Trop Water Pty Ltd
Contact Name	Tony Boland – Director
Contact Number	(08) 89818889
Contact Email	Tony.Boland@tropwater.com.au
Business Address	Unit 12/43 Berrimah Road, Berrimah NT 0828 AUSTRALIA
Postal Address	GPO Box 3511, Darwin NT 0801 AUSTRALIA
ABN	89 638 479 080
Website	www.tropwater.com.au

EXECUTIVE SUMMARY

In accordance with Conditions 39 and 40 of Waste Discharge Licence WDL212-04, this report details the results of environmental monitoring conducted under WDL212-04 for the period from 1 November 2024 to 31 October 2025 and includes a long-term trend analysis from October 2019 to October 2025. The monitoring program focused on several key areas: wastewater discharge volumes, surface water quality assessments, annual contaminant load calculations, and sediment quality evaluations at critical sites, namely ADP1, ADP2, NODH1, and SODH1.

Monitoring results for Channel Island Power Station (CIPS) wastewater and sediment monitoring programs are summarised as follows:

- During this reporting period, the total wastewater discharge from ADP1 significantly decreased to approximately **42.79 ML**, compared to **122.2 ML** in the previous year. This notable decline was driven by efficient water re-circulation at the cooling tower. ADP2 also reported a total discharge of **8.89 ML**, a decrease from **9.44 ML** in the previous year, indicating reduction in operational water use. In total, approximately 60% reduction in operational water use is observed in this year compared to the previous year.
- Surface water quality results indicated that all monitored parameters remained within regulatory limits defined in WDL212-04.
- On four occasions (November 2024 (8.92), December 2024 (8.67), April 2025 (8.74) and May 2025 (8.7)), pH levels at ADP1 exceeded the WDL212-04 trigger range. This elevated pH is consistent with typical values found in thermal power cooling water systems (7.0 - 9.5) (Ahmed, Jamal & Shujaatullah, 2020). However, these exceedances did not meet the criteria for notification, as they were neither three times the trigger value range nor recorded on three consecutive sampling occasions.
- During the reporting, TP, TN and TSS concentrations at the monthly monitoring sites were variable but consistently remained below their specified trigger value throughout this period, resulting in no notifications for TP, TN and TSS this year. Generally, TP, TN and TSS concentrations at all monthly monitoring sites showed a decreasing trend compared to previous years since 2019.
- All filtered metal concentrations at ADP1, ADP2, SODH1 and NODH1 were below their respective trigger Values. Therefore, no notification was issued under WDL212-04 concerning filtered metals. This indicates a downward trend for all filtered metals in this year compared to historical data from October 2019.
- All hydrocarbon concentrations were below the limit of reporting (LOR) for each chemical at the CIPS monitoring sites, except for TPH, which was recorded at NODH1, ILCP and ISCP. The detected TPH concentrations can be attributed to petrol range organics (C6 – C9 fraction), diesel range organics (C10 – C28 fraction), and motor oils (C29 – C36 fraction) (Collins, 2007).
- Apart from the estimated contaminant loads for TN, TP, TSS, Al, As, Cr, Cu, Pb, Ni and Zn at ADP1, all other reported contaminant loads at ADP1 this year were estimated using the absolute values of their respective LORs. At ADP2, the absolute values of hydrocarbons and metals except Al, Ni and Zn were employed for estimating contaminant loads throughout the year.
- In comparison to the previous year, contaminant loads at ADP1 and ADP2 have decreased, respectively for this year. This can be attributed to the 60% reduction in the wastewater discharge volume at ADP1 and ADP2.
- Sediment monitoring at NODH2 and SODH2 reported metal concentrations consistently below trigger values, although slight increases were noted in Al and As concentrations at NODH2, reflecting minimal fluctuations over the past three years and indicating stable sediment quality.

The report emphasizes the effectiveness of sustained monitoring efforts and strict adherence to compliance measures designed to protect the marine receiving environment. Moving forward, TGen will

endeavour to maintain this level of vigilance in operational practices. Additional focus on addressing any irregularities promptly will be critical in sustaining water quality, protecting ecological health, and ensuring ongoing compliance with environmental regulatory standards. Continued investment in monitoring technologies and practices will be pursued to further enhance the ability to safeguard wastewater quality being discharged to Darwin Harbour against the backdrop of changing environmental conditions.

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1 INTRODUCTION

Power Generation Corporation, trading as Territory Generation (TGen) is a corporation owned by the Northern Territory Government. TGen is the largest wholesale electricity producer in the Northern Territory with 597.1 MW of installed capacity and contract an additional 5.1 MW from independent power producers, including 4 MW of solar power from Uterne in Alice Springs and 1.1 MW of reclaimed gas produced by LMS Energy from the Shoal Bay Renewable Energy Facility. TGen own and operate 8 power stations, including Channel Island Power Station (CIPS).

CIPS is the largest power station in the Northern Territory of Australia. It was commissioned in 1986 and commenced formal operations in 1987. CIPS is the main source of electricity for the Darwin-Katherine Interconnected system (DKIS). CIPS currently has 279 MW of installed power capacity generated by four (4) heavy industrial gas turbines, three (3) aeroderivative gas turbines, three (3) dual fuel and one (1) steam turbine. A 35 MVA Darwin-Katherine Battery Energy Storage System and a renewable-fuel capable TM2500 gas turbine generator set are undergoing commissioning.

Wastewater is a byproduct of the electricity generation processes at CIPS. This wastewater is discharged into Darwin Harbour through two authorised discharge points: Authorised Discharge Point 1 (ADP1) and Authorised Discharge Point 2 (ADP2), as shown in Figure 1 and Figure 2, respectively. The wastewater is released into the harbour through two outlets, each receiving effluent from different sources, including the cooling tower, settling or cooling ponds, and stormwater, as illustrated in Figure 3.

TGen is committed to environmental stewardship and deliver reliable electricity in a way that meets their environmental, social and economic responsibilities. TGen currently holds Waste Discharge Licence WDL212-04, issued in June 2024 by the Northern Territory Environment Protection Authority (NTEPA) under the *Water Act 1992*. This licence governs the discharge of wastewater from cooling towers and settling or cooling ponds into the stormwater system flowing into Darwin Harbour. The NTEPA granted CIPS its first Waste Discharge Licence (WDL 212), for the period November 2015 to November 2017. From June 2018 to June 2020, wastewater discharge was managed under WDL 212-01. Subsequently, wastewater discharge was managed under WDL212-02 from June 2022 to November 2022 and WDL212-03 from December 2022 to June 2024.

Trop Water Pty Ltd (TW), formerly known as Tropical Water Solutions Pty Ltd, was contracted by TGen in April 2016 to conduct the required monitoring program associated with the Waste Discharge Licence (WDL) and to manage waste discharge licence activities. The current licence, WDL212-04, outlines the conditions and approvals necessary for managing wastewater discharge from CIPS facility. This includes monitoring wastewater at the property's boundaries (all land-based) and sediment in the marine receiving environment.

This report, prepared by TW on behalf of TGen, fulfills the annual monitoring report requirements set forth in conditions 39 and 40 of WDL212-04. It details the wastewater and sediment monitoring program and interprets in-situ and laboratory analysis results for various physical and chemical parameters. The reporting period for this document spans from 1 November 2024 to 31 October 2025.

Figure 1: CIPS Authorised Discharge Point 1 (ADP1) or Compliance Point 1.

Figure 2: CIPS Authorised Discharge Point 2 (ADP2) or Compliance Point 2.

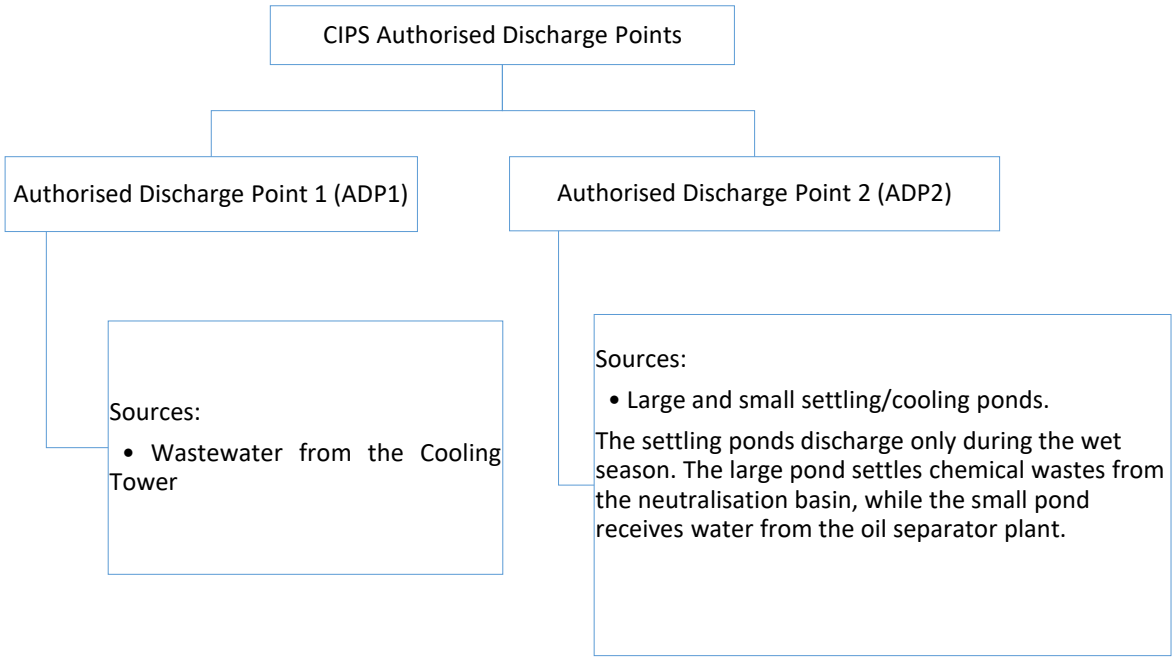

Figure 3: Wastewater sources at CIPS Authorised Discharge Points.

Wastewater sources from Channel Island Power Station

Wastewater at CIPS is produced from three main sources: stormwater, sewage, and operational water. Apart from rainwater, all source water is supplied by Power and Water and is pumped to an elevated fire tank located on the northeastern side of CIPS. This water undergoes multiple treatments and processes for power generation before being discharged.

Operational wastewater refers to water that has been utilised or contaminated during power generation and related activities. This includes water from steam and cooling cycles, neutralisation basins, oily water separators, settling ponds, washdown areas, chemical handling, and any other treatment processes or spills that affect water quality.

WDL212-04 outlines two authorised operational wastewater discharge points: authorised discharge point 1 (ADP1) and authorised discharge point 2 (ADP2) (see Figure 1 and Figure 2). ADP1 receives wastewater from the cooling tower (see Figure 3). This wastewater flows through a drainage line into the northern stormwater drainage, ultimately discharging into Darwin Harbour. The monitoring point for this discharge, known as the Northern Outlet to Darwin Harbour (NODH1), is located at the end of the northern stormwater drainage (Figure 4). The quality and discharge of wastewater at ADP1 are influenced by the water chemistry of the cooling tower water, which can vary significantly based on various operational conditions of the onsite power generation infrastructure. During rainfall events, discharge from the cooling tower mixes with stormwater, then drains through the northern stormwater drainage, passing through rocks and mangroves before reaching Darwin Harbour (Figure 4).

ADP2 also receives wastewater from two settling ponds (see Figure 3). This wastewater flows into a drainage line that directs it to the southern stormwater drainage, and eventually to Darwin Harbour. The monitoring point for this discharge, called the Southern Outlet to Darwin Harbour (SODH1), is located at the end of the

southern stormwater drainage (Figure 4). As depicted in Figure 4, the settling ponds receive water from two sources: the Neutralisation Basin and the Oil and Water Separator plant. In addition to the flows from ADP2, SODH1 also receives stormwater from the roofing of the CIPS onsite and the southern area of the site (Figure 4). The mangrove population density around both the southern and northern stormwater drains is relatively low, with the nearest receiving water body located no more than 30 meters away from the stormwater drain outlets.

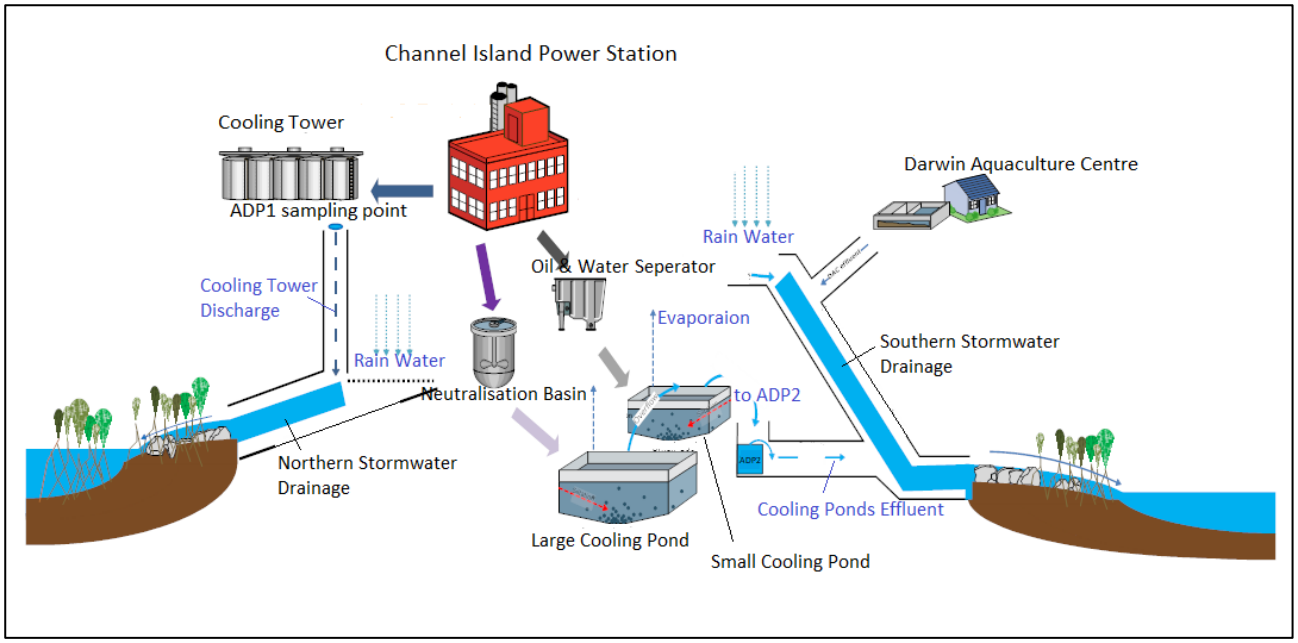

Figure 4: Channel Island Power Station wastewater discharge facility.

Climate

CIPS is located on an island in the Middle Arm of Darwin Harbour. Darwin has a tropical climate with distinct wet and dry seasons. The dry season typically lasts from May to September, characterised by dry southeasterly trade winds that create relatively low humidity, clear skies, and cooler temperatures, with rare rainfall. In contrast, the wet season, spanning December to April, features warm temperatures, high humidity, and frequent rainfall brought by northwestern winds from the coast. Rainfall during this period is often linked to monsoonal troughs, although tropical cyclones can also bring strong winds and heavy rain to localized areas. The transitional phase known as the "build-up" occurs from October to December, marked by high temperatures and humidity, along with occasional convective storms of varying intensity (Safarova et al., 2022).

Rainfall during the build-up and wet seasons typically leads to increased stormwater infiltration into the CIPS stormwater drainage networks and settling ponds, significantly raising water levels in the ponds. Discharge at ADP2 predominantly occurs during the wet season when rainfall in the settling ponds surpasses evaporation rates, resulting in flows from the ponds to ADP2. Consequently, during the dry season, flow from ADP2 is restricted by evaporation, causing upstream settling pond levels to drop over one meter below the inlet to ADP2.

2 METHODS

CIPS Monitoring sites under WDL212-04

2.1.1 Water and wastewater monitoring sites

Wastewater monitoring sites changes under WDL212 revision or amendment. Wastewater monitoring was conducted at six sites from April 2016 to May 2018 under WDL 212. In July 2018, four marine water sites in Darwin Harbour were added to the monitoring program under WDL 212-01. All ten sites, including these additional marine locations, continued to be monitored under WDL 212-02. However, under WDL 212-03 and subsequently WDL 212-04, the four marine sites were removed from the monitoring program, leaving only the six land-based sites. Despite this, sampling at the four Darwin Harbour marine monitoring sites has continued quarterly to assess the environmental health of the receiving water. The data for these marine sites is not included in this Annual report, but it can be made available to the NTEPA upon request. Table 1 lists all site codes, descriptions, and coordinates for the current monitoring program under WDL 212-04, including the four marine sites. Figure 5 illustrates the relative locations of all monitoring sites, while Figure 6 features signage identifying each land-based sampling site.

Table 1: Water and Wastewater Monitoring Sites

Site Code	Description	Coordinates (degrees)
SODH1	Southern Outlet to Darwin Harbour (Drain prior to mixing in receiving environment)	Lat: -12.5602148 Long: 130.8627621
NODH1	Northern Outlet to Darwin Harbour (Drain prior to mixing in receiving environment)	Lat: -12.5540919 Long: 130.8640302
ADP1	Cooling Tower Wastewater Discharge (Representative of discharge from cooling tower to drainage system that flows to NODH1)	Lat: -12.554612 Long: 130.8649699
ILCP	Influent Large Cooling Pond	Lat: -12.5556373 Long: 130.8639617
ISCP	Influent Small Cooling Pond	Lat: -12.5561714 Long: 130.86412
ADP2	Settling Ponds Wastewater Discharge (Representative of discharge from settling ponds to drainage system that flows to SODH1)	Lat: -12.5565488 Long: 130.8635673
SODH3	Southern Discharge Point Mixing Zone (marine)	Lat: --12.560221 Long: 130.863668
SODH4	Southern Receiving Environment Monitoring Point (marine)	Lat: -12.5607378 Long: 130.8646005
NODH3	Northern Discharge Point Mixing Zone (marine)	Lat: -12.555015 Long: 130.862802
NODH4	Northern Receiving Environment Monitoring Point (marine)	Lat: -12.5553539 Long: 130.8616205

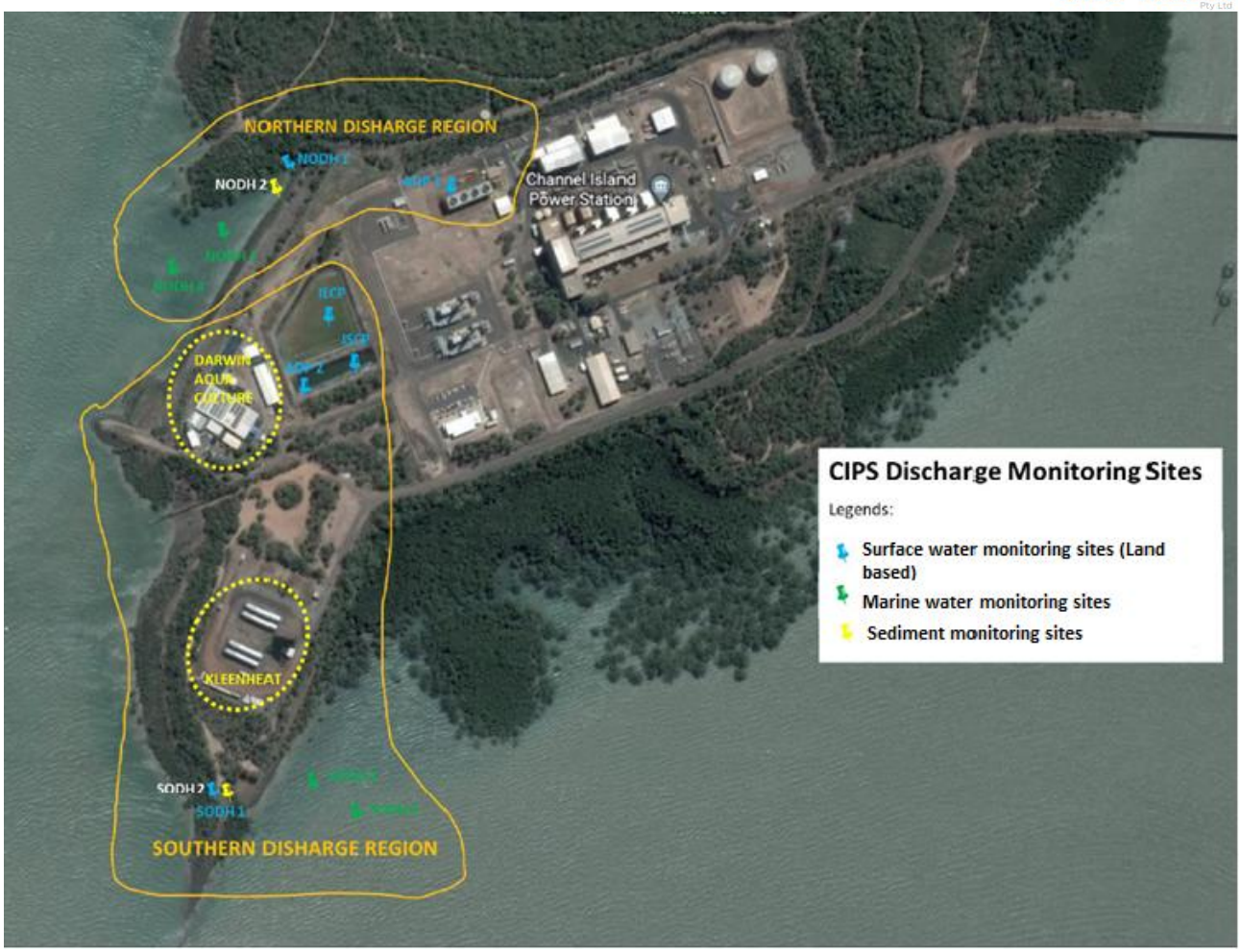

Figure 5: CIPS water and sediment monitoring sites.

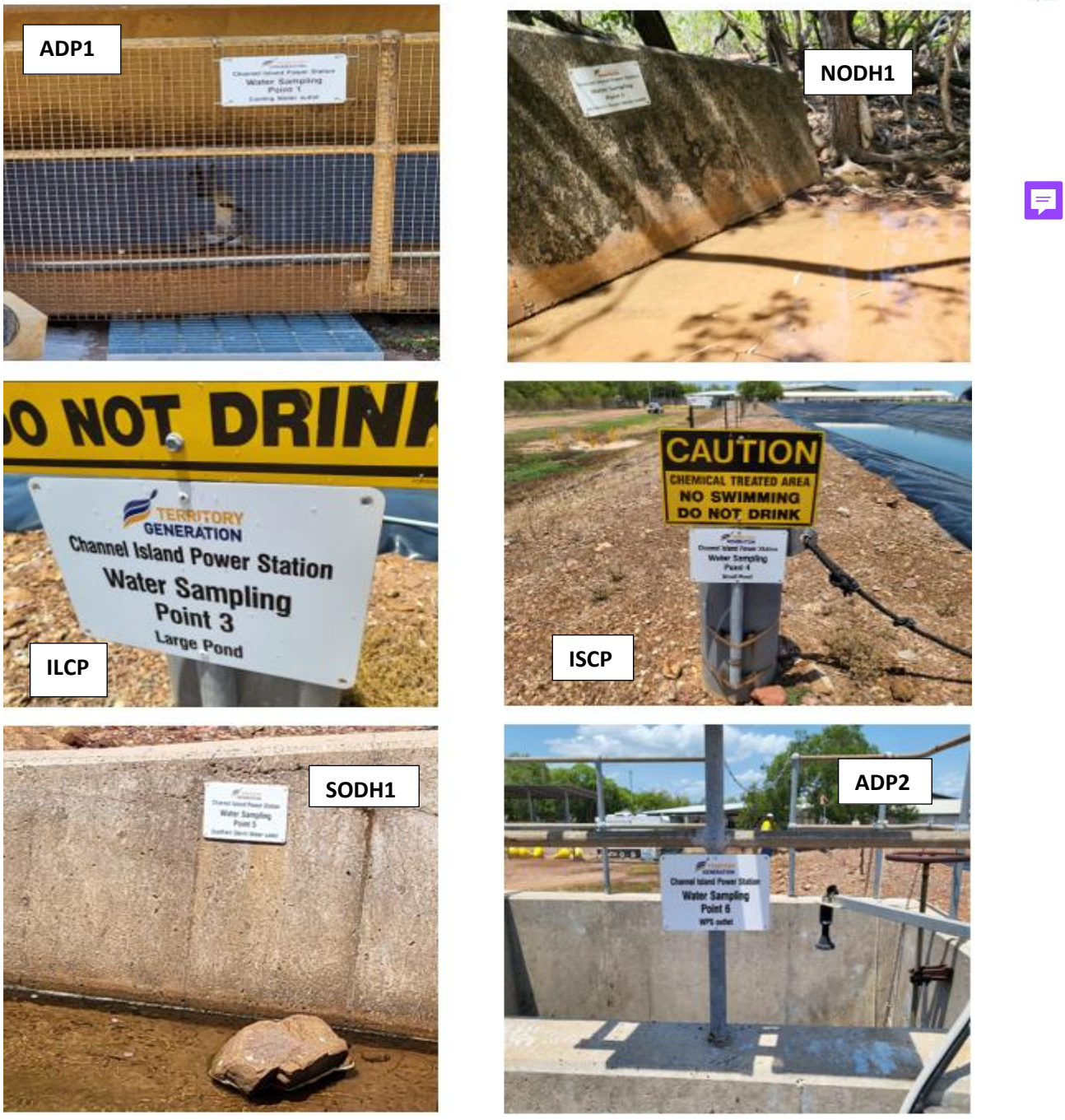

Figure 6: Monitoring signs at land-based sites.

2.1.2 Sediment Monitoring sites

Sediment samples in Darwin Habour are collected within the area of potential CIPS wastewater discharge impact (i.e., in proximity to sites NODH1 and SODH1) (See Figure 5). The monitored sites are as follows:

- NODH2 - outfall from NODH1 (Lat: -12.5544821 and Long: 130.8632593)
- SODH2 - outfall from SODH1 (Lat: -12.560561 and Long: 130.8631102)

Monitoring frequencies and parameters

2.1.3 Water and wastewater monitoring frequencies and parameters

Table 2 shows the water and wastewater monitoring frequencies and parameters analysed under the WDL212-04 monitoring program and additional marine sites.

Table 2: Water and wastewater monitoring frequencies and parameters analysed.

Sites	Monitoring frequency	Parameters
SODH1 NODH1 ADP1 ADP2	Monthly	• Total and Filtered Metals (Aluminium, Arsenic, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Nickel, and Zinc) • Nutrients/Suspended Solids (Total Phosphorous, Total Nitrogen and Total Suspended Solids) • Hydrocarbons (Total Petroleum Hydrocarbons, Polycyclic aromatic hydrocarbons, Benzene, Toluene, Ethylbenzene and Xylenes) • In-situ or Field parameters (Flow rate, Temperature, pH, Turbidity, Electrical Conductivity, Free Chlorine, and Dissolved Oxygen % Saturation)
ILCP ISCP NODH3 NODH4 SODH3 SODH4	Quarterly	

2.1.4 Sediment monitoring frequencies and parameters

Sediment monitoring under WDL212-04 is scheduled to occur annually. However, TGen conducts quarterly monitoring at the NODH2 and SODH2 sites. Parameters analysed include metals (Aluminium, Arsenic, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Nickel, and Zinc) and hydrocarbons (Total Petroleum Hydrocarbons, Polycyclic Aromatic Hydrocarbons, Benzene, Ethylbenzene, Xylenes, and Toluene).

Sampling procedure

In the 2024/25 monitoring year, water and sediment monitoring were undertaken by Trop Water Pty Ltd in accordance with the monitoring program specified in item 11 of WDL212-04. All samples and field environmental data were collected in accordance with the *Australian Guidelines for Water Quality Monitoring and Reporting* (AS/NZS 5667; ANZECC/ARMCANZ, 2000), where applicable.

Measurements of Temperature, Electrical Conductivity (EC), Dissolved Oxygen, and pH at each site were done in-situ using a Horiba U-52G multiparameter probe. A Hach 2100Q Turbidimeter and a Hach DR300 Pocket Colorimeter were used for *in-situ* measurements of Turbidity and free chlorine, respectively. Samples for *in-situ* measurements were collected from the part of water that provides representative (well mixed) samples at each of the designated sampling site. Field instruments were calibrated prior to each sampling event and post-field checks are undertaken after each sampling event to ensure the instruments' continued operation within the manufacturer's specifications. All calibration records are available upon request.

2.1.5 Sampling for nutrients, metals, and hydrocarbons analyses

Monthly samples from ADP1 and ADP2, which are analysed for nutrients, metals, and hydrocarbon were obtained from the outflow at the installed v-notches, while samples from SODH1 and NODH1 were collected from the end of the drainage pipes, using a sampling pole. The quarterly samples at the settling ponds, ILCP and ISCP were obtained from at least 0.2m below the water surface using a sampling pole.

Site SODH1 is intermittently influenced by saltwater from the Darwin Aquaculture Centre and/or marine water from tidal water pooling. Hence, EC or Salinity of the water is determined prior to sample collection. This ensured that the appropriate samples bottles and method of analysis (marine or freshwater analysis) are used for the processing of the sample.

All collected samples are delivered to Australian Laboratory Services (ALS) Darwin – Environmental, located at Woolner, on the day of collection. ALS Darwin – Environmental arrange overnight transport of the samples to ALS Sydney – Environmental (NATA Accreditation No. 825) for analysis.

2.1.6 Sediment sampling

Annual sediment samples, conducted according to the monitoring program under WDL212-04 at sites NODH2 and SODH2, were collected using a stainless-steel Ekman grab sampler capable of digging up to 15 cm into the sediment. In each successful collection, the samples were mixed to achieve homogenisation. Approximately 700 grams of sediment were collected from each site and stored in 250 mL glass jars provided by ALS.

Sediment samples obtained were also delivered to ALS Darwin– Environmental, located at Woolner, on the same day of collection. Analysis for hydrocarbons and metals is undertaken by ALS Sydney – Environmental (NATA Accreditation No. 825).

Quality Assurance/Quality Control

Quality Assurance and Quality Control (QA/QC) measures for water and sediment monitoring were implemented in accordance with AS/NZS 5667 and ANZECC & ARMCANZ where applicable. These measures included:

- Proper sample labelling, preservation, storage, and transportation following chain of custody procedures.
- Laboratory analyses conducted within designated holding times.
- Analysis of laboratory QA/QC samples, including duplicates, blanks, matrix spikes, matrix spike duplicates, and surrogates.
- Utilisation of a laboratory accredited by NATA for the required analyses as listed in the laboratory's NATA registration.

These QA/QC controls are deemed sufficient according to relevant standards and guidelines. The results of the laboratory's internal quality assurance programs are included with the NATA test certificates in the Appendix.

3 RESULTS

Monitoring Results

This section provides a detailed discussion of the data and information gathered from the monitoring program implemented under WDL212-04, as specified in Item 13. The annual year encompass the period from November 1, 2024, to October 31, 2025. However, the monitoring report includes data from October 2019 to October 2025 where available to allow for long term trend analysis. Data from the monitoring listed below are included:

(a) Monitoring of discharge volume in accordance with Appendix 2;

(b) Surface water quality monitoring in accordance with Appendix 2;

(c) Monitoring of annual contaminant loads discharged to Darwin Harbour in accordance with Appendix 2 and conditions 40;

(d) Sediment monitoring in accordance with Appendix 3.

The results of surface water and sediment quality monitoring were compared to the trigger values specified in WDL212-04, where applicable. *Trigger values for contaminants in water are applicable solely to discharges at **ADP1** and **ADP2** for **WDL212-04** incident notification. Sediment monitoring is conducted annually, with samples able to be collected at any time throughout the year. As noted in Appendix 2 (Page 20) of WDL212-04, "trigger values specified in WDL212-04 for metals and metalloids apply only to the filtered fraction." The results for filtered metals in this report refer to field-filtered samples*.

Trigger value limits for various parameters are outlined in Appendix 2 of WDL212-04. These values are established for pH, Total Phosphorous (TP), Total Nitrogen (TN), Total Suspended Solids (TSS), and Filtered Metals (Al, As, Cd, Cr, Co, Cu, Pb, Hg, Ni, and Zn). The trigger values for TP, TN, TSS, Al, and Zn specified in WDL212-04 apply at ADP1, ADP2, NODH1, and SODH1.

Notifiable incidents with WDL212-04 are stated in Schedule 1, Item 10 and include:

(a) An exceedance of a trigger value specified in Item 7 at the compliance points in Item 8, on three consecutive sampling occasions;
(b) An exceedance of three or more times a trigger value specified in Item 7 at the compliance points in Item 8;
(c) A discharge at a point not specified in Item 5;

(d) A discharge from a source not specified in Item 6;

(e) A failure to comply with conditions 20 or 23.

Monitoring results that fall outside the relevant trigger value range specified in WDL212-04 are displayed in **bold font**. If a result is outside this range and requires "notification" under WDL212-04, it is indicated in **bold red font**.

Certificates of Analysis, which include laboratory Limits of Reporting (LOR) and QA/QC information, are provided in the Appendix. When results are reported as less than (<) a specific value, it indicates they are below the corresponding laboratory LOR. Variations in LOR for the same parameter are typically related to the sample matrix (e.g., saline versus non-saline water). For more details regarding laboratory LOR, please refer to the Appendix.

Results that are below the laboratory LOR are replaced with a value equal to the LOR for the purposes of graphing and statistical analysis. Some sites show no data due to a lack of discharge at the time of monitoring. During this reporting period, out of twelve sampling events, no discharge was reported at ADP1 on three occasions. Consequently, this lack of discharge at ADP1 resulted in no flow at NODH1 on a single occasion. Additionally, no flow was recorded at ADP2 on ten of the twelve sampling events. Furthermore, the absence of flow (or only minor flow) at ADP2 led to no discharge at SODH1 on ten occasions. Monitoring results for certain parameters at ADP2, NODH1, and SODH1 are not available for the December 2022 sampling event, as the samples were damaged in transit and could not be analysed upon arrival at the receiving laboratory.

Wastewater Discharge Volume

3.1.1 Wastewater discharge at ADP1 and ADP2

Figure 7 and Figure 8 below display the daily discharge (kL/day) and monthly discharge (kL/month) of wastewater released from November 2024 to October 2025 at ADP1 (cooling tower). The wastewater discharged from ADP1 flows into the CIPS northern drainage system, ultimately reaching the outlet at NODH1 and then entering Darwin Harbour.

The monthly flow rate at ADP1 ranged from a minimum of 199.13 kL/month (December 2024) to a maximum of 12,309.9 kL/month (September 2025) during the reporting period (November 2024 to October 2025). The flow meter installed at ADP1 recorded discharges for all twelve months (see Figure 8). However, samples for laboratory analysis were only taken for nine months excluding February, March and July 2025 because there was no discharge on the scheduled day of sampling. Monitoring of WDL212-04 is undertaken by Trop Water Pty Ltd, an independent contractor with the requisite personnel and instrument as specified in WDL212-04. WDL212-04 monitoring events are scheduled at least a month in an advance by Trop Water. Wastewater is discharged from ADP1 only when specific water chemistry conditions are met, which is highly unpredictable and depends on various operational factors of the onsite power generation infrastructure. This sporadic and unpredictable discharge from ADP1 leads to operational conditions in which scheduling monitoring events by Trop Water to coincide with discharge is not always feasible.

Over the past 12 months, a total of 42.79 ML of wastewater was discharged at ADP1, compared to 122.2 ML in the previous year. Hence a decreasing trend in water discharge is observed at ADP1. This can be attributed to the efficient water re-circulation at the cooling tower.

Daily discharges (kL/day) and monthly total discharges (kL/month) at ADP2 are illustrated in Figure 9 and Figure 10, respectively. Throughout the year from November 2024 to October 2025, monthly discharge at ADP2 varied significantly, ranging from no discharge (0 kL/month) to a maximum of 6611.02 kL/month. The peak discharge occurred in April 2025, while the flow meter recorded no discharge for several months, including January 2025, February 2025, March 2025, May 2025, June 2025, July 2025, September 2025 and October 2025 (refer to Figure 10). Out of the four months (November 2024, December 2024, April 2025 and August 2025) that discharges occurred at ADP2, samples for laboratory analysis were only taken for April and August 2025 sampling events. It is worth noting that the discharge recorded in August 2025 was estimated from the available water in the small settling pond prior to discharge on 20 August 2025 due to failure of the flow meter to record discharges. The cause of the unmeasured discharge is that the 'V-notch' weir at ADP2 sustained a mechanical failure to the lower section of the outflow basin, resulting in unmeasured discharge from the lower section, below the weir at ADP2. Prior to the discharge, it was observed that water level in the small settling pond was about two thirds of its total volume. The total volume of the small settling pond is estimated to be 2,470 m^3.

Over the past 12 months, the total wastewater discharged at ADP2 amounted to 8.89 ML compared to 9.44 ML in the preceding annual year. Typically, discharge at ADP2 is more prominent during the wet season when

rainfall and inflow surpass evaporation rates in the settling ponds. Conversely, during the dry season, evaporation limits flow from ADP2, leading to a drop of over one meter in the settling pond level below the outfall to ADP2.

In total, CIPS discharged 51.67 ML of recorded wastewater for the 12-month reporting period (November 2024 to October 2025) from ADP1 and ADP2. This amounts to about 60% reduction in wastewater released compared to the preceding annual year.

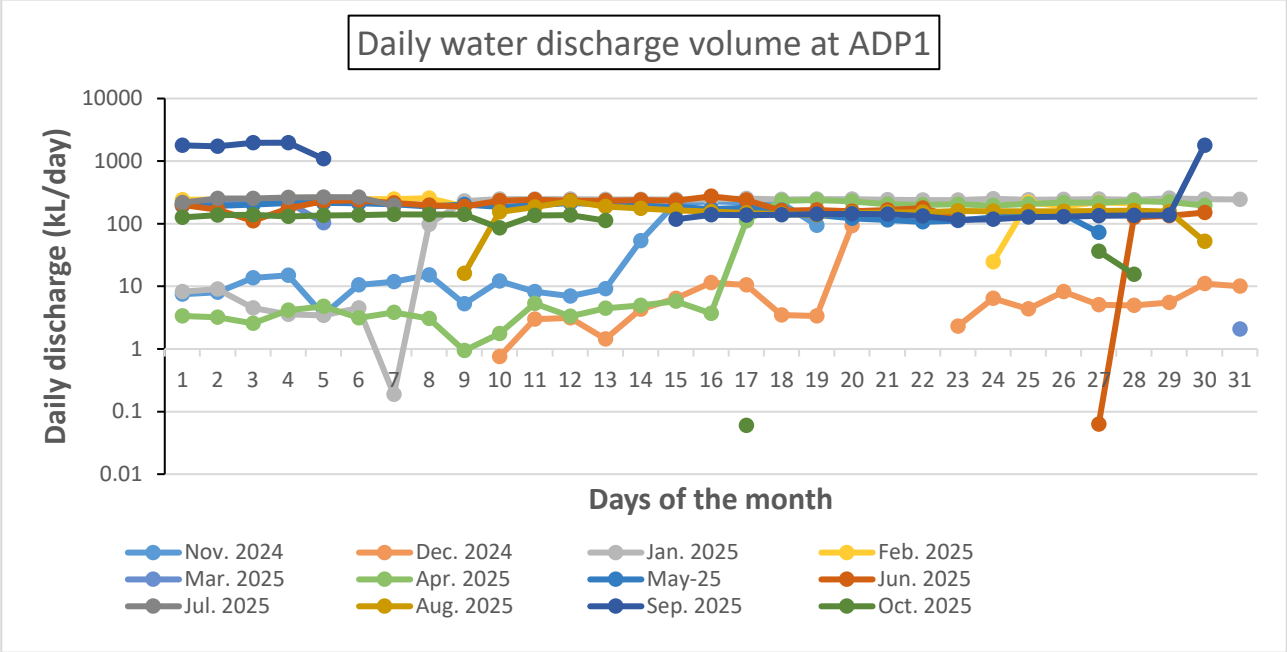

Figure 7: Daily wastewater discharge rate at ADP1 (Cooling Tower) from November 2024 to October 2025.

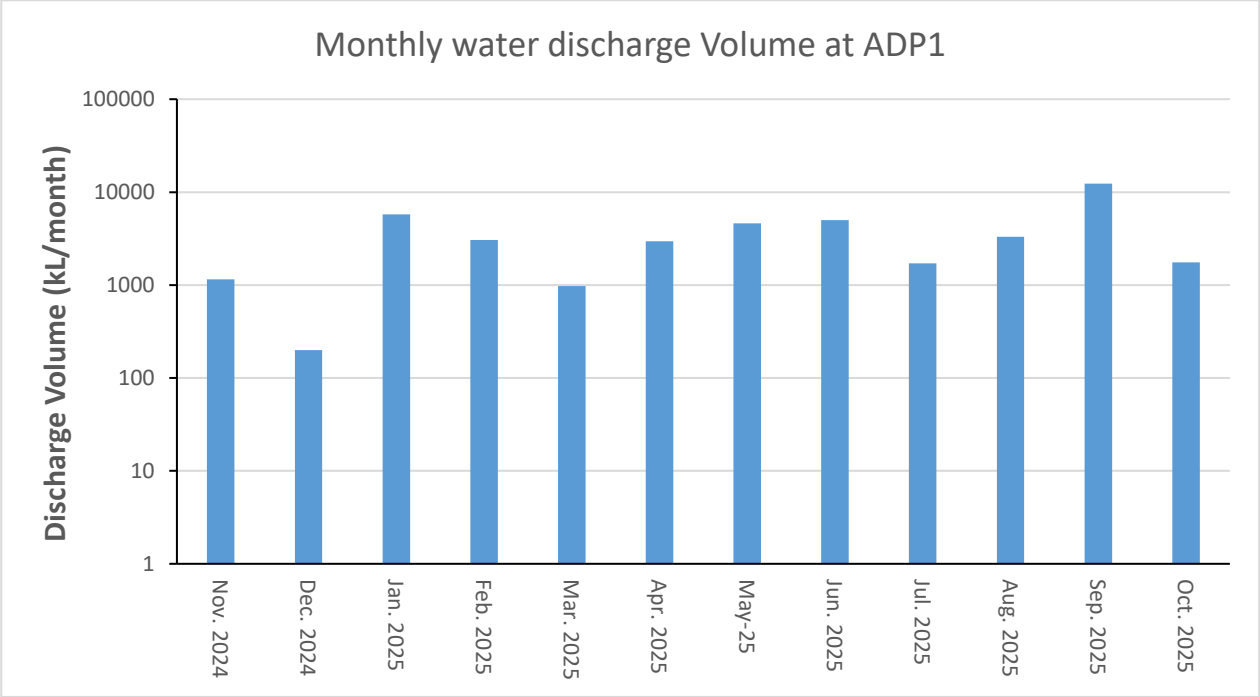

Figure 8: Monthly wastewater discharge rate at ADP1 (Cooling Tower) from November 2024 to October 2025.

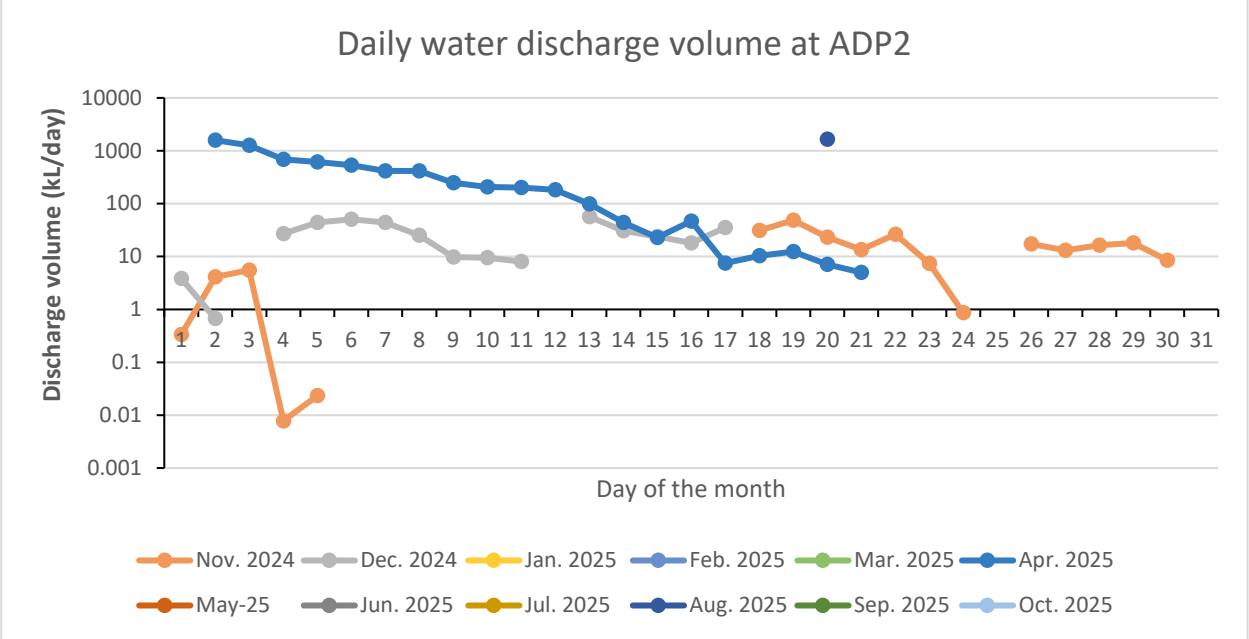

Figure 9: Daily wastewater discharge rate at ADP2 from November 2024 to October 2025.

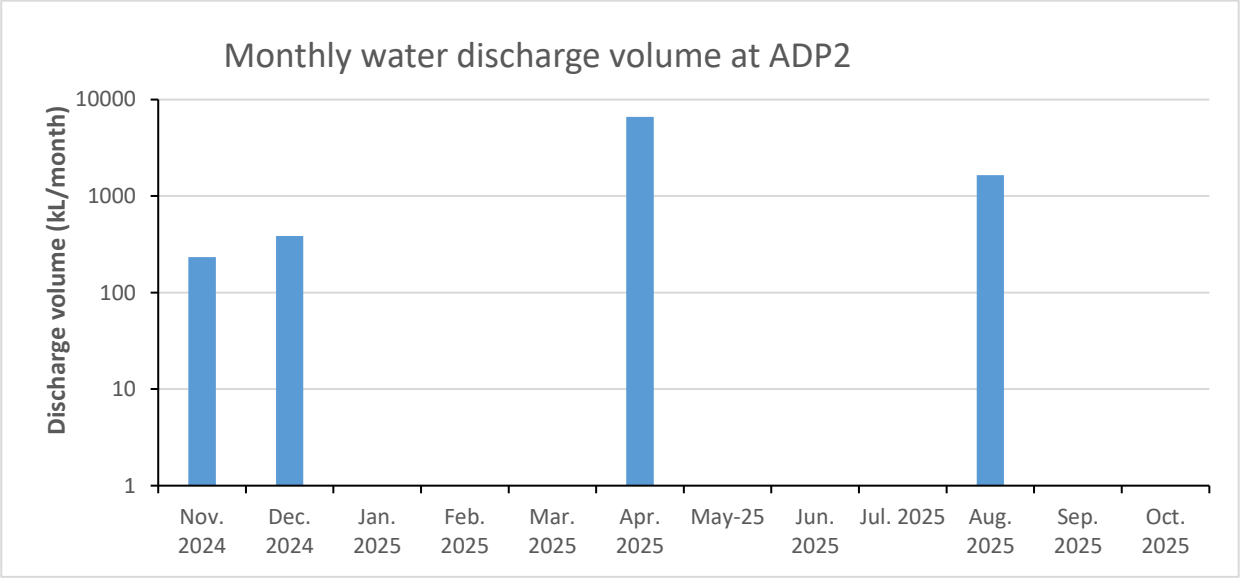

Figure 10: Monthly wastewater discharge rate at ADP2 from November 2024 to October 2025.

Surface water quality monitoring

In accordance with the monitoring plan specified in WDL212-04, both monthly (M) and quarterly (Q) monitoring is prescribed for the following monitoring points:

Authorised Discharge Point 1 and associated Monitoring Points (Northern Monitoring Points):

ADP1 – Authorised Discharge Point 1/Compliance Point 1 (M)
NODH1 – Northern Outlet to Darwin Harbour/Downstream Monitoring Point (M)

Authorised Discharge Point 2 and associated Monitoring Points (Southern Monitoring Points):

ADP2 – Authorised Discharge Point 2/Compliance Point 2 (M)
SODH1 – Southern Outlet to Darwin Harbour/Downstream Monitoring Point (M)
ILCP – Influent Large Cooling Pond (Q)

ISCP – Influent Small Cooling Pond (Q)

Monthly samples for laboratory analysis were taken on nine (ADP1), two (ADP2), eleven (NODH1) and two (SODH1) occasions out of the scheduled twelve monitoring events. All four quarterly samples were taken at ILCP and ISCP.

3.1.2 Results of in-situ parameters where WDL212-04 Trigger Values are specified

pH

WDL212-04 specify collection of water quality data on field parameters like temperature, pH, electrical conductivity, dissolved oxygen saturation, turbidity and residual free chlorine. Out of these, trigger value is specified for pH only.

The pH levels (in pH units) at the monthly monitoring sites (ADP1, ADP2, NODH1, and SODH1) and the quarterly monitoring sites (ILCP and ISCP) from October 2019 to October 2025 are presented in Figure 11 and Figure 12. These results are compared to the trigger pH value range specified in WDL212-04, with maximum (8.5) and minimum (6.0) values indicated in pink and red lines, respectively. The trigger value for pH apply solely to discharges at ADP1 and ADP2 for incident notifications under WDL212-04.

During the current monitoring period (November 2024 to October 2025), pH levels at the authorized discharge sites (ADP1 and ADP2) fluctuated between 7.58 and 8.92 pH units (see Figure 11 and Table A1 in the Additional Data section). At the southern and northern drainage outlets (SODH1 and NODH1), pH ranged from 6.15 to 8.83 pH units. Throughout the monitoring period, pH values at all monthly sites varied, typically staying within or slightly above the trigger value range of 6.00 to 8.50.

On four occasions (November 2024 (8.92), December 2024 (8.67), April 2025 (8.74) and May 2025 (8.7)), pH levels at ADP1 exceeded the WDL212-04 trigger range. This elevated pH is consistent with typical values found in thermal power cooling water systems (7.0 - 9.5) (Ahmed, Jamal & Shujaatullah, 2020). However, these exceedances did not meet the criteria for notification, as they were neither three times the trigger value range nor recorded on three consecutive sampling occasions. Therefore, no notifiable incident for pH occurred at ADP1 and ADP2 during the monitoring period. The pH levels at the monthly monitoring sites remains relatively stable within the WDL212-04 trigger range from October 2019 to October 2025, with few out of range values.

At the quarterly monitoring sites (ILCP and ISCP), pH values ranged from 2.21 to 8.72 pH units (as shown in Figure 12 and Table A 1 in the Additional Data section) during the current reporting period. An exceedance of pH units at these sites does not require notification. Apart from low pH measurements recorded at ISCP in November 2024 (2.21) and February 2025 (2.89), pH levels at the quarterly monitoring sites have remained within or slightly above the trigger value range of 6.00 to 8.50 from October 2019 to October 2025.

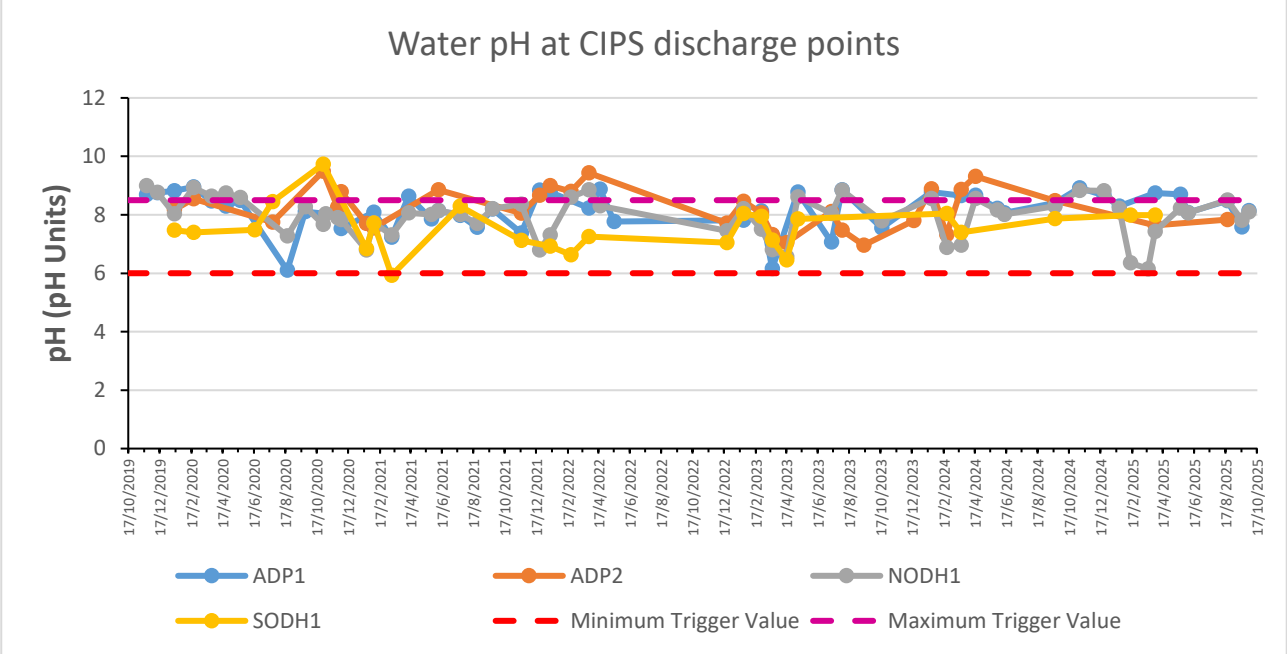

Figure 11: pH (pH units) at monthly monitoring sites from October 2019 to October 2025

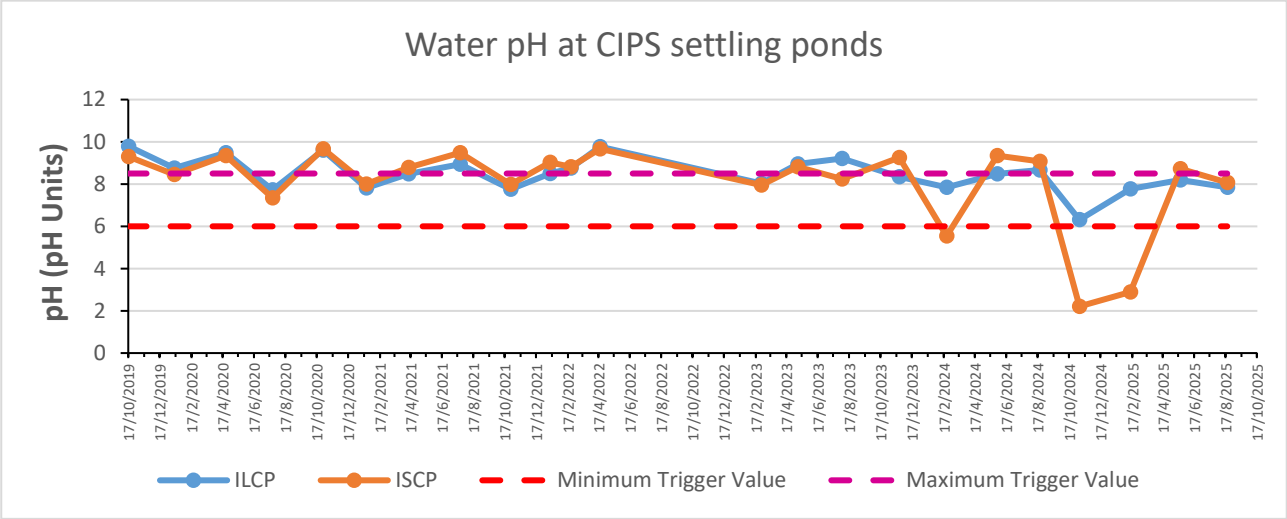

Figure 12: pH (pH units) at quarterly monitoring sites from October 2019 to October 2025

3.1.3 Results of other physical parameters where WDL212-04 Trigger Values are not specified

Temperature

Figure 13 and Figure 14, along with Table A 2 in the Additional Data section, present the water temperature results measured at the monthly discharge monitoring sites (ADP1, ADP2, NODH1, and SODH1) and the settling ponds quarterly monitoring sites (ILCP and ISCP) from October 2019 to October 2025. Notably, WDL212-04 does not provide a trigger value for this parameter.

During the reporting period from November 1, 2024, to October 31, 2025, water temperature across all monitoring sites ranged from 20.95 to 36.08°C. These temperatures are consistent with the typical mean water temperature for the Darwin region of Northern Australia, which falls between 20 and 35°C (Chapman, 1969).

The variation in water temperature typically reflects the corresponding air temperature in the Darwin area. The air temperature usually declines between May and September during the dry season due to the influence of southeast trade winds and relatively low insolation. As the seasons transition to the build-up and wet months (October to April), increased insolation and lower average wind speeds contribute to rising air temperatures. Historic seasonal temperature trends shown in Figure 13 and Figure 14 are similar across all monitoring years presented except the low temperatures recorded in dry season of 2021.

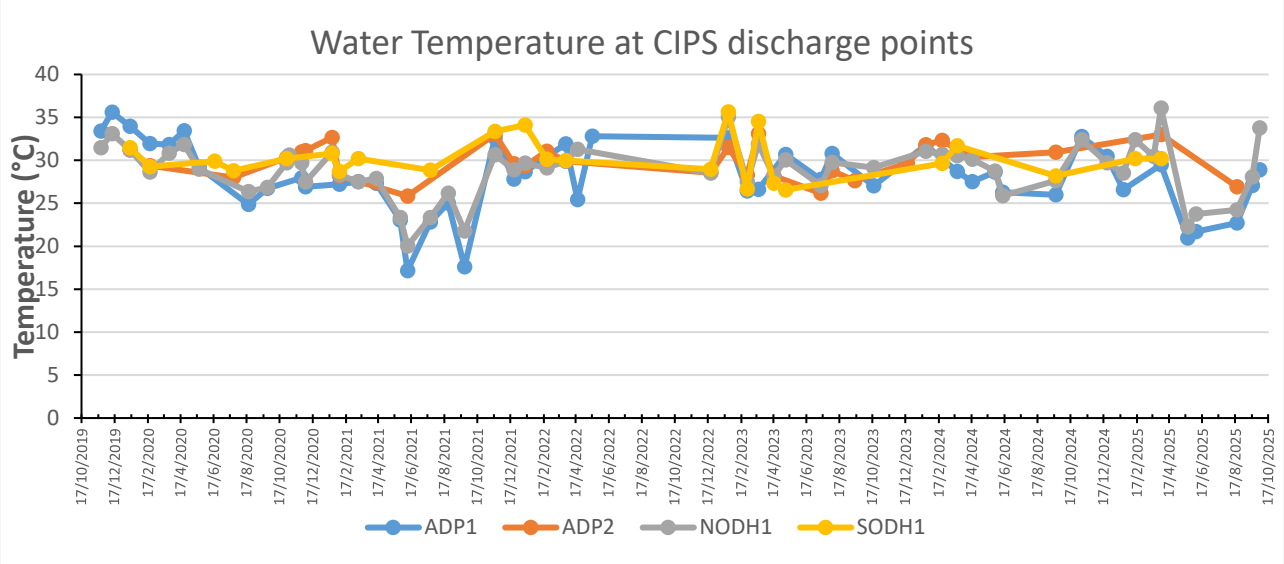

Figure 13: Water Temperature (°C) at monthly monitoring sites from October 2019 to October 2025.

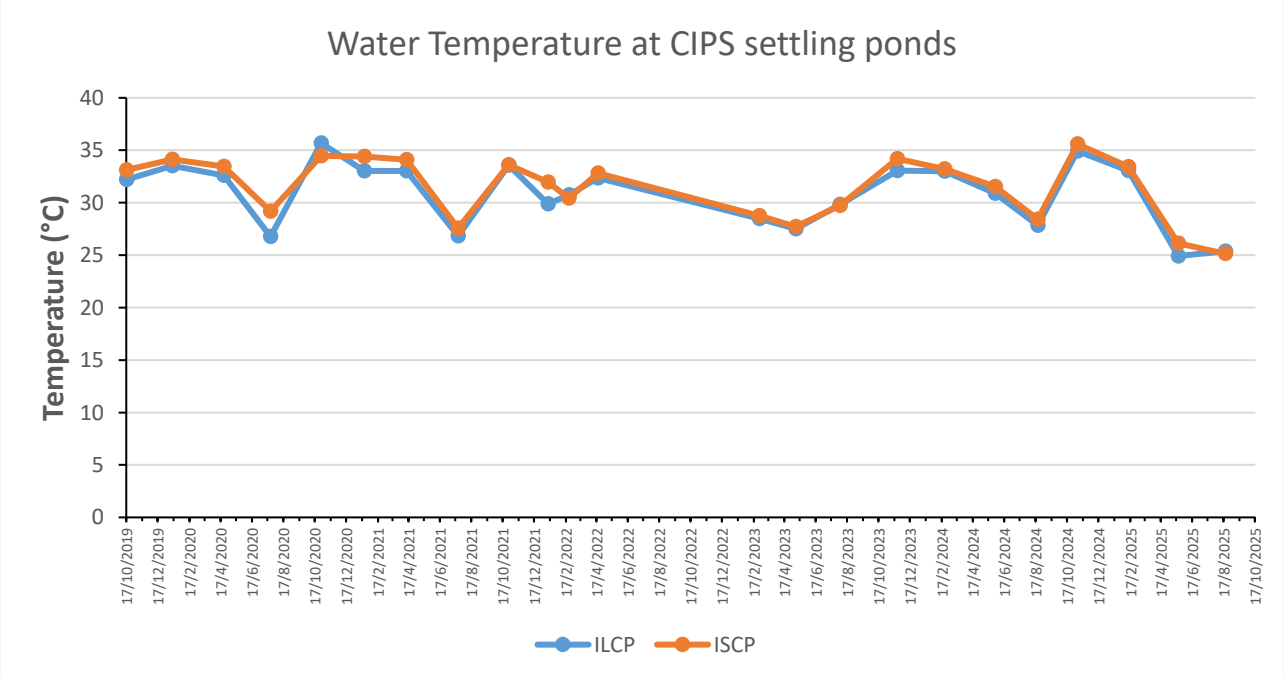

Figure 14: Water Temperature (°C) at quarterly monitoring sites from October 2019 to October 2025.

Dissolved Oxygen

Dissolved Oxygen % Saturation (DO % Sat) at the monthly monitoring sites and the settling ponds quarterly monitoring sites are illustrated in Figure 15 and Figure 16, respectively. From November 2024 to October 2025, DO % Sat at the monthly monitoring sites fluctuated between 51.2% and 109.5%. Throughout the monitoring period from October 2019 to October 2025, DO % Sat exhibited significant variability across all monthly sites, with no discernible seasonal trend. However, ADP2 consistently recorded lower DO % Sat levels compared to the other monthly monitoring sites (see Figure 15). Factors such as elevated temperatures, reduced nutrient concentrations (due to decomposition or nitrification), and limited water contact with the atmosphere may contribute to the decreased DO saturation observed at ADP2 (Rounds, 2002).

At the quarterly monitoring sites, DO % Sat ranged from 49.2% to 106.2% between November 2024 and October 2025 (refer to Figure 16). Table A 3 in the Additional Data section provides the DO % Sat data for all monitoring sites from October 2019 to October 2025. Overall, DO % Sat has shown variability at all monitoring locations since 2019.

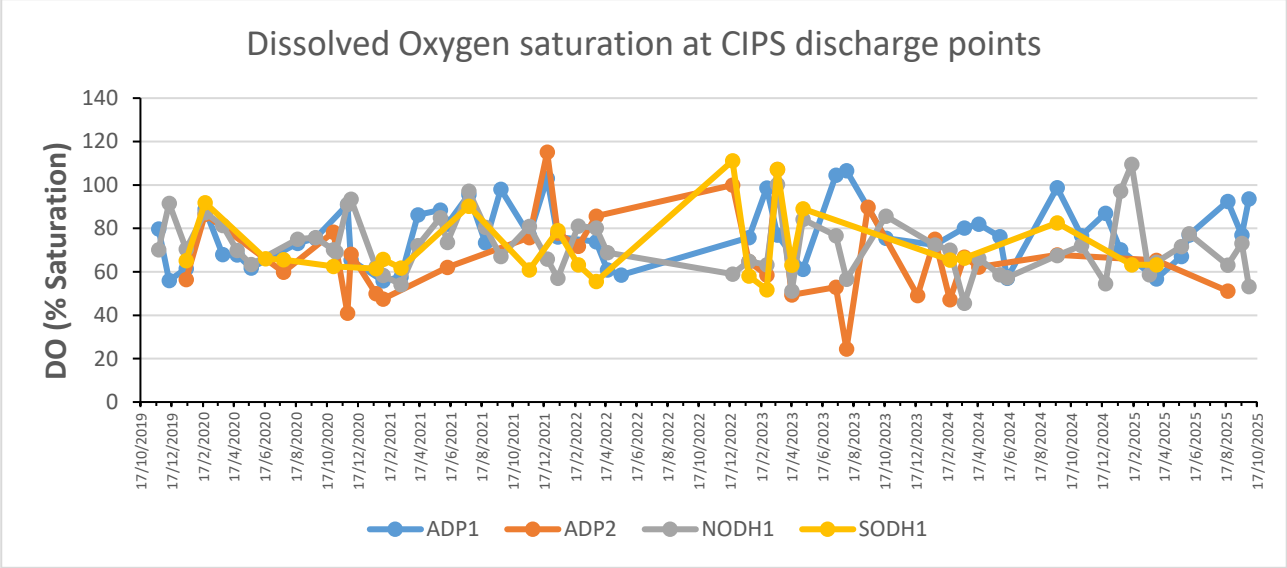

Figure 15: Dissolved Oxygen (% Saturation) at monthly monitoring sites from October 2019 to October 2025.

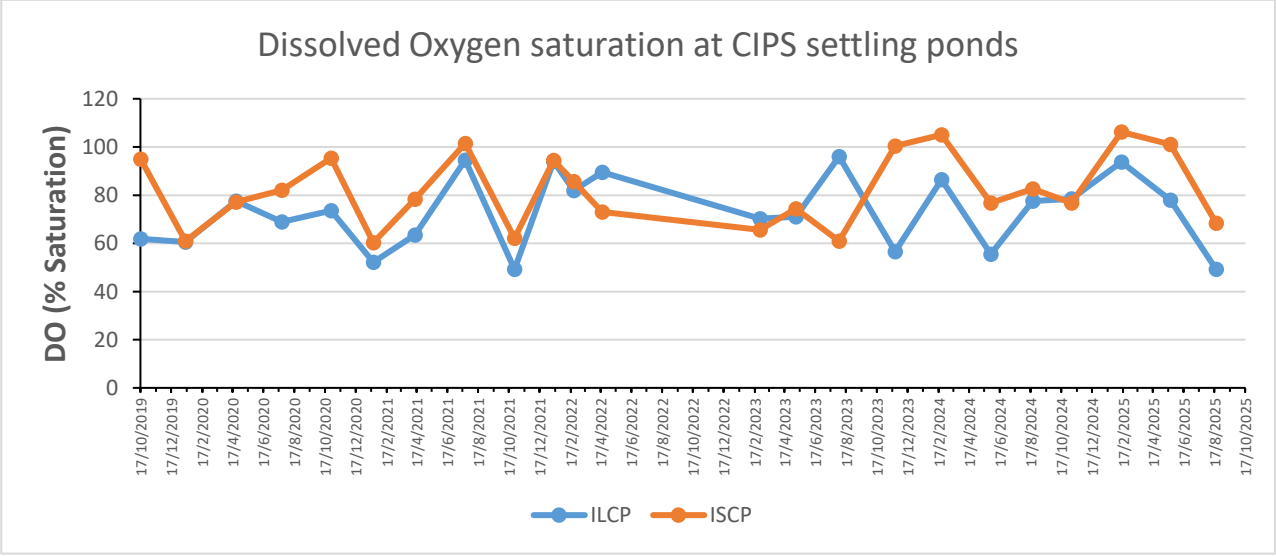

Figure 16: Dissolved Oxygen (% Saturation) at quarterly monitoring sites from October 2019 to October 2025

Electrical Conductivity (EC µs/cm)

Electrical Conductivity corrected to its equivalent at 25°C (EC_{25}) serves as an indirect indicator of the total concentration of dissolved salts in water. The EC values recorded at all WDL212-04 water monitoring sites from October 2019 to October 2025 are presented in Figure 17 and Figure 18, as well as in Table A 4 in the Additional Data section. It is noteworthy that WDL212-04 does not specify a trigger value for EC.

During the reporting period from November 2024 to October 2025, EC values at the monthly monitoring sites ranged from 103 to 1770 µs/cm. Historically, between October 2019 and October 2025, EC levels were lowest at ADP2 and NODH1 and highest at SODH1, influenced by rainwater and the influx of saltwater from the Darwin Aquaculture Centre, as well as the tidal pooling of marine water, respectively (see Figure 17).

At the quarterly monitoring sites, EC values ranged from 106 - 4470 µs/cm during the same reporting period. Generally, EC levels are elevated during the build-up period (October to December) at these sites due to evaporation and the concentration of salts. The rise in EC at ILCP is typically greater than at ISCP, primarily due to the larger surface area of ILCP, which facilitates more evaporation and salt concentration. Notably, the peak EC levels during the build-up period at ILCP were recorded in 2019, and 2023, in descending order compared to other years (refer to Figure 18).

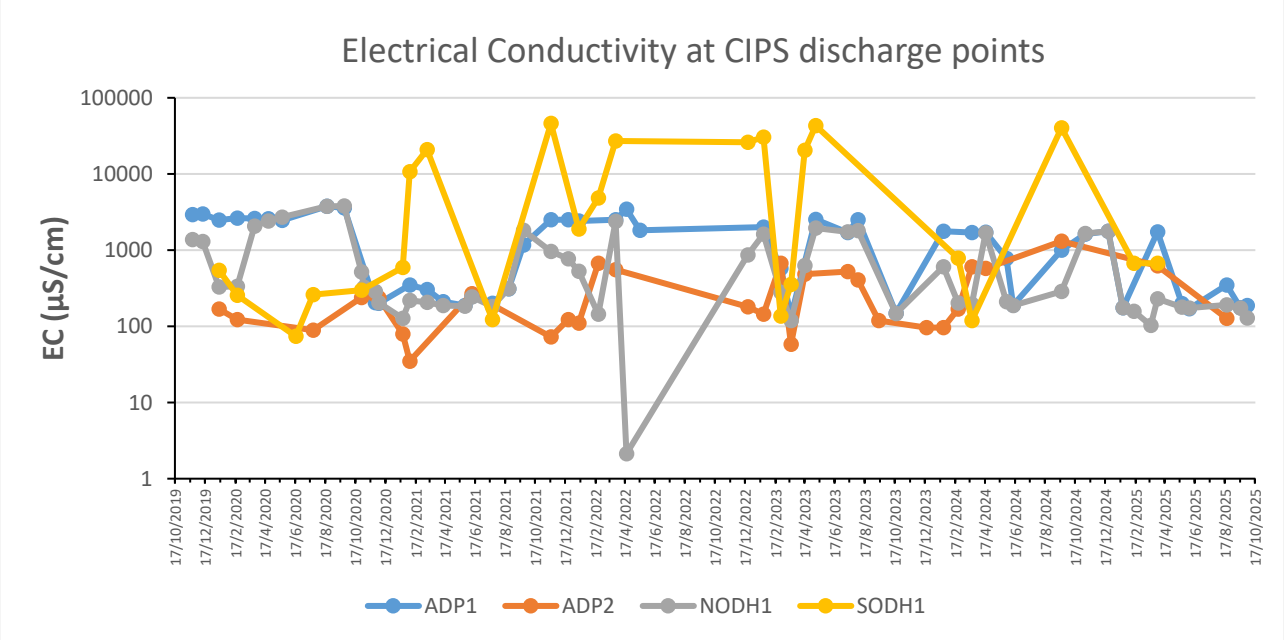

Figure 17: EC (µS) at monthly monitoring sites from October 2019 to October 2025

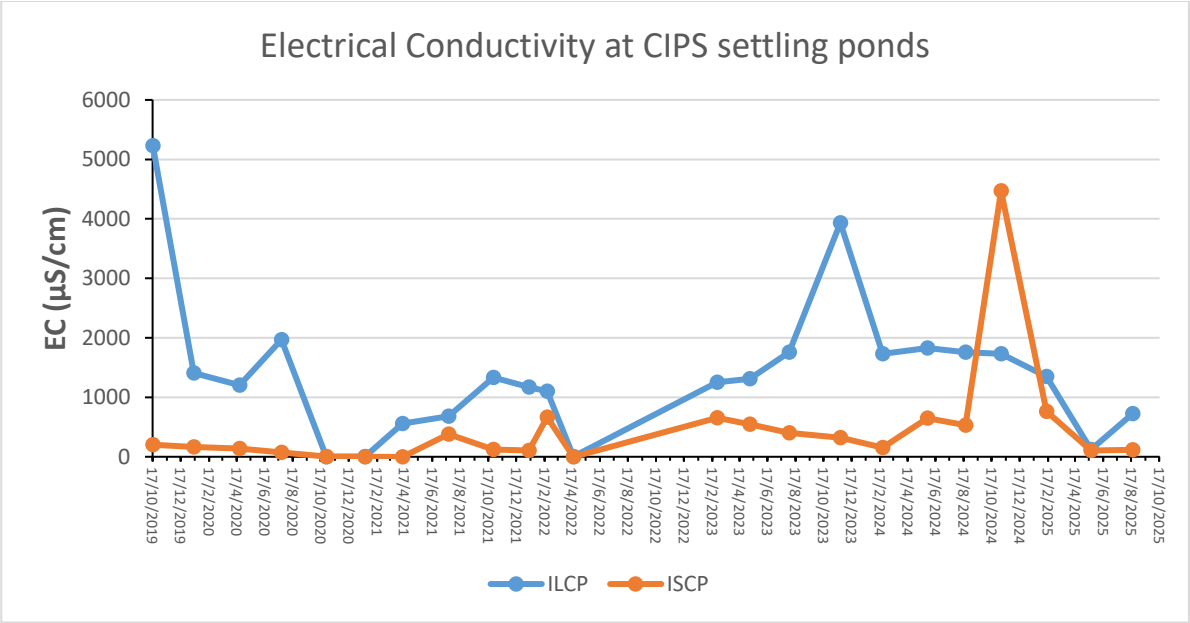

Figure 18: EC (µS) at quarterly monitoring sites from October 2019 to October 2025

Turbidity (NTU)

The turbidity data recorded from October 2019 to October 2025 at all WDL212-04 water monitoring sites is displayed in Figure 19 and Figure 20, as well as in Table A 5 in the Additional Data section. Notably, WDL212-04 does not specify a trigger value for turbidity.

During the reporting period from November 2024 to October 2025, turbidity at the monthly monitoring sites varied, with values ranging from 0.45 to 48.9 NTU. Typically, turbidity levels are slightly higher during the wet season at these sites. Apart from the elevated turbidity noted at SODH1 on February 27, 2023 (68.3 NTU), and at NODH1 on May 21, 2020 (131 NTU) and April 2025 (48.9 NTU), turbidity levels have generally remained below 20 NTU from 2019 to the present (see Figure 19).

For the current monitoring period (November 1, 2024, to October 31, 2025), turbidity at the quarterly monitoring sites ranged from 1.28 to 20.6 NTU. Other than the high turbidity recorded at ISCP (20 NTU and 20.6 NTU) in November 2023 and May 2025, respectively, the variability in turbidity during the 2024/25 monitoring period is like that of 2022/23 (refer Figure 20).

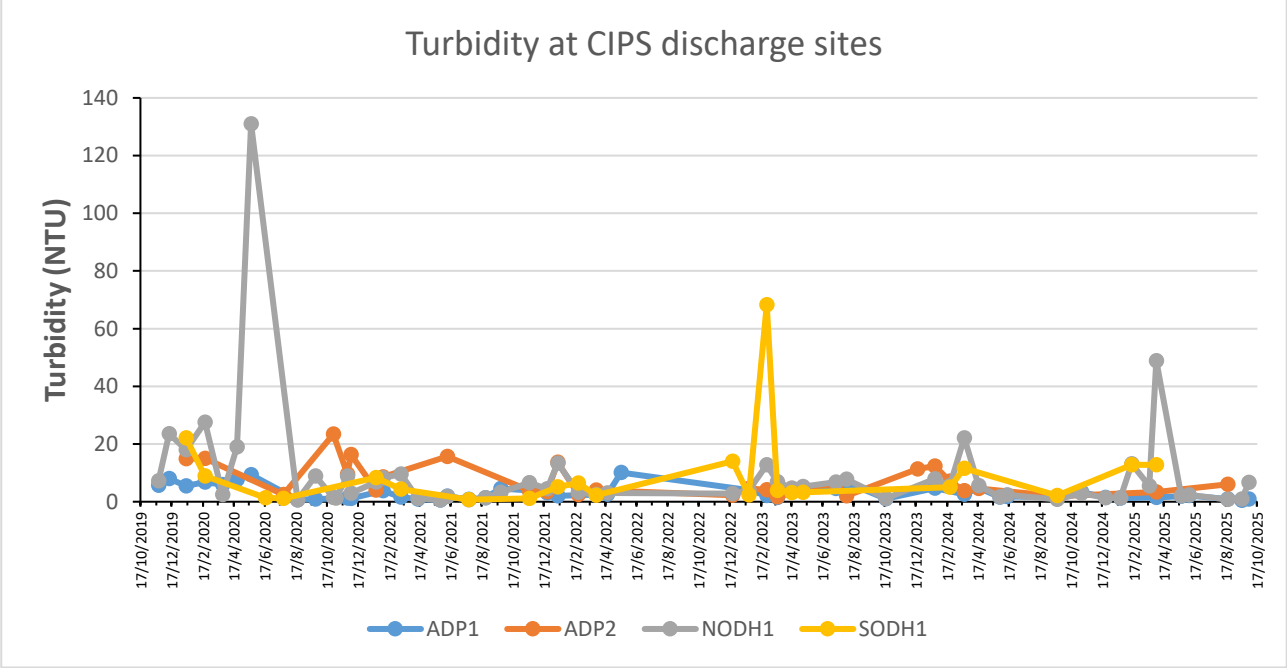

Figure 19: Turbidity (NTU) at monthly monitoring sites from October 2019 to October 2025

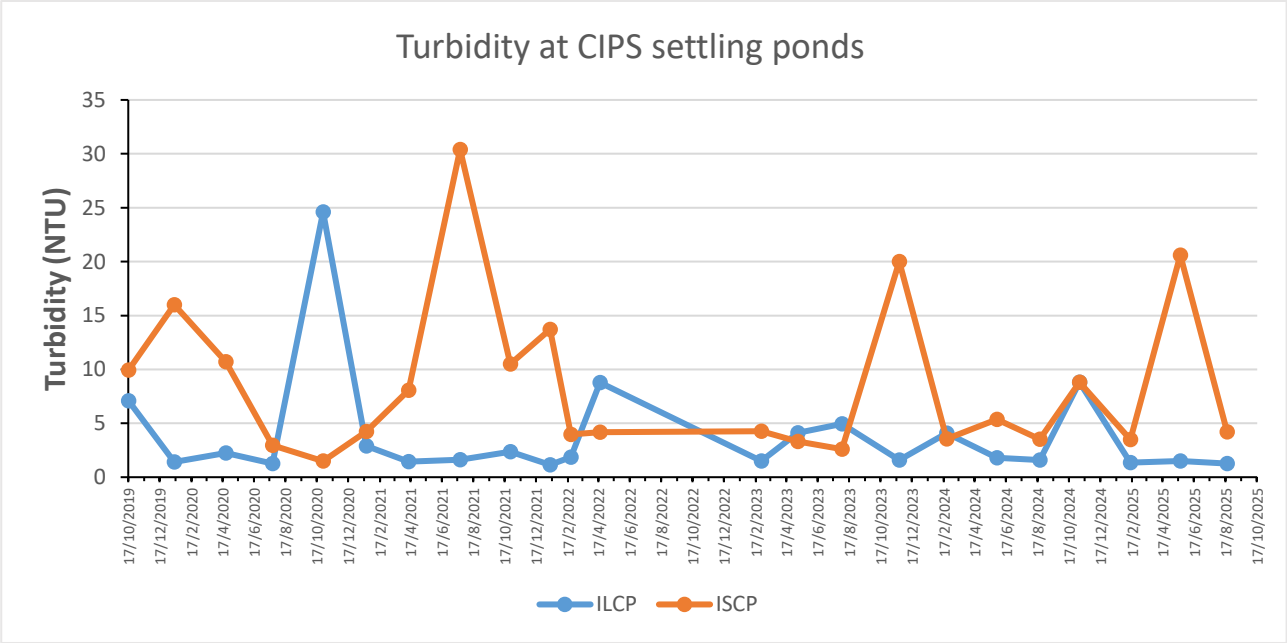

Figure 20: Turbidity (NTU) at quarterly monitoring sites from October 2019 to October 2025

Free Chlorine (mg/L)

Figure 21 and Figure 22, along with Table A 6 in the Additional Data section, display free chlorine concentrations at all WDL212-04 water monitoring sites from October 2019 to October 2025. It is important to note that WDL212-04 does not specify a trigger value for this parameter.

From November 2024 to October 2025, free chlorine concentrations ranged from below the instrument detection limit (0.01 mg/L) to 2.1 mg/L at all monitoring sites. Generally, free chlorine levels are slightly elevated at ADP1 and NODH1 due to the operational use of sodium hypochlorite for cooling system water, aimed at preventing bacterial growth. Except for the elevated free chlorine concentrations noted at ADP1

and NODH1 between April 2020 and March 2022, all recorded concentrations remained below 2.5 mg/L at all monitoring sites from 2019 to 2025 (see Figure 21 and Figure 22).

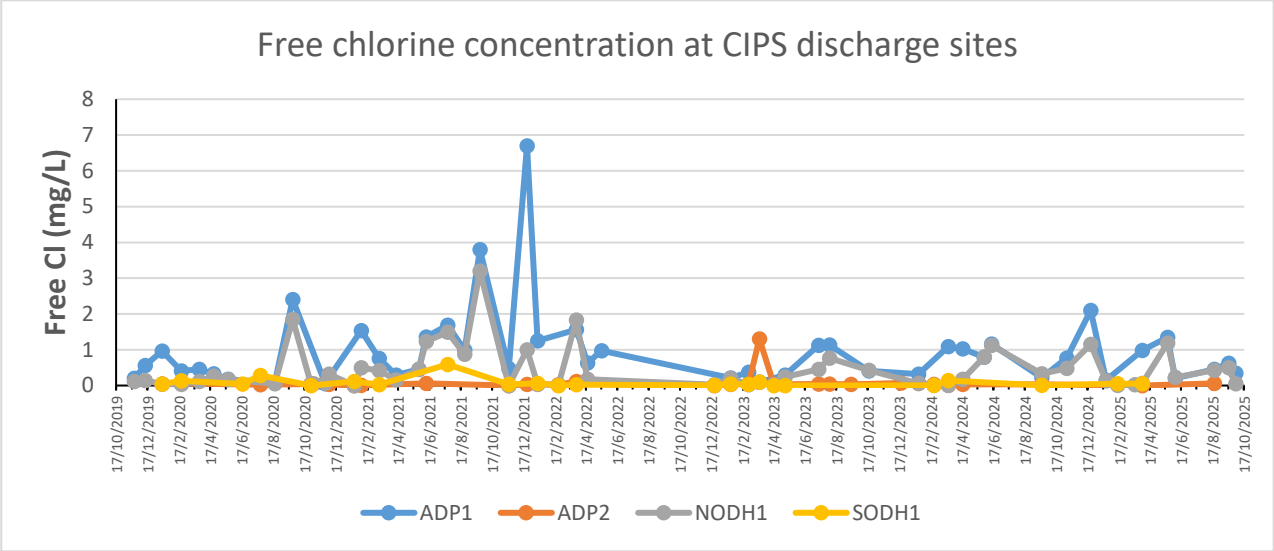

Figure 21: Free Cl (mg/L) at monthly monitoring sites from October 2019 to October 2025

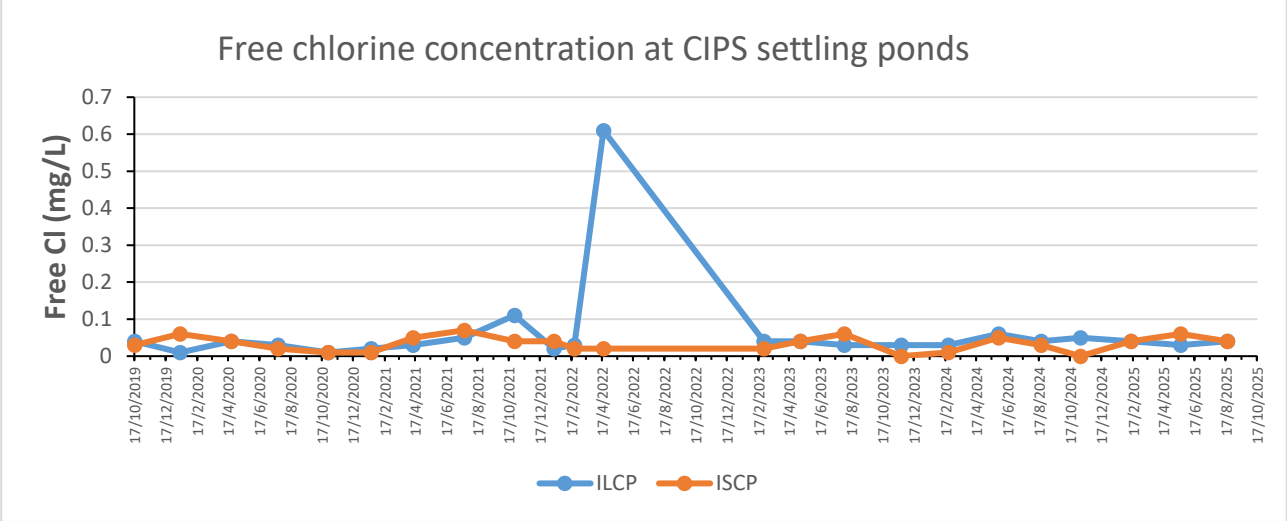

Figure 22: Free Cl (mg/L) at quarterly monitoring sites from October 2019 to October 2025

3.1.4 Results of nutrient and Total Suspended Solids analysis

Total Suspended Solids (TSS) (mg/L)

The concentrations of Total Suspended Solids (TSS) recorded at the monthly and quarterly monitoring sites from October 2019 to October 2025 are presented in Figure 23, Figure 24 and Table A 7. TSS recorded at each monitoring site was compared to the trigger value of 25 mg/L specified in WDL212-04. The trigger value is indicated in red line, while the laboratory limit of reporting (LOR) at 5 mg/L is shown in pink line. Trigger value for TSS is applicable at ADP1, ADP2, NODH1, and SODH1 for WDL212-04 incident notification.

During the reporting year from November 2024 to October 2025, TSS levels at the monthly monitoring sites ranged from below the LOR (<5 mg/L) to 12 mg/L. TSS levels at the monthly monitoring sites in this year did not exceed the trigger value, resulting in no notifiable incidents for TSS. Historically, high TSS are recorded at

SODH1 compared to other sites due to suspended solids from marine influence. TSS levels at the monthly monitoring sites this year indicate a decreasing trend compared to previous years since 2019 (see Figure 23).

At the quarterly monitoring sites, TSS concentrations ranged from below the LOR (<5 mg/L) to 17 mg/L during the reporting period from November 2024 to October 2025. Typically, TSS concentrations at these sites remain below the trigger value of 25 mg/L specified in WDL212-04 (refer to Figure 24).

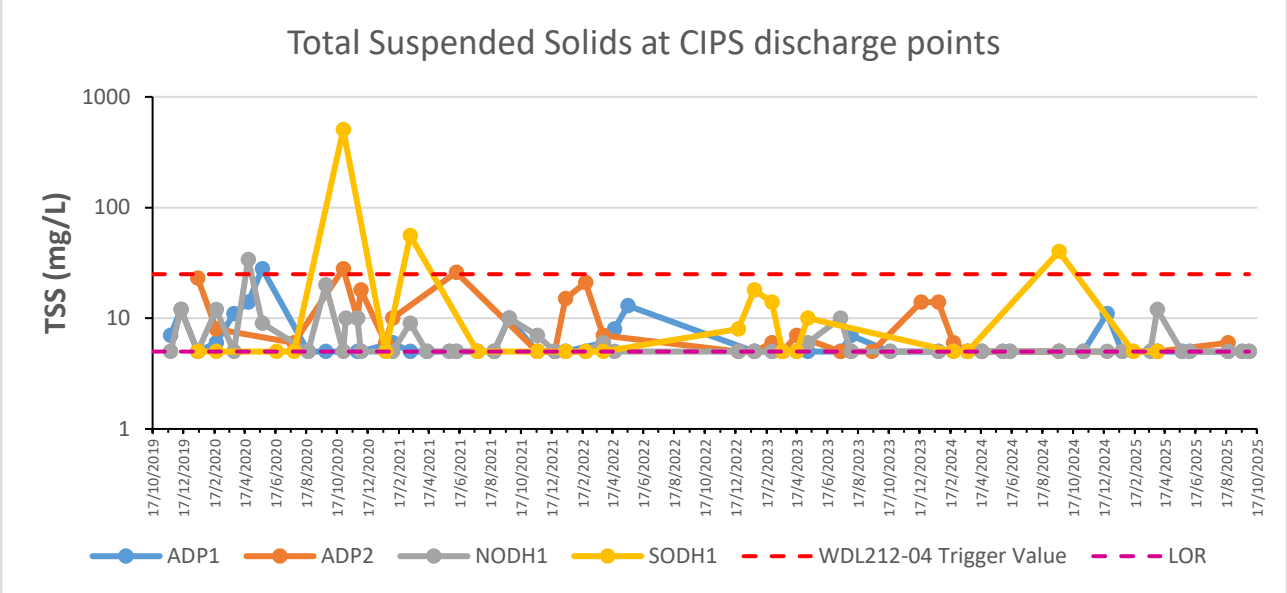

Figure 23: Total Suspended Solids (TSS, mg/L) at monthly monitoring sites from October 2019 to October 2025

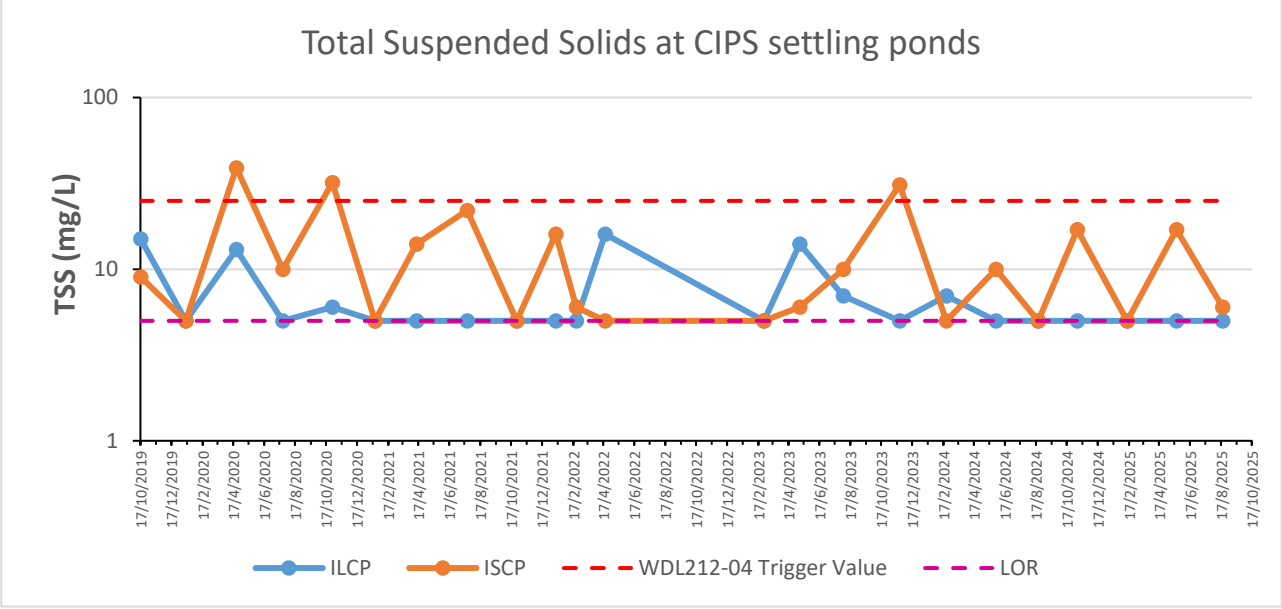

Figure 24 Total Suspended Solids (TSS, mg/L) at quarterly monitoring sites from October 2019 to October 2025

Total Phosphorous (TP) (mg/L)

Figure 25 and Figure 26, along with Table A 8, display the concentrations of Total Phosphorous (TP) at the monthly and quarterly monitoring sites from October 2019 to October 2025. TP concentrations were compared to the trigger value of 0.3 mg/L specified in WDL212-04. The trigger value is indicated by a dotted red line, while the dotted pink line represents the laboratory limit of reporting (LOR) at 0.01 mg/L. Trigger values for TP are applicable at ADP1, ADP2, NODH1, and SODH1 for incident notification under WDL212-04.

During the reporting period from November 2024 to October 2025, TP concentrations at the monthly monitoring sites ranged from below the LOR (<0.01 mg/L) to 0.22 mg/L. TP levels were variable but consistently remained below the trigger value throughout this period, resulting in no notifications for TP this year. Generally, TP concentrations at all monthly monitoring sites showed a decreasing trend compared to previous years since 2019 (see Figure 25).

For the current reporting year (November 2024 to October 2025), TP levels at the quarterly monitoring sites varied from below the LOR (<0.01 mg/L) to 0.41 mg/L. All TP concentrations at ILCP remained below the trigger value and displayed a downward trend. However, TP at ISCP exceeded the trigger value on two occasions (November 2024 and May 20250) (refer to Figure 26).

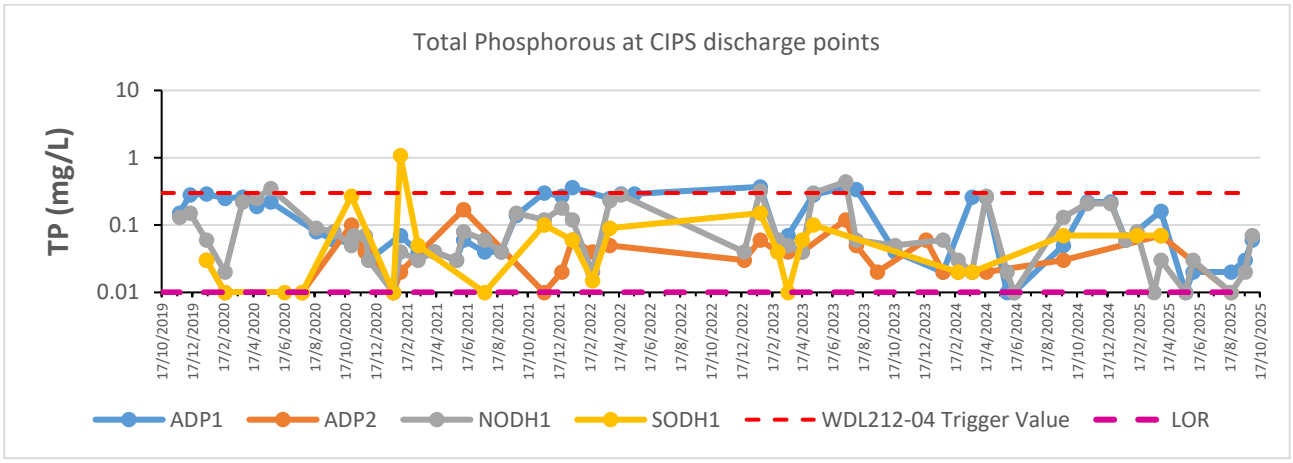

Figure 25: Total Phosphorous concentration (TP, mg/L) at monthly monitoring sites from October 2019 to October 2025

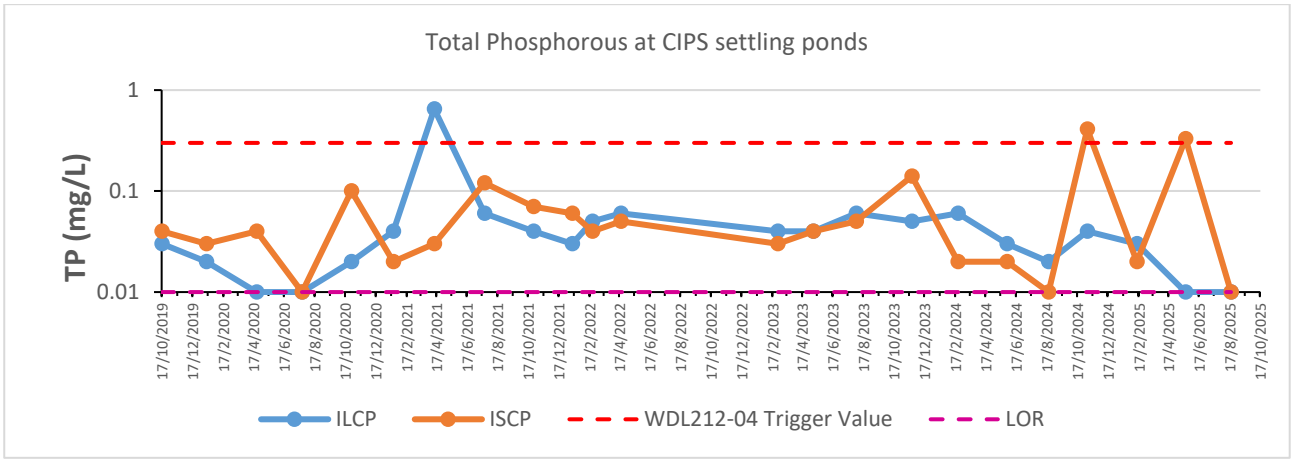

Figure 26: Total Phosphorous concentration (TP, mg/L) at quarterly monitoring sites from October 2019 to October 2025

Total Nitrogen (TN) (mg/L)

Figure 27 and Figure 28 along with Table A 9, present the concentrations of Total Nitrogen (TN) at the monthly and quarterly monitoring sites from October 2019 to October 2025. The TN trigger value of 3.5 mg/L specified in WDL212-04 and the laboratory limit of reporting (LOR) at 0.1 mg/L are indicated by dotted red and pink lines, respectively. Trigger value for TN is enforced at ADP1, ADP2, NODH1, and SODH1, for incident notification under WDL212-04.

During the reporting period from November 2024 to October 2025, TN concentrations at the monthly monitoring sites ranged from 0.3 to 2.9 mg/L. All TN concentrations at the monthly sites remained below the trigger value this year. As a result, there were no notifiable incidents concerning TN at the compliance points (ADP1 and ADP2) during the monitoring period. Historically, TN concentrations have shown variability at the monthly monitoring sites; however, this reporting period exhibited lower variability and declining trend compared to previous years since 2019 (see Figure 27).

At the quarterly monitoring sites, TN concentrations ranged from 0.5 to 7.0 mg/L during the same reporting period (November 2024 to October 2025). Like TP, TN levels were relatively stable and remained below the trigger value at ILCP, while they were more variable at ISCP, where the trigger value was exceeded on two occasions (refer to Figure 28). However, notification for exceedances at ISCP is not required.

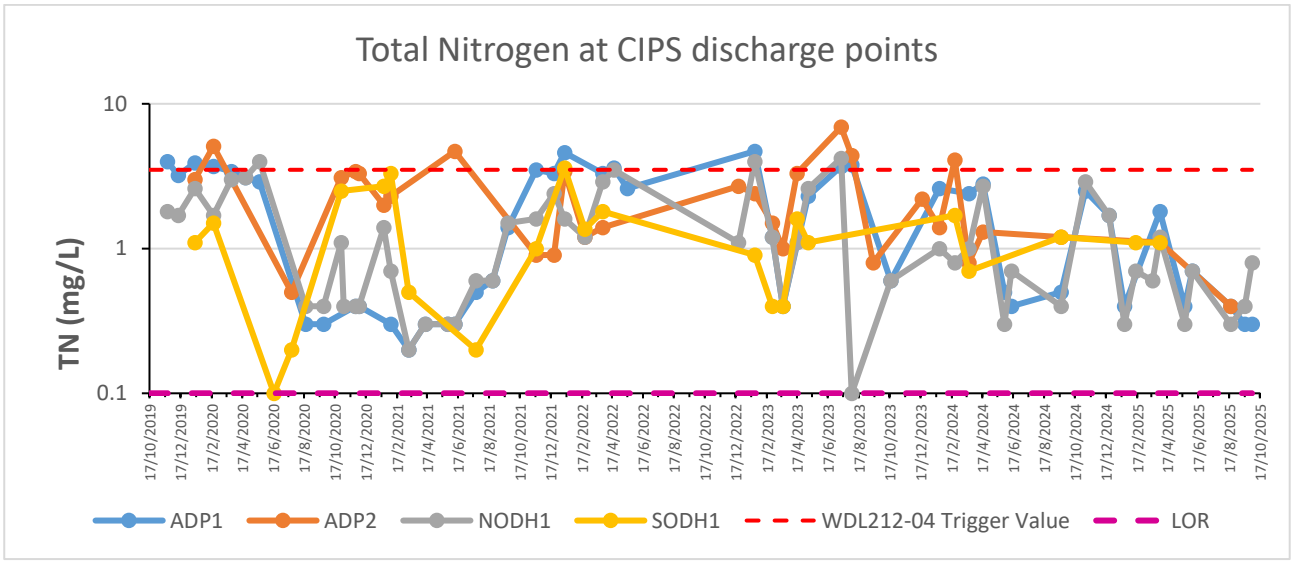

Figure 27: Total Nitrogen concentration (TN, mg/L) at monthly monitoring sites from October 2019 to October 2025

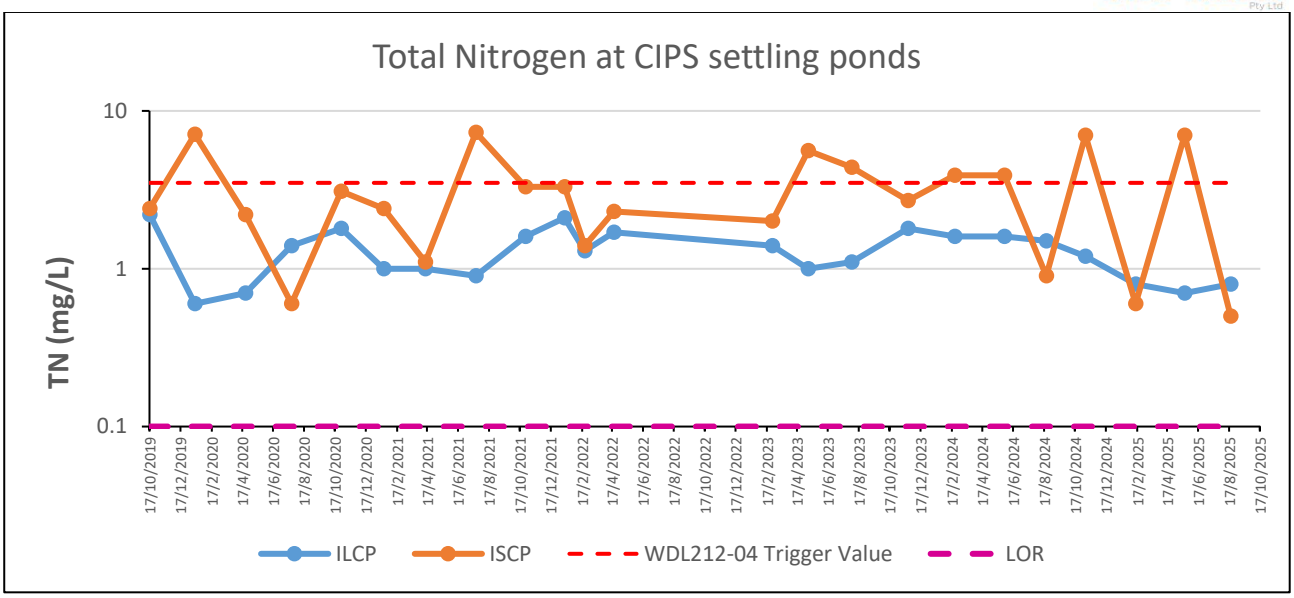

Figure 28: Total Nitrogen concentration (TN, mg/L) at quarterly monitoring sites from October 2019 to October 2025

3.1.5 Results of metal analysis

Metal concentrations at the monthly and quarterly monitoring sites from October 2019 to October 2025 are presented in Figure 29 to Figure 40 and Table A 10 to Table A 19 (see Additional data section). Water samples were analysed for ten metal elements (both total and filtered) as part of the monitoring program. According to Appendix 2 (Page 20) of WDL212-03, "*trigger values specified in WDL212-04 for metals and metalloids apply to the filtered/dissolved fraction only*." No trigger value is established for arsenic (As) in water under WDL212-04. Trigger values for filtered aluminium (Al) and zinc (Zn) are applied at ADP1, ADP2, NODH1, and SODH1, while trigger values for all other filtered metals are enforced only at ADP1 and ADP2. Exceedances of trigger values at ADP1 and ADP2 for all filtered metals warrant incident notification under WDL212-04. Prior to 18 July 2024, wastewater discharge at CIPS was regulated under WDL212-03, which included a Zn trigger value of 21 µg/L applicable only at ADP1 and ADP2. No trigger value for Al was imposed at any site under WDL212-03. The current monitoring year runs from November 1, 2024, to October 31, 2025.

In this reporting year (November 2024 to October 2025), all filtered metal concentrations at ADP1, ADP2, SODH1 and NODH1 were all below their respective trigger Values. Therefore, no notification was issued under WDL212-04 concerning filtered metals. This indicates a downward trend for all filtered metals in this year compared to historical data from October 2019.

For total metals at ADP1, ADP2, SODH1 and NODH1, apart from Al (140 µg/L) and Zn (343 µg/L) at ADP2 on 2 April 2025, Al (220 µg/L, 190 µg/L and 140 µg/L) at NODH1 on 13 February 2025, 19 March 2025 and 2 April 2025, respectively and Al (110 µg/L and 560 µg/L) at SODH1 on 13 February 2025 and 2 April 2025, respectively, none of them exceeded the filtered metal trigger value for each element.

At the quarterly monitoring sites, all filtered metal concentrations were below the trigger value specified for each metal under WDL212-04, except Al (15900 µg/L), Cr (72 µg/L), Cu (85 µg/L) Pb (54 µg/L) and Zn (10100 µg/L) at ISCP on 6 November 2024. However, notification is not required for exceedance of trigger values at these sites.

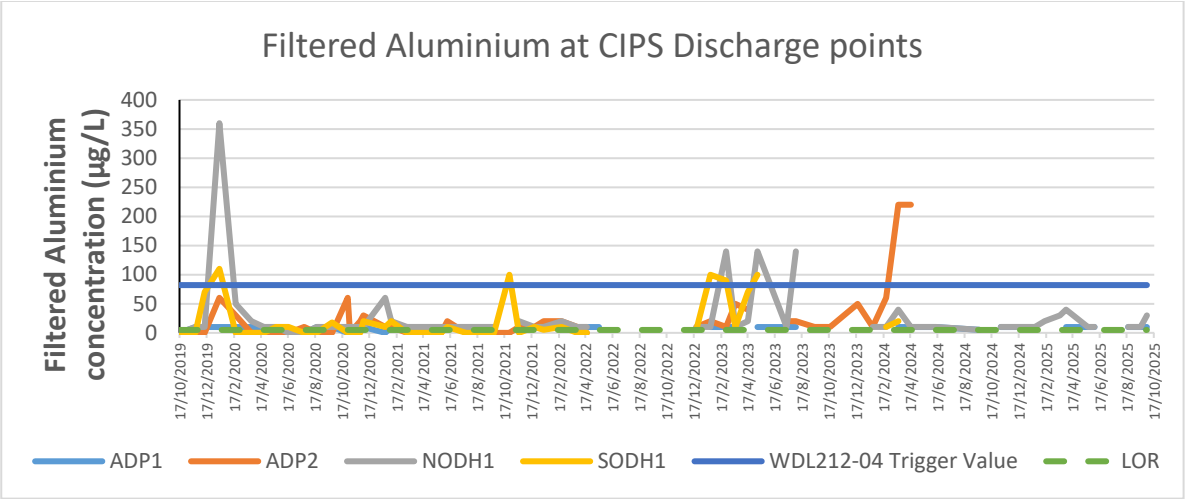

Figure 29: Filtered aluminium concentration at the monthly monitoring sites from October 2019 to October 2025

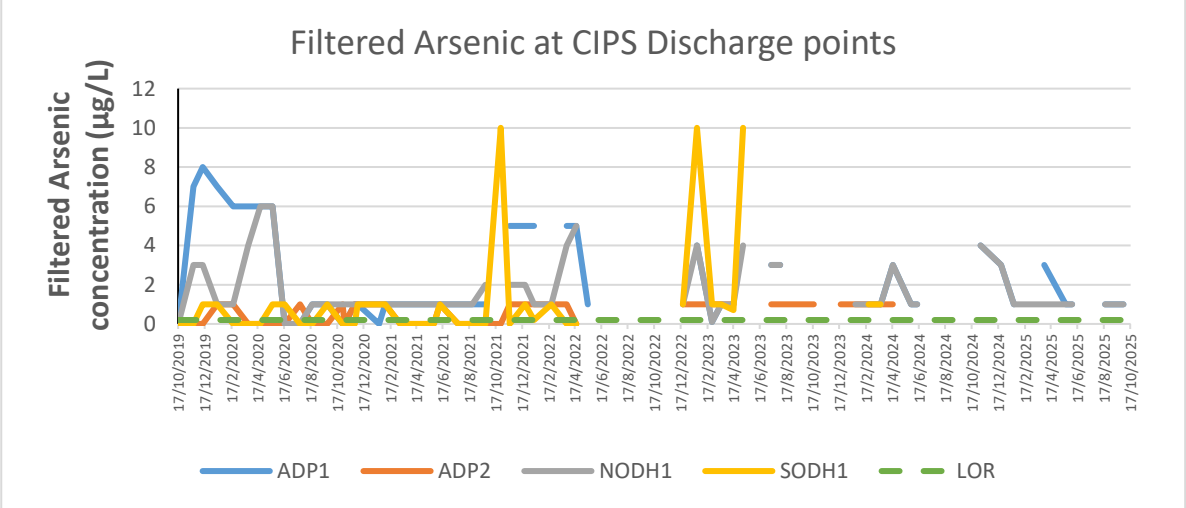

Figure 30: Filtered arsenic concentration at the monthly monitoring sites from October 2019 to October 2025

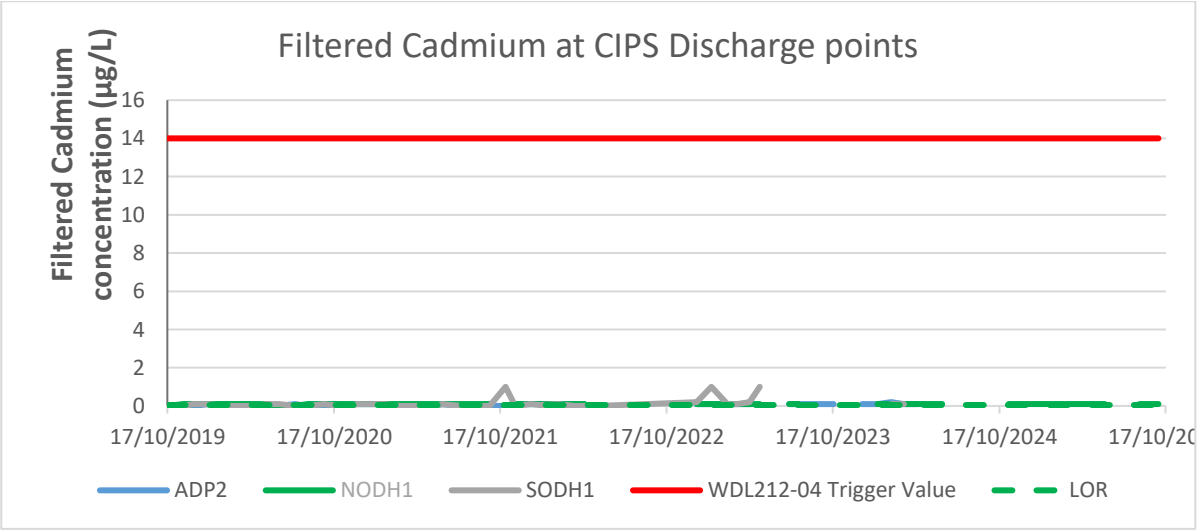

Figure 31: Filtered cadmium concentration at the monthly monitoring sites from October 2019 to October 2025

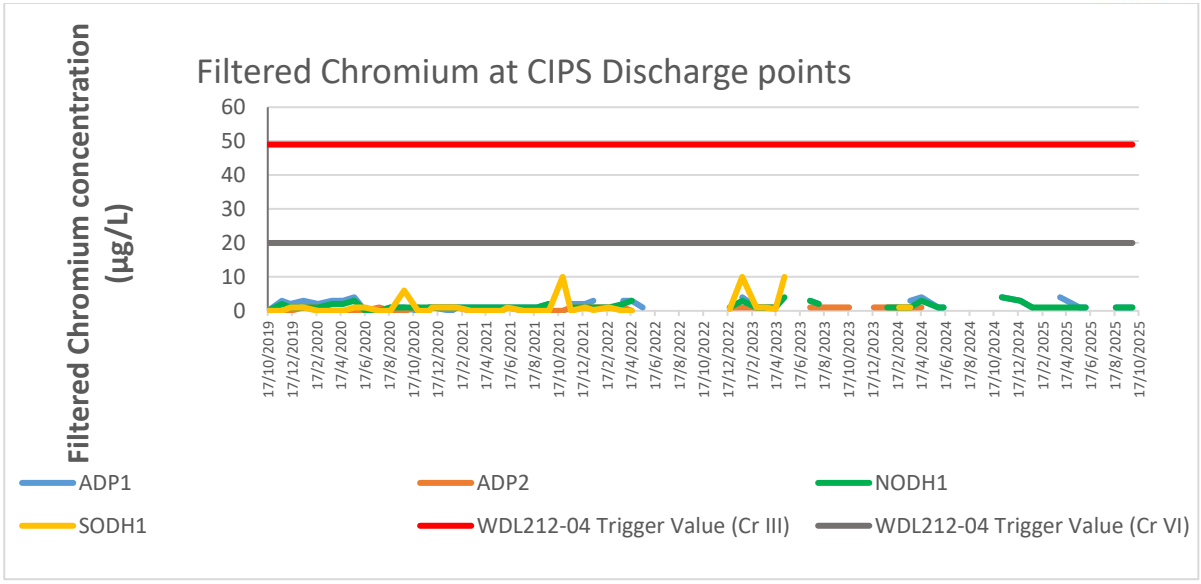

Figure 32: Filtered chromium concentration at the monthly monitoring sites from October 2019 to October 2025

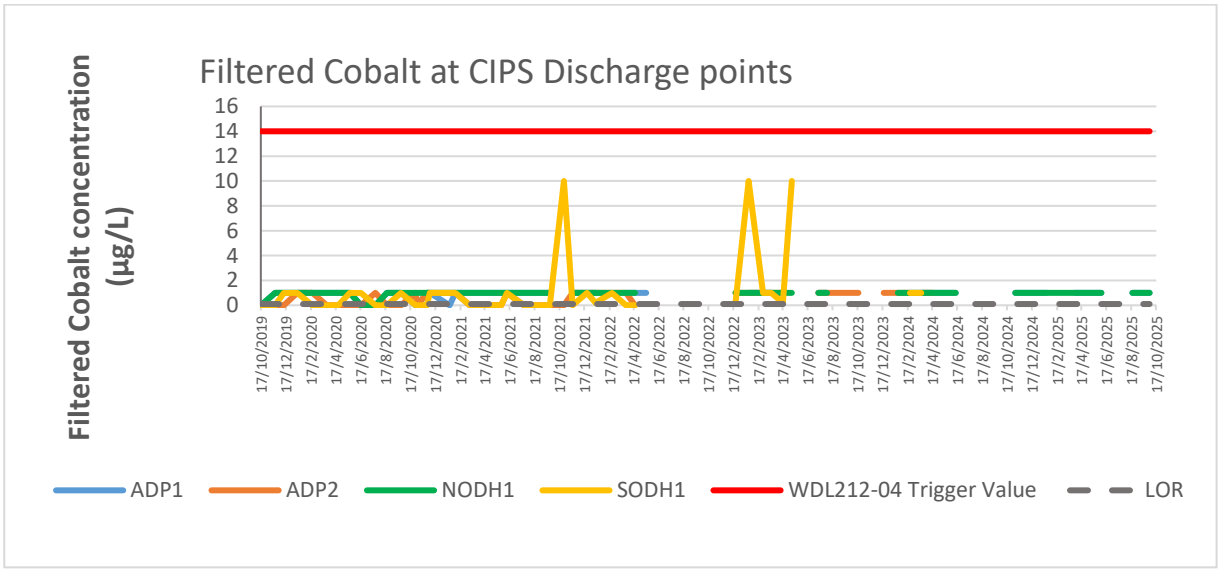

Figure 33: Filtered cobalt concentration at the monthly monitoring sites from October 2019 to October 2025

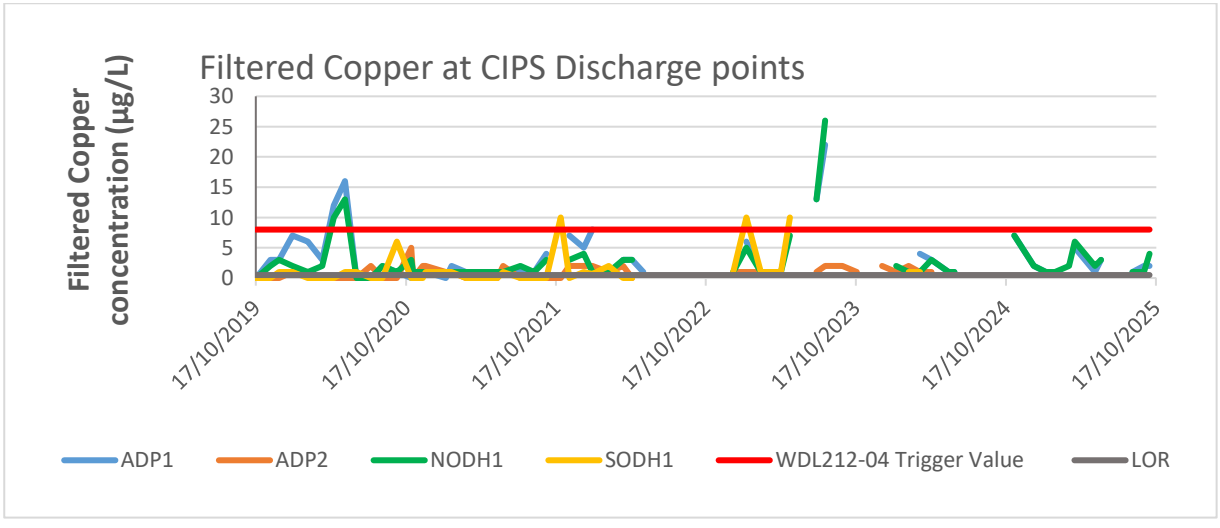

Figure 34: Filtered copper concentration at the monthly monitoring sites from October 2019 to October 2025

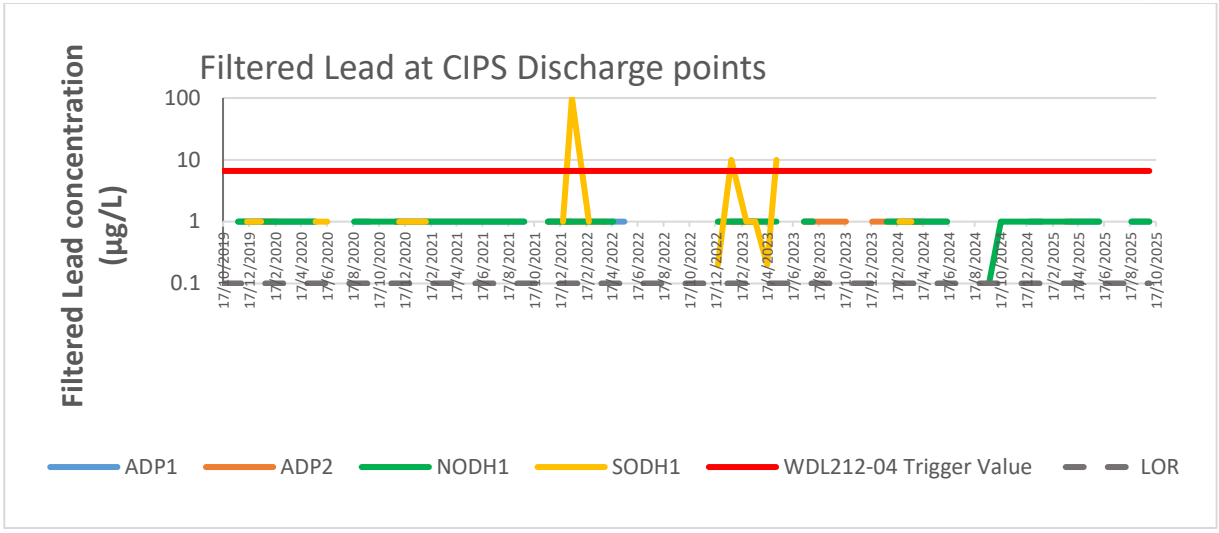

Figure 35: Filtered lead concentration at the monthly monitoring sites from October 2019 to October 2025

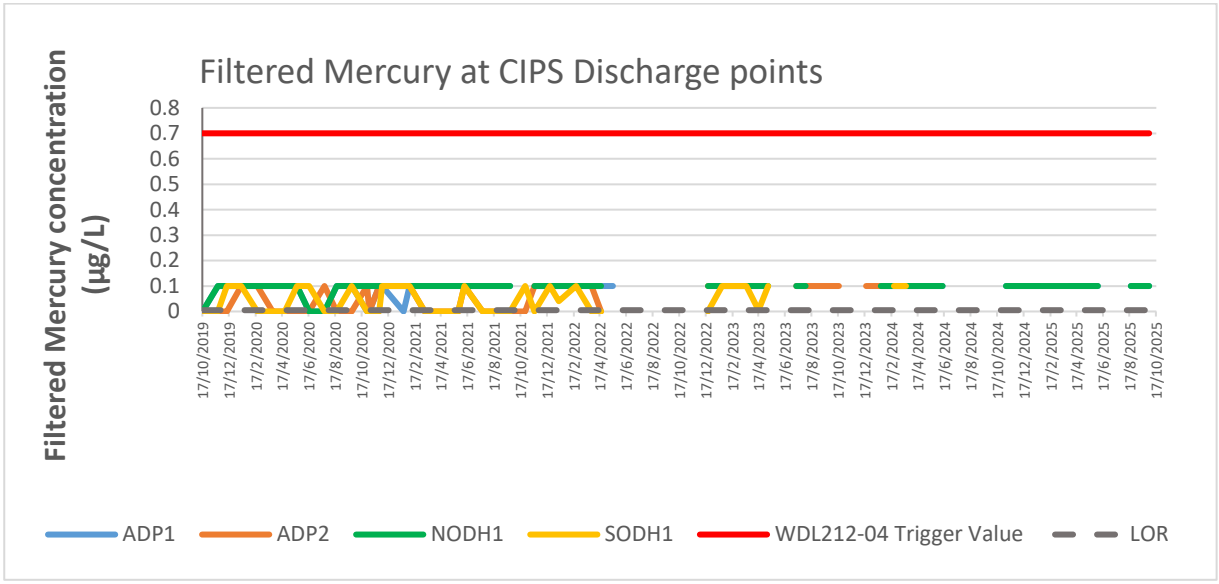

Figure 36: Filtered mercury concentration at the monthly monitoring sites from October 2019 to October 2025

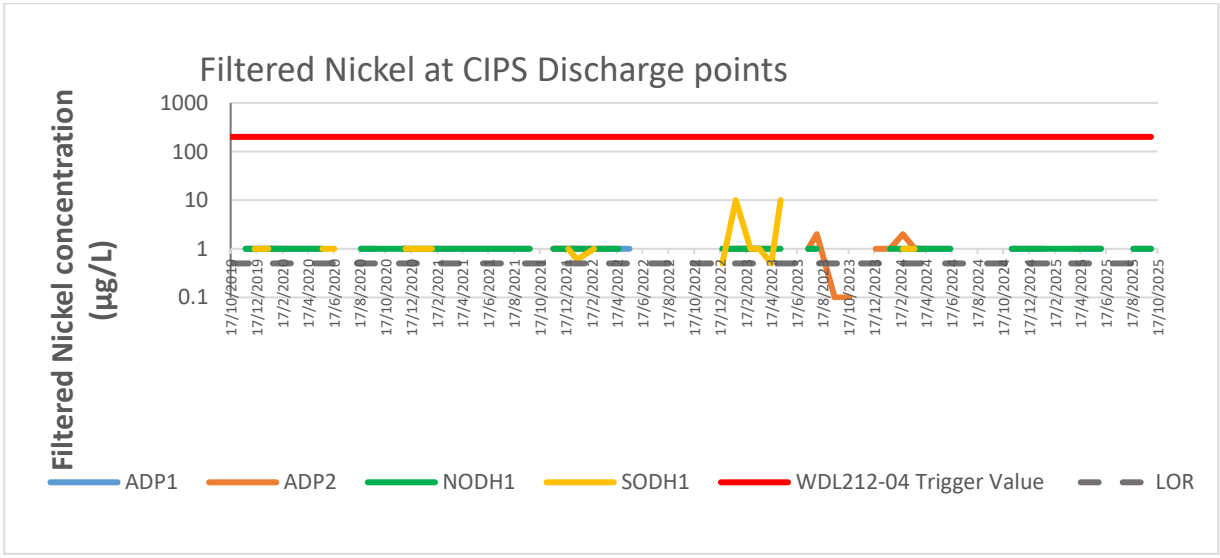

Figure 37: Filtered nickel concentration at the monthly monitoring sites from October 2019 to October 2025

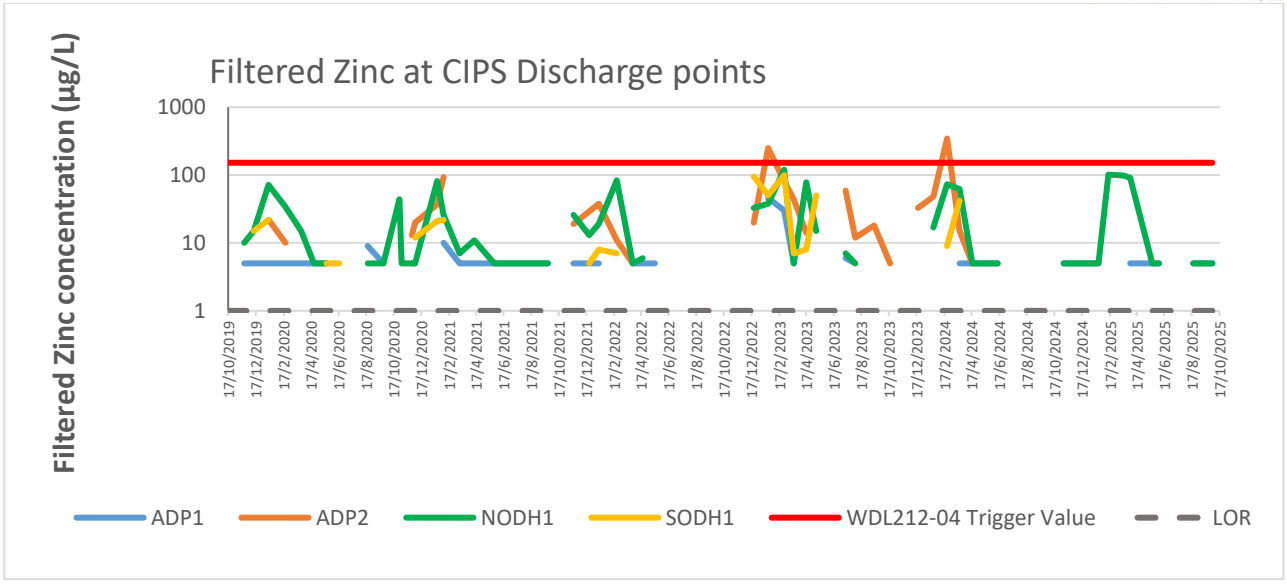

Figure 38: Filtered zinc concentration at the monthly monitoring sites from October 2019 to October 2025

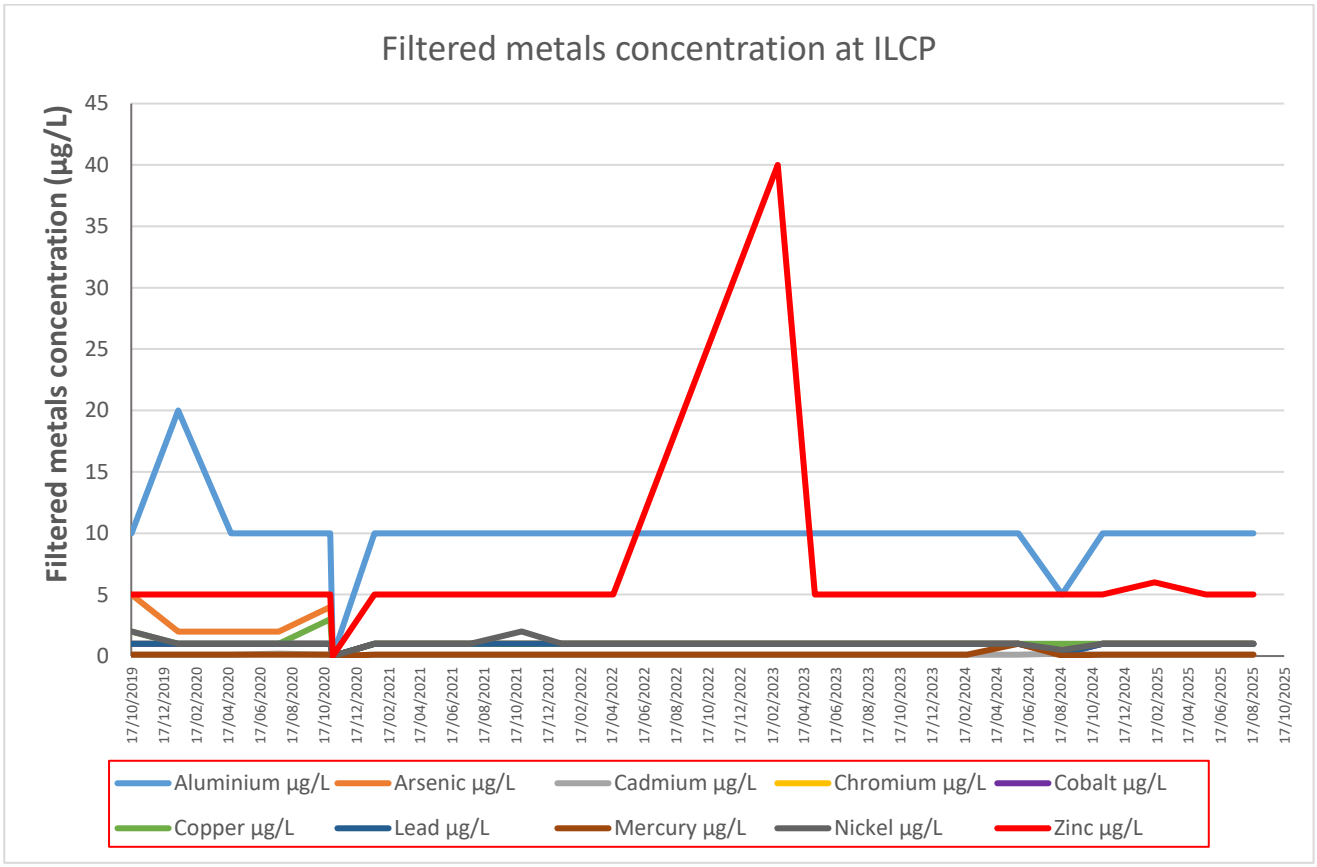

Figure 39: Filtered metal concentrations at the quarterly monitoring sites from October 2019 to October 2025

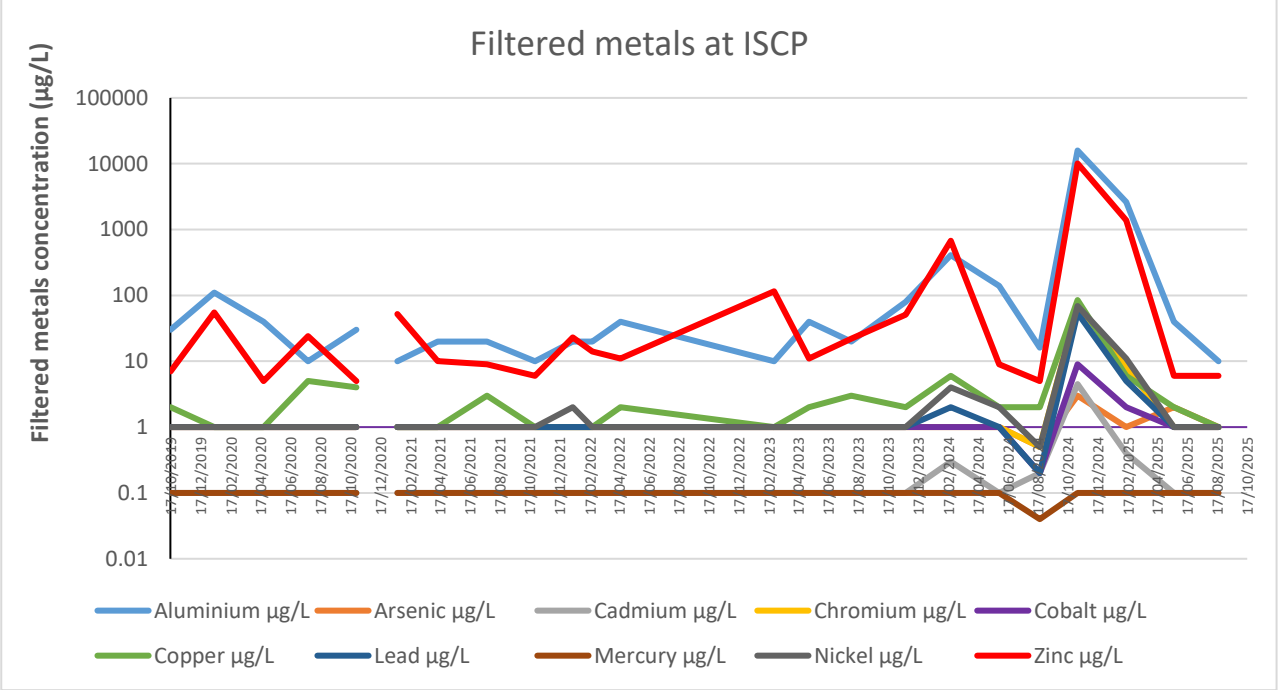

Figure 40: Filtered metal concentrations at the quarterly monitoring sites from October 2019 to October 2025

3.1.6 Results of hydrocarbons analysis

Hydrocarbon concentrations at all CIPS surface water monitoring sites are outlined in Table A 20 to Table A 24 in the additional data section. No trigger values apply to hydrocarbons in water under WDL212-04. The analysis includes Polycyclic Aromatic Hydrocarbons (PAHs), Total Petroleum Hydrocarbons (TPH), as well as Benzene, Ethylbenzene, Toluene, and Xylenes (BTEX).

All hydrocarbon concentrations were below the limit of reporting (LOR) for each chemical at the CIPS monitoring sites, except for TPH, which was recorded at NODH1, ILCP and ISCP. At NODH1, TPH fraction C6-C9 at 20 µg/L was recorded on 6 November 2024. At ILCP TPH fraction included C15–C28 at 350 µg/L on 6 November 2024. At ISCP, TPH fractions of C10–C14 at 100 µg/L, C15–C28 at 360 µg/L and C29-C36 at 110 were detected on 6 November 2024 and 21 May 2025, respectively. The detected TPH concentrations are associated with petrol range organics (PRO) in C6-C9, diesel range organics (DRO) in the C10–C28 fraction and motor oils in the C29–C36 fraction (Collins, 2007).

CIPS is classified as a heavy industrial site, utilizing diesel and mineral oils for power generation and equipment maintenance. Wastewater from the CIPS site is directed to an oil/water separator designed to remove hydrocarbons, while ISCP receives effluent from this separator before discharging it to ADP2. This indicates that the oil/water separator was unable to capture all TPH flowing through it. However, concentrations of key hydrocarbons of environmental concern, specifically BTEX and PAHs, remained below their respective laboratory LORs at all sites during this year.

Contamination load

3.1.7 Contamination loads at ADP1 and ADP2

Monthly contamination loads for nutrients, metals, and hydrocarbons at ADP1 and ADP2 for the reporting year (November 1, 2024, to October 31, 2025) are presented in Table 3 and Table 4, respectively. These loads are calculated based on the discharge volume and the concentration of contaminants measured at ADP1 and ADP2 during monitoring events. For months without monitoring but with discharge, linear interpolation was utilized to estimate contamination loads. When the concentration of a contaminant was below the Limit of

Reporting (LOR), the absolute LOR value was used for load estimation. Estimation of contamination loads relies on accurate measurements. An absolute LOR provides a clear threshold for determining when a contaminant is present, aiding in quantifying contamination levels, with potential implications for environmental health. However, the use of absolute LOR can result in over estimation of annual contaminant load.

Except for the estimated contamination loads for Total Nitrogen (TN), Total Phosphorus (TP), Total Suspended Solids (TSS), aluminium (Al), arsenic (As), chromium (Cr), copper (Cu), lead (Pb), nickel (Ni) and zinc (Zn) at ADP1, all other reported contamination loads at ADP1 this year were estimated using the absolute values of their respective LORs. At ADP2, the absolute values of hydrocarbons and metals except Al, Ni and Zn were employed for estimating contamination loads throughout the year.

In comparison to the previous year, the annual contaminant loads at ADP1 and ADP2 have decreased, respectively for this year. This can be attributed to the reduction in the wastewater discharge volume at ADP1 and ADP2, respectively.

Table 3: Annual and monthly contamination loads for nutrients, metals and hydrocarbons at ADP1 from November 2024 to October 2025.

	Contaminant	Unit	Nov-24	Dec-24	Jan-25	Apr-25	May-25	Jun-25	Aug-25	Sep-25	Oct-25	Annual
Nutrients and Suspended Solids	Total Nitrogen (TN)	g	2988.93	427.82	1416.70	8208.45	1790.00	3173.585	1461.20	15463.13	524.40	32465.28
	Total Phosphorus (TP)	g	26.13	48.91	26.49	720.51	40.67	88.5151	79.90	245.478	856.16	2106.63
	Total Suspended Solids (TSS)	g	5750.94	1424.89	28795.94	14813.55	0.00	0	8277.60	30774.75	4370.00	88456.73
Filtered Metals	Aluminium	g	11.5	1.99	57.59	29.63	0	0	16.60	61.5495	8.74	176.10
	Arsenic	g	4.6	0.34	5.76	13.00	0	0	1.70	6.15495	0.87	27.83
	Cadmium	g	0.12	0.02	0.58	0.30	0	0	0.20	0.615495	0.09	1.79
	Chromium	g	3.47	0.60	2.04	11.85	0	3.670188	1.70	6.15495	0.87	26.89
	Cobalt	g	1.15	0.20	5.76	2.96	0	0	1.70	6.15495	0.87	17.65
	Copper	g	4.65	0.65	0.18	23.03	0	11.01056	3.30	22.55997	3.50	64.23
	Lead	g	1.15	0.20	5.76	2.96	0	0	1.70	6.15495	0.87	17.65
	Mercury	g	0.12	0.02	0.58	0.30	0	0	1.70	53.58123	0.09	56.26
	Nickel	g	1.15	0.20	5.76	3.99	0	0	1.70	6.15495	0.87	18.68
	Zinc	g	9.15	1.00	28.80	14.81	0	0	0.80	3.077475	0.44	48.92
Total Metals	Aluminium	g	11.5	3.27	38.99	29.63	0	73.40375	16.50	61.5495	8.74	232.08
	Arsenic	g	4.59	0.60	2.04	8.89	0	0	1.70	6.15495	0.87	20.25
	Cadmium	g	0.12	0.02	0.58	0.30	0	0.000151	0.20	0.615495	0.09	1.80
	Chromium	g	3.47	0.80	0.18	11.85	0	0	1.70	6.15495	0.87	21.55
	Cobalt	g	1.15	0.20	5.76	2.96	0	0	1.70	6.15495	0.87	17.65
	Copper	g	8.05	0.27	5.76	21.88	0	18.35547	1.60	24.6198	3.50	75.99
	Lead	g	1.15	0.20	5.76	2.96	0	0	1.60	6.15495	0.87	17.55
	Mercury	g	0.12	0.02	0.58	0.30	0	0	0.20	0.615495	0.09	1.79
	Nickel	g	1.15	0.20	5.76	2.96	0	0	1.70	6.15495	0.87	17.65
	Zinc	g	18.23	1.00	28.80	14.81	0	29.3615	0.80	3.077475	0.44	78.28
Polycyclic Aromatic Hydrocarbons	Naphthalene	g	1.15	0.20	5.76	2.96	0	0	1.60	6.15495	0.87	17.55
	Acenaphthylene	g	1.15	0.20	5.76	2.96	0	0	35.70	6.15495	0.87	51.65
	Acenaphthene	g	1.15	0.20	5.76	2.96	0	0	35.70	6.15495	0.87	51.65

	Contaminant	Unit	Nov-24	Dec-24	Jan-25	Apr-25	May-25	Jun-25	Aug-25	Sep-25	Oct-25	Annual
	Fluorene	g	1.15	0.20	5.76	2.96	0	0	35.70	6.15495	0.87	51.65
	Phenanthrene	g	1.15	0.20	5.76	2.96	0	0	35.70	6.15495	0.87	51.65
	Anthracene	g	1.15	0.20	5.76	2.96	0	0	35.70	6.15495	0.87	51.65
	Fluoranthene	g	1.15	0.20	5.76	2.96	0	0	35.70	6.15495	0.87	51.65
	Pyrene	g	1.15	0.20	5.76	2.96	0	0	35.70	6.15495	0.87	51.65
	Benz(a)anthracene	g	1.15	0.20	5.76	2.96	0	0	35.70	6.15495	0.87	51.65
	Chrysene	g	1.15	0.20	5.76	2.96	0	0	35.70	6.15495	0.87	51.65
	Benzo(b+j)fluoranthene	g	1.15	0.20	5.76	2.96	0	0	35.70	6.15495	0.87	51.65
	Benzo(k)fluoranthene	g	1.15	0.20	5.76	2.96	0	0	35.70	6.15495	0.87	51.65
	Benzo(a)pyrene	g	0.58	0.10	2.88	1.48	0	0	17.85	3.077475	0.44	25.82
	Indeno(1.2.3.cd)pyrene	g	1.15	0.20	5.76	2.96	0	0	35.70	6.15495	0.87	51.65
	Dibenz(a.h)anthracene	g	1.15	0.20	5.76	2.96	0	0	35.70	6.15495	0.87	51.65
	Benzo(g.h.i)perylene	g	1.15	0.20	5.76	2.96	0	0	35.70	6.15495	0.87	51.65
	Sum of polycyclic aromatic hydrocarbons	g	0.58	0.10	2.88	1.48	0	0	17.85	3.077475	0.44	25.82
	Benzo(a)pyrene TEQ (zero)	g	0.58	0.10	2.88	1.48	0	0	17.85	3.077475	0.44	25.82
Total Petroleum Hydrocarbons	C6 - C9 Fraction	g	23	3.98	115.18	59.25	0	0	33.10	123.099	17.48	352.10
	C10 - C14 Fraction	g	57.51	9.96	287.96	148.14	0	0	82.80	307.7475	43.70	880.30
	C15 - C28 Fraction	g	115.02	19.91	575.92	296.27	0	0	165.60	615.495	87.40	1760.60
	C29 - C36 Fraction	g	57.51	9.96	287.96	148.14	0	0	82.80	307.7475	43.70	880.30
	C10 - C36 Fraction (sum)	g	57.51	9.96	287.96	148.14	0	0	82.80	307.7475	43.70	880.30
Total Recoverable Petroleum Hydrocarbons	C6 - C10 Fraction	g	23	3.98	115.18	59.25	0	0	33.10	123.099	17.48	352.10
	C6 - C10 Fraction minus BTEX	g	23	3.98	115.18	59.25	0	0	33.10	123.099	17.48	352.10
	C10 - C16 Fraction	g	115.02	19.91	575.92	296.27	0	0	165.60	615.495	87.40	1760.60
	C16 - C34 Fraction	g	115.02	19.91	575.92	296.27	0	0	165.60	615.495	87.40	1760.60
	C34 - C40 Fraction	g	115.02	19.91	575.92	296.27	0	0	165.60	615.495	87.40	1760.60
	C10 - C40 Fraction (sum)	g	115.02	19.91	575.92	296.27	0	0	165.60	615.495	87.40	1760.60

	Contaminant	Unit	Nov-24	Dec-24	Jan-25	Apr-25	May-25	Jun-25	Aug-25	Sep-25	Oct-25	Annual
	C10 - C16 Fraction minus Naphthalene	g	115.02	19.91	575.92	296.27	0	0	165.60	615.495	87.40	1760.60
BTEXN	Benzene	g	1.15	0.20	5.76	2.96	0	0	1.70	6.15495	0.87	17.65
	Toluene	g	2.3	0.40	11.52	5.93	0	0	3.30	12.3099	1.75	35.20
	Ethylbenzene	g	2.3	0.40	11.52	5.93	0	0	3.30	12.3099	1.75	35.20
	meta- & para-Xylene	g	2.3	0.40	11.52	5.93	0	0	3.30	12.3099	1.75	35.20
	ortho-Xylene	g	2.3	0.40	11.52	5.93	0	0	3.30	12.3099	1.75	35.20
	Total Xylenes	g	2.3	0.40	11.52	5.93	0	0	3.30	12.3099	1.75	35.20
	Sum of BTEX	g	1.15	0.20	5.76	2.96	0	0	1.70	6.15495	0.87	17.65
	Naphthalene	g	5.75	1.00	28.80	14.81		0	8.50	30.77475	4.37	88.25

Table 4: Annual and monthly contamination loads for nutrients, metals and hydrocarbons at ADP2 from November 2024 to October 2025.

	Contaminant	Unit	Apr-25	Aug-25	Annual
Nutrients and Suspended Solids	Total Nitrogen (TN)	g	7765.84	658.67	8424.50
	Total Phosphorus (TP)	g	209.49	16.47	225.96
	Total Suspended Solids (TSS)	g	33055.10	9880.02	42935.12
Filtered Metals	Aluminium	g	20.70	16.47	37.16
	Arsenic	g	3.74	1.65	5.39
	Cadmium	g	0.30	0.16	0.47
	Chromium	g	0.88	1.65	2.52
	Cobalt	g	0.16	1.65	1.81
	Copper	g	8.04	3.29	11.34
	Lead	g	0.16	1.65	1.81

	Contaminant	Unit	Apr-25	Aug-25	Annual
	Mercury	g	0.04	0.16	0.21
	Nickel	g	1.91	1.65	3.56
	Zinc	g	150.99	11.53	162.51
Total Metals	Aluminium	g	20.76	32.93	53.70
	Arsenic	g	3.74	1.65	5.39
	Cadmium	g	0.30	0.16	0.47
	Chromium	g	1.59	1.65	3.24
	Cobalt	g	0.16	1.65	1.81
	Copper	g	9.48	3.29	12.77
	Lead	g	0.16	1.65	1.81
	Mercury	g	0.12	0.16	0.29
	Nickel	g	23.42	1.65	25.06
	Zinc	g	162.70	24.70	187.40
Polycyclic Aromatic Hydrocarbons	Naphthalene	g	6.61	0.82	7.43
	Acenaphthylene	g	6.61	0.82	7.43
	Acenaphthene	g	6.61	0.82	7.43
	Fluorene	g	6.61	0.82	7.43
	Phenanthrene	g	6.61	0.82	7.43
	Anthracene	g	6.61	0.82	7.43

	Contaminant	Unit	Apr-25	Aug-25	Annual
	Fluoranthene	g	6.61	0.82	7.43
	Pyrene	g	6.61	0.82	7.43
	Benz(a)anthracene	g	6.61	0.82	7.43
	Chrysene	g	6.61	0.82	7.43
	Benzo(b+j)fluoranthene	g	6.61	0.82	7.43
	Benzo(k)fluoranthene	g	6.61	0.82	7.43
	Benzo(a)pyrene	g	3.31	0.41	3.72
	Indeno(1.2.3.cd)pyrene	g	6.61	0.82	7.43
	Dibenz(a.h)anthracene	g	6.61	0.82	7.43
	Benzo(g.h.i)perylene	g	6.61	0.82	7.43
	Sum of polycyclic aromatic hydrocarbons	g	3.31	0.41	3.72
	Benzo(a)pyrene TEQ (zero)	g	3.31	0.41	3.72
Total Petroleum Hydrocarbons	C6 - C9 Fraction	g	132.22	16.47	148.69
	C10 - C14 Fraction	g	330.55	41.17	371.72
	C15 - C28 Fraction	g	661.10	82.33	743.44
	C29 - C36 Fraction	g	330.55	41.17	371.72
	C10 - C36 Fraction (sum)	g	330.55	41.17	371.72
Total Recoverable Petroleum Hydrocarbons	C6 - C10 Fraction	g	132.22	16.47	148.69
	C6 - C10 Fraction minus BTEX	g	132.22	16.47	148.69

	Contaminant	Unit	Apr-25	Aug-25	Annual
	C10 - C16 Fraction	g	661.10	82.33	743.44
	C16 - C34 Fraction	g	661.10	82.33	743.44
	C34 - C40 Fraction	g	661.10	82.33	743.44
	C10 - C40 Fraction (sum)	g	661.10	82.33	743.44
	C10 - C16 Fraction minus Naphthalene	g	661.10	82.33	743.44
BTEXN	Benzene	g	6.61	0.82	7.43
	Toluene	g	13.22	1.65	14.87
	Ethylbenzene	g	13.22	1.65	14.87
	meta- & para-Xylene	g	13.22	1.65	14.87
	ortho-Xylene	g	13.22	1.65	14.87
	Total Xylenes	g	13.22	1.65	14.87
	Sum of BTEX	g	6.61	0.82	7.43
	Naphthalene	g	33.06	4.12	37.17

Sediment Monitoring Results

Results of sediment monitoring at NODH2 and SODH2 from January 2021 to October 2024 are presented in Table 5 and Table 6, respectively. Trigger Values specified for these sites under WDL212-04, are also provided. Although WDL212-04 specified annual sediment monitoring, sediment samples were collected on a quarterly basis in this reporting period (November 2024 to October 2025) to provide the opportunity for early detection for any environmental harm resulting from the wastewater discharged during electricity generation to the marine receiving environment.

Certificates of Analysis incorporating laboratory Limit of Reporting (LOR) and QA/QC information are provided in the Appendix. Where results are reported as less than (<) a value, this is less than the relevant laboratory LOR.

Where results of monitoring are elevated above the trigger value (whether or not the result requires "notification" under WDL212-04), the result is shown in **Bold** font. Where results of monitoring are elevated above the trigger value and requires "notification" under WDL212-04, the result is shown in **Bold Red font**.

3.1.8 Results of metal analysis in sediment

Metal concentrations in sediments at NODH2 and SODH2 from January 2021 to October 2025 are detailed in Table 5 and Table 6 below. All metal levels in sediment for the current reporting period (November 2024 to October 2025) are below the trigger values specified in WDL212-04. At NODH2, most metal concentrations exhibited a slight upward trend, while those at SODH2 remained relatively stable during this reporting period. In general, except for an increase in the average Al, As and Ni concentration at NODH2 this year, the average concentrations of all metals in sediment are comparable to those from the previous three years. This suggests that water and sediment transport from the CIPS facility has not significantly impacted metal concentrations in the sediment of Darwin Harbour.

3.1.9 Results of hydrocarbon analysis in sediment

Hydrocarbons including Total Petroleum Hydrocarbons (TPHs), Polynuclear Aromatic Hydrocarbons (PAHs) and Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) concentrations at NODH2 and SODH2 from January 2021 to October 2025 are shown in Table 5 and Table 6 below. All hydrocarbon results in sediment for this year (November 2024 to October 2025) and that of the preceding three (3) years are less than the LOR and below trigger values specified in WDL212-04. On this basis, there is no evidence of the influence of hydrocarbons from CIPS on Darwin Harbour sediment quality.

Table 5: Sediment-Chemicals concentrations at NODH2 from January 2021 to October 2025.

	Chemical	Units	WDL212-04 Trigger Value	LOR	21/01/2021	13/04/2021	22/07/2021	28/10/2021	13/01/2022	22/02/2022	3/08/2023	22/02/2024	30/05/2024	21/08/2024	6/11/2024	13/02/2025	21/05/2025	20/08/2025
Total Metals	Aluminium	mg/kg	18800	50	12500	6440	11000	22000	15000	19300	10600	8440	15000	16200	16600	17300	13000	15900
	Arsenic	mg/kg	20	5	13	11	14	12	10	13	9	8	16	17	16	16	11	16
	Cadmium	mg/kg	1.5	1	1	1	1	1	1	1	1	<1	<1	<1	<1	<1	<1	<1
	Chromium	mg/kg	80	2	28	27	30	41	33	41	28	23	39	40	39	42	33	35
	Cobalt	mg/kg	8	2	6	7	6	8	6	7	6	5	6	7	8	8	6	7
	Copper	mg/kg	65	5	7	6	6	11	6	11	6	5	12	8	10	9	7	8
	Lead	mg/kg	50	5	10	8	9	11	15	14	6	9	13	12	12	13	10	14
	Mercury	mg/kg	0.15	0.1							0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Nickel	mg/kg	21	2	9	9	9	12	10	14	8	7	11	12	11	12	10	10
	Zinc	mg/kg	200	5	28	32	34	34	27	68	33	23	106	54	75	78	31	42
Polycyclic Aromatic Hydrocarbons	Naphthalene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Acenaphthylene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Acenaphthene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Fluorene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Phenanthrene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Anthracene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Fluoranthene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Pyrene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Benz(a)anthracene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Chrysene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Benzo(b+j)fluoranthene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Benzo(k)fluoranthene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Benzo(a)pyrene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Indeno(1.2.3.cd)pyrene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8

	Chemical	Units	WDL212-04 Trigger Value	LOR	21/01/2021	13/04/2021	22/07/2021	28/10/2021	13/01/2022	22/02/2022	3/08/2023	22/02/2024	30/05/2024	21/08/2024	6/11/2024	13/02/2025	21/05/2025	20/08/2025
	Dibenz(a.h)anthracene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Benzo(g.h.i)perylene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Sum of polycyclic aromatic hydrocarbons	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benzo(a)pyrene TEQ (zero)	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Petroleum Hydrocarbons	C6 - C9 Fraction	mg/kg	10	10	10	10	10	10	10	10	10	<10	<10	<10	<10	<10	<10	<10
	C10 - C14 Fraction	mg/kg	50	50	50	50	50	50	50	50	50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28 Fraction	mg/kg	100	100	100	100	100	100	100	100	100	<100	<100	<100	<100	<100	<100	<100
	C29 - C36 Fraction	mg/kg	100	100	100	100	100	100	100	100	100	<100	<100	<100	<100	<100	<100	<100
	C10 - C36 Fraction (sum)	mg/kg	50	50	50	50	50	50	50	50	50	<50	<50	<50	<50	<50	<50	<50
Total Recoverable Petroleum Hydrocarbons	C6 - C10 Fraction	mg/kg	10	10	10	10	10	10	10	10	10	<10	<10	<10	<10	<10	<10	<10
	C6 - C10 Fraction minus BTEX	mg/kg	10	10	10	10	10	10	10	10	10	<10	<10	<10	<10	<10	<10	<10
	C10 - C16 Fraction	mg/kg	50	50	50	50	50	50	50	50	50	<50	<50	<50	<50	<50	<50	<50
	C16 - C34 Fraction	mg/kg	100	100	100	100	100	100	100	100	100	<100	<100	<100	<100	<100	<100	<100
	C34 - C40 Fraction	mg/kg	100	100	100	100	100	100	100	100	100	<100	<100	<100	<100	<100	<100	<100
	C10 - C40 Fraction (sum)	mg/kg	50	50	50	50	50	50	50	50	50	<50	<50	<50	<50	<50	<50	<50
	C10 - C16 Fraction minus Naphthalene	mg/kg	50	50	50	50	50	50	50	50	50	<50	<50	<50	<50	<50	<50	<50
BTEXN	Benzene	mg/kg	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Toluene	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Ethylbenzene	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	meta- & para-Xylene	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	ortho-Xylene	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Total Xylenes	mg/kg	0.5	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Sum of BTEX	mg/kg	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Naphthalene	mg/kg	1	1	1	1	1	1	1	1	1	<0.2	<1	<1	<1	<1	<1	<1

Table 6: Sediment-Chemicals concentrations at SODH2 from January 2021 to October 2025

	Chemical	Units	WDL212-04 Trigger Value	LOR	21/01/2021	13/04/2021	22/07/2021	28/10/2021	13/01/2022	22/02/2022	3/08/2023	22/02/2024	21/08/2024	6/11/2024	13/02/2025	21/05/2025	20/08/2025
Total Metals	Aluminium	mg/kg	18800	50	6810	4900	9910	8210	13300	14600	10600	8100	11400	8280	10800	3530	11000
	Arsenic	mg/kg	20	5	9	**10**	**14**	**9**	**13**	11	11.4	12	19	15	14	10	20
	Cadmium	mg/kg	1.5	1	1	**1**	**1**	**1**	**1**	1	0.1	<1	<1	<1	<1	<1	<1
	Chromium	mg/kg	80	2	16	**16**	**27**	**16**	**29**	31	25.3	25	29	22	26	9	25
	Cobalt	mg/kg	8	2	4	**4**	**6**	**3**	**5**	6	5.4	4	5	4	5	<2	5
	Copper	mg/kg	65	5	5	**5**	**6**	**5**	**6**	7	4.6	5	6	5	6	<5	6
	Lead	mg/kg	50	5	7	**5**	**9**	**5**	**12**	8	8.5	8	10	8	9	<5	10
	Mercury	mg/kg	0.15	0.1							0.01	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Nickel	mg/kg	21	2	5	**5**	8	5	8	10	7.4	7	8	6	8	3	8
	Zinc	mg/kg	200	5	13	**17**	**22**	**11**	**21**	24	21.4	17	23	19	19	8	22
Polycyclic Aromatic Hydrocarbons	Naphthalene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Acenaphthylene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Acenaphthene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Fluorene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Phenanthrene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Anthracene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Fluoranthene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Pyrene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Benz(a)anthracene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Chrysene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Benzo(b+j)fluoranthene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Benzo(k)fluoranthene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Benzo(a)pyrene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Indeno(1.2.3.cd)pyrene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8

	Chemical	Units	WDL212-04 Trigger Value	LOR	21/01/2021	13/04/2021	22/07/2021	28/10/2021	13/01/2022	22/02/2022	3/08/2023	22/02/2024	21/08/2024	6/11/2024	13/02/2025	21/05/2025	20/08/2025
	Dibenz(a.h)anthracene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Benzo(g.h.i)perylene	mg/kg	0.8	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
	Sum of polycyclic aromatic hydrocarbons	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benzo(a)pyrene TEQ (zero)	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Petroleum Hydrocarbons	C6 - C9 Fraction	mg/kg	10	10	10	10	10	10	10	10	10	<10	<10	<10	<10	<10	<10
	C10 - C14 Fraction	mg/kg	50	50	50	50	50	50	50	50	50	<50	<50	<50	<50	<50	<50
	C15 - C28 Fraction	mg/kg	100	100	100	100	100	100	100	100	100	<100	<100	<100	<100	<100	<100
	C29 - C36 Fraction	mg/kg	100	100	100	100	100	100	100	100	100	<100	<100	<100	<100	<100	<100
	C10 - C36 Fraction (sum)	mg/kg	50	50	50	50	50	50	50	50	50	<50	<50	<50	<50	<50	<50
Total Recoverable Petroleum Hydrocarbons	C6 - C10 Fraction	mg/kg	10	10	10	10	10	10	10	10	10	<10	<10	<10	<10	<10	<10
	C6 - C10 Fraction minus BTEX	mg/kg	10	10	10	10	10	10	10	10	10	<10	<10	<10	<10	<10	<10
	C10 - C16 Fraction	mg/kg	50	50	50	50	50	50	50	50	50	<50	<50	<50	<50	<50	<50
	C16 - C34 Fraction	mg/kg	100	100	100	100	100	100	100	100	100	<100	<100	<100	<100	<100	<100
	C34 - C40 Fraction	mg/kg	100	100	100	100	100	100	100	100	100	<100	<100	<100	<100	<100	<100
	C10 - C40 Fraction (sum)	mg/kg	50	50	50	50	50	50	50	50	50	<50	<50	<50	<50	<50	<50
	C10 - C16 Fraction minus Naphthalene	mg/kg	50	50	50	50	50	50	50	50	50	<50	<50	<50	<50	<50	<50
BTEXN	Benzene	mg/kg	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Toluene	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Ethylbenzene	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	meta- & para-Xylene	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	ortho-Xylene	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Total Xylenes	mg/kg	0.5	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Sum of BTEX	mg/kg	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Naphthalene	mg/kg	1	1	1	1	1	1	1	1	1	<0.2	<1	<1	<1	<1	<1

Reporting incident to the NT EPA within the year

On 20 August 2025, a licensed discharge occurred at ADP2 from the small settling pond. During post-event review, it was observed that the discharge was not recorded by the installed flow meter due to low water level conditions and an equipment issue at the outflow structure. The discharge occurred at an authorised point and source under WDL212-04. Monitoring confirmed no exceedance of trigger values and no environmental harm. Corrective actions have been implemented, including repair of the outflow structure and restoration of metering functionality. NT EPA was informed of the event on 29 October 2025 via email, in line with our commitment to transparent reporting. A summary of the notification is provided below.

Condition 26.1.

TGen identified the incident on 8 September 2025 while reviewing discharge trends and subsequently logged it in the Incident Management system.

Condition 26.2.

The identified incident occurred during the 20 August 2025 monitoring event at 1630 hrs.

Condition 26.3.

Discharge was occurring on the day of incident, and a volumetric estimation of flow was recorded as 117.26 kL/day. The source of discharge to ADP2 is the wastewater from the oil/water separator, via the small settling pond, i.e. all final inflow to ADP2 originates at the outlet pipe-works of the small pond (ISCP).

Condition 26.4.

The potential cause of the unmeasured discharge is that the 'V-notch' weir at ADP2 sustained a failure to the lower section of the outflow basin, resulting in unmeasured discharge from ADP2.

Condition 26.5.

No discharge has been recorded at ADP2 since April 2025.

Condition 26.6.

Volumetric estimation of flow was recorded as 117.26 kL/day. The sample point ADP2 is on the CIPS property and is not influenced by any stream or river. Additionally, this sampling point does not represent discharge to the marine receiving environment.

Condition 26.7.

There is no available weather station on site. Therefore, the rainfall data from the nearest weather stations to the site, Darwin Airport and East Arm stations are used to provide indicative rainfall data for the CIPS site. Daily rainfall recorded at Darwin Airport (BOM Station ID 014015) for the period August 2025 is shown in Figure 41. Figure 42 below also shows the daily rainfall recorded in the month of August 2025 at East Arm (BOM Station ID 014260). No rainfall was recorded at both stations in the month of August 2025. On the day of sampling, no rainfall was recorded at both Darwin Airport and East Arm stations.

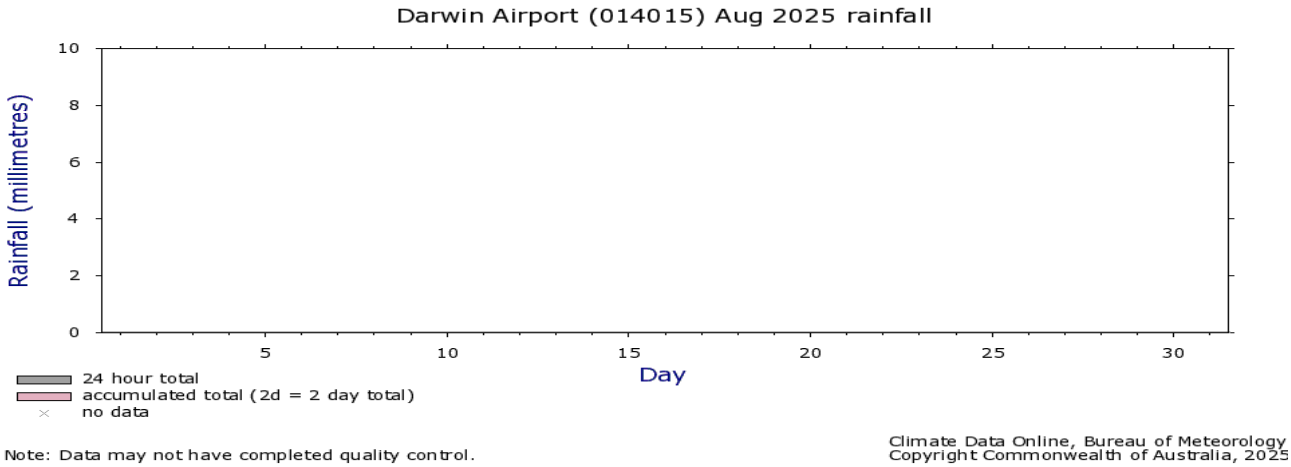

Figure 41: Daily rainfall recorded at Darwin Airport (Bureau of Meteorology Station ID 014015) for the month of August 2025 (adopted from Bureau of Meteorology 2025).

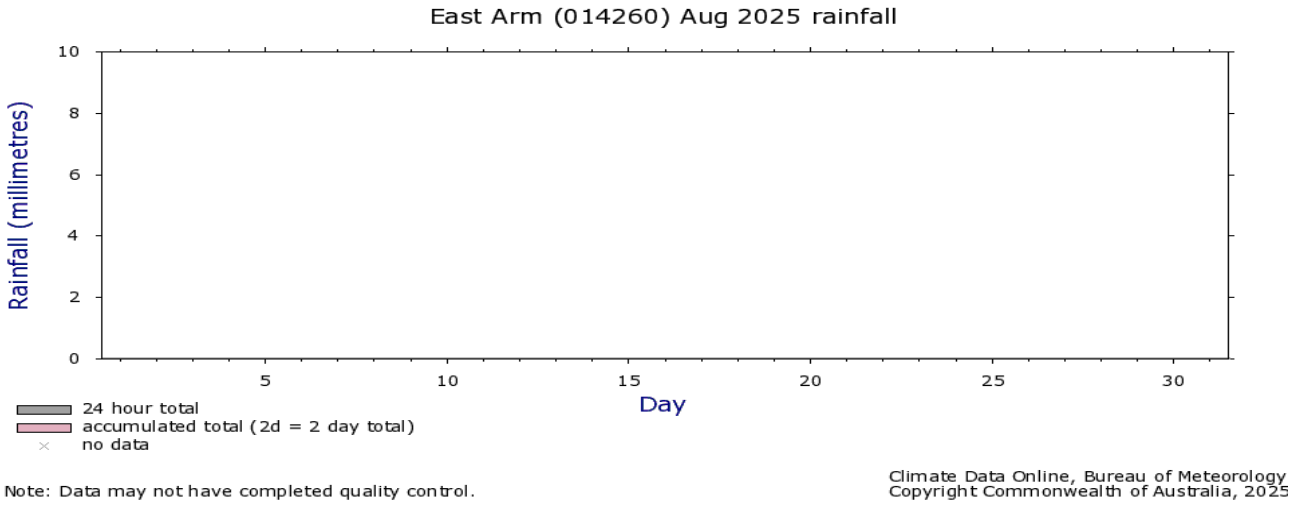

Figure 42: Daily rainfall for the month of August 2025 at East Arm (Bureau of Meteorology Station ID 014260) (adopted from Bureau of Meteorology 2025).

Condition 26.8.

It is highly unlikely that the discharge at ADP2 has had any negative impact on the Darwin Harbour marine environment. Apart from TN (0.4 mg/L), TSS (6 mg/L) and filtered Zn (7 µg/L), the concentrations of all other parameters analysed at ADP2 on the day of discharge were below their respective LOR. None of TN, TSS and Zn concentrations also exceeded their specified trigger value in WDL212-04.

Condition 26.9.

The valve allowing discharge from the small pond to ADP2 was closed until remedial works was completed.

Condition 26.10.

Territory Generation circulated the water between the small and large settling ponds to reduce the level of water in the small pond.

4 CONCLUSIONS

Wastewater discharged from CIPS and sediment in Darwin Harbour receiving environment were monitored from November 2024 to October 2025 in accordance with WDL212-04 to assess environmental harm (if any) resulting from power generation. Monitoring results for the reporting period is presented and discussed in this report.

The findings indicate that operational management at the CIPS facility effectively maintained water quality standards for wastewater discharged into Darwin Harbour throughout the reporting period.

Specifically, monitoring confirmed that 100% of the filtered metal concentrations at ADP1 and ADP2 were below their respective trigger values, suggesting no significant impacts from wastewater discharges.

Approximately, 60% reduction in wastewater discharge volume was observed in the annual year compared to the previous year.

The total nitrogen and phosphorous concentrations at compliance points remained below the 3.5 mg/L and 0.3 mg/L thresholds across all monthly sampling events, while total suspended solids (TSS) did not exceed the 25 mg/L trigger level, reinforcing compliance with WDL212-04.

Despite noted increases in certain contaminants, such as total aluminium concentrations at NODH1 reaching up to 1,600 µg/L, these values did not necessitate notifications. The report clearly demonstrates the effectiveness of ongoing monitoring and adherence to compliance measures designed to protect the marine environment. Continued vigilance in operational practices and prompt remediation of any anomalies will be pursued to sustain water quality and safeguarding ecological health in the Darwin Harbour.

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WDL212-03 (2022): Channel Island Power Station-Waste Discharge Licence, December 2022.

WDL212-04 (2024): Channel Island Power Station-Waste Discharge Licence, July 2024

ADDITIONAL DATA

A.1 pH

Table A 1: pH at WDL212-04 water monitoring sites.

Date	ADP1	ADP2	NODH1	SODH1
17/10/2019				
21/11/2019	8.69		9	
12/12/2019	8.76		8.77	
14/1/2020	8.82	8.18	8.03	7.47
20/2/2020	8.95	8.55	8.93	7.4
26/3/2020	8.47		8.64	
23/4/2020	8.3		8.74	
21/5/2020	8.49		8.59	
18/6/2020				7.49
23/7/2020		7.75		8.45
20/8/2020	6.1		7.28	
24/9/2020	8.11		8.27	
29/10/2020		9.49	7.67	9.73
3/11/2020			8.03	
26/11/2020	7.99	8.26	7.9	
3/12/2020	7.53	8.79	7.84	
21/1/2021		7.7	6.79	6.84
4/2/2021	8.09	7.55	7.73	7.71
11/3/2021	7.23		7.31	5.93
13/4/2021	8.64		8.07	
27/5/2021	7.86		8.01	
10/6/2021	8.14	8.85	8.14	
22/7/2021	7.98		8.01	8.3
24/8/2021	7.57		7.7	
23/9/2021	8.2		8.21	
28/10/2021				
18/11/2021	7.37	8.05	8.36	7.12
23/12/2021	8.84	8.67	6.79	
13/1/2022	8.78	9	7.31	6.93
22/2/2022		8.8	8.6	6.63
29/3/2022	8.23	9.43	8.85	7.25
20/4/2022	8.88		8.31	
17/5/2022	7.77			
22/12/2022		7.72	7.45	7.05
23/01/2023	7.81	8.46	8.21	8.04
27/02/2023	8.13	8.07	7.51	7.94
20/03/2023	6.16	7.32	6.81	7.13
17/04/2023		7.05	6.56	6.45
9/05/2023	8.78		8.61	7.86
15/06/2023				
13/07/2023	7.07	8.11	8.04	
3/08/2023	8.85	7.47	8.84	
14/09/2023		6.96		
19/10/2023	7.55		7.79	
22/11/2023				
20/12/2023		7.8		
23/01/2024	**8.78**	**8.89**	8.56	
22/02/2024		7.32	6.88	8.04
21/03/2024	**8.66**	**8.86**	6.96	7.4
18/04/2024	**8.67**	**9.31**	8.56	
30/05/2024	8.22		8.16	
13/06/2024	8.06		8.01	
23/07/2024				
21/08/2024				
19/09/2024	8.4	8.48	8.3	7.87
17/10/2024				
6/11/2024	**8.92**		8.83	
23/12/2024	**8.67**		8.82	
22/01/2025	8.29		8.22	
13/02/2025			6.36	7.99
19/03/2025			6.15	
2/04/2025	**8.74**	7.64	7.43	7.99
21/05/2025	**8.7**		8.23	
5/06/2025	8.08		8.06	
31/07/2025				
20/08/2025	8.48	7.83	8.5	
17/09/2025	7.58		7.81	
1/10/2025	8.14		8.1	

Date	ILCP	ISCP
17/10/2019	9.79	9.3
14/1/2020	8.75	8.46
23/4/2020	9.49	9.34
23/7/2020	7.73	7.35
29/10/2020	9.6	9.67
3/11/2020		
21/1/2021	7.81	8
13/4/2021	8.48	8.79
22/7/2021	8.93	9.49
28/10/2021	7.76	7.98
13/1/2022	8.5	9.03
22/2/2022	8.75	8.82
20/04/2022	9.77	9.67
27/02/2023	8.03	7.95
9/05/2023	8.96	8.82
3/08/2023	9.21	8.24
22/11/2023	8.34	9.25
22/02/2024	7.85	**5.55**
30/05/2024	8.48	9.35
21/08/2024	8.67	9.07
6/11/2024	6.31	**2.21**
13/02/2025	7.77	2.89
21/05/2025	8.2	8.72
20/08/2025	7.84	8.08

A.2 Temperature

Table A 2: Temperature (C) at WDL212-04 water monitoring sites.

Date	ADP1	ADP2	NODH1	SODH1
17/10/2019				
21/11/2019	33.42		31.48	
12/12/2019	35.59		33.09	
14/1/2020	33.96	31.21	31.22	31.47
20/2/2020	31.96	29.36	28.62	29.28
26/3/2020	31.83		30.85	
23/4/2020	33.44		31.85	
21/5/2020	29.19		28.98	
18/6/2020				29.91
23/7/2020		28		28.79
20/8/2020	24.86		26.36	
24/9/2020	26.75		26.85	
29/10/2020		30.31	29.71	30.19
3/11/2020			30.624	
26/11/2020	27.95	30.97	29.72	
3/12/2020	26.93	31.13	27.48	
21/1/2021		32.64	30.93	30.79
4/2/2021	27.21	28.2	28.31	28.71
11/3/2021	27.5		27.5	30.2
13/4/2021	27.33		27.9	
27/5/2021	23.03		23.35	
10/6/2021	17.17	25.85	20.04	
22/7/2021	22.82		23.34	28.84
24/8/2021	25.03		26.18	
23/9/2021	17.61		21.78	
28/10/2021				
18/11/2021	32.62	33.04	30.65	33.36
23/12/2021	27.81	29.62	28.88	
13/1/2022	28.66	29.33	29.67	34.12
22/2/2022		31.06	29.11	30.11
29/3/2022	31.91	29.91	29.89	29.98
20/4/2022	25.42		31.26	
17/5/2022	32.81			
22/12/2022		28.57	28.51	28.97
23/01/2023	32.61	31.5	35.05	35.65
27/02/2023	26.45	28.29	27.52	26.64
20/03/2023	26.63	33.09	31.9	34.52
17/04/2023		28.2	28.16	27.32
9/05/2023	30.7		30.05	26.56
15/06/2023				
13/07/2023	27.79	26.17	27.07	
3/08/2023	30.79	28.78	29.74	
14/09/2023		27.64		
19/10/2023	27.02		29.15	
22/11/2023				
20/12/2023		29.69		
23/01/2024	31.75	31.8	31.06	
22/02/2024		32.31	30.69	29.64
21/03/2024	28.71	31.28	30.54	31.68
18/04/2024	27.52	30.4	30.12	
30/05/2024	28.64		28.73	
13/06/2024	26.27		25.86	
23/07/2024				
21/08/2024				
19/09/2024	25.97	30.95	27.62	28.17
17/10/2024				
6/11/2024	32.76		32.38	
23/12/2024	30.46		29.73	
22/01/2025	26.6		28.51	
13/02/2025			32.38	30.21
19/03/2025			30.47	
2/04/2025	29.5	32.98	36.08	30.21
21/05/2025	20.95		22.25	
5/06/2025	21.69		23.74	
31/07/2025				
20/08/2025	22.7	26.92	24.22	
17/09/2025	27.06		28.06	
1/10/2025	28.88		33.77	

Date	ILCP	ISCP
17/10/2019	32.22	33.11
14/1/2020	33.52	34.13
23/4/2020	32.6	33.46
23/7/2020	26.77	29.17
29/10/2020	35.68	34.45
3/11/2020		
21/1/2021	33.04	34.4
13/4/2021	33.03	34.1
22/7/2021	26.82	27.56
28/10/2021	33.57	33.61
13/1/2022	29.9	31.95
22/2/2022	30.73	30.45
20/04/2022	32.35	32.83
27/02/2023	28.47	28.75
9/05/2023	27.49	27.72
3/08/2023	29.83	29.72
22/11/2023	33.06	34.2
22/02/2024	33	33.21
30/05/2024	30.9	31.54
21/08/2024	27.84	28.43
6/11/2024	34.92	35.59
13/02/2025	33.05	33.42
21/05/2025	24.92	26.12
20/08/2025	25.36	25.14

A.3 Dissolved Oxygen (% saturation)

Table A 3: Dissolved Oxygen at WDL212-04 water monitoring sites.

Date	ADP1	ADP2	NODH1	SODH1
17/10/2019				
21/11/2019	79.7		70.1	
12/12/2019	56		91.5	
14/1/2020	61.5	56.5	70.4	65.1
20/2/2020	88.9	86.6	87.3	91.8
26/3/2020	67.9		81.3	
23/4/2020	67.8		69.9	
21/5/2020	61.7		63.4	
18/6/2020				66.1
23/7/2020		59.9		65.6
20/8/2020	73.1		75.1	
24/9/2020	75.5		75.8	
29/10/2020		78.3	70.2	62.5
3/11/2020			69.2	
26/11/2020	90.9	41	91.1	
3/12/2020	65.4	68.1	93.4	
21/1/2021		49.9	62.2	61.5
4/2/2021	55.8	47.4	58.4	65.7
11/3/2021	57.6		54.1	61.8
13/4/2021	86.2		72.1	
27/5/2021	88.4		84.9	
10/6/2021	81.9	62.1	73.5	
22/7/2021	95.5		97.1	90.2
24/8/2021	73.4		80.5	
23/9/2021	98		67	
28/10/2021				
18/11/2021	76.8	75.8	80.9	60.8
23/12/2021	103	115.1	65.9	
13/1/2022	76.1	77.9	57	79
22/2/2022		71.8	81	63.3
29/3/2022	73.9	85.6	80.2	55.6
20/4/2022	60.9		68.8	
17/5/2022	58.5			
22/12/2022		100	59	111.1
23/01/2023	75.8	64.7	64.9	58
27/02/2023	98.6	58.5	63.3	51.8
20/03/2023	77	107.2	100.2	107.2
17/04/2023		49.3	51.2	63.1
9/05/2023	61.2		84.2	89
15/06/2023				
13/07/2023	104.5	52.9	76.6	
3/08/2023	106.6	24.4	56.6	
14/09/2023		89.8		
19/10/2023	75.5		85.7	
22/11/2023				
20/12/2023		49		
23/01/2024	72.4	75.1	72.4	
22/02/2024		47.1	70	65.5
21/03/2024	80.2	66.7	45.5	66.3
18/04/2024	82	62.2	66.2	
30/05/2024	76.2		58.6	
13/06/2024	57		57.4	
23/07/2024				
21/08/2024				
19/09/2024	98.8	67.8	67.5	82.5
17/10/2024				
6/11/2024	76.7		72.1	
23/12/2024	87		54.6	
22/01/2025	70.1		97.2	
13/02/2025			109.5	63.3
19/03/2025			58.7	
2/04/2025	56.8	65.3	64.4	63.3
21/05/2025	67.1		71.7	
5/06/2025	77		77.5	
31/07/2025				
20/08/2025	92.5	51.2	63.1	
17/09/2025	76.9		73.1	
1/10/2025	93.6		53.2	

Date	ILCP	ISCP
17/10/2019	61.8	95
14/1/2020	60.6	61
23/4/2020	77.6	77.1
23/7/2020	68.9	82
29/10/2020	73.5	95.3
3/11/2020		
21/1/2021	52.2	60.3
13/4/2021	63.5	78.4
22/7/2021	94.6	101.5
28/10/2021	49.2	62.1
13/1/2022	94	94.4
22/2/2022	81.9	85.7
20/04/2022	89.5	73
27/02/2023	70.3	65.6
9/05/2023	71	74.3
3/08/2023	96	61
22/11/2023	56.5	100.4
22/02/2024	86.4	105.1
30/05/2024	55.5	76.8
21/08/2024	77.5	82.6
6/11/2024	78.5	76.7
13/02/2025	93.7	106.2
21/05/2025	77.9	101.1
20/08/2025	49.2	68.4

A.4 Electrical Conductivity(µS/cm)

Table A 4: Electrical Conductivity at WDL212-04 water monitoring sites.

Date	ADP1	ADP2	NODH1	SODH1
17/9/2019			142	
17/10/2019				
21/11/2019	2930		1382	
12/12/2019	2990		1295	
14/1/2020	2490	169	330	542
20/2/2020	2640	122	334	256
26/3/2020	2620		2060	
23/4/2020	2580		2410	
21/5/2020	2450		2710	
18/6/2020				74
23/7/2020		89		260
20/8/2020	3760		3780	
24/9/2020	3580		3790	
29/10/2020		239	519	299
3/11/2020			326	
26/11/2020	204	257	288	
3/12/2020	201	237	204	
21/1/2021		79	127	592
4/2/2021	350	35	220	10670
11/3/2021	303		207	20800
13/4/2021	210		188	
27/5/2021	188		184	
10/6/2021	245	269	243	
22/7/2021	200		182	123
24/8/2021	310		313	
23/9/2021	1170		1830	
28/10/2021				
18/11/2021	2500	73	965	46000
23/12/2021	2510	122	769	
13/1/2022	2410	110	526	1890
22/2/2022		671	144	4830
29/3/2022	2510	556	2380	27100
20/4/2022	3440		2.13	
17/5/2022	1820			
22/12/2022		181	863	26200
23/01/2023	2000	145	1620	30500
27/02/2023	574	676	278	136
20/03/2023	137	58	119	356
17/04/2023		483	630	20400
9/05/2023	2530		1960	43100
15/06/2023				
13/07/2023	1700	522	1730	
3/08/2023	2500	408	1800	
14/09/2023		119		
19/10/2023	149		148	
22/11/2023				
20/12/2023		96		
23/01/2024	1770	96	605	
22/02/2024		169	202	788
21/03/2024	1700	606	195	119
18/04/2024	1720	576	1690	
30/05/2024	780		211	
13/06/2024	189		188	
23/07/2024				
21/08/2024				
19/09/2024	1000	1310	286	40300
17/10/2024				
6/11/2024	1630		1660	
23/12/2024	1770		1770	
22/01/2025	176		175	
13/02/2025			157	674
19/03/2025			103	
2/04/2025	1733	624	229	674
21/05/2025	0.199		0.179	
5/06/2025	0.17		0.173	
31/07/2025				
20/08/2025	350	128	191	
17/09/2025	175		174	
1/10/2025	187		129	

Date	ILCP	ISCP
17/10/2019	5230	201
14/1/2020	1409	166
23/4/2020	1202	140
23/7/2020	1970	75
29/10/2020	0.244	2.91
3/11/2020		
21/1/2021	1.011	0.084
13/4/2021	559	0.235
22/7/2021	684	382
28/10/2021	1330	120
13/1/2022	1170	103
22/2/2022	1100	665
20/04/2022	1.47	0.547
27/02/2023	1250	652
9/05/2023	1310	546
3/08/2023	1760	401
22/11/2023	3930	322
22/02/2024	1730	156
30/05/2024	1830	649
21/08/2024	1760	531
6/11/2024	1730	4470
13/02/2025	1350	763
21/05/2025	1.19	1.06
20/08/2025	722	115

A.5 Turbidity

Table A 5: Turbidity (NTU) at WDL212-04 water monitoring sites.

Date	ADP1	ADP2	NODH1	SODH1
17/10/2019				
21/11/2019	5.64		7.23	
12/12/2019	8.05		23.6	
14/1/2020	5.47	14.9	18	22.1
20/2/2020	6.76	15	27.6	8.86
26/3/2020	5.92		2.5	
23/4/2020	7.74		19	
21/5/2020	9.3		131	
18/6/2020				1.37
23/7/2020		2.49		1.11
20/8/2020	0.72		0.62	
24/9/2020	0.95		8.92	
29/10/2020		23.4	1.45	
3/11/2020			1.22	
26/11/2020	1.25	9.55	8.89	
3/12/2020	1.12	16.4	2.96	
21/1/2021		4.08	6.78	8.3
4/2/2021	3.84	8.54	8.26	
11/3/2021	1.62		9.6	4.4
13/4/2021	0.95		1.13	
27/5/2021	0.61		0.62	
10/6/2021	1.96	15.7	1.77	
22/7/2021	0.8		0.71	0.73
24/8/2021	1.33		1.31	
23/9/2021	4.63		3.22	
28/10/2021				
18/11/2021	3.91	3.96	6.53	1.14
23/12/2021	3.08	3.47	4.44	
13/1/2022	2.05	13.7	13.3	5.09
22/2/2022		2.51	3.25	6.45
29/3/2022	2.44	4.06	2.44	2.29
20/4/2022	2.61		3.06	
17/5/2022	10.1			
22/12/2022		2.27	2.81	14
23/01/2023	4.04	4.61	3.93	2.35
27/02/2023	2.16	4.12	12.8	68.3
20/03/2023	1.43	1.71	6.91	3.96
17/04/2023		4.56	4.64	3.15
9/05/2023	4.6		5.21	3.21
15/06/2023				
13/07/2023	4.56	6.08	6.78	
3/08/2023	6.69	2.08	7.76	
14/09/2023				
19/10/2023	1.05		1.14	
22/11/2023				
20/12/2023		11.4		
23/01/2024	4.67	12.4	7.93	
22/02/2024		7.11	5.62	5.04
21/03/2024	2.55	3.77	22.1	11.6
18/04/2024	4.84	4.59	5.54	
30/05/2024	1.54		1.68	
13/06/2024	1.76		2.34	
23/07/2024				
21/08/2024				
19/09/2024	1.59	1.97	0.85	2.15
17/10/2024				
6/11/2024	3.36		2.89	
23/12/2024	1.48		1.31	
22/01/2025	1.28		1.38	
13/02/2025			13.1	12.8
19/03/2025			5.48	
2/04/2025	1.42	3.38	48.9	12.8
21/05/2025	1.87		2.03	
5/06/2025	2.09		2.41	
31/07/2025				
20/08/2025	0.92	5.98	0.8	
17/09/2025	0.45		0.93	
1/10/2025	0.92		6.66	

Date	ILCP	ISCP
17/10/2019	7.09	9.94
14/1/2020	1.4	16
23/4/2020	2.25	10.7
23/7/2020	1.28	2.95
29/10/2020	24.6	1.49
3/11/2020		
21/1/2021	2.91	4.23
13/4/2021	1.43	8.06
22/7/2021	1.63	30.4
28/10/2021	2.37	10.5
13/1/2022	1.15	13.7
22/2/2022	1.85	3.96
20/04/2022	8.79	4.18
27/02/2023	1.49	4.27
9/05/2023	4.12	3.31
3/08/2023	4.96	2.61
22/11/2023	1.59	20
22/02/2024	4.08	3.55
30/05/2024	1.8	5.36
21/08/2024	1.58	3.51
6/11/2024	8.82	8.82
13/02/2025	1.35	3.49
21/05/2025	1.51	20.6
20/08/2025	1.28	4.22

A.6 Free Chlorine(mg/L)

Table A 6: Free Chlorine concentration at WDL212-04 water monitoring sites.

Date	ADP1	ADP2	NODH1	SODH1
17/9/2019			0.1	
17/10/2019				
21/11/2019	0.2		0.11	
12/12/2019	0.56		0.14	
14/1/2020	0.96	0.04	0.04	0.04
20/2/2020	0.41	0.06	0.03	0.13
26/3/2020	0.45		0.11	
23/4/2020	0.33		0.27	
21/5/2020	0.18		0.17	
18/6/2020				0.04
23/7/2020		0.02		0.28
20/8/2020	0.08		0.05	
24/9/2020	2.4		1.85	
29/10/2020		0.04	0.05	0
3/11/2020			0.05	
26/11/2020	0.05	0.08	0.07	
3/12/2020	0.22	0.03	0.32	
21/1/2021		0.00	0	0.11
4/2/2021	1.54	0.01	0.5	
11/3/2021	0.76		0.42	0.02
13/4/2021	0.29		0.16	
27/5/2021	0.45		0.45	
10/6/2021	1.36	0.06	1.23	
22/7/2021	1.69		1.49	0.59
24/8/2021	0.99		0.87	
23/9/2021	3.8		3.2	
28/10/2021				
18/11/2021	0.47	0	0	0.03
23/12/2021	6.7	0.03	1	
13/1/2022	1.25	0.04	0.03	0.06
22/2/2022		0.02	0.01	0
29/3/2022	1.56	0.11	1.83	0.02
20/4/2022	0.63		0.18	
17/5/2022	0.97			
22/12/2022		0	0.02	0.01
23/01/2023	0.21	0.03	0.2	0.04
27/02/2023	0.37	0.04	0.02	0.03
20/03/2023	0.1	1.3	0.1	0.1
17/04/2023		0.03	0.02	0
9/05/2023	0.29		0.24	0
15/06/2023				
13/07/2023	1.12	0.04	0.45	
3/08/2023	1.13	0.04	0.77	
14/09/2023		0.03		
19/10/2023	0.41		0.43	
22/11/2023				
20/12/2023		0.07		
23/01/2024	0.32	0.06	0.06	
22/02/2024		0.03	0.01	0.01
21/03/2024	1.09	0.01	0.01	0.14
18/04/2024	1.03	0.03	0.18	
30/05/2024	0.79		0.79	
13/06/2024	1.16		1.12	
23/07/2024				
21/08/2024				
19/09/2024	0.22	0.03	0.33	0.01
17/10/2024				
6/11/2024	0.77		0.48	
23/12/2024	2.1		1.15	
22/01/2025	0.15		0.13	
13/02/2025			0.01	0.05
19/03/2025			0.02	
2/04/2025	0.98	0	0.06	0.05
21/05/2025	1.35		1.19	
5/06/2025	0.2		0.23	
31/07/2025				
20/08/2025	0.45	0.06	0.43	
17/09/2025	0.62		0.5	
1/10/2025	0.35		0.05	

Date	ILCP	ISCP
17/10/2019	0.04	0.03
14/1/2020	0.01	0.06
23/4/2020	0.04	0.04
23/7/2020	0.03	0.02
29/10/2020	0.01	0.01
3/11/2020		
21/1/2021	0.02	0.01
13/4/2021	0.03	0.05
22/7/2021	0.05	0.07
28/10/2021	0.11	0.04
13/1/2022	0.02	0.04
22/2/2022	0.03	0.02
20/04/2022	0.61	0.02
27/02/2023	0.04	0.02
9/05/2023	0.04	0.04
3/08/2023	0.03	0.06
22/11/2023	0.03	0
22/02/2024	0.03	0.01
30/05/2024	0.06	0.05
21/08/2024	0.04	0.03
6/11/2024	0.05	0
13/02/2025	0.04	0.04
21/05/2025	0.03	0.06
20/08/2025	0.04	0.04

A.7 Total Suspended Solids (TSS) (mg/L)

Table A 7: Total Suspended Solids concentration at WDL212-04 water monitoring sites.

Date	ADP1	ADP2	NODH1	SODH1
17/10/2019				
21/11/2019	7		5	
12/12/2019	12		12	
14/1/2020	5	23	5	5
20/2/2020	6	8	12	5
26/3/2020	11		5	
23/4/2020	14		34	
21/5/2020	28		9	
18/6/2020				5
23/7/2020		6		5
20/8/2020	5		5	
24/9/2020	5		20	
29/10/2020		28	5	506
3/11/2020			10	
26/11/2020	5	10	10	
3/12/2020	5	18	5	
21/1/2021		6	5	5
4/2/2021	6	10	5	
11/3/2021	5		9	56
13/4/2021	5		5	
27/5/2021	5		5	
10/6/2021	5	26	5	
22/7/2021	5		5	5
24/8/2021	5		5	
23/9/2021	10		10	
28/10/2021				
18/11/2021	5	5	7	5
23/12/2021	5	5	5	
13/1/2022	5	15	5	5
22/2/2022		21	5	5
29/3/2022	6	7	6	5
20/4/2022	8		5	
17/5/2022	13			
22/12/2022		5	5	8
23/01/2023	5	5	5	18
27/02/2023	5	6	5	14
20/03/2023	5	5	5	5
17/04/2023		7	5	5
9/05/2023	5		6	10
15/06/2023				
13/07/2023	5	5	10	
3/08/2023	7	5	5	
14/09/2023		5		
19/10/2023	5		5	
22/11/2023				
20/12/2023		14		
23/01/2024	5	14	5	
22/02/2024		6	5	5
21/03/2024	5	5	5	5
18/04/2024	5	5	5	
30/05/2024	5		5	
13/06/2024	5		5	
23/07/2024				
21/08/2024				
19/09/2024	5	5	5	40
17/10/2024				
6/11/2024	5		5	
23/12/2024	11		5	
22/01/2025	5		5	
13/02/2025			5	5
19/03/2025			5	
2/04/2025	5	5	12	5
21/05/2025	5		5	
5/06/2025	5		5	
31/07/2025				
20/08/2025	5	6	5	
17/09/2025	5		5	
1/10/2025	5		5	

Date	ILCP	ISCP
17/10/2019	15	9
14/1/2020	5	5
23/4/2020	13	39
23/7/2020	5	10
29/10/2020	6	32
3/11/2020		
21/1/2021	5	5
13/4/2021	5	14
22/7/2021	5	22
28/10/2021	5	5
13/1/2022	5	16
22/2/2022	5	6
20/04/2022	16	5
27/02/2023	5	5
9/05/2023	14	6
3/08/2023	7	10
22/11/2023	5	31
22/02/2024	7	5
30/05/2024	5	10
21/08/2024	5	5
6/11/2024	5	17
13/02/2025	5	5
21/05/2025	5	17
20/08/2025	5	6

A.8 Total Phosphorous (TP) (mg/L)

Table A 8: Total Phosphorous concentration at WDL212-04 water monitoring sites.

Date	ADP1	ADP2	NODH1	SODH1
17/10/2019				
21/11/2019	0.15		0.13	
12/12/2019	0.28		0.15	
14/1/2020	0.29	0.03	0.06	0.03
20/2/2020	0.25	0.01	0.02	0.01
26/3/2020	0.26		0.22	
23/4/2020	0.19		0.25	
21/5/2020	0.22		0.35	
18/6/2020				0.01
23/7/2020		0.01		0.01
20/8/2020	0.08		0.09	
24/9/2020	0.06		0.08	
29/10/2020		0.1	0.05	0.27
3/11/2020			0.07	
26/11/2020	0.05	0.04	0.07	
3/12/2020	0.03	0.04	0.03	
21/1/2021		0.01	0.01	0.01
4/2/2021	0.07	0.02	0.04	1.08
11/3/2021	0.04		0.03	0.05
13/4/2021	0.04		0.04	
27/5/2021	0.03		0.03	
10/6/2021	0.06	0.17	0.08	
22/7/2021	0.04		0.06	0.01
24/8/2021	0.04		0.04	
23/9/2021	0.14		0.15	
28/10/2021				
18/11/2021	0.3	0.01	0.12	0.1
23/12/2021	0.27	0.02	0.18	
13/1/2022	0.36	0.06	0.12	0.06
22/2/2022		0.04	0.02	0.015
29/3/2022	0.25	0.05	0.23	0.09
20/4/2022	0.29		0.28	
17/5/2022	0.29			
22/12/2022		0.03	0.04	
23/01/2023	0.37	0.06	0.32	0.15
27/02/2023	0.06	0.04	0.06	0.04
20/03/2023	0.07	0.04	0.05	0.01
17/04/2023		0.04	0.04	0.06
9/05/2023	0.28		0.3	0.1
15/06/2023				
13/07/2023	0.36	0.12	0.44	
3/08/2023	0.34	0.05	0.06	
14/09/2023		0.02		
19/10/2023	0.04		0.05	
22/11/2023				
20/12/2023		0.06		
23/01/2024	0.02	0.02	0.06	
22/02/2024		0.02	0.03	0.02
21/03/2024	0.26	0.02	0.02	0.02
18/04/2024	0.26	0.02	0.27	
30/05/2024	0.01		0.02	
13/06/2024	0.01		0.01	
23/07/2024				
21/08/2024				
19/09/2024	0.05	0.03	0.13	0.07
17/10/2024				
6/11/2024	0.22		0.21	
23/12/2024	0.22		0.21	
22/01/2025	0.06		0.06	
13/02/2025			0.08	0.07
19/03/2025			0.01	
2/04/2025	0.16	0.07	0.03	0.07
21/05/2025	0.01		0.01	
5/06/2025	0.02		0.03	
31/07/2025				
20/08/2025	0.02	0.01	0.01	
17/09/2025	0.03		0.02	
1/10/2025	0.06		0.07	

Date	ILCP	ISCP
17/10/2019	0.03	0.04
14/1/2020	0.02	0.03
23/4/2020	0.01	0.04
23/7/2020	0.01	0.01
29/10/2020	0.02	0.1
3/11/2020		
21/1/2021	0.04	0.02
13/4/2021	0.65	0.03
22/7/2021	0.06	0.12
28/10/2021	0.04	0.07
13/1/2022	0.03	0.06
22/2/2022	0.05	0.04
20/04/2022	0.06	0.05
27/02/2023	0.04	0.03
9/05/2023	0.04	0.04
3/08/2023	0.06	0.05
22/11/2023	0.05	0.14
22/02/2024	0.06	0.02
30/05/2024	0.03	0.02
21/08/2024	0.02	0.01
6/11/2024	0.04	**0.41**
13/02/2025	0.03	0.02
21/05/2025	0.01	0.33
20/08/2025	0.01	0.01

A.9 Total Nitrogen (TN) (mg/L)

Table A 9: Total Nitrogen concentration at WDL212-04 water monitoring sites.

Date	ADP1	ADP2	NODH1	SODH1
17/10/2019				
21/11/2019	4		1.8	
12/12/2019	3.2		1.7	
14/1/2020	3.9	3	2.6	1.1
20/2/2020	3.7	5.1	1.7	1.5
26/3/2020	3.4		3	
23/4/2020	3.1		3.1	
21/5/2020	2.9		4	
18/6/2020				0.1
23/7/2020		0.5		0.2
20/8/2020	0.3		0.4	
24/9/2020	0.3		0.4	
29/10/2020		3.1	1.1	2.5
3/11/2020			0.4	
26/11/2020	0.4	3.4	0.4	
3/12/2020	0.4	3.3	0.4	
21/1/2021		2	1.4	2.7
4/2/2021	0.3	2.3	0.7	3.3
11/3/2021	0.2		0.2	0.5
13/4/2021	0.3		0.3	
27/5/2021	0.3		0.3	
10/6/2021	0.3	4.7	0.3	
22/7/2021	0.5		0.6	0.2
24/8/2021	0.6		0.6	
23/9/2021	1.4		1.5	
28/10/2021				
18/11/2021	3.5	0.9	1.6	1
23/12/2021	3.3	0.9	2.4	
13/1/2022	4.6	3.4	1.6	3.6
22/2/2022		1.2	1.2	1.36
29/3/2022	3.3	1.4	2.9	1.8
20/4/2022	3.6		3.5	
17/5/2022	2.6			
22/12/2022		2.7	1.1	
23/01/2023	4.7	2.4	4	0.9
27/02/2023	1.2	1.5	1.2	0.4
20/03/2023	0.4	1	0.4	0.4
17/04/2023		3.3	1.1	1.6
9/05/2023	2.3		2.6	1.1
15/06/2023				
13/07/2023	3.7	6.9	4.2	
3/08/2023	3.8	4.4	0.1	
14/09/2023		0.8		
19/10/2023	0.6		0.6	
22/11/2023				
20/12/2023		2.2		
23/01/2024	2.6	1.4	1	
22/02/2024		**4.1**	0.8	1.7
21/03/2024	2.4	0.8	1	0.7
18/04/2024	2.8	1.3	2.7	
30/05/2024	0.5		0.3	
13/06/2024	0.4		0.7	
23/07/2024				
21/08/2024				
19/09/2024	0.5	1.2	0.4	1.2
17/10/2024				
6/11/2024	2.5		2.9	
23/12/2024	1.7		1.7	
22/01/2025	0.4		0.3	
13/02/2025			0.7	1.1
19/03/2025			0.6	
2/04/2025	1.8	1.1	1.2	1.1
21/05/2025	0.4		0.3	
5/06/2025	0.7		0.7	
31/07/2025				
20/08/2025	0.4	0.4	0.3	
17/09/2025	0.3		0.4	
1/10/2025	0.3		0.8	

Date	ILCP	ISCP
17/10/2019	2.2	2.4
14/1/2020	0.6	7.1
23/4/2020	0.7	2.2
23/7/2020	1.4	0.6
29/10/2020	1.8	3.1
3/11/2020		
21/1/2021	1	2.4
13/4/2021	1	1.1
22/7/2021	0.9	7.3
28/10/2021	1.6	3.3
13/1/2022	2.1	3.3
22/2/2022	1.3	1.4
20/04/2022	1.7	2.3
27/02/2023	1.4	2
9/05/2023	1	5.6
3/08/2023	1.1	4.4
22/11/2023	1.8	2.7
22/02/2024	1.6	3.9
30/05/2024	1.6	3.9
21/08/2024	1.5	0.9
6/11/2024	1.2	**7**
13/02/2025	0.8	0.6
21/05/2025	0.7	7
20/08/2025	0.8	0.5

A.10 Filtered Metals at ADP1

Table A 10: Filtered metals at WDL212-04 ADP1 site.

ADP1	Aluminium	Arsenic	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Zinc
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WDL212-04 Trigger Value	82	N/A	14	49.0 (Cr III) 20.0 (Cr VI)	14	8	6.6	0.7	200	152
LOR	5	0.2	0.05	0.2	0.1	0.5	0.1	0.005	0.5	1
17/10/2019	0	0	0	0	0	0	0	0	0	0
21/11/2019	10	7	0.1	3	1	3	1	0.1	1	5
12/12/2019	10	8	0.1	2	1	3	1	0.1	1	5
14/1/2020	10	7	0.1	3	1	7	1	0.1	1	5
20/2/2020	10	6	0.1	2	1	6	1	0.1	1	5
26/3/2020	10	6	0.1	3	1	3	1	0.1	1	5
23/4/2020	10	6	0.1	3	1	**12**	1	0.1	1	5
21/5/2020	10	6	0.1	4	1	**16**	1	0.1	1	5
18/6/2020	0	0	0	0	0	0	0	0	0	0
23/7/2020	0	0	0	0	0	0	0	0	0	0
20/8/2020	10	1	0.1	1	1	2	1	0.1	1	9
24/9/2020	10	1	0.1	1	1	1	1	0.1	1	5
29/10/2020	0	0	0	0	0	0	0	0	0	0
3/11/2020	0	0	0	0	0	0	0	0	0	0
26/11/2020	10	1	0.1	1	1	1	1	0.1	1	5
3/12/2020	10	1	0.1	1	1	1	1	0.1	1	5
21/1/2021	0	0	0	0	0	0	0	0	0	0
4/2/2021	10	1	0.1	1	1	2	1	0.1	1	10
11/3/2021	10	1	0.1	1	1	1	1	0.1	1	5
13/4/2021	10	1	0.1	1	1	1	1	0.1	1	5
27/5/2021	10	1	0.1	1	1	1	1	0.1	1	5
10/6/2021	10	1	0.1	1	1	1	1	0.1	1	5
22/7/2021	10	1	0.1	1	1	1	1	0.1	1	5
24/8/2021	10	1	0.1	1	1	1	1	0.1	1	5
23/9/2021	10	1	0.1	2	1	4	1	0.1	1	5
28/10/2021										
18/11/2021	10	5	0.1	2	1	7	1	0.1	1	5
23/12/2021	10	5	0.1	2	1	5	1	0.1	1	5
13/1/2022	10	5	0.1	3	1	8	1	0.1	1	5
22/2/2022										
29/3/2022	10	5	0.1	3	1	3	1	0.1	1	5
20/4/2022	10	5	0.1	3	1	3	1	0.1	1	5
17/5/2022	10	1	0.1	1	1	1	1	0.1	1	5
22/12/2022										
23/01/2023	10	4	0.1	4	1	6	1	0.1	1	**46.0***
27/02/2023	10	0.1	0.1	1	1	1	1	0.1	1	**30.0***
20/03/2023	10	1	0.1	1	1	1	1	0.1	1	5
17/04/2023										
9/05/2023	10	2	0.1	4	1	6	1	0.1	1	5
15/06/2023										
13/07/2023	10	3	0.1	3	1	**13**	1	0.1	1	6
3/08/2023	10	3	0.1	2	1	**22**	1	0.1	1	5
14/09/2023										
19/10/2023	10	1	0.1	1	1	1	1	0.1	0.1	5
22/11/2023										
20/12/2023										
23/01/2024	<10	4	<0.1	3	<1.0	4	<1.0	<0.1	<1.0	8
22/02/2024										
21/03/2024	<10	<1.0	<0.1	3	<1.0	4	<1.0	<0.1	<1.0	<5.0
18/04/2024	<10	3	<0.1	4	<1.0	3	<1.0	<0.1	<1.0	<5.0
30/05/2024	<10.0	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<5.0
13/06/2024	<10	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<5.0
23/07/2024										
21/08/2024										
19/09/2024	<5	0.4	<0.05	0.6	<0.1	2.2	<0.1	0.006	<0.5	<1
17/10/2024										
6/11/2024	<10.0	4	<0.1	4	<1.0	7	<1.0	<0.1	<1.0	<5.0
23/12/2024	<10.0	3	<0.1	3	<1.0	2	<1.0	<0.1	<1.0	<5.0
22/01/2025	<10.0	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<5.0
13/02/2025										
19/03/2025										
2/04/2025	<10.0	3	<0.1	4	<1.0	5	<1.0	<0.1	<0.1	<5.0
21/05/2025	<10	<1	<0.1	<1	<1	<1	<1	<0.1	<1	<5
5/06/2025	<10	<1	<0.1	1	<1	3	<1	<0.1	<1	<5
31/07/2025										
20/08/2025	<10	<1	<0.1	<1	<1	1	<1	<0.1	<1	<5
17/09/2025	<10	<1	<0.1	<1	<1	2	<1	<0.1	<1	<5
1/10/2025	<10	<1	<0.1	<1	<1	2	<1	<0.1	<1	<5

A.11 Filtered Metals at ADP2

Table A 11: Filtered metals at WDL212-04 ADP2 site.

ADP2	Aluminium	Arsenic	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Zinc
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WDL212-04 Trigger Value	82	N/A	14	49.0 (Cr III) 20.0 (Cr VI)	14	8	6.6	0.7	200	152
LOR	5	0.2	0.05	0.2	0.1	0.5	0.1	0.005	0.5	1
17/10/2019	0	0	0	0	0	0	0	0	0	0
21/11/2019	0	0	0	0	0	0	0	0	0	0
12/12/2019	0	0	0	0	0	0	0	0	0	0
14/1/2020	60	1	0.1	1	1	1	1	0.1	1	22
20/2/2020	30	1	0.1	1	1	1	1	0.1	1	10
26/3/2020	0	0	0	0	0	0	0	0	0	0
23/4/2020	0	0	0	0	0	**0**	0	0	0	0
21/5/2020	0	0	0	0	0	**0**	0	0	0	0
18/6/2020	0	0	0	0	0	0	0	0	0	0
23/7/2020	10	1	0.1	1	1	2	1	0.1	1	14
20/8/2020	0	0	0	0	0	0	0	0	0	0
24/9/2020	0	0	0	0	0	0	0	0	0	0
29/10/2020	60	1	0.1	1	1	5	1	0.1	1	32
3/11/2020	0	0	0	0	0	0	0	0	0	0
26/11/2020	20	1	0.1	1	1	2	1	0.1	1	13
3/12/2020	30	1	0.1	1	1	2	1	0.1	1	20
21/1/2021	10	1	0.1	1	1	1	1	0.1	1	37
4/2/2021	10	1	0.1	1	1	1	1	0.1	1	93
11/3/2021	0	0	0	0	0	0	0	0	0	0
13/4/2021	0	0	0	0	0	0	0	0	0	0
27/5/2021	0	0	0	0	0	0	0	0	0	0
10/6/2021	20	1	0.1	1	1	2	1	0.1	1	26
22/7/2021	0	0	0	0	0	0	0	0	0	0
24/8/2021	0	0	0	0	0	0	0	0	0	0
23/9/2021	0	0	0	0	0	0	0	0	0	0
28/10/2021	0	0	0	0	0	0	0	0	0	0
18/11/2021	10	1	0.1	1	1	2	1	0.1	1	19
23/12/2021	10	1	0.1	1	1	2	1	0.1	1	29
13/1/2022	20	1	0.1	1	1	2	1	0.1	1	38
22/2/2022	20	1	0.1	1	1	1	1	0.1	1	11
29/3/2022	10	1	0.1	1	1	2	1	0.1	1	5
20/4/2022	0	0	0	0	0	0	0	0	0	0
17/5/2022										
22/12/2022	10	1	0.1	1	1	1	1	0.1	1	20
23/01/2023	20	1	0.1	1	1	1	1	0.1	1	**250.0***
27/02/2023	10	1	0.1	1	1	1	1	0.1	1	**81***
20/03/2023	50	1	0.1	1	1	1	1	0.1	1	44
17/04/2023	40	1	0.1	1	1	1	1	0.1	1	14
9/05/2023										
15/06/2023										
13/07/2023	20	1	0.1	1	1	**1**	1	0.1	1	59*
3/08/2023	20	1	0.1	1	1	**2**	1	0.1	2	12
14/09/2023	10	1	0.1	1	1	2	1	0.1	0.1	18
19/10/2023	10	1	0.1	1	1	1	1	0.1	0.1	5
22/11/2023										
20/12/2023	50	<1.0	<0.1	<1.0	<1.0	2	<1.0	<0.1	1	33
23/01/2024	10	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	0.1	1	48
22/02/2024	60	<1.0	0.2	<1.0	<1.0	2	<1.0	<0.1	2	346
21/03/2024	220	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	15
18/04/2024	220	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<5.0
30/05/2024										
13/06/2024										
23/07/2024										
21/08/2024										
19/09/2024	6	0.6	<0.05	0.2	<0.1	1.2	<0.1	0.014	<0.5	4
17/10/2024										
6/11/2024										
23/12/2024										
22/01/2025										
13/02/2025										
19/03/2025										
2/04/2025	40	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	3	322
21/05/2025										
5/06/2025										
31/07/2025										
20/08/2025	<10	<1	<0.1	<1	<1	2	<1	<0.1	<1	7
17/09/2025										
1/10/2025										

A.12 Filtered Metals at NODH1

Table A 12: Filtered metals at WDL212-04 NODH1 site.

NODH1	Aluminium	Arsenic	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Zinc
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WDL212-04 Trigger Value	82	N/A	14	49.0 (Cr III) 20.0 (Cr VI)	14	8	6.6	0.7	200	152
LOR	5	0.2	0.05	0.2	0.1	0.5	0.1	0.005	0.5	1
17/10/2019	0	0	0	0	0	0	0	0	0	0
21/11/2019	10	3	0.1	2	1	2	1	0.1	1	10
12/12/2019	10	3	0.1	1	1	3	1	0.1	1	15
14/1/2020	360	1	0.1	1	1	2	1	0.1	1	72
20/2/2020	50	1	0.1	1	1	1	1	0.1	1	34
26/3/2020	20	4	0.1	2	1	2	1	0.1	1	15
23/4/2020	10	6	0.1	2	1	**10**	1	0.1	1	5
21/5/2020	10	6	0.1	3	1	**13**	1	0.1	1	5
18/6/2020	0	0	0	0	0	0	0	0	0	0
23/7/2020	0	0	0	0	0	0	0	0	0	0
20/8/2020	10	1	0.1	1	1	2	1	0.1	1	5
24/9/2020	10	1	0.1	1	1	1	1	0.1	1	5
29/10/2020	10	1	0.1	1	1	3	1	0.1	1	44
3/11/2020	10	1	0.1	1	1	1	1	0.1	1	5
26/11/2020	10	1	0.1	1	1	1	1	0.1	1	5
3/12/2020	10	1	0.1	1	1	1	1	0.1	1	5
21/1/2021	60	1	0.1	1	1	1	1	0.1	1	82
4/2/2021	20	1	0.1	1	1	1	1	0.1	1	26
11/3/2021	10	1	0.1	1	1	1	1	0.1	1	7
13/4/2021	10	1	0.1	1	1	1	1	0.1	1	11
27/5/2021	10	1	0.1	1	1	1	1	0.1	1	5
10/6/2021	10	1	0.1	1	1	1	1	0.1	1	5
22/7/2021	10	1	0.1	1	1	2	1	0.1	1	5
24/8/2021	10	1	0.1	1	1	1	1	0.1	1	5
23/9/2021	10	2	0.1	2	1	3	1	0.1	1	5
28/10/2021										
18/11/2021	20	2	0.1	1	1	3	1	0.1	1	26
23/12/2021	10	2	0.1	1	1	4	1	0.1	1	13
13/1/2022	10	1	0.1	1	1	1	1	0.1	1	19
22/2/2022	20	1	0.1	1	1	1	1	0.1	1	84
29/3/2022	10	4	0.1	2	1	3	1	0.1	1	5
20/4/2022	10	5	0.1	3	1	3	1	0.1	1	6
17/5/2022										
22/12/2022	10	1	0.1	1	1	1	1	0.1	1	33
23/01/2023	10	4	0.1	3	1	5	1	0.1	1	**38.0***
27/02/2023	140	0.1	0.1	1	1	1	1	0.1	1	**120.0***
20/03/2023	10	1	0.1	1	1	1	1	0.1	1	5
17/04/2023	20	1	0.1	1	1	1	1	0.1	1	78
9/05/2023	140	4	0.1	4	1	7	1	0.1	1	15
15/06/2023										
13/07/2023	10	3	0.1	3	1	**13**	1	0.1	1	7
3/08/2023	140	3	0.1	2	1	**26**	1	0.1	1	5
14/09/2023										
19/10/2023	10	1	0.1	1	1	1	1	0.1	0.1	5
22/11/2023										
20/12/2023										
23/01/2024	10	1	<0.1	<1.0	<1.0	2	<1.0	<0.1	<1.0	17
22/02/2024	10	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	73
21/03/2024	40	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	62
18/04/2024	<10	3	<0.1	3	<1.0	3	<1.0	<0.1	<1.0	<5.0
30/05/2024	<10.0	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<5.0
13/06/2024	<10	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<5.0
23/07/2024										
21/08/2024										
19/09/2024	<5	0.4	<0.05	0.6	<0.1	2.2	<0.1	0.007	<0.5	3
17/10/2024										
6/11/2024	<10.0	4	<0.1	4	<1.0	7	<1.0	<0.1	<1.0	5
23/12/2024	<10.0	3	<0.1	3	<1.0	2	<1.0	<0.1	<1.0	5
22/01/2025	<10.0	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<5.0
13/02/2025	20	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	102
19/03/2025	30	<1.0	<0.1	<1.0	<1.0	2	<1.0	<0.1	<1.0	98
2/04/2025	40	<1.0	<0.1	<1.0	<1.0	6	<1.0	<0.1	1	91
21/05/2025	<10	1	<0.1	<1	<1	2	<1	<0.1	<1	<5
5/06/2025	<10	<1	<0.1	<1	<1	3	<1	<0.1	<1	<5
31/07/2025										
20/08/2025	<10	1	<0.1	<1	<1	1	<1	<0.1	<1	<5
17/09/2025	<10	<1	<0.1	<1	<1	1	<1	<0.1	<1	<5
1/10/2025	30	<1	<0.1	<1	<1	4	<1	<0.1	<1	<5

A.13 Filtered Metals at SODH1

Table A 13: Filtered metals at WDL212-04 SODH1 site.

SODH1	Aluminium	Arsenic	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Zinc
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WDL212-04 Trigger Value	82	N/A	14	49.0 (Cr III) 20.0 (Cr VI)	14	8	6.6	0.7	200	152
LOR	5	0.2	0.05	0.2	0.1	0.5	0.1	0.005	0.5	1
17/10/2019	0	0	0	0	0	0	0	0	0	0
21/11/2019	0	0	0	0	0	0	0	0	0	0
12/12/2019	70	1	0.1	1	1	1	1	0.1	1	15
14/1/2020	110	1	0.1	1	1	1	1	0.1	1	22
20/2/2020	0	0	0	0	0	0	0	0	0	0
26/3/2020	0	0	0	0	0	0	0	0	0	0
23/4/2020	0	0	0	0	0	**0**	0	0	0	0
21/5/2020	10	1	0.1	1	1	**1**	1	0.1	1	5
18/6/2020	10	1	0.1	1	1	1	1	0.1	1	5
23/7/2020	0	0	0	0	0	0	0	0	0	0
20/8/2020	0	0	0	0	0	0	0	0	0	0
24/9/2020	18	1	0.1	6	1	6	5	0.1	1	97
29/10/2020	0	0	0	0	0	0	0	0	0	0
3/11/2020	0	0	0	0	0	0	0	0	0	0
26/11/2020	0	0	0	0	0	0	0	0	0	0
3/12/2020	20	1	0.1	1	1	1	1	0.1	1	12
21/1/2021	10	1	0.1	1	1	1	1	0.1	1	21
4/2/2021	20	1	0.1	1	1	1	1	0.1	1	22
11/3/2021	0	0	0	0	0	0	0	0	0	0
13/4/2021	0	0	0	0	0	0	0	0	0	0
27/5/2021	0	0	0	0	0	0	0	0	0	0
10/6/2021	10	1	0.1	1	1	1	1	0.1	1	5
22/7/2021	0	0	0	0	0	0	0	0	0	0
24/8/2021	0	0	0	0	0	0	0	0	0	0
23/9/2021	0	0	0	0	0	0	0	0	0	0
28/10/2021	100*	10*	1	10*	10*	10*	10*	0.1	10*	50*
18/11/2021	0	0	0	0	0	0	0	0	0	0
23/12/2021	10	1	0.1	1	1	1	1	0.1	1	5
13/1/2022	5	0.2	0.05	0.2	0.2	0.7	100	0.04	0.6	8
22/2/2022	10	1	0.1	1	1	2	1	0.1	1	7
29/3/2022	0	0	0	0	0	0	0	0	0	0
20/4/2022	0	0	0	0	0	0	0	0	0	0
17/5/2022			0							
22/12/2022	5	1	0.2	0.5	0.2	1	0.2	-	0.5	95
23/01/2023	100*	10*	1	10*	10*	10*	10*	0.1	10*	**50***
27/02/2023	90	1	0.1	1	1	1	1	0.1	1	**100***
20/03/2023	10	1	0.1	1	1	1	1	0.1	1	7
17/04/2023	70	0.7	0.2	0.5	0.2	1	0.2	0.005	0.5	8
9/05/2023	100*	10*	1	10*	10*	10*	10*	0.1	10*	50*
15/06/2023										
13/07/2023										
3/08/2023										
14/09/2023										
19/10/2023										
22/11/2023										
20/12/2023										
23/01/2024										
22/02/2024	10	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	9
21/03/2024	20	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	42
18/04/2024										
30/05/2024										
13/06/2024										
23/07/2024										
21/08/2024										
19/09/2024	10	1	1.9	0.9	<0.2	1	<0.2	<0.005	1.3	101
17/10/2024										
6/11/2024										
23/12/2024										
22/01/2025										
13/02/2025	20	<1.0	<0.1	<1.0	<1.0	4	<1.0	<0.1	<1.0	20
19/03/2025										
2/04/2025	20	<1.0	<0.1	<1.0	<1.0	2	<1.0	<0.1	<1.0	20
21/05/2025										
5/06/2025										
31/07/2025										
20/08/2025										
17/09/2025										
1/10/2025										

A.14 Filtered Metals at Settling ponds

Table A 14: Filtered metals at WDL212-04 ILCP and ISCP sites.

ILCP	Aluminium	Arsenic	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Zinc
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WDL212-04 Trigger Value	82	N/A	14	49.0 (Cr III) 20.0 (Cr VI)	14	8	6.6	0.7	200	152
LOR	5	0.2	0.05	0.2	0.1	0.5	0.1	0.005	0.5	1
17/10/2019	10	5	0.1	1	1	2	1	0.1	2	5
14/01/2020	20	2	0.1	1	1	1	1	0.1	1	5
23/04/2020	10	2	0.1	1	1	1	1	0.1	1	5
23/07/2020	10	2	0.2	1	1	1	1	0.1	1	5
29/10/2020	10	4	0.1	1	1	3	1	0.1	1	5
3/11/2020	0	0	0	0	0	0	0	0	0	0
21/01/2021	10	1	0.1	1	1	1	1	0.1	1	5
13/04/2021	10	1	0.1	1	1	1	1	0.1	1	5
22/07/2021	10	1	0.1	1	1	1	1	0.1	1	5
28/10/2021	10	1	0.1	1	1	1	1	0.1	2	5
13/01/2022	10	1	0.1	1	1	1	1	0.1	1	5
22/02/2022	10	1	0.1	1	1	1	1	0.1	1	5
20/04/2022	10	1	0.1	1	1	1	1	0.1	1	5
27/02/2023	10	1	0.1	1	1	1	1	0.1	1	**40***
9/05/2023	10	1	0.1	1	1	1	1	0.1	1	5
3/08/2023	10	1	0.1	1	1	1	1	0.1	1	5
22/11/2023	10	1	0.1	1	1	1	1	0.1	1	5
22/02/2024	<10.0	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<5.0
30/05/2024	<10.0	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<5.0
21/08/2024	<5.0	<0.5	<0.2	<0.5	<0.2	<1.0	<0.2	<0.04	<0.5	<5.0
6/11/2024	<10.0	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<5.0
13/02/2025	<10.0	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	6
21/05/2025	<10	<1	<0.1	<1	<1	<1	<1	<0.1	<1	<5
20/08/2025	<10	<1	<0.1	<1	<1	<1	<1	<0.1	<1	<5

ISCP	Aluminium	Arsenic	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Zinc
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WDL212-04 Trigger Value	82	N/A	14	49.0 (Cr III) 20.0 (Cr VI)	14	8	6.6	0.7	200	152
LOR	5	0.2	0.05	0.2	0.1	0.5	0.1	0.005	0.5	1
17/10/2019	30	1	0.1	1	1	2	1	0.1	1	7
14/01/2020	110	1	0.1	1	1	1	1	0.1	1	55
23/04/2020	40	1	0.1	1	1	1	1	0.1	1	5
23/07/2020	10	1	0.1	1	1	5	1	0.1	1	24
29/10/2020	30	1	0.1	1	1	4	1	0.1	1	5
3/11/2020	0	0	0	0	0	0	0	0	0	0
21/01/2021	10	1	0.1	1	1	1	1	0.1	1	52
13/04/2021	20	1	0.1	1	1	1	1	0.1	1	10
22/07/2021	20	1	0.1	1	1	3	1	0.1	1	9
28/10/2021	10	1	0.1	1	1	1	1	0.1	1	6
13/01/2022	20	1	0.1	1	1	1	1	0.1	2	23
22/02/2022	20	1	0.1	1	1	1	1	0.1	1	14
20/04/2022	40	1	0.1	1	1	2	1	0.1	1	11
27/02/2023	10	1	0.1	1	1	1	1	0.1	1	**115***
9/05/2023	40	1	0.1	1	1	2	1	0.1	1	11
3/08/2023	20	1	0.1	1	1	3	1	0.1	1	22
22/11/2023	80	1	0.1	1	1	2	1	0.1	1	51
22/02/2024	410	<1.0	0.3	<1.0	<1.0	6	2	<0.1	4	674
30/05/2024	140	<1.0	<0.1	<1.0	<1.0	2	<1.0	<0.1	2	9
21/08/2024	16	<0.5	<0.2	<0.5	<0.2	2	<0.2	<0.04	<0.5	<5.0
6/11/2024	15900	3	4.5	72	9	85	54	<0.1	69	10100
13/02/2025	2610	<1.0	0.4	8	2	6	5	<0.1	11	1380
21/05/2025	40	2	<0.1	<1	<1	2	<1	<0.1	1	6
20/08/2025	<10	<1	<0.1	<1	<1	1	<1	<0.1	<1	6

A.15 Total Metals at ADP1

Table A 15: Total metals at WDL212-04 ADP1 site.

ADP1	Aluminium	Arsenic	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Zinc
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WDL212-04 Trigger Value	82	N/A	14	49.0 (Cr III) 20.0 (Cr VI)	14	8	6.6	0.7	200	152
LOR	5	0.2	0.05	0.2	0.1	0.5	0.1	0.005	0.5	1
17/10/2019	0	0	0	0	0	0	0	0	0	0
21/11/2019	20	7	0.1	3	1	3	1	0.1	1	5
12/12/2019	10	8	0.1	3	1	4	1	0.1	1	5
14/01/2020	10	7	0.1	3	1	**11**	1	0.1	1	**75**
20/02/2020	40	7	0.1	2	1	**12**	1	0.1	1	6
26/03/2020	60	6	0.1	3	1	4	1	0.1	1	12
23/04/2020	20	6	0.1	3	1	**17**	1	0.1	1	5
21/05/2020	100	6	0.1	4	1	**24**	1	0.1	1	11
18/06/2020	0	0	0	0	0	0	0	0	0	0
23/07/2020	0	0	0	0	0	0	0	0	0	0
20/08/2020	10	1	0.1	1	1	2	1	0.1	1	10
24/09/2020	10	1	0.1	1	1	1	1	0.1	1	5
29/10/2020	0	0	0	0	0	0	0	0	0	0
3/11/2020	0	0	0	0	0	0	0	0	0	0
26/11/2020	10	1	0.1	1	1	1	1	0.1	1	6
3/12/2020	10	1	0.1	1	1	1	1	0.1	1	9
21/01/2021	0	0	0	0	0	0	0	0	0	0
4/02/2021	30	1	0.1	1	1	3	1	0.1	1	**84**
11/03/2021	10	1	0.1	1	1	1	1	0.1	1	6
13/04/2021	10	1	0.1	1	1	1	1	0.1	1	5
27/05/2021	10	1	0.1	1	1	1	1	0.1	1	5
10/06/2021	10	1	0.1	1	1	2	1	0.1	1	17
22/07/2021	10	1	0.1	1	1	1	1	0.1	1	8
24/08/2021	10	1	0.1	1	1	2	1	0.1	1	8
23/09/2021	20	2	0.1	2	1	8	1	0.1	1	**22**
28/10/2021	0	0	0	0	0	0	0	0	0	0
18/11/2021	20	5	0.1	3	1	**10**	1	0.1	1	14
23/12/2021	10	5	0.1	2	1	6	1	0.1	1	5
13/01/2022	20	5	0.1	3	1	**11**	1	0.1	1	5
22/02/2022	0	0	0	0	0	0	0	0	0	0
29/03/2022	10	6	0.1	3	1	5	1	0.1	1	5
20/04/2022	10	7	0.1	4	1	5	1	0.1	1	16
17/05/2022	60	4	0.1	3	1	6	1	0.1	1	**32**
22/12/2022										
23/01/2023	10	6	0.1	4	1	**8**	1	0.1	1	5
27/02/2023	10	1	0.1	1	1	**1**	1	0.1	1	**5**
20/03/2023	10	1	0.1	1	1	1	1	0.1	1	5
17/04/2023										
9/05/2023	10	3	0.1	4	1	7	1	0.1	1	13
15/06/2023										
13/07/2023	10	3	0.1	3	1	**16**	1	0.1	1	5
3/08/2023	20	3	0.1	2	1	**23**	1	0.1	1	**22**
14/09/2023										
19/10/2023	10	1	0.1	1	1	2	1	0.1	0.1	5
22/11/2023										
20/12/2023										
23/01/2024	10	4	<0.1	3	<1.0	7	<1.0	<0.1	<1.0	16
22/02/2024										
21/03/2024	20	3	<0.1	4	<1.0	1	<1.0	<0.1	<1.0	5
18/04/2024	30	3	<0.1	3	<1.0	7	<1.0	<0.1	<1.0	21
30/05/2024	<10	<1.0	<0.1	<1.0	<1.0	1	<1.0	<0.1	<1.0	<5.0
13/06/2024	<10	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<5.0
23/07/2024										
21/08/2024										
19/09/2024	<5	0.5	<0.05	0.6	<0.1	2.4	<0.1	0.008	<0.5	2
17/10/2024										
6/11/2024	<10.0	3	<0.1	4	<1.0	7	<1.0	<0.1	<1.0	<5.0
23/12/2024	<10.0	3	<0.1	4	<1.0	2	<1.0	<0.1	<1.0	<5.0
22/01/2025	<10.0	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<5.0
13/02/2025										
19/03/2025										
2/04/2025	<10.0	3	<0.1	4	<1.0	6	<1.0	<0.1	<1.0	<5.0
21/05/2025	<10	<1	0.1	<1	<1	3	<1	<0.1	<1	<5
5/06/2025	20	<1	<0.1	<1	<1	5	<1	<0.1	<1	8
31/07/2025										
20/08/2025	<10	<1	<0.1	<1	<1	2	<1	<0.1	<1	<5
17/09/2025	<10	<1	<0.1	<1	<1	2	<1	<0.1	<1	<5
1/10/2025	<10	<1	<0.1	<1	<1	2	<1	<0.1	<1	<5

A.16 Total Metals at ADP2

Table A 16: Total metals at WDL212-04 ADP2 site.

ADP2	Aluminium	Arsenic	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Zinc
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WDL212-04 Trigger Value	82	N/A	14	49.0 (Cr III) 2	14	8	6.6	0.7	200	152
LOR	5	0.2	0.05	0.2	0.1	0.5	0.1	0.005	0.5	1
17/10/2019	0	0	0	0	0	0	0	0	0	0
21/11/2019	0	0	0	0	0	0	0	0	0	0
12/12/2019	0	0	0	0	0	0	0	0	0	0
14/01/2020	90	1	0.1	1	1	2	1	0.1	1	**62**
20/02/2020	90	1	0.1	1	1	2	1	0.1	1	**26**
26/03/2020	0	0	0	0	0	0	0	0	0	0
23/04/2020	0	0	0	0	0	0	0	0	0	0
21/05/2020	0	0	0	0	0	0	0	0	0	0
18/06/2020	0	0	0	0	0	0	0	0	0	0
23/07/2020	10	1	0.1	1	1	5	1	0.1	1	**23**
20/08/2020	0	0	0	0	0	0	0	0	0	0
24/09/2020	0	0	0	0	0	0	0	0	0	0
29/10/2020	70	1	0.1	1	1	5	1	0.1	1	**27**
3/11/2020	0	0	0	0	0	0	0	0	0	0
26/11/2020	40	1	0.1	1	1	4	1	0.1	1	**32**
3/12/2020	80	1	0.1	1	1	4	1	0.1	1	**31**
21/01/2021	10	1	0.1	1	1	1	1	0.1	1	**45**
4/02/2021	60	1	0.1	1	1	1	1	0.1	2	**71**
11/03/2021	0	0	0	0	0	0	0	0	0	0
13/04/2021	0	0	0	0	0	0	0	0	0	0
27/05/2021	0	0	0	0	0	0	0	0	0	0
10/06/2021	50	1	0.3	1	1	3	1	0.1	4	**40**
22/07/2021	0	0	0	0	0	0	0	0	0	0
24/08/2021	0	0	0	0	0	0	0	0	0	0
23/09/2021	0	0	0	0	0	0	0	0	0	0
28/10/2021	0	0	0	0	0	0	0	0	0	0
18/11/2021	20	1	0.1	1	1	5	1	0.1	1	**30**
23/12/2021	10	1	0.1	1	1	2	1	0.1	1	**33**
13/01/2022	50	1	0.1	1	1	2	1	0.1	1	**60**
22/02/2022	30	1	0.1	1	1	1	1	0.1	1	**27**
29/03/2022	20	1	0.1	1	1	3	1	0.1	1	**12**
20/04/2022	0	0	0	0	0	0	0	0	0	0
17/05/2022	0	0	0	0	0	0	0	0	0	0
22/12/2022	30	1	0.1	1	1	1	1	0.1	1	**29**
23/01/2023	40	1	0.1	1	1	1	1	0.1	2	**99**
27/02/2023	30	1	0.1	2	1	1	1	0.1	25	**30**
20/03/2023	70	1	0.1	1	1	1	1	0.1	1	**101**
17/04/2023	20	1	0.1	1	1	1	1	0.1	1	7
9/05/2023										
15/06/2023										
13/07/2023	20	1	0.1	1	1	1	1	0.1	2	**29**
3/08/2023	20	1	0.1	1	1	2	1	0.1	2	**23**
14/09/2023	10	1	0.1	1	1	5	1	0.1	1	**32**
19/10/2023										
22/11/2023										
20/12/2023	60	<1.0	<0.1	<1.0	<1.0	3	<1.0	<0.1	1	**71**
23/01/2024	30	<1.0	<0.1	<1.0	<1.0	2	<1.0	<0.1	<1.0	**123**
22/02/2024	410	<1.0	0.2	1	<1.0	6	6	<0.1	2	**435**
21/03/2024	1290	32	5	1	**105**	**15**	44	<0.1	149	**99**
18/04/2024	220	<1.0	<0.1	<1.0	<1.0	2	<1.0	<0.1	<1.0	18
30/05/2024										
13/06/2024										
23/07/2024										
21/08/2024										
19/09/2024	8	0.6	<0.05	0.3	<0.1	1.4	<0.1	0.025	3.5	4
17/10/2024										
6/11/2024										
23/12/2024										
22/01/2025										
13/02/2025										
19/03/2025										
2/04/2025	**140**	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	3	**343**
21/05/2025										
5/06/2025										
31/07/2025										
20/08/2025	20	<1	<0.1	<1	<1	2	<1	<0.1	<1	15
17/09/2025										
1/10/2025										

A.17 Total Metals at NODH1

Table A 17: Total metals at WDL212-04 NODH1 site.

NODH1	Aluminium	Arsenic	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Zinc
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WDL212-04 Trigger Value	82	N/A	14	49.0 (Cr III) 20.0 (Cr VI)	14	8	6.6	0.7	200	152
LOR	5	0.2	0.05	0.2	0.1	0.5	0.1	0.005	0.5	1
17/10/2019										
21/11/2019	30	4	0.1	2	1	2	1	0.1	1	**30**
12/12/2019	10	3	0.1	1	1	3	1	0.1	2	10
14/01/2020	340	1	0.1	1	1	3	1	0.1	1	**78**
20/02/2020	260	1	0.1	1	1	3	1	0.1	1	**56**
26/03/2020	40	5	0.1	2	1	3	1	0.1	1	**24**
23/04/2020	30	6	0.1	3	1	**17**	1	0.1	1	12
21/05/2020	670	6	0.1	4	1	**34**	2	0.1	2	115
18/06/2020										
23/07/2020										
20/08/2020	10	1	0.1	1	1	2	1	0.1	1	5
24/09/2020	130	1	0.1	1	1	4	1	0.1	1	**69**
29/10/2020	20	1	0.1	1	1	4	1	0.1	1	**46**
3/11/2020	30	1	0.1	1	1	3	1	0.1	1	**39**
26/11/2020	30	1	0.1	1	1	3	1	0.1	1	**39**
3/12/2020	20	1	0.1	1	1	1	1	0.1	1	10
21/01/2021	70	1	0.1	1	1	1	1	0.1	1	**85**
4/02/2021	130	1	0.1	2	1	2	1	0.1	2	**32**
11/03/2021	30	1	0.4	1	1	3	1	0.1	1	**62**
13/04/2021	10	1	0.1	1	1	**12**	1	0.1	1	20
27/05/2021	10	1	0.1	1	1	2	1	0.1	1	9
10/06/2021	10	1	0.1	1	1	2	1	0.1	1	7
22/07/2021	10	1	0.1	1	1	1	1	0.1	1	8
24/08/2021	10	1	0.1	1	1	2	1	0.1	1	7
23/09/2021	20	2	0.1	2	1	7	1	0.1	1	**25**
28/10/2021										
18/11/2021	100	2	0.1	1	1	6	1	0.1	1	**76**
23/12/2021	40	3	0.1	1	1	4	1	0.1	1	18
13/01/2022	470	1	0.1	1	1	3	1	0.1	1	**64**
22/02/2022	90	1	0.1	1	1	2	1	0.1	1	**93**
29/03/2022	10	4	0.1	2	1	3	1	0.1	1	14
20/04/2022	10	6	0.1	3	1	5	1	0.1	1	13
17/05/2022										
22/12/2022	60	1	0.1	1	1	1	1	0.1	1	**38**
23/01/2023	20	4	0.1	4	1	8	1	0.1	1	19
27/02/2023	230	1	0.1	1	1	1	1	0.1	1	**41**
20/03/2023	10	1	0.1	1	1	1	1	0.1	1	6
17/04/2023	90	1	0.1	1	1	1	1	0.1	1	**81**
9/05/2023	20	3	0.1	4	1	7	1	0.1	1	**22**
15/06/2023										
13/07/2023	10	3	0.1	3	1	**16**	1	0.1	1	8
3/08/2023	210	4	0.1	3	1	**36**	1	0.1	1	**52**
14/09/2023										
19/10/2023	10	1	0.1	1	1	2	1	0.1	0.1	5
22/11/2023										
20/12/2023										
23/01/2024	10	2	0.1	1	<1.0	4	<1.0	<0.1	<1.0	40
22/02/2024	130	<1.0	<0.1	<1.0	<1.0	1	<1.0	<0.1	<1.0	**76**
21/03/2024	130	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	**74**
18/04/2024	160	3	<0.1	4	<1.0	7	<1.0	<0.1	<1.0	16
30/05/2024	<10.0	<1.0	<0.1	<1.0	<1.0	1	<1.0	<0.1	<1.0	<5.0
13/06/2024	<10	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<5.0
23/07/2024										
21/08/2024										
19/09/2024	<5	0.4	<0.05	0.7	<0.1	2.4	<0.1	0.01	<0.5	5
17/10/2024										
6/11/2024	<10.0	3	<0.1	4	<1.0	7	<1.0	<0.1	<1.0	9
23/12/2024	<10.0	3	<0.1	4	<1.0	3	<1.0	<0.1	<1.0	9
22/01/2025	<10.0	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<5.0
13/02/2025	**220**	<1.0	<0.1	<1.0	<1.0	4	<1.0	<0.1	2	95
19/03/2025	**190**	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	100
2/04/2025	**140**	<1.0	<0.1	<1.0	<1.0	2	<1.0	<0.1	<1.0	56
21/05/2025	10	<1	<0.1	<1	<1	3	<1	<0.1	<1	<5
5/06/2025	10	<1	<0.1	<1	<1	4	<1	<0.1	<1	<5
31/07/2025										
20/08/2025	<10	<1	<0.1	<1	<1	2	<1	<0.1	<1	<5
17/09/2025	<10	<1	<0.1	<1	<1	2	<1	<0.1	<1	<5
1/10/2025	60	<1	<0.1	<1	<1	4	<1	<0.1	<1	12

A.18 Total Metals at SODH1

Table A 18: Total metals at WDL212-04 SODH1 site.

SODH1	Aluminium	Arsenic	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Zinc
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WDL212-04 Trigger Value	82	N/A	14	49.0 (Cr III) 2	14	8	6.6	0.7	200	152
LOR	5	0.2	0.05	0.2	0.1	0.5	0.1	0.005	0.5	1
17/10/2019										
21/11/2019										
12/12/2019										
14/01/2020	490	1	0.1	1	1	2	1	0.1	1	21
20/02/2020	200	1	0.1	1	1	3	1	0.1	1	**30**
26/03/2020										
23/04/2020										
21/05/2020										
18/06/2020	20	1	0.1	1	1	1	1	0.1	1	5
23/07/2020	10	1	0.1	1	1	1	1	0.1	1	5
20/08/2020										
24/09/2020										
29/10/2020	4430	1	0.1	11	1	8	6	0.1	3	**104**
3/11/2020										
26/11/2020										
3/12/2020										
21/01/2021	80	1	0.1	1	1	1	1	0.1	1	9
4/02/2021	1560	1	0.1	3	1	4	3	0.1	8	**67**
11/03/2021	40	1	0.2	1	1	1	1	0.1	1	**24**
13/04/2021										
27/05/2021										
10/06/2021										
22/07/2021	10	1	0.1	1	1	1	1	0.1	1	5
24/08/2021										
23/09/2021										
28/10/2021										
18/11/2021	**100***	**10***	**1**	**10***	**10***	**10***	**10***	**0.1**	**10***	**52***
23/12/2021										
13/01/2022	80	1	0.1	1	1	1	1	0.1	1	11
22/02/2022	5	0.2	0.05	0.2	0.2	0.7	0.1	0.04	0.6	8
29/03/2022	30	1	0.1	1	1	5	1	0.1	1	15
20/04/2022										
17/05/2022										
22/12/2022	112									
23/01/2023	**100***	**10***	**1**	**10***	**10***	**10***	**10***	**0.1**	**10***	**52***
27/02/2023	740	1	0.1	1	1	1	1	0.1	1	**34**
20/03/2023	10	1	0.1	1	1	1	1	0.1	1	5
17/04/2023	67	0.7	0.2	0.5	0.2	1	0.2	0.1	0.5	10
9/05/2023	**100***	**10***	**1**	**10***	**10***	**10***	**10***	**0.1**	**10***	**50***
15/06/2023										
13/07/2023										
3/08/2023										
14/09/2023										
19/10/2023										
22/11/2023										
20/12/2023										
23/01/2024										
22/02/2024	70	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	10
21/03/2024	170	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	**65**
18/04/2024										
30/05/2024										
13/06/2024										
23/07/2024										
21/08/2024										
19/09/2024	187	1.2	1.9	1.7	0.4	2	0.4	0.007	1.8	131
17/10/2024										
6/11/2024										
23/12/2024										
22/01/2025										
13/02/2025	**110**	<1.0	<0.1	<1.0	<1.0	2	<1.0	0.04	<1.0	15
19/03/2025										
2/04/2025	**560**	<1.0	<0.1	<1.0	<1.0	2	<1.0	<0.1	<1.0	34
21/05/2025										
5/06/2025										
31/07/2025										
20/08/2025										
17/09/2025										
1/10/2025										

A.19 Total Metals at ILCP and ISCP

Table A 19: Total metals at WDL212-04 settling ponds sites.

ILCP	Aluminium	Arsenic	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Zinc
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WDL212-04 Trigger	82	N/A	14	49.0 (Cr III) 2	14	8	6.6	0.7	200	152
LOR	5	0.2	0.05	0.2	0.1	0.5	0.1	0.005	0.5	1
17/10/2019	30	5	0.1	1	1	2	1	0.1	1	5
14/01/2020	10	2	0.1	1	1	1	1	0.1	1	5
23/04/2020	10	2	0.1	10	1	1	1	0.1	1	5
23/07/2020	10	3	0.1	1	1	3	1	0.1	1	5
29/10/2020	10	3	0.1	1	1	2	1	0.1	1	5
3/11/2020	0	0	0	0	0	0	0	0	0	0
21/01/2021	10	1	0.1	1	1	1	1	0.1	1	5
13/04/2021	10	1	0.1	1	1	1	1	0.1	1	5
22/07/2021	10	1	0.1	1	1	1	1	0.1	1	5
28/10/2021	10	2	0.1	1	1	1	1	0.1	1	5
13/01/2022	10	1	0.1	1	1	1	1	0.1	1	5
22/02/2022	10	1	0.1	1	1	3	1	0.1	1	5
20/04/2022	20	1	0.1	1	1	1	1	0.1	1	6
27/02/2023	10	1	0.1	1	1	1	1	0.1	1	5
9/05/2023	10	1	0.1	1	1	1	1	0.1	1	5
3/08/2023	30	1	0.1	1	1	2	1	0.1	2	5
22/11/2023	10	1	0.1	1	1	2	1	0.1	1	5
22/02/2024	20	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<5.0
30/05/2024	<10.0	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	9
21/08/2024	<5.0	<0.6	<0.2	<0.5	<0.2	<1.0	<0.2	0.04	0.7	<5.0
6/11/2024	<10.0	<1.0	<0.1	4	<1.0	<1.0	<1.0	0.04	<1.0	<5.0
13/02/2025	**<10.0**	<1.0	<0.1	<1.0	<1.0	<1.0	<1.0	<0.1	<1.0	<5.0
21/05/2025	20	<1	<0.1	<1	<1	<1	<1	<0.1	<1	<5
20/08/2025	<10	<1	<0.1	<1	<1	<1	<1	<0.1	<1	<5

ISCP	Aluminium	Arsenic	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Zinc
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
WDL212-04 Trigger	82	N/A	14	49.0 (Cr III) 2	14	8	6.6	0.7	200	152
LOR	5	0.2	0.05	0.2	0.1	0.5	0.1	0.005	0.5	1
17/10/2019	30	1	0.1	1	1	3	1	0.1	1	11
14/01/2020	150	1	0.1	1	1	4	1	0.1	1	**148**
23/04/2020	70	1	0.1	1	1	4	1	0.1	1	**28**
23/07/2020	10	1	0.1	1	1	6	1	0.1	1	21
29/10/2020	70	1	0.1	1	1	5	1	0.1	1	**34**
3/11/2020	0	0	0	0	0	0	0	0	0	0
21/01/2021	10	1	0.1	1	1	1	1	0.1	1	**47**
13/04/2021	30	1	0.1	1	1	2	1	0.1	1	**25**
22/07/2021	40	1	0.1	1	1	4	1	0.1	1	**23**
28/10/2021	10	1	0.1	1	1	1	1	0.1	1	12
13/01/2022	40	1	0.1	1	1	2	1	0.1	2	**61**
22/02/2022	20	1	0.1	1	1	1	1	0.1	1	**22**
20/04/2022	40	1	0.1	1	1	4	1	0.1	1	20
27/02/2023	30	1	0.1	1	1	1	1	0.1	1	**82**
9/05/2023	50	1	0.1	1	1	3	1	0.1	1	17
3/08/2023	10	1	0.1	1	1	3	1	0.1	1	**25**
22/11/2023	**120**	1	0.1	1	1	7	1	0.1	2	**176**
22/02/2024	**750**	<1.0	0.4	2	<1.0	9	9	<0.1	4	**708**
30/05/2024	**160**	<1.0	<0.1	<1.0	<1.0	2	<1.0	<0.1	3	17
21/08/2024	27	<0.5	<0.2	2.7	<0.2	4	<0.2	<0.04	1.4	11
6/11/2024	**15400**	2	4.6	**73**	9	**78**	50	<0.04	67	**9760**
13/02/2025	**2920**	<1.0	0.6	9	2	7	6	<0.1	13	**1520**
21/05/2025	70	2	<0.1	<1	<1	4	<1	<0.1	1	11
20/08/2025	10	<1	<0.1	<1	<1	2	<1	<0.1	<1	11

A.20 Hydrocarbons at ADP1

Table A 20: Hydrocarbons at WDL212-04 ADP1 site.

Group of Hydrocarbon	Hydrocarbon	Units	WDL212-04 Trigger Value	LOR	22/12/2022	23/01/2023	27/02/2023	20/03/2023	9/05/2023	13/07/2023	3/08/2023	19/10/2023	23/01/2024	21/03/2024	18/04/2024	30/05/2024	13/06/2024	19/09/2024	6/11/2024	23/12/2024	22/01/2025	2/04/2025	21/05/2025	5/06/2025	20/08/2025	17/09/2025	1/10/2025
Polycyclic Aromatic Hydrocarbons	Naphthalene	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Acenaphthylene	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Acenaphthene	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Fluorene	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Phenanthrene	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Anthracene	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Fluoranthene	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Pyrene	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benz(a)anthracene	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chrysene	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(b+j)fluoranthene	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(k)fluoranthene	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(a)pyrene	µg/L	N/A	0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1.2.3.cd)pyrene	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Dibenz(a.h)anthracene	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(g.h.i)perylene	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Sum of polycyclic aromatic hydroca	µg/L	N/A	0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benzo(a)pyrene TEQ (zero)	µg/L	N/A	0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Petroleum Hydrocarbons	C6 - C9 Fraction	µg/L	N/A	20		<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	C10 - C14 Fraction	µg/L	N/A	50		<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28 Fraction	µg/L	N/A	100		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C29 - C36 Fraction	µg/L	N/A	50		<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C10 - C36 Fraction (sum)	µg/L	N/A	50		<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Total Recoverable Petroleum Hydrocarbons	C6 - C10 Fraction	µg/L	N/A	20		<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	C6 - C10 Fraction minus BTEX	µg/L	N/A	20		<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	C10 - C16 Fraction	µg/L	N/A	100		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C16 - C34 Fraction	µg/L	N/A	100		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C34 - C40 Fraction	µg/L	N/A	100		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C10 - C40 Fraction (sum)	µg/L	N/A	100		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C10 - C16 Fraction minus Naphthale	µg/L	N/A	100		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
BTEXN	Benzene	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Toluene	µg/L	N/A	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Ethylbenzene	µg/L	N/A	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	meta- & para-Xylene	µg/L	N/A	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	ortho-Xylene	µg/L	N/A	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Xylenes	µg/L	N/A	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Sum of BTEX	µg/L	N/A	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Naphthalene	µg/L	N/A	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

A.21 Hydrocarbons at ADP2

Table A 21: Hydrocarbons at WDL212-04 ADP2 site.

Group of Hydrocarbon	Hydrocarbon	Units	WDL212-04 Trigger Value	LOR	23/01/2023	27/02/2023	20/03/2023	17/04/2023	13/07/2023	3/08/2023	14/09/2023	20/12/2023	23/01/2024	22/02/2024	21/03/2024	18/04/2024	19/09/2024	2/04/2025	20/08/2025
Polycyclic Aromatic Hydrocarbons	Naphthalene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Acenaphthylene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Acenaphthene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Fluorene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Phenanthrene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Anthracene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Fluoranthene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Pyrene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benz(a)anthracene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chrysene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(b+j)fluoranthene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(k)fluoranthene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(a)pyrene	µg/L	N/A	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1.2.3.cd)pyrene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Dibenz(a.h)anthracene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(g.h.i)perylene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Sum of polycyclic aromatic hydroca	µg/L	N/A	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benzo(a)pyrene TEQ (zero)	µg/L	N/A	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Petroleum Hydrocarbons	C6 - C9 Fraction	µg/L	N/A	20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20.0	<20.0	<20	<20	<20	<20
	C10 - C14 Fraction	µg/L	N/A	50	640	<50	<50	<50	140	<50	<50	<50	<50	<50.0	<50.0	300	<50	<50	<50
	C15 - C28 Fraction	µg/L	N/A	100	260	<100	<100	340	310	370	<100	300	<100	<100.0	<100.0	400	<100	<100	<100
	C29 - C36 Fraction	µg/L	N/A	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50.0	<50.0	140	<50	<50	<50
	C10 - C36 Fraction (sum)	µg/L	N/A	50	900	<50	<50	340	450	370	<50	300	<50	<50.0	<50.0	840	<50	<50	<50
Total Recoverable Petroleum Hydrocarbons	C6 - C10 Fraction	µg/L	N/A	20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	C6 - C10 Fraction minus BTEX	µg/L	N/A	20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	C10 - C16 Fraction	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	280	<100	<100	<100
	C16 - C34 Fraction	µg/L	N/A	100	250	<100	<100	340	300	320	<100	300	<100	<100	<100	490	<100	<100	<100
	C34 - C40 Fraction	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	110	<100	<100	<100
	C10 - C40 Fraction (sum)	µg/L	N/A	100	250	<100	<100	340	300	320	<100	300	<100	<100	<100	880	<100	<100	<100
	C10 - C16 Fraction minus Naphthale	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	280	<100	<100	<100
BTEXN	Benzene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Toluene	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Ethylbenzene	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	meta- & para-Xylene	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	ortho-Xylene	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Xylenes	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Sum of BTEX	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Naphthalene	µg/L	N/A	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

A.22 Hydrocarbons at NODH1

Table A 22: Hydrocarbons at WDL212-04 NODH1 site.

NODH1																																
Group of Hydrocarbon	Hydrocarbon	Units	WDL212-03 Trigger Value	LOR	23/01/2023	27/02/2023	20/03/2023	17/04/2023	9/05/2023	13/07/2023	3/08/2023	19/10/2023	23/01/2024	22/02/2024	21/03/2024	18/04/2024	30/05/2024	13/06/2024	19/09/2024	6/11/2024	23/12/2024	22/01/2025	13/02/2025	19/03/2025	2/04/2025	21/05/2025	5/06/2025	20/08/2025	17/09/2025	1/10/2025
Polycyclic Aromatic Hydrocarbons	Naphthale	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Acenaphth	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Acenaphth	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Fluorene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Phenanthr	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Anthracen	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Fluoranthe	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Pyrene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benz[a]an	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chrysene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo[b+j	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo[k]fl	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(a)p	µg/L	N/A	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1,2	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Dibenz(a,h	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(g,h	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Sum of po	µg/L	N/A	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benzo(a)p	µg/L	N/A	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Petroleum Hydrocarbons	C6 - C9 Fra	µg/L	N/A	20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	C10 - C14	µg/L	N/A	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C29 - C36	µg/L	N/A	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C10 - C36	µg/L	N/A	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Total Recoverable Petroleum Hydrocarbons	C6 - C10 F	µg/L	N/A	20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	C6 - C10 F	µg/L	N/A	20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	C10 - C16	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C16 - C34	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C34 - C40	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C10 - C40	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C10 - C16	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
BTEXN	Benzene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Toluene	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Ethylbenz	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	meta- & p	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	ortho-Xyle	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Xyle	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Sum of BT	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Naphthale	µg/L	N/A	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

A.23 Hydrocarbons at SODH1

Table A 23: Hydrocarbons at WDL212-04 SODH1 site.

SODH1														
Group of Hydrocarbon	Hydrocarbon	Units	WDL212-03 Trigger Value	LOR	23/01/2023	27/02/2023	20/03/2023	17/04/2023	9/05/2023	22/02/2024	21/03/2024	19/09/2024	13/02/2025	2/04/2025
Polycyclic Aromatic Hydrocarbons	Naphthale	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Acenaphth	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Acenaphth	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Fluorene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Phenanthr	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Anthracen	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Fluoranthe	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Pyrene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benz(a)ant	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chrysene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(b+j)	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(k)fl	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(a)p	µg/L	N/A	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1.2	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Dibenz(a.h	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(g.h.	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Sum of po	µg/L	N/A	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benzo(a)p	µg/L	N/A	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Petroleum Hydrocarbons	C6 - C9 Fra	µg/L	N/A	20	<20	<20	30	<20	<20	<20	<20	<20	<20	<20
	C10 - C14	µg/L	N/A	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C15 - C28	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C29 - C36	µg/L	N/A	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
	C10 - C36	µg/L	N/A	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Total Recoverable Petroleum Hydrocarbons	C6 - C10 F	µg/L	N/A	20	<20	<20	30	<20	<20	<20	<20	<20	<20	<20
	C6 - C10 F	µg/L	N/A	20	<20	<20	30	<20	<20	<20	<20	<20	<20	<20
	C10 - C16	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C16 - C34	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C34 - C40	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C10 - C40	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C10 - C16	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
BTEXN	Benzene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Toluene	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Ethylbenze	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	meta- & p	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	ortho-Xyle	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Xyle	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Sum of BT	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Naphthale	µg/L	N/A	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

A.24 Hydrocarbons at ILCP and ISCP

Table A 24: Hydrocarbons at WDL212-04 settling ponds sites.

					ILCP											ISCP										
Group of Hydrocarbon	Hydrocarbon	Units	WDL212-04 Trigger Value	LOR	27/2/2023	9/05/2023	3/08/2023	22/11/2023	22/02/2024	30/05/2024	21/08/2024	6/11/2024	13/02/2025	21/05/2025	20/08/2025	27/02/2023	9/05/2023	3/08/2023	22/11/2023	22/02/2024	30/05/2024	21/08/2024	6/11/2024	13/02/2025	21/05/2025	20/08/2025
Polycyclic Aromatic Hydrocarbons	Naphthalene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Acenaphthylene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Acenaphthene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Fluorene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Phenanthrene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Anthracene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Fluoranthene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Pyrene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benz(a)anthracene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chrysene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(b+j)fluoranthene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(k)fluoranthene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(a)pyrene	µg/L	N/A	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Indeno(1.2.3.cd)pyrene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Dibenz(a.h)anthracene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Benzo(g.h.i)perylene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Sum of polycyclic aromatic hydroca	µg/L	N/A	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Benzo(a)pyrene TEQ (zero)	µg/L	N/A	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Petroleum Hydrocarbons	C6 - C9 Fraction	µg/L	N/A	20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20.0	<20	<20	<20	<20	<20
	C10 - C14 Fraction	µg/L	N/A	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	650	<50	100	<50	<50	<50
	C15 - C28 Fraction	µg/L	N/A	100	<100	2160	1220	<100	<100	<100	<100	350	<100	<100	<100	<100	210	260	580	<100	440	<100	<100	<100	360	<100
	C29 - C36 Fraction	µg/L	N/A	50	<50	60	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	100	<50	<50.0	<50	<50	<50	110	<50
	C10 - C36 Fraction (sum)	µg/L	N/A	50	<50	2290	1220	<50	<50	<50	<50	350	<50	<50	<50	<50	210	260	680	<50	1090	<50	100	<50	470	<50
Total Recoverable Petroleum Hydrocarbons	C6 - C10 Fraction	µg/L	N/A	20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	C6 - C10 Fraction minus BTEX	µg/L	N/A	20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	C10 - C16 Fraction	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C16 - C34 Fraction	µg/L	N/A	100	<100	2180	1270	<100	<100	<100	<100	360	<100	<100	<100	<100	200	220	600	<100	460	<100	<100	<100	410	<100
	C34 - C40 Fraction	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	C10 - C40 Fraction (sum)	µg/L	N/A	100	<100	2180	1270	<100	<100	<100	<100	<100	<100	<100	<100	<100	200	220	600	<100	460	<100	<100	<100	410	<100
	C10 - C16 Fraction minus Naphthale	µg/L	N/A	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
BTEXN	Benzene	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Toluene	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Ethylbenzene	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	meta- & para-Xylene	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	ortho-Xylene	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Xylenes	µg/L	N/A	2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Sum of BTEX	µg/L	N/A	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Naphthalene	µg/L	N/A	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

APPENDIX CERTIFICATES OF ANALYSIS

CERTIFICATE OF ANALYSIS

Work Order	: ES2436169	Page	: 1 of 15
Amendment	: 1		
Client	: TROP WATER PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: GODFRED DUODU	Contact	: Customer Services ES
Address	: Unit 12 / 43 Berrimah Road Northern Territory Berrimah Darwin 0828	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ---	Telephone	: +61-2-8784 8555
Project	: CIPS WDL	Date Samples Received	: 08-Nov-2024 09:30
Order number	: ---	Date Analysis Commenced	: 09-Nov-2024
C-O-C number	: ---	Issue Date	: 22-Nov-2024 09:54
Sampler	: GODFRED DUODU, QUENTIN VANDA		
Site	: ---		
Quote number	: EN/222		
No. of samples received	: 10		
No. of samples analysed	: 10		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	Position	Accreditation Category
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Sanjeshni Jyoti	Senior Chemist Volatiles	Sydney Organics, Smithfield, NSW

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Work Order	: ES2436169 Amendment 1
Client	: TROP WATER PTY LTD
Project	: CIPS WDL

General Comments

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

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

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

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

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

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

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EP080: Positive result for ES2436169-02 has been confirmed by re-analysis.
- EG093: Samples containing high levels of sulfate may precipitate barium under the acidic conditions of this method and may therefore bias results low.

TROP WATER PTY LTD

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Work Order : ES2436169 Amendment 1
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	NODH2	SODH2	---	---	---
			Sampling date / time	06-Nov-2024 16:30	06-Nov-2024 10:15	---	---	---
Compound	CAS Number	LOR	Unit	ES2436169-009	ES2436169-010	-------	-------	-------
				Result	Result	---	---	---
EA055: Moisture Content								
Moisture Content	---	1.0	%	57.2	50.5	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Aluminium	7429-90-5	50	mg/kg	16600	8280	----	----	----
Cobalt	7440-48-4	2	mg/kg	8	4	----	----	----
Arsenic	7440-38-2	5	mg/kg	16	15	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	39	22	----	----	----
Copper	7440-50-8	5	mg/kg	10	5	----	----	----
Lead	7439-92-1	5	mg/kg	12	8	----	----	----
Nickel	7440-02-0	2	mg/kg	11	6	----	----	----
Zinc	7440-66-6	5	mg/kg	75	19	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N (Sol.)	---	0.1	mg/kg	1.8	0.8	----	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	---	20	mg/kg	1820	860	----	----	----
EK062: Total Nitrogen as N (TKN + NOx)								
* Total Nitrogen as N	---	20	mg/kg	1820	860	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	---	2	mg/kg	486	424	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.8	<0.8	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.8	<0.8	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.8	<0.8	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.8	<0.8	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.8	<0.8	----	----	----

TROP WATER PTY LTD

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Work Order : ES2436169 Amendment 1
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	NODH2	SODH2	---	---	---
				Sampling date / time	06-Nov-2024 16:30	06-Nov-2024 10:15	---	---	---
Compound	CAS Number	LOR	Unit		ES2436169-009	ES2436169-010	-------	-------	-------
					Result	Result	---	---	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Anthracene	120-12-7	0.5	mg/kg		<0.8	<0.8	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.8	<0.8	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.8	<0.8	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.8	<0.8	----	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.8	<0.8	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.8	<0.8	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.8	<0.8	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.8	<0.8	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.8	<0.8	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.8	<0.8	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.8	<0.8	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	---	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	---	0.5	mg/kg		1.0	1.0	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	---	0.5	mg/kg		1.9	1.9	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	---	10	mg/kg		<10	<10	----	----	----
C10 - C14 Fraction	---	50	mg/kg		<50	<50	----	----	----
C15 - C28 Fraction	---	100	mg/kg		<100	<100	----	----	----
C29 - C36 Fraction	---	100	mg/kg		<100	<100	----	----	----
^ C10 - C36 Fraction (sum)	---	50	mg/kg		<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	----	----	----
>C10 - C16 Fraction	---	50	mg/kg		<50	<50	----	----	----
>C16 - C34 Fraction	---	100	mg/kg		<100	<100	----	----	----

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Work Order : ES2436169 Amendment 1
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	NODH2	SODH2	----	----	----
				Sampling date / time	06-Nov-2024 16:30	06-Nov-2024 10:15	----	----	----
Compound	CAS Number	LOR	Unit		ES2436169-009	ES2436169-010	--------	--------	--------
					Result	Result	---	---	---
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	----	----	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	----	----	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		80.7	88.2	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		81.6	84.8	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		57.9	59.1	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		83.4	84.0	----	----	----
Anthracene-d10	1719-06-8	0.5	%		83.2	81.6	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		82.0	81.6	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		89.8	83.0	----	----	----
Toluene-D8	2037-26-5	0.2	%		89.3	86.2	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		101	94.9	----	----	----

TROP WATER PTY LTD

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Work Order : ES2436169 Amendment 1
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	ILCP	ISCP	SODH3
				Sampling date / time	06-Nov-2024 11:08	06-Nov-2024 11:27	06-Nov-2024 11:58	06-Nov-2024 11:55	06-Nov-2024 10:08
Compound	CAS Number	LOR	Unit		ES2436169-001	ES2436169-002	ES2436169-003	ES2436169-004	ES2436169-005
					Result	Result	Result	Result	Result
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	5	mg/L		<5	<5	<5	17	<5
EG020F: Dissolved Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		<0.01	<0.01	<0.01	15.9	----
Arsenic	7440-38-2	0.001	mg/L		0.004	0.004	<0.001	0.003	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	<0.0001	0.0045	----
Chromium	7440-47-3	0.001	mg/L		0.004	0.004	<0.001	0.072	----
Copper	7440-50-8	0.001	mg/L		0.007	0.007	<0.001	0.085	----
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	<0.001	0.009	----
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	<0.001	0.069	----
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	0.054	----
Zinc	7440-66-6	0.005	mg/L		<0.005	0.005	<0.005	10.1	----
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		<0.01	<0.01	<0.01	15.4	----
Arsenic	7440-38-2	0.001	mg/L		0.003	0.003	<0.001	0.002	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	<0.0001	0.0046	----
Chromium	7440-47-3	0.001	mg/L		0.004	0.004	0.004	0.073	----
Copper	7440-50-8	0.001	mg/L		0.007	0.007	<0.001	0.078	----
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	<0.001	0.009	----
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	<0.001	0.067	----
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	0.050	----
Zinc	7440-66-6	0.005	mg/L		<0.005	0.009	<0.005	9.76	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.005	µg/L		----	----	----	----	<0.005
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	----
EG035T: Total Mercury by FIMS									
Mercury	7439-97-6	0.005	µg/L		----	----	----	----	<0.005
EG035T: Total Recoverable Mercury by FIMS									

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Work Order : ES2436169 Amendment 1
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	ILCP	ISCP	SODH3
				Sampling date / time	06-Nov-2024 11:08	06-Nov-2024 11:27	06-Nov-2024 11:58	06-Nov-2024 11:55	06-Nov-2024 10:08
Compound	CAS Number	LOR	Unit		ES2436169-001	ES2436169-002	ES2436169-003	ES2436169-004	ES2436169-005
					Result	Result	Result	Result	Result
EG035T: Total Recoverable Mercury by FIMS - Continued									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	----
EG093F: Dissolved Metals in Saline Water by ORC-ICPMS									
Aluminium	7429-90-5	5	µg/L		----	----	----	----	<5
Arsenic	7440-38-2	0.5	µg/L		----	----	----	----	1.4
Cadmium	7440-43-9	0.2	µg/L		----	----	----	----	<0.2
Chromium	7440-47-3	0.5	µg/L		----	----	----	----	<0.5
Cobalt	7440-48-4	0.2	µg/L		----	----	----	----	<0.2
Copper	7440-50-8	1	µg/L		----	----	----	----	<1
Lead	7439-92-1	0.2	µg/L		----	----	----	----	<0.2
Nickel	7440-02-0	0.5	µg/L		----	----	----	----	<0.5
Zinc	7440-66-6	5	µg/L		----	----	----	----	<5
EG093T: Total Metals in Saline Water by ORC-ICPMS									
Aluminium	7429-90-5	5	µg/L		----	----	----	----	288
Arsenic	7440-38-2	0.5	µg/L		----	----	----	----	1.8
Cadmium	7440-43-9	0.2	µg/L		----	----	----	----	<0.2
Chromium	7440-47-3	0.5	µg/L		----	----	----	----	0.8
Cobalt	7440-48-4	0.2	µg/L		----	----	----	----	<0.2
Copper	7440-50-8	1	µg/L		----	----	----	----	<1
Lead	7439-92-1	0.2	µg/L		----	----	----	----	<0.2
Nickel	7440-02-0	0.5	µg/L		----	----	----	----	<0.5
Zinc	7440-66-6	5	µg/L		----	----	----	----	<5
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		0.41	0.70	<0.01	0.30	<0.01
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		2.1	2.2	1.2	6.7	0.2
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		2.5	2.9	1.2	7.0	0.2

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Work Order	: ES2436169 Amendment 1
Client	: TROP WATER PTY LTD
Project	: CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	ILCP	ISCP	SODH3
				Sampling date / time	06-Nov-2024 11:08	06-Nov-2024 11:27	06-Nov-2024 11:58	06-Nov-2024 11:55	06-Nov-2024 10:08
Compound	CAS Number	LOR	Unit		ES2436169-001	ES2436169-002	ES2436169-003	ES2436169-004	ES2436169-005
					Result	Result	Result	Result	Result
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		0.22	0.21	0.04	0.41	0.05
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	20	<20	<20	<20
C10 - C14 Fraction	----	50	µg/L		<50	<50	<50	100	<50
C15 - C28 Fraction	----	100	µg/L		<100	<100	350	<100	<100
C29 - C36 Fraction	----	50	µg/L		<50	<50	<50	<50	<50
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<50	350	100	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									

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Work Order	: ES2436169 Amendment 1
Client	: TROP WATER PTY LTD
Project	: CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	ILCP	ISCP	SODH3
				Sampling date / time	06-Nov-2024 11:08	06-Nov-2024 11:27	06-Nov-2024 11:58	06-Nov-2024 11:55	06-Nov-2024 10:08
Compound	CAS Number	LOR	Unit		ES2436169-001	ES2436169-002	ES2436169-003	ES2436169-004	ES2436169-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	20	<20	<20	<20
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	20	<20	<20	<20
>C10 - C16 Fraction	---	100	µg/L		<100	<100	<100	<100	<100
>C16 - C34 Fraction	---	100	µg/L		<100	<100	360	<100	<100
>C34 - C40 Fraction	---	100	µg/L		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	---	100	µg/L		<100	<100	360	<100	<100
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	100	µg/L		<100	<100	<100	<100	<100
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	<1	<1	<1
Toluene	108-88-3	2	µg/L		<2	<2	<2	<2	<2
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	<2	<2
^ Total Xylenes	---	2	µg/L		<2	<2	<2	<2	<2
^ Sum of BTEX	---	1	µg/L		<1	<1	<1	<1	<1
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	<5	<5
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		27.6	24.4	22.3	24.1	26.5
2-Chlorophenol-D4	93951-73-6	1.0	%		40.4	47.4	37.9	48.3	48.0
2.4.6-Tribromophenol	118-79-6	1.0	%		38.1	40.0	35.2	74.2	62.1
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		64.2	64.4	54.6	48.5	51.2
Anthracene-d10	1719-06-8	1.0	%		73.8	74.8	74.7	71.4	80.3
4-Terphenyl-d14	1718-51-0	1.0	%		65.5	73.6	72.3	72.0	80.2
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		114	93.1	118	111	101

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Work Order	: ES2436169 Amendment 1
Client	: TROP WATER PTY LTD
Project	: CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	ILCP	ISCP	SODH3
				Sampling date / time	06-Nov-2024 11:08	06-Nov-2024 11:27	06-Nov-2024 11:58	06-Nov-2024 11:55	06-Nov-2024 10:08
Compound	CAS Number	LOR	Unit		ES2436169-001	ES2436169-002	ES2436169-003	ES2436169-004	ES2436169-005
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
Toluene-D8	2037-26-5	2	%		120	95.8	116	113	102
4-Bromofluorobenzene	460-00-4	2	%		130	103	130	125	112

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Work Order	: ES2436169 Amendment 1
Client	: TROP WATER PTY LTD
Project	: CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SODH4	NODH3	NODH4	----	----
			Sampling date / time	06-Nov-2024 10:02	06-Nov-2024 09:40	06-Nov-2024 09:26	----	----
Compound	CAS Number	LOR	Unit	ES2436169-006	ES2436169-007	ES2436169-008	--------	--------
				Result	Result	Result	----	----
EA025: Total Suspended Solids dried at 104 ± 2°C								
Suspended Solids (SS)	----	5	mg/L	<5	<5	<5	----	----
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.005	µg/L	<0.005	<0.005	<0.005	----	----
EG035T: Total Mercury by FIMS								
Mercury	7439-97-6	0.005	µg/L	<0.005	<0.005	<0.005	----	----
EG093F: Dissolved Metals in Saline Water by ORC-ICPMS								
Aluminium	7429-90-5	5	µg/L	<5	<5	<5	----	----
Arsenic	7440-38-2	0.5	µg/L	1.4	1.5	1.4	----	----
Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	<0.2	----	----
Chromium	7440-47-3	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Cobalt	7440-48-4	0.2	µg/L	<0.2	<0.2	<0.2	----	----
Copper	7440-50-8	1	µg/L	<1	<1	<1	----	----
Lead	7439-92-1	0.2	µg/L	<0.2	<0.2	<0.2	----	----
Nickel	7440-02-0	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Zinc	7440-66-6	5	µg/L	<5	<5	<5	----	----
EG093T: Total Metals in Saline Water by ORC-ICPMS								
Aluminium	7429-90-5	5	µg/L	255	100	147	----	----
Arsenic	7440-38-2	0.5	µg/L	1.8	1.7	1.7	----	----
Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	<0.2	----	----
Chromium	7440-47-3	0.5	µg/L	3.6	<0.5	<0.5	----	----
Cobalt	7440-48-4	0.2	µg/L	<0.2	<0.2	<0.2	----	----
Copper	7440-50-8	1	µg/L	<1	<1	<1	----	----
Lead	7439-92-1	0.2	µg/L	<0.2	<0.2	<0.2	----	----
Nickel	7440-02-0	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Zinc	7440-66-6	5	µg/L	<5	<5	<5	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	0.01	0.01	<0.01	----	----

TROP WATER PTY LTD

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Work Order : ES2436169 Amendment 1
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH4	NODH3	NODH4	----	----
				Sampling date / time	06-Nov-2024 10:02	06-Nov-2024 09:40	06-Nov-2024 09:26	----	----
Compound	CAS Number	LOR	Unit		ES2436169-006	ES2436169-007	ES2436169-008	--------	--------
					Result	Result	Result	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.2	0.1	0.2	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		0.2	0.1	0.2	----	----
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		0.06	0.05	0.04	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	<1.0	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L		<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		<0.5	<0.5	<0.5	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	<20	<20	----	----
C10 - C14 Fraction	----	50	µg/L		<50	<50	<50	----	----

TROP WATER PTY LTD

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Work Order : ES2436169 Amendment 1
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH4	NODH3	NODH4	----	----
				Sampling date / time	06-Nov-2024 10:02	06-Nov-2024 09:40	06-Nov-2024 09:26	----	----
Compound	CAS Number	LOR	Unit		ES2436169-006	ES2436169-007	ES2436169-008	--------	--------
					Result	Result	Result	----	----
EP080/071: Total Petroleum Hydrocarbons - Continued									
C15 - C28 Fraction	----	100	µg/L		<100	<100	<100	----	----
C29 - C36 Fraction	----	50	µg/L		<50	<50	<50	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	<20	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	<20	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	<100	<100	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	<100	<100	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	<100	<100	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	<100	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	<1	----	----
Toluene	108-88-3	2	µg/L		<2	<2	<2	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	----	----
^ Total Xylenes	----	2	µg/L		<2	<2	<2	----	----
^ Sum of BTEX	----	1	µg/L		<1	<1	<1	----	----
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		27.5	27.9	22.6	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		51.6	50.0	42.2	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%		87.7	46.3	84.1	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		97.0	58.6	85.8	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH4	NODH3	NODH4	---	---
				Sampling date / time	06-Nov-2024 10:02	06-Nov-2024 09:40	06-Nov-2024 09:26	----	----
Compound	CAS Number	LOR	Unit		ES2436169-006	ES2436169-007	ES2436169-008	--------	--------
					Result	Result	Result	---	---
EP075(SIM)T: PAH Surrogates - Continued									
Anthracene-d10	1719-06-8	1.0	%		70.3	70.6	61.8	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		78.9	83.6	71.0	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		116	113	114	----	----
Toluene-D8	2037-26-5	2	%		112	115	113	----	----
4-Bromofluorobenzene	460-00-4	2	%		127	126	126	----	----

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Work Order	:	ES2436169 Amendment 1
Client	:	TROP WATER PTY LTD
Project	:	CIPS WDL

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	63	125
Toluene-D8	2037-26-5	67	124
4-Bromofluorobenzene	460-00-4	66	131

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2.4.6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72	143
Toluene-D8	2037-26-5	75	131
4-Bromofluorobenzene	460-00-4	73	137

CERTIFICATE OF ANALYSIS

Work Order	: ES2441923	Page	: 1 of 7
Client	: TROP WATER PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: GODFRED DUODU	Contact	: Customer Services ES
Address	: Unit 12 / 43 Berrimah Road Berrimah Darwin 0828	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: CIPS WDL	Date Samples Received	: 24-Dec-2024 10:00
Order number	: ----	Date Analysis Commenced	: 24-Dec-2024
C-O-C number	: ----	Issue Date	: 03-Jan-2025 09:55
Sampler	: LABIN MAGAR, QUENTIN VANDA		
Site	: ----		
Quote number	: SY/016/23_V2		
No. of samples received	: 2		
No. of samples analysed	: 2		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

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

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

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

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

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

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

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.

TROP WATER PTY LTD

Page : 3 of 7
Work Order : ES2441923
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	23-Dec-2024 07:54	23-Dec-2024 08:32	---	---	---
Compound	CAS Number	LOR	Unit		ES2441923-001	ES2441923-002	-----	-----	-----
					Result	Result	---	---	---
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	---	5	mg/L		11	<5	---	---	---
EG020F: Dissolved Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		<0.01	<0.01	---	---	---
Arsenic	7440-38-2	0.001	mg/L		0.003	0.003	---	---	---
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	---	---	---
Chromium	7440-47-3	0.001	mg/L		0.003	0.003	---	---	---
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	---	---	---
Copper	7440-50-8	0.001	mg/L		0.002	0.002	---	---	---
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	---	---	---
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	---	---	---
Zinc	7440-66-6	0.005	mg/L		<0.005	0.006	---	---	---
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		<0.01	<0.01	---	---	---
Arsenic	7440-38-2	0.001	mg/L		0.003	0.003	---	---	---
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	---	---	---
Chromium	7440-47-3	0.001	mg/L		0.004	0.004	---	---	---
Copper	7440-50-8	0.001	mg/L		0.002	0.003	---	---	---
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	---	---	---
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	---	---	---
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	---	---	---
Zinc	7440-66-6	0.005	mg/L		<0.005	0.009	---	---	---
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	---	---	---
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	---	---	---
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	---	0.01	mg/L		0.50	0.47	---	---	---

TROP WATER PTY LTD

Page : 4 of 7
Work Order : ES2441923
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	23-Dec-2024 07:54	23-Dec-2024 08:32	---	---	---
Compound	CAS Number	LOR	Unit		ES2441923-001	ES2441923-002	-----	-----	-----
					Result	Result	---	---	---
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	---	0.1	mg/L		1.2	1.2	---	---	---
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	---	0.1	mg/L		1.7	1.7	---	---	---
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	---	0.01	mg/L		0.22	0.21	---	---	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	---	---	---
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	---	---	---
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	---	---	---
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	---	---	---
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	---	---	---
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	---	---	---
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	---	---	---
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	---	---	---
Benz[a]anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	---	---	---
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	---	---	---
Benzo[b+j]fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	<1.0	---	---	---
Benzo[k]fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	---	---	---
Benzo[a]pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	---	---	---
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	---	---	---
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	---	---	---
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	---	---	---
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	µg/L		<0.5	<0.5	---	---	---
^ Benzo(a)pyrene TEQ (zero)	---	0.5	µg/L		<0.5	<0.5	---	---	---
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	---	20	µg/L		<20	<20	---	---	---
C10 - C14 Fraction	---	50	µg/L		<50	<50	---	---	---

Page	: 5 of 7
Work Order	: ES2441923
Client	: TROP WATER PTY LTD
Project	: CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	23-Dec-2024 07:54	23-Dec-2024 08:32	---	---	---
Compound	CAS Number	LOR	Unit		ES2441923-001	ES2441923-002	-----	-----	-----
					Result	Result	---	---	---
EP080/071: Total Petroleum Hydrocarbons - Continued									
C15 - C28 Fraction	---	100	µg/L		<100	<100	---	---	---
C29 - C36 Fraction	---	50	µg/L		<50	<50	---	---	---
^ C10 - C36 Fraction (sum)	---	50	µg/L		<50	<50	---	---	---
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	---	---	---
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	---	---	---
>C10 - C16 Fraction	---	100	µg/L		<100	<100	---	---	---
>C16 - C34 Fraction	---	100	µg/L		<100	<100	---	---	---
>C34 - C40 Fraction	---	100	µg/L		<100	<100	---	---	---
^ >C10 - C40 Fraction (sum)	---	100	µg/L		<100	<100	---	---	---
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	100	µg/L		<100	<100	---	---	---
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	---	---	---
Toluene	108-88-3	2	µg/L		<2	<2	---	---	---
Ethylbenzene	100-41-4	2	µg/L		<2	<2	---	---	---
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	---	---	---
ortho-Xylene	95-47-6	2	µg/L		<2	<2	---	---	---
^ Total Xylenes	---	2	µg/L		<2	<2	---	---	---
^ Sum of BTEX	---	1	µg/L		<1	<1	---	---	---
Naphthalene	91-20-3	5	µg/L		<5	<5	---	---	---
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		10.6	16.8	---	---	---
2-Chlorophenol-D4	93951-73-6	1.0	%		19.8	40.2	---	---	---
2,4,6-Tribromophenol	118-79-6	1.0	%		29.0	32.4	---	---	---
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		51.9	58.7	---	---	---

TROP WATER PTY LTD

Page : 6 of 7
Work Order : ES2441923
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	23-Dec-2024 07:54	23-Dec-2024 08:32	---	---	---
Compound	CAS Number	LOR	Unit		ES2441923-001	ES2441923-002	-----	-----	-----
					Result	Result	---	---	---
EP075(SIM)T: PAH Surrogates - Continued									
Anthracene-d10	1719-06-8	1.0	%		58.5	74.8	---	---	---
4-Terphenyl-d14	1718-51-0	1.0	%		71.8	79.2	---	---	---
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	2	%		118	111	---	---	---
Toluene-D8	2037-26-5	2	%		128	113	---	---	---
4-Bromofluorobenzene	460-00-4	2	%		115	116	---	---	---

Page	:	7 of 7
Work Order	:	ES2441923
Client	:	TROP WATER PTY LTD
Project	:	CIPS WDL

Surrogate Control Limits

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2.4.6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72	143
Toluene-D8	2037-26-5	75	131
4-Bromofluorobenzene	460-00-4	73	137

CERTIFICATE OF ANALYSIS

Work Order	: ES2501372	Page	: 1 of 7
Client	: TROP WATER PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: GODFRED DUODU	Contact	: Customer Services ES
Address	: Unit 12 / 43 Berrimah Road Berrimah Darwin 0828	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: CIPS WDL	Date Samples Received	: 23-Jan-2025 11:30
Order number	: ----	Date Analysis Commenced	: 25-Jan-2025
C-O-C number	: ----	Issue Date	: 30-Jan-2025 16:34
Sampler	: GODFRED DUODU, TONY BOLAND		
Site	: ----		
Quote number	: SY/016/23_V2		
No. of samples received	: 2		
No. of samples analysed	: 2		

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

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

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- Analytical Results
- Surrogate Control Limits

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Signatories

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Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW

Page	: 2 of 7
Work Order	: ES2501372
Client	: TROP WATER PTY LTD
Project	: CIPS WDL

General Comments

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^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.

TROP WATER PTY LTD

Page : 3 of 7
Work Order : ES2501372
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	ADP1	NODH1	---	---	---
			Sampling date / time	22-Jan-2025 09:05	22-Jan-2025 09:38	---	---	---
Compound	CAS Number	LOR	Unit	ES2501372-001	ES2501372-002	-------	-------	-------
				Result	Result	---	---	---
EA025: Total Suspended Solids dried at 104 ± 2°C								
Suspended Solids (SS)	---	5	mg/L	<5	<5	----	----	----
EG020F: Dissolved Metals by ICP-MS								
Aluminium	7429-90-5	0.01	mg/L	<0.01	<0.01	----	----	----
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	----	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	----	----	----
Cobalt	7440-48-4	0.001	mg/L	<0.001	<0.001	----	----	----
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	----	----	----
Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	----	----	----
EG020T: Total Metals by ICP-MS								
Aluminium	7429-90-5	0.01	mg/L	<0.01	<0.01	----	----	----
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	----	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	----	----	----
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	----	----	----
Cobalt	7440-48-4	0.001	mg/L	<0.001	<0.001	----	----	----
Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	----	----	----
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	---	0.01	mg/L	**0.06**	**0.07**	----	----	----

TROP WATER PTY LTD

Page : 4 of 7
Work Order : ES2501372
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	---	---	---
				Sampling date / time	22-Jan-2025 09:05	22-Jan-2025 09:38	---	---	---
Compound	CAS Number	LOR	Unit		ES2501372-001	ES2501372-002	-------	-------	-------
					Result	Result	---	---	---
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	---	0.1	mg/L		0.3	0.2	----	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
* Total Nitrogen as N	---	0.1	mg/L		0.4	0.3	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	---	0.01	mg/L		0.06	0.06	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	----	----	----
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	----	----	----
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	----	----	----
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	----	----	----
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	----	----	----
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	----	----	----
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	----	----	----
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	----	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	----	----	----
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	----	----	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	----	----	----
* Sum of polycyclic aromatic hydrocarbons	---	0.5	µg/L		<0.5	<0.5	----	----	----
* Benzo(a)pyrene TEQ (zero)	---	0.5	µg/L		<0.5	<0.5	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	---	20	µg/L		<20	<20	----	----	----
C10 - C14 Fraction	---	50	µg/L		<50	<50	----	----	----

TROP WATER PTY LTD

Page : 5 of 7
Work Order : ES2501372
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	---	---	---
				Sampling date / time	22-Jan-2025 09:05	22-Jan-2025 09:38	---	---	---
Compound	CAS Number	LOR	Unit		ES2501372-001	ES2501372-002	-------	-------	-------
					Result	Result	---	---	---
EP080/071: Total Petroleum Hydrocarbons - Continued									
C15 - C28 Fraction	---	100	µg/L		<100	<100	----	----	----
C29 - C36 Fraction	---	50	µg/L		<50	<50	----	----	----
^ C10 - C36 Fraction (sum)	---	50	µg/L		<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	----	----	----
>C10 - C16 Fraction	---	100	µg/L		<100	<100	----	----	----
>C16 - C34 Fraction	---	100	µg/L		<100	<100	----	----	----
>C34 - C40 Fraction	---	100	µg/L		<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	---	100	µg/L		<100	<100	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	100	µg/L		<100	<100	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	----	----	----
Toluene	108-88-3	2	µg/L		<2	<2	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	----	----	----
^ Total Xylenes	---	2	µg/L		<2	<2	----	----	----
^ Sum of BTEX	---	1	µg/L		<1	<1	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	<5	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		30.0	28.5	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		55.2	63.5	----	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%		44.6	56.8	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		62.2	73.2	----	----	----

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Work Order	:	ES2501372
Client	:	TROP WATER PTY LTD
Project	:	CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	22-Jan-2025 09:05	22-Jan-2025 09:38	----	----	----
Compound	CAS Number	LOR	Unit		ES2501372-001	ES2501372-002	--------	--------	--------
					Result	Result	----	----	----
EP075(SIM)T: PAH Surrogates - Continued									
Anthracene-d10	1719-06-8	1.0	%		69.5	79.9	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		72.0	80.5	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		88.1	77.3	----	----	----
Toluene-D8	2037-26-5	2	%		89.2	81.4	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		107	96.5	----	----	----

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Work Order	:	ES2501372
Client	:	TROP WATER PTY LTD
Project	:	CIPS WDL

Surrogate Control Limits

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2.4.6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72	143
Toluene-D8	2037-26-5	75	131
4-Bromofluorobenzene	460-00-4	73	137

CERTIFICATE OF ANALYSIS

Work Order	: ES2504008	Page	: 1 of 15
Client	: TROP WATER PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: GODFRED DUODU	Contact	: Customer Services ES
Address	: Unit 12 / 43 Berrimah Road Berrimah Darwin 0828	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: CIPS WDL	Date Samples Received	: 14-Feb-2025 11:00
Order number	: ----	Date Analysis Commenced	: 17-Feb-2025
C-O-C number	: ----	Issue Date	: 21-Feb-2025 14:04
Sampler	: GODFRED DUODU, QUENTIN VANDA		
Site	: ----		
Quote number	: SY/016/23_V2		
No. of samples received	: 10		
No. of samples analysed	: 10		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW

TROP WATER PTY LTD

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Work Order	: ES2504008
Client	: TROP WATER PTY LTD
Project	: CIPS WDL

General Comments

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

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

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

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

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

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

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG093: It is recognised that total concentration is less than dissolved for some metal analytes. However, the difference is within experimental variation of the methods.
- EP075(SIM): LOR for particular sample(s) raised due to high moisture content.
- EG020: It is recognised that total concentration is less than dissolved for some metal analytes. However, the difference is within experimental variation of the methods.
- EG093: Samples containing high levels of sulfate may precipitate barium under the acidic conditions of this method and may therefore bias results low.

TROP WATER PTY LTD

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Work Order : ES2504008
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	NODH2	SODH2	----	----	----
			Sampling date / time	13-Feb-2025 09:20	13-Feb-2025 09:09	----	----	----
Compound	CAS Number	LOR	Unit	ES2504008-009	ES2504008-010	--------	--------	--------
				Result	Result	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	55.9	47.2	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Aluminium	7429-90-5	50	mg/kg	17300	10800	----	----	----
Cobalt	7440-48-4	2	mg/kg	8	5	----	----	----
Arsenic	7440-38-2	5	mg/kg	16	14	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	42	26	----	----	----
Copper	7440-50-8	5	mg/kg	9	6	----	----	----
Lead	7439-92-1	5	mg/kg	13	9	----	----	----
Nickel	7440-02-0	2	mg/kg	12	8	----	----	----
Zinc	7440-66-6	5	mg/kg	78	19	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N (Sol.)	----	0.1	mg/kg	1.1	0.6	----	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	20	mg/kg	1190	940	----	----	----
EK062: Total Nitrogen as N (TKN + NOx)								
* Total Nitrogen as N	----	20	mg/kg	1190	940	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	2	mg/kg	576	501	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.8	<0.5	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.8	<0.5	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.8	<0.5	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.8	<0.5	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.8	<0.5	----	----	----

TROP WATER PTY LTD

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Work Order : ES2504008
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	NODH2	SODH2	----	----	----
				Sampling date / time	13-Feb-2025 09:20	13-Feb-2025 09:09	----	----	----
Compound	CAS Number	LOR	Unit		ES2504008-009	ES2504008-010	--------	--------	--------
					Result	Result	---	---	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Anthracene	120-12-7	0.5	mg/kg		<0.8	<0.5	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.8	<0.5	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.8	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.8	<0.5	----	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.8	<0.5	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.8	<0.5	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.8	<0.5	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.8	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.8	<0.5	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.8	<0.5	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.8	<0.5	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		1.0	0.6	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		1.9	1.2	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	----	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	----	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	----	----	----
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	----	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	----	----	----

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Work Order : ES2504008
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	NODH2	SODH2	----	----	----
				Sampling date / time	13-Feb-2025 09:20	13-Feb-2025 09:09	----	----	----
Compound	CAS Number	LOR	Unit		ES2504008-009	ES2504008-010	--------	--------	--------
					Result	Result	---	---	---
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	----	----	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	----	----	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		104	81.0	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		100.0	77.2	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		56.0	49.6	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		79.9	81.9	----	----	----
Anthracene-d10	1719-06-8	0.5	%		80.7	79.1	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		89.1	86.8	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		77.0	75.0	----	----	----
Toluene-D8	2037-26-5	0.2	%		73.7	68.9	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		67.6	71.0	----	----	----

TROP WATER PTY LTD

Page : 6 of 15
Work Order : ES2504008
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH1	NODH1	ILCP	ISCP	SODH3
				Sampling date / time	13-Feb-2025 10:39	13-Feb-2025 11:20	13-Feb-2025 11:38	13-Feb-2025 11:48	13-Feb-2025 08:48
Compound	CAS Number	LOR	Unit		ES2504008-001	ES2504008-002	ES2504008-003	ES2504008-004	ES2504008-005
					Result	Result	Result	Result	Result
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	5	mg/L		<5	<5	<5	<5	<5
EG020F: Dissolved Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		0.02	0.02	<0.01	2.61	----
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	<0.0001	0.0004	----
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	<0.001	0.008	----
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	<0.001	0.002	----
Copper	7440-50-8	0.001	mg/L		0.004	<0.001	<0.001	0.006	----
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	0.005	----
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	<0.001	0.011	----
Zinc	7440-66-6	0.005	mg/L		0.020	0.102	0.006	1.38	----
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		0.11	0.22	<0.01	2.52	----
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	<0.0001	0.0006	----
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	<0.001	0.009	----
Copper	7440-50-8	0.001	mg/L		0.002	0.004	<0.001	0.007	----
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	<0.001	0.002	----
Nickel	7440-02-0	0.001	mg/L		<0.001	0.002	<0.001	0.013	----
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	0.006	----
Zinc	7440-66-6	0.005	mg/L		0.015	0.095	<0.005	1.52	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.00004	mg/L		----	----	----	----	<0.00004
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	----
EG035T: Total Mercury by FIMS									
Mercury	7439-97-6	0.00004	mg/L		----	----	----	----	<0.00004
EG035T: Total Recoverable Mercury by FIMS									

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH1	NODH1	ILCP	ISCP	SODH3
				Sampling date / time	13-Feb-2025 10:39	13-Feb-2025 11:20	13-Feb-2025 11:36	13-Feb-2025 11:48	13-Feb-2025 08:48
Compound	CAS Number	LOR	Unit		ES2504008-001	ES2504008-002	ES2504008-003	ES2504008-004	ES2504008-005
					Result	Result	Result	Result	Result
EG035T: Total Recoverable Mercury by FIMS - Continued									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	----
EG093F: Dissolved Metals in Saline Water by ORC-ICPMS									
Aluminium	7429-90-5	5	µg/L		----	----	----	----	<5
Arsenic	7440-38-2	0.5	µg/L		----	----	----	----	1.3
Cadmium	7440-43-9	0.2	µg/L		----	----	----	----	<0.2
Chromium	7440-47-3	0.5	µg/L		----	----	----	----	<0.5
Cobalt	7440-48-4	0.2	µg/L		----	----	----	----	<0.2
Copper	7440-50-8	1	µg/L		----	----	----	----	<1
Lead	7439-92-1	0.2	µg/L		----	----	----	----	<0.2
Nickel	7440-02-0	0.5	µg/L		----	----	----	----	0.6
Zinc	7440-66-6	5	µg/L		----	----	----	----	<5
EG093T: Total Metals in Saline Water by ORC-ICPMS									
Aluminium	7429-90-5	5	µg/L		----	----	----	----	48
Arsenic	7440-38-2	0.5	µg/L		----	----	----	----	1.4
Cadmium	7440-43-9	0.2	µg/L		----	----	----	----	<0.2
Chromium	7440-47-3	0.5	µg/L		----	----	----	----	<0.5
Cobalt	7440-48-4	0.2	µg/L		----	----	----	----	<0.2
Copper	7440-50-8	1	µg/L		----	----	----	----	<1
Lead	7439-92-1	0.2	µg/L		----	----	----	----	<0.2
Nickel	7440-02-0	0.5	µg/L		----	----	----	----	0.6
Zinc	7440-66-6	5	µg/L		----	----	----	----	<5
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		0.83	0.48	<0.01	0.04	0.01
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.3	0.2	0.8	0.6	0.3
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		1.1	0.7	0.8	0.6	0.3

TROP WATER PTY LTD

Page : 8 of 15
Work Order : ES2504008
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH1	NODH1	ILCP	ISCP	SODH3
				Sampling date / time	13-Feb-2025 10:39	13-Feb-2025 11:20	13-Feb-2025 11:38	13-Feb-2025 11:48	13-Feb-2025 08:48
Compound	CAS Number	LOR	Unit		ES2504008-001	ES2504008-002	ES2504008-003	ES2504008-004	ES2504008-005
					Result	Result	Result	Result	Result
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	---	0.01	mg/L		0.07	0.08	0.03	0.02	0.56
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	---	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	---	20	µg/L		<20	<20	<20	<20	<20
C10 - C14 Fraction	---	50	µg/L		<50	<50	<50	<50	<50
C15 - C28 Fraction	---	100	µg/L		<100	<100	<100	<100	<100
C29 - C36 Fraction	---	50	µg/L		<50	<50	<50	<50	<50
^ C10 - C36 Fraction (sum)	---	50	µg/L		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									

TROP WATER PTY LTD

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Work Order : ES2504008
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH1	NODH1	ILCP	ISCP	SODH3
				Sampling date / time	13-Feb-2025 10:39	13-Feb-2025 11:20	13-Feb-2025 11:38	13-Feb-2025 11:48	13-Feb-2025 08:48
Compound	CAS Number	LOR	Unit		ES2504008-001	ES2504008-002	ES2504008-003	ES2504008-004	ES2504008-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	<20	<20	<20
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	<20	<20	<20
>C10 - C16 Fraction	---	100	µg/L		<100	<100	<100	<100	<100
>C16 - C34 Fraction	---	100	µg/L		<100	<100	<100	<100	<100
>C34 - C40 Fraction	---	100	µg/L		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	---	100	µg/L		<100	<100	<100	<100	<100
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	100	µg/L		<100	<100	<100	<100	<100
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	<1	<1	<1
Toluene	108-88-3	2	µg/L		<2	<2	<2	<2	<2
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	<2	<2
^ Total Xylenes	---	2	µg/L		<2	<2	<2	<2	<2
^ Sum of BTEX	---	1	µg/L		<1	<1	<1	<1	<1
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	<5	<5
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		24.0	26.4	24.9	24.9	31.9
2-Chlorophenol-D4	93951-73-6	1.0	%		54.8	62.4	55.2	54.7	61.9
2.4.6-Tribromophenol	118-79-6	1.0	%		43.2	57.6	38.8	44.6	46.4
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		56.2	56.3	50.2	55.2	61.5
Anthracene-d10	1719-06-8	1.0	%		72.1	80.1	75.8	73.1	83.1
4-Terphenyl-d14	1718-51-0	1.0	%		75.2	81.4	74.2	71.8	82.5
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		85.7	104	110	97.4	101

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Work Order	: ES2504008
Client	: TROP WATER PTY LTD
Project	: CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH1	NODH1	ILCP	ISCP	SODH3
				Sampling date / time	13-Feb-2025 10:39	13-Feb-2025 11:20	13-Feb-2025 11:38	13-Feb-2025 11:48	13-Feb-2025 08:48
Compound	CAS Number	LOR	Unit		ES2504008-001	ES2504008-002	ES2504008-003	ES2504008-004	ES2504008-005
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
Toluene-D8	2037-26-5	2	%		92.8	108	117	103	103
4-Bromofluorobenzene	460-00-4	2	%		91.7	110	112	97.8	102

TROP WATER PTY LTD

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Work Order : ES2504008
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SODH4	NODH3	NODH4	----	----
			Sampling date / time	13-Feb-2025 08:59	13-Feb-2025 09:28	13-Feb-2025 09:45	----	----
Compound	CAS Number	LOR	Unit	ES2504008-006	ES2504008-007	ES2504008-008	--------	--------
				Result	Result	Result	----	----
EA025: Total Suspended Solids dried at 104 ± 2°C								
Suspended Solids (SS)	----	5	mg/L	<5	<5	<5	----	----
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.00004	mg/L	<0.00004	<0.00004	<0.00004	----	----
EG035T: Total Mercury by FIMS								
Mercury	7439-97-6	0.00004	mg/L	<0.00004	<0.00004	<0.00004	----	----
EG093F: Dissolved Metals in Saline Water by ORC-ICPMS								
Aluminium	7429-90-5	5	µg/L	<5	<5	<5	----	----
Arsenic	7440-38-2	0.5	µg/L	1.3	1.3	1.2	----	----
Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	<0.2	----	----
Chromium	7440-47-3	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Cobalt	7440-48-4	0.2	µg/L	<0.2	<0.2	<0.2	----	----
Copper	7440-50-8	1	µg/L	<1	<1	<1	----	----
Lead	7439-92-1	0.2	µg/L	<0.2	<0.2	<0.2	----	----
Nickel	7440-02-0	0.5	µg/L	0.6	0.6	<0.5	----	----
Zinc	7440-66-6	5	µg/L	<5	<5	<5	----	----
EG093T: Total Metals in Saline Water by ORC-ICPMS								
Aluminium	7429-90-5	5	µg/L	37	42	27	----	----
Arsenic	7440-38-2	0.5	µg/L	1.3	1.4	1.4	----	----
Cadmium	7440-43-9	0.2	µg/L	<0.2	<0.2	<0.2	----	----
Chromium	7440-47-3	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Cobalt	7440-48-4	0.2	µg/L	<0.2	<0.2	<0.2	----	----
Copper	7440-50-8	1	µg/L	<1	<1	<1	----	----
Lead	7439-92-1	0.2	µg/L	<0.2	<0.2	<0.2	----	----
Nickel	7440-02-0	0.5	µg/L	0.7	<0.5	0.6	----	----
Zinc	7440-66-6	5	µg/L	<5	<5	<5	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	0.01	0.02	0.01	----	----

TROP WATER PTY LTD

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Work Order : ES2504008
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH4	NODH3	NODH4	----	----
				Sampling date / time	13-Feb-2025 08:59	13-Feb-2025 09:28	13-Feb-2025 09:45	----	----
Compound	CAS Number	LOR	Unit		ES2504008-006	ES2504008-007	ES2504008-008	--------	--------
					Result	Result	Result	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.2	0.2	0.3	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		0.2	0.2	0.3	----	----
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		0.68	0.78	0.67	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	<1.0	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L		<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		<0.5	<0.5	<0.5	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	<20	<20	----	----
C10 - C14 Fraction	----	50	µg/L		<50	<50	<50	----	----

TROP WATER PTY LTD

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Work Order : ES2504008
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Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH4	NODH3	NODH4	----	----
				Sampling date / time	13-Feb-2025 08:59	13-Feb-2025 09:28	13-Feb-2025 09:45	----	----
Compound	CAS Number	LOR	Unit		ES2504008-006	ES2504008-007	ES2504008-008	--------	--------
					Result	Result	Result	----	----
EP080/071: Total Petroleum Hydrocarbons - Continued									
C15 - C28 Fraction	----	100	µg/L		<100	<100	<100	----	----
C29 - C36 Fraction	----	50	µg/L		<50	<50	<50	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	<20	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	<20	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	<100	<100	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	<100	<100	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	<100	<100	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	<100	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	<1	----	----
Toluene	108-88-3	2	µg/L		<2	<2	<2	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	----	----
^ Total Xylenes	----	2	µg/L		<2	<2	<2	----	----
^ Sum of BTEX	----	1	µg/L		<1	<1	<1	----	----
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		25.8	25.8	23.8	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		50.0	50.7	46.2	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%		39.3	39.4	35.8	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		59.0	60.2	57.1	----	----

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Work Order	: ES2504008
Client	: TROP WATER PTY LTD
Project	: CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH4	NODH3	NODH4	----	----
				Sampling date / time	13-Feb-2025 08:59	13-Feb-2025 09:28	13-Feb-2025 09:45	----	----
Compound	CAS Number	LOR	Unit		ES2504008-006	ES2504008-007	ES2504008-008	--------	--------
					Result	Result	Result	----	----
EP075(SIM)T: PAH Surrogates - Continued									
Anthracene-d10	1719-06-8	1.0	%		65.5	65.1	58.0	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		64.8	61.2	60.2	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		98.6	103	101	----	----
Toluene-D8	2037-26-5	2	%		103	110	105	----	----
4-Bromofluorobenzene	460-00-4	2	%		101	108	101	----	----

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Work Order	: ES2504008
Client	: TROP WATER PTY LTD
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Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	63	125
Toluene-D8	2037-26-5	67	124
4-Bromofluorobenzene	460-00-4	66	131

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2.4.6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72	143
Toluene-D8	2037-26-5	75	131
4-Bromofluorobenzene	460-00-4	73	137

CERTIFICATE OF ANALYSIS

Work Order	: ES2507725	Page	: 1 of 7
Client	: TROP WATER PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: * ADMIN	Contact	: Customer Services ES
Address	: Unit 12 / 43 Berrimah Road Berrimah Darwin 0828	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: 8981 8889	Telephone	: +61-2-8784 8555
Project	: CIPS WDL	Date Samples Received	: 20-Mar-2025 11:30
Order number	: ----	Date Analysis Commenced	: 20-Mar-2025
C-O-C number	: ----	Issue Date	: 26-Mar-2025 14:45
Sampler	: GODFRED DUODU, William Wood		
Site	: ----		
Quote number	: SY/016/23_V3		
No. of samples received	: 1		
No. of samples analysed	: 1		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW

Page	: 2 of 7
Work Order	: ES2507725
Client	: TROP WATER PTY LTD
Project	: CIPS WDL

General Comments

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

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

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

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

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

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

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG035: Poor matrix spike recovery was obtained for sample ED2500451 # 001. Confirmed by reanalysis.

Page	: 3 of 7
Work Order	: ES2507725
Client	: TROP WATER PTY LTD
Project	: CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	NODH1	----	----	----	----
				Sampling date / time	19-Mar-2025 10:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2507725-001	--------	--------	--------	--------
					Result	---	---	---	---
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	5	mg/L		<5	----	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		0.03	----	----	----	----
Arsenic	7440-38-2	0.001	mg/L		<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	----	----	----	----
Cobalt	7440-48-4	0.001	mg/L		<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L		0.002	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		0.098	----	----	----	----
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		0.19	----	----	----	----
Arsenic	7440-38-2	0.001	mg/L		<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Cobalt	7440-48-4	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		0.100	----	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		0.47	----	----	----	----

TROP WATER PTY LTD

Page : 4 of 7
Work Order : ES2507725
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	NODH1	---	---	---	---
				Sampling date / time	19-Mar-2025 10:00	---	---	---	---
Compound	CAS Number	LOR	Unit	ES2507725-001	--------	--------	--------	--------	
				Result	---	---	---	---	
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	---	0.1	mg/L	**0.1**	----	----	----	----	
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	---	0.1	mg/L	**0.6**	----	----	----	----	
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	---	0.01	mg/L	<0.01	----	----	----	----	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L	<1.0	----	----	----	----	
Acenaphthylene	208-96-8	1.0	µg/L	<1.0	----	----	----	----	
Acenaphthene	83-32-9	1.0	µg/L	<1.0	----	----	----	----	
Fluorene	86-73-7	1.0	µg/L	<1.0	----	----	----	----	
Phenanthrene	85-01-8	1.0	µg/L	<1.0	----	----	----	----	
Anthracene	120-12-7	1.0	µg/L	<1.0	----	----	----	----	
Fluoranthene	206-44-0	1.0	µg/L	<1.0	----	----	----	----	
Pyrene	129-00-0	1.0	µg/L	<1.0	----	----	----	----	
Benz(a)anthracene	56-55-3	1.0	µg/L	<1.0	----	----	----	----	
Chrysene	218-01-9	1.0	µg/L	<1.0	----	----	----	----	
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L	<1.0	----	----	----	----	
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	<1.0	----	----	----	----	
Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	----	----	----	----	
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L	<1.0	----	----	----	----	
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L	<1.0	----	----	----	----	
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L	<1.0	----	----	----	----	
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	µg/L	<0.5	----	----	----	----	
^ Benzo(a)pyrene TEQ (zero)	---	0.5	µg/L	<0.5	----	----	----	----	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	---	20	µg/L	<20	----	----	----	----	
C10 - C14 Fraction	---	50	µg/L	<50	----	----	----	----	

TROP WATER PTY LTD

Page : 5 of 7
Work Order : ES2507725
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	NODH1	----	----	----	----
				Sampling date / time	19-Mar-2025 10:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2507725-001	-------	-------	-------	-------
					Result	---	---	---	---
EP080/071: Total Petroleum Hydrocarbons - Continued									
C15 - C28 Fraction	----	100	µg/L		<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L		<50	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	----	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	----	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	----	----	----	----
Toluene	108-88-3	2	µg/L		<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	----	----	----	----
^ Total Xylenes	----	2	µg/L		<2	----	----	----	----
^ Sum of BTEX	----	1	µg/L		<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		29.2	----	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		55.2	----	----	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%		46.7	----	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		78.0	----	----	----	----

TROP WATER PTY LTD

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Work Order : ES2507725
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	NODH1	----	----	----	----
				Sampling date / time	19-Mar-2025 10:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2507725-001	--------	--------	--------	--------	
				Result	---	---	---	---	
EP075(SIM)T: PAH Surrogates - Continued									
Anthracene-d10	1719-06-8	1.0	%	86.5	----	----	----	----	
4-Terphenyl-d14	1718-51-0	1.0	%	90.7	----	----	----	----	
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%	136	----	----	----	----	
Toluene-D8	2037-26-5	2	%	108	----	----	----	----	
4-Bromofluorobenzene	460-00-4	2	%	98.1	----	----	----	----	

Page	: 7 of 7
Work Order	: ES2507725
Client	: TROP WATER PTY LTD
Project	: CIPS WDL

Surrogate Control Limits

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2.4.6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72	143
Toluene-D8	2037-26-5	75	131
4-Bromofluorobenzene	460-00-4	73	137

CERTIFICATE OF ANALYSIS

Work Order	: ES2509355	Page	: 1 of 7
Client	: TROP WATER PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: * ADMIN	Contact	: Customer Services ES
Address	: Unit 12 / 43 Berrimah Road Berrimah Darwin 0828	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: 8981 8889	Telephone	: +61-2-8784 8555
Project	: CIPS WDL	Date Samples Received	: 04-Apr-2025 13:30
Order number	: ----	Date Analysis Commenced	: 07-Apr-2025
C-O-C number	: ----	Issue Date	: 10-Apr-2025 17:18
Sampler	: GODFRED DUODU, William Wood		
Site	: ----		
Quote number	: SY/016/23_V3		
No. of samples received	: 5		
No. of samples analysed	: 5		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Sanjeshni Jyoti	Senior Chemist Volatiles	Sydney Organics, Smithfield, NSW

Page	:	2 of 7
Work Order	:	ES2509355
Client	:	TROP WATER PTY LTD
Project	:	CIPS WDL

General Comments

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

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

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

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

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

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

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG020: It has been confirmed by re-digestion and re-analysis that dissolved concentration for Zinc is higher than total concentration for sample ES2509355-#003. For all other elements where filtered results are greater than total results, the difference is within experimental variation of the methods.

TROP WATER PTY LTD

Page : 3 of 7
Work Order : ES2509355
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH1	ADP1	NODH1	ADP2	ISCP
				Sampling date / time	02-Apr-2025 13:20	02-Apr-2025 10:16	02-Apr-2025 12:50	02-Apr-2025 12:21	02-Apr-2025 08:44
Compound	CAS Number	LOR	Unit		ES2509355-001	ES2509355-002	ES2509355-003	ES2509355-004	ES2509355-005
					Result	Result	Result	Result	Result
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	5	mg/L		12	<5	<5	<5	<5
EG020F: Dissolved Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		0.02	<0.01	0.04	0.04	0.04
Arsenic	7440-38-2	0.001	mg/L		<0.001	0.003	<0.001	<0.001	<0.001
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	7440-47-3	0.001	mg/L		<0.001	0.004	<0.001	<0.001	<0.001
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Copper	7440-50-8	0.001	mg/L		0.002	0.005	0.006	<0.001	<0.001
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	0.001	0.003	0.003
Zinc	7440-66-6	0.005	mg/L		0.020	<0.005	0.031	0.322	0.356
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		0.56	<0.01	0.14	0.14	0.15
Arsenic	7440-38-2	0.001	mg/L		<0.001	0.003	<0.001	<0.001	<0.001
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	<0.0001	0.0001	0.0001
Chromium	7440-47-3	0.001	mg/L		<0.001	0.004	<0.001	<0.001	<0.001
Copper	7440-50-8	0.001	mg/L		0.002	0.006	0.002	<0.001	<0.001
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	<0.001	0.003	0.003
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	7440-66-6	0.005	mg/L		0.034	<0.005	0.056	0.343	0.363
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		0.95	0.46	0.36	0.09	0.08

TROP WATER PTY LTD

Page : 4 of 7
Work Order : ES2509355
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH1	ADP1	NODH1	ADP2	ISCP
				Sampling date / time	02-Apr-2025 13:20	02-Apr-2025 10:16	02-Apr-2025 12:50	02-Apr-2025 12:21	02-Apr-2025 08:44
Compound	CAS Number	LOR	Unit		ES2509355-001	ES2509355-002	ES2509355-003	ES2509355-004	ES2509355-005
					Result	Result	Result	Result	Result
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	---	0.1	mg/L		0.3	1.3	0.2	1.4	1.4
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	---	0.1	mg/L		1.2	1.8	0.6	1.5	1.5
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	---	0.01	mg/L		0.03	0.16	<0.01	<0.01	0.01
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
^ Sum of polycyclic aromatic hydrocarbons	---	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	---	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	---	20	µg/L		<20	<20	<20	<20	<20
C10 - C14 Fraction	---	50	µg/L		<50	<50	<50	<50	<50

TROP WATER PTY LTD

Page : 5 of 7
Work Order : ES2509355
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH1	ADP1	NODH1	ADP2	ISCP
				Sampling date / time	02-Apr-2025 13:20	02-Apr-2025 10:16	02-Apr-2025 12:50	02-Apr-2025 12:21	02-Apr-2025 08:44
Compound	CAS Number	LOR	Unit		ES2509355-001	ES2509355-002	ES2509355-003	ES2509355-004	ES2509355-005
					Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued									
C15 - C28 Fraction	---	100	µg/L		<100	<100	<100	<100	<100
C29 - C36 Fraction	---	50	µg/L		<50	<50	<50	<50	<50
^ C10 - C36 Fraction (sum)	---	50	µg/L		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	<20	<20	<20
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	<20	<20	<20
>C10 - C16 Fraction	---	100	µg/L		<100	<100	<100	<100	<100
>C16 - C34 Fraction	---	100	µg/L		<100	<100	<100	<100	<100
>C34 - C40 Fraction	---	100	µg/L		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	---	100	µg/L		<100	<100	<100	<100	<100
^ >C10 - C16 Fraction minus Naphthalene (F2)	---	100	µg/L		<100	<100	<100	<100	<100
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	<1	<1	<1
Toluene	108-88-3	2	µg/L		<2	<2	<2	<2	<2
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	<2	<2
^ Total Xylenes	---	2	µg/L		<2	<2	<2	<2	<2
^ Sum of BTEX	---	1	µg/L		<1	<1	<1	<1	<1
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	<5	<5
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		25.8	30.0	28.3	31.0	27.7
2-Chlorophenol-D4	93951-73-6	1.0	%		61.6	48.7	60.7	60.5	53.1
2.4.6-Tribromophenol	118-79-6	1.0	%		57.0	31.8	53.2	54.6	46.1
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		62.9	59.2	61.9	61.4	55.3

TROP WATER PTY LTD

Page : 6 of 7
Work Order : ES2509355
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH1	ADP1	NODH1	ADP2	ISCP
				Sampling date / time	02-Apr-2025 13:20	02-Apr-2025 10:16	02-Apr-2025 12:50	02-Apr-2025 12:21	02-Apr-2025 08:44
Compound	CAS Number	LOR	Unit		ES2509355-001	ES2509355-002	ES2509355-003	ES2509355-004	ES2509355-005
					Result	Result	Result	Result	Result
EP075(SIM)T: PAH Surrogates - Continued									
Anthracene-d10	1719-06-8	1.0	%		95.5	86.1	89.4	90.1	77.3
4-Terphenyl-d14	1718-51-0	1.0	%		79.3	78.7	83.3	79.8	66.5
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		104	99.3	98.8	99.7	101
Toluene-D8	2037-26-5	2	%		101	107	103	102	95.0
4-Bromofluorobenzene	460-00-4	2	%		107	105	103	104	85.5

Page	:	7 of 7
Work Order	:	ES2509355
Client	:	TROP WATER PTY LTD
Project	:	CIPS WDL

Surrogate Control Limits

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2.4.6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72	143
Toluene-D8	2037-26-5	75	131
4-Bromofluorobenzene	460-00-4	73	137

CERTIFICATE OF ANALYSIS

Work Order	: **ES2514832**	Page	: 1 of 15
Client	: **TROP WATER PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: * ADMIN	Contact	: Customer Services ES
Address	: Unit 12 / 43 Berrimah Road Berrimah Darwin 0828	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: 8981 8889	Telephone	: +61-2-8784 8555
Project	: CIPS WDL	Date Samples Received	: 22-May-2025 11:30
Order number	: ----	Date Analysis Commenced	: 22-May-2025
C-O-C number	: ----	Issue Date	: 28-May-2025 14:41
Sampler	: GODFRED DUODU, QUENTIN VANDA		
Site	: ----		
Quote number	: SY/016/23_V3		
No. of samples received	: 10		
No. of samples analysed	: 10		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Dian Dao	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW

General Comments

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

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

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

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

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

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

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EP075(SIM): LOR for particular sample raised due to high moisture content.
- EG093: Samples containing high levels of sulfate may precipitate barium under the acidic conditions of this method and may therefore bias results low.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	NODH2	SODH2	----	----	----
				Sampling date / time	21-May-2025 09:10	21-May-2025 08:37	----	----	----
Compound	CAS Number	LOR	Unit		ES2514832-009	ES2514832-010	-------	-------	-------
					Result	Result	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		60.9	46.2	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Aluminium	7429-90-5	50	mg/kg		13000	3530	----	----	----
Cobalt	7440-48-4	2	mg/kg		6	<2	----	----	----
Arsenic	7440-38-2	5	mg/kg		11	10	----	----	----
Cadmium	7440-43-9	1	mg/kg		<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg		33	9	----	----	----
Copper	7440-50-8	5	mg/kg		7	<5	----	----	----
Lead	7439-92-1	5	mg/kg		10	<5	----	----	----
Nickel	7440-02-0	2	mg/kg		10	3	----	----	----
Zinc	7440-66-6	5	mg/kg		31	8	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N (Sol.)	----	0.1	mg/kg		0.1	0.2	----	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	20	mg/kg		1190	500	----	----	----
EK062: Total Nitrogen as N (TKN + NOx)									
^ Total Nitrogen as N	----	20	mg/kg		1190	500	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	2	mg/kg		402	349	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.8	<0.5	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.8	<0.5	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.8	<0.5	----	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.8	<0.5	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.8	<0.5	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	NODH2	SODH2	----	----	----
				Sampling date / time	21-May-2025 09:10	21-May-2025 08:37	----	----	----
Compound	CAS Number	LOR	Unit		ES2514832-009	ES2514832-010	-------	-------	-------
					Result	Result	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Anthracene	120-12-7	0.5	mg/kg		<0.8	<0.5	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.8	<0.5	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.8	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.8	<0.5	----	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.8	<0.5	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.8	<0.5	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.8	<0.5	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.8	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.8	<0.5	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.8	<0.5	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.8	<0.5	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		1.0	0.6	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		1.9	1.2	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	----	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	----	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	----	----	----
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	----	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	NODH2	SODH2	----	----	----
				Sampling date / time	21-May-2025 09:10	21-May-2025 08:37	----	----	----
Compound	CAS Number	LOR	Unit		ES2514832-009	ES2514832-010	-------	-------	-------
					Result	Result	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	----	----	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	----	----	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		83.4	87.1	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		82.3	82.4	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		68.0	69.5	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		81.5	86.6	----	----	----
Anthracene-d10	1719-06-8	0.5	%		99.6	100	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		95.3	97.6	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		69.4	84.2	----	----	----
Toluene-D8	2037-26-5	0.2	%		74.6	86.0	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		80.0	96.4	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	ILCP	ISCP	SODH3
				Sampling date / time	21-May-2025 10:30	21-May-2025 10:51	21-May-2025 11:05	21-May-2025 11:19	21-May-2025 08:42
Compound	CAS Number	LOR	Unit		ES2514832-001	ES2514832-002	ES2514832-003	ES2514832-004	ES2514832-005
					Result	Result	Result	Result	Result
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	5	mg/L		<5	<5	<5	17	<5
EG020F: Dissolved Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		<0.01	<0.01	<0.01	0.04	----
Arsenic	7440-38-2	0.001	mg/L		<0.001	0.001	<0.001	0.002	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	----
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	----
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	----
Copper	7440-50-8	0.001	mg/L		<0.001	0.002	<0.001	0.002	----
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	----
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	<0.001	0.001	----
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	<0.005	0.006	----
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		<0.01	0.01	0.02	0.07	----
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	<0.001	0.002	----
Cadmium	7440-43-9	0.0001	mg/L		0.0001	<0.0001	<0.0001	<0.0001	----
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	----
Copper	7440-50-8	0.001	mg/L		0.003	0.003	<0.001	0.004	----
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	----
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	<0.001	0.001	----
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	----
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	<0.005	0.011	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.005	µg/L		----	----	----	----	<0.005
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	----
EG035T: Total Mercury by FIMS									
Mercury	7439-97-6	0.005	µg/L		----	----	----	----	<0.005
EG035T: Total Recoverable Mercury by FIMS									

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	ILCP	ISCP	SODH3
				Sampling date / time	21-May-2025 10:30	21-May-2025 10:51	21-May-2025 11:05	21-May-2025 11:19	21-May-2025 08:42
Compound	CAS Number	LOR	Unit		ES2514832-001	ES2514832-002	ES2514832-003	ES2514832-004	ES2514832-005
					Result	Result	Result	Result	Result
EG035T: Total Recoverable Mercury by FIMS - Continued									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	---
EG093F: Dissolved Metals in Saline Water by ORC-ICPMS									
Aluminium	7429-90-5	5	µg/L		---	---	---	---	<5
Arsenic	7440-38-2	0.5	µg/L		---	---	---	---	1.0
Cadmium	7440-43-9	0.2	µg/L		---	---	---	---	<0.2
Chromium	7440-47-3	0.5	µg/L		---	---	---	---	<0.5
Cobalt	7440-48-4	0.2	µg/L		---	---	---	---	<0.2
Copper	7440-50-8	1	µg/L		---	---	---	---	<1
Lead	7439-92-1	0.2	µg/L		---	---	---	---	<0.2
Nickel	7440-02-0	0.5	µg/L		---	---	---	---	<0.5
Zinc	7440-66-6	5	µg/L		---	---	---	---	<5
EG093T: Total Metals in Saline Water by ORC-ICPMS									
Aluminium	7429-90-5	5	µg/L		---	---	---	---	61
Arsenic	7440-38-2	0.5	µg/L		---	---	---	---	2.5
Cadmium	7440-43-9	0.2	µg/L		---	---	---	---	0.4
Chromium	7440-47-3	0.5	µg/L		---	---	---	---	<0.5
Cobalt	7440-48-4	0.2	µg/L		---	---	---	---	<0.2
Copper	7440-50-8	1	µg/L		---	---	---	---	<1
Lead	7439-92-1	0.2	µg/L		---	---	---	---	<0.2
Nickel	7440-02-0	0.5	µg/L		---	---	---	---	<0.5
Zinc	7440-66-6	5	µg/L		---	---	---	---	<5
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		0.06	0.07	<0.01	<0.01	<0.01
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.3	0.2	0.7	7.0	0.2
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		0.4	0.3	0.7	7.0	0.2

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	ILCP	ISCP	SODH3
				Sampling date / time	21-May-2025 10:30	21-May-2025 10:51	21-May-2025 11:05	21-May-2025 11:19	21-May-2025 08:42
Compound	CAS Number	LOR	Unit		ES2514832-001	ES2514832-002	ES2514832-003	ES2514832-004	ES2514832-005
					Result	Result	Result	Result	Result
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		0.01	<0.01	<0.01	0.33	0.04
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	µg/L		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	µg/L		<100	<100	<100	360	<100
C29 - C36 Fraction	----	50	µg/L		<50	<50	<50	110	<50
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<50	<50	470	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	ILCP	ISCP	SODH3
				Sampling date / time	21-May-2025 10:30	21-May-2025 10:51	21-May-2025 11:05	21-May-2025 11:19	21-May-2025 08:42
Compound	CAS Number	LOR	Unit		ES2514832-001	ES2514832-002	ES2514832-003	ES2514832-004	ES2514832-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	<20	<20	<20
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	<20	<20	<20
>C10 - C16 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
>C16 - C34 Fraction	----	100	µg/L		<100	<100	<100	410	<100
>C34 - C40 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	<100	<100	410	<100
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	<100	<100	<100
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	<1	<1	<1
Toluene	108-88-3	2	µg/L		<2	<2	<2	<2	<2
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	<2	<2
^ Total Xylenes	----	2	µg/L		<2	<2	<2	<2	<2
^ Sum of BTEX	----	1	µg/L		<1	<1	<1	<1	<1
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	<5	<5
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		21.3	25.8	27.5	28.0	22.8
2-Chlorophenol-D4	93951-73-6	1.0	%		46.1	51.2	53.3	51.7	65.8
2.4.6-Tribromophenol	118-79-6	1.0	%		54.6	60.1	49.7	47.8	62.1
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		69.5	70.9	59.4	60.5	80.2
Anthracene-d10	1719-06-8	1.0	%		67.9	72.3	64.6	64.3	83.6
4-Terphenyl-d14	1718-51-0	1.0	%		71.9	74.8	64.8	61.1	82.3
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		106	110	99.2	73.3	102

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	ILCP	ISCP	SODH3
				Sampling date / time	21-May-2025 10:30	21-May-2025 10:51	21-May-2025 11:05	21-May-2025 11:19	21-May-2025 08:42
Compound	CAS Number	LOR	Unit		ES2514832-001	ES2514832-002	ES2514832-003	ES2514832-004	ES2514832-005
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
Toluene-D8	2037-26-5	2	%		101	97.8	99.0	75.4	102
4-Bromofluorobenzene	460-00-4	2	%		110	112	107	82.9	109

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH4	NODH3	NODH4	----	----
				Sampling date / time	21-May-2025 08:57	21-May-2025 09:20	21-May-2025 09:31	----	----
Compound	CAS Number	LOR	Unit		ES2514832-006	ES2514832-007	ES2514832-008	--------	-------
					Result	Result	Result	---	---
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	5	mg/L		<5	<5	<5	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.005	µg/L		<0.005	<0.005	<0.005	----	----
EG035T: Total Mercury by FIMS									
Mercury	7439-97-6	0.005	µg/L		<0.005	<0.005	<0.005	----	----
EG093F: Dissolved Metals in Saline Water by ORC-ICPMS									
Aluminium	7429-90-5	5	µg/L		<5	<5	<5	----	----
Arsenic	7440-38-2	0.5	µg/L		1.0	1.0	1.1	----	----
Cadmium	7440-43-9	0.2	µg/L		<0.2	<0.2	<0.2	----	----
Chromium	7440-47-3	0.5	µg/L		<0.5	<0.5	<0.5	----	----
Cobalt	7440-48-4	0.2	µg/L		<0.2	<0.2	<0.2	----	----
Copper	7440-50-8	1	µg/L		<1	<1	<1	----	----
Lead	7439-92-1	0.2	µg/L		<0.2	<0.2	<0.2	----	----
Nickel	7440-02-0	0.5	µg/L		<0.5	<0.5	<0.5	----	----
Zinc	7440-66-6	5	µg/L		<5	<5	<5	----	----
EG093T: Total Metals in Saline Water by ORC-ICPMS									
Aluminium	7429-90-5	5	µg/L		34	101	34	----	----
Arsenic	7440-38-2	0.5	µg/L		1.1	1.9	1.2	----	----
Cadmium	7440-43-9	0.2	µg/L		<0.2	0.3	<0.2	----	----
Chromium	7440-47-3	0.5	µg/L		<0.5	<0.5	<0.5	----	----
Cobalt	7440-48-4	0.2	µg/L		<0.2	<0.2	<0.2	----	----
Copper	7440-50-8	1	µg/L		<1	<1	<1	----	----
Lead	7439-92-1	0.2	µg/L		<0.2	<0.2	<0.2	----	----
Nickel	7440-02-0	0.5	µg/L		<0.5	<0.5	<0.5	----	----
Zinc	7440-66-6	5	µg/L		<5	<5	<5	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		<0.01	<0.01	<0.01	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH4	NODH3	NODH4	----	----
				Sampling date / time	21-May-2025 08:57	21-May-2025 09:20	21-May-2025 09:31	----	----
Compound	CAS Number	LOR	Unit		ES2514832-006	ES2514832-007	ES2514832-008	--------	-------
					Result	Result	Result	---	---
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.2	0.2	0.2	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		0.2	0.2	0.2	----	----
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		<0.01	0.05	<0.01	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	<1.0	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L		<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		<0.5	<0.5	<0.5	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	<20	<20	----	----
C10 - C14 Fraction	----	50	µg/L		<50	<50	<50	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH4	NODH3	NODH4	----	----
				Sampling date / time	21-May-2025 08:57	21-May-2025 09:20	21-May-2025 09:31	----	----
Compound	CAS Number	LOR	Unit		ES2514832-006	ES2514832-007	ES2514832-008	--------	-------
					Result	Result	Result	---	---
EP080/071: Total Petroleum Hydrocarbons - Continued									
C15 - C28 Fraction	----	100	µg/L		<100	<100	<100	----	----
C29 - C36 Fraction	----	50	µg/L		<50	<50	<50	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	<20	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	<20	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	<100	<100	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	<100	<100	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	<100	<100	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	<100	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	<1	----	----
Toluene	108-88-3	2	µg/L		<2	<2	<2	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	----	----
^ Total Xylenes	----	2	µg/L		<2	<2	<2	----	----
^ Sum of BTEX	----	1	µg/L		<1	<1	<1	----	----
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		31.9	27.9	27.9	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		62.6	61.0	59.6	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%		51.9	52.9	50.4	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		68.0	68.4	69.3	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH4	NODH3	NODH4	----	----
				Sampling date / time	21-May-2025 08:57	21-May-2025 09:20	21-May-2025 09:31	----	----
Compound	CAS Number	LOR	Unit		ES2514832-006	ES2514832-007	ES2514832-008	--------	-------
					Result	Result	Result	---	---
EP075(SIM)T: PAH Surrogates - Continued									
Anthracene-d10	1719-06-8	1.0	%		73.0	74.0	73.6	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		73.1	73.2	75.0	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		96.6	97.9	103	----	----
Toluene-D8	2037-26-5	2	%		101	94.6	106	----	----
4-Bromofluorobenzene	460-00-4	2	%		107	104	112	----	----

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	63	125
Toluene-D8	2037-26-5	67	124
4-Bromofluorobenzene	460-00-4	66	131

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2.4.6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72	143
Toluene-D8	2037-26-5	75	131
4-Bromofluorobenzene	460-00-4	73	137

CERTIFICATE OF ANALYSIS

Work Order	: **ES2516728**	Page	: 1 of 7
Client	: TROP WATER PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: * ADMIN	Contact	: Customer Services ES
Address	: Unit 12 / 43 Berrimah Road Berrimah Darwin 0828	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: 8981 8889	Telephone	: +61-2-8784 8555
Project	: CIPS WDL	Date Samples Received	: 06-Jun-2025 11:00
Order number	: ----	Date Analysis Commenced	: 06-Jun-2025
C-O-C number	: ----	Issue Date	: 13-Jun-2025 12:58
Sampler	: GODFRED DUODU, LABIN MAGAR		
Site	: ----		
Quote number	: SY/016/23_V3		
No. of samples received	: 2		
No. of samples analysed	: 2		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	Position	Accreditation Category
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Rassem Ayoubi	Senior Organic Chemist	Sydney Organics, Smithfield, NSW
Sanjeshni Jyoti	Senior Chemist Volatiles	Sydney Organics, Smithfield, NSW

General Comments

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

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

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

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

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

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

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG020: It is recognised that total concentration is less than dissolved for some metal analytes. However, the difference is within experimental variation of the methods.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	05-Jun-2025 09:55	05-Jun-2025 10:36	----	----	----
Compound	CAS Number	LOR	Unit		ES2516728-001	ES2516728-002	--------	--------	--------
					Result	Result	----	----	----
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	5	mg/L		<5	<5	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		<0.01	<0.01	----	----	----
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	----	----	----
Chromium	7440-47-3	0.001	mg/L		0.001	<0.001	----	----	----
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	----	----	----
Copper	7440-50-8	0.001	mg/L		0.003	0.003	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	----	----	----
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		0.02	0.01	----	----	----
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	----	----	----
Copper	7440-50-8	0.001	mg/L		0.005	0.004	----	----	----
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L		0.008	<0.005	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		0.22	0.22	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	05-Jun-2025 09:55	05-Jun-2025 10:36	----	----	----
Compound	CAS Number	LOR	Unit		ES2516728-001	ES2516728-002	--------	--------	--------
					Result	Result	---	---	---
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.5	0.5	----	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		0.7	0.7	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		0.02	0.03	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	----	----	----
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	----	----	----
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	----	----	----
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	----	----	----
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	----	----	----
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	----	----	----
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	----	----	----
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	----	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	----	----	----
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	----	----	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		<0.5	<0.5	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	<20	----	----	----
C10 - C14 Fraction	----	50	µg/L		<50	<50	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	05-Jun-2025 09:55	05-Jun-2025 10:36	----	----	----
Compound	CAS Number	LOR	Unit		ES2516728-001	ES2516728-002	--------	--------	--------
					Result	Result	---	---	---
EP080/071: Total Petroleum Hydrocarbons - Continued									
C15 - C28 Fraction	----	100	µg/L		<100	<100	----	----	----
C29 - C36 Fraction	----	50	µg/L		<50	<50	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	----	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	<100	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	<100	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	<100	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	----	----	----
Toluene	108-88-3	2	µg/L		<2	<2	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	----	----	----
^ Total Xylenes	----	2	µg/L		<2	<2	----	----	----
^ Sum of BTEX	----	1	µg/L		<1	<1	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	<5	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		29.0	27.4	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		69.3	56.6	----	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%		55.2	43.4	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		87.9	74.3	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	05-Jun-2025 09:55	05-Jun-2025 10:36	----	----	----
Compound	CAS Number	LOR	Unit		ES2516728-001	ES2516728-002	--------	--------	--------
					Result	Result	---	---	---
EP075(SIM)T: PAH Surrogates - Continued									
Anthracene-d10	1719-06-8	1.0	%		90.7	79.0	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		95.6	81.7	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		119	117	----	----	----
Toluene-D8	2037-26-5	2	%		110	109	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		127	126	----	----	----

Surrogate Control Limits

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2.4.6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72	143
Toluene-D8	2037-26-5	75	131
4-Bromofluorobenzene	460-00-4	73	137

CERTIFICATE OF ANALYSIS

Work Order	: **ES2525729**	Page	: 1 of 14
Client	: **TROP WATER PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: * ADMIN	Contact	: Customer Services ES
Address	: Unit 12 / 43 Berrimah Road Berrimah Darwin 0828	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: 8981 8889	Telephone	: +61-2-8784 8555
Project	: CIPS WDL	Date Samples Received	: 21-Aug-2025 10:00
Order number	: ----	Date Analysis Commenced	: 21-Aug-2025
C-O-C number	: ----	Issue Date	: 28-Aug-2025 16:22
Sampler	: GODFRED DUODU, QUENTIN VANDA		
Site	: ----		
Quote number	: SY/016/23_V3		
No. of samples received	: 11		
No. of samples analysed	: 11		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

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

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

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

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

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

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

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG093: Samples containing high levels of sulfate may precipitate barium under the acidic conditions of this method and may therefore bias results low.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	NODH2	SODH2	----	----	----
			Sampling date / time	20-Aug-2025 09:34	20-Aug-2025 09:05	----	----	----
Compound	CAS Number	LOR	Unit	ES2525729-010	ES2525729-011	-------	-------	-------
				Result	Result	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	48.2	49.6	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Aluminium	7429-90-5	50	mg/kg	15900	11000	----	----	----
Cobalt	7440-48-4	2	mg/kg	7	5	----	----	----
Arsenic	7440-38-2	5	mg/kg	16	20	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	35	25	----	----	----
Copper	7440-50-8	5	mg/kg	8	6	----	----	----
Lead	7439-92-1	5	mg/kg	14	10	----	----	----
Nickel	7440-02-0	2	mg/kg	10	8	----	----	----
Zinc	7440-66-6	5	mg/kg	42	22	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N (Sol.)	----	0.1	mg/kg	1.2	0.2	----	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	20	mg/kg	1020	1200	----	----	----
EK062: Total Nitrogen as N (TKN + NOx)								
^ Total Nitrogen as N	----	20	mg/kg	1020	1200	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	2	mg/kg	445	282	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	NODH2	SODH2	----	----	----
			Sampling date / time	20-Aug-2025 09:34	20-Aug-2025 09:05	----	----	----
Compound	CAS Number	LOR	Unit	ES2525729-010	ES2525729-011	-------	-------	-------
				Result	Result	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	----	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	0.6	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	1.2	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	----	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	----	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	----	----	----
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	----	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	NODH2	SODH2	----	----	----
				Sampling date / time	20-Aug-2025 09:34	20-Aug-2025 09:05	----	----	----
Compound	CAS Number	LOR	Unit		ES2525729-010	ES2525729-011	-------	-------	-------
					Result	Result	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	----	----	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	----	----	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		100	97.0	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		98.3	101	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		68.9	70.2	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		93.7	90.1	----	----	----
Anthracene-d10	1719-06-8	0.5	%		101	96.3	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		96.0	92.2	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		85.0	74.2	----	----	----
Toluene-D8	2037-26-5	0.2	%		96.3	85.3	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		98.0	86.0	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	ADP2	ILCP	ISCP
				Sampling date / time	20-Aug-2025 10:28	20-Aug-2025 10:51	20-Aug-2025 12:05	20-Aug-2025 11:10	20-Aug-2025 11:19
Compound	CAS Number	LOR	Unit		ES2525729-001	ES2525729-002	ES2525729-003	ES2525729-004	ES2525729-005
					Result	Result	Result	Result	Result
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	5	mg/L		<5	<5	6	<5	6
EG020F: Dissolved Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Copper	7440-50-8	0.001	mg/L		0.001	0.001	0.002	<0.001	0.001
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	0.007	<0.005	0.006
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		<0.01	<0.01	0.02	<0.01	0.01
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Copper	7440-50-8	0.001	mg/L		0.002	0.002	0.002	<0.001	0.002
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	0.015	<0.005	0.011
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		0.03	0.03	<0.01	<0.01	<0.01

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	ADP2	ILCP	ISCP
				Sampling date / time	20-Aug-2025 10:28	20-Aug-2025 10:51	20-Aug-2025 12:05	20-Aug-2025 11:10	20-Aug-2025 11:19
Compound	CAS Number	LOR	Unit		ES2525729-001	ES2525729-002	ES2525729-003	ES2525729-004	ES2525729-005
					Result	Result	Result	Result	Result
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.4	0.4	0.4	0.8	0.5
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		0.4	0.4	0.4	0.8	0.5
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		0.02	0.02	<0.01	<0.01	<0.01
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	<0.5
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	µg/L		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	ADP2	ILCP	ISCP
				Sampling date / time	20-Aug-2025 10:28	20-Aug-2025 10:51	20-Aug-2025 12:05	20-Aug-2025 11:10	20-Aug-2025 11:19
Compound	CAS Number	LOR	Unit		ES2525729-001	ES2525729-002	ES2525729-003	ES2525729-004	ES2525729-005
					Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued									
C15 - C28 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	50	µg/L		<50	<50	<50	<50	<50
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	<20	<20	<20
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	<20	<20	<20
>C10 - C16 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
>C16 - C34 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	<100	<100	<100	<100
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	<100	<100	<100
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	<1	<1	<1
Toluene	108-88-3	2	µg/L		<2	<2	<2	<2	<2
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	<2	<2
^ Total Xylenes	----	2	µg/L		<2	<2	<2	<2	<2
^ Sum of BTEX	----	1	µg/L		<1	<1	<1	<1	<1
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	<5	<5
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		33.2	25.1	21.0	25.5	19.3
2-Chlorophenol-D4	93951-73-6	1.0	%		34.6	41.5	48.2	63.9	47.0
2.4.6-Tribromophenol	118-79-6	1.0	%		35.8	63.5	54.0	66.8	52.8
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		60.8	82.6	66.2	78.9	63.6

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	ADP2	ILCP	ISCP
				Sampling date / time	20-Aug-2025 10:28	20-Aug-2025 10:51	20-Aug-2025 12:05	20-Aug-2025 11:10	20-Aug-2025 11:19
Compound	CAS Number	LOR	Unit		ES2525729-001	ES2525729-002	ES2525729-003	ES2525729-004	ES2525729-005
					Result	Result	Result	Result	Result
EP075(SIM)T: PAH Surrogates - Continued									
Anthracene-d10	1719-06-8	1.0	%		40.2	66.0	92.0	82.0	91.3
4-Terphenyl-d14	1718-51-0	1.0	%		64.4	96.6	74.2	88.4	70.2
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		94.6	89.3	85.3	83.6	90.9
Toluene-D8	2037-26-5	2	%		112	113	80.6	81.0	114
4-Bromofluorobenzene	460-00-4	2	%		116	116	84.5	86.7	118

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH3	SODH4	NODH3	NODH4	-----
				Sampling date / time	20-Aug-2025 09:12	20-Aug-2025 09:21	20-Aug-2025 09:46	20-Aug-2025 09:50	----
Compound	CAS Number	LOR	Unit		ES2525729-006	ES2525729-007	ES2525729-008	ES2525729-009	--------
					Result	Result	Result	Result	----
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	5	mg/L		<5	<5	<5	<5	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.005	µg/L		<0.005	<0.005	<0.005	<0.005	----
EG035T: Total Mercury by FIMS									
Mercury	7439-97-6	0.005	µg/L		<0.005	<0.005	<0.005	<0.005	----
EG093F: Dissolved Metals in Saline Water by ORC-ICPMS									
Aluminium	7429-90-5	5	µg/L		<5	<5	<5	<5	----
Arsenic	7440-38-2	0.5	µg/L		1.4	1.3	1.3	1.3	----
Cadmium	7440-43-9	0.2	µg/L		<0.2	<0.2	<0.2	<0.2	----
Chromium	7440-47-3	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	----
Cobalt	7440-48-4	0.2	µg/L		<0.2	<0.2	<0.2	<0.2	----
Copper	7440-50-8	1	µg/L		<1	<1	<1	<1	----
Lead	7439-92-1	0.2	µg/L		<0.2	<0.2	<0.2	<0.2	----
Nickel	7440-02-0	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	----
Zinc	7440-66-6	5	µg/L		<5	<5	<5	<5	----
EG093T: Total Metals in Saline Water by ORC-ICPMS									
Aluminium	7429-90-5	5	µg/L		55	54	101	52	----
Arsenic	7440-38-2	0.5	µg/L		1.4	1.4	1.4	1.4	----
Cadmium	7440-43-9	0.2	µg/L		<0.2	<0.2	<0.2	<0.2	----
Chromium	7440-47-3	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	----
Cobalt	7440-48-4	0.2	µg/L		<0.2	<0.2	<0.2	<0.2	----
Copper	7440-50-8	1	µg/L		<1	<1	<1	<1	----
Lead	7439-92-1	0.2	µg/L		<0.2	<0.2	<0.2	<0.2	----
Nickel	7440-02-0	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	----
Zinc	7440-66-6	5	µg/L		<5	<5	<5	<5	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		<0.01	<0.01	<0.01	<0.01	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH3	SODH4	NODH3	NODH4	-----
				Sampling date / time	20-Aug-2025 09:12	20-Aug-2025 09:21	20-Aug-2025 09:46	20-Aug-2025 09:50	----
Compound	CAS Number	LOR	Unit		ES2525729-006	ES2525729-007	ES2525729-008	ES2525729-009	-------
					Result	Result	Result	Result	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		**0.1**	**0.1**	**0.1**	**0.2**	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		**0.1**	**0.1**	**0.1**	**0.2**	----
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		**0.03**	**0.03**	**0.01**	**0.02**	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	----
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	----
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	----
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	----
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	----
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	----
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	----
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	----
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	----
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	----
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	<1.0	<1.0	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		<0.5	<0.5	<0.5	<0.5	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	<20	<20	<20	----
C10 - C14 Fraction	----	50	µg/L		<50	<50	<50	<50	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH3	SODH4	NODH3	NODH4	-----
				Sampling date / time	20-Aug-2025 09:12	20-Aug-2025 09:21	20-Aug-2025 09:46	20-Aug-2025 09:50	----
Compound	CAS Number	LOR	Unit		ES2525729-006	ES2525729-007	ES2525729-008	ES2525729-009	-------
					Result	Result	Result	Result	----
EP080/071: Total Petroleum Hydrocarbons - Continued									
C15 - C28 Fraction	----	100	µg/L		<100	<100	<100	<100	----
C29 - C36 Fraction	----	50	µg/L		<50	<50	<50	<50	----
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<50	<50	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	<20	<20	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	<20	<20	----
>C10 - C16 Fraction	----	100	µg/L		<100	<100	<100	<100	----
>C16 - C34 Fraction	----	100	µg/L		<100	<100	<100	<100	----
>C34 - C40 Fraction	----	100	µg/L		<100	<100	<100	<100	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	<100	<100	<100	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	<100	<100	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	<1	<1	----
Toluene	108-88-3	2	µg/L		<2	<2	<2	<2	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	<2	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	<2	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	<2	----
^ Total Xylenes	----	2	µg/L		<2	<2	<2	<2	----
^ Sum of BTEX	----	1	µg/L		<1	<1	<1	<1	----
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	<5	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		**27.7**	**30.1**	**27.8**	**22.4**	----
2-Chlorophenol-D4	93951-73-6	1.0	%		**49.9**	**64.3**	**54.4**	**47.7**	----
2.4.6-Tribromophenol	118-79-6	1.0	%		**58.7**	**53.0**	**40.9**	**34.5**	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		**80.2**	**81.2**	**73.5**	**64.1**	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SODH3	SODH4	NODH3	NODH4	----
				Sampling date / time	20-Aug-2025 09:12	20-Aug-2025 09:21	20-Aug-2025 09:46	20-Aug-2025 09:50	----
Compound	CAS Number	LOR	Unit		ES2525729-006	ES2525729-007	ES2525729-008	ES2525729-009	--------
					Result	Result	Result	Result	----
EP075(SIM)T: PAH Surrogates - Continued									
Anthracene-d10	1719-06-8	1.0	%		83.6	84.4	92.6	55.8	----
4-Terphenyl-d14	1718-51-0	1.0	%		93.8	89.7	80.5	70.2	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		93.7	91.0	92.3	74.1	----
Toluene-D8	2037-26-5	2	%		114	116	111	90.9	----
4-Bromofluorobenzene	460-00-4	2	%		120	119	116	94.7	----

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	63	125
Toluene-D8	2037-26-5	67	124
4-Bromofluorobenzene	460-00-4	66	131

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2.4.6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72	143
Toluene-D8	2037-26-5	75	131
4-Bromofluorobenzene	460-00-4	73	137

CERTIFICATE OF ANALYSIS

Work Order	: **ES2528929**	Page	: 1 of 7
Client	: **TROP WATER PTY LTD**	Laboratory	: Environmental Division Sydney
Contact	: * ADMIN	Contact	: Customer Services ES
Address	: Unit 12 / 43 Berrimah Road Berrimah Darwin 0828	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: 8981 8889	Telephone	: +61-2-8784 8555
Project	: CIPS WDL	Date Samples Received	: 18-Sep-2025 10:30
Order number	: ----	Date Analysis Commenced	: 18-Sep-2025
C-O-C number	: ----	Issue Date	: 24-Sep-2025 14:39
Sampler	: GODFRED DUODU, LABIN MAGAR		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 2		
No. of samples analysed	: 2		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW

General Comments

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

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

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

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

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

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

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	17-Sep-2025 09:42	17-Sep-2025 10:10	----	----	----
Compound	CAS Number	LOR	Unit		ES2528929-001	ES2528929-002	-------	-------	-------
					Result	Result	----	----	----
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	5	mg/L		<5	<5	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		<0.01	<0.01	----	----	----
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	----	----	----
Copper	7440-50-8	0.001	mg/L		**0.002**	**0.001**	----	----	----
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	----	----	----
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		<0.01	<0.01	----	----	----
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	----	----	----
Copper	7440-50-8	0.001	mg/L		**0.002**	**0.002**	----	----	----
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		**0.04**	**0.04**	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	17-Sep-2025 09:42	17-Sep-2025 10:10	----	----	----
Compound	CAS Number	LOR	Unit		ES2528929-001	ES2528929-002	-------	-------	-------
					Result	Result	----	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		**0.3**	**0.4**	----	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		**0.3**	**0.4**	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		**0.03**	**0.02**	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	----	----	----
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	----	----	----
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	----	----	----
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	----	----	----
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	----	----	----
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	----	----	----
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	----	----	----
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	----	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	----	----	----
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	----	----	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L		<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		<0.5	<0.5	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	<20	----	----	----
C10 - C14 Fraction	----	50	µg/L		<50	<50	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	17-Sep-2025 09:42	17-Sep-2025 10:10	----	----	----
Compound	CAS Number	LOR	Unit		ES2528929-001	ES2528929-002	-------	-------	-------
					Result	Result	----	----	----
EP080/071: Total Petroleum Hydrocarbons - Continued									
C15 - C28 Fraction	----	100	µg/L		<100	<100	----	----	----
C29 - C36 Fraction	----	50	µg/L		<50	<50	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	----	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	<100	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	<100	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	<100	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	----	----	----
Toluene	108-88-3	2	µg/L		<2	<2	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	----	----	----
^ Total Xylenes	----	2	µg/L		<2	<2	----	----	----
^ Sum of BTEX	----	1	µg/L		<1	<1	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	<5	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		**27.9**	**29.0**	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		**48.6**	**43.0**	----	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%		**39.5**	**34.4**	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		**64.5**	**55.1**	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	17-Sep-2025 09:42	17-Sep-2025 10:10	----	----	----
Compound	CAS Number	LOR	Unit		ES2528929-001	ES2528929-002	========	========	========
					Result	Result	----	----	----
EP075(SIM)T: PAH Surrogates - Continued									
Anthracene-d10	1719-06-8	1.0	%		90.3	71.6	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		75.0	64.4	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		114	109	----	----	----
Toluene-D8	2037-26-5	2	%		109	101	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		108	99.6	----	----	----

Surrogate Control Limits

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2.4.6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72	143
Toluene-D8	2037-26-5	75	131
4-Bromofluorobenzene	460-00-4	73	137

CERTIFICATE OF ANALYSIS

Work Order	: ES2530597	Page	: 1 of 7
Client	: TROP WATER PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: GODFRED DUODU	Contact	: Customer Services ES
Address	: Unit 12 / 43 Berrimah Road Berrimah Darwin 0828	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: CIPS WDL	Date Samples Received	: 02-Oct-2025 11:00
Order number	: ----	Date Analysis Commenced	: 03-Oct-2025
C-O-C number	: ----	Issue Date	: 09-Oct-2025 14:50
Sampler	: GODFRED DUODU, ROHAN SAUNDERS		
Site	: ----		
Quote number	: SY/016/23_V3		
No. of samples received	: 2		
No. of samples analysed	: 2		

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

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- Analytical Results
- Surrogate Control Limits

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Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW

General Comments

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

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

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^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- EP075 (SIM): Where reported, Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.

Page	: 3 of 7
Work Order	: ES2530597
Client	: TROP WATER PTY LTD
Project	: CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	01-Oct-2025 09:35	01-Oct-2025 10:11	----	----	----
Compound	CAS Number	LOR	Unit		ES2530597-001	ES2530597-002	-------	-------	-------
					Result	Result	----	----	----
EA025: Total Suspended Solids dried at 104 ± 2°C									
Suspended Solids (SS)	----	5	mg/L		<5	<5	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		<0.01	**0.03**	----	----	----
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	----	----	----
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	----	----	----
Copper	7440-50-8	0.001	mg/L		**0.002**	**0.004**	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	----	----	----
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		<0.01	**0.06**	----	----	----
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	----	----	----
Cadmium	7440-43-9	0.0001	mg/L		<0.0001	<0.0001	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	<0.001	----	----	----
Copper	7440-50-8	0.001	mg/L		**0.002**	**0.004**	----	----	----
Cobalt	7440-48-4	0.001	mg/L		<0.001	<0.001	----	----	----
Nickel	7440-02-0	0.001	mg/L		<0.001	<0.001	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	**0.012**	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		**0.04**	**0.25**	----	----	----

TROP WATER PTY LTD

Page : 4 of 7
Work Order : ES2530597
Client : TROP WATER PTY LTD
Project : CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	01-Oct-2025 09:35	01-Oct-2025 10:11	----	----	----
Compound	CAS Number	LOR	Unit		ES2530597-001	ES2530597-002	-------	-------	-------
					Result	Result	---	---	---
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.3	0.5	----	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
* Total Nitrogen as N	----	0.1	mg/L		0.3	0.8	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		0.06	0.07	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	1.0	µg/L		<1.0	<1.0	----	----	----
Acenaphthylene	208-96-8	1.0	µg/L		<1.0	<1.0	----	----	----
Acenaphthene	83-32-9	1.0	µg/L		<1.0	<1.0	----	----	----
Fluorene	86-73-7	1.0	µg/L		<1.0	<1.0	----	----	----
Phenanthrene	85-01-8	1.0	µg/L		<1.0	<1.0	----	----	----
Anthracene	120-12-7	1.0	µg/L		<1.0	<1.0	----	----	----
Fluoranthene	206-44-0	1.0	µg/L		<1.0	<1.0	----	----	----
Pyrene	129-00-0	1.0	µg/L		<1.0	<1.0	----	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L		<1.0	<1.0	----	----	----
Chrysene	218-01-9	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L		<1.0	<1.0	----	----	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	----	----	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	----	----	----
* Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L		<0.5	<0.5	----	----	----
* Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		<0.5	<0.5	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	µg/L		<20	<20	----	----	----
C10 - C14 Fraction	----	50	µg/L		<50	<50	----	----	----

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Work Order	: ES2530597
Client	: TROP WATER PTY LTD
Project	: CIPS WDL

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	01-Oct-2025 09:35	01-Oct-2025 10:11	----	----	----
Compound	CAS Number	LOR	Unit		ES2530597-001	ES2530597-002	-------	-------	-------
					Result	Result	----	----	----
EP080/071: Total Petroleum Hydrocarbons - Continued									
C15 - C28 Fraction	----	100	µg/L		<100	<100	----	----	----
C29 - C36 Fraction	----	50	µg/L		<50	<50	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	----	----	----
>C10 - C16 Fraction	----	100	µg/L		<100	<100	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	<100	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	<100	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	----	----	----
Toluene	108-88-3	2	µg/L		<2	<2	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	----	----	----
^ Total Xylenes	----	2	µg/L		<2	<2	----	----	----
^ Sum of BTEX	----	1	µg/L		<1	<1	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	<5	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		29.2	31.0	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		34.8	36.6	----	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%		33.7	41.0	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		60.9	63.3	----	----	----

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	ADP1	NODH1	----	----	----
				Sampling date / time	01-Oct-2025 09:35	01-Oct-2025 10:11	----	----	----
Compound	CAS Number	LOR	Unit		ES2530597-001	ES2530597-002	-------	-------	-------
					Result	Result	----	----	----
EP075(SIM)T: PAH Surrogates - Continued									
Anthracene-d10	1719-06-8	1.0	%		63.0	68.8	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		93.4	86.2	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		107	113	----	----	----
Toluene-D8	2037-26-5	2	%		101	107	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		126	133	----	----	----

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Client	: TROP WATER PTY LTD
Project	: CIPS WDL

Surrogate Control Limits

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2.4.6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72	143
Toluene-D8	2037-26-5	75	131
4-Bromofluorobenzene	460-00-4	73	137