Annual Compliance Report - Year 4 (EPBC 2018/8166)

Harvest Estate, Byron Bay (EPBC 2018/8166)

Prepared for Villa World Byron Pty Ltd

By Planit Consulting Pty Ltd

V.1 - October 2026

Job No: J7148

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Document Control

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Revision	Date	Prepared By	Reviewed By	Approved By
V.1	2/11/2026	Tomy Rados	Giuseppe Fallara	Tomy Rados

Approval Details

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Signature	

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1 Introduction and Background

Villa World Byron P/L has engaged Planit Consulting to prepare an Annual Compliance Report for the Harvest Estate located within the West Byron Urban Release Area, Byron Bay (refer to **Figure 1**).

Harvest Estate is an approved 149 allotment residential subdivision which also comprises of the creation of 7 green infrastructure lots, together with associated works including vegetation removal, earthworks, landscaping, creation of public reserves, roads, environmental management and protection and stormwater works.

Harvest Estate was referred under the *Environment Protection and Biodiversity Conservation Act* and determined to be a 'controlled action' under the provisions of sections 18/18A (listed threatened species and communities) of the Act (EPBC 2018/8166). The assessment process determined by the then Department of Environment and Energy (DoEE) was that the project would be assessed by referral information.

On 6th July 2018 the Harvest Estate residential development was granted approval under sections 130(1) and 133 of the EPBCA subject to conditions.

The purpose of this document is to demonstrate that there has been compliance with the conditions of the EPBC approval for the Project (EPBC 2018/8166) and to satisfy Condition 8 of that approval, which states:

> *The approval holder must prepare a compliance report for each 12-month period following the date of commencement of the action, or otherwise in accordance with an annual date that has been agreed to in writing by the Minister. The approval holder must:*
>
> *a. publish each compliance report on the website within 60 business days following the relevant 12-month period,*
>
> *b. notify the department by email that a compliance report has been published on the website and provide the weblink for the compliance report within 5 business days of publication, and*
>
> *c. keep all compliance reports publicly available on the website until this approval expires.*



Figure 1: Harvest Estate Aerial Photograph (Nearmap 2026)

1.1 Terms, Definitions and Acronyms

The following terms are used within this report:

ACR: means Annual Compliance Report

Annual Compliance Report Guidelines/ACR Guidelines: means DCCEEW (2023) *Annual Compliance Report Guidelines*. Commonwealth of Australia.

Approval/EPBC Act Approval: means EPBC 2018/8166 approval for the Harvest Estate.

Approval holder: means the person to whom the approval is granted, or any person acting on their behalf, or to whom approval is transferred under section 145B of the EPBC Act. For this offset under EPBC 2018/8166 the approval holder is Villa World Byron Pty Ltd.

BSC: Byron Shire Council.

Contractor/sub-contractor: means a party or company appointed by the proponent that performs works on site, and includes all employees of the Contractor and its sub-contractors, e.g. machinery operators, bush regenerators, spotter catchers etc.

Commence / commenced / commencement of construction: means any physical works associated with the action, excluding fences and signage.

Construction: means the clearing of land and creation of residential allotments, roadways and infrastructure services (sewerage, electricity, water, stormwater) associated with the action. This does not include preparatory works.

Date of commencement: 29th August 2023

Department/DoEE/DCCEEW: the Australian Government Department administering the EPBC Act.

Development or action: To develop the Harvest Estate staged master planned residential community within the West Byron Urban Release Area in Byron Bay, NSW..

EPBC Act: the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

Existing Habitat: means the areas represented in Attachment B of the EPBC Act Approval by the zones enclosed within the blue solid lines labelled 'PROTECTED FROG HABITAT ZONES'.

Habitat creation areas: means the areas represented in Attachment B of the EPBC Act Approval by the black hatched shaded polygons labelled 'HABITAT CREATION AREAS FOR ACID FROGS'.

Harvest Estate: the development or action being a residential estate and all associated ancillary works necessary for establishment.

NES: means National Environmental Significance.

Project Area: means the location of the action, represented by the area enclosed within the red lines labelled 'SUBJECT LAND' in Attachment B of the EPBC Act Approval.

Proponent: the approval holder.

Rehabilitation Plan: means the document: Australian Wetlands Consultancy (2021) *Acid Frog Management Plan, 'Harvest Estate ', West Byron Urban Release Area, Ewingsdale Road, Byron Bay*, prepared for Tower Holdings Pty Ltd, dated 18 October 2021, or a version revised in accordance with this approval.

Wallum Sedge Frog: means the EPBC Act listed threatened species *Litoria olongburenses*, also known as the Olongburra Frog.

Year 4: The period from 29th August 2025 to 29th August 2026.

2 EPBC Approval Details & Descriptions of Activities

2.1 Project Background

The Project was referred to the then Department of Environment and Energy (DoEE) for assessment on 25th February 2018. The referred Project incorporated a staged master planned residential community, involving 282 lots and a development footprint of approximately 27.8 ha (refer to **Figure 2**).

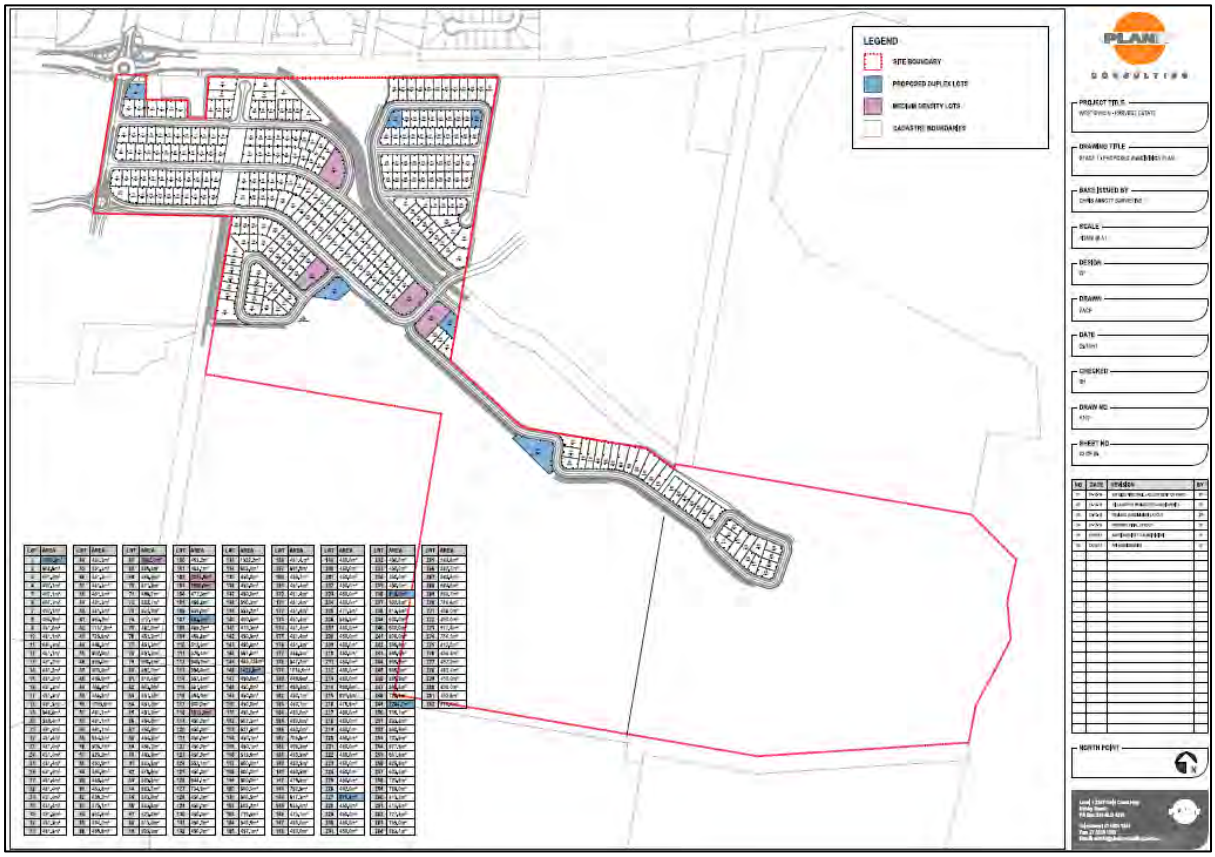


Figure 2: Original Harvest Estate Subdivision Plan (Provided with EPBC 2018/8166)

On the 29th March 2018, the Department advised that the Project would be a controlled action and would require assessment and approval under the EPBC Act before it could proceed. The relevant controlling provisions being listed threatened species and community (sections 18 & 18A). Following assessment, the Project was approved by the Department subject to conditions dated 6th July 2018.

During this time, the development application was in the process of being reviewed and determined by Byron Shire Council. The development was officially refused by Council on 8th April 2019 due to a variety of factors. This refusal occurred post the original EPBC Act determination.

The development was then modified and significantly reduced its development footprint and yield. The proposal was reduced from 282 lots and a development footprint of ~27.8 ha, to 149 lots and a development footprint of ~16 ha (refer to **Figure 3**).

Approval was eventually granted by the Land and Environment Court of NSW by way of a Section 34 Agreement on 8th December 2020 (Villa World Byron Pty Ltd v Byron Shire Council - LEC No. 2019/00310612) for the delivery of the Harvest Estate.

A summary of the Harvest Estate development details is provided below:

Table 1: Approved Harvest Estate Development Details

Approval Information	
Applicant	Villa World Byron Pty Ltd
Address	342 Ewingsdale Road, 22A and 22B Melaleuca Drive, Byron Bay
Development Consent Description	Staged subdivision of 9 lots into 149 residential lots (comprised of 145 smaller residential lots and 4 large lifestyle lots) and the creation of 7 green infrastructure lots, together with associated works including vegetation removal, earthworks, landscaping, creation of public reserves, roads, environmental management and protection and stormwater works at 342 Ewingsdale Road, 22A and 22B Melaleuca Drive, Byron Bay
Local Government Approval Reference	Development Consent 10.2017.201.1 (Villa World Byron Pty Ltd v Byron Shire Council - LEC No. 2019/00310612)
Modification Consent Description	Development Consent 10.2017.201.1 S4.56 Modification to amend staging and timeframes Determination Date 4th November 2021
EPBC Act Approval Reference	EPBC 2018/8166

Harvest Estate will be developed in accordance with the subdivision approval as depicted above.

Additionally, the development shall also be conducted in accordance with EPBC 2018/8166 Villa World Byron P/L dated 8 November 2022 which requires the approval holder to conduct a variety of activities in accordance with the conditions stipulated within the approval and this document.

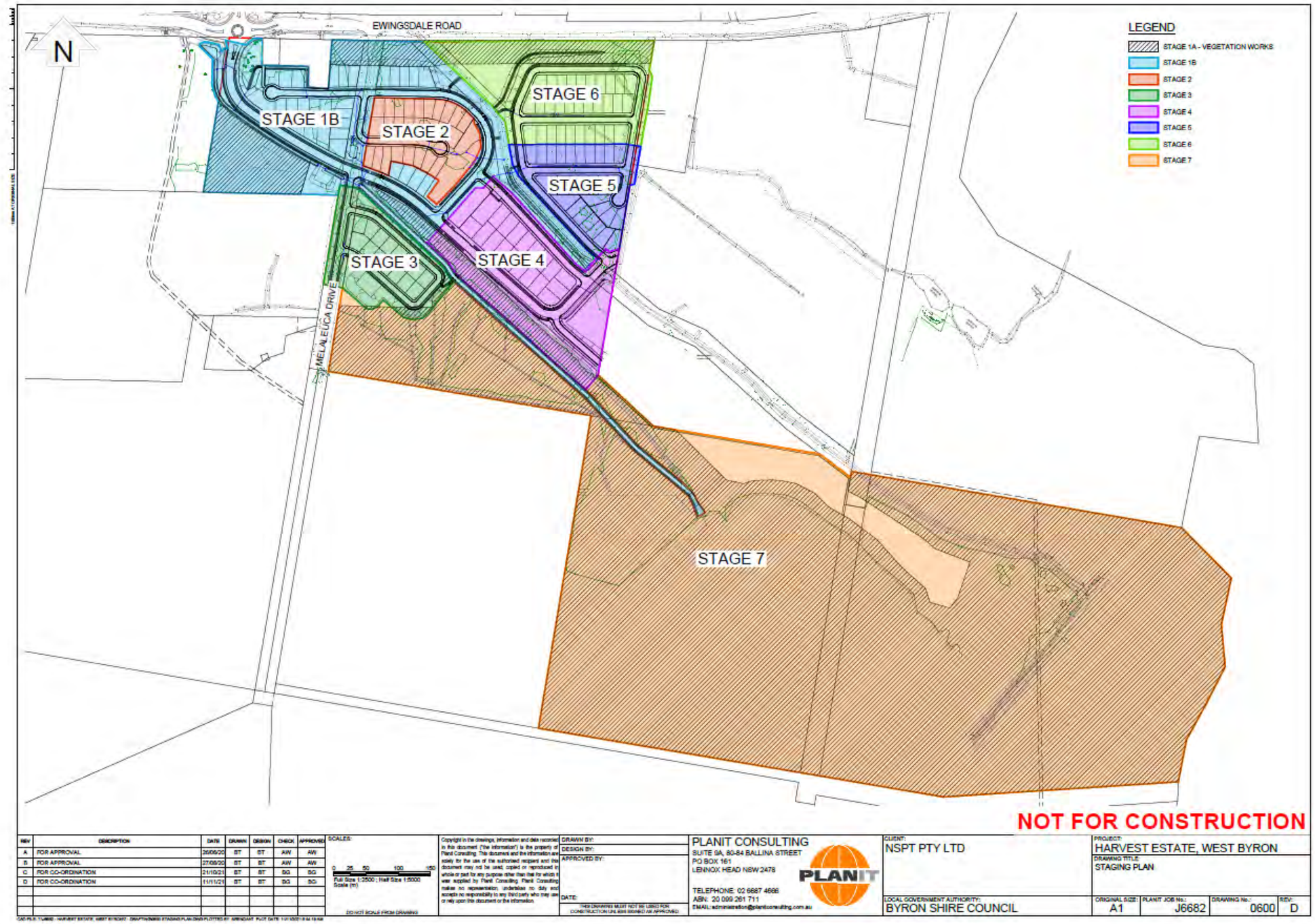


Figure 3: Current Approved Harvest Estate Layout

2.2 Description of Activities Prior to and Within Year 4 and Key Dates

The following key dates are provided with regard to development activities relevant to Year 4 of project monitoring:

- Variation to EPBC Act approval – 8 November 2022
- Notification of commencement of construction to DCCEEW – 29 August 2022
- First Annual Compliance Report provided – 21 November 2023
- Second Annual Compliance Report provided – 28 October 2024
- Third Annual Compliance Report due date – 31 October 2025
- Fourth Annual Compliance Report due date – 22 November 2026

Subsequent to the commencement of the action the following activities have occurred (within Years 1-4):

- Clearing of vegetation has occurred from the first portions of the Harvest Estate from within numbered stages 1B and 2 in accordance with the Development Consent (10.2017.201.1).
- Installation of sediment and erosion control devices;
- Construction activities (i.e. earthworks) associated with stages 1B and 2;
- Civil infrastructure (i.e. construction of roads, building pads, stormwater infrastructure, electricity, sewerage etc.) associated with stages 1B and 2;
- Landscaping associated with stages 1B and 2;
- Rehabilitation/Restoration Works within retained Rehabilitation Zones;
- Continuous monitoring and maintenance; and
- Creation of frog breeding habitat areas within Rehabilitation Zones 2 and 3.

The following images are relevant to the Year 4 site activity:



Rehabilitation Zone 1: Baseline Survey



Rehabilitation Zone 1: End Year 4



Rehabilitation Zone 3: Baseline Survey



Rehabilitation Zone 3: End Year 4



Retained Frog Habitat Rehabilitation Zone 6: Baseline Survey



Retained Frog Habitat Rehabilitation Zone 6: End Year 4



Created Frog Habitat Area Rehabilitation Zone 3: End Year 2



Created Frog Habitat Area Rehabilitation Zone 2: End Year 4

	
Planted Eucalypts Increasing In Height and Coverage within Zone 1	*Vegetation Protection Fencing and Signages Installed Externally to the Retained Frog Habitat Zone*
	
Koala Scat Recorded within Zone 6 During Annual Spring/Summer Survey Efforts	*Treated Camphor Laurel Proximate Created Frog Habitat Area*
	
Frog Fencing Installed Between Frog Habitat Zones	*Nestboxes Installed within Rehabilitation Zone 6*

3 EPBC 2018/8166 Approval Condition Compliance

This section addresses the status and compliance of the action against the conditions imposed within the EPBC Act Approval 2015/8166 for the fourth reporting period between 29th August 2025 and 29th August 2026. Details on the status of compliance have been tabulated for conditions under EPBC Act Approval 2018/8166 as follows:

- **Table 2** – EPBC Act Approval 2018/8166 Conditions – Compliance Assessment Table

For each column below, the approval condition or management measure is provided with a note on its status of compliance, a general comment and related source of evidence as relevant. The DCCEEW have prepared guidance (Annual Compliance Report Guidelines, 2023) related to the preparation of compliance audits, including generic expressions that are used to identify the status of each item (DCCEEW, 2023 Section 3.7):

The following designations must be used to record findings in compliance reports:

Compliant
'Compliance' is achieved when all the requirements of a condition have been met, including the implementation of management plans or other measures required by those conditions.

Non-compliant
A designation of 'non-compliant' must be given where the requirements of a condition or elements of a condition, including the implementation of management plans and other measures, have not been met.

Not applicable
A designation of 'not applicable' must be given where the requirements of a condition or elements of a condition fall outside of the scope of the current reporting period. For example, a condition that applies to an activity that has not yet commenced.

Table 2: EPBC 2018/8166 Approval Conditions Compliance Table

Condition No.	Approval Condition	Condition Currently Triggered?	Compliance?	Comments and Supporting Documentation
1	To avoid impacts to the Wallum Sedge Frog, the person taking the action must retain all existing habitat within the project area.	Yes.	Compliant.	The frog habitat zones have been retained and protected during the Year 4 reporting period. The frog habitat zones have been regularly monitored and maintained during the Year 4 period.
2	Revoked as a part of the variation dated 8 November 2022.	Not applicable.	Not applicable.	Not applicable.
3	Revoked as a part of the variation dated 8 November 2022.	Not applicable.	Not applicable.	Not applicable.
4	Revoked as a part of the variation dated 8 November 2022.	Not applicable.	Not applicable.	Not applicable.
5	The person taking the action must implement the Rehabilitation Plan for the life of this approval. In accordance with the Appendix A of the Rehabilitation Plan, the person taking the action must, by 30 June 2028, establish at least: a. 0.64 ha of Wallum Sedge Frog breeding habitat in the habitat creation areas, and b. 4.77 ha of Wallum Sedge Frog movement/foraging habitat in the habitat creation areas. The habitat creation areas must be maintained and monitored to achieve the performance criteria specified in section 5.4 of the Rehabilitation Plan for, at least, the life of the approval.	Not applicable.	Not applicable.	The 4.77 ha of Wallum Sedge Frog movement/foraging habitat in the habitat creation areas have been subject to restoration/rehabilitation works and is regularly maintained and monitored as per the Rehabilitation Plan, as well as other management plans approved as a part of the Harvest Estate development approval (Development Consent 10.2017.201.1). The created frog breeding habitat areas were constructed over a four-week period in September-October 2023 within rehabilitation zones 2 and 3. Transplantation of native species occurred which covers approximately 20% of the area. The ponds were then infilled with native wetland species in the following months during ideal conditions and have since become well-established. The monitoring efforts have noted that the frog ponds are establishing nicely and have regularly met the performance criteria. Although Wallum Sedge Frogs are yet to be recorded within these newly created frog pongs, other native species of amphibians are regularly recorded, including the Wallum Froglet (Vulnerable under the NSW *Biodiversity Conservation Act 2016*). Once the plantings establish further and become denser, these created frog ponds will become ideal habitat for the Wallum Sedge Frog. As summary of the Year 4 monitoring efforts are provided within **Appendices B** and **C**.
6	Within 20 business days after the commencement of the action, the person taking the action must advise the Department in writing of the actual date of commencement.	Yes.	Compliant.	The Project commenced on 29 August 2022. The Department was notified regarding the commencement date and confirmed commencement by way of return correspondence dated 16 September 2022.
7	The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.	Yes.	Compliant.	The approval holder records and holds all relevant information for this EPBC Act approval which can be made available upon request.
8	The approval holder must prepare a compliance report for each 12-month period following the date of commencement of the action, or otherwise in accordance with an annual date that has been agreed to in writing by the Minister. The approval holder must: a. publish each compliance report on the website within 60 business days following the relevant 12-month period, b. notify the department by email that a compliance report has been published on the website and provide the weblink for the compliance report within 5 business days of publication, and	Yes.	Compliant.	The Project commenced on 29 August 2022. As such, the compliance report must be prepared and published by 22 November 2026. This report has been prepared to satisfy this condition and will be published on Planit Consulting's website (https://planitconsulting.com.au/projects/harvest-estate/) prior to 22 November 2026.

Condition No.	Approval Condition	Condition Currently Triggered?	Compliance?	Comments and Supporting Documentation
	c. keep all compliance reports publicly available on the website until this approval expires.			
9	Unless otherwise agreed to in writing by the Minister, the person taking the action must publish all plans and agreements referred to in these conditions of approval on their website. Each plan and agreement must be published on the website within 1 month of being approved by the Minister or being submitted under condition 11. Plans and agreements must remain published for the life of the approval. Plans and agreements must continue to be published unless otherwise agreed to by the Minister in writing.	Yes.	Compliant.	The EPBC Act Approval and approved Rehabilitation Plan is published on Planit Consulting's website (https://planitconsulting.com.au/projects/harvest-estate/). The Plans and agreements will remain published for the life of the approval unless otherwise agreed to by the Minister in writing.
10	If, at any time after five (5) years from the date of this approval, the person taking the action has not substantially commenced the action, then the person taking the action must not substantially commence the action without the written agreement of the Minister.	Not applicable.	Not applicable	The Project substantially commenced on 29 August 2022 which is within 5 years of the date of the approval.
11	The person taking the action may choose to revise the Rehabilitation Plan approved by the Minister without submitting it for approval under section 143A of the EPBC Act, if the taking of the action in accordance with the revised plan would not be likely to have a new or increased impact. If the person taking the action makes this choice they must: a. Notify the Department in writing that the approved plan has been revised and provide the Department with an electronic copy of the revised plan. b. Implement the revised plan from the date that the plan is submitted to the Department. For the life of this approval, maintain a record of the reasons the approval holder considers that taking the action in accordance with the revised plan would not be likely to have a new or increased impact.	Not applicable.	Not applicable	The Rehabilitation Plan has not been revised since the variation approval by the Department on 8 November 2022.
12	The person taking the action may revoke their choice under condition 11 at any time by notice to the Department. If the person taking the action revokes the choice to implement a revised plan without approval under section 143A of the EPBC Act, the plan approved by the Minister must be implemented.	Not applicable	Not applicable	Not applicable.
13	If the Minister gives a notice to the person taking the action that the Minister is satisfied that the taking of the action in accordance with the revised plan would be likely to have a new or increased impact, then: a. Condition 11 does not apply, or ceases to apply, in relation to the revised plan; and b. The person taking the action must implement the plan approved by the Minister. To avoid any doubt, this condition does not affect any operation of conditions 11 and 12 in the period before the day the notice is given.	Not applicable	Not applicable	No notice was provided by the Minister under this condition during the reporting period.

Condition No.	Approval Condition	Condition Currently Triggered?	Compliance?	Comments and Supporting Documentation
	At the time of giving the notice the Minister may also notify that for a specified period of time that condition 11 does not apply for one or more specified plans required under the approval.			
14	Conditions 11, 12, and 13 are not intended to limit the operation of section 143A of the EPBC Act which allows the person taking the action to submit a revised plan to the Minister for approval.	Not applicable	Not applicable.	The Rehabilitation Plan has not been revised since the variation approval by the Department on 8 November 2022.
15	The approval holder must notify the Department electronically, within 2 business days of becoming aware of any incident and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a plan. The approval holder must specify in the notification: a. any condition or commitment made in a plan which has been or may have been breached. b. a short description of the incident and/or potential non-compliance and/or actual non-compliance. c. the location (including co-ordinates), date, and time of the incident and/or potential non-compliance and/or actual non-compliance. Note: If the exact information cannot be provided, the approval holder must provide the best information available.	Yes.	Compliant.	There have been no notifiable incidents or non-compliance during the reporting period. The Project is therefore complaint with this condition.
16	The approval holder must provide to the Department in writing, within 12 business days of becoming aware of any incident and/or potential non-compliance and/or actual non-compliance, the details of that incident and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a plan. The approval holder must specify: a. any corrective action or investigation which the approval holder has already taken b. the potential impacts of the incident and/or non-compliance and/or non-compliance c. the method and timing of any corrective action that will be undertaken by the approval holder.	Yes.	Compliant.	There have been no notifiable incidents or non-compliance during the reporting period. The Project is therefore complaint with this condition. A portion of Rehabilitation Zones 4 and 6 (refer to Figure 5 of Appendix C) has been cleared/impacted since the previous annual report. Around December 2025 / January 2026, diggers came through from the neighbouring property in the north through zones 6 and 4 to access water lines situated along the Union Drain. Areas were cleared for the access track and some road base brought in to gain access across the creek. Part way along this cleared zone a 4wd track has been made through zone 4 plantings This clearing also affected sections of zone 6. It is understood that Byron Shire Council were working on a burst repair on the water main crossing the east section of the Harvest Estate property. It is noted that the landowner/approval holder was not aware of the works. It is noted that while these works have impacted areas retained and rehabilitated under an approved Vegetation Management Plan subject to Council conditions, these works have not impacted any Existing Habitat or Habitat Creation Areas subject to the Rehabilitation Plan, as defined within the EPBC Act approval (EPBC 2018/8166). The clearing occurred approximately 450m east of the protected frog habitat zones and habitat creation areas for acid frogs. As such, it is considered highly unlikely that these works affected these habitat areas subject to the Rehabilitation Plan. As a precautionary measure, notification of the incident was written and provided to DCCEEW via email dated 18th March 2026 (refer to **Appendix E**).

3.1 Correcting Non-compliance

No incidences of non-compliance have been identified in Year 4.

4 New Environmental Risks

No major new environmental risks were identified in Year 4.

As noted within the Year 3 Compliance Report, a small section of wall between the Rehabilitation Zone 2 frog pond and the Council owned stormwater swale collapsed (~1.5m section) sometime in July/August 2025. The section of wall was repaired which involved sandbags wrapped in geofabric material to close the gap. Subsequent inspections confirmed that the fix was successful for a period of time.

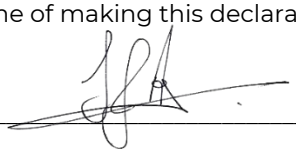
In recent routine frog monitoring efforts of Rehabilitation Zone 2 (specifically AF-05), elevated pH levels and the occurrence of Mosquito Fish and filamentous algae were recorded. Stormwater infiltration from the adjoining swale is likely occurring to cause this. Further reinforcement of the previously damaged bank will be required to ensure the created frog habitat achieves the performance criteria set out in the approved Acid Frog Management Plan (AWC, 2021) prepared for the estate.

Recommendations set out within the Acid Frog Monitoring Annual Report 2026 (**Appendix B**) is to be implemented as soon as possible in order to meet the performance criteria.

No other new environmental risks have been identified in Year 4.

5 Declaration of Accuracy

In making this declaration, I am aware that sections 490 and 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) make it an offence in certain circumstances to knowingly provide false or misleading information or documents. The offence is punishable on conviction by imprisonment or a fine, or both. I declare that all the information and documentation supporting this compliance report is true and correct in every particular. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed 

Full Name (please print) Terrence Agnew

Position (please print) Director

Organisation (please print including ABN/CAN if applicable) Villa World Byron Pty Ltd

Date 02 / 11 / 2026

Appendix A – EPBC Act Approval (EPBC 2018/8166)

VARIATION OF CONDITIONS ATTACHED TO APPROVAL

Harvest Estate, West Byron Urban Release Area, Ewingsdale Road, Byron Bay, NSW (EPBC 2018/8166)

This decision to vary conditions of approval is made under section 143 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

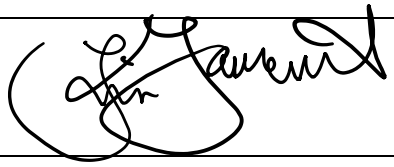
Approved action

Approval holder	**Name:** Villa World Byron Pty Ltd **ACN:** 612 247 195
Approved action	To develop the Harvest Estate staged master planned residential community within the West Byron Urban Release Area in Byron Bay, NSW [See EPBC Act referral 2018/8166]

Variation

Variation of conditions attached to approval	The variation is: Delete conditions 1, 5 and 8 attached to the approval and substitute with the conditions 1, 5 and 8 specified in the table below Delete definitions of **Existing habitat**, **Minister**, **Rehabilitation Plan** and **Wallum Sedge Frog** attached to the approval and substitute with the definitions of **Existing habitat**, **Minister**, **Rehabilitation Plan** and **Wallum Sedge Frog** specified in the table below Delete Attachment B attached to the approval and substitute with the Attachment B specified in the table below Add new conditions 15 and 16 specified in the table below Add new definitions of **Business day**, **Clear, cleared or clearing**, **Compliance reports**, **EPBC Act**, **Habitat creation areas**, **Impact**, **Incident**, **Project area**, **Plan** and **Website** specified in the table below Revoke conditions 2, 3 and 4 Revoke the definitions of **BioBanking Statement** and **Statement of assessment of reasonable equivalence of biodiversity credits** Revoke Attachment A and Attachment C.
Date of effect	This variation has effect on the date this instrument is signed

Person authorised to make decision

Name and position	Kim Farrant Branch Head Environment Assessments (Vic, Tas) and Post Approvals Branch
Signature	
Date of decision	8 November 2022

Date of decision	Conditions attached to approval
As varied on the date this instrument was signed	1. To avoid impacts to the **Wallum Sedge Frog**, the person taking the action must retain all **existing habitat** within the **project area**.
As varied on the date this instrument was signed	2. **REVOKED**
As varied on the date this instrument was signed	3. **REVOKED**
As varied on the date this instrument was signed	4. **REVOKED**
As varied on the date this instrument was signed	5. The person taking the action must implement the **Rehabilitation Plan** for the life of this approval. In accordance with the Appendix A of the **Rehabilitation Plan**, the person taking the action must, by 30 June 2028, establish at least: a. 0.64 ha of **Wallum Sedge Frog** breeding habitat in the **habitat creation areas**, and b. 4.77 ha of **Wallum Sedge Frog** movement/foraging habitat in the **habitat creation areas**. The **habitat creation areas** must be maintained and monitored to achieve the performance criteria specified in section 5.4 of the **Rehabilitation Plan** for, at least, the life of the approval.
Original dated 6/7/2018	6. Within 20 business days after the **commencement** of the action, the person taking the action must advise the **Department** in writing of the actual date of **commencement**.
Original dated 6/7/2018	7. The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, and make them available upon request to the **Department**. Such records may be subject to audit by the **Department** or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.
Annual compliance reporting	
As varied on the date this instrument was signed	8. The approval holder must prepare a **compliance report** for each 12-month period following the date of **commencement** of the action, or otherwise in accordance with an annual date that has been agreed to in writing by the **Minister**. The approval holder must:

Date of decision	Conditions attached to approval
	a. publish each **compliance report** on the **website** within 60 **business days** following the relevant 12-month period, b. notify the **department** by email that a **compliance report** has been published on the **website** and provide the weblink for the **compliance report** within 5 **business days** of publication, and c. keep all **compliance reports** publicly available on the **website** until this approval expires. **Note**: **Compliance reports** may be published on the **Department**'s website.
Original dated 6/7/2018	9. Unless otherwise agreed to in writing by the **Minister**, the person taking the action must publish all plans and agreements referred to in these conditions of approval on their website. Each plan and agreement must be published on the website within 1 month of being approved by the **Minister** or being submitted under condition 11. Plans and agreements must remain published for the life of the approval. Plans and agreements must continue to be published unless otherwise agreed to by the **Minister** in writing.
Original dated 6/7/2018	10. If, at any time after five (5) years from the date of this approval, the person taking the action has not substantially commenced the action, then the person taking the action must not substantially commence the action without the written agreement of the **Minister**.
Revision of plan	
Original dated 6/7/2018	11. The person taking the action may choose to revise the **Rehabilitation Plan** approved by the **Minister** without submitting it for approval under section 143A of the EPBC Act, if the taking of the action in accordance with the revised plan would not be likely to have a **new or increased impact**. If the person taking the action makes this choice they must: a. Notify the **Department** in writing that the approved plan has been revised and provide the **Department** with an electronic copy of the revised plan. b. Implement the revised plan from the date that the plan is submitted to the **Department**. For the life of this approval, maintain a record of the reasons the approval holder considers that taking the action in accordance with the revised plan would not be likely to have a **new or increased impact**.
Original dated 6/7/2018	12. The person taking the action may revoke their choice under condition 11 at any time by notice to the **Department**. If the person taking the action revokes the choice to implement a revised plan without approval under

Date of decision	Conditions attached to approval
	section 143A of the **EPBC Act**, the plan approved by the **Minister** must be implemented.
Original dated 6/7/2018	13. If the **Minister** gives a notice to the person taking the action that the **Minister** is satisfied that the taking of the action in accordance with the revised plan would be likely to have a **new or increased impact**, then: a. Condition 11 does not apply, or ceases to apply, in relation to the revised plan; and b. The person taking the action must implement the plan approved by the **Minister**. To avoid any doubt, this condition does not affect any operation of conditions 11 and 12 in the period before the day the notice is given. At the time of giving the notice the **Minister** may also notify that for a specified period of time that condition 11 does not apply for one or more specified plans required under the approval.
Original dated 6/7/2018	14. Conditions 11, 12, and 13 are not intended to limit the operation of section 143A of the **EPBC Act** which allows the person taking the action to submit a revised plan to the **Minister** for approval.
Reporting non-compliance	
As varied on the date this instrument was signed	15. The approval holder must notify the **Department** electronically, within 2 **business days** of becoming aware of any **incident** and/or potential non-compliance and/or actual non-compliance with the conditions or commitments made in a **plan**. The approval holder must specify in the notification: a. any condition or commitment made in a **plan** which has been or may have been breached. b. a short description of the **incident** and/or potential non-compliance and/or actual non-compliance. c. the location (including co-ordinates), date, and time of the **incident** and/or potential non-compliance and/or actual non-compliance. **Note**: If the exact information cannot be provided, the approval holder must provide the best information available.
As varied on the date this instrument was signed	16. The approval holder must provide to the **Department** in writing, within 12 **business days** of becoming aware of any **incident** and/or potential non-compliance and/or actual non-compliance, the details of that **incident** and/or potential non-compliance and/or actual non-compliance with the

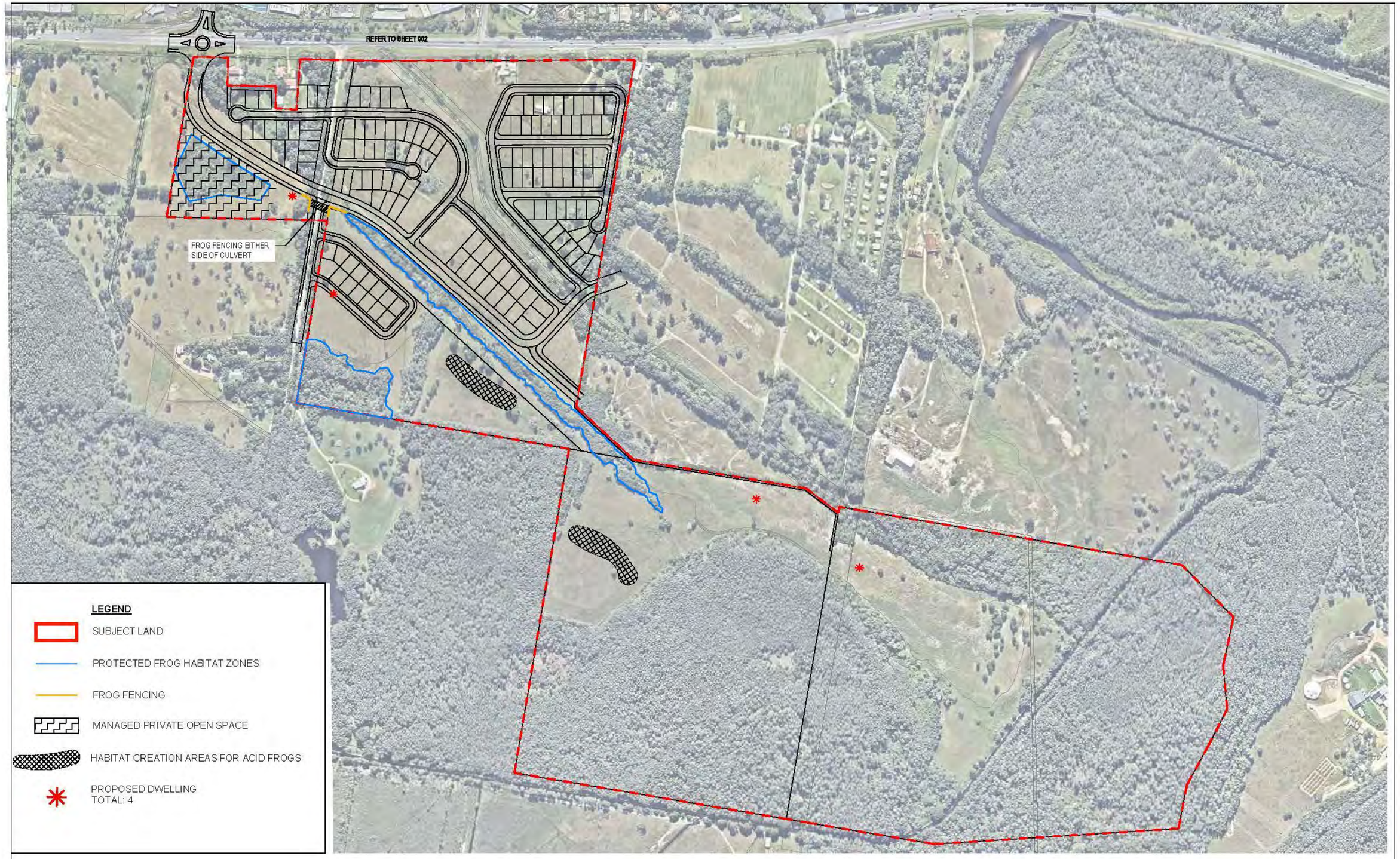
Date of decision	Conditions attached to approval
	conditions or commitments made in a **plan**. The approval holder must specify: a. any corrective action or investigation which the approval holder has already taken b. the potential impacts of the **incident** and/or non-compliance and/or non-compliance c. the method and timing of any corrective action that will be undertaken by the approval holder.

Date of decision	Definitions attached to approval
As varied on the date this instrument was signed	**BioBanking Statement** - **REVOKED**
As varied on the date this instrument was signed	**Business day** means a day that is not a Saturday, a Sunday or a public holiday in the state of New South Wales.
As varied on the date this instrument was signed	**Clear**, **cleared** or **clearing** means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting, or burning of vegetation.
Original dated 6/7/2018	**Commencement** means any physical works associated with the action, excluding fences and signage.
As varied on the date this instrument was signed	**Compliance reports** means written reports: i. providing accurate and complete details of compliance, **incidents**, and non-compliance with the conditions and the **plans** ii. consistent with the **Department**'s *Annual Compliance Report Guidelines* (2014) iii. include a **shapefile** of any clearance of any **protected matters**, or their habitat, undertaken within the relevant 12-month period iv. annexing a schedule of all **plans** prepared and in existence in relation to the conditions during the relevant 12-month period.
Original dated 6/7/2018	**Department** means the Australian Government Department or any other agency administering the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) from time to time.
As varied on the date this instrument was signed	**EPBC Act** means the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).
As varied on the date this instrument was signed	**Existing habitat** means the areas represented in Attachment B by the zones enclosed within the blue solid lines labelled 'PROTECTED FROG HABITAT ZONES'.
As varied on the date this instrument was signed	**Habitat creation areas** means the areas represented in Attachment B by the black hatched shaded polygons labelled 'HABITAT CREATION AREAS FOR ACID FROGS'.

Date of decision	Definitions attached to approval
As varied on the date this instrument was signed	**Impact** means to cause any measurable direct or indirect disturbance or harmful change as a result of any activity associated with the action.
As varied on the date this instrument was signed	**Incident** means any event which has the potential to, or does, impact on **Wallum Sedge Frog**.
As varied on the date this instrument was signed	**Minister** means the Minister administering the **EPBC Act** and includes a delegate of the Minister.
Original dated 6/7/2018	**New or increased impact** means a new or increased impact on any matter protected by the controlling provisions for the action, when compared to the plan that has been approved by the Minister.
As varied on the date this instrument was signed	**Project area** means the location of the action, represented by the area enclosed within the red lines labelled 'SUBJECT LAND' in Attachment B.
As varied on the date this instrument was signed	**Plan** means any action management plan or strategy that the approval holder is required by these conditions to implement.
As varied on the date this instrument was signed	**Rehabilitation Plan** means the document: Australian Wetlands Consultancy (2021) *Acid Frog Management Plan, 'Harvest Estate ', West Byron Urban Release Area, Ewingsdale Road, Byron Bay*, prepared for Tower Holdings Pty Ltd, dated 18 October 2021, or a version revised in accordance with this approval.
As varied on the date this instrument was signed	**Statement of assessment of reasonable equivalence of biodiversity credits** - **REVOKED**
As varied on the date this instrument was signed	**Wallum Sedge Frog** means the **EPBC Act** listed threatened species *Litoria olongburensis*, also known as the Olongburra Frog.
As varied on the date this instrument was signed	**Website** means a set of related web pages located under a single domain name attributed to the approval holder and available to the public.

Date of decision	Annexures
As varied on the date this instrument was signed	**Annexure A – REVOKED**
As varied on the date this instrument was signed	**Annexure B – Habitat Creation Areas for Acid Frogs**
As varied on the date this instrument was signed	**Annexure C – REVOKED**

Attachment B: Habitat Creation Areas for Acid Frogs



SHEET 02

PROJECT: THREATENED SPECIES MANAGEMENT PLAN

DRAWING TITLE: HABITAT CREATION AREAS FOR ACID FROGS

01	LANDSCAPE MANAGEMENT PLAN FOR INFORMATION	13.05.20	AH	AH	JA
02	LANDSCAPE OPW FOR INFORMATION	18.08.20	AH	AH	LT

JOB NO: J5644 DWG NO: J5644_02

SCALE: 1:2500 @ A1

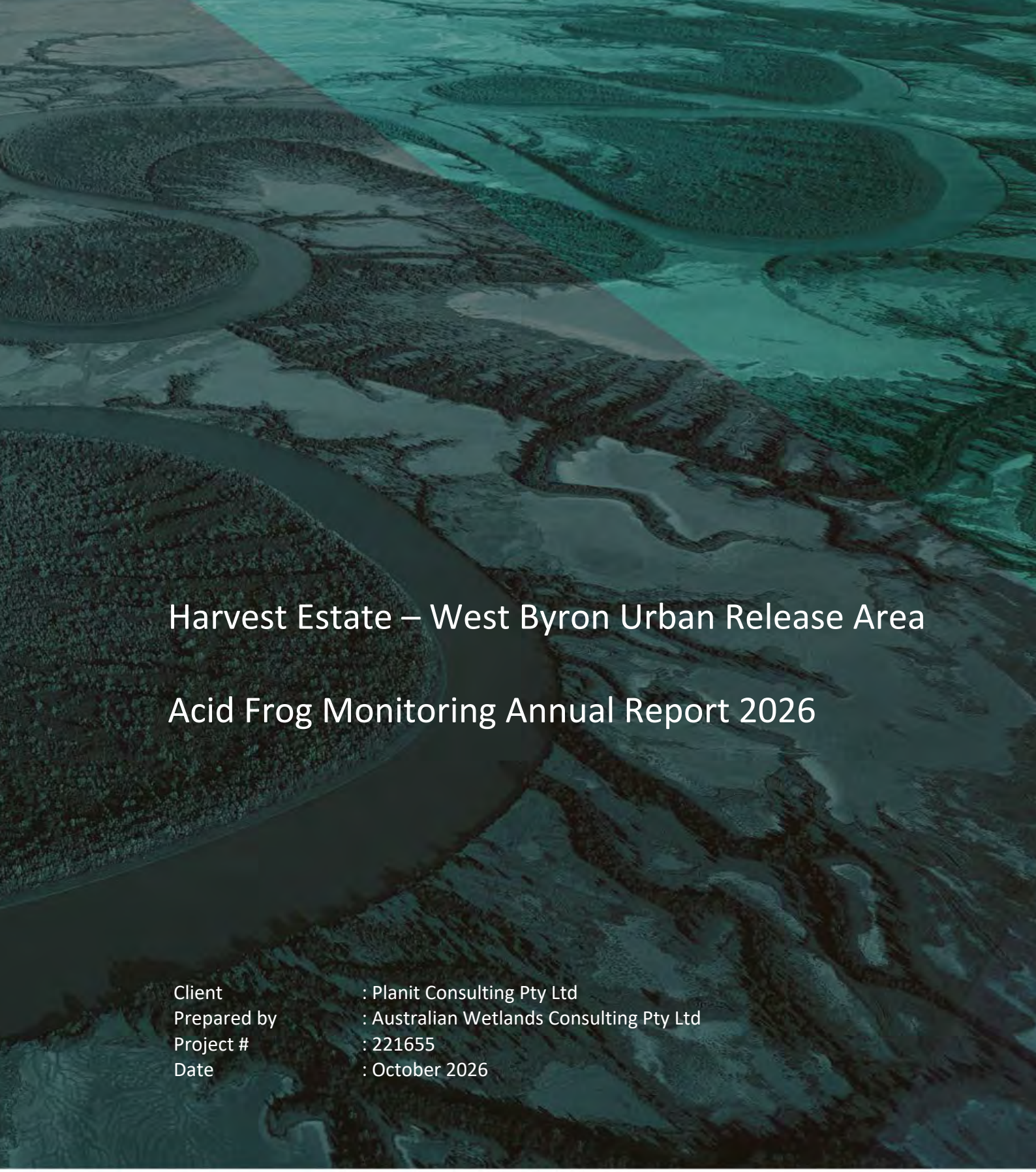
CLIENT: Tower Holdings Pty Ltd

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Appendix B – Acid Frog Monitoring Annual Report 2026



Harvest Estate – West Byron Urban Release Area

Acid Frog Monitoring Annual Report 2026

Client	: Planit Consulting Pty Ltd
Prepared by	: Australian Wetlands Consulting Pty Ltd
Project #	: 221655
Date	: October 2026

Leading environmental solutions...

AWC



Harvest Estate – West Byron Urban Release Area

Acid Frog Monitoring Annual Report 2026

Project control

Project name: Harvest Estate – West Byron Urban Release Area
Acid Frog Monitoring Annual Report 2026

Job number: 221655
Client: Planit Consulting Pty Ltd
Contact: giuseppef@planitconsulting.com.au

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1 Introduction and Background

This annual report has been prepared to summarise monitoring results from the Acid Frog monitoring undertaken at the Harvest Estate, West Byron Urban Release Area following the monitoring requirements set out in the Acid Frog Management Plan (AFMP) (AWC, 2021) ('the Plan')

Acid Frogs are known for their tolerance (and preference) for mildly acidic ground and water conditions, and are found along Australia's eastern seaboard. Whilst their geographic range has been largely unchanged since pre-European times, their area of occupancy has been significantly reduced due to land clearing, development and other anthropogenic impacts (Meyer *et al.*, 2006). The scope of the Plan is to address State and Commonwealth listed threatened Acid Frogs that are known to occur on the proposed development site, specifically:

Wallum Sedge Frog (*Drymomantis olongburensis*)

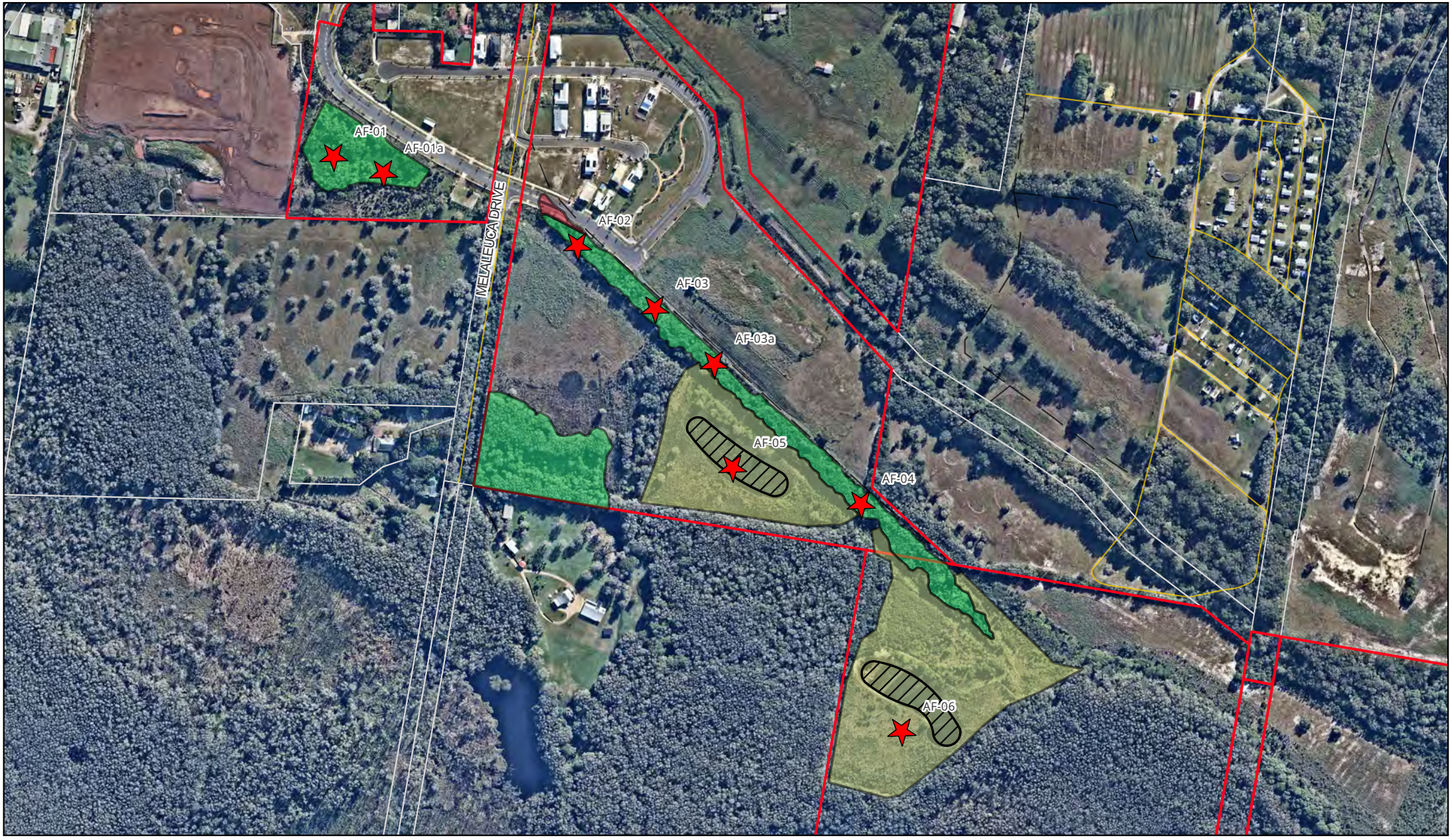
- Listed as Vulnerable under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- Listed as Vulnerable under the NSW *Biodiversity Conservation Act 2016* (BC Act)

Wallum Froglet (*Crinia tinnula*)

- Listed as Vulnerable under the BC Act

1.1 Subject Site

Harvest Estate, part of the West Byron Urban Release Area, is located along Ewingsdale Rd, approximately 3km west of Byron Bay, on the traditional lands of the Arakwal people. The site is approximately 27.8ha in area and comprises a large residential subdivision on formerly rural lands. Eight permanent monitoring locations have been established at the site to indicate Acid Frog presence and population abundance (Figure 1.1).



AWC

Legend

- Lot
- Road
- Site boundary

Acid frog habitat

- Created Breeding Habitat
- Created Foraging Habitat
- Impacted
- Retained

Acid frog monitoring sites

Figure 1.1
Site overview

Scale:
1:5,250 @ A4
GDA2020 MGA56

N

0 50 100 150 m

Project:
221655_Harvest Acid Frog Monitoring

Data sources
Spatial data: © NSW Govt 2026
Imagery: © NearMap 2026

Drawn: AA
Checked: IH

Date: 21/10/2026
Job ref: 221655

1.2 Acid Frog Habitat

Both the Wallum Froglet and Wallum Sedge Frog are found in wallum habitats, which are characterised by acidic conditions and ephemeral wetlands. The Wallum Sedge Frog is likely to be found in undisturbed wallum heath or sedgeland environments and is not generally known to inhabit disturbed environments. Their lifecycle is adapted to the acidic pH (2.5 –5.5) of these wetlands. In undisturbed wallum habitat, Wallum Froglets occur sympatric with other 'acid' frog species including the Wallum Sedge Frog and Wallum Rocket Frog (*Litoria freycineti*). In disturbed habitats, Wallum Froglets may be found in low-lying areas with sparse grass and sedge cover, including fire breaks and access tracks through wallum heath.

For breeding habitat, the Wallum Sedge Frog shows a clear preference for ephemeral (seasonally inundated) perched swamps with emergent upright sedges, such as *Machaerina* spp. and *Schoenus* spp. These sedges are preferred by adult frogs for perching.

Like other Acid Frog species, the Wallum Froglet is highly acid tolerant, breeding in waters as acidic as pH 3.2 (Hines and Meyer 2011; Meyer 2004). The Wallum Froglet is known to breed in shallow surface water along cleared tracks as well as borrow pits and drainage ditches (Hines and Meyer 2011). Non-breeding habitat usage is poorly documented in the Wallum Froglet; however, adult animals have been recorded some distance (many tens of meters) from breeding habitat in nearby *Banksia* woodland and/or open eucalypt forest (Meyer *et al*. 2006). Non-breeding animals have also been located amidst damp leaf litter and down crayfish burrows (Hines and Meyer 2011).

1.2.1 Management On-site

To ensure the long-term viability of the population of Wallum Sedge Frog and Wallum Froglet, the core elements of the Plan's proposed mitigation strategy are:

- Retain existing habitat:
    - A total of 3.0ha of habitat occurs at the site, with 2.95ha being retained following development. Habitat lost (0.05ha) is located adjacent to a primary road
- Create new habitat:
    - An additional 4.77ha of movement/foraging habitat will be created through vegetation management
    - An additional 0.64ha of breeding habitat (ponds) will be created
- Provide a fauna underpass connecting the two mapped habitat polygons, including the installation of sections of frog fencing to facilitate effective movement
- Direct stormwater discharge away from habitat areas, resulting in no direct stormwater entering the habitat during or after construction
- Implement management measures including sediment and erosion control, water quality monitoring, weed management, frog fencing and frog-friendly fauna crossings
- Ensure that the habitat being recreated, rehabilitated and conserved is protected and managed in perpetuity
- The design and implementation of rehabilitation and habitat re-creation will be informed by additional soil and groundwater assessment
- Maintaining and/or creating an ephemeral acidic wetland will be key to negating the threats of Cane Toad (*Rhinella marina*) and Mosquito Fish (*Gambusia holbrooki*) on existing Acid Frog populations at the site:
    - Ephemeral wetlands will disrupt the potential populations of the Mosquito Fish
    - Acidic waters (pH <5.2) are unfavourable to Cane Toad and Cane Toad breeding
- Ensure there are no artificial waterbodies created incidentally during development (defined as ponds/wetlands that have permanent water) to minimise the habitat suitable to Cane Toad

and/or Mosquito Fish

- All water-sensitive urban design (WSUD) devices are ephemeral, meaning they will dry out between rainfall events and thus not be habitable by either Cane Toads or Mosquito Fish
- Prevention of regular external catchment surface flows from entering frog habitat will ensure external transport of Cane Toad tadpoles and/or Mosquito Fish will not occur

2 Methodology

The plan aims to provide mitigation strategies to ensure the conservation of these frog species, and provide key monitoring and management actions to ensure the species' long-term survival across the subject site. Section 5 of the plan sets out monitoring requirements for the two species of Acid Frogs. Key performance criteria have been developed to determine whether mitigation strategies are successful. These are outlined in Section 4.7 of this report, with recommendations following in Section 5.

2.1 Past Monitoring

Monitoring of acid frogs was initiated in April 2021. 16 previous monitoring events have occurred to date, with the latest event (October 2026) being the 17th iteration (refer Table 2.1)

Table 2.1 Acid frog monitoring events

Monitoring Event	Date (Night 1)	Date (Night 2)	Stage
April 2021	26/04/2021	28/04/2021	Pre-construction
August 2021	23/08/2021	24/08/2021	Pre-construction
December 2021	06/12/2022	08/12/2022	Pre-construction
August 2022	08/08/2022	10/08/2022	Pre-construction
December 2022	05/12/2022	08/12/2022	Construction
March 2023	21/03/2023	22/03/2023	Construction
July 2023	26/07/2023	27/07/2023	Construction
October 2023	27/10/2023	31/10/2023	Construction
March 2024	05/03/2024	06/03/2024	Construction
July 2024	09/07/2024	10/07/2024	Construction
October 2024	09/10/2024	10/10/2024	Construction
April 2025	02/04/2025	03/04/2025	Construction
July 2025	08/07/2025	09/07/2025	Construction
October 2025	08/10/2025	09/10/2025	Construction
March 2026	10/03/2026	11/03/2026	Construction
July 2026	08/07/2026	09/07/2026	Construction
October 2026	19/10/2026	20/10/2026	Construction

2.2 Monitoring Requirements and Schedule

The monitoring requirements for the 'construction' phase of development are outlined in Table 2.2.

Table 2.2 Monitoring requirements for 'construction' phase.

Phase	Monitoring requirements	Responsibility
Construction	• 'No-go' areas maintained, and frog habitat protected • Water quality • Weed control • Implementation and maintenance of sediment and erosion controls	Site foreman/Ecologist and/or appointed contractors

Monitoring is required three times annually (i.e. every four months) for a period of 20 years, and is to be completed at the ecologist's discretion within the four month 'window', with an aim to optimise species detection based on climatic conditions (e.g. temperature/rainfall), as outlined in the Plan.

Monitoring of retained habitat areas was conducted three times during 2026 (April, July and October). Each monitoring event occurred over two nights for a total of 2.5 person-hours and comprised of:

- Nocturnal survey and counting of Wallum Sedge Frog and Wallum Froglet individuals at six locations across the two retained habitat areas:
- Call playback to elicit a response
- Water quality sampling if standing water was present
- Recording of incidental amphibian and Mosquito Fish at the site
- Recording weather conditions (temperature, relative humidity, rainfall)

2.3 Constructed Habitat Monitoring

Additional monitoring of constructed habitat was incorporated into the monitoring schedule in July 2024, and has been conducted annually to track the establishment of aquatic vegetation. 12 permanent 5x5m plots were surveyed, one within each cell of the two constructed frog ponds. The following data was recorded for each plot:

- Percentage cover of all species (including weeds)
- A photo at a permanent photo point
- Any other relevant observations

2.4 Survey and Assessment Limitations

The survey for the target species was conducted over specific, limited time periods and, therefore, does not represent a full census of the populations at the site. However, the survey method was considered appropriate for detecting the presence and estimating the abundance of the two target species, as well as identifying any threatening processes outlined in the Plan.

3 Results

3.1 Climate

3.1.1 Survey Conditions

Weather conditions during each survey, recorded at the Cape Byron weather station (#058216) (BoM 2026), are outlined in Table 3.1.

Table 3.1 Weather conditions during quarterly surveys

Survey Date	Rainfall	Rainfall 1 week prior	Relative Humidity	Temperature
10/03/2026	11.6 mm	26 mm	77% (3pm)	24.7 °C (3pm)
11/03/2026	0.4 mm		60% (3pm)	27.2°C (3pm)
08/07/2026	N/A	26 mm	69% (3pm)	17.3 °C (3pm)
09/07/2026	12.2 mm		98% (3pm)	14.3 °C (3pm)
19/10/2026	3.8 mm	10.4 mm	78% (7pm)	17.9 °C (7pm)
20/10/2026	39.4 mm		91% (7pm)	19.3 °C (7pm)

3.1.2 Rainfall Data

Rainfall in early 2026 (January to March) was largely below monthly averages, with ponding absent across all monitoring sites except constructed ponds. Rainfall returned to near-average in April, with anomalous events in May producing higher than average rainfall. Rainfall was variable in the following months (refer Figure 3.1), with July producing higher than average rainfall, evident in ponding of all monitoring sites except AF-02. Surveys in October were conducted in wet conditions with a total of 43.2 mm falling across both survey dates. Rainfall data for the remaining months is unavailable, however mean values show an increased trend in rainfall in late spring and early summer.

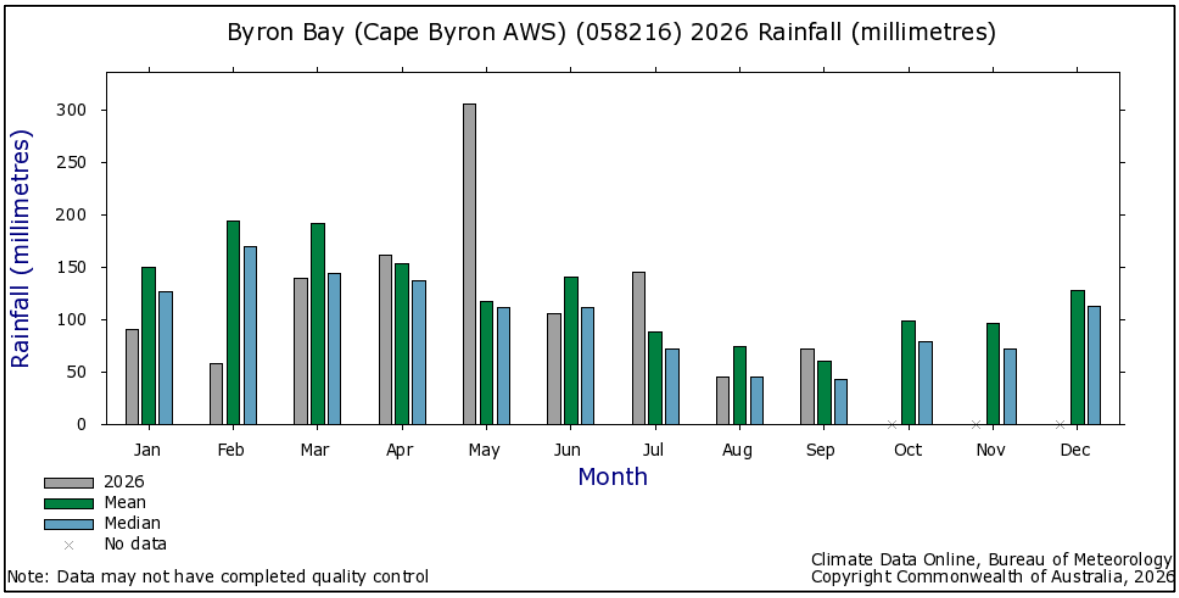


Figure 3.1 Monthly rainfall data (BoM 2026)

3.2 Water Quality

Water quality monitoring was undertaken in March, July and October 2026, where sufficient standing water was available. During March, measurements were limited to constructed ponds AF-05 and AF-06, as retained habitat sites (AF-01 – AF-04) were dry. By July, water was present at most retained sites, with AF-02 remaining dry. Consequently, water quality data were incomplete across the monitoring year.

pH across retained habitat sites was generally within the preferred range of 3–5 for acid frog habitat. July measurements ranged from 3.0 to 4.5, while October measurements ranged from 2.94 to 3.85. At constructed pond AF-05, pH remained above the preferred range throughout the year, measuring 5.5–6.22 in March, 6.4 in July and 5.05–6.21 in October. In comparison, AF-06 recorded pH values of 4.1–4.68 in March, 5.0 in July and 4.45–5.04 in October. Elevated pH at AF-05 coincided with observations of ongoing stormwater inflow from the adjacent drain. pH distribution is displayed in Figure 3.2.

October dissolved oxygen measurements varied from 12.2% saturation at AF-03 to 153.3% at AF-06. Electrical conductivity and turbidity also varied between sites. Overall, pH was generally within the preferred range across retained habitat sites, while AF-05 consistently recorded elevated values. Results from the 2026 monitoring events are shown in Tables 3.2 to 3.7. Refer to Appendix A for the March and July monitoring reports.

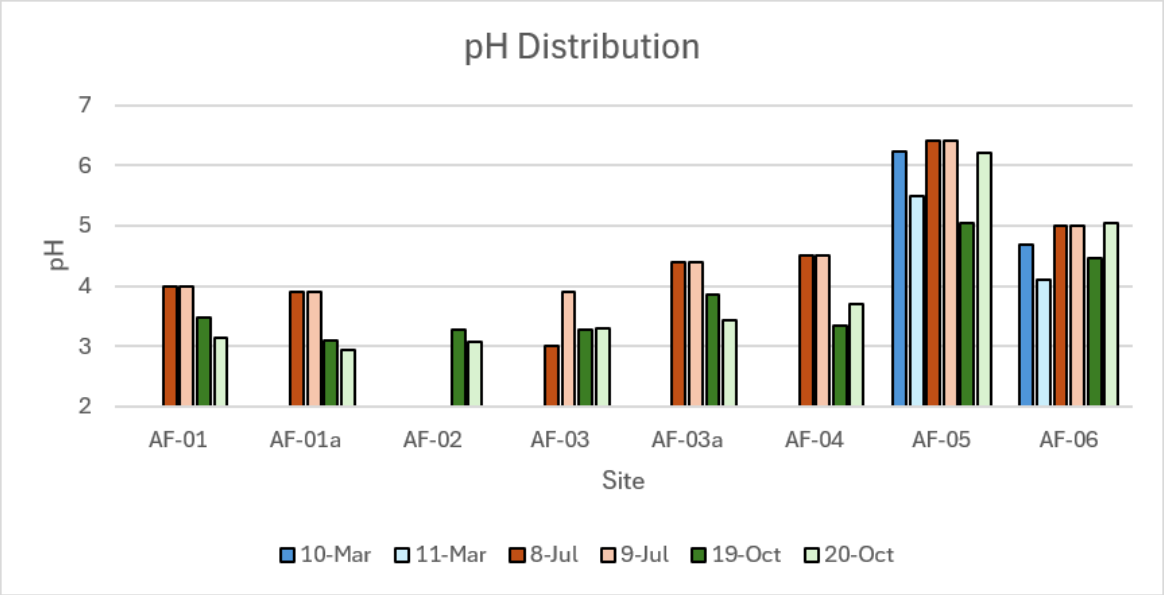


Figure 3.2 pH values at monitoring sites throughout 2026.

Table 3.2 March 2026 monitoring results – Night 1

Date: 10/03/2026												
Site	**Wallum Sedge Frog**	**Number**	**Wallum Froglet**	**Number**	**pH**	**DO (%)**	**Temp (˚C)**	**EC (mS/cm)**	**Turbidity**	**Depth (cm)**	**Incidental species**	**Comments**
AF-01	N	-	Y	1	-	-	-	-	-	-	1	2x *C. signifera*
AF-01a	N	-	Y	3	-	-	-	-	-	-	1	2x *C. signifera*
AF-02	N	-	N	-	-	-	-	-	-	-	1	1x *C. signifera*
AF-03	N	-	N	-	-	-	-	-	-	-	1	1x *C. signifera*
AF-03a	N	-	N	-	-	-	-	-	-	-	1	1x *C. signifera*
AF-04	N	-	N	-	-	-	-	-	-	-	2	1x *C. signifera*, 1x *Rhinella marina*
AF-05	N	-	N	-	6.22	9.01	26.32	238	31.48	5	1	3x *C. signifera*
AF-06	N	-	Y	4	4.68	8.81	27.35	242.3	4.68	5	3	5x *C. signifera*. 1x *Litoria peroni*, 1x *R. marina*

Table 3.3 March 2026 monitoring results – Night 2

Date: 11/03/2026												
Site	**Wallum Sedge Frog**	**Number**	**Wallum Froglet**	**Number**	**pH**	**DO (%)**	**Temp (˚C)**	**EC (mS/cm)**	**Turbidity**	**Depth (cm)**	**Incidental species**	**Comments**
AF-01	N	-	Y	2	-	-	-	-	-	-	2	4x *C. signifera*. 1x *L. nasuta.* Dry
AF-01a	N	-	Y	1	-	-	-	-	-	-	2	5x *C. signifera*, 3x *L. nasuta.* Dry
AF-02	N	-	N	-	-	-	-	-	-	-	2	4x *C. signifera,* 2x *R. marina.* Dry. Cane toad on access track
AF-03	N	-	N	-	-	-	-	-	-	-	2	2x *C. signifera, 3*x *R. marina.* Dry. Cane toad on access track
AF-03a	N	-	N	-	-	-	-	-	-	-	2	3x *C. signifera,* 1x *R. marina.* Dry. Cane toad on access track
AF-04	N	-	N	-	-	-	-	-	-	-	-	No incidental species. Dry
AF-05	N	-	Y	2	5.5	-	25.7	150	-	5	2	2x *C. signifera,* 2x *R. marina.* Slight yellowing of sedge in habitat pond
AF-06	N	-	Y	2	4.1	-	26.1	210	-	5	1	8x *C. signifera.* Slight yellowing of sedge in habitat pond

Table 3.4 July 2026 monitoring results – Night 1

Date: 08/07/2026												
Site	Wallum Sedge Frog	Number	Wallum Froglet	Number	pH	DO (%)	Temp (°C)	EC (mS/cm)	Turbidity	Depth (cm)	Incidental species	Comments
AF-01	N	-	Y	2	4.0	-	15.3	270	-	3	1	3x *C. signifera*
AF-01a	N	-	N	-	3.9	-	15.4	260	-	4	-	Inundated, no incidental species
AF-02	N	-	N	-	-	-	-	-	-	-	-	No water in drain
AF-03	N	-	N	-	3	-	15.9	300	-	6	1	1x *C. signifera*. Drain partially inundated with pools
AF-03a	N	-	Y	1	4.4	-	15.7	150	-	5	1	2x *C. signifera*. Inundated drain
AF-04	N	-	N	-	4.5	-	16.3	140	-	3	1	1x *C. signifera*. Drain with some water pooling
AF-05	N	-	Y	2	6.4	-	16.1	300	-	15	1	3x *C. signifera*. 1x *Limnodynastes peronii.* Water from constructed drain flowing readily into constructed pond
AF-06	N	-	Y	3	5.0	-	17.2	170	-	5	2	4x *C. signifera*. 1x *C. parinsignifera*. Algae on bank and edges of water 1m in.

Table 3.5 July 2026 monitoring results – Night 2

Date: 09/07/2026												
Site	Wallum Sedge Frog	Number	Wallum Froglet	Number	pH	DO (%)	Temp (˚C)	EC (mS/cm)	Turbidity	Depth (cm)	Incidental species	Comments
AF-01	N	-	Y	1	4.0	-	15.1	230	-	5	1	2x *C. signifera*
AF-01a	N	-	Y	1	3.9	-	15.2	240	-	5	1	2x *C. signifera*
AF-02	N	-	N	-	-	-	-	-	-	-	-	No standing water observed
AF-03	N	-	N	-	3.9	-	15.6	270	-	8	1	1x *C. signifera*
AF-03a	N	-	N	-	4.4	-	15.5	140	-	7	1	2x *C. signifera*
AF-04	N	-	N	-	4.5	-	15.7	120	-	5	1	1x *C. signifera*
AF-05	N	-	Y	3	6.4	-	15.6	280	-	10	1	5x *C. signifera*
AF-06	N	-	Y	4	5.0	16.4	26.1	150	-	8	1	6x *C. signifera*. Reeds on outer/shallow edge are green. Browning of mature reeds within deeper area of pond. Colonisation of juvenile Paperbark approximately 1.5 m into pond.

Table 3.6 October 2026 monitoring results – Night 1

Date: 19/10/2026												
Site	Wallum Sedge Frog	Number	Wallum Froglet	Number	pH	DO (%)	Temp (˚C)	EC (mS/cm)	Turbidity	Depth (cm)	Incidental species	Comments
AF-01	N	-	N	-	3.47	45.5	18.1	26.5	4.62	10	-	No incidental species, minimal ponding observed due to dense vegetation
AF-01a	N	-	Y	3	3.1	39.3	18.35	242.3	2.94	10	-	No incidental species, strong *C. tinnula* response to call playback
AF-02	N	-	N	-	3.28	21.3	17.86	364.9	16.94	5	-	No frogs calling, minimal ponding observed
AF-03	N	-	N	-	3.28	14.3	18.7	364.2	3.13	15	-	No frogs calling
AF-03a	N	-	N	-	3.85	23.3	18.11	147.1	2.46	10	1	3x *L. nasuta* on track
AF-04	N	-	N	-	3.35	83	18.09	0.1	2.14	10	3	1x *C. signifera*, 1x *L. peroni*, 1x *R. marina* on track
AF-05	N	-	Y	1	5.05	70.5	19.85	222.3	1.58	300	-	No incidental species, many *C. tinnula* calling from nearby habitat to the west of the pond
AF-06	N	-	Y	1	4.45	95.5	20.26	189.3	5.29	300	1	1x *C. signifera*

Table 3.7 October 2026 monitoring results – Night 2

Date: 20/10/2026												
Site	Wallum Sedge Frog	Number	Wallum Froglet	Number	pH	DO (%)	Temp (˚C)	EC (mS/cm)	Turbidity	Depth (cm)	Incidental species	Comments
AF-01	N	-	Y	3	3.15	93.1	19.02	0.2	1.03	10	-	No incidental species
AF-01a	N	-	Y	3	2.94	35.9	20.01	275.9	6.22	10	-	No incidental species
AF-02	N	-	N	-	3.08	18.1	18.90	391.8	14.36	5	-	No frogs in immediate drain
AF-03	N	-	N	-	3.29	12.2	18.98	375.5	2.12	15	-	No frogs in immediate drain
AF-03a	N	-	N	-	3.44	15	19.36	291.0	1.68	15	-	No frogs in immediate drain. Can hear more frogs opposite track in drain
AF-04	N	-	N	-	3.69	-	19.06	154.7	1.93	10	-	No frogs in immediate drain
AF-05	N	-	N	-	6.21	60.9	20.99	256.8	4.69	300	-	No frogs calling in immediate pond. Can hear in distance. Stormwater still infiltrating likely causing high pH
AF-06	N	-	Y	1	5.04	153.3	22.8	193.5	2.86	300	1	4x *C. signifera*

3.3 Acid frog abundance and distribution

A total of 41 Wallum Froglets were recorded across the three 2026 monitoring events. Records were relatively consistent between March (15), July (14) and October (12), representing 37%, 34% and 29% of total observations, respectively (refer Figure 3.3). The Wallum Froglet was recorded at 5/8 monitoring sites, including AF-01, AF-01a, AF-03, AF-05 and AF-06. No Wallum Froglets recorded at AF-02, AF-03a or AF-04 throughout the year.

No Wallum Sedge Frogs were recorded during the 2026 surveys.

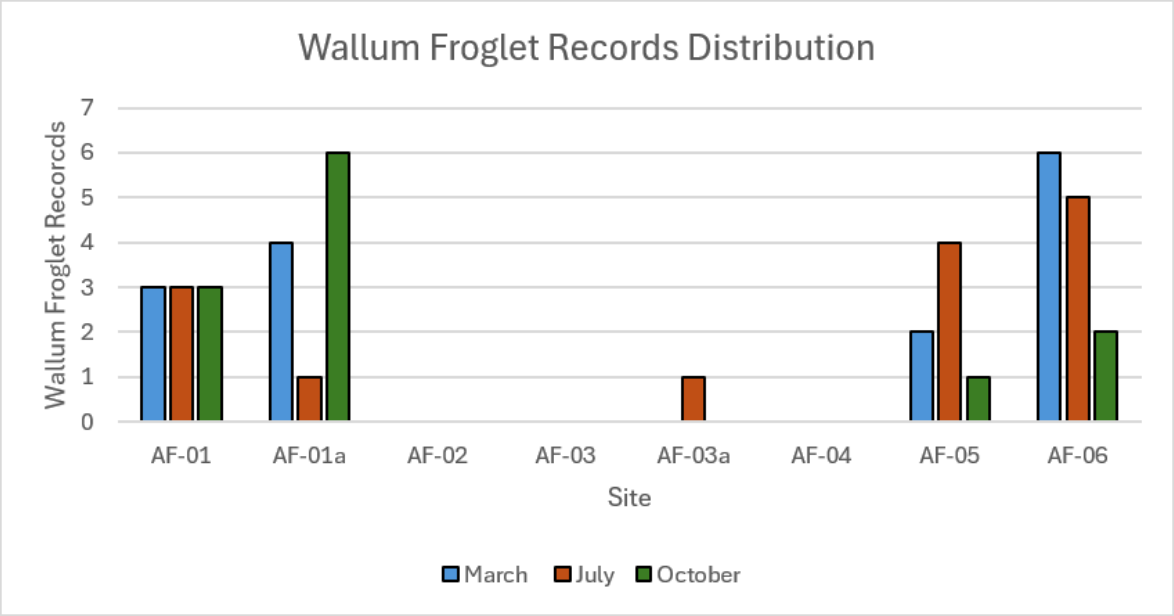


Figure 3.3 Distribution of Wallum Froglet records by site and monitoring period.

3.4 Habitat Suitability

Results from the frog pond vegetation assessment in July 2026 show continued development of sedge and rush cover with a relationship between cell depth and cover evident. Vegetation was observed to be in good condition at AF-05, and moderate condition at AF-06. At site AF-06, browning of mature sedges was observed in deeper areas of the habitat pond, as was algae on bank and edges of water, and colonisation of juvenile paperbarks in cells. Vegetation cover was observed to have increased, as plantings from December 2023 continue to establish. Most cells are showing steady growth, however, shallow cells may require intervention through planting of species suited to ephemeral inundation, to assist with the goal of increased cover. Detailed habitat plot results are provided in the July monitoring report (Appendix A).

3.4.1 Weeds

Habitat monitoring in July 2026 found no exotic weeds within the constructed pond survey plots. Broad-leaved Paperbarks, which can act as a transformer species in wetland environments, occurred in 90% of cells as seedlings and juvenile plants. One Camphor Laurel (*Cinnamomum camphora*) was observed growing out of a mature Paperbark at the southern edge of Cell 4, Site AF-06.

Whisky Grass (*Andropogon virginicus*) was observed on the northern batters of both ponds where vegetation cover is sparse-moderate. Visual assessment of retained habitat identified Whisky Grass invading consistently along the northern edge. Other weed species, such as Tobacco Bush (*Solanum mauritianum*) and Broad-leaved Paspalum (*Paspalum mandiocanum*) were observed growing along the edges of habitat and along the tracks either side of habitat strip (AF-02 to AF-04).

By October, it was observed that targeted woody weed removal had reduced the abundance of Broad-leaved Paperbark seedlings throughout the constructed ponds (AF-05 and AF-06) and successfully removed the Camphor Laurel at AF-06. Treatment of Whisky Grass and other weeds was also evident across the site.

3.5 Invasive species

Two invasive species were detected during the monitoring events. In July, Mosquito Fish (*Gambusia holbrooki*) were identified at the constructed ponds AF-05 and AF-06. In March, Cane Toads (*Rhinella marina*) were detected at all sites except AF-01 and AF-01a. In October, one Cane Toad was detected on the track adjacent to AF-04.

4 Discussion

4.1 Climate Context

This year's monitoring results do not indicate a clear relationship between rainfall and acid frog abundance at the monitoring sites. Other factors, including habitat conditions, water quality, temperature and breeding cycles, may have a greater influence on frog activity and detection rates than rainfall alone.

Weather conditions may, however, help explain the absence of Wallum Sedge Frog detections during this year's surveys. Lowe et al. (2016) identified the following conditions as suitable for targeted surveys of the species:

- Air temperature equal to or greater than 21.7°C;
- Substantial rainfall within the preceding week and/or month; and
- Surveys conducted between October and March, extending to May in seasons with late summer rainfall.

Although surveys were conducted in October and substantial rainfall had occurred within the preceding 24 hours, air temperatures were below the recommended threshold, probably reducing the likelihood of detecting the species. A lack of detections in cooler conditions is consistent with baseline surveys which also failed to detect Wallum Sedge Frog outside of warm summer periods with high rainfall.

Scheduled summer surveys when air temperatures meet the recommended threshold and rainfall conditions are suitable, should improve the likelihood of detecting Wallum Sedge Frogs.

4.2 Water Quality and Hydrology

Hydrological conditions throughout the monitoring year varied in response to seasonal rainfall, with periods of reduced ponding in drier months (March) and increased inundation following higher rainfall (July and October).

Despite these variations, pH remained within the preferred acidic range of 3–5 for across most monitoring locations. Sites AF-01 and AF-01a generally maintained suitable pH, although AF-01a recorded a slightly lower pH value of 2.94 in October. Sites AF-02 to AF-04 also maintained acidic conditions, with pH generally ranging from 3.0 to 4.5 where measurements were available.

In contrast, at the constructed ponds, AF-05 consistently recorded elevated pH throughout the year, ranging from 5.05 to 6.4 and exceeding the key performance criteria. The previously repaired bank at AF-05 remains damaged and continues to allow stormwater from the adjacent drain to infiltrate the pond (refer Figure 4.1). This is a likely contributing factor to the elevated pH. AF-06 also recorded pH values around or marginally above the preferred upper limit during October.

Visual observations during the March 2026 monitoring recorded no standing water at sites AF-01, AF-01a, or in the central swale drain (sites AF-02-AF-04), as discussed in Table 4.1. It is recommended that groundwater monitoring data is analysed to determine whether there has been a change in hydrology.



Figure 4.1. Ruptured bank at AF-05

4.3 Frog Records

4.3.1 Wallum Sedge Frog

No Wallum Sedge Frogs were recorded this year during the quarterly surveys. The last record for WSF was in April 2025 at AF-01a. Changes in habitat structure at AF-01 and AF-01a, including the invasion of Swamp Water Fern (*Telmatoblechnum indicum*), reduction in sedge cover, and increasing encroachment of woody vegetation may affect these sites' ongoing suitability for the Wallum Sedge Frog.

As mentioned in Section 4.1, it is recommended that additional surveys be conducted between October and March to better understand the Wallum Sedge Frog population dynamics and habitat usage during the transitional periods of their breeding season. Conclusions regarding population trends remain uncertain due to the limited number of surveys conducted under optimal conditions, compounded by low baseline abundance. Additional surveys during periods of expected peak activity are recommended to determine whether the lack of detections reflects seasonal variation or a potential decline in population.

4.3.2 Wallum Froglet

Wallum Froglets were consistently recorded at AF-01 and AF-01a, and at AF-05 and AF-06 throughout the monitoring year. These sites contain larger bodies of water, with AF-01 and AF-01a located within a freshwater wetland (albeit now dominated by Swamp Water Fern), and AF-05 and AF-06 comprising constructed ponds.

Within the central swale drain (AF-02 to AF-04), detections were limited to a single individual at AF-03 in July, with no Wallum Froglets recorded at AF-02, AF-03a or AF-04 throughout the year.

Overall, Wallum Froglet detections were concentrated at sites with larger water bodies, while detections within the central swale drain were limited. This pattern may reflect differences in water availability and habitat structure, particularly given the lack of standing water observed within the drain during drier months.

4.4 Habitat Suitability

Vegetation at the central swale drain sites (AF-02 to AF-04) appeared in good condition with minimal weed presence. Sites AF-01 and AF-01a continue to be dominated by Swamp Water Fern (*Telmatoblechnum indicum*), reflecting the ongoing change in vegetation composition within the freshwater wetland. Monitoring of retained habitat areas is recommended to evaluate the extent of weed cover and woody native vegetation cover within these sites.

Ongoing weed management is required across all sites to prevent the establishment of transformer weed species and maintain the suitability of habitat for acid frogs.

4.5 Invasive Fauna Species

The presence of Mosquito Fish at the constructed ponds may be due to flood-mediated dispersal, particularly at AF-05, where the rupture in the bank provides a direct pathway for Mosquito Fish to enter the pond via the adjacent stormwater drain.

4.6 Key Performance Criteria

Key Performance Criteria for Acid Frog management at Harvest Estate are detailed along with their achievement status in Table 4.1.

Table 4.1 Key performance criteria

Item	Performance Criteria	Achieved?	Comments
Retained habitat areas			
Water quality	Water chemistry is between a pH range of 3-5	Partially	pH at AF-01a was slightly below the preferred range of 3–5 in October (2.94). All other retained habitat sites were within the preferred range during the monitoring periods when measurements were available.
Wetland hydroperiod	Ponding of water for a minimum period of 6 weeks under >60th percentile rainfall conditions between January and May	No	It was observed that standing water was absent from sites AF-01, AF-01a, and the central swale drain (sites AF-02-AF-04) during the March surveys.
Vegetation	Native vegetation continues to persist and is not degraded or disturbed.	Yes	Native vegetation generally appeared to be in good condition across retained habitat areas. However, AF-01 and AF-01a remain dominated by Swamp Water Fern, with reduced sedge cover potentially affecting habitat suitability for acid frogs.
Weed control	Environmental weeds comprise < 10% total within each habitat area	Yes	Retained habitat sites appeared in good condition with minimal weed presence.
Wallum Froglet / Wallum Sedge Frog populations	Existing/known habitat areas continue to be utilised by Wallum Froglet / Wallum Sedge Frog.	Partially	Wallum Froglets were recorded at 3/6 retained habitat sites, including AF-01, AF-01a and AF-03. No Wallum Sedge Frogs were recorded during 2026 surveys.
Cane Toads	No observed breeding/tadpoles within created or retained	Partially	Cane Toads were observed throughout the site in March and in one location in October. No

Item	Performance Criteria	Achieved?	Comments
	habitat.		tadpoles were recorded.
Mosquito Fish	No observed Mosquito Fish within created or retained habitat	Yes	No Mosquito Fish were detected in retained habitat sites
Constructed habitat areas			
Water quality	As above	Partially	pH at AF-05 remained above the desirable range of 3-5 throughout the year ranging from 5.05 to 6.4. At AF-06, pH was within the preferred range throughout the year, with a slight exceedance during the October survey (pH 5.05).
Wetland hydroperiod	Ponding of water for a minimum period of 6 weeks under >60th percentile rainfall conditions between January and May	Yes	Standing water was present in both constructed habitat ponds throughout the monitoring year.
Weed control	Environmental weeds comprise < 10% total within each identified frog compensation area per precinct.	Partially	In July, Broad-leaved Paperbark seedlings were recorded in approximately 90% of pond cells. Targeted woody vegetation removal undertaken before the October survey reduced seedling abundance throughout the constructed ponds.
Habitat establishment	Survival rate of greater than 90% of all plantings and translocated material	Partially	Most cells showed continued vegetation growth. However, shallower cells may require supplementary planting with species suited to ephemeral inundation to increase vegetation cover.
Wallum Froglet / Wallum Sedge Frog populations	Utilisation by Wallum Froglets / Wallum Sedge Frog and persistence at constructed habitat areas over time.	Partially	Wallum Froglets were recorded at both constructed habitat sites (AF-05 and AF-06). No Wallum Sedge Frogs were recorded during 2026 surveys.
Cane toads	No observed breeding/tadpoles within created or retained habitat.	Partially	Cane Toads were observed throughout the site in March and in one location in October. No tadpoles were recorded.
Mosquito Fish	No observed Mosquito Fish within created or retained habitat	No	Mosquito Fish were detected at both constructed habitat ponds (AF-05 and AF-06) during the July survey.

5 Conclusion & Recommendations

Monitoring throughout 2026 has concluded that several KPIs listed in Table 4.1 have been not met or have been only partially achieved. The following recommendations may assist in improving KPI progress in the following year:

- Repair the bank at AF-05 to prevent stormwater from the adjacent drain from entering the pond
- Following repair of the bank rupture, it is recommended that some of the water be removed from AF-05. The following options are suggested for consideration:
    - Installation of a permanent outlet pipe that can be easily managed during site visits
    - Confirm levy levels are correct and adjust if required
    - Investigate blockages along adjacent drain/conveyance swale
- Infill planting of sedges and rushes at constructed ponds to increase cover and maintain the vegetation structure required for breeding habitat, which may help limit Paperbark establishment
- Conduct a summer survey during ideal conditions to give greater confidence that Wallum Sedge Frogs are utilising the habitat
- Conduct habitat monitoring at retained habitat sites to evaluate the extent of weed cover and woody native vegetation cover
- Review groundwater data to determine if the hydroperiod within retained habitat remains within appropriate ranges
- Discuss the proposed action within the approved AFMP (Revision E) (AWC 2021), to create an underpass linking remnant habitats and determine its relevance and feasibility
- Wallum Froglet surveys are to continue as normal to determine the species' presence
- Annual habitat monitoring of the constructed basins is to continue as normal with the next vegetation assessment due in July 2027

6 References

AWC (2021) *Harvest Estate – West Byron Urban Release Area: Acid Frog Management Plan.* Australian Wetlands Consulting Pty Ltd (AWC). (18/10/2021). Document no. 1-201243_01e

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Appendix A – March and July 2026 Monitoring Reports

Technical Memorandum

To:	Giuseppe Fallara (Planit)
From:	Ana Assis
Date:	25 June 2026
Pg/Attach.:	7
Job ref:	221655_AF Monitoring – March 2026

Monitoring of Acid Frogs in Retained and Created Habitats at Harvest Estate

As outlined in the *Harvest Estate West Byron Urban Release Area Acid Frog Management Plan 2021* ('the Plan') monitoring of retained acid frog habitat is required on a four monthly basis to monitor the continued utilisation of the site by the two acid frog species previously recorded:

- Wallum Sedge Frog (*Litoria olongburensis*)
  - Listed as Vulnerable under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
  - Listed as Vulnerable under the NSW *Biodiversity Conservation Act 2016* (BC Act)
- Wallum Froglet (*Crinia tinnula*)
  - Listed as Vulnerable under the BC Act

Monitoring Methodology

Under the approved Plan, monitoring of retained habitat areas is to be conducted three times annually (i.e. every four months) and include:

- Nocturnal survey and counting of acid frogs within retained habitat areas
- Call playback to elicit response and visual searches
- Water quality sampling (if standing water present)
- Records of incidental species recorded at the site
- Recording of weather conditions (temperature, relative humidity, rainfall)

Increased effort was employed to survey the species present at created habitats, with particular interest in determining the presence/absence of the target species. A bioacoustics recorder *(Titley Scientific Chorusmeter)* was deployed at site between AF-04 and AF-06, recording two nights and mornings. The recordings were analysed for frog calls using the call analysis software *Kaleidoscope.*

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Monitoring of acid frogs was initiated in April 2021 and will continue three times a year. 15 previous monitoring events have occurred to date, with the current event being the fifteenth iteration (refer Table 1). Locations of the monitoring sites are shown in Figure 1.

Table 1 Acid frog monitoring events

Monitoring Event	Date (Night 1)	Date (Night 2)	Stage
April 2021	26/04/2021	28/04/2021	Pre-construction
August 2021	23/08/2021	24/08/2021	Pre-construction
December 2021	06/12/2022	08/12/2022	Pre-construction
August 2022	08/08/2022	10/08/2022	Pre-construction
December 2022	05/12/2022	08/12/2022	Construction
March 2023	21/03/2023	22/03/2023	Construction
July 2023	26/07/2023	27/07/2023	Construction
October 2023	27/10/2023	31/10/2023	Construction
March 2024	05/03/2024	06/03/2024	Construction
July 2024	09/07/2024	10/07/2024	Construction
October 2024	09/10/2024	10/10/2024	Construction
April 2025	02/04/2025	03/04/2025	Construction
July 2025	08/07/2025	09/07/2025	Construction
October 2025	08/10/2025	09/10/2025	Construction
March 2026	10/03/2026	11/03/2026	Construction

Results

Site visit

In the week prior to the monitoring, 26 mm of rain was recorded at the Byron Bay (Cape Byron) weather station. During the two survey nights, a further 12 mm was recorded. Humidity was recorded at 73% and 73%, and temperature was recorded at 24°C and 23.6°C for the two respective evenings (data from BOM - Byron Bay Cape Byron).

Standing water was present at both created habitat ponds, with maximum depths of 50 mm (monitoring site AF-05) and 50 mm (monitoring site AF-06). Measurements and surveys were based at the deepest of the cells in the two created habitat basins. Standing water was only present at two of the monitoring sites (AF-05 and AF-06). pH was in the ideal range (3.5-5) at AF-06 for the first night of monitoring, and in the ideal range at AF-05 and AF-06 in the second night of monitoring. pH exceeded the ideal range at AF-05 in the first night of monitoring, reaching a pH value of 6.22. Vegetation in the created habitats was observed to be in good condition, with slight yellowing of sedges observed in habitat pond. Vegetation cover within created habitat plantings has increased as expected as plantings from

December 2023 continue to establish (refer Plates 1 and 2). There were no significant areas of weeds observed at the sites.

No Wallum Sedge Frogs were observed or detected aurally in response to call playback. A total of 15 Wallum Froglets were detected aurally in response to call playback across sites AF-01, AF-01a, AF-05, and AF-06.

Four non-target frog species were identified during the survey;

- Common Eastern Froglet (*Crinia signifera*)
- Striped rocket frog (*Litoria nasuta*)
- Peron's Tree Frog (*Litoria peroni*)
- Cane Toads (*Rhinella marina*)

Common Eastern Froglets were particularly abundant, with 25 records throughout two surveys. Cane Toads were detected at all sites except AF-01 and AF-01a



Plate 1 Vegetation at created habitat (site AF-06) – March 2024



Plate 2 Vegetation at created habitat (site AF-06) – March 2025

Discussion

The survey found evidence of target species' (Wallum Froglet) using the created habitats directly. Wallum Froglets are known for their high dispersal especially during warm, wet conditions. Suitability and use of the created habitat has likely improved as plantings establish and increased cover.

The AFMP outlines several KPIs, including *Existing/known habitat areas continue to be utilised by Wallum Froglet / Wallum Sedge Frog.* This KPI has been partially met due to the presence of Wallum Froglet in known habitat areas, but no Wallum Sedge Frog records. The lack of Wallum Sedge Frog detections at the site may have been due to surveys occurring late in the breeding season (March) and a lack of accumulative monthly rain, key indicators of likely activity.

The results from this survey indicate the Wallum Froglet remains stable at retained habitat site AF-01 and AF-01a, and at habitat pond sites AF-05 and AF-06, where it has been consistently detected in previous surveys.

Since the Wallum Froglet was initially confirmed in several locations of the retained habitat strip in 2009, subsequent surveys (2022-2026) have recorded low numbers at sites AF-02-AF-04. Changes in occupancy at these sites may be due to natural seasonal variation in climatic conditions, as has anecdotally occurred at similar sites, and/or changes to the hydrology of the site. Results from 2023 suggested that changes in hydrology may be preventing water from pooling at the sites in the retained habitat strip (AF-02-AF-04). Results from the most recent survey indicate that conditions were dry and water was only present at habitat pond sites AF-05 and AF-06. It is acknowledged that all works and hydrology arrangements have been constructed with the approved plans, including AFMP.

Created habitats were assessed to be predominantly inundated and had a more complete cover of rushes and sedges than previous years. The most consistently detected species in the created ponds were the Common Eastern Froglet and the Cane Toad. At present, the created ponds are not meeting the KPI- *Utilisation by Wallum Froglets / Wallum Sedge Frog and persistence at constructed habitat areas over time.* Further monitoring will be required to assess the utilisation of acid frogs at constructed habitat areas.

Filamentous algae and macrophytes continue to be present in created pond AF-05. These conditions are not optimal for Wallum Froglets and Wallum Sedge Frogs. If conditions persist, then it would be recommended that management actions to reduce algae cover be taken and investigate the source of the eutrophication in this wetland, so as steps can be taken to minimise nutrient loading and algae growth on the long term.

Recommendations

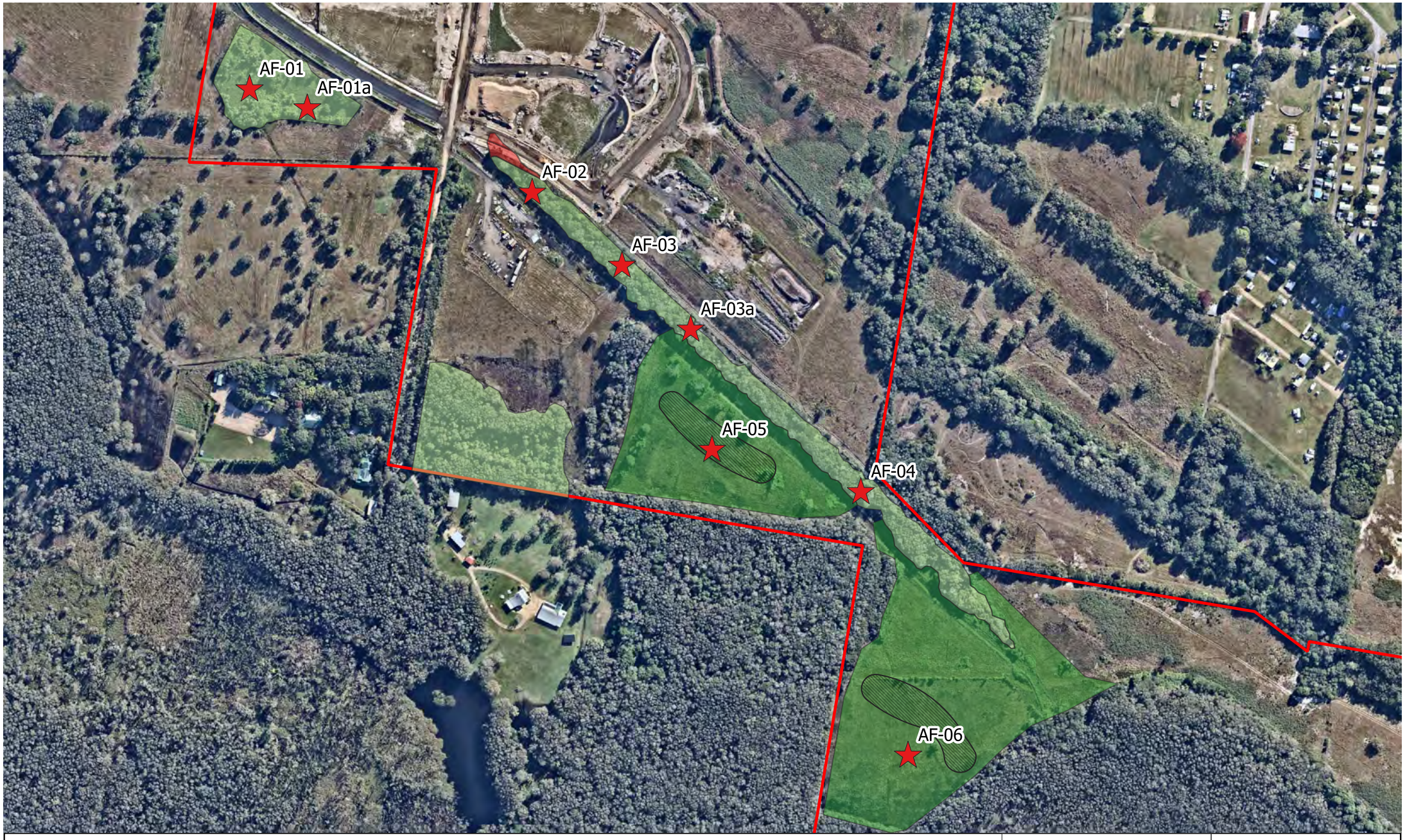
Continued monitoring should be undertaken to determine the persistence of the Wallum Sedge Frog at all sites. As per the findings of Lowe *et al.* (2016), targeted surveys should be conducted under the following conditions:

- Air temperature is equal to or greater than 21.7°C
- Substantial rainfall within one week and/or one month
- Between October and March (or until May in seasons with late summer rainfall)

To rule out the possible impact of changes in groundwater patterns on the retained habitat, it is recommended that the groundwater data that has been collected under the obligations of *Harvest Estate Groundwater Management Plan* (2020) be assessed at analysed.

It is recommended that habitat assessments occur to assess the state of habitat at both retained and created habitats. These assessments will consider weed extent and alignment of existing woody native vegetation with known habitat requirements for acid frogs (i.e. vegetation structure and species composition). These should be conducted during the day. During such visits, any observations (seen or heard) of the target species would be noted. The results from these assessments, in combination with ongoing frog surveys, can inform recommendations for the improvement of habitat at the site and facilitate achievement of KPIs.

Additionally, as presence of filamentous algae continues to persist in constructed habitat, it is recommended that management actions to reduce algae cover be taken and the source of the eutrophication in this wetland be investigated.



AWC

Legend

AF Habitat
- Impacted
- Retained
- Created
- Retained 2
- Created foraging hab
- Created breeding hab
- AF monitoring locations

Figure:
Acid Frog Monitoring Locations

Project:
Harvest Estate

Scale:
1:4,380 @ A4
GDA2020 MGA56

N

0 50 100 150 m

Data sources
Spatial data: © NSW Government 2024
Imagery: © Google 2024

Date: 07/08/2024
Drawn:
Checked: XX

Table 2 Night one survey results

Date: 02/04/2025												
Site	Wallum Sedge Frog Y/N	Number	Wallum Froglet Y/N	Number	PH	DO %	Temp (C)	EC	Turbidity	Depth (cm)	Incidental species	Comments
AF-01	N	-	Y	1	-	-	-	-	-	-	1	*2x Crinia signifera*
AF-01a	N	-	Y	3	-	-	-	-	-	-	1	2x *C. signifera*
AF-02	N	-	N	-	-	-	-	-	-	-	1	1x *C. signifera*
AF-03	N	-	N	-	-	-	-	-	-	-	1	1x *C. signifera*
AF-03a	N	-	N	-	-	-	-	-	-	-	1	1x *C. signifera*
AF-04	N	-	N	-	-	-	-	-	-	-	2	1x *C. signifera, 1x Rhinella marina*
AF-05	N	-	N	-	6.22	9.01	26.32	238	31.48	5	1	3x *C. signifera*
AF-06	N	-	Y	4	4.68	8.81	27.35	242.3	4.68	5	3	5x *C. signifera. 1x Litoria peroni, 1x Rhinella marina*

Table 3 Night two survey results

Date: 03/04/2025												
Site	Wallum Sedge Frog Y/N	Number	Wallum Froglet Y/N	Number	PH	DO %	Temp (C)	EC	Turbidity	Depth (cm)	Incidental species	Comments
AF-01	N	-	Y	2	-	-	-	-	-	-	2	4x *C. signifera, 1x L. nasuta; Dry*
AF-01a	N	-	Y	1	-	-	-	-	-	-	2	5x *C. signifera, 2x L. nasuta; Dry*
AF-02	N	-	N	-	-	-	-	-	-	-	2	4x *C. signifera, 2x R. marina; Dry* *Cane toads on access track*
AF-03	N	-	N	-	-	-	-	-	-	-	2	4x *C. signifera, 2x R. marina; Dry* *Cane toads on access track*
AF-03a	N	-	N	-	-	-	-	-	-	-	2	2x *C. signifera, 3x R. marina; Dry* *Cane toads on access track*
AF-04	N	-	N	-	-	-	-	-	-	-	-	*Dry*
AF-05	N	-	Y	2	5.5	-	25.7	150	-	5	2	2x *C. signifera, 2x R. marina* *Slight yellowing of sedge in habitat pond*
AF-06	N	-	Y	2	4.1	-	26.1	210	-	5	1	8x *C. signifera* *Slight yellowing of sedge in habitat pond*

Technical Memorandum

To:	Giuseppe Fallara (Planit)
From:	Ana Assis
Date:	3 September 2026
Pg/Attach.:	19/-
Job ref:	221655_AF Monitoring – July 2026

Monitoring of Acid Frogs in Retained and Created Habitats at Harvest Estate

Water | Ecology | Management

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As outlined in the approved *Harvest Estate West Byron Urban Release Area Acid Frog Management Plan* (AWC 2021) ('the Plan') monitoring of retained acid frog habitat is required on a four monthly basis to monitor the continued utilisation of the site by the two acid frog species previously recorded:

- Wallum Sedge Frog (*Litoria olongburensis*)
  - Listed as Vulnerable under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
  - Listed as Vulnerable under the NSW *Biodiversity Conservation Act 2016* (BC Act)
- Wallum Froglet (*Crinia tinnula*)
  - Listed as Vulnerable under the BC Act

Methodology

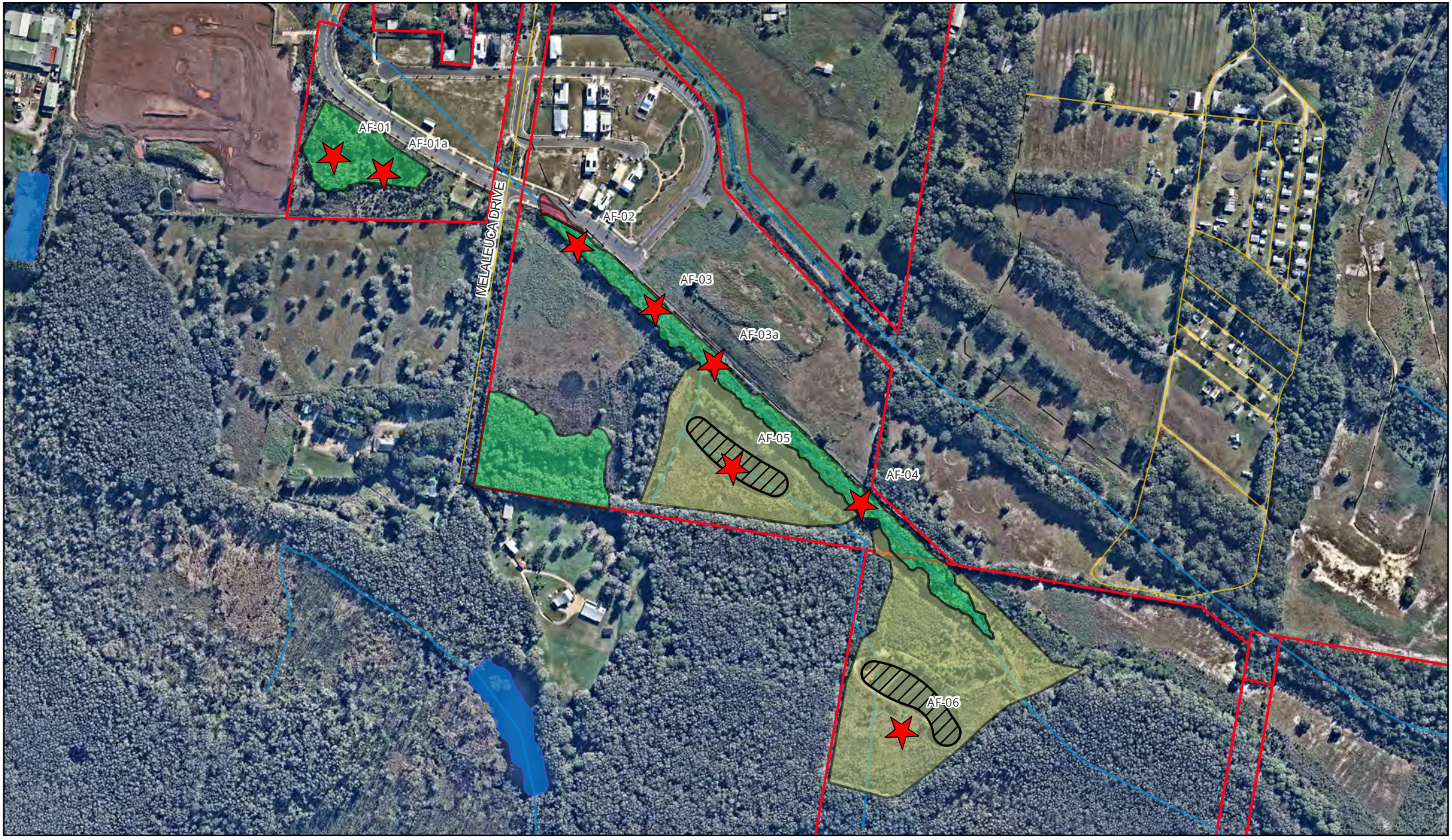
Frog survey

Under the Plan, monitoring of retained habitat areas is to be conducted three times annually (i.e. every four months) and include:

- Nocturnal survey and counting of acid frogs within retained habitat areas
- Call playback to elicit response and visual searches
- Water quality sampling (if standing water present)
- Records of incidental species recorded at the site
- Recording of weather conditions (temperature, relative humidity, rainfall)

Locations of the monitoring sites are shown in Figure 1.

Australian Wetlands Consulting Pty Ltd
ABN 81 140 533 919



AWC

Legend

- Road
- Hydroline
- Hydroarea
- Site boundary

Acid frog habitat

- Created Breeding Habitat
- Created Foraging Habitat
- Impacted
- Retained

Acid frog monitoring sites

Figure 1
Survey sites

Scale:
1:5,250 @ A4
GDA2020 MGA56

N

0 50 100 150 m

Project:
221655_Harvest Acid Frog Monitoring

Data sources
Spatial data: © NSW Govt 2026
Imagery: © NearMap 2026

Drawn: AA
Checked: IH

Date: 13/08/2026
Job ref: 221655

Frog pond vegetation monitoring

Vegetation monitoring was undertaken on the 23rd and 30th of July 2026, at the constructed frog ponds to track the establishment and health of aquatic vegetation. 12 permanent 5x5m plots were surveyed, one in each cell of the two constructed frog ponds being sites AF-05 and AF-06 (Figure 1). Plots were remarked with flagging tape where stakes and tape were visible above the waterline. In deeper cells where no stakes were visible the survey was conducted based on GPS location only. GPS locations showed a high degree of accuracy (<5m) throughout the vegetation surveys. The following data was recorded for each plot:

- Percentage cover of all species (including weeds)
- A photo at a permanent photo point
- Any other relevant observations

Past monitoring

Monitoring of acid frogs was initiated in April 2021. 15 previous monitoring events have occurred to date, with the current event being the 16th iteration (refer Table 1).

Table 1 Acid frog monitoring events

Monitoring Event	Date (Night 1)	Date (Night 2)	Stage
April 2021	26/04/2021	28/04/2021	Pre-construction
August 2021	23/08/2021	24/08/2021	Pre-construction
December 2021	06/12/2022	08/12/2022	Pre-construction
August 2022	08/08/2022	10/08/2022	Pre-construction
December 2022	05/12/2022	08/12/2022	Construction
March 2023	21/03/2023	22/03/2023	Construction
July 2023	26/07/2023	27/07/2023	Construction
October 2023	27/10/2023	31/10/2023	Construction
March 2024	05/03/2024	06/03/2024	Construction
July 2024	09/07/2024	10/07/2024	Construction
October 2024	09/10/2024	10/10/2024	Construction
April 2025	02/04/2025	03/04/2025	Construction
July 2025	08/07/2025	09/07/2025	Construction
October 2025	08/10/2025	09/10/2025	Construction
March 2026	10/03/2026	11/03/2026	Construction
July 2026	08/07/2026	09/07/2026	Construction

Results

Weather & conditions

In the week prior to the frog monitoring, 18.1 mm of rain was recorded at the Byron Bay (Cape Byron) weather station. During the two survey nights, a further 12.2 mm was recorded. Humidity was recorded at 69% and 98%, and temperature was recorded at 17.3^{o}C and 14.3^{o}C for the two respective evenings (data from BOM - Byron Bay Cape Byron).

Water depth and quality

Standing water was present at both created habitat ponds, with maximum depths of 150 mm (monitoring site AF-05) and 80 mm (monitoring site AF-06). Measurements and surveys were based at the deepest part of the cells in the two created habitat basins. Standing water was present at all monitoring sites except for Site AF-02. pH was in the ideal range (3.5-5) at all sites except for AF-05, where it exceeded the ideal range, reaching a pH value of 6.4 on both nights.

Created habitat condition

Vegetation in the created habitats was observed to be good condition at AF-05, and moderate condition at AF-06. At site AF-06, browning of mature sedges was observed in deeper areas of the habitat pond, as was algae on bank and edges of water, and colonisation of juvenile paperbarks in cells. Vegetation cover within created habitat plantings has increased, as expected, as plantings from December 2023 continue to establish. Water levels at site AF-05 were elevated (between 700 mm to 1000 mm deep) with most stakes underwater. There were no significant areas of weeds observed at the sites. One Camphor Laurel was observed growing out of a mature Paperbark at the southern edge of Cell 4, AF-06. Refer to Figure 2 for locations of weeds. Vegetation plot survey results are shown in Table 5 and Table 6 and photo points are shown in Table 7.

Frog survey

No Wallum Sedge Frogs were observed or detected aurally in response to call playback. A total of 17 Wallum Froglets were detected aurally in response to call playback across sites AF-01, AF-01a, AF-03a, AF-05, and AF-06.

Three non-target frog species were identified during the survey:

- Common Eastern Froglet (*Crinia signifera*)
- Eastern Sign-bearing Froglet (*Crinia parinsignifera*)
- Striped Marsh Frog (*Limnodynastes peronii*)

Common Eastern Froglets were particularly abundant, with 33 records over the two surveys. Cane Toads were not detected during this round of monitoring.

Vegetation survey

The annual frog pond vegetation survey repeated the baseline survey established in winter 2024 following construction and planting of frog ponds (AF-05, AF-06) with macrophyte species in late 2023. Grey Sedge (*Lepironia articulata*) and Jointed Twig-rush (*Machaerina articulata*) were well established and well represented across the pond cells. No exotic weeds were recorded within the survey plots. Broad-leaved Paperbarks, which can act as a transformer species in wetland environments, occurred in 90% of cells as seedlings and juvenile plants, with one individual being approximately 3.5m in height. Whisky Grass (*Andropogon virginicus*) was observed on the northern batters of both ponds where vegetation cover is sparse-moderate.

Visual assessment of retained habitat identified Whisky Grass invading consistently along the northern edge. Given the long edges and narrow extent of the retained habitat, the Whisky Grass invasion is at a level that requires intervention. One Camphor Laurel (*Cinnamomum camphora*) was observed growing out of a mature Paperbark at the southern edge of Cell 4, Site AF-06. Other weed species, such as Tobacco Bush (*Solanum mauritianum*) and Broad-leaved Paspalum (*Paspalum mandiocanum*) were observed growing along the edges of habitat and along the tracks either side of habitat strip (AF-02 to AF-04).

Discussion

Frog presence

The survey found evidence of one of the target species (Wallum Froglet) using the created habitats directly. Wallum Froglets are known for their high dispersal especially during warm, wet conditions. Suitability and use of the created habitat have likely improved as plantings establish and increased cover.

The Plan outlines several KPIs, including *Existing/known habitat areas continue to be utilised by Wallum Froglet / Wallum Sedge Frog.* This KPI has been partially met due to the presence of Wallum Froglet in known habitat areas, but the absence of Wallum Sedge Frogs. The lack of Wallum Sedge Frog detections at the site may have been due to surveys occurring outside the breeding season.

The results from this survey indicate the Wallum Froglet remains stable at retained habitat site AF-01 and AF-01a, and at created habitat pond sites AF-05 and AF-06, where it has been consistently detected in previous surveys.

Since the Wallum Froglet was initially confirmed in several locations of the retained habitat strip in 2009, subsequent surveys (2022-2026) have recorded low numbers at sites AF-02-AF-04. Changes in occupancy at these sites may be due to natural seasonal variation in climatic conditions, as has anecdotally occurred at similar sites, and/or changes to the hydrology of the site. Results from the March 2026 survey indicate that conditions were dry and water was only present at habitat pond sites AF-05 and AF-06. Results from the most recent survey show that conditions were wet and water was present at all sites except AF-02. It is acknowledged that all works and hydrology arrangements have been constructed with the approved plans, including AFMP.

Water Depth and Quality

The elevated pH and water depths recorded at AF-05 may be in response to rainfall in the preceding fortnight and stormwater entering the pond from the constructed drain/conveyance swale. pH was measured at the standard survey point approximately 20 m west of the previously ruptured stormwater channel bank (refer to Plate 1).

Rupture of the bank separating the pond from the constructed drain/conveyance swale has occurred, and been repaired, previously. Nevertheless, these results indicate that further reinforcement of the bank is required to prevent stormwater from entering the pond. Ongoing monitoring of pH will be critical to confirm the success of any response measures and that pH in the created pond has returned to the suitable range.

Created habitat condition

Created habitats were predominantly inundated and had a more complete cover of rushes and sedges than observed previously. The most consistently detected species in the created ponds were the Common Eastern Froglet. At present, the created ponds are partially meeting the KPI- *Utilisation by Wallum Froglets / Wallum Sedge Frog and persistence at constructed habitat areas over time.*

Results from the frog pond vegetation assessment show continued development of sedge and rush cover with a relationship between cell depth and cover evident. Most cells are showing steady growth, however, shallow cells may require intervention through planting of species suited to ephemeral inundation, to assist with the goal of increased cover.

Broad-leaved Paperbark seedlings and juvenile plants were present in most cells across ponds AF-05 and AF-06. The Plan outlines corrective actions for the removal of woody trees in retained habitat, including a five-yearly review and removal where required. A similar approach could reasonably be applied to the breeding ponds at AF-05 and AF-06.

Monitoring undertaken by AWC at nearby sites suggest Paperbark wetland environments are supportive of Wallum Froglet populations. However, species such as Broad-leaved Paperbark can increase shading within ponds and potentially displace groundcover vegetation. Therefore, the following is recommended:

- Infill planting of sedges and rushes to increase cover and maintain the vegetation structure required for breeding habitat, which may help limit Paperbark establishment
- Targeted removal of Paperbarks when cover exceeds 20% at each constructed pond, with early intervention likely to be more practical and cost-effective than removal of established trees
- Re-assess condition of the Paperbark control strategy within 12 months of any thinning activities. It is acknowledged that the Paperbark control effort will be greater while macrophytes are establishing

Filamentous algae continue to be present in created pond AF-05 and AF-06, which may be an indicator of elevated nutrient availability. Additionally, numerous mosquito fish were observed within pond AF-05, which may pose a predation risk to Wallum Froglet and Wallum Sedge Frog eggs and tadpoles.

Stormwater infiltration is likely to be adversely impacting the water quality and depth at AF-05 (**Error! Reference source not found.**). The water depth at AF-05 was observed to be between 700 mm – 1000 mm, substantially deeper than at AF-06. As rupture of the bank has occurred previously, further reinforcement will be required to prevent stormwater from entering the pond, reduce nutrient inputs and reduce the potential for mosquito fish to enter the pond



Plate 1. Stormwater infiltrating constructed pond AF-05 where bank was previously repaired.

The Plan outlines several key performance indicators (KPIs), including *Existing/known habitat areas continue to be utilised by Wallum Froglet / Wallum Sedge Frog.* The extent to which these are met is outlined in Table 2.

Table 2 Assessment of July 2026 Monitoring Against KPIs

Item	Performance Criteria	Achieved	Comments
Water quality	Water chemistry is between a pH range of 3 –5	No*	pH recorded at all sites was within the suitable pH range except AF-05 where pH was above the suitable range ($\bar{x}$ = 6.4) *See report discussion
Wetland hydroperiod	Ponding of water for a minimum period of 6 weeks under >60th percentile rainfall conditions between Jan and May	N/A	Monitoring was not within the Jan-May period. Ponding of water was observed at all sites except AF-02
Vegetation	Native vegetation continues to persist and is not degraded or disturbed	Yes	Native vegetation in retained habitat persisting

Item	Performance Criteria	Achieved	Comments
Weed control	Environmental weeds comprise <10% total cover within each habitat area	Yes	Weed cover was <10%. Weed incursions were observed along some edges of retained and constructed habitat
Habitat establishment	Survival rate of > 90% of all plantings and/or translocated material	Yes	Annual vegetation surveys show a vegetation survival rate of >90%. Slow growth observed in shallow cells of pond AF-06 may require intervention.
Wallum Froglet / Wallum Sedge Frog populations	Existing known & retained habitat areas continue to be utilised by Wallum Froglet / Wallum Sedge Frog	Partially	Wallum Froglets were recorded at sites AF-01, AF-01a, AF-03a, AF-05, and AF-06. Wallum Sedge Frogs were not recorded at any of the sites. The lack of Wallum Sedge Frog detections may be due to the survey being outside the peak breeding season for the species (peak breeding seasons is October to April)
Cane Toads	No observed breeding / tadpoles within created or retained habitat	Yes	None observed

Recommendations

Targeted monitoring should be undertaken for Wallum Sedge Frog at all sites. As per the findings of Lowe *et al.* (2016), targeted surveys should be conducted under the following conditions:

- Air temperature is equal to or greater than 21.7°C
- Substantial rainfall within one week and/or one month
- Between October and March (or until May in seasons with late summer rainfall)

To rule out the possible impact of changes in groundwater patterns on the retained habitat, it is recommended that the groundwater data that has been collected under the *Harvest Estate Groundwater Management Plan* (2020) be reviewed as part of the next acid frog monitoring report.

It is recommended that vegetation/habitat assessments occur to assess the state of habitat at retained sites in addition to constructed ponds. These assessments would consider weed extent/cover and alignment of existing woody native vegetation with known habitat requirements for acid frogs (i.e. vegetation structure and species composition). Any observations (seen or heard) of the target frog species would be noted as part of the vegetation/habitat assessments. The results from these assessments, in combination with ongoing frog surveys, can inform recommendations for the improvement of habitat at the site and achievement of KPIs.

Pond AF-05

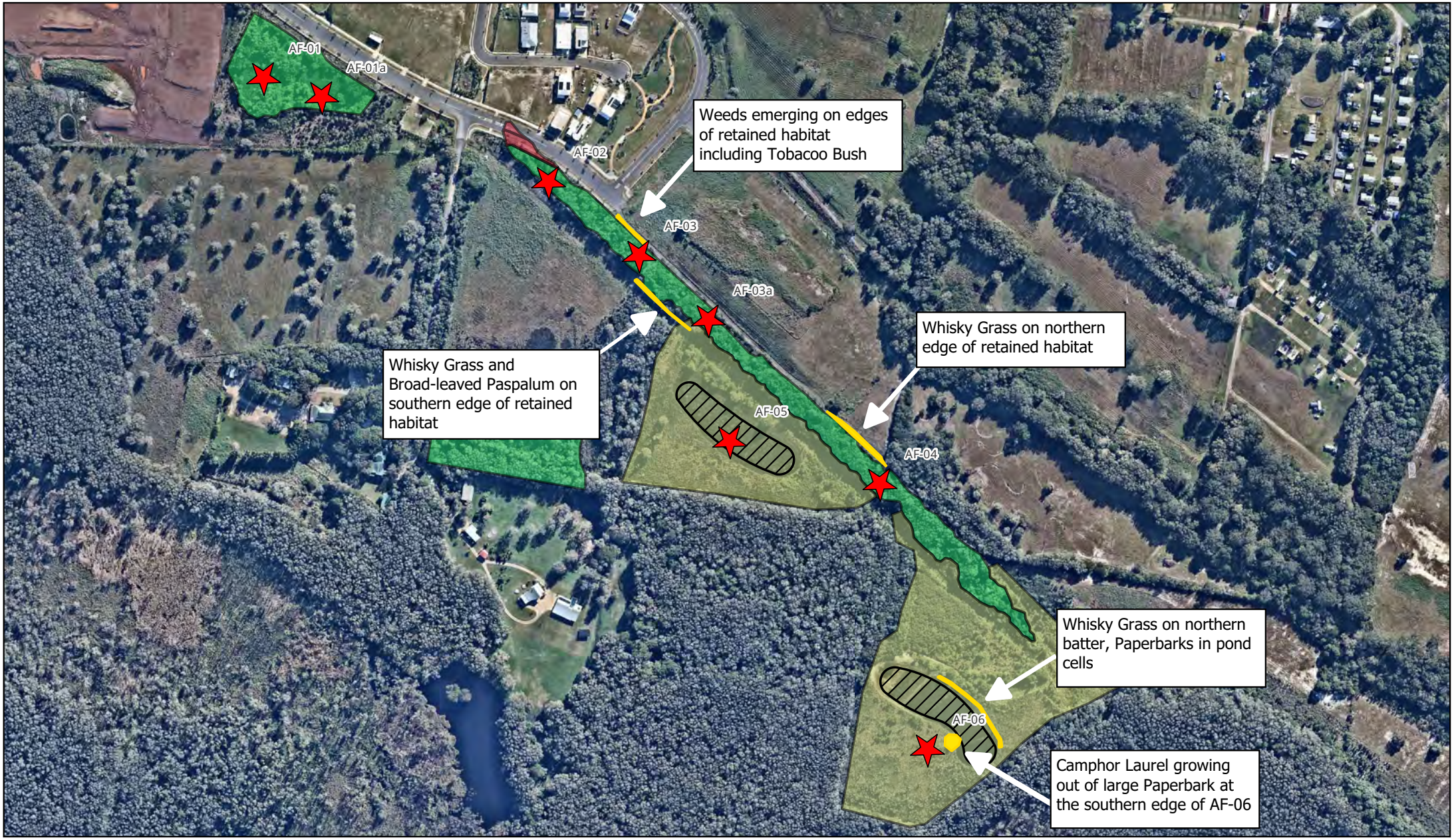
It is recommended that the bank rupture at AF-05 be further reinforced to prevent stormwater from entering the site/constructed pond. Consistently elevated pH and water levels reduce the suitability of the pond for acid frogs.

Following repair of the bank rupture, it is recommended that some of the water be removed from the northern constructed pond, to improve the value of the pond as frog habitat by restoring the pond to its intended design as a groundwater-fed wetland.

The following options are suggested for consideration:

- Installation of a permanent outlet pipe that can be easily managed during site visits
- Confirm levy levels are correct and adjust if required
- Investigate blockages along adjacent drain/conveyance swale

Minimising stormwater infiltration into the constructed pond may also assist in reducing the presence of filamentous algae in pond AF-05. If filamentous algae persists following removal of excess water from the pond, actions to reduce algae cover, and investigations into the cause of algae growth should be considered.



AWC

Legend

- Weed areas
- Acid frog monitoring sites

Acid frog habitat

- Created Breeding Habitat
- Created Foraging Habitat
- Impacted
- Retained

Figure 2
Weed markup

Scale:
1:4,500 @ A4
GDA2020 MGA56

N

0 50 100 150 m

Project:
221655_Harvest Acid Frog Monitoring

Data sources
Spatial data: © NSW Govt 2026
Imagery: © NearMap 2026

Drawn: AA Date: 17/08/2026
Checked: IH Job ref: 221655

Table 3 Night one survey results

Date: 08/07/2026												
Site	Wallum Sedge Frog Y/N	Number	Wallum Froglet Y/N	Number	PH	DO %	Temp (C)	EC	Turbidity	Depth (cm)	Incidental species	Comments
AF-01	N	-	Y	2	4.0	-	15.3	270	-	3	1	*3x Crinia signifera*
AF-01a	N	-	N	-	3.9	-	15.4	260	-	4	-	Inundated, no incidental species
AF-02	N	-	N	-	-	-	-	-	-	-	-	No water in drain
AF-03	N	-	N	-	3	-	15.9	300	-	6	1	1x *C. signifera.* Drain partially inundated with pools
AF-03a	N	-	Y	1	4.4	-	15.7	150	-	5	1	2x *C. signifera.* Inundated drain
AF-04	N	-	N	-	4.5	-	16.3	140	-	3	1	1x *C. signifera.* Drain with some water pooling
AF-05	N	-	Y	2	6.4	-	16.1	300	-	15	1	3x *C. signifera.* 1x *Limnodynastes peronii*. Water from constructed drain flowing readily into constructed pond
AF-06	N	-	Y	3	5.0	-	17.2	170	-	5	2	4x *C. signifera. 1x C. parinsignifera.* Algae on bank and edges of water 1m in.

Table 4 Night two survey results

Date: 09/07/2026												
Site	Wallum Sedge Frog Y/N	Number	Wallum Froglet Y/N	Number	PH	DO %	Temp (C)	EC	Turbidity	Depth (cm)	Incidental species	Comments
AF-01	N	-	Y	1	4.0	-	15.1	230	-	5	1	2x *C. signifera*
AF-01a	N	-	Y	1	3.9	-	15.2	240	-	5	1	2x *C. signifera*
AF-02	N	-	N	-	-	-	-	-	-	-	-	No standing water observed
AF-03	N	-	N	-	3.9	-	15.6	270	-	8	1	1x *C. signifera*
AF-03a	N	-	N	-	4.4	-	15.5	140	-	7	1	2x *C. signifera*
AF-04	N	-	N	-	4.5	-	15.7	120	-	5	1	*1x C. signifera*
AF-05	N	-	Y	3	6.4	-	15.6	280	-	10	1	5x *C. signifera*
AF-06	N	-	Y	4	5.0	16.4	26.1	150	-	8	1	6x *C. signifera.* Reeds on outer/shallow edge are green. Browning of mature reeds within deeper area of pond. Colonisation of juvenile Paperbark approximately 1.5 m into pond.

Table 5 July 2026 frog pond vegetation survey

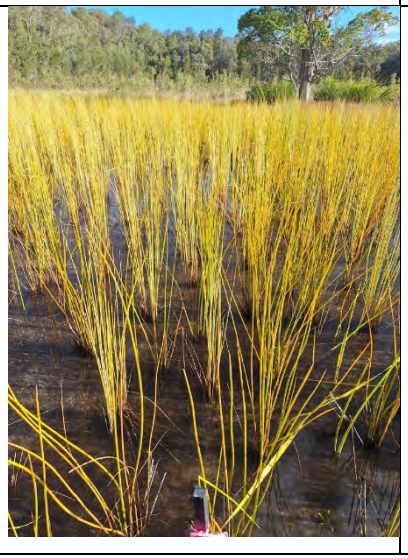
Scientific Name	Common Name	Percentage Cover (%)												
		Plot	1	2	3	4	5	6	7	8	9	10	11	12
Lepironia articulata	Grey Sedge		40	25	30	30	25	20	25	35	10	10	35	50
Machaerina articulata	Jointed Twig-rush		5	2	30	15	25	10	25	25	20	15	25	35
Telmatoblechnum indicum	Swamp Water Fern								1	1				
Melaleuca quinquenervia	Broad-leaved Paperbark		2	5	2	10	7	5	1	1		0.1	1	5
Machaerina rubiginosa	Soft Twig-rush		1			5			25	20	5			5
Andropogon virginicus	Whisky Grass*													
Philydrum lanuginosum	Woolly Waterlily				1					2			1	
Cyperus haspan	Dwarf Papyrus													
Cyperus polystachyos							1							
Baloskion tetraphyllum	Tassel Rope-rush						1	1						
Fimbristylis polytrichoides	Rusty Sedge						1	2						
Drosera spatulata	Spoon-leaved Sundew						1							
Ischaemum australe														
Nymphoides indica	Water Snowflake									1	2	1	2	
Goodenia spp.							2	1						
	Total weed cover (%)		-	-	-	-	-	-	-	-	-	-	-	-
	Total native cover (%)		**47**	**32**	**63**	**60**	**63**	**39**	**77**	**84**	**35**	**25.1**	**62**	**95**
	TOTAL (%)		**47**	**32**	**63**	**60**	**63**	**39**	**77**	**84**	**35**	**25.1**	**62**	**95**

**Exotic species*

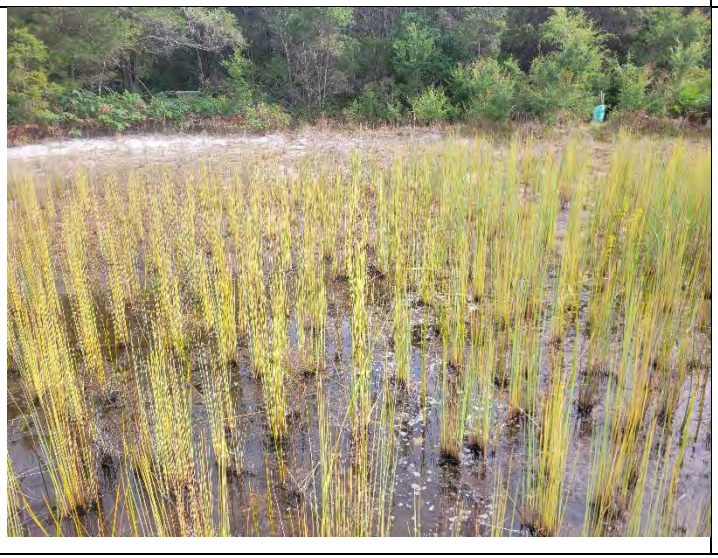
Table 6 Vegetation plot comments

Plot	Comments
AF-06	Multiple calling frogs - *C. tinnula*, *C. signifera*, grey sedge and jointed twig rushes yellowing off, some dead stalks, numerous paperbark seedlings, gambusia present
1	Knee deep water, paperbark seedlings and juveniles, mostly grey sedge/jointed twig rush
2	
3	
4	Knee deep water, paperbark seedlings and juveniles, mostly grey sedge/jointed twig rush, Camphor Laurel growing out of paperbark at the southern edge of the cell
5	Shallower than cells 1-4
6	Shallow to no water, sundews and other herbaceous species present
AF-05	Inflow of stormwater observed, water levels very high ~ 700 - 900 mm deep, dense vegetation cover, with sedges reaching 2 m in height , most stakes underwater, numerous mosquito fish observed
7	Very dense vegetation cover
8	Very dense vegetation cover, stake underwater
9	Stake well underwater ~ 900 mm deep. Vegetation was less dense with more open water compared to cells 7-9 and 12.
10	
11	More open water than cells 7-9 and 12, with lily pads
12	Very dense vegetation, hard to walk through, tagged paperbark present approx. 4 m tall

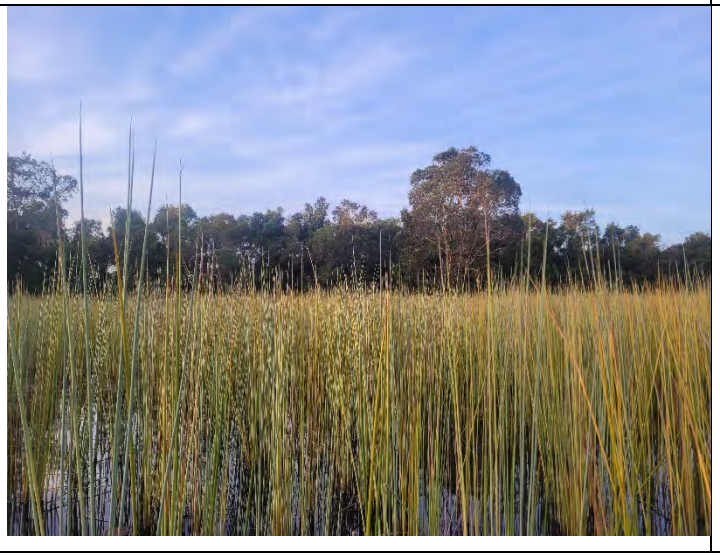
Table 7 Vegetation plot photo points and coordinates (GDA2020 MGA zone 56)

Plot	Baseline Photo (2024)	Year 1 Photo (2025)	Year 2 Photo (2026)	GPS Detail
1				E: 557502 N: 6831195
2				E: 557487 N: 6831215

Plot	Baseline Photo (2024)	Year 1 Photo (2025)	Year 2 Photo (2026)	GPS Detail
3				E: 557478 N: 6831230
4				E: 557453 N: 6831241

Plot	Baseline Photo (2024)	Year 1 Photo (2025)	Year 2 Photo (2026)	GPS Detail
5				E: 557431 N: 6831255
6				E: 557411 N: 6831263

Plot	Baseline Photo (2024)	Year 1 Photo (2025)	Year 2 Photo (2026)	GPS Detail
7				E: 557229 N: 6831518
8				E: 557251 N: 6831506

Plot	Baseline Photo (2024)	Year 1 Photo (2025)	Year 2 Photo (2026)	GPS Detail
9				E: 557248 N: 6831476
10				E: 557264 N: 6831462

Plot	Baseline Photo (2024)	Year 1 Photo (2025)	Year 2 Photo (2026)	GPS Detail
11				E: 557286 N: 6831451
12				E: 557320 N: 6831462

References

AWC (2021). *Harvest Estate West Byron Urban Release Area Acid Frog Management Plan – September 2021*. Prepared for Tower Holdings Pty Ltd.

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Appendix C – Year 4 Annual Revegetation / Rehabilitation Monitoring Report

Year 4 – Annual Revegetation / Rehabilitation Monitoring Report

Harvest Estate, West Byron

Prepared for OZTON Pty Ltd

By Planit Consulting Pty Ltd

V.1 - October 2026

Job No: J7148

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Document Control

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Planit Reference	J7148
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Revision History

Revision	Date	Prepared By	Reviewed By	Approved By
V.1	30/10/2026	Tomy Rados	Giuseppe Fallara	Tomy Rados

Approval Details

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1 Introduction

Planit Consulting has been commissioned by OZTON Pty Ltd to prepare a Revegetation/Rehabilitation Monitoring Report associated with an approved subdivision of 149 allotments located within part of the West Byron Urban Release Area, known as the Harvest Estate (refer **Figure 1**).

In order to track the progress of revegetation/rehabilitation zones associated with the estate, the approved Vegetation Management Plan (VMP) stipulates that regular flora/vegetation ground surveys of permanent monitoring plots to be performed.

These ongoing surveys qualify and quantify the condition of representative flora/vegetation habitat will enable periodic comparison of vegetation condition (to the baseline surveys performed) to assess compliance with the set performance criteria of the approved VMP.

The fourth Annual Monitoring Report is required 4 years after the substantial commencement works, which was accepted 26th July 2022.

Table 1: Approved Harvest Estate Development Details

Approval Information	
Applicant	Villa World Byron Pty Ltd
Application	Development Consent 10.2017.201.1 (Villa World Byron Pty Ltd v Byron Shire Council - LEC No. 2019/00310612)
Address	342 Ewingsdale Road, 22A and 22B Melaleuca Drive, Byron Bay
Development Consent Description	Staged subdivision of 9 lots into 149 residential lots (comprised of 145 smaller residential lots and 4 large lifestyle lots) and the creation of 7 green infrastructure lots, together with associated works including vegetation removal, earthworks, landscaping, creation of public reserves, roads, environmental management and protection and stormwater works at 342 Ewingsdale Road, 22A and 22B Melaleuca Drive, Byron Bay
Modification Consent Description	Development Consent 10.2017.201.1 S4.56 Modification to amend staging and timeframes Determination Date 4th November 2021

In association with the issued approval and subsequent subdivision certificate assessment a Vegetation Management Plan has been approved which stipulate the frequency and parameter specifications necessary to routinely monitor and assess the success of the rehabilitation/revegetation plans/works being:

Table 2: Approved Vegetation Management Plan Details

Document/Plan Title	Job No.	Revision	Date	Author	Approval Date
Vegetation Management Plan Harvest Estate, West Byron prepared for Villa World Byron P/L November 2021	6681	H	03-02-2022	Planit Consulting	10-02-2022

The relevant sections identifying rehabilitation/revegetation monitoring requirements of the VMP (which are also echoed in other site management plans) are tabulated below for ease of reference:

Table 3: Rehabilitation/Revegetation [RR] Monitoring Requirement Sections of Conditioned Management Plans

Vegetation Management Plan		
Report Section	**Brief Description**	**Timing/Frequency**
5.2 Monitoring	Establish Baseline monitoring plots for all RR zones, Complete monitoring Form C photographs for later comparison prior to works. Complete Monitoring Form C	Baseline [prior to commencement]
	Complete Monitoring Forms & visual monitoring/photographs for each RR zone	Six monthly from commencement until Year 5. Annually thereafter
5.5 Reporting	Report to include All Monitoring Results, Assessment against Performance Criteria, Incidence of non-compliance, Corrective Action	Annually
	Report to include Landscaper/bush regenerator work logs for RR annual report	Annually

Biodiversity Conservation Management Plan		
Report Section	**Brief Description**	**Timing/Frequency**
4.1 Monitoring and Reporting	Establish Baseline monitoring plots for all RR zones, Complete monitoring Form C photographs for later comparison prior to works. Complete Monitoring Form C	Baseline [prior to commencement]
	Complete Monitoring Forms & visual monitoring/photographs for each RR zone	Six monthly from commencement until Year 5. Annually thereafter

Biodiversity Conservation Management Plan		
Report Section	**Brief Description**	**Timing/Frequency**
	Report to include All Monitoring Results, Assessment against Performance Criteria, Incidence of non-compliance, Corrective Action	Annually
	Report to include Landscaper/bush regenerator work logs for RR annual report	Annually

Threatened Species Management Plan		
Report Section	**Brief Description**	**Timing/Frequency**
6.2.1 Monitoring	Minor mention of RR monitoring and management for minimum of ten years	Baseline [prior to commencement]
6.3 Reporting	Minor mention of RR reporting also required on an annual basis	Annually



Figure 1: Harvest Estate Aerial Photograph (Nearmap, 2026)

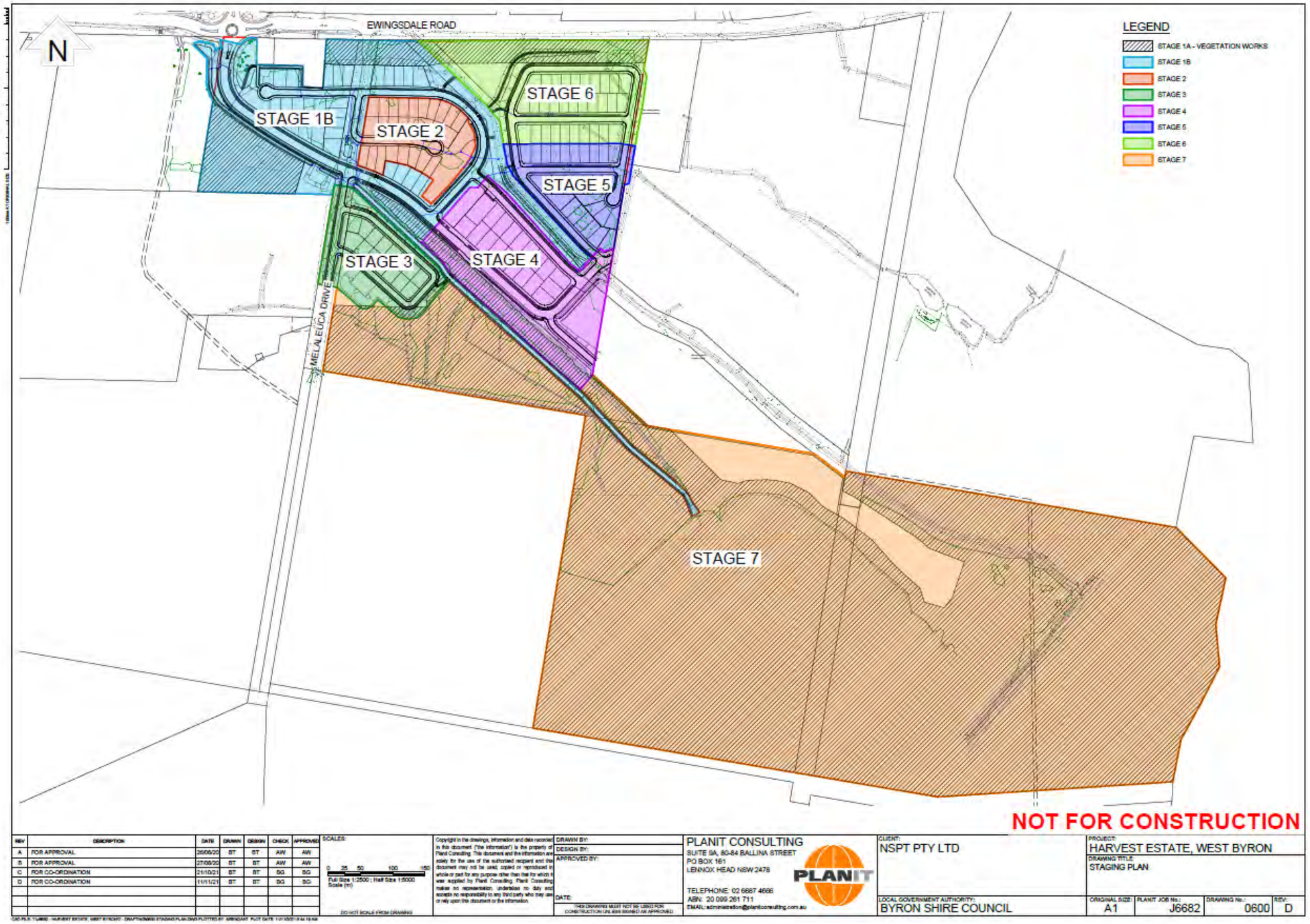


Figure 2: Harvest Estate Approved Layout

2 Revegetation/Rehabilitation Zones

The approved rehabilitation/revegetation zones (RZs) associated with the Harvest Estate are depicted in **Figures 3** and **Appendix 1**. Detailed management plans have been prepared and approved which identify the management requirements and objective for each rehabilitation zone which are summarized below:

Table 4: Rehabilitation Zone Details

Zone	Area (ha)	Rehabilitation Strategy	Targeted Vegetation Type
1	0.87	Reconstruction + Assisted Natural Regeneration	Freshwater Wetland
2	3.90	Reconstruction + Assisted Natural Regeneration	Freshwater Wetland
3	4.60	Reconstruction + Assisted Natural Regeneration	Freshwater Wetland
4	4.38	Reconstruction + Assisted Natural Regeneration	Swamp Sclerophyll Forest
5	0.89	Reconstruction + Assisted Natural Regeneration	Landscaped Buffer
6	35	Assisted Natural Regeneration	Existing Vegetation Communities Protection

NB. in accordance with the approved Harvest Estate Vegetation Management Plan rehabilitation monitoring is not required for the landscape buffer to Ewingsdale Road (RZ5).

2.1 Revegetation/Rehabilitation Monitoring Objective

The design of the approved monitoring protocol for the RZs is simple, replicable and aims to prove the following hypotheses.

Rehabilitation/revegetation of the RZs site will:

- Protect existing native vegetation communities, and associated habitat, within the RZs
- Increase the extent of native habitat (including potential habitat for threatened fauna species) within the RZs
- Increase the abundance and diversity of native flora species within the RZs
- Increase native canopy, mid-strata and ground layer cover across the RZs
- Significantly reduce weed cover and weed diversity within the RZs

2.2 Existing Vegetation Communities

Detailed surveying of the existing vegetation communities contained within the RZs are documented within the *Terrestrial Flora and Fauna Assessment (Planit, 2020)* and include the following as presented in **Figure 4**:

1. Mid-High to Tall Open Forest (Broad-Leaved Paperbark
2. Mid-High to Tall Open Dry Heath +/- Broad-Leaved Paperbark
3. Tall to Very Tall Open Forest (Brush Box)
4. Tall to Very Tall Open Forest (Swamp Mahogany)
5. Mid-High to Tall Open Forest (Swamp Oak)
6. Low to Mid-High Open Woodland (Coastal Banksia)
7. Paperbark Swamp Forest of The Coastal Lowlands
8. Freshwater Wetland
9. Grassed Paddocks with Scattered Trees and Regrowth

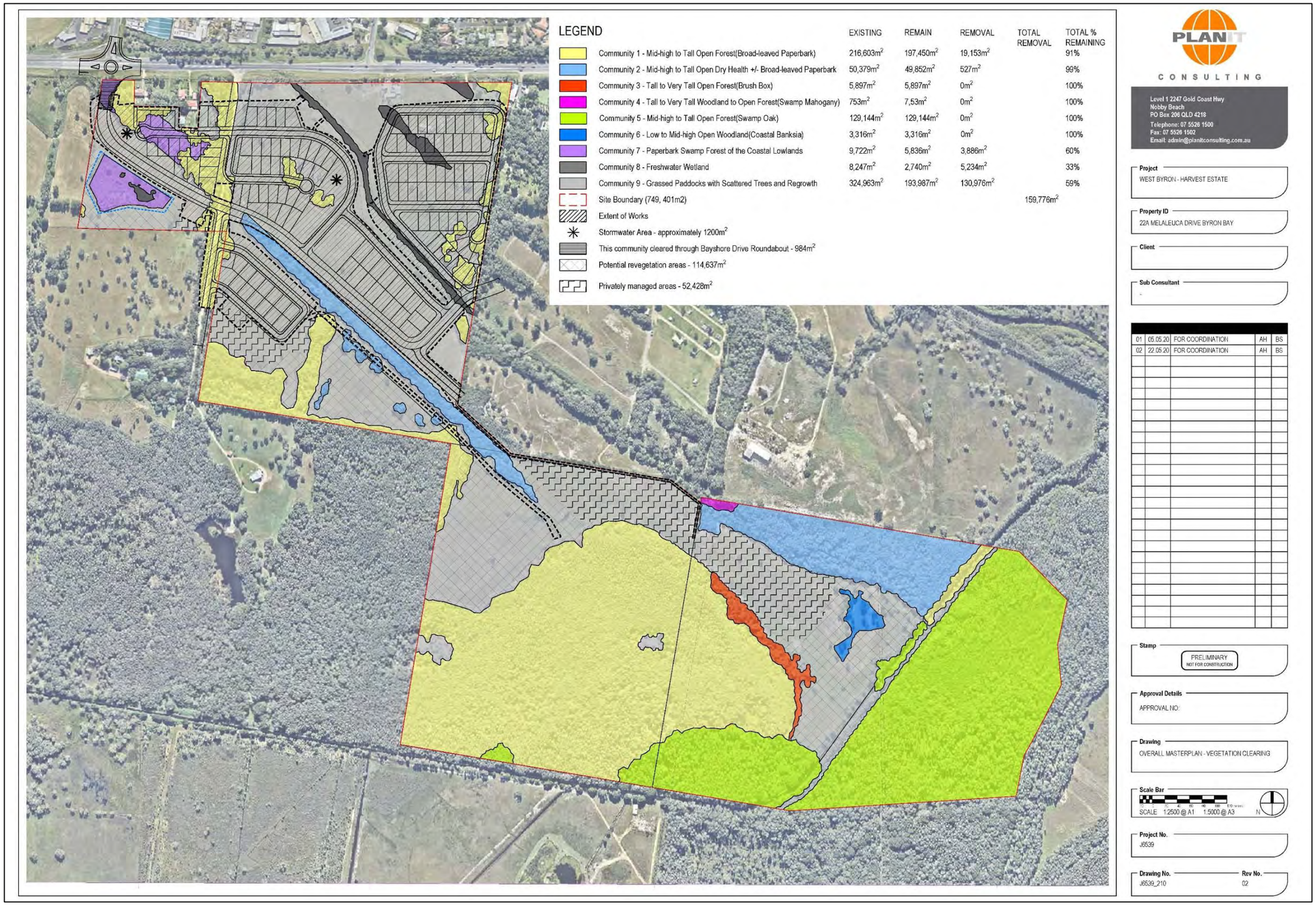
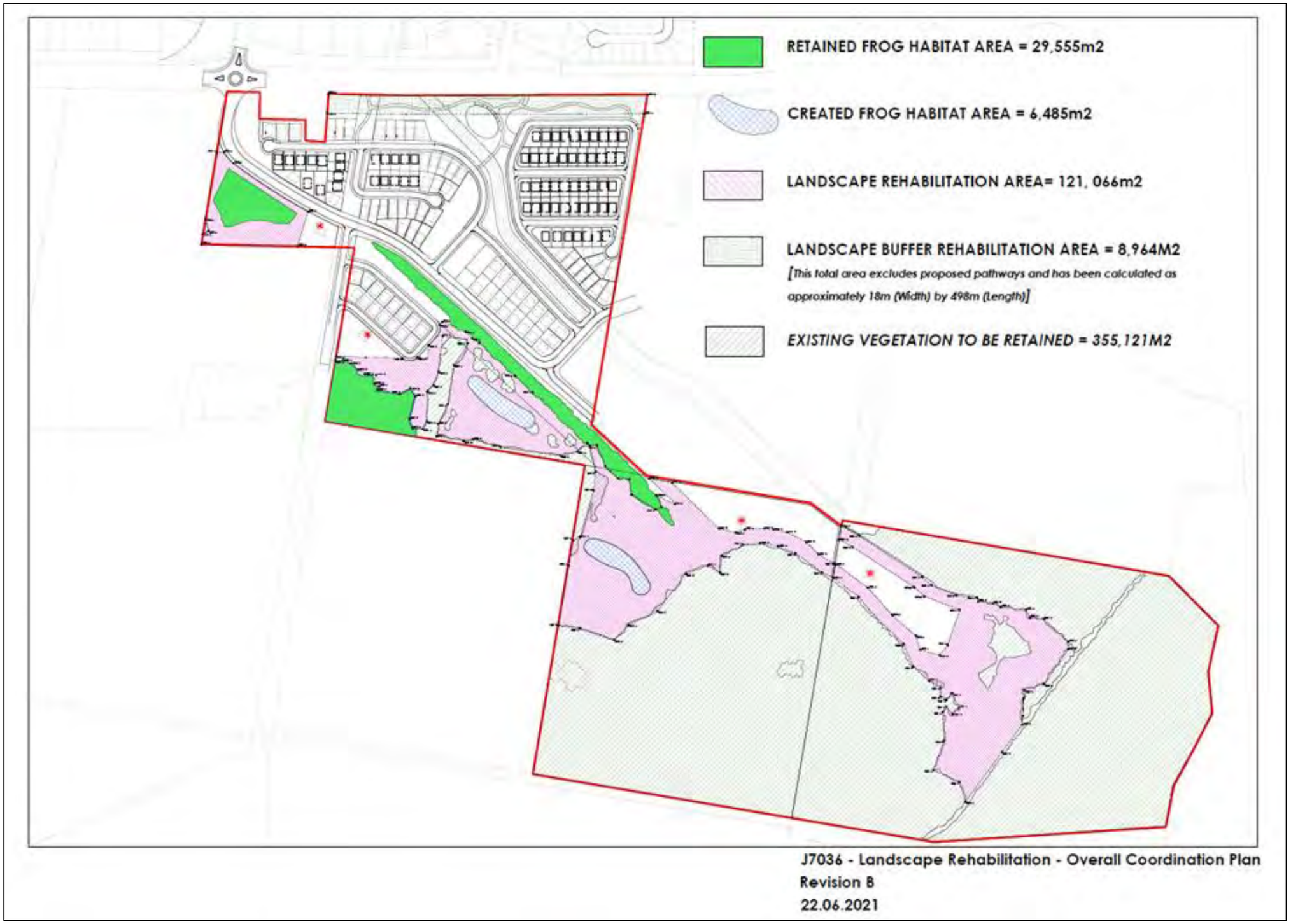


Figure 3: Harvest Estate Existing Vegetation Communities


RETAINED FROG HABITAT AREA = 29,555m2
CREATED FROG HABITAT AREA = 6,485m2
LANDSCAPE REHABILITATION AREA= 121, 066m2
LANDSCAPE BUFFER REHABILITATION AREA = 8,964M2
[This total area excludes proposed pathways and has been calculated as approximately 18m (Width) by 498m (Length)]
EXISTING VEGETATION TO BE RETAINED = 355,121M2
J7036 - Landscape Rehabilitation - Overall Coordination Plan
Revision B
22.06.2021

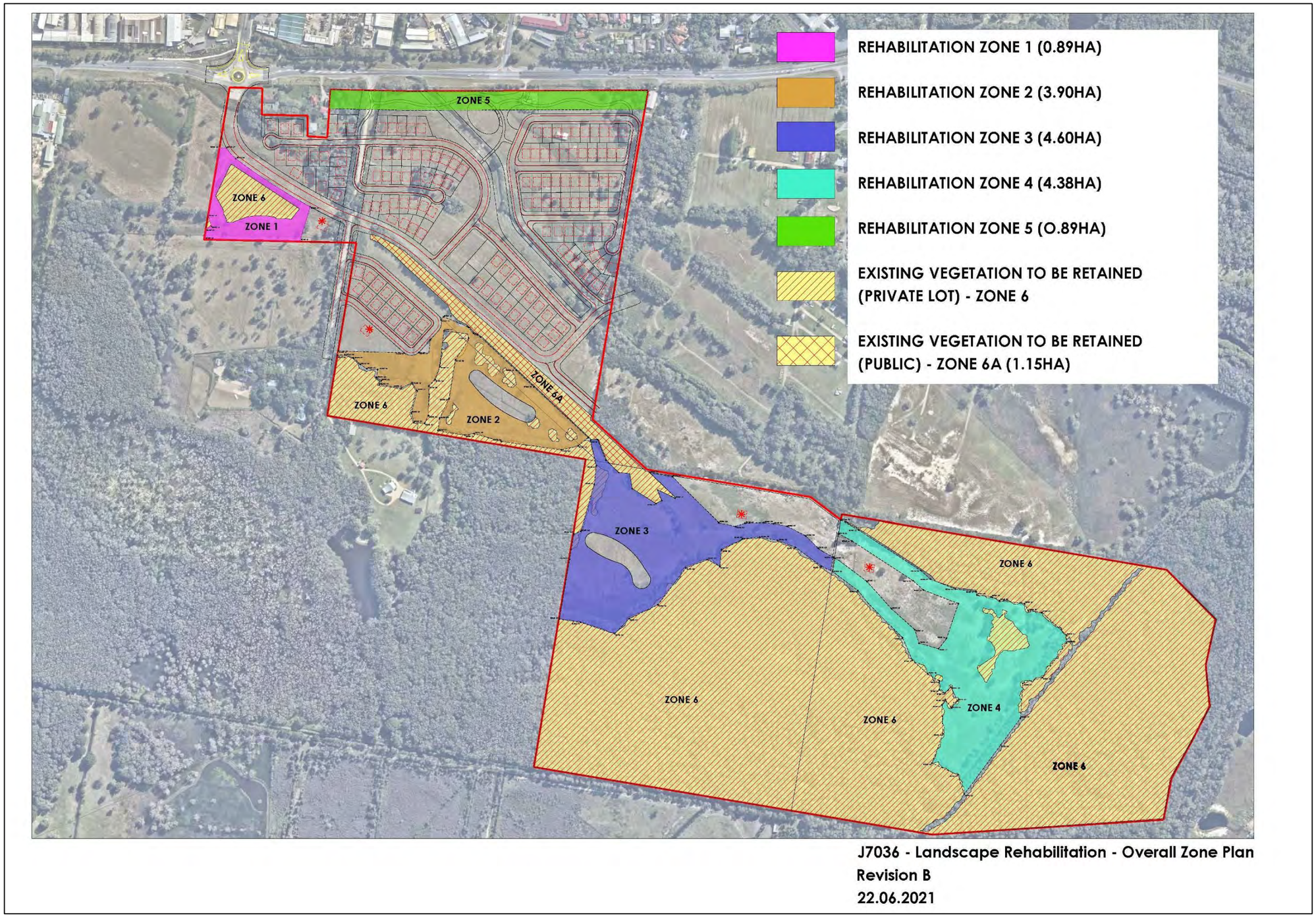


Figure 4: Approved Rehabilitation/Revegetation Zone

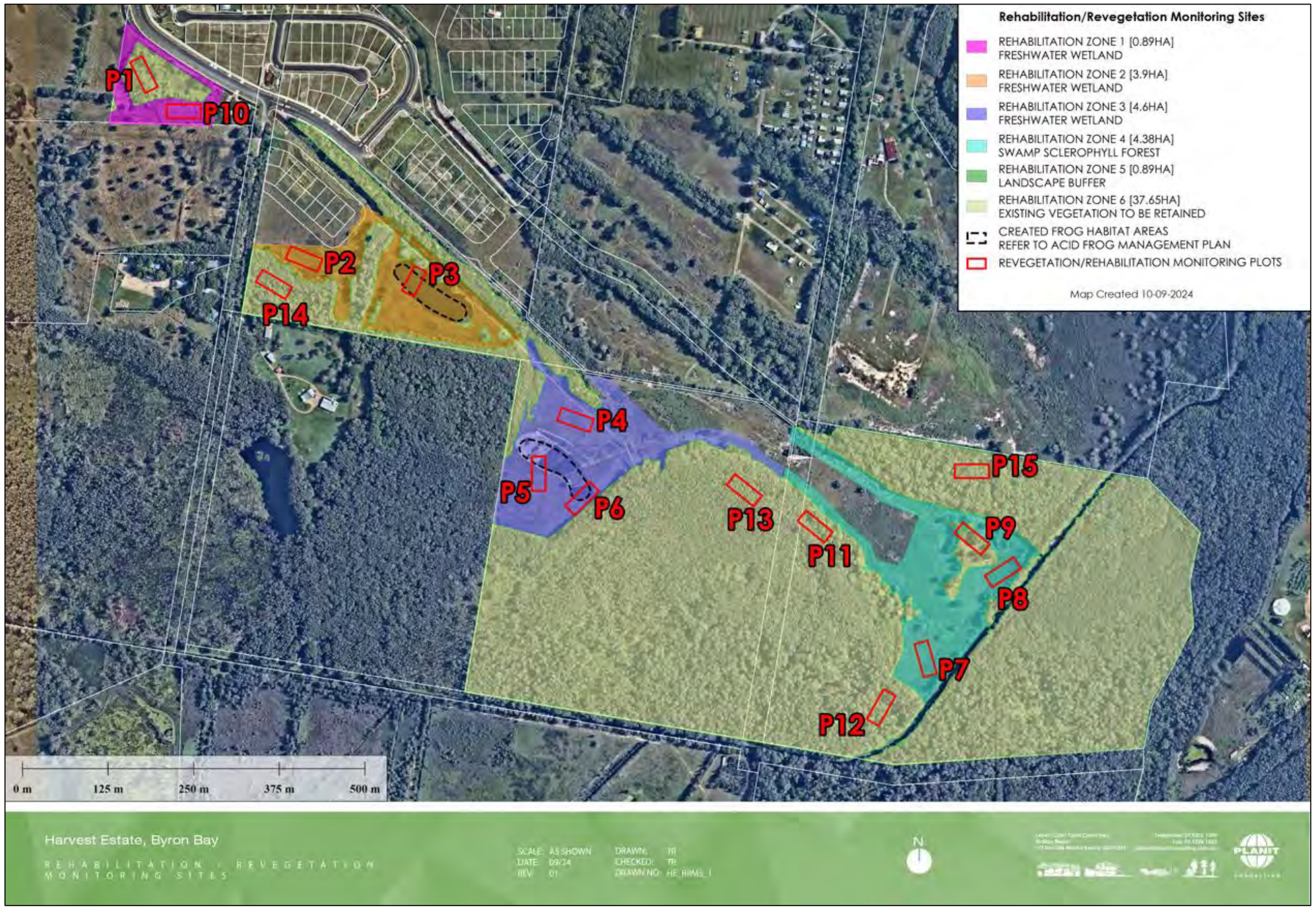


Figure 5: Revegetation/Rehabilitation Monitoring Plots

3 Monitoring Requirements

This section provides a summary of the RZ monitoring requirements. Revegetation/rehabilitation progress shall be performed twice a year for the first five years and annually thereafter with an annual report produced as required by the provisions of the approved Harvest Estate Vegetation Management Plan.

3.1 Monitoring Frequency

In accordance with the approved Harvest Estate Vegetation Management Plan revegetation/rehabilitation monitoring is to occur for each rehabilitation zone:

YEARS 1-5

- Six monthly visual monitoring results and photographs
- Six monthly monitoring and completion of the required monitoring forms for the 15 x 1000m^2 permanent monitoring quadrats
- Six-monthly monitoring of compliance with the rehabilitation zone performance criteria (refer approved Vegetation Management Plan Section 5.3)

AFTER YEAR 5

- Annual visual monitoring results and photographs as outlined above
- Annual monitoring and completion of the required monitoring forms for the 15 x 1000m^2 permanent monitoring quadrats
- Annual monitoring of compliance with the rehabilitation zone performance criteria (refer approved Vegetation Management Plan Section 5.3)

The monitoring efforts will inform maintenance requirements (particularly with regard to weed management), enable assessment against performance criteria, trigger for maintenance and/or correction actions and allow comparison of the rehabilitation zones to their pre-management condition.

Note that a less intensive regime is approved following a five-year period when the rehabilitation zones are likely to be well established with native vegetation cover.

3.2 Monitoring Methodology

The monitoring methodology is described in Section 5.2 of the approved Vegetation Management Plan and the baseline results established in accordance with the VMP prepared in February 2022. The August/September 2026 monitoring results for the 15 x 1000m2 permanent monitoring plots are presented in **Appendix 2**.

4 Results Summary

Upon completion of the required surveys an Annual Monitoring Report (hard copy and electronic PDF document) is to be prepared including:

- Formal monitoring of the 15 permanent monitoring plots including forms and photographs
- Assessment of progress against revegetation/rehabilitation performance requirements (refer approved Vegetation Management Plan Section 5.3)
- Incidences of non-compliance and corrective action (if applicable) (refer approved Vegetation Management Section 5.3)
- A work log of all monitoring/maintenance (and corrective action where required) activities performed by the appointed landscape contractor/bush regenerator during the preceding 12 months.

4.1 Monitoring Plot Results

The monitoring forms and photographs for the 15 permanent monitoring plots are presented within **Appendix 2**. Condition improvement was observed (between baseline and September 2026) across all plots except P14 due to a very slight increase in weeds noted which are to be treated during the next round of routine weed control.

Most monitoring plots displayed obvious rehabilitation improvement from baseline as a result of weed control and subsequent rehabilitation and revegetation, or a combination of both. A higher rainfall average over the past year has also benefitted the restoration works which largely comprises of wetland and swamp sclerophyll species.

An increase in condition was observed between September 2025 and September 2026 for plots P3, P7 and P13. The main reason for this was due to the increase in native vegetation coverage and height and becoming well-established.

A slight decrease in condition score was noted within P8, P9 and P15, although these areas are still high in condition and significantly improved since baseline. The decrease in condition score for these areas is directly related to damage which occurred within the associated Rehabilitation Zones due to recent emergency works conducted by Byron Shire Council.

A portion of Rehabilitation Zones 4 and 6 has been cleared/impacted since the previous annual report. Around December 2025 / January 2026, diggers came through from the neighbouring property in the north through zones 6 and 4 to access water lines situated along the Union Drain. Areas were cleared for the access track and some road base brought in to gain access across the creek. Part way along this cleared zone a 4wd track has been made through zone 4 plantings This clearing also affected sections of zone 6.

It is understood that Byron Shire Council were working on a burst repair on the water main crossing the east section of the Harvest Estate property.

It is noted that the landowner was not aware of the works.

At this current stage, it is undetermined as to what remedial measures will be undertaken to those impacted areas within the Rehabilitation Zones. It is noted that signs of natural regeneration are starting to occur in areas, although this event has setback over 3 years' worth of restoration works within those areas affected.

The approximate location of these clearing works and images of the damage is illustrated below:

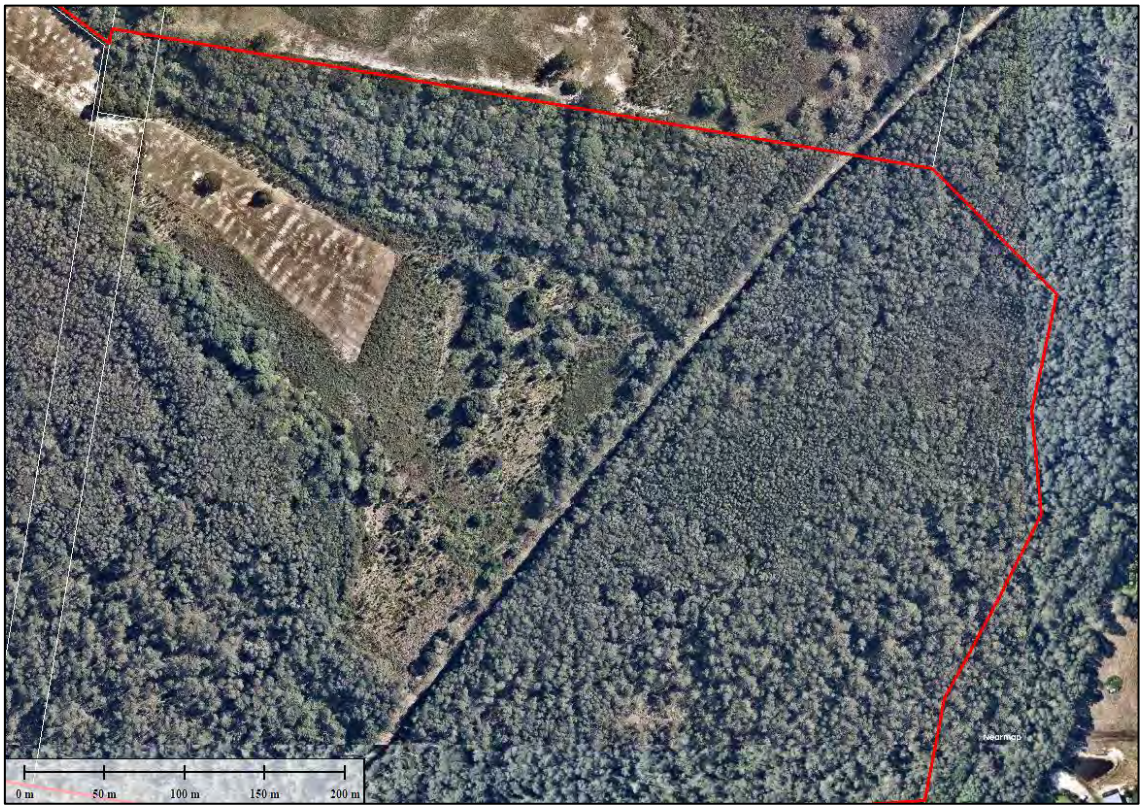


Figure 6: Rehabilitation Zones 4 and 6 Prior to Clearing (September 2025)

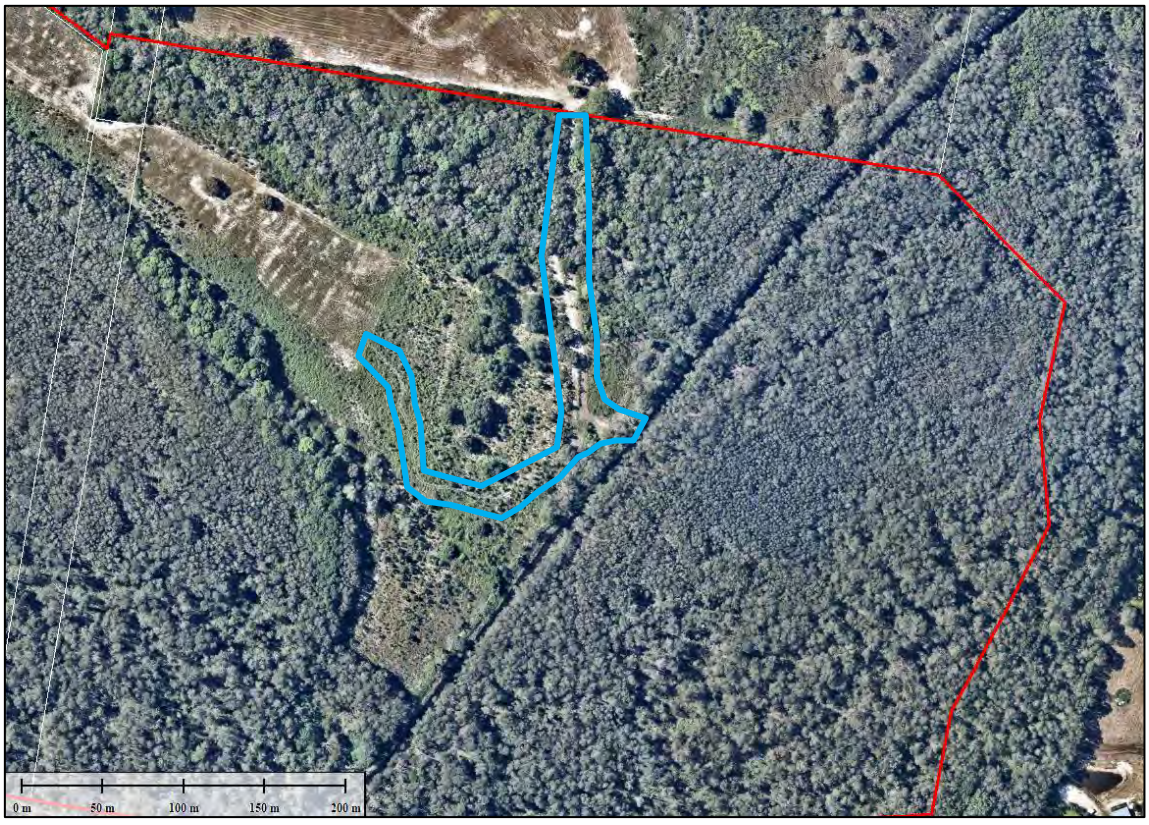


Figure 7: Rehabilitation Zones 4 and 6 Post Clearing [Approx. Impact Areas Shown in Blue] (March 2026)

	
Damage to Rehabilitation Zone	**Damage to Rehabilitation Zone**

The remaining plots remained the same condition score as 2026. The majority of these areas are already established and previously contained a high condition score.

A summary score table, spider graph and example comparison photos between Baseline, November 2022, September 2023, September 2024, September 2025 and September 2026 are provided below.

Table 5: Condition Score Summary

Form B Overall Condition Score Summary						
Plot No.	**Baseline**	**Nov. 22**	**Sep. 23**	**Sep. 24**	**Sep. 25**	**Sep. 26**
P1	100	100	99	100	100	100
P2	60	92.5	80	80	87.5	87.5
P3	55	67.5	70	87.5	90	94
P4	52.5	85	80	80	87.5	87.5
P5	65	70	67.5	75	75	75
P6	90	92.5	92.5	95	95	95
P7	52.5	80	75	82.5	82.5	85
P8	70	82.5	85	90	90	87.5
P9	80	92.5	95	92.5	92.5	90
P10	52.5	80	80	75	80	80
P11	99	99.5	99.5	99.5	99.5	99.5
P12	80	82.5	95	98.5	98.5	98.5
P13	97.5	97.5	99	97.5	98.5	99
P14	100	100	100	99.5	99.5	99.5
P15	99	100	100	99.5	99.5	98.5

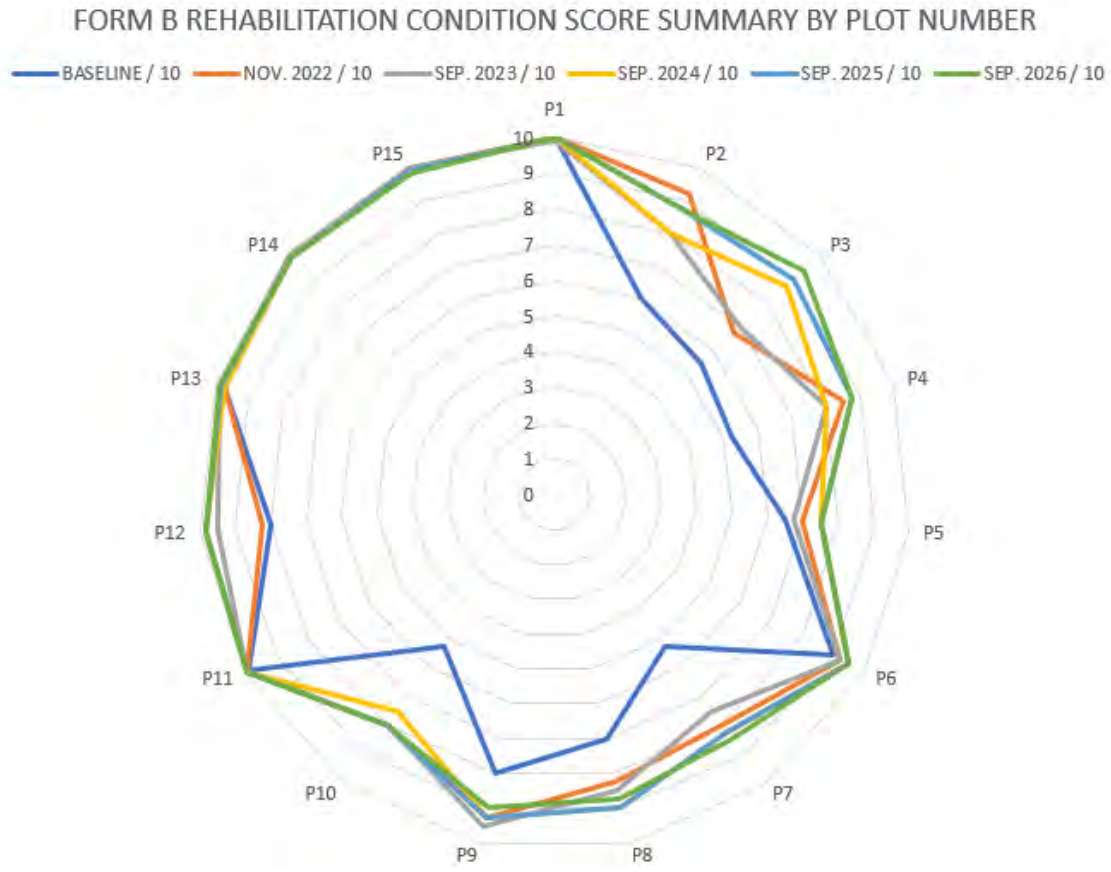


Figure 8: Condition Score Baseline Comparison

Table 6: Examples of Improvement Between Baseline, November 2022, September 2024, September 2025 and September 2026

				
PLOT 2 BASELINE @ 25M	PLOT 2 NOV 2022 @ 25M	PLOT 2 SEP 2024 @ 25M	PLOT 2 AUG 2025 @ 25M	PLOT 2 SEP 2026 @ 25M
				
PLOT 4 BASELINE @ 0M	PLOT 4 NOV 2022 @ 0M	PLOT 4 SEP 2024 @ 0M	PLOT 4 SEP 2025 @ 0M	PLOT 4 SEP 2026 @ 0M
				
PLOT 6 BASELINE @ 50M	PLOT 6 NOV 2022 @ 50M	PLOT 6 SEP 2024 @ 50M	PLOT 6 SEP 2025 @ 50M	PLOT 6 SEP 2026 @ 50M

				
PLOT 8 BASELINE @ 0M	PLOT 8 NOV 2022 @ 0M	PLOT 8 SEP 2024 @ 0M	PLOT 8 SEP 2025 @ 0M	PLOT 8 AUG 2026 @ 0M (CLEARED TRACK SINCE 2025)
				
PLOT 9 BASELINE @ NW 50M	PLOT 9 NOV 2022 @ NW 50M	PLOT 9 SEP 2024 @ NW 50M	PLOT 9 SEP 2025 @ NW 50M	PLOT 9 AUG 2026 @ NW 50M
				
PLOT 10 BASELINE @ N 25M	PLOT 10 NOV 2022 @ N 25M	PLOT 10 SEP 2024 @ N 25M	PLOT 10 SEP 2025 @ N 25M	PLOT 10 AUG 2026 @ N 25M

				
PLOT 6 BASELINE @ N 25M	PLOT 6 NOV 2022 @ N 25M	PLOT 6 SEP 2024 @ N 25M [POST FROG POND CREATION]	PLOT 6 SEP 2025 @ N 25M [POST FROG POND CREATION]	PLOT 6 SEP 2026 @ N 25M [POST FROG POND CREATION]
				
PLOT 5 BASELINE @ 0M	PLOT 5 NOV 2022 @ 0M	PLOT 5 SEP 2024 @ 0M [POST FROG POND CREATION]	PLOT 5 SEP 2025 @ 0M [POST FROG POND CREATION]	PLOT 5 SEP 2026 @ 0M [POST FROG POND CREATION]
				
REHAB ZONE 2 BASELINE	REHAB ZONE 2 NOV 2023 POST FROG POND CREATION AND PRIOR TO INFILL PLANTINGS	REHAB ZONE 2 SEP 2024 POST FROG POND CREATION AND INFILL PLANTINGS	REHAB ZONE 2 SEP 2025 POST FROG POND CREATION AND INFILL PLANTINGS	REHAB ZONE 2 SEP 2026 POST FROG POND CREATION AND INFILL PLANTINGS

Minor typical rehabilitation issues were observed within several of the monitoring plots and rehabilitation zones in general which are summarised below, although none are considered to be reasonable threats of failure at this stage of the management program. These are predominately related to weed re-establishment. Such issues are summarised below but are not present to a significant degree such that the plots have been inhibited in improving from baseline surveys:

Table 7: Minor Issue Summary and Nomination of Routine/Reactive Maintenance Responses

Plot No.	Rehabilitation Issue	Maintenance-Routine	Maintenance Reactive
P1	Nil.	Monitor for weeds and apply control as needed.	Nil.
P2	Re-establishment of pasture grass and Columbian Waxweed Performance criteria for weed coverage not achieved, predominantly in the drier areas to the north.	Follow up spot weed control.	Routine weed control.
P3	Re-establishment of pasture grass. Performance criteria for weeds not achieved.	Follow up spot weed control. Monitor frog pond plantings success.	Frog pond created and planted out with aquatic/wetland species. Weed control required for pasture grasses in areas external to the created frog pond.
P4	Re-establishment of pasture grass and Columbian Waxweed. Performance criteria for weeds and coverage not achieved, including areas associated with the previous construction access track for the frog ponds.	Follow up spot weed control.	Ongoing routine management of pasture grasses. Weed control required for pasture grasses. Supplementary plantings required to infill areas of pasture grass post treatment and along the frog pond construction access tracks.
P5	Pasture grasses dominant within areas external to created frog pond. Performance criteria for weeds and coverage not achieved.	Follow up spot weed control. Monitor frog pond plantings success.	Frog pond created and planted out with aquatic/wetland species. Supplementary plantings within areas external to frog pond to increase coverage as per the approved Rehabilitation Plan (Planit, 2020). Weed control required for pasture grasses in areas external to the frog pond.
P6	Pasture grass prominent in areas, in particularly within the northern areas of the Plot which is drier.	Follow up spot weed control. Monitor frog pond plantings success.	Frog pond created and planted out with aquatic/wetland species.

Plot No.	Rehabilitation Issue	Maintenance-Routine	Maintenance Reactive
	Performance criteria for weeds not achieved.		Weed control required for pasture grasses in areas external to the frog pond.
P7	Pasture grass re-establishing. Performance criteria for weeds and coverage not achieved in some areas of the zone, particularly the southern parts.	Follow up spot weed control.	Ongoing routine management of pasture grasses. Treatment of pasture grasses required. Supplementary plantings may be required following treatment of pasture grasses.
P8	Pasture grass re-establishing. Performance criteria for weeds not achieved.	Follow up spot weed control.	Ongoing routine management of pasture grasses. Treatment of pasture grasses required.
P9	Pasture grass and some weeds re-establishing, although coverage is within the performance criteria limits.	Follow up spot weed control.	Ongoing routine management of pasture grasses. Treatment of pasture grasses and weeds required.
P10	Pasture grass and some herbaceous weeds re-establishing. Performance criteria for weeds and coverage not achieved (predominantly in areas west of P10 plot).	Follow up spot weed control.	Ongoing routine management of pasture grasses. Treatment of pasture grasses and herbaceous weeds required. Supplementary plantings required following treatment of pasture grasses.
P11	Minor areas of Paspalum, Coral Berry and Umbrella Tree present, although coverage is within the performance criteria limits.	Follow up spot weed control.	Ongoing routine weed management.
P12	Minor areas of Paspalum, Inkweed and Easter Cassia present, although coverage is within the performance criteria limits.	Follow up spot weed control.	Ongoing routine weed management.
P13	Minor areas of Paspalum present, although coverage is within the performance criteria limits.	Follow up spot weed control.	Ongoing routine weed management.
P14	Several isolated stems of Easter Cassia and small patches of Paspalum present, although	Follow up weed control.	Ongoing routine weed management.

Plot No.	Rehabilitation Issue	Maintenance-Routine	Maintenance Reactive
	coverage is within the performance criteria limits.		
P15	Several Coral Berry plants present., although coverage is within the performance criteria limits.	Follow up weed control.	Ongoing routine weed management.

Plot surveys are contained within **Appendix 2.**

4.2 Performance Criteria Assessment

An assessment of the rehabilitation/revegetation project against the performance criteria of Section 5.3 of the approved VMP is a bi-annual requirement. Areas of non-compliance are proposed to be managed as identified in **Table 7** and **Table 8** and progress will be re-assessed in association with the next monitoring survey undertaken in early 2027.

Table 8: Performance Criteria Assessment

Performance Criteria	Compliance	Additional Comments
The contractor undertaking regeneration works is to be a suitably qualified professional with necessary licencing/permits.	Complies.	No action required.
Existing native vegetation and areas of natural regeneration to be retained (where applicable).	Compliant across the ~48ha rehabilitation zone. With the exception of clearing associated with emergency Council works (refer to Section 4.1 for details), no designated rehabilitation areas have been cleared/removed since the previous annual report. Vegetation protection fencing has been repaired since the previous inspection and are in good condition with adequate signage present.	Ongoing monitoring of vegetation protection and exclusion fencing proximate to works interface to occur. As noted within **Table 7** and **Appendix 2.**
All rubbish/vegetation dumping, non-approved structures etc. are removed from the Rehabilitation Zones.	Generally compliant across the ~48ha rehabilitation zone. Some minor rubbish debris (i.e. planting tubes, planting labels, bottles) noted within the rehabilitation zones which are to be removed during routine inspections.	Removal of rubbish to occur. Ongoing monitoring required.
Cattle and domestic animals are excluded.	Complies.	Ongoing monitoring required.
A significant reduction in the presence of weed species is	Generally compliant across the ~48ha rehabilitation zone.	Routine monitoring and control in accordance with VMP to occur.

Performance Criteria	Compliance	Additional Comments
evident. In practice it is noted that the removal of all individuals of all weed species for 100% of the time is unachievable. Therefore, it is considered appropriate that the following performance criteria be adopted: • **All large weed/ornamental trees are treated;** • **No weed shrubs/trees older than six months of age are present;** • **Densities of such shrubs/trees is not to exceed 1 per 20m2; and** • **Scattered groundcover weed species may occur but not in any covering an area greater than 5m^2.**	The non-compliant areas occur within sections of Rehabilitation Zones 1-4 which has seen a relatively consistent coverage of pasture grass since the previous annual report. On-going treatment of these areas are required. It's noted that it may take several years for the pasture grass to be controlled with the hope that native ground-layer vegetation will eventually smother and take over the pasture grass, which is already evident within several rehabilitation zones. Routine maintenance weed control is to continue to occur per the VMP. Previously treated camphor laurel trees have since died.	Continued monitoring of treated pasture grasses for natural regeneration with supplementary plantings to occur where necessary to achieve coverage performance criteria. Treatment of pasture grass and some areas of herbaceous weeds required as depicted within **Table 7** and **Appendix 2**.
A survival rate of the following minimum standards are to apply for all planted trees, shrubs and groundcovers: • **One year following planting: 95%** • **Three years following planting: 90%** • **Five years following planting: 90%**	Compliant. Whilst several plantings have died, the overall survival rate success was above 90%.	Ongoing monitoring and corrective actions (where required).
Growth rate targets per VMP table 6.	Compliant. An increase in native height and coverage was noted throughout all rehabilitation zones.	Ongoing monitoring proposed with corrective actions to be implemented where required.
Inappropriate public access to the Rehabilitation Zones is to be effectively restricted (through fencing or signage).	Complies. With the exception of clearing associated with emergency Council works (refer to Section 4.1 for details), no inappropriate public access was noted within the designated rehabilitation areas. Vegetation protection fencing has been repaired since the previous inspection and are in good condition with adequate signage present.	Ongoing monitoring of vegetation protection and exclusion fencing proximate to works interface to occur.
Assisted natural regeneration per VMP Section 5.3.1 Coverage Success	Not yet compliant across all areas.	Corrective action proposed: Routine monitoring and control in accordance with VMP to occur.

Performance Criteria	Compliance	Additional Comments
	An increase in height, diversity and coverage was noted throughout all rehabilitation zones. Some areas of Rehabilitation zones 1-4 did not meet the performance criteria for coverage. The main issue for this was due to the pasture grass coverage. The pasture grass coverage has likely affected the natural regeneration potential throughout the rehabilitation zones.	Treatment of pasture grass within Rehabilitation Zones 1-4 are to occur. At the end of year 4 areas below coverage success are to be treated with supplementary planting in accordance with VMP Section 5.3.1 and 4.4.1 (refer to **Table 7** and **Appendix 2**).



VEGETATION PROTECTION/REHABILITATION FENCING & SIGNAGE



PLANTINGS INCREASING IN HEIGHT AND COVERAGE – REHABILITATION ZONE 4



CORAL BERRY SAPLING WITHIN REHABILITATION ZONE 6



INCIDENCE OF NON-COMPLIANCE TO BE RECTIFIED: WEEDS AND CANOPY COVERAGE NOT ACHEIVED – REHABILITATION ZONE 3



CREATED FROG POND PLANTINGS INCREASING IN HEIGHT AND DESNITY – REHABILITATION ZONE 2



TREATED CAMPHOR LAUREL DYING - REHABILITATION ZONE 6



RECENTLY CLEARED/WIDENDED TRACK WITHIN REHABILITATION ZONE 6, EAST OF P15



NESTBOXES WITHIN REHABILITATION ZONE 6 SOUTHEAST OF P11

In accordance with the VMP, the next flora survey shall be performed in early 2027 and will be the fifth monitoring report to be performed after initiation of the rehabilitation/revegetation project. Data collected during the next survey shall be compared to the baseline survey as well as previous surveys to track progress across time and report back on the success on the ongoing routine management and the recommended adaptive/reactive measures proposed in this document. It is noted that following the fifth monitoring report, monitoring will occur annually, rather than 6-monthly (as per the VMP).

Appendix 1 – Approved Rehabilitation / Revegetation Plans

WEST BYRON - Rehabilitation Plan (ZONE 1)

30 June '22

- Low assist regen
- High Assist Regen
- Weed Control
- - ? all areas





Location Plan NTS

Legend

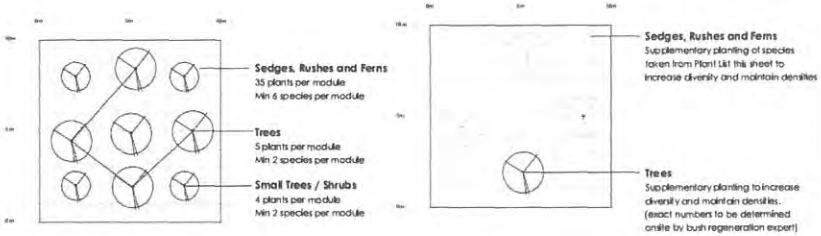
- LANDSCAPE REHABILITATION AREAS. Refer to relevant species lists and typical planting modules on this sheet.
- EXISTING VEGETATION COMMUNITY TO BE RETAINED. Refer to Vegetation Management Plan prepared by Planit Consulting for further information.
- REHAB 1.0 BOUNDARY PEGS. Boundary of rehabilitation areas to be pegged out by surveyor prior to commencement of works. Pegs to be star pickets / galv pipe to minimum 1 meter above ground painted yellow with notation to match as noted on these plans. Existing vegetation line to form all other boundaries as indicated this sheet.

Rehabilitation Zone 1

Total Area: 0.89Ha

Vegetation Type: Fresh-water Wetland

Scale: 1:1000 at full size A1



Planting Module 1 - Freshwater Wetland NTS

PIONEER SPECIES PLANTING 10 x 10 meter module

Planting Module 2 - Freshwater Wetland NTS

SUPPLEMENTARY SPECIES PLANTING 10 x 10 meter module

REHABILITATION ZONE 1 (89 MODULES)

TREES

Refer to Planting Module 1 and 2 for layout

CODE	PLANT SPECIES	COMMON NAME	NO PER MODULE	SIZE	QTY
cas gla	Casuarina glauca	Swamp Oak	5	140MM	445
cal sal	Callistemon salignus	Willow bottlebrush			
lep sco	Leptospermum scoparium	Swamptea			
mel qui	Melaleuca quinquenervia	Paperbark			
euc rob	Eucalyptus robusta	Swamp Mahogany			
euc ter	Eucalyptus tereticornis	Forest Red Gum			

SMALL TREES / SHRUBS

Refer to Planting Module 1 and 2 for layout

CODE	PLANT SPECIES	COMMON NAME	NO PER MODULE	SIZE	QTY
bre obl	Breynia oblongifolia	Breynia	4	140MM	356
hov act	Hovea acutifolia	Painted-Leaf HOvea			
mel ett	Melastoma ellitica	Blue Tongue			
lep pol	Leptospermum polygalifolium	Yellow Tea Tree			
bae fru	Baeckea frutescens	Weeping Baeckea			
cal pac	Callistemon pachyphyllus	Wollum bottlebrush			
ban rob	Banksia robur	Swamp Banksia			

SEDGES, RUSHES + FERNS -

Refer to Planting Module 1 and 2 for layout

CODE	PLANT SPECIES	COMMON NAME	NO PER MODULE	SIZE	QTY
bay jun	Baumea juncea	Bare Twigrush	35 min 6 species per mod	75MM TUBE	3115
bau ter	Baumea teretifolia	Twigrush			
ble lin	Blechnum indicum	Bungwall fern			
cen asi	Centella asiatica	Pennywort			
cyp pul	Cyperus polystachyos	Bunchy Sedge			
jun usi	Juncus usitatus	Common Rush			
phl lan	Philydrum lanuginosum	Frogsmouth			
gah cla	Gahnia clarkei	Saw Sedge			
bau rub	Baumea rubiginosa	Twig Rush			

Rehabilitation Zone 1 Schedule

Stage	Year 1	Year 2	Year 3	Year 4	Year 5+
Stage 1 Total Area: 0.89Ha	PLANTING MODULE 1 PIONEER SPECIES PLANTING 'Seed and Small Tree' selection from Rehabilitation Area 1 species list this sheet. Exact numbers to achieve densities as stated dependent on natural regeneration (determined onsite by regeneration expert)	PLANTING MODULE 2 SUPPLEMENTARY SPECIES PLANTING Supplementary planting to increase diversity.	Natural Regeneration Weed Management Monitoring and maintenance as per VMP - prepared by Planit	Natural Regeneration Weed Management Monitoring and maintenance as per VMP - prepared by Planit	Natural Regeneration Weed Management Monitoring and maintenance as per VMP - prepared by Planit
	Ongoing monitoring and maintenance as per VMP				

PROJECT: REHABILITATION PLAN

DRAWING TITLE: ZONE 1

REV	DESCRIPTION	DATE	DRAWN	DESIGN	CHECKED
01	LANDSCAPE DPW FOR INFORMATION	18.04.18	AH	AH	JA
02	LANDSCAPE DPW FOR INFORMATION	18.06.20	AH	AH	LT
03	FOR APPROVAL	06.07.21	AH	AH	LT
04	FOR APPROVAL	19.07.21	AH	AH	LT

JOB NO: J7148 DWG NO: J7148_501

SCALE 1:1000 @ A1 1:2000 @ A3

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WEST BYRON - Rehabilitation Plan (ZONE 2)



Legend

- LANDSCAPE REHABILITATION AREAS — Refer to relevant species lists and typical planting modules on this sheet.
- EXISTING VEGETATION COMMUNITY TO BE RETAINED. Refer to Vegetation Management Plan prepared by Planit Consulting for further information.
- HABITAT CREATION AREAS FOR ACID FROGS. Refer to Acid Frog Habitat Plan prepared by Planit Consulting for further information.
- REHAB 1.0 — BOUNDARY PEGS. Boundary of rehabilitation areas to be pegged out by surveyor prior to commencement of works. Pegs to be star pickets / galv pipe to minimum 1 meter above ground painted yellow with notation to match as noted on these plans. Existing vegetation line to form all other boundaries as indicated this sheet.

Low amount Regen

High amount Regen

Weed Control - To all areas



Location Plan NTS

Scale: 1:1000 at full size A1

Rehabilitation Zone 2

Total Area: 3.9Ha

Vegetation Type: Fresh-water Wetland

REHABILITATION ZONE 2 (390 MODULES)

TREES

Refer to Planting Module 1 and 2 for layout

CODE	PLANT SPECIES	COMMON NAME	NO PER MODULE	SIZE	QTY
cas gla	Casuarina glauca	Swamp Oak	5	140MM	1950
cal sal	Callistemon salignus	Willow bottlebrush			
lop sou	Lophostemon suaveolens	Swampbox			
mel qui	Melaleuca quinquenervia	Paperbark			
euc rob	Eucalyptus robusta	Swamp Mahogany			
euc ter	Eucalyptus tereticornis	Forest Red Gum			

SMALL TREES / SHRUBS

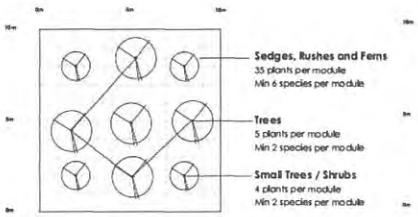
Refer to Planting Module 1 and 2 for layout

CODE	PLANT SPECIES	COMMON NAME	NO PER MODULE	SIZE	QTY
bre ast	Breynia oblongifolia	Breynia	4	75MM	1560
hov ell	Hovea ellipticifolia	Painted-Leaf Hovea			
mel aff	Melastoma affine	Blue Tongue			
lep pet	Leptospermum polygalifolium	Yellow Tea Tree			
bau hy	Baeckea hutacoana	Weeping Baeckea			
cal pac	Callistemon pachyphyllus	Wollum bottlebrush			
ban rob	Banksia robur	Swamp Banksia			

SEDGES, RUSHES + FERNS

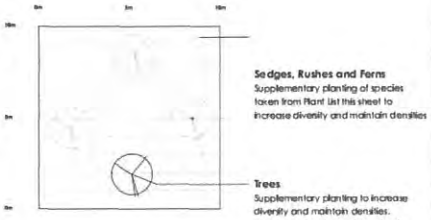
Refer to Planting Module 1 and 2 for layout

CODE	PLANT SPECIES	COMMON NAME	NO PER MODULE	SIZE	QTY
bau jun	Baumea juncea	Bare Twigrush	35 min 6 species per mod	75MM TUBE	13,650
bau ter	Baumea teretifolia	Twigrush			
ble ind	Blechnum indicum	Bungwall Fern			
cen asi	Centella asiatica	Pennywort			
cyp pol	Cyperus polystachyos	Bunchy Sedge			
jun vil	Juncus villosus	Common Rush			
phi lon	Phillydrum lanuginosum	Frogsmouth			
gah cla	Gahnia clarkei	Saw Sedge			
bau rub	Baumea rubiginosa	Twig Rush			



Planting Module 1 - Freshwater Wetland

PIONEER SPECIES PLANTING 10 x 10 meter module NTS



Planting Module 2 - Freshwater Wetland

SUPPLEMENTARY SPECIES PLANTING 10 x 10 meter module NTS

Rehabilitation Zone 2 Schedule

Stage	Year 1	Year 2	Year 3	Year 4	Year 5+
Stage 1 Total Area: 3.9Ha	PLANTING MODULE 1 Species selected from Rehabilitation Area 2 species list this sheet, 6 each numbers to achieve densities as stated dependent on natural regeneration (to be determined onsite by Regeneration expert)	PLANTING MODULE 2 SUPPLEMENTARY SPECIES PLANTING Supplementary planting to increase diversity.	Natural Regeneration Weed Management Monitoring and maintenance as per VMP - prepared by Planit	Natural Regeneration Weed Management Monitoring and maintenance as per VMP - prepared by Planit	Natural Regeneration Weed Management Monitoring and maintenance as per VMP - prepared by Planit

PROJECT: REHABILITATION PLAN

DRAWING TITLE: ZONE 2

REV	DESCRIPTION	DATE	DRAWN	DESIGN	CHECKED
01	LANDSCAPE OPW FOR INFORMATION	18.04.18	AH	AH	JA
02	LANDSCAPE OPW FOR INFORMATION	16.06.20	AH	AH	LT
03	FOR APPROVAL	06.07.21	AH	AH	LT
04	FOR APPROVAL	19.07.21	AH	AH	LT

JOB NO: J7148 DWG NO: J7148_502

SCALE 1:1000 @ A1 1:2000 @ A3

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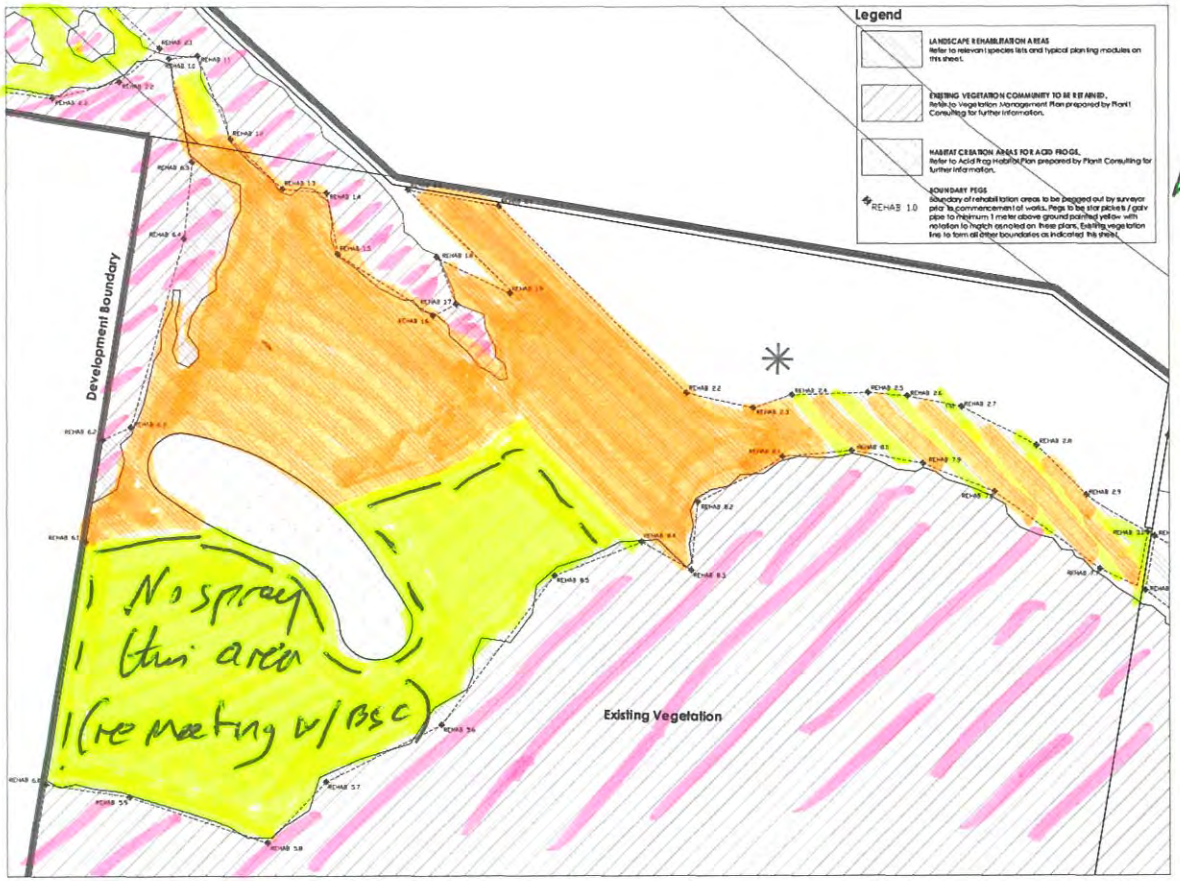
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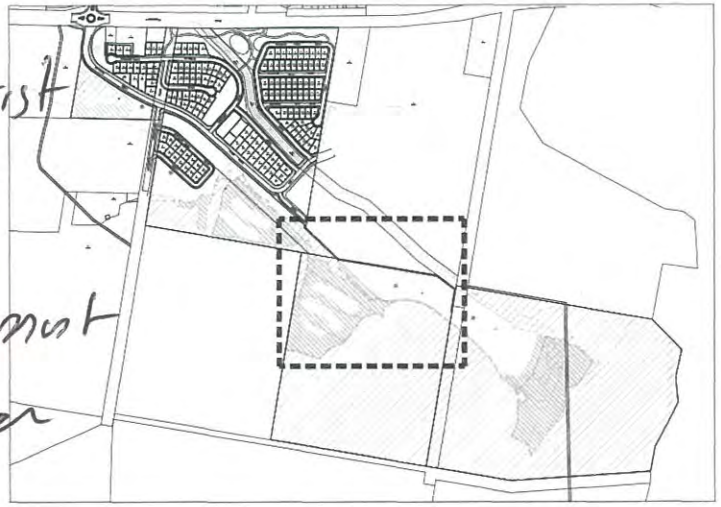
WEST BYRON - Rehabilitation Plan (ZONE 3)



Scale: 1:1000 at full size A1

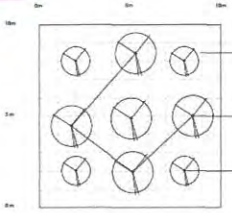
Low assist Regen

High assist Regen



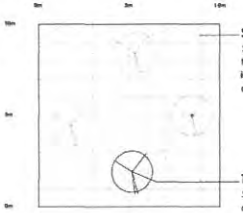
Location Plan NTS

Weed Control - to all areas



Planting Module 1 - Freshwater Wetland NTS

PIONEER SPECIES PLANTING 10 x 10 meter module



Planting Module 2 - Freshwater Wetland NTS

SUPPLEMENTARY SPECIES PLANTING 10 x 10 meter module

Rehabilitation Zone 3

Total Area: 4.6Ha

Vegetation Type: Fresh-water Wetland

REHABILITATION ZONE 3 (460 MODULES)

TREES - module 1, 2

CODE	PLANT SPECIES	COMMON NAME	NO PER MODULE	SIZE	QTY
cas gla	Casuarina glauca	Swamp Oak	5	140MM	2300
cal sal	Callistemon salignus	Willow Bottlebrush			
lep sou	Lophostemon suaveolens	Swampbox			
mel qui	Melaleuca quinquenervia	Paperbark			
euc rob	Eucalyptus robusta	Swamp Mahogany			
euc ter	Eucalyptus tereticornis	Forest Red Gum			

SMALL TREES / SHRUBS - module 1, 2

CODE	PLANT SPECIES	COMMON NAME	NO PER MODULE	SIZE	QTY
tre oli	Breynia oblongifolia	Breynia	4	75MM	1840
hov ell	Hovea ewartiana	Pointed-Leaf HOvea			
mel ell	Melastoma affine	Blue Tongue			
lep pet	Leptospermum polygalifolium	Yellow Tea Tree			
bae fru	Baeckea frutescens	Weeping Baeckea			
cal pac	Callistemon pachyphyllus	Wollumbottlebrush			
ban rob	Banksia robur	Swamp Banksia			

SEDGES, RUSHES + FERNS - module 1, 2

CODE	PLANT SPECIES	COMMON NAME	NO PER MODULE	SIZE	QTY
bau jun	Baumea juncea	Bare Twigrush	35 min 6 species per mod	75MM TUBE	2115
bau ter	Baumea terntifolia	Twigrush			
ble ind	Blechnum indicum	Bungwall fern			
cen asi	Centella asiatica	Penny wort			
cyp pol	Cyperus polystachyos	Bunchy Sedge			
jun vil	Juncus villosus	Common Rush			
phi lan	Phillydrum lanuginosum	Frogsmouth			
gah cla	Gahnia clarkei	Saw Sedge			
bau tub	Baumea tubiginosa	Twig Rush			

Rehabilitation Zone 3 Schedule

Stage	Year 1	Year 2	Year 3	Year 4	Year 5
Stage 1 Total Area: 4.6Ha	**PLANTING MODULE 1** Species selected from Rehabilitation Area 3 species lists sheet. Exact numbers to achieve densities as stated dependent on natural regeneration (infill amendments by Regeneration expert)	**PLANTING MODULE 2** SUPPLEMENTARY SPECIES PLANTING Supplementary planting to increase diversity.	Natural Regeneration Weed Management monitoring and maintenance as per VMP - prepared by Planit	Natural Regeneration Weed Management monitoring and maintenance as per VMP - prepared by Planit	Natural Regeneration Weed Management monitoring and maintenance as per VMP - prepared by Planit
	Ongoing monitoring and maintenance as per VMP				

PROJECT: REHABILITATION PLAN

DRAWING TITLE: ZONE 3

REV	DESCRIPTION	DATE	DRAWN	DESIGN	CHECKED
01	LANDSCAPE OPW FOR INFORMATION	18.04.18	AH	AH	JA
02	LANDSCAPE OPW FOR INFORMATION	18.06.20	AH	AH	LT
03	FOR APPROVAL	06.07.21	AH	AH	LT
04	FOR APPROVAL	19.07.21	AH	AH	LT

JOB NO: J7148 DWG NO: J7148_503

SCALE 1:1000 @ A1 1:2000 @ A3

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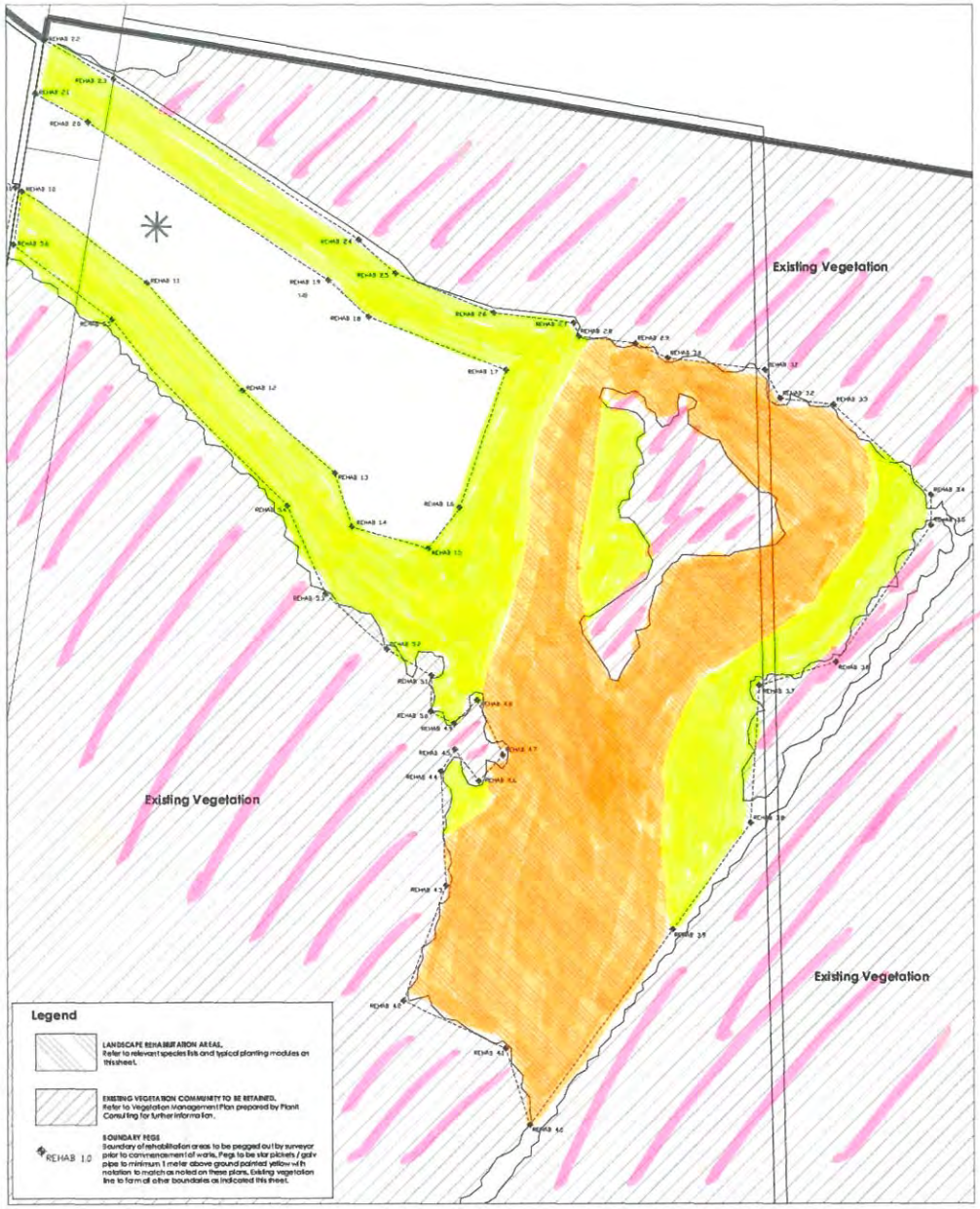
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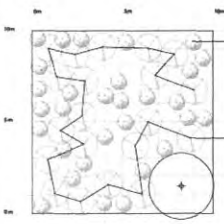
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WEST BYRON - Rehabilitation Plan (ZONE 4)

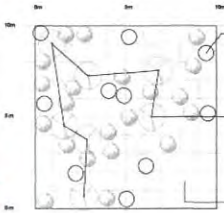


Rehabilitation Zone 4
Total Area: 4.38Ha
Vegetation Type: Swamp Sclerophy II

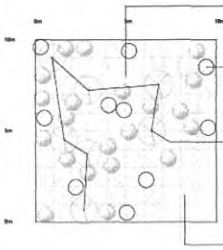
Scale: 1:1000 at full size A1



Planting Module 1 - Swamp Sclerophyll
PIONEER SPECIES PLANTING 10 x 10 meter module NTS



Planting Module 2 - Swamp Sclerophyll
SUPPLEMENTARY SPECIES PLANTING 10 x 10 meter module NTS



Planting Module 3 - Swamp Sclerophyll NTS
SUPPLEMENTARY SPECIES PLANTING TO INCLUDE GROUNDCOVERS 10 x 10 meter module



High amst Regen

Weed Control - B all areas

REHABILITATION ZONE 4 (438 MODULES)

TREES - module 1, 2 and 3

CODE	PLANT SPECIES	COMMON NAME	NO PER MODULE	SIZE	QTY
cal sal	Callistemon salignus	White Bottlebrush	20 Minimum 3 species selected per module	75MM TUBE	8760
car int	Carynata intermedia	Pink Bloodwood			
euc ter	Eucalyptus tereticornis	Forest Red Gum			
euc rob	Eucalyptus robusta	Swamp Mahogany			
mel qui	Melaleuca quinquenervia	Paperbark			
lop sou	Lophostemon suaveolens	Swamp Box			
lop con	Lophostemon confertus	Brush Box			

SMALL TREES / SHRUBS - module 1, 2 and 3

CODE	PLANT SPECIES	COMMON NAME	NO PER MODULE	SIZE	QTY
all tor	Allocasuarina torulosa	Forest Oak	30 Minimum 3 species selected per module	75MM TUBE	13140
acr imp	Acronychia imperforata	Beach Acronychia			
ban int	Banksia integrifolia	Coastal Banksia			
lep pet	Leptospermum polygalifolium	Yellow Tea Tree			
ban rob	Banksia robur	Swamp Banksia			
hov acu	Hovea acutifolia	Hovea			
nat lon	Notelaea longifolia	Long-leaved Mock-olive			
bee fru	Beaches fruticosa	Weeping Beachsea			
syz ole	Syzygium oleosum	Blue Lillipilli			
cal pac	Callistemon pachyphyllus	Wollum bottlebrush			

GROUNDCOVERS - module 3 only

CODE	PLANT SPECIES	COMMON NAME	NO PER MODULE	SIZE	QTY
aus dut	Austromyrtus dulcis	Midyim	50 Minimum 3 species selected per module	75MM TUBE	To be determined on site by bush regeneration expert
blechnum	Blechnum indicum	Bungwall Fern			
cen asi	Centella asiatica	Pennywort			
cyp pol	Cyperus polystachyos	Flat Sedge			
dia cae	Dianella caerulea	Blue Flax Lilly			
gah asp	Gahnia aspera	Saw Sedge			
hib sca	Hibbertia scandens	Snake Vine			
har vib	Hardenbergia violacea	Native sarsaparilla			
lom lon	Lomandra longifolia	Matrush			
lom hys	Lomandra hystrix	Creek Matrush			
pte esc	Pteridium esculentum	Bracken Fern			
sch val	Schoenoplectus validus	Clubrush			
xyr com	Xyris complanata	Yellow-eyed Grass			

Rehabilitation Zone 4 Schedule

Stage	Year 1	Year 2	Year 3	Year 4	Year 5
Stage 1 Total Area: 4.38Ha	**PLANTING MODULE 1** PIONEER SPECIES PLANTING Trees and Small Trees' selected from Rehabilitation Areas 4 specimens per sheet. Exact numbers to achieve densities as stated dependant on natural regeneration (determined onsite by regeneration expert)	**PLANTING MODULE 2** SUPPLEMENTARY SPECIES PLANTING Supplementary planting to increase diversity. Pioneer species - Trees' and 'Small Trees' selected from Rehabilitation Area 4 species list this sheet.	**PLANTING MODULE 3** SUPPLEMENTARY SPECIES PLANTING TO INCLUDE GROUNDCOVERS Supplementary planting to increase diversity. 'Trees' and 'Small Trees' selected from Rehabilitation Area 4 species list this sheet. Introduction of Groundcover species, dependant on natural regeneration.	Natural Regeneration Weed Management monitoring and maintenance as per VMP - prepared by Planit	Natural Regeneration Weed Management monitoring and maintenance as per VMP - prepared by Planit
	Ongoing monitoring and maintenance as per VMP				

PROJECT:	
REHABILITATION PLAN	
DRAWING TITLE:	
ZONE 4	

REV	DESCRIPTION	DATE	DRAWN	DESIGN	CHECKED
01	LANDSCAPE OPW FOR INFORMATION	18.04.18	AH	AH	JA
02	LANDSCAPE OPW FOR INFORMATION	16.06.20	AH	AH	LT
03	FOR APPROVAL	06.07.21	AH	AH	LT
04	FOR APPROVAL	19.07.21	AH	AH	LT

JOB NO: J7148 DWG NO: J7148_504
SCALE 1:1000 @ A1 1:2000 @ A3
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WEST BYRON - Rehabilitation Plan (ZONE 5)



Legend

- LANDSCAPE REHABILITATION AREAS. Refer to fauna neutral plant list and typical planting modules on this sheet.
- EXISTING VEGETATION COMMUNITY TO BE RETAINED. Refer to Vegetation Management Plan prepared by Planit Consulting for further information.
- REHAB 1.0 — BOUNDARY PEGS. Boundary of rehabilitation areas to be pegged out by surveyor prior to commencement of works. Pegs to be star pickets / galv pipe to minimum 1 meter above ground painted yellow with notation to match as noted on these plans. Existing vegetation line to form all other boundaries as indicated this sheet.
- TURF TYPE 1. Refer to specification
- MULCH ONLY (TO FUTURE RECREATION AND OPEN SPACE GARDENS). Refer to specification

High amount Regen

Weed Control - to all areas



Location Plan — NTS

Landscape Buffer Rehabilitation Zone 5

Scale: 1:1000 at full size A1

Total Area: 0.89Ha

Vegetation Type: Swamp Sclerophyll.

Note: Refer to detailed planting setout (Sheet 506 - 508) for detailed planting works.

Planting areas to exclude proposed pathways and recreation / open space areas. Planting areas affected by future earthworks are to be temporarily turfed, refer to Sheet 507 - 509.

FAUNA NEUTRAL PLANT LIST

ADVANCED TREE STOCK

Refer to Planting Module 1 for layout

CODE	PLANT SPECIES	COMMON NAME	SIZE	HEIGHT	CLEAR TRUNK	SPREAD	SPACING	QUANTITY (STAGE 1 REHABILITATION WORKS)
LIV aus	Livistona australis	Cabbage Tree Palm	5kg	NA	3m	2.5m	As per plan	12
ELA ret	Elaeocarpus reticulatus	Blueberry Ash	100Lt	2.5-3.5m	NA	2m	As per plan	10
MEL qui	Melaleuca quinquenervia	Broad leaf paperbark	100Lt	2.5-3.5m	NA	2m	As per plan	19
LOP sou	Lophostemon suaveolens	Swamp Box	100Lt	2.5-3.5m	NA	2m	As per plan	9
LOP con	Lophostemon confertus	Brush Box	100Lt	2.5-3.5m	NA	2m	As per plan	13

REHABILITATION ZONE 5 (89.6 MODULES)

TREES

Refer to Planting Module 1 and 2 for layout

PLANT SPECIES	COMMON NAME	NO PER MODULE	NO PER MODULE	SIZE	QUANTITY (STAGE 1 REHABILITATION WORKS)	QUANTITY (STAGE 2 REHABILITATION WORKS)
Acacia disparima subsp. 'disparima'	Hickory Wattle	Quantity within first 10m of Ewingsdale Road buffer:	Quantity beyond the first 10m of Ewingsdale Road buffer:	75MM TUBE	281 E	1195
Acacia melanoxylon	Blackwood	20	15			
Elaeocarpus reticulatus	Blueberry Ash					
Melicope elleryana	Pink Dungwood	Minimum 3 species selected per module	Minimum 3 species selected per module			
Lophostemon suaveolens	Swamp Box					
Lophostemon confertus	Brush Box					

SMALL TREES / SHRUBS

Refer to Planting Module 1 and 2 for layout

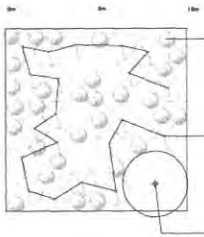
PLANT SPECIES	COMMON NAME	NO PER MODULE	NO PER MODULE	SIZE	QUANTITY (STAGE 1 REHABILITATION WORKS)	QUANTITY (STAGE 2 REHABILITATION WORKS)
Allocasuarina torulosa	Forest Oak	Quantity within first 10m of Ewingsdale Road buffer:	Quantity beyond the first 10m of Ewingsdale Road buffer:	75MM TUBE	39 88	1038
Cordyline stricta	Narrow-leaved palm lily					
Durabaldia myrsinoides	Carinwood					
Hibiscus diversifolius	Swamp hibiscus					
Hovea acutifolia	Hovea					
Leptospermum juniperinum	Prickly Tea-tree					
Leptospermum polygalifolium	Tantoon	30	30			
Leptospermum trinervium	Black Tea-tree	Minimum 3 species selected per module	Minimum 3 species selected per module			
Callistemon pachyphyllus	Wollum bottlebrush					
Trochocarpa laurina	Tree Heath					

GROUNDCOVERS

Refer to Planting Module 3 for layout

PLANT SPECIES	COMMON NAME	NO PER MODULE	NO PER MODULE	SIZE	QUANTITY (STAGE 1 REHABILITATION WORKS)	QUANTITY (STAGE 2 REHABILITATION WORKS)
Blechnum indicum	Bungwall fern	Quantity within first 10m of Ewingsdale Road buffer:	Quantity beyond the first 10m of Ewingsdale Road buffer:	75MM TUBE	1470	1100
Centella asiatica	Pennywort					
Cyperus polystachyos	Bat Sedge					
Dianella caerulea	Blue Flax Lily					
Gahnia aspera	Saw Sedge					
Hibbertia scandens	Snake Vine					
Hardenbergia violacea	Native sarsaparilla	50	50			
Lomandra longifolia	Mat-rush	Minimum 5 single selected per module	Minimum 5 species selected per module			
Lomandra hystrix	Creek Mat-rush					
Pteridium esculentum	Native Fern					
Schoenoplectus validus	Club-rush					
Xyris complanata	Yellow-eyed Grass					

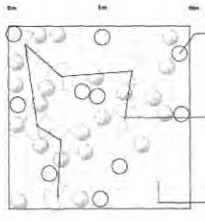
NOTE:
FOREST MULCH TO 50MM DEPTH, COVERING 0.89HA
TOTAL: 4,450M3



- **Small Trees / Shrubs** — 30 plants per module. Min 3 species per module. Note: minimum 20 plants per module beyond first 10m of Ewingsdale Road.
- **Trees** — 20 plants per module. Min 3 species per module. Note: minimum 15 plants per module beyond first 10m of Ewingsdale Road.
- **Advanced trees as shown on sheet 506-508.** **Forest mulch required to entire planting area.**

Planting Module 1 - Swamp Sclerophyll — NTS

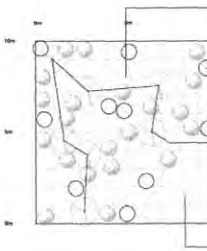
PIONEER SPECIES PLANTING 10 x 10 meter module



- **Small Trees / Shrubs** — Supplementary planting to increase diversity and maintain densities. (exact numbers to be determined onsite by bush regeneration expert)
- **Trees** — Supplementary planting to increase diversity and maintain densities. (exact numbers to be determined onsite by bush regeneration expert)
- **Existing Trees** — Existing trees to remain

Planting Module 2 - Swamp Sclerophyll — NTS

SUPPLEMENTARY SPECIES PLANTING 10 x 10 meter module



- **Groundcovers** — Introduction of Groundcover species. exact numbers dependent on natural regeneration.
- **Small Trees / Shrubs** — Supplementary planting to increase diversity and maintain densities. (exact numbers to be determined onsite by bush regeneration expert)
- **Trees** — Supplementary planting to increase diversity and maintain densities. (exact numbers to be determined onsite by bush regeneration expert)
- **Existing Trees** — Existing trees to remain

Planting Module 3 - Swamp Sclerophyll — NTS

SUPPLEMENTARY SPECIES PLANTING TO INCLUDE GROUNDCOVERS 10 x 10 meter module

Rehabilitation Zone 5 Schedule

Stage	Year 1	Year 2	Year 3	Year 4	Year 5
Stage 1 Total Area: 0.89Ha	PLANTING MODULE 1 PIONEER SPECIES PLANTING With 'Tree' and 'Small Tree' selection from Rehabilitation Area 5 specified this level. Exact numbers to achieve densities as stated dependent on natural regeneration (determined onsite by bush regeneration expert)	PLANTING MODULE 2 SUPPLEMENTARY SPECIES PLANTING Supplementary planting to increase diversity. Pioneer species - 'Tree' and 'Small Tree' selection from Rehabilitation Area 5 specific to this level.	PLANTING MODULE 3 SUPPLEMENTARY SPECIES PLANTING TO INCLUDE GROUNDCOVERS Supplementary planting to increase diversity. 'Tree' and 'Small Tree' selected from Rehabilitation Area 5 specific to this level. Introduction of Groundcover species, dependent on natural regeneration.	Natural Regeneration Weed Management Weeding and maintenance as per WMP - prepared by Planit	Natural Regeneration Weed Management Weeding and maintenance as per WMP - prepared by Planit

PROJECT: REHABILITATION PLAN

DRAWING TITLE: ZONE 5

REV	DESCRIPTION	DATE	DRAWN	DESIGN	CHECKED
07	REVISED COUNCIL APPROVAL	08.02.22	LE	AH	LT

JOB NO: J7148 | DWG NO: J7148_505

SCALE 1:1000 @ A1 1:2000 @ A3

CLIENT: NSPT Pty Ltd

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Appendix 2 – February / March 2026 and August / September 2026 Rehabilitation Plot Monitoring Results

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N/A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

No.

What species?

N/A

What management was undertaken to eradicate these weeds?

N/A

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 6-10m
- Shrub species: 1.5-4m
- ground covers: <1.5m

Area already well established.

What are the dominant species within each layer?

- Tree: Melaleuca quinquernervia
- Shrub: Acacia melanoxylon
- ground covers: Blechnum indicum

Have you noticed any new native plant species since the last inspection?

No.

If yes name the species or take a photograph

N/A

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Large nectar feeding birds (i.e. honeyeaters etc.)

Small tree and ground birds (i.e. finches)

Amphibians (i.e. eastern sedgefrog, crinia signifera)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

Minor trampling noted throughout the plot, likely from previous frog surveys.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? No.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? No.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

N/A.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

PROJECT DESCRIPTION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 146. Paperbark/Heath Swamp Forest.@ 556849, 6831798		**Monitoring Site ID:** P1
Type of on-grounds: approved for assisted natural regeneration to maintain Paperbark/Heath Swamp Forest	**Years since site commenced:** 3.5	**When was this site last assessed?** 12-08-25
Current assessment conducted by: TR	**Date of current assessment:** 25-02-26	
Overall comments on site condition: Closed Sedgeland/Fernland/ Rushland with scattered Paperbark Low Woodland. Excellent condition. Dry at time of survey.		
Has the condition of the site changed since last assessment? No.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	100	Native swamp in excellent condition. Currently fenced off from surrounding pasture	20-30% Summed for plot but only in NE, NW and SW corner	Dense native species	N/A	No change.		Assisted rehabilitation (weed management) is approved for this zone. Maintain exclusion from surrounding paddocks.
B = Uncertain significant problems	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A (describe)
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A (describe)
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								100 %

LOCATION

Site No.	P1							**Date:**	25-02-26		
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT										
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 146. Paperbark/Heath Swamp Forest. Rehabilitation Zone 6										
GPS coordinates centre plot/meander:	**Zone**	5	6	**E**	Centred @ 556849		**N**	Centred @ 6831798	**Datum:**	MGA94256	

VEGETATION STRUCTURE

Stratum	Est. Median Height (m)	Est. cover density (D,M,S,V)
E	-	-
T1	5-9	S-V
T2	3-5	S-V
S1	1.5-3	S-V
G	0-1	D

Structural formation: (including height)	Closed Sedgeland/Fernland/ Rushland with scattered Paperbark Low Woodland
Ecologically dominant layer:	G

Small clusters at northern and southern ends of plot

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
T1	D	*Melaleuca quinquenervia*
T1	S	*Glochidion ferdinandi*
T2		*Melaleuca quinquenervia*
T2		*Melicope elleryana*
S		*Elaeocarpus reticulatus*
S		*Oxylobium robustum*
S		*Leptospermum juniperinum*
S		*Banksia oblongifolia*
S		*Acacia melanoxylon*
S		*Austromyrtus dulcis*
S		*Homalanthus populifolius*

Str.	Scientific Name
G	*Blechnum indicum*
G	*Gahnia clarkei*
G	*Pteridium esculentum*
G	*Hibbertia scandens*
G	*Gleichenia dicarpa*
G	*Entolasia stricta*
G	*Imperata cylindrica*
G	*Paspalidium distans*
G	*Baloskion tetraphyllum*
G	*Pomax umbellata*
G	*Lygodium microphyllum*
G	*Selaginella uliginosa*
G	*Sphagnum cuspidatum*
G	*Baumea rubiginosa*
G	*Parsonsia straminea*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	The overall 0.65ha vegetation zone is comprised of an open canopy layer of Melaleuca quinquenervia and a sparse midstorey/shrub layer including species such as Gahnia clarkei, Elaeocarpus reticulatus, Leptospermum juniperinum, Oxylobium robustum and Acacia ulicifolia. The ground layer was relatively dense and included a 0.06 ha area of ephemeral sedge swamp dominated by Baumea rubiginosa, with occasional Blechnum indicum and patches of Baloskion tetraphyllum. Outside of the sedge swamp, the balance of the vegetation zone comprised dense understorey vegetation dominated by Baloskion tetraphyllum, with Hibbertia scandens and Parsonsia straminea in areas and various ferns throughout (e.g. Blechnum indicum, Pteridium esculentum, Gleichenia dicarpa, Lygodium microphyllum). Grasses were present throughout the site, and included native species such as Entolasia stricta, Imperata cylindrica and Paspalidium distans. Forbs included Pomax umbellata and Selaginella uliginosa. Weed free within the 1000m² plot and currently fenced. Recorded Wallum Froglet and Wallum Sedge Frog habitat. Treated camphor laurel trees are dead and starting to break apart. Some minor tramping of ferns in areas, likely from previous frog surveys and/or landscape contractor conducting routine inspection. Dry at time of inspection.

Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 6. Existing Sedgeland/Fernland/Rushland Swamp to be managed by assisted natural regeneration.



Centreline @ om



Centreline @ 50m



NE corner @ om



NE corner @ om



NW corner @ om



NW corner @ om



Centreline South @ 25m



Centreline North @ 25m



Centre west @ 25m



Centre east @ 25m



SW Corner @ 50m



SW Corner @ 50m



SE Corner @ 50m



SE Corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m



Previously treated Camphor Laurel trees breaking apart

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Exotic grasses present with Columbian Waxweed also common.

What species?

Andropogon virginicus, Paspalum, Axonopus spp. and Columbian Waxweed.

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: N/A
- Shrub species: 1-2m
- ground covers: <1.5m

What are the dominant species within each layer?

- Tree: N/A
- Shrub: Melaleuca quinquenervia
- ground covers: Philydrum lanuginosum and Baumea

Have you noticed any new native plant species since the last inspection?

No.

If yes name the species or take a photograph

-

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. wrens)

Amphibians (i.e. wallum froglets)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Fencing requires replacement.

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? Yes.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? N/A. Rehab Zone 2 is exempt from the diversity performance requirement.

Groundcover Coverage? N/A. Rehab Zone 2 is exempt from the groundcover coverage requirement.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Weed removal to be undertaken to treat exotic grasses. Protection fencing to be repaired.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 147 @ 557080, 6831531		**Monitoring Site ID:** P2
Type of on-grounds: approved for assisted natural regeneration with reconstruction to Freshwater Wetland habitat	**Years since site commenced:** 3.5	**When was this site last assessed?** 08-09-25
Current assessment conducted by: TR	**Date of current assessment:** 02.03.26	
Overall comments on site condition: Good conversion from grazed pasture to Freshwater Wetland since baseline survey. Exotic grasses coverage has decreased since last inspection with native wetland groundcover species overtaking, although exotic grasses are still common within the drier areas in the northern sections of the rehab zone. Plantings and wetland species increasing in height and coverage. Dry underfoot.		
Has the condition of the site changed since last assessment? YES. Increase in wetland/plantings height and coverage. Pasture grass less prominent with native wetland species taking over. Protection fencing requires repairs.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	75	Freshwater wetland flora establishing.	0 Juvenile phase	Dense establishing native flora species.	Nil	Sporadic melaleuca quinequenrvia + planted species.		Routine weed control.
B = Uncertain significant problems	25	Freshwater wetland flora establishing 25% estimate of area is estimated to have exotic grasses.	0 Juvenile phase	Mid – dense of pasture grasses	Pasture grasses Columbian waxweed	Sporadic melaleuca quinequenrvia + planted species.		Routine weed control.
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								87.5%

LOCATION

Site No.	P2							**Date:**	02-03-26		
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT										
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 147 Rehabilitation Zone 2										
GPS coordinates centre plot:	**Zone**	5	6	**E**	557080		**N**	6831531	**Datum:**	MGA94z56	

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	-	-
T2	-	-
S1	0.25-2.5	V
G	0.1-0.1.5	D

Structural formation: (including height)	rushland/ sedgeland/ wetland
Ecologically dominant layer:	G

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1		-
T1		-
T2		-
T2		-
S		*Melaleuca quinquenervia*
S		*Callistemon salignus*
S		*Lophostemon suaveolens*
S		*Eucalyptus robusta*
G		*Pomax umbellata*
G		*Gahnia clarkei*

Str.	Scientific Name
G	Pasture Grasses
G	*Baloskion tetraphylla*
G	*Eleocharis dulcis*
G	*Blechnum indicum*
G	*Juncus usitatus*
G	*Cyperus* spp.
G	*Persicaria decipiens, P. strigosa*
G	*Imperata cylindrica*
G	*Philydrum lanuginosum*
G	*Liparophyllum exaltatum*
G	*Baumea spp*
G	*Cuphea carthagenensis**
G	*Centella asiatica*
G	*Hemarthria uncinata*
G	*Fimbristylis dichotoma*
G	*Drosera spatulata*
G	*Selaginella uliginosa*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Previously established Pasture Grassland managed and transforming to wetland vegetation under natural regeneration efforts with supplementary plantings. Exotic grasses common. Wet at time of inspection. Protection fencing installed at the interface between slashing area and rehab zone, requires repairs. Dry underfoot.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 2: Freshwater Wetland



Centreline @ om



Centreline @ 50m



NW corner @ om



NW corner @ om



SW corner @ om



SW corner @ om



Centre South @ 25m



Centre North @ 25m



Centre East @ 25m



Centre West @ 25m



SE corner @ 50m



SE corner @ 50m



NE corner @ 50m



NE corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Pasture grasses, Columbian waxweed and Nymphaea spp.

What species?

Andropogon virginicus, Axonopus, Paspalum, *Nymphaea spp.* and Columbian waxweed

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 4-6m
- Shrub species: <1.5m
- ground covers: <1.6m

What are the dominant species within each layer?

- Tree: Elaeocarpus reticulatis
- Shrub: Melaleuca quinquenervia
- ground covers: Baumea spp / Leipronia acticulata

Have you noticed any new native plant species since the last inspection?

Yes

If yes name the species or take a photograph

Hardenbergia violacea

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches, grassbird and wrens)

Nectivore birds (i.e. honeyeaters, friarbird)

Amphibians (i.e. striped marsh frog, Eastern Sedgefrog, crinia signifera, wallum froglet)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Fencing at the interface between the development footprint and rehabilitation zone 2 requires replacing.

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? Yes.

Survival Rate of Plants? Yes.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? N/A. Rehab Zone 2 is exempt from the diversity performance requirement.

Groundcover Coverage? N/A. Rehab Zone 3 is exempt from the groundcover coverage requirement.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Frog ponds have been constructed and planted out and establishing nicely. Water depth varies between ~0-0.75m. Weed control to treat pasture grass required within areas external to the frog ponds. Some Nymphaea spp. noted within frog pond.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 147 @ 557262, 6831473		**Monitoring Site ID:** P3
Type of on-grounds: approved for assisted natural regeneration with reconstruction to Freshwater Wetland habitat / frog ponds	**Years since site commenced:** 3.5	**When was this site last assessed?** 08-09-25
Current assessment conducted by: TR	**Date of current assessment:** 02-03-26	
Overall comments on site condition: Pasture Grassland with regenerating wetland flora. Frog ponds created and planted out. So far, it's looking good (i.e. no obvious dead plantings and increasing in height and coverage). Externally to the frog ponds, native wetland species starting to overtake pasture grass.		
Has the condition of the site changed since last assessment? YES. Frog pond plantings increasing in height and coverage. Wetland species increasing in coverage externally to frog ponds.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	85	Frog ponds created and planted out with aquatic/wetland species. External to the frog ponds, freshwater wetland flora establishing amongst the pasture grassland.	0 Juvenile stage.	Mid-dense establishing native flora species.	Pasture grasses	Persoonia stradbrokensis, Melaleuca quinquenervia + planted aquatic/wetland species within the frog ponds.		Ongoing routine management of pasture grasses. Keeping monitoring frog pond plantings.
B = Uncertain significant problems	15	Pasture grasses present within areas external to the frog ponds. Weed control required.	0	Dense	Pasture grasses	Performance criteria for weeds not achieved in some areas.		Ongoing routine management of pasture grasses required.
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								92.5 %

LOCATION

Site No.	P3							**Date:**	02-03-26		
Purpose	VEGETATION/REHABILITATION MONITORING 40m x 20m PLOT										
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 147. In the southeast. Rehabilitation Zone 2. Frog pond.										
GPS coordinates centre plot:	**Zone**	5	6	**E**	557262		**N**	6831473	**Datum:**	MGA94z56	

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)	
E	-	-	
T1	-	-	
T2	4-8	V	Established trees along northern banks of pond.
S1	0.25-1.5	V	Several paperbark stems.
G	0.1-1.5	D	Frog pond plantings, regenerating wetland species and pasture grass

Structural formation: (including height)	Closed Grassland
Ecologically dominant layer:	G

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1		-
T1		-
T2		*Acacia sophorae*
T2		*Elaeocarpus reticulatus*
S		*Melaleuca quinquenervia*
S		
S		
G		*Eleocharis dulcis*
G		*Drosera spatulata*
G		*Calochlaena dubia*
G		*Hemarthria uncinata*
G		*Fimbristylis dichotoma*

Str.	Scientific Name
G	Pasture Grasses along banks*
G	*Baloskion tetraphylla*
G	*Blechnum indicum*
G	*Juncus usitatus*
G	*Cyperus* spp.
G	*Philydrum lanuginosum*
G	*Lygodium microphyllum*
G	*Baumea juncea*
G	*Baumea rubiginosa*
G	*Baumea articulata*
G	*Schoenoplectus validus*
G	*Leipronia articulata*
G	*Cuphea* *
G	*Centella asiatica*
G	*Nymphaea spp.*
G	*Hardenbergia violacea*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Frog ponds have been constructed and planted. Plantings establishing nicely. Water depth varies ~0-0.75m in depth. The previous monitoring plot of P3 has been relocated further to the west and is 40m x 20m in size. Given the depth of water within the frog pond and the soft nature of the sandy soil, no groundcover photos or centre photos were undertaken. This may change in the future once the plantings have become more established and the soft soil stabilises. It us visually obvious that the coverage and height of the plantings are increasing. Some Nymphaea noted within frog pond. External to the frog ponds previous plantings and treatments of pasture grasses have occurred, although the pasture grasses are still present. Protection fencing installed at the interface between the approved development footprint and rehabilitation zone requiring minor repairs.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 2: Freshwater Wetland & Constructed Frog Pond



Centreline @ om



Centreline @ 50m



SE corner @ om



SE corner @ om



SW corner @ om



SW corner @ om





NW corner @ 50m	NW corner @ 50m
	
NE corner @ 50m	NE corner @ 50m
	
Fencing at rehabilitation zone interface requiring minor repairs	New species observed: *Hardenbergia violacea*

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Exotic grasses established (predominantly within the eastern sections) and some Columbian Waxweed.

What species?

Andropogon virginicus, Setaria sphacelata, Paspalum, Axonopus and Cuphea.

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 1-6m (planted Eucalypts)
- Shrub species: 0.5-3m (Leptospermums)
- ground covers: 0.2-1.5m

What are the dominant species within each layer?

- Tree: Eucalyptus spp.
- Shrub: Leptospermum spp.
- ground covers: Pasture grasses +/- Bracken and Bunchy Sedge

Have you noticed any new native plant species since the last inspection?

Yes.

If yes name the species or take a photograph

Wahlenbergia stricta

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches, wagtail, grassbird and wrens)

Reptiles (i.e. skinks)

Amphibians (i.e. striped marsh frog, crinia signifera and eastern sedge frog)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? Yes.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? N/A. Rehab Zone 3 is exempt from the diversity performance requirement.

Groundcover Coverage? N/A. Rehab Zone 3 is exempt from the groundcover coverage requirement.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Weed removal to be undertaken to control pasture grass. Supplementary plantings to be undertaken post pasture grass treatment to increase coverage in bare/grassy areas..

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 148. In the north @ 557480, 6831293		**Monitoring Site ID:** P4
Type of on-grounds: approved for assisted natural regeneration with reconstruction to Freshwater Wetland habitat	**Years since site commenced:** 3.5	**When was this site last assessed?** 08-09-25
Current assessment conducted by: TR	**Date of current assessment:** 02-03-26	
Overall comments on site condition: Pasture grassland re-establishing/dominant in some eastern parts. Zone revegetated with freshwater wetland module. Plantings going well with a noticeable increase in height and coverage. Supplementary plantings required in areas currently suppressed by pasture grass (following treatment), predominantly within the eastern areas of the plot. Previous access track to the frog ponds has been dominated by Swamp Rice Grass		
Has the condition of the site changed since last assessment? YES. Noticeable increase in plant heights/coverage.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	75	Revegetation zone with some natural recruitment. Substantial replacement of previous pasture.	0 Juvenile phase	Planted species, mostly rushes and sedge with eucalypts/paperbarks also present.	Pasture grass	Several species mostly planted with some regeneration (refer preceding page). Increasing in height and coverage.		Ongoing routine management of pasture grasses. Supplementary plantings required for pasture grass areas post treatment.
B = Uncertain significant problems	25	Nominal 25% representing pasture grasses re=establishing.	0 Juvenile phase	Planted species, mostly rushes and sedge with eucalypts/paperbarks also present.	Pasture grass Columbian Waxweed	Several species mostly planted with some regeneration (refer preceding page) Performance criteria for weeds and coverage not achieved.		Ongoing routine management of pasture grasses. Weed control required for pasture grasses. Supplementary plantings required pasture grass dominant areas post treatment.
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								87.5 %

LOCATION

Site No.	P4	**Date:**	02-03-26
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT		
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 148. In the north. Rehabilitation Zone 3		

GPS coordinates centre plot:	**Zone**	5	6	**E**	557480	**N**	6831293	**Datum:**	MGA94z56

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)	
E	-	-	
T1	-	-	
T2	1-4	S	Planted Eucalypts
S1	0.25-2.5	S	Mostly planted natives
G	0.1-2	S	Planted and recruited natives
G	0.05-1.5	S-M	Pasture grass and planted wetland natives

Structural formation: (including height)	Open Rush/Sedgeland revegetation zone over low controlled pasture grass
Ecologically dominant layer:	G

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1		-
T1		-
T2		-
T2		*Eucalyptus robusta*
S		*Persoonia stradbrokensis*
S		*Acacia melanoxylon*
S		*Acacia sophorae*
S		*Leptospermum spp.*
S		*Melaleuca quinquenervia*
S		*Oxylobium robustum*
S		*Bansia robur*
S		*Eucalyptus tereticornis*
S		*Callistemon salignus*
S		*Leptospermum polygalifolium*
S		*Lophostemon suaveolens*
S		*Eucalyptus robusta*
S		*Melastoma affine*
S		*Callistemon salignus*
S		*Casuarina glauca*
S		*Macaranga tanarius*

Str.	Scientific Name
G	Pasture Grasses
G	*Baloskion tetraphylla*
G	*Centella asiatica*
G	*Cyperus spp.*
G	*Pteridium esculentum*
G	*Ischaemum australe*
G	*Baumea juncea/rubiginsoa*
G	*Juncus usitatus*
G	*Carex appressa*
G	*Liparophyllum exaltatum*
G	*Histiopteris incisa*
G	*Lobelia stenophylla*
G	*Gahnia spp.*
G	*Hardenbergia violacea*
G	*Cuphea carthagenensis**
G	*Calochlaena dubia*
G	*Elaeocharis dulcis*
G	*Fimbristylis dichotoma*
G	*Goodenia rotundifolia*
G	*Drosera spatulata*
G	Parsonsia straminea
G	Wahlenbergia stricta

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Previous tall, closed grassland now managed as a revegetation zone. Planted native species and retained regenerating species established and increasing in heigh and coverage. Pasture grasses are present throughout the area, in particularly within the eastern portions and require treatment. Noticeable increase in height and coverage of native vegetation since previous inspection, in particularly the Leptospermums and Bunchy Sedges. Previous access tracks for the construction of frog ponds have regenerated with Bunchy Sedge and Leersia hexandra.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 3: Freshwater Wetland



Centreline @ om



Centreline @ 50m



SE corner @ om



SE corner @ om



NE corner @ om



NE corner @ om



Centre west @ 25m



Centre east @ 25m



Centre south @ 25m



Centre north @ 25m



SW corner @ 50m



SW corner @ 50m



NW corner @ 50m



NW corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m



Previous frog pond access track dominated by Swamp Rice Grass

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Exotic grasses established within areas externally to frog ponds.

What species?

Andropogon virginicus, Axonopus spp, Setaria sphacelata and Paspalum.

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: N/A
- Shrub species: 0.25-2.5m
- ground covers: <1.75m

What are the dominant species within each layer?

- Tree: N/A
- Shrub: Melaleuca quinquenervia
- ground covers: Pasture Grass / Cyperus spp. (Leipronia articulata within frog ponds)

Have you noticed any new native plant species since the last inspection?

Yes

If yes name the species or take a photograph

Pomax umbrella and Selaginella uliginosa

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. fairy wrens, grassbird)

Amphibians (i.e. striped marsh frog and eastern sedge frog)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

N/A

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? Yes.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? Yes.

Tree, Small Tree & Shrub Diversity? N/A. Rehab Zone 3 is exempt from the diversity performance requirement.

Groundcover Coverage? N/A. Rehab Zone 3 is exempt from the groundcover coverage requirement.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Frog ponds have been constructed with plantings establishing nicely. Water depth varies between 0-0.5m. Weed control to treat pasture grass required within areas external to the frog ponds and infill with plantings once treated to increase coverage, in particularly tree/shrub species.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 148. Centre. @ 557425, 557425		**Monitoring Site ID:** P5
Type of on-grounds: approved for assisted natural regeneration with reconstruction to Freshwater Wetland habitat. Frog pond.	**Years since site commenced:** 3.5	**When was this site last assessed?** 08-09-25
Current assessment conducted by: TR	**Date of current assessment:** 02-03-26	
Overall comments on site condition: Pasture Grassland with regenerating wetland flora. Frog ponds created with plantings establishing nicely (i.e. no obvious dead plantings). Paperbarks regenerating although pasture grass dominates areas south of the frog pond. Treatment of pasture grasses required with supplementary plantings to follow to increase native shrub/tree coverage.		
Has the condition of the site changed since last assessment? YES. Frog ponds have been constructed and planted out with aquatic/wetlands species and establishing nicely. External to the frog ponds, pasture grass is dominant. Paperbark saplings increasing in height and coverage although more shrub/tree species is required (supplementary plantings).		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	50	Frog ponds created and planted out with aquatic/wetland species. External to the frog ponds, freshwater wetland flora establishing amongst the pasture grassland.	0 Juvenile phase	Mid-dense establishing native flora species.	Pasture grasses	Performance criteria for coverage not achieved.		Ongoing routine management of pasture grasses. Paperbark saplings increasing in height and coverage.
B = Uncertain significant problems	50	Pasture grasses have re-established within areas external to the frog ponds. Weed control required.	0 Juvenile phase	Dense non-native	Pasture grasses	Performance criteria for weeds and coverage not achieved.		Ongoing routine management of pasture grasses required. Following pasture grass treatment, Infill plantings required to achieve coverage criteria.
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								75 %

LOCATION

Site No.	P5							**Date:**	02-03-26		
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT										
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 148. Centre. Rehabilitation Zone 3. Frog Pond.										
GPS coordinates centre plot:	**Zone**	5	6	**E**	557425		**N**	557425	**Datum:**	MGA94z56	

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)	
E	-	-	
T1	-	-	
T2	-	-	
S1	0.25-3	V-S	Primarily Regenerating Paperbarks
G	0.1-1.75	D	Predominantly planted wetland/frog pond species and Pasture Grass

Structural formation: (including height)	Closed Grassland with regenerating rushland/ sedgeland/ wetland flora in the south
Ecologically dominant layer:	G

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1		-
T1		-
T2		-
T2		-
S		*Melaleuca quinquenervia*
S		*Persoonia stradbrokensis*
S		*Acacia melanoxylon*
S		*Acacia sophorae*
S		*Eucalyptus tereticornis*

Str.	Scientific Name
G	Pasture Grasses *
G	*Baloskion tetraphylla*
G	*Eleocharis dulcis*
G	*Juncus usitatus*
G	*Cyperus spp.*
G	*Lygodium microphyllum*
G	*Fimbristylis ferruginea*
G	*Liparophyllum exaltatum*
G	*Centella asiatica*
G	*Baumea juncea, B. rubiginosa, B. articulata*
G	*Xyris complanata*
G	*Ischaemum australe*
G	*Philydrum lanuginosum*
G	*Schoenoplectus validus*
G	*Leipronia articulata*
G	*Viola hederacea*
G	*Cuphea carthagenensis**
G	*Drosera spatulate*
G	*Pomax umbrella*
G	*Salaginella uliginosa*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Frog pond plantings establishing nicely. Water depth varies ~0-0.5m in depth. External to the frog ponds previous plantings/natural regeneration have occurred, although pasture grass is dominant. Treatment of pasture grass is required with supplementary plantings to follow within areas south of the frog ponds. Increase in plantings/natural regeneration height noted, in particularly paperbarks.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 3: Freshwater Wetland.



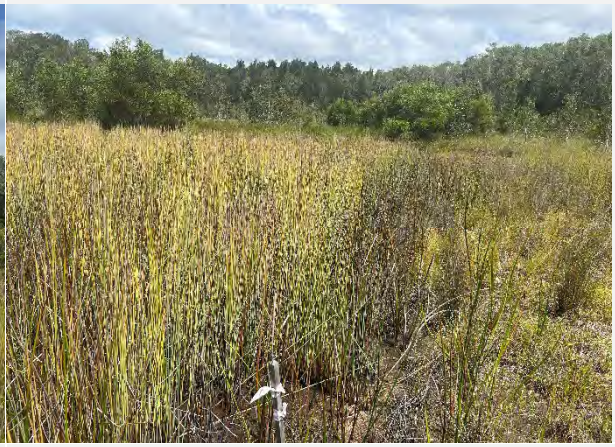
Centreline @ om



Centreline @ 50m



NW corner @ om



NW corner @ om



NE corner @ om



NE corner @ om



Centreline North @ 25m



Centreline South @ 25m



Centre west @ 25m



Centre east @ 25m



SW corner @ 50m



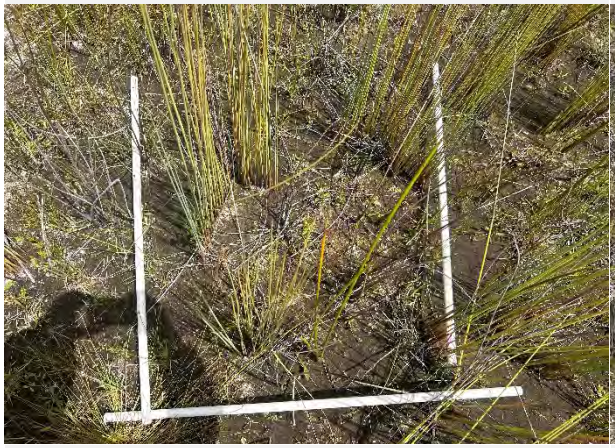
SW corner @ 50m



SE corner @ 50m



SE corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Exotic grasses established.

What species?

Andropogon virginicus, Axonopus and Paspalum.

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: N/A
- Shrub species: 0.25-3m
- ground covers: <1.5m

What are the dominant species within each layer?

- Tree: N/A
- Shrub: Melaleuca quinquenervia
- ground covers: Baumea spp. +/- Cyperus spp and Pasture Grass (Lepironia articulata associated with frog ponds)

Have you noticed any new native plant species since the last inspection?

Yes.

If yes name the species or take a photograph

Casuarina glauca

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches and wrens)

Amphibians (i.e. eastern sedgefrog)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

N/A.

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? Yes.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? N/A. Rehab Zone 3 is exempt from the diversity performance requirement.

Groundcover Coverage? N/A. Rehab Zone 3 is exempt from the groundcover coverage requirement.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Generally in good condition and regenerating nicely, although exotic grass still prominent, in particularly within the northern areas which are drier. Pasture grass requires treatment.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 148. Southeast. @ 557494, 6831176		**Monitoring Site ID:** P6
Type of on-grounds: approved for assisted natural regeneration with reconstruction to Freshwater Wetland habitat. Frog pond.	**Years since site commenced:** 3.5	**When was this site last assessed?** 28-08-25
Current assessment conducted by: TR	**Date of current assessment:** 02-03-26	
Overall comments on site condition: Pasture Grassland with regenerating wetland flora. Frog ponds created and planted out. So far, it's looking good (i.e. no obvious dead plantings and increasing in heigh/coverage). Paperbarks regenerating nicely although pasture grass is prominent in sections (particularly north). Dry under feet. Pasture grass requires treatment in areas.		
Has the condition of the site changed since last assessment? YES Frog pond plantings increasing in height and coverage. Melaleuca quinquenervia juveniles very common and increasing in height and coverage.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	90	Freshwater wetland flora establishing amongst the pasture grassland supplemented by native plantings. Frog ponds created and planted out with aquatic/wetland species.	0	Mid-dense to dense establishing native flora species.	Pasture grasses	Excellent regeneration of paperbark. Native species height and coverage increasing and achieving performance criteria.		Ongoing routine management of pasture grasses. Paperbark saplings increasing in height and coverage. Monitor frog pond planting success.
B = Uncertain significant problems	10	10% estimate of pasture grasses which requires treatment.	0	Dense non-native	Pasture grasses	Pasture grass prominent in areas. Performance criteria for weeds not achieved.		Ongoing routine management of pasture grasses.
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								95 %

LOCATION

Site No.	P6							**Date:**	02-03-26		
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT										
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 148. Southeast. Rehabilitation Zone 3. Frog Pond										
GPS coordinates centre plot:	**Zone**	5	6	**E**	557494		**N**	6831176	**Datum:**	MGA94z56	

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	-	-
T2	-	-
S1	0.25-3	S-M
G	0.1-1.5	D

Structural formation: (including height)	Closed Freshwater Wetland/Rushland/Sedgeland with Pasture Grassland Associated
Ecologically dominant layer:	G

Predominantly regenerating Paperbarks

Frog pond plantings and regenerating wetland species and pasture grass.

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1		-
T1		-
T2		-
T2		-
S		*Melaleuca quinquenervia*
S		*Breynia oblongifolia*
S		*Acacia sophorae*
S		Casuarina glauca

Str.	Scientific Name
G	Pasture Grasses
G	*Baloskion tetraphylla*
G	*Eleocharis dulcis*
G	*Juncus usitatus*
G	*Cyperus* spp. x 2
G	*Lygodium microphyllum*
G	*Fimbristylis ferruginea*
G	*Liparophyllum exaltatum*
G	*Centella asiatica*
G	*Baumea juncea, B. rubiginosa, B. articulata*
G	*Blechnum indicum*
G	*Gahnia clarkei*
G	*Lepironia articulata*
G	*Philydrum lanuginosum*
G	*Schoenus brevifolius*
G	*Centella asiatica*
G	*Phragmite australis*
G	*Xyris complanata*
G	*Lobelia stenophylla*
G	*Schoenoplectus Validus*
G	*Selaginella uliginosa*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Regenerating freshwater wetland with pasture grasses present. Excellent regeneration of paperbark saplings and aquatic flora from baseline. Increase in plantings/natural regeneration height and coverage. Pasture grass slowly becoming overtaken by native groundcover species, although pasture grasses are still prominent within the drier sections within the northern areas of the plot. Dry under feet at time of survey. Frog pond plantings are establishing nicely. Water depth varies ~0-0.5m in depth.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 3: Freshwater Wetland. Constructed Frog Pond.



Centreline @ om



Centreline @ 50m



NE corner @ om



NE corner @ om



NW corner @ om



NW corner @ om



Centre west @ 25m



Centre east @ 25m



Centre south @ 25m



Centre north @ 25m



SW corner @ 50m



SW corner @ 50m



SE corner @ 50m



SE corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m



Frog Pond Plantings Establishing Nicely

FORM A: ROUTINE REHABILITATION MONITORING SHEET

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<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

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<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Exotic grasses re-established.

What species?

Andropogon virginicus, Paspalum spp., Axonopus spp., Kikuyu, Groundsel and some Columbian Waxweed.

What management was undertaken to eradicate these weeds?

To be treated.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

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<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: Some planted Eucalypts 5m+ in height
- Shrub species: 0.25-2.5m
- ground covers: 0.1-1.25m

What are the dominant species within each layer?

- Tree: Eucalyptus spp.

- Shrub: Melaleuca quinquenervia +/- Eucalyptus spp.

- ground covers: Pasture grass and Lomandras

Have you noticed any new native plant species since the last inspection?

No

If yes name the species or take a photograph

N/A.

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

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<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches, silvereye and wrens)

Mammal (i.e. Swamp Wallaby, Bandicoot diggings)

Reptiles (i.e. skinks, common tree snake)

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<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

Yes. 4wd track created within the rehab zone (likely by BSC to repair water mains). This has resulted in an access track carved into the Rehabilitation Zone.

What actions were undertaken to remove any illegal modifications?

TBC at this current stage.

Condition of fences
- Good
- Need minor repair
- Poor (need replacement)

N/A

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Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? Yes.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? Yes.

General Coverage/Success? Yes.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Natural regeneration and plantings establishing nicely, although exotic grass are prominent, particularly within the southern areas of the Zone. Bandicoot diggings and wallaby scats common. Supplementary plantings required to increase coverage once exotic grass is treated. Fence off and monitor impacts associated with 4wd track (appears to be ok for now, with the exception of some trampling).

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MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 149. In south of paddock. @ 557990, 6830947		**Monitoring Site ID:** P7
Type of on-grounds: approved for assisted natural regeneration with reconstruction to Swamp Sclerophyll Forest Habitat	**Years since site commenced:** 3.5	**When was this site last assessed?** 18-08-25
Current assessment conducted by: TR	**Date of current assessment:** 05-03-26	
Overall comments on site condition: Previous pasture grassland controlled and revegetated with swamp sclerophyll module, although whiskey grass, kikuyu and carpet grass are established in areas, particularly the southern areas of the zone. Planted species taking off excellently, in particularly the Eucalypts. Recently created 4wd track noted within rehab zone.		
Has the condition of the site changed since last assessment? YES. Plantings establishing nicely and increasing in height and coverage. Pasture grass persisting. 4wd track created within Rehab zone.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	70	Revegetation zone with natural recruitment. Substantial replacement of previous pasture. Plantings increasing in height and coverage.	0 Juvenile phase	Planted species	Pasture grass	Several species mostly planted with some regeneration (refer preceding page) Native plantings increasing in height and coverage.		Ongoing routine management of pasture grasses. Treatment of pasture grasses required, particularly within the southern areas of Zone 4. Supplementary plantings required following treatment of pasture grasses
B = Uncertain significant problems	30	30% representing pasture re-establishing. A 4wd track has been created within Zone 4, likely as a result of the water main works conducted on site. Whilst not entirely cleared like in other areas affected by these works, this 4wd track has trampled/flattened vegetation within the rehab zone. Remedial measures to restore these areas are yet to be determined at this current stage, although there are signs of natural regeneration already occurring.	0 Juvenile phase	Dense non-native	Pasture grasses	Several species mostly planted with some regeneration (refer preceding page) Performance criteria for weeds and coverage not achieved in some areas (primarily where pasture grass has taken over).		Ongoing routine management of pasture grasses. Treatment of pasture grasses required. Supplementary plantings required following treatment of pasture grasses. Fence off and monitor areas affected by the 4wd track.

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								85 %

LOCATION

Site No.	P7							**Date:**	05-03-26		
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT										
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 149. In south of paddock. Rehabilitation Zone 4										
GPS coordinates centre plot:	**Zone**	5	6	**E**	557990		**N**	6830947	**Datum:**	MGA94z56	

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)	
E	-	-	
T1	-	-	
T2	1.5-6	M	Planted eucalypts
S1	0.25-2	V	Mostly planted natives
G	0.1-1.25	M	Planted and recruited natives
G	0.1-1.25	S-M	Pasture grass and planted natives with some natural recruitment

Structural formation: (including height)	Very Open Shrubland revegetation zone over low controlled pasture grass
Ecologically dominant layer:	G

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1		-
T1		-
S		Melaleuca quinquenervia
S		Persoonia stradbrokensis
S		Acacia sophorae
S		Lophostemon suaveolens
S		Zieria smithii
T2/S		Lophostemon confertus
T2/S		Eucalyptus tereticornis
S		Bankisa robur
S		Austromyrtus dulcis
S		Leptospermum polygalifolium
S		Callistemon salignus
S		Casuarina glauca
S		Corymbia intermedia
T2/S		Eucalyptus robusta
S		Callistemon pachyphyllus
S		Syzygium oleosum

Str.	Scientific Name
G	Pasture Grasses *
G	Baloskion tetraphylla
G	Blechnum indicum
G	Hibbertia scandens
G	Cyperus spp.
G	Gahnia clarkei
G	Centella asiatica
G	Pteridium esculentum
G	Wahlenbergia gracilis
G	Drosera spatulata
G	Liparophyllum exaltatum
G	Lomandra spp.
G	Histiopteris incisa
G	Fimbristylis ferruginea
G	Xyris complanata
G	Hardenbergia violaceae
G	Viola hederacea
G	Baccharis halimifolia*
G	Cuphea carthagenensis*
G	Pomax umbellata
G	Imperata cylindrica
G	*Staphania japonica*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes	Previous tall, closed grassland now managed as a revegetation zone. Coverage and height improved from previous inspection with planted native species and retained regenerating species establishing nicely. Pasture grass remains persistent within understory and requires treatment. Bandicoot diggings and wallaby scats common within zone. A portion of the Rehab Zone has been cleared since the previous inspection. Diggers came through from the neighbouring property to the north through zones 6 and 4 to access water lines. Large areas were cleared for the access track and some road base brought in to gain access across the creek. Part way along this cleared zone a 4wd track has been made through zone 4 plantings. It is understood that Byron Shire Council were working on a burst repair on the water main crossing the east section of the Harvest Estate property. It is noted that the landowner was not aware of the works. At this current stage, it is undetermined as to what remedial measures will be undertaken to those impacted areas within the Rehabilitation Zones. It is noted that signs of natural regeneration are starting to occur in areas, although this event has setback over 3 years' worth of restoration works in within those areas affected.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 4: Swamp Sclerophyll Forest.



Centreline @ om



Centreline @ 50m



SE corner @ om



SW corner @ om



Centre south @ 25m



Centre north @ 25m



Centre east @ 25m



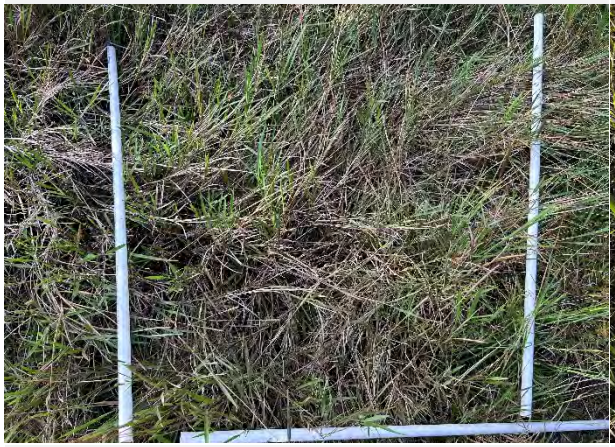
Centre west @ 25m



NW corner @ 50m



NE corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m



4wd track recently made through Rehab Zone 4 causing some vegetation damage

FORM A: ROUTINE REHABILITATION MONITORING SHEET

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<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

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<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Exotic grasses within western areas present although not dominant.

What species?

Andropogon virginicus, Axonopus and Paspalum.

What management was undertaken to eradicate these weeds?

To be treated.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

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<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 1-6m
- Shrub species: 0.25-2.5m
- ground covers: 0.1-1.5m

What are the dominant species within each layer?

- Tree: Eucalyptus robusta
- Shrub: Melaleuca quinquenervia
- ground covers: Baloskion tetraphylla +/- Baumea spp.

Have you noticed any new native plant species since the last inspection?

No.

If yes name the species or take a photograph

N/A

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

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<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches and wrens, yellow robin, grassbird)

Amphibians (i.e. crinia signifera)

Mammals (i.e. Swamp Wallaby, bandicoot diggings)

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<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

Yes. Diggers came through from the neighbouring property to the north through zones 6 and 4 to access water lines. This has resulted in an access track carved into the Rehabilitation Zone.

What actions were undertaken to remove any illegal modifications?

TBC at this current stage.

Condition of fences
- Good
- Need minor repair
- Poor (need replacement)

N/A

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Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? Yes.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? No.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Natural regeneration and plantings establishing nicely, although exotic grass (primarily Whiskey Grass, Carpet Grass and Paspalum) is present and requires treatment within western edges of the plot/zone. Potential plantings required in those areas affected by recent access track clearing (TBC).

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MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 149. In east of paddock. @ 558101, 6831072		**Monitoring Site ID:** P8
Type of on-grounds: approved for assisted natural regeneration with reconstruction to Swamp Sclerophyll Forest Habitat	**Years since site commenced:** 3.5	**When was this site last assessed?** 12-08-25
Current assessment conducted by: TR	**Date of current assessment:** 25-02-26	
Overall comments on site condition: Regenerating freshwater wetland with pasture grasses present but not dominant. Wetland species starting to smother the pasture grass. Revegetated swamp sclerophyll module on the fringe with tree species planting throughout. Damage from recently constructed access track.		
Has the condition of the site changed since last assessment? YES. Native shrubs and trees planted and naturally regenerating nicely, increasing in height and density. Pasture grass prominent in the western sections of plot/zone. Native groundcover species (in particularly baloskion) starting to smother/dominate the pasture grasses. A portion of the Rehab Zone has been cleared since the previous inspection. Diggers came through from the neighbouring property to the north through zones 6 and 4 to access water lines. Large areas were cleared for the access track and some road base brought in to gain access across the creek. Part way along this cleared zone a 4wd track has been made through zone 4 plantings This clearing also affected sections of zone 6. It is understood that Byron Shire Council were working on a burst repair on the water main crossing the east section of the Harvest Estate property.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	75	Freshwater wetland flora establishing amongst the previous pasture grassland supplemented by native plantings.	0	Dense establishing native aquatic flora species.	Pasture grasses	Regenerating and supplementary planting performed. Increasing in height and coverage.		Ongoing monitoring of pasture grasses for natural regeneration. May require some treatment in the western sections where whiskey grass is prominent, although it has improved since previous inspection. Monitoring and routine follow up weed control where needed.
B = Uncertain significant problems	25	20% estimate of pasture grasses or areas not containing regeneration or planted native species. Recently cleared access track has setback approximately 3 years worth of restoration works in some areas. Remedial measures to restore these areas are yet to be determined at this current stage, although there are signs of natural regeneration already occurring.	0	non-native grasses within wetland	Pasture grasses	Regenerating and supplementary planting performed. Performance criteria for weeds not achieved within the western areas of the zone/plot where it's drier.		Ongoing monitoring/treatment of pasture grasses for natural regeneration in drier western areas. Potential plantings required to those areas affected by recent access track clearing (TBC).
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								87.5 %

LOCATION

Site No.	P8	**Date:**	25-02-26
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT		
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 149. In east of paddock. Rehabilitation Zone 4		

GPS coordinates centre plot:	**Zone**	5	6	**E**	558101	**N**	6831072	**Datum:**	MGA94z56

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	-	-
T2	1-5	S
S1	0.25-2.5	V-S
G	0.1-1.5	D

Structural formation: (including height)	Regenerating rushland/ sedgeland/ wetland flora with previous grassland becoming subdominant
Ecologically dominant layer:	G

Several Eucalypts and Paperbarks

Native flora becoming dominant. Some patches of pasture grasses remain.

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1		-
T1		-
T2		Melaleuca quinquenervia
T2		Eucalyptus robusta
S		Melaleuca quinquenervia
S		Persoonia stradbrokensis
S		Lophostemon suaveolens
S		Casuarina glauca
S		Melastoma affine
S		Oxylobium robustum
S		Banskia integrifolia
S		Leptospermum spp.
S		Banksia robur
S		Eucalyptus robusta
S		Corymbia intermeida
S		Eucalyptus tereticornis

Str.	Scientific Name
G	Pasture Grasses *
G	Baloskion tetraphylla
G	Baumea juncea, rubiginosa
G	Juncus usitatus
G	Cyperus spp.
G	Lepironia articulata
G	Selaginella uliginosa
G	Gonocarpus micranthus
G	Gahnia clarkei
G	Blechnum indicum
G	Drosera spatulata
G	Xyris complanata
G	Wahlenbergia gracilis
G	Lomandra hystrix
G	Dianella caerulea
G	Liparophyllum exaltatum
G	Centella asiatica
G	Viola hederacea
G	Fimbristylis dichotoma
G	Imperata cylindrica

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Previously establish Pasture Grassland well managed and transforming to wetland vegetation under natural regeneration efforts. Dry underfoot at the time of inspection. Generally in good condition and regenerating nicely, although there's some patches of pasture grass present, in particularly along the western edge of the plot which requires treatment. Very wet underfoot at the time of survey (>50mm rainfall in the previous week). A portion of the Rehab Zone has been cleared since the previous inspection. Diggers came through from the neighbouring property to the north through zones 6 and 4 to access water lines. Large areas were cleared for the access track and some road base brought in to gain access across the creek. Part way along this cleared zone a 4wd track has been made through zone 4 plantings This clearing also affected sections of zone 6. It is understood that Byron Shire Council were working on a burst repair on the water main crossing the east section of the Harvest Estate property. It is noted that the landowner was not aware of the works. At this current stage, it is undetermined as to what remedial measures will be undertaken to those impacted areas within the Rehabilitation Zones. It is noted that signs of natural regeneration are starting to occur in areas, although this event has setback over 3 years' worth of restoration works in within those areas affected.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 4: Swamp Sclerophyll Forest.



Centreline @ om



Centreline @ 50m



SE corner @ om



SE corner @ om



SW corner @ om



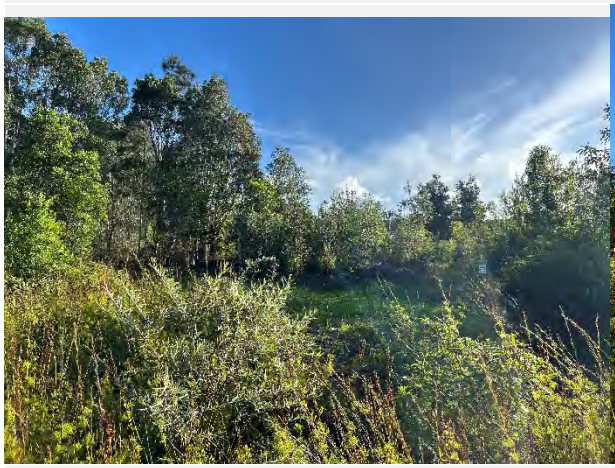
SW corner @ om



Centre east @ 25m



Centre west @ 25m



Centre north @ 25m



Centre south @ 25m



NW corner @ 50m



NW corner @ 50m



NE corner @ 50m



NE corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m



Access track carved into Rehab Zone 4



Access track carved into Rehab Zone 4



Signs of natural regeneration occurring within access track

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N/A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Exotic grasses present although not dominant, several stems of Easter Cassia, Groundsel, and Camphor Laurel sapling.

What species?

Andropogon virginicus, Paspalum, Asparagus Fern, Groundsel, Camphor Laurel, Thickhhead and Easter Cassia.

What management was undertaken to eradicate these weeds?

To be removed/treated.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 8-12m
- Shrub species: 0.5-5m
- ground covers: <1.5m

What are the dominant species within each layer?

- Tree: Banskia integrifolia
- Shrub: Mixed (i.e. Paperbark, Leptospermum spp, Acacia, Banskia etc.)
- ground covers: Pteridium esculentatum +/- Lomandra spp.

Have you noticed any new native plant species since the last inspection?

No.

If yes name the species or take a photograph

N/A

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches and fairy wrens)

Nectivore/insectivore/frugivore birds (i.e. honeyeaters, noisy friarbird, noisy minor)

Reptiles (i.e. skinks)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

Yes. Diggers came through from the neighbouring property to the north through zones 6 and 4 to access water lines. This has resulted in an access track carved into the Rehabilitation Zone.

What actions were undertaken to remove any illegal modifications?

TBC at this current stage.

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

N/A

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? No.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? No.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Natural regeneration and plantings establishing nicely, although exotic grass and some Easter Cassia, Groundsel, Coral Berry and Camphor Laurel are present and require removal at next weed control round. Potential plantings required in those areas affected by recent access track clearing (TBC).

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 149. In east of paddock within existing Banksia Woodland @ 558050, 6831124		**Monitoring Site ID:** P9
Type of on-grounds: approved for assisted natural regeneration to Coastal Banksia Woodland/ Open Forest Habitat	**Years since site commenced:** 3.5	**When was this site last assessed?** 12-08-25
Current assessment conducted by: TR	**Date of current assessment:** 25-02-26	
Overall comments on site condition: Good beginnings of natural regeneration with a variety of native flora species encountered. Where canopy trees are grouped providing shade a good leaf litter layer is present. Previous pasture largely controlled and now revegetated, although there's still some pasture grass and herbaceous weeds. Damage from recently constructed access track.		
Has the condition of the site changed since last assessment? YES. Native regeneration increasing in density and height. A portion of the Rehab Zone has been cleared since the previous inspection. Diggers came through from the neighbouring property to the north through zones 6 and 4 to access water lines. Large areas were cleared for the access track and some road base brought in to gain access across the creek. Part way along this cleared zone a 4wd track has been made through zone 4 plantings This clearing also affected sections of zone 6. It is understood that Byron Shire Council were working on a burst repair on the water main crossing the east section of the Harvest Estate property.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	80	Fragmented Banksia Woodland/ Open Forest on sandy substrate. Good regeneration, particularly where canopy cover exists. Open areas still contain a variety of native forbs/groundcovers. Revegetation zone with some natural recruitment. Substantial replacement of previous pasture.	40-45%	Mid-dense establishing native flora species with revegetation also performed.	Pasture grasses	Native regeneration Increasing in height and coverage.		Ongoing routine management of pasture grasses.
B = Uncertain significant problems	20	Nominal 15% representing pasture grasses re-establishing in patches. Minor herbaceous weed coverage. Recently cleared access track has setback approximately 3 years worth of restoration works in some areas. Remedial measures to restore these areas are yet to be determined at this current stage, although there are signs of natural regeneration already occurring.	0 Juvenile phase	Dense non-native.	Pasture grasses, *Senna pendula* *Cinnamomum camphora* Groundsel Asparagus Fern	Performance criteria for weeds not achieved.		Ongoing routine management of pasture grasses. Spot control of weeds. Potential plantings required to those areas affected by recent access track clearing (TBC).

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								90 %

LOCATION

Site No.	P9						**Date:**	25-02-26	
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT								
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 149. In east of paddock within existing Banksia Woodland. Rehabilitation Zone 6								
GPS coordinates centre plot:	**Zone**	5	6	**E**	558050	**N**	6831124	**Datum:**	MGA94z56

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	8-12	M
T2	4-8	S-V
S1	0.5-5	S-M
G	0.1-1.5	S-D

Structural formation: (including height)	Coastal Banksia Woodland / Open Forest
Ecologically dominant layer:	T1

Planted natives + existing regeneration post cattle exclusion

Planted natives with natural recruitment. Some exposed sand typical to vegetation type. Weeds/grasses re-establishing slightly.

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1	D	*Banksia integrifolia*
T1	A	*Melaleuca quinquenervia*
T2		*Regenerating T1 species*
T2		*Acacia sophorae*
T2		*Persoonia stradbrokensis*
T2		*Glochidion sumatranum*
T2		*Duboisia myoporoides*
S		*Regenerating T1 and T2 species*
S		*Acacia ulicifolia*
S		*Leptospermum juniperinum, L. polygalifolium*
S		*Acrotriche aggregata*
S		*Notelaea longifolia*
S		*Austromyrtus dulcis*
S		*Monotoca elliptica*
S		*Elaeocarpus reticulatus*
S		*Melicope elleryana*
S		*Lophostemon suaveolens*
S		*Senna pendula**
S		*Banksia robor*
S		*Cupaniopsis anacardioides*
S		*Callistemon salignus*
S		*Syzygium oleosum*
S		*Acronychia imperforata*
S		*Eucalyptus robusta*
S		*Macaranga tanarius*

Str.	Scientific Name
G	Pasture Grasses *
G	*Pomax umbellata*
G	*Hibbertia scandens*
G	*Baloskion tetraphylla*
G	*Cyperus spp.*
G	*Dianella caerulea*
G	*Geitonoplesium cymosum*
G	*Gonocarpus micranthus*
G	*Gahnia clarkei*
G	*Lomandra filiformis*
G	*Parsonsia straminae*
G	*Pteridium esculentum*
G	*Hatpins*
G	*Marsdenia rostrata*
G	*Smilax australis*
G	*Goodenia rotundifolia*
G	*Centella asiatica*
G	*Wahlenbergia gracilis*
G	*Drosera spatulata*
G	*Pomax umbellata*
G	*Imperata cylindrica*
G	*Lomandra hystrix*
G	*Stephania japonica*
G	*Entolasia stricta*
G	*Commelina cyanea*
G	*Cinnamomum camphora**
G	*Asparagus aethiopicus **
G	*Baccharis halimifolia **
G	*Crassocephalum crepidioides **
G	*Ardisia crenata**

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Banksia woodland within former grazing paddock on sandy substrate. Good beginnings of natural regeneration with a variety of native flora species encountered and a large number of native saplings observed. Where canopy trees are grouped providing shade a good leaf litter layer is present. Previous pasture largely controlled, and site now revegetated, although there's a minor increase in pasture grass presence since the previous inspection. Several other weeds such as Asparagus Fern, Groundsel, Thickhead and Easter Cassia also noted, although scarce. Increase in density and height of regenerating native flora noticeable since the previous inspection. A portion of the Rehab Zone has been cleared since the previous inspection. Diggers came through from the neighbouring property to the north through zones 6 and 4 to access water lines. Large areas were cleared for the access track and some road base brought in to gain access across the creek. Part way along this cleared zone a 4wd track has been made through zone 4 plantings This clearing also affected sections of zone 6. It is understood that Byron Shire Council were working on a burst repair on the water main crossing the east section of the Harvest Estate property. It is noted that the landowner was not aware of the works. At this current stage, it is undetermined as to what remedial measures will be undertaken to those impacted areas within the Rehabilitation Zones. It is noted that signs of natural regeneration are starting to occur in areas, although this event has setback over 3 years' worth of restoration works in within those areas affected.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 6. Coastal Banksia Woodland/Open Forest to be managed by assisted natural regeneration.



Centreline @ om



Centreline @ 50m



SE corner @ om



SE corner @ om



NE corner @ om



NE corner @ om



Centre east @ 25m



Centre west @ 25m



Centre north @ 25m



Centre south @ 25m



NW corner @ 50m



NW corner @ 50m



SW corner @ 50m



SW corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m



Minor weed intrusion requiring treatment



Recently cleared track within the eastern portions of Zone 6 proximate to Plot 9

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Exotic grasses dominant in areas.

What species?

Mainly Andropogon virginicus, Axonopus spp. and Paspalum.

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 1.5-6
- Shrub species: 0.5-2m
- ground covers: <1.5m

What are the dominant species within each layer?

- Tree: Eucalyptus spp.
- Shrub: Eucalyptus spp. +/- Melaleuca quinquenervia
- ground covers: Pasture grasses and Bunchy Sedge

Have you noticed any new native plant species since the last inspection?

No.

If yes name the species or take a photograph

-

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches, wrens

Mammals (i.e. bandicoot diggings)

Amphibians (i.e.litoria fallax)

Reptiles (i.e. skinks, common tree snake)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? Yes.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? Yes.

Tree, Small Tree & Shrub Diversity? N/A. Rehab Zone 1 is exempt from the diversity performance requirement.

Groundcover Coverage? N/A. Rehab Zone 1 is exempt from the groundcover coverage requirement.

General Coverage/Success? Yes.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Weed removal to be undertaken for pasture grass with in-fill plantings in bare/grass dominant areas where canopy coverage isn't being met. These occur predominantly west of Plot 10, proximate the natural swale/drain.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 146. South of Frog Pond. @ 556907, 6831745		**Monitoring Site ID:** P10
Type of on-grounds: approved for assisted natural regeneration with reconstruction to Freshwater Wetland habitat	**Years since site commenced:** 3.5	**When was this site last assessed?** 13-08-25
Current assessment conducted by: TR	**Date of current assessment:** 25-02-26	
Overall comments on site condition: Previous pasture grassland revegetated with freshwater wetland module, although there's an increase in exotic grass coverage since previous inspection noted. Plantings establishing nicely, in particularly Eucalypts. Several areas external to the plot require additional plantings to meet canopy coverage performance criteria.		
Has the condition of the site changed since last assessment? YES. Plantings and natural regeneration establishing and increasing in height, although exotic grasses are dominant throughout the ground layer.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	60	Revegetation zone with some natural recruitment. Substantial replacement of previous pasture.	0 Juvenile phase	Planted species, mostly rushes and sedge.	Pasture grass	Several species mostly planted with some regeneration (refer preceding page) Increasing in height and coverage.		Ongoing routine management of pasture grasses. Monitoring and routine follow up weed control where needed. Supplementary/replacement plantings required once grass/weeds are treated.
B = Uncertain significant problems	40	Nominal 40% representing pasture grasses re-establishing (dominant). Limited occurrence of waxweed, billygoat weed, thickhead, but monitoring and routine control required due to proficiency to spread within wetlands.	0 Juvenile phase	Planted species, mostly rushes and sedge with minor pasture regeneration and sporadic waxweed, billygoat weed and thickhead.	Pasture grasses, Columbian waxweed, Billygoat weed, Thickhead	Several species mostly planted with some regeneration (refer preceding page) Performance criteria for weeds and canopy coverage not achieved.		Ongoing routine management of pasture grasses. Spot control of waxweed, billygoat weed, thickhead and pasture grasses. Canopy coverage not achieved within sections of the Rehab Zone. Plantings required. Repair/install protection fencing.

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								80 %

LOCATION

Site No.	P10	**Date:**	25-02-26
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT		
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 146. South of Frog Pond. Rehabilitation Zone 1		

GPS coordinates centre plot:	**Zone**	5	6	**E**	556907	**N**	6831745	**Datum:**	MGA94256

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)	
E	-	-	
T1	-	-	
T2	1-6	S	Planted Eucalypts
S1	0.25-2	V-S	Mostly planted natives
G	0.1-1.5	S	Planted and recruited natives
G	0.05-1.5	S	Pasture grass and planted wetland natives

Structural formation: (including height)	Closed Pasture Grassland
Ecologically dominant layer:	G

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1		-
T1		-
T2		-
T2		-
S		*Persoonia stradbrokensis*
S		*Callistemon salignus*
S		*Eucalyptus robusta*
S		*Melaleuca quinquenervia*
S		*Casuarina glauca*
S		*Acacia sophorae*
S		*Lophostemon suaveolens*
S		*Eucalyptus tereticornis*
S		*Banksia robur*
G		Viola hederacea
G		Drosera spatulata

Str.	Scientific Name
G	Pasture Grasses
G	*Baloskion tetraphylla*
G	*Centella asiatica*
G	*Cyperus* spp.
G	*Liparophyllum exaltatum*
G	*Blechnum indicum*
G	*Hibbertia scandens*
G	*Fimbristylis ferruginea*
G	*Cuphea carthagenensis**
G	*Juncus usitatus*
G	*Philydrum lanuginosum*
G	*Histiopteris incisa*
G	*Carex appressa*
G	*Baumea juncea/rubiginsoa*
G	*Pteridium esculentum*
G	*Ageratum houstianum**
G	*Leptospermum spp.*
G	*Lobelia stenophylla*
G	*Pultenea villosa*
G	*Xyris complanata*
G	*Fimbristylis polytrichoides*
G	*Hardenbergia violacea*
G	*Crassocephalum crepidioides**

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Previous low to mid-high, closed grassland now managed as a revegetation zone. Planted native species and retained regenerating species becoming established. Exotic grasses re-establishing and dominating the ground layer in areas. Several plants exhibit wallaby grazing. Fencing at interface requiring minor repairs. Several tree guards require refitting. External to the plot, areas of the Rehab Zone failing to meet canopy coverage and weed coverage performance criteria. Several planted Eucalypts/Lophostemons are above 6m in height and 20cm dbh.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 1: Freshwater Wetland



Centreline @ om



Centreline @ 50m



SE corner @ om



SE corner @ om



NE corner @ om



NE corner @ om



Centre north @ 25m



Centre south @ 25m



Centre east @ 25m



Centre west @ 25m



SW corner @ 50m



SW corner @ 50m



NW corner @ 50m



NW corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m



Areas of Rehab Zone Failing to Meet Weed Coverage and Canopy Coverage Performance Criteria



Protection Fencing Requiring Repairs in Sections



Eucalypt plantings increasing in height and coverage

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Minor areas of Paspalum within northern areas of the plot. An Umbrella Tree and Coral Berry sapling also present.

What species?

Paspalum spp. Ardisia crenata and Schefflera actinophylla

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 14-20m
- Shrub species: 0.5-3m
- ground covers: <1.2m

Area already well established.

What are the dominant species within each layer?

- Tree: Lophostemon confertus
- Shrub: Melaleuca quinquenervia
- ground covers: Gahnia clarkei

Have you noticed any new native plant species since the last inspection?

No.

If yes name the species or take a photograph

N.A

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. fairy wrens and brush turkey)

Nectivore/insectivore/frugivore birds (i.e. honeyeaters, noisy friarbird)

Mammals (i.e. swamp wallaby)

Reptiles (i.e. skinks)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? No.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? No.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

In excellent condition with minor areas of Paspalum present which require routine weed control. A large Umbrella Tree and Coral Berry sapling also requires treatment during next weed control round.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 147. Mapped Brushbox area. @ 557828, 6831140		**Monitoring Site ID:** P11
Type of on-grounds: Approved for assisted natural regeneration	**Years since site commenced:** 3.5	**When was this site last assessed?** 12-08-25
Current assessment conducted by: TR	**Date of current assessment:** 02-03-26	
Overall comments on site condition: Established Brushbox Community. Fenced off and removed from construction zone. In excellent condition with minor weed regenerating (limited to Paspalum, a Umbrella Tree and Coral Berry sapling). Dry underfoot.		
Has the condition of the site changed since last assessment? YES. Remains in excellent condition although very minor weed intrusion noted.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	99	In excellent condition with no weeds.	80	Dense	N/A	N/A	-	Nil. Monitoring only.
B = Uncertain significant problems	1	Weeds previously treated. Minor areas of Paspalum present. One Umbrella Tree and Coral Berry sapling present.	80	Sparse	Paspalum	N/A	-	Routine follow up weed control of Paspalum, Coral berry and Umbrella Tree
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								99.5 %

LOCATION

Site No.	P11							**Date:**	02-03-26		
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT										
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 147. Within mapped Brushbox Foest. Rehabilitation Zone 6										
GPS coordinates centre plot:	**Zone**	5	6	**E**	557828		**N**	6831140	**Datum:**	MGA94z56	

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	14-20	D
T2	5-14	V
S1	0.5-3	M-S
G	0.1-1.2	M-D

Structural formation: (including height)	Tall to Very Tall Open Forest
Ecologically dominant layer:	T1

Dense growth of native ferns, sedges, rushes. Thick organic leaf layer and coarse woody debris present.

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1	D	*Lophostemon confertus*
T1	A	*Melaleuca quinquenervia*
T1	S	*Lophostemon suaveolens*
T1	S	*Melicope elleryana*
T2		*Elaeocarpus reticulatus*
T2		*Endiandra sieberi*
T2		*Syzygium oleosum*
T2		*Schefflera actinophylla**
T2		*Platycerium superbum*
S1		*Regenerating T1/T2*
S1		*Melastoma affine*
S1		*Leptospermum spp.*
S1		*Austromyrtus dulcis*
S1		*Homalanthus populifolius*
S1		*Banksia integrifolia*

Str.	Scientific Name
G	*Paspalum spp. **
G	*Gahnia clarkei*
G	*Banksia integrifolia*
G	*Blechnum indicum*
G	*Smilax australis*
G	*Selaginella uliginosa*
G	*Pterdium esculentum*
G	*Calochlaena dubia*
G	*Marsdenia rostrata*
G	*Hibbertia scandens*
G	*Lygodium microphyllum*
G	*Ardisia crenata**
G	Centella asiatica

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Brushbox forest. Fenced off from construction zone. In excellent condition with very minor areas of Paspalum present. Large Camphor Laurels previously treated and have since died and starting to break apart. Dry underfoot.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 6: Existing Vegetation



Centreline @ om



Centreline @ 50m



Northeast corner @ om



Northeast corner @ om



Northwest corner @ om



Northwest corner @ om



Centre north @ 25m



Centre south @ 25m



Centre west @ 25m



Centre east @ 25m



Southwest corner @ 50m



Southwest corner @ 50m



Southeast corner @ 50m



Southeast corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<table>
<tr>
<td>
<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A
</td>
<td>
<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes.

What species?

Paspalum, Inkweed and Easter Cassia.

What management was undertaken to eradicate these weeds?

To be treated.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.
</td>
<td>
<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 8-14m
- Shrub species: 0.5-3m
- ground covers: <1.5m

The area is already well established.

What are the dominant species within each layer?

- Tree: Casuarina gluaca

- Shrub: Melaleuca quinquenervia

- ground covers: Pteridium esculentatum +/- Gahnia

Have you noticed any new native plant species since the last inspection?

No

If yes name the species or take a photograph

N/A

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.
</td>
</tr>
<tr>
<td>
<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches, brush-turkey and pardalote)

Nectivore/insectivore/frugivore birds (i.e. honeyeaters, whipbird, king parrot)

Reptiles (i.e. skinks and red-bellied black snake)

Mammals (i.e. swamp wallaby)
</td>
<td>
<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences
- Good
- Need minor repair
- Poor (need replacement)
</td>
<td>
Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? No.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? No*

*Whilst there are areas exceeding the groundcover coverage performance criteria, these occur as Swamp Oak pine needles which are typical to Swamp Forest communities.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

In good condition with minor areas of Paspalum and some saplings of Easter Cassia and Inkweed present which requires routine weed control. Previously treated Camphor Laurel has died and falling apart.
</td>
</tr>
</table>

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

PROJECT DESCRIPTION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 147. Mapped Swamp Oak area proximate Belongil Creek. @ 557927, 6830883		**Monitoring Site ID:** P12
Type of on-grounds: Approved for assisted natural regeneration	**Years since site commenced:** 3.5	**When was this site last assessed?** 18-08-25
Current assessment conducted by: TR	**Date of current assessment:** 05-03-26	
Overall comments on site condition: Established Swamp Oak Community generally in good condition. Minor intrusion of pasture grasses and weeds, although well below the performance criteria. A lot of fallen debris/trees, likely from Cyclone Alfred.		
Has the condition of the site changed since last assessment? YES. Groundlayer coverage has increased since previous inspection.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	97	Mostly dense native ground cover. Treated camphor laurel trees have been treated and died.	70	Dense	individual camphor laurel trees	Treated camphor laurel dieback. Increase in native groundcover density noted.	-	Routine monitoring and weed control.
B = Uncertain significant problems	3	Paspalum previous treated and left as mulch although some minor patches still remain and require treatment. Easter Cassia and Inkweed saplings requiring treatment during next round of weed control.	70	Dense	Pasture grasses, Easter Cassia, Inkweed	N/A	-	Treatment of pasture grasses, Inkweed and Easter Cassia required. Routine monitoring of native ground cover regeneration within treated areas.
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								98.5 %

LOCATION

Site No.	P12	**Date:**	05-03-26
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT		
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 147. Within mapped Swamp Oak Forest proximate Belongil Creek. Rehabilitation Zone 6		

GPS coordinates centre plot:	**Zone**	5	6	**E**	557927	**N**	6830883	**Datum:**	MGA94z56

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	12-16	D
T2	3-12	S
S1	0.75-3	S
G	0.1-1.5	D

Structural formation: (including height)	Mid-high to Tall Open Forest
Ecologically dominant layer:	T1 - G

Dense growth of native ferns, sedges, rushes. Thick organic leaf layer and coarse woody debris present including casuarina needles.

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1	D	*Casuarina glauca*
T1	A	*Melaleuca quinquenervia*
T1	S	*Melicope elleryana*
T1		*Regenerating T1 species*
T2		*Acacia melanoxylon*
T2		*Cupaniopsis anacardioides*
T2		*Acacia melanoxylon*
T2		*Cupaniopsis anacardioides*
S1		*Breynia oblongifolia*
S1		*Regenerating T1/T2 species*
G		*Senna pendula**
G		*Phytolacca octandra**

Str.	Scientific Name
G	*Pteridium esculentum*
G	*Calochlaena dubia*
G	Exotic Grasses (*Paspalum spp)**
G	*Dianella caerulea*
G	*Blechnum indicum*
G	*Marsdenia rostrata*
G	*Smilax australis*
G	*Stephania japonica*
G	*Gahnia clarkei*
G	*Asplenium australasicum*
G	*Parsonsia straminea*
G	*Platycerium superbum*
G	*Commelina cyanea*
G	*Baumea juncea*
G	Lygodium microphyllum
G	Rubus moluccanus
G	*Viola hederacea*
G	*Eleocharis equisetina*
G	*Imperata cyclindrica*
G	*Ottochloa gracillima*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary estuarine alluvium overlain by and/or mixed with Quaternary (Pleistocene) sands. The sands are generally aeolian, originating from the adjacent beach ridge systems.
Field observation and notes:	Swamp Oak forest. Treatment has previously occurred to camphor laurels which have died and falling apart. Groundcover coverage increased since last inspection. Some minor Paspalum, Inkweed and Easter Cassia regeneration noted although still below the performance criteria (monitor). Several trees fallen/damaged, likely from Cyclone Alfred. Dry underfoot. Overall still in great condition.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 6: Existing Vegetation



Centreline @ om



Centreline @ 50m



NW corner @ om



NW corner @ om



NE corner @ om



NE corner @ om



Centreline south @ 25m



Centreline north @ 25m



Centreline east @ 25m



Centreline west @ 25m



SW Corner @ 50m



SW Corner @ 50m



SE Corner @ 50m



SE Corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m



Paspalum and Easter Cassia requiring treatment

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Small patches of Paspalum present.

What species?

Paspalum spp.

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 14-20m
- Shrub species: 0.5-4m
- ground covers: <1.5m

Area already well established.

What are the dominant species within each layer?

- Tree: Melaleuca quinquenervia
- Shrub: Melaleuca quinquenervia
- ground covers: Eleocharis equisetina +/- Gahnia clarkei

Have you noticed any new native plant species since the last inspection?

Yes

If yes name the species or take a photograph

Melastoma affine

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. fairy wrens, finches and pardalote)

Nectivore/insectivore/frugivore birds (i.e. honeyeaters, wonga pigeon)

Reptiles (i.e. skinks and common tree snake)

Mammals (i.e. swamp wallaby)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? No.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? No.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

In good condition with minor areas of Paspalum present which requires routine weed control.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 147. Mapped Paperbark Forest area. @ 557731, 6831194		**Monitoring Site ID:** P13
Type of on-grounds: Approved for assisted natural regeneration	**Years since site commenced:** 3.5	**When was this site last assessed?** 08-09-25
Current assessment conducted by: TR	**Date of current assessment:** 02-03-26	
Overall comments on site condition: Established Paperbark Swamp Community. Fenced off and removed from construction zone. In excellent condition with minor weed intrusion (Paspalum).		
Has the condition of the site changed since last assessment? Yes. Area remains in excellent condition. Dry underfoot.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	97	Undisturbed area well removed from construction zone.	70	Moderate - Dense	None	N/A	-	Nil. Monitoring only.
B = Uncertain significant problems	3	Minor presence of exotic grass	70	Moderate - Dense	Paspalum	N/A	-	Routine weed control of exotic grass presence.
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								98.5 %

LOCATION

Site No.	P13	**Date:**	02-03-26
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT		
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 147. Within mapped Paperbark Swamp Forest. Rehabilitation Zone 6		

GPS coordinates centre plot:	**Zone**	5	6	**E**	557731	**N**	6831194	**Datum:**	MGA94z56

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	14-20	D
T2	4-14	V
S1	0.5-4	V
G	0.1-1.5	M-D

Structural formation: (including height)	Mid-high to Tall Forest
Ecologically dominant layer:	T1

Dense growth of native ferns, sedges, rushes. Thick organic leaf layer and coarse woody debris present. Paspalum in parts.

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1/T2	D	*Melaleuca quinquenervia*
T2	S	*Melicope elleryana*
S1		*Regenerating T1/T2 species*
G		*Sphagnum spp.*
G		*Histiopteris incisa*

Str.	Scientific Name
G	*Blechnum indicum*
G	*Baumea rubignosa*
G	*Juncus usitatus*
G	*Paspalum spp.**
G	*Lygodium microphyllum*
G	*Marsdenia rostrata*
G	*Pteridium esculentum*
G	*Calochlaena dubia*
G	*Gahnia clarkeri*
G	*Lepironia articulata*
G	*Phragmites australis*
G	*Parsonsia straminea*
G	*Commelina cyanea*
G	*Elaeocharis equisetina*
G	*Baloskion tetraphyllum*
G	*Melastoma affine*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Paperbark swamp forest. Historically fenced off from cattle. In excellent condition with very minor weed presence (Paspalum). Dry underfoot compared to previous surveys. More groundcover coverage compared to previous survey.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 6: Existing Vegetation



Centreline @ om



Centreline @ 50m



Northeast corner @ om



Northeast corner @ om



Southeast corner @ om



Southeast corner @ om



Centreline west @ 25m



Centreline east @ 25m



Centre north @ 25m



Centre south @ 25m



Northwest corner @ 50m



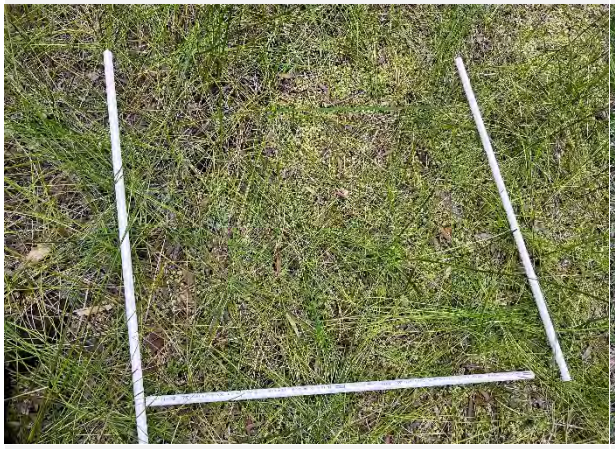
Northwest corner @ 50m



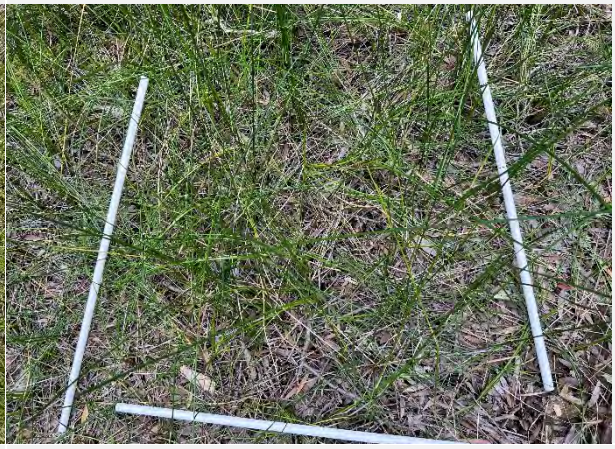
Southwest corner @ 50m



Southwest corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m



Paspalum browned off

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes.

What species?

Minor areas of Easter Cassia and Paspalum spp.

What management was undertaken to eradicate these weeds?

N.A

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 10-15m
- Shrub species: 1.5-4m
- ground covers: <1.5m

Area already well-established.

What are the dominant species within each layer?

- Tree: Melaleuca quinquenervia
- Shrub: Acacia spp.
- ground covers: Baloskion tetraphylla +/- Blechnum indicum

Have you noticed any new native plant species since the last inspection?

No

If yes name the species or take a photograph

N/A

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches)

Reptiles (i.e. skinks)

Nectivore birds (i.e. honeyeaters)

Amphibians (i.e. eastern sedge-frog and wallum froglet)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? No.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? No.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

In excellent condition. Removal of isolated stems of easter cassia and small patches of paspalum required during routine weed control regime.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 147. Mapped Paperbark Swamp Forest area off Melaleuca Drive. @ 557037, 6831497		**Monitoring Site ID:** P14
Type of on-grounds: Approved for assisted natural regeneration	**Years since site commenced:** 3	**When was this site last assessed?** 12-08-25
Current assessment conducted by: TR	**Date of current assessment:** 25-02-26	
Overall comments on site condition: Established Paperbark Swamp Forest Community. Fenced off and buffered from construction. Excellent condition. Very minor weed intrusion. Very wet at time of inspection.		
Has the condition of the site changed since last assessment? YES. Remains in excellent condition although small increase in paspalum coverage noticed.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	99	Undisturbed area well removed from construction zone.	70	Dense	-	-	-	Nil. Monitoring only.
B = Uncertain significant problems	1	Very minor weed intrusion.	-	-	Isolated stems of easter cassia and a small patches of paspalum present	Some dead trees present in south east. No evidence of anything other than natural dieback. Isolated stems of easter cassia and a small patches of paspalum present	-	Remove stems of easter cassia and treat patches of paspalum.
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								99.5 %

LOCATION

Site No.	P14							**Date:**	25-02-26		
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT										
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 147. Within mapped Paperbark Swamp Forest off Melaleuca Drive. Rehabilitation Zone 6										
GPS coordinates centre plot:	**Zone**	5	6	**E**	557037		**N**	6831497	**Datum:**	MGA94z56	

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	12-15	M
T2	4-12	S
S1	0.5-4	V
G	0.1-1.5	D

Structural formation: (including height)	Mid-high to Tall Open Forest
Ecologically dominant layer:	T1

Dense growth of native ferns, sedges, rushes. Thick organic leaf layer and coarse woody debris present.

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1	D	*Melaleuca quinquenervia*
T1	S	*Parsonsia straminea*
T2	S	*Elaeocarpus reticulatus*
T2	S	*Melicope elleryana*
T2	S	*Acacia spp.*
S		*Regenerating T1/T2 species.*
S	S	*Senna pendula**
S	S	*Myrsine howittiana*

Str.	Scientific Name
G	*Lobelia purpurascens*
G	*Baloskion tetraphylla*
G	*Gahnia clarkei*
G	*Blechnum indicum*
G	*Hibbertia scandens*
G	*Selaginella uliginosa*
G	*Marsdenia rostrata*
G	*Baumea spp*
G	*Parsonsia straminea*
G	Paspalum spp.*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary estuarine alluvium overlain by and/or mixed with Quaternary (Pleistocene) sands. The sands are generally aeolian, originating from the adjacent beach ridge systems.
Field observation and notes:	Paperbark Swamp forest. Fenced off and separated from construction footprint. Excellent condition with very minor weed intrusion. Dry underfoot.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 6: Existing Vegetation



Centreline @ om



Centreline @ 50m



NW Corner @ om



NW Corner @ om



SW Corner @ om



SW Corner @ om



Centre North @ 25m



Centre North @ 25m



SE Corner @ 50m



SE Corner @ 50m



Centre West @ 25m



Centre East @ 25m



NE Corner @ 50m



NE Corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes

What species?

Ardisia crenata

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 15-17m
- Shrub species: 1.5-3m
- ground covers: <1.5m

Area already well-established.

What are the dominant species within each layer?

- Tree: Melaleuca quinquenervia
- Shrub: Variety although regenerating M. quinquenervia most dominant.
- ground covers: Gahnia clarkei

Have you noticed any new native plant species since the last inspection?

Hovea acutifolia.

If yes name the species or take a photograph

Yes

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. fairy wrens, finches and rufous fantail)

Nectivore/insectivore/frugivore birds (i.e. honeyeaters and friarbirds)

Reptiles (i.e. skinks)

Mammals (i.e. swamp wallaby)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

Yes. Diggers came through from the neighbouring property to the north through zones 6 and 4 to access water lines. This has resulted in an access track carved into the Rehabilitation Zone.

What actions were undertaken to remove any illegal modifications?

TBC at this current stage.

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? No.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? No.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

In excellent condition with no current corrective actions required. Several Coral Berry plants noted which require treatment during the next round of routine weed control. Potential plantings required in those areas affected by recent access track clearing (TBC).

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 149. North of fenced of paddock with drainage channel @ 558057, 6831220		**Monitoring Site ID:** P15
Type of on-grounds: approved for assisted natural regeneration to maintain existing Mid-high to Tall Open Dry Heath/Paperbark Forest	**Years since site commenced:** 3.5	**When was this site last assessed?** 09-09-25
Current assessment conducted by: TR	**Date of current assessment:25**-02-26	
Overall comments on site condition: Paperbark and heath open forest on sand. In excellent condition. Regeneration of T1 species evident with excellent ground cover and native diversity in the lower strata.		
Has the condition of the site changed since last assessment? YES. Remains in pristine condition, although several saplings of Coral Berry noted. Existing access track through the Rehabilitation Zone has been cleared/widened since the previous inspection.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	97	Mid-high to Tall Open Dry Heath/Paperbark Forest in excellent condition. Currently fenced off from surrounding pasture Very minor weed intrusion.	50-60%	Excellent. Dense native flora cover.	-	-	-	Nil. Monitoring only.
B = Uncertain significant problems	3	Very minor weed intrusion. Recently cleared/widened access track has setback approximately 3 years worth of restoration works in some areas. Remedial measures to restore these areas are yet to be determined at this current stage.	-	-	Isolated stems of Coral Berry	Several stems of Coral Berry present.	-	Treat several Coral Berry stems. Potential plantings required to those areas affected by recent access track clearing (TBC).

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								98.5 %

LOCATION

Site No.	P15	**Date:**	25-02-26
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT		
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 149. North of fenced of paddock with drainage channel. Mid-high to Tall Paperbark Forest with Heath species. Rehabilitation Zone 6		

GPS coordinates centre plot:	**Zone**	5	6	**E**	558057	**N**	6831220	**Datum:**	MGA94256

VEGETATION STRUCTURE

Stratum	Est. Median Height (m)	Est. cover density (D,M,S,V)
E	15-17	V
T1	8-14	M-D
T2	3-7	M
S	1.5-3	M-S
G	0-2	D

Structural formation: (including height)	Forest-Open Forest
Ecologically dominant layer:	T1

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
T1	D	*Melaleuca quinquenervia*
E	S	*Eucalyptus robusta [1]*
T1	D	*Melaleuca quinquenervia*
T1	S	*Duboisia myoporoides*
T1	S	*Lophostemon suaveolens*
T1	S	*Lophostemon confertus*
T1	S	*Elaeacarpus reticulatus*
T2		*Regenerating T1 species [excluding brushbox]*
T2		*Cryptocarya microneura*
T2		*Melicope elleryana*
T2		*Nematolepis squamea*
S		*Regenerating T1 and T2 species*
S		*Acrotriche aggregata*
S		*Austromyrtus dulcis*
S		*Leptospermum polygalifolium*
S		*Syzygium oleosum*
S		*Melastoma affine*
S		*Archontophoenix cunninghamiana*
S		*Acmena smithii*
S		*Acacia melanoxylon (juvenile)*
S		*Myrsine howittiana*

Str.	Scientific Name
G	*Gahnia clarkei*
G	*Baloskion tetraphylla*
G	*Pomax umbellata*
G	*Blechnum indicum*
G	*Pomax umbellata*
G	*Lomandra longifolia*
G	*Lygodium microphyllum*
G	*Calochlaena dubia*
G	*Histiopteris incisa*
G	*Pteridium esculentum*
G	*Liparophyllum exaltatum*
G	*Hibbertia scandens*
G	*Smilax australis*
G	*Marsdenia rostrata*
G	*Parsonsia straminae*
G	*Smilax glyciphylla*
G	*Pandorea pandorana*
G	*Ardisia crenata**
S	*Acacia sophorae*
G	*Drosera spatulata*
S	*Syzygium luehmannii*
S	*Hovea acutifolia*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Paperbark and heath open forest on sand. In excellent condition. Regeneration of T1 species evident with excellent ground cover and native diversity in the lower strata. Several small stems of Coral Berry noted. Existing track east of the P15 plot has been recently cleared/widened.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 6. Existing Mid-high to Tall Open Dry Heath/Paperbark Forest to be managed by assisted natural regeneration.



Centreline @ om



Centreline @ 50m



SE corner @ om



SE corner @ om



NE corner @ om



NE corner @ om



Centreline east @ 25m



Centreline west @ 25m



Centreline north @ 25m



Centreline south @ 25m



NW Corner @ 50m



NW Corner @ 50m



SW Corner @ 50m



SW Corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m



Recently widened/cleared access track east of P15

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N/A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

No.

What species?

N/A

What management was undertaken to eradicate these weeds?

N/A

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 6-10m
- Shrub species: 1.5-4m
- ground covers: <1.5m

Area already well established.

What are the dominant species within each layer?

- Tree: Melaleuca quinquernervia
- Shrub: Acacia melanoxylon
- ground covers: Blechnum indicum

Have you noticed any new native plant species since the last inspection?

Yes.

If yes name the species or take a photograph

Liparophyllum exaltatum

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Large nectar feeding birds (i.e. honeyeaters etc.)

Small tree and ground birds (i.e. finches, wrens)

Amphibians (i.e. eastern sedgefrog, crinia signifera)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

Minor trampling noted throughout the plot, likely from previous frog surveys.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? No.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? No.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

N/A.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

PROJECT DESCRIPTION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 146. Paperbark/Heath Swamp Forest.@ 556849, 6831798		**Monitoring Site ID:** P1
Type of on-grounds: approved for assisted natural regeneration to maintain Paperbark/Heath Swamp Forest	**Years since site commenced:** 4	**When was this site last assessed?** 25-02-26
Current assessment conducted by: TR	**Date of current assessment:** 03-09-26	
Overall comments on site condition: Closed Sedgeland/Fernland/ Rushland with scattered Paperbark Low Woodland. Excellent condition. Damp at time of survey.		
Has the condition of the site changed since last assessment? No.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	100	Native swamp in excellent condition. Currently fenced off from surrounding pasture	20-30% Summed for plot but only in NE, NW and SW corner	Dense native species	N/A	No change.		Assisted rehabilitation (weed management) is approved for this zone. Maintain exclusion from surrounding paddocks.
B = Uncertain significant problems	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A (describe)
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A (describe)
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								100 %

LOCATION

Site No.	P1						**Date:**	03-09-26		
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT									
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 146. Paperbark/Heath Swamp Forest. Rehabilitation Zone 6									
GPS coordinates centre plot/meander:	**Zone**	5	6	**E**	Centred @ 556849	**N**	Centred @ 6831798	**Datum:**	MGA94256	

VEGETATION STRUCTURE

Stratum	Est. Median Height (m)	Est. cover density (D,M,S,V)
E	-	-
T1	5-9	S-V
T2	3-5	S-V
S1	1.5-3	S-V
G	0-1	D

Structural formation: (including height)	Closed Sedgeland/Fernland/ Rushland with scattered Paperbark Low Woodland
Ecologically dominant layer:	G

Small clusters at northern and southern ends of plot

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
T1	D	*Melaleuca quinquenervia*
T1	S	*Glochidion ferdinandi*
T2		*Melaleuca quinquenervia*
T2		*Melicope elleryana*
S		*Elaeocarpus reticulatus*
S		*Oxylobium robustum*
S		*Leptospermum juniperinum*
S		*Banksia oblongifolia*
S		*Acacia melanoxylon*
S		*Austromyrtus dulcis*
S		*Homalanthus populifolius*
G		*Liparophyllum exaltatum*

Str.	Scientific Name
G	*Blechnum indicum*
G	*Gahnia clarkei*
G	*Pteridium esculentum*
G	*Hibbertia scandens*
G	*Gleichenia dicarpa*
G	*Entolasia stricta*
G	*Imperata cylindrica*
G	*Paspalidium distans*
G	*Baloskion tetraphyllum*
G	*Pomax umbellata*
G	*Lygodium microphyllum*
G	*Selaginella uliginosa*
G	*Sphagnum cuspidatum*
G	*Baumea rubiginosa*
G	*Parsonsia straminea*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	The overall 0.65ha vegetation zone is comprised of an open canopy layer of Melaleuca quinquenervia and a sparse midstorey/shrub layer including species such as Gahnia clarkei, Elaeocarpus reticulatus, Leptospermum juniperinum, Oxylobium robustum and Acacia ulicifolia. The ground layer was relatively dense and included a 0.06 ha area of ephemeral sedge swamp dominated by Baumea rubiginosa, with occasional Blechnum indicum and patches of Baloskion tetraphyllum. Outside of the sedge swamp, the balance of the vegetation zone comprised dense understorey vegetation dominated by Baloskion tetraphyllum, with Hibbertia scandens and Parsonsia straminea in areas and various ferns throughout (e.g. Blechnum indicum, Pteridium esculentum, Gleichenia dicarpa, Lygodium microphyllum). Grasses were present throughout the site, and included native species such as Entolasia stricta, Imperata cylindrica and Paspalidium distans. Forbs included Pomax umbellata and Selaginella uliginosa. Weed free within the 1000m² plot and currently fenced. Recorded Wallum Froglet and Wallum Sedge Frog habitat. Some minor tramping of ferns in areas, likely from previous frog surveys and/or landscape contractor conducting routine inspection. Damp at time of inspection.

Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 6. Existing Sedgeland/Fernland/Rushland Swamp to be managed by assisted natural regeneration.



Centreline @ om



Centreline @ 50m



NE corner @ om



NE corner @ om



NW corner @ om



NW corner @ om



Centreline South @ 25m



Centreline North @ 25m



Centre west @ 25m



Centre east @ 25m



SW Corner @ 50m



SW Corner @ 50m



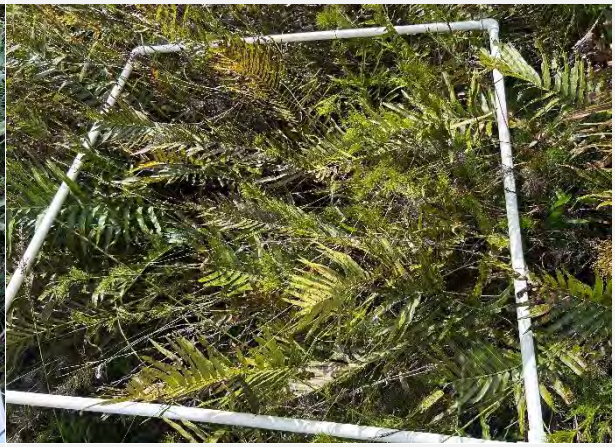
SE Corner @ 50m



SE Corner @ 50m



Ground centre @ 5m



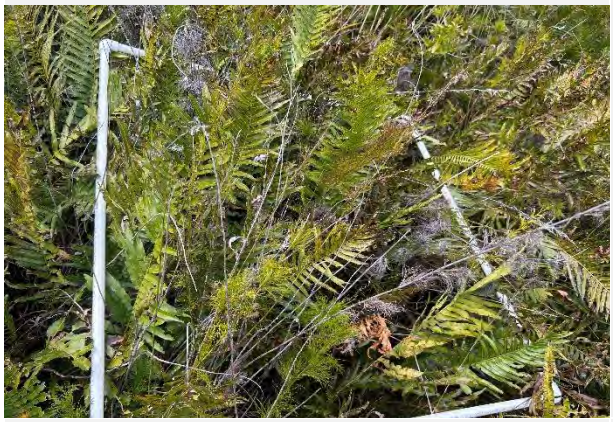
Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Exotic grasses present with Columbian Waxweed also common.

What species?

Andropogon virginicus, Paspalum, Axonopus spp. and Columbian Waxweed.

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: N/A
- Shrub species: 1-2.5m
- ground covers: <1.5m

What are the dominant species within each layer?

- Tree: N/A
- Shrub: Melaleuca quinquenervia
- ground covers: Philydrum lanuginosum and Baumea

Have you noticed any new native plant species since the last inspection?

No.

If yes name the species or take a photograph

-

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. wrens and finches)

Amphibians (i.e. Crinia signifera)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? Yes.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? N/A. Rehab Zone 2 is exempt from the diversity performance requirement.

Groundcover Coverage? N/A. Rehab Zone 2 is exempt from the groundcover coverage requirement.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Weed removal to be undertaken to treat exotic grasses.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 147 @ 557080, 6831531		**Monitoring Site ID:** P2
Type of on-grounds: approved for assisted natural regeneration with reconstruction to Freshwater Wetland habitat	**Years since site commenced:** 4	**When was this site last assessed?** 02-03-26
Current assessment conducted by: TR	**Date of current assessment:** 03.09.26	
Overall comments on site condition: Good conversion from grazed pasture to Freshwater Wetland since baseline survey. Exotic grasses coverage has decreased since last inspection with native wetland groundcover species overtaking, although exotic grasses are still common within the drier areas in the northern sections of the rehab zone. Plantings and wetland species increasing in height and coverage. Wet underfoot.		
Has the condition of the site changed since last assessment? YES. Increase in wetland/plantings height and coverage. Pasture grass less prominent with native wetland species taking over. Protection fencing repaired since previous inspection.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	75	Freshwater wetland flora establishing.	0 Juvenile phase	Dense establishing native flora species.	Nil	Sporadic melaleuca quinequenrvia + planted species.		Routine weed control.
B = Uncertain significant problems	25	Freshwater wetland flora establishing 25% estimate of area is estimated to have exotic grasses.	0 Juvenile phase	Mid – dense of pasture grasses	Pasture grasses Columbian waxweed	Sporadic melaleuca quinequenrvia + planted species.		Routine weed control.
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								87.5%

LOCATION

Site No.	P2	**Date:**	03-09-26
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT		
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 147 Rehabilitation Zone 2		

GPS coordinates centre plot:	**Zone**	5	6	**E**	557080	**N**	6831531	**Datum:**	MGA94z56

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	-	-
T2	-	-
S1	0.25-3	V
G	0.1-0.1.75	D

Structural formation: (including height)	rushland/ sedgeland/ wetland
Ecologically dominant layer:	G

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1		-
T1		-
T2		-
T2		-
S		*Melaleuca quinquenervia*
S		*Callistemon salignus*
S		*Lophostemon suaveolens*
S		*Eucalyptus robusta*
G		*Pomax umbellata*
G		*Gahnia clarkei*

Str.	Scientific Name
G	Pasture Grasses
G	*Baloskion tetraphylla*
G	*Eleocharis dulcis*
G	*Blechnum indicum*
G	*Juncus usitatus*
G	*Cyperus* spp.
G	*Persicaria decipiens, P. strigosa*
G	*Imperata cylindrica*
G	*Philydrum lanuginosum*
G	*Liparophyllum exaltatum*
G	*Baumea spp*
G	*Cuphea carthagenensis**
G	*Centella asiatica*
G	*Hemarthria uncinata*
G	*Fimbristylis dichotoma*
G	*Drosera spatulata*
G	*Selaginella uliginosa*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Previously established Pasture Grassland managed and transforming to wetland vegetation under natural regeneration efforts with supplementary plantings. Exotic grasses common in the drier parts. Wet at time of inspection. Protection fencing replaced since previous inspection.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 2: Freshwater Wetland



Centreline @ om



Centreline @ 50m



NW corner @ om



NW corner @ om



SW corner @ om



SW corner @ om



Centre South @ 25m



Centre North @ 25m



Centre East @ 25m



Centre West @ 25m



SE corner @ 50m



SE corner @ 50m



NE corner @ 50m



NE corner @ 50m



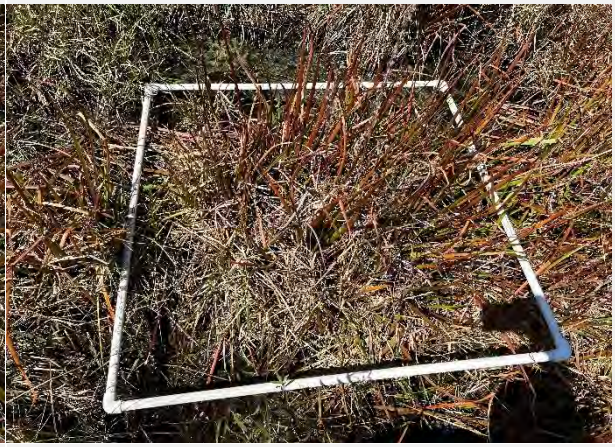
Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m



New protection fence

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Pasture grasses, Columbian waxweed and Nymphaea spp.

What species?

Andropogon virginicus, Axonopus, Paspalum, *Nymphaea spp.* and Columbian waxweed

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 4-6m
- Shrub species: <1.5m
- ground covers: <1.75m

What are the dominant species within each layer?

- Tree: Elaeocarpus reticulatis
- Shrub: Melaleuca quinquenervia
- ground covers: Baumea spp / Leipronia acticulata

Have you noticed any new native plant species since the last inspection?

No

If yes name the species or take a photograph

-

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches and wrens)

Nectivore birds (i.e. honeyeaters)

Amphibians (i.e. striped marsh frog, Eastern Sedgefrog, crinia signifera)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? Yes.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? N/A. Rehab Zone 2 is exempt from the diversity performance requirement.

Groundcover Coverage? N/A. Rehab Zone 3 is exempt from the groundcover coverage requirement.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Frog ponds have been constructed and planted out and establishing nicely. Water depth varies between ~0-0.75m. Weed control to treat pasture grass required within areas external to the frog ponds. Some Nymphaea spp. noted within frog pond.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 147 @ 557262, 6831473		**Monitoring Site ID:** P3
Type of on-grounds: approved for assisted natural regeneration with reconstruction to Freshwater Wetland habitat / frog ponds	**Years since site commenced:** 4	**When was this site last assessed?** 02-03-26
Current assessment conducted by: TR	**Date of current assessment:** 03-09-26	
Overall comments on site condition: Pasture Grassland with regenerating wetland flora. Frog ponds created and planted out. So far, it's looking good (i.e. no obvious dead plantings and increasing in height and coverage). Externally to the frog ponds, native wetland species starting to overtake pasture grass.		
Has the condition of the site changed since last assessment? YES. Frog pond plantings increasing in height and coverage. Wetland species increasing in coverage externally to frog ponds. Rehabilitation Zone externally to the plot is increasing in native coverage, although small patches of pasture grass still remain.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	88	Frog ponds created and planted out with aquatic/wetland species. External to the frog ponds, freshwater wetland flora establishing amongst the pasture grassland.	0 Juvenile stage.	Mid-dense establishing native flora species.	Pasture grasses	Persoonia stradbrokensis, Melaleuca quinquenervia + planted aquatic/wetland species within the frog ponds.		Ongoing routine management of pasture grasses. Keeping monitoring frog pond plantings.
B = Uncertain significant problems	12	Pasture grasses present within areas external to the frog ponds. Weed control required.	0	Dense	Pasture grasses	Performance criteria for weeds not achieved in some areas.		Ongoing routine management of pasture grasses required.
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								94 %

LOCATION

Site No.	P3	**Date:**	03-09-26
Purpose	VEGETATION/REHABILITATION MONITORING 40m x 20m PLOT		
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 147. In the southeast. Rehabilitation Zone 2. Frog pond.		

GPS coordinates centre plot:	**Zone**	5	6	**E**	557262	**N**	6831473	**Datum:**	MGA94z56

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)	
E	-	-	
T1	-	-	
T2	4-8	V	Established trees along northern banks of pond.
S1	0.25-1.5	V	Several paperbark stems.
G	0.1-1.5	D	Frog pond plantings, regenerating wetland species and pasture grass

Structural formation: (including height)	Closed Grassland
Ecologically dominant layer:	G

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1		-
T1		-
T2		*Acacia sophorae*
T2		*Elaeocarpus reticulatus*
S		*Melaleuca quinquenervia*
S		
S		
G		*Eleocharis dulcis*
G		*Drosera spatulata*
G		*Calochlaena dubia*
G		*Hemarthria uncinata*
G		*Fimbristylis dichotoma*

Str.	Scientific Name
G	Pasture Grasses along banks*
G	*Baloskion tetraphylla*
G	*Blechnum indicum*
G	*Juncus usitatus*
G	*Cyperus* spp.
G	*Philydrum lanuginosum*
G	*Lygodium microphyllum*
G	*Baumea juncea*
G	*Baumea rubiginosa*
G	*Baumea articulata*
G	*Schoenoplectus validus*
G	*Leipronia articulata*
G	*Cuphea* *
G	*Centella asiatica*
G	*Nymphaea spp.*
G	*Hardenbergia violacea*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Frog ponds have been constructed and planted. Plantings establishing nicely. Water depth varies ~0-0.75m in depth. The previous monitoring plot of P3 has been relocated further to the west and is 40m x 20m in size. Given the depth of water within the frog pond and the soft nature of the sandy soil, no groundcover photos or centre photos were undertaken. It is visually obvious that the coverage and height of the plantings are increasing. Some Nymphaea noted within frog pond. External to the frog ponds previous plantings and treatments of pasture grasses have occurred, although the pasture grasses are still present. Protection fencing installed at the interface between the approved development footprint and rehabilitation zone has been replaced since previous inspection.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 2: Freshwater Wetland & Constructed Frog Pond



Centreline @ om



Centreline @ 50m



SE corner @ om



SE corner @ om



SW corner @ om



SW corner @ om





NW corner @ 50m	NW corner @ 50m
	
NE corner @ 50m	NE corner @ 50m
	
Fencing at rehabilitation zone interface has been replaced	

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Exotic grasses established (predominantly within the eastern sections) and some Columbian Waxweed.

What species?

Andropogon virginicus, Setaria sphacelata, Paspalum, Axonopus and Cuphea.

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 1-6m (planted Eucalypts)
- Shrub species: 0.5-3m (Leptospermums)
- ground covers: 0.2-1.5m

What are the dominant species within each layer?

- Tree: Eucalyptus spp.
- Shrub: Leptospermum spp.
- ground covers: Pasture grasses +/- Bracken and Bunchy Sedge

Have you noticed any new native plant species since the last inspection?

No

If yes name the species or take a photograph

-

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches, silvereye, grassbird and wrens)

Reptiles (i.e. skinks)

Amphibians (i.e. striped marsh frog and eastern sedge frog)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? Yes.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? N/A. Rehab Zone 3 is exempt from the diversity performance requirement.

Groundcover Coverage? N/A. Rehab Zone 3 is exempt from the groundcover coverage requirement.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Weed removal to be undertaken to control pasture grass.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 148. In the north @ 557480, 6831293		**Monitoring Site ID:** P4
Type of on-grounds: approved for assisted natural regeneration with reconstruction to Freshwater Wetland habitat	**Years since site commenced:** 4	**When was this site last assessed?** 02-03-26
Current assessment conducted by: TR	**Date of current assessment:** 03-09-26	
Overall comments on site condition: Pasture grassland re-establishing/dominant in some eastern parts. Zone revegetated with freshwater wetland module. Plantings going well with a noticeable increase in height and coverage. Supplementary plantings may be required in areas currently suppressed by pasture grass (following treatment), predominantly within the eastern areas of the plot. Previous access track to the frog ponds has been dominated by Swamp Rice Grass		
Has the condition of the site changed since last assessment? YES. Noticeable increase in plant heights/coverage.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	75	Revegetation zone with some natural recruitment. Substantial replacement of previous pasture.	0 Juvenile phase	Planted species, mostly rushes and sedge with eucalypts/paperbarks also present.	Pasture grass	Several species mostly planted with some regeneration (refer preceding page). Increasing in height and coverage.		Ongoing routine management of pasture grasses. Supplementary plantings required for pasture grass areas post treatment.
B = Uncertain significant problems	25	Nominal 25% representing pasture grasses re=establishing.	0 Juvenile phase	Planted species, mostly rushes and sedge with eucalypts/paperbarks also present.	Pasture grass Columbian Waxweed	Several species mostly planted with some regeneration (refer preceding page) Performance criteria for weeds and coverage not achieved.		Ongoing routine management of pasture grasses. Weed control required for pasture grasses. Supplementary plantings required pasture grass dominant areas post treatment.
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								87.5 %

LOCATION

Site No.	P4	**Date:**	03-09-26
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT		
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 148. In the north. Rehabilitation Zone 3		

GPS coordinates centre plot:	**Zone**	5	6	**E**	557480	**N**	6831293	**Datum:**	MGA94z56

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)	
E	-	-	
T1	-	-	
T2	1-5	S	Planted Eucalypts
S1	0.25-2.5	S	Mostly planted natives
G	0.1-2	S	Planted and recruited natives
G	0.05-1.5	S-M	Pasture grass and planted wetland natives

Structural formation: (including height)	Open Rush/Sedgeland revegetation zone over low controlled pasture grass
Ecologically dominant layer:	G

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1		-
T1		-
T2		-
T2		*Eucalyptus robusta*
S		*Persoonia stradbrokensis*
S		*Acacia melanoxylon*
S		*Acacia sophorae*
S		*Leptospermum spp.*
S		*Melaleuca quinquenervia*
S		*Oxylobium robustum*
S		*Bansia robur*
S		*Eucalyptus tereticornis*
S		*Callistemon salignus*
S		*Leptospermum polygalifolium*
S		*Lophostemon suaveolens*
S		*Eucalyptus robusta*
S		*Melastoma affine*
S		*Callistemon salignus*
S		*Casuarina glauca*
S		*Macaranga tanarius*

Str.	Scientific Name
G	Pasture Grasses
G	*Baloskion tetraphylla*
G	*Centella asiatica*
G	*Cyperus spp.*
G	*Pteridium esculentum*
G	*Ischaemum australe*
G	*Baumea juncea/rubiginsoa*
G	*Juncus usitatus*
G	*Carex appressa*
G	*Liparophyllum exaltatum*
G	*Histiopteris incisa*
G	*Lobelia stenophylla*
G	*Gahnia spp.*
G	*Hardenbergia violacea*
G	*Cuphea carthagenensis**
G	*Calochlaena dubia*
G	*Elaeocharis dulcis*
G	*Fimbristylis dichotoma*
G	*Goodenia rotundifolia*
G	*Drosera spatulata*
G	Parsonsia straminea
G	Wahlenbergia stricta

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Previous tall, closed grassland now managed as a revegetation zone. Planted native species and retained regenerating species established and increasing in heigh and coverage. Pasture grasses are present throughout the area, in particularly within the eastern portions and require treatment. Noticeable increase in height and coverage of native vegetation since previous inspection, in particularly the Leptospermums and Bunchy Sedges. Previous access tracks for the construction of frog ponds have regenerated with Bunchy Sedge and Leersia hexandra.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 3: Freshwater Wetland



Centreline @ om



Centreline @ 50m



SE corner @ om



SE corner @ om



NE corner @ om



NE corner @ om



Centre west @ 25m



Centre east @ 25m



Centre south @ 25m



Centre north @ 25m



SW corner @ 50m



SW corner @ 50m



NW corner @ 50m



NW corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Exotic grasses established within areas externally to frog ponds.

What species?

Andropogon virginicus, Axonopus spp, Setaria sphacelata and Paspalum.

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: N/A
- Shrub species: 0.25-3m
- ground covers: <1.75m

What are the dominant species within each layer?

- Tree: N/A
- Shrub: Melaleuca quinquenervia
- ground covers: Pasture Grass / Cyperus spp. (Leipronia articulata within frog ponds)

Have you noticed any new native plant species since the last inspection?

No

If yes name the species or take a photograph

-

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches)

Amphibians (i.e. striped marsh frog)

Reptiles (i.e. Yellow-faced Whip Snake)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

N/A

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? Yes.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? Yes.

Tree, Small Tree & Shrub Diversity? N/A. Rehab Zone 3 is exempt from the diversity performance requirement.

Groundcover Coverage? N/A. Rehab Zone 3 is exempt from the groundcover coverage requirement.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Frog ponds have been constructed with plantings establishing nicely. Water depth varies between 0-0.5m. Weed control to treat pasture grass required within areas external to the frog ponds and infill with plantings once treated to increase coverage, in particularly tree/shrub species.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 148. Centre. @ 557425, 557425		**Monitoring Site ID:** P5
Type of on-grounds: approved for assisted natural regeneration with reconstruction to Freshwater Wetland habitat. Frog pond.	**Years since site commenced:** 4	**When was this site last assessed?** 02-03-26
Current assessment conducted by: TR	**Date of current assessment:** 03-09-26	
Overall comments on site condition: Pasture Grassland with regenerating wetland flora. Frog ponds establishing nicely and increasing in height and coverage. Paperbarks regenerating although pasture grass dominates areas south of the frog pond. Treatment of pasture grasses required with supplementary plantings to follow to increase native shrub/tree coverage.		
Has the condition of the site changed since last assessment? YES. Frog ponds have been constructed and planted out with aquatic/wetlands species and establishing nicely. External to the frog ponds, pasture grass is dominant. Paperbark saplings increasing in height and coverage although more shrub/tree species is required (supplementary plantings).		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	50	Frog ponds created and planted out with aquatic/wetland species. External to the frog ponds, freshwater wetland flora establishing amongst the pasture grassland.	0 Juvenile phase	Mid-dense establishing native flora species.	Pasture grasses	Performance criteria for coverage not achieved.		Ongoing routine management of pasture grasses. Paperbark saplings increasing in height and coverage.
B = Uncertain significant problems	50	Pasture grasses have re-established within areas external to the frog ponds. Weed control required.	0 Juvenile phase	Dense non-native	Pasture grasses	Performance criteria for weeds and coverage not achieved.		Ongoing routine management of pasture grasses required. Following pasture grass treatment, Infill plantings required to achieve coverage criteria.
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								75 %

LOCATION

Site No.	P5							**Date:**	03-09-26		
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT										
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 148. Centre. Rehabilitation Zone 3. Frog Pond.										
GPS coordinates centre plot:	**Zone**	5	6	**E**	557425		**N**	557425	**Datum:**	MGA94z56	

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	-	-
T2	-	-
S1	0.25-3	V-S
G	0.1-1.75	D

Structural formation: (including height)	Closed Grassland with regenerating rushland/ sedgeland/ wetland flora in the south
Ecologically dominant layer:	G

Primarily Regenerating Paperbarks

Predominantly planted wetland/frog pond species and Pasture Grass

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1		-
T1		-
T2		-
T2		-
S		*Melaleuca quinquenervia*
S		*Persoonia stradbrokensis*
S		*Acacia melanoxylon*
S		*Acacia sophorae*
S		*Eucalyptus tereticornis*

Str.	Scientific Name
G	Pasture Grasses *
G	*Baloskion tetraphylla*
G	*Eleocharis dulcis*
G	*Juncus usitatus*
G	*Cyperus spp.*
G	*Lygodium microphyllum*
G	*Fimbristylis ferruginea*
G	*Liparophyllum exaltatum*
G	*Centella asiatica*
G	*Baumea juncea, B. rubiginosa, B. articulata*
G	*Xyris complanata*
G	*Ischaemum australe*
G	*Philydrum lanuginosum*
G	*Schoenoplectus validus*
G	*Leipronia articulata*
G	*Viola hederacea*
G	*Cuphea carthagenensis**
G	*Drosera spatulate*
G	*Pomax umbrella*
G	*Salaginella uliginosa*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Frog pond plantings establishing nicely. Water depth varies ~0-0.5m in depth. External to the frog ponds previous plantings/natural regeneration have occurred, although pasture grass is dominant. Treatment of pasture grass is required with supplementary plantings to follow within areas south of the frog ponds. Increase in plantings/natural regeneration height noted, in particularly paperbarks.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 3: Freshwater Wetland.



Centreline @ om



Centreline @ 50m



NW corner @ om



NW corner @ om



NE corner @ om



NE corner @ om



Centreline North @ 25m



Centreline South @ 25m



Centre west @ 25m



Centre east @ 25m



SW corner @ 50m



SW corner @ 50m



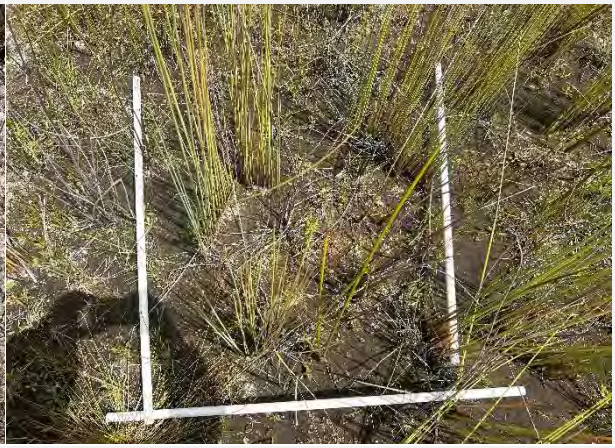
SE corner @ 50m



SE corner @ 50m



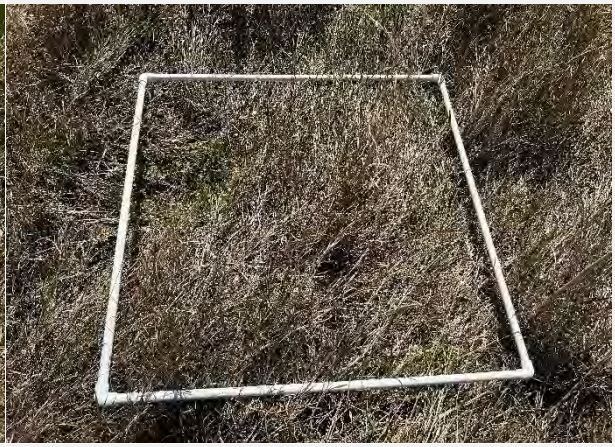
Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Exotic grasses established.

What species?

Andropogon virginicus, Axonopus and Paspalum.

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: N/A
- Shrub species: 0.25-3m
- ground covers: <1.5m

What are the dominant species within each layer?

- Tree: N/A
- Shrub: Melaleuca quinquenervia
- ground covers: Baumea spp. +/- Cyperus spp and Pasture Grass (Lepironia articulata associated with frog ponds)

Have you noticed any new native plant species since the last inspection?

No.

If yes name the species or take a photograph

-

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches and wrens)

Amphibians (i.e. eastern sedgefrog and crinia signifera)

Wader (i.e. White-necked Heron)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

N/A.

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? Yes.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? N/A. Rehab Zone 3 is exempt from the diversity performance requirement.

Groundcover Coverage? N/A. Rehab Zone 3 is exempt from the groundcover coverage requirement.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Generally in good condition and regenerating nicely, although exotic grass still prominent in areas, in particularly within the northern areas which are drier. Pasture grass requires treatment.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 148. Southeast. @ 557494, 6831176		**Monitoring Site ID:** P6
Type of on-grounds: approved for assisted natural regeneration with reconstruction to Freshwater Wetland habitat. Frog pond.	**Years since site commenced:** 4	**When was this site last assessed?** 02-03-26
Current assessment conducted by: TR	**Date of current assessment:** 03-09-26	
Overall comments on site condition: Pasture Grassland with regenerating wetland flora. Frog ponds establishing nicely and increasing in height and coverage. Paperbarks regenerating nicely although pasture grass is prominent in sections (particularly north). Damp under feet. Pasture grass requires treatment in areas.		
Has the condition of the site changed since last assessment? YES Frog pond plantings increasing in height and coverage. Melaleuca quinquenervia juveniles very common and increasing in height and coverage.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	90	Freshwater wetland flora establishing amongst the pasture grassland supplemented by native plantings. Frog ponds created and planted out with aquatic/wetland species.	0	Mid-dense to dense establishing native flora species.	Pasture grasses	Excellent regeneration of paperbark. Native species height and coverage increasing and achieving performance criteria.		Ongoing routine management of pasture grasses. Paperbark saplings increasing in height and coverage. Monitor frog pond planting success.
B = Uncertain significant problems	10	10% estimate of pasture grasses which requires treatment.	0	Dense non-native	Pasture grasses	Pasture grass prominent in areas. Performance criteria for weeds not achieved.		Ongoing routine management of pasture grasses.
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								95 %

LOCATION

Site No.	P6	**Date:**	03-09-26
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT		
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 148. Southeast. Rehabilitation Zone 3. Frog Pond		

GPS coordinates centre plot:	**Zone**	5	6	**E**	557494	**N**	6831176	**Datum:**	MGA94z56

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	-	-
T2	-	-
S1	0.25-4	S-M
G	0.1-1.5	D

Structural formation: (including height)	Closed Freshwater Wetland/Rushland/Sedgeland with Pasture Grassland Associated
Ecologically dominant layer:	G

Predominantly regenerating Paperbarks

Frog pond plantings and regenerating wetland species and pasture grass.

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1		-
T1		-
T2		-
T2		-
S		*Melaleuca quinquenervia*
S		*Breynia oblongifolia*
S		*Acacia sophorae*
S		Casuarina glauca

Str.	Scientific Name
G	Pasture Grasses
G	*Baloskion tetraphylla*
G	*Eleocharis dulcis*
G	*Juncus usitatus*
G	*Cyperus* spp. x 2
G	*Lygodium microphyllum*
G	*Fimbristylis ferruginea*
G	*Liparophyllum exaltatum*
G	*Centella asiatica*
G	*Baumea juncea, B. rubiginosa, B. articulata*
G	*Blechnum indicum*
G	*Gahnia clarkei*
G	*Lepironia articulata*
G	*Philydrum lanuginosum*
G	*Schoenus brevifolius*
G	*Centella asiatica*
G	*Phragmite australis*
G	*Xyris complanata*
G	*Lobelia stenophylla*
G	*Schoenoplectus Validus*
G	*Selaginella uliginosa*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Regenerating freshwater wetland with pasture grasses present. Excellent regeneration of paperbark saplings and aquatic flora from baseline. Increase in plantings/natural regeneration height and coverage. Pasture grass slowly becoming overtaken by native groundcover species, although pasture grasses are still prominent within the drier sections within the northern areas of the plot. Frog pond plantings are establishing nicely. Water depth varies ~0-0.5m in depth.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 3: Freshwater Wetland. Constructed Frog Pond.



Centreline @ om



Centreline @ 50m



NE corner @ om



NE corner @ om



NW corner @ om



NW corner @ om



Centre west @ 25m



Centre east @ 25m



Centre south @ 25m



Centre north @ 25m



SW corner @ 50m



SW corner @ 50m



SE corner @ 50m



SE corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m



Treated Camphor Laurel Tree Dying

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Exotic grasses re-established.

What species?

Andropogon virginicus, Paspalum spp., Axonopus spp., Kikuyu, Groundsel and some Columbian Waxweed.

What management was undertaken to eradicate these weeds?

To be treated.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: Some planted Eucalypts 6m+ in height
- Shrub species: 0.25-2.5m
- ground covers: 0.1-1.25m

What are the dominant species within each layer?

- Tree: Eucalyptus spp.
- Shrub: Melaleuca quinquenervia +/- Eucalyptus spp.
- ground covers: Pasture grass and Lomandras

Have you noticed any new native plant species since the last inspection?

Yes.

If yes name the species or take a photograph

Gonocarpus tetragynus

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches, grassbird and wrens)

Mammal (i.e. Bandicoot diggings)

Reptiles (i.e. skinks)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

N/A

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? Yes.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? Yes.

General Coverage/Success? Yes.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Natural regeneration and plantings are establishing nicely, although exotic grass are prominent, particularly within the southern areas of the Zone. Bandicoot diggings and wallaby scats common. Supplementary plantings may be required to increase coverage once exotic grass is treated.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 149. In south of paddock. @ 557990, 6830947		**Monitoring Site ID:** P7
Type of on-grounds: approved for assisted natural regeneration with reconstruction to Swamp Sclerophyll Forest Habitat	**Years since site commenced:** 4	**When was this site last assessed?** 05-03-26
Current assessment conducted by: TR	**Date of current assessment:** 20-08-26	
Overall comments on site condition: Previous pasture grassland controlled and revegetated with swamp sclerophyll module, although whiskey grass, kikuyu and carpet grass are established in areas, particularly the southern areas of the zone. Planted species taking off excellently, in particularly the Eucalypts. Previously damaged areas associated with 4wd regenerating nicely.		
Has the condition of the site changed since last assessment? YES. Plantings establishing nicely and increasing in height and coverage. Pasture grass persisting.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	70	Revegetation zone with natural recruitment. Substantial replacement of previous pasture. Plantings increasing in height and coverage.	0 Juvenile phase	Planted species	Pasture grass	Several species mostly planted with some regeneration (refer preceding page) Native plantings increasing in height and coverage.		Ongoing routine management of pasture grasses. Treatment of pasture grasses required, particularly within the southern areas of Zone 4. Supplementary plantings required following treatment of pasture grasses
B = Uncertain significant problems	30	30% representing pasture re-establishing. A 4wd track has been created within Zone 4, likely as a result of the water main works conducted on site. Whilst not entirely cleared like in other areas affected by these works, this 4wd track has trampled/flattened vegetation within the rehab zone. Remedial measures to restore these areas are yet to be determined at this current stage, although there are signs of natural regeneration already occurring.	0 Juvenile phase	Dense non-native	Pasture grasses	Several species mostly planted with some regeneration (refer preceding page) Performance criteria for weeds and coverage not achieved in some areas (primarily where pasture grass has taken over).		Ongoing routine management of pasture grasses. Treatment of pasture grasses required. Supplementary plantings required following treatment of pasture grasses. Monitor areas affected by the 4wd track.

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								85 %

LOCATION

Site No.	P7	**Date:**	20-08-26
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT		
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 149. In south of paddock. Rehabilitation Zone 4		

GPS coordinates centre plot:	**Zone**	5	6	**E**	557990	**N**	6830947	**Datum:**	MGA94z56

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)	
E	-	-	
T1	-	-	
T2	1.5-7	M	Planted eucalypts
S1	0.25-2	V	Mostly planted natives
G	0.1-1.25	M	Planted and recruited natives
G	0.1-1.25	S-M	Pasture grass and planted natives with some natural recruitment

Structural formation: (including height)	Very Open Shrubland revegetation zone over low controlled pasture grass
Ecologically dominant layer:	G

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1		-
T1		-
S		Melaleuca quinquenervia
S		Persoonia stradbrokensis
S		Acacia sophorae
S		Lophostemon suaveolens
S		Zieria smithii
T2/S		Lophostemon confertus
T2/S		Eucalyptus tereticornis
S		Bankisa robur
S		Austromyrtus dulcis
S		Leptospermum polygalifolium
S		Callistemon salignus
S		Casuarina glauca
S		Corymbia intermedia
T2/S		Eucalyptus robusta
S		Callistemon pachyphyllus
S		Syzygium oleosum

Str.	Scientific Name
G	Pasture Grasses *
G	Baloskion tetraphylla
G	Blechnum indicum
G	Hibbertia scandens
G	Cyperus spp.
G	Gahnia clarkei
G	Centella asiatica
G	Pteridium esculentum
G	Wahlenbergia gracilis
G	Drosera spatulata
G	Liparophyllum exaltatum
G	Lomandra spp.
G	Histiopteris incisa
G	Fimbristylis ferruginea
G	Xyris complanata
G	Hardenbergia violaceae
G	Viola hederacea
G	Baccharis halimifolia*
G	Cuphea carthagenensis*
G	Pomax umbellata
G	Imperata cylindrica
G	*Staphania japonica*
G	*Gonocarpus tetragynus*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes	Previous tall, closed grassland now managed as a revegetation zone. Coverage and height improved from previous inspection with planted native species and retained regenerating species establishing nicely. Pasture grass remains persistent within understory and requires treatment, in particularly the southern sections of the zone. Bandicoot diggings and wallaby scats common within zone.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 4: Swamp Sclerophyll Forest.



Centreline @ om



Centreline @ 50m



SE corner @ om



SW corner @ om



Centre south @ 25m



Centre north @ 25m



Centre east @ 25m



Centre west @ 25m



NW corner @ 50m



NE corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m



Pasture grass requiring treatment

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<table>
<tr>
<td>
<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A
</td>
<td>
<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Exotic grasses within western areas present although not dominant.

What species?

Andropogon virginicus, Axonopus and Paspalum.

What management was undertaken to eradicate these weeds?

To be treated.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.
</td>
<td>
<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 1-6m
- Shrub species: 0.25-2.5m
- ground covers: 0.1-1.5m

What are the dominant species within each layer?

- Tree: Eucalyptus robusta

- Shrub: Melaleuca quinquenervia

- ground covers: Baloskion tetraphylla +/- Baumea spp.

Have you noticed any new native plant species since the last inspection?

No.

If yes name the species or take a photograph

N/A

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.
</td>
</tr>
<tr>
<td>
<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches and wrens)

Amphibians (i.e. crinia signifera)

Mammals (i.e. bandicoot diggings)
</td>
<td>
<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences
- Good
- Need minor repair
- Poor (need replacement)

N/A
</td>
<td>
Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? Yes.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? No.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Natural regeneration and plantings establishing nicely, although exotic grass (primarily Whiskey Grass, Carpet Grass and Paspalum) is present and requires treatment within western edges of the plot/zone. Potential plantings required in those areas affected by recent access track clearing (TBC).
</td>
</tr>
</table>

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 149. In east of paddock. @ 558101, 6831072		**Monitoring Site ID:** P8
Type of on-grounds: approved for assisted natural regeneration with reconstruction to Swamp Sclerophyll Forest Habitat	**Years since site commenced:** 4	**When was this site last assessed?** 25-02-26
Current assessment conducted by: TR	**Date of current assessment:** 20-08-26	
Overall comments on site condition: Regenerating freshwater wetland with pasture grasses present but not dominant. Wetland species starting to smother the pasture grass. Revegetated swamp sclerophyll module on the fringe with tree species planting throughout. Damage from recently constructed access track.		
Has the condition of the site changed since last assessment? YES. Native shrubs and trees planted and naturally regenerating nicely, increasing in height and density. Pasture grass prominent in the western sections of plot/zone. Native groundcover species (in particularly baloskion) starting to smother/dominate the pasture grasses. Natural regeneration occurring within previously cleared access track.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	75	Freshwater wetland flora establishing amongst the previous pasture grassland supplemented by native plantings.	0	Dense establishing native aquatic flora species.	Pasture grasses	Regenerating and supplementary planting performed. Increasing in height and coverage.		Ongoing monitoring of pasture grasses for natural regeneration. May require some treatment in the western sections where whiskey grass is prominent, although it has improved since previous inspection. Monitoring and routine follow up weed control where needed.
B = Uncertain significant problems	25	20% estimate of pasture grasses or areas not containing regeneration or planted native species. Recently cleared access track has setback approximately 3 years worth of restoration works in some areas. Remedial measures to restore these areas are yet to be determined at this current stage, although there are signs of natural regeneration already occurring.	0	non-native grasses within wetland	Pasture grasses	Regenerating and supplementary planting performed. Performance criteria for weeds not achieved within the western areas of the zone/plot where it's drier.		Ongoing monitoring/treatment of pasture grasses for natural regeneration in drier western areas. Potential plantings required to those areas affected by recent access track clearing (TBC).
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								87.5 %

LOCATION

Site No.	P8							**Date:**	20-08-26		
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT										
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 149. In east of paddock. Rehabilitation Zone 4										
GPS coordinates centre plot:	**Zone**	5	6	**E**	558101		**N**	6831072	**Datum:**	MGA94z56	

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	-	-
T2	1-6	S
S1	0.25-2.5	V-S
G	0.1-1.5	D

Structural formation: (including height)	Regenerating rushland/ sedgeland/ wetland flora with previous grassland becoming subdominant
Ecologically dominant layer:	G

Several Eucalypts and Paperbarks

Native flora becoming dominant. Some patches of pasture grasses remain.

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1		-
T1		-
T2		Melaleuca quinquenervia
T2		Eucalyptus robusta
S		Melaleuca quinquenervia
S		Persoonia stradbrokensis
S		Lophostemon suaveolens
S		Casuarina glauca
S		Melastoma affine
S		Oxylobium robustum
S		Banskia integrifolia
S		Leptospermum spp.
S		Banksia robur
S		Eucalyptus robusta
S		Corymbia intermeida
S		Eucalyptus tereticornis

Str.	Scientific Name
G	Pasture Grasses *
G	Baloskion tetraphylla
G	Baumea juncea, rubiginosa
G	Juncus usitatus
G	Cyperus spp.
G	Lepironia articulata
G	Selaginella uliginosa
G	Gonocarpus micranthus
G	Gahnia clarkei
G	Blechnum indicum
G	Drosera spatulata
G	Xyris complanata
G	Wahlenbergia gracilis
G	Lomandra hystrix
G	Dianella caerulea
G	Liparophyllum exaltatum
G	Centella asiatica
G	Viola hederacea
G	Fimbristylis dichotoma
G	Imperata cylindrica

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Previously establish Pasture Grassland well managed and transforming to wetland vegetation under natural regeneration efforts. Generally in good condition and regenerating nicely, although there's some patches of pasture grass present, in particularly along the western edge of the plot which requires treatment. A portion of the Rehab Zone was cleared in the past year (refer to Feb 2026 monitoring sheets for details). Natural regeneration occurring within these areas.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 4: Swamp Sclerophyll Forest.



Centreline @ om



Centreline @ 50m



SE corner @ om



SE corner @ om



SW corner @ om



SW corner @ om



Centre east @ 25m



Centre west @ 25m



Centre north @ 25m



Centre south @ 25m



NW corner @ 50m



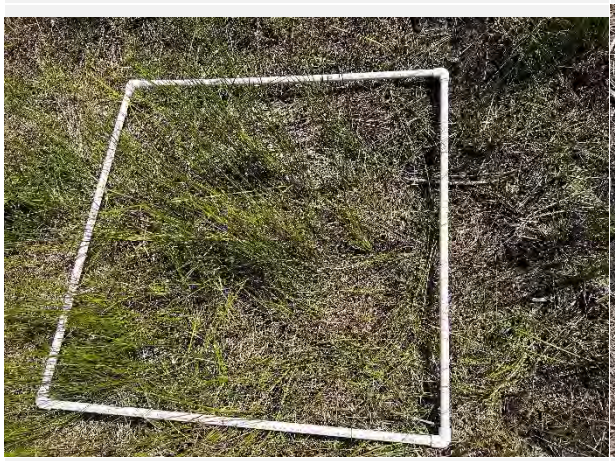
NW corner @ 50m



NE corner @ 50m



NE corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N/A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Exotic grasses present although not dominant, several stems of Easter Cassia, Groundsel, and Camphor Laurel sapling.

What species?

Andropogon virginicus, Paspalum, Asparagus Fern, Groundsel, Camphor Laurel, Thickhhead and Easter Cassia.

What management was undertaken to eradicate these weeds?

To be removed/treated.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 8-12m
- Shrub species: 0.5-5m
- ground covers: <1.5m

What are the dominant species within each layer?

- Tree: Banskia integrifolia
- Shrub: Mixed (i.e. Paperbark, Leptospermum spp, Acacia, Banskia etc.)
- ground covers: Pteridium esculentatum +/- Lomandra spp.

Have you noticed any new native plant species since the last inspection?

No.

If yes name the species or take a photograph

N/A

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches and fairy wrens)

Nectivore/insectivore/frugivore birds (i.e. honeyeaters, noisy friarbird, noisy minor)

Reptiles (i.e. skinks, red-bellied black snake)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N.A.

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? No.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? No.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Natural regeneration and plantings establishing nicely, although exotic grass and some Easter Cassia, Groundsel, Coral Berry and Camphor Laurel are present and require removal/spray at next weed control round.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 149. In east of paddock within existing Banksia Woodland @ 558050, 6831124		**Monitoring Site ID:** P9
Type of on-grounds: approved for assisted natural regeneration to Coastal Banksia Woodland/ Open Forest Habitat	**Years since site commenced:** 4	**When was this site last assessed?** 25-02-26
Current assessment conducted by: TR	**Date of current assessment:** 20-08-26	
Overall comments on site condition: Good beginnings of natural regeneration with a variety of native flora species encountered. Where canopy trees are grouped providing shade a good leaf litter layer is present. Previous pasture largely controlled and now revegetated, although there's still some pasture grass and herbaceous weeds. Several fallen trees remain as a result of Cyclone Alfred.		
Has the condition of the site changed since last assessment? YES. Native regeneration increasing in density and height. Some natural regeneration noted within recently cleared access track.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	80	Fragmented Banksia Woodland/ Open Forest on sandy substrate. Good regeneration, particularly where canopy cover exists. Open areas still contain a variety of native forbs/groundcovers. Revegetation zone with some natural recruitment. Substantial replacement of previous pasture.	40-45%	Mid-dense establishing native flora species with revegetation also performed.	Pasture grasses	Native regeneration Increasing in height and coverage.		Ongoing routine management of pasture grasses.
B = Uncertain significant problems	20	Nominal 15% representing pasture grasses re-establishing in patches. Minor herbaceous weed coverage. Recently cleared access track has setback approximately 3 years worth of restoration works in some areas. Remedial measures to restore these areas are yet to be determined at this current stage, although there are signs of natural regeneration already occurring.	0 Juvenile phase	Dense non-native.	Pasture grasses, *Senna pendula* *Cinnamomum camphora* Groundsel Asparagus Fern	Performance criteria for weeds not achieved.		Ongoing routine management of pasture grasses. Spot control of weeds. Potential plantings required to those areas affected by recent access track clearing (TBC).

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								90 %

LOCATION

Site No.	P9						**Date:**	20-08-26	
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT								
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 149. In east of paddock within existing Banksia Woodland. Rehabilitation Zone 6								
GPS coordinates centre plot:	**Zone**	5	6	**E**	558050	**N**	6831124	**Datum:**	MGA94z56

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	8-12	M
T2	4-8	S-V
S1	0.5-5	S-M
G	0.1-1.5	S-D

Structural formation: (including height)	Coastal Banksia Woodland / Open Forest
Ecologically dominant layer:	T1

Planted natives + existing regeneration post cattle exclusion

Planted natives with natural recruitment. Some exposed sand typical to vegetation type. Weeds/grasses re-establishing slightly.

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1	D	*Banksia integrifolia*
T1	A	*Melaleuca quinquenervia*
T2		*Regenerating T1 species*
T2		*Acacia sophorae*
T2		*Persoonia stradbrokensis*
T2		*Glochidion sumatranum*
T2		*Duboisia myoporoides*
S		*Regenerating T1 and T2 species*
S		*Acacia ulicifolia*
S		*Leptospermum juniperinum, L. polygalifolium*
S		*Acrotriche aggregata*
S		*Notelaea longifolia*
S		*Austromyrtus dulcis*
S		*Monotoca elliptica*
S		*Elaeocarpus reticulatus*
S		*Melicope elleryana*
S		*Lophostemon suaveolens*
S		*Senna pendula**
S		*Banksia robor*
S		*Cupaniopsis anacardioides*
S		*Callistemon salignus*
S		*Syzygium oleosum*
S		*Acronychia imperforata*
S		*Eucalyptus robusta*
S		*Macaranga tanarius*

Str.	Scientific Name
G	Pasture Grasses *
G	*Pomax umbellata*
G	*Hibbertia scandens*
G	*Baloskion tetraphylla*
G	*Cyperus spp.*
G	*Dianella caerulea*
G	*Geitonoplesium cymosum*
G	*Gonocarpus micranthus*
G	*Gahnia clarkei*
G	*Lomandra filiformis*
G	*Parsonsia straminae*
G	*Pteridium esculentum*
G	*Hatpins*
G	*Marsdenia rostrata*
G	*Smilax australis*
G	*Goodenia rotundifolia*
G	*Centella asiatica*
G	*Wahlenbergia gracilis*
G	*Drosera spatulata*
G	*Pomax umbellata*
G	*Imperata cylindrica*
G	*Lomandra hystrix*
G	*Stephania japonica*
G	*Entolasia stricta*
G	*Commelina cyanea*
G	*Cinnamomum camphora**
G	*Asparagus aethiopicus **
G	*Baccharis halimifolia **
G	*Crassocephalum crepidioides **
G	*Ardisia crenata**

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Banksia woodland within former grazing paddock on sandy substrate. Good beginnings of natural regeneration with a variety of native flora species encountered and a large number of native saplings observed. Where canopy trees are grouped providing shade a good leaf litter layer is present. Previous pasture largely controlled, and site now revegetated, although there's a minor increase in pasture grass presence since the previous inspection. Several other weeds such as Asparagus Fern, Groundsel, Thickhead and Easter Cassia also noted, although scarce and don't exceed weed coverage performance criteria. Increase in density and height of regenerating native flora noticeable since the previous inspection. The previously cleared tracks (refer to Feb 2026 inspection sheets for details) shows signs of natural regeneration, although remains bare/sandy for the most part.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 6. Coastal Banksia Woodland/Open Forest to be managed by assisted natural regeneration.



Centreline @ om



Centreline @ 50m



SE corner @ om



SE corner @ om



NE corner @ om



NE corner @ om



Centre east @ 25m



Centre west @ 25m



Centre north @ 25m



Centre south @ 25m



NW corner @ 50m



NW corner @ 50m



SW corner @ 50m



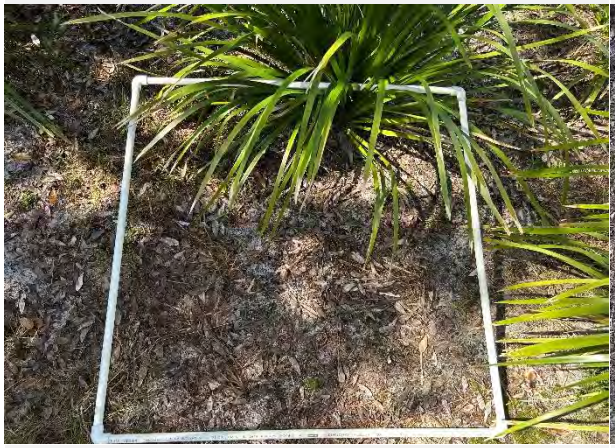
SW corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m



Recently cleared track within the eastern portions of Zone 6 proximate to Plot 9 showing some natural regeneration

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Exotic grasses dominant in areas.

What species?

Mainly Andropogon virginicus, Axonopus spp. and Paspalum.

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 1.5-7
- Shrub species: 0.5-2.5m
- ground covers: <1.5m

What are the dominant species within each layer?

- Tree: Eucalyptus spp.
- Shrub: Eucalyptus spp. +/- Melaleuca quinquenervia
- ground covers: Pasture grasses and Bunchy Sedge

Have you noticed any new native plant species since the last inspection?

No.

If yes name the species or take a photograph

Goodenia paniculata

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches, wrens, honeyeaters)

Mammals (i.e. bandicoot diggings, swamp wallaby)

Amphibians (i.e.litoria fallax, wallum froglet)

Reptiles (i.e. skinks)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? Yes.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? Yes.

Tree, Small Tree & Shrub Diversity? N/A. Rehab Zone 1 is exempt from the diversity performance requirement.

Groundcover Coverage? N/A. Rehab Zone 1 is exempt from the groundcover coverage requirement.

General Coverage/Success? Yes.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

Weed removal to be undertaken for pasture grass with in-fill plantings in bare/grass dominant areas where canopy coverage isn't being met. These occur predominantly west of Plot 10, proximate the natural swale/drain.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 146. South of Frog Pond. @ 556907, 6831745		**Monitoring Site ID:** P10
Type of on-grounds: approved for assisted natural regeneration with reconstruction to Freshwater Wetland habitat	**Years since site commenced:** 4	**When was this site last assessed?** 25-02-26
Current assessment conducted by: TR	**Date of current assessment:** 20-08-26	
Overall comments on site condition: Previous pasture grassland revegetated with freshwater wetland module, although there's an increase in exotic grass coverage since previous inspection noted. Plantings establishing nicely, in particularly Eucalypts. Several areas external to the plot require additional plantings to meet canopy coverage performance criteria.		
Has the condition of the site changed since last assessment? YES. Plantings and natural regeneration establishing and increasing in height, although exotic grasses are dominant throughout the ground layer.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	60	Revegetation zone with some natural recruitment. Substantial replacement of previous pasture.	0 Juvenile phase	Planted species, mostly rushes and sedge.	Pasture grass	Several species mostly planted with some regeneration (refer preceding page) Increasing in height and coverage.		Ongoing routine management of pasture grasses. Monitoring and routine follow up weed control where needed. Supplementary/replacement plantings required once grass/weeds are treated.
B = Uncertain significant problems	40	Nominal 40% representing pasture grasses re-establishing (dominant). Limited occurrence of waxweed, billygoat weed, thickhead, but monitoring and routine control required due to proficiency to spread within wetlands.	0 Juvenile phase	Planted species, mostly rushes and sedge with minor pasture regeneration and sporadic waxweed, billygoat weed and thickhead.	Pasture grasses, Columbian waxweed, Billygoat weed, Thickhead	Several species mostly planted with some regeneration (refer preceding page) Performance criteria for weeds and canopy coverage not achieved.		Ongoing routine management of pasture grasses. Spot control of waxweed, billygoat weed, thickhead and pasture grasses. Canopy coverage not achieved within sections of the Rehab Zone. Plantings required.

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								80 %

LOCATION

Site No.	P10	**Date:**	20-08-26
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT		
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 146. South of Frog Pond. Rehabilitation Zone 1		

GPS coordinates centre plot:	**Zone**	5	6	**E**	556907	**N**	6831745	**Datum:**	MGA94256

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)	
E	-	-	
T1	-	-	
T2	1-7	S	Planted Eucalypts
S1	0.25-2.5	V-S	Mostly planted natives
G	0.1-1.5	S	Planted and recruited natives
G	0.05-1.5	S	Pasture grass and planted wetland natives

Structural formation: (including height)	Closed Pasture Grassland
Ecologically dominant layer:	G

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1		-
T1		-
T2		-
T2		-
S		*Persoonia stradbrokensis*
S		*Callistemon salignus*
S		*Eucalyptus robusta*
S		*Melaleuca quinquenervia*
S		*Casuarina glauca*
S		*Acacia sophorae*
S		*Lophostemon suaveolens*
S		*Eucalyptus tereticornis*
S		*Banksia robur*
G		Viola hederacea
G		Drosera spatulata
G		Goodenia paniculata
G		*Emilia sonchifolia**

Str.	Scientific Name
G	Pasture Grasses
G	*Baloskion tetraphylla*
G	*Centella asiatica*
G	*Cyperus* spp.
G	*Liparophyllum exaltatum*
G	*Blechnum indicum*
G	*Hibbertia scandens*
G	*Fimbristylis ferruginea*
G	*Cuphea carthagenensis**
G	*Juncus usitatus*
G	*Philydrum lanuginosum*
G	*Histiopteris incisa*
G	*Carex appressa*
G	*Baumea juncea/rubiginsoa*
G	*Pteridium esculentum*
G	*Ageratum houstianum**
G	*Leptospermum spp.*
G	*Lobelia stenophylla*
G	*Pultenea villosa*
G	*Xyris complanata*
G	*Fimbristylis polytrichoides*
G	*Hardenbergia violacea*
G	*Crassocephalum crepidioides**

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Previous low to mid-high, closed grassland now managed as a revegetation zone. Planted native species and retained regenerating species increasing in height and coverage. Exotic grasses dominating the ground layer in areas. Fencing at interface replaced since previous inspection. External to the plot, some areas of the Rehab Zone failing to meet canopy coverage and weed coverage performance criteria. Several planted Eucalypts/Lophostemons are above 7m in height and 20cm dbh. Muddy/damp underfoot from recent rain.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 1: Freshwater Wetland



Centreline @ om



Centreline @ 50m



SE corner @ om



SE corner @ om



NE corner @ om



NE corner @ om



Centre north @ 25m



Centre south @ 25m



Centre east @ 25m



Centre west @ 25m



SW corner @ 50m



SW corner @ 50m



NW corner @ 50m



NW corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m

Ground centre @ 45m (forgot to take the photo)



New Protection Fencing at Interface

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Minor areas of Paspalum within northern areas of the plot. An Umbrella Tree and Coral Berry sapling also present.

What species?

Paspalum spp. Ardisia crenata and Schefflera actinophylla

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 14-20m
- Shrub species: 0.5-3m
- ground covers: <1.2m

Area already well established.

What are the dominant species within each layer?

- Tree: Lophostemon confertus
- Shrub: Melaleuca quinquenervia
- ground covers: Gahnia clarkei

Have you noticed any new native plant species since the last inspection?

No.

If yes name the species or take a photograph

N.A

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. fairy wrens and silvereye)

Nectivore/insectivore/frugivore birds (i.e. honeyeaters, noisy friarbird, king parrot)

Mammals (i.e. swamp wallaby)

Reptiles (i.e. skinks, common tree snake)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? No.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? No.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

In excellent condition with minor areas of Paspalum present which require routine weed control. A large Umbrella Tree and Coral Berry sapling also requires treatment during next weed control round.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 147. Mapped Brushbox area. @ 557828, 6831140		**Monitoring Site ID:** P11
Type of on-grounds: Approved for assisted natural regeneration	**Years since site commenced:** 4	**When was this site last assessed?** 02-03-26
Current assessment conducted by: TR	**Date of current assessment:** 20-08-26	
Overall comments on site condition: Established Brushbox Community. Fenced off and removed from construction zone. In excellent condition with minor weed regenerating (limited to Paspalum, a Umbrella Tree and Coral Berry sapling). Wet underfoot.		
Has the condition of the site changed since last assessment? NO. Remains in excellent condition although very minor weed intrusion noted.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	99	In excellent condition with no weeds.	80	Dense	N/A	N/A	-	Nil. Monitoring only.
B = Uncertain significant problems	1	Weeds previously treated. Minor areas of Paspalum present. One Umbrella Tree and Coral Berry sapling present.	80	Sparse	Paspalum	N/A	-	Routine follow up weed control of Paspalum, Coral berry and Umbrella Tree
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								99.5 %

LOCATION

Site No.	P11							**Date:**	20-08-26		
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT										
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 147. Within mapped Brushbox Foest. Rehabilitation Zone 6										
GPS coordinates centre plot:	**Zone**	5	6	**E**	557828		**N**	6831140	**Datum:**	MGA94z56	

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	14-20	D
T2	5-14	V
S1	0.5-3	M-S
G	0.1-1.2	M-D

Structural formation: (including height)	Tall to Very Tall Open Forest
Ecologically dominant layer:	T1

Dense growth of native ferns, sedges, rushes. Thick organic leaf layer and coarse woody debris present.

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1	D	*Lophostemon confertus*
T1	A	*Melaleuca quinquenervia*
T1	S	*Lophostemon suaveolens*
T1	S	*Melicope elleryana*
T2		*Elaeocarpus reticulatus*
T2		*Litsea australis*
T2		*Endiandra sieberi*
T2		*Syzygium oleosum*
T2		*Schefflera actinophylla**
T2		*Platycerium superbum*
S1		*Regenerating T1/T2*
S1		*Melastoma affine*
S1		*Leptospermum spp.*
S1		*Austromyrtus dulcis*
S1		*Homalanthus populifolius*
S1		*Banksia integrifolia*

Str.	Scientific Name
G	*Paspalum spp. **
G	*Gahnia clarkei*
G	*Banksia integrifolia*
G	*Blechnum indicum*
G	*Smilax australis*
G	*Selaginella uliginosa*
G	*Pterdium esculentum*
G	*Calochlaena dubia*
G	*Marsdenia rostrata*
G	*Hibbertia scandens*
G	*Lygodium microphyllum*
G	*Ardisia crenata**
G	Centella asiatica

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Brushbox forest. Fenced off from construction zone. In excellent condition with very minor areas of Paspalum present. Wet underfoot.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 6: Existing Vegetation



Centreline @ om



Centreline @ 50m



Northeast corner @ om



Northeast corner @ om



Northwest corner @ om



Northwest corner @ om



Centre north @ 25m



Centre south @ 25m



Centre west @ 25m



Centre east @ 25m



Southwest corner @ 50m



Southwest corner @ 50m



Southeast corner @ 50m



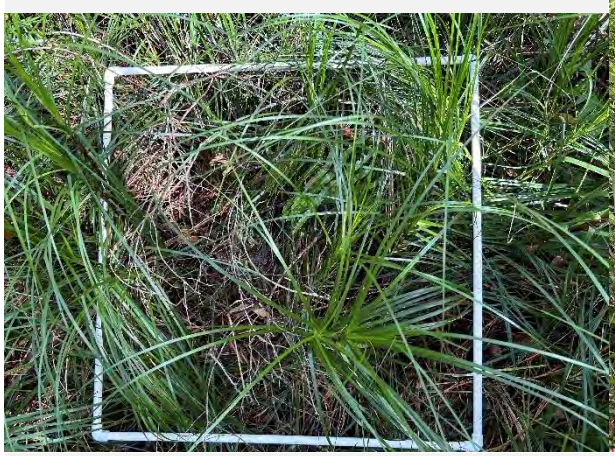
Southeast corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m



Nestboxes nearby remain in good condition

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes.

What species?

Paspalum, Inkweed and Easter Cassia.

What management was undertaken to eradicate these weeds?

To be treated.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 8-14m
- Shrub species: 0.5-3m
- ground covers: <1.5m

The area is already well established.

What are the dominant species within each layer?

- Tree: Casuarina gluaca
- Shrub: Melaleuca quinquenervia
- ground covers: Hypolepis muelleri +/- Gahnia

Have you noticed any new native plant species since the last inspection?

No

If yes name the species or take a photograph

Centella asiatica

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches, wrens and yellow robin)

Nectivore/insectivore/frugivore birds (i.e. honeyeaters, whipbird, firarbird)

Reptiles (i.e. skinks)

Amphibians (i.e. Crinia signifera)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? No.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? No*

*Whilst there are areas exceeding the groundcover coverage performance criteria, these occur as Swamp Oak pine needles which are typical to Swamp Forest communities.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

In good condition with minor areas of Paspalum and some saplings of Easter Cassia and Inkweed present which requires routine weed control.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

PROJECT DESCRIPTION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 147. Mapped Swamp Oak area proximate Belongil Creek. @ 557927, 6830883		**Monitoring Site ID:** P12
Type of on-grounds: Approved for assisted natural regeneration	**Years since site commenced:** 4	**When was this site last assessed?** 05-03-26
Current assessment conducted by: TR	**Date of current assessment:** 20-08-26	
Overall comments on site condition: Established Swamp Oak Community generally in good condition. Minor intrusion of pasture grasses and weeds, although well below the performance criteria. A lot of fallen debris/trees, likely from Cyclone Alfred.		
Has the condition of the site changed since last assessment? YES. Groundlayer coverage has increased since previous inspection.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	97	Mostly dense native ground cover. Treated camphor laurel trees have been treated and died.	70	Dense	individual camphor laurel trees	Treated camphor laurel dieback. Increase in native groundcover density noted.	-	Routine monitoring and weed control.
B = Uncertain significant problems	3	Minor patches of paspalum still remain and require treatment. Easter Cassia and Inkweed saplings requiring treatment during next round of weed control.	70	Dense	Pasture grasses, Easter Cassia, Inkweed	N/A	-	Treatment of pasture grasses, Inkweed and Easter Cassia required. Routine monitoring of native ground cover regeneration within treated areas.
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								98.5 %

LOCATION

Site No.	P12	**Date:**	21-08-26
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT		
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 147. Within mapped Swamp Oak Forest proximate Belongil Creek. Rehabilitation Zone 6		

GPS coordinates centre plot:	**Zone**	5	6	**E**	557927	**N**	6830883	**Datum:**	MGA94z56

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	12-16	D
T2	3-12	S
S1	0.75-3	S
G	0.1-1.5	D

Structural formation: (including height)	Mid-high to Tall Open Forest
Ecologically dominant layer:	T1 - G

Dense growth of native ferns, sedges, rushes. Thick organic leaf layer and coarse woody debris present including casuarina needles.

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1	D	*Casuarina glauca*
T1	A	*Melaleuca quinquenervia*
T1	S	*Melicope elleryana*
T1		*Regenerating T1 species*
T2		*Acacia melanoxylon*
T2		*Cupaniopsis anacardioides*
T2		*Acacia melanoxylon*
T2		*Cupaniopsis anacardioides*
S1		*Breynia oblongifolia*
S1		*Regenerating T1/T2 species*
G		*Senna pendula**
G		*Phytolacca octandra**
G		*Centella asiatica*
G		*Eleocharis equisetina*
G		*Hypolepis muelleri*

Str.	Scientific Name
G	*Pteridium esculentum*
G	*Calochlaena dubia*
G	Exotic Grasses (*Paspalum spp)**
G	*Dianella caerulea*
G	*Blechnum indicum*
G	*Marsdenia rostrata*
G	*Smilax australis*
G	*Stephania japonica*
G	*Gahnia clarkei*
G	*Asplenium australasicum*
G	*Parsonsia straminea*
G	*Platycerium superbum*
G	*Commelina cyanea*
G	*Baumea juncea*
G	Lygodium microphyllum
G	Rubus moluccanus
G	*Viola hederacea*
G	*Eleocharis equisetina*
G	*Imperata cyclindrica*
G	*Ottochloa gracillima*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary estuarine alluvium overlain by and/or mixed with Quaternary (Pleistocene) sands. The sands are generally aeolian, originating from the adjacent beach ridge systems.
Field observation and notes:	Swamp Oak forest. Treatment has previously occurred to camphor laurels which have died and falling apart. Groundcover coverage increased since last inspection. Some minor Paspalum, Inkweed and Easter Cassia regeneration noted although still below the performance criteria (monitor). Several trees fallen/damaged, likely from Cyclone Alfred. Overall, still in great condition.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 6: Existing Vegetation



Centreline @ om



Centreline @ 50m



NW corner @ om



NW corner @ om



NE corner @ om



NE corner @ om



Centreline south @ 25m



Centreline north @ 25m



Centreline east @ 25m



Centreline west @ 25m



SW Corner @ 50m



SW Corner @ 50m



SE Corner @ 50m



SE Corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes. Small patches of Paspalum present.

What species?

Paspalum spp.

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 14-20m
- Shrub species: 0.5-4m
- ground covers: <1.5m

Area already well established.

What are the dominant species within each layer?

- Tree: Melaleuca quinquenervia
- Shrub: Melaleuca quinquenervia
- ground covers: Eleocharis equisetina +/- Gahnia clarkei

Have you noticed any new native plant species since the last inspection?

Yes

If yes name the species or take a photograph

Syzygium oleosum

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. fairy wrens, finches and pardalote)

Nectivore/insectivore/frugivore birds (i.e. honeyeaters)

Reptiles (i.e. skinks)

Amphibians (i.e. litoria fallax, crinia signifera)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? No.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? No.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

In good condition with minor areas of Paspalum present which requires routine weed control.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 147. Mapped Paperbark Forest area. @ 557731, 6831194		**Monitoring Site ID:** P13
Type of on-grounds: Approved for assisted natural regeneration	**Years since site commenced:** 4	**When was this site last assessed?** 02-03-26
Current assessment conducted by: TR	**Date of current assessment:** 20-08-26	
Overall comments on site condition: Established Paperbark Swamp Community. Fenced off and removed from construction zone. In excellent condition with minor weed intrusion (Paspalum).		
Has the condition of the site changed since last assessment? No. Area remains in excellent condition. Wet underfoot.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	98	Undisturbed area well removed from construction zone.	70	Moderate - Dense	None	N/A	-	Nil. Monitoring only.
B = Uncertain significant problems	2	Minor presence of exotic grass	70	Moderate - Dense	Paspalum	N/A	-	Routine weed control of exotic grass presence.
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								99 %

LOCATION

Site No.	P13	**Date:**	20-08-26
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT		
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 147. Within mapped Paperbark Swamp Forest. Rehabilitation Zone 6		

GPS coordinates centre plot:	**Zone**	5	6	**E**	557731	**N**	6831194	**Datum:**	MGA94z56

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	14-20	D
T2	4-14	V
S1	0.5-4	V
G	0.1-1.5	M-D

Structural formation: (including height)	Mid-high to Tall Forest
Ecologically dominant layer:	T1

Dense growth of native ferns, sedges, rushes. Thick organic leaf layer and coarse woody debris present. Paspalum in parts.

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1/T2	D	*Melaleuca quinquenervia*
T2	S	*Melicope elleryana*
S1		*Regenerating T1/T2 species*
S1		*Syzygium oleaosum*
G		*Sphagnum spp.*
G		*Histiopteris incisa*
G		*Hypolepis muelleri*

Str.	Scientific Name
G	*Blechnum indicum*
G	*Baumea rubignosa*
G	*Juncus usitatus*
G	*Paspalum spp.**
G	*Lygodium microphyllum*
G	*Marsdenia rostrata*
G	*Pteridium esculentum*
G	*Calochlaena dubia*
G	*Gahnia clarkeri*
G	*Lepironia articulata*
G	*Phragmites australis*
G	*Parsonsia straminea*
G	*Commelina cyanea*
G	*Elaeocharis equisetina*
G	*Baloskion tetraphyllum*
G	*Melastoma affine*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Paperbark swamp forest. Historically fenced off from cattle. In excellent condition with very minor weed presence (Paspalum). Wet underfoot.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 6: Existing Vegetation



Centreline @ 0m



Centreline @ 50m



Northeast corner @ 0m



Northeast corner @ 0m



Southeast corner @ 0m



Southeast corner @ 0m



Centreline west @ 25m



Centreline east @ 25m



Centre north @ 25m



Centre south @ 25m



Northwest corner @ 50m



Northwest corner @ 50m



Southwest corner @ 50m



Southwest corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes.

What species?

Minor areas of Easter Cassia and Paspalum spp.

What management was undertaken to eradicate these weeds?

N.A

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 10-15m
- Shrub species: 1.5-4m
- ground covers: <1.5m

Area already well-established.

What are the dominant species within each layer?

- Tree: Melaleuca quinquenervia
- Shrub: Acacia spp.
- ground covers: Baloskion tetraphylla +/- Blechnum indicum

Have you noticed any new native plant species since the last inspection?

No

If yes name the species or take a photograph

N/A

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. finches and wrens)

Reptiles (i.e. skinks)

Nectivore birds (i.e. honeyeaters and golden whistler)

Amphibians (i.e. eastern sedge-frog)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? No.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? No.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

In excellent condition. Removal of isolated stems of easter cassia and small patches of paspalum required during routine weed control regime.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 147. Mapped Paperbark Swamp Forest area off Melaleuca Drive. @ 557037, 6831497		**Monitoring Site ID:** P14
Type of on-grounds: Approved for assisted natural regeneration	**Years since site commenced:** 4	**When was this site last assessed?** 25-02-26
Current assessment conducted by: TR	**Date of current assessment:** 03-09-26	
Overall comments on site condition: Established Paperbark Swamp Forest Community. Fenced off and buffered from construction. Excellent condition. Very minor weed intrusion. Wet at time of inspection.		
Has the condition of the site changed since last assessment? YES. Remains in excellent condition with very minor weed intrusion.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	99	Undisturbed area well removed from construction zone.	70	Dense	-	-	-	Nil. Monitoring only.
B = Uncertain significant problems	1	Very minor weed intrusion.	-	-	Isolated stems of easter cassia and a small patches of paspalum present	Some dead trees present in south east. No evidence of anything other than natural dieback. Isolated stems of easter cassia and a small patches of paspalum present	-	Remove stems of easter cassia and treat patches of paspalum.
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								99.5 %

LOCATION

Site No.	P14							**Date:**	03-09-26		
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT										
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 147. Within mapped Paperbark Swamp Forest off Melaleuca Drive. Rehabilitation Zone 6										
GPS coordinates centre plot:	**Zone**	5	6	**E**	557037		**N**	6831497	**Datum:**	MGA94z56	

VEGETATION STRUCTURE

Stratum	Est. Median Height	Est. cover density (D,M,S,V)
E	-	-
T1	12-15	M
T2	4-12	S
S1	0.5-4	V
G	0.1-1.5	D

Structural formation: (including height)	Mid-high to Tall Open Forest
Ecologically dominant layer:	T1

Dense growth of native ferns, sedges, rushes. Thick organic leaf layer and coarse woody debris present.

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
E		-
T1	D	*Melaleuca quinquenervia*
T1	S	*Parsonsia straminea*
T2	S	*Elaeocarpus reticulatus*
T2	S	*Melicope elleryana*
T2	S	*Acacia spp.*
S		*Regenerating T1/T2 species.*
S	S	*Senna pendula**
S	S	*Myrsine howittiana*

Str.	Scientific Name
G	*Lobelia purpurascens*
G	*Baloskion tetraphylla*
G	*Gahnia clarkei*
G	*Blechnum indicum*
G	*Hibbertia scandens*
G	*Selaginella uliginosa*
G	*Marsdenia rostrata*
G	*Baumea spp*
G	*Parsonsia straminea*
G	Paspalum spp.*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary estuarine alluvium overlain by and/or mixed with Quaternary (Pleistocene) sands. The sands are generally aeolian, originating from the adjacent beach ridge systems.
Field observation and notes:	Paperbark Swamp forest. Fenced off and separated from construction footprint. Excellent condition with very minor weed intrusion. Dry underfoot.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 6: Existing Vegetation



Centreline @ om



Centreline @ 50m



NW Corner @ om



NW Corner @ om



SW Corner @ om



SW Corner @ om



Centre North @ 25m



Centre North @ 25m



SE Corner @ 50m



SE Corner @ 50m



Centre West @ 25m



Centre East @ 25m



NE Corner @ 50m



NE Corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m

FORM A: ROUTINE REHABILITATION MONITORING SHEET

<u>General Management</u>

Has there been a fire since the last inspection?

No.

Do the bushfire trails or adjacent pasture areas require slashing or maintenance to reduce fire risk?

No.

Is there evidence of rubbish dumping within the rehabilitation zone?

No.

Is there evidence of plant theft within the rehabilitation zone?

No.

Does it appear that the rehabilitation zone has been utilized for stockpiling, vehicle parking, building waste dumping, cattle grazing or person traffic?

No.

If yes, acknowledge below what works were undertaken to rectify/restore and the date

N.A

<u>Weeds</u>

Have any areas of weeds re- established within the rehabilitation zones since the last inspection?

Yes

What species?

Ardisia crenata

What management was undertaken to eradicate these weeds?

To be removed.

If management was undertaken acknowledge that such was performed in accordance with the approved vegetation management plan.

<u>Vegetation regeneration</u> add additional page if necessary

Natural regeneration is occurring in (height range estimate):

- Tree species: 15-17m
- Shrub species: 1.5-3m
- ground covers: <1.5m

Area already well-established.

What are the dominant species within each layer?

- Tree: Melaleuca quinquenervia
- Shrub: Variety although regenerating M. quinquenervia most dominant.
- ground covers: Gahnia clarkei

Have you noticed any new native plant species since the last inspection?

No.

If yes name the species or take a photograph

N/A

Acknowledge that the required routine photographs have been taken within the rehabilitation zones

Yes.

<u>Biodiversity</u>

Have you spotted native fauna within the rehabilitation zone during inspection?

If yes, what types?

Small tree and ground birds (i.e. fairy wrens, finches and bush turkey)

Nectivore/insectivore/frugivore birds (i.e. honeyeaters and friarbirds)

Reptiles (i.e. skinks)

Mammals (i.e. swamp wallaby)

<u>Modifications</u>

Have there been any structural additions (eg. new tracks, fences etc) to the rehabilitation zones since the last visit?

No.

What actions were undertaken to remove any illegal modifications?

N/A

Condition of fences

- Good
- Need minor repair
- Poor (need replacement)

Are any of the following performance criteria exceeded (refer Section 5.3 of approved VMP)?

Declared Weeds? No.

Extent of other Weeds? No.

Survival Rate of Plants? No.

Condition of Plants? No.

Canopy Coverage? No.

Tree, Small Tree & Shrub Diversity? No.

Groundcover Coverage? No.

General Coverage/Success? No.

If yes, what corrective action was performed (i.e. weed recolonization was evident so routine management was performed; garden waste dumping was noted and removed, assisted regeneration was deemed unsuccessful and revegetation of the relevant module was undertaken, plant showed drought stress and so watering was undertaken, plant was dead so a replacement plant was pocket planted, canopy plant coverage was not achieved so relevant pioneer plants were pocket planted).

In excellent condition with no current corrective actions required. Several Coral Berry plants noted which require treatment during the next round of routine weed control.

MONITORING FORM B-ASSESSING REHABILITATION CONDITION

Project name: West Byron Harvest Estate		**Project ID:** 7036
Site location centrepoint (MGAz56): Future Lot 149. North of fenced of paddock with drainage channel @ 558057, 6831220		**Monitoring Site ID:** P15
Type of on-grounds: approved for assisted natural regeneration to maintain existing Mid-high to Tall Open Dry Heath/Paperbark Forest	**Years since site commenced:** 4	**When was this site last assessed?** 25-02-26
Current assessment conducted by: TR	**Date of current assessment:20**-08-26	
Overall comments on site condition: Paperbark and heath open forest on sand. In excellent condition. Regeneration of T1 species evident with excellent ground cover and native diversity in the lower strata.		
Has the condition of the site changed since last assessment? YES. Remains in pristine condition, although several saplings of Coral Berry noted. Some signs of natural regeneration occurring along recently cleared/widened access track, east of the Plot.		

DESCRIPTION OF SITE CONDITION *Complete table as per monitoring schedule, or if conditions have changed since last assessment.*

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
A = OK on track towards target	97	Mid-high to Tall Open Dry Heath/Paperbark Forest in excellent condition. Currently fenced off from surrounding pasture Very minor weed intrusion.	50-60%	Excellent. Dense native flora cover.	-	-	-	Nil. Monitoring only.
B = Uncertain significant problems	3	Very minor weed intrusion. Recently cleared/widened access track has setback approximately 3 years worth of restoration works in some areas. Remedial measures to restore these areas are yet to be determined at this current stage.	-	-	Isolated stems of Coral Berry	Several stems of Coral Berry present.	-	Treat several Coral Berry stems. Potential plantings required to those areas affected by recent access track clearing (TBC).

Rating/ zone	% of monitoring plot	Location and factors affecting outcomes	Canopy cover (%)	Ground cover	Problem weeds	Tree survival or Recruitment	Other comments	Suggested maintenance or action
C = Poor major problems, likely to fail	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Overall Condition Score (ranges from 0-100%) *Multiply percentage of site occupied by each zone (A, B or C), by the condition rating for each zone (A = 1; B = 0.5; C = 0), and add the products: e.g. (70% x 1) + (20% x 0.5) + (10% x 0) = 80%*								98.5 %

LOCATION

Site No.	P15	**Date:**	20-08-26
Purpose	VEGETATION/REHABILITATION MONITORING 50m x 20m PLOT		
Location:	Retained Habitat and Rehabilitation Zones within Future Lot 149. North of fenced of paddock with drainage channel. Mid-high to Tall Paperbark Forest with Heath species. Rehabilitation Zone 6		

GPS coordinates centre plot:	**Zone**	5	6	**E**	558057	**N**	6831220	**Datum:**	MGA94z56

VEGETATION STRUCTURE

Stratum	Est. Median Height (m)	Est. cover density (D,M,S,V)
E	15-17	V
T1	8-14	M-D
T2	3-7	M
S	1.5-3	M-S
G	0-2	D

Structural formation: (including height)	Forest-Open Forest
Ecologically dominant layer:	T1

PLANT SPECIES

Relative dominance for EDL *d* – dominant; *c* – codominant; *a* – associated; *s* – suppressed

Str.	Rel. dom	Scientific Name
T1	D	*Melaleuca quinquenervia*
E	S	*Eucalyptus robusta [1]*
T1	D	*Melaleuca quinquenervia*
T1	S	*Duboisia myoporoides*
T1	S	*Lophostemon suaveolens*
T1	S	*Lophostemon confertus*
T1	S	*Elaeacarpus reticulatus*
T2		*Regenerating T1 species [excluding brushbox]*
T2		*Cryptocarya microneura*
T2		*Melicope elleryana*
T2		*Nematolepis squamea*
S		*Regenerating T1 and T2 species*
S		*Acrotriche aggregata*
S		*Austromyrtus dulcis*
S		*Leptospermum polygalifolium*
S		*Syzygium oleosum*
S		*Melastoma affine*
S		*Archontophoenix cunninghamiana*
S		*Acmena smithii*
S		*Acacia melanoxylon (juvenile)*
S		*Myrsine howittiana*

Str.	Scientific Name
G	*Gahnia clarkei*
G	*Baloskion tetraphylla*
G	*Pomax umbellata*
G	*Blechnum indicum*
G	*Pomax umbellata*
G	*Lomandra longifolia*
G	*Lygodium microphyllum*
G	*Calochlaena dubia*
G	*Histiopteris incisa*
G	*Pteridium esculentum*
G	*Liparophyllum exaltatum*
G	*Hibbertia scandens*
G	*Smilax australis*
G	*Marsdenia rostrata*
G	*Parsonsia straminae*
G	*Smilax glyciphylla*
G	*Pandorea pandorana*
G	*Ardisia crenata**
S	*Acacia sophorae*
G	*Drosera spatulata*
S	*Syzygium luehmannii*
S	*Hovea acutifolia*

OTHER NOTES

Geology/soil Landscape Mapping	Quaternary (Pleistocene) beach and dune sand.
Field observation and notes:	Paperbark and heath open forest on sand. In excellent condition. Regeneration of T1 species evident with excellent ground cover and native diversity in the lower strata. Several small stems of Coral Berry noted. Existing track east of the P15 plot has been recently cleared/widened.
Vegetation Community Type (existing or proposed through rehabilitation) per Planit, 2020)	Approved Rehabilitation Zone 6. Existing Mid-high to Tall Open Dry Heath/Paperbark Forest to be managed by assisted natural regeneration.



Centreline @ om



Centreline @ 50m



SE corner @ om



SE corner @ om



NE corner @ om



NE corner @ om



Centreline east @ 25m



Centreline west @ 25m



Centreline north @ 25m



Centreline south @ 25m



NW Corner @ 50m



NW Corner @ 50m



SW Corner @ 50m



SW Corner @ 50m



Ground centre @ 5m



Ground centre @ 15m



Ground centre @ 25m



Ground centre @ 35m



Ground centre @ 45m



Recently widened/cleared access track east of P15 showing some natural regeneration

Appendix 3 – Work Logs of All Monitoring / Maintenance / Chemical Application (and Corrective Action Where Required) Activities Performed by the Appointed Landscape Contractor / Bush Regenerator (Boyds Bay Group) Between September 2025 and August 2026

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #38

34/36	2	0	21	11
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Ashton Lindbeck on 25/08/25
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Matthew Partridge
Linked Drawings			
Description	To be completed on each maintenance visit.		
Attachments	IMG_2025_08_18_11_33_02_857.jpg, IMG_2025_08_18_11_33_00_744.jpg, IMG_2025_08_18_11_32_59_304.jpg, IMG_2025_08_18_11_31_48_631.jpg, IMG_2025_08_18_11_31_35_778.jpg		

Inspection Details

Inspection Date	18 Aug, 2025	**Due Date**	18 Aug, 2025
Point of Contact		**Responsible Contractor**	
Assignee(s)	Matthew Partridge		

General

2 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Zone 1, 2. 3, 5
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	17º c W: SE 15km H: 65% Cc: 30%
1.3 Notes	No Response

Tasks

0 Neutral **1 Conforming** **0 Deficient** **7 N/A**

2.4 Weeding	Yes

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

7 Neutral **1 Conforming** **0 Deficient** **5 N/A**

4.1 Weeding	Yes

4.3 Other	Creek in zone 5 has been cleared. Trees have been pushed into Regen zone (see photos)
4.4 Methods Used: Monocotyledon	Knapsack
4.5 Methods Used: Dicotyledon	Knapsack
4.8 Glyphosate Used (100ml:10lt)	800
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	8
4.10 Dye Used (ML) (40ml:10lt)	320
4.13 Surfactant Used (ml) (10ml:10lt)	80

Post Turf Laying Treatment

0 Neutral **0 Conforming** **0 Deficient** **5 N/A**

Observations

2 Neutral **0 Conforming** **0 Deficient** **1 N/A**

6.1 Flora & Fauna Observations	Red belly black snake, Egret.
6.2 OH&S Observations, Comments, Additional Works	All good. Snakes.

Damage

0 Neutral **0 Conforming** **0 Deficient** **0 N/A**

7.1 Dead, Damaged, Vandalised or Stolen Plants, Materials or Equipment	No Response

Inspection Signatures



Matthew Partridge signed on 18 Aug, 2025 at 15:15 AEST

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #39

36/36	10	0	17	9
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Ashton Lindbeck on 11/09/25
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Hideya Fujiki
Linked Drawings			
Description	To be completed on each maintenance visit.		
Attachments			

Inspection Details

Inspection Date	27 Aug, 2025	**Due Date**	27 Aug, 2025
Point of Contact		**Responsible Contractor**	
Assignee(s)	Hideya Fujiki		

General

3 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Zone 1,3,4
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	19.2 degrees N28km/h 73%humidity
1.3 Notes	Standard maintenance run plus brushcutting in zone 1

Tasks

0 Neutral **7 Conforming** **0 Deficient** **1 N/A**

2.1 Mowing	No
2.2 Snipping	Yes
2.3 Prunning	No
2.4 Weeding	No
2.5 Rubbish Removal	No

2.6 Irrigation / Service	No
2.7 Water Truck	No

Fertilise

0 Neutral 0 Conforming 0 Deficient 3 N/A

Spraying

6 Neutral 2 Conforming 0 Deficient 5 N/A

4.1 Weeding	Yes
4.2 Grubbing	No
4.4 Methods Used: Monocotyledon	Spray
4.5 Methods Used: Dicotyledon	Spray
4.8 Glyphosate Used (100ml:10lt)	1600
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	16
4.10 Dye Used (ML) (40ml:10lt)	640
4.13 Surfactant Used (ml) (10ml:10lt)	160

Post Turf Laying Treatment

0 Neutral 0 Conforming 0 Deficient 5 N/A

Observations

0 Neutral 1 Conforming 0 Deficient 2 N/A

6.3 Fire Ants Detected	No

Damage

0 Neutral 0 Conforming 0 Deficient 1 N/A

Inspection Signatures



Hideya Fujiki signed on 28 Aug, 2025 at 11:07 AEST

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #40

34/36	3	0	23	8
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Ashton Lindbeck on 01/10/25
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Hideya Fujiki
Linked Drawings			
Description	To be completed on each maintenance visit.		
Attachments			

Inspection Details

Inspection Date	15 Sep, 2025	**Due Date**	15 Sep, 2025
Point of Contact		**Responsible Contractor**	
Assignee(s)	Hideya Fujiki		

General

2 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Zone 1,2,3,4,5
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	21.2 degrees N 22km/h 66%humidity
1.3 Notes	No Response

Tasks

0 Neutral **0 Conforming** **0 Deficient** **8 N/A**

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

6 Neutral **2 Conforming** **0 Deficient** **4 N/A**

4.1 Weeding	Yes
4.2 Grubbing	No
4.3 Other	No Response

4.4 Methods Used: Monocotyledon	Spray
4.5 Methods Used: Dicotyledon	Spray
4.8 Glyphosate Used (100ml:10lt)	1000
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	10
4.10 Dye Used (ML) (40ml:10lt)	400
4.13 Surfactant Used (ml) (10ml:10lt)	100

Post Turf Laying Treatment

0 Neutral **0 Conforming** **0 Deficient** **5 N/A**

Observations

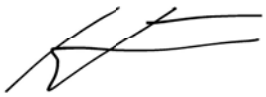
0 Neutral **1 Conforming** **0 Deficient** **2 N/A**

6.3 Fire Ants Detected	No

Damage

0 Neutral **0 Conforming** **0 Deficient** **1 N/A**

Inspection Signatures



Hideya Fujiki signed on 17 Sep, 2025 at 16:34 AEST

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #41

30/36	0	0	20	10
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Ashton Lindbeck on 01/10/25
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Hideya Fujiki
Linked Drawings			
Description	Standard maintenance		
Attachments			

Inspection Details

Inspection Date	15 Sep, 2025	**Due Date**	15 Sep, 2025
Point of Contact		**Responsible Contractor**	
Assignee(s)	Hideya Fujiki		

General

3 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Zones 1,2,3,4
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	21.2 degrees N 22km/h 66%humidity
1.3 Notes	Zone 1 perimeter has been slashed into causing damage

Tasks

0 Neutral **0 Conforming** **0 Deficient** **8 N/A**

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

6 Neutral **0 Conforming** **0 Deficient** **4 N/A**

4.1 Weeding	No Response
4.2 Grubbing	No Response

4.3 Other	No Response
4.4 Methods Used: Monocotyledon	Spray
4.5 Methods Used: Dicotyledon	Spray
4.8 Glyphosate Used (100ml:10lt)	1200
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	12
4.10 Dye Used (ML) (40ml:10lt)	480
4.13 Surfactant Used (ml) (10ml:10lt)	120

Post Turf Laying Treatment

0 Neutral 0 Conforming 0 Deficient 5 N/A

Observations

0 Neutral 0 Conforming 0 Deficient 0 N/A

6.1 Flora & Fauna Observations	No Response
6.2 OH&S Observations, Comments, Additional Works	No Response
6.3 Fire Ants Detected	No Response

Damage

1 Neutral 0 Conforming 0 Deficient 0 N/A

7.1 Dead, Damaged, Vandalised or Stolen Plants, Materials or Equipment	Zone 1 slashed along edge of border

Inspection Signatures



Hideya Fujiki signed on 19 Sep, 2025 at 11:36 AEST

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #42

36/36	5	0	19	12
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Ashton Lindbeck on 01/10/25
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Bo Walton
Linked Drawings			
Description	Maintenance over creek see map attached. Weeds treated include Easter cassia, Morning glory and broadleaf paspalum.		
Attachments	IMG_2025_09_23_09_44_06_823.jpg, IMG_2025_09_23_08_35_47_863.jpg, IMG_2025_09_23_08_19_13_125.jpg, IMG_2025_09_23_08_19_08_752.jpg, Screenshot_20250926_135124_Avenza Maps.jpg		

Inspection Details

Inspection Date	23 Sep, 2025	**Due Date**	23 Sep, 2025
Point of Contact		**Responsible Contractor**	
Assignee(s)	Bo Walton		

General

3 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	See map attached
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	Light to moderate se wind, sunny, 20c
1.3 Notes	Area protected from wind

Tasks

1 Neutral **2 Conforming** **0 Deficient** **5 N/A**

2.4 Weeding	Yes
2.5 Rubbish Removal	No
2.8 Other Works	Maintenance over creek see map attached. Weeds treated include Easter cassia, Morning glory and broadleaf paspalum.

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

8 Neutral | 2 Conforming | 0 Deficient | 3 N/A

4.1 Weeding	Yes
4.2 Grubbing	No
4.3 Other	Cut and paint and handweed
4.4 Methods Used: Monocotyledon	Foliar spray
4.5 Methods Used: Dicotyledon	Cut and paint
4.6 Methods Used: Cut/Scrape/Paint (1:1 Glyphosate)	1.5lt
4.8 Glyphosate Used (100ml:10lt)	1350
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	13.5
4.10 Dye Used (ML) (40ml:10lt)	360
4.13 Surfactant Used (ml) (10ml:10lt)	90

Post Turf Laying Treatment

0 Neutral | 0 Conforming | 0 Deficient | 5 N/A

Observations

0 Neutral | 1 Conforming | 0 Deficient | 2 N/A

6.3 Fire Ants Detected	No

Damage

0 Neutral | 0 Conforming | 0 Deficient | 1 N/A

Inspection Signatures



Bo Walton signed on 28 Sep, 2025 at 14:21 AEST

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #43

28/36	1	0	19	8
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 28/07/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Hideya Fujiki
Linked Drawings			
Description	To be completed on each maintenance visit.		
Attachments			

Inspection Details

Inspection Date	20 Oct, 2025	**Due Date**	20 Oct, 2025
Point of Contact		**Responsible Contractor**	
Assignee(s)	Hideya Fujiki		

General

2 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Zone 1,2,3,4,5
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	23 degrees N 22km/h 77%humidity
1.3 Notes	No Response

Tasks

0 Neutral **0 Conforming** **0 Deficient** **8 N/A**

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

6 Neutral **0 Conforming** **0 Deficient** **2 N/A**

4.1 Weeding	No Response
4.2 Grubbing	No Response
4.3 Other	No Response

4.4 Methods Used: Monocotyledon	Spray
4.5 Methods Used: Dicotyledon	Spray
4.8 Glyphosate Used (100ml:10lt)	1200
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	12
4.10 Dye Used (ML) (40ml:10lt)	480
4.11 Sempra Used (Grams) (1g:10lt)	No Response
4.12 Starane Used (ml)	No Response
4.13 Surfactant Used (ml) (10ml:10lt)	120

Post Turf Laying Treatment

0 Neutral 0 Conforming 0 Deficient 5 N/A

Observations

0 Neutral 1 Conforming 0 Deficient 0 N/A

6.1 Flora & Fauna Observations	No Response
6.2 OH&S Observations, Comments, Additional Works	No Response
6.3 Fire Ants Detected	No

Damage

0 Neutral 0 Conforming 0 Deficient 1 N/A

Inspection Signatures



Hideya Fujiki signed on 21 Oct, 2025 at 13:30 AEDT

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #44

36/36	8	0	18	10
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 28/07/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Bo Walton
Linked Drawings			
Description	General maintenance		
Attachments	Screenshot_20251027_152430_Avenza Maps.jpg, IMG_2025_10_22_13_47_17_838.jpg		

Inspection Details

Inspection Date	22 Oct, 2025	**Due Date**	22 Oct, 2025
Point of Contact		**Responsible Contractor**	
Assignee(s)	Bo Walton		

General

2 Neutral **0 Conforming** **0 Deficient** **1 N/A**

1.1 Area of works	See map attached
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	Light se breeze, 28c, sunny

Tasks

1 Neutral **5 Conforming** **0 Deficient** **2 N/A**

2.1 Mowing	No
2.2 Snipping	No
2.3 Prunning	No
2.4 Weeding	Yes
2.5 Rubbish Removal	Yes
2.8 Other Works	Removed deteriorated flagging and replace with signage

Fertilise	0 Neutral	0 Conforming	0 Deficient	3 N/A
Spraying	7 Neutral	2 Conforming	0 Deficient	4 N/A

4.1 Weeding	Yes
4.2 Grubbing	No
4.3 Other	Handweed
4.4 Methods Used: Monocotyledon	Foliar spray and handweed
4.5 Methods Used: Dicotyledon	Foliar spray
4.8 Glyphosate Used (100ml:10lt)	800
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	12
4.10 Dye Used (ML) (40ml:10lt)	320
4.13 Surfactant Used (ml) (10ml:10lt)	80

Post Turf Laying Treatment	0 Neutral	0 Conforming	0 Deficient	5 N/A
Observations	0 Neutral	1 Conforming	0 Deficient	2 N/A

6.3 Fire Ants Detected	No

Damage	0 Neutral	0 Conforming	0 Deficient	1 N/A

Inspection Signatures



Bo Walton signed on 27 Oct, 2025 at 15:25 AEDT

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #45

36/36	3	0	22	11
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 28/07/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Matthew Partridge
Linked Drawings			
Description	Monthly maintenance visit		
Attachments			

Inspection Details

Inspection Date	24 Nov, 2025	**Due Date**	24 Nov, 2025
Point of Contact		**Responsible Contractor**	
Assignee(s)	Matthew Partridge		

General

3 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Zone 5, 1, 4
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	24ºc W: S13km H:88% Cc: 50%
1.3 Notes	Packed up early due to storm

Tasks

0 Neutral **1 Conforming** **0 Deficient** **7 N/A**

2.4 Weeding	Yes

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

6 Neutral **1 Conforming** **0 Deficient** **6 N/A**

4.1 Weeding	Yes

4.4 Methods Used: Monocotyledon	Knapsack
4.5 Methods Used: Dicotyledon	Knapsack
4.8 Glyphosate Used (100ml:10lt)	800
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	8
4.10 Dye Used (ML) (40ml:10lt)	320
4.13 Surfactant Used (ml) (10ml:10lt)	80

Post Turf Laying Treatment

0 Neutral **0 Conforming** **0 Deficient** **5 N/A**

Observations

2 Neutral **1 Conforming** **0 Deficient** **0 N/A**

6.1 Flora & Fauna Observations	Black shouldered kite, white belly sea eagle, whip snake.
6.2 OH&S Observations, Comments, Additional Works	All good but packed up a little early due to lightning
6.3 Fire Ants Detected	No

Damage

0 Neutral **0 Conforming** **0 Deficient** **1 N/A**

Inspection Signatures



Matthew Partridge signed on 25 Nov, 2025 at 14:50 AEDT

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #46

33/36	3	0	21	9
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 28/07/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Hideya Fujiki
Linked Drawings			
Description	To be completed on each maintenance visit.		
Attachments			

Inspection Details

Inspection Date	27 Nov, 2025	**Due Date**	27 Nov, 2025
Point of Contact		**Responsible Contractor**	
Assignee(s)	Hideya Fujiki		

General

2 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Area 4 3 2
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	24 degrees N 43 km /h 84% humidity
1.3 Notes	No Response

Tasks

0 Neutral **0 Conforming** **0 Deficient** **8 N/A**

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

7 Neutral **2 Conforming** **0 Deficient** **3 N/A**

4.1 Weeding	Yes
4.2 Grubbing	No
4.3 Other	No Response

4.4 Methods Used: Monocotyledon	Spray
4.5 Methods Used: Dicotyledon	Spray
4.8 Glyphosate Used (100ml:10lt)	800
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	8
4.10 Dye Used (ML) (40ml:10lt)	320
4.11 Sempra Used (Grams) (1g:10lt)	8
4.13 Surfactant Used (ml) (10ml:10lt)	80

Post Turf Laying Treatment

0 Neutral 0 Conforming 0 Deficient 5 N/A

Observations

0 Neutral 1 Conforming 0 Deficient 2 N/A

6.3 Fire Ants Detected	No

Damage

0 Neutral 0 Conforming 0 Deficient 0 N/A

7.1 Dead, Damaged, Vandalised or Stolen Plants, Materials or Equipment	No Response

Inspection Signatures



Hideya Fujiki signed on 28 Nov, 2025 at 07:50 AEDT

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #47

36/36	5	0	19	12
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 28/07/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Bo Walton
Linked Drawings			
Description	Maintenance of natural and assisted areas see map attached, weeds treated include whiskey grass, cuphea, fleabane, Singapore daisy, paspalum, setaria		
Attachments	Screenshot_20251216_150444_Avenza Maps.jpg, IMG_2025_12_16_13_07_34_169.jpg, IMG_2025_12_16_12_37_45_789.jpg		

Inspection Details

Inspection Date	16 Dec, 2025	**Due Date**	16 Dec, 2025
Point of Contact		**Responsible Contractor**	
Assignee(s)	Bo Walton		

General

3 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Natural areas see map attached
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	25c ,overcast, moderate se
1.3 Notes	Working in protective areas out of wind

Tasks

1 Neutral **2 Conforming** **0 Deficient** **5 N/A**

2.4 Weeding	Yes
2.5 Rubbish Removal	No
2.8 Other Works	Maintenance of natural and assisted areas see map attached, weeds treated include whiskey grass, cuphea, fleabane, Singapore daisy, paspalum, setaria

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

7 Neutral | 2 Conforming | 0 Deficient | 4 N/A

4.1 Weeding	Yes
4.2 Grubbing	No
4.3 Other	Handweed
4.4 Methods Used: Monocotyledon	Foliar spray and handweed
4.5 Methods Used: Dicotyledon	Handweed
4.8 Glyphosate Used (100ml:10lt)	1500
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	20
4.10 Dye Used (ML) (40ml:10lt)	600
4.13 Surfactant Used (ml) (10ml:10lt)	150

Post Turf Laying Treatment

0 Neutral | 0 Conforming | 0 Deficient | 5 N/A

Observations

0 Neutral | 1 Conforming | 0 Deficient | 2 N/A

6.3 Fire Ants Detected	No

Damage

1 Neutral | 0 Conforming | 0 Deficient | 0 N/A

7.1 Dead, Damaged, Vandalised or Stolen Plants, Materials or Equipment	Rubbish in 44 gal drum cleaned up. Will remove next visit

Inspection Signatures



Bo Walton signed on 16 Dec, 2025 at 15:05 AEDT

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #48

35/36	3	0	22	10
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 28/07/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Matthew Partridge
Linked Drawings			
Description	Finish zone 5		
Attachments	IMG_2025_12_18_07_27_08_754.jpg		

Inspection Details

Inspection Date	18 Dec, 2025	**Due Date**	18 Dec, 2025
Point of Contact		**Responsible Contractor**	
Assignee(s)	Matthew Partridge		

General

2 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Zone 5
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	26ºc W: E 10km H: 53% Cc: 50%
1.3 Notes	No Response

Tasks

0 Neutral **1 Conforming** **0 Deficient** **7 N/A**

2.4 Weeding	Yes

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

6 Neutral **1 Conforming** **0 Deficient** **6 N/A**

4.1 Weeding	Yes

4.4 Methods Used: Monocotyledon	Knapsack
4.5 Methods Used: Dicotyledon	Knapsack
4.8 Glyphosate Used (100ml:10lt)	200
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	2
4.10 Dye Used (ML) (40ml:10lt)	80
4.13 Surfactant Used (ml) (10ml:10lt)	20

Post Turf Laying Treatment

0 Neutral **0 Conforming** **0 Deficient** **5 N/A**

Observations

1 Neutral **1 Conforming** **0 Deficient** **1 N/A**

6.2 OH&S Observations, Comments, Additional Works	All good
6.3 Fire Ants Detected	No

Damage

1 Neutral **0 Conforming** **0 Deficient** **0 N/A**

7.1 Dead, Damaged, Vandalised or Stolen Plants, Materials or Equipment	Rubbish has been dumped in zone

Inspection Signatures



Matthew Partridge signed on 18 Dec, 2025 at 11:36 AEDT

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #49

31/36	3	0	20	8
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 28/07/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Hideya Fujiki
Linked Drawings			
Description	To be completed on each maintenance visit.		
Attachments			

Inspection Details

Inspection Date	18 Dec, 2025	**Due Date**	18 Dec, 2025
Point of Contact		**Responsible Contractor**	
Assignee(s)	Hideya Fujiki		

General

2 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Vegetation area
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	25.1 degrees E 15 km/h 60 % humidity
1.3 Notes	No Response

Tasks

0 Neutral **0 Conforming** **0 Deficient** **8 N/A**

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **0 N/A**

3.1 Turf	No Response
3.2 Plants	No Response
3.3 Other	No Response

Spraying

6 Neutral 2 Conforming 0 Deficient 4 N/A

4.1 Weeding	Yes
4.2 Grubbing	No
4.3 Other	No Response
4.4 Methods Used: Monocotyledon	Spray
4.5 Methods Used: Dicotyledon	Spray
4.8 Glyphosate Used (100ml:10lt)	3000
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	30
4.10 Dye Used (ML) (40ml:10lt)	1200
4.13 Surfactant Used (ml) (10ml:10lt)	300

Post Turf Laying Treatment

0 Neutral 0 Conforming 0 Deficient 5 N/A

Observations

0 Neutral 1 Conforming 0 Deficient 2 N/A

6.3 Fire Ants Detected	No

Damage

0 Neutral 0 Conforming 0 Deficient 1 N/A

Inspection Signatures

Hideya Fujiki

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #51

35/36	3	0	22	10
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 28/07/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Matthew Partridge
Linked Drawings			
Description	Finished incomplete areas.		
Attachments			

Inspection Details

Inspection Date	13 Jan, 2026	**Due Date**	13 Jan, 2026
Point of Contact		**Responsible Contractor**	
Assignee(s)	Matthew Partridge		

General

2 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Completed incomplete zones
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	29º c W: SE 15km H: 67% Cc: 50%
1.3 Notes	No Response

Tasks

0 Neutral **1 Conforming** **0 Deficient** **7 N/A**

2.4 Weeding	Yes

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

6 Neutral **1 Conforming** **0 Deficient** **6 N/A**

4.1 Weeding	Yes

4.4 Methods Used: Monocotyledon	Knapsack
4.5 Methods Used: Dicotyledon	Knapsack
4.8 Glyphosate Used (100ml:10lt)	1500
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	15
4.10 Dye Used (ML) (40ml:10lt)	600
4.13 Surfactant Used (ml) (10ml:10lt)	150

Post Turf Laying Treatment

0 Neutral **0 Conforming** **0 Deficient** **5 N/A**

Observations

2 Neutral **1 Conforming** **0 Deficient** **0 N/A**

6.1 Flora & Fauna Observations	White belly sea eagle, Red necked wallabies. Magpies. Wattle birds. Leptospermum in flower
6.2 OH&S Observations, Comments, Additional Works	All good
6.3 Fire Ants Detected	No

Damage

0 Neutral **0 Conforming** **0 Deficient** **1 N/A**

Inspection Signatures



Matthew Partridge signed on 13 Jan, 2026 at 14:29 AEDT

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #52

34/36	2	0	24	8
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 28/07/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Hideya Fujiki
Linked Drawings			
Description	Monthly maintenance run		
Attachments			

Inspection Details

Inspection Date	18 Feb, 2026	**Due Date**	18 Feb, 2026
Point of Contact		**Responsible Contractor**	
Assignee(s)	Hideya Fujiki		

General

2 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Zone 1,5,4
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	26.9degrees N 28km/h 70 humidity
1.3 Notes	No Response

Tasks

0 Neutral **0 Conforming** **0 Deficient** **8 N/A**

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

6 Neutral **2 Conforming** **0 Deficient** **4 N/A**

4.1 Weeding	Yes
4.2 Grubbing	No
4.3 Other	No Response

4.4 Methods Used: Monocotyledon	Spray
4.5 Methods Used: Dicotyledon	Spray
4.8 Glyphosate Used (100ml:10lt)	1200
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	12
4.10 Dye Used (ML) (40ml:10lt)	480
4.13 Surfactant Used (ml) (10ml:10lt)	120

Post Turf Laying Treatment	**0 Neutral**	**0 Conforming**	**0 Deficient**	**5 N/A**
Observations	**0 Neutral**	**0 Conforming**	**0 Deficient**	**3 N/A**
Damage	**0 Neutral**	**0 Conforming**	**0 Deficient**	**1 N/A**

Inspection Signatures



Hideya Fujiki signed on 18 Feb, 2026 at 15:20 AEDT

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #53

33/36	3	0	20	10
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 28/07/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Matthew Partridge
Linked Drawings			
Description	Zones 1 to 4		
Attachments			

Inspection Details

Inspection Date	14 Apr, 2026	**Due Date**	14 Apr, 2026
Point of Contact		**Responsible Contractor**	
Assignee(s)	Matthew Partridge		

General

2 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	1 to 4
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	27ºc W: e 5km H: 67% Cc: 10 %
1.3 Notes	No Response

Tasks

1 Neutral **1 Conforming** **0 Deficient** **6 N/A**

2.4 Weeding	Yes
2.8 Other Works	Large amounts of whisky grass seed blowing in from paddocks

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

5 Neutral 1 Conforming 0 Deficient 5 N/A

4.1 Weeding	Yes
4.2 Grubbing	No Response
4.3 Other	No Response
4.4 Methods Used: Monocotyledon	Knapsack
4.5 Methods Used: Dicotyledon	Knapsack
4.8 Glyphosate Used (100ml:10lt)	600
4.10 Dye Used (ML) (40ml:10lt)	240
4.13 Surfactant Used (ml) (10ml:10lt)	60

Post Turf Laying Treatment

0 Neutral 0 Conforming 0 Deficient 5 N/A

Observations

2 Neutral 1 Conforming 0 Deficient 0 N/A

6.1 Flora & Fauna Observations	Green tree snake, numerous frogs. Wallabies, bush rat. Melaleuca in flower
6.2 OH&S Observations, Comments, Additional Works	All positive
6.3 Fire Ants Detected	No

Damage

0 Neutral 0 Conforming 0 Deficient 1 N/A

Inspection Signatures



Matthew Partridge signed on 14 Apr, 2026 at 07:13 AEST

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #54

36/36	3	0	22	11
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 28/07/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Matthew Partridge
Linked Drawings			
Description	Finish zone 1 and 5		
Attachments	Screenshot_20260421_124118_Avenza Maps.jpg		

Inspection Details

Inspection Date	17 Apr, 2026	**Due Date**	
Point of Contact		**Responsible Contractor**	
Assignee(s)	Matthew Partridge		

General

3 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Zone 1 and 5.
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	30ºc W: NW 15km H: 39% Cc: 0%
1.3 Notes	Chasing mostly whiskey grass, cuphea, hairy commelina

Tasks

0 Neutral **1 Conforming** **0 Deficient** **7 N/A**

2.4 Weeding	Yes

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

6 Neutral **1 Conforming** **0 Deficient** **6 N/A**

4.1 Weeding	Yes

4.4 Methods Used: Monocotyledon	Knapsack
4.5 Methods Used: Dicotyledon	Knapsack
4.8 Glyphosate Used (100ml:10lt)	600
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	6
4.10 Dye Used (ML) (40ml:10lt)	240
4.13 Surfactant Used (ml) (10ml:10lt)	60

Post Turf Laying Treatment

0 Neutral **0 Conforming** **0 Deficient** **5 N/A**

Observations

2 Neutral **1 Conforming** **0 Deficient** **0 N/A**

6.1 Flora & Fauna Observations	Butcher birds, numerous frogs, magpies, swamp wallabies
6.2 OH&S Observations, Comments, Additional Works	All good
6.3 Fire Ants Detected	No

Damage

0 Neutral **0 Conforming** **0 Deficient** **1 N/A**

Inspection Signatures



Matthew Partridge signed on 17 Apr, 2026 at 12:14 AEST

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #55

36/36	7	0	16	13
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 28/07/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Bo Walton
Linked Drawings			
Description	Maintenance of natural assisted regeneration areas. Weeds treated include Easter Cassia, corky passionflower, coral berry, lantana, broadleaf paspalum		
Attachments	IMG-20260422-WA0001.jpeg, Screenshot_20260422_151236_Avenza Maps.jpg, Screenshot_20260422_151349_Avenza Maps.jpg, 1FA3C731-E0AC-4561-AB35-85AB19FC8966.jpeg		

Inspection Details

Inspection Date	22 Apr, 2026	**Due Date**	22 Apr, 2026
Point of Contact		**Responsible Contractor**	
Assignee(s)	Bo Walton		

General

2 Neutral **0 Conforming** **0 Deficient** **1 N/A**

1.1 Area of works	Natural assisted areas see maps attached
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	Light to moderate se breeze, 24c, overcast

Tasks

1 Neutral **4 Conforming** **0 Deficient** **3 N/A**

2.2 Snipping	No
2.3 Prunning	No
2.4 Weeding	Yes
2.5 Rubbish Removal	Yes

2.8 Other Works	Maintenance of natural assisted regeneration areas. Weeds treated include Easter Cassia, corky passionflower, coral berry, lantana, broadleaf paspalum

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

9 Neutral **2 Conforming** **0 Deficient** **2 N/A**

4.1 Weeding	Yes
4.2 Grubbing	No
4.3 Other	Hand weed
4.4 Methods Used: Monocotyledon	Foliar spray
4.5 Methods Used: Dicotyledon	Foliar spray and Handweed
4.6 Methods Used: Cut/Scrape/Paint (1:1 Glyphosate)	Yes
4.7 Methods Used: Stem Injection (1:1 Glyphosate)	Yes
4.8 Glyphosate Used (100ml:10lt)	1.5
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	4.5
4.10 Dye Used (ML) (40ml:10lt)	240
4.13 Surfactant Used (ml) (10ml:10lt)	40

Post Turf Laying Treatment

0 Neutral **0 Conforming** **0 Deficient** **5 N/A**

Observations

1 Neutral **1 Conforming** **0 Deficient** **1 N/A**

6.1 Flora & Fauna Observations	Easter cassia in flower. Obvious plants treated. Cut, scrape and paint
6.3 Fire Ants Detected	No

Damage

0 Neutral **0 Conforming** **0 Deficient** **1 N/A**

Inspection Signatures



Bo Walton signed on 22 Apr, 2026 at 15:17 AEST

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #56

36/36	3	0	21	12
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 28/07/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Bo Walton
Linked Drawings			
Description	Maintenance natural areas see map attached. Weeds treated whiskey grass, cuphea, fleabane and various other exotic annuals and grasses		
Attachments	IMG_2026_05_26_08_25_53_425.jpg, Screenshot_20260526_135459_Avenza Maps.jpg, Screenshot_20260526_135718_Avenza Maps.jpg		

Inspection Details

Inspection Date	26 May, 2026	**Due Date**	26 May, 2026
Point of Contact		**Responsible Contractor**	
Assignee(s)	Bo Walton		

General

3 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Natural areas
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	26c, light Se, overcast with showers
1.3 Notes	Sprayed until showers

Tasks

1 Neutral **1 Conforming** **0 Deficient** **6 N/A**

2.4 Weeding	Yes
2.8 Other Works	Maintenance natural areas see map attached. Weeds treated whiskey grass, cuphea, fleabane and various other exotic annuals and grasses

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

7 Neutral | 1 Conforming | 0 Deficient | 5 N/A

4.1 Weeding	Yes
4.3 Other	Handweed
4.4 Methods Used: Monocotyledon	Foliar spray and handweed
4.5 Methods Used: Dicotyledon	Foliar spray and handweed
4.8 Glyphosate Used (100ml:10lt)	400
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	6
4.10 Dye Used (ML) (40ml:10lt)	160
4.13 Surfactant Used (ml) (10ml:10lt)	40

Post Turf Laying Treatment

0 Neutral | 0 Conforming | 0 Deficient | 5 N/A

Observations

1 Neutral | 1 Conforming | 0 Deficient | 1 N/A

6.1 Flora & Fauna Observations	Wallaby observed
6.3 Fire Ants Detected	No

Damage

0 Neutral | 0 Conforming | 0 Deficient | 1 N/A

Inspection Signatures



Bo Walton signed on 27 May, 2026 at 08:13 AEST

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #57

36/36	1	0	32	3
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 28/07/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Bo Walton
Linked Drawings			
Description	Planted 24 balokion to bare areas in and adjacent plot 10. See photos attached		
Attachments	Screenshot_20260526_135920_Avenza Maps.jpg, IMG_2026_05_27_07_57_29_599.jpg, IMG_2026_05_27_07_51_56_801.jpg, IMG_2026_05_27_07_45_11_814.jpg		

Inspection Details

Inspection Date	27 May, 2026	**Due Date**	27 May, 2026
Point of Contact		**Responsible Contractor**	
Assignee(s)	Bo Walton		

General

2 Neutral **0 Conforming** **0 Deficient** **1 N/A**

1.1 Area of works	See map attached
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	Light sw breeze, overcast, 24c

Tasks

1 Neutral **0 Conforming** **0 Deficient** **7 N/A**

2.8 Other Works	Planted 24 balokion to bare areas in and adjacent plot 10. See photos attached

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

0 Neutral **0 Conforming** **0 Deficient** **13 N/A**

Post Turf Laying Treatment

0 Neutral **0 Conforming** **0 Deficient** **5 N/A**

Observations

0 Neutral	1 Conforming	0 Deficient	2 N/A

6.3 Fire Ants Detected	No

Damage

0 Neutral	0 Conforming	0 Deficient	1 N/A

Inspection Signatures



Bo Walton signed on 29 May, 2026 at 06:25 AEST

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #58

36/36	3	0	22	11
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 28/07/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Matthew Partridge
Linked Drawings			
Description	Zones, 1,2,3,5		
Attachments	31744570206577.jpeg, 31744567477551.jpeg, Resized_IMG_2026_07_03_12_48_48_297_98319821681991.jpeg, Resized_IMG_2026_07_03_12_54_52_411_98320307398514.jpeg		

Inspection Details

Inspection Date	3 Jul, 2026	**Due Date**	
Point of Contact		**Responsible Contractor**	
Assignee(s)	Matthew Partridge		

General

3 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	1,2,3,5
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	26ºc H:52% W: NW 10km Cc:20%
1.3 Notes	Damage to zone 3 by slasher. Photos in procore, also email

Tasks

0 Neutral **1 Conforming** **0 Deficient** **7 N/A**

2.4 Weeding	Yes

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

6 Neutral **1 Conforming** **0 Deficient** **6 N/A**

4.1 Weeding	Yes

4.4 Methods Used: Monocotyledon	Knapsack
4.6 Methods Used: Cut/Scrape/Paint (1:1 Glyphosate)	Knapsack
4.8 Glyphosate Used (100ml:10lt)	1000
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	10
4.10 Dye Used (ML) (40ml:10lt)	400
4.13 Surfactant Used (ml) (10ml:10lt)	100

Post Turf Laying Treatment

0 Neutral **0 Conforming** **0 Deficient** **5 N/A**

Observations

1 Neutral **1 Conforming** **0 Deficient** **1 N/A**

6.1 Flora & Fauna Observations	Damage as emailed. Red belly black snake. White belly sea eagle
6.3 Fire Ants Detected	No

Damage

1 Neutral **0 Conforming** **0 Deficient** **0 N/A**

7.1 Dead, Damaged, Vandalised or Stolen Plants, Materials or Equipment	See photos

Inspection Signatures



Matthew Partridge signed on 3 Jul, 2026 at 14:04 AEST

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #59

30/36	2	0	26	2
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 04/08/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Matthew Partridge
Linked Drawings			
Description	Handweed melaleuca from frog ponds		
Attachments	IMG_2026_08_03_12_47_27_179.jpg, IMG_2026_08_03_12_47_27_179.jpg, IMG_2026_08_03_09_23_30_216.jpg		

Inspection Details

Inspection Date	3 Aug, 2026	**Due Date**	3 Aug, 2026
Point of Contact		**Responsible Contractor**	
Assignee(s)	Matthew Partridge		

General

1 Neutral **0 Conforming** **0 Deficient** **1 N/A**

1.1 Area of works	Frog ponds
1.3 Notes	No Response

Tasks

0 Neutral **1 Conforming** **0 Deficient** **7 N/A**

2.4 Weeding	Yes

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

1 Neutral **1 Conforming** **0 Deficient** **11 N/A**

4.1 Weeding	Yes
4.5 Methods Used: Dicotyledon	Handweed

Post Turf Laying Treatment

0 Neutral | 0 Conforming | 0 Deficient | 0 N/A

5.1 Post Turf Laying Treatment	No Response
5.2 Post Turf Laying Treatment Area (m2)	No Response
5.3 Fipronil Used (Grams)(750g/100m2)(Broadcaster)	No Response
5.4 Bifenthrin Used (kgs)(2kg/100m2)(Broadcaster)	No Response
5.5 Bifenthrin Used (ml)(5ml:10lt)(Spray)	No Response

Observations

0 Neutral | 0 Conforming | 0 Deficient | 3 N/A

Damage

0 Neutral | 0 Conforming | 0 Deficient | 1 N/A

Inspection Signatures



Matthew Partridge signed on 4 Aug, 2026 at 09:44 AEST

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #60

35/36	3	0	26	6
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 07/08/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Matthew Partridge
Linked Drawings			
Description	Final, handweed basin		
Attachments			

Inspection Details

Inspection Date	7 Aug, 2026	**Due Date**	7 Aug, 2026
Point of Contact		**Responsible Contractor**	
Assignee(s)	Matthew Partridge		

General

2 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Frog ponds
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	Sunny, 23º
1.3 Notes	No Response

Tasks

1 Neutral **1 Conforming** **0 Deficient** **6 N/A**

2.4 Weeding	Yes
2.8 Other Works	Handweed melaleuca from frog ponds

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

1 Neutral **1 Conforming** **0 Deficient** **11 N/A**

4.1 Weeding	Yes

4.5 Methods Used: Dicotyledon	Handweed

Post Turf Laying Treatment

0 Neutral **0 Conforming** **0 Deficient** **5 N/A**

Observations

2 Neutral **1 Conforming** **0 Deficient** **0 N/A**

6.1 Flora & Fauna Observations	Numerous frogs calling
6.2 OH&S Observations, Comments, Additional Works	New waders worked well
6.3 Fire Ants Detected	No

Damage

0 Neutral **0 Conforming** **0 Deficient** **1 N/A**

Inspection Signatures



Matthew Partridge signed on 7 Aug, 2026 at 12:57 AEST

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #61

35/36	2	0	22	11
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Matthew Partridge on 10/08/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Matthew Partridge
Linked Drawings			
Description	Handweed frog ponds. Spray weeds		
Attachments			

Inspection Details

Inspection Date	5 Aug, 2026	**Due Date**	5 Aug, 2026
Point of Contact		**Responsible Contractor**	
Assignee(s)	Matthew Partridge		

General

2 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Frog ponds and various areas
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	20º c W: 16km light south-east H: 67º Cc: 20%
1.3 Notes	No Response

Tasks

0 Neutral **1 Conforming** **0 Deficient** **7 N/A**

2.4 Weeding	Yes

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

6 Neutral **1 Conforming** **0 Deficient** **6 N/A**

4.1 Weeding	Yes

4.4 Methods Used: Monocotyledon	Knapsack
4.5 Methods Used: Dicotyledon	Knapsack
4.8 Glyphosate Used (100ml:10lt)	300
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	3
4.10 Dye Used (ML) (40ml:10lt)	120
4.13 Surfactant Used (ml) (10ml:10lt)	30

Post Turf Laying Treatment

0 Neutral **0 Conforming** **0 Deficient** **5 N/A**

Observations

2 Neutral **0 Conforming** **0 Deficient** **1 N/A**

6.1 Flora & Fauna Observations	Lots of frogs
6.2 OH&S Observations, Comments, Additional Works	Nil

Damage

1 Neutral **0 Conforming** **0 Deficient** **0 N/A**

7.1 Dead, Damaged, Vandalised or Stolen Plants, Materials or Equipment	Nil

Inspection Signatures



Matthew Partridge signed on 10 Aug, 2026 at 11:47 AEST

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #62

36/36	3	0	24	9
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	Closed by Hideya Fujiki on 21/08/26
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Hideya Fujiki
Linked Drawings			
Description	maintenance visit.		
Attachments	1787276003962.871094_templmage.jpeg, 1787276004067.332031_templmage.jpeg, 1787276004336.716064_templmage.jpeg, 1787276004244.312988_templmage.jpeg, 1787276004159.512939_templmage.jpeg, 1787276003791.274170_templmage.jpeg		

Inspection Details

Inspection Date	21 Aug, 2026	**Due Date**	21 Aug, 2026
Point of Contact		**Responsible Contractor**	
Assignee(s)	Hideya Fujiki		

General

3 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Zone 1 and 5 plus frog pond
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	15.6 degrees W 7km/h humidity 65%
1.3 Notes	Callistemon planted in zone 5

Tasks

0 Neutral **0 Conforming** **0 Deficient** **8 N/A**

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

6 Neutral **2 Conforming** **0 Deficient** **5 N/A**

4.1 Weeding	Yes
4.2 Grubbing	No

4.4 Methods Used: Monocotyledon	Spray
4.5 Methods Used: Dicotyledon	Spray
4.8 Glyphosate Used (100ml:10lt)	400
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	4
4.10 Dye Used (ML) (40ml:10lt)	160
4.13 Surfactant Used (ml) (10ml:10lt)	40

Post Turf Laying Treatment

0 Neutral 0 Conforming 0 Deficient 5 N/A

Observations

0 Neutral 1 Conforming 0 Deficient 2 N/A

6.3 Fire Ants Detected	No

Damage

0 Neutral 0 Conforming 0 Deficient 1 N/A

Inspection Signatures



Hideya Fujiki signed on 21 Aug, 2026 at 11:40 AEST

Boyds Bay Group
9/10 1 Sands St
Tweed Heads, New South Wales 2485

Project: 70000 Harvest
TBC
Byron Bay, New South Wales 2481

Inspection: Maintenance Visit & Chemical Application #63

35/36	3	0	24	8
Items Inspected	Conforming	Deficient	N/A	Neutral

Type	Environmental	**Status**	In review
Trade	Bush Regeneration	**Location**	
Spec Section		**Created By**	Hideya Fujiki
Linked Drawings			
Description	maintenance visit.		
Attachments	1787554079744.900879_templmage.jpeg, 1787554079823.747070_templmage.jpeg, 1787554079672.030029_templmage.jpeg, 1787554079601.027100_templmage.jpeg, 1787554079479.677002_templmage.jpeg		

Inspection Details

Inspection Date	24 Aug, 2026	**Due Date**	24 Aug, 2026
Point of Contact		**Responsible Contractor**	
Assignee(s)	Hideya Fujiki		

General

2 Neutral **0 Conforming** **0 Deficient** **0 N/A**

1.1 Area of works	Rehabilitation zone 6 . Monitoring plot 12
1.2 Weather conditions (Temperature, Wind, Humidity, Cloud Cover)	15.9 degrees SW13 km/h 90% humidity
1.3 Notes	No Response

Tasks

0 Neutral **0 Conforming** **0 Deficient** **8 N/A**

Fertilise

0 Neutral **0 Conforming** **0 Deficient** **3 N/A**

Spraying

6 Neutral **2 Conforming** **0 Deficient** **5 N/A**

4.1 Weeding	Yes
4.2 Grubbing	Yes

4.4 Methods Used: Monocotyledon	Spray
4.5 Methods Used: Dicotyledon	Spray
4.8 Glyphosate Used (100ml:10lt)	800
4.9 Metsulfuron Used (Grams)(1.5g:10lt)	8
4.10 Dye Used (ML) (40ml:10lt)	480
4.13 Surfactant Used (ml) (10ml:10lt)	80

Post Turf Laying Treatment

0 Neutral 0 Conforming 0 Deficient 5 N/A

Observations

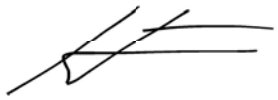
0 Neutral 1 Conforming 0 Deficient 2 N/A

6.3 Fire Ants Detected	No

Damage

0 Neutral 0 Conforming 0 Deficient 1 N/A

Inspection Signatures



Hideya Fujiki signed on 24 Aug, 2026 at 15:11 AEST

Appendix D – Monthly Water Quality Monitoring Reports

MONTHLY WATER QUALITY MONITORING REPORT

Harvest Estate Urban Development

Monitoring Event: 14th August 2025

Ewingsdale Road, Byron Bay, NSW, 2481

Job Number: 217140

For:

Planit Consulting

By:

ENV Services Pty Ltd

Date:

1/09/2025

ENV Services Pty Ltd

313 River Street, Ballina NSW 2478

T: 1300 861 325

E: admin@envsolutions.com.au

www.envsolutions.com.au

DOCUMENT CONTROL

Job No:	Job Number: 217140
Client:	Planit Consulting
Filename:	217140_Harvest Estate_WQ_August_2025

	Name:	**Date:**	**Signature:**
Prepared By:	Jemma Attkins	1/09/2025	
Reviewed By:	Kingsley Baldwin	2/09/2025	

Revision:	**Date:**	**Details:**

SCOPE OF ENGAGEMENT AND LIMITATIONS

This report has been prepared by ENV Services at the request of Planit Consulting for the purpose of consolidating and assessing water quality monitoring (surface water and ground water) data to determine impact associated with the development of the Harvest Estate. No other parties may rely on the contents of this report for any purposes except those stated.

This report has been prepared based on the information provided to us and from other information obtained as a result of enquiries made by us. ENV accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this document for a purpose other than that described above.

No part of this report may be reproduced, stored, or transmitted in any form without the prior consent of ENV.

ENV declares that it does not have, nor expects to have, a beneficial interest in the subject project.

To avoid this advice being used inappropriately, it is recommended that you consult with ENV before conveying the information to another who may not fully understand the objectives of the report. This report is meant only for the subject site/project and should not be applied to any other.

1 INTRODUCTION

ENV Services Pty Ltd (ENV) was engaged by Planit Consulting to prepare a Monthly Water Quality Report (MWQR) to meet requirements outlined in the Harvest Estate Development Conditions of Consent (11b - d, 32, 33 & 78) and Section 6.2 and 6.4 of the Planit Construction Environmental Management Plan (CEMP). Monitoring has been undertaken in accordance with the following approved plans.

- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate Groundwater Management Plan.* Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Belongil Creek Plan of Management*. Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate West Byron Urban Release Area; Acid Frog Management Plan.* Dated August 2020.

Baseline water quality parameters outlined in this report have been derived from mean or range values calculated over a 12-month sampling period undertaken between 25 May 2020 and 17 May 2021. This baseline water quality monitoring was carried out by Australian Wetlands Consulting (AWC) and undertaken in accordance with the Harvest Estate Groundwater Management Plan (AWC 2020) and the Harvest Estate – Belongil Creek Plan of Management (AWC 2020).

Guideline water quality trigger values have been derived from the ANZG (2018) Water Quality Guidelines and ANZECC (2000) guidelines for Fresh and Marine Water Quality. These guidelines define Belongil Creek as a lowland river of South-Eastern Australia, with trigger values chosen to reflect this. In assessing human disturbance, this report recognises Belongil Creek as being slight to moderately disturbed. On this basis, for toxicants in water, 95% species protection default guideline values have been presented for assessed toxicants.

No construction works were being undertaken during this monitoring period, with major civil earthworks associated with Stage 1 of the Project completed in November 2023.

2 MONITORING RESULTS & OBSERVATIONS

2.1 Monthly Groundwater Monitoring

Monthly groundwater monitoring at five (5) groundwater wells (MW2 – MW5 & MW7) was carried out to assess for impact within the underlying aquifer. This monitoring was conducted in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.2 of the Planit Construction Environmental Management Plan (CEMP). Groundwater monitoring locations are presented in Appendix 1.

An assessment of the monthly analytical results presented in Appendix 2, Table 1, identified the following observations:

Site	Observation	Comments
MW2	EC, TDS, SO_4 and Na concentrations were outside baseline ranges.	Concentrations remain elevated when compared to the previous monitoring round (EC, SO_4 and Na).
MW3	All parameters were within baseline ranges.	No site related impacts identified at this monitoring location.
MW4	All parameters were within baseline ranges with the exception of Total Nitrogen.	No site related impacts identified at this location.
MW5	pH, EC, TDS, SO_4, Al and Ca concentrations were outside baseline ranges.	Low pH and elevated analytes (EC, TDS, and cations/anions) at this site indicate the presence of oxidising acid sulfate soils proximal to the monitoring well. A trend analysis of water quality parameters at MW5 continue to show gradual improvement.
MW7	All parameters were within baseline ranges with the exception of SO_4.	No site related impacts identified at this location.

2.2 Monthly Surface Water Monitoring

Monthly surface water sampling (SW01 – SW06) was carried out to assess for impact from site activities on the receiving environment. Monitoring was carried out in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.4 of the Planit Construction Environmental Management Plan (CEMP), which require the assessment of the following analytes; physiochemical parameters, nutrient, metals, cation/anion and total recoverable hydrocarbon (TRH).

Surface water monitoring locations are presented in Appendix 1 and the coordinates (GDA94) of all locations tabulated and presented in Table 1. Tabulated analytical results are presented in Appendix 3. Select photos of the surface water sampling programme are presented in Appendix 4.

Table 1: Surface Water Monitoring Coordinates

Monitoring Location	Location	Easting	Northing
SW01	Upstream	556852	6831954
SW02	Upstream	557145	6831963
SW03	Downstream	557411	6831604
SW04	Downstream	557397	6831429
SW05	Upstream	557992	6830881
SW06	Downstream	558257	6831214

2.2.1 Assessment of Analytical Results

An assessment of the monthly analytical results presented in Appendix 3, identified the following observations:

Site	Observation	Comments
SW01	All parameters were within baseline ranges with the exception of Ca.	This site is located at an upstream location receiving water from off-site.
SW02	TDS, EC, SO_4 and cations/anions (Ca, Na, Mg and K) were recorded outside of baseline ranges.	This site is located at an upstream location receiving water from off-site.
SW03	pH, TDS, EC, SO_4, and cations/anions (Ca, Na, Mg and K) were recorded outside baseline values.	This site is located within the Northern Main Drain, downstream of Stage 1 works and SW02. Water quality parameters observed at SW03 are consistent and marginally better than upstream location SW02. As such, there are no discernible site derived impacts.
SW04	pH, TDS, EC, SO_4, Total Nitrogen and cations/anions (Ca, Fe, Na, Mg and Zn) were outside baseline ranges.	This site is located downstream of Stage 1 works within the Southern Swale Drain. Water quality remains poor at this location when compared to 'upstream' (SW01) and baseline values.

Site	Observation	Comments
SW05	All parameters were within baseline ranges with the exception of Total Nitrogen.	No site related impacts identified.
SW06	pH, Al, Fe and Zn were recorded outside ANZG default guideline values (95% for slightly disturbed river systems).	Water quality at SW06 remains similar to that observed upstream at SW05. As such, no definitive degradation in water quality is observed between the two locations. No site related impacts observed.

3 RAINFALL

During this monitoring period (8/07/2025 – 14/08/2025), 153.2 mm of rain was recorded in the area (Byron Bay, Cape Byron Lighthouse, Bureau of Meteorology).

4 CONCLUSION & RECOMMENDATIONS

4.1 Conclusion

Monitoring results indicate that impacts associated with exposure of acid sulfate soils appeared to have improved significantly at surface water location SW04 (Southern Swale Drain) downstream of the Stage 1 works package.

Water quality reported at SW03 is noted to be of marginally better quality than upstream (SW02) water quality, inferring no discernible site related impacts.

The groundwater monitoring network continues to present indicators of localised impact from acid sulfate soils adjacent to MW5 however trend analysis of water quality parameters shows gradual improvements.

4.2 Recommendations

Based on the above conclusions of this monitoring report, the following recommendations are to be implemented with respect to improving water quality throughout the site:

- Given pH across the site is within or above the baseline water quality values, no corrective action is required.

APPENDIX 1

Figures



Legend

Site Location

0 0.5 1km

Figure 1 – Site Location
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

ENV Solutions
ENVIRONMENTAL | ASBESTOS | REMEDIATION | RESOURCE RECOVERY

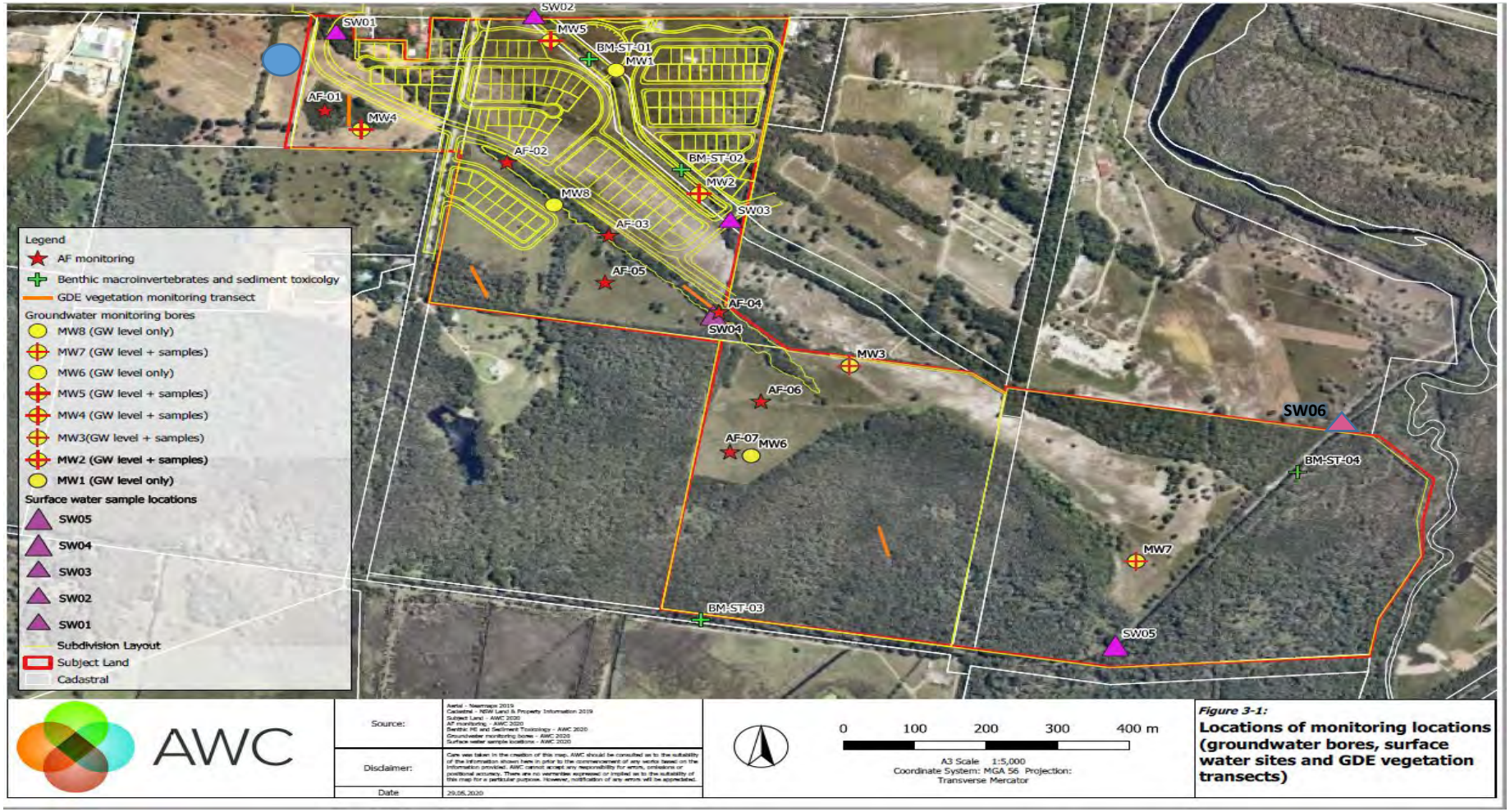


Figure 2 – AWC Surface Water Monitoring Locations
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

ENV Solutions
ENVIRONMENTAL | ASBESTOS | REMEDIATION | RESOURCE RECOVERY

APPENDIX 2

Groundwater Quality Analytical Results

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW2	29/09/22	5.8	54	92	<5	0.12	0.51	14	0.02	0.5	30	< 2	< 0.5	0.8	2.4			0.1
	20/10/22	5.6	100	110	<5	0.09	0.24	13	0.02	2	28	< 2	<0.5	0.8	2.2			0.1
	14/11/22	6.0	100	240	<5	0.07	0.24	19	<0.10	<0.2	30	< 2	1.3	1.4	2.4			0.1
	14/12/22	5.6	110	170	<5	0.02	<0.05	15	<0.10	3.1	29	5	<5	<5	<5			0.3
	18/01/23	4.6	130	76	9.2	0.12	0.09	17	<0.05	2.5	29	7	<5	<5	<5			0.4
	20/02/23	6.0	100	160	5.3	0.09	0.1	27	<0.25	0.25	27	3.7	<0.5	0.7	3.1			0.1
	28/03/23	5.9	140	92	17	0.02	0.12	15	<0.02	<0.2	21	7.2	<5	<5	<5			0.5
	18/04/23	6.2	170	88	<5	0.08	1.2	15	<0.02	7.7	18	5.2	<5	<5	<5			0.3
	18/05/23	5.9	130	76	10	0.09	0.1	13	<0.02	9	28	2.1	0.6	0.9	2.6			0.2
	25/06/23	3.3	4,500	3,000	250	0.26	1.6	45	<0.02	8.1	86	3,800	440	82	7.9			84.4
	24/07/23	6.2	220	150	<5	0.03	0.16	12	<0.2	1	24	12	<0.5	0.8	2.5			1.0
	21/08/23	5.7	120	84	<5	0.08	0.14	15	<0.02	1.7	30	2.3	<5	<5	<5			0.2
	18/09/23	5.9	120	130	11	0.04	0.15	13	<0.02	1.2	25	<2	<0.5	0.9	2.7			0.1
	18/10/23	5.6	110	73	6.6	0.30	0.11	15	<0.02	0.3	25	3.0	<0.5	0.9	2.8			0.2
	20/11/23	6.0	160	70	<5	0.11	0.17	16	<0.01	0.8	28	4.2	<0.5	0.8	2.6			0.3
	19/12/23	6.3	110	100	<5	0.05	0.48	16	<0.02	2.8	28	2.1	0.5	0.9	2.9			0.1
	20/01/24	6.2	150	88	<5	0.05	0.08	13	<0.02	1.1	26	<2	<0.5	0.8	3.0			0.1
	26/02/24	5.1	150	340	7.4	0.07	0.09	15	<0.02	8.6	36	14	0.6	1	2.7			0.9
	26/03/24	5.7	180	310	<5	0.07	0.13	16	<0.02	<1	27	6.9	<0.5	0.8	2.7			0.4
	18/04/24	5.7	170	<5	<5	0.05	0.09	15	<0.02	1.8	29	2.6	<0.5	0.9	2.8	3.6	<1	0.17
	20/05/24	5.6	160	120	<5	0.11	0.1	19	<0.02	1	32	2.9	<0.5	0.8	2.8	3.9	<1	0.2
	25/06/24	5.5	170	170	12	0.09	<0.01	21	<0.02	2.7	30	<2	<0.5	0.8	2.3	3.8	<1	0.0
	10/07/24	5.8	150	190	<5	0.03	0.11	15	<0.02	<1	28	2.2	<0.5	0.7	2.7	2.8	<1	0.1
	06/08/24	5.9	170	90	6.9	0.16	0.12	20	<0.1	2.4	25	3.3	<0.5	0.6	2.1	3.4	<1	0.2
	11/09/24	5.7	140	110	<5	0.02	0.83	21	<0.2	<1	28	<2	<0.5	0.7	2.4	2.8	<1	0.0
	09/10/24	5.9	150	210	6.3	0.21	<0.01	17	0.02	<0.2	30	2.8	<0.5	<0.5	2.6	2.4	<1	0.1
	06/11/24	5.7	120	190	6.6	2.0	0.02	17	-	2.3	33	<2	1.0	1	3.1	3.6	<1	0.1
	16/12/24	6.0	120	60	8.0	0.05	<0.1	16	<0.2	0.9	30	5.3	0.14	0.8	2.8	3.5	<1	0.3
	14/01/25	6.4	150	94	610.0	0.03	<0.05	15	<0.1	<0.25	31	<2	<0.5	0.6	2.4	2.7	1	0.1
	11/02/25	5.7	170	150	<5	0.04	<0.1	13	<0.02	<0.5	29	2.8	<0.5	0.6	2.4	2.8	<1	0.2
	24/03/25	5.7	120	190	<5	<0.05	0.05	36	0.02	4.2	28	5.8	<0.5	0.7	2.4	2.7	<1	0.2
	08/04/25	5.7	120	220	<5	0.02	0.03	16	0.03	<2	31	4.2	<0.5	0.7	2.6	3.5	<1	0.3
	09/05/25	6.0	150	210	<5	0.01	<0.1	17	<0.2	1.1	29	7	1.3	0.7	2.6	3.2	<1	0.4
	25/06/25	5.6	180	200	<5	0.06	<0.01	15	<0.02	0.8	33	22	<0.5	0.7	2.6	1.7	<1	1.5
	08/07/25	5.5	190	180	<5	0.04	0.13	14	<0.2	1.6	32	24	<0.5	0.8	2.5	1.7	<1	1.7
	14/08/25	5.8	180	160	12.0	0.07	0.11	15	<0.02	1.9	30	33	<0.5	0.8	2.5	0.82	<1	2.2
MW2 Baseline		**4.2 - 5.7**	**152**	**103**	**483**	**0.45**	**0.338**	**189**	**0.07**	**2.03**	**29.7**	**9.8**	**0.7**	**1.4**	**4.2**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW3	29/09/22	4.2	53	40	370	0.09	0.05	8.8	0.02	0.5	7	<2	< 0.5	1	0.6			0.1
	20/10/22	4.1	64	62	130	0.01	0.2	8	0.02	0.5	7	<2	0.5	0.9	<0.5			0.1
	14/11/22	4.6	57	84	170	0.03	0.27	7.4	<0.02	<0.2	7.1	<2	0.8	0.6	<0.5			0.1
	14/12/22	4.3	43	32	280	<0.01	<0.01	5.2	<0.02	1.1	6	<2	<5	<5	<5			0.2
	18/01/23	4.25	54	28	670	0.03	<0.01	4.1	<0.05	1.4	<5	4.1	<5	<5	<5			1.0
	20/02/23	4.2	36	40	76	0.02	<0.10	6.8	0.06	7.26	7.6	<2	<0.5	1	<0.5			0.1
	28/03/23	4.1	70	44	<5	<0.01	<0.01	7.9	<0.02	0.22	4.8	2.2	<0.5	1	0.6			0.3
	18/04/23	4.6	89	54	110	0.02	0.1	9.6	<0.02	5.7	4.3	4.3	<0.5	0.6	<0.5			0.4
	18/05/23	4.5	60	40	450	0.02	0.04	5.8	<0.02	1	4.8	2.1	0.6	0.8	<0.5			0.4
	15/06/23	4.0	84	48	22	0.27	0.4	5.5	<0.02	1.96	5	63	<0.5	0.8	<0.5			11.5
	24/07/23	4.5	85	59	160	0.04	<0.01	9.5	<0.02	<0.2	5.6	12	<0.5	0.8	<0.5			1.3
	21/08/23	3.9	110	52	100	0.01	<0.01	6.3	<0.02	<0.2	6.6	3.0	<0.5	1.1	<0.5			0.5
	18/09/23	Dry – no sample collected																
	18/10/23	Dry – no sample collected																
	20/11/23	4.0	96	46	120	0.03	<0.02	7.8	<0.01	0.7	5.8	5.0	<0.5	0.7	<0.5			0.6
	19/12/23	4.0	46	30	92	<0.01	0.04	13	<0.02	<0.2	9.7	5.6	<0.5	1.3	0.6			0.4
	20/01/24	4.2	70	28	270	0.01	<0.01	5.4	<0.02	0.6	5.5	<2	<0.5	0.8	<0.5			0.2
	26/02/24	4.5	70	50	29	0.01	0.02	10	<0.02	16	5	4.5	<0.5	0.6	<0.5			0.5
	26/03/24	4.1	67	56	110	<0.01	0.06	5.1	<0.02	0.3	4.4	6.1	<0.5	0.8	<0.5			1.2
	18/04/24	3.7	150	< 5	<5	0.05	0.01	4.6	<0.02	0.7	4	12	<0.5	0.8	<0.5	0.99	<1	0.3
	20/05/24	4.5	36	30	26	0.03	<0.01	31	<0.02	0.3	3	3.9	0.6	<0.5	<0.5	1.1	<1	0.1
	25/06/24	3.5	160	90	120	0.17	<0.01	2.8	<0.02	<0.2	3.1	5	<0.5	<0.5	<0.5	0.7	<1	0.1
	10/07/24	4.4	42	40	300	<0.01	<0.01	4.2	<0.02	0.5	3.5	2.5	<0.5	<0.5	<0.5	0.7	<1	0.6
	06/08/24	4.3	45	22	310	0.03	0.01	4.4	<0.02	3.2	2.5	<2	<.5	<0.5	<0.5	1.0	<1	0.2
	11/09/24	4.2	44	28	720	0.02	<0.1	5	<0.02	<1	3.7	<2	<0.5	<0.5	<0.5	1.3	<1	0.2
	09/10/24	4.2	50	32	430	0.10	<0.01	5.3	<0.02	<0.2	4.1	2.8	2.9	0.6	0.6	0.48	<1	0.2
	06/11/24	4.3	38	20	370	<0.01	0.09	4.8	-	0.9	4.6	<2	0.6	0.7	<0.5	0.84		0.2
	16/12/24	4.3	35	24	63	0.02	<0.01	4.4	<0.02	0.5	3.8	2.2	<0.5	0.7	<0.5	0.75	<1	0.5
	14/01/25	4.5	40	20	38	0.03	0.01	3.3	<0.02	0.5	2.8	<2	<0.5	<0.5	<0.5	0.75	<1	0.3
	11/02/25	4.2	64	36	8.2	<0.01	<0.01	2.9	<0.02	<0.2	3.1	4.4	<0.5	<0.5	<0.5	1.1	<1	1.5
	24/03/25	4.0	79	50	150	0.02	<0.01	13	<0.02	0.9	5.8	3.9	0.8	1.1	<0.5	0.52	1.5	0.3
	08/04/25	4.2	71	38	160	<0.01	0.02	11	<0.02	0.9	7.3	4.1	0.9	1.4	2.6	0.58	1.5	0.4
	09/05/25	4.5	73	74	210	<0.01	0.02	9.9	<0.02	0.8	7	3.1	0.7	0.9	<0.5	0.74	<1	0.3
	25/06/25	4.5	42	44	170	0.05	<0.01	4.4	<0.02	1.9	5	4.3	<0.5	<0.5	<0.5	1.0	<1	1.0
	08/07/25	4.5	47	25	670	0.02	0.03	4.5	0.03	0.6	4.9	2.5	<0.5	<0.5	<0.5	1	<1	0.6
	14/08/25	4.8	34	38	550	0.06	0.06	3.8	0.02	5.7	3.6	4	<0.5	<0.5	<0.5	0.5	<1	1.0
MW3 Baseline		**4.0 - 5.3**	**206**	**140**	**5223**	**1.57**	**0.294**	**121**	**0.167**	**4.14**	**26.4**	**13.4**	**3.8**	**5.3**	**3.1**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW4	09/29/22	4.5	100	88	350	0.03	0.16	22	0.1	1.5	19	<2	3.6	3.7	0.9			0.0
	10/20/22	4.5	110	100	69	0.02	0.78	20	0.04	1	14	<2	3.9	2.1	<0.5			0.1
	11/14/22	4.2	130	340	16	0.01	0.13	30	<0.10	7	22	5	2.6	4.8	1.1			0.2
	12/14/22	4.2	140	140	60	<0.01	<0.05	23	<0.10	3	21	7.8	<5	<5	<5			0.3
	01/18/23	5.73	170	110	170	0.02	0.16	26	<0.50	2.4	20	6.6	<5	<5	<5			0.3
	02/20/23	3.9	87	110	31	0.04	<0.05	15	0.28	3.88	15	5.8	3.5	5.4	0.9			0.4
	03/28/23	4.7	180	120	190	0.04	0.08	28	<0.02	22	18	6	8.8	5.1	<5			0.2
	04/18/23	3.7	500	280	340	0.11	0.07	27	<0.02	0.9	19	130	3.4	5	<0.5			4.8
	05/18/23	5.4	110	72	70	0.03	<0.01	14	<0.02	2.89	11	10	5.7	3.7	<0.5			0.7
	06/15/23	3.8	200	150	130	1.4	0.29	29	<0.02	0.9	21	12	<5	6	<5			0.4
	07/24/23	4.1	170	94	58	0.03	<0.1	24	<0.2	1	20	17	2.8	6.2	0.6			0.7
	08/21/23	3.8	200	120	75	0.03	0.07	18	0.65	1.76	15	3.6	2.0	5.0	<0.5			0.2
	09/18/23	3.8	160	86	21	0.02	0.11	19	0.02	1.1	17	10	1.5	4.1	<0.5			0.5
	10/18/23	3.8	190	110	31	0.08	0.08	25	<0.02	0.9	18	9.3	1.7	4.5	0.5			0.4
	11/20/23	4.4	160	870	28	0.05	0.10	22	<0.01	2.2	15	5.8	3.3	4.0	0.7			0.3
	12/19/23	4.0	190	130	27	0.03	0.41	38	<0.02	1.5	22	13	3.3	7.8	1.0			0.3
	01/20/24	4.2	170	120	27	0.01	0.02	24	<0.02	1.2	17	2.9	5.4	5.1	<0.5			0.1
	02/26/24	3.6	290	190	96	0.03	0.07	27	<0.02	6.9	17	38	10	4.1	<0.5			1.4
	26/03/24	5.6	150	140	18	0.02	0.58	25	<0.02	1.1	15	7	9.3	3.8	<0.5			0.3
	18/04/24	4.3	140	90	12	0.02	0.04	17	<0.02	24	13	6.7	3.2	3.6	<0.5	1.1	2.9	0.4
	20/05/24	5.9	200	180	9.4	0.01	0.83	15	<0.02	1.1	10	5.6	9.6	2.1	<0.5	1.5	6.4	0.4
	25/06/24	4.2	120	100	33	0.10	<0.01	15	<0.02	1.4	9.1	2.3	3.5	2.2	<0.5	1.7	<1	0.2
	10/07/24	6.3	79	46	16	0.02	0.12	8.7	<0.02	1.4	6.4	4	9.7	1	<0.5	0.55	<1	0.5
	06/08/24	4.4	170	100	24	0.02	0.12	26	<0.02	2.4	12	5.5	1.5	3.2	<0.5	0.86	<1	0.2
	11/09/24	5.2	110	74	27	0.02	0.14	21	<0.02	0.6	12	2.5	7.2	2.9	<0.5	1.3	<1	0.1
	09/10/24	4.1	150	140	190	0.10	0.07	25	0.03	0.9	15	6.2	2.9	4	0.7	1.2	<1	0.2
	06/11/24	4.4	130	180	40	0.51	0.04	22	-	1.9	15	2.3	4.7	4.8	<0.5	1.4	3.35	0.1
	16/12/24	5.7	80	70	<5	0.02	<0.1	18	<0.2	1	11	4.1	8.1	3	<0.5	0.99	7.2	0.2
	14/01/25	4.1	180	120	86	0.02	1.3	26	<0.02	1.2	14	2.4	4.4	3.8	<0.5	1.6	<1	0.1
	11/02/25	4.1	170	150	<5	0.01	<0.1	25	<0.02	<0.5	16	3.1	2.5	4.8	<0.5	1.8	<1	0.1
	24/03/25	5.0	110	84	39	<0.05	0.04	22	0.02	5	13	7.6	4.9	3.4	<0.5	0.85	5.76	0.3
	08/04/25	5.2	90	130	22	<0.01	0.03	16	<0.02	1	10	3.7	6.9	2.7	<0.5	0.58	11.9	0.2
	09/05/25	6.0	110	140	45	-	-	14	<0.2	-	8.7	2.7	11	2	<0.5	0.8	13.75	0.2
	25/06/25	5.4	98	140	130	0.06	0.01	12	0.2	1.6	8.8	8.2	8.6	1.6	<0.5	0.98	8.8	0.7
	08/07/25	5.0	110	100	300	0.01	0.23	15	<0.2	<0.5	11	9.4	5.7	2.4	<0.5	1.7	3.35	0.6
	14/08/25	5.7	110	150	600	0.11	0.12	15	0.04	4.7	9.6	4.3	10	2	<0.5	0.64	<1	0.3
MW4 Baseline		**4.0 - 5.8**	**890**	**605**	**1220**	**0.43**	**1.392**	**199**	**0.185**	**4.36**	**146.3**	**19.2**	**11.3**	**15.6**	**5.4**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW5	09/29/22	4.5	59	68	630	0.13	0.41	18	0.02	6.33	14	<2	2	3	0.6			0.1
	10/20/22	4.4	75	82	92	0.02	0.1	15	0.02	0.5	12	<2	2	2	0.5			0.1
	11/14/22	4.6	120	270	150	0.08	0.52	29	<0.10	7.8	26	<2	5	6	1.4			0.0
	12/14/22	4.5	150	150	230	0.02	<0.060	29	<0.05	11	24	10	<5	<5	<5			0.3
	01/18/23	2.8	1,600	1,100	480	0.05	1.7	43	<0.05	5.7	49	7	90	72	<5			0.2
	02/20/23	2.6	2,700	3,200	310	0.03	4.2	27	<0.05	3.2	47	750	390	76	7.8			27.8
	03/28/23	3.0	5,200	3,700	130	0.02	5.9	28	<0.02	11	34	1,100	440	57	7.1			39.3
	04/18/23	2.9	3,800	5,100	300	0.01	4	44	<0.02	4	49	3,800	380	120	4.7			86.4
	05/18/23	3.4	3,100	3,400	150	<0.01	<0.01	15	<0.02	4.9	23	2,200	240	31	4.2			146.7
	06/15/23	2.9	3,000	1,800	640	0.3	2.9	28	<0.02	2.66	64	2,100	410	130	6.5			75.0
	07/24/23	5.5	2,800	1,600	6.0	0.07	0.19	1,400	<0.2	0.5	450	380	25	54	25.0			0.3
	08/21/23	3.3	5,200	3,400	13	0.03	4.6	67	<0.02	5	89	2,200	420	200	9.9			32.8
	09/18/23	3.3	4,500	5,800	6.1	0.01	4.0	51	0.02	3.7	67	4,300	360	140	7.9			84.3
	10/18/23	3.2	4,700	4,900	96	0.03	1.3	58	<0.02	2.1	68	710	380	130	7.3			12.2
	11/20/23	2.8	5,900	7,500	29	0.06	2.7	55	<0.01	11	60	6,600	310	100	6.8			120.0
	12/19/23	2.9	3,100	2,700	230	0.01	4.6	80	<0.02	5.0	80	3,500	290	86	6.9			43.8
	01/20/24	3.2	4,900	6,600	74	0.03	<0.01	52	<0.02	4.5	68	1,000	370	84	7.9			19.2
	02/26/24	2.6	3,400	4,500	180	0.03	0.59	25	<0.02	5.4	51	3,000	290	46	4.0			120.0
	26/03/24	3.2	4,400	3,500	17	0.02	1.8	140	<0.02	2.5	54	11,000	360	77	6.0			78.6
	18/04/24	3.3	4,200	2,200	39	<0.01	0.02	49	0.05	5.1	50	3,300	310	47	4.0	210	1.5	67.3
	20/05/24	3.4	3,100	1,600	8.8	0.03	3.1	53	<0.02	2.9	27	2,900	200	22	2.8	140	1.42	54.7
	25/06/24	3.2	4,100	2,700	310	0.03	<0.01	76	<0.02	7.2	75	1,400	290	60	4.3	320	<1	18.4
	10/07/24	3.5	2,300	2,600	49	0.02	<0.01	14	<0.02	3.9	20	1,900	240	20	2.4	130	<1	135.7
	06/08/24	3.3	170	3,500	14	0.19	4.6	62	<0.02	7.7	56	3,600	310	54	4.2	250	<1	58.1
	11/09/24	3.5	1,700	1,000	38	<0.01	3.9	27	<0.2	4.9	27	750	290	29	3.2	94	<1	27.8
	09/10/24	3.5	1,300	930	46	0.03	<0.01	27	<0.02	1.5	22	870	120	17	1.6	35	<1	32.2
	06/11/24	3.3	2,000	1,300	31	<0.01	4.8	44	-	5	59	680	300	62	4.9	90	3.33	15.5
	16/12/24	3.2	1,800	1,100	53	0.02	21	32	<0.2	2.8	25	980	180	21	2.4	35	5.1	30.6
	14/01/25	3.7	1,600	1,400	190	<0.01	1.3	19	<0.02	2.1	16	320	210	16	1.8	25	8.4	16.8
	11/02/25	3.5	2,000	1,700	69	0.01	2.6	160	<0.02	14	110	860	110	50	2.8	56	1.96	5.4
	24/03/25	3.6	1,000	890	38	<0.05	0.06	20	<0.02	3.3	14	570	140	8.5	1.7	17	8.24	28.5
	08/04/25	3.7	790	700	73	<0.01	0.85	36	<0.02	5.2	42	390	86	16.0	<0.5	13	6.6	10.8
	09/05/25	3.7	1,300	1,200	200	<0.01	1.2	87	<0.2	3.3	24	470	87	11.0	1.5	9.6	9.06	5.4
	25/06/25	3.7	1,300	840	140	0.21	1.5	26	<0.02	2	18	580	140	17.0	1.7	17	8.3	22.3
	08/07/25	4.0	720	480	170	<0.010	0.81	21	<0.2	5.4	20	280	58	10.0	0.9	11	5.3	13.3
	14/08/25	3.8	530	300	230	0.02	0.55	19	<0.02	5.5	11	230	28	4.3	0.5	4.5	6.2	12.1
MW5 Baseline		**4.3 - 5.5**	**191**	**130**	**3003**	**0.97**	**13.4**	**82**	**0.117**	**13.4**	**27.2**	**8.3**	**6**	**8.4**	**5.4**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW7	09/29/22	4.6	26	40	190	0.1	0.3	8.5	0.02	2.5	8.5	<2	1	0.9	0.6			0.1
	10/20/22	4.5	86	70	120	0.01	0.4	12	0.04	2.9	8.5	<2	1.7	1.7	0.5			0.1
	11/14/22	4.5	44	170	<100	0.03	0.01	9.7	<0.10	<2.00	9.7	<2	1.9	1.4	1.4			0.1
	12/14/22	4.6	56	92	23	0.04	<0.10	7.5	<0.20	11	8.7	2.5	<5	<5	<5			0.3
	01/18/23	4.4	63	32	390	0.09	<0.05	7.5	<0.025	2	11	31	<5	<5	<5			4.1
	02/20/23	4.1	87	60	30	0.02	<0.05	9.1	0.42	4.9	5.8	5.7	1.4	1.9	1.1			0.6
	03/28/23	4.5	160	94	18	0.02	0.02	21	<0.02	4.4	12	66	2	2	0.6			3.1
	04/18/23	4.9	150	58	7.4	<0.01	0.11	11	<0.02	<0.20	9.8	120	1.9	0.8	<0.5			10.9
	05/18/23	4.9	78	56	130	0.03	<0.01	11	<0.02	0.89	9.3	9.3	1.4	0.9	<0.5			0.8
	06/15/23	4.6	77	50	30	0.28	0.25	11	<0.02	<0.20	9.2	62	<5	<5	<5			5.6
	07/24/23	5.1	140	100	90	0.12	<0.1	10	<0.2	1	8.5	14	1.9	1.4	0.9			1.4
	08/21/23	5.3	67	34	29	0.08	0.06	8.4	<0.02	0.8	9.0	45	1.8	1.7	0.8			5.4
	09/18/23	5.1	57	78	25	<0.01	0.07	9.6	<0.02	0.8	9.4	83	1.6	2.0	0.8			8.6
	10/18/23	5.2	61	46	10	0.04	0.10	11	<0.02	<0.2	10	160	1.6	2.1	0.8			14.5
	11/20/23	4.1	210	64	13	0.04	<0.02	8.4	<0.01	2.2	8.1	280	2.5	2.2	0.7			33.3
	12/19/23	4.6	91	62	11	0.03	0.09	19	<0.02	0.7	11	5.6	4.4	2.3	0.9			0.3
	01/20/24	4.2	170	130	34	0.01	0.09	21	<0.02	0.3	15	160	2.8	1.4	<0.5			7.6
	02/26/24	4.0	210	190	23	0.03	0.51	44	<0.02	5.8	24	7.5	3.6	2.1	0.5			0.2
	26/03/24	4.4	320	100	22	0.02	0.18	320	<0.02	<1	13	590	1.6	0.9	0.9			1.8
	18/04/24	4.3	100	98	17	0.02	0.07	8.9	<0.02	3	9	380	1.4	1.2	<0.5	1.7	<1	42.7
	20/05/24	4.4	77	56	11	0.05	0.38	6.4	<0.02	1.2	5.4	170	1.3	1	<0.5	2.3	<1	26.6
	25/06/24	4.6	66	36	33	<0.01	<0.01	<0.01	<0.02	0.6	6.7	48	1.1	0.9	<0.5	1.5	<1	0.0
	10/07/24	4.5	74	58	29	<0.01	0.22	6.5	<0.02	2.1	6.2	270	2	1.3	<0.5	0.73	<1	41.5
	06/08/24	4.8	4,600	180	19	0.04	0.06	9.1	<0.02	0.5	5.3	36	1.4	0.9	<0.5	1	<1	4.0
	11/09/24	4.4	75	50	6.4	0.04	<0.1	11	<0.02	1..0	7.1	5.2	1.3	1.1	<0.5	1.4	<1	0.5
	09/10/24	4.3	73	42	71	0.54	<0.01	8	<0.02	1.6	5.8	12	1.3	1.2	<0.5	0.94	<1	1.5
	06/11/24	4.5	59	32	35	0.02	0.03	11	-	1.3	7.8	4.4	1.3	1.4	<0.5	1.6	<1	0.4
	16/12/24	4.3	58	68	29	0.04	<0.1	12	<0.2	1.3	8.5	42	1.6	1.3	<0.5	1.9	<1	3.5
	14/01/25	4.7	63	36	120	0.04	0.02	8.6	0.03	1.3	6.8	7.0	1.7	1.2	0.5	2.4	1.4	0.8
	11/02/25	4.6	68	70	13	0.07	<0.1	9.2	<0.02	1.2	8.4	2	1.5	1.5	0.8	2.7	<1	0.2
	24/03/25	4.1	0	56	28	<0.05	0.02	15	<0.02	1.8	7.7	43	2.3	1.4	<0.5	1.2	1.91	2.9
	08/04/25	4.4	76	70	14	<0.01	0.03	14	<0.02	<1	8.1	31	2.8	1.1	2.1	1.4	2	2.2
	09/05/25	4.7	81	110	24	<0.01	0.03	13	<0.2	1.2	8.1	28	1.5	0.9	<0.5	1.6	<1	2.2
	25/06/25	4.6	65	70	39	0.07	<0.01	8.3	<0.02	<0.2	6.7	56	1.2	0.8	<0.5	1.2	1	6.7
	08/07/25	4.6	65	44	130	0.02	0.14	7.9	<0.02	<0.5	6.3	37	1.4	0.9	<0.5	2.6	<1	4.7
	14/08/25	4.7	60	70	140	0.06	0.01	8.9	0.04	2.2	5.7	15	0.9	0.5	<0.5	0.93	3	1.7
MW7 Baseline		**4.6 - 5.6**	**147**	**100**	**3140**	**0.71**	**0.471**	**172**	**0.048**	**4.15**	**31**	**7.3**	**3.4**	**2.2**	**3.1**	**<1.0***	**<1***	**<0.5***

APPENDIX 3

Surface Water Quality Analytical Results

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW01	29/09/2022	6.9	180	11	3.1	140	0.47	<0.01	14	<0.02	5.2	30	3.4	450		0.2
	20/10/2022	6.6	320	30	4.7	400	0.03	0.03	22	<0.02	<0.02	31	33	43		1.5
	14/11/2022	6.0	780	4900	0.2	920	3.1	6.9	25	<0.02	14	200	3.7	67		0.1
	14/12/2022	4.5	800	210	3.6	1100	0.15	0.05	24	<0.10	23.27	54	560	88		23.3
	18/01/2023	6.3	380	120	4.7	25	0.047	0.087	24	<0.02	5.2	40	180	25		7.5
	20/02/2023	3.4	1100	32	3.8	1300	0.42	0.37	28	<0.02	8.9	57	350	<5		12.5
	28/03/2023	3.0	2000	100	7.7	3000	<0.01	2.1	29	<0.02	1.29	47	880	<5		30.3
	18/04/2023	7.7	130	33	8.6	320	0.06	0.01	24	<0.02	8.4	16	14	8.8		0.6
	18/05/2023	7.4	130	6	4.4	250	0.21	0.14	11	<0.02	0.9	14	10	<5		0.9
	15/06/2023	3.2	1900	6.8	7.6	2700	0.03	1.6	59	<0.02	2.1	61	1500	<5		25.4
	24/07/2023	7.9	84	<5	8.4	140	0.11	<0.01	6.4	<0.02	0.3	13	4.0	<0.005		0.6
	21/08/2023	6.9	120	25	3.0	190	0.34	0.01	5.6	<0.02	0.4	18	<2	<0.005		0.2
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	No surface water located at monitoring site – no sample collected														
	20/11/2023	7.2	230	6.5	2.9	480	2.0	<0.02	56	<0.01	<0.2	43	160	<0.005		2.9
	19/12/2023	No surface water located at monitoring site – no sample collected														
	23/01/2024	7.0	160	130	2.2	160	3.7	0.06	14	<0.02	1.3	21	69	<0.005		4.9
	26/02/2024	6.2	160	47	7.2	200	0.35	<0.01	9.0	<0.02	3.0	12	59	<5		6.6
	26/03/2024	6.9	26	7.5	8.3	78	0.25	<0.01	6.7	<0.02	0.4	7.5	3.4	<5		0.5
	18/04/2024	7.2	220	23	0.5	390	0.06	0.24	25	<0.02	0.7	32	110	180	13	4.4
	20/05/3034	6.7	160	< 5	3.8	260	0.16	0.01	13	<0.02	0.5	19	33	56	231	2.5
	25/06/2024	6.3	440	15	5.9	710	<0.01	<0.01	12	<0.02	<0.2	23	100	5.7	15	8.3
	10/07/2024	7.0	120	29	5.5	240	0.07	0.01	14	<0.02	1.1	17	6.9	39	12	0.5
	6/08/2024	4.0	760	19	7.6	950	0.08	<0.01	14	<0.02	1.3	23	470	<5	12	33.6
	15/08/2024	6.7	64	<5	7.3	100	0.04	0.01	6.1	<0.02	<0.2	7.2	5.5	<5	<10	0.9
	11/09/2024	6.9	120	250	0.2	190	1.1	0.11	8.9	<0.02	4.1	13	2.6	<10	17	0.3
	24/09/2024 - Investigation	6.3	170	-	-	280	-	-	-	-	-	-	-	-	-	-
	9/10/2024	7.4	190	11	8.9	290	0.38	0.01	14	<0.02	<0.2	20	3.4	<5	<10	0.2
	6/11/2024	7.1	92	400	0.4	140	13	<0.01	8.1	<0.02	2.8	12	2.2	<5	<10	0.3
	16/12/2024	6.9	90	190	3.3	140	0.36	<0.01	8.2	<0.02	0.02	11	5.4	170	<10	0.7
	14/01/2025	6.7	48	7.2	3.5	89	0.14	<0.1	4.8	<0.02	0.6	5.4	<5	<0.005	<10	0.0
	11/02/2025	7.5	390	<5	8.3	620	0.06	0.03	110	<0.02	0.8	16	16	12	<10	0.1
	24/03/2025	6.9	58	<5	8.6	64	0.32	0.02	6.1	<0.02	0.8	7.9	2.4	48	<10	0.4
	31/03/2025	7.1	170	5.8	9.2	200	0.14	<0.01	14	<0.02	1.1	15	6.4	<5	<10	0.5
	8/04/2025	7.2	200	9.4	8.8	230	0.37	0.04	14	<0.02	0.4	18	3.6	<5	<10	0.3
	9/05/2025	7.5	170	<5	-	200	0.2	0.03	10	<0.02	0.8	13	4.5	<5	<10	0.5
	25/06/2025	6.9	130	24	7.5	190	1.1	0.07	6.2	<0.02	1.1	12	7.1	12	22	1.1
	8/07/2025	6.9	150	<5	8	260	0.12	0.18	8	<0.02	0.8	16	5	28	34	1.6
	14/08/2025	7.3	140	7.1	6.9	240	0.17	0.03	11	<0.02	1	16	6	<5	15	
SW01 Baseline		**6.2 – 7.0**	**291**	**73**	**-**	**428**	**3.52**	**0.164**	**118**	**0.039**	**3.5**	**51**	**9**	**768**		**<0.5**

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW01	29/09/2022	1.5	0.003	<0.0002	22	0.002	0.32	2.7	0.005	14	<0.0001	0.015	3	0.071	<1
	20/10/2022	0.66	2	<0.0002	24	0.002	0.16	2.4	0.003	9.1	<0.0001	0.009	2.9	0.042	<1
	14/11/2022	130	1.3	<0.02	280	<0.10	1	130	0.1	73	<0.001	0.3	<50	4.7	<1
	14/12/2022	22	0.0016	<0.002	180	0.014	0.2	1.6	0.015	43	<0.001	0.077	6.8	0.68	<1
	18/01/2023	0.7	<0.010	<0.002	<2	<0.010	<0.01	3.2	<0.01	13	<0.01	<0.01	<5	<0.05	<1
	20/02/2023	37	0.027	0.0004	170	0.019	0.07	0.049	0.049	57	0.002	0.16	6.3	0.35	<1
	28/03/2023	150	0.002	0.0008	290	0.002	0.003	36	0.003	38	0.0001	0.46	5.1	0.97	<1
	18/04/2023	0.53	0.002	<0.0002	13	0.005	0.005	0.002	0.002	2.7	<0.0001	0.002	0.8	0.15	<1
	18/05/2023	0.16	0.002	<0.0002	23	<0.001	0.002	0.24	<0.001	7.5	<0.0001	0.002	2.3	0.02	<1
	15/06/2023	120	0.002	0.0003	350	<0.001	0.004	15	0.003	42	<0.0001	0.24	8.1	0.35	<1
	24/07/2023	0.08	0.003	<0.0002	13	<0.001	0.003	0.38	0.002	4.1	<0.0001	0.002	0.8	0.037	<1
	21/08/2023	0.52	0.001	<0.0002	17	0.001	0.002	1.2	0.001	6.3	<0.0001	0.003	<0.5	0.014	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	No surface water located at monitoring site – no sample collected													
	20/11/2023	0.13	<0.001	<0.0002	26	<0.001	0.002	5.7	<0.001	7.9	<0.0001	0.003	2.2	0.006	<1
	19/12/2023	No surface water located at monitoring site – no sample collected													
	23/01/2024	<0.05	<0.001	<0.0002	30	0.001	<0.001	1.8	<0.001	10	<0.0001	<0.001	3.4	0.006	<1
	26/02/2024	<0.005	<0.001	<0.0002	14.00	<0.001	<0.001	0.93	<0.001	4.60	<0.0001	<0.001	1.70	0.05	<1
	26/03/2024	0.11	<0.001	<0.0002	7.4	<0.001	0.002	0.38	<0.001	2.0	<0.0001	<0.001	1.5	0.013	<1
	18/04/2024	0.06	<0.001	<0.0002	32	<0.001	<0.001	1.4	<0.001	9.5	<0.0001	0.002	2.0	<0.005	<1
	20/05/3034	0.06	<0.001	<0.0002	26	<0.001	0.001	0.86	<0.001	7.0	<0.0001	0.002	1.7	0.014	<1
	25/06/2024	0.69	<0.001	<0.0002	94	<0.001	0.002	0.28	<0.001	15	<0.0001	0.008	2.3	0.055	<1
	10/07/2024	0.25	0.002	<0.0002	28	<0.001	0.003	2.1	<0.001	6.6	<0.0001	0.002	2.0	0.037	<1
	6/08/2024	0.85	<0.001	<0.0002	120	<0.001	0.004	1.3	<0.001	14	<0.0001	0.021	2.3	0.1	<1
	15/08/2024	0.24	<0.001	<0.0002	12	<0.001	0.004	0.33	<0.001	2.8	<0.0001	0.001	1.2	0.027	<1
	11/09/2024	9.1	0.009	0.0005	36	0.023	0.11	49	0.031	8.1	0.0001	0.019	5.2	0.72	<1
	24/09/2024 - Investigation	-	<0.001	<0.001	-	<0.001	0.001	-	<0.001	<0.0001	-	0.004	-	0.04	-
	9/10/2024	0.14	0.001	<0.0002	27	<0.001	0.002	1.7	<0.001	8.1	<0.0001	0.002	1.5	0.017	<1
	6/11/2024	1.2	0.004	<0.0002	26	0.005	0.011	54	0.003	6.1	<0.0001	0.004	2.8	0.041	<1
	16/12/2024	2.4	0.004	<0.0002	22	0.006	0.019	38	0.006	4.5	<0.0001	0.004	2.8	0.092	<1
	14/01/2025	0.15	<0.001	<0.0002	8.8	0.001	0.003	0.34	<0.001	1.8	<0.0001	0.001	0.6	0.018	<1
	11/02/2025	0.58	0.002	<0.0002	13.00	<0.001	<0.001	6.10	<0.001	3.50	<0.0001	0.002	1.00	0.015	<1
	24/03/2025	0.13	<0.001	<0.0002	5.20	<0.001	0.002	0.35	<0.001	1.40	<0.0001	<0.001	1.20	0.037	<1
	31/03/2025	0.10	0.002	<0.0002	22	<0.001	0.003	1.2	<0.001	6.8	<0.0001	0.002	2.4	0.066	<1
	8/04/2025	<0.05	0.002	<0.0002	29	<0.001	<0.001	2.2	<0.001	8.1	<0.0001	0.002	2.4	0.008	<1
	9/05/2025	0.27	<0.001	<0.0002	20	<0.001	0.002	1.6	<0.001	5.9	<0.0001	0.002	1.7	0.030	<1
	25/06/2025	0.11	<0.001	<0.0002	19	<0.001	0.002	0.72	<0.001	4.4	<0.0001	0.002	<0.5	0.032	<1
	8/07/2025	0.05	<0.001	<0.0002	26	<0.001	0.002	0.49	<0.001	7.2	<0.0001	0.002	<0.5	0.024	<1
	14/08/2025	0.14	<0.001	<0.0002	26	<0.001	0.003	0.69	<0.001	6.8	<0.0001	0.002	1.8	0.019	<1
SW01 Baseline		**0.5**	**0.003**	**0.001**	**22**	**0.002**	**0.041**	**1.2**	**0.001**	**16**	**0.0005**	**0.006**	**6**	**0.058**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW01	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	220	220	<100	<100	<20	250	<100	<100	250	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	<50	<50	20	-	<20	<50	100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No surface water located at monitoring site – no sample collected									
	18/10/2023	No surface water located at monitoring site – no sample collected									
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	No surface water located at monitoring site – no sample collected									
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/3034	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Investigation	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW01 Baseline		**60**	**-**	**24**	**100**	**-**	**50**	**130**	**90**	**170**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW02	29/09/2022	6.9	170	8.8	8	160	0.04	0.03	29	<0.02	1.3	27	2.8	22		0.10
	20/10/2022	6.5	120	6.2	8.7	140	0.02	0.01	17	<0.02	<0.20	16	2.9	<5		0.17
	14/11/2022	6.4	150	210	0.1	190	0.18	<0.01	54	<0.02	13	62	18	24		0.33
	14/12/2022	6.3	110	870	0.1	200	0.27	0.05	26	<0.10	2.7	25	29	14		1.12
	18/01/2023	6.6	220	190	0.1	61	0.79	0.049	31	<0.20	21	27	6.2	61		0.20
	20/02/2023	6.5	240	29	4.4	1300	0.023	0.31	26	<0.10	1.9	29	24	<5		0.92
	28/03/2023	4.8	310	370	5.7	370	1.5	0.19	22	<0.02	<0.20	17	92	<10		4.18
	18/04/2023	6.2	300	60	7.3	410	0.05	0.16	32	<0.02	1.38	25	120	<5		3.75
	18/05/2023	6.5	130	39	6	270	0.06	0.09	25	<0.02	<0.2	18	29	<5		1.16
	15/06/2023	6.4	190	25	8.9	280	0.37	0.23	34	<0.02	1.2	25	38	<5		1.12
	21/08/2023	6.1	430	20	5.7	690	0.02	0.50	36	<0.02	1.2	38	75	<0.005		2.08
	18/09/2023	7.2	180	15	8.1	260	0.06	0.04	31	<0.02	0.8	28	39	<0.005		1.26
	18/10/2023	6.8	150	11	8.1	240	0.05	0.02	40	<0.02	<0.2	28	13	<0.005		0.33
	20/11/2023	6.9	180	18	4.9	350	0.07	0.04	37	<0.01	0.3	26	50	<0.005		1.35
	19/12/2023	6.7	140	15	4.6	240	0.05	0.03	37	<0.02	0.7	29	11	<0.005		0.30
	23/01/2024	6.8	210	27	9.7	350	0.06	0.02	35	<0.02	0.5	31	25	<0.005		0.71
	26/02/2024	4.5	140	43	7.1	190	0.05	0.03	9.0	<0.02	0.6	8.5	65	<5		7.22
	26/03/2024	6.7	44	12	6.8	99	0.07	<0.01	9.5	<0.02	0.5	8.8	8.7	<5		0.92
	18/04/2024	7.6	350	<5	6.4	630	0.03	0.9	93	<0.02	0.6	78	56	<5	<10	0.60
	20/05/2024	6.7	130	27	2.1	210	0.04	0.05	20	<0.02	1.1	18	16	<5	11	0.80
	25/06/2024	6.7	180	9.7	8.8	330	0.03	<0.01	42	0.03	<0.2	35	10	<5	11	0.24
	10/07/2024	7.0	150	8.2	6.1	220	0.01	0.11	22	<0.02	1.9	18	21	<5	<10	0.95
	6/08/2024	6.5	220	8.5	7.0	280	0.06	0.02	39	<0.02	1.7	24	19	<5	20	0.49
	15/08/2024	6.6	48	<5	7.8	80	0.07	0.01	8.0	<0.02	<0.2	7.0	6.9	18	<10	0.86
	11/09/2024	7.1	250	<5	6.1	450	0.02	0.05	90	<0.02	0.3	71	48	<5	<10	0.53
	9/10/2024	7.0	260	<5	8.9	500	0.12	0.03	88	<0.02	0.6	73	35	<5	<10	0.40
	6/11/2024	7.5	300	6.4	6.0	500	0.07	<0.01	89	<0.02	1.0	72	34	<5	<10	0.38
	16/12/2024	6.4	200	110	8.8	310	1.1	<0.01	55	<0.02	0.4	11	19	6.6	<10	0.35
	14/01/2025	6.9	170	<5	4.6	340	0.08	<0.01	51	<0.02	0.9	44	7.7	<0.005	<10	0.15
	11/02/2025	7.1	96	5.6	6.1	150	0.08	<0.01	14	<0.02	1.9	91	3.9	190	<10	0.28
	24/03/2024	3.2	420	7.2	8.6	670	<0.05	0.02	17	<0.02	2.8	17	250	<5	<10	14.71
	31/03/2025	7.2	160	<5	9.8	200	0.14	0.05	14	<0.02	<0.4	16	7	<5	<10	0.50
	8/04/2025	7.2	150	12	6.2	230	0.37	0.03	14	<0.02	0.7	18	3.4	<5	<10	0.24
	9/05/2025	3.9	320	1100	-	560	1.5	0.23	31	<0.02	2.8	18	150	<20	34	4.84
	25/06/2025	7.1	400	9.4	9.8	580	1.5	0.01	88	<0.03	1.5	74	38	38	14	0.40
	8/07/2025	6.9	300	14	8.4	600	0.34	0.58	96	<0.02	0.9	73	38	19	21	2.53
	14/08/2025	7.2	330	6.1	8.6	600	0.05	0.03	120	<0.02	0.7	85	31	<5	<10	3.87
SW02 Baseline		**6.3 – 7.0**	**199**	**495**	**-**	**292**	**1.88**	**0.261**	**161**	**0.06**	**8.6**	**32**	**10**	**182**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW02	29/09/2022	0.42	0.003	<0.0002	19	0.002	0.004	1.5	0.001	5.8	<0.0001	0.002	1.9	0.057	<1
	20/10/2022	0.22	0.001	<0.0002	12	0.001	0.003	0.62	<0.001	3.4	<0.0001	0.001	1.7	0.032	<1
	14/11/2022	1.8	0.037	<0.002	47	<0.001	0.015	53	<0.01	11	<0.001	<0.01	<5	0.096	<1
	14/12/2022	13	0.066	<0.002	38	0.034	0.094	9.7	0.071	5.9	<0.001	0.013	5.1	1	<1
	18/01/2023	3.3	0.023	<0.002	<2	<0.01	0.015	45	0.014	5.8	<0.001	<0.010	<5	0.15	<1
	20/02/2023	12	0.033	0.0002	38	0.009	0.09	0.013	0.013	11	<0.001	0.018	4.1	0.28	<1
	28/03/2023	3.4	0.002	0.0003	43	0.002	0.003	2.5	0.001	8.4	<0.0001	0.024	4.1	0.63	<1
	18/04/2023	0.86	<0.001	<0.0002	20	0.002	0.002	<0.001	<0.001	4	<0.0001	0.006	2.7	0.089	<1
	18/05/2023	0.72	0.002	<0.0002	17	0.002	0.006	1	0.002	4.3	<0.0001	0.003	2.4	0.081	<1
	15/06/2023	1.7	0.001	<0.0002	22	0.001	0.004	2.1	0.001	5.5	<0.0001	0.005	1.9	0.037	<1
	21/08/2023	1.1	<0.001	<0.0002	71	<0.001	<0.001	8.0	<0.001	16	<0.0001	0.024	5.7	0.057	<1
	18/09/2023	1.7	0.003	<0.0002	19	0.002	0.004	3.0	0.002	6.3	<0.0001	0.005	3.0	0.023	<1
	18/10/2023	0.88	0.002	<0.0002	17	0.001	0.003	2.2	0.001	5.5	<0.0001	0.002	1.9	0.014	<1
	20/11/2023	2.3	0.002	<0.0002	19	0.002	0.002	2.6	<0.001	6.7	<0.0001	0.007	1.4	0.032	<1
	19/12/2023	1.1	0.002	<0.0002	19	0.001	0.001	4.8	<0.001	6.5	0.0002	0.004	2.9	0.012	<1
	23/01/2024	2.9	0.003	<0.0002	23	0.002	0.001	5.8	<0.001	7.8	<0.0001	0.007	3.3	0.031	<1
	26/02/2024	1.5	0.001	<0.0002	9.7	0.001	0.003	1.7	<0.001	2.5	<0.0001	0.004	1.4	0.027	<1
	26/03/2024	0.34	<0.001	<0.0002	6.9	0.001	0.003	0.67	<0.001	1.9	<0.0001	0.001	1.8	0.021	<1
	18/04/2024	0.09	<0.001	<0.0002	20	<0.001	<0.001	0.39	<0.001	5.4	<0.0001	<0.001	14	0.014	<1
	20/05/2024	0.71	0.004	<0.0002	19	0.002	0.003	5.6	<0.001	3.8	<0.0001	0.003	3.0	0.015	<1
	25/06/2024	1.1	<0.001	<0.0002	21	<0.001	0.001	1.4	<0.001	4.6	<0.0001	0.004	4.5	0.022	<1
	10/07/2024	1.1	0.002	<0.0002	20	<0.001	0.004	1.2	<0.001	4.2	<0.0001	0.004	2.3	0.047	<1
	6/08/2024	0.61	0.001	<0.0002	17	0.001	0.002	1.4	<0.001	3.7	<0.0001	0.002	3	0.019	<1
	15/08/2024	0.31	0.002	<0.0002	8	0.001	0.004	0.37	<0.001	1.5	<0.0001	0.001	1.4	0.038	<1
	11/09/2024	0.19	<0.001	<0.0002	20	<0.001	0.001	0.31	<0.001	4.8	<0.0001	0.001	14	0.021	<1
	9/10/2024	0.8	<0.001	<0.0002	23	<0.001	0.001	1.5	<0.001	5	<0.0001	0.003	15	0.032	<1
	6/11/2024	0.007	0.001	<0.0002	21	<0.001	<0.001	0.7	<0.001	5.8	<0.0001	<0.001	15	0.011	<1
	16/12/2024	0.05	<0.001	<0.0002	14	<0.001	0.001	0.24	<0.001	3.1	<0.0001	<0.001	9.4	0.008	<1
	14/01/2025	0.06	<0.001	<0.0002	14	0.001	0.002	0.28	<0.001	2.7	<0.0001	0.001	9.4	0.015	<1
	11/02/2025	0.82	<0.001	<0.0002	24	<0.001	0.002	4.4	<0.001	4.8	<0.0001	0.005	19	0.058	<1
	24/03/2024	7.4	<0.001	<0.0002	56	0.002	0.001	22	<0.001	6.9	<0.0001	0.021	1.8	0.097	<1
	31/03/2025	0.25	0.002	<0.0002	23	<0.001	0.003	1.7	<0.001	7.0	<0.0001	0.002	2.5	0.054	<1
	8/04/2025	0.10	0.001	<0.0002	29	<0.001	0.001	2.7	<0.001	8.3	<0.0001	0.002	2.3	0.015	<1
	9/05/2025	2.3	0.007	<0.0002	34	0.005	0.002	140	<0.001	9.1	<0.0001	0.011	2.1	0.077	<1
	25/06/2025	0.30	<0.001	<0.0002	21	<0.001	0.001	1.1	<0.001	5.4	<0.0001	0.002	14	0.030	<1
	8/07/2025	0.15	<0.001	<0.0002	19	<0.001	<0.001	0.65	<0.001	5.3	<0.0001	0.001	12	0.018	<1
	14/08/2025	0.11	<0.001	<0.0002	21	<0.001	<0.001	0.39	<0.001	5.9	<0.0001	<0.001	11	0.012	<1
SW02 Baseline		**3.8**	**0.045**	**0.001**	**17**	**0.007**	**0.012**	**71.9**	**0.02**	**5**	**0.0005**	**0.005**	**6**	**0.09**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW02	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	90	<100	<20	<50	60	30	90	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	180	180	30	-	<20	170	30	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	200	<100	<20	<50	100	<100	100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	140	140	100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW02 Baseline		**60**	**-**	**22**	**100**	**-**	**50**	**100**	**50**	**140**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW03	29/09/2022	6.8	120	<5	9.3	100	0.02	<0.01	24	<0.02	1.10	23	2.40	<5		0.1
	20/10/2022	5.9	650	26	7.5	870	0.03	<0.01	270	<0.02	<0.2	12	13.00	<5		0.0
	14/11/2022	6.5	140	260	2.6	160	0.13	<0.05	27	<0.01	7.40	36	9.00	<5		0.3
	14/12/2022	6.5	110	11	4.4	160	0.01	0.05	23	<0.01	3.90	18	11.00	<5		0.5
	18/01/2023	6.5	160	9	5.1	<5	0.02	<0.010	31	<0.02	1.30	26	17	<5		0.5
	20/02/2023	3.4	540	13	6.0	720	0.01	<0.010	22	<0.02	5.10	28	100	<5		4.5
	28/03/2023	3.3	400	7	9.9	750	0.02	0.07	14	<0.02	<0.2	16	110	<5		7.9
	18/04/2023	4.2	280	<5	7.4	450	<0.01	0.04	29	<0.02	<0.2	22	140	<5		4.8
	18/05/2023	4.3	310	37	5.5	580	0.02	0.32	22	<0.02	12.33	21	230	<5		10.5
	15/06/2023	3.3	580	17	8.9	870	0.04	0.68	32	<0.02	1.40	31	300	<5		9.4
	24/07/2023	3.9	290	36	9.0	510	0.03	0.40	17	<0.02	1	20	250	<0.005		14.7
	21/08/2023	6.8	270	5.8	7.2	350	0.04	0.04	45	<0.02	0.5	43	8	<0.005		0.2
	18/09/2023	4.6	410	20	7.4	540	<0.01	0.28	30	<0.02	0.4	29	230	<0.005		7.7
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	0.0099		4.5
	20/11/2023	3.5	640	18	7.1	1100	0.03	0.58	32	<0.01	0.6	30	370	0.0067		11.6
	19/12/2023	3.8	610	7.7	6.7	850	<0.01	0.86	36	<0.02	0.9	37	150	<0.005		4.2
	23/01/2024	3.7	460	55	4.1	880	<0.01	0.16	31	<0.02	1.6	37	100	<0.005		3.2
	26/02/2024	4.3	200	93	7.5	250	0.09	0.09	53	0.02	1.5	11	440	7.2		8.3
	26/03/2024	6.1	170	54	7.7	300	0.08	0.13	21	<0.02	1.0	20	78	<5		3.7
	18/04/2024	7.5	360	9.2	7.4	650	0.03	0.08	88	<0.02	0.8	78	64	<5	<10	0.6
	20/05/2024	4.5	300	21	5.6	450	<0.01	0.50	19	<0.02	1.2	23	190	<5	66	10.0
	25/06/2024	6.3	80	2300	7.2	140	0.98	<0.1	9.4	<0.2	140	9	5	<5	48	0.5
	10/07/2024	4.4	260	29	5.1	400	0.01	0.64	19	<0.02	0.7	21	10	<5	50	0.5
	6/08/2024	4.6	340	22	6.3	630	0.02	0.62	35	<0.02	1.3	29	230	<5	70	6.6
	15/08/2024	6.3	82	19	8.3	120	0.04	0.07	9.5	<0.02	<0.2	9	31	<5	11	3.3
	11/09/2024	7.1	290	<5	7.7	440	<0.01	0.11	84	<0.02	0.3	66	56	<5	<10	0.7
	9/10/2024	6.6	240	330	7.7	360	0.46	<0.01	56	<0.02	7.1	45	35	33	<10	0.6
	6/11/2024	7.2	300	49	7.5	460	0.07	<0.01	88	<0.02	1.2	72	39	<5	<10	0.4
	16/12/2024	7.2	250	5.3	19.0	370	<0.01	<0.01	70	<0.02	0.7	61	31	50	<10	0.4
	14/01/2025	6.9	220	<5	7.7	420	0.04	<0.01	66	<0.02	1.3	57	11	<5	<10	0.2
	11/02/2025	7.4	340	<5	7.5	570	0.07	0.02	99	<0.02	1.4	87	14	<5	<10	0.1
	24/03/2024	6.9	130	<5	8.1	230	0.05	<0.01	38	<0.02	0.9	32	66	<5	<10	1.7
	31/03/2025	7.0	260	9.3	9.8	440	0.06	0.19	100	<0.02	0.9	70	26	<5	<10	0.3
	8/04/2025	7.2	290	<5	8.9	470	0.04	0.07	100	<0.02	0.4	82	36	<5	<10	0.4
	9/05/2025	7.1	290	<5	-	460	<0.01	<0.1	100	<0.02	0.7	73	36	<5	<10	0.4
	25/06/2025	6.7	360	230	6.5	540	2.3	0.01	88	<0.03	2.3	68	36	46	14	0.4
	8/07/2025	6.8	300	82	9.1	570	0.15	0.48	89	<0.02	1.1	67	39	27	<10	0.4
	14/08/2025	7.2	300	16	9.1	580	0.08	0.05	110	<0.02	1.0	81	32	<5	<10	0.3
SW03 Baseline		**6.1 - 6.7**	**191**	**1005**	**-**	**281**	**2.14**	**0.155**	**111**	**0.041**	**4.3**	**30**	**6**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW03	29/09/2022	0.4	0.00	<0.0002	13	0.00	0.00	0.8	<0.001	4.4	<0.0001	0.002	1.00	0.034	<1
	20/10/2022	0.5	0.00	<0.0002	8	0.00	0.00	0.9	0.00	2.3	<0.0001	0.001	1.00	0.03	<1
	14/11/2022	1.1	<0.001	<0.002	18	<0.001	0.00	1.9	<0.010	5.7	<0.001	<0.01	<5	0.24	<1
	14/12/2022	0.6	<0.001	<0.002	13	<0.01	<0.010	1.3	<0.010	<5	<0.001	<0.01	<5	0.53	<1
	18/01/2023	0.5	0.01	<0.002	<2	<0.010	<0.01	0.5	<0.01	6.2	<0.001	<0.01	<5	<0.05	<1
	20/02/2023	17	0.00	<0.0002	63	0.00	0.02	0.0	0.00	14.0	<0.001	0.065	3.00	0.12	<1
	28/03/2023	15	<0.001	<0.0002	63	0.00	0.00	4.5	<0.001	11.0	<0.0001	0.065	2.30	0.15	<1
	18/04/2023	3.8	<0.001	<0.0002	30	0.00	0.00	<0.001	<0.001	5.0	<0.0001	0.023	2.10	0.048	<1
	18/05/2023	5.8	<0.001	<0.0002	48	<0.001	0.00	14.0	<0.001	10.0	<0.0001	0.033	2.80	0.16	<1
	15/06/2023	11	<0.001	<0.0002	74	<0.001	0.00	12.0	<0.001	15.0	<0.0001	0.058	2.70	0.15	<1
	24/07/2023	7.1	<0.001	<0.0002	39	<0.001	0.002	8.9	0.001	9.7	<0.0001	0.030	2.5	0.10	<1
	21/08/2023	0.7	0.001	<0.0002	18	0.001	0.003	1.1	<0.001	6.3	<0.0001	0.002	6.8	0.026	<1
	18/09/2023	2.8	<0.001	<0.0002	59	<0.001	<0.001	1.1	<0.001	14.0	<0.0001	0.022	3.2	0.049	<1
	18/10/2023	3.0	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12.0	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	11.0	0.002	<0.0002	75	<0.001	<0.001	17	<0.001	17.0	<0.0001	0.060	3.0	0.14	<1
	19/12/2023	21.0	0.003	0.0011	80	<0.001	0.002	3.6	0.001	19.0	0.0007	0.071	4.3	0.16	<1
	23/01/2024	17.0	0.002	<0.0002	63	0.002	0.001	17	<0.001	19.0	<0.0001	0.059	5.1	0.13	<1
	26/02/2024	8.8	0.003	<0.0002	17	0.003	0.005	9.0	0.002	4.8	<0.0001	0.016	1.8	0.050	<1
	26/03/2024	0.9	<0.001	<0.0002	24	<0.001	<0.001	1.8	<0.001	6.1	<0.0001	0.009	2.8	0.025	<1
	18/04/2024	1.1	<0.001	<0.0002	22	<0.001	<0.001	1.8	<0.001	6.0	<0.0001	0.005	13	0.018	<1
	20/05/2024	5.4	0.002	<0.0002	34	<0.001	<0.001	13	<0.001	7.3	<0.0001	0.026	3.6	0.047	<1
	25/06/2024	0.2	<0.001	<0.0002	10	<0.001	<0.001	170	<0.001	2.7	<0.0001	0.011	2.3	0.042	<1
	10/07/2024	3.6	0.001	<0.0002	34	<0.001	0.001	6.6	<0.001	6.6	<0.0001	0.019	3.0	0.053	<1
	6/08/2024	3.10	<0.001	<0.0002	51	<0.001	<0.001	4.8	<0.001	7.8	<0.0001	0.026	3.4	0.092	<1
	15/08/2024	1.20	0.00	<0.0002	12	<0.001	0.003	2.1	<0.001	2.2	<0.0001	0.004	1.6	0.037	<1
	11/09/2024	0.59	<0.001	<0.0002	21	<0.001	0.001	1.0	<0.001	4.9	<0.0001	0.003	13	0.021	<1
	9/10/2024	20	0.02	<0.0002	21	0.011	0.01	39.0	0.008	4.4	<0.0001	0.008	8.8	0.10	<1
	6/11/2024	3	0.00	<0.0002	23	0.002	0.002	4.5	<0.001	6.2	<0.0001	0.003	15	0.017	<1
	16/12/2024	0.29	0.001	<0.0002	19	0.001	<0.001	1.6	<0.001	4.0	<0.0001	0.001	12	0.009	<1
	14/01/2025	0.17	0.001	<0.0002	17	<0.001	0.001	0.74	<0.001	3.3	<0.0001	0.001	12	0.016	<1
	11/02/2025	0.45	0.001	<0.0002	23	<0.001	<0.001	2.1	<0.001	4.5	<0.0001	0.001	18	0.031	<1
	24/03/2024	0.18	0.001	<0.0002	10	<0.001	0.002	0.8	<0.001	2.6	<0.0001	0.001	6.6	0.036	<1
	31/03/2025	0.42	0.002	<0.0002	21	<0.001	0.001	3.5	<0.001	4.9	<0.0001	0.002	11	0.045	<1
	8/04/2025	0.30	<0.001	<0.0002	21	<0.001	<0.001	1.3	<0.001	5.4	<0.0001	0.002	11	0.012	<1
	9/05/2025	0.62	0.002	<0.0002	20	<0.001	0.001	2.0	<0.001	4.9	<0.0001	0.005	11	0.042	<1
	25/06/2025	2.0	0.002	<0.0002	21	<0.001	0.003	6.1	0.001	5.2	<0.0001	0.002	12	0.053	<1
	8/07/2025	0.24	<0.001	<0.0002	19	<0.001	<0.001	0.49	<0.001	5.0	<0.0001	0.001	11	0.015	<1
	14/08/2025	0.20	<0.001	<0.0002	20	<0.001	<0.001	0.59	<0.001	5.8	<0.0001	0.001	11	0.010	**<1**
SW03 Baseline		**7.9**	**0.058**	**0.001**	**21**	**0.008**	**0.028**	**85.5**	**0.028**	**5**	**0.0005**	**0.006**	**4**	**0.26**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW03	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	<50	<100	<20	<50	<100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	130	130	<100	<100	<20	<50	10	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	**<50**	**<50**	**<100**	**<100**	**<20**	**<50**	**<100**	**<100**	**<100**	**<100**
SW03 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**120**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW04	29/09/2022	4.5	68	<5	4.8	52	0.01	0.18	20	<0.02	5.1	17	<2	<5		0.05
	20/10/2022	4.2	90	<5	7.5	110	0.01	<0.10	20	<0.02	0.3	16	<2	<5		0.05
	14/11/2022	No surface water located at monitoring site – no sample collected														
	14/12/2022	3.2	190	<5	2	280	0.01	0.05	42	<0.10	3.2	20	<2	<5		0.02
	18/01/2023	No surface water located at monitoring site – no sample collected														
	20/02/2023	4.1	0.2	<5	5.9	160	0.02	0.09	22	<0.10	7.4	23	15	<5		0.7
	28/03/2023	4.2	68	<5	8	130	<0.01	<0.01	17	<0.10	<0.25	14	25	<5		1.5
	18/04/2023	4.6	130	16	9.1	190	0.01	0.03	32	<0.02	0.5	21	8.7	<5		0.3
	18/05/2023	3.6	1200	42	8	1800	0.03	1.2	26	<0.02	1.15	53	1000	<5		38.5
	15/06/2023	4.2	140	160	7.7	200	1.5	0.44	44	<0.02	12	24	<2	8		0.02
	24/07/2023	3.6	1,600	21	9.0	2,400	0.02	1.5	180	<0.02	3.4	78	5,700	<0.005		31.7
	21/08/2023	3.3	2,400	5.7	7.5	3,700	<0.01	2.8	33	<0.02	3.4	97	850	0.0053		25.8
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	0.0099		4.5
	20/11/2023	3.2	2,100	<5	9.0	3,500	0.03	0.80	4.7	<0.01	1.1	63	400	<0.005		85.1
	19/12/2023	3.0	3,200	15	0.8	3,700	<0.01	0.44	34	<0.02	4.5	100	980	<0.005		28.8
	23/01/2024	3.1	1,600	23	7.8	2,500	<0.01	0.19	27	<0.02	0.5	54	730	<0.005		27.0
	26/02/2024	3.1	1000	11	7.8	1200	0.03	0.31	14	<0.02	1.5	30	570	<5		40.7
	26/03/2024	3.2	900	5.7	9.6	1300	<0.01	0.36	21	<0.02	0.9	30	710	<5		33.8
	18/04/2024	3.1	980	67	7.5	1900	0.03	0.42	15	<0.02	0.8	33	1000	27	310	66.7
	20/05/2024	3.3	630	8	8.3	1100	<0.01	0.30	11	<0.02	0.7	25	500	<5	190	45.5
	25/06/2024	3.2	1000	5.4	8.6	1600	0.01	0.4	13	<0.02	1.0	27	270	<5	160	20.8
	10/07/2024	3.5	420	<5	7.9	870	<0.01	0.24	11	<0.02	0.6	21	450	<5	150	40.9
	6/08/2024	3.3	1300	38	8.7	1700	0.04	0.03	13	<0.02	1.1	28	860	7.8	230	66.2
	15/08/2024	3.9	240	<5	9.3	390	0.02	0.13	13	<0.02	0.8	16	150	<5	40	11.5
	11/09/2024	3.4	460	<5	6.9	690	0.01	0.05	8.7	<0.02	<0.2	17	390	15	77	44.8
	24/09/2024 - Additional	3.5	750	-	-	1300	-	-	-	-	-	-	-	-	-	-
	9/10/2024	3.1	810	<5	9.0	1200	0.02	<0.01	10	<0.02	0.8	26	580	<5	<10	58.0
	6/11/2024	3.3	440	23	6.4	660	0.05	<0.01	10	<0.02	1.0	18	310	<5	15	31.0
	16/12/2024	5.7	210	420	0.2	360	0.10	0.25	13	<0.02	13	12	110	7	25	8.5
	14/01/2025	4.1	310	120	4.9	460	0.13	0.03	6.3	<0.02	1.3	11	64	<5	<10	10.2
	11/02/2025	7.6	700	<5	8.8	1000	0.01	0.03	5.8	<0.02	1.3	21	150	7.7	<10	25.9
	24/03/2025	3.9	390	21	7.4	470	0.03	0.03	18	<0.02	1.5	24	180	8.1	<10	10.0
	31/03/2025	6.3	260	70	10	370	<0.01	0.10	11	<0.02	0.8	16	160	<5	<10	14.5
	8/04/2025	6.0	430	43	4.1	470	0.09	0.27	11	0.04	2.3	18	240	<10	16	21.8
	9/05/2025	6.5	270	260	-	570	<0.01	0.02	10	<0.02	4.5	16	250	160	<10	25.0
	25/06/2025	6.7	410	67	6.1	590	0.6	0.01	8.3	<0.02	0.6	16	160	6.5	28	19.2
	8/07/2025	4.0	140	180	6.1	160	0.21	<0.01	21	<0.02	6.2	17	<2	7.6	43	21.0
	14/08/2025	6.5	180	250	6.6	290	0.47	-	9.4	-	-	14	86	<5	13	9.4
SW04 Baseline		**4.2 – 4.5**	**112**	**293**	**-**	**165**	**0.5**	**0.693**	**90**	**0.052**	**4.5**	**20**	**3**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW04	29/09/2022	1.3	0.001	<0.0002	1.6	0.005	0.001	2.7	0.001	2.6	<0.0001	0.002	1	0.027	<1
	20/10/2022	1.1	<0.001	<0.0002	1.3	0.004	0.001	2.4	0.001	2.3	<0.0001	0.002	1	0.024	<1
	14/11/2022	No surface water located at monitoring site – no sample collected													
	14/12/2022	1.2	<0.001	<0.002	<5	<0.001	<0.01	3.2	<0.01	<5	<0.001	<0.01	<5	0.084	<1
	18/01/2023	No surface water located at monitoring site – no sample collected													
	20/02/2023	1.6	0.002	<0.0002	2.7	0.005	0.05	0.002	0.002	3.9	<0.001	0.003	1.6	0.039	<1
	28/03/2023	1.1	<0.01	<0.002	<5	0.002	<0.01	2.7	<0.01	<5	<0.0001	0.01	<5	<0.05	<1
	18/04/2023	0.85	<0.001	<0.0002	1.8	<0.01	<0.001	<0.001	<0.001	2.7	<0.0001	0.001	0.8	0.034	<1
	18/05/2023	41	<0.001	0.0005	200	<0.001	0.003	16	0.003	31	<0.0001	0.11	5.7	0.4	<1
	15/06/2023	3.1	0.002	<0.0002	2.2	0.007	0.007	6.3	0.005	4.5	<0.0001	0.003	1.4	0.075	1.41
	24/07/2023	50	<0.001	0.0002	330	<0.001	0.003	3.9	0.002	51	<0.0001	0.13	9.0	0.18	<1
	21/08/2023	72	0.002	0.0004	560	<0.001	0.003	3.4	0.002	83	<0.0001	0.23	13	0.34	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	3.0	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	91	0.003	0.0007	380	0.001	0.003	4.3	0.003	52	<0.0001	0.27	7.2	0.55	<1
	19/12/2023	110	0.005	0.0022	570	0.002	0.005	11	0.007	90	0.0010	0.39	4.3	0.70	<1
	23/01/2024	55	0.002	0.0003	260	0.002	0.003	9.7	0.002	35	<0.0001	0.19	6.1	0.33	<1
	26/02/2024	23	<0.001	<0.0002	140	<0.001	<0.001	5.1	<0.001	20	<0.0001	0.083	3.9	0.18	<1
	26/03/2024	20	<0.001	<0.0002	130	<0.001	<0.001	3.1	<0.001	19	<0.0001	0.068	4.9	0.10	<1
	18/04/2024	32	<0.001	<0.0002	190	0.001	0.002	7.0	<0.001	26	<0.0001	0.10	3.6	0.18	<1
	20/05/2024	20	<0..001	<0.0002	100	<0.001	<0.001	5.7	<0.001	14	<0.0001	0.064	2.6	0.13	<1
	25/06/2024	16	<0.001	<0.0002	210	<0.001	<0.001	5.3	<0.001	23	<0.0001	0.059	3.7	0.090	<1
	10/07/2024	12	<0.001	<0.0002	110	<0.001	0.001	2.5	<0.001	12	<0.0001	0.051	2.2	0.11	<1
	6/08/2024	17	<0.001	<0.0002	200	<0.001	0.001	5.5	<0.001	24	<0.0001	0.059	2.5	0.1	<1
	15/08/2024	2.0	<0.001	<0.0002	36	<0.001	<0.001	0.81	<0.001	6.0	<0.0001	0.015	2.5	0.057	<1
	11/09/2024	5.6	<0.001	<0.0002	87	<0.001	<0.001	3.6	<0.001	11	<0.0001	0.026	1.6	0.061	<1
	24/09/2024 - Additional	-	<0.001	<0.0001	-	<0.001	0.0001	-	<0.001	-	<0.0001	0.032	-	0.043	-
	9/10/2024	14	<0.001	<0.0002	140	<0.001	0.002	8.1	<0.001	17	<0.0001	0.057	2.7	0.12	<1
	6/11/2024	2.8	<0.001	<0.0002	81	<0.001	<0.001	6.1	<0.001	11	<0.0001	0.020	<0.5	0.034	<1
	16/12/2024	4.4	0.007	<0.0002	29	0.009	0.006	170	0.003	4.5	<0.0001	0.009	1.3	0.035	<1
	14/01/2025	1.2	<0.001	<0.0002	53	<0.001	0.001	5.8	<0.001	5.8	<0.0001	0.014	0.8	0.039	<1
	11/02/2025	<0.05	<0.001	<0.0002	200	<0.001	<0.001	0.14	<0.001	18	<0.0001	0.004	<0.5	0.033	<1
	24/03/2025	1.1	<0.001	<0.0002	52	<0.001	0.002	6.6	<0.001	8.5	<0.0001	0.012	2.3	0.10	<1
	31/03/2025	0.50	0.003	<0.0002	50	<0.001	0.001	17	<0.001	7.6	<0.0001	0.007	2.4	0.047	<1
	8/04/2025	0.36	0.004	<0.0002	70	<0.001	<0.001	38	<0.001	9.8	<0.0001	0.006	2.3	0.014	<1
	9/05/2025	0.64	<0.001	<0.0002	61	<0.001	0.001	34	<0.001	7.9	<0.0001	0.001	1.9	0.032	<1
	25/06/2025	0.35	<0.001	<0.0002	85	<0.001	<0.001	7.3	<0.001	8.5	<0.0001	0.004	1.3	0.013	<1
	8/07/2025	0.92	<0.001	<0.0002	0.6	0.004	0.002	1.8	<0.001	1.5	<0.0001	0.001	0.8	0.042	<1
	14/08/2025	0.34	<0.001	<0.0002	38	<0.001	<0.001	17	<0.001	5.7	<0.0001	0.002	1.0	0.018	<1
SW04 Baseline		**1.4**	**0.002**	**0.001**	**3.2**	**0.007**	**0.002**	**2.8**	**0.002**	**2.3**	**0.0005**	**0.005**	**2.9**	**0.028**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW04	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	No flow - No sample collected									
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	No flow - No sample collected									
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No flow - No sample collected									
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	160	160	<100	<100	<20	<50	<100	<100	160	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Additional	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW04 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW05	29/09/2022	5.9	480	5.2	7.7	510	0.12	0.17	220	<0.20	3	140	11	<5		0.05
	20/10/2022	6.2	650	7.2	8.9	690	0.06	0.24	180	<0.20	0.5	160	8.6	<5		0.05
	14/11/2022	6.2	820	13	4.7	1000	0.06	<0.05	310	<0.10	8.1	260	100	<5		0.32
	14/12/2022	6.2	830	16	7.5	1100	0.05	0.05	330	<0.10	3.1	240	40	<5		0.12
	18/01/2023	6.3	2800	33	7	<5	0.09	0.09	1300	<0.02	3.38	820	160	<5		0.12
	20/02/2023	6.7	18	18	5.4	2300	0.1	0.07	2000	<0.10	3.4	4700	890	<5		0.45
	28/03/2023	5.6	470	<5	9.4	760	0.02	0.08	200	<0.10	<0.02	110	23	6.7		0.12
	18/04/2023	6.4	4000	16	8.5	5300	0.1	0.12	2000	<0.02	80	1100	230	<5		0.12
	18/05/2023	5.8	260	17	5.7	460	0.08	<0.01	110	<0.02	<0.2	64	25	<5		0.23
	15/06/2023	6.2	1100	<5	8.8	1400	0.58	0.14	450	<0.02	1.1	250	40	<5		0.09
	24/07/2023	6.5	1,600	<5	9.3	2,800	0.05	0.17	1,500	<0.5	1.1	440	1,200	<0.005		0.80
	21/08/2023	6.6	1,600	<5	6.3	2,900	0.06	0.15	1,500	<0.02	1.28	480	190	<0.005		0.13
	18/09/2023	6.6	2,500	13	6.4	3,800	0.06	0.11	1,200	<0.02	1.3	650	210	<0.005		0.18
	18/10/2023	6.9	4,800	6.6	6.5	7,700	0.06	0.05	2,700	<0.02	<0.2	1,300	730	0.01		0.27
	20/11/2023	6.8	2,100	12	4.8	3,700	0.18	0.46	1,100	<0.01	0.6	460	1,200	<0.005		1.09
	19/12/2023	6.7	3,300	14	5.3	5,400	0.19	0.77	1,700	<0.02	<2	1,000	64	<0.005		0.04
	23/01/2024	6.2	1,100	13	9.3	1,000	0.09	0.05	440	<0.02	2.3	260	220	<0.005		0.50
	26/02/2024	6.3	970	16	8.6	1200	0.11	0.03	330	<0.02	1.5	200	130	<5		0.39
	26/03/2024	6.6	1100	9.1	5.6	1700	0.03	0.09	910	<0.02	2.0	290	420	<5		0.46
	18/04/2024	6.5	560	8.4	5.8	830	0.07	0.16	160	<0.02	1.7	110	160	5.4	<10	1.00
	20/05/2024	6.7	240	<5	5.8	350	<0.01	0.03	68	<0.02	0.4	47	140	<5	15	2.06
	25/06/2024	6.5	1000	16	7.7	1800	0.06	0.1	500	<0.02	1.2	300	29	<5	16	0.06
	10/07/2024	6.2	950	5.6	6.3	1700	0.02	0.16	170	<0.02	0.9	280	130	<5	11	0.76
	6/08/2024	6.3	3300	9.0	8.9	5800	0.05	0.11	1500	<0.02	1.2	820	210	<5	27	0.14
	15/08/2024	6.2	300	<5	7.1	430	0.08	0.03	30	<0.02	<0.2	80	27	<5	12	0.90
	11/09/2024	6.4	710	8.2	5.5	1200	0.03	0.40	450	<0.02	1.1	230	72	<5	12	0.16
	9/10/2024	6.4	700	11	9.0	1100	0.15	0.15	320	<0.1	<0.25	180	53	<5	14	0.17
	6/11/2024	7.1	930	15	6.1	1300	0.08	0.16	440	<0.02	1.0	250	56	<5	<10	0.13
	16/12/2024	7.4	31000	26	9.3	44000	0.02	0.14	1400	<0.02	0.4	<0.5	2000	<5	<10	1.43
	14/01/2025	7.1	19000	9.4	6.2	30000	0.04	0.04	12000	<0.02	0.3	5500	500	<5	<10	0.04
	11/02/2025	7.5	24000	9.1	8.5	35000	0.03	0.06	6300	<0.02	<0.2	6900	260	<5	<10	0.04
	24/03/2024	6.3	1600	<5	7	2500	<0.1	0.12	790	<0.02	4.4	440	140	<5	<10	0.18
	31/03/2025	7.0	210	8	9.2	260	0.08	<10	72	<0.02	2.3	41	9.5	<5	<10	0.13
	8/04/2025	6.3	610	8.3	6.7	760	0.08	0.44	230	<0.2	<1	140	29	<10	<10	0.13
	9/05/2025	6.8	340	<5	-	480	0.08	<0.1	120	<0.2	1.7	71	40	<5	<10	0.33
	25/06/2025	6.2	2,000	6.6	5.9	3,500	<0.2	0.07	1,700	<0.2	<0.2	510	250	<5	17	0.14
	8/07/2025	6	470	<5	8	910	0.05	0.03	230	0.07	<0.2	130	41	<5	13	0.18
	14/08/2025	6.2	570	16	6.1	930	0.08	0.03	550	<0.02	16	140	62	6.5	13	0.11
SW05 Baseline		**5.1 – 7.2**	**4710**	**136**	**-**	**6927**	**0.21**	**0.592**	**980**	**<0.02**	**2.2**	**1667**	**115**	**63**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW05	29/09/2022	0.83	<0.001	<0.0002	9.4	0.002	<0.001	4.6	<0.001	17	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.66	<0.001	<0.0002	11	0.001	<0.001	3.5	0.001	19	<0.0001	0.002	7.9	0.007	<1
	14/11/2022	0.75	<0.001	<0.002	18	<0.001	0.002	5.4	<0.01	27	<0.001	<0.001	11	0.12	<1
	14/12/2022	0.93	<0.001	<0.002	16	<0.01	<0.01	6.1	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.73	<0.01	<0.002	<2	<0.01	<0.01	6.2	<0.01	96	<0.001	<0.01	41	<0.05	<1
	20/02/2023	0.22	0.002	<0.0002	190	0.001	0.01	<0.001	<0.001	550	<0.001	0.001	170	0.008	<1
	28/03/2023	0.77	<0.01	<0.002	9.4	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.4	<0.05	<1
	18/04/2023	1	<0.001	<0.0002	42	0.001	<0.001	<0.001	<0.001	110	<0.0001	0.003	37	0.008	<1
	18/05/2023	0.6	<0.001	<0.0002	5.2	<0.001	<0.001	2.4	<0.001	9.1	<0.0001	0.002	4.9	0.009	<1
	15/06/2023	0.32	<0.001	<0.0002	14	0.001	2	2	<0.001	27	<0.0001	0.001	14	0.01	<1
	24/07/2023	0.33	<0.001	<0.0002	22	<0.001	<0.001	1.9	<0.001	52	<0.0001	0.002	25	0.006	<1
	21/08/2023	0.41	<0.001	<0.0002	23	<0.001	0.002	2.2	<0.001	54	<0.0001	0.002	29	0.005	<1
	18/09/2023	0.28	<0.001	<0.0002	29	<0.001	<0.001	2.6	<0.001	70	<0.0001	0.001	42	<0.005	<1
	18/10/2023	0.27	<0.001	<0.0002	61	<0.001	<0.001	2.0	<0.001	160	<0.0001	<0.001	76	<0.005	<1
	20/11/2023	0.51	0.001	<0.0002	25	0.001	<0.001	4.3	<0.001	56	<0.0001	0.002	27	<0.005	<1
	19/12/2023	0.54	0.005	0.0028	46	0.001	0.001	4.2	0.001	120	0.0020	0.002	47	0.009	<1
	23/01/2024	0.90	0.003	<0.0002	16	0.002	0.001	7.8	<0.001	32	<0.0001	0.001	16	0.012	<1
	26/02/2024	0.63	0.001	<0.0002	13	0.001	<0.001	3.7	<0.001	23	<0.0001	0.002	10	0.029	<1
	26/03/2024	0.64	<0.001	<0.0002	16	0.001	<0.001	3.3	<0.001	33	<0.0001	0.002	14	0.008	<1
	18/04/2024	0.69	<0.001	<0.0002	8.3	0.002	0.001	<0.001	<0.001	14	<0.0001	0.008	6.7	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.6	<0.001	0.001	2.5	<0.001	5.1	<0.0001	0.002	3.5	0.008	<1
	25/06/2024	0.2	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	31	<0.0001	0.002	12	0.012	<1
	10/07/2024	0.48	<0.001	<0.0002	17	<0.001	<0.001	2.9	<0.001	31	<0.0001	0.002	11	0.008	<1
	6/08/2024	0.28	<0.001	<0.0002	37	<0.001	<0.001	<0.001	<0.001	100	<0.0001	0.001	30	0.007	<1
	15/08/2024	0.5	<0.001	<0.0002	5.0	0.001	<0.001	1.6	<0.001	8.0	<0.0001	0.001	4.6	0.010	<1
	11/09/2024	0.52	<0.001	<0.0002	14	<0.001	<0.001	2.9	<0.001	25	<0.0001	0.002	10	0.011	<1
	9/10/2024	0.85	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.5	0.016	<1
	6/11/2024	0.68	<0.001	<0.0002	17	0.002	<0.001	3.8	<0.001	29	<0.0001	0.002	12	0.008	<1
	16/12/2024	<0.05	<0.001	<0.0002	<0.5	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.24	0.002	<0.0002	230	0.002	<0.001	0.64	<0.001	660	<0.0001	<0.001	210	0.006	<1
	11/02/2025	0.12	0.002	<0.0002	290	0.001	<0.001	0.5	<0.001	820	<0.0001	<0.001	260	0.047	<1
	24/03/2024	0.54	<0.001	<0.0002	22	<0.001	0.001	3.2	<0.001	53	<0.0001	0.002	17	0.32	<1
	31/03/2025	0.58	<0.001	<0.0002	4.2	<0.001	<0.001	3.7	<0.001	5.2	<0.0001	0.002	3.5	0.062	<1
	8/04/2025	0.77	<0.001	<0.0002	9.9	0.001	<0.001	4.2	<0.001	18	<0.0001	0.002	6.0	0.011	<1
	9/05/2025	0.75	<0.001	<0.0002	6.3	0.001	<0.001	3.2	<0.001	8.5	<0.0001	0.002	3.7	0.015	<1
	25/06/2025	0.46	<0.001	<0.0002	26	<0.001	<0.001	2.0	<0.001	63	<0.0001	0.001	19	0.010	<1
	8/07/2025	0.68	<0.001	<0.0002	9.1	0.001	<0.001	3.0	<0.001	16	<0.0001	0.002	4.9	0.008	<1
	14/08/2025	0.46	<0.001	<0.0002	8.6	<0.001	<0.001	2.6	<0.001	17	<0.0001	0.001	6.2	0.008	13
SW05 Baseline		**2.1**	**0.002**	**0.001**	**57**	**0.002**	**0.003**	**12.3**	0.001	**130**	**0.0005**	**0.011**	**58**	**0.026**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW05	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	70	70	-	-	<20	60	100	-	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	120	120	<100	120	<20	<50	120	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW05 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW06	29/09/2022	6.0	480	<5	7.8	580	0.13	0.16	220	<0.02	8.6	140	11	5.1		0.05
	20/10/2022	6.3	580	16	8.7	730	0.05	0.19	330	<0.02	0.5	110	7.5	6.2		0.02
	14/11/2022	6.2	840	13	<5	1000	0.04	0.36	310	<0.10	1.1	270	100	<5		0.32
	14/12/2022	6.3	840	16	8.3	1200	0.1	0.05	340	<0.10	5.8	240	44	<5		0.13
	18/01/2023	6.4	3700	31.47	6.8	5400	0.07	0.04	1800	<0.02	2.5	1000	200	<5		0.11
	20/02/2023	6.8	19	89	5.1	14000	0.09	0.11	22	<0.10	4.1	4000	1200	<5		54.55
	28/03/2023	5.6	400	6.2	8.3	730	0.03	0.07	180	<0.20	<0.20	110	18	9.7		0.10
	18/04/2023	6.7	6400	18	7.4	6700	0.07	1.2	3200	<0.02	1.26	1700	360	<10		0.11
	18/05/2023	5.9	280	17	6.3	470	0.08	0.06	120	<0.02	0.4	370	21	<5		0.18
	15/06/2023	6.4	1100	<5	7.4	1400	0.55	0.18	440	<0.02	0.7	250	38	<5		0.09
	24/07/2023	6.7	2,100	5.8	6.6	3,500	0.07	0.23	1,800	<0.2	0.6	540	620	<0.005		0.34
	21/08/2023	6.6	2,800	<5	6.1	5,400	0.19	0.16	1,300	<0.02	0.78	870	59	<0.005		0.05
	18/09/2023	6.7	2,900	24	6.5	4,600	0.06	0.12	1,500	<0.02	0.4	1,300	200	<0.005		0.13
	18/10/2023	6.9	7,900	6.3	6.4	9,700	0.05	0.05	3,700	<0.02	<0.2	1,600	430	<0.005		0.12
	20/11/2023	6.6	2,200	9.9	4.6	4,000	0.18	0.43	1,200	<0.01	1.2	490	720	<0.005		0.60
	19/12/2023	6.8	3,300	9.3	5.6	6,600	0.09	0.82	2,300	<0.02	<2	1,300	94	<0.005		0.04
	23/01/2024	6.2	4,300	15	2.1	4,300	0.18	0.08	2,800	<0.02	1.4	1,100	330	<0.005		0.12
	26/02/2024	6.4	880	17	9.0	1200	0.11	0.02	60	<0.02	1.7	200	10	<5		0.17
	26/03/2024	6.8	1300	9.9	5.9	1900	0.05	0.07	760	0.05	1.2	300	120	<5		0.16
	18/04/2024	6.6	520	5.8	6.0	840	0.06	0.16	170	<0.02	<1	110	31	<5	17	0.18
	20/05/2024	6.3	240	<5	6.1	290	<0.01	0.05	59	<0.02	1.0	42	47	<5	15	0.80
	25/06/2024	6.7	960	17	9.2	1900	0.06	0.09	500	<0.02	5.3	270	21	<5	19	0.04
	10/07/2024	6.2	880	<5	6.2	1600	0.03	0.13	170	<0.02	1.4	250	33	<5	15	0.19
	6/08/2024	6.3	4500	6.8	7.6	8400	0.08	0.15	2100	<0.02	1.6	1200	270	<5	24	0.13
	15/08/2024	6.2	160	<5	7.0	240	0.10	0.03	57	<0.02	<0.2	38	15	<5	14	0.26
	11/09/2024	6.7	710	7.0	6.6	1000	0.04	0.28	370	<0.02	1.8	180	54	<5	11	0.15
	9/10/2024	6.5	720	14	8.5	1000	0.15	<0.01	310	<0.1	4.3	180	33	18	<10	0.11
	6/11/2024	6.9	1900	37	5.6	2400	0.10	0.11	890	<0.02	1.6	490	160	<5	<10	0.18
	16/12/2024	7.7	33000	13	9.5	47000	0.01	0.18	16000	<0.02	<0.2	<0.5	2,100	<5	<10	0.13
	14/01/2025	7.2	25000	11	6.3	38000	0.03	0.06	15000	<0.02	0.7	7200	600	<5	<10	0.04
	11/02/2025	7.6	24000	11	7.2	34000	0.003	0.06	6100	<0.02	<0.2	7200	240	5.9	<10	0.04
	24/03/2025	6.5	1700	<5	6.8	2500	<0.1	0.12	820	<0.02	4.2	450	110	<5	<10	0.13
	31/03/2025	6.7	250	11	9.5	250	0.08	<10	68	<0.02	<1	42	9.7	<5	<10	0.14
	8/04/2025	6.4	610	7.6	9.4	740	0.08	0.28	260	<0.2	<1	140	31	<10	<10	0.12
	9/05/2025	6.6	260	<5	-	490	0.07	<0.1	120	<0.2	<1	70	28	<5	<10	0.23
	25/06/2025	6.2	2,000	7.4	5.9	3,600	1.4	0.08	1,700	<0.2	1.4	520	260	<5	20	1.50
	8/07/2025	6	470	<5	8.2	910	0.05	0.02	230	<0.02	<0.2	130	28	<5	13	0.12
	14/08/2025	6.3	590	31	6.1	910	0.07	0.03	340	<0.02	0.3	140	37	<5	13	0.11
ANZG (2018): 95% Slightly Disturbed		**6.5 – 8.0**	**-**	**<50**	**-**	**<2200**	**<0.05**	**-**	**-**	**-**	**<0.50**	**-**	**-**	**5**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW06	29/09/2022	0.78	<0.001	<0.0002	9.4	0.002	<0.001	4.5	<0.001	18	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.54	<0.001	<0.0002	9.1	0.001	<0.001	2.7	0.001	13	<0.0001	0.002	5.8	0.012	<1
	14/11/2022	0.68	<0.001	<0.002	18	<0.001	0.012	5.3	<0.01	29	<0.001	<0.01	12	0.11	<1
	14/12/2022	0.75	<0.001	<0.002	16	<0.01	<0.01	5.4	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.63	<0.010	<0.001	<2	<0.01	<0.01	0.01	<0.01	120	<0.001	<0.01	47	<0.05	<1
	20/02/2023	0.34	0.002	<0.0002	170	0.001	0.01	<0.001	<0.001	480	<0.001	0.002	160	0.008	<1
	28/03/2023	1.1	<0.01	<0.002	11	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.3	<0.05	<1
	18/04/2023	0.54	<0.001	<0.0002	68	0.001	<0.001	<0.001	<0.001	200	<0.0001	0.002	63	0.009	<1
	18/05/2023	0.44	0.003	<0.0002	14	<0.001	<0.001	0.13	<0.001	4.8	<0.0001	0.008	3.3	<0.005	<1
	15/06/2023	0.36	<0.001	<0.0002	15	<0.001	2.1	2.1	<0.001	28	28	0.001	14	<0.005	<1
	24/07/2023	0.36	<0.001	<0.0002	26	<0.001	<0.001	1.9	0.001	65	<0.0001	0.002	29	0.007	<1
	21/08/2023	0.41	<0.001	<0.0002	39	0.001	<0.001	1.9	<0.001	100	<0.0001	0.002	46	<0.005	<1
	18/09/2023	0.30	<0.001	<0.0002	56	<0.001	<0.001	2.4	<0.001	150	<0.0001	0.001	64	<0.005	<1
	18/10/2023	0.20	<0.001	<0.0002	73	<0.001	<0.001	1.7	<0.001	190	<0.0001	<0.001	85	<0.005	<1
	20/11/2023	0.63	0.001	<0.0002	27	0.001	<0.001	4.5	<0.001	60	<0.0001	0.003	28	0.010	<1
	19/12/2023	0.62	0.002	0.0007	56	0.001	0.002	3.4	<0.001	150	0.0005	0.002	55	0.008	<1
	23/01/2024	0.71	0.003	<0.0002	50	0.002	<0.001	5.7	<0.001	140	<0.0001	<0.001	46	0.008	<1
	26/02/2024	0.61	<0.001	<0.0002	14	0.003	<0.001	3.5	<0.001	24	<0.0001	0.005	10	0.025	<1
	26/03/2024	0.61	<0.001	<0.0002	17	0.001	<0.001	3.1	<0.001	34	<0.0001	0.002	15	0.008	<1
	18/04/2024	0.71	<0.001	<0.0002	10	0.001	<0.001	<0.001	<0.001	13	<0.0001	0.008	7.6	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.7	<0.001	<0.001	2.3	<0.001	4.8	<0.0001	0.002	3.2	0.009	<1
	25/06/2024	0.23	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	28	<0.0001	0.002	11	0.016	<1
	10/07/2024	0.5	<0.001	<0.0002	17	<0.001	<0.001	2.6	<0.001	28	<0.0001	0.002	10	0.01	<1
	6/08/2024	0.31	<0.001	<0.0002	50	<0.001	<0.001	<0.001	<0.001	140	<0.0001	0.002	40	0.011	<1
	15/08/2024	0.51	<0.001	<0.0002	4.8	<0.001	0.001	1.6	<0.001	4.6	<0.0001	0.002	3.0	0.011	<1
	11/09/2024	0.46	<0.001	<0.0002	14	<0.001	<0.001	2.1	<0.001	20	<0.0001	0.002	11	0.012	<1
	9/10/2024	0.84	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.7	0.009	<1
	6/11/2024	0.79	<0.001	<0.0002	25	0.002	<0.001	4.1	<0.001	60	<0.0001	0.002	20	0.010	<1
	16/12/2024	4.4	0.007	<0.0002	29	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.15	0.002	<0.0002	300	0.002	<0.001	0.3	<0.001	860	<0.0001	<0.001	270	<0.005	<1
	11/02/2025	0.09	0.002	<0.0002	300	0.001	<0.001	0.38	<0.001	850	<0.0001	<0.001	270	0.048	<1
	24/03/2025	0.55	<0.001	<0.0002	22	<0.001	<0.001	3.4	<0.001	54	<0.0001	0.002	17	0.027	<1
	31/03/2025	0.59	0.001	<0.0002	4.2	<0.001	<0.001	3.3	<0.001	5.3	<0.0001	0.002	3.5	0.044	<1
	8/04/2025	0.80	<0.001	<0.0002	9.9	0.003	<0.001	4.1	<0.001	18	<0.0001	0.002	6.0	0.007	<1
	9/05/2025	0.74	<0.001	<0.0002	6.3	0.001	0.001	2.8	<0.001	8.5	<0.0001	0.002	3.7	0.010	<1
	25/06/2025	0.70	<0.001	<0.0002	26	<0.001	<0.001	2.6	<0.001	64	<0.0001	0.002	20	0.008	<1
	8/07/2025	0.55	<0.001	<0.0002	11	0.001	0.001	2.3	<0.001	13	<0.0001	0.002	6.3	0.008	<1
	14/08/2025	0.43	<0.001	<0.0002	9.1	<0.001	<0.001	2.4	<0.001	16	<0.0001	0.001	6.3	0.011	13
ANZG (2018): 95% Slightly Disturbed		**0.055**	**0.013**	**0.0002**	**-**	**0.0033**	**0.0018**	**0.3**	**0.0034**	**-**	**0.0006**	**0.011**	**-**	**0.008**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW06	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	-	-	<20	<50	<100	<100	-	<100
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	90	90	<100	<100	<20	160	<100	<100	160	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<1,00	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	2.1	2.1	<100	<100	<20	<50	0.9	<100	0.9	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
ANZG (2018): 95% Slightly Disturbed		-	-	-	-	-	-	-	-	-	-

APPENDIX 4

Photolog

PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
1	14/08/2025

Description

Surface water monitoring location SW04.



Photo No.	Date
2	14/08/2025

Description

Surface water monitoring location SW03.



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
3	14/08/2025

Description

Surface water monitoring location SW05.



Photo No.	Date
4	14/08/2025

Description

Surface water monitoring location SW02.



MONTHLY WATER QUALITY MONITORING REPORT

Harvest Estate Urban Development

Monitoring Event: 11th September 2025

Ewingsdale Road, Byron Bay, NSW, 2481

Job Number: 217140

For:

Planit Consulting

By:

ENV Services Pty Ltd

Date:

1/10/2025

ENV Services Pty Ltd

313 River Street, Ballina NSW 2478

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DOCUMENT CONTROL

Job No:	Job Number: 217140
Client:	Planit Consulting
Filename:	217140_Harvest Estate_WQ_September_2025

	Name:	**Date:**	**Signature:**
Prepared By:	Jemma Attkins Environmental Scientist	1/10/2025	
Reviewed By:	Craig Helbig Principal Environmental Scientist (CEnvP(SC))	2/09/2025	

Revision:	**Date:**	**Details:**

SCOPE OF ENGAGEMENT AND LIMITATIONS

This report has been prepared by ENV Services at the request of Planit Consulting for the purpose of consolidating and assessing water quality monitoring (surface water and ground water) data to determine impact associated with the development of the Harvest Estate. No other parties may rely on the contents of this report for any purposes except those stated.

This report has been prepared based on the information provided to us and from other information obtained as a result of enquiries made by us. ENV accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this document for a purpose other than that described above.

No part of this report may be reproduced, stored, or transmitted in any form without the prior consent of ENV.

ENV declares that it does not have, nor expects to have, a beneficial interest in the subject project.

To avoid this advice being used inappropriately, it is recommended that you consult with ENV before conveying the information to another who may not fully understand the objectives of the report. This report is meant only for the subject site/project and should not be applied to any other.

1 INTRODUCTION

ENV Services Pty Ltd (ENV) was engaged by Planit Consulting to prepare a Monthly Water Quality Report (MWQR) to meet requirements outlined in the Harvest Estate Development Conditions of Consent (11b - d, 32, 33 & 78) and Section 6.2 and 6.4 of the Planit Construction Environmental Management Plan (CEMP). Monitoring has been undertaken in accordance with the following approved plans.

- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate Groundwater Management Plan.* Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Belongil Creek Plan of Management*. Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate West Byron Urban Release Area; Acid Frog Management Plan.* Dated August 2020.

Baseline water quality parameters outlined in this report have been derived from mean or range values calculated over a 12-month sampling period undertaken between 25 May 2020 and 17 May 2021. This baseline water quality monitoring was carried out by Australian Wetlands Consulting (AWC) and undertaken in accordance with the Harvest Estate Groundwater Management Plan (AWC 2020) and the Harvest Estate – Belongil Creek Plan of Management (AWC 2020).

Guideline water quality trigger values have been derived from the ANZG (2018) Water Quality Guidelines and ANZECC (2000) guidelines for Fresh and Marine Water Quality. These guidelines define Belongil Creek as a lowland river of South-Eastern Australia, with trigger values chosen to reflect this. In assessing human disturbance, this report recognises Belongil Creek as being slight to moderately disturbed. On this basis, for toxicants in water, 95% species protection default guideline values have been presented for assessed toxicants.

No construction works were being undertaken during this monitoring period, with major civil earthworks associated with Stage 1 of the Project completed in November 2023.

2 MONITORING RESULTS & OBSERVATIONS

2.1 Monthly Groundwater Monitoring

Monthly groundwater monitoring at five (5) groundwater wells (MW2 – MW5 & MW7) was carried out to assess for impact within the underlying aquifer. This monitoring was conducted in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.2 of the Planit Construction Environmental Management Plan (CEMP). Groundwater monitoring locations are presented in Appendix A.

An assessment of the monthly analytical results presented in Appendix B, Table 1, identified the following observations:

Site	Observation	Comments
MW2	EC, TN, SO_4 and Na concentrations were outside baseline ranges.	Concentrations remain elevated, consistent to the previous monitoring round (EC, SO_4 and Na).
MW3	All parameters were within baseline ranges.	No site related impacts identified at this location.
MW4	All parameters were within baseline ranges with the exception of Al.	No site related impacts identified at this location.
MW5	pH, EC, TDS, SO_4,TN, Al and several cations/anions (Ca, Na and Mg) concentrations were outside baseline ranges.	Low pH and elevated analytes (EC, TDS, and cations/anions) at this site indicate the presence of oxidising acid sulfate soils (ASS), proximal to the monitoring well.
MW7	All parameters were within baseline ranges with the exception of pH and SO_4.	No site related impacts identified at this location.

2.2 Monthly Surface Water Monitoring

Monthly surface water sampling (SW01 – SW06) was carried out to assess for impact from site activities on the receiving environment. Monitoring was carried out in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.4 of the Planit Construction Environmental Management Plan (CEMP), which require assessment of the following analytes; physiochemical parameters, nutrient, metals, cation/anion and total recoverable hydrocarbon (TRH).

Surface water monitoring locations are presented in Appendix A and the coordinates (GDA94) of all locations tabulated and presented in Table 1. Tabulated analytical results are presented in Appendix C. Select photos of the surface water sampling programme are presented in Appendix D.

Table 1: Surface Water Monitoring Coordinates

Monitoring Location	Location	Easting	Northing
SW01	Upstream of SW04	556852	6831954
SW02	Upstream of SW03	557145	6831963
SW03	Downstream SW02	557411	6831604
SW04	Downstream SW01	557397	6831429
SW05	Upstream SW06	557992	6830881
SW06	Downstream SW05	558257	6831214

2.2.1 Assessment of Analytical Results

An assessment of the monthly analytical results presented in Appendix C, identified the following observations:

Site	Observation	Comments
SW01	All parameters were within baseline ranges, with the exception of pH, Ca and Fe.	This site is located at an upstream location, receiving water from off-site.
SW02	TDS, EC, SO_4 and cations/anions (Ca, Na, Mg and K) were recorded outside of baseline ranges.	This site is located at an upstream location, receiving water from off-site.
SW03	pH, TDS, EC, NH_3, SO_4, and cations/anions (Na, Mg and K) were recorded outside baseline values.	This site is located within the Northern Main Drain, downstream of Stage 1 works and SW02. Water quality parameters observed at SW03 are relatively consistent and of marginally better quality than upstream location SW02. As such, there are no discernible site-derived impacts.
SW04	pH, TDS, TSS, EC, SO_4, Total Nitrogen and cations/anions (Ca, Fe, Na, Mg and Zn) were outside baseline ranges.	This site is located downstream of Stage 1 works, within the Southern Swale Drain. Water quality remains poor at this location when compared to 'upstream' (SW01) and baseline values.

Site	Observation	Comments
SW05	All parameters were within baseline ranges, with the exception of Total Nitrogen and Na.	No site related impacts identified.
SW06	EC, Total Nitrogen and Fe were recorded outside ANZG default guideline values (95% for slightly disturbed river systems).	Water quality at SW06 remains consistent with that observed upstream at SW05. As such, no definitive degradation in water quality is observed between the two locations. No site related impacts observed.

3 RAINFALL

During this monitoring period (14/08/2025 – 11/09/2025), 151.8 mm of rain was recorded in the area (Byron Bay, Cape Byron Lighthouse, Bureau of Meteorology).

4 CONCLUSION & RECOMMENDATIONS

4.1 Conclusion

Monitoring results indicate that impacts associated with exposure of ASS appeared to have improved significantly at surface water location SW04 (Southern Swale Drain), downstream of the Stage 1 works package.

Water quality reported at SW03 is noted to be consistent with that observed at upstream (SW02) water quality, inferring no discernible site related impacts.

The groundwater monitoring network continues to present indicators of localised impact from ASS adjacent to MW5.

4.2 Recommendations

Based on the conclusions of this monitoring report, the following recommendations are to be implemented with respect to improving water quality throughout the site:

- Given pH across the site is within or above the baseline water quality values, no corrective action is required.

APPENDIX A

Figures



Legend

Site Location

0 0.5 1km

Figure 1 – Site Location
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

ENV Solutions
ENVIRONMENTAL | ASBESTOS | REMEDIATION | RESOURCE RECOVERY

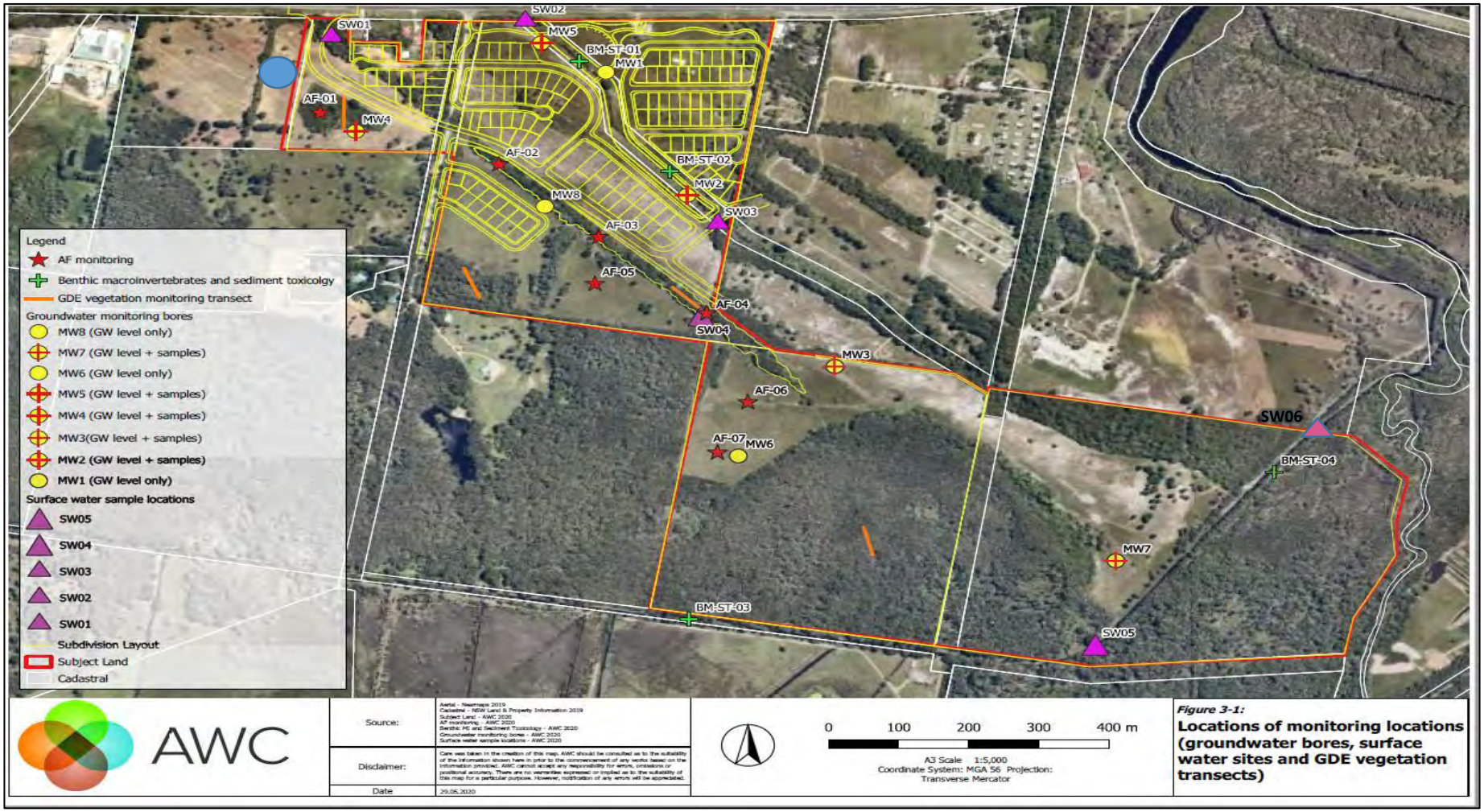


Figure 2 – AWC Monitoring Locations
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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APPENDIX B

Groundwater Quality Analytical Results

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW2	29/09/22	5.8	54	92	<5	0.12	0.51	14	0.02	0.5	30	< 2	< 0.5	0.8	2.4			0.1
	20/10/22	5.6	100	110	<5	0.09	0.24	13	0.02	2	28	< 2	<0.5	0.8	2.2			0.1
	14/11/22	6.0	100	240	<5	0.07	0.24	19	<0.10	<0.2	30	< 2	1.3	1.4	2.4			0.1
	14/12/22	5.6	110	170	<5	0.02	<0.05	15	<0.10	3.1	29	5	<5	<5	<5			0.3
	18/01/23	4.6	130	76	9.2	0.12	0.09	17	<0.05	2.5	29	7	<5	<5	<5			0.4
	20/02/23	6.0	100	160	5.3	0.09	0.1	27	<0.25	0.25	27	3.7	<0.5	0.7	3.1			0.1
	28/03/23	5.9	140	92	17	0.02	0.12	15	<0.02	<0.2	21	7.2	<5	<5	<5			0.5
	18/04/23	6.2	170	88	<5	0.08	1.2	15	<0.02	7.7	18	5.2	<5	<5	<5			0.3
	18/05/23	5.9	130	76	10	0.09	0.1	13	<0.02	9	28	2.1	0.6	0.9	2.6			0.2
	25/06/23	3.3	4,500	3,000	250	0.26	1.6	45	<0.02	8.1	86	3,800	440	82	7.9			84.4
	24/07/23	6.2	220	150	<5	0.03	0.16	12	<0.2	1	24	12	<0.5	0.8	2.5			1.0
	21/08/23	5.7	120	84	<5	0.08	0.14	15	<0.02	1.7	30	2.3	<5	<5	<5			0.2
	18/09/23	5.9	120	130	11	0.04	0.15	13	<0.02	1.2	25	<2	<0.5	0.9	2.7			0.1
	18/10/23	5.6	110	73	6.6	0.30	0.11	15	<0.02	0.3	25	3.0	<0.5	0.9	2.8			0.2
	20/11/23	6.0	160	70	<5	0.11	0.17	16	<0.01	0.8	28	4.2	<0.5	0.8	2.6			0.3
	19/12/23	6.3	110	100	<5	0.05	0.48	16	<0.02	2.8	28	2.1	0.5	0.9	2.9			0.1
	20/01/24	6.2	150	88	<5	0.05	0.08	13	<0.02	1.1	26	<2	<0.5	0.8	3.0			0.1
	26/02/24	5.1	150	340	7.4	0.07	0.09	15	<0.02	8.6	36	14	0.6	1	2.7			0.9
	26/03/24	5.7	180	310	<5	0.07	0.13	16	<0.02	<1	27	6.9	<0.5	0.8	2.7			0.4
	18/04/24	5.7	170	<5	<5	0.05	0.09	15	<0.02	1.8	29	2.6	<0.5	0.9	2.8	3.6	<1	0.17
	20/05/24	5.6	160	120	<5	0.11	0.1	19	<0.02	1	32	2.9	<0.5	0.8	2.8	3.9	<1	0.2
	25/06/24	5.5	170	170	12	0.09	<0.01	21	<0.02	2.7	30	<2	<0.5	0.8	2.3	3.8	<1	0.0
	10/07/24	5.8	150	190	<5	0.03	0.11	15	<0.02	<1	28	2.2	<0.5	0.7	2.7	2.8	<1	0.1
	06/08/24	5.9	170	90	6.9	0.16	0.12	20	<0.1	2.4	25	3.3	<0.5	0.6	2.1	3.4	<1	0.2
	11/09/24	5.7	140	110	<5	0.02	0.83	21	<0.2	<1	28	<2	<0.5	0.7	2.4	2.8	<1	0.0
	09/10/24	5.9	150	210	6.3	0.21	<0.01	17	0.02	<0.2	30	2.8	<0.5	<0.5	2.6	2.4	<1	0.1
	06/11/24	5.7	120	190	6.6	2.0	0.02	17	-	2.3	33	<2	1.0	1	3.1	3.6	<1	0.1
	16/12/24	6.0	120	60	8.0	0.05	<0.1	16	<0.2	0.9	30	5.3	0.14	0.8	2.8	3.5	<1	0.3
	14/01/25	6.4	150	94	610.0	0.03	<0.05	15	<0.1	<0.25	31	<2	<0.5	0.6	2.4	2.7	1	0.1
	11/02/25	5.7	170	150	<5	0.04	<0.1	13	<0.02	<0.5	29	2.8	<0.5	0.6	2.4	2.8	<1	0.2
	24/03/25	5.7	120	190	<5	<0.05	0.05	36	0.02	4.2	28	5.8	<0.5	0.7	2.4	2.7	<1	0.2
	08/04/25	5.7	120	220	<5	0.02	0.03	16	0.03	<2	31	4.2	<0.5	0.7	2.6	3.5	<1	0.3
	09/05/25	6.0	150	210	<5	0.01	<0.1	17	<0.2	1.1	29	7	1.3	0.7	2.6	3.2	<1	0.4
	25/06/25	5.6	180	200	<5	0.06	<0.01	15	<0.02	0.8	33	22	<0.5	0.7	2.6	1.7	<1	1.5
	08/07/25	5.5	190	180	<5	0.04	0.13	14	<0.2	1.6	32	24	<0.5	0.8	2.5	1.7	<1	1.7
	14/08/25	5.8	180	160	12.0	0.07	0.11	15	<0.02	1.9	30	33	<0.5	0.8	2.5	0.82	<1	2.2
	11/09/25	5.7	190	100	<5	0.03	0.09	17	<0.02	3.1	33	31	<0.5	0.8	2.6	0.84	<1	1.8
MW2 Baseline		**4.2 - 5.7**	**152**	**103**	**483**	**0.45**	**0.338**	**189**	**0.07**	**2.03**	**29.7**	**9.8**	**0.7**	**1.4**	**4.2**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW3	29/09/22	4.2	53	40	370	0.09	0.05	8.8	0.02	0.5	7	<2	< 0.5	1	0.6			0.1
	20/10/22	4.1	64	62	130	0.01	0.2	8	0.02	0.5	7	<2	0.5	0.9	<0.5			0.1
	14/11/22	4.6	57	84	170	0.03	0.27	7.4	<0.02	<0.2	7.1	<2	0.8	0.6	<0.5			0.1
	14/12/22	4.3	43	32	280	<0.01	<0.01	5.2	<0.02	1.1	6	<2	<5	<5	<5			0.2
	18/01/23	4.25	54	28	670	0.03	<0.01	4.1	<0.05	1.4	<5	4.1	<5	<5	<5			1.0
	20/02/23	4.2	36	40	76	0.02	<0.10	6.8	0.06	7.26	7.6	<2	<0.5	1	<0.5			0.1
	28/03/23	4.1	70	44	<5	<0.01	<0.01	7.9	<0.02	0.22	4.8	2.2	<0.5	1	0.6			0.3
	18/04/23	4.6	89	54	110	0.02	0.1	9.6	<0.02	5.7	4.3	4.3	<0.5	0.6	<0.5			0.4
	18/05/23	4.5	60	40	450	0.02	0.04	5.8	<0.02	1	4.8	2.1	0.6	0.8	<0.5			0.4
	15/06/23	4.0	84	48	22	0.27	0.4	5.5	<0.02	1.96	5	63	<0.5	0.8	<0.5			11.5
	24/07/23	4.5	85	59	160	0.04	<0.01	9.5	<0.02	<0.2	5.6	12	<0.5	0.8	<0.5			1.3
	21/08/23	3.9	110	52	100	0.01	<0.01	6.3	<0.02	<0.2	6.6	3.0	<0.5	1.1	<0.5			0.5
	18/09/23	Dry – no sample collected																
	18/10/23	Dry – no sample collected																
	20/11/23	4.0	96	46	120	0.03	<0.02	7.8	<0.01	0.7	5.8	5.0	<0.5	0.7	<0.5			0.6
	19/12/23	4.0	46	30	92	<0.01	0.04	13	<0.02	<0.2	9.7	5.6	<0.5	1.3	0.6			0.4
	20/01/24	4.2	70	28	270	0.01	<0.01	5.4	<0.02	0.6	5.5	<2	<0.5	0.8	<0.5			0.2
	26/02/24	4.5	70	50	29	0.01	0.02	10	<0.02	16	5	4.5	<0.5	0.6	<0.5			0.5
	26/03/24	4.1	67	56	110	<0.01	0.06	5.1	<0.02	0.3	4.4	6.1	<0.5	0.8	<0.5			1.2
	18/04/24	3.7	150	< 5	<5	0.05	0.01	4.6	<0.02	0.7	4	12	<0.5	0.8	<0.5	0.99	<1	0.3
	20/05/24	4.5	36	30	26	0.03	<0.01	31	<0.02	0.3	3	3.9	0.6	<0.5	<0.5	1.1	<1	0.1
	25/06/24	3.5	160	90	120	0.17	<0.01	2.8	<0.02	<0.2	3.1	5	<0.5	<0.5	<0.5	0.7	<1	0.1
	10/07/24	4.4	42	40	300	<0.01	<0.01	4.2	<0.02	0.5	3.5	2.5	<0.5	<0.5	<0.5	0.7	<1	0.6
	06/08/24	4.3	45	22	310	0.03	0.01	4.4	<0.02	3.2	2.5	<2	<.5	<0.5	<0.5	1.0	<1	0.2
	11/09/24	4.2	44	28	720	0.02	<0.1	5	<0.02	<1	3.7	<2	<0.5	<0.5	<0.5	1.3	<1	0.2
	09/10/24	4.2	50	32	430	0.10	<0.01	5.3	<0.02	<0.2	4.1	2.8	2.9	0.6	0.6	0.48	<1	0.2
	06/11/24	4.3	38	20	370	<0.01	0.09	4.8	-	0.9	4.6	<2	0.6	0.7	<0.5	0.84		0.2
	16/12/24	4.3	35	24	63	0.02	<0.01	4.4	<0.02	0.5	3.8	2.2	<0.5	0.7	<0.5	0.75	<1	0.5
	14/01/25	4.5	40	20	38	0.03	0.01	3.3	<0.02	0.5	2.8	<2	<0.5	<0.5	<0.5	0.75	<1	0.3
	11/02/25	4.2	64	36	8.2	<0.01	<0.01	2.9	<0.02	<0.2	3.1	4.4	<0.5	<0.5	<0.5	1.1	<1	1.5
	24/03/25	4.0	79	50	150	0.02	<0.01	13	<0.02	0.9	5.8	3.9	0.8	1.1	<0.5	0.52	1.5	0.3
	08/04/25	4.2	71	38	160	<0.01	0.02	11	<0.02	0.9	7.3	4.1	0.9	1.4	2.6	0.58	1.5	0.4
	09/05/25	4.5	73	74	210	<0.01	0.02	9.9	<0.02	0.8	7	3.1	0.7	0.9	<0.5	0.74	<1	0.3
	25/06/25	4.5	42	44	170	0.05	<0.01	4.4	<0.02	1.9	5	4.3	<0.5	<0.5	<0.5	1.0	<1	1.0
	08/07/25	4.5	47	25	670	0.02	0.03	4.5	0.03	0.6	4.9	2.5	<0.5	<0.5	<0.5	1	<1	0.6
	14/08/25	4.8	34	38	550	0.06	0.06	3.8	0.02	5.7	3.6	4	<0.5	<0.5	<0.5	0.5	<1	1.0
	11/09/25	4.6	42	28	2,500	0.02	0.3	4.7	0.11	2.1	4.7	3.5	<0.5	<0.5	<0.5	0.49	<1	0.7
MW3 Baseline		**4.0 - 5.3**	**206**	**140**	**5223**	**1.57**	**0.294**	**121**	**0.167**	**4.14**	**26.4**	**13.4**	**3.8**	**5.3**	**3.1**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW4	09/29/22	4.5	100	88	350	0.03	0.16	22	0.1	1.5	19	<2	3.6	3.7	0.9			0.0
	10/20/22	4.5	110	100	69	0.02	0.78	20	0.04	1	14	<2	3.9	2.1	<0.5			0.1
	11/14/22	4.2	130	340	16	0.01	0.13	30	<0.10	7	22	5	2.6	4.8	1.1			0.2
	12/14/22	4.2	140	140	60	<0.01	<0.05	23	<0.10	3	21	7.8	<5	<5	<5			0.3
	01/18/23	5.73	170	110	170	0.02	0.16	26	<0.50	2.4	20	6.6	<5	<5	<5			0.3
	02/20/23	3.9	87	110	31	0.04	<0.05	15	0.28	3.88	15	5.8	3.5	5.4	0.9			0.4
	03/28/23	4.7	180	120	190	0.04	0.08	28	<0.02	22	18	6	8.8	5.1	<5			0.2
	04/18/23	3.7	500	280	340	0.11	0.07	27	<0.02	0.9	19	130	3.4	5	<0.5			4.8
	05/18/23	5.4	110	72	70	0.03	<0.01	14	<0.02	2.89	11	10	5.7	3.7	<0.5			0.7
	06/15/23	3.8	200	150	130	1.4	0.29	29	<0.02	0.9	21	12	<5	6	<5			0.4
	07/24/23	4.1	170	94	58	0.03	<0.1	24	<0.2	1	20	17	2.8	6.2	0.6			0.7
	08/21/23	3.8	200	120	75	0.03	0.07	18	0.65	1.76	15	3.6	2.0	5.0	<0.5			0.2
	09/18/23	3.8	160	86	21	0.02	0.11	19	0.02	1.1	17	10	1.5	4.1	<0.5			0.5
	10/18/23	3.8	190	110	31	0.08	0.08	25	<0.02	0.9	18	9.3	1.7	4.5	0.5			0.4
	11/20/23	4.4	160	870	28	0.05	0.10	22	<0.01	2.2	15	5.8	3.3	4.0	0.7			0.3
	12/19/23	4.0	190	130	27	0.03	0.41	38	<0.02	1.5	22	13	3.3	7.8	1.0			0.3
	01/20/24	4.2	170	120	27	0.01	0.02	24	<0.02	1.2	17	2.9	5.4	5.1	<0.5			0.1
	02/26/24	3.6	290	190	96	0.03	0.07	27	<0.02	6.9	17	38	10	4.1	<0.5			1.4
	26/03/24	5.6	150	140	18	0.02	0.58	25	<0.02	1.1	15	7	9.3	3.8	<0.5			0.3
	18/04/24	4.3	140	90	12	0.02	0.04	17	<0.02	24	13	6.7	3.2	3.6	<0.5	1.1	2.9	0.4
	20/05/24	5.9	200	180	9.4	0.01	0.83	15	<0.02	1.1	10	5.6	9.6	2.1	<0.5	1.5	6.4	0.4
	25/06/24	4.2	120	100	33	0.10	<0.01	15	<0.02	1.4	9.1	2.3	3.5	2.2	<0.5	1.7	<1	0.2
	10/07/24	6.3	79	46	16	0.02	0.12	8.7	<0.02	1.4	6.4	4	9.7	1	<0.5	0.55	<1	0.5
	06/08/24	4.4	170	100	24	0.02	0.12	26	<0.02	2.4	12	5.5	1.5	3.2	<0.5	0.86	<1	0.2
	11/09/24	5.2	110	74	27	0.02	0.14	21	<0.02	0.6	12	2.5	7.2	2.9	<0.5	1.3	<1	0.1
	09/10/24	4.1	150	140	190	0.10	0.07	25	0.03	0.9	15	6.2	2.9	4	0.7	1.2	<1	0.2
	06/11/24	4.4	130	180	40	0.51	0.04	22	-	1.9	15	2.3	4.7	4.8	<0.5	1.4	3.35	0.1
	16/12/24	5.7	80	70	<5	0.02	<0.1	18	<0.2	1	11	4.1	8.1	3	<0.5	0.99	7.2	0.2
	14/01/25	4.1	180	120	86	0.02	1.3	26	<0.02	1.2	14	2.4	4.4	3.8	<0.5	1.6	<1	0.1
	11/02/25	4.1	170	150	<5	0.01	<0.1	25	<0.02	<0.5	16	3.1	2.5	4.8	<0.5	1.8	<1	0.1
	24/03/25	5.0	110	84	39	<0.05	0.04	22	0.02	5	13	7.6	4.9	3.4	<0.5	0.85	5.76	0.3
	08/04/25	5.2	90	130	22	<0.01	0.03	16	<0.02	1	10	3.7	6.9	2.7	<0.5	0.58	11.9	0.2
	09/05/25	6.0	110	140	45	-	-	14	<0.2	-	8.7	2.7	11	2	<0.5	0.8	13.75	0.2
	25/06/25	5.4	98	140	130	0.06	0.01	12	0.2	1.6	8.8	8.2	8.6	1.6	<0.5	0.98	8.8	0.7
	08/07/25	5.0	110	100	300	0.01	0.23	15	<0.2	<0.5	11	9.4	5.7	2.4	<0.5	1.7	3.35	0.6
	14/08/25	5.7	110	150	600	0.11	0.12	15	0.04	4.7	9.6	4.3	10	2	<0.5	0.64	<1	0.3
	11/09/25	4.4	140	89	290	0.02	0.15	25	0.07	4.2	15	7.3	4.0	3.5	0.9	1.1	3.6	0.3
MW4 Baseline		**4.0 - 5.8**	**890**	**605**	**1220**	**0.43**	**1.392**	**199**	**0.185**	**4.36**	**146.3**	**19.2**	**11.3**	**15.6**	**5.4**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW5	09/29/22	4.5	59	68	630	0.13	0.41	18	0.02	6.33	14	<2	2	3	0.6			0.1
	10/20/22	4.4	75	82	92	0.02	0.1	15	0.02	0.5	12	<2	2	2	0.5			0.1
	11/14/22	4.6	120	270	150	0.08	0.52	29	<0.10	7.8	26	<2	5	6	1.4			0.0
	12/14/22	4.5	150	150	230	0.02	<0.060	29	<0.05	11	24	10	<5	<5	<5			0.3
	01/18/23	2.8	1,600	1,100	480	0.05	1.7	43	<0.05	5.7	49	7	90	72	<5			0.2
	02/20/23	2.6	2,700	3,200	310	0.03	4.2	27	<0.05	3.2	47	750	390	76	7.8			27.8
	03/28/23	3.0	5,200	3,700	130	0.02	5.9	28	<0.02	11	34	1,100	440	57	7.1			39.3
	04/18/23	2.9	3,800	5,100	300	0.01	4	44	<0.02	4	49	3,800	380	120	4.7			86.4
	05/18/23	3.4	3,100	3,400	150	<0.01	<0.01	15	<0.02	4.9	23	2,200	240	31	4.2			146.7
	06/15/23	2.9	3,000	1,800	640	0.3	2.9	28	<0.02	2.66	64	2,100	410	130	6.5			75.0
	07/24/23	5.5	2,800	1,600	6.0	0.07	0.19	1,400	<0.2	0.5	450	380	25	54	25.0			0.3
	08/21/23	3.3	5,200	3,400	13	0.03	4.6	67	<0.02	5	89	2,200	420	200	9.9			32.8
	09/18/23	3.3	4,500	5,800	6.1	0.01	4.0	51	0.02	3.7	67	4,300	360	140	7.9			84.3
	10/18/23	3.2	4,700	4,900	96	0.03	1.3	58	<0.02	2.1	68	710	380	130	7.3			12.2
	11/20/23	2.8	5,900	7,500	29	0.06	2.7	55	<0.01	11	60	6,600	310	100	6.8			120.0
	12/19/23	2.9	3,100	2,700	230	0.01	4.6	80	<0.02	5.0	80	3,500	290	86	6.9			43.8
	01/20/24	3.2	4,900	6,600	74	0.03	<0.01	52	<0.02	4.5	68	1,000	370	84	7.9			19.2
	02/26/24	2.6	3,400	4,500	180	0.03	0.59	25	<0.02	5.4	51	3,000	290	46	4.0			120.0
	26/03/24	3.2	4,400	3,500	17	0.02	1.8	140	<0.02	2.5	54	11,000	360	77	6.0			78.6
	18/04/24	3.3	4,200	2,200	39	<0.01	0.02	49	0.05	5.1	50	3,300	310	47	4.0	210	1.5	67.3
	20/05/24	3.4	3,100	1,600	8.8	0.03	3.1	53	<0.02	2.9	27	2,900	200	22	2.8	140	1.42	54.7
	25/06/24	3.2	4,100	2,700	310	0.03	<0.01	76	<0.02	7.2	75	1,400	290	60	4.3	320	<1	18.4
	10/07/24	3.5	2,300	2,600	49	0.02	<0.01	14	<0.02	3.9	20	1,900	240	20	2.4	130	<1	135.7
	06/08/24	3.3	170	3,500	14	0.19	4.6	62	<0.02	7.7	56	3,600	310	54	4.2	250	<1	58.1
	11/09/24	3.5	1,700	1,000	38	<0.01	3.9	27	<0.2	4.9	27	750	290	29	3.2	94	<1	27.8
	09/10/24	3.5	1,300	930	46	0.03	<0.01	27	<0.02	1.5	22	870	120	17	1.6	35	<1	32.2
	06/11/24	3.3	2,000	1,300	31	<0.01	4.8	44	-	5	59	680	300	62	4.9	90	3.33	15.5
	16/12/24	3.2	1,800	1,100	53	0.02	21	32	<0.2	2.8	25	980	180	21	2.4	35	5.1	30.6
	14/01/25	3.7	1,600	1,400	190	<0.01	1.3	19	<0.02	2.1	16	320	210	16	1.8	25	8.4	16.8
	11/02/25	3.5	2,000	1,700	69	0.01	2.6	160	<0.02	14	110	860	110	50	2.8	56	1.96	5.4
	24/03/25	3.6	1,000	890	38	<0.05	0.06	20	<0.02	3.3	14	570	140	8.5	1.7	17	8.24	28.5
	08/04/25	3.7	790	700	73	<0.01	0.85	36	<0.02	5.2	42	390	86	16.0	<0.5	13	6.6	10.8
	09/05/25	3.7	1,300	1,200	200	<0.01	1.2	87	<0.2	3.3	24	470	87	11.0	1.5	9.6	9.06	5.4
	25/06/25	3.7	1,300	840	140	0.21	1.5	26	<0.02	2	18	580	140	17.0	1.7	17	8.3	22.3
	08/07/25	4.0	720	480	170	<0.010	0.81	21	<0.2	5.4	20	280	58	10.0	0.9	11	5.3	13.3
	14/08/25	3.8	530	300	230	0.02	0.55	19	<0.02	5.5	11	230	28	4.3	0.5	4.5	6.2	12.1
	11/09/25	3.8	630	430	110	<0.01	0.73	41	0.04	14	35	240	33	9.7	1.3	4.4	7.5	5.9
MW5 Baseline		**4.3 - 5.5**	**191**	**130**	**3003**	**0.97**	**13.4**	**82**	**0.117**	**13.4**	**27.2**	**8.3**	**6**	**8.4**	**5.4**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW7	09/29/22	4.6	26	40	190	0.1	0.3	8.5	0.02	2.5	8.5	<2	1	0.9	0.6			0.1
	10/20/22	4.5	86	70	120	0.01	0.4	12	0.04	2.9	8.5	<2	1.7	1.7	0.5			0.1
	11/14/22	4.5	44	170	<100	0.03	0.01	9.7	<0.10	<2.00	9.7	<2	1.9	1.4	1.4			0.1
	12/14/22	4.6	56	92	23	0.04	<0.10	7.5	<0.20	11	8.7	2.5	<5	<5	<5			0.3
	01/18/23	4.4	63	32	390	0.09	<0.05	7.5	<0.025	2	11	31	<5	<5	<5			4.1
	02/20/23	4.1	87	60	30	0.02	<0.05	9.1	0.42	4.9	5.8	5.7	1.4	1.9	1.1			0.6
	03/28/23	4.5	160	94	18	0.02	0.02	21	<0.02	4.4	12	66	2	2	0.6			3.1
	04/18/23	4.9	150	58	7.4	<0.01	0.11	11	<0.02	<0.20	9.8	120	1.9	0.8	<0.5			10.9
	05/18/23	4.9	78	56	130	0.03	<0.01	11	<0.02	0.89	9.3	9.3	1.4	0.9	<0.5			0.8
	06/15/23	4.6	77	50	30	0.28	0.25	11	<0.02	<0.20	9.2	62	<5	<5	<5			5.6
	07/24/23	5.1	140	100	90	0.12	<0.1	10	<0.2	1	8.5	14	1.9	1.4	0.9			1.4
	08/21/23	5.3	67	34	29	0.08	0.06	8.4	<0.02	0.8	9.0	45	1.8	1.7	0.8			5.4
	09/18/23	5.1	57	78	25	<0.01	0.07	9.6	<0.02	0.8	9.4	83	1.6	2.0	0.8			8.6
	10/18/23	5.2	61	46	10	0.04	0.10	11	<0.02	<0.2	10	160	1.6	2.1	0.8			14.5
	11/20/23	4.1	210	64	13	0.04	<0.02	8.4	<0.01	2.2	8.1	280	2.5	2.2	0.7			33.3
	12/19/23	4.6	91	62	11	0.03	0.09	19	<0.02	0.7	11	5.6	4.4	2.3	0.9			0.3
	01/20/24	4.2	170	130	34	0.01	0.09	21	<0.02	0.3	15	160	2.8	1.4	<0.5			7.6
	02/26/24	4.0	210	190	23	0.03	0.51	44	<0.02	5.8	24	7.5	3.6	2.1	0.5			0.2
	26/03/24	4.4	320	100	22	0.02	0.18	320	<0.02	<1	13	590	1.6	0.9	0.9			1.8
	18/04/24	4.3	100	98	17	0.02	0.07	8.9	<0.02	3	9	380	1.4	1.2	<0.5	1.7	<1	42.7
	20/05/24	4.4	77	56	11	0.05	0.38	6.4	<0.02	1.2	5.4	170	1.3	1	<0.5	2.3	<1	26.6
	25/06/24	4.6	66	36	33	<0.01	<0.01	<0.01	<0.02	0.6	6.7	48	1.1	0.9	<0.5	1.5	<1	0.0
	10/07/24	4.5	74	58	29	<0.01	0.22	6.5	<0.02	2.1	6.2	270	2	1.3	<0.5	0.73	<1	41.5
	06/08/24	4.8	4,600	180	19	0.04	0.06	9.1	<0.02	0.5	5.3	36	1.4	0.9	<0.5	1	<1	4.0
	11/09/24	4.4	75	50	6.4	0.04	<0.1	11	<0.02	1..0	7.1	5.2	1.3	1.1	<0.5	1.4	<1	0.5
	09/10/24	4.3	73	42	71	0.54	<0.01	8	<0.02	1.6	5.8	12	1.3	1.2	<0.5	0.94	<1	1.5
	06/11/24	4.5	59	32	35	0.02	0.03	11	-	1.3	7.8	4.4	1.3	1.4	<0.5	1.6	<1	0.4
	16/12/24	4.3	58	68	29	0.04	<0.1	12	<0.2	1.3	8.5	42	1.6	1.3	<0.5	1.9	<1	3.5
	14/01/25	4.7	63	36	120	0.04	0.02	8.6	0.03	1.3	6.8	7.0	1.7	1.2	0.5	2.4	1.4	0.8
	11/02/25	4.6	68	70	13	0.07	<0.1	9.2	<0.02	1.2	8.4	2	1.5	1.5	0.8	2.7	<1	0.2
	24/03/25	4.1	0	56	28	<0.05	0.02	15	<0.02	1.8	7.7	43	2.3	1.4	<0.5	1.2	1.91	2.9
	08/04/25	4.4	76	70	14	<0.01	0.03	14	<0.02	<1	8.1	31	2.8	1.1	2.1	1.4	2	2.2
	09/05/25	4.7	81	110	24	<0.01	0.03	13	<0.2	1.2	8.1	28	1.5	0.9	<0.5	1.6	<1	2.2
	25/06/25	4.6	65	70	39	0.07	<0.01	8.3	<0.02	<0.2	6.7	56	1.2	0.8	<0.5	1.2	1	6.7
	08/07/25	4.6	65	44	130	0.02	0.14	7.9	<0.02	<0.5	6.3	37	1.4	0.9	<0.5	2.6	<1	4.7
	14/08/25	4.7	60	70	140	0.06	0.01	8.9	0.04	2.2	5.7	15	0.9	0.5	<0.5	0.93	3	1.7
	11/09/25	4.4	75	51	100	0.03	0.06	12	0.04	1.1	7.2	18	1.8	1.1	0.6	0.86	2.09	1.5
MW7 Baseline		**4.6 - 5.6**	**147**	**100**	**3140**	**0.71**	**0.471**	**172**	**0.048**	**4.15**	**31**	**7.3**	**3.4**	**2.2**	**3.1**	**<1.0***	**<1***	**<0.5***

APPENDIX C

Surface Water Quality Analytical Results

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW01	29/09/2022	6.9	180	11	3.1	140	0.47	<0.01	14	<0.02	5.2	30	3.4	450		0.2
	20/10/2022	6.6	320	30	4.7	400	0.03	0.03	22	<0.02	<0.02	31	33	43		1.5
	14/11/2022	6.0	780	4900	0.2	920	3.1	6.9	25	<0.02	14	200	3.7	67		0.1
	14/12/2022	4.5	800	210	3.6	1100	0.15	0.05	24	<0.10	23.27	54	560	88		23.3
	18/01/2023	6.3	380	120	4.7	25	0.047	0.087	24	<0.02	5.2	40	180	25		7.5
	20/02/2023	3.4	1100	32	3.8	1300	0.42	0.37	28	<0.02	8.9	57	350	<5		12.5
	28/03/2023	3.0	2000	100	7.7	3000	<0.01	2.1	29	<0.02	1.29	47	880	<5		30.3
	18/04/2023	7.7	130	33	8.6	320	0.06	0.01	24	<0.02	8.4	16	14	8.8		0.6
	18/05/2023	7.4	130	6	4.4	250	0.21	0.14	11	<0.02	0.9	14	10	<5		0.9
	15/06/2023	3.2	1900	6.8	7.6	2700	0.03	1.6	59	<0.02	2.1	61	1500	<5		25.4
	24/07/2023	7.9	84	<5	8.4	140	0.11	<0.01	6.4	<0.02	0.3	13	4.0	<0.005		0.6
	21/08/2023	6.9	120	25	3.0	190	0.34	0.01	5.6	<0.02	0.4	18	<2	<0.005		0.2
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	No surface water located at monitoring site – no sample collected														
	20/11/2023	7.2	230	6.5	2.9	480	2.0	<0.02	56	<0.01	<0.2	43	160	<0.005		2.9
	19/12/2023	No surface water located at monitoring site – no sample collected														
	23/01/2024	7.0	160	130	2.2	160	3.7	0.06	14	<0.02	1.3	21	69	<0.005		4.9
	26/02/2024	6.2	160	47	7.2	200	0.35	<0.01	9.0	<0.02	3.0	12	59	<5		6.6
	26/03/2024	6.9	26	7.5	8.3	78	0.25	<0.01	6.7	<0.02	0.4	7.5	3.4	<5		0.5
	18/04/2024	7.2	220	23	0.5	390	0.06	0.24	25	<0.02	0.7	32	110	180	13	4.4
	20/05/3034	6.7	160	< 5	3.8	260	0.16	0.01	13	<0.02	0.5	19	33	56	231	2.5
	25/06/2024	6.3	440	15	5.9	710	<0.01	<0.01	12	<0.02	<0.2	23	100	5.7	15	8.3
	10/07/2024	7.0	120	29	5.5	240	0.07	0.01	14	<0.02	1.1	17	6.9	39	12	0.5
	6/08/2024	4.0	760	19	7.6	950	0.08	<0.01	14	<0.02	1.3	23	470	<5	12	33.6
	15/08/2024	6.7	64	<5	7.3	100	0.04	0.01	6.1	<0.02	<0.2	7.2	5.5	<5	<10	0.9
	11/09/2024	6.9	120	250	0.2	190	1.1	0.11	8.9	<0.02	4.1	13	2.6	<10	17	0.3
	24/09/2024 - Investigation	6.3	170	-	-	280	-	-	-	-	-	-	-	-	-	-
	9/10/2024	7.4	190	11	8.9	290	0.38	0.01	14	<0.02	<0.2	20	3.4	<5	<10	0.2
	6/11/2024	7.1	92	400	0.4	140	13	<0.01	8.1	<0.02	2.8	12	2.2	<5	<10	0.3
	16/12/2024	6.9	90	190	3.3	140	0.36	<0.01	8.2	<0.02	0.02	11	5.4	170	<10	0.7
	14/01/2025	6.7	48	7.2	3.5	89	0.14	<0.1	4.8	<0.02	0.6	5.4	<5	<0.005	<10	0.0
	11/02/2025	7.5	390	<5	8.3	620	0.06	0.03	110	<0.02	0.8	16	16	12	<10	0.1
	24/03/2025	6.9	58	<5	8.6	64	0.32	0.02	6.1	<0.02	0.8	7.9	2.4	48	<10	0.4
	31/03/2025	7.1	170	5.8	9.2	200	0.14	<0.01	14	<0.02	1.1	15	6.4	<5	<10	0.5
	8/04/2025	7.2	200	9.4	8.8	230	0.37	0.04	14	<0.02	0.4	18	3.6	<5	<10	0.3
	9/05/2025	7.5	170	<5	-	200	0.2	0.03	10	<0.02	0.8	13	4.5	<5	<10	0.5
	25/06/2025	6.9	130	24	7.5	190	1.1	0.07	6.2	<0.02	1.1	12	7.1	12	22	1.1
	8/07/2025	6.9	150	<5	8	260	0.12	0.18	8	<0.02	0.8	16	5	28	34	1.6
	14/08/2025	7.3	140	7.1	6.9	240	0.17	0.03	11	<0.02	1	16	6	<5	15	1.8
	11/09/2025	7.2	150	5.2	3.9	260	0.22	0.01	13	<0.02	1.4	19	5.2	<5	16	2.5
SW01 Baseline		**6.2 – 7.0**	**291**	**73**	**-**	**428**	**3.52**	**0.164**	**118**	**0.039**	**3.5**	**51**	**9**	**768**		**<0.5**

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW01	29/09/2022	1.5	0.003	<0.0002	22	0.002	0.32	2.7	0.005	14	<0.0001	0.015	3	0.071	<1
	20/10/2022	0.66	2	<0.0002	24	0.002	0.16	2.4	0.003	9.1	<0.0001	0.009	2.9	0.042	<1
	14/11/2022	130	1.3	<0.02	280	<0.10	1	130	0.1	73	<0.001	0.3	<50	4.7	<1
	14/12/2022	22	0.0016	<0.002	180	0.014	0.2	1.6	0.015	43	<0.001	0.077	6.8	0.68	<1
	18/01/2023	0.7	<0.010	<0.002	<2	<0.010	<0.01	3.2	<0.01	13	<0.01	<0.01	<5	<0.05	<1
	20/02/2023	37	0.027	0.0004	170	0.019	0.07	0.049	0.049	57	0.002	0.16	6.3	0.35	<1
	28/03/2023	150	0.002	0.0008	290	0.002	0.003	36	0.003	38	0.0001	0.46	5.1	0.97	<1
	18/04/2023	0.53	0.002	<0.0002	13	0.005	0.005	0.002	0.002	2.7	<0.0001	0.002	0.8	0.15	<1
	18/05/2023	0.16	0.002	<0.0002	23	<0.001	0.002	0.24	<0.001	7.5	<0.0001	0.002	2.3	0.02	<1
	15/06/2023	120	0.002	0.0003	350	<0.001	0.004	15	0.003	42	<0.0001	0.24	8.1	0.35	<1
	24/07/2023	0.08	0.003	<0.0002	13	<0.001	0.003	0.38	0.002	4.1	<0.0001	0.002	0.8	0.037	<1
	21/08/2023	0.52	0.001	<0.0002	17	0.001	0.002	1.2	0.001	6.3	<0.0001	0.003	<0.5	0.014	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	No surface water located at monitoring site – no sample collected													
	20/11/2023	0.13	<0.001	<0.0002	26	<0.001	0.002	5.7	<0.001	7.9	<0.0001	0.003	2.2	0.006	<1
	19/12/2023	No surface water located at monitoring site – no sample collected													
	23/01/2024	<0.05	<0.001	<0.0002	30	0.001	<0.001	1.8	<0.001	10	<0.0001	<0.001	3.4	0.006	<1
	26/02/2024	<0.005	<0.001	<0.0002	14.00	<0.001	<0.001	0.93	<0.001	4.60	<0.0001	<0.001	1.70	0.05	<1
	26/03/2024	0.11	<0.001	<0.0002	7.4	<0.001	0.002	0.38	<0.001	2.0	<0.0001	<0.001	1.5	0.013	<1
	18/04/2024	0.06	<0.001	<0.0002	32	<0.001	<0.001	1.4	<0.001	9.5	<0.0001	0.002	2.0	<0.005	<1
	20/05/3034	0.06	<0.001	<0.0002	26	<0.001	0.001	0.86	<0.001	7.0	<0.0001	0.002	1.7	0.014	<1
	25/06/2024	0.69	<0.001	<0.0002	94	<0.001	0.002	0.28	<0.001	15	<0.0001	0.008	2.3	0.055	<1
	10/07/2024	0.25	0.002	<0.0002	28	<0.001	0.003	2.1	<0.001	6.6	<0.0001	0.002	2.0	0.037	<1
	6/08/2024	0.85	<0.001	<0.0002	120	<0.001	0.004	1.3	<0.001	14	<0.0001	0.021	2.3	0.1	<1
	15/08/2024	0.24	<0.001	<0.0002	12	<0.001	0.004	0.33	<0.001	2.8	<0.0001	0.001	1.2	0.027	<1
	11/09/2024	9.1	0.009	0.0005	36	0.023	0.11	49	0.031	8.1	0.0001	0.019	5.2	0.72	<1
	24/09/2024 - Investigation	-	<0.001	<0.001	-	<0.001	0.001	-	<0.001	<0.0001	-	0.004	-	0.04	-
	9/10/2024	0.14	0.001	<0.0002	27	<0.001	0.002	1.7	<0.001	8.1	<0.0001	0.002	1.5	0.017	<1
	6/11/2024	1.2	0.004	<0.0002	26	0.005	0.011	54	0.003	6.1	<0.0001	0.004	2.8	0.041	<1
	16/12/2024	2.4	0.004	<0.0002	22	0.006	0.019	38	0.006	4.5	<0.0001	0.004	2.8	0.092	<1
	14/01/2025	0.15	<0.001	<0.0002	8.8	0.001	0.003	0.34	<0.001	1.8	<0.0001	0.001	0.6	0.018	<1
	11/02/2025	0.58	0.002	<0.0002	13.00	<0.001	<0.001	6.10	<0.001	3.50	<0.0001	0.002	1.00	0.015	<1
	24/03/2025	0.13	<0.001	<0.0002	5.20	<0.001	0.002	0.35	<0.001	1.40	<0.0001	<0.001	1.20	0.037	<1
	31/03/2025	0.10	0.002	<0.0002	22	<0.001	0.003	1.2	<0.001	6.8	<0.0001	0.002	2.4	0.066	<1
	8/04/2025	<0.05	0.002	<0.0002	29	<0.001	<0.001	2.2	<0.001	8.1	<0.0001	0.002	2.4	0.008	<1
	9/05/2025	0.27	<0.001	<0.0002	20	<0.001	0.002	1.6	<0.001	5.9	<0.0001	0.002	1.7	0.030	<1
	25/06/2025	0.11	<0.001	<0.0002	19	<0.001	0.002	0.72	<0.001	4.4	<0.0001	0.002	<0.5	0.032	<1
	8/07/2025	0.05	<0.001	<0.0002	26	<0.001	0.002	0.49	<0.001	7.2	<0.0001	0.002	<0.5	0.024	<1
	14/08/2025	0.14	<0.001	<0.0002	26	<0.001	0.003	0.69	<0.001	6.8	<0.0001	0.002	1.8	0.019	<1
	11/09/2025	0.05	0.001	<0.0002	24	<0.001	0.002	1.5	<0.001	6.8	<0.0001	0.002	1.6	0.014	<1
SW01 Baseline		**0.5**	**0.003**	**0.001**	**22**	**0.002**	**0.041**	**1.2**	**0.001**	**16**	**0.0005**	**0.006**	**6**	**0.058**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW01	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	220	220	<100	<100	<20	250	<100	<100	250	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	<50	<50	20	-	<20	<50	100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No surface water located at monitoring site – no sample collected									
	18/10/2023	No surface water located at monitoring site – no sample collected									
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	No surface water located at monitoring site – no sample collected									
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/3034	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Investigation	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW01 Baseline		**60**	**-**	**24**	**100**	**-**	**50**	**130**	**90**	**170**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW02	29/09/2022	6.9	170	8.8	8	160	0.04	0.03	29	<0.02	1.3	27	2.8	22		0.10
	20/10/2022	6.5	120	6.2	8.7	140	0.02	0.01	17	<0.02	<0.20	16	2.9	<5		0.17
	14/11/2022	6.4	150	210	0.1	190	0.18	<0.01	54	<0.02	13	62	18	24		0.33
	14/12/2022	6.3	110	870	0.1	200	0.27	0.05	26	<0.10	2.7	25	29	14		1.12
	18/01/2023	6.6	220	190	0.1	61	0.79	0.049	31	<0.20	21	27	6.2	61		0.20
	20/02/2023	6.5	240	29	4.4	1300	0.023	0.31	26	<0.10	1.9	29	24	<5		0.92
	28/03/2023	4.8	310	370	5.7	370	1.5	0.19	22	<0.02	<0.20	17	92	<10		4.18
	18/04/2023	6.2	300	60	7.3	410	0.05	0.16	32	<0.02	1.38	25	120	<5		3.75
	18/05/2023	6.5	130	39	6	270	0.06	0.09	25	<0.02	<0.2	18	29	<5		1.16
	15/06/2023	6.4	190	25	8.9	280	0.37	0.23	34	<0.02	1.2	25	38	<5		1.12
	21/08/2023	6.1	430	20	5.7	690	0.02	0.50	36	<0.02	1.2	38	75	<5		2.08
	18/09/2023	7.2	180	15	8.1	260	0.06	0.04	31	<0.02	0.8	28	39	<5		1.26
	18/10/2023	6.8	150	11	8.1	240	0.05	0.02	40	<0.02	<0.2	28	13	<5		0.33
	20/11/2023	6.9	180	18	4.9	350	0.07	0.04	37	<0.01	0.3	26	50	<5		1.35
	19/12/2023	6.7	140	15	4.6	240	0.05	0.03	37	<0.02	0.7	29	11	<5		0.30
	23/01/2024	6.8	210	27	9.7	350	0.06	0.02	35	<0.02	0.5	31	25	<5		0.71
	26/02/2024	4.5	140	43	7.1	190	0.05	0.03	9.0	<0.02	0.6	8.5	65	<5		7.22
	26/03/2024	6.7	44	12	6.8	99	0.07	<0.01	9.5	<0.02	0.5	8.8	8.7	<5		0.92
	18/04/2024	7.6	350	<5	6.4	630	0.03	0.9	93	<0.02	0.6	78	56	<5	<10	0.60
	20/05/2024	6.7	130	27	2.1	210	0.04	0.05	20	<0.02	1.1	18	16	<5	11	0.80
	25/06/2024	6.7	180	9.7	8.8	330	0.03	<0.01	42	0.03	<0.2	35	10	<5	11	0.24
	10/07/2024	7.0	150	8.2	6.1	220	0.01	0.11	22	<0.02	1.9	18	21	<5	<10	0.95
	6/08/2024	6.5	220	8.5	7.0	280	0.06	0.02	39	<0.02	1.7	24	19	<5	20	0.49
	15/08/2024	6.6	48	<5	7.8	80	0.07	0.01	8.0	<0.02	<0.2	7.0	6.9	18	<10	0.86
	11/09/2024	7.1	250	<5	6.1	450	0.02	0.05	90	<0.02	0.3	71	48	<5	<10	0.53
	9/10/2024	7.0	260	<5	8.9	500	0.12	0.03	88	<0.02	0.6	73	35	<5	<10	0.40
	6/11/2024	7.5	300	6.4	6.0	500	0.07	<0.01	89	<0.02	1.0	72	34	<5	<10	0.38
	16/12/2024	6.4	200	110	8.8	310	1.1	<0.01	55	<0.02	0.4	11	19	6.6	<10	0.35
	14/01/2025	6.9	170	<5	4.6	340	0.08	<0.01	51	<0.02	0.9	44	7.7	<0.005	<10	0.15
	11/02/2025	7.1	96	5.6	6.1	150	0.08	<0.01	14	<0.02	1.9	91	3.9	190	<10	0.28
	24/03/2024	3.2	420	7.2	8.6	670	<0.05	0.02	17	<0.02	2.8	17	250	<5	<10	14.71
	31/03/2025	7.2	160	<5	9.8	200	0.14	0.05	14	<0.02	<0.4	16	7	<5	<10	0.50
	8/04/2025	7.2	150	12	6.2	230	0.37	0.03	14	<0.02	0.7	18	3.4	<5	<10	0.24
	9/05/2025	3.9	320	1100	-	560	1.5	0.23	31	<0.02	2.8	18	150	<20	34	4.84
	25/06/2025	7.1	400	9.4	9.8	580	1.5	0.01	88	<0.03	1.5	74	38	38	14	0.40
	8/07/2025	6.9	300	14	8.4	600	0.34	0.58	96	<0.02	0.9	73	38	19	21	2.53
	14/08/2025	7.2	330	6.1	8.6	600	0.05	0.03	120	<0.02	0.7	85	31	<5	<10	3.87
	11/09/2025	7.0	320	6.1	7.9	530	0.05	0.11	87	<0.02	2.8	69	36	<5	<10	2.42
SW02 Baseline		**6.3 – 7.0**	**199**	**495**	**-**	**292**	**1.88**	**0.261**	**161**	**0.06**	**8.6**	**32**	**10**	**182**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW02	29/09/2022	0.42	0.003	<0.0002	19	0.002	0.004	1.5	0.001	5.8	<0.0001	0.002	1.9	0.057	<1
	20/10/2022	0.22	0.001	<0.0002	12	0.001	0.003	0.62	<0.001	3.4	<0.0001	0.001	1.7	0.032	<1
	14/11/2022	1.8	0.037	<0.002	47	<0.001	0.015	53	<0.01	11	<0.001	<0.01	<5	0.096	<1
	14/12/2022	13	0.066	<0.002	38	0.034	0.094	9.7	0.071	5.9	<0.001	0.013	5.1	1	<1
	18/01/2023	3.3	0.023	<0.002	<2	<0.01	0.015	45	0.014	5.8	<0.001	<0.010	<5	0.15	<1
	20/02/2023	12	0.033	0.0002	38	0.009	0.09	0.013	0.013	11	<0.001	0.018	4.1	0.28	<1
	28/03/2023	3.4	0.002	0.0003	43	0.002	0.003	2.5	0.001	8.4	<0.0001	0.024	4.1	0.63	<1
	18/04/2023	0.86	<0.001	<0.0002	20	0.002	0.002	<0.001	<0.001	4	<0.0001	0.006	2.7	0.089	<1
	18/05/2023	0.72	0.002	<0.0002	17	0.002	0.006	1	0.002	4.3	<0.0001	0.003	2.4	0.081	<1
	15/06/2023	1.7	0.001	<0.0002	22	0.001	0.004	2.1	0.001	5.5	<0.0001	0.005	1.9	0.037	<1
	21/08/2023	1.1	<0.001	<0.0002	71	<0.001	<0.001	8.0	<0.001	16	<0.0001	0.024	5.7	0.057	<1
	18/09/2023	1.7	0.003	<0.0002	19	0.002	0.004	3.0	0.002	6.3	<0.0001	0.005	3.0	0.023	<1
	18/10/2023	0.88	0.002	<0.0002	17	0.001	0.003	2.2	0.001	5.5	<0.0001	0.002	1.9	0.014	<1
	20/11/2023	2.3	0.002	<0.0002	19	0.002	0.002	2.6	<0.001	6.7	<0.0001	0.007	1.4	0.032	<1
	19/12/2023	1.1	0.002	<0.0002	19	0.001	0.001	4.8	<0.001	6.5	0.0002	0.004	2.9	0.012	<1
	23/01/2024	2.9	0.003	<0.0002	23	0.002	0.001	5.8	<0.001	7.8	<0.0001	0.007	3.3	0.031	<1
	26/02/2024	1.5	0.001	<0.0002	9.7	0.001	0.003	1.7	<0.001	2.5	<0.0001	0.004	1.4	0.027	<1
	26/03/2024	0.34	<0.001	<0.0002	6.9	0.001	0.003	0.67	<0.001	1.9	<0.0001	0.001	1.8	0.021	<1
	18/04/2024	0.09	<0.001	<0.0002	20	<0.001	<0.001	0.39	<0.001	5.4	<0.0001	<0.001	14	0.014	<1
	20/05/2024	0.71	0.004	<0.0002	19	0.002	0.003	5.6	<0.001	3.8	<0.0001	0.003	3.0	0.015	<1
	25/06/2024	1.1	<0.001	<0.0002	21	<0.001	0.001	1.4	<0.001	4.6	<0.0001	0.004	4.5	0.022	<1
	10/07/2024	1.1	0.002	<0.0002	20	<0.001	0.004	1.2	<0.001	4.2	<0.0001	0.004	2.3	0.047	<1
	6/08/2024	0.61	0.001	<0.0002	17	0.001	0.002	1.4	<0.001	3.7	<0.0001	0.002	3	0.019	<1
	15/08/2024	0.31	0.002	<0.0002	8	0.001	0.004	0.37	<0.001	1.5	<0.0001	0.001	1.4	0.038	<1
	11/09/2024	0.19	<0.001	<0.0002	20	<0.001	0.001	0.31	<0.001	4.8	<0.0001	0.001	14	0.021	<1
	9/10/2024	0.8	<0.001	<0.0002	23	<0.001	0.001	1.5	<0.001	5	<0.0001	0.003	15	0.032	<1
	6/11/2024	0.007	0.001	<0.0002	21	<0.001	<0.001	0.7	<0.001	5.8	<0.0001	<0.001	15	0.011	<1
	16/12/2024	0.05	<0.001	<0.0002	14	<0.001	0.001	0.24	<0.001	3.1	<0.0001	<0.001	9.4	0.008	<1
	14/01/2025	0.06	<0.001	<0.0002	14	0.001	0.002	0.28	<0.001	2.7	<0.0001	0.001	9.4	0.015	<1
	11/02/2025	0.82	<0.001	<0.0002	24	<0.001	0.002	4.4	<0.001	4.8	<0.0001	0.005	19	0.058	<1
	24/03/2024	7.4	<0.001	<0.0002	56	0.002	0.001	22	<0.001	6.9	<0.0001	0.021	1.8	0.097	<1
	31/03/2025	0.25	0.002	<0.0002	23	<0.001	0.003	1.7	<0.001	7.0	<0.0001	0.002	2.5	0.054	<1
	8/04/2025	0.10	0.001	<0.0002	29	<0.001	0.001	2.7	<0.001	8.3	<0.0001	0.002	2.3	0.015	<1
	9/05/2025	2.3	0.007	<0.0002	34	0.005	0.002	140	<0.001	9.1	<0.0001	0.011	2.1	0.077	<1
	25/06/2025	0.30	<0.001	<0.0002	21	<0.001	0.001	1.1	<0.001	5.4	<0.0001	0.002	14	0.030	<1
	8/07/2025	0.15	<0.001	<0.0002	19	<0.001	<0.001	0.65	<0.001	5.3	<0.0001	0.001	12	0.018	<1
	14/08/2025	0.11	<0.001	<0.0002	21	<0.001	<0.001	0.39	<0.001	5.9	<0.0001	<0.001	11	0.012	<1
	11/09/2025	0.32	0.001	<0.0002	21	<0.001	0.002	1.2	<0.001	5.6	<0.0001	0.001	11	0.016	<1
SW02 Baseline		**3.8**	**0.045**	**0.001**	**17**	**0.007**	**0.012**	**71.9**	**0.02**	**5**	**0.0005**	**0.005**	**6**	**0.09**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW02	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	90	<100	<20	<50	60	30	90	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	180	180	30	-	<20	170	30	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	200	<100	<20	<50	100	<100	100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	140	140	100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW02 Baseline		**60**	**-**	**22**	**100**	**-**	**50**	**100**	**50**	**140**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW03	29/09/2022	6.8	120	<5	9.3	100	0.02	<0.01	24	<0.02	1.10	23	2.40	<5		0.1
	20/10/2022	5.9	650	26	7.5	870	0.03	<0.01	270	<0.02	<0.2	12	13.00	<5		0.0
	14/11/2022	6.5	140	260	2.6	160	0.13	<0.05	27	<0.01	7.40	36	9.00	<5		0.3
	14/12/2022	6.5	110	11	4.4	160	0.01	0.05	23	<0.01	3.90	18	11.00	<5		0.5
	18/01/2023	6.5	160	9	5.1	<5	0.02	<0.010	31	<0.02	1.30	26	17	<5		0.5
	20/02/2023	3.4	540	13	6.0	720	0.01	<0.010	22	<0.02	5.10	28	100	<5		4.5
	28/03/2023	3.3	400	7	9.9	750	0.02	0.07	14	<0.02	<0.2	16	110	<5		7.9
	18/04/2023	4.2	280	<5	7.4	450	<0.01	0.04	29	<0.02	<0.2	22	140	<5		4.8
	18/05/2023	4.3	310	37	5.5	580	0.02	0.32	22	<0.02	12.33	21	230	<5		10.5
	15/06/2023	3.3	580	17	8.9	870	0.04	0.68	32	<0.02	1.40	31	300	<5		9.4
	24/07/2023	3.9	290	36	9.0	510	0.03	0.40	17	<0.02	1	20	250	<0.005		14.7
	21/08/2023	6.8	270	5.8	7.2	350	0.04	0.04	45	<0.02	0.5	43	8	<0.005		0.2
	18/09/2023	4.6	410	20	7.4	540	<0.01	0.28	30	<0.02	0.4	29	230	<0.005		7.7
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	0.0099		4.5
	20/11/2023	3.5	640	18	7.1	1100	0.03	0.58	32	<0.01	0.6	30	370	0.0067		11.6
	19/12/2023	3.8	610	7.7	6.7	850	<0.01	0.86	36	<0.02	0.9	37	150	<0.005		4.2
	23/01/2024	3.7	460	55	4.1	880	<0.01	0.16	31	<0.02	1.6	37	100	<0.005		3.2
	26/02/2024	4.3	200	93	7.5	250	0.09	0.09	53	0.02	1.5	11	440	7.2		8.3
	26/03/2024	6.1	170	54	7.7	300	0.08	0.13	21	<0.02	1.0	20	78	<5		3.7
	18/04/2024	7.5	360	9.2	7.4	650	0.03	0.08	88	<0.02	0.8	78	64	<5	<10	0.6
	20/05/2024	4.5	300	21	5.6	450	<0.01	0.50	19	<0.02	1.2	23	190	<5	66	10.0
	25/06/2024	6.3	80	2300	7.2	140	0.98	<0.1	9.4	<0.2	140	9	5	<5	48	0.5
	10/07/2024	4.4	260	29	5.1	400	0.01	0.64	19	<0.02	0.7	21	10	<5	50	0.5
	6/08/2024	4.6	340	22	6.3	630	0.02	0.62	35	<0.02	1.3	29	230	<5	70	6.6
	15/08/2024	6.3	82	19	8.3	120	0.04	0.07	9.5	<0.02	<0.2	9	31	<5	11	3.3
	11/09/2024	7.1	290	<5	7.7	440	<0.01	0.11	84	<0.02	0.3	66	56	<5	<10	0.7
	9/10/2024	6.6	240	330	7.7	360	0.46	<0.01	56	<0.02	7.1	45	35	33	<10	0.6
	6/11/2024	7.2	300	49	7.5	460	0.07	<0.01	88	<0.02	1.2	72	39	<5	<10	0.4
	16/12/2024	7.2	250	5.3	19.0	370	<0.01	<0.01	70	<0.02	0.7	61	31	50	<10	0.4
	14/01/2025	6.9	220	<5	7.7	420	0.04	<0.01	66	<0.02	1.3	57	11	<5	<10	0.2
	11/02/2025	7.4	340	<5	7.5	570	0.07	0.02	99	<0.02	1.4	87	14	<5	<10	0.1
	24/03/2024	6.9	130	<5	8.1	230	0.05	<0.01	38	<0.02	0.9	32	66	<5	<10	1.7
	31/03/2025	7.0	260	9.3	9.8	440	0.06	0.19	100	<0.02	0.9	70	26	<5	<10	0.3
	8/04/2025	7.2	290	<5	8.9	470	0.04	0.07	100	<0.02	0.4	82	36	<5	<10	0.4
	9/05/2025	7.1	290	<5	-	460	<0.01	<0.1	100	<0.02	0.7	73	36	<5	<10	0.4
	25/06/2025	6.7	360	230	6.5	540	2.3	0.01	88	<0.03	2.3	68	36	46	14	0.4
	8/07/2025	6.8	300	82	9.1	570	0.15	0.48	89	<0.02	1.1	67	39	27	<10	0.4
	14/08/2025	7.2	300	16	9.1	580	0.08	0.05	110	<0.02	1.0	81	32	<5	<10	0.3
	11/09/2025	6.8	300	6.7	12.0	530	0.05	0.22	84	<0.02	0.7	67	43	43	11	0.5
SW03 Baseline		**6.1 - 6.7**	**191**	**1005**	**-**	**281**	**2.14**	**0.155**	**111**	**0.041**	**4.3**	**30**	**6**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW03	29/09/2022	0.4	0.00	<0.0002	13	0.00	0.00	0.8	<0.001	4.4	<0.0001	0.002	1.00	0.034	<1
	20/10/2022	0.5	0.00	<0.0002	8	0.00	0.00	0.9	0.00	2.3	<0.0001	0.001	1.00	0.03	<1
	14/11/2022	1.1	<0.001	<0.002	18	<0.001	0.00	1.9	<0.010	5.7	<0.001	<0.01	<5	0.24	<1
	14/12/2022	0.6	<0.001	<0.002	13	<0.01	<0.010	1.3	<0.010	<5	<0.001	<0.01	<5	0.53	<1
	18/01/2023	0.5	0.01	<0.002	<2	<0.010	<0.01	0.5	<0.01	6.2	<0.001	<0.01	<5	<0.05	<1
	20/02/2023	17	0.00	<0.0002	63	0.00	0.02	0.0	0.00	14.0	<0.001	0.065	3.00	0.12	<1
	28/03/2023	15	<0.001	<0.0002	63	0.00	0.00	4.5	<0.001	11.0	<0.0001	0.065	2.30	0.15	<1
	18/04/2023	3.8	<0.001	<0.0002	30	0.00	0.00	<0.001	<0.001	5.0	<0.0001	0.023	2.10	0.048	<1
	18/05/2023	5.8	<0.001	<0.0002	48	<0.001	0.00	14.0	<0.001	10.0	<0.0001	0.033	2.80	0.16	<1
	15/06/2023	11	<0.001	<0.0002	74	<0.001	0.00	12.0	<0.001	15.0	<0.0001	0.058	2.70	0.15	<1
	24/07/2023	7.1	<0.001	<0.0002	39	<0.001	0.002	8.9	0.001	9.7	<0.0001	0.030	2.5	0.10	<1
	21/08/2023	0.7	0.001	<0.0002	18	0.001	0.003	1.1	<0.001	6.3	<0.0001	0.002	6.8	0.026	<1
	18/09/2023	2.8	<0.001	<0.0002	59	<0.001	<0.001	1.1	<0.001	14.0	<0.0001	0.022	3.2	0.049	<1
	18/10/2023	3.0	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12.0	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	11.0	0.002	<0.0002	75	<0.001	<0.001	17	<0.001	17.0	<0.0001	0.060	3.0	0.14	<1
	19/12/2023	21.0	0.003	0.0011	80	<0.001	0.002	3.6	0.001	19.0	0.0007	0.071	4.3	0.16	<1
	23/01/2024	17.0	0.002	<0.0002	63	0.002	0.001	17	<0.001	19.0	<0.0001	0.059	5.1	0.13	<1
	26/02/2024	8.8	0.003	<0.0002	17	0.003	0.005	9.0	0.002	4.8	<0.0001	0.016	1.8	0.050	<1
	26/03/2024	0.9	<0.001	<0.0002	24	<0.001	<0.001	1.8	<0.001	6.1	<0.0001	0.009	2.8	0.025	<1
	18/04/2024	1.1	<0.001	<0.0002	22	<0.001	<0.001	1.8	<0.001	6.0	<0.0001	0.005	13	0.018	<1
	20/05/2024	5.4	0.002	<0.0002	34	<0.001	<0.001	13	<0.001	7.3	<0.0001	0.026	3.6	0.047	<1
	25/06/2024	0.2	<0.001	<0.0002	10	<0.001	<0.001	170	<0.001	2.7	<0.0001	0.011	2.3	0.042	<1
	10/07/2024	3.6	0.001	<0.0002	34	<0.001	0.001	6.6	<0.001	6.6	<0.0001	0.019	3.0	0.053	<1
	6/08/2024	3.10	<0.001	<0.0002	51	<0.001	<0.001	4.8	<0.001	7.8	<0.0001	0.026	3.4	0.092	<1
	15/08/2024	1.20	0.00	<0.0002	12	<0.001	0.003	2.1	<0.001	2.2	<0.0001	0.004	1.6	0.037	<1
	11/09/2024	0.59	<0.001	<0.0002	21	<0.001	0.001	1.0	<0.001	4.9	<0.0001	0.003	13	0.021	<1
	9/10/2024	20	0.02	<0.0002	21	0.011	0.01	39.0	0.008	4.4	<0.0001	0.008	8.8	0.10	<1
	6/11/2024	3	0.00	<0.0002	23	0.002	0.002	4.5	<0.001	6.2	<0.0001	0.003	15	0.017	<1
	16/12/2024	0.29	0.001	<0.0002	19	0.001	<0.001	1.6	<0.001	4.0	<0.0001	0.001	12	0.009	<1
	14/01/2025	0.17	0.001	<0.0002	17	<0.001	0.001	0.74	<0.001	3.3	<0.0001	0.001	12	0.016	<1
	11/02/2025	0.45	0.001	<0.0002	23	<0.001	<0.001	2.1	<0.001	4.5	<0.0001	0.001	18	0.031	<1
	24/03/2024	0.18	0.001	<0.0002	10	<0.001	0.002	0.8	<0.001	2.6	<0.0001	0.001	6.6	0.036	<1
	31/03/2025	0.42	0.002	<0.0002	21	<0.001	0.001	3.5	<0.001	4.9	<0.0001	0.002	11	0.045	<1
	8/04/2025	0.30	<0.001	<0.0002	21	<0.001	<0.001	1.3	<0.001	5.4	<0.0001	0.002	11	0.012	<1
	9/05/2025	0.62	0.002	<0.0002	20	<0.001	0.001	2.0	<0.001	4.9	<0.0001	0.005	11	0.042	<1
	25/06/2025	2.0	0.002	<0.0002	21	<0.001	0.003	6.1	0.001	5.2	<0.0001	0.002	12	0.053	<1
	8/07/2025	0.24	<0.001	<0.0002	19	<0.001	<0.001	0.49	<0.001	5.0	<0.0001	0.001	11	0.015	<1
	14/08/2025	0.20	<0.001	<0.0002	20	<0.001	<0.001	0.59	<0.001	5.8	<0.0001	0.001	11	0.010	**<1**
	11/09/2025	2.0	0.003	<0.0002	19	0.002	0.004	4.0	0.002	5.4	<0.0001	0.003	11	0.037	**<1**
SW03 Baseline		**7.9**	**0.058**	**0.001**	**21**	**0.008**	**0.028**	**85.5**	**0.028**	**5**	**0.0005**	**0.006**	**4**	**0.26**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW03	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	<50	<100	<20	<50	<100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	130	130	<100	<100	<20	<50	10	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	**<50**	**<50**	**<100**	**<100**	**<20**	**<50**	**<100**	**<100**	**<100**	**<100**
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW03 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**120**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW04	29/09/2022	4.5	68	<5	4.8	52	0.01	0.18	20	<0.02	5.1	17	<2	<5		0.05
	20/10/2022	4.2	90	<5	7.5	110	0.01	<0.10	20	<0.02	0.3	16	<2	<5		0.05
	14/11/2022	No surface water located at monitoring site – no sample collected														
	14/12/2022	3.2	190	<5	2	280	0.01	0.05	42	<0.10	3.2	20	<2	<5		0.02
	18/01/2023	No surface water located at monitoring site – no sample collected														
	20/02/2023	4.1	0.2	<5	5.9	160	0.02	0.09	22	<0.10	7.4	23	15	<5		0.7
	28/03/2023	4.2	68	<5	8	130	<0.01	<0.01	17	<0.10	<0.25	14	25	<5		1.5
	18/04/2023	4.6	130	16	9.1	190	0.01	0.03	32	<0.02	0.5	21	8.7	<5		0.3
	18/05/2023	3.6	1200	42	8	1800	0.03	1.2	26	<0.02	1.15	53	1000	<5		38.5
	15/06/2023	4.2	140	160	7.7	200	1.5	0.44	44	<0.02	12	24	<2	8		0.02
	24/07/2023	3.6	1,600	21	9.0	2,400	0.02	1.5	180	<0.02	3.4	78	5,700	<0.005		31.7
	21/08/2023	3.3	2,400	5.7	7.5	3,700	<0.01	2.8	33	<0.02	3.4	97	850	0.0053		25.8
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	0.0099		4.5
	20/11/2023	3.2	2,100	<5	9.0	3,500	0.03	0.80	4.7	<0.01	1.1	63	400	<0.005		85.1
	19/12/2023	3.0	3,200	15	0.8	3,700	<0.01	0.44	34	<0.02	4.5	100	980	<0.005		28.8
	23/01/2024	3.1	1,600	23	7.8	2,500	<0.01	0.19	27	<0.02	0.5	54	730	<0.005		27.0
	26/02/2024	3.1	1000	11	7.8	1200	0.03	0.31	14	<0.02	1.5	30	570	<5		40.7
	26/03/2024	3.2	900	5.7	9.6	1300	<0.01	0.36	21	<0.02	0.9	30	710	<5		33.8
	18/04/2024	3.1	980	67	7.5	1900	0.03	0.42	15	<0.02	0.8	33	1000	27	310	66.7
	20/05/2024	3.3	630	8	8.3	1100	<0.01	0.30	11	<0.02	0.7	25	500	<5	190	45.5
	25/06/2024	3.2	1000	5.4	8.6	1600	0.01	0.4	13	<0.02	1.0	27	270	<5	160	20.8
	10/07/2024	3.5	420	<5	7.9	870	<0.01	0.24	11	<0.02	0.6	21	450	<5	150	40.9
	6/08/2024	3.3	1300	38	8.7	1700	0.04	0.03	13	<0.02	1.1	28	860	7.8	230	66.2
	15/08/2024	3.9	240	<5	9.3	390	0.02	0.13	13	<0.02	0.8	16	150	<5	40	11.5
	11/09/2024	3.4	460	<5	6.9	690	0.01	0.05	8.7	<0.02	<0.2	17	390	15	77	44.8
	24/09/2024 - Additional	3.5	750	-	-	1300	-	-	-	-	-	-	-	-	-	-
	9/10/2024	3.1	810	<5	9.0	1200	0.02	<0.01	10	<0.02	0.8	26	580	<5	<10	58.0
	6/11/2024	3.3	440	23	6.4	660	0.05	<0.01	10	<0.02	1.0	18	310	<5	15	31.0
	16/12/2024	5.7	210	420	0.2	360	0.10	0.25	13	<0.02	13	12	110	7	25	8.5
	14/01/2025	4.1	310	120	4.9	460	0.13	0.03	6.3	<0.02	1.3	11	64	<5	<10	10.2
	11/02/2025	7.6	700	<5	8.8	1000	0.01	0.03	5.8	<0.02	1.3	21	150	7.7	<10	25.9
	24/03/2025	3.9	390	21	7.4	470	0.03	0.03	18	<0.02	1.5	24	180	8.1	<10	10.0
	31/03/2025	6.3	260	70	10	370	<0.01	0.10	11	<0.02	0.8	16	160	<5	<10	14.5
	8/04/2025	6.0	430	43	4.1	470	0.09	0.27	11	0.04	2.3	18	240	<10	16	21.8
	9/05/2025	6.5	270	260	-	570	<0.01	0.02	10	<0.02	4.5	16	250	160	<10	25.0
	25/06/2025	6.7	410	67	6.1	590	0.6	0.01	8.3	<0.02	0.6	16	160	6.5	28	19.2
	8/07/2025	4.0	140	180	6.1	160	0.21	<0.01	21	<0.02	6.2	17	<2	7.6	43	21.0
	14/08/2025	6.5	180	250	6.6	290	0.47	-	9.4	-	-	14	86	<5	13	9.4
	11/09/2025	6.5	260	1,400	0.2	460	0.03	0.31	7.3	<0.02	38	16	150	10	22	7.3
SW04 Baseline		**4.2 – 4.5**	**112**	**293**	**-**	**165**	**0.5**	**0.693**	**90**	**0.052**	**4.5**	**20**	**3**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW04	29/09/2022	1.3	0.001	<0.0002	1.6	0.005	0.001	2.7	0.001	2.6	<0.0001	0.002	1	0.027	<1
	20/10/2022	1.1	<0.001	<0.0002	1.3	0.004	0.001	2.4	0.001	2.3	<0.0001	0.002	1	0.024	<1
	14/11/2022	No surface water located at monitoring site – no sample collected													
	14/12/2022	1.2	<0.001	<0.002	<5	<0.001	<0.01	3.2	<0.01	<5	<0.001	<0.01	<5	0.084	<1
	18/01/2023	No surface water located at monitoring site – no sample collected													
	20/02/2023	1.6	0.002	<0.0002	2.7	0.005	0.05	0.002	0.002	3.9	<0.001	0.003	1.6	0.039	<1
	28/03/2023	1.1	<0.01	<0.002	<5	0.002	<0.01	2.7	<0.01	<5	<0.0001	0.01	<5	<0.05	<1
	18/04/2023	0.85	<0.001	<0.0002	1.8	<0.01	<0.001	<0.001	<0.001	2.7	<0.0001	0.001	0.8	0.034	<1
	18/05/2023	41	<0.001	0.0005	200	<0.001	0.003	16	0.003	31	<0.0001	0.11	5.7	0.4	<1
	15/06/2023	3.1	0.002	<0.0002	2.2	0.007	0.007	6.3	0.005	4.5	<0.0001	0.003	1.4	0.075	1.41
	24/07/2023	50	<0.001	0.0002	330	<0.001	0.003	3.9	0.002	51	<0.0001	0.13	9.0	0.18	<1
	21/08/2023	72	0.002	0.0004	560	<0.001	0.003	3.4	0.002	83	<0.0001	0.23	13	0.34	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	3.0	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	91	0.003	0.0007	380	0.001	0.003	4.3	0.003	52	<0.0001	0.27	7.2	0.55	<1
	19/12/2023	110	0.005	0.0022	570	0.002	0.005	11	0.007	90	0.0010	0.39	4.3	0.70	<1
	23/01/2024	55	0.002	0.0003	260	0.002	0.003	9.7	0.002	35	<0.0001	0.19	6.1	0.33	<1
	26/02/2024	23	<0.001	<0.0002	140	<0.001	<0.001	5.1	<0.001	20	<0.0001	0.083	3.9	0.18	<1
	26/03/2024	20	<0.001	<0.0002	130	<0.001	<0.001	3.1	<0.001	19	<0.0001	0.068	4.9	0.10	<1
	18/04/2024	32	<0.001	<0.0002	190	0.001	0.002	7.0	<0.001	26	<0.0001	0.10	3.6	0.18	<1
	20/05/2024	20	<0..001	<0.0002	100	<0.001	<0.001	5.7	<0.001	14	<0.0001	0.064	2.6	0.13	<1
	25/06/2024	16	<0.001	<0.0002	210	<0.001	<0.001	5.3	<0.001	23	<0.0001	0.059	3.7	0.090	<1
	10/07/2024	12	<0.001	<0.0002	110	<0.001	0.001	2.5	<0.001	12	<0.0001	0.051	2.2	0.11	<1
	6/08/2024	17	<0.001	<0.0002	200	<0.001	0.001	5.5	<0.001	24	<0.0001	0.059	2.5	0.1	<1
	15/08/2024	2.0	<0.001	<0.0002	36	<0.001	<0.001	0.81	<0.001	6.0	<0.0001	0.015	2.5	0.057	<1
	11/09/2024	5.6	<0.001	<0.0002	87	<0.001	<0.001	3.6	<0.001	11	<0.0001	0.026	1.6	0.061	<1
	24/09/2024 - Additional	-	<0.001	<0.0001	-	<0.001	0.0001	-	<0.001	-	<0.0001	0.032	-	0.043	-
	9/10/2024	14	<0.001	<0.0002	140	<0.001	0.002	8.1	<0.001	17	<0.0001	0.057	2.7	0.12	<1
	6/11/2024	2.8	<0.001	<0.0002	81	<0.001	<0.001	6.1	<0.001	11	<0.0001	0.020	<0.5	0.034	<1
	16/12/2024	4.4	0.007	<0.0002	29	0.009	0.006	170	0.003	4.5	<0.0001	0.009	1.3	0.035	<1
	14/01/2025	1.2	<0.001	<0.0002	53	<0.001	0.001	5.8	<0.001	5.8	<0.0001	0.014	0.8	0.039	<1
	11/02/2025	<0.05	<0.001	<0.0002	200	<0.001	<0.001	0.14	<0.001	18	<0.0001	0.004	<0.5	0.033	<1
	24/03/2025	1.1	<0.001	<0.0002	52	<0.001	0.002	6.6	<0.001	8.5	<0.0001	0.012	2.3	0.10	<1
	31/03/2025	0.50	0.003	<0.0002	50	<0.001	0.001	17	<0.001	7.6	<0.0001	0.007	2.4	0.047	<1
	8/04/2025	0.36	0.004	<0.0002	70	<0.001	<0.001	38	<0.001	9.8	<0.0001	0.006	2.3	0.014	<1
	9/05/2025	0.64	<0.001	<0.0002	61	<0.001	0.001	34	<0.001	7.9	<0.0001	0.001	1.9	0.032	<1
	25/06/2025	0.35	<0.001	<0.0002	85	<0.001	<0.001	7.3	<0.001	8.5	<0.0001	0.004	1.3	0.013	<1
	8/07/2025	0.92	<0.001	<0.0002	0.6	0.004	0.002	1.8	<0.001	1.5	<0.0001	0.001	0.8	0.042	<1
	14/08/2025	0.34	<0.001	<0.0002	38	<0.001	<0.001	17	<0.001	5.7	<0.0001	0.002	1.0	0.018	<1
	11/09/2025	8.7	0.031	<0.002	120	0.017	0.011	830	<0.01	12	<0.001	0.027	<5	0.10	<1
SW04 Baseline		**1.4**	**0.002**	**0.001**	**3.2**	**0.007**	**0.002**	**2.8**	**0.002**	**2.3**	**0.0005**	**0.005**	**2.9**	**0.028**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW04	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	No flow - No sample collected									
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	No flow - No sample collected									
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No flow - No sample collected									
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	160	160	<100	<100	<20	<50	<100	<100	160	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Additional	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW04 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW05	29/09/2022	5.9	480	5.2	7.7	510	0.12	0.17	220	<0.20	3	140	11	<5		0.05
	20/10/2022	6.2	650	7.2	8.9	690	0.06	0.24	180	<0.20	0.5	160	8.6	<5		0.05
	14/11/2022	6.2	820	13	4.7	1000	0.06	<0.05	310	<0.10	8.1	260	100	<5		0.32
	14/12/2022	6.2	830	16	7.5	1100	0.05	0.05	330	<0.10	3.1	240	40	<5		0.12
	18/01/2023	6.3	2800	33	7	<5	0.09	0.09	1300	<0.02	3.38	820	160	<5		0.12
	20/02/2023	6.7	18	18	5.4	2300	0.1	0.07	2000	<0.10	3.4	4700	890	<5		0.45
	28/03/2023	5.6	470	<5	9.4	760	0.02	0.08	200	<0.10	<0.02	110	23	6.7		0.12
	18/04/2023	6.4	4000	16	8.5	5300	0.1	0.12	2000	<0.02	80	1100	230	<5		0.12
	18/05/2023	5.8	260	17	5.7	460	0.08	<0.01	110	<0.02	<0.2	64	25	<5		0.23
	15/06/2023	6.2	1100	<5	8.8	1400	0.58	0.14	450	<0.02	1.1	250	40	<5		0.09
	24/07/2023	6.5	1,600	<5	9.3	2,800	0.05	0.17	1,500	<0.5	1.1	440	1,200	<0.005		0.80
	21/08/2023	6.6	1,600	<5	6.3	2,900	0.06	0.15	1,500	<0.02	1.28	480	190	<0.005		0.13
	18/09/2023	6.6	2,500	13	6.4	3,800	0.06	0.11	1,200	<0.02	1.3	650	210	<0.005		0.18
	18/10/2023	6.9	4,800	6.6	6.5	7,700	0.06	0.05	2,700	<0.02	<0.2	1,300	730	0.01		0.27
	20/11/2023	6.8	2,100	12	4.8	3,700	0.18	0.46	1,100	<0.01	0.6	460	1,200	<0.005		1.09
	19/12/2023	6.7	3,300	14	5.3	5,400	0.19	0.77	1,700	<0.02	<2	1,000	64	<0.005		0.04
	23/01/2024	6.2	1,100	13	9.3	1,000	0.09	0.05	440	<0.02	2.3	260	220	<0.005		0.50
	26/02/2024	6.3	970	16	8.6	1200	0.11	0.03	330	<0.02	1.5	200	130	<5		0.39
	26/03/2024	6.6	1100	9.1	5.6	1700	0.03	0.09	910	<0.02	2.0	290	420	<5		0.46
	18/04/2024	6.5	560	8.4	5.8	830	0.07	0.16	160	<0.02	1.7	110	160	5.4	<10	1.00
	20/05/2024	6.7	240	<5	5.8	350	<0.01	0.03	68	<0.02	0.4	47	140	<5	15	2.06
	25/06/2024	6.5	1000	16	7.7	1800	0.06	0.1	500	<0.02	1.2	300	29	<5	16	0.06
	10/07/2024	6.2	950	5.6	6.3	1700	0.02	0.16	170	<0.02	0.9	280	130	<5	11	0.76
	6/08/2024	6.3	3300	9.0	8.9	5800	0.05	0.11	1500	<0.02	1.2	820	210	<5	27	0.14
	15/08/2024	6.2	300	<5	7.1	430	0.08	0.03	30	<0.02	<0.2	80	27	<5	12	0.90
	11/09/2024	6.4	710	8.2	5.5	1200	0.03	0.40	450	<0.02	1.1	230	72	<5	12	0.16
	9/10/2024	6.4	700	11	9.0	1100	0.15	0.15	320	<0.1	<0.25	180	53	<5	14	0.17
	6/11/2024	7.1	930	15	6.1	1300	0.08	0.16	440	<0.02	1.0	250	56	<5	<10	0.13
	16/12/2024	7.4	31000	26	9.3	44000	0.02	0.14	1400	<0.02	0.4	<0.5	2000	<5	<10	1.43
	14/01/2025	7.1	19000	9.4	6.2	30000	0.04	0.04	12000	<0.02	0.3	5500	500	<5	<10	0.04
	11/02/2025	7.5	24000	9.1	8.5	35000	0.03	0.06	6300	<0.02	<0.2	6900	260	<5	<10	0.04
	24/03/2024	6.3	1600	<5	7	2500	<0.1	0.12	790	<0.02	4.4	440	140	<5	<10	0.18
	31/03/2025	7.0	210	8	9.2	260	0.08	<10	72	<0.02	2.3	41	9.5	<5	<10	0.13
	8/04/2025	6.3	610	8.3	6.7	760	0.08	0.44	230	<0.2	<1	140	29	<10	<10	0.13
	9/05/2025	6.8	340	<5	-	480	0.08	<0.1	120	<0.2	1.7	71	40	<5	<10	0.33
	25/06/2025	6.2	2,000	6.6	5.9	3,500	<0.2	0.07	1,700	<0.2	<0.2	510	250	<5	17	0.14
	8/07/2025	6	470	<5	8	910	0.05	0.03	230	0.07	<0.2	130	41	<5	13	0.18
	14/08/2025	6.2	570	16	6.1	930	0.08	0.03	550	<0.02	16	140	62	6.5	13	0.11
	11/09/2025	6.5	940	5.4	6.9	1,700	0.04	0.05	440	<0.02	1.7	260	61	<5	9	0.14
SW05 Baseline		**5.1 – 7.2**	**4710**	**136**	**-**	**6927**	**0.21**	**0.592**	**980**	**<0.02**	**2.2**	**1667**	**115**	**63**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW05	29/09/2022	0.83	<0.001	<0.0002	9.4	0.002	<0.001	4.6	<0.001	17	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.66	<0.001	<0.0002	11	0.001	<0.001	3.5	0.001	19	<0.0001	0.002	7.9	0.007	<1
	14/11/2022	0.75	<0.001	<0.002	18	<0.001	0.002	5.4	<0.01	27	<0.001	<0.001	11	0.12	<1
	14/12/2022	0.93	<0.001	<0.002	16	<0.01	<0.01	6.1	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.73	<0.01	<0.002	<2	<0.01	<0.01	6.2	<0.01	96	<0.001	<0.01	41	<0.05	<1
	20/02/2023	0.22	0.002	<0.0002	190	0.001	0.01	<0.001	<0.001	550	<0.001	0.001	170	0.008	<1
	28/03/2023	0.77	<0.01	<0.002	9.4	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.4	<0.05	<1
	18/04/2023	1	<0.001	<0.0002	42	0.001	<0.001	<0.001	<0.001	110	<0.0001	0.003	37	0.008	<1
	18/05/2023	0.6	<0.001	<0.0002	5.2	<0.001	<0.001	2.4	<0.001	9.1	<0.0001	0.002	4.9	0.009	<1
	15/06/2023	0.32	<0.001	<0.0002	14	0.001	2	2	<0.001	27	<0.0001	0.001	14	0.01	<1
	24/07/2023	0.33	<0.001	<0.0002	22	<0.001	<0.001	1.9	<0.001	52	<0.0001	0.002	25	0.006	<1
	21/08/2023	0.41	<0.001	<0.0002	23	<0.001	0.002	2.2	<0.001	54	<0.0001	0.002	29	0.005	<1
	18/09/2023	0.28	<0.001	<0.0002	29	<0.001	<0.001	2.6	<0.001	70	<0.0001	0.001	42	<0.005	<1
	18/10/2023	0.27	<0.001	<0.0002	61	<0.001	<0.001	2.0	<0.001	160	<0.0001	<0.001	76	<0.005	<1
	20/11/2023	0.51	0.001	<0.0002	25	0.001	<0.001	4.3	<0.001	56	<0.0001	0.002	27	<0.005	<1
	19/12/2023	0.54	0.005	0.0028	46	0.001	0.001	4.2	0.001	120	0.0020	0.002	47	0.009	<1
	23/01/2024	0.90	0.003	<0.0002	16	0.002	0.001	7.8	<0.001	32	<0.0001	0.001	16	0.012	<1
	26/02/2024	0.63	0.001	<0.0002	13	0.001	<0.001	3.7	<0.001	23	<0.0001	0.002	10	0.029	<1
	26/03/2024	0.64	<0.001	<0.0002	16	0.001	<0.001	3.3	<0.001	33	<0.0001	0.002	14	0.008	<1
	18/04/2024	0.69	<0.001	<0.0002	8.3	0.002	0.001	<0.001	<0.001	14	<0.0001	0.008	6.7	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.6	<0.001	0.001	2.5	<0.001	5.1	<0.0001	0.002	3.5	0.008	<1
	25/06/2024	0.2	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	31	<0.0001	0.002	12	0.012	<1
	10/07/2024	0.48	<0.001	<0.0002	17	<0.001	<0.001	2.9	<0.001	31	<0.0001	0.002	11	0.008	<1
	6/08/2024	0.28	<0.001	<0.0002	37	<0.001	<0.001	<0.001	<0.001	100	<0.0001	0.001	30	0.007	<1
	15/08/2024	0.5	<0.001	<0.0002	5.0	0.001	<0.001	1.6	<0.001	8.0	<0.0001	0.001	4.6	0.010	<1
	11/09/2024	0.52	<0.001	<0.0002	14	<0.001	<0.001	2.9	<0.001	25	<0.0001	0.002	10	0.011	<1
	9/10/2024	0.85	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.5	0.016	<1
	6/11/2024	0.68	<0.001	<0.0002	17	0.002	<0.001	3.8	<0.001	29	<0.0001	0.002	12	0.008	<1
	16/12/2024	<0.05	<0.001	<0.0002	<0.5	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.24	0.002	<0.0002	230	0.002	<0.001	0.64	<0.001	660	<0.0001	<0.001	210	0.006	<1
	11/02/2025	0.12	0.002	<0.0002	290	0.001	<0.001	0.5	<0.001	820	<0.0001	<0.001	260	0.047	<1
	24/03/2024	0.54	<0.001	<0.0002	22	<0.001	0.001	3.2	<0.001	53	<0.0001	0.002	17	0.32	<1
	31/03/2025	0.58	<0.001	<0.0002	4.2	<0.001	<0.001	3.7	<0.001	5.2	<0.0001	0.002	3.5	0.062	<1
	8/04/2025	0.77	<0.001	<0.0002	9.9	0.001	<0.001	4.2	<0.001	18	<0.0001	0.002	6.0	0.011	<1
	9/05/2025	0.75	<0.001	<0.0002	6.3	0.001	<0.001	3.2	<0.001	8.5	<0.0001	0.002	3.7	0.015	<1
	25/06/2025	0.46	<0.001	<0.0002	26	<0.001	<0.001	2.0	<0.001	63	<0.0001	0.001	19	0.010	<1
	8/07/2025	0.68	<0.001	<0.0002	9.1	0.001	<0.001	3.0	<0.001	16	<0.0001	0.002	4.9	0.008	<1
	14/08/2025	0.46	<0.001	<0.0002	8.6	<0.001	<0.001	2.6	<0.001	17	<0.0001	0.001	6.2	0.008	13
	11/09/2025	0.55	<0.001	<0.0002	15	<0.001	<0.001	3.2	<0.001	33	<0.0001	0.001	11	0.010	<1
SW05 Baseline		**2.1**	**0.002**	**0.001**	**57**	**0.002**	**0.003**	**12.3**	0.001	**130**	**0.0005**	**0.011**	**58**	**0.026**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW05	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	70	70	-	-	<20	60	100	-	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	120	120	<100	120	<20	<50	120	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW05 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW06	29/09/2022	6.0	480	<5	7.8	580	0.13	0.16	220	<0.02	8.6	140	11	5.1		0.05
	20/10/2022	6.3	580	16	8.7	730	0.05	0.19	330	<0.02	0.5	110	7.5	6.2		0.02
	14/11/2022	6.2	840	13	<5	1000	0.04	0.36	310	<0.10	1.1	270	100	<5		0.32
	14/12/2022	6.3	840	16	8.3	1200	0.1	0.05	340	<0.10	5.8	240	44	<5		0.13
	18/01/2023	6.4	3700	31.47	6.8	5400	0.07	0.04	1800	<0.02	2.5	1000	200	<5		0.11
	20/02/2023	6.8	19	89	5.1	14000	0.09	0.11	22	<0.10	4.1	4000	1200	<5		54.55
	28/03/2023	5.6	400	6.2	8.3	730	0.03	0.07	180	<0.20	<0.20	110	18	9.7		0.10
	18/04/2023	6.7	6400	18	7.4	6700	0.07	1.2	3200	<0.02	1.26	1700	360	<10		0.11
	18/05/2023	5.9	280	17	6.3	470	0.08	0.06	120	<0.02	0.4	370	21	<5		0.18
	15/06/2023	6.4	1100	<5	7.4	1400	0.55	0.18	440	<0.02	0.7	250	38	<5		0.09
	24/07/2023	6.7	2,100	5.8	6.6	3,500	0.07	0.23	1,800	<0.2	0.6	540	620	<0.005		0.34
	21/08/2023	6.6	2,800	<5	6.1	5,400	0.19	0.16	1,300	<0.02	0.78	870	59	<0.005		0.05
	18/09/2023	6.7	2,900	24	6.5	4,600	0.06	0.12	1,500	<0.02	0.4	1,300	200	<0.005		0.13
	18/10/2023	6.9	7,900	6.3	6.4	9,700	0.05	0.05	3,700	<0.02	<0.2	1,600	430	<0.005		0.12
	20/11/2023	6.6	2,200	9.9	4.6	4,000	0.18	0.43	1,200	<0.01	1.2	490	720	<0.005		0.60
	19/12/2023	6.8	3,300	9.3	5.6	6,600	0.09	0.82	2,300	<0.02	<2	1,300	94	<0.005		0.04
	23/01/2024	6.2	4,300	15	2.1	4,300	0.18	0.08	2,800	<0.02	1.4	1,100	330	<0.005		0.12
	26/02/2024	6.4	880	17	9.0	1200	0.11	0.02	60	<0.02	1.7	200	10	<5		0.17
	26/03/2024	6.8	1300	9.9	5.9	1900	0.05	0.07	760	0.05	1.2	300	120	<5		0.16
	18/04/2024	6.6	520	5.8	6.0	840	0.06	0.16	170	<0.02	<1	110	31	<5	17	0.18
	20/05/2024	6.3	240	<5	6.1	290	<0.01	0.05	59	<0.02	1.0	42	47	<5	15	0.80
	25/06/2024	6.7	960	17	9.2	1900	0.06	0.09	500	<0.02	5.3	270	21	<5	19	0.04
	10/07/2024	6.2	880	<5	6.2	1600	0.03	0.13	170	<0.02	1.4	250	33	<5	15	0.19
	6/08/2024	6.3	4500	6.8	7.6	8400	0.08	0.15	2100	<0.02	1.6	1200	270	<5	24	0.13
	15/08/2024	6.2	160	<5	7.0	240	0.10	0.03	57	<0.02	<0.2	38	15	<5	14	0.26
	11/09/2024	6.7	710	7.0	6.6	1000	0.04	0.28	370	<0.02	1.8	180	54	<5	11	0.15
	9/10/2024	6.5	720	14	8.5	1000	0.15	<0.01	310	<0.1	4.3	180	33	18	<10	0.11
	6/11/2024	6.9	1900	37	5.6	2400	0.10	0.11	890	<0.02	1.6	490	160	<5	<10	0.18
	16/12/2024	7.7	33000	13	9.5	47000	0.01	0.18	16000	<0.02	<0.2	<0.5	2,100	<5	<10	0.13
	14/01/2025	7.2	25000	11	6.3	38000	0.03	0.06	15000	<0.02	0.7	7200	600	<5	<10	0.04
	11/02/2025	7.6	24000	11	7.2	34000	0.003	0.06	6100	<0.02	<0.2	7200	240	5.9	<10	0.04
	24/03/2025	6.5	1700	<5	6.8	2500	<0.1	0.12	820	<0.02	4.2	450	110	<5	<10	0.13
	31/03/2025	6.7	250	11	9.5	250	0.08	<10	68	<0.02	<1	42	9.7	<5	<10	0.14
	8/04/2025	6.4	610	7.6	9.4	740	0.08	0.28	260	<0.2	<1	140	31	<10	<10	0.12
	9/05/2025	6.6	260	<5	-	490	0.07	<0.1	120	<0.2	<1	70	28	<5	<10	0.23
	25/06/2025	6.2	2,000	7.4	5.9	3,600	1.4	0.08	1,700	<0.2	1.4	520	260	<5	20	1.50
	8/07/2025	6	470	<5	8.2	910	0.05	0.02	230	<0.02	<0.2	130	28	<5	13	0.12
	14/08/2025	6.3	590	31	6.1	910	0.07	0.03	340	<0.02	0.3	140	37	<5	13	0.11
	11/09/2025	6.6	1,299	6.8	7.1	2,200	0.04	0.05	590	<0.02	5.6	340	67	<5	<10	0.11
ANZG (2018): 95% Slightly Disturbed		**6.5 – 8.0**	**-**	**<50**	**-**	**<2200**	**<0.05**	**-**	**-**	**-**	**<0.50**	**-**	**-**	**5**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW06	29/09/2022	0.78	<0.001	<0.0002	9.4	0.002	<0.001	4.5	<0.001	18	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.54	<0.001	<0.0002	9.1	0.001	<0.001	2.7	0.001	13	<0.0001	0.002	5.8	0.012	<1
	14/11/2022	0.68	<0.001	<0.002	18	<0.001	0.012	5.3	<0.01	29	<0.001	<0.01	12	0.11	<1
	14/12/2022	0.75	<0.001	<0.002	16	<0.01	<0.01	5.4	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.63	<0.010	<0.001	<2	<0.01	<0.01	0.01	<0.01	120	<0.001	<0.01	47	<0.05	<1
	20/02/2023	0.34	0.002	<0.0002	170	0.001	0.01	<0.001	<0.001	480	<0.001	0.002	160	0.008	<1
	28/03/2023	1.1	<0.01	<0.002	11	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.3	<0.05	<1
	18/04/2023	0.54	<0.001	<0.0002	68	0.001	<0.001	<0.001	<0.001	200	<0.0001	0.002	63	0.009	<1
	18/05/2023	0.44	0.003	<0.0002	14	<0.001	<0.001	0.13	<0.001	4.8	<0.0001	0.008	3.3	<0.005	<1
	15/06/2023	0.36	<0.001	<0.0002	15	<0.001	2.1	2.1	<0.001	28	28	0.001	14	<0.005	<1
	24/07/2023	0.36	<0.001	<0.0002	26	<0.001	<0.001	1.9	0.001	65	<0.0001	0.002	29	0.007	<1
	21/08/2023	0.41	<0.001	<0.0002	39	0.001	<0.001	1.9	<0.001	100	<0.0001	0.002	46	<0.005	<1
	18/09/2023	0.30	<0.001	<0.0002	56	<0.001	<0.001	2.4	<0.001	150	<0.0001	0.001	64	<0.005	<1
	18/10/2023	0.20	<0.001	<0.0002	73	<0.001	<0.001	1.7	<0.001	190	<0.0001	<0.001	85	<0.005	<1
	20/11/2023	0.63	0.001	<0.0002	27	0.001	<0.001	4.5	<0.001	60	<0.0001	0.003	28	0.010	<1
	19/12/2023	0.62	0.002	0.0007	56	0.001	0.002	3.4	<0.001	150	0.0005	0.002	55	0.008	<1
	23/01/2024	0.71	0.003	<0.0002	50	0.002	<0.001	5.7	<0.001	140	<0.0001	<0.001	46	0.008	<1
	26/02/2024	0.61	<0.001	<0.0002	14	0.003	<0.001	3.5	<0.001	24	<0.0001	0.005	10	0.025	<1
	26/03/2024	0.61	<0.001	<0.0002	17	0.001	<0.001	3.1	<0.001	34	<0.0001	0.002	15	0.008	<1
	18/04/2024	0.71	<0.001	<0.0002	10	0.001	<0.001	<0.001	<0.001	13	<0.0001	0.008	7.6	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.7	<0.001	<0.001	2.3	<0.001	4.8	<0.0001	0.002	3.2	0.009	<1
	25/06/2024	0.23	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	28	<0.0001	0.002	11	0.016	<1
	10/07/2024	0.5	<0.001	<0.0002	17	<0.001	<0.001	2.6	<0.001	28	<0.0001	0.002	10	0.01	<1
	6/08/2024	0.31	<0.001	<0.0002	50	<0.001	<0.001	<0.001	<0.001	140	<0.0001	0.002	40	0.011	<1
	15/08/2024	0.51	<0.001	<0.0002	4.8	<0.001	0.001	1.6	<0.001	4.6	<0.0001	0.002	3.0	0.011	<1
	11/09/2024	0.46	<0.001	<0.0002	14	<0.001	<0.001	2.1	<0.001	20	<0.0001	0.002	11	0.012	<1
	9/10/2024	0.84	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.7	0.009	<1
	6/11/2024	0.79	<0.001	<0.0002	25	0.002	<0.001	4.1	<0.001	60	<0.0001	0.002	20	0.010	<1
	16/12/2024	4.4	0.007	<0.0002	29	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.15	0.002	<0.0002	300	0.002	<0.001	0.3	<0.001	860	<0.0001	<0.001	270	<0.005	<1
	11/02/2025	0.09	0.002	<0.0002	300	0.001	<0.001	0.38	<0.001	850	<0.0001	<0.001	270	0.048	<1
	24/03/2025	0.55	<0.001	<0.0002	22	<0.001	<0.001	3.4	<0.001	54	<0.0001	0.002	17	0.027	<1
	31/03/2025	0.59	0.001	<0.0002	4.2	<0.001	<0.001	3.3	<0.001	5.3	<0.0001	0.002	3.5	0.044	<1
	8/04/2025	0.80	<0.001	<0.0002	9.9	0.003	<0.001	4.1	<0.001	18	<0.0001	0.002	6.0	0.007	<1
	9/05/2025	0.74	<0.001	<0.0002	6.3	0.001	0.001	2.8	<0.001	8.5	<0.0001	0.002	3.7	0.010	<1
	25/06/2025	0.70	<0.001	<0.0002	26	<0.001	<0.001	2.6	<0.001	64	<0.0001	0.002	20	0.008	<1
	8/07/2025	0.55	<0.001	<0.0002	11	0.001	0.001	2.3	<0.001	13	<0.0001	0.002	6.3	0.008	<1
	14/08/2025	0.43	<0.001	<0.0002	9.1	<0.001	<0.001	2.4	<0.001	16	<0.0001	0.001	6.3	0.011	13
	11/09/2025	0.51	<0.001	<0.0002	19	0.001	<0.001	2.9	<0.001	42	<0.0001	0.001	14	0.008	<1
ANZG (2018): 95% Slightly Disturbed		**0.055**	**0.013**	**0.0002**	**-**	**0.0033**	**0.0018**	**0.3**	**0.0034**	**-**	**0.0006**	**0.011**	**-**	**0.008**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW06	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	-	-	<20	<50	<100	<100	-	<100
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	90	90	<100	<100	<20	160	<100	<100	160	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<1,00	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	2.1	2.1	<100	<100	<20	<50	0.9	<100	0.9	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
ANZG (2018): 95% Slightly Disturbed		-	-	-	-	-	-	-	-	-	-

APPENDIX D

Photolog

PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
1	11/09/2025

Description

Image showing southern swale, downstream of monitoring location SW04.



Photo No.	Date
2	11/09/2025

Description

Surface water monitoring location SW03.



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
3	11/09/2025

Description

Surface water monitoring location SW05.



Photo No.	Date
4	11/09/2025

Description

Surface water monitoring location SW02.



MONTHLY WATER QUALITY MONITORING REPORT

Harvest Estate Urban Development

Monitoring Event: 13th October 2025

Ewingsdale Road, Byron Bay, NSW, 2481

Job Number: 217140

For:

Planit Consulting **By:**

ENV Services Pty Ltd

Date:

31/10/2025

ENV Services Pty Ltd

313 River Street, Ballina NSW 2478

T: 1300 861 325

E: admin@envsolutions.com.au

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DOCUMENT CONTROL

Job No:	Job Number: 217140
Client:	Planit Consulting
Filename:	217140_Harvest Estate_WQ_October_2025

	Name:	**Date:**	**Signature:**
Prepared By:	Maddy Pratt Environmental Scientist	29/10/2025	
Reviewed By:	Kingsley Baldwin Environmental Team Leader	30/10/2025	

Revision:	**Date:**	**Details:**

SCOPE OF ENGAGEMENT AND LIMITATIONS

This report has been prepared by ENV Services at the request of Planit Consulting for the purpose of consolidating and assessing water quality monitoring (surface water and ground water) data to determine impact associated with the development of the Harvest Estate. No other parties may rely on the contents of this report for any purposes except those stated.

This report has been prepared based on the information provided to us and from other information obtained as a result of enquiries made by us. ENV accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this document for a purpose other than that described above.

No part of this report may be reproduced, stored, or transmitted in any form without the prior consent of ENV.

ENV declares that it does not have, nor expects to have, a beneficial interest in the subject project.

To avoid this advice being used inappropriately, it is recommended that you consult with ENV before conveying the information to another who may not fully understand the objectives of the report. This report is meant only for the subject site/project and should not be applied to any other.

1 INTRODUCTION

ENV Services Pty Ltd (ENV) was engaged by Planit Consulting to prepare a Monthly Water Quality Report (MWQR) to meet requirements outlined in the Harvest Estate Development Conditions of Consent (11b - d, 32, 33 & 78) and Section 6.2 and 6.4 of the Planit Construction Environmental Management Plan (CEMP). Monitoring has been undertaken in accordance with the following approved plans.

- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate Groundwater Management Plan.* Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Belongil Creek Plan of Management*. Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate West Byron Urban Release Area; Acid Frog Management Plan.* Dated August 2020.

Baseline water quality parameters outlined in this report have been derived from mean or range values calculated over a 12-month sampling period undertaken between 25 May 2020 and 17 May 2021. This baseline water quality monitoring was carried out by Australian Wetlands Consulting (AWC) and undertaken in accordance with the Harvest Estate Groundwater Management Plan (AWC 2020) and the Harvest Estate – Belongil Creek Plan of Management (AWC 2020).

Guideline water quality trigger values have been derived from the ANZG (2018) Water Quality Guidelines and ANZECC (2000) guidelines for Fresh and Marine Water Quality. These guidelines define Belongil Creek as a lowland river of South-Eastern Australia, with trigger values chosen to reflect this. In assessing human disturbance, this report recognises Belongil Creek as being slight to moderately disturbed. On this basis, for toxicants in water, 95% species protection default guideline values have been presented for assessed toxicants.

No construction works were being undertaken during this monitoring period, with major civil earthworks associated with Stage 1 of the Project completed in November 2023.

2 MONITORING RESULTS & OBSERVATIONS

2.1 Monthly Groundwater Monitoring

Monthly groundwater monitoring at five (5) groundwater wells (MW2 – MW5 & MW7) was carried out to assess for impact within the underlying aquifer. This monitoring was conducted in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.2 of the Planit Construction Environmental Management Plan (CEMP). Groundwater monitoring locations are presented in Appendix A.

An assessment of the monthly analytical results presented in Appendix B, Table 1, identified the following observations:

Site	Observation	Comments
MW2	EC, TDS, SO_4, Na and Al concentrations were outside baseline ranges or guideline values (Al only).	The elevated values just outside baseline ranges are likely to be associated with partial oxidation of sediments and mobilisation of salts through seasonal fluctuations of the water table typical within known acid sulfate soil horizons. No site related impacts identified at this location.
MW3	Dry well	No groundwater encountered during monitoring round.
MW4	All parameters were within baseline ranges with the exception of Al.	No site related impacts identified at this location.
MW5	pH, EC, TDS, TN, Al and several cations/anions (Cl, Ca, Na, SO_4 and Mg) concentrations were outside baseline ranges or guideline values (Al only).	Low pH and elevated analytes (EC, TDS, and cations/anions) at this site indicate the presence of oxidising acid sulfate soils (ASS) proximal to the monitoring well. Localised impacts continue to be reported at this site.
MW7	All parameters were within baseline ranges with the exception of TDS, SO_4 and Al	Reported results were recorded slightly outside of the baseline range for TDS, SO_4 and Al. These elevated values are likely to be associated with partial oxidation of sediments and mobilisation of salts through natural fluctuations in REDOX conditions (e.g. during seasonal drawdown). No site related impacts identified at this location.

2.2 Monthly Surface Water Monitoring

Monthly surface water sampling (SW01 – SW06) was carried out to assess for impact from site activities on the receiving environment. Monitoring was carried out in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.4 of the Planit Construction Environmental Management Plan (CEMP), which require assessment of the following analytes; physiochemical parameters, nutrient, metals, cation/anion and total recoverable hydrocarbon (TRH).

Surface water monitoring locations are presented in Appendix A and the coordinates (GDA94) of all locations tabulated and presented in Table 1. Tabulated analytical results are presented in Appendix C. Select photos of the surface water sampling programme are presented in Appendix D.

Table 1: Surface Water Monitoring Coordinates

Monitoring Location	Location	Easting	Northing
SW01	Upstream of development - Southern Swale Drain	0556852	6831954
SW02	Upstream of development - Northern Main Drain	0557145	6831963
SW03	Downstream of development - Northern Main Drain	0557411	6831604
SW04	Downstream of development - Southern Swale Drain	0557397	6831429
SW05	Receiving environment - Outlet of Southern Swale Drain	0557992	6830881
SW06	Receiving environment - Outlet of Northern Main Drain	0558257	6831214

2.2.1 Assessment of Analytical Results

An assessment of the monthly analytical results presented in Appendix C, identified the following observations:

Site	Observation	Comments
SW01	All parameters were within baseline ranges, with the exception of pH, TDS, EC, NH_3, SO_4, Ca and Hydrocarbons.	This site is located at an upstream location, receiving water from off-site. Hydrocarbons identified within the samples are likely to be derived from the existing road corridor (Ewingsdale Road). All remaining elevated results are attributed to the oxidation of acid sulfate soils typical of the environmental setting.
SW02	TDS, EC, and cations/anions (Ca, Na, SO_4, Mg and K) were recorded outside of baseline ranges.	This site is located at an upstream location, receiving water from off-site. All elevated values are typical of the environmental (ASS) setting.

Site	Observation	Comments
SW03	TDS, EC, and cations/anions (Ca, Na, SO_4, Mg and K) were recorded outside of baseline ranges.	This site is located within the Northern Main Drain, downstream of Stage 1 works and SW02. Water quality parameters observed at SW03 are relatively consistent with water quality observed at the upstream location SW02. No site related impacts identified.
SW04	pH, TDS, EC, SO_4, Fe and cations/anions (Ca, SO_4, Na and Mg) were outside baseline ranges.	This site is located downstream of Stage 1 works, within the Southern Swale Drain. Water quality remains poor at this location when compared to 'upstream' (SW01) and baseline values.
SW05	All parameters were within baseline ranges, except for TDS, EC and several cations/anions (Ca, Mg, K, Cl, Na, and SO_4).	Elevated TDS and EC indicate the influence of tidal inflows of saltwater during king tides. Concentrations remain in line with marine ANZECC guideline values. No site related impacts identified.
SW06	EC, Total Nitrogen Al and Fe were recorded outside ANZG default guideline values (95% for slightly disturbed river systems).	Water quality at SW06 remains consistent with that observed upstream at SW05. As such, no definitive degradation in water quality is observed between the two locations. No site related impacts observed.

3 RAINFALL

During this monitoring period (12/09/2025 – 13/10/2025), 8.6 mm of rain was recorded in the area (Byron Bay, Cape Byron Lighthouse, Bureau of Meteorology).

4 CONCLUSION & RECOMMENDATIONS

4.1 Conclusion

Monitoring results indicate that impacts associated with exposure of ASS appeared to have improved significantly at surface water location SW04 (Southern Swale Drain), downstream of the Stage 1 works package.

Water quality reported at SW03 is noted to be consistent with results reported from the upstream catchment (SW02), inferring no discernible site related impacts.

The groundwater monitoring network continues to present indicators of localised impact from ASS adjacent to MW5 however the trend analysis of several analytes is showing gradual improvements in water quality.

4.2 Recommendations

Based on the conclusions of this monitoring report, the following recommendations are to be implemented with respect to improving water quality throughout the site:

- Given pH across the site is within or above the baseline water quality values, no corrective actions are required.

APPENDIX A

Figures



Legend

Site Location

0 0.5 1km

Figure 1 – Site Location
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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ENVIRONMENTAL | ASBESTOS | REMEDIATION | RESOURCE RECOVERY

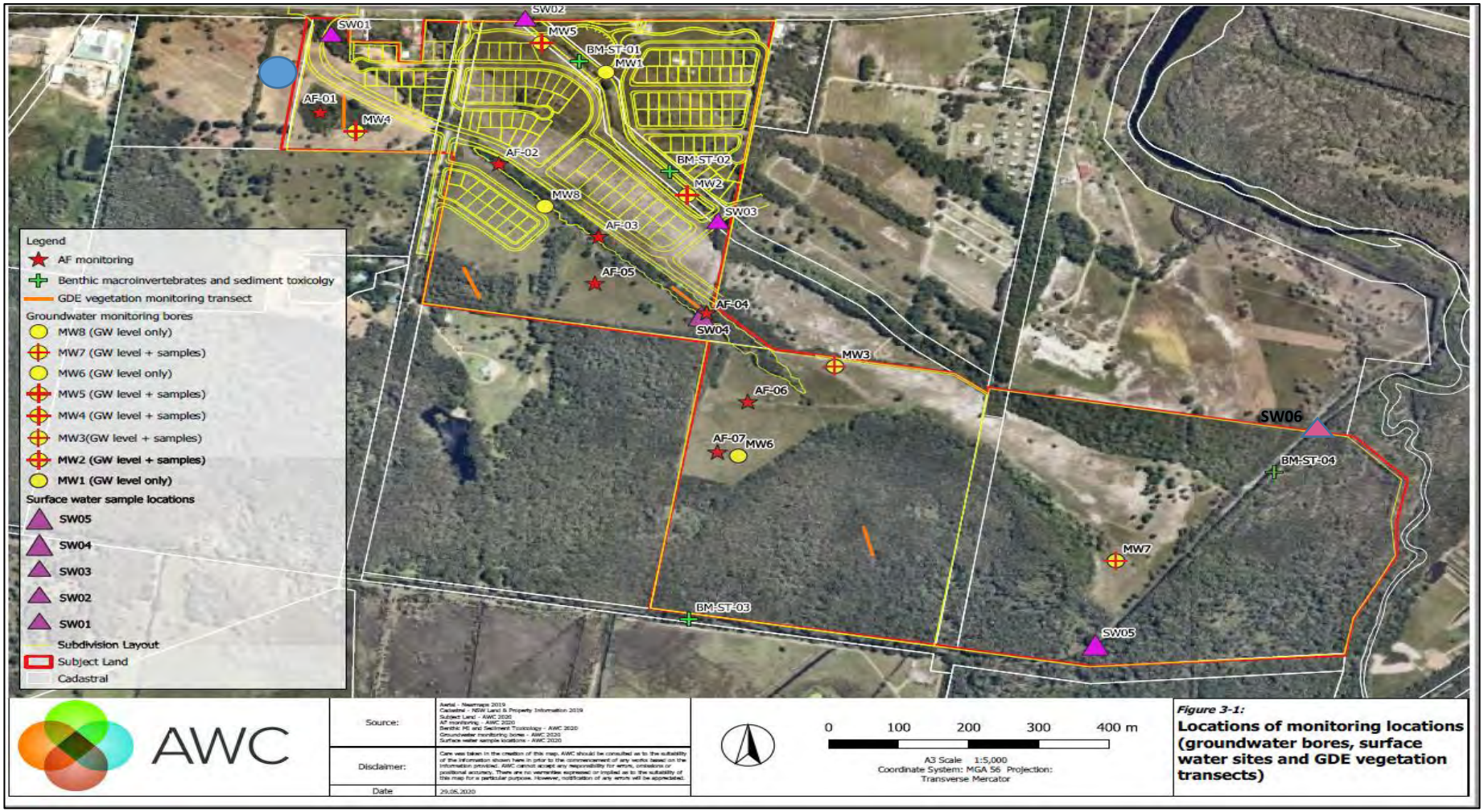


Figure 2 – AWC Monitoring Locations
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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APPENDIX B

Groundwater Quality Analytical Results

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW2	29/09/22	5.8	54	92	<5	0.12	0.51	14	0.02	0.5	30	< 2	< 0.5	0.8	2.4			0.1
	20/10/22	5.6	100	110	<5	0.09	0.24	13	0.02	2	28	< 2	<0.5	0.8	2.2			0.1
	14/11/22	6.0	100	240	<5	0.07	0.24	19	<0.10	<0.2	30	< 2	1.3	1.4	2.4			0.1
	14/12/22	5.6	110	170	<5	0.02	<0.05	15	<0.10	3.1	29	5	<5	<5	<5			0.3
	18/01/23	4.6	130	76	9.2	0.12	0.09	17	<0.05	2.5	29	7	<5	<5	<5			0.4
	20/02/23	6.0	100	160	5.3	0.09	0.1	27	<0.25	0.25	27	3.7	<0.5	0.7	3.1			0.1
	28/03/23	5.9	140	92	17	0.02	0.12	15	<0.02	<0.2	21	7.2	<5	<5	<5			0.5
	18/04/23	6.2	170	88	<5	0.08	1.2	15	<0.02	7.7	18	5.2	<5	<5	<5			0.3
	18/05/23	5.9	130	76	10	0.09	0.1	13	<0.02	9	28	2.1	0.6	0.9	2.6			0.2
	25/06/23	3.3	4,500	3,000	250	0.26	1.6	45	<0.02	8.1	86	3,800	440	82	7.9			84.4
	24/07/23	6.2	220	150	<5	0.03	0.16	12	<0.2	1	24	12	<0.5	0.8	2.5			1.0
	21/08/23	5.7	120	84	<5	0.08	0.14	15	<0.02	1.7	30	2.3	<5	<5	<5			0.2
	18/09/23	5.9	120	130	11	0.04	0.15	13	<0.02	1.2	25	<2	<0.5	0.9	2.7			0.1
	18/10/23	5.6	110	73	6.6	0.3	0.11	15	<0.02	0.3	25	3	<0.5	0.9	2.8			0.2
	20/11/23	6.0	160	70	<5	0.11	0.17	16	<0.01	0.8	28	4.2	<0.5	0.8	2.6			0.3
	19/12/23	6.3	110	100	<5	0.05	0.48	16	<0.02	2.8	28	2.1	0.5	0.9	2.9			0.1
	20/01/24	6.2	150	88	<5	0.05	0.08	13	<0.02	1.1	26	<2	<0.5	0.8	3			0.1
	26/02/24	5.1	150	340	7.4	0.07	0.09	15	<0.02	8.6	36	14	0.6	1	2.7			0.9
	26/03/24	5.7	180	310	<5	0.07	0.13	16	<0.02	<1	27	6.9	<0.5	0.8	2.7			0.4
	18/04/24	5.7	170	<5	<5	0.05	0.09	15	<0.02	1.8	29	2.6	<0.5	0.9	2.8	3.6	<1	0.17
	20/05/24	5.6	160	120	<5	0.11	0.1	19	<0.02	1	32	2.9	<0.5	0.8	2.8	3.9	<1	0.2
	25/06/24	5.5	170	170	12	0.09	<0.01	21	<0.02	2.7	30	<2	<0.5	0.8	2.3	3.8	<1	0.0
	10/07/24	5.8	150	190	<5	0.03	0.11	15	<0.02	<1	28	2.2	<0.5	0.7	2.7	2.8	<1	0.1
	06/08/24	5.9	170	90	6.9	0.16	0.12	20	<0.1	2.4	25	3.3	<0.5	0.6	2.1	3.4	<1	0.2
	11/09/24	5.7	140	110	<5	0.02	0.83	21	<0.2	<1	28	<2	<0.5	0.7	2.4	2.8	<1	0.0
	09/10/24	5.9	150	210	6.3	0.21	<0.01	17	0.02	<0.2	30	2.8	<0.5	<0.5	2.6	2.4	<1	0.1
	06/11/24	5.7	120	190	6.6	2	0.02	17	-	2.3	33	<2	1	1	3.1	3.6	<1	0.1
	16/12/24	6.0	120	60	8.0	0.05	<0.1	16	<0.2	0.9	30	5.3	0.14	0.8	2.8	3.5	<1	0.3
	14/01/25	6.4	150	94	610.0	0.03	<0.05	15	<0.1	<0.25	31	<2	<0.5	0.6	2.4	2.7	1	0.1
	11/02/25	5.7	170	150	<5	0.04	<0.1	13	<0.02	<0.5	29	2.8	<0.5	0.6	2.4	2.8	<1	0.2
	24/03/25	5.7	120	190	<5	<0.05	0.05	36	0.02	4.2	28	5.8	<0.5	0.7	2.4	2.7	<1	0.2
	08/04/25	5.7	120	220	<5	0.02	0.03	16	0.03	<2	31	4.2	<0.5	0.7	2.6	3.5	<1	0.3
	09/05/25	6.0	150	210	<5	0.01	<0.1	17	<0.2	1.1	29	7	1.3	0.7	2.6	3.2	<1	0.4
	25/06/25	5.6	180	200	<5	0.06	<0.01	15	<0.02	0.8	33	22	<0.5	0.7	2.6	1.7	<1	1.5
	08/07/25	5.5	190	180	<5	0.04	0.13	14	<0.2	1.6	32	24	<0.5	0.8	2.5	1.7	<1	1.7
	14/08/25	5.8	180	160	12.0	0.07	0.11	15	<0.02	1.9	30	33	<0.5	0.8	2.5	0.82	<1	2.2
	11/09/25	5.7	190	100	<5	0.03	0.09	17	<0.02	3.1	33	31	<0.5	0.8	2.6	0.84	<1	1.8
	13/10/25	5.6	170	180	<5	0.16	0.16	18	<0.2	0.6	33	24	<0.5	0.8	2.5	2	<1	1.3
MW2 Baseline		**4.2 - 5.7**	**152**	**103**	**483**	**0.45**	**0.338**	**189**	**0.07**	**2.03**	**29.7**	**9.8**	**0.7**	**1.4**	**4.2**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW3	29/09/22	4.2	53	40	370	0.09	0.05	8.8	0.02	0.5	7	<2	< 0.5	1	0.6			0.1
	20/10/22	4.1	64	62	130	0.01	0.2	8	0.02	0.5	7	<2	0.5	0.9	<0.5			0.1
	14/11/22	4.6	57	84	170	0.03	0.27	7.4	<0.02	<0.2	7.1	<2	0.8	0.6	<0.5			0.1
	14/12/22	4.3	43	32	280	<0.01	<0.01	5.2	<0.02	1.1	6	<2	<5	<5	<5			0.2
	18/01/23	4.3	54	28	670	0.03	<0.01	4.1	<0.05	1.4	<5	4.1	<5	<5	<5			1.0
	20/02/23	4.2	36	40	76	0.02	<0.10	6.8	0.06	7.26	7.6	<2	<0.5	1	<0.5			0.1
	28/03/23	4.1	70	44	<5	<0.01	<0.01	7.9	<0.02	0.22	4.8	2.2	<0.5	1	0.6			0.3
	18/04/23	4.6	89	54	110	0.02	0.1	9.6	<0.02	5.7	4.3	4.3	<0.5	0.6	<0.5			0.4
	18/05/23	4.5	60	40	450	0.02	0.04	5.8	<0.02	1	4.8	2.1	0.6	0.8	<0.5			0.4
	15/06/23	4.0	84	48	22	0.27	0.4	5.5	<0.02	1.96	5	63	<0.5	0.8	<0.5			11.5
	24/07/23	4.5	85	59	160	0.04	<0.01	9.5	<0.02	<0.2	5.6	12	<0.5	0.8	<0.5			1.3
	21/08/23	3.9	110	52	100	0.01	<0.01	6.3	<0.02	<0.2	6.6	3	<0.5	1.1	<0.5			0.5
	18/09/23	Dry – no sample collected																
	18/10/23	Dry – no sample collected																
	20/11/23	4.0	96	46	120	0.03	<0.02	7.8	<0.01	0.7	5.8	5	<0.5	0.7	<0.5			0.6
	19/12/23	4.0	46	30	92	<0.01	0.04	13	<0.02	<0.2	9.7	5.6	<0.5	1.3	0.6			0.4
	20/01/24	4.2	70	28	270	0.01	<0.01	5.4	<0.02	0.6	5.5	<2	<0.5	0.8	<0.5			0.2
	26/02/24	4.5	70	50	29	0.01	0.02	10	<0.02	16	5	4.5	<0.5	0.6	<0.5			0.5
	26/03/24	4.1	67	56	110	<0.01	0.06	5.1	<0.02	0.3	4.4	6.1	<0.5	0.8	<0.5			1.2
	18/04/24	3.7	150	< 5	<5	0.05	0.01	4.6	<0.02	0.7	4	12	<0.5	0.8	<0.5	0.99	<1	0.3
	20/05/24	4.5	36	30	26	0.03	<0.01	31	<0.02	0.3	3	3.9	0.6	<0.5	<0.5	1.1	<1	0.1
	25/06/24	3.5	160	90	120	0.17	<0.01	2.8	<0.02	<0.2	3.1	5	<0.5	<0.5	<0.5	0.7	<1	0.1
	10/07/24	4.4	42	40	300	<0.01	<0.01	4.2	<0.02	0.5	3.5	2.5	<0.5	<0.5	<0.5	0.7	<1	0.6
	06/08/24	4.3	45	22	310	0.03	0.01	4.4	<0.02	3.2	2.5	<2	<.5	<0.5	<0.5	1	<1	0.2
	11/09/24	4.2	44	28	720	0.02	<0.1	5	<0.02	<1	3.7	<2	<0.5	<0.5	<0.5	1.3	<1	0.2
	09/10/24	4.2	50	32	430	0.1	<0.01	5.3	<0.02	<0.2	4.1	2.8	2.9	0.6	0.6	0.48	<1	0.2
	06/11/24	4.3	38	20	370	<0.01	0.09	4.8	-	0.9	4.6	<2	0.6	0.7	<0.5	0.84		0.2
	16/12/24	4.3	35	24	63	0.02	<0.01	4.4	<0.02	0.5	3.8	2.2	<0.5	0.7	<0.5	0.75	<1	0.5
	14/01/25	4.5	40	20	38	0.03	0.01	3.3	<0.02	0.5	2.8	<2	<0.5	<0.5	<0.5	0.75	<1	0.3
	11/02/25	4.2	64	36	8.2	<0.01	<0.01	2.9	<0.02	<0.2	3.1	4.4	<0.5	<0.5	<0.5	1.1	<1	1.5
	24/03/25	4.0	79	50	150	0.02	<0.01	13	<0.02	0.9	5.8	3.9	0.8	1.1	<0.5	0.52	1.5	0.3
	08/04/25	4.2	71	38	160	<0.01	0.02	11	<0.02	0.9	7.3	4.1	0.9	1.4	2.6	0.58	1.5	0.4
	09/05/25	4.5	73	74	210	<0.01	0.02	9.9	<0.02	0.8	7	3.1	0.7	0.9	<0.5	0.74	<1	0.3
	25/06/25	4.5	42	44	170	0.05	<0.01	4.4	<0.02	1.9	5	4.3	<0.5	<0.5	<0.5	1	<1	1.0
	08/07/25	4.5	47	25	670	0.02	0.03	4.5	0.03	0.6	4.9	2.5	<0.5	<0.5	<0.5	1	<1	0.6
	14/08/25	4.8	34	38	550	0.06	0.06	3.8	0.02	5.7	3.6	4	<0.5	<0.5	<0.5	0.5	<1	1.0
	11/09/25	4.6	42	28	2,500	0.02	0.3	4.7	0.11	2.1	4.7	3.5	<0.5	<0.5	<0.5	0.49	<1	0.7
	13/10/25	Dry – no sample collected																
MW3 Baseline		**4.0 - 5.3**	**206**	**140**	**5223**	**1.57**	**0.294**	**121**	**0.167**	**4.14**	**26.4**	**13.4**	**3.8**	**5.3**	**3.1**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW4	29/09/22	4.5	100	88	350	0.03	0.16	22	0.1	1.5	19	<2	3.6	3.7	0.9			0.0
	20/10/22	4.5	110	100	69	0.02	0.78	20	0.04	1	14	<2	3.9	2.1	<0.5			0.1
	14/11/22	4.2	130	340	16	0.01	0.13	30	<0.10	7	22	5	2.6	4.8	1.1			0.2
	14/12/22	4.2	140	140	60	<0.01	<0.05	23	<0.10	3	21	7.8	<5	<5	<5			0.3
	18/01/23	5.7	170	110	170	0.02	0.16	26	<0.50	2.4	20	6.6	<5	<5	<5			0.3
	20/02/23	3.9	87	110	31	0.04	<0.05	15	0.28	3.88	15	5.8	3.5	5.4	0.9			0.4
	28/03/23	4.7	180	120	190	0.04	0.08	28	<0.02	22	18	6	8.8	5.1	<5			0.2
	18/04/23	3.7	500	280	340	0.11	0.07	27	<0.02	0.9	19	130	3.4	5	<0.5			4.8
	18/05/23	5.4	110	72	70	0.03	<0.01	14	<0.02	2.89	11	10	5.7	3.7	<0.5			0.7
	15/06/23	3.8	200	150	130	1.4	0.29	29	<0.02	0.9	21	12	<5	6	<5			0.4
	24/07/23	4.1	170	94	58	0.03	<0.1	24	<0.2	1	20	17	2.8	6.2	0.6			0.7
	21/08/23	3.8	200	120	75	0.03	0.07	18	0.65	1.76	15	3.6	2	5	<0.5			0.2
	18/09/23	3.8	160	86	21	0.02	0.11	19	0.02	1.1	17	10	1.5	4.1	<0.5			0.5
	18/10/23	3.8	190	110	31	0.08	0.08	25	<0.02	0.9	18	9.3	1.7	4.5	0.5			0.4
	20/11/23	4.4	160	870	28	0.05	0.1	22	<0.01	2.2	15	5.8	3.3	4	0.7			0.3
	19/12/23	4.0	190	130	27	0.03	0.41	38	<0.02	1.5	22	13	3.3	7.8	1			0.3
	20/01/24	4.2	170	120	27	0.01	0.02	24	<0.02	1.2	17	2.9	5.4	5.1	<0.5			0.1
	26/02/24	3.6	290	190	96	0.03	0.07	27	<0.02	6.9	17	38	10	4.1	<0.5			1.4
	26/03/24	5.6	150	140	18	0.02	0.58	25	<0.02	1.1	15	7	9.3	3.8	<0.5			0.3
	18/04/24	4.3	140	90	12	0.02	0.04	17	<0.02	24	13	6.7	3.2	3.6	<0.5	1.1	2.9	0.4
	20/05/24	5.9	200	180	9.4	0.01	0.83	15	<0.02	1.1	10	5.6	9.6	2.1	<0.5	1.5	6.4	0.4
	25/06/24	4.2	120	100	33	0.1	<0.01	15	<0.02	1.4	9.1	2.3	3.5	2.2	<0.5	1.7	<1	0.2
	10/07/24	6.3	79	46	16	0.02	0.12	8.7	<0.02	1.4	6.4	4	9.7	1	<0.5	0.55	<1	0.5
	06/08/24	4.4	170	100	24	0.02	0.12	26	<0.02	2.4	12	5.5	1.5	3.2	<0.5	0.86	<1	0.2
	11/09/24	5.2	110	74	27	0.02	0.14	21	<0.02	0.6	12	2.5	7.2	2.9	<0.5	1.3	<1	0.1
	09/10/24	4.1	150	140	190	0.1	0.07	25	0.03	0.9	15	6.2	2.9	4	0.7	1.2	<1	0.2
	06/11/24	4.4	130	180	40	0.51	0.04	22	-	1.9	15	2.3	4.7	4.8	<0.5	1.4	3.4	0.1
	16/12/24	5.7	80	70	<5	0.02	<0.1	18	<0.2	1	11	4.1	8.1	3	<0.5	0.99	7.2	0.2
	14/01/25	4.1	180	120	86	0.02	1.3	26	<0.02	1.2	14	2.4	4.4	3.8	<0.5	1.6	<1	0.1
	11/02/25	4.1	170	150	<5	0.01	<0.1	25	<0.02	<0.5	16	3.1	2.5	4.8	<0.5	1.8	<1	0.1
	24/03/25	5.0	110	84	39	<0.05	0.04	22	0.02	5	13	7.6	4.9	3.4	<0.5	0.85	5.8	0.3
	08/04/25	5.2	90	130	22	<0.01	0.03	16	<0.02	1	10	3.7	6.9	2.7	<0.5	0.58	12	0.2
	09/05/25	6.0	110	140	45	-	-	14	<0.2	-	8.7	2.7	11.0	2	<0.5	0.8	14	0.2
	25/06/25	5.4	98	140	130	0.06	0.01	12	0.2	1.6	8.8	8.2	8.6	1.6	<0.5	0.98	8.8	0.7
	08/07/25	5.0	110	100	300	0.01	0.23	15	<0.2	<0.5	11	9.4	5.7	2.4	<0.5	1.7	3.4	0.6
	14/08/25	5.7	110	150	600	0.11	0.12	15	0.04	4.7	9.6	4.3	10.0	2	<0.5	0.64	<1	0.3
	11/09/25	4.4	140	89	290	0.02	0.15	25	0.07	4.2	15	7.3	4.0	3.5	0.9	1.1	3.6	0.3
	13/10/25	4.3	160	210	120	0.11	0.42	30	<0.2	<2	18	2.8	2.9	4.5	0.8	2.2	1.3	0.1
MW4 Baseline		**4.0 - 5.8**	**890**	**605**	**1220**	**0.43**	**1.392**	**199**	**0.185**	**4.36**	**146.3**	**19.2**	**11.3**	**15.6**	**5.4**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW5	29/09/22	4.5	59	68	630	0.13	0.41	18	0.02	6.33	14	<2	2	3	0.6			0.1
	20/10/22	4.4	75	82	92	0.02	0.1	15	0.02	0.5	12	<2	2	2	0.5			0.1
	14/11/22	4.6	120	270	150	0.08	0.52	29	<0.10	7.8	26	<2	5	6	1.4			0.0
	14/12/22	4.5	150	150	230	0.02	<0.060	29	<0.05	11	24	10	<5	<5	<5			0.3
	18/01/23	2.8	1,600	1,100	480	0.05	1.7	43	<0.05	5.7	49	7	90	72	<5			0.2
	20/02/23	2.6	2,700	3,200	310	0.03	4.2	27	<0.05	3.2	47	750	390	76	7.8			27.8
	28/03/23	3.0	5,200	3,700	130	0.02	5.9	28	<0.02	11	34	1,100	440	57	7.1			39.3
	18/04/23	2.9	3,800	5,100	300	0.01	4	44	<0.02	4	49	3,800	380	120	4.7			86.4
	18/05/23	3.4	3,100	3,400	150	<0.01	<0.01	15	<0.02	4.9	23	2,200	240	31	4.2			146.7
	15/06/23	2.9	3,000	1,800	640	0.3	2.9	28	<0.02	2.66	64	2,100	410	130	6.5			75.0
	24/07/23	5.5	2,800	1,600	6	0.07	0.19	1,400	<0.2	0.5	450	380	25	54	25.0			0.3
	21/08/23	3.3	5,200	3,400	13	0.03	4.6	67	<0.02	5	89	2,200	420	200	9.9			32.8
	18/09/23	3.3	4,500	5,800	6.1	0.01	4	51	0.02	3.7	67	4,300	360	140	7.9			84.3
	18/10/23	3.2	4,700	4,900	96	0.03	1.3	58	<0.02	2.1	68	710	380	130	7.3			12.2
	20/11/23	2.8	5,900	7,500	29	0.06	2.7	55	<0.01	11	60	6,600	310	100	6.8			120.0
	19/12/23	2.9	3,100	2,700	230	0.01	4.6	80	<0.02	5	80	3,500	290	86	6.9			43.8
	20/01/24	3.2	4,900	6,600	74	0.03	<0.01	52	<0.02	4.5	68	1,000	370	84	7.9			19.2
	26/02/24	2.6	3,400	4,500	180	0.03	0.59	25	<0.02	5.4	51	3,000	290	46	4.0			120.0
	26/03/24	3.2	4,400	3,500	17	0.02	1.8	140	<0.02	2.5	54	11,000	360	77	6.0			78.6
	18/04/24	3.3	4,200	2,200	39	<0.01	0.02	49	0.05	5.1	50	3,300	310	47	4.0	210	1.5	67.3
	20/05/24	3.4	3,100	1,600	8.8	0.03	3.1	53	<0.02	2.9	27	2,900	200	22	2.8	140	1.42	54.7
	25/06/24	3.2	4,100	2,700	310	0.03	<0.01	76	<0.02	7.2	75	1,400	290	60	4.3	320	<1	18.4
	10/07/24	3.5	2,300	2,600	49	0.02	<0.01	14	<0.02	3.9	20	1,900	240	20	2.4	130	<1	135.7
	06/08/24	3.3	170	3,500	14	0.19	4.6	62	<0.02	7.7	56	3,600	310	54	4.2	250	<1	58.1
	11/09/24	3.5	1,700	1,000	38	<0.01	3.9	27	<0.2	4.9	27	750	290	29	3.2	94	<1	27.8
	09/10/24	3.5	1,300	930	46	0.03	<0.01	27	<0.02	1.5	22	870	120	17	1.6	35	<1	32.2
	06/11/24	3.3	2,000	1,300	31	<0.01	4.8	44	-	5	59	680	300	62	4.9	90	3.33	15.5
	16/12/24	3.2	1,800	1,100	53	0.02	21	32	<0.2	2.8	25	980	180	21	2.4	35	5.1	30.6
	14/01/25	3.7	1,600	1,400	190	<0.01	1.3	19	<0.02	2.1	16	320	210	16	1.8	25	8.4	16.8
	11/02/25	3.5	2,000	1,700	69	0.01	2.6	160	<0.02	14	110	860	110	50	2.8	56	1.96	5.4
	24/03/25	3.6	1,000	890	38	<0.05	0.06	20	<0.02	3.3	14	570	140	8.5	1.7	17	8.24	28.5
	08/04/25	3.7	790	700	73	<0.01	0.85	36	<0.02	5.2	42	390	86	16.0	<0.5	13	6.6	10.8
	09/05/25	3.7	1,300	1,200	200	<0.01	1.2	87	<0.2	3.3	24	470	87	11.0	1.5	9.6	9.06	5.4
	25/06/25	3.7	1,300	840	140	0.21	1.5	26	<0.02	2	18	580	140	17.0	1.7	17	8.3	22.3
	08/07/25	4.0	720	480	170	<0.010	0.81	21	<0.2	5.4	20	280	58	10.0	0.9	11	5.3	13.3
	14/08/25	3.8	530	300	230	0.02	0.55	19	<0.02	5.5	11	230	28	4.3	0.5	4.5	6.2	12.1
	11/09/25	3.8	630	430	110	<0.01	0.73	41	0.04	14	35	240	33	9.7	1.3	4.4	7.5	5.9
	13/10/25	4.0	1,200	970	260	0.11	2.8	120	<0.2	<2	76	420	68	32	2.2	13	5.2	3.5
MW5 Baseline		**4.3 - 5.5**	**191**	**130**	**3003**	**0.97**	**13.4**	**82**	**0.117**	**13.4**	**27.2**	**8.3**	**6**	**8.4**	**5.4**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW7	29/09/22	4.6	26	40	190	0.1	0.3	8.5	0.02	2.5	8.5	<2	1	0.9	0.6			0.1
	20/10/22	4.5	86	70	120	0.01	0.4	12	0.04	2.9	8.5	<2	1.7	1.7	0.5			0.1
	14/11/22	4.5	44	170	<100	0.03	0.01	9.7	<0.10	<2.00	9.7	<2	1.9	1.4	1.4			0.1
	14/12/22	4.6	56	92	23	0.04	<0.10	7.5	<0.20	11	8.7	2.5	<5	<5	<5			0.3
	18/01/23	4.4	63	32	390	0.09	<0.05	7.5	<0.025	2	11	31	<5	<5	<5			4.1
	20/02/23	4.1	87	60	30	0.02	<0.05	9.1	0.42	4.9	5.8	5.7	1.4	1.9	1.1			0.6
	28/03/23	4.5	160	94	18	0.02	0.02	21	<0.02	4.4	12	66	2	2	0.6			3.1
	18/04/23	4.9	150	58	7.4	<0.01	0.11	11	<0.02	<0.20	9.8	120	1.9	0.8	<0.5			10.9
	18/05/23	4.9	78	56	130	0.03	<0.01	11	<0.02	0.89	9.3	9.3	1.4	0.9	<0.5			0.8
	15/06/23	4.6	77	50	30	0.28	0.25	11	<0.02	<0.20	9.2	62	<5	<5	<5			5.6
	24/07/23	5.1	140	100	90	0.12	<0.1	10	<0.2	1	8.5	14	1.9	1.4	0.9			1.4
	21/08/23	5.3	67	34	29	0.08	0.06	8.4	<0.02	0.8	9	45	1.8	1.7	0.8			5.4
	18/09/23	5.1	57	78	25	<0.01	0.07	9.6	<0.02	0.8	9.4	83	1.6	2	0.8			8.6
	18/10/23	5.2	61	46	10	0.04	0.1	11	<0.02	<0.2	10	160	1.6	2.1	0.8			14.5
	20/11/23	4.1	210	64	13	0.04	<0.02	8.4	<0.01	2.2	8.1	280	2.5	2.2	0.7			33.3
	19/12/23	4.6	91	62	11	0.03	0.09	19	<0.02	0.7	11	5.6	4.4	2.3	0.9			0.3
	20/01/24	4.2	170	130	34	0.01	0.09	21	<0.02	0.3	15	160	2.8	1.4	<0.5			7.6
	26/02/24	4.0	210	190	23	0.03	0.51	44	<0.02	5.8	24	7.5	3.6	2.1	0.5			0.2
	26/03/24	4.4	320	100	22	0.02	0.18	320	<0.02	<1	13	590	1.6	0.9	0.9			1.8
	18/04/24	4.3	100	98	17	0.02	0.07	8.9	<0.02	3	9	380	1.4	1.2	<0.5	1.7	<1	42.7
	20/05/24	4.4	77	56	11	0.05	0.38	6.4	<0.02	1.2	5.4	170	1.3	1	<0.5	2.3	<1	26.6
	25/06/24	4.6	66	36	33	<0.01	<0.01	<0.01	<0.02	0.6	6.7	48	1.1	0.9	<0.5	1.5	<1	0.0
	10/07/24	4.5	74	58	29	<0.01	0.22	6.5	<0.02	2.1	6.2	270	2	1.3	<0.5	0.73	<1	41.5
	06/08/24	4.8	4,600	180	19	0.04	0.06	9.1	<0.02	0.5	5.3	36	1.4	0.9	<0.5	1	<1	4.0
	11/09/24	4.4	75	50	6.4	0.04	<0.1	11	<0.02	1..0	7.1	5.2	1.3	1.1	<0.5	1.4	<1	0.5
	09/10/24	4.3	73	42	71	0.54	<0.01	8	<0.02	1.6	5.8	12	1.3	1.2	<0.5	0.94	<1	1.5
	06/11/24	4.5	59	32	35	0.02	0.03	11	-	1.3	7.8	4.4	1.3	1.4	<0.5	1.6	<1	0.4
	16/12/24	4.3	58	68	29	0.04	<0.1	12	<0.2	1.3	8.5	42	1.6	1.3	<0.5	1.9	<1	3.5
	14/01/25	4.7	63	36	120	0.04	0.02	8.6	0.03	1.3	6.8	7	1.7	1.2	0.5	2.4	1.4	0.8
	11/02/25	4.6	68	70	13	0.07	<0.1	9.2	<0.02	1.2	8.4	2	1.5	1.5	0.8	2.7	<1	0.2
	24/03/25	4.1	0	56	28	<0.05	0.02	15	<0.02	1.8	7.7	43	2.3	1.4	<0.5	1.2	1.91	2.9
	08/04/25	4.4	76	70	14	<0.01	0.03	14	<0.02	<1	8.1	31	2.8	1.1	2.1	1.4	2	2.2
	09/05/25	4.7	81	110	24	<0.01	0.03	13	<0.2	1.2	8.1	28	1.5	0.9	<0.5	1.6	<1	2.2
	25/06/25	4.6	65	70	39	0.07	<0.01	8.3	<0.02	<0.2	6.7	56	1.2	0.8	<0.5	1.2	1	6.7
	08/07/25	4.6	65	44	130	0.02	0.14	7.9	<0.02	<0.5	6.3	37	1.4	0.9	<0.5	2.6	<1	4.7
	14/08/25	4.7	60	70	140	0.06	0.01	8.9	0.04	2.2	5.7	15	0.9	0.5	<0.5	0.93	3	1.7
	11/09/25	4.4	75	51	100	0.03	0.06	12	0.04	1.1	7.2	18	1.8	1.1	0.6	0.86	2.09	1.5
	13/10/25	4.8	66	110	66	0.02	0.12	11	<0.2	<1	7.4	20	2.1	1.5	<0.5	1.3	1.6	1.8
MW7 Baseline		**4.6 - 5.6**	**147**	**100**	**3140**	**0.71**	**0.471**	**172**	**0.048**	**4.15**	**31**	**7.3**	**3.4**	**2.2**	**3.1**	**<1.0***	**<1***	**<0.5***

APPENDIX C

Surface Water Quality Analytical Results

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW01	29/09/2022	6.9	180	11	3.1	140	0.47	<0.01	14	<0.02	5.2	30	3.4	450		0.2
	20/10/2022	6.6	320	30	4.7	400	0.03	0.03	22	<0.02	<0.02	31	33	43		1.5
	14/11/2022	6.0	780	4,900	0.2	920	3.1	6.9	25	<0.02	14	200	3.7	67		0.1
	14/12/2022	4.5	800	210	3.6	1,100	0.15	0.05	24	<0.10	23	54	560	88		23
	18/01/2023	6.3	380	120	4.7	25	0.047	0.087	24	<0.02	5.2	40	180	25		7.5
	20/02/2023	3.4	1,100	32	3.8	1,300	0.42	0.37	28	<0.02	8.9	57	350	<5		13
	28/03/2023	3.0	2,000	100	7.7	3,000	<0.01	2.1	29	<0.02	1.29	47	880	<5		30
	18/04/2023	7.7	130	33	8.6	320	0.06	0.01	24	<0.02	8.4	16	14	8.8		0.6
	18/05/2023	7.4	130	6	4.4	250	0.21	0.14	11	<0.02	0.9	14	10	<5		0.9
	15/06/2023	3.2	1,900	6.8	7.6	2,700	0.03	1.6	59	<0.02	2.1	61	1,500	<5		25
	24/07/2023	7.9	84	<5	8.4	140	0.11	<0.01	6.4	<0.02	0.3	13	4	<5		0.6
	21/08/2023	6.9	120	25	3	190	0.34	0.01	5.6	<0.02	0.4	18	<2	<5		0.2
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	No surface water located at monitoring site – no sample collected														
	20/11/2023	7.2	230	6.5	2.9	480	2	<0.02	56	<0.01	<0.2	43	160	<5		2.9
	19/12/2023	No surface water located at monitoring site – no sample collected														
	23/01/2024	7.0	160	130	2.2	160	3.7	0.06	14	<0.02	1.3	21	69	<5		4.9
	26/02/2024	6.2	160	47	7.2	200	0.35	<0.01	9	<0.02	3	12	59	<5		6.6
	26/03/2024	6.9	26	7.5	8.3	78	0.25	<0.01	6.7	<0.02	0.4	7.5	3.4	<5		0.5
	18/04/2024	7.2	220	23	0.5	390	0.06	0.24	25	<0.02	0.7	32	110	180	13	4.4
	20/05/3034	6.7	160	<5	3.8	260	0.16	0.01	13	<0.02	0.5	19	33	56	231	2.5
	25/06/2024	6.3	440	15	5.9	710	<0.01	<0.01	12	<0.02	<0.2	23	100	5.7	15	8.3
	10/07/2024	7.0	120	29	5.5	240	0.07	0.01	14	<0.02	1.1	17	6.9	39	12	0.5
	6/08/2024	4.0	760	19	7.6	950	0.08	<0.01	14	<0.02	1.3	23	470	<5	12	34
	15/08/2024	6.7	64	<5	7.3	100	0.04	0.01	6.1	<0.02	<0.2	7.2	5.5	<5	<10	0.9
	11/09/2024	6.9	120	250	0.2	190	1.1	0.11	8.9	<0.02	4.1	13	2.6	<10	17	0.3
	24/09/2024 - Investigation	6.3	170	-	-	280	-	-	-	-	-	-	-	-	-	-
	9/10/2024	7.4	190	11	8.9	290	0.38	0.01	14	<0.02	<0.2	20	3.4	<5	<10	0.2
	6/11/2024	7.1	92	400	0.4	140	13	<0.01	8.1	<0.02	2.8	12	2.2	<5	<10	0.3
	16/12/2024	6.9	90	190	3.3	140	0.36	<0.01	8.2	<0.02	0.02	11	5.4	170	<10	0.7
	14/01/2025	6.7	48	7.2	3.5	89	0.14	<0.1	4.8	<0.02	0.6	5.4	<5	<5	<10	0.0
	11/02/2025	7.5	390	<5	8.3	620	0.06	0.03	110	<0.02	0.8	16	16	12	<10	0.1
	24/03/2025	6.9	58	<5	8.6	64	0.32	0.02	6.1	<0.02	0.8	7.9	2.4	48	<10	0.4
	31/03/2025	7.1	170	5.8	9.2	200	0.14	<0.01	14	<0.02	1.1	15	6.4	<5	<10	0.5
	8/04/2025	7.2	200	9.4	8.8	230	0.37	0.04	14	<0.02	0.4	18	3.6	<5	<10	0.3
	9/05/2025	7.5	170	<5	-	200	0.2	0.03	10	<0.02	0.8	13	4.5	<5	<10	0.5
	25/06/2025	6.9	130	24	7.5	190	1.1	0.07	6.2	<0.02	1.1	12	7.1	12	22	1.1
	8/07/2025	6.9	150	<5	8	260	0.12	0.18	8	<0.02	0.8	16	5	28	34	1.6
	14/08/2025	7.3	140	7.1	6.9	240	0.17	0.03	11	<0.02	1	16	6	<5	15	1.8
	11/09/2025	7.2	150	5.2	3.9	260	0.22	0.01	13	<0.02	1.4	19	5.2	<5	16	2.5
	13/10/2025	7.2	350	14	0.3	520	0.61	0.26	39	<0.02	0.5	58	30	<5	14	1.3
SW01 Baseline		**6.2 – 7.0**	**291**	**73**	**-**	**428**	**3.52**	**0.164**	**118**	**0.039**	**3.5**	**51**	**9**	**768**		**<0.5**

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW01	29/09/2022	1.5	0.003	<0.0002	22	0.002	0.32	2.7	0.005	14	<0.0001	0.015	3	0.071	<1
	20/10/2022	0.66	2	<0.0002	24	0.002	0.16	2.4	0.003	9.1	<0.0001	0.009	2.9	0.042	<1
	14/11/2022	130	1.3	<0.02	280	<0.10	1	130	0.1	73	<0.001	0.3	<50	4.7	<1
	14/12/2022	22	0.0016	<0.002	180	0.014	0.2	1.6	0.015	43	<0.001	0.077	6.8	0.68	<1
	18/01/2023	0.7	<0.010	<0.002	<2	<0.010	<0.01	3.2	<0.01	13	<0.01	<0.01	<5	<0.05	<1
	20/02/2023	37	0.027	0.0004	170	0.019	0.07	0.049	0.049	57	0.002	0.16	6.3	0.35	<1
	28/03/2023	150	0.002	0.0008	290	0.002	0.003	36	0.003	38	0.0001	0.46	5.1	0.97	<1
	18/04/2023	0.53	0.002	<0.0002	13	0.005	0.005	0.002	0.002	2.7	<0.0001	0.002	0.8	0.15	<1
	18/05/2023	0.16	0.002	<0.0002	23	<0.001	0.002	0.24	<0.001	7.5	<0.0001	0.002	2.3	0.02	<1
	15/06/2023	120	0.002	0.0003	350	<0.001	0.004	15	0.003	42	<0.0001	0.24	8.1	0.35	<1
	24/07/2023	0.08	0.003	<0.0002	13	<0.001	0.003	0.38	0.002	4.1	<0.0001	0.002	0.8	0.037	<1
	21/08/2023	0.52	0.001	<0.0002	17	0.001	0.002	1.2	0.001	6.3	<0.0001	0.003	<0.5	0.014	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	No surface water located at monitoring site – no sample collected													
	20/11/2023	0.13	<0.001	<0.0002	26	<0.001	0.002	5.7	<0.001	7.9	<0.0001	0.003	2.2	0.006	<1
	19/12/2023	No surface water located at monitoring site – no sample collected													
	23/01/2024	<0.05	<0.001	<0.0002	30	0.001	<0.001	1.8	<0.001	10	<0.0001	<0.001	3.4	0.006	<1
	26/02/2024	<0.005	<0.001	<0.0002	14.00	<0.001	<0.001	0.93	<0.001	4.60	<0.0001	<0.001	1.70	0.05	<1
	26/03/2024	0.11	<0.001	<0.0002	7.4	<0.001	0.002	0.38	<0.001	2	<0.0001	<0.001	1.5	0.013	<1
	18/04/2024	0.06	<0.001	<0.0002	32	<0.001	<0.001	1.4	<0.001	9.5	<0.0001	0.002	2	<0.005	<1
	20/05/3034	0.06	<0.001	<0.0002	26	<0.001	0.001	0.86	<0.001	7	<0.0001	0.002	1.7	0.014	<1
	25/06/2024	0.69	<0.001	<0.0002	94	<0.001	0.002	0.28	<0.001	15	<0.0001	0.008	2.3	0.055	<1
	10/07/2024	0.25	0.002	<0.0002	28	<0.001	0.003	2.1	<0.001	6.6	<0.0001	0.002	2	0.037	<1
	6/08/2024	0.85	<0.001	<0.0002	120	<0.001	0.004	1.3	<0.001	14	<0.0001	0.021	2.3	0.1	<1
	15/08/2024	0.24	<0.001	<0.0002	12	<0.001	0.004	0.33	<0.001	2.8	<0.0001	0.001	1.2	0.027	<1
	11/09/2024	9.1	0.009	0.0005	36	0.023	0.11	49	0.031	8.1	0.0001	0.019	5.2	0.72	<1
	24/09/2024 - Investigation	-	<0.001	<0.001	-	<0.001	0.001	-	<0.001	<0.0001	-	0.004	-	0.04	-
	9/10/2024	0.14	0.001	<0.0002	27	<0.001	0.002	1.7	<0.001	8.1	<0.0001	0.002	1.5	0.017	<1
	6/11/2024	1.2	0.004	<0.0002	26	0.005	0.011	54	0.003	6.1	<0.0001	0.004	2.8	0.041	<1
	16/12/2024	2.4	0.004	<0.0002	22	0.006	0.019	38	0.006	4.5	<0.0001	0.004	2.8	0.092	<1
	14/01/2025	0.15	<0.001	<0.0002	8.8	0.001	0.003	0.34	<0.001	1.8	<0.0001	0.001	0.6	0.018	<1
	11/02/2025	0.58	0.002	<0.0002	13.00	<0.001	<0.001	6.10	<0.001	3.50	<0.0001	0.002	1.00	0.015	<1
	24/03/2025	0.13	<0.001	<0.0002	5.20	<0.001	0.002	0.35	<0.001	1.40	<0.0001	<0.001	1.20	0.037	<1
	31/03/2025	0.1	0.002	<0.0002	22	<0.001	0.003	1.2	<0.001	6.8	<0.0001	0.002	2.4	0.066	<1
	8/04/2025	<0.05	0.002	<0.0002	29	<0.001	<0.001	2.2	<0.001	8.1	<0.0001	0.002	2.4	0.008	<1
	9/05/2025	0.27	<0.001	<0.0002	20	<0.001	0.002	1.6	<0.001	5.9	<0.0001	0.002	1.7	0.03	<1
	25/06/2025	0.11	<0.001	<0.0002	19	<0.001	0.002	0.72	<0.001	4.4	<0.0001	0.002	<0.5	0.032	<1
	8/07/2025	0.05	<0.001	<0.0002	26	<0.001	0.002	0.49	<0.001	7.2	<0.0001	0.002	<0.5	0.024	<1
	14/08/2025	0.14	<0.001	<0.0002	26	<0.001	0.003	0.69	<0.001	6.8	<0.0001	0.002	1.8	0.019	<1
	11/09/2025	0.05	0.001	<0.0002	24	<0.001	0.002	1.5	<0.001	6.8	<0.0001	0.002	1.6	0.014	<1
	13/10/2025	0.07	0.002	<0.0002	37	<0.001	0.01	0.69	<0.001	10	<0.0001	0.005	4.8	0.055	<1
SW01 Baseline		**0.5**	**0.003**	**0.001**	**22**	**0.002**	**0.041**	**1.2**	**0.001**	**16**	**0.0005**	**0.006**	**6**	**0.058**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW01	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	220	220	<100	<100	<20	250	<100	<100	250	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	<50	<50	20	-	<20	<50	100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No surface water located at monitoring site – no sample collected									
	18/10/2023	No surface water located at monitoring site – no sample collected									
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	No surface water located at monitoring site – no sample collected									
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/3034	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Investigation	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	160	160	300	<100	<20	110	300	<100	410	<100
SW01 Baseline		**60**	**-**	**24**	**100**	**-**	**50**	**130**	**90**	**170**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW02	29/09/2022	6.9	170	8.8	8	160	0.04	0.03	29	<0.02	1.3	27	2.8	22		0.1
	20/10/2022	6.5	120	6.2	8.7	140	0.02	0.01	17	<0.02	<0.20	16	2.9	<5		0.2
	14/11/2022	6.4	150	210	0.1	190	0.18	<0.01	54	<0.02	13	62	18	24		0.3
	14/12/2022	6.3	110	870	0.1	200	0.27	0.05	26	<0.10	2.7	25	29	14		1.1
	18/01/2023	6.6	220	190	0.1	61	0.79	0.049	31	<0.20	21	27	6.2	61		0.2
	20/02/2023	6.5	240	29	4.4	1300	0.023	0.31	26	<0.10	1.9	29	24	<5		0.9
	28/03/2023	4.8	310	370	5.7	370	1.5	0.19	22	<0.02	<0.20	17	92	<10		4.2
	18/04/2023	6.2	300	60	7.3	410	0.05	0.16	32	<0.02	1.38	25	120	<5		3.8
	18/05/2023	6.5	130	39	6	270	0.06	0.09	25	<0.02	<0.2	18	29	<5		1.2
	15/06/2023	6.4	190	25	8.9	280	0.37	0.23	34	<0.02	1.2	25	38	<5		1.1
	21/08/2023	6.1	430	20	5.7	690	0.02	0.5	36	<0.02	1.2	38	75	<5		2.1
	18/09/2023	7.2	180	15	8.1	260	0.06	0.04	31	<0.02	0.8	28	39	<5		1.3
	18/10/2023	6.8	150	11	8.1	240	0.05	0.02	40	<0.02	<0.2	28	13	<5		0.3
	20/11/2023	6.9	180	18	4.9	350	0.07	0.04	37	<0.01	0.3	26	50	<5		1.4
	19/12/2023	6.7	140	15	4.6	240	0.05	0.03	37	<0.02	0.7	29	11	<5		0.3
	23/01/2024	6.8	210	27	9.7	350	0.06	0.02	35	<0.02	0.5	31	25	<5		0.7
	26/02/2024	4.5	140	43	7.1	190	0.05	0.03	9	<0.02	0.6	8.5	65	<5		7.2
	26/03/2024	6.7	44	12	6.8	99	0.07	<0.01	9.5	<0.02	0.5	8.8	8.7	<5		0.9
	18/04/2024	7.6	350	<5	6.4	630	0.03	0.9	93	<0.02	0.6	78	56	<5	<10	0.6
	20/05/2024	6.7	130	27	2.1	210	0.04	0.05	20	<0.02	1.1	18	16	<5	11	0.8
	25/06/2024	6.7	180	9.7	8.8	330	0.03	<0.01	42	0.03	<0.2	35	10	<5	11	0.2
	10/07/2024	7.0	150	8.2	6.1	220	0.01	0.11	22	<0.02	1.9	18	21	<5	<10	1.0
	6/08/2024	6.5	220	8.5	7	280	0.06	0.02	39	<0.02	1.7	24	19	<5	20	0.5
	15/08/2024	6.6	48	<5	7.8	80	0.07	0.01	8	<0.02	<0.2	7	6.9	18	<10	0.9
	11/09/2024	7.1	250	<5	6.1	450	0.02	0.05	90	<0.02	0.3	71	48	<5	<10	0.5
	9/10/2024	7.0	260	<5	8.9	500	0.12	0.03	88	<0.02	0.6	73	35	<5	<10	0.4
	6/11/2024	7.5	300	6.4	6	500	0.07	<0.01	89	<0.02	1	72	34	<5	<10	0.4
	16/12/2024	6.4	200	110	8.8	310	1.1	<0.01	55	<0.02	0.4	11	19	6.6	<10	0.3
	14/01/2025	6.9	170	<5	4.6	340	0.08	<0.01	51	<0.02	0.9	44	7.7	<5	<10	0.2
	11/02/2025	7.1	96	5.6	6.1	150	0.08	<0.01	14	<0.02	1.9	91	3.9	190	<10	0.3
	24/03/2024	3.2	420	7.2	8.6	670	<0.05	0.02	17	<0.02	2.8	17	250	<5	<10	15
	31/03/2025	7.2	160	<5	9.8	200	0.14	0.05	14	<0.02	<0.4	16	7	<5	<10	0.5
	8/04/2025	7.2	150	12	6.2	230	0.37	0.03	14	<0.02	0.7	18	3.4	<5	<10	0.2
	9/05/2025	3.9	320	1,100	-	560	1.5	0.23	31	<0.02	2.8	18	150	<20	34	4.8
	25/06/2025	7.1	400	9.4	9.8	580	1.5	0.01	88	<0.03	1.5	74	38	38	14	0.4
	8/07/2025	6.9	300	14	8.4	600	0.34	0.58	96	<0.02	0.9	73	38	19	21	2.5
	14/08/2025	7.2	330	6.1	8.6	600	0.05	0.03	120	<0.02	0.7	85	31	<5	<10	3.9
	11/09/2025	7.0	320	6.1	7.9	530	0.05	0.11	87	<0.02	2.8	69	36	<5	<10	2.4
	13/10/2025	6.9	270	6.3	8.1	470	0.12	<0.01	73	0.11	1.9	60	29	<5	14	2.5
SW02 Baseline		**6.3 – 7.0**	**199**	**495**	**-**	**292**	**1.88**	**0.261**	**161**	**0.06**	**8.6**	**32**	**10**	**182**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW02	29/09/2022	0.42	0.003	<0.0002	19	0.002	0.004	1.5	0.001	5.8	<0.0001	0.002	1.9	0.057	<1
	20/10/2022	0.22	0.001	<0.0002	12	0.001	0.003	0.62	<0.001	3.4	<0.0001	0.001	1.7	0.032	<1
	14/11/2022	1.8	0.037	<0.002	47	<0.001	0.015	53	<0.01	11	<0.001	<0.01	<5	0.096	<1
	14/12/2022	13	0.066	<0.002	38	0.034	0.094	9.7	0.071	5.9	<0.001	0.013	5.1	1	<1
	18/01/2023	3.3	0.023	<0.002	<2	<0.01	0.015	45	0.014	5.8	<0.001	<0.010	<5	0.15	<1
	20/02/2023	12	0.033	0.0002	38	0.009	0.09	0.013	0.013	11	<0.001	0.018	4.1	0.28	<1
	28/03/2023	3.4	0.002	0.0003	43	0.002	0.003	2.5	0.001	8.4	<0.0001	0.024	4.1	0.63	<1
	18/04/2023	0.86	<0.001	<0.0002	20	0.002	0.002	<0.001	<0.001	4	<0.0001	0.006	2.7	0.089	<1
	18/05/2023	0.72	0.002	<0.0002	17	0.002	0.006	1	0.002	4.3	<0.0001	0.003	2.4	0.081	<1
	15/06/2023	1.7	0.001	<0.0002	22	0.001	0.004	2.1	0.001	5.5	<0.0001	0.005	1.9	0.037	<1
	21/08/2023	1.1	<0.001	<0.0002	71	<0.001	<0.001	8	<0.001	16	<0.0001	0.024	5.7	0.057	<1
	18/09/2023	1.7	0.003	<0.0002	19	0.002	0.004	3	0.002	6.3	<0.0001	0.005	3	0.023	<1
	18/10/2023	0.88	0.002	<0.0002	17	0.001	0.003	2.2	0.001	5.5	<0.0001	0.002	1.9	0.014	<1
	20/11/2023	2.3	0.002	<0.0002	19	0.002	0.002	2.6	<0.001	6.7	<0.0001	0.007	1.4	0.032	<1
	19/12/2023	1.1	0.002	<0.0002	19	0.001	0.001	4.8	<0.001	6.5	0.0002	0.004	2.9	0.012	<1
	23/01/2024	2.9	0.003	<0.0002	23	0.002	0.001	5.8	<0.001	7.8	<0.0001	0.007	3.3	0.031	<1
	26/02/2024	1.5	0.001	<0.0002	9.7	0.001	0.003	1.7	<0.001	2.5	<0.0001	0.004	1.4	0.027	<1
	26/03/2024	0.34	<0.001	<0.0002	6.9	0.001	0.003	0.67	<0.001	1.9	<0.0001	0.001	1.8	0.021	<1
	18/04/2024	0.09	<0.001	<0.0002	20	<0.001	<0.001	0.39	<0.001	5.4	<0.0001	<0.001	14	0.014	<1
	20/05/2024	0.71	0.004	<0.0002	19	0.002	0.003	5.6	<0.001	3.8	<0.0001	0.003	3	0.015	<1
	25/06/2024	1.1	<0.001	<0.0002	21	<0.001	0.001	1.4	<0.001	4.6	<0.0001	0.004	4.5	0.022	<1
	10/07/2024	1.1	0.002	<0.0002	20	<0.001	0.004	1.2	<0.001	4.2	<0.0001	0.004	2.3	0.047	<1
	6/08/2024	0.61	0.001	<0.0002	17	0.001	0.002	1.4	<0.001	3.7	<0.0001	0.002	3	0.019	<1
	15/08/2024	0.31	0.002	<0.0002	8	0.001	0.004	0.37	<0.001	1.5	<0.0001	0.001	1.4	0.038	<1
	11/09/2024	0.19	<0.001	<0.0002	20	<0.001	0.001	0.31	<0.001	4.8	<0.0001	0.001	14	0.021	<1
	9/10/2024	0.8	<0.001	<0.0002	23	<0.001	0.001	1.5	<0.001	5	<0.0001	0.003	15	0.032	<1
	6/11/2024	0.007	0.001	<0.0002	21	<0.001	<0.001	0.7	<0.001	5.8	<0.0001	<0.001	15	0.011	<1
	16/12/2024	0.05	<0.001	<0.0002	14	<0.001	0.001	0.24	<0.001	3.1	<0.0001	<0.001	9.4	0.008	<1
	14/01/2025	0.06	<0.001	<0.0002	14	0.001	0.002	0.28	<0.001	2.7	<0.0001	0.001	9.4	0.015	<1
	11/02/2025	0.82	<0.001	<0.0002	24	<0.001	0.002	4.4	<0.001	4.8	<0.0001	0.005	19	0.058	<1
	24/03/2024	7.4	<0.001	<0.0002	56	0.002	0.001	22	<0.001	6.9	<0.0001	0.021	1.8	0.097	<1
	31/03/2025	0.25		<0.0002	23	<0.001	0.003	1.7	<0.001	7	<0.0001	0.002	2.5	0.054	<1
	8/04/2025	0.1	0.001	<0.0002	29	<0.001	0.001	2.7	<0.001	8.3	<0.0001	0.002	2.3	0.015	<1
	9/05/2025	2.3	0.007	<0.0002	34	0.005	0.002	140	<0.001	9.1	<0.0001	0.011	2.1	0.077	<1
	25/06/2025	0.3	<0.001	<0.0002	21	<0.001	0.001	1.1	<0.001	5.4	<0.0001	0.002	14	0.03	<1
	8/07/2025	0.15	<0.001	<0.0002	19	<0.001	<0.001	0.65	<0.001	5.3	<0.0001	0.001	12	0.018	<1
	14/08/2025	0.11	<0.001	<0.0002	21	<0.001	<0.001	0.39	<0.001	5.9	<0.0001	<0.001	11	0.012	<1
	11/09/2025	0.32	0.001	<0.0002	21	<0.001	0.002	1.2	<0.001	5.6	<0.0001	0.001	11	0.016	<1
	13/10/2025	0.15	0.002	<0.0002	19	<0.001	0.004	0.82	<0.001	5.2	<0.0001	0.002	11	0.054	<1
SW02 Baseline		**3.8**	**0.045**	**0.001**	**17**	**0.007**	**0.012**	**71.9**	**0.02**	**5**	**0.0005**	**0.005**	**6**	**0.09**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW02	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	90	<100	<20	<50	60	30	90	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	180	180	30	-	<20	170	30	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	200	<100	<20	<50	100	<100	100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	140	140	100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW02 Baseline		**60**	**-**	**22**	**100**	**-**	**50**	**100**	**50**	**140**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW03	29/09/2022	6.8	120	<5	9.3	100	0.02	<0.01	24	<0.02	1.10	23	2	<5		0.1
	20/10/2022	5.9	650	26	7.5	870	0.03	<0.01	270	<0.02	<0.2	12	13	<5		0.0
	14/11/2022	6.5	140	260	2.6	160	0.13	<0.05	27	<0.01	7.40	36	9	<5		0.3
	14/12/2022	6.5	110	11	4.4	160	0.01	0.05	23	<0.01	3.90	18	11	<5		0.5
	18/01/2023	6.5	160	9	5.1	<5	0.02	<0.010	31	<0.02	1.30	26	17	<5		0.5
	20/02/2023	3.4	540	13	6.0	720	0.01	<0.010	22	<0.02	5.10	28	100	<5		4.5
	28/03/2023	3.3	400	7	9.9	750	0.02	0.07	14	<0.02	<0.2	16	110	<5		7.9
	18/04/2023	4.2	280	<5	7.4	450	<0.01	0.04	29	<0.02	<0.2	22	140	<5		4.8
	18/05/2023	4.3	310	37	5.5	580	0.02	0.32	22	<0.02	12.33	21	230	<5		10
	15/06/2023	3.3	580	17	8.9	870	0.04	0.68	32	<0.02	1.40	31	300	<5		9.4
	24/07/2023	3.9	290	36	9	510	0.03	0.4	17	<0.02	1	20	250	<5		15
	21/08/2023	6.8	270	5.8	7.2	350	0.04	0.04	45	<0.02	0.5	43	8	<5		0.2
	18/09/2023	4.6	410	20	7.4	540	<0.01	0.28	30	<0.02	0.4	29	230	<5		7.7
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.5	640	18	7.1	1100	0.03	0.58	32	<0.01	0.6	30	370	6.7		12
	19/12/2023	3.8	610	7.7	6.7	850	<0.01	0.86	36	<0.02	0.9	37	150	<5		4.2
	23/01/2024	3.7	460	55	4.1	880	<0.01	0.16	31	<0.02	1.6	37	100	<5		3.2
	26/02/2024	4.3	200	93	7.5	250	0.09	0.09	53	0.02	1.5	11	440	7.2		8.3
	26/03/2024	6.1	170	54	7.7	300	0.08	0.13	21	<0.02	1	20	78	<5		3.7
	18/04/2024	7.5	360	9.2	7.4	650	0.03	0.08	88	<0.02	0.8	78	64	<5	<10	0.6
	20/05/2024	4.5	300	21	5.6	450	<0.01	0.5	19	<0.02	1.2	23	190	<5	66	10
	25/06/2024	6.3	80	2300	7.2	140	0.98	<0.1	9.4	<0.2	140	9	5	<5	48	0.5
	10/07/2024	4.4	260	29	5.1	400	0.01	0.64	19	<0.02	0.7	21	10	<5	50	0.5
	6/08/2024	4.6	340	22	6.3	630	0.02	0.62	35	<0.02	1.3	29	230	<5	70	6.6
	15/08/2024	6.3	82	19	8.3	120	0.04	0.07	9.5	<0.02	<0.2	9	31	<5	11	3.3
	11/09/2024	7.1	290	<5	7.7	440	<0.01	0.11	84	<0.02	0.3	66	56	<5	<10	0.7
	9/10/2024	6.6	240	330	7.7	360	0.46	<0.01	56	<0.02	7.1	45	35	33	<10	0.6
	6/11/2024	7.2	300	49	7.5	460	0.07	<0.01	88	<0.02	1.2	72	39	<5	<10	0.4
	16/12/2024	7.2	250	5.3	19.0	370	<0.01	<0.01	70	<0.02	0.7	61	31	50	<10	0.4
	14/01/2025	6.9	220	<5	7.7	420	0.04	<0.01	66	<0.02	1.3	57	11	<5	<10	0.2
	11/02/2025	7.4	340	<5	7.5	570	0.07	0.02	99	<0.02	1.4	87	14	<5	<10	0.1
	24/03/2024	6.9	130	<5	8.1	230	0.05	<0.01	38	<0.02	0.9	32	66	<5	<10	1.7
	31/03/2025	7.0	260	9.3	9.8	440	0.06	0.19	100	<0.02	0.9	70	26	<5	<10	0.3
	8/04/2025	7.2	290	<5	8.9	470	0.04	0.07	100	<0.02	0.4	82	36	<5	<10	0.4
	9/05/2025	7.1	290	<5	-	460	<0.01	<0.1	100	<0.02	0.7	73	36	<5	<10	0.4
	25/06/2025	6.7	360	230	6.5	540	2.3	0.01	88	<0.03	2.3	68	36	46	14	0.4
	8/07/2025	6.8	300	82	9.1	570	0.15	0.48	89	<0.02	1.1	67	39	27	<10	0.4
	14/08/2025	7.2	300	16	9.1	580	0.08	0.05	110	<0.02	1	81	32	<5	<10	0.3
	11/09/2025	6.8	300	6.7	12.0	530	0.05	0.22	84	<0.02	0.7	67	43	43	11	0.5
	13/10/2025	7.2	340	7.5	9	620	0.07	<0.01	100	<0.02	0.8	83	43	16	<10	0.4
	SW03 Baseline	**6.1 - 6.7**	**191**	**1005**	**-**	**281**	**2.14**	**0.155**	**111**	**0.041**	**4.3**	**30**	**6**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW03	29/09/2022	0.4	0.00	<0.0002	13	0.00	0.00	0.8	<0.001	4.4	<0.0001	0.002	1.00	0.034	<1
	20/10/2022	0.5	0.00	<0.0002	8	0.00	0.00	0.9	0.00	2.3	<0.0001	0.001	1.00	0.03	<1
	14/11/2022	1.1	<0.001	<0.002	18	<0.001	0.00	1.9	<0.010	5.7	<0.001	<0.01	<5	0.24	<1
	14/12/2022	0.6	<0.001	<0.002	13	<0.01	<0.010	1.3	<0.010	<5	<0.001	<0.01	<5	0.53	<1
	18/01/2023	0.5	0.01	<0.002	<2	<0.010	<0.01	0.5	<0.01	6.2	<0.001	<0.01	<5	<0.05	<1
	20/02/2023	17	0.00	<0.0002	63	0.00	0.02	0.0	0.00	14.0	<0.001	0.065	3.00	0.12	<1
	28/03/2023	15	<0.001	<0.0002	63	0.00	0.00	4.5	<0.001	11.0	<0.0001	0.065	2.30	0.15	<1
	18/04/2023	3.8	<0.001	<0.0002	30	0.00	0.00	<0.001	<0.001	5.0	<0.0001	0.023	2.10	0.048	<1
	18/05/2023	5.8	<0.001	<0.0002	48	<0.001	0.00	14.0	<0.001	10.0	<0.0001	0.033	2.80	0.16	<1
	15/06/2023	11	<0.001	<0.0002	74	<0.001	0.00	12	<0.001	15.0	<0.0001	0.058	2.7	0.15	<1
	24/07/2023	7.1	<0.001	<0.0002	39	<0.001	0.002	8.9	0.001	9.7	<0.0001	0.030	2.5	0.1	<1
	21/08/2023	0.7	0.001	<0.0002	18	0.001	0.003	1.1	<0.001	6.3	<0.0001	0.002	6.8	0.026	<1
	18/09/2023	2.8	<0.001	<0.0002	59	<0.001	<0.001	1.1	<0.001	14.0	<0.0001	0.022	3.2	0.049	<1
	18/10/2023	3.0	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12.0	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	11.0	0.002	<0.0002	75	<0.001	<0.001	17	<0.001	17.0	<0.0001	0.060	3	0.14	<1
	19/12/2023	21.0	0.003	0.0011	80	<0.001	0.002	3.6	0.001	19.0	0.0007	0.071	4.3	0.16	<1
	23/01/2024	17.0	0.002	<0.0002	63	0.002	0.001	17	<0.001	19.0	<0.0001	0.059	5.1	0.13	<1
	26/02/2024	8.8	0.003	<0.0002	17	0.003	0.005	9	0.002	4.8	<0.0001	0.016	1.8	0.05	<1
	26/03/2024	0.9	<0.001	<0.0002	24	<0.001	<0.001	1.8	<0.001	6.1	<0.0001	0.009	2.8	0.025	<1
	18/04/2024	1.1	<0.001	<0.0002	22	<0.001	<0.001	1.8	<0.001	6.0	<0.0001	0.005	13	0.018	<1
	20/05/2024	5.4	0.002	<0.0002	34	<0.001	<0.001	13	<0.001	7.3	<0.0001	0.026	3.6	0.047	<1
	25/06/2024	0.2	<0.001	<0.0002	10	<0.001	<0.001	170	<0.001	2.7	<0.0001	0.011	2.3	0.042	<1
	10/07/2024	3.6	0.001	<0.0002	34	<0.001	0.001	6.6	<0.001	6.6	<0.0001	0.019	3	0.053	<1
	6/08/2024	3.10	<0.001	<0.0002	51	<0.001	<0.001	4.8	<0.001	7.8	<0.0001	0.026	3.4	0.092	<1
	15/08/2024	1.20	0.00	<0.0002	12	<0.001	0.003	2.1	<0.001	2.2	<0.0001	0.004	1.6	0.037	<1
	11/09/2024	0.59	<0.001	<0.0002	21	<0.001	0.001	1.0	<0.001	4.9	<0.0001	0.003	13	0.021	<1
	9/10/2024	20	0.02	<0.0002	21	0.011	0.01	39.0	0.008	4.4	<0.0001	0.008	8.8	0.1	<1
	6/11/2024	3	0.00	<0.0002	23	0.002	0.002	4.5	<0.001	6.2	<0.0001	0.003	15	0.017	<1
	16/12/2024	0.29	0.001	<0.0002	19	0.001	<0.001	1.6	<0.001	4	<0.0001	0.001	12	0.009	<1
	14/01/2025	0.17	0.001	<0.0002	17	<0.001	0.001	0.74	<0.001	3.3	<0.0001	0.001	12	0.016	<1
	11/02/2025	0.45	0.001	<0.0002	23	<0.001	<0.001	2.1	<0.001	4.5	<0.0001	0.001	18	0.031	<1
	24/03/2024	0.18	0.001	<0.0002	10	<0.001	0.002	0.79	<0.001	2.6	<0.0001	0.001	6.6	0.036	<1
	31/03/2025	0.42	0.002	<0.0002	21	<0.001	0.001	3.5	<0.001	4.9	<0.0001	0.002	11	0.045	<1
	8/04/2025	0.3	<0.001	<0.0002	21	<0.001	<0.001	1.3	<0.001	5.4	<0.0001	0.002	11	0.012	<1
	9/05/2025	0.62	0.002	<0.0002	20	<0.001	0.001	2	<0.001	4.9	<0.0001	0.005	11	0.042	<1
	25/06/2025	2	0.002	<0.0002	21	<0.001	0.003	6.1	0.001	5.2	<0.0001	0.002	12	0.053	<1
	8/07/2025	0.24	<0.001	<0.0002	19	<0.001	<0.001	0.49	<0.001	5	<0.0001	0.001	11	0.015	<1
	14/08/2025	0.2	<0.001	<0.0002	20	<0.001	<0.001	0.59	<0.001	5.8	<0.0001	0.001	11	0.01	<1
	11/09/2025	2	0.003	<0.0002	19	0.002	0.004	4	0.002	5.4	<0.0001	0.003	11	0.037	<1
	13/10/2025	0.29	0.001	<0.0002	22	<0.001	0.002	0.97	<0.001	5.9	<0.0001	0.001	16	0.019	<1
	SW03 Baseline	**7.9**	**0.058**	**0.001**	**21**	**0.008**	**0.028**	**85.5**	**0.028**	**5**	**0.0005**	**0.006**	**4**	**0.26**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW03	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	<50	<100	<20	<50	<100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	130	130	<100	<100	<20	<50	10	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW03 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**120**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW04	29/09/2022	4.5	68	<5	4.8	52	0.01	0.18	20	<0.02	5.1	17	<2	<5		0.05
	20/10/2022	4.2	90	<5	7.5	110	0.01	<0.10	20	<0.02	0.3	16	<2	<5		0.05
	14/11/2022	No surface water located at monitoring site – no sample collected														
	14/12/2022	3.2	190	<5	2	280	0.01	0.05	42	<0.10	3.2	20	<2	<5		0.02
	18/01/2023	No surface water located at monitoring site – no sample collected														
	20/02/2023	4.1	0.2	<5	5.9	160	0.02	0.09	22	<0.10	7.4	23	15	<5		0.7
	28/03/2023	4.2	68	<5	8	130	<0.01	<0.01	17	<0.10	<0.25	14	25	<5		1.5
	18/04/2023	4.6	130	16	9.1	190	0.01	0.03	32	<0.02	0.5	21	8.7	<5		0.3
	18/05/2023	3.6	1,200	42	8	1,800	0.03	1.2	26	<0.02	1.15	53	1,000	<5		38.5
	15/06/2023	4.2	140	160	7.7	200	1.5	0.44	44	<0.02	12	24	<2	8		0.02
	24/07/2023	3.6	1,600	21	9	2,400	0.02	1.5	180	<0.02	3.4	78	5,700	<5		31.7
	21/08/2023	3.3	2,400	5.7	7.5	3,700	<0.01	2.8	33	<0.02	3.4	97	850	5.3		25.8
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.2	2,100	<5	9	3,500	0.03	0.8	4.7	<0.01	1.1	63	400	<5		85.1
	19/12/2023	3.0	3,200	15	0.8	3,700	<0.01	0.44	34	<0.02	4.5	100	980	<5		28.8
	23/01/2024	3.1	1,600	23	7.8	2,500	<0.01	0.19	27	<0.02	0.5	54	730	<5		27.0
	26/02/2024	3.1	1,000	11	7.8	1,200	0.03	0.31	14	<0.02	1.5	30	570	<5		40.7
	26/03/2024	3.2	900	5.7	9.6	1,300	<0.01	0.36	21	<0.02	0.9	30	710	<5		33.8
	18/04/2024	3.1	980	67	7.5	1,900	0.03	0.42	15	<0.02	0.8	33	1,000	27	310	66.7
	20/05/2024	3.3	630	8	8.3	1,100	<0.01	0.3	11	<0.02	0.7	25	500	<5	190	45.5
	25/06/2024	3.2	1,000	5.4	8.6	1,600	0.01	0.4	13	<0.02	1	27	270	<5	160	20.8
	10/07/2024	3.5	420	<5	7.9	870	<0.01	0.24	11	<0.02	0.6	21	450	<5	150	40.9
	6/08/2024	3.3	1,300	38	8.7	1,700	0.04	0.03	13	<0.02	1.1	28	860	7.8	230	66.2
	15/08/2024	3.9	240	<5	9.3	390	0.02	0.13	13	<0.02	0.8	16	150	<5	40	11.5
	11/09/2024	3.4	460	<5	6.9	690	0.01	0.05	8.7	<0.02	<0.2	17	390	15	77	44.8
	24/09/2024 - Additional	3.5	750	-	-	1,300	-	-	-	-	-	-	-	-	-	-
	9/10/2024	3.1	810	<5	9	1,200	0.02	<0.01	10	<0.02	0.8	26	580	<5	<10	58.0
	6/11/2024	3.3	440	23	6.4	660	0.05	<0.01	10	<0.02	1	18	310	<5	15	31.0
	16/12/2024	5.7	210	420	0.2	360	0.1	0.25	13	<0.02	13	12	110	7	25	8.5
	14/01/2025	4.1	310	120	4.9	460	0.13	0.03	6.3	<0.02	1.3	11	64	<5	<10	10.2
	11/02/2025	7.6	700	<5	8.8	1000	0.01	0.03	5.8	<0.02	1.3	21	150	7.7	<10	25.9
	24/03/2025	3.9	390	21	7.4	470	0.03	0.03	18	<0.02	1.5	24	180	8.1	<10	10.0
	31/03/2025	6.3	260	70	10	370	<0.01	0.1	11	<0.02	0.8	16	160	<5	<10	14.5
	8/04/2025	6.0	430	43	4.1	470	0.09	0.27	11	0.04	2.3	18	240	<10	16	21.8
	9/05/2025	6.5	270	260	-	570	<0.01	0.02	10	<0.02	4.5	16	250	160	<10	25.0
	25/06/2025	6.7	410	67	6.1	590	0.6	0.01	8.3	<0.02	0.6	16	160	6.5	28	19.2
	8/07/2025	4.0	140	180	6.1	160	0.21	<0.01	21	<0.02	6.2	17	<2	7.6	43	21.0
	14/08/2025	6.5	180	250	6.6	290	0.47	-	9.4	-	-	14	86	<5	13	9.4
	11/09/2025	6.5	260	1,400	0.2	460	0.03	0.31	7.3	<0.02	38	16	150	10	22	7.3
	13/10/2025	7.3	580	14	8.3	760	0.04	<0.01	4	<0.02	0.8	16	230	20	<10	4.0
	SW04 Baseline	**4.2 – 4.5**	**112**	**293**	**-**	**165**	**0.5**	**0.693**	**90**	**0.052**	**4.5**	**20**	**3**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW04	29/09/2022	1.3	0.001	<0.0002	1.6	0.005	0.001	2.7	0.001	2.6	<0.0001	0.002	1	0.027	<1
	20/10/2022	1.1	<0.001	<0.0002	1.3	0.004	0.001	2.4	0.001	2.3	<0.0001	0.002	1	0.024	<1
	14/11/2022	No surface water located at monitoring site – no sample collected													
	14/12/2022	1.2	<0.001	<0.002	<5	<0.001	<0.01	3.2	<0.01	<5	<0.001	<0.01	<5	0.084	<1
	18/01/2023	No surface water located at monitoring site – no sample collected													
	20/02/2023	1.6	0.002	<0.0002	2.7	0.005	0.05	0.002	0.002	3.9	<0.001	0.003	1.6	0.039	<1
	28/03/2023	1.1	<0.01	<0.002	<5	0.002	<0.01	2.7	<0.01	<5	<0.0001	0.01	<5	<0.05	<1
	18/04/2023	0.85	<0.001	<0.0002	1.8	<0.01	<0.001	<0.001	<0.001	2.7	<0.0001	0.001	0.8	0.034	<1
	18/05/2023	41	<0.001	0.0005	200	<0.001	0.003	16	0.003	31	<0.0001	0.11	5.7	0.4	<1
	15/06/2023	3.1	0.002	<0.0002	2.2	0.007	0.007	6.3	0.005	4.5	<0.0001	0.003	1.4	0.075	1.41
	24/07/2023	50	<0.001	0.0002	330	<0.001	0.003	3.9	0.002	51	<0.0001	0.13	9	0.18	<1
	21/08/2023	72	0.002	0.0004	560	<0.001	0.003	3.4	0.002	83	<0.0001	0.23	13	0.34	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	3	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	91	0.003	0.0007	380	0.001	0.003	4.3	0.003	52	<0.0001	0.27	7.2	0.55	<1
	19/12/2023	110	0.005	0.0022	570	0.002	0.005	11	0.007	90	0.001	0.39	4.3	0.7	<1
	23/01/2024	55	0.002	0.0003	260	0.002	0.003	9.7	0.002	35	<0.0001	0.19	6.1	0.33	<1
	26/02/2024	23	<0.001	<0.0002	140	<0.001	<0.001	5.1	<0.001	20	<0.0001	0.083	3.9	0.18	<1
	26/03/2024	20	<0.001	<0.0002	130	<0.001	<0.001	3.1	<0.001	19	<0.0001	0.068	4.9	0.1	<1
	18/04/2024	32	<0.001	<0.0002	190	0.001	0.002	7	<0.001	26	<0.0001	0.1	3.6	0.18	<1
	20/05/2024	20	<0.001	<0.0002	100	<0.001	<0.001	5.7	<0.001	14	<0.0001	0.064	2.6	0.13	<1
	25/06/2024	16	<0.001	<0.0002	210	<0.001	<0.001	5.3	<0.001	23	<0.0001	0.059	3.7	0.09	<1
	10/07/2024	12	<0.001	<0.0002	110	<0.001	0.001	2.5	<0.001	12	<0.0001	0.051	2.2	0.11	<1
	6/08/2024	17	<0.001	<0.0002	200	<0.001	0.001	5.5	<0.001	24	<0.0001	0.059	2.5	0.1	<1
	15/08/2024	2	<0.001	<0.0002	36	<0.001	<0.001	0.81	<0.001	6	<0.0001	0.015	2.5	0.057	<1
	11/09/2024	5.6	<0.001	<0.0002	87	<0.001	<0.001	3.6	<0.001	11	<0.0001	0.026	1.6	0.061	<1
	24/09/2024 - Additional	-	<0.001	<0.0001	-	<0.001	0.0001	-	<0.001	-	<0.0001	0.032	-	0.043	-
	9/10/2024	14	<0.001	<0.0002	140	<0.001	0.002	8.1	<0.001	17	<0.0001	0.057	2.7	0.12	<1
	6/11/2024	2.8	<0.001	<0.0002	81	<0.001	<0.001	6.1	<0.001	11	<0.0001	0.02	<0.5	0.034	<1
	16/12/2024	4.4	0.007	<0.0002	29	0.009	0.006	170	0.003	4.5	<0.0001	0.009	1.3	0.035	<1
	14/01/2025	1.2	<0.001	<0.0002	53	<0.001	0.001	5.8	<0.001	5.8	<0.0001	0.014	0.8	0.039	<1
	11/02/2025	<0.05	<0.001	<0.0002	200	<0.001	<0.001	0.14	<0.001	18	<0.0001	0.004	<0.5	0.033	<1
	24/03/2025	1.1	<0.001	<0.0002	52	<0.001	0.002	6.6	<0.001	8.5	<0.0001	0.012	2.3	0.1	<1
	31/03/2025	0.5	0.003	<0.0002	50	<0.001	0.001	17	<0.001	7.6	<0.0001	0.007	2.4	0.047	<1
	8/04/2025	0.36	0.004	<0.0002	70	<0.001	<0.001	38	<0.001	9.8	<0.0001	0.006	2.3	0.014	<1
	9/05/2025	0.64	<0.001	<0.0002	61	<0.001	0.001	34	<0.001	7.9	<0.0001	0.001	1.9	0.032	<1
	25/06/2025	0.35	<0.001	<0.0002	85	<0.001	<0.001	7.3	<0.001	8.5	<0.0001	0.004	1.3	0.013	<1
	8/07/2025	0.92	<0.001	<0.0002	0.6	0.004	0.002	1.8	<0.001	1.5	<0.0001	0.001	0.8	0.042	<1
	14/08/2025	0.34	<0.001	<0.0002	38	<0.001	<0.001	17	<0.001	5.7	<0.0001	0.002	1	0.018	<1
	11/09/2025	8.7	0.031	<0.002	120	0.017	0.011	830	<0.01	12	<0.001	0.027	<5	0.1	<1
	13/10/2025	0.31	0.002	<0.0002	130	<0.001	<0.001	12	<0.001	14	<0.0001	0.004	1.5	<0.005	<1
SW04 Baseline		**1.4**	**0.002**	**0.001**	**3.2**	**0.007**	**0.002**	**2.8**	**0.002**	**2.3**	**0.0005**	**0.005**	**2.9**	**0.028**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW04	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	No flow - No sample collected									
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	No flow - No sample collected									
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No flow - No sample collected									
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	160	160	<100	<100	<20	<50	<100	<100	160	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Additional	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW04 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

ENV
ENVIRONMENTAL | ASBESTOS | REMEDIATION | RESOURCE RECOVERY

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW05	29/09/2022	5.9	480	5.2	7.7	510	0.12	0.17	220	<0.20	3	140	11	<5		0.05
	20/10/2022	6.2	650	7.2	8.9	690	0.06	0.24	180	<0.20	0.5	160	8.6	<5		0.05
	14/11/2022	6.2	820	13	4.7	1,000	0.06	<0.05	310	<0.10	8.1	260	100	<5		0.32
	14/12/2022	6.2	830	16	7.5	1,100	0.05	0.05	330	<0.10	3.1	240	40	<5		0.12
	18/01/2023	6.3	2,800	33	7	<5	0.09	0.09	1,300	<0.02	3.38	820	160	<5		0.12
	20/02/2023	6.7	18	18	5.4	2,300	0.1	0.07	2,000	<0.10	3.4	4700	890	<5		0.45
	28/03/2023	5.6	470	<5	9.4	760	0.02	0.08	200	<0.10	<0.02	110	23	6.7		0.12
	18/04/2023	6.4	4,000	16	8.5	5,300	0.1	0.12	2,000	<0.02	80	1100	230	<5		0.12
	18/05/2023	5.8	260	17	5.7	460	0.08	<0.01	110	<0.02	<0.2	64	25	<5		0.23
	15/06/2023	6.2	1,100	<5	8.8	1,400	0.58	0.14	450	<0.02	1.1	250	40	<5		0.09
	24/07/2023	6.5	1,600	<5	9.3	2,800	0.05	0.17	1,500	<0.5	1.1	440	1,200	<5		0.80
	21/08/2023	6.6	1,600	<5	6.3	2,900	0.06	0.15	1,500	<0.02	1.28	480	190	<5		0.13
	18/09/2023	6.6	2,500	13	6.4	3,800	0.06	0.11	1,200	<0.02	1.3	650	210	<5		0.18
	18/10/2023	6.9	4,800	6.6	6.5	7,700	0.06	0.05	2,700	<0.02	<0.2	1,300	730	10		0.27
	20/11/2023	6.8	2,100	12	4.8	3,700	0.18	0.46	1,100	<0.01	0.6	460	1,200	<5		1.09
	19/12/2023	6.7	3,300	14	5.3	5,400	0.19	0.77	1,700	<0.02	<2	1,000	64	<5		0.04
	23/01/2024	6.2	1,100	13	9.3	1,000	0.09	0.05	440	<0.02	2.3	260	220	<5		0.50
	26/02/2024	6.3	970	16	8.6	1,200	0.11	0.03	330	<0.02	1.5	200	130	<5		0.39
	26/03/2024	6.6	1,100	9.1	5.6	1,700	0.03	0.09	910	<0.02	2	290	420	<5		0.46
	18/04/2024	6.5	560	8.4	5.8	830	0.07	0.16	160	<0.02	1.7	110	160	5.4	<10	1.00
	20/05/2024	6.7	240	<5	5.8	350	<0.01	0.03	68	<0.02	0.4	47	140	<5	15	2.06
	25/06/2024	6.5	1,000	16	7.7	1,800	0.06	0.1	500	<0.02	1.2	300	29	<5	16	0.06
	10/07/2024	6.2	950	5.6	6.3	1,700	0.02	0.16	170	<0.02	0.9	280	130	<5	11	0.76
	6/08/2024	6.3	3,300	9	8.9	5,800	0.05	0.11	1500	<0.02	1.2	820	210	<5	27	0.14
	15/08/2024	6.2	300	<5	7.1	430	0.08	0.03	30	<0.02	<0.2	80	27	<5	12	0.90
	11/09/2024	6.4	710	8.2	5.5	1,200	0.03	0.4	450	<0.02	1.1	230	72	<5	12	0.16
	9/10/2024	6.4	700	11	9	1,100	0.15	0.15	320	<0.1	<0.25	180	53	<5	14	0.17
	6/11/2024	7.1	930	15	6.1	1,300	0.08	0.16	440	<0.02	1	250	56	<5	<10	0.13
	16/12/2024	7.4	31,000	26	9.3	44,000	0.02	0.14	1,400	<0.02	0.4	<0.5	2,000	<5	<10	1.43
	14/01/2025	7.1	19,000	9.4	6.2	30,000	0.04	0.04	12,000	<0.02	0.3	5,500	500	<5	<10	0.04
	11/02/2025	7.5	24,000	9.1	8.5	35,000	0.03	0.06	6,300	<0.02	<0.2	6,900	260	<5	<10	0.04
	24/03/2024	6.3	1,600	<5	7	2,500	<0.1	0.12	790	<0.02	4.4	440	140	<5	<10	0.18
	31/03/2025	7.0	210	8	9.2	260	0.08	<10	72	<0.02	2.3	41	9.5	<5	<10	0.13
	8/04/2025	6.3	610	8.3	6.7	760	0.08	0.44	230	<0.2	<1	140	29	<10	<10	0.13
	9/05/2025	6.8	340	<5	-	480	0.08	<0.1	120	<0.2	1.7	71	40	<5	<10	0.33
	25/06/2025	6.2	2,000	6.6	5.9	3,500	<0.2	0.07	1,700	<0.2	<0.2	510	250	<5	17	0.14
	8/07/2025	6.0	470	<5	8	910	0.05	0.03	230	0.07	<0.2	130	41	<5	13	0.18
	14/08/2025	6.2	570	16	6.1	930	0.08	0.03	550	<0.02	16	140	62	6.5	13	0.11
	11/09/2025	6.5	940	5.4	6.9	1,700	0.04	0.05	440	<0.02	1.7	260	61	<5	9	0.14
	13/10/2025	6.8	6,600	<5	5.4	11,000	0.05	0.1	3,300	<0.02	1.7	1,800	370	<5	12	0.11
	SW05 Baseline	**5.1 – 7.2**	**4710**	**136**	**-**	**6927**	**0.21**	**0.592**	**980**	**<0.02**	**2.2**	**1667**	**115**	**63**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW05	29/09/2022	0.83	<0.001	<0.0002	9.4	0.002	<0.001	4.6	<0.001	17	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.66	<0.001	<0.0002	11	0.001	<0.001	3.5	0.001	19	<0.0001	0.002	7.9	0.007	<1
	14/11/2022	0.75	<0.001	<0.002	18	<0.001	0.002	5.4	<0.01	27	<0.001	<0.001	11	0.12	<1
	14/12/2022	0.93	<0.001	<0.002	16	<0.01	<0.01	6.1	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.73	<0.01	<0.002	<2	<0.01	<0.01	6.2	<0.01	96	<0.001	<0.01	41	<0.05	<1
	20/02/2023	0.22	0.002	<0.0002	190	0.001	0.01	<0.001	<0.001	550	<0.001	0.001	170	0.008	<1
	28/03/2023	0.77	<0.01	<0.002	9.4	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.4	<0.05	<1
	18/04/2023	1	<0.001	<0.0002	42	0.001	<0.001	<0.001	<0.001	110	<0.0001	0.003	37	0.008	<1
	18/05/2023	0.6	<0.001	<0.0002	5.2	<0.001	<0.001	2.4	<0.001	9.1	<0.0001	0.002	4.9	0.009	<1
	15/06/2023	0.32	<0.001	<0.0002	14	0.001	2	2	<0.001	27	<0.0001	0.001	14	0.01	<1
	24/07/2023	0.33	<0.001	<0.0002	22	<0.001	<0.001	1.9	<0.001	52	<0.0001	0.002	25	0.006	<1
	21/08/2023	0.41	<0.001	<0.0002	23	<0.001	0.002	2.2	<0.001	54	<0.0001	0.002	29	0.005	<1
	18/09/2023	0.28	<0.001	<0.0002	29	<0.001	<0.001	2.6	<0.001	70	<0.0001	0.001	42	<0.005	<1
	18/10/2023	0.27	<0.001	<0.0002	61	<0.001	<0.001	2	<0.001	160	<0.0001	<0.001	76	<0.005	<1
	20/11/2023	0.51	0.001	<0.0002	25	0.001	<0.001	4.3	<0.001	56	<0.0001	0.002	27	<0.005	<1
	19/12/2023	0.54	0.005	0.0028	46	0.001	0.001	4.2	0.001	120	0.002	0.002	47	0.009	<1
	23/01/2024	0.9	0.003	<0.0002	16	0.002	0.001	7.8	<0.001	32	<0.0001	0.001	16	0.012	<1
	26/02/2024	0.63	0.001	<0.0002	13	0.001	<0.001	3.7	<0.001	23	<0.0001	0.002	10	0.029	<1
	26/03/2024	0.64	<0.001	<0.0002	16	0.001	<0.001	3.3	<0.001	33	<0.0001	0.002	14	0.008	<1
	18/04/2024	0.69	<0.001	<0.0002	8.3	0.002	0.001	<0.001	<0.001	14	<0.0001	0.008	6.7	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.6	<0.001	0.001	2.5	<0.001	5.1	<0.0001	0.002	3.5	0.008	<1
	25/06/2024	0.2	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	31	<0.0001	0.002	12	0.012	<1
	10/07/2024	0.48	<0.001	<0.0002	17	<0.001	<0.001	2.9	<0.001	31	<0.0001	0.002	11	0.008	<1
	6/08/2024	0.28	<0.001	<0.0002	37	<0.001	<0.001	<0.001	<0.001	100	<0.0001	0.001	30	0.007	<1
	15/08/2024	0.5	<0.001	<0.0002	5	0.001	<0.001	1.6	<0.001	8	<0.0001	0.001	4.6	0.01	<1
	11/09/2024	0.52	<0.001	<0.0002	14	<0.001	<0.001	2.9	<0.001	25	<0.0001	0.002	10	0.011	<1
	9/10/2024	0.85	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.5	0.016	<1
	6/11/2024	0.68	<0.001	<0.0002	17	0.002	<0.001	3.8	<0.001	29	<0.0001	0.002	12	0.008	<1
	16/12/2024	<0.05	<0.001	<0.0002	<0.5	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.24	0.002	<0.0002	230	0.002	<0.001	0.64	<0.001	660	<0.0001	<0.001	210	0.006	<1
	11/02/2025	0.12	0.002	<0.0002	290	0.001	<0.001	0.5	<0.001	820	<0.0001	<0.001	260	0.047	<1
	24/03/2024	0.54	<0.001	<0.0002	22	<0.001	0.001	3.2	<0.001	53	<0.0001	0.002	17	0.32	<1
	31/03/2025	0.58	<0.001	<0.0002	4.2	<0.001	<0.001	3.7	<0.001	5.2	<0.0001	0.002	3.5	0.062	<1
	8/04/2025	0.77	<0.001	<0.0002	9.9	0.001	<0.001	4.2	<0.001	18	<0.0001	0.002	6	0.011	<1
	9/05/2025	0.75	<0.001	<0.0002	6.3	0.001	<0.001	3.2	<0.001	8.5	<0.0001	0.002	3.7	0.015	<1
	25/06/2025	0.46	<0.001	<0.0002	26	<0.001	<0.001	2	<0.001	63	<0.0001	0.001	19	0.01	<1
	8/07/2025	0.68	<0.001	<0.0002	9.1	0.001	<0.001	3	<0.001	16	<0.0001	0.002	4.9	0.008	<1
	14/08/2025	0.46	<0.001	<0.0002	8.6	<0.001	<0.001	2.6	<0.001	17	<0.0001	0.001	6.2	0.008	<1
	11/09/2025	0.55	<0.001	<0.0002	15	<0.001	<0.001	3.2	<0.001	33	<0.0001	0.001	11	0.01	<1
	13/10/2025	0.21	<0.001	<0.0002	77	<0.001	<0.001	2	<0.001	220	<0.0001	<0.001	69	<0.005	<1
SW05 Baseline		**2.1**	**0.002**	**0.001**	**57**	**0.002**	**0.003**	**12.3**	0.001	**130**	**0.0005**	**0.011**	**58**	**0.026**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW05	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	70	70	-	-	<20	60	100	-	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	120	120	<100	120	<20	<50	120	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW05 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW06	29/09/2022	6.0	480	<5	7.8	580	0.13	0.16	220	<0.02	8.6	140	11	5.1		0.05
	20/10/2022	6.3	580	16	8.7	730	0.05	0.19	330	<0.02	0.5	110	7.5	6.2		0.02
	14/11/2022	6.2	840	13	<5	1000	0.04	0.36	310	<0.10	1.1	270	100	<5		0.32
	14/12/2022	6.3	840	16	8.3	1200	0.1	0.05	340	<0.10	5.8	240	44	<5		0.13
	18/01/2023	6.4	3,700	31	6.8	5,400	0.07	0.04	1,800	<0.02	2.5	1,000	200	<5		0.11
	20/02/2023	6.8	19	89	5.1	14,000	0.09	0.11	22	<0.10	4.1	4,000	1,200	<5		54.55
	28/03/2023	5.6	400	6.2	8.3	730	0.03	0.07	180	<0.20	<0.20	110	18	9.7		0.10
	18/04/2023	6.7	6,400	18	7.4	6,700	0.07	1.2	3,200	<0.02	1.26	1,700	360	<10		0.11
	18/05/2023	5.9	280	17	6.3	470	0.08	0.06	120	<0.02	0.4	370	21	<5		0.18
	15/06/2023	6.4	1,100	<5	7.4	1,400	0.55	0.18	440	<0.02	0.7	250	38	<5		0.09
	24/07/2023	6.7	2,100	5.8	6.6	3,500	0.07	0.23	1,800	<0.2	0.6	540	620	<5		0.34
	21/08/2023	6.6	2,800	<5	6.1	5,400	0.19	0.16	1,300	<0.02	0.78	870	59	<5		0.05
	18/09/2023	6.7	2,900	24	6.5	4,600	0.06	0.12	1,500	<0.02	0.4	1,300	200	<5		0.13
	18/10/2023	6.9	7,900	6.3	6.4	9,700	0.05	0.05	3,700	<0.02	<0.2	1,600	430	<5		0.12
	20/11/2023	6.6	2,200	9.9	4.6	4,000	0.18	0.43	1,200	<0.01	1.2	490	720	<5		0.60
	19/12/2023	6.8	3,300	9.3	5.6	6,600	0.09	0.82	2,300	<0.02	<2	1,300	94	<5		0.04
	23/01/2024	6.2	4,300	15	2.1	4,300	0.18	0.08	2,800	<0.02	1.4	1,100	330	<5		0.12
	26/02/2024	6.4	880	17	9	1,200	0.11	0.02	60	<0.02	1.7	200	10	<5		0.17
	26/03/2024	6.8	1,300	9.9	5.9	1,900	0.05	0.07	760	0.05	1.2	300	120	<5		0.16
	18/04/2024	6.6	520	5.8	6	840	0.06	0.16	170	<0.02	<1	110	31	<5	17	0.18
	20/05/2024	6.3	240	<5	6.1	290	<0.01	0.05	59	<0.02	1	42	47	<5	15	0.80
	25/06/2024	6.7	960	17	9.2	1,900	0.06	0.09	500	<0.02	5.3	270	21	<5	19	0.04
	10/07/2024	6.2	880	<5	6.2	1,600	0.03	0.13	170	<0.02	1.4	250	33	<5	15	0.19
	6/08/2024	6.3	4,500	6.8	7.6	8,400	0.08	0.15	2,100	<0.02	1.6	1,200	270	<5	24	0.13
	15/08/2024	6.2	160	<5	7	240	0.1	0.03	57	<0.02	<0.2	38	15	<5	14	0.26
	11/09/2024	6.7	710	7	6.6	1,000	0.04	0.28	370	<0.02	1.8	180	54	<5	11	0.15
	9/10/2024	6.5	720	14	8.5	1,000	0.15	<0.01	310	<0.1	4.3	180	33	18	<10	0.11
	6/11/2024	6.9	1,900	37	5.6	2,400	0.1	0.11	890	<0.02	1.6	490	160	<5	<10	0.18
	16/12/2024	7.7	33,000	13	9.5	47,000	0.01	0.18	16,000	<0.02	<0.2	<0.5	2,100	<5	<10	0.13
	14/01/2025	7.2	25,000	11	6.3	38,000	0.03	0.06	15,000	<0.02	0.7	7,200	600	<5	<10	0.04
	11/02/2025	7.6	24,000	11	7.2	34,000	0.003	0.06	6,100	<0.02	<0.2	7,200	240	5.9	<10	0.04
	24/03/2025	6.5	1,700	<5	6.8	2,500	<0.1	0.12	820	<0.02	4.2	450	110	<5	<10	0.13
	31/03/2025	6.7	250	11	9.5	250	0.08	<10	68	<0.02	<1	42	9.7	<5	<10	0.14
	8/04/2025	6.4	610	7.6	9.4	740	0.08	0.28	260	<0.2	<1	140	31	<10	<10	0.12
	9/05/2025	6.6	260	<5	-	490	0.07	<0.1	120	<0.2	<1	70	28	<5	<10	0.23
	25/06/2025	6.2	2,000	7.4	5.9	3,600	1.4	0.08	1,700	<0.2	1.4	520	260	<5	20	1.50
	8/07/2025	6.0	470	<5	8.2	910	0.05	0.02	230	<0.02	<0.2	130	28	<5	13	0.12
	14/08/2025	6.3	590	31	6.1	910	0.07	0.03	340	<0.02	0.3	140	37	<5	13	0.11
	11/09/2025	6.6	1,299	6.8	7.1	2,200	0.04	0.05	590	<0.02	5.6	340	67	<5	<10	0.11
	13/10/2025	6.8	14,000	5.9	4.9	23,000	0.04	0.29	7,400	<0.02	0.6	4,100	830	5.9	14	0.11
ANZG (2018): 95% Slightly Disturbed		**6.5 – 8.0**	**-**	**<50**	**-**	**<2200**	**<0.05**	**-**	**-**	**-**	**<0.50**	**-**	**-**	**5**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW06	29/09/2022	0.78	<0.001	<0.0002	9.4	0.002	<0.001	4.5	<0.001	18	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.54	<0.001	<0.0002	9.1	0.001	<0.001	2.7	0.001	13	<0.0001	0.002	5.8	0.012	<1
	14/11/2022	0.68	<0.001	<0.002	18	<0.001	0.012	5.3	<0.01	29	<0.001	<0.01	12	0.11	<1
	14/12/2022	0.75	<0.001	<0.002	16	<0.01	<0.01	5.4	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.63	<0.010	<0.001	<2	<0.01	<0.01	0.01	<0.01	120	<0.001	<0.01	47	<0.05	<1
	20/02/2023	0.34	0.002	<0.0002	170	0.001	0.01	<0.001	<0.001	480	<0.001	0.002	160	0.008	<1
	28/03/2023	1.1	<0.01	<0.002	11	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.3	<0.05	<1
	18/04/2023	0.54	<0.001	<0.0002	68	0.001	<0.001	<0.001	<0.001	200	<0.0001	0.002	63	0.009	<1
	18/05/2023	0.44	0.003	<0.0002	14	<0.001	<0.001	0.13	<0.001	4.8	<0.0001	0.008	3.3	<0.005	<1
	15/06/2023	0.36	<0.001	<0.0002	15	<0.001	2.1	2.1	<0.001	28	28	0.001	14	<0.005	<1
	24/07/2023	0.36	<0.001	<0.0002	26	<0.001	<0.001	1.9	0.001	65	<0.0001	0.002	29	0.007	<1
	21/08/2023	0.41	<0.001	<0.0002	39	0.001	<0.001	1.9	<0.001	100	<0.0001	0.002	46	<0.005	<1
	18/09/2023	0.3	<0.001	<0.0002	56	<0.001	<0.001	2.4	<0.001	150	<0.0001	0.001	64	<0.005	<1
	18/10/2023	0.2	<0.001	<0.0002	73	<0.001	<0.001	1.7	<0.001	190	<0.0001	<0.001	85	<0.005	<1
	20/11/2023	0.63	0.001	<0.0002	27	0.001	<0.001	4.5	<0.001	60	<0.0001	0.003	28	0.01	<1
	19/12/2023	0.62	0.002	0.0007	56	0.001	0.002	3.4	<0.001	150	0.0005	0.002	55	0.008	<1
	23/01/2024	0.71	0.003	<0.0002	50	0.002	<0.001	5.7	<0.001	140	<0.0001	<0.001	46	0.008	<1
	26/02/2024	0.61	<0.001	<0.0002	14	0.003	<0.001	3.5	<0.001	24	<0.0001	0.005	10	0.025	<1
	26/03/2024	0.61	<0.001	<0.0002	17	0.001	<0.001	3.1	<0.001	34	<0.0001	0.002	15	0.008	<1
	18/04/2024	0.71	<0.001	<0.0002	10	0.001	<0.001	<0.001	<0.001	13	<0.0001	0.008	7.6	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.7	<0.001	<0.001	2.3	<0.001	4.8	<0.0001	0.002	3.2	0.009	<1
	25/06/2024	0.23	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	28	<0.0001	0.002	11	0.016	<1
	10/07/2024	0.5	<0.001	<0.0002	17	<0.001	<0.001	2.6	<0.001	28	<0.0001	0.002	10	0.01	<1
	6/08/2024	0.31	<0.001	<0.0002	50	<0.001	<0.001	<0.001	<0.001	140	<0.0001	0.002	40	0.011	<1
	15/08/2024	0.51	<0.001	<0.0002	4.8	<0.001	0.001	1.6	<0.001	4.6	<0.0001	0.002	3	0.011	<1
	11/09/2024	0.46	<0.001	<0.0002	14	<0.001	<0.001	2.1	<0.001	20	<0.0001	0.002	11	0.012	<1
	9/10/2024	0.84	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.7	0.009	<1
	6/11/2024	0.79	<0.001	<0.0002	25	0.002	<0.001	4.1	<0.001	60	<0.0001	0.002	20	0.01	<1
	16/12/2024	4.4	0.007	<0.0002	29	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.15	0.002	<0.0002	300	0.002	<0.001	0.3	<0.001	860	<0.0001	<0.001	270	<0.005	<1
	11/02/2025	0.09	0.002	<0.0002	300	0.001	<0.001	0.38	<0.001	850	<0.0001	<0.001	270	0.048	<1
	24/03/2025	0.55	<0.001	<0.0002	22	<0.001	<0.001	3.4	<0.001	54	<0.0001	0.002	17	0.027	<1
	31/03/2025	0.59	0.001	<0.0002	4.2	<0.001	<0.001	3.3	<0.001	5.3	<0.0001	0.002	3.5	0.044	<1
	8/04/2025	0.8	<0.001	<0.0002	9.9	0.003	<0.001	4.1	<0.001	18	<0.0001	0.002	6	0.007	<1
	9/05/2025	0.74	<0.001	<0.0002	6.3	0.001	0.001	2.8	<0.001	8.5	<0.0001	0.002	3.7	0.01	<1
	25/06/2025	0.7	<0.001	<0.0002	26	<0.001	<0.001	2.6	<0.001	64	<0.0001	0.002	20	0.008	<1
	8/07/2025	0.55	<0.001	<0.0002	11	0.001	0.001	2.3	<0.001	13	<0.0001	0.002	6.3	0.008	<1
	14/08/2025	0.43	<0.001	<0.0002	9.1	<0.001	<0.001	2.4	<0.001	16	<0.0001	0.001	6.3	0.011	<1
	11/09/2025	0.51	<0.001	<0.0002	19	0.001	<0.001	2.9	<0.001	42	<0.0001	0.001	14	0.008	<1
	13/10/2025	0.12	0.001	<0.0002	170	<0.001	<0.001	1.2	<0.001	500	<0.0001	<0.001	150	0.006	<1
ANZG (2018): 95% Slightly Disturbed		**0.055**	**0.013**	**0.0002**	**-**	**0.0033**	**0.0018**	**0.3**	**0.0034**	**-**	**0.0006**	**0.011**	**-**	**0.008**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW06	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	-	-	<20	<50	<100	<100	-	<100
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	90	90	<100	<100	<20	160	<100	<100	160	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<100	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	2.1	2.1	<100	<100	<20	<50	0.9	<100	0.9	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
ANZG (2018): 95% Slightly Disturbed		-	-	-	-	-	-	-	-	-	-

APPENDIX D

Photolog

PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
1	13/10/2025

Description

Surface water monitoring location SW02.



Photo No.	Date
2	13/10/2025

Description

Surface water monitoring location SW03.



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
3	13/10/2025

Description

Surface water monitoring location SW05.



Photo No.	Date
4	13/10/2025

Description

Surface water monitoring location SW06.



MONTHLY WATER QUALITY MONITORING REPORT

Harvest Estate Urban Development

Monitoring Event: 20th November 2025

Ewingsdale Road, Byron Bay, NSW, 2481

Job Number: 217140

For:

Planit Consulting

By:

ENV Services Pty Ltd

Date:

5/12/2025

ENV Services Pty Ltd

313 River Street, Ballina NSW 2478

T: 1300 861 325

E: admin@envsolutions.com.au

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DOCUMENT CONTROL

Job No:	Job Number: 217140
Client:	Planit Consulting
Filename:	217140_Harvest Estate_WQ_November_2025

	Name:	**Date:**	**Signature:**
Prepared By:	Jemma Attkins Environmental Scientist	5/12/2025	
Reviewed By:	Kingsley Baldwin Environmental Team Leader	9/12/2025	

Revision:	**Date:**	**Details:**

SCOPE OF ENGAGEMENT AND LIMITATIONS

This report has been prepared by ENV Services at the request of Planit Consulting for the purpose of consolidating and assessing water quality monitoring (surface water and ground water) data to determine impact associated with the development of the Harvest Estate. No other parties may rely on the contents of this report for any purposes except those stated.

This report has been prepared based on the information provided to us and from other information obtained as a result of enquiries made by us. ENV accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this document for a purpose other than that described above.

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ENV declares that it does not have, nor expects to have, a beneficial interest in the subject project.

To avoid this advice being used inappropriately, it is recommended that you consult with ENV before conveying the information to another who may not fully understand the objectives of the report. This report is meant only for the subject site/project and should not be applied to any other.

1 INTRODUCTION

ENV Services Pty Ltd (ENV) was engaged by Planit Consulting to prepare a Monthly Water Quality Report (MWQR) to meet requirements outlined in the Harvest Estate Development Conditions of Consent (11b - d, 32, 33 & 78) and Section 6.2 and 6.4 of the Planit Construction Environmental Management Plan (CEMP). Monitoring has been undertaken in accordance with the following approved plans.

- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate Groundwater Management Plan.* Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Belongil Creek Plan of Management*. Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate West Byron Urban Release Area; Acid Frog Management Plan.* Dated August 2020.

Baseline water quality parameters outlined in this report have been derived from mean or range values calculated over a 12-month sampling period undertaken between 25 May 2020 and 17 May 2021. This baseline water quality monitoring was carried out by Australian Wetlands Consulting (AWC) and undertaken in accordance with the Harvest Estate Groundwater Management Plan (AWC 2020) and the Harvest Estate – Belongil Creek Plan of Management (AWC 2020).

Guideline water quality trigger values have been derived from the ANZG (2018) Water Quality Guidelines and ANZECC (2000) guidelines for Fresh and Marine Water Quality. These guidelines define Belongil Creek as a lowland river of South-Eastern Australia, with trigger values chosen to reflect this. In assessing human disturbance, this report recognises Belongil Creek as being slight to moderately disturbed. On this basis, for toxicants in water, 95% species protection default guideline values have been presented for assessed toxicants.

No construction works were being undertaken during this monitoring period, with major civil earthworks associated with Stage 1 of the Project completed in November 2023.

2 MONITORING RESULTS & OBSERVATIONS

2.1 Monthly Groundwater Monitoring

Monthly groundwater monitoring at five (5) groundwater wells (MW2 – MW5 & MW7) was carried out to assess for impact within the underlying aquifer. This monitoring was conducted in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.2 of the Planit Construction Environmental Management Plan (CEMP). Groundwater monitoring locations are presented in Appendix A.

An assessment of the monthly analytical results presented in Appendix B, Table 1, identified the following observations:

Site	Observation	Comments
MW2	EC, TDS, Na and Al concentrations were outside baseline ranges or guideline values (Al only).	The elevated values just outside baseline ranges are likely to be associated with partial oxidation of sediments and mobilisation of dissolved solids (TDS and Na) through seasonal fluctuations of the water table typical within known acid sulfate soil horizons. No site related impacts identified at this location.
MW3	Dry well	No groundwater encountered during monitoring round.
MW4	All parameters were within baseline ranges with the exception of Na and Al.	No site related impacts identified at this location.
MW5	pH, EC, TDS, Al and several cations/anions (Cl, Ca, Na, SO_4 and Mg) concentrations were outside baseline ranges or guideline values (Al only).	Low pH and elevated analytes (EC, TDS, and cations/anions) at this site indicate the presence of oxidising acid sulfate soils (ASS) proximal to the monitoring well. Localised impacts continue to be reported at this site.
MW7	All parameters were within baseline ranges with the exception of pH, and SO_4.	Reported results for Al and TDS have returned to within baseline ranges since the previous monitoring round. pH and SO_4 values are likely to be associated with partial oxidation of sediments and mobilisation of salts (sulfate) through natural fluctuations in REDOX conditions (e.g. during seasonal drawdown). No site related impacts identified at this location.

2.2 Monthly Surface Water Monitoring

Monthly surface water sampling (SW01 – SW06) was carried out to assess for impact from site activities on the receiving environment. Monitoring was carried out in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.4 of the Planit Construction Environmental Management Plan (CEMP), which require assessment of the following analytes; physiochemical parameters, nutrient, metals, cation/anion and total recoverable hydrocarbon (TRH).

Surface water monitoring locations are presented in Appendix A and the coordinates (GDA94) of all locations tabulated and presented in Table 1. Tabulated analytical results are presented in Appendix C. Select photos of the surface water sampling programme are presented in Appendix D.

Table 1: Surface Water Monitoring Coordinates

Monitoring Location	Location	Easting	Northing
SW01	Upstream of development - Southern Swale Drain	0556852	6831954
SW02	Upstream of development - Northern Main Drain	0557145	6831963
SW03	Downstream of development - Northern Main Drain	0557411	6831604
SW04	Downstream of development - Southern Swale Drain	0557397	6831429
SW05	Receiving environment - Outlet of Southern Swale Drain	0557992	6830881
SW06	Receiving environment - Outlet of Northern Main Drain	0558257	6831214

2.2.1 Assessment of Analytical Results

An assessment of the monthly analytical results presented in Appendix C, identified the following observations:

Site	Observation	Comments
SW01	All parameters were within baseline ranges, with the exception of Cu.	This site is located at an upstream location, receiving water from off-site.
SW02	EC, SO_4 and Ca, were recorded outside of baseline ranges.	This site is located at an upstream location, receiving water from off-site. All elevated values are typical of the environmental (ASS) setting.
SW03	EC, SO_4, and cations/anions (Ca, K) were recorded outside of baseline ranges.	This site is located within the Northern Main Drain, downstream of Stage 1 works and SW02. Water quality parameters observed at SW03 are relatively consistent with water quality observed at the upstream location SW02. No site related impacts identified.

Site	Observation	Comments
SW04	pH, TDS, EC and cations/anions (SO_4, Fe, Ca, SO_4, and Mg) were outside baseline ranges.	This site is located downstream of Stage 1 works, within the Southern Swale Drain. Water quality remains poor at this location when compared to 'upstream' (SW01) and baseline values.
SW05	EC and several cations/anions (Ca, Mg, Cl, and SO_4).	Concentrations of elevated analytes remain in line with marine ANZECC guideline values. No site related impacts identified.
SW06	EC, Total Nitrogen, Al and Fe were recorded outside ANZG default guideline values (95% for slightly disturbed river systems).	Water quality appears to be poor than upstream location SW05. With the exception of TDS, concentrations of the elevated analytes are within baselines ranges for upstream location SW05. No site related impacts observed.

3 RAINFALL

During this monitoring period 13/10/2025 – 20/11/2025), 207.8 mm of rain was recorded in the area (Byron Bay, Cape Byron Lighthouse, Bureau of Meteorology).

4 CONCLUSION & RECOMMENDATIONS

4.1 Conclusion

Monitoring results indicate that impacts associated with exposure of ASS appear to show continued improvement at surface water location SW04 (Southern Swale Drain), downstream of the Stage 1 works package.

Similarly, water quality reported at SW03 is noted to be consistent with results reported from the upstream catchment (SW02), inferring no discernible site related impacts.

The groundwater monitoring network continues to present indicators of localised impact from ASS adjacent to MW5 however the trend analysis of several analytes has identified gradual improvements in water quality.

4.2 Recommendations

Based on the conclusions of this monitoring report, the following recommendations are to be implemented with respect to improving water quality throughout the site:

- Given pH across the site is within or above the baseline water quality values, no corrective actions are required.

APPENDIX A

Figures



Legend

Site Location

0 0.5 1km

Figure 1 – Site Location
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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ENVIRONMENTAL | ASBESTOS | REMEDIATION | RESOURCE RECOVERY

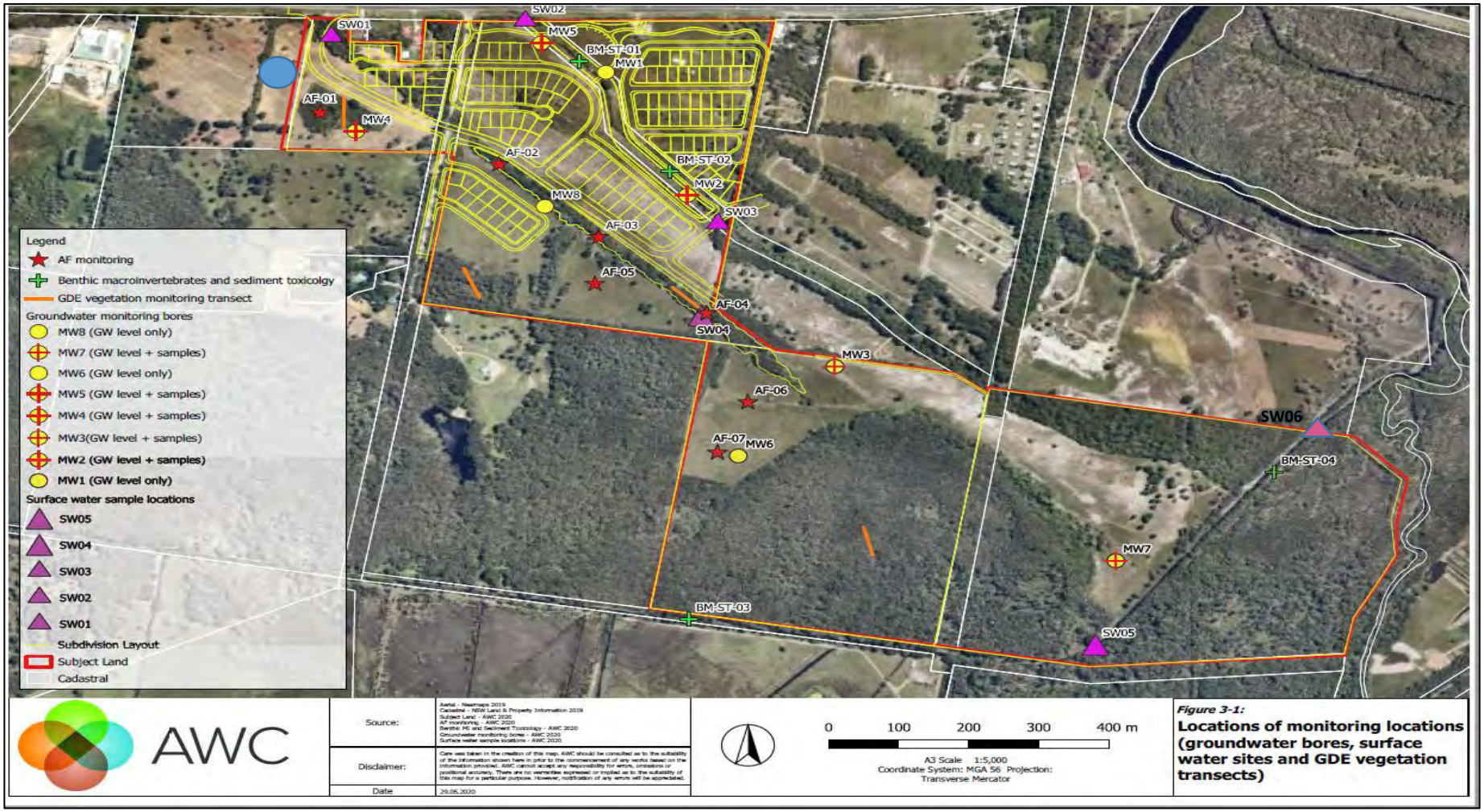


Figure 2 – AWC Monitoring Locations
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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APPENDIX B

Groundwater Quality Analytical Results

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW2	29/09/22	5.8	54	92	<5	0.12	0.51	14	0.02	0.5	30	< 2	< 0.5	0.8	2.4			0.1
	20/10/22	5.6	100	110	<5	0.09	0.24	13	0.02	2	28	< 2	<0.5	0.8	2.2			0.1
	14/11/22	6.0	100	240	<5	0.07	0.24	19	<0.10	<0.2	30	< 2	1.3	1.4	2.4			0.1
	14/12/22	5.6	110	170	<5	0.02	<0.05	15	<0.10	3.1	29	5	<5	<5	<5			0.3
	18/01/23	4.6	130	76	9.2	0.12	0.09	17	<0.05	2.5	29	7	<5	<5	<5			0.4
	20/02/23	6.0	100	160	5.3	0.09	0.1	27	<0.25	0.25	27	3.7	<0.5	0.7	3.1			0.1
	28/03/23	5.9	140	92	17	0.02	0.12	15	<0.02	<0.2	21	7.2	<5	<5	<5			0.5
	18/04/23	6.2	170	88	<5	0.08	1.2	15	<0.02	7.7	18	5.2	<5	<5	<5			0.3
	18/05/23	5.9	130	76	10	0.09	0.1	13	<0.02	9	28	2.1	0.6	0.9	2.6			0.2
	25/06/23	3.3	4,500	3,000	250	0.26	1.6	45	<0.02	8.1	86	3,800	440	82	7.9			84.4
	24/07/23	6.2	220	150	<5	0.03	0.16	12	<0.2	1	24	12	<0.5	0.8	2.5			1.0
	21/08/23	5.7	120	84	<5	0.08	0.14	15	<0.02	1.7	30	2.3	<5	<5	<5			0.2
	18/09/23	5.9	120	130	11	0.04	0.15	13	<0.02	1.2	25	<2	<0.5	0.9	2.7			0.1
	18/10/23	5.6	110	73	6.6	0.3	0.11	15	<0.02	0.3	25	3	<0.5	0.9	2.8			0.2
	20/11/23	6.0	160	70	<5	0.11	0.17	16	<0.01	0.8	28	4.2	<0.5	0.8	2.6			0.3
	19/12/23	6.3	110	100	<5	0.05	0.48	16	<0.02	2.8	28	2.1	0.5	0.9	2.9			0.1
	20/01/24	6.2	150	88	<5	0.05	0.08	13	<0.02	1.1	26	<2	<0.5	0.8	3			0.1
	26/02/24	5.1	150	340	7.4	0.07	0.09	15	<0.02	8.6	36	14	0.6	1	2.7			0.9
	26/03/24	5.7	180	310	<5	0.07	0.13	16	<0.02	<1	27	6.9	<0.5	0.8	2.7			0.4
	18/04/24	5.7	170	<5	<5	0.05	0.09	15	<0.02	1.8	29	2.6	<0.5	0.9	2.8	3.6	<1	0.17
	20/05/24	5.6	160	120	<5	0.11	0.1	19	<0.02	1	32	2.9	<0.5	0.8	2.8	3.9	<1	0.2
	25/06/24	5.5	170	170	12	0.09	<0.01	21	<0.02	2.7	30	<2	<0.5	0.8	2.3	3.8	<1	0.0
	10/07/24	5.8	150	190	<5	0.03	0.11	15	<0.02	<1	28	2.2	<0.5	0.7	2.7	2.8	<1	0.1
	06/08/24	5.9	170	90	6.9	0.16	0.12	20	<0.1	2.4	25	3.3	<0.5	0.6	2.1	3.4	<1	0.2
	11/09/24	5.7	140	110	<5	0.02	0.83	21	<0.2	<1	28	<2	<0.5	0.7	2.4	2.8	<1	0.0
	09/10/24	5.9	150	210	6.3	0.21	<0.01	17	0.02	<0.2	30	2.8	<0.5	<0.5	2.6	2.4	<1	0.1
	06/11/24	5.7	120	190	6.6	2	0.02	17	-	2.3	33	<2	1	1	3.1	3.6	<1	0.1
	16/12/24	6.0	120	60	8.0	0.05	<0.1	16	<0.2	0.9	30	5.3	0.14	0.8	2.8	3.5	<1	0.3
	14/01/25	6.4	150	94	610.0	0.03	<0.05	15	<0.1	<0.25	31	<2	<0.5	0.6	2.4	2.7	1	0.1
	11/02/25	5.7	170	150	<5	0.04	<0.1	13	<0.02	<0.5	29	2.8	<0.5	0.6	2.4	2.8	<1	0.2
	24/03/25	5.7	120	190	<5	<0.05	0.05	36	0.02	4.2	28	5.8	<0.5	0.7	2.4	2.7	<1	0.2
	08/04/25	5.7	120	220	<5	0.02	0.03	16	0.03	<2	31	4.2	<0.5	0.7	2.6	3.5	<1	0.3
	09/05/25	6.0	150	210	<5	0.01	<0.1	17	<0.2	1.1	29	7	1.3	0.7	2.6	3.2	<1	0.4
	25/06/25	5.6	180	200	<5	0.06	<0.01	15	<0.02	0.8	33	22	<0.5	0.7	2.6	1.7	<1	1.5
	08/07/25	5.5	190	180	<5	0.04	0.13	14	<0.2	1.6	32	24	<0.5	0.8	2.5	1.7	<1	1.7
	14/08/25	5.8	180	160	12.0	0.07	0.11	15	<0.02	1.9	30	33	<0.5	0.8	2.5	0.82	<1	2.2
	11/09/25	5.7	190	100	<5	0.03	0.09	17	<0.02	3.1	33	31	<0.5	0.8	2.6	0.84	<1	1.8
	13/10/25	5.6	170	180	<5	0.16	0.16	18	<0.2	0.6	33	24	<0.5	0.8	2.5	2	<1	1.3
	20/11/25	5.8	180	210	6	0.08	0.25	14	<0.2	0.7	35	8.1	<0.5	0.8	2.6	1.1	<1	0.6
MW2 Baseline		**4.2 - 5.7**	**152**	**103**	**483**	**0.45**	**0.338**	**189**	**0.07**	**2.03**	**29.7**	**9.8**	**0.7**	**1.4**	**4.2**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

ENV
ENVIRONMENTAL | ASBESTOS | REMEDIATION | RESOURCE RECOVERY

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW3	29/09/22	4.2	53	40	370	0.09	0.05	8.8	0.02	0.5	7	<2	< 0.5	1	0.6			0.1
	20/10/22	4.1	64	62	130	0.01	0.2	8	0.02	0.5	7	<2	0.5	0.9	<0.5			0.1
	14/11/22	4.6	57	84	170	0.03	0.27	7.4	<0.02	<0.2	7.1	<2	0.8	0.6	<0.5			0.1
	14/12/22	4.3	43	32	280	<0.01	<0.01	5.2	<0.02	1.1	6	<2	<5	<5	<5			0.2
	18/01/23	4.3	54	28	670	0.03	<0.01	4.1	<0.05	1.4	<5	4.1	<5	<5	<5			1.0
	20/02/23	4.2	36	40	76	0.02	<0.10	6.8	0.06	7.26	7.6	<2	<0.5	1	<0.5			0.1
	28/03/23	4.1	70	44	<5	<0.01	<0.01	7.9	<0.02	0.22	4.8	2.2	<0.5	1	0.6			0.3
	18/04/23	4.6	89	54	110	0.02	0.1	9.6	<0.02	5.7	4.3	4.3	<0.5	0.6	<0.5			0.4
	18/05/23	4.5	60	40	450	0.02	0.04	5.8	<0.02	1	4.8	2.1	0.6	0.8	<0.5			0.4
	15/06/23	4.0	84	48	22	0.27	0.4	5.5	<0.02	1.96	5	63	<0.5	0.8	<0.5			11.5
	24/07/23	4.5	85	59	160	0.04	<0.01	9.5	<0.02	<0.2	5.6	12	<0.5	0.8	<0.5			1.3
	21/08/23	3.9	110	52	100	0.01	<0.01	6.3	<0.02	<0.2	6.6	3	<0.5	1.1	<0.5			0.5
	18/09/23	Dry – no sample collected																
	18/10/23	Dry – no sample collected																
	20/11/23	4.0	96	46	120	0.03	<0.02	7.8	<0.01	0.7	5.8	5	<0.5	0.7	<0.5			0.6
	19/12/23	4.0	46	30	92	<0.01	0.04	13	<0.02	<0.2	9.7	5.6	<0.5	1.3	0.6			0.4
	20/01/24	4.2	70	28	270	0.01	<0.01	5.4	<0.02	0.6	5.5	<2	<0.5	0.8	<0.5			0.2
	26/02/24	4.5	70	50	29	0.01	0.02	10	<0.02	16	5	4.5	<0.5	0.6	<0.5			0.5
	26/03/24	4.1	67	56	110	<0.01	0.06	5.1	<0.02	0.3	4.4	6.1	<0.5	0.8	<0.5			1.2
	18/04/24	3.7	150	< 5	<5	0.05	0.01	4.6	<0.02	0.7	4	12	<0.5	0.8	<0.5	0.99	<1	0.3
	20/05/24	4.5	36	30	26	0.03	<0.01	31	<0.02	0.3	3	3.9	0.6	<0.5	<0.5	1.1	<1	0.1
	25/06/24	3.5	160	90	120	0.17	<0.01	2.8	<0.02	<0.2	3.1	5	<0.5	<0.5	<0.5	0.7	<1	0.1
	10/07/24	4.4	42	40	300	<0.01	<0.01	4.2	<0.02	0.5	3.5	2.5	<0.5	<0.5	<0.5	0.7	<1	0.6
	06/08/24	4.3	45	22	310	0.03	0.01	4.4	<0.02	3.2	2.5	<2	<.5	<0.5	<0.5	1	<1	0.2
	11/09/24	4.2	44	28	720	0.02	<0.1	5	<0.02	<1	3.7	<2	<0.5	<0.5	<0.5	1.3	<1	0.2
	09/10/24	4.2	50	32	430	0.1	<0.01	5.3	<0.02	<0.2	4.1	2.8	2.9	0.6	0.6	0.48	<1	0.2
	06/11/24	4.3	38	20	370	<0.01	0.09	4.8	-	0.9	4.6	<2	0.6	0.7	<0.5	0.84		0.2
	16/12/24	4.3	35	24	63	0.02	<0.01	4.4	<0.02	0.5	3.8	2.2	<0.5	0.7	<0.5	0.75	<1	0.5
	14/01/25	4.5	40	20	38	0.03	0.01	3.3	<0.02	0.5	2.8	<2	<0.5	<0.5	<0.5	0.75	<1	0.3
	11/02/25	4.2	64	36	8.2	<0.01	<0.01	2.9	<0.02	<0.2	3.1	4.4	<0.5	<0.5	<0.5	1.1	<1	1.5
	24/03/25	4.0	79	50	150	0.02	<0.01	13	<0.02	0.9	5.8	3.9	0.8	1.1	<0.5	0.52	1.5	0.3
	08/04/25	4.2	71	38	160	<0.01	0.02	11	<0.02	0.9	7.3	4.1	0.9	1.4	2.6	0.58	1.5	0.4
	09/05/25	4.5	73	74	210	<0.01	0.02	9.9	<0.02	0.8	7	3.1	0.7	0.9	<0.5	0.74	<1	0.3
	25/06/25	4.5	42	44	170	0.05	<0.01	4.4	<0.02	1.9	5	4.3	<0.5	<0.5	<0.5	1	<1	1.0
	08/07/25	4.5	47	25	670	0.02	0.03	4.5	0.03	0.6	4.9	2.5	<0.5	<0.5	<0.5	1	<1	0.6
	14/08/25	4.8	34	38	550	0.06	0.06	3.8	0.02	5.7	3.6	4	<0.5	<0.5	<0.5	0.5	<1	1.0
	11/09/25	4.6	42	28	2,500	0.02	0.3	4.7	0.11	2.1	4.7	3.5	<0.5	<0.5	<0.5	0.49	<1	0.7
	13/10/25	Dry – no sample collected																
	20/11/25	Dry – no sample collected																
MW3 Baseline		**4.0 - 5.3**	**206**	**140**	**5223**	**1.57**	**0.294**	**121**	**0.167**	**4.14**	**26.4**	**13.4**	**3.8**	**5.3**	**3.1**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW4	29/09/22	4.5	100	88	350	0.03	0.16	22	0.1	1.5	19	<2	3.6	3.7	0.9			0.0
	20/10/22	4.5	110	100	69	0.02	0.78	20	0.04	1	14	<2	3.9	2.1	<0.5			0.1
	14/11/22	4.2	130	340	16	0.01	0.13	30	<0.10	7	22	5	2.6	4.8	1.1			0.2
	14/12/22	4.2	140	140	60	<0.01	<0.05	23	<0.10	3	21	7.8	<5	<5	<5			0.3
	18/01/23	5.7	170	110	170	0.02	0.16	26	<0.50	2.4	20	6.6	<5	<5	<5			0.3
	20/02/23	3.9	87	110	31	0.04	<0.05	15	0.28	3.88	15	5.8	3.5	5.4	0.9			0.4
	28/03/23	4.7	180	120	190	0.04	0.08	28	<0.02	22	18	6	8.8	5.1	<5			0.2
	18/04/23	3.7	500	280	340	0.11	0.07	27	<0.02	0.9	19	130	3.4	5	<0.5			4.8
	18/05/23	5.4	110	72	70	0.03	<0.01	14	<0.02	2.89	11	10	5.7	3.7	<0.5			0.7
	15/06/23	3.8	200	150	130	1.4	0.29	29	<0.02	0.9	21	12	<5	6	<5			0.4
	24/07/23	4.1	170	94	58	0.03	<0.1	24	<0.2	1	20	17	2.8	6.2	0.6			0.7
	21/08/23	3.8	200	120	75	0.03	0.07	18	0.65	1.76	15	3.6	2	5	<0.5			0.2
	18/09/23	3.8	160	86	21	0.02	0.11	19	0.02	1.1	17	10	1.5	4.1	<0.5			0.5
	18/10/23	3.8	190	110	31	0.08	0.08	25	<0.02	0.9	18	9.3	1.7	4.5	0.5			0.4
	20/11/23	4.4	160	870	28	0.05	0.1	22	<0.01	2.2	15	5.8	3.3	4	0.7			0.3
	19/12/23	4.0	190	130	27	0.03	0.41	38	<0.02	1.5	22	13	3.3	7.8	1			0.3
	20/01/24	4.2	170	120	27	0.01	0.02	24	<0.02	1.2	17	2.9	5.4	5.1	<0.5			0.1
	26/02/24	3.6	290	190	96	0.03	0.07	27	<0.02	6.9	17	38	10	4.1	<0.5			1.4
	26/03/24	5.6	150	140	18	0.02	0.58	25	<0.02	1.1	15	7	9.3	3.8	<0.5			0.3
	18/04/24	4.3	140	90	12	0.02	0.04	17	<0.02	24	13	6.7	3.2	3.6	<0.5	1.1	2.9	0.4
	20/05/24	5.9	200	180	9.4	0.01	0.83	15	<0.02	1.1	10	5.6	9.6	2.1	<0.5	1.5	6.4	0.4
	25/06/24	4.2	120	100	33	0.1	<0.01	15	<0.02	1.4	9.1	2.3	3.5	2.2	<0.5	1.7	<1	0.2
	10/07/24	6.3	79	46	16	0.02	0.12	8.7	<0.02	1.4	6.4	4	9.7	1	<0.5	0.55	<1	0.5
	06/08/24	4.4	170	100	24	0.02	0.12	26	<0.02	2.4	12	5.5	1.5	3.2	<0.5	0.86	<1	0.2
	11/09/24	5.2	110	74	27	0.02	0.14	21	<0.02	0.6	12	2.5	7.2	2.9	<0.5	1.3	<1	0.1
	09/10/24	4.1	150	140	190	0.1	0.07	25	0.03	0.9	15	6.2	2.9	4	0.7	1.2	<1	0.2
	06/11/24	4.4	130	180	40	0.51	0.04	22	-	1.9	15	2.3	4.7	4.8	<0.5	1.4	3.4	0.1
	16/12/24	5.7	80	70	<5	0.02	<0.1	18	<0.2	1	11	4.1	8.1	3	<0.5	0.99	7.2	0.2
	14/01/25	4.1	180	120	86	0.02	1.3	26	<0.02	1.2	14	2.4	4.4	3.8	<0.5	1.6	<1	0.1
	11/02/25	4.1	170	150	<5	0.01	<0.1	25	<0.02	<0.5	16	3.1	2.5	4.8	<0.5	1.8	<1	0.1
	24/03/25	5.0	110	84	39	<0.05	0.04	22	0.02	5	13	7.6	4.9	3.4	<0.5	0.85	5.8	0.3
	08/04/25	5.2	90	130	22	<0.01	0.03	16	<0.02	1	10	3.7	6.9	2.7	<0.5	0.58	12	0.2
	09/05/25	6.0	110	140	45	-	-	14	<0.2	-	8.7	2.7	11.0	2	<0.5	0.8	14	0.2
	25/06/25	5.4	98	140	130	0.06	0.01	12	0.2	1.6	8.8	8.2	8.6	1.6	<0.5	0.98	8.8	0.7
	08/07/25	5.0	110	100	300	0.01	0.23	15	<0.2	<0.5	11	9.4	5.7	2.4	<0.5	1.7	3.4	0.6
	14/08/25	5.7	110	150	600	0.11	0.12	15	0.04	4.7	9.6	4.3	10.0	2	<0.5	0.64	<1	0.3
	11/09/25	4.4	140	89	290	0.02	0.15	25	0.07	4.2	15	7.3	4.0	3.5	0.9	1.1	3.6	0.3
	13/10/25	4.3	160	210	120	0.11	0.42	30	<0.2	<2	18	2.8	2.9	4.5	0.8	2.2	1.3	0.1
	20/11/25	4.2	160	220	140	0.06	0.22	22	<0.2	1.1	16	2.2	2.7	4.1	0.6	1.2	2.3	0.1
MW4 Baseline		**4.0 - 5.8**	**890**	**605**	**1220**	**0.43**	**1.392**	**199**	**0.185**	**4.36**	**146.3**	**19.2**	**11.3**	**15.6**	**5.4**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW5	29/09/22	4.5	59	68	630	0.13	0.41	18	0.02	6.33	14	<2	2	3	0.6			0.1
	20/10/22	4.4	75	82	92	0.02	0.1	15	0.02	0.5	12	<2	2	2	0.5			0.1
	14/11/22	4.6	120	270	150	0.08	0.52	29	<0.10	7.8	26	<2	5	6	1.4			0.0
	14/12/22	4.5	150	150	230	0.02	<0.060	29	<0.05	11	24	10	<5	<5	<5			0.3
	18/01/23	2.8	1,600	1,100	480	0.05	1.7	43	<0.05	5.7	49	7	90	72	<5			0.2
	20/02/23	2.6	2,700	3,200	310	0.03	4.2	27	<0.05	3.2	47	750	390	76	7.8			27.8
	28/03/23	3.0	5,200	3,700	130	0.02	5.9	28	<0.02	11	34	1,100	440	57	7.1			39.3
	18/04/23	2.9	3,800	5,100	300	0.01	4	44	<0.02	4	49	3,800	380	120	4.7			86.4
	18/05/23	3.4	3,100	3,400	150	<0.01	<0.01	15	<0.02	4.9	23	2,200	240	31	4.2			146.7
	15/06/23	2.9	3,000	1,800	640	0.3	2.9	28	<0.02	2.66	64	2,100	410	130	6.5			75.0
	24/07/23	5.5	2,800	1,600	6	0.07	0.19	1,400	<0.2	0.5	450	380	25	54	25.0			0.3
	21/08/23	3.3	5,200	3,400	13	0.03	4.6	67	<0.02	5	89	2,200	420	200	9.9			32.8
	18/09/23	3.3	4,500	5,800	6.1	0.01	4	51	0.02	3.7	67	4,300	360	140	7.9			84.3
	18/10/23	3.2	4,700	4,900	96	0.03	1.3	58	<0.02	2.1	68	710	380	130	7.3			12.2
	20/11/23	2.8	5,900	7,500	29	0.06	2.7	55	<0.01	11	60	6,600	310	100	6.8			120.0
	19/12/23	2.9	3,100	2,700	230	0.01	4.6	80	<0.02	5	80	3,500	290	86	6.9			43.8
	20/01/24	3.2	4,900	6,600	74	0.03	<0.01	52	<0.02	4.5	68	1,000	370	84	7.9			19.2
	26/02/24	2.6	3,400	4,500	180	0.03	0.59	25	<0.02	5.4	51	3,000	290	46	4.0			120.0
	26/03/24	3.2	4,400	3,500	17	0.02	1.8	140	<0.02	2.5	54	11,000	360	77	6.0			78.6
	18/04/24	3.3	4,200	2,200	39	<0.01	0.02	49	0.05	5.1	50	3,300	310	47	4.0	210	1.5	67.3
	20/05/24	3.4	3,100	1,600	8.8	0.03	3.1	53	<0.02	2.9	27	2,900	200	22	2.8	140	1.42	54.7
	25/06/24	3.2	4,100	2,700	310	0.03	<0.01	76	<0.02	7.2	75	1,400	290	60	4.3	320	<1	18.4
	10/07/24	3.5	2,300	2,600	49	0.02	<0.01	14	<0.02	3.9	20	1,900	240	20	2.4	130	<1	135.7
	06/08/24	3.3	170	3,500	14	0.19	4.6	62	<0.02	7.7	56	3,600	310	54	4.2	250	<1	58.1
	11/09/24	3.5	1,700	1,000	38	<0.01	3.9	27	<0.2	4.9	27	750	290	29	3.2	94	<1	27.8
	09/10/24	3.5	1,300	930	46	0.03	<0.01	27	<0.02	1.5	22	870	120	17	1.6	35	<1	32.2
	06/11/24	3.3	2,000	1,300	31	<0.01	4.8	44	-	5	59	680	300	62	4.9	90	3.33	15.5
	16/12/24	3.2	1,800	1,100	53	0.02	21	32	<0.2	2.8	25	980	180	21	2.4	35	5.1	30.6
	14/01/25	3.7	1,600	1,400	190	<0.01	1.3	19	<0.02	2.1	16	320	210	16	1.8	25	8.4	16.8
	11/02/25	3.5	2,000	1,700	69	0.01	2.6	160	<0.02	14	110	860	110	50	2.8	56	1.96	5.4
	24/03/25	3.6	1,000	890	38	<0.05	0.06	20	<0.02	3.3	14	570	140	8.5	1.7	17	8.24	28.5
	08/04/25	3.7	790	700	73	<0.01	0.85	36	<0.02	5.2	42	390	86	16.0	<0.5	13	6.6	10.8
	09/05/25	3.7	1,300	1,200	200	<0.01	1.2	87	<0.2	3.3	24	470	87	11.0	1.5	9.6	9.06	5.4
	25/06/25	3.7	1,300	840	140	0.21	1.5	26	<0.02	2	18	580	140	17.0	1.7	17	8.3	22.3
	08/07/25	4.0	720	480	170	<0.010	0.81	21	<0.2	5.4	20	280	58	10.0	0.9	11	5.3	13.3
	14/08/25	3.8	530	300	230	0.02	0.55	19	<0.02	5.5	11	230	28	4.3	0.5	4.5	6.2	12.1
	11/09/25	3.8	630	430	110	<0.01	0.73	41	0.04	14	35	240	33	9.7	1.3	4.4	7.5	5.9
	13/10/25	4.0	1,200	970	260	0.11	2.8	120	<0.2	<2	76	420	68	32	2.2	13	5.2	3.5
	20/11/25	3.6	1,400	1000	59	0.05	2.4	64	<0.02	2.4	43	270	83	34	2	13	6.4	4.2
MW5 Baseline		**4.3 - 5.5**	**191**	**130**	**3003**	**0.97**	**13.4**	**82**	**0.117**	**13.4**	**27.2**	**8.3**	**6**	**8.4**	**5.4**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
	29/09/22	4.6	26	40	190	0.1	0.3	8.5	0.02	2.5	8.5	<2	1	0.9	0.6			0.1
	20/10/22	4.5	86	70	120	0.01	0.4	12	0.04	2.9	8.5	<2	1.7	1.7	0.5			0.1
	14/11/22	4.5	44	170	<100	0.03	0.01	9.7	<0.10	<2.00	9.7	<2	1.9	1.4	1.4			0.1
	14/12/22	4.6	56	92	23	0.04	<0.10	7.5	<0.20	11	8.7	2.5	<5	<5	<5			0.3
	18/01/23	4.4	63	32	390	0.09	<0.05	7.5	<0.025	2	11	31	<5	<5	<5			4.1
	20/02/23	4.1	87	60	30	0.02	<0.05	9.1	0.42	4.9	5.8	5.7	1.4	1.9	1.1			0.6
	28/03/23	4.5	160	94	18	0.02	0.02	21	<0.02	4.4	12	66	2	2	0.6			3.1
	18/04/23	4.9	150	58	7.4	<0.01	0.11	11	<0.02	<0.20	9.8	120	1.9	0.8	<0.5			10.9
	18/05/23	4.9	78	56	130	0.03	<0.01	11	<0.02	0.89	9.3	9.3	1.4	0.9	<0.5			0.8
	15/06/23	4.6	77	50	30	0.28	0.25	11	<0.02	<0.20	9.2	62	<5	<5	<5			5.6
	24/07/23	5.1	140	100	90	0.12	<0.1	10	<0.2	1	8.5	14	1.9	1.4	0.9			1.4
	21/08/23	5.3	67	34	29	0.08	0.06	8.4	<0.02	0.8	9	45	1.8	1.7	0.8			5.4
	18/09/23	5.1	57	78	25	<0.01	0.07	9.6	<0.02	0.8	9.4	83	1.6	2	0.8			8.6
	18/10/23	5.2	61	46	10	0.04	0.1	11	<0.02	<0.2	10	160	1.6	2.1	0.8			14.5
	20/11/23	4.1	210	64	13	0.04	<0.02	8.4	<0.01	2.2	8.1	280	2.5	2.2	0.7			33.3
	19/12/23	4.6	91	62	11	0.03	0.09	19	<0.02	0.7	11	5.6	4.4	2.3	0.9			0.3
	20/01/24	4.2	170	130	34	0.01	0.09	21	<0.02	0.3	15	160	2.8	1.4	<0.5			7.6
	26/02/24	4.0	210	190	23	0.03	0.51	44	<0.02	5.8	24	7.5	3.6	2.1	0.5			0.2
	26/03/24	4.4	320	100	22	0.02	0.18	320	<0.02	<1	13	590	1.6	0.9	0.9			1.8
MW7	18/04/24	4.3	100	98	17	0.02	0.07	8.9	<0.02	3	9	380	1.4	1.2	<0.5	1.7	<1	42.7
	20/05/24	4.4	77	56	11	0.05	0.38	6.4	<0.02	1.2	5.4	170	1.3	1	<0.5	2.3	<1	26.6
	25/06/24	4.6	66	36	33	<0.01	<0.01	<0.01	<0.02	0.6	6.7	48	1.1	0.9	<0.5	1.5	<1	0.0
	10/07/24	4.5	74	58	29	<0.01	0.22	6.5	<0.02	2.1	6.2	270	2	1.3	<0.5	0.73	<1	41.5
	06/08/24	4.8	4,600	180	19	0.04	0.06	9.1	<0.02	0.5	5.3	36	1.4	0.9	<0.5	1	<1	4.0
	11/09/24	4.4	75	50	6.4	0.04	<0.1	11	<0.02	1..0	7.1	5.2	1.3	1.1	<0.5	1.4	<1	0.5
	09/10/24	4.3	73	42	71	0.54	<0.01	8	<0.02	1.6	5.8	12	1.3	1.2	<0.5	0.94	<1	1.5
	06/11/24	4.5	59	32	35	0.02	0.03	11	-	1.3	7.8	4.4	1.3	1.4	<0.5	1.6	<1	0.4
	16/12/24	4.3	58	68	29	0.04	<0.1	12	<0.2	1.3	8.5	42	1.6	1.3	<0.5	1.9	<1	3.5
	14/01/25	4.7	63	36	120	0.04	0.02	8.6	0.03	1.3	6.8	7	1.7	1.2	0.5	2.4	1.4	0.8
	11/02/25	4.6	68	70	13	0.07	<0.1	9.2	<0.02	1.2	8.4	2	1.5	1.5	0.8	2.7	<1	0.2
	24/03/25	4.1	0	56	28	<0.05	0.02	15	<0.02	1.8	7.7	43	2.3	1.4	<0.5	1.2	1.91	2.9
	08/04/25	4.4	76	70	14	<0.01	0.03	14	<0.02	<1	8.1	31	2.8	1.1	2.1	1.4	2	2.2
	09/05/25	4.7	81	110	24	<0.01	0.03	13	<0.2	1.2	8.1	28	1.5	0.9	<0.5	1.6	<1	2.2
	25/06/25	4.6	65	70	39	0.07	<0.01	8.3	<0.02	<0.2	6.7	56	1.2	0.8	<0.5	1.2	1	6.7
	08/07/25	4.6	65	44	130	0.02	0.14	7.9	<0.02	<0.5	6.3	37	1.4	0.9	<0.5	2.6	<1	4.7
	14/08/25	4.7	60	70	140	0.06	0.01	8.9	0.04	2.2	5.7	15	0.9	0.5	<0.5	0.93	3	1.7
	11/09/25	4.4	75	51	100	0.03	0.06	12	0.04	1.1	7.2	18	1.8	1.1	0.6	0.86	2.09	1.5
	13/10/25	4.8	66	110	66	0.02	0.12	11	<0.2	<1	7.4	20	2.1	1.5	<0.5	1.3	1.6	1.8
	20/11/25	4.4	84	78	64	0.05	0.12	12	<0.2	1.1	7.8	17	1.9	1.2	<0.5	0.86	2.2	1.4
MW7 Baseline		**4.6 - 5.6**	**147**	**100**	**3140**	**0.71**	**0.471**	**172**	**0.048**	**4.15**	**31**	**7.3**	**3.4**	**2.2**	**3.1**	**<1.0***	**<1***	**<0.5***

APPENDIX C

Surface Water Quality Analytical Results

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW01	29/09/2022	6.9	180	11	3.1	140	0.47	<0.01	14	<0.02	5.2	30	3.4	450		0.2
	20/10/2022	6.6	320	30	4.7	400	0.03	0.03	22	<0.02	<0.02	31	33	43		1.5
	14/11/2022	6.0	780	4,900	0.2	920	3.1	6.9	25	<0.02	14	200	3.7	67		0.1
	14/12/2022	4.5	800	210	3.6	1,100	0.15	0.05	24	<0.10	23	54	560	88		23
	18/01/2023	6.3	380	120	4.7	25	0.047	0.087	24	<0.02	5.2	40	180	25		7.5
	20/02/2023	3.4	1,100	32	3.8	1,300	0.42	0.37	28	<0.02	8.9	57	350	<5		13
	28/03/2023	3.0	2,000	100	7.7	3,000	<0.01	2.1	29	<0.02	1.29	47	880	<5		30
	18/04/2023	7.7	130	33	8.6	320	0.06	0.01	24	<0.02	8.4	16	14	8.8		0.6
	18/05/2023	7.4	130	6	4.4	250	0.21	0.14	11	<0.02	0.9	14	10	<5		0.9
	15/06/2023	3.2	1,900	6.8	7.6	2,700	0.03	1.6	59	<0.02	2.1	61	1,500	<5		25
	24/07/2023	7.9	84	<5	8.4	140	0.11	<0.01	6.4	<0.02	0.3	13	4	<5		0.6
	21/08/2023	6.9	120	25	3	190	0.34	0.01	5.6	<0.02	0.4	18	<2	<5		0.2
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	No surface water located at monitoring site – no sample collected														
	20/11/2023	7.2	230	6.5	2.9	480	2	<0.02	56	<0.01	<0.2	43	160	<5		2.9
	19/12/2023	No surface water located at monitoring site – no sample collected														
	23/01/2024	7.0	160	130	2.2	160	3.7	0.06	14	<0.02	1.3	21	69	<5		4.9
	26/02/2024	6.2	160	47	7.2	200	0.35	<0.01	9	<0.02	3	12	59	<5		6.6
	26/03/2024	6.9	26	7.5	8.3	78	0.25	<0.01	6.7	<0.02	0.4	7.5	3.4	<5		0.5
	18/04/2024	7.2	220	23	0.5	390	0.06	0.24	25	<0.02	0.7	32	110	180	13	4.4
	20/05/3034	6.7	160	<5	3.8	260	0.16	0.01	13	<0.02	0.5	19	33	56	231	2.5
	25/06/2024	6.3	440	15	5.9	710	<0.01	<0.01	12	<0.02	<0.2	23	100	5.7	15	8.3
	10/07/2024	7.0	120	29	5.5	240	0.07	0.01	14	<0.02	1.1	17	6.9	39	12	0.5
	6/08/2024	4.0	760	19	7.6	950	0.08	<0.01	14	<0.02	1.3	23	470	<5	12	34
	15/08/2024	6.7	64	<5	7.3	100	0.04	0.01	6.1	<0.02	<0.2	7.2	5.5	<5	<10	0.9
	11/09/2024	6.9	120	250	0.2	190	1.1	0.11	8.9	<0.02	4.1	13	2.6	<10	17	0.3
	24/09/2024 - Investigation	6.3	170	-	-	280	-	-	-	-	-	-	-	-	-	-
	9/10/2024	7.4	190	11	8.9	290	0.38	0.01	14	<0.02	<0.2	20	3.4	<5	<10	0.2
	6/11/2024	7.1	92	400	0.4	140	13	<0.01	8.1	<0.02	2.8	12	2.2	<5	<10	0.3
	16/12/2024	6.9	90	190	3.3	140	0.36	<0.01	8.2	<0.02	0.02	11	5.4	170	<10	0.7
	14/01/2025	6.7	48	7.2	3.5	89	0.14	<0.1	4.8	<0.02	0.6	5.4	<5	<5	<10	0.0
	11/02/2025	7.5	390	<5	8.3	620	0.06	0.03	110	<0.02	0.8	16	16	12	<10	0.1
	24/03/2025	6.9	58	<5	8.6	64	0.32	0.02	6.1	<0.02	0.8	7.9	2.4	48	<10	0.4
	31/03/2025	7.1	170	5.8	9.2	200	0.14	<0.01	14	<0.02	1.1	15	6.4	<5	<10	0.5
	8/04/2025	7.2	200	9.4	8.8	230	0.37	0.04	14	<0.02	0.4	18	3.6	<5	<10	0.3
	9/05/2025	7.5	170	<5	-	200	0.2	0.03	10	<0.02	0.8	13	4.5	<5	<10	0.5
	25/06/2025	6.9	130	24	7.5	190	1.1	0.07	6.2	<0.02	1.1	12	7.1	12	22	1.1
	8/07/2025	6.9	150	<5	8	260	0.12	0.18	8	<0.02	0.8	16	5	28	34	1.6
	14/08/2025	7.3	140	7.1	6.9	240	0.17	0.03	11	<0.02	1	16	6	<5	15	1.8
	11/09/2025	7.2	150	5.2	3.9	260	0.22	0.01	13	<0.02	1.4	19	5.2	<5	16	2.5
	13/10/2025	7.2	350	14	0.3	520	0.61	0.26	39	<0.02	0.5	58	30	<5	14	1.3
	20/11/2025	7.0	110	8.9	5.2	200	0.24	0.03	9.1	<0.02	0.7	14	4.5	<5	16	2.0
SW01 Baseline		**6.2 – 7.0**	**291**	**73**	**-**	**428**	**3.52**	**0.164**	**118**	**0.039**	**3.5**	**51**	**9**	**768**		**<0.5**

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW01	29/09/2022	1.5	0.003	<0.0002	22	0.002	0.32	2.7	0.005	14	<0.0001	0.015	3	0.071	<1
	20/10/2022	0.66	2	<0.0002	24	0.002	0.16	2.4	0.003	9.1	<0.0001	0.009	2.9	0.042	<1
	14/11/2022	130	1.3	<0.02	280	<0.10	1	130	0.1	73	<0.001	0.3	<50	4.7	<1
	14/12/2022	22	0.0016	<0.002	180	0.014	0.2	1.6	0.015	43	<0.001	0.077	6.8	0.68	<1
	18/01/2023	0.7	<0.010	<0.002	<2	<0.010	<0.01	3.2	<0.01	13	<0.01	<0.01	<5	<0.05	<1
	20/02/2023	37	0.027	0.0004	170	0.019	0.07	0.049	0.049	57	0.002	0.16	6.3	0.35	<1
	28/03/2023	150	0.002	0.0008	290	0.002	0.003	36	0.003	38	0.0001	0.46	5.1	0.97	<1
	18/04/2023	0.53	0.002	<0.0002	13	0.005	0.005	0.002	0.002	2.7	<0.0001	0.002	0.8	0.15	<1
	18/05/2023	0.16	0.002	<0.0002	23	<0.001	0.002	0.24	<0.001	7.5	<0.0001	0.002	2.3	0.02	<1
	15/06/2023	120	0.002	0.0003	350	<0.001	0.004	15	0.003	42	<0.0001	0.24	8.1	0.35	<1
	24/07/2023	0.08	0.003	<0.0002	13	<0.001	0.003	0.38	0.002	4.1	<0.0001	0.002	0.8	0.037	<1
	21/08/2023	0.52	0.001	<0.0002	17	0.001	0.002	1.2	0.001	6.3	<0.0001	0.003	<0.5	0.014	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	No surface water located at monitoring site – no sample collected													
	20/11/2023	0.13	<0.001	<0.0002	26	<0.001	0.002	5.7	<0.001	7.9	<0.0001	0.003	2.2	0.006	<1
	19/12/2023	No surface water located at monitoring site – no sample collected													
	23/01/2024	<0.05	<0.001	<0.0002	30	0.001	<0.001	1.8	<0.001	10	<0.0001	<0.001	3.4	0.006	<1
	26/02/2024	<0.005	<0.001	<0.0002	14.00	<0.001	<0.001	0.93	<0.001	4.60	<0.0001	<0.001	1.70	0.05	<1
	26/03/2024	0.11	<0.001	<0.0002	7.4	<0.001	0.002	0.38	<0.001	2	<0.0001	<0.001	1.5	0.013	<1
	18/04/2024	0.06	<0.001	<0.0002	32	<0.001	<0.001	1.4	<0.001	9.5	<0.0001	0.002	2	<0.005	<1
	20/05/3034	0.06	<0.001	<0.0002	26	<0.001	0.001	0.86	<0.001	7	<0.0001	0.002	1.7	0.014	<1
	25/06/2024	0.69	<0.001	<0.0002	94	<0.001	0.002	0.28	<0.001	15	<0.0001	0.008	2.3	0.055	<1
	10/07/2024	0.25	0.002	<0.0002	28	<0.001	0.003	2.1	<0.001	6.6	<0.0001	0.002	2	0.037	<1
	6/08/2024	0.85	<0.001	<0.0002	120	<0.001	0.004	1.3	<0.001	14	<0.0001	0.021	2.3	0.1	<1
	15/08/2024	0.24	<0.001	<0.0002	12	<0.001	0.004	0.33	<0.001	2.8	<0.0001	0.001	1.2	0.027	<1
	11/09/2024	9.1	0.009	0.0005	36	0.023	0.11	49	0.031	8.1	0.0001	0.019	5.2	0.72	<1
	24/09/2024 - Investigation	-	<0.001	<0.001	-	<0.001	0.001	-	<0.001	<0.0001	-	0.004	-	0.04	-
	9/10/2024	0.14	0.001	<0.0002	27	<0.001	0.002	1.7	<0.001	8.1	<0.0001	0.002	1.5	0.017	<1
	6/11/2024	1.2	0.004	<0.0002	26	0.005	0.011	54	0.003	6.1	<0.0001	0.004	2.8	0.041	<1
	16/12/2024	2.4	0.004	<0.0002	22	0.006	0.019	38	0.006	4.5	<0.0001	0.004	2.8	0.092	<1
	14/01/2025	0.15	<0.001	<0.0002	8.8	0.001	0.003	0.34	<0.001	1.8	<0.0001	0.001	0.6	0.018	<1
	11/02/2025	0.58	0.002	<0.0002	13.00	<0.001	<0.001	6.10	<0.001	3.50	<0.0001	0.002	1.00	0.015	<1
	24/03/2025	0.13	<0.001	<0.0002	5.20	<0.001	0.002	0.35	<0.001	1.40	<0.0001	<0.001	1.20	0.037	<1
	31/03/2025	0.1	0.002	<0.0002	22	<0.001	0.003	1.2	<0.001	6.8	<0.0001	0.002	2.4	0.066	<1
	8/04/2025	<0.05	0.002	<0.0002	29	<0.001	<0.001	2.2	<0.001	8.1	<0.0001	0.002	2.4	0.008	<1
	9/05/2025	0.27	<0.001	<0.0002	20	<0.001	0.002	1.6	<0.001	5.9	<0.0001	0.002	1.7	0.03	<1
	25/06/2025	0.11	<0.001	<0.0002	19	<0.001	0.002	0.72	<0.001	4.4	<0.0001	0.002	<0.5	0.032	<1
	8/07/2025	0.05	<0.001	<0.0002	26	<0.001	0.002	0.49	<0.001	7.2	<0.0001	0.002	<0.5	0.024	<1
	14/08/2025	0.14	<0.001	<0.0002	26	<0.001	0.003	0.69	<0.001	6.8	<0.0001	0.002	1.8	0.019	<1
	11/09/2025	0.05	0.001	<0.0002	24	<0.001	0.002	1.5	<0.001	6.8	<0.0001	0.002	1.6	0.014	<1
	13/10/2025	0.07	0.002	<0.0002	37	<0.001	0.01	0.69	<0.001	10	<0.0001	0.005	4.8	0.055	<1
	20/11/2025	<0.05	0.001	<0.0002	19	<0.001	0.002	0.0015	0.001	4.7	<0.0001	0.002	0.9	0.012	<1
SW01 Baseline		**0.5**	**0.003**	**0.001**	**22**	**0.002**	**0.041**	**1.2**	**0.001**	**16**	**0.0005**	**0.006**	**6**	**0.058**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW01	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	220	220	<100	<100	<20	250	<100	<100	250	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	<50	<50	20	-	<20	<50	100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No surface water located at monitoring site – no sample collected									
	18/10/2023	No surface water located at monitoring site – no sample collected									
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	No surface water located at monitoring site – no sample collected									
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/3034	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Investigation	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	160	160	300	<100	<20	110	300	<100	410	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW01 Baseline		**60**	**-**	**24**	**100**	**-**	**50**	**130**	**90**	**170**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW02	29/09/2022	6.9	170	8.8	8	160	0.04	0.03	29	<0.02	1.3	27	2.8	22		0.1
	20/10/2022	6.5	120	6.2	8.7	140	0.02	0.01	17	<0.02	<0.20	16	2.9	<5		0.2
	14/11/2022	6.4	150	210	0.1	190	0.18	<0.01	54	<0.02	13	62	18	24		0.3
	14/12/2022	6.3	110	870	0.1	200	0.27	0.05	26	<0.10	2.7	25	29	14		1.1
	18/01/2023	6.6	220	190	0.1	61	0.79	0.049	31	<0.20	21	27	6.2	61		0.2
	20/02/2023	6.5	240	29	4.4	1300	0.023	0.31	26	<0.10	1.9	29	24	<5		0.9
	28/03/2023	4.8	310	370	5.7	370	1.5	0.19	22	<0.02	<0.20	17	92	<10		4.2
	18/04/2023	6.2	300	60	7.3	410	0.05	0.16	32	<0.02	1.38	25	120	<5		3.8
	18/05/2023	6.5	130	39	6	270	0.06	0.09	25	<0.02	<0.2	18	29	<5		1.2
	15/06/2023	6.4	190	25	8.9	280	0.37	0.23	34	<0.02	1.2	25	38	<5		1.1
	21/08/2023	6.1	430	20	5.7	690	0.02	0.5	36	<0.02	1.2	38	75	<5		2.1
	18/09/2023	7.2	180	15	8.1	260	0.06	0.04	31	<0.02	0.8	28	39	<5		1.3
	18/10/2023	6.8	150	11	8.1	240	0.05	0.02	40	<0.02	<0.2	28	13	<5		0.3
	20/11/2023	6.9	180	18	4.9	350	0.07	0.04	37	<0.01	0.3	26	50	<5		1.4
	19/12/2023	6.7	140	15	4.6	240	0.05	0.03	37	<0.02	0.7	29	11	<5		0.3
	23/01/2024	6.8	210	27	9.7	350	0.06	0.02	35	<0.02	0.5	31	25	<5		0.7
	26/02/2024	4.5	140	43	7.1	190	0.05	0.03	9	<0.02	0.6	8.5	65	<5		7.2
	26/03/2024	6.7	44	12	6.8	99	0.07	<0.01	9.5	<0.02	0.5	8.8	8.7	<5		0.9
	18/04/2024	7.6	350	<5	6.4	630	0.03	0.9	93	<0.02	0.6	78	56	<5	<10	0.6
	20/05/2024	6.7	130	27	2.1	210	0.04	0.05	20	<0.02	1.1	18	16	<5	11	0.8
	25/06/2024	6.7	180	9.7	8.8	330	0.03	<0.01	42	0.03	<0.2	35	10	<5	11	0.2
	10/07/2024	7.0	150	8.2	6.1	220	0.01	0.11	22	<0.02	1.9	18	21	<5	<10	1.0
	6/08/2024	6.5	220	8.5	7	280	0.06	0.02	39	<0.02	1.7	24	19	<5	20	0.5
	15/08/2024	6.6	48	<5	7.8	80	0.07	0.01	8	<0.02	<0.2	7	6.9	18	<10	0.9
	11/09/2024	7.1	250	<5	6.1	450	0.02	0.05	90	<0.02	0.3	71	48	<5	<10	0.5
	9/10/2024	7.0	260	<5	8.9	500	0.12	0.03	88	<0.02	0.6	73	35	<5	<10	0.4
	6/11/2024	7.5	300	6.4	6	500	0.07	<0.01	89	<0.02	1	72	34	<5	<10	0.4
	16/12/2024	6.4	200	110	8.8	310	1.1	<0.01	55	<0.02	0.4	11	19	6.6	<10	0.3
	14/01/2025	6.9	170	<5	4.6	340	0.08	<0.01	51	<0.02	0.9	44	7.7	<5	<10	0.2
	11/02/2025	7.1	96	5.6	6.1	150	0.08	<0.01	14	<0.02	1.9	91	3.9	190	<10	0.3
	24/03/2024	3.2	420	7.2	8.6	670	<0.05	0.02	17	<0.02	2.8	17	250	<5	<10	15
	31/03/2025	7.2	160	<5	9.8	200	0.14	0.05	14	<0.02	<0.4	16	7	<5	<10	0.5
	8/04/2025	7.2	150	12	6.2	230	0.37	0.03	14	<0.02	0.7	18	3.4	<5	<10	0.2
	9/05/2025	3.9	320	1,100	-	560	1.5	0.23	31	<0.02	2.8	18	150	<20	34	4.8
	25/06/2025	7.1	400	9.4	9.8	580	1.5	0.01	88	<0.03	1.5	74	38	38	14	0.4
	8/07/2025	6.9	300	14	8.4	600	0.34	0.58	96	<0.02	0.9	73	38	19	21	2.5
	14/08/2025	7.2	330	6.1	8.6	600	0.05	0.03	120	<0.02	0.7	85	31	<5	<10	3.9
	11/09/2025	7.0	320	6.1	7.9	530	0.05	0.11	87	<0.02	2.8	69	36	<5	<10	2.4
	13/10/2025	6.9	270	6.3	8.1	470	0.12	<0.01	73	0.11	1.9	60	29	<5	14	2.5
	20/11/2025	6.8	190	11	5.2	300	0.19	0.16	33	<0.02	0.9	30	16	<5	<10	2.1
SW02 Baseline		**6.3 – 7.0**	**199**	**495**	**-**	**292**	**1.88**	**0.261**	**161**	**0.06**	**8.6**	**32**	**10**	**182**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW02	29/09/2022	0.42	0.003	<0.0002	19	0.002	0.004	1.5	0.001	5.8	<0.0001	0.002	1.9	0.057	<1
	20/10/2022	0.22	0.001	<0.0002	12	0.001	0.003	0.62	<0.001	3.4	<0.0001	0.001	1.7	0.032	<1
	14/11/2022	1.8	0.037	<0.002	47	<0.001	0.015	53	<0.01	11	<0.001	<0.01	<5	0.096	<1
	14/12/2022	13	0.066	<0.002	38	0.034	0.094	9.7	0.071	5.9	<0.001	0.013	5.1	1	<1
	18/01/2023	3.3	0.023	<0.002	<2	<0.01	0.015	45	0.014	5.8	<0.001	<0.010	<5	0.15	<1
	20/02/2023	12	0.033	0.0002	38	0.009	0.09	0.013	0.013	11	<0.001	0.018	4.1	0.28	<1
	28/03/2023	3.4	0.002	0.0003	43	0.002	0.003	2.5	0.001	8.4	<0.0001	0.024	4.1	0.63	<1
	18/04/2023	0.86	<0.001	<0.0002	20	0.002	0.002	<0.001	<0.001	4	<0.0001	0.006	2.7	0.089	<1
	18/05/2023	0.72	0.002	<0.0002	17	0.002	0.006	1	0.002	4.3	<0.0001	0.003	2.4	0.081	<1
	15/06/2023	1.7	0.001	<0.0002	22	0.001	0.004	2.1	0.001	5.5	<0.0001	0.005	1.9	0.037	<1
	21/08/2023	1.1	<0.001	<0.0002	71	<0.001	<0.001	8	<0.001	16	<0.0001	0.024	5.7	0.057	<1
	18/09/2023	1.7	0.003	<0.0002	19	0.002	0.004	3	0.002	6.3	<0.0001	0.005	3	0.023	<1
	18/10/2023	0.88	0.002	<0.0002	17	0.001	0.003	2.2	0.001	5.5	<0.0001	0.002	1.9	0.014	<1
	20/11/2023	2.3	0.002	<0.0002	19	0.002	0.002	2.6	<0.001	6.7	<0.0001	0.007	1.4	0.032	<1
	19/12/2023	1.1	0.002	<0.0002	19	0.001	0.001	4.8	<0.001	6.5	0.0002	0.004	2.9	0.012	<1
	23/01/2024	2.9	0.003	<0.0002	23	0.002	0.001	5.8	<0.001	7.8	<0.0001	0.007	3.3	0.031	<1
	26/02/2024	1.5	0.001	<0.0002	9.7	0.001	0.003	1.7	<0.001	2.5	<0.0001	0.004	1.4	0.027	<1
	26/03/2024	0.34	<0.001	<0.0002	6.9	0.001	0.003	0.67	<0.001	1.9	<0.0001	0.001	1.8	0.021	<1
	18/04/2024	0.09	<0.001	<0.0002	20	<0.001	<0.001	0.39	<0.001	5.4	<0.0001	<0.001	14	0.014	<1
	20/05/2024	0.71	0.004	<0.0002	19	0.002	0.003	5.6	<0.001	3.8	<0.0001	0.003	3	0.015	<1
	25/06/2024	1.1	<0.001	<0.0002	21	<0.001	0.001	1.4	<0.001	4.6	<0.0001	0.004	4.5	0.022	<1
	10/07/2024	1.1	0.002	<0.0002	20	<0.001	0.004	1.2	<0.001	4.2	<0.0001	0.004	2.3	0.047	<1
	6/08/2024	0.61	0.001	<0.0002	17	0.001	0.002	1.4	<0.001	3.7	<0.0001	0.002	3	0.019	<1
	15/08/2024	0.31	0.002	<0.0002	8	0.001	0.004	0.37	<0.001	1.5	<0.0001	0.001	1.4	0.038	<1
	11/09/2024	0.19	<0.001	<0.0002	20	<0.001	0.001	0.31	<0.001	4.8	<0.0001	0.001	14	0.021	<1
	9/10/2024	0.8	<0.001	<0.0002	23	<0.001	0.001	1.5	<0.001	5	<0.0001	0.003	15	0.032	<1
	6/11/2024	0.007	0.001	<0.0002	21	<0.001	<0.001	0.7	<0.001	5.8	<0.0001	<0.001	15	0.011	<1
	16/12/2024	0.05	<0.001	<0.0002	14	<0.001	0.001	0.24	<0.001	3.1	<0.0001	<0.001	9.4	0.008	<1
	14/01/2025	0.06	<0.001	<0.0002	14	0.001	0.002	0.28	<0.001	2.7	<0.0001	0.001	9.4	0.015	<1
	11/02/2025	0.82	<0.001	<0.0002	24	<0.001	0.002	4.4	<0.001	4.8	<0.0001	0.005	19	0.058	<1
	24/03/2024	7.4	<0.001	<0.0002	56	0.002	0.001	22	<0.001	6.9	<0.0001	0.021	1.8	0.097	<1
	31/03/2025	0.25		<0.0002	23	<0.001	0.003	1.7	<0.001	7	<0.0001	0.002	2.5	0.054	<1
	8/04/2025	0.1	0.001	<0.0002	29	<0.001	0.001	2.7	<0.001	8.3	<0.0001	0.002	2.3	0.015	<1
	9/05/2025	2.3	0.007	<0.0002	34	0.005	0.002	140	<0.001	9.1	<0.0001	0.011	2.1	0.077	<1
	25/06/2025	0.3	<0.001	<0.0002	21	<0.001	0.001	1.1	<0.001	5.4	<0.0001	0.002	14	0.03	<1
	8/07/2025	0.15	<0.001	<0.0002	19	<0.001	<0.001	0.65	<0.001	5.3	<0.0001	0.001	12	0.018	<1
	14/08/2025	0.11	<0.001	<0.0002	21	<0.001	<0.001	0.39	<0.001	5.9	<0.0001	<0.001	11	0.012	<1
	11/09/2025	0.32	0.001	<0.0002	21	<0.001	0.002	1.2	<0.001	5.6	<0.0001	0.001	11	0.016	<1
	13/10/2025	0.15	0.002	<0.0002	19	<0.001	0.004	0.82	<0.001	5.2	<0.0001	0.002	11	0.054	<1
	20/11/2025	0.53	0.002	<0.0002	20	0.001	0.002	1.8	0.002	4.9	<0.0001	0.002	3.9	0.021	<1
SW02 Baseline		**3.8**	**0.045**	**0.001**	**17**	**0.007**	**0.012**	**71.9**	**0.02**	**5**	**0.0005**	**0.005**	**6**	**0.09**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW02	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	90	<100	<20	<50	60	30	90	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	180	180	30	-	<20	170	30	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	200	<100	<20	<50	100	<100	100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	140	140	100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW02 Baseline		**60**	**-**	**22**	**100**	**-**	**50**	**100**	**50**	**140**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW03	29/09/2022	6.8	120	<5	9.3	100	0.02	<0.01	24	<0.02	1.10	23	2	<5		0.1
	20/10/2022	5.9	650	26	7.5	870	0.03	<0.01	270	<0.02	<0.2	12	13	<5		0.0
	14/11/2022	6.5	140	260	2.6	160	0.13	<0.05	27	<0.01	7.40	36	9	<5		0.3
	14/12/2022	6.5	110	11	4.4	160	0.01	0.05	23	<0.01	3.90	18	11	<5		0.5
	18/01/2023	6.5	160	9	5.1	<5	0.02	<0.010	31	<0.02	1.30	26	17	<5		0.5
	20/02/2023	3.4	540	13	6.0	720	0.01	<0.010	22	<0.02	5.10	28	100	<5		4.5
	28/03/2023	3.3	400	7	9.9	750	0.02	0.07	14	<0.02	<0.2	16	110	<5		7.9
	18/04/2023	4.2	280	<5	7.4	450	<0.01	0.04	29	<0.02	<0.2	22	140	<5		4.8
	18/05/2023	4.3	310	37	5.5	580	0.02	0.32	22	<0.02	12.33	21	230	<5		10
	15/06/2023	3.3	580	17	8.9	870	0.04	0.68	32	<0.02	1.40	31	300	<5		9.4
	24/07/2023	3.9	290	36	9	510	0.03	0.4	17	<0.02	1	20	250	<5		15
	21/08/2023	6.8	270	5.8	7.2	350	0.04	0.04	45	<0.02	0.5	43	8	<5		0.2
	18/09/2023	4.6	410	20	7.4	540	<0.01	0.28	30	<0.02	0.4	29	230	<5		7.7
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.5	640	18	7.1	1100	0.03	0.58	32	<0.01	0.6	30	370	6.7		12
	19/12/2023	3.8	610	7.7	6.7	850	<0.01	0.86	36	<0.02	0.9	37	150	<5		4.2
	23/01/2024	3.7	460	55	4.1	880	<0.01	0.16	31	<0.02	1.6	37	100	<5		3.2
	26/02/2024	4.3	200	93	7.5	250	0.09	0.09	53	0.02	1.5	11	440	7.2		8.3
	26/03/2024	6.1	170	54	7.7	300	0.08	0.13	21	<0.02	1	20	78	<5		3.7
	18/04/2024	7.5	360	9.2	7.4	650	0.03	0.08	88	<0.02	0.8	78	64	<5	<10	0.6
	20/05/2024	4.5	300	21	5.6	450	<0.01	0.5	19	<0.02	1.2	23	190	<5	66	10
	25/06/2024	6.3	80	2300	7.2	140	0.98	<0.1	9.4	<0.2	140	9	5	<5	48	0.5
	10/07/2024	4.4	260	29	5.1	400	0.01	0.64	19	<0.02	0.7	21	10	<5	50	0.5
	6/08/2024	4.6	340	22	6.3	630	0.02	0.62	35	<0.02	1.3	29	230	<5	70	6.6
	15/08/2024	6.3	82	19	8.3	120	0.04	0.07	9.5	<0.02	<0.2	9	31	<5	11	3.3
	11/09/2024	7.1	290	<5	7.7	440	<0.01	0.11	84	<0.02	0.3	66	56	<5	<10	0.7
	9/10/2024	6.6	240	330	7.7	360	0.46	<0.01	56	<0.02	7.1	45	35	33	<10	0.6
	6/11/2024	7.2	300	49	7.5	460	0.07	<0.01	88	<0.02	1.2	72	39	<5	<10	0.4
	16/12/2024	7.2	250	5.3	19.0	370	<0.01	<0.01	70	<0.02	0.7	61	31	50	<10	0.4
	14/01/2025	6.9	220	<5	7.7	420	0.04	<0.01	66	<0.02	1.3	57	11	<5	<10	0.2
	11/02/2025	7.4	340	<5	7.5	570	0.07	0.02	99	<0.02	1.4	87	14	<5	<10	0.1
	24/03/2024	6.9	130	<5	8.1	230	0.05	<0.01	38	<0.02	0.9	32	66	<5	<10	1.7
	31/03/2025	7.0	260	9.3	9.8	440	0.06	0.19	100	<0.02	0.9	70	26	<5	<10	0.3
	8/04/2025	7.2	290	<5	8.9	470	0.04	0.07	100	<0.02	0.4	82	36	<5	<10	0.4
	9/05/2025	7.1	290	<5	-	460	<0.01	<0.1	100	<0.02	0.7	73	36	<5	<10	0.4
	25/06/2025	6.7	360	230	6.5	540	2.3	0.01	88	<0.03	2.3	68	36	46	14	0.4
	8/07/2025	6.8	300	82	9.1	570	0.15	0.48	89	<0.02	1.1	67	39	27	<10	0.4
	14/08/2025	7.2	300	16	9.1	580	0.08	0.05	110	<0.02	1	81	32	<5	<10	0.3
	11/09/2025	6.8	300	6.7	12.0	530	0.05	0.22	84	<0.02	0.7	67	43	43	11	0.5
	13/10/2025	7.2	340	7.5	9	620	0.07	<0.01	100	<0.02	0.8	83	43	16	<10	0.4
	20/11/2025	6.6	190	28	4.7	300	0.15	0.19	28	<0.02	1.0	28	35	<5	<10	1.3
SW03 Baseline		**6.1 - 6.7**	**191**	**1005**	**-**	**281**	**2.14**	**0.155**	**111**	**0.041**	**4.3**	**30**	**6**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW03	29/09/2022	0.4	0.00	<0.0002	13	0.00	0.00	0.8	<0.001	4.4	<0.0001	0.002	1.00	0.034	<1
	20/10/2022	0.5	0.00	<0.0002	8	0.00	0.00	0.9	0.00	2.3	<0.0001	0.001	1.00	0.03	<1
	14/11/2022	1.1	<0.001	<0.002	18	<0.001	0.00	1.9	<0.010	5.7	<0.001	<0.01	<5	0.24	<1
	14/12/2022	0.6	<0.001	<0.002	13	<0.01	<0.010	1.3	<0.010	<5	<0.001	<0.01	<5	0.53	<1
	18/01/2023	0.5	0.01	<0.002	<2	<0.010	<0.01	0.5	<0.01	6.2	<0.001	<0.01	<5	<0.05	<1
	20/02/2023	17	0.00	<0.0002	63	0.00	0.02	0.0	0.00	14.0	<0.001	0.065	3.00	0.12	<1
	28/03/2023	15	<0.001	<0.0002	63	0.00	0.00	4.5	<0.001	11.0	<0.0001	0.065	2.30	0.15	<1
	18/04/2023	3.8	<0.001	<0.0002	30	0.00	0.00	<0.001	<0.001	5.0	<0.0001	0.023	2.10	0.048	<1
	18/05/2023	5.8	<0.001	<0.0002	48	<0.001	0.00	14.0	<0.001	10.0	<0.0001	0.033	2.80	0.16	<1
	15/06/2023	11	<0.001	<0.0002	74	<0.001	0.00	12	<0.001	15.0	<0.0001	0.058	2.7	0.15	<1
	24/07/2023	7.1	<0.001	<0.0002	39	<0.001	0.002	8.9	0.001	9.7	<0.0001	0.030	2.5	0.1	<1
	21/08/2023	0.7	0.001	<0.0002	18	0.001	0.003	1.1	<0.001	6.3	<0.0001	0.002	6.8	0.026	<1
	18/09/2023	2.8	<0.001	<0.0002	59	<0.001	<0.001	1.1	<0.001	14.0	<0.0001	0.022	3.2	0.049	<1
	18/10/2023	3.0	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12.0	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	11.0	0.002	<0.0002	75	<0.001	<0.001	17	<0.001	17.0	<0.0001	0.060	3	0.14	<1
	19/12/2023	21.0	0.003	0.0011	80	<0.001	0.002	3.6	0.001	19.0	0.0007	0.071	4.3	0.16	<1
	23/01/2024	17.0	0.002	<0.0002	63	0.002	0.001	17	<0.001	19.0	<0.0001	0.059	5.1	0.13	<1
	26/02/2024	8.8	0.003	<0.0002	17	0.003	0.005	9	0.002	4.8	<0.0001	0.016	1.8	0.05	<1
	26/03/2024	0.9	<0.001	<0.0002	24	<0.001	<0.001	1.8	<0.001	6.1	<0.0001	0.009	2.8	0.025	<1
	18/04/2024	1.1	<0.001	<0.0002	22	<0.001	<0.001	1.8	<0.001	6.0	<0.0001	0.005	13	0.018	<1
	20/05/2024	5.4	0.002	<0.0002	34	<0.001	<0.001	13	<0.001	7.3	<0.0001	0.026	3.6	0.047	<1
	25/06/2024	0.2	<0.001	<0.0002	10	<0.001	<0.001	170	<0.001	2.7	<0.0001	0.011	2.3	0.042	<1
	10/07/2024	3.6	0.001	<0.0002	34	<0.001	0.001	6.6	<0.001	6.6	<0.0001	0.019	3	0.053	<1
	6/08/2024	3.10	<0.001	<0.0002	51	<0.001	<0.001	4.8	<0.001	7.8	<0.0001	0.026	3.4	0.092	<1
	15/08/2024	1.20	0.00	<0.0002	12	<0.001	0.003	2.1	<0.001	2.2	<0.0001	0.004	1.6	0.037	<1
	11/09/2024	0.59	<0.001	<0.0002	21	<0.001	0.001	1.0	<0.001	4.9	<0.0001	0.003	13	0.021	<1
	9/10/2024	20	0.02	<0.0002	21	0.011	0.01	39.0	0.008	4.4	<0.0001	0.008	8.8	0.1	<1
	6/11/2024	3	0.00	<0.0002	23	0.002	0.002	4.5	<0.001	6.2	<0.0001	0.003	15	0.017	<1
	16/12/2024	0.29	0.001	<0.0002	19	0.001	<0.001	1.6	<0.001	4	<0.0001	0.001	12	0.009	<1
	14/01/2025	0.17	0.001	<0.0002	17	<0.001	0.001	0.74	<0.001	3.3	<0.0001	0.001	12	0.016	<1
	11/02/2025	0.45	0.001	<0.0002	23	<0.001	<0.001	2.1	<0.001	4.5	<0.0001	0.001	18	0.031	<1
	24/03/2024	0.18	0.001	<0.0002	10	<0.001	0.002	0.79	<0.001	2.6	<0.0001	0.001	6.6	0.036	<1
	31/03/2025	0.42	0.002	<0.0002	21	<0.001	0.001	3.5	<0.001	4.9	<0.0001	0.002	11	0.045	<1
	8/04/2025	0.3	<0.001	<0.0002	21	<0.001	<0.001	1.3	<0.001	5.4	<0.0001	0.002	11	0.012	<1
	9/05/2025	0.62	0.002	<0.0002	20	<0.001	0.001	2	<0.001	4.9	<0.0001	0.005	11	0.042	<1
	25/06/2025	2	0.002	<0.0002	21	<0.001	0.003	6.1	0.001	5.2	<0.0001	0.002	12	0.053	<1
	8/07/2025	0.24	<0.001	<0.0002	19	<0.001	<0.001	0.49	<0.001	5	<0.0001	0.001	11	0.015	<1
	14/08/2025	0.2	<0.001	<0.0002	20	<0.001	<0.001	0.59	<0.001	5.8	<0.0001	0.001	11	0.01	<1
	11/09/2025	2	0.003	<0.0002	19	0.002	0.004	4	0.002	5.4	<0.0001	0.003	11	0.037	<1
	13/10/2025	0.29	0.001	<0.0002	22	<0.001	0.002	0.97	<0.001	5.9	<0.0001	0.001	16	0.019	<1
	20/11/2025	2.4	0.004	<0.0002	22	0.003	0.003	8.8	0.003	4.7	<0.0001	0.003	4.4	0.015	<1
SW03 Baseline		**7.9**	**0.058**	**0.001**	**21**	**0.008**	**0.028**	**85.5**	**0.028**	**5**	**0.0005**	**0.006**	**4**	**0.26**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW03	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	<50	<100	<20	<50	<100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	130	130	<100	<100	<20	<50	10	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW03 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**120**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW04	29/09/2022	4.5	68	<5	4.8	52	0.01	0.18	20	<0.02	5.1	17	<2	<5		0.05
	20/10/2022	4.2	90	<5	7.5	110	0.01	<0.10	20	<0.02	0.3	16	<2	<5		0.05
	14/11/2022	No surface water located at monitoring site – no sample collected														
	14/12/2022	3.2	190	<5	2	280	0.01	0.05	42	<0.10	3.2	20	<2	<5		0.02
	18/01/2023	No surface water located at monitoring site – no sample collected														
	20/02/2023	4.1	0.2	<5	5.9	160	0.02	0.09	22	<0.10	7.4	23	15	<5		0.7
	28/03/2023	4.2	68	<5	8	130	<0.01	<0.01	17	<0.10	<0.25	14	25	<5		1.5
	18/04/2023	4.6	130	16	9.1	190	0.01	0.03	32	<0.02	0.5	21	8.7	<5		0.3
	18/05/2023	3.6	1,200	42	8	1,800	0.03	1.2	26	<0.02	1.15	53	1,000	<5		38.5
	15/06/2023	4.2	140	160	7.7	200	1.5	0.44	44	<0.02	12	24	<2	8		0.02
	24/07/2023	3.6	1,600	21	9	2,400	0.02	1.5	180	<0.02	3.4	78	5,700	<5		31.7
	21/08/2023	3.3	2,400	5.7	7.5	3,700	<0.01	2.8	33	<0.02	3.4	97	850	5.3		25.8
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.2	2,100	<5	9	3,500	0.03	0.8	4.7	<0.01	1.1	63	400	<5		85.1
	19/12/2023	3.0	3,200	15	0.8	3,700	<0.01	0.44	34	<0.02	4.5	100	980	<5		28.8
	23/01/2024	3.1	1,600	23	7.8	2,500	<0.01	0.19	27	<0.02	0.5	54	730	<5		27.0
	26/02/2024	3.1	1,000	11	7.8	1,200	0.03	0.31	14	<0.02	1.5	30	570	<5		40.7
	26/03/2024	3.2	900	5.7	9.6	1,300	<0.01	0.36	21	<0.02	0.9	30	710	<5		33.8
	18/04/2024	3.1	980	67	7.5	1,900	0.03	0.42	15	<0.02	0.8	33	1,000	27	310	66.7
	20/05/2024	3.3	630	8	8.3	1,100	<0.01	0.3	11	<0.02	0.7	25	500	<5	190	45.5
	25/06/2024	3.2	1,000	5.4	8.6	1,600	0.01	0.4	13	<0.02	1	27	270	<5	160	20.8
	10/07/2024	3.5	420	<5	7.9	870	<0.01	0.24	11	<0.02	0.6	21	450	<5	150	40.9
	6/08/2024	3.3	1,300	38	8.7	1,700	0.04	0.03	13	<0.02	1.1	28	860	7.8	230	66.2
	15/08/2024	3.9	240	<5	9.3	390	0.02	0.13	13	<0.02	0.8	16	150	<5	40	11.5
	11/09/2024	3.4	460	<5	6.9	690	0.01	0.05	8.7	<0.02	<0.2	17	390	15	77	44.8
	24/09/2024 - Additional	3.5	750	-	-	1,300	-	-	-	-	-	-	-	-	-	-
	9/10/2024	3.1	810	<5	9	1,200	0.02	<0.01	10	<0.02	0.8	26	580	<5	<10	58.0
	6/11/2024	3.3	440	23	6.4	660	0.05	<0.01	10	<0.02	1	18	310	<5	15	31.0
	16/12/2024	5.7	210	420	0.2	360	0.1	0.25	13	<0.02	13	12	110	7	25	8.5
	14/01/2025	4.1	310	120	4.9	460	0.13	0.03	6.3	<0.02	1.3	11	64	<5	<10	10.2
	11/02/2025	7.6	700	<5	8.8	1000	0.01	0.03	5.8	<0.02	1.3	21	150	7.7	<10	25.9
	24/03/2025	3.9	390	21	7.4	470	0.03	0.03	18	<0.02	1.5	24	180	8.1	<10	10.0
	31/03/2025	6.3	260	70	10	370	<0.01	0.1	11	<0.02	0.8	16	160	<5	<10	14.5
	8/04/2025	6.0	430	43	4.1	470	0.09	0.27	11	0.04	2.3	18	240	<10	16	21.8
	9/05/2025	6.5	270	260	-	570	<0.01	0.02	10	<0.02	4.5	16	250	160	<10	25.0
	25/06/2025	6.7	410	67	6.1	590	0.6	0.01	8.3	<0.02	0.6	16	160	6.5	28	19.2
	8/07/2025	4.0	140	180	6.1	160	0.21	<0.01	21	<0.02	6.2	17	<2	7.6	43	21.0
	14/08/2025	6.5	180	250	6.6	290	0.47	-	9.4	-	-	14	86	<5	13	9.4
	11/09/2025	6.5	260	1,400	0.2	460	0.03	0.31	7.3	<0.02	38	16	150	10	22	7.3
	13/10/2025	7.3	580	14	8.3	760	0.04	<0.01	4	<0.02	0.8	16	230	20	<10	4.0
	20/11/2025	6.9	280	35	2.1	490	0.08	0.05	8.4	<0.02	1.0	15	150	2.7	<10	8.4
SW04 Baseline		**4.2 – 4.5**	**112**	**293**	**-**	**165**	**0.5**	**0.693**	**90**	**0.052**	**4.5**	**20**	**3**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW04	29/09/2022	1.3	0.001	<0.0002	1.6	0.005	0.001	2.7	0.001	2.6	<0.0001	0.002	1	0.027	<1
	20/10/2022	1.1	<0.001	<0.0002	1.3	0.004	0.001	2.4	0.001	2.3	<0.0001	0.002	1	0.024	<1
	14/11/2022	No surface water located at monitoring site – no sample collected													
	14/12/2022	1.2	<0.001	<0.002	<5	<0.001	<0.01	3.2	<0.01	<5	<0.001	<0.01	<5	0.084	<1
	18/01/2023	No surface water located at monitoring site – no sample collected													
	20/02/2023	1.6	0.002	<0.0002	2.7	0.005	0.05	0.002	0.002	3.9	<0.001	0.003	1.6	0.039	<1
	28/03/2023	1.1	<0.01	<0.002	<5	0.002	<0.01	2.7	<0.01	<5	<0.0001	0.01	<5	<0.05	<1
	18/04/2023	0.85	<0.001	<0.0002	1.8	<0.01	<0.001	<0.001	<0.001	2.7	<0.0001	0.001	0.8	0.034	<1
	18/05/2023	41	<0.001	0.0005	200	<0.001	0.003	16	0.003	31	<0.0001	0.11	5.7	0.4	<1
	15/06/2023	3.1	0.002	<0.0002	2.2	0.007	0.007	6.3	0.005	4.5	<0.0001	0.003	1.4	0.075	1.41
	24/07/2023	50	<0.001	0.0002	330	<0.001	0.003	3.9	0.002	51	<0.0001	0.13	9	0.18	<1
	21/08/2023	72	0.002	0.0004	560	<0.001	0.003	3.4	0.002	83	<0.0001	0.23	13	0.34	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	3	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	91	0.003	0.0007	380	0.001	0.003	4.3	0.003	52	<0.0001	0.27	7.2	0.55	<1
	19/12/2023	110	0.005	0.0022	570	0.002	0.005	11	0.007	90	0.001	0.39	4.3	0.7	<1
	23/01/2024	55	0.002	0.0003	260	0.002	0.003	9.7	0.002	35	<0.0001	0.19	6.1	0.33	<1
	26/02/2024	23	<0.001	<0.0002	140	<0.001	<0.001	5.1	<0.001	20	<0.0001	0.083	3.9	0.18	<1
	26/03/2024	20	<0.001	<0.0002	130	<0.001	<0.001	3.1	<0.001	19	<0.0001	0.068	4.9	0.1	<1
	18/04/2024	32	<0.001	<0.0002	190	0.001	0.002	7	<0.001	26	<0.0001	0.1	3.6	0.18	<1
	20/05/2024	20	<0.001	<0.0002	100	<0.001	<0.001	5.7	<0.001	14	<0.0001	0.064	2.6	0.13	<1
	25/06/2024	16	<0.001	<0.0002	210	<0.001	<0.001	5.3	<0.001	23	<0.0001	0.059	3.7	0.09	<1
	10/07/2024	12	<0.001	<0.0002	110	<0.001	0.001	2.5	<0.001	12	<0.0001	0.051	2.2	0.11	<1
	6/08/2024	17	<0.001	<0.0002	200	<0.001	0.001	5.5	<0.001	24	<0.0001	0.059	2.5	0.1	<1
	15/08/2024	2	<0.001	<0.0002	36	<0.001	<0.001	0.81	<0.001	6	<0.0001	0.015	2.5	0.057	<1
	11/09/2024	5.6	<0.001	<0.0002	87	<0.001	<0.001	3.6	<0.001	11	<0.0001	0.026	1.6	0.061	<1
	24/09/2024 - Additional	-	<0.001	<0.0001	-	<0.001	0.0001	-	<0.001	-	<0.0001	0.032	-	0.043	-
	9/10/2024	14	<0.001	<0.0002	140	<0.001	0.002	8.1	<0.001	17	<0.0001	0.057	2.7	0.12	<1
	6/11/2024	2.8	<0.001	<0.0002	81	<0.001	<0.001	6.1	<0.001	11	<0.0001	0.02	<0.5	0.034	<1
	16/12/2024	4.4	0.007	<0.0002	29	0.009	0.006	170	0.003	4.5	<0.0001	0.009	1.3	0.035	<1
	14/01/2025	1.2	<0.001	<0.0002	53	<0.001	0.001	5.8	<0.001	5.8	<0.0001	0.014	0.8	0.039	<1
	11/02/2025	<0.05	<0.001	<0.0002	200	<0.001	<0.001	0.14	<0.001	18	<0.0001	0.004	<0.5	0.033	<1
	24/03/2025	1.1	<0.001	<0.0002	52	<0.001	0.002	6.6	<0.001	8.5	<0.0001	0.012	2.3	0.1	<1
	31/03/2025	0.5	0.003	<0.0002	50	<0.001	0.001	17	<0.001	7.6	<0.0001	0.007	2.4	0.047	<1
	8/04/2025	0.36	0.004	<0.0002	70	<0.001	<0.001	38	<0.001	9.8	<0.0001	0.006	2.3	0.014	<1
	9/05/2025	0.64	<0.001	<0.0002	61	<0.001	0.001	34	<0.001	7.9	<0.0001	0.001	1.9	0.032	<1
	25/06/2025	0.35	<0.001	<0.0002	85	<0.001	<0.001	7.3	<0.001	8.5	<0.0001	0.004	1.3	0.013	<1
	8/07/2025	0.92	<0.001	<0.0002	0.6	0.004	0.002	1.8	<0.001	1.5	<0.0001	0.001	0.8	0.042	<1
	14/08/2025	0.34	<0.001	<0.0002	38	<0.001	<0.001	17	<0.001	5.7	<0.0001	0.002	1	0.018	<1
	11/09/2025	8.7	0.031	<0.002	120	0.017	0.011	830	<0.01	12	<0.001	0.027	<5	0.1	<1
	13/10/2025	0.31	0.002	<0.0002	130	<0.001	<0.001	12	<0.001	14	<0.0001	0.004	1.5	<0.005	<1
	20/11/2025	0.26	<0.001	<0.0002	69	<0.001	0.002	7.6	0.001	8.5	<0.0001	0.003	0.6	0.016	<1
SW04 Baseline		**1.4**	**0.002**	**0.001**	**3.2**	**0.007**	**0.002**	**2.8**	**0.002**	**2.3**	**0.0005**	**0.005**	**2.9**	**0.028**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW04	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	No flow - No sample collected									
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	No flow - No sample collected									
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No flow - No sample collected									
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	160	160	<100	<100	<20	<50	<100	<100	160	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Additional	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW04 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW05	29/09/2022	5.9	480	5.2	7.7	510	0.12	0.17	220	<0.20	3	140	11	<5		0.05
	20/10/2022	6.2	650	7.2	8.9	690	0.06	0.24	180	<0.20	0.5	160	8.6	<5		0.05
	14/11/2022	6.2	820	13	4.7	1,000	0.06	<0.05	310	<0.10	8.1	260	100	<5		0.32
	14/12/2022	6.2	830	16	7.5	1,100	0.05	0.05	330	<0.10	3.1	240	40	<5		0.12
	18/01/2023	6.3	2,800	33	7	<5	0.09	0.09	1,300	<0.02	3.38	820	160	<5		0.12
	20/02/2023	6.7	18	18	5.4	2,300	0.1	0.07	2,000	<0.10	3.4	4700	890	<5		0.45
	28/03/2023	5.6	470	<5	9.4	760	0.02	0.08	200	<0.10	<0.02	110	23	6.7		0.12
	18/04/2023	6.4	4,000	16	8.5	5,300	0.1	0.12	2,000	<0.02	80	1100	230	<5		0.12
	18/05/2023	5.8	260	17	5.7	460	0.08	<0.01	110	<0.02	<0.2	64	25	<5		0.23
	15/06/2023	6.2	1,100	<5	8.8	1,400	0.58	0.14	450	<0.02	1.1	250	40	<5		0.09
	24/07/2023	6.5	1,600	<5	9.3	2,800	0.05	0.17	1,500	<0.5	1.1	440	1,200	<5		0.80
	21/08/2023	6.6	1,600	<5	6.3	2,900	0.06	0.15	1,500	<0.02	1.28	480	190	<5		0.13
	18/09/2023	6.6	2,500	13	6.4	3,800	0.06	0.11	1,200	<0.02	1.3	650	210	<5		0.18
	18/10/2023	6.9	4,800	6.6	6.5	7,700	0.06	0.05	2,700	<0.02	<0.2	1,300	730	10		0.27
	20/11/2023	6.8	2,100	12	4.8	3,700	0.18	0.46	1,100	<0.01	0.6	460	1,200	<5		1.09
	19/12/2023	6.7	3,300	14	5.3	5,400	0.19	0.77	1,700	<0.02	<2	1,000	64	<5		0.04
	23/01/2024	6.2	1,100	13	9.3	1,000	0.09	0.05	440	<0.02	2.3	260	220	<5		0.50
	26/02/2024	6.3	970	16	8.6	1,200	0.11	0.03	330	<0.02	1.5	200	130	<5		0.39
	26/03/2024	6.6	1,100	9.1	5.6	1,700	0.03	0.09	910	<0.02	2	290	420	<5		0.46
	18/04/2024	6.5	560	8.4	5.8	830	0.07	0.16	160	<0.02	1.7	110	160	5.4	<10	1.00
	20/05/2024	6.7	240	<5	5.8	350	<0.01	0.03	68	<0.02	0.4	47	140	<5	15	2.06
	25/06/2024	6.5	1,000	16	7.7	1,800	0.06	0.1	500	<0.02	1.2	300	29	<5	16	0.06
	10/07/2024	6.2	950	5.6	6.3	1,700	0.02	0.16	170	<0.02	0.9	280	130	<5	11	0.76
	6/08/2024	6.3	3,300	9	8.9	5,800	0.05	0.11	1500	<0.02	1.2	820	210	<5	27	0.14
	15/08/2024	6.2	300	<5	7.1	430	0.08	0.03	30	<0.02	<0.2	80	27	<5	12	0.90
	11/09/2024	6.4	710	8.2	5.5	1,200	0.03	0.4	450	<0.02	1.1	230	72	<5	12	0.16
	9/10/2024	6.4	700	11	9	1,100	0.15	0.15	320	<0.1	<0.25	180	53	<5	14	0.17
	6/11/2024	7.1	930	15	6.1	1,300	0.08	0.16	440	<0.02	1	250	56	<5	<10	0.13
	16/12/2024	7.4	31,000	26	9.3	44,000	0.02	0.14	1,400	<0.02	0.4	<0.5	2,000	<5	<10	1.43
	14/01/2025	7.1	19,000	9.4	6.2	30,000	0.04	0.04	12,000	<0.02	0.3	5,500	500	<5	<10	0.04
	11/02/2025	7.5	24,000	9.1	8.5	35,000	0.03	0.06	6,300	<0.02	<0.2	6,900	260	<5	<10	0.04
	24/03/2024	6.3	1,600	<5	7	2,500	<0.1	0.12	790	<0.02	4.4	440	140	<5	<10	0.18
	31/03/2025	7.0	210	8	9.2	260	0.08	<10	72	<0.02	2.3	41	9.5	<5	<10	0.13
	8/04/2025	6.3	610	8.3	6.7	760	0.08	0.44	230	<0.2	<1	140	29	<10	<10	0.13
	9/05/2025	6.8	340	<5	-	480	0.08	<0.1	120	<0.2	1.7	71	40	<5	<10	0.33
	25/06/2025	6.2	2,000	6.6	5.9	3,500	<0.2	0.07	1,700	<0.2	<0.2	510	250	<5	17	0.14
	8/07/2025	6.0	470	<5	8	910	0.05	0.03	230	0.07	<0.2	130	41	<5	13	0.18
	14/08/2025	6.2	570	16	6.1	930	0.08	0.03	550	<0.02	16	140	62	6.5	13	0.11
	11/09/2025	6.5	940	5.4	6.9	1,700	0.04	0.05	440	<0.02	1.7	260	61	<5	9	0.14
	13/10/2025	6.8	6,600	<5	5.4	11,000	0.05	0.1	3,300	<0.02	1.7	1,800	370	<5	12	0.11
	20/11/2025	6.6	4,600	<5	4.3	9,000	0.10	0.21	2,600	<0.02	0.4	1,400	320	<5	12	0.12
SW05 Baseline		**5.1 – 7.2**	**4710**	**136**	**-**	**6,927**	**0.21**	**0.592**	**980**	**<0.02**	**2.2**	**1,667**	**115**	**63**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW05	29/09/2022	0.83	<0.001	<0.0002	9.4	0.002	<0.001	4.6	<0.001	17	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.66	<0.001	<0.0002	11	0.001	<0.001	3.5	0.001	19	<0.0001	0.002	7.9	0.007	<1
	14/11/2022	0.75	<0.001	<0.002	18	<0.001	0.002	5.4	<0.01	27	<0.001	<0.001	11	0.12	<1
	14/12/2022	0.93	<0.001	<0.002	16	<0.01	<0.01	6.1	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.73	<0.01	<0.002	<2	<0.01	<0.01	6.2	<0.01	96	<0.001	<0.01	41	<0.05	<1
	20/02/2023	0.22	0.002	<0.0002	190	0.001	0.01	<0.001	<0.001	550	<0.001	0.001	170	0.008	<1
	28/03/2023	0.77	<0.01	<0.002	9.4	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.4	<0.05	<1
	18/04/2023	1	<0.001	<0.0002	42	0.001	<0.001	<0.001	<0.001	110	<0.0001	0.003	37	0.008	<1
	18/05/2023	0.6	<0.001	<0.0002	5.2	<0.001	<0.001	2.4	<0.001	9.1	<0.0001	0.002	4.9	0.009	<1
	15/06/2023	0.32	<0.001	<0.0002	14	0.001	2	2	<0.001	27	<0.0001	0.001	14	0.01	<1
	24/07/2023	0.33	<0.001	<0.0002	22	<0.001	<0.001	1.9	<0.001	52	<0.0001	0.002	25	0.006	<1
	21/08/2023	0.41	<0.001	<0.0002	23	<0.001	0.002	2.2	<0.001	54	<0.0001	0.002	29	0.005	<1
	18/09/2023	0.28	<0.001	<0.0002	29	<0.001	<0.001	2.6	<0.001	70	<0.0001	0.001	42	<0.005	<1
	18/10/2023	0.27	<0.001	<0.0002	61	<0.001	<0.001	2	<0.001	160	<0.0001	<0.001	76	<0.005	<1
	20/11/2023	0.51	0.001	<0.0002	25	0.001	<0.001	4.3	<0.001	56	<0.0001	0.002	27	<0.005	<1
	19/12/2023	0.54	0.005	0.0028	46	0.001	0.001	4.2	0.001	120	0.002	0.002	47	0.009	<1
	23/01/2024	0.9	0.003	<0.0002	16	0.002	0.001	7.8	<0.001	32	<0.0001	0.001	16	0.012	<1
	26/02/2024	0.63	0.001	<0.0002	13	0.001	<0.001	3.7	<0.001	23	<0.0001	0.002	10	0.029	<1
	26/03/2024	0.64	<0.001	<0.0002	16	0.001	<0.001	3.3	<0.001	33	<0.0001	0.002	14	0.008	<1
	18/04/2024	0.69	<0.001	<0.0002	8.3	0.002	0.001	<0.001	<0.001	14	<0.0001	0.008	6.7	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.6	<0.001	0.001	2.5	<0.001	5.1	<0.0001	0.002	3.5	0.008	<1
	25/06/2024	0.2	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	31	<0.0001	0.002	12	0.012	<1
	10/07/2024	0.48	<0.001	<0.0002	17	<0.001	<0.001	2.9	<0.001	31	<0.0001	0.002	11	0.008	<1
	6/08/2024	0.28	<0.001	<0.0002	37	<0.001	<0.001	<0.001	<0.001	100	<0.0001	0.001	30	0.007	<1
	15/08/2024	0.5	<0.001	<0.0002	5	0.001	<0.001	1.6	<0.001	8	<0.0001	0.001	4.6	0.01	<1
	11/09/2024	0.52	<0.001	<0.0002	14	<0.001	<0.001	2.9	<0.001	25	<0.0001	0.002	10	0.011	<1
	9/10/2024	0.85	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.5	0.016	<1
	6/11/2024	0.68	<0.001	<0.0002	17	0.002	<0.001	3.8	<0.001	29	<0.0001	0.002	12	0.008	<1
	16/12/2024	<0.05	<0.001	<0.0002	<0.5	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.24	0.002	<0.0002	230	0.002	<0.001	0.64	<0.001	660	<0.0001	<0.001	210	0.006	<1
	11/02/2025	0.12	0.002	<0.0002	290	0.001	<0.001	0.5	<0.001	820	<0.0001	<0.001	260	0.047	<1
	24/03/2024	0.54	<0.001	<0.0002	22	<0.001	0.001	3.2	<0.001	53	<0.0001	0.002	17	0.32	<1
	31/03/2025	0.58	<0.001	<0.0002	4.2	<0.001	<0.001	3.7	<0.001	5.2	<0.0001	0.002	3.5	0.062	<1
	8/04/2025	0.77	<0.001	<0.0002	9.9	0.001	<0.001	4.2	<0.001	18	<0.0001	0.002	6	0.011	<1
	9/05/2025	0.75	<0.001	<0.0002	6.3	0.001	<0.001	3.2	<0.001	8.5	<0.0001	0.002	3.7	0.015	<1
	25/06/2025	0.46	<0.001	<0.0002	26	<0.001	<0.001	2	<0.001	63	<0.0001	0.001	19	0.01	<1
	8/07/2025	0.68	<0.001	<0.0002	9.1	0.001	<0.001	3	<0.001	16	<0.0001	0.002	4.9	0.008	<1
	14/08/2025	0.46	<0.001	<0.0002	8.6	<0.001	<0.001	2.6	<0.001	17	<0.0001	0.001	6.2	0.008	<1
	11/09/2025	0.55	<0.001	<0.0002	15	<0.001	<0.001	3.2	<0.001	33	<0.0001	0.001	11	0.01	<1
	13/10/2025	0.21	<0.001	<0.0002	77	<0.001	<0.001	2	<0.001	220	<0.0001	<0.001	69	<0.005	<1
	20/11/2025	0.32	0.001	<0.0002	63	0.001	<0.001	2.7	<0.001	180	<0.0001	0.001	53	<0.005	<1
SW05 Baseline		**2.1**	**0.002**	**0.001**	**57**	**0.002**	**0.003**	**12.3**	0.001	**130**	**0.0005**	**0.011**	**58**	**0.026**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW05	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	70	70	-	-	<20	60	100	-	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	120	120	<100	120	<20	<50	120	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW05 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW06	29/09/2022	6.0	480	<5	7.8	580	0.13	0.16	220	<0.02	8.6	140	11	5.1		0.05
	20/10/2022	6.3	580	16	8.7	730	0.05	0.19	330	<0.02	0.5	110	7.5	6.2		0.02
	14/11/2022	6.2	840	13	<5	1000	0.04	0.36	310	<0.10	1.1	270	100	<5		0.32
	14/12/2022	6.3	840	16	8.3	1200	0.1	0.05	340	<0.10	5.8	240	44	<5		0.13
	18/01/2023	6.4	3,700	31	6.8	5,400	0.07	0.04	1,800	<0.02	2.5	1,000	200	<5		0.11
	20/02/2023	6.8	19	89	5.1	14,000	0.09	0.11	22	<0.10	4.1	4,000	1,200	<5		54.55
	28/03/2023	5.6	400	6.2	8.3	730	0.03	0.07	180	<0.20	<0.20	110	18	9.7		0.10
	18/04/2023	6.7	6,400	18	7.4	6,700	0.07	1.2	3,200	<0.02	1.26	1,700	360	<10		0.11
	18/05/2023	5.9	280	17	6.3	470	0.08	0.06	120	<0.02	0.4	370	21	<5		0.18
	15/06/2023	6.4	1,100	<5	7.4	1,400	0.55	0.18	440	<0.02	0.7	250	38	<5		0.09
	24/07/2023	6.7	2,100	5.8	6.6	3,500	0.07	0.23	1,800	<0.2	0.6	540	620	<5		0.34
	21/08/2023	6.6	2,800	<5	6.1	5,400	0.19	0.16	1,300	<0.02	0.78	870	59	<5		0.05
	18/09/2023	6.7	2,900	24	6.5	4,600	0.06	0.12	1,500	<0.02	0.4	1,300	200	<5		0.13
	18/10/2023	6.9	7,900	6.3	6.4	9,700	0.05	0.05	3,700	<0.02	<0.2	1,600	430	<5		0.12
	20/11/2023	6.6	2,200	9.9	4.6	4,000	0.18	0.43	1,200	<0.01	1.2	490	720	<5		0.60
	19/12/2023	6.8	3,300	9.3	5.6	6,600	0.09	0.82	2,300	<0.02	<2	1,300	94	<5		0.04
	23/01/2024	6.2	4,300	15	2.1	4,300	0.18	0.08	2,800	<0.02	1.4	1,100	330	<5		0.12
	26/02/2024	6.4	880	17	9	1,200	0.11	0.02	60	<0.02	1.7	200	10	<5		0.17
	26/03/2024	6.8	1,300	9.9	5.9	1,900	0.05	0.07	760	0.05	1.2	300	120	<5		0.16
	18/04/2024	6.6	520	5.8	6	840	0.06	0.16	170	<0.02	<1	110	31	<5	17	0.18
	20/05/2024	6.3	240	<5	6.1	290	<0.01	0.05	59	<0.02	1	42	47	<5	15	0.80
	25/06/2024	6.7	960	17	9.2	1,900	0.06	0.09	500	<0.02	5.3	270	21	<5	19	0.04
	10/07/2024	6.2	880	<5	6.2	1,600	0.03	0.13	170	<0.02	1.4	250	33	<5	15	0.19
	6/08/2024	6.3	4,500	6.8	7.6	8,400	0.08	0.15	2,100	<0.02	1.6	1,200	270	<5	24	0.13
	15/08/2024	6.2	160	<5	7	240	0.1	0.03	57	<0.02	<0.2	38	15	<5	14	0.26
	11/09/2024	6.7	710	7	6.6	1,000	0.04	0.28	370	<0.02	1.8	180	54	<5	11	0.15
	9/10/2024	6.5	720	14	8.5	1,000	0.15	<0.01	310	<0.1	4.3	180	33	18	<10	0.11
	6/11/2024	6.9	1,900	37	5.6	2,400	0.1	0.11	890	<0.02	1.6	490	160	<5	<10	0.18
	16/12/2024	7.7	33,000	13	9.5	47,000	0.01	0.18	16,000	<0.02	<0.2	<0.5	2,100	<5	<10	0.13
	14/01/2025	7.2	25,000	11	6.3	38,000	0.03	0.06	15,000	<0.02	0.7	7,200	600	<5	<10	0.04
	11/02/2025	7.6	24,000	11	7.2	34,000	0.003	0.06	6,100	<0.02	<0.2	7,200	240	5.9	<10	0.04
	24/03/2025	6.5	1,700	<5	6.8	2,500	<0.1	0.12	820	<0.02	4.2	450	110	<5	<10	0.13
	31/03/2025	6.7	250	11	9.5	250	0.08	<10	68	<0.02	<1	42	9.7	<5	<10	0.14
	8/04/2025	6.4	610	7.6	9.4	740	0.08	0.28	260	<0.2	<1	140	31	<10	<10	0.12
	9/05/2025	6.6	260	<5	-	490	0.07	<0.1	120	<0.2	<1	70	28	<5	<10	0.23
	25/06/2025	6.2	2,000	7.4	5.9	3,600	1.4	0.08	1,700	<0.2	1.4	520	260	<5	20	1.50
	8/07/2025	6.0	470	<5	8.2	910	0.05	0.02	230	<0.02	<0.2	130	28	<5	13	0.12
	14/08/2025	6.3	590	31	6.1	910	0.07	0.03	340	<0.02	0.3	140	37	<5	13	0.11
	11/09/2025	6.6	1,299	6.8	7.1	2,200	0.04	0.05	590	<0.02	5.6	340	67	<5	<10	0.11
	13/10/2025	6.8	14,000	5.9	4.9	23,000	0.04	0.29	7,400	<0.02	0.6	4,100	830	5.9	14	0.11
	20/11/2025	6.7	8,400	<5	4.5	14,000	0.09	0.22	4,800	<0.02	0.7	2,300	1,100	<5	12	0.23
ANZG (2018): 95% Slightly Disturbed		**6.5 – 8.0**	-	**<50**	-	**<2200**	**<0.05**	-	-	-	**<0.50**	-	-	**5**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW06	29/09/2022	0.78	<0.001	<0.0002	9.4	0.002	<0.001	4.5	<0.001	18	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.54	<0.001	<0.0002	9.1	0.001	<0.001	2.7	0.001	13	<0.0001	0.002	5.8	0.012	<1
	14/11/2022	0.68	<0.001	<0.002	18	<0.001	0.012	5.3	<0.01	29	<0.001	<0.01	12	0.11	<1
	14/12/2022	0.75	<0.001	<0.002	16	<0.01	<0.01	5.4	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.63	<0.010	<0.001	<2	<0.01	<0.01	0.01	<0.01	120	<0.001	<0.01	47	<0.05	<1
	20/02/2023	0.34	0.002	<0.0002	170	0.001	0.01	<0.001	<0.001	480	<0.001	0.002	160	0.008	<1
	28/03/2023	1.1	<0.01	<0.002	11	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.3	<0.05	<1
	18/04/2023	0.54	<0.001	<0.0002	68	0.001	<0.001	<0.001	<0.001	200	<0.0001	0.002	63	0.009	<1
	18/05/2023	0.44	0.003	<0.0002	14	<0.001	<0.001	0.13	<0.001	4.8	<0.0001	0.008	3.3	<0.005	<1
	15/06/2023	0.36	<0.001	<0.0002	15	<0.001	2.1	2.1	<0.001	28	28	0.001	14	<0.005	<1
	24/07/2023	0.36	<0.001	<0.0002	26	<0.001	<0.001	1.9	0.001	65	<0.0001	0.002	29	0.007	<1
	21/08/2023	0.41	<0.001	<0.0002	39	0.001	<0.001	1.9	<0.001	100	<0.0001	0.002	46	<0.005	<1
	18/09/2023	0.3	<0.001	<0.0002	56	<0.001	<0.001	2.4	<0.001	150	<0.0001	0.001	64	<0.005	<1
	18/10/2023	0.2	<0.001	<0.0002	73	<0.001	<0.001	1.7	<0.001	190	<0.0001	<0.001	85	<0.005	<1
	20/11/2023	0.63	0.001	<0.0002	27	0.001	<0.001	4.5	<0.001	60	<0.0001	0.003	28	0.01	<1
	19/12/2023	0.62	0.002	0.0007	56	0.001	0.002	3.4	<0.001	150	0.0005	0.002	55	0.008	<1
	23/01/2024	0.71	0.003	<0.0002	50	0.002	<0.001	5.7	<0.001	140	<0.0001	<0.001	46	0.008	<1
	26/02/2024	0.61	<0.001	<0.0002	14	0.003	<0.001	3.5	<0.001	24	<0.0001	0.005	10	0.025	<1
	26/03/2024	0.61	<0.001	<0.0002	17	0.001	<0.001	3.1	<0.001	34	<0.0001	0.002	15	0.008	<1
	18/04/2024	0.71	<0.001	<0.0002	10	0.001	<0.001	<0.001	<0.001	13	<0.0001	0.008	7.6	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.7	<0.001	<0.001	2.3	<0.001	4.8	<0.0001	0.002	3.2	0.009	<1
	25/06/2024	0.23	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	28	<0.0001	0.002	11	0.016	<1
	10/07/2024	0.5	<0.001	<0.0002	17	<0.001	<0.001	2.6	<0.001	28	<0.0001	0.002	10	0.01	<1
	6/08/2024	0.31	<0.001	<0.0002	50	<0.001	<0.001	<0.001	<0.001	140	<0.0001	0.002	40	0.011	<1
	15/08/2024	0.51	<0.001	<0.0002	4.8	<0.001	0.001	1.6	<0.001	4.6	<0.0001	0.002	3	0.011	<1
	11/09/2024	0.46	<0.001	<0.0002	14	<0.001	<0.001	2.1	<0.001	20	<0.0001	0.002	11	0.012	<1
	9/10/2024	0.84	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.7	0.009	<1
	6/11/2024	0.79	<0.001	<0.0002	25	0.002	<0.001	4.1	<0.001	60	<0.0001	0.002	20	0.01	<1
	16/12/2024	4.4	0.007	<0.0002	29	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.15	0.002	<0.0002	300	0.002	<0.001	0.3	<0.001	860	<0.0001	<0.001	270	<0.005	<1
	11/02/2025	0.09	0.002	<0.0002	300	0.001	<0.001	0.38	<0.001	850	<0.0001	<0.001	270	0.048	<1
	24/03/2025	0.55	<0.001	<0.0002	22	<0.001	<0.001	3.4	<0.001	54	<0.0001	0.002	17	0.027	<1
	31/03/2025	0.59	0.001	<0.0002	4.2	<0.001	<0.001	3.3	<0.001	5.3	<0.0001	0.002	3.5	0.044	<1
	8/04/2025	0.8	<0.001	<0.0002	9.9	0.003	<0.001	4.1	<0.001	18	<0.0001	0.002	6	0.007	<1
	9/05/2025	0.74	<0.001	<0.0002	6.3	0.001	0.001	2.8	<0.001	8.5	<0.0001	0.002	3.7	0.01	<1
	25/06/2025	0.7	<0.001	<0.0002	26	<0.001	<0.001	2.6	<0.001	64	<0.0001	0.002	20	0.008	<1
	8/07/2025	0.55	<0.001	<0.0002	11	0.001	0.001	2.3	<0.001	13	<0.0001	0.002	6.3	0.008	<1
	14/08/2025	0.43	<0.001	<0.0002	9.1	<0.001	<0.001	2.4	<0.001	16	<0.0001	0.001	6.3	0.011	<1
	11/09/2025	0.51	<0.001	<0.0002	19	0.001	<0.001	2.9	<0.001	42	<0.0001	0.001	14	0.008	<1
	13/10/2025	0.12	0.001	<0.0002	170	<0.001	<0.001	1.2	<0.001	500	<0.0001	<0.001	150	0.006	<1
	20/11/2025	0.26	0.001	<0.0002	99	0.001	<0.001	1.9	<0.001	280	<0.0001	0.001	86	0.006	<1
ANZG (2018): 95% Slightly Disturbed		**0.055**	**0.013**	**0.0002**	**-**	**0.0033**	**0.0018**	**0.3**	**0.0034**	**-**	**0.0006**	**0.011**	**-**	**0.008**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW06	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	-	-	<20	<50	<100	<100	-	<100
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	90	90	<100	<100	<20	160	<100	<100	160	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<100	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	2.1	2.1	<100	<100	<20	<50	0.9	<100	0.9	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
ANZG (2018): 95% Slightly Disturbed		-	-	-	-	-	-	-	-	-	-

APPENDIX D

Photolog

PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
1	20/11/2025

Description

Surface water monitoring location SW01.



Photo No.	Date
2	20/11/2025

Description

Surface water monitoring location SW03.



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
3	20/11/2025

Description

Surface water monitoring location SW04.



Photo No.	Date
4	20/11/2025

Description

Surface water monitoring location SW06.



MONTHLY WATER QUALITY MONITORING REPORT

Harvest Estate Urban Development

Monitoring Event: 17th December 2025

Ewingsdale Road, Byron Bay, NSW, 2481

Job Number: 217140

For:

Planit Consulting

By:

ENV Services Pty Ltd

Date:

16/01/2025

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Job No:	Job Number: 217140
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	Name:	**Date:**	**Signature:**
Prepared By:	Jemma Attkins Environmental Scientist	13/1/2026	
Reviewed By:	Kingsley Baldwin Environmental Team Leader	16/1/2026	

Revision:	**Date:**	**Details:**

SCOPE OF ENGAGEMENT AND LIMITATIONS

This report has been prepared by ENV Services at the request of Planit Consulting for the purpose of consolidating and assessing water quality monitoring (surface water and ground water) data to determine impact associated with the development of the Harvest Estate. No other parties may rely on the contents of this report for any purposes except those stated.

This report has been prepared based on the information provided to us and from other information obtained as a result of enquiries made by us. ENV accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this document for a purpose other than that described above.

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ENV declares that it does not have, nor expects to have, a beneficial interest in the subject project.

To avoid this advice being used inappropriately, it is recommended that you consult with ENV before conveying the information to another who may not fully understand the objectives of the report. This report is meant only for the subject site/project and should not be applied to any other.

1 INTRODUCTION

ENV Services Pty Ltd (ENV) was engaged by Planit Consulting to prepare a Monthly Water Quality Report (MWQR) to meet requirements outlined in the Harvest Estate Development Conditions of Consent (11b - d, 32, 33 & 78) and Section 6.2 and 6.4 of the Planit Construction Environmental Management Plan (CEMP). Monitoring has been undertaken in accordance with the following approved plans.

- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate Groundwater Management Plan.* Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Belongil Creek Plan of Management*. Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate West Byron Urban Release Area; Acid Frog Management Plan.* Dated August 2020.

Baseline water quality parameters outlined in this report have been derived from mean or range values calculated over a 12-month sampling period undertaken between 25 May 2020 and 17 May 2021. This baseline water quality monitoring was carried out by Australian Wetlands Consulting (AWC) and undertaken in accordance with the Harvest Estate Groundwater Management Plan (AWC 2020) and the Harvest Estate – Belongil Creek Plan of Management (AWC 2020).

Guideline water quality trigger values have been derived from the ANZG (2018) Water Quality Guidelines and ANZECC (2000) guidelines for Fresh and Marine Water Quality. These guidelines define Belongil Creek as a lowland river of South-Eastern Australia, with trigger values chosen to reflect this. In assessing human disturbance, this report recognises Belongil Creek as being slight to moderately disturbed. On this basis, for toxicants in water, 95% species protection default guideline values have been presented for assessed toxicants.

No construction works were being undertaken during this monitoring period, with major civil earthworks associated with Stage 1 of the Project completed in November 2023.

2 MONITORING RESULTS & OBSERVATIONS

2.1 Monthly Groundwater Monitoring

Monthly groundwater monitoring at five (5) groundwater wells (MW2 – MW5 & MW7) was carried out to assess for impact within the underlying aquifer. This monitoring was conducted in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.2 of the Planit Construction Environmental Management Plan (CEMP). Groundwater monitoring locations are presented in Appendix A.

An assessment of the monthly analytical results presented in Appendix B, Table 1, identified the following observations:

Site	Observation	Comments
MW2	All parameters were within baseline ranges with the exception of EC and Na.	No site related impacts identified at this location.
MW3	Dry well	No groundwater encountered during monitoring round.
MW4	All parameters were within baseline ranges with the exception of Al which was outside of guidelines values.	No site related impacts identified at this location. There are no site-specific baseline values for Al.
MW5	pH, EC, TDS and several cations/anions (Cl, SO_4, Ca, Mg and Al) concentrations were outside baseline ranges or guideline values (Al only).	Low pH and elevated analytes (EC, TDS, and cations/anions) at this site indicate the presence of oxidising acid sulfate soils (ASS) proximal to the monitoring well. Localised impacts continue to be reported at this site.
MW7	All parameters were within baseline ranges with the exception of SO_4.	SO_4 values are likely to be associated with partial oxidation of sediments and mobilisation of salts (sulfate) through natural fluctuations in REDOX conditions (e.g. during seasonal drawdown). No site related impacts identified at this location.

2.2 Monthly Surface Water Monitoring

Monthly surface water sampling (SW01 – SW06) was carried out to assess for impact from site activities on the receiving environment. Monitoring was carried out in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.4 of the Planit Construction Environmental Management Plan (CEMP), which require assessment of the following analytes; physiochemical parameters, nutrient, metals, cation/anion and total recoverable hydrocarbon (TRH).

Surface water monitoring locations are presented in Appendix A and the coordinates (GDA94) of all locations tabulated and presented in Table 1. Tabulated analytical results are presented in Appendix C. Select photos of the surface water sampling programme are presented in Appendix D.

Table 1: Surface Water Monitoring Coordinates

Monitoring Location	Location	Easting	Northing
SW01	Upstream of development - Southern Swale Drain	0556852	6831954
SW02	Upstream of development - Northern Main Drain	0557145	6831963
SW03	Downstream of development - Northern Main Drain	0557411	6831604
SW04	Downstream of development - Southern Swale Drain	0557397	6831429
SW05	Receiving environment - Outlet of Southern Swale Drain	0557992	6830881
SW06	Receiving environment - Outlet of Northern Main Drain	0558257	6831214

2.2.1 Assessment of Analytical Results

An assessment of the monthly analytical results presented in Appendix C, identified the following observations:

Site	Observation	Comments
SW01	All parameters were within baseline ranges, with the exception of pH and SO_4.	This site is located at an upstream location, receiving water from off-site.
SW02	All parameters were within baseline ranges, with the exception of TDS.	No site related impacts identified.
SW03	NH_3, SO_4 and Ca were recorded outside of baseline ranges.	This site is located within the Northern Main Drain, downstream of Stage 1 works and SW02. Water quality parameters observed at SW03 have significantly improved with many analytes now within baseline ranges. No site related impacts identified.

Site	Observation	Comments
SW04	pH, TDS, EC and cations/anions (Al, SO_4, Fe, Ca, Na, Zn and Mg) were outside baseline ranges.	This site is located downstream of Stage 1 works, within the Southern Swale Drain. Water quality remains poor at this location when compared to 'upstream' (SW01) and baseline values.
SW05	TDS, EC and several cations/anions (Cl, Na, SO_4, Ca, Mg and K).	Elevated EC and cation/anions associated with tidal influences. No site related impacts identified.
SW06	EC, Total Nitrogen, Chlorophyll a, Al and Fe were recorded outside ANZG default guideline values (95% for slightly disturbed river systems).	Water quality appears to be poor than upstream location SW05. Elevated EC and cation/anions associated with tidal influences. With the exception of TDS (elevated concentration attributed to tidal influences), concentrations of the elevated analytes are within baselines ranges for upstream location SW05. No site related impacts observed.

3 RAINFALL

During this monitoring period (20/11/2025 – 17/12/2025), 42.6 mm of rain was recorded in the area (Byron Bay, Cape Byron Lighthouse, Bureau of Meteorology).

4 CONCLUSION & RECOMMENDATIONS

4.1 Conclusion

Monitoring results indicate that impacts associated with exposure of ASS continue to improvement at surface water location SW04 (Southern Swale Drain) as indicated by analyte concentrations trending lower since the completion of Stage 1 of the development.

Similarly, water quality reported at SW03 is noted to be consistent with results reported from the upstream catchment (SW02), inferring no discernible site related impacts.

The groundwater monitoring network continues to present indicators of localised impact from ASS adjacent to MW5 however the trend analysis of several analytes has identified gradual improvements in water quality.

4.2 Recommendations

Based on the conclusions of this monitoring report, the following recommendations are to be implemented with respect to improving water quality throughout the site:

- Given pH across the site is within or above the baseline water quality values, no corrective actions are required.

APPENDIX A

Figures



Legend

Site Location

0 0.5 1km

Figure 1 – Site Location
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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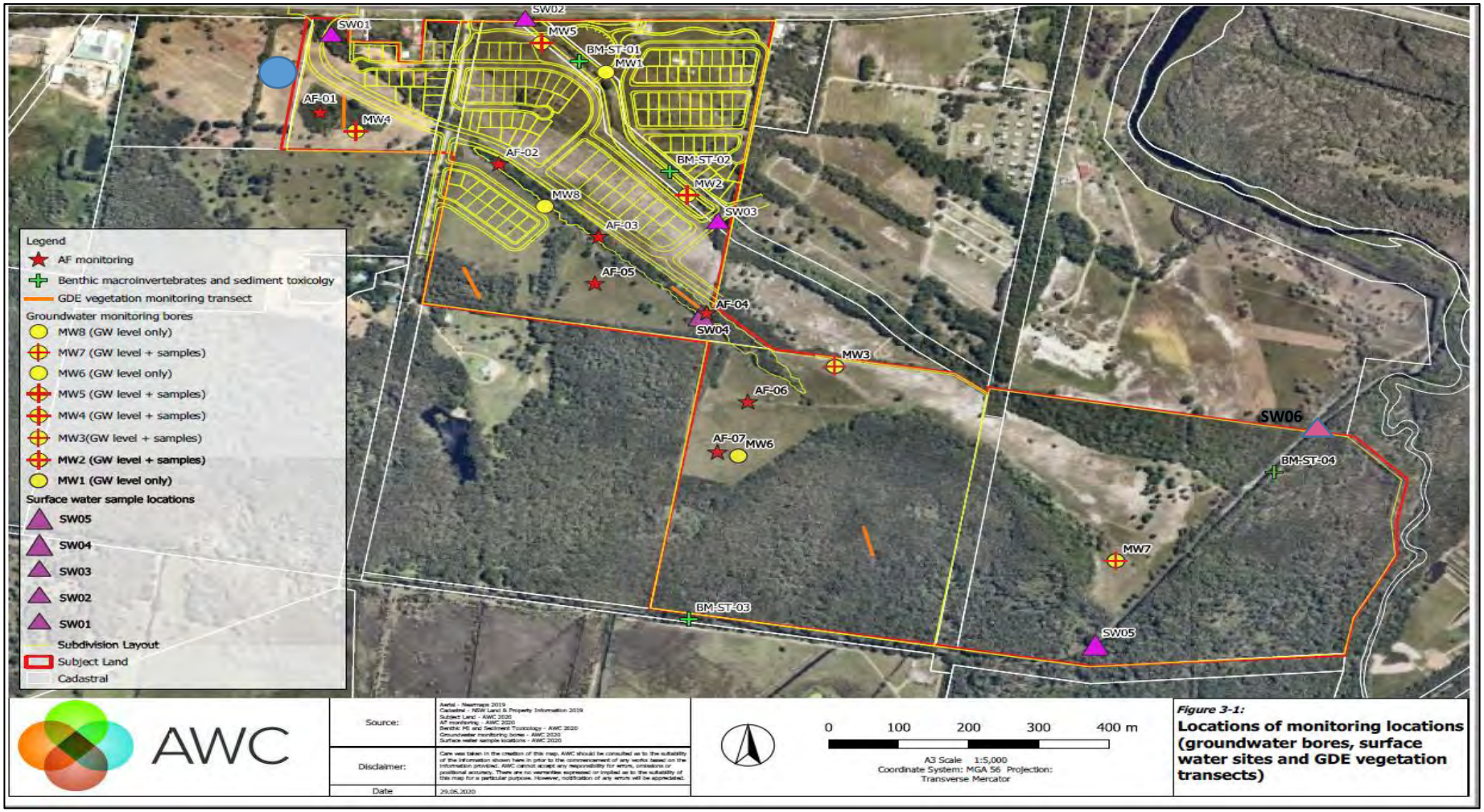


Figure 2 – AWC Monitoring Locations
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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APPENDIX B

Groundwater Quality Analytical Results

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW2	29/09/22	5.8	54	92	<5	0.12	0.51	14	0.02	0.5	30	< 2	< 0.5	0.8	2.4			0.1
	20/10/22	5.6	100	110	<5	0.09	0.24	13	0.02	2	28	< 2	<0.5	0.8	2.2			0.1
	14/11/22	6.0	100	240	<5	0.07	0.24	19	<0.10	<0.2	30	< 2	1.3	1.4	2.4			0.1
	14/12/22	5.6	110	170	<5	0.02	<0.05	15	<0.10	3.1	29	5	<5	<5	<5			0.3
	18/01/23	4.6	130	76	9.2	0.12	0.09	17	<0.05	2.5	29	7	<5	<5	<5			0.4
	20/02/23	6.0	100	160	5.3	0.09	0.1	27	<0.25	0.25	27	3.7	<0.5	0.7	3.1			0.1
	28/03/23	5.9	140	92	17	0.02	0.12	15	<0.02	<0.2	21	7.2	<5	<5	<5			0.5
	18/04/23	6.2	170	88	<5	0.08	1.2	15	<0.02	7.7	18	5.2	<5	<5	<5			0.3
	18/05/23	5.9	130	76	10	0.09	0.1	13	<0.02	9	28	2.1	0.6	0.9	2.6			0.2
	25/06/23	3.3	4,500	3,000	250	0.26	1.6	45	<0.02	8.1	86	3,800	440	82	7.9			84.4
	24/07/23	6.2	220	150	<5	0.03	0.16	12	<0.2	1	24	12	<0.5	0.8	2.5			1.0
	21/08/23	5.7	120	84	<5	0.08	0.14	15	<0.02	1.7	30	2.3	<5	<5	<5			0.2
	18/09/23	5.9	120	130	11	0.04	0.15	13	<0.02	1.2	25	<2	<0.5	0.9	2.7			0.1
	18/10/23	5.6	110	73	6.6	0.3	0.11	15	<0.02	0.3	25	3	<0.5	0.9	2.8			0.2
	20/11/23	6.0	160	70	<5	0.11	0.17	16	<0.01	0.8	28	4.2	<0.5	0.8	2.6			0.3
	19/12/23	6.3	110	100	<5	0.05	0.48	16	<0.02	2.8	28	2.1	0.5	0.9	2.9			0.1
	20/01/24	6.2	150	88	<5	0.05	0.08	13	<0.02	1.1	26	<2	<0.5	0.8	3			0.1
	26/02/24	5.1	150	340	7.4	0.07	0.09	15	<0.02	8.6	36	14	0.6	1	2.7			0.9
	26/03/24	5.7	180	310	<5	0.07	0.13	16	<0.02	<1	27	6.9	<0.5	0.8	2.7			0.4
	18/04/24	5.7	170	<5	<5	0.05	0.09	15	<0.02	1.8	29	2.6	<0.5	0.9	2.8	3.6	<1	0.17
	20/05/24	5.6	160	120	<5	0.11	0.1	19	<0.02	1	32	2.9	<0.5	0.8	2.8	3.9	<1	0.2
	25/06/24	5.5	170	170	12	0.09	<0.01	21	<0.02	2.7	30	<2	<0.5	0.8	2.3	3.8	<1	0.0
	10/07/24	5.8	150	190	<5	0.03	0.11	15	<0.02	<1	28	2.2	<0.5	0.7	2.7	2.8	<1	0.1
	06/08/24	5.9	170	90	6.9	0.16	0.12	20	<0.1	2.4	25	3.3	<0.5	0.6	2.1	3.4	<1	0.2
	11/09/24	5.7	140	110	<5	0.02	0.83	21	<0.2	<1	28	<2	<0.5	0.7	2.4	2.8	<1	0.0
	09/10/24	5.9	150	210	6.3	0.21	<0.01	17	0.02	<0.2	30	2.8	<0.5	<0.5	2.6	2.4	<1	0.1
	06/11/24	5.7	120	190	6.6	2	0.02	17	-	2.3	33	<2	1	1	3.1	3.6	<1	0.1
	16/12/24	6.0	120	60	8.0	0.05	<0.1	16	<0.2	0.9	30	5.3	0.14	0.8	2.8	3.5	<1	0.3
	14/01/25	6.4	150	94	610.0	0.03	<0.05	15	<0.1	<0.25	31	<2	<0.5	0.6	2.4	2.7	1	0.1
	11/02/25	5.7	170	150	<5	0.04	<0.1	13	<0.02	<0.5	29	2.8	<0.5	0.6	2.4	2.8	<1	0.2
	24/03/25	5.7	120	190	<5	<0.05	0.05	36	0.02	4.2	28	5.8	<0.5	0.7	2.4	2.7	<1	0.2
	08/04/25	5.7	120	220	<5	0.02	0.03	16	0.03	<2	31	4.2	<0.5	0.7	2.6	3.5	<1	0.3
	09/05/25	6.0	150	210	<5	0.01	<0.1	17	<0.2	1.1	29	7	1.3	0.7	2.6	3.2	<1	0.4
	25/06/25	5.6	180	200	<5	0.06	<0.01	15	<0.02	0.8	33	22	<0.5	0.7	2.6	1.7	<1	1.5
	08/07/25	5.5	190	180	<5	0.04	0.13	14	<0.2	1.6	32	24	<0.5	0.8	2.5	1.7	<1	1.7
	14/08/25	5.8	180	160	12.0	0.07	0.11	15	<0.02	1.9	30	33	<0.5	0.8	2.5	0.82	<1	2.2
	11/09/25	5.7	190	100	<5	0.03	0.09	17	<0.02	3.1	33	31	<0.5	0.8	2.6	0.84	<1	1.8
	13/10/25	5.6	170	180	<5	0.16	0.16	18	<0.2	0.6	33	24	<0.5	0.8	2.5	2	<1	1.3
	20/11/25	5.8	180	210	6	0.08	0.25	14	<0.2	0.7	35	8.1	<0.5	0.8	2.6	1.1	<1	0.6
	17/12/25	5.7	170	100	6.8	0.09	0.17	15	<0.2	1.0	35	9.3	<0.5	0.9	2.5	0.99	<2	0.6
MW2 Baseline		**4.2 - 5.7**	**152**	**103**	**483**	**0.45**	**0.338**	**189**	**0.07**	**2.03**	**29.7**	**9.8**	**0.7**	**1.4**	**4.2**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

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Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW3	29/09/22	4.2	53	40	370	0.09	0.05	8.8	0.02	0.5	7	<2	< 0.5	1	0.6			0.1
	20/10/22	4.1	64	62	130	0.01	0.2	8	0.02	0.5	7	<2	0.5	0.9	<0.5			0.1
	14/11/22	4.6	57	84	170	0.03	0.27	7.4	<0.02	<0.2	7.1	<2	0.8	0.6	<0.5			0.1
	14/12/22	4.3	43	32	280	<0.01	<0.01	5.2	<0.02	1.1	6	<2	<5	<5	<5			0.2
	18/01/23	4.3	54	28	670	0.03	<0.01	4.1	<0.05	1.4	<5	4.1	<5	<5	<5			1.0
	20/02/23	4.2	36	40	76	0.02	<0.10	6.8	0.06	7.26	7.6	<2	<0.5	1	<0.5			0.1
	28/03/23	4.1	70	44	<5	<0.01	<0.01	7.9	<0.02	0.22	4.8	2.2	<0.5	1	0.6			0.3
	18/04/23	4.6	89	54	110	0.02	0.1	9.6	<0.02	5.7	4.3	4.3	<0.5	0.6	<0.5			0.4
	18/05/23	4.5	60	40	450	0.02	0.04	5.8	<0.02	1	4.8	2.1	0.6	0.8	<0.5			0.4
	15/06/23	4.0	84	48	22	0.27	0.4	5.5	<0.02	1.96	5	63	<0.5	0.8	<0.5			11.5
	24/07/23	4.5	85	59	160	0.04	<0.01	9.5	<0.02	<0.2	5.6	12	<0.5	0.8	<0.5			1.3
	21/08/23	3.9	110	52	100	0.01	<0.01	6.3	<0.02	<0.2	6.6	3	<0.5	1.1	<0.5			0.5
	18/09/23	Dry – no sample collected																
	18/10/23	Dry – no sample collected																
	20/11/23	4.0	96	46	120	0.03	<0.02	7.8	<0.01	0.7	5.8	5	<0.5	0.7	<0.5			0.6
	19/12/23	4.0	46	30	92	<0.01	0.04	13	<0.02	<0.2	9.7	5.6	<0.5	1.3	0.6			0.4
	20/01/24	4.2	70	28	270	0.01	<0.01	5.4	<0.02	0.6	5.5	<2	<0.5	0.8	<0.5			0.2
	26/02/24	4.5	70	50	29	0.01	0.02	10	<0.02	16	5	4.5	<0.5	0.6	<0.5			0.5
	26/03/24	4.1	67	56	110	<0.01	0.06	5.1	<0.02	0.3	4.4	6.1	<0.5	0.8	<0.5			1.2
	18/04/24	3.7	150	< 5	<5	0.05	0.01	4.6	<0.02	0.7	4	12	<0.5	0.8	<0.5	0.99	<1	0.3
	20/05/24	4.5	36	30	26	0.03	<0.01	31	<0.02	0.3	3	3.9	0.6	<0.5	<0.5	1.1	<1	0.1
	25/06/24	3.5	160	90	120	0.17	<0.01	2.8	<0.02	<0.2	3.1	5	<0.5	<0.5	<0.5	0.7	<1	0.1
	10/07/24	4.4	42	40	300	<0.01	<0.01	4.2	<0.02	0.5	3.5	2.5	<0.5	<0.5	<0.5	0.7	<1	0.6
	06/08/24	4.3	45	22	310	0.03	0.01	4.4	<0.02	3.2	2.5	<2	<.5	<0.5	<0.5	1	<1	0.2
	11/09/24	4.2	44	28	720	0.02	<0.1	5	<0.02	<1	3.7	<2	<0.5	<0.5	<0.5	1.3	<1	0.2
	09/10/24	4.2	50	32	430	0.1	<0.01	5.3	<0.02	<0.2	4.1	2.8	2.9	0.6	0.6	0.48	<1	0.2
	06/11/24	4.3	38	20	370	<0.01	0.09	4.8	-	0.9	4.6	<2	0.6	0.7	<0.5	0.84		0.2
	16/12/24	4.3	35	24	63	0.02	<0.01	4.4	<0.02	0.5	3.8	2.2	<0.5	0.7	<0.5	0.75	<1	0.5
	14/01/25	4.5	40	20	38	0.03	0.01	3.3	<0.02	0.5	2.8	<2	<0.5	<0.5	<0.5	0.75	<1	0.3
	11/02/25	4.2	64	36	8.2	<0.01	<0.01	2.9	<0.02	<0.2	3.1	4.4	<0.5	<0.5	<0.5	1.1	<1	1.5
	24/03/25	4.0	79	50	150	0.02	<0.01	13	<0.02	0.9	5.8	3.9	0.8	1.1	<0.5	0.52	1.5	0.3
	08/04/25	4.2	71	38	160	<0.01	0.02	11	<0.02	0.9	7.3	4.1	0.9	1.4	2.6	0.58	1.5	0.4
	09/05/25	4.5	73	74	210	<0.01	0.02	9.9	<0.02	0.8	7	3.1	0.7	0.9	<0.5	0.74	<1	0.3
	25/06/25	4.5	42	44	170	0.05	<0.01	4.4	<0.02	1.9	5	4.3	<0.5	<0.5	<0.5	1	<1	1.0
	08/07/25	4.5	47	25	670	0.02	0.03	4.5	0.03	0.6	4.9	2.5	<0.5	<0.5	<0.5	1	<1	0.6
	14/08/25	4.8	34	38	550	0.06	0.06	3.8	0.02	5.7	3.6	4	<0.5	<0.5	<0.5	0.5	<1	1.0
	11/09/25	4.6	42	28	2,500	0.02	0.3	4.7	0.11	2.1	4.7	3.5	<0.5	<0.5	<0.5	0.49	<1	0.7
	13/10/25	Dry – no sample collected																
	20/11/25	Dry – no sample collected																
	17/12/25	Dry – no sample collected																
MW3 Baseline		**4.0 - 5.3**	**206**	**140**	**5223**	**1.57**	**0.294**	**121**	**0.167**	**4.14**	**26.4**	**13.4**	**3.8**	**5.3**	**3.1**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW4	29/09/22	4.5	100	88	350	0.03	0.16	22	0.1	1.5	19	<2	3.6	3.7	0.9			0.0
	20/10/22	4.5	110	100	69	0.02	0.78	20	0.04	1	14	<2	3.9	2.1	<0.5			0.1
	14/11/22	4.2	130	340	16	0.01	0.13	30	<0.10	7	22	5	2.6	4.8	1.1			0.2
	14/12/22	4.2	140	140	60	<0.01	<0.05	23	<0.10	3	21	7.8	<5	<5	<5			0.3
	18/01/23	5.7	170	110	170	0.02	0.16	26	<0.50	2.4	20	6.6	<5	<5	<5			0.3
	20/02/23	3.9	87	110	31	0.04	<0.05	15	0.28	3.88	15	5.8	3.5	5.4	0.9			0.4
	28/03/23	4.7	180	120	190	0.04	0.08	28	<0.02	22	18	6	8.8	5.1	<5			0.2
	18/04/23	3.7	500	280	340	0.11	0.07	27	<0.02	0.9	19	130	3.4	5	<0.5			4.8
	18/05/23	5.4	110	72	70	0.03	<0.01	14	<0.02	2.89	11	10	5.7	3.7	<0.5			0.7
	15/06/23	3.8	200	150	130	1.4	0.29	29	<0.02	0.9	21	12	<5	6	<5			0.4
	24/07/23	4.1	170	94	58	0.03	<0.1	24	<0.2	1	20	17	2.8	6.2	0.6			0.7
	21/08/23	3.8	200	120	75	0.03	0.07	18	0.65	1.76	15	3.6	2	5	<0.5			0.2
	18/09/23	3.8	160	86	21	0.02	0.11	19	0.02	1.1	17	10	1.5	4.1	<0.5			0.5
	18/10/23	3.8	190	110	31	0.08	0.08	25	<0.02	0.9	18	9.3	1.7	4.5	0.5			0.4
	20/11/23	4.4	160	870	28	0.05	0.1	22	<0.01	2.2	15	5.8	3.3	4	0.7			0.3
	19/12/23	4.0	190	130	27	0.03	0.41	38	<0.02	1.5	22	13	3.3	7.8	1			0.3
	20/01/24	4.2	170	120	27	0.01	0.02	24	<0.02	1.2	17	2.9	5.4	5.1	<0.5			0.1
	26/02/24	3.6	290	190	96	0.03	0.07	27	<0.02	6.9	17	38	10	4.1	<0.5			1.4
	26/03/24	5.6	150	140	18	0.02	0.58	25	<0.02	1.1	15	7	9.3	3.8	<0.5			0.3
	18/04/24	4.3	140	90	12	0.02	0.04	17	<0.02	24	13	6.7	3.2	3.6	<0.5	1.1	2.9	0.4
	20/05/24	5.9	200	180	9.4	0.01	0.83	15	<0.02	1.1	10	5.6	9.6	2.1	<0.5	1.5	6.4	0.4
	25/06/24	4.2	120	100	33	0.1	<0.01	15	<0.02	1.4	9.1	2.3	3.5	2.2	<0.5	1.7	<1	0.2
	10/07/24	6.3	79	46	16	0.02	0.12	8.7	<0.02	1.4	6.4	4	9.7	1	<0.5	0.55	<1	0.5
	06/08/24	4.4	170	100	24	0.02	0.12	26	<0.02	2.4	12	5.5	1.5	3.2	<0.5	0.86	<1	0.2
	11/09/24	5.2	110	74	27	0.02	0.14	21	<0.02	0.6	12	2.5	7.2	2.9	<0.5	1.3	<1	0.1
	09/10/24	4.1	150	140	190	0.1	0.07	25	0.03	0.9	15	6.2	2.9	4	0.7	1.2	<1	0.2
	06/11/24	4.4	130	180	40	0.51	0.04	22	-	1.9	15	2.3	4.7	4.8	<0.5	1.4	3.4	0.1
	16/12/24	5.7	80	70	<5	0.02	<0.1	18	<0.2	1	11	4.1	8.1	3	<0.5	0.99	7.2	0.2
	14/01/25	4.1	180	120	86	0.02	1.3	26	<0.02	1.2	14	2.4	4.4	3.8	<0.5	1.6	<1	0.1
	11/02/25	4.1	170	150	<5	0.01	<0.1	25	<0.02	<0.5	16	3.1	2.5	4.8	<0.5	1.8	<1	0.1
	24/03/25	5.0	110	84	39	<0.05	0.04	22	0.02	5	13	7.6	4.9	3.4	<0.5	0.85	5.8	0.3
	08/04/25	5.2	90	130	22	<0.01	0.03	16	<0.02	1	10	3.7	6.9	2.7	<0.5	0.58	12	0.2
	09/05/25	6.0	110	140	45	-	-	14	<0.2	-	8.7	2.7	11.0	2	<0.5	0.8	14	0.2
	25/06/25	5.4	98	140	130	0.06	0.01	12	0.2	1.6	8.8	8.2	8.6	1.6	<0.5	0.98	8.8	0.7
	08/07/25	5.0	110	100	300	0.01	0.23	15	<0.2	<0.5	11	9.4	5.7	2.4	<0.5	1.7	3.4	0.6
	14/08/25	5.7	110	150	600	0.11	0.12	15	0.04	4.7	9.6	4.3	10.0	2	<0.5	0.64	<1	0.3
	11/09/25	4.4	140	89	290	0.02	0.15	25	0.07	4.2	15	7.3	4.0	3.5	0.9	1.1	3.6	0.3
	13/10/25	4.3	160	210	120	0.11	0.42	30	<0.2	<2	18	2.8	2.9	4.5	0.8	2.2	1.3	0.1
	20/11/25	4.2	160	220	140	0.06	0.22	22	<0.2	1.1	16	2.2	2.7	4.1	0.6	1.2	2.3	0.1
	17/12/25	4.1	170	110	170	0.02	<0.1	26	<0.2	1.9	20	2.9	1.4	5.6	0.9	1.1	1.3	0.1
MW4 Baseline		**4.0 - 5.8**	**890**	**605**	**1220**	**0.43**	**1.392**	**199**	**0.185**	**4.36**	**146.3**	**19.2**	**11.3**	**15.6**	**5.4**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW5	29/09/22	4.5	59	68	630	0.13	0.41	18	0.02	6.33	14	<2	2	3	0.6			0.1
	20/10/22	4.4	75	82	92	0.02	0.1	15	0.02	0.5	12	<2	2	2	0.5			0.1
	14/11/22	4.6	120	270	150	0.08	0.52	29	<0.10	7.8	26	<2	5	6	1.4			0.0
	14/12/22	4.5	150	150	230	0.02	<0.060	29	<0.05	11	24	10	<5	<5	<5			0.3
	18/01/23	2.8	1,600	1,100	480	0.05	1.7	43	<0.05	5.7	49	7	90	72	<5			0.2
	20/02/23	2.6	2,700	3,200	310	0.03	4.2	27	<0.05	3.2	47	750	390	76	7.8			27.8
	28/03/23	3.0	5,200	3,700	130	0.02	5.9	28	<0.02	11	34	1,100	440	57	7.1			39.3
	18/04/23	2.9	3,800	5,100	300	0.01	4	44	<0.02	4	49	3,800	380	120	4.7			86.4
	18/05/23	3.4	3,100	3,400	150	<0.01	<0.01	15	<0.02	4.9	23	2,200	240	31	4.2			146.7
	15/06/23	2.9	3,000	1,800	640	0.3	2.9	28	<0.02	2.66	64	2,100	410	130	6.5			75.0
	24/07/23	5.5	2,800	1,600	6	0.07	0.19	1,400	<0.2	0.5	450	380	25	54	25.0			0.3
	21/08/23	3.3	5,200	3,400	13	0.03	4.6	67	<0.02	5	89	2,200	420	200	9.9			32.8
	18/09/23	3.3	4,500	5,800	6.1	0.01	4	51	0.02	3.7	67	4,300	360	140	7.9			84.3
	18/10/23	3.2	4,700	4,900	96	0.03	1.3	58	<0.02	2.1	68	710	380	130	7.3			12.2
	20/11/23	2.8	5,900	7,500	29	0.06	2.7	55	<0.01	11	60	6,600	310	100	6.8			120.0
	19/12/23	2.9	3,100	2,700	230	0.01	4.6	80	<0.02	5	80	3,500	290	86	6.9			43.8
	20/01/24	3.2	4,900	6,600	74	0.03	<0.01	52	<0.02	4.5	68	1,000	370	84	7.9			19.2
	26/02/24	2.6	3,400	4,500	180	0.03	0.59	25	<0.02	5.4	51	3,000	290	46	4.0			120.0
	26/03/24	3.2	4,400	3,500	17	0.02	1.8	140	<0.02	2.5	54	11,000	360	77	6.0			78.6
	18/04/24	3.3	4,200	2,200	39	<0.01	0.02	49	0.05	5.1	50	3,300	310	47	4.0	210	1.5	67.3
	20/05/24	3.4	3,100	1,600	8.8	0.03	3.1	53	<0.02	2.9	27	2,900	200	22	2.8	140	1.42	54.7
	25/06/24	3.2	4,100	2,700	310	0.03	<0.01	76	<0.02	7.2	75	1,400	290	60	4.3	320	<1	18.4
	10/07/24	3.5	2,300	2,600	49	0.02	<0.01	14	<0.02	3.9	20	1,900	240	20	2.4	130	<1	135.7
	06/08/24	3.3	170	3,500	14	0.19	4.6	62	<0.02	7.7	56	3,600	310	54	4.2	250	<1	58.1
	11/09/24	3.5	1,700	1,000	38	<0.01	3.9	27	<0.2	4.9	27	750	290	29	3.2	94	<1	27.8
	09/10/24	3.5	1,300	930	46	0.03	<0.01	27	<0.02	1.5	22	870	120	17	1.6	35	<1	32.2
	06/11/24	3.3	2,000	1,300	31	<0.01	4.8	44	-	5	59	680	300	62	4.9	90	3.33	15.5
	16/12/24	3.2	1,800	1,100	53	0.02	21	32	<0.2	2.8	25	980	180	21	2.4	35	5.1	30.6
	14/01/25	3.7	1,600	1,400	190	<0.01	1.3	19	<0.02	2.1	16	320	210	16	1.8	25	8.4	16.8
	11/02/25	3.5	2,000	1,700	69	0.01	2.6	160	<0.02	14	110	860	110	50	2.8	56	1.96	5.4
	24/03/25	3.6	1,000	890	38	<0.05	0.06	20	<0.02	3.3	14	570	140	8.5	1.7	17	8.24	28.5
	08/04/25	3.7	790	700	73	<0.01	0.85	36	<0.02	5.2	42	390	86	16.0	<0.5	13	6.6	10.8
	09/05/25	3.7	1,300	1,200	200	<0.01	1.2	87	<0.2	3.3	24	470	87	11.0	1.5	9.6	9.06	5.4
	25/06/25	3.7	1,300	840	140	0.21	1.5	26	<0.02	2	18	580	140	17.0	1.7	17	8.3	22.3
	08/07/25	4.0	720	480	170	<0.010	0.81	21	<0.2	5.4	20	280	58	10.0	0.9	11	5.3	13.3
	14/08/25	3.8	530	300	230	0.02	0.55	19	<0.02	5.5	11	230	28	4.3	0.5	4.5	6.2	12.1
	11/09/25	3.8	630	430	110	<0.01	0.73	41	0.04	14	35	240	33	9.7	1.3	4.4	7.5	5.9
	13/10/25	4.0	1,200	970	260	0.11	2.8	120	<0.2	<2	76	420	68	32	2.2	13	5.2	3.5
	20/11/25	3.6	1,400	1000	59	0.05	2.4	64	<0.02	2.4	43	270	83	34	2	13	6.4	4.2
	17/12/25	3.7	1,300	650	290	0.02	2.0	120	<0.2	<10	19	180	83	11	<0.5	10.0	8.3	1.5
MW5 Baseline		**4.3 - 5.5**	**191**	**130**	**3003**	**0.97**	**13.4**	**82**	**0.117**	**13.4**	**27.2**	**8.3**	**6**	**8.4**	**5.4**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW7	29/09/22	4.6	26	40	190	0.1	0.3	8.5	0.02	2.5	8.5	<2	1	0.9	0.6			0.1
	20/10/22	4.5	86	70	120	0.01	0.4	12	0.04	2.9	8.5	<2	1.7	1.7	0.5			0.1
	14/11/22	4.5	44	170	<100	0.03	0.01	9.7	<0.10	<2.00	9.7	<2	1.9	1.4	1.4			0.1
	14/12/22	4.6	56	92	23	0.04	<0.10	7.5	<0.20	11	8.7	2.5	<5	<5	<5			0.3
	18/01/23	4.4	63	32	390	0.09	<0.05	7.5	<0.025	2	11	31	<5	<5	<5			4.1
	20/02/23	4.1	87	60	30	0.02	<0.05	9.1	0.42	4.9	5.8	5.7	1.4	1.9	1.1			0.6
	28/03/23	4.5	160	94	18	0.02	0.02	21	<0.02	4.4	12	66	2	2	0.6			3.1
	18/04/23	4.9	150	58	7.4	<0.01	0.11	11	<0.02	<0.20	9.8	120	1.9	0.8	<0.5			10.9
	18/05/23	4.9	78	56	130	0.03	<0.01	11	<0.02	0.89	9.3	9.3	1.4	0.9	<0.5			0.8
	15/06/23	4.6	77	50	30	0.28	0.25	11	<0.02	<0.20	9.2	62	<5	<5	<5			5.6
	24/07/23	5.1	140	100	90	0.12	<0.1	10	<0.2	1	8.5	14	1.9	1.4	0.9			1.4
	21/08/23	5.3	67	34	29	0.08	0.06	8.4	<0.02	0.8	9	45	1.8	1.7	0.8			5.4
	18/09/23	5.1	57	78	25	<0.01	0.07	9.6	<0.02	0.8	9.4	83	1.6	2	0.8			8.6
	18/10/23	5.2	61	46	10	0.04	0.1	11	<0.02	<0.2	10	160	1.6	2.1	0.8			14.5
	20/11/23	4.1	210	64	13	0.04	<0.02	8.4	<0.01	2.2	8.1	280	2.5	2.2	0.7			33.3
	19/12/23	4.6	91	62	11	0.03	0.09	19	<0.02	0.7	11	5.6	4.4	2.3	0.9			0.3
	20/01/24	4.2	170	130	34	0.01	0.09	21	<0.02	0.3	15	160	2.8	1.4	<0.5			7.6
	26/02/24	4.0	210	190	23	0.03	0.51	44	<0.02	5.8	24	7.5	3.6	2.1	0.5			0.2
	26/03/24	4.4	320	100	22	0.02	0.18	320	<0.02	<1	13	590	1.6	0.9	0.9			1.8
	18/04/24	4.3	100	98	17	0.02	0.07	8.9	<0.02	3	9	380	1.4	1.2	<0.5	1.7	<1	42.7
	20/05/24	4.4	77	56	11	0.05	0.38	6.4	<0.02	1.2	5.4	170	1.3	1	<0.5	2.3	<1	26.6
	25/06/24	4.6	66	36	33	<0.01	<0.01	<0.01	<0.02	0.6	6.7	48	1.1	0.9	<0.5	1.5	<1	0.0
	10/07/24	4.5	74	58	29	<0.01	0.22	6.5	<0.02	2.1	6.2	270	2	1.3	<0.5	0.73	<1	41.5
	06/08/24	4.8	4,600	180	19	0.04	0.06	9.1	<0.02	0.5	5.3	36	1.4	0.9	<0.5	1	<1	4.0
	11/09/24	4.4	75	50	6.4	0.04	<0.1	11	<0.02	1..0	7.1	5.2	1.3	1.1	<0.5	1.4	<1	0.5
	09/10/24	4.3	73	42	71	0.54	<0.01	8	<0.02	1.6	5.8	12	1.3	1.2	<0.5	0.94	<1	1.5
	06/11/24	4.5	59	32	35	0.02	0.03	11	-	1.3	7.8	4.4	1.3	1.4	<0.5	1.6	<1	0.4
	16/12/24	4.3	58	68	29	0.04	<0.1	12	<0.2	1.3	8.5	42	1.6	1.3	<0.5	1.9	<1	3.5
	14/01/25	4.7	63	36	120	0.04	0.02	8.6	0.03	1.3	6.8	7	1.7	1.2	0.5	2.4	1.4	0.8
	11/02/25	4.6	68	70	13	0.07	<0.1	9.2	<0.02	1.2	8.4	2	1.5	1.5	0.8	2.7	<1	0.2
	24/03/25	4.1	0	56	28	<0.05	0.02	15	<0.02	1.8	7.7	43	2.3	1.4	<0.5	1.2	1.91	2.9
	08/04/25	4.4	76	70	14	<0.01	0.03	14	<0.02	<1	8.1	31	2.8	1.1	2.1	1.4	2	2.2
	09/05/25	4.7	81	110	24	<0.01	0.03	13	<0.2	1.2	8.1	28	1.5	0.9	<0.5	1.6	<1	2.2
	25/06/25	4.6	65	70	39	0.07	<0.01	8.3	<0.02	<0.2	6.7	56	1.2	0.8	<0.5	1.2	1	6.7
	08/07/25	4.6	65	44	130	0.02	0.14	7.9	<0.02	<0.5	6.3	37	1.4	0.9	<0.5	2.6	<1	4.7
	14/08/25	4.7	60	70	140	0.06	0.01	8.9	0.04	2.2	5.7	15	0.9	0.5	<0.5	0.93	3	1.7
	11/09/25	4.4	75	51	100	0.03	0.06	12	0.04	1.1	7.2	18	1.8	1.1	0.6	0.86	2.09	1.5
	13/10/25	4.8	66	110	66	0.02	0.12	11	<0.2	<1	7.4	20	2.1	1.5	<0.5	1.3	1.6	1.8
	20/11/25	4.4	84	78	64	0.05	0.12	12	<0.2	1.1	7.8	17	1.9	1.2	<0.5	0.86	2.2	1.4
	17/12/25	4.6	79	10	75	0.04	<0.1	13	<0.2	3.1	9.0	11	2.1	1.7	0.5	1.0	2.1	0.8
MW7 Baseline		**4.6 - 5.6**	**147**	**100**	**3140**	**0.71**	**0.471**	**172**	**0.048**	**4.15**	**31**	**7.3**	**3.4**	**2.2**	**3.1**	**<1.0***	**<1***	**<0.5***

APPENDIX C

Surface Water Quality Analytical Results

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW01	29/09/2022	6.9	180	11	3.1	140	0.47	<0.01	14	<0.02	5.2	30	3.4	450		0.2
	20/10/2022	6.6	320	30	4.7	400	0.03	0.03	22	<0.02	<0.02	31	33	43		1.5
	14/11/2022	6.0	780	4,900	0.2	920	3.1	6.9	25	<0.02	14	200	3.7	67		0.1
	14/12/2022	4.5	800	210	3.6	1,100	0.15	0.05	24	<0.10	23	54	560	88		23
	18/01/2023	6.3	380	120	4.7	25	0.047	0.087	24	<0.02	5.2	40	180	25		7.5
	20/02/2023	3.4	1,100	32	3.8	1,300	0.42	0.37	28	<0.02	8.9	57	350	<5		13
	28/03/2023	3.0	2,000	100	7.7	3,000	<0.01	2.1	29	<0.02	1.29	47	880	<5		30
	18/04/2023	7.7	130	33	8.6	320	0.06	0.01	24	<0.02	8.4	16	14	8.8		0.6
	18/05/2023	7.4	130	6	4.4	250	0.21	0.14	11	<0.02	0.9	14	10	<5		0.9
	15/06/2023	3.2	1,900	6.8	7.6	2,700	0.03	1.6	59	<0.02	2.1	61	1,500	<5		25
	24/07/2023	7.9	84	<5	8.4	140	0.11	<0.01	6.4	<0.02	0.3	13	4	<5		0.6
	21/08/2023	6.9	120	25	3	190	0.34	0.01	5.6	<0.02	0.4	18	<2	<5		0.2
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	No surface water located at monitoring site – no sample collected														
	20/11/2023	7.2	230	6.5	2.9	480	2	<0.02	56	<0.01	<0.2	43	160	<5		2.9
	19/12/2023	No surface water located at monitoring site – no sample collected														
	23/01/2024	7.0	160	130	2.2	160	3.7	0.06	14	<0.02	1.3	21	69	<5		4.9
	26/02/2024	6.2	160	47	7.2	200	0.35	<0.01	9	<0.02	3	12	59	<5		6.6
	26/03/2024	6.9	26	7.5	8.3	78	0.25	<0.01	6.7	<0.02	0.4	7.5	3.4	<5		0.5
	18/04/2024	7.2	220	23	0.5	390	0.06	0.24	25	<0.02	0.7	32	110	180	13	4.4
	20/05/3034	6.7	160	<5	3.8	260	0.16	0.01	13	<0.02	0.5	19	33	56	231	2.5
	25/06/2024	6.3	440	15	5.9	710	<0.01	<0.01	12	<0.02	<0.2	23	100	5.7	15	8.3
	10/07/2024	7.0	120	29	5.5	240	0.07	0.01	14	<0.02	1.1	17	6.9	39	12	0.5
	6/08/2024	4.0	760	19	7.6	950	0.08	<0.01	14	<0.02	1.3	23	470	<5	12	34
	15/08/2024	6.7	64	<5	7.3	100	0.04	0.01	6.1	<0.02	<0.2	7.2	5.5	<5	<10	0.9
	11/09/2024	6.9	120	250	0.2	190	1.1	0.11	8.9	<0.02	4.1	13	2.6	<10	17	0.3
	24/09/2024 - Investigation	6.3	170	-	-	280	-	-	-	-	-	-	-	-	-	-
	9/10/2024	7.4	190	11	8.9	290	0.38	0.01	14	<0.02	<0.2	20	3.4	<5	<10	0.2
	6/11/2024	7.1	92	400	0.4	140	13	<0.01	8.1	<0.02	2.8	12	2.2	<5	<10	0.3
	16/12/2024	6.9	90	190	3.3	140	0.36	<0.01	8.2	<0.02	0.02	11	5.4	170	<10	0.7
	14/01/2025	6.7	48	7.2	3.5	89	0.14	<0.1	4.8	<0.02	0.6	5.4	<5	<5	<10	0.0
	11/02/2025	7.5	390	<5	8.3	620	0.06	0.03	110	<0.02	0.8	16	16	12	<10	0.1
	24/03/2025	6.9	58	<5	8.6	64	0.32	0.02	6.1	<0.02	0.8	7.9	2.4	48	<10	0.4
	31/03/2025	7.1	170	5.8	9.2	200	0.14	<0.01	14	<0.02	1.1	15	6.4	<5	<10	0.5
	8/04/2025	7.2	200	9.4	8.8	230	0.37	0.04	14	<0.02	0.4	18	3.6	<5	<10	0.3
	9/05/2025	7.5	170	<5	-	200	0.2	0.03	10	<0.02	0.8	13	4.5	<5	<10	0.5
	25/06/2025	6.9	130	24	7.5	190	1.1	0.07	6.2	<0.02	1.1	12	7.1	12	22	1.1
	8/07/2025	6.9	150	<5	8	260	0.12	0.18	8	<0.02	0.8	16	5	28	34	1.6
	14/08/2025	7.3	140	7.1	6.9	240	0.17	0.03	11	<0.02	1	16	6	<5	15	1.8
	11/09/2025	7.2	150	5.2	3.9	260	0.22	0.01	13	<0.02	1.4	19	5.2	<5	16	2.5
	13/10/2025	7.2	350	14	0.3	520	0.61	0.26	39	<0.02	0.5	58	30	<5	14	1.3
	20/11/2025	7.0	110	8.9	5.2	200	0.24	0.03	9.1	<0.02	0.7	14	4.5	<5	16	2.0
	17/12/2025	7.2	150	30	6.1	240	0.14	0.19	27	<0.5	1.2	22	9.3	<5	37	2.9
SW01 Baseline		**6.2 – 7.0**	**291**	**73**	**-**	**428**	**3.52**	**0.164**	**118**	**0.039**	**3.5**	**51**	**9**	**768**		**<0.5**

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW01	29/09/2022	1.5	0.003	<0.0002	22	0.002	0.32	2.7	0.005	14	<0.0001	0.015	3	0.071	<1
	20/10/2022	0.66	2	<0.0002	24	0.002	0.16	2.4	0.003	9.1	<0.0001	0.009	2.9	0.042	<1
	14/11/2022	130	1.3	<0.02	280	<0.10	1	130	0.1	73	<0.001	0.3	<50	4.7	<1
	14/12/2022	22	0.0016	<0.002	180	0.014	0.2	1.6	0.015	43	<0.001	0.077	6.8	0.68	<1
	18/01/2023	0.7	<0.010	<0.002	<2	<0.010	<0.01	3.2	<0.01	13	<0.01	<0.01	<5	<0.05	<1
	20/02/2023	37	0.027	0.0004	170	0.019	0.07	0.049	0.049	57	0.002	0.16	6.3	0.35	<1
	28/03/2023	150	0.002	0.0008	290	0.002	0.003	36	0.003	38	0.0001	0.46	5.1	0.97	<1
	18/04/2023	0.53	0.002	<0.0002	13	0.005	0.005	0.002	0.002	2.7	<0.0001	0.002	0.8	0.15	<1
	18/05/2023	0.16	0.002	<0.0002	23	<0.001	0.002	0.24	<0.001	7.5	<0.0001	0.002	2.3	0.02	<1
	15/06/2023	120	0.002	0.0003	350	<0.001	0.004	15	0.003	42	<0.0001	0.24	8.1	0.35	<1
	24/07/2023	0.08	0.003	<0.0002	13	<0.001	0.003	0.38	0.002	4.1	<0.0001	0.002	0.8	0.037	<1
	21/08/2023	0.52	0.001	<0.0002	17	0.001	0.002	1.2	0.001	6.3	<0.0001	0.003	<0.5	0.014	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	No surface water located at monitoring site – no sample collected													
	20/11/2023	0.13	<0.001	<0.0002	26	<0.001	0.002	5.7	<0.001	7.9	<0.0001	0.003	2.2	0.006	<1
	19/12/2023	No surface water located at monitoring site – no sample collected													
	23/01/2024	<0.05	<0.001	<0.0002	30	0.001	<0.001	1.8	<0.001	10	<0.0001	<0.001	3.4	0.006	<1
	26/02/2024	<0.005	<0.001	<0.0002	14.00	<0.001	<0.001	0.93	<0.001	4.60	<0.0001	<0.001	1.70	0.05	<1
	26/03/2024	0.11	<0.001	<0.0002	7.4	<0.001	0.002	0.38	<0.001	2	<0.0001	<0.001	1.5	0.013	<1
	18/04/2024	0.06	<0.001	<0.0002	32	<0.001	<0.001	1.4	<0.001	9.5	<0.0001	0.002	2	<0.005	<1
	20/05/3034	0.06	<0.001	<0.0002	26	<0.001	0.001	0.86	<0.001	7	<0.0001	0.002	1.7	0.014	<1
	25/06/2024	0.69	<0.001	<0.0002	94	<0.001	0.002	0.28	<0.001	15	<0.0001	0.008	2.3	0.055	<1
	10/07/2024	0.25	0.002	<0.0002	28	<0.001	0.003	2.1	<0.001	6.6	<0.0001	0.002	2	0.037	<1
	6/08/2024	0.85	<0.001	<0.0002	120	<0.001	0.004	1.3	<0.001	14	<0.0001	0.021	2.3	0.1	<1
	15/08/2024	0.24	<0.001	<0.0002	12	<0.001	0.004	0.33	<0.001	2.8	<0.0001	0.001	1.2	0.027	<1
	11/09/2024	9.1	0.009	0.0005	36	0.023	0.11	49	0.031	8.1	0.0001	0.019	5.2	0.72	<1
	24/09/2024 - Investigation	-	<0.001	<0.001	-	<0.001	0.001	-	<0.001	<0.0001	-	0.004	-	0.04	-
	9/10/2024	0.14	0.001	<0.0002	27	<0.001	0.002	1.7	<0.001	8.1	<0.0001	0.002	1.5	0.017	<1
	6/11/2024	1.2	0.004	<0.0002	26	0.005	0.011	54	0.003	6.1	<0.0001	0.004	2.8	0.041	<1
	16/12/2024	2.4	0.004	<0.0002	22	0.006	0.019	38	0.006	4.5	<0.0001	0.004	2.8	0.092	<1
	14/01/2025	0.15	<0.001	<0.0002	8.8	0.001	0.003	0.34	<0.001	1.8	<0.0001	0.001	0.6	0.018	<1
	11/02/2025	0.58	0.002	<0.0002	13.00	<0.001	<0.001	6.10	<0.001	3.50	<0.0001	0.002	1.00	0.015	<1
	24/03/2025	0.13	<0.001	<0.0002	5.20	<0.001	0.002	0.35	<0.001	1.40	<0.0001	<0.001	1.20	0.037	<1
	31/03/2025	0.1	0.002	<0.0002	22	<0.001	0.003	1.2	<0.001	6.8	<0.0001	0.002	2.4	0.066	<1
	8/04/2025	<0.05	0.002	<0.0002	29	<0.001	<0.001	2.2	<0.001	8.1	<0.0001	0.002	2.4	0.008	<1
	9/05/2025	0.27	<0.001	<0.0002	20	<0.001	0.002	1.6	<0.001	5.9	<0.0001	0.002	1.7	0.03	<1
	25/06/2025	0.11	<0.001	<0.0002	19	<0.001	0.002	0.72	<0.001	4.4	<0.0001	0.002	<0.5	0.032	<1
	8/07/2025	0.05	<0.001	<0.0002	26	<0.001	0.002	0.49	<0.001	7.2	<0.0001	0.002	<0.5	0.024	<1
	14/08/2025	0.14	<0.001	<0.0002	26	<0.001	0.003	0.69	<0.001	6.8	<0.0001	0.002	1.8	0.019	<1
	11/09/2025	0.05	0.001	<0.0002	24	<0.001	0.002	1.5	<0.001	6.8	<0.0001	0.002	1.6	0.014	<1
	13/10/2025	0.07	0.002	<0.0002	37	<0.001	0.01	0.69	<0.001	10	<0.0001	0.005	4.8	0.055	<1
	20/11/2025	<0.05	0.001	<0.0002	19	<0.001	0.002	0.0015	0.001	4.7	<0.0001	0.002	0.9	0.012	<1
	17/12/2025	0.26	0.001	<0.0002	16	<0.001	0.001	0.89	<0.001	3.8	<0.0001	0.001	1.5	0.017	<1
SW01 Baseline		**0.5**	**0.003**	**0.001**	**22**	**0.002**	**0.041**	**1.2**	**0.001**	**16**	**0.0005**	**0.006**	**6**	**0.058**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW01	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	220	220	<100	<100	<20	250	<100	<100	250	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	<50	<50	20	-	<20	<50	100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No surface water located at monitoring site – no sample collected									
	18/10/2023	No surface water located at monitoring site – no sample collected									
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	No surface water located at monitoring site – no sample collected									
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/3034	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Investigation	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	160	160	300	<100	<20	110	300	<100	410	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	17/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW01 Baseline		**60**	**-**	**24**	**100**	**-**	**50**	**130**	**90**	**170**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW02	29/09/2022	6.9	170	8.8	8	160	0.04	0.03	29	<0.02	1.3	27	2.8	22		0.1
	20/10/2022	6.5	120	6.2	8.7	140	0.02	0.01	17	<0.02	<0.20	16	2.9	<5		0.2
	14/11/2022	6.4	150	210	0.1	190	0.18	<0.01	54	<0.02	13	62	18	24		0.3
	14/12/2022	6.3	110	870	0.1	200	0.27	0.05	26	<0.10	2.7	25	29	14		1.1
	18/01/2023	6.6	220	190	0.1	61	0.79	0.049	31	<0.20	21	27	6.2	61		0.2
	20/02/2023	6.5	240	29	4.4	1300	0.023	0.31	26	<0.10	1.9	29	24	<5		0.9
	28/03/2023	4.8	310	370	5.7	370	1.5	0.19	22	<0.02	<0.20	17	92	<10		4.2
	18/04/2023	6.2	300	60	7.3	410	0.05	0.16	32	<0.02	1.38	25	120	<5		3.8
	18/05/2023	6.5	130	39	6	270	0.06	0.09	25	<0.02	<0.2	18	29	<5		1.2
	15/06/2023	6.4	190	25	8.9	280	0.37	0.23	34	<0.02	1.2	25	38	<5		1.1
	21/08/2023	6.1	430	20	5.7	690	0.02	0.5	36	<0.02	1.2	38	75	<5		2.1
	18/09/2023	7.2	180	15	8.1	260	0.06	0.04	31	<0.02	0.8	28	39	<5		1.3
	18/10/2023	6.8	150	11	8.1	240	0.05	0.02	40	<0.02	<0.2	28	13	<5		0.3
	20/11/2023	6.9	180	18	4.9	350	0.07	0.04	37	<0.01	0.3	26	50	<5		1.4
	19/12/2023	6.7	140	15	4.6	240	0.05	0.03	37	<0.02	0.7	29	11	<5		0.3
	23/01/2024	6.8	210	27	9.7	350	0.06	0.02	35	<0.02	0.5	31	25	<5		0.7
	26/02/2024	4.5	140	43	7.1	190	0.05	0.03	9	<0.02	0.6	8.5	65	<5		7.2
	26/03/2024	6.7	44	12	6.8	99	0.07	<0.01	9.5	<0.02	0.5	8.8	8.7	<5		0.9
	18/04/2024	7.6	350	<5	6.4	630	0.03	0.9	93	<0.02	0.6	78	56	<5	<10	0.6
	20/05/2024	6.7	130	27	2.1	210	0.04	0.05	20	<0.02	1.1	18	16	<5	11	0.8
	25/06/2024	6.7	180	9.7	8.8	330	0.03	<0.01	42	0.03	<0.2	35	10	<5	11	0.2
	10/07/2024	7.0	150	8.2	6.1	220	0.01	0.11	22	<0.02	1.9	18	21	<5	<10	1.0
	6/08/2024	6.5	220	8.5	7	280	0.06	0.02	39	<0.02	1.7	24	19	<5	20	0.5
	15/08/2024	6.6	48	<5	7.8	80	0.07	0.01	8	<0.02	<0.2	7	6.9	18	<10	0.9
	11/09/2024	7.1	250	<5	6.1	450	0.02	0.05	90	<0.02	0.3	71	48	<5	<10	0.5
	9/10/2024	7.0	260	<5	8.9	500	0.12	0.03	88	<0.02	0.6	73	35	<5	<10	0.4
	6/11/2024	7.5	300	6.4	6	500	0.07	<0.01	89	<0.02	1	72	34	<5	<10	0.4
	16/12/2024	6.4	200	110	8.8	310	1.1	<0.01	55	<0.02	0.4	11	19	6.6	<10	0.3
	14/01/2025	6.9	170	<5	4.6	340	0.08	<0.01	51	<0.02	0.9	44	7.7	<5	<10	0.2
	11/02/2025	7.1	96	5.6	6.1	150	0.08	<0.01	14	<0.02	1.9	91	3.9	190	<10	0.3
	24/03/2024	3.2	420	7.2	8.6	670	<0.05	0.02	17	<0.02	2.8	17	250	<5	<10	15
	31/03/2025	7.2	160	<5	9.8	200	0.14	0.05	14	<0.02	<0.4	16	7	<5	<10	0.5
	8/04/2025	7.2	150	12	6.2	230	0.37	0.03	14	<0.02	0.7	18	3.4	<5	<10	0.2
	9/05/2025	3.9	320	1,100	-	560	1.5	0.23	31	<0.02	2.8	18	150	<20	34	4.8
	25/06/2025	7.1	400	9.4	9.8	580	1.5	0.01	88	<0.03	1.5	74	38	38	14	0.4
	8/07/2025	6.9	300	14	8.4	600	0.34	0.58	96	<0.02	0.9	73	38	19	21	2.5
	14/08/2025	7.2	330	6.1	8.6	600	0.05	0.03	120	<0.02	0.7	85	31	<5	<10	3.9
	11/09/2025	7.0	320	6.1	7.9	530	0.05	0.11	87	<0.02	2.8	69	36	<5	<10	2.4
	13/10/2025	6.9	270	6.3	8.1	470	0.12	<0.01	73	0.11	1.9	60	29	<5	14	2.5
	20/11/2025	6.8	190	11	5.2	300	0.19	0.16	33	<0.02	0.9	30	16	<5	<10	2.1
	16/12/2025	7	520	8.0	7.2	240	0.11	0.13	26	<0.5	<0.5	23	9.1	<5	19	2.9
SW02 Baseline		**6.3 – 7.0**	**199**	**495**	**-**	**292**	**1.88**	**0.261**	**161**	**0.06**	**8.6**	**32**	**10**	**182**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW02	29/09/2022	0.42	0.003	<0.0002	19	0.002	0.004	1.5	0.001	5.8	<0.0001	0.002	1.9	0.057	<1
	20/10/2022	0.22	0.001	<0.0002	12	0.001	0.003	0.62	<0.001	3.4	<0.0001	0.001	1.7	0.032	<1
	14/11/2022	1.8	0.037	<0.002	47	<0.001	0.015	53	<0.01	11	<0.001	<0.01	<5	0.096	<1
	14/12/2022	13	0.066	<0.002	38	0.034	0.094	9.7	0.071	5.9	<0.001	0.013	5.1	1	<1
	18/01/2023	3.3	0.023	<0.002	<2	<0.01	0.015	45	0.014	5.8	<0.001	<0.010	<5	0.15	<1
	20/02/2023	12	0.033	0.0002	38	0.009	0.09	0.013	0.013	11	<0.001	0.018	4.1	0.28	<1
	28/03/2023	3.4	0.002	0.0003	43	0.002	0.003	2.5	0.001	8.4	<0.0001	0.024	4.1	0.63	<1
	18/04/2023	0.86	<0.001	<0.0002	20	0.002	0.002	<0.001	<0.001	4	<0.0001	0.006	2.7	0.089	<1
	18/05/2023	0.72	0.002	<0.0002	17	0.002	0.006	1	0.002	4.3	<0.0001	0.003	2.4	0.081	<1
	15/06/2023	1.7	0.001	<0.0002	22	0.001	0.004	2.1	0.001	5.5	<0.0001	0.005	1.9	0.037	<1
	21/08/2023	1.1	<0.001	<0.0002	71	<0.001	<0.001	8	<0.001	16	<0.0001	0.024	5.7	0.057	<1
	18/09/2023	1.7	0.003	<0.0002	19	0.002	0.004	3	0.002	6.3	<0.0001	0.005	3	0.023	<1
	18/10/2023	0.88	0.002	<0.0002	17	0.001	0.003	2.2	0.001	5.5	<0.0001	0.002	1.9	0.014	<1
	20/11/2023	2.3	0.002	<0.0002	19	0.002	0.002	2.6	<0.001	6.7	<0.0001	0.007	1.4	0.032	<1
	19/12/2023	1.1	0.002	<0.0002	19	0.001	0.001	4.8	<0.001	6.5	0.0002	0.004	2.9	0.012	<1
	23/01/2024	2.9	0.003	<0.0002	23	0.002	0.001	5.8	<0.001	7.8	<0.0001	0.007	3.3	0.031	<1
	26/02/2024	1.5	0.001	<0.0002	9.7	0.001	0.003	1.7	<0.001	2.5	<0.0001	0.004	1.4	0.027	<1
	26/03/2024	0.34	<0.001	<0.0002	6.9	0.001	0.003	0.67	<0.001	1.9	<0.0001	0.001	1.8	0.021	<1
	18/04/2024	0.09	<0.001	<0.0002	20	<0.001	<0.001	0.39	<0.001	5.4	<0.0001	<0.001	14	0.014	<1
	20/05/2024	0.71	0.004	<0.0002	19	0.002	0.003	5.6	<0.001	3.8	<0.0001	0.003	3	0.015	<1
	25/06/2024	1.1	<0.001	<0.0002	21	<0.001	0.001	1.4	<0.001	4.6	<0.0001	0.004	4.5	0.022	<1
	10/07/2024	1.1	0.002	<0.0002	20	<0.001	0.004	1.2	<0.001	4.2	<0.0001	0.004	2.3	0.047	<1
	6/08/2024	0.61	0.001	<0.0002	17	0.001	0.002	1.4	<0.001	3.7	<0.0001	0.002	3	0.019	<1
	15/08/2024	0.31	0.002	<0.0002	8	0.001	0.004	0.37	<0.001	1.5	<0.0001	0.001	1.4	0.038	<1
	11/09/2024	0.19	<0.001	<0.0002	20	<0.001	0.001	0.31	<0.001	4.8	<0.0001	0.001	14	0.021	<1
	9/10/2024	0.8	<0.001	<0.0002	23	<0.001	0.001	1.5	<0.001	5	<0.0001	0.003	15	0.032	<1
	6/11/2024	0.007	0.001	<0.0002	21	<0.001	<0.001	0.7	<0.001	5.8	<0.0001	<0.001	15	0.011	<1
	16/12/2024	0.05	<0.001	<0.0002	14	<0.001	0.001	0.24	<0.001	3.1	<0.0001	<0.001	9.4	0.008	<1
	14/01/2025	0.06	<0.001	<0.0002	14	0.001	0.002	0.28	<0.001	2.7	<0.0001	0.001	9.4	0.015	<1
	11/02/2025	0.82	<0.001	<0.0002	24	<0.001	0.002	4.4	<0.001	4.8	<0.0001	0.005	19	0.058	<1
	24/03/2024	7.4	<0.001	<0.0002	56	0.002	0.001	22	<0.001	6.9	<0.0001	0.021	1.8	0.097	<1
	31/03/2025	0.25		<0.0002	23	<0.001	0.003	1.7	<0.001	7	<0.0001	0.002	2.5	0.054	<1
	8/04/2025	0.1	0.001	<0.0002	29	<0.001	0.001	2.7	<0.001	8.3	<0.0001	0.002	2.3	0.015	<1
	9/05/2025	2.3	0.007	<0.0002	34	0.005	0.002	140	<0.001	9.1	<0.0001	0.011	2.1	0.077	<1
	25/06/2025	0.3	<0.001	<0.0002	21	<0.001	0.001	1.1	<0.001	5.4	<0.0001	0.002	14	0.03	<1
	8/07/2025	0.15	<0.001	<0.0002	19	<0.001	<0.001	0.65	<0.001	5.3	<0.0001	0.001	12	0.018	<1
	14/08/2025	0.11	<0.001	<0.0002	21	<0.001	<0.001	0.39	<0.001	5.9	<0.0001	<0.001	11	0.012	<1
	11/09/2025	0.32	0.001	<0.0002	21	<0.001	0.002	1.2	<0.001	5.6	<0.0001	0.001	11	0.016	<1
	13/10/2025	0.15	0.002	<0.0002	19	<0.001	0.004	0.82	<0.001	5.2	<0.0001	0.002	11	0.054	<1
	20/11/2025	0.53	0.002	<0.0002	20	0.001	0.002	1.8	0.002	4.9	<0.0001	0.002	3.9	0.021	<1
	16/12/2025	0.26	<0.001	<0.0002	16	0.002	<0.001	1.5	0.001	4.0	<0.0001	0.002	1.6	0.010	<1
SW02 Baseline		**3.8**	**0.045**	**0.001**	**17**	**0.007**	**0.012**	**71.9**	**0.02**	**5**	**0.0005**	**0.005**	**6**	**0.09**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW02	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	90	<100	<20	<50	60	30	90	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	180	180	30	-	<20	170	30	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	200	<100	<20	<50	100	<100	100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	140	140	100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW02 Baseline		**60**	**-**	**22**	**100**	**-**	**50**	**100**	**50**	**140**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW03	29/09/2022	6.8	120	<5	9.3	100	0.02	<0.01	24	<0.02	1.10	23	2	<5		0.1
	20/10/2022	5.9	650	26	7.5	870	0.03	<0.01	270	<0.02	<0.2	12	13	<5		0.0
	14/11/2022	6.5	140	260	2.6	160	0.13	<0.05	27	<0.01	7.40	36	9	<5		0.3
	14/12/2022	6.5	110	11	4.4	160	0.01	0.05	23	<0.01	3.90	18	11	<5		0.5
	18/01/2023	6.5	160	9	5.1	<5	0.02	<0.010	31	<0.02	1.30	26	17	<5		0.5
	20/02/2023	3.4	540	13	6.0	720	0.01	<0.010	22	<0.02	5.10	28	100	<5		4.5
	28/03/2023	3.3	400	7	9.9	750	0.02	0.07	14	<0.02	<0.2	16	110	<5		7.9
	18/04/2023	4.2	280	<5	7.4	450	<0.01	0.04	29	<0.02	<0.2	22	140	<5		4.8
	18/05/2023	4.3	310	37	5.5	580	0.02	0.32	22	<0.02	12.33	21	230	<5		10
	15/06/2023	3.3	580	17	8.9	870	0.04	0.68	32	<0.02	1.40	31	300	<5		9.4
	24/07/2023	3.9	290	36	9	510	0.03	0.4	17	<0.02	1	20	250	<5		15
	21/08/2023	6.8	270	5.8	7.2	350	0.04	0.04	45	<0.02	0.5	43	8	<5		0.2
	18/09/2023	4.6	410	20	7.4	540	<0.01	0.28	30	<0.02	0.4	29	230	<5		7.7
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.5	640	18	7.1	1100	0.03	0.58	32	<0.01	0.6	30	370	6.7		12
	19/12/2023	3.8	610	7.7	6.7	850	<0.01	0.86	36	<0.02	0.9	37	150	<5		4.2
	23/01/2024	3.7	460	55	4.1	880	<0.01	0.16	31	<0.02	1.6	37	100	<5		3.2
	26/02/2024	4.3	200	93	7.5	250	0.09	0.09	53	0.02	1.5	11	440	7.2		8.3
	26/03/2024	6.1	170	54	7.7	300	0.08	0.13	21	<0.02	1	20	78	<5		3.7
	18/04/2024	7.5	360	9.2	7.4	650	0.03	0.08	88	<0.02	0.8	78	64	<5	<10	0.6
	20/05/2024	4.5	300	21	5.6	450	<0.01	0.5	19	<0.02	1.2	23	190	<5	66	10
	25/06/2024	6.3	80	2300	7.2	140	0.98	<0.1	9.4	<0.2	140	9	5	<5	48	0.5
	10/07/2024	4.4	260	29	5.1	400	0.01	0.64	19	<0.02	0.7	21	10	<5	50	0.5
	6/08/2024	4.6	340	22	6.3	630	0.02	0.62	35	<0.02	1.3	29	230	<5	70	6.6
	15/08/2024	6.3	82	19	8.3	120	0.04	0.07	9.5	<0.02	<0.2	9	31	<5	11	3.3
	11/09/2024	7.1	290	<5	7.7	440	<0.01	0.11	84	<0.02	0.3	66	56	<5	<10	0.7
	9/10/2024	6.6	240	330	7.7	360	0.46	<0.01	56	<0.02	7.1	45	35	33	<10	0.6
	6/11/2024	7.2	300	49	7.5	460	0.07	<0.01	88	<0.02	1.2	72	39	<5	<10	0.4
	16/12/2024	7.2	250	5.3	19.0	370	<0.01	<0.01	70	<0.02	0.7	61	31	50	<10	0.4
	14/01/2025	6.9	220	<5	7.7	420	0.04	<0.01	66	<0.02	1.3	57	11	<5	<10	0.2
	11/02/2025	7.4	340	<5	7.5	570	0.07	0.02	99	<0.02	1.4	87	14	<5	<10	0.1
	24/03/2024	6.9	130	<5	8.1	230	0.05	<0.01	38	<0.02	0.9	32	66	<5	<10	1.7
	31/03/2025	7.0	260	9.3	9.8	440	0.06	0.19	100	<0.02	0.9	70	26	<5	<10	0.3
	8/04/2025	7.2	290	<5	8.9	470	0.04	0.07	100	<0.02	0.4	82	36	<5	<10	0.4
	9/05/2025	7.1	290	<5	-	460	<0.01	<0.1	100	<0.02	0.7	73	36	<5	<10	0.4
	25/06/2025	6.7	360	230	6.5	540	2.3	0.01	88	<0.03	2.3	68	36	46	14	0.4
	8/07/2025	6.8	300	82	9.1	570	0.15	0.48	89	<0.02	1.1	67	39	27	<10	0.4
	14/08/2025	7.2	300	16	9.1	580	0.08	0.05	110	<0.02	1	81	32	<5	<10	0.3
	11/09/2025	6.8	300	6.7	12.0	530	0.05	0.22	84	<0.02	0.7	67	43	43	11	0.5
	13/10/2025	7.2	340	7.5	9	620	0.07	<0.01	100	<0.02	0.8	83	43	16	<10	0.4
	20/11/2025	6.6	190	28	4.7	300	0.15	0.19	28	<0.02	1.0	28	35	<5	<10	1.3
	16/12/2025	6.3	96	400	0.3	170	0.94	0.18	14	<0.5	12	17	18	17	38	1.3
SW03 Baseline		**6.1 - 6.7**	**191**	**1005**	**-**	**281**	**2.14**	**0.155**	**111**	**0.041**	**4.3**	**30**	**6**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW03	29/09/2022	0.4	0.00	<0.0002	13	0.00	0.00	0.8	<0.001	4.4	<0.0001	0.002	1.00	0.034	<1
	20/10/2022	0.5	0.00	<0.0002	8	0.00	0.00	0.9	0.00	2.3	<0.0001	0.001	1.00	0.03	<1
	14/11/2022	1.1	<0.001	<0.002	18	<0.001	0.00	1.9	<0.010	5.7	<0.001	<0.01	<5	0.24	<1
	14/12/2022	0.6	<0.001	<0.002	13	<0.01	<0.010	1.3	<0.010	<5	<0.001	<0.01	<5	0.53	<1
	18/01/2023	0.5	0.01	<0.002	<2	<0.010	<0.01	0.5	<0.01	6.2	<0.001	<0.01	<5	<0.05	<1
	20/02/2023	17	0.00	<0.0002	63	0.00	0.02	0.0	0.00	14.0	<0.001	0.065	3.00	0.12	<1
	28/03/2023	15	<0.001	<0.0002	63	0.00	0.00	4.5	<0.001	11.0	<0.0001	0.065	2.30	0.15	<1
	18/04/2023	3.8	<0.001	<0.0002	30	0.00	0.00	<0.001	<0.001	5.0	<0.0001	0.023	2.10	0.048	<1
	18/05/2023	5.8	<0.001	<0.0002	48	<0.001	0.00	14.0	<0.001	10.0	<0.0001	0.033	2.80	0.16	<1
	15/06/2023	11	<0.001	<0.0002	74	<0.001	0.00	12	<0.001	15.0	<0.0001	0.058	2.7	0.15	<1
	24/07/2023	7.1	<0.001	<0.0002	39	<0.001	0.002	8.9	0.001	9.7	<0.0001	0.030	2.5	0.1	<1
	21/08/2023	0.7	0.001	<0.0002	18	0.001	0.003	1.1	<0.001	6.3	<0.0001	0.002	6.8	0.026	<1
	18/09/2023	2.8	<0.001	<0.0002	59	<0.001	<0.001	1.1	<0.001	14.0	<0.0001	0.022	3.2	0.049	<1
	18/10/2023	3.0	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12.0	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	11.0	0.002	<0.0002	75	<0.001	<0.001	17	<0.001	17.0	<0.0001	0.060	3	0.14	<1
	19/12/2023	21.0	0.003	0.0011	80	<0.001	0.002	3.6	0.001	19.0	0.0007	0.071	4.3	0.16	<1
	23/01/2024	17.0	0.002	<0.0002	63	0.002	0.001	17	<0.001	19.0	<0.0001	0.059	5.1	0.13	<1
	26/02/2024	8.8	0.003	<0.0002	17	0.003	0.005	9	0.002	4.8	<0.0001	0.016	1.8	0.05	<1
	26/03/2024	0.9	<0.001	<0.0002	24	<0.001	<0.001	1.8	<0.001	6.1	<0.0001	0.009	2.8	0.025	<1
	18/04/2024	1.1	<0.001	<0.0002	22	<0.001	<0.001	1.8	<0.001	6.0	<0.0001	0.005	13	0.018	<1
	20/05/2024	5.4	0.002	<0.0002	34	<0.001	<0.001	13	<0.001	7.3	<0.0001	0.026	3.6	0.047	<1
	25/06/2024	0.2	<0.001	<0.0002	10	<0.001	<0.001	170	<0.001	2.7	<0.0001	0.011	2.3	0.042	<1
	10/07/2024	3.6	0.001	<0.0002	34	<0.001	0.001	6.6	<0.001	6.6	<0.0001	0.019	3	0.053	<1
	6/08/2024	3.10	<0.001	<0.0002	51	<0.001	<0.001	4.8	<0.001	7.8	<0.0001	0.026	3.4	0.092	<1
	15/08/2024	1.20	0.00	<0.0002	12	<0.001	0.003	2.1	<0.001	2.2	<0.0001	0.004	1.6	0.037	<1
	11/09/2024	0.59	<0.001	<0.0002	21	<0.001	0.001	1.0	<0.001	4.9	<0.0001	0.003	13	0.021	<1
	9/10/2024	20	0.02	<0.0002	21	0.011	0.01	39.0	0.008	4.4	<0.0001	0.008	8.8	0.1	<1
	6/11/2024	3	0.00	<0.0002	23	0.002	0.002	4.5	<0.001	6.2	<0.0001	0.003	15	0.017	<1
	16/12/2024	0.29	0.001	<0.0002	19	0.001	<0.001	1.6	<0.001	4	<0.0001	0.001	12	0.009	<1
	14/01/2025	0.17	0.001	<0.0002	17	<0.001	0.001	0.74	<0.001	3.3	<0.0001	0.001	12	0.016	<1
	11/02/2025	0.45	0.001	<0.0002	23	<0.001	<0.001	2.1	<0.001	4.5	<0.0001	0.001	18	0.031	<1
	24/03/2024	0.18	0.001	<0.0002	10	<0.001	0.002	0.79	<0.001	2.6	<0.0001	0.001	6.6	0.036	<1
	31/03/2025	0.42	0.002	<0.0002	21	<0.001	0.001	3.5	<0.001	4.9	<0.0001	0.002	11	0.045	<1
	8/04/2025	0.3	<0.001	<0.0002	21	<0.001	<0.001	1.3	<0.001	5.4	<0.0001	0.002	11	0.012	<1
	9/05/2025	0.62	0.002	<0.0002	20	<0.001	0.001	2	<0.001	4.9	<0.0001	0.005	11	0.042	<1
	25/06/2025	2	0.002	<0.0002	21	<0.001	0.003	6.1	0.001	5.2	<0.0001	0.002	12	0.053	<1
	8/07/2025	0.24	<0.001	<0.0002	19	<0.001	<0.001	0.49	<0.001	5	<0.0001	0.001	11	0.015	<1
	14/08/2025	0.2	<0.001	<0.0002	20	<0.001	<0.001	0.59	<0.001	5.8	<0.0001	0.001	11	0.01	<1
	11/09/2025	2	0.003	<0.0002	19	0.002	0.004	4	0.002	5.4	<0.0001	0.003	11	0.037	<1
	13/10/2025	0.29	0.001	<0.0002	22	<0.001	0.002	0.97	<0.001	5.9	<0.0001	0.001	16	0.019	<1
	20/11/2025	2.4	0.004	<0.0002	22	0.003	0.003	8.8	0.003	4.7	<0.0001	0.003	4.4	0.015	<1
	16/12/2025	6.0	0.003	<0.0002	15	0.002	0.005	2.7	0.002	3.2	<0.0001	0.007	2.4	0.14	<1
SW03 Baseline		**7.9**	**0.058**	**0.001**	**21**	**0.008**	**0.028**	**85.5**	**0.028**	**5**	**0.0005**	**0.006**	**4**	**0.26**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW03	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	<50	<100	<20	<50	<100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	130	130	<100	<100	<20	<50	10	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW03 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**120**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW04	29/09/2022	4.5	68	<5	4.8	52	0.01	0.18	20	<0.02	5.1	17	<2	<5		0.05
	20/10/2022	4.2	90	<5	7.5	110	0.01	<0.10	20	<0.02	0.3	16	<2	<5		0.05
	14/11/2022	No surface water located at monitoring site – no sample collected														
	14/12/2022	3.2	190	<5	2	280	0.01	0.05	42	<0.10	3.2	20	<2	<5		0.02
	18/01/2023	No surface water located at monitoring site – no sample collected														
	20/02/2023	4.1	0.2	<5	5.9	160	0.02	0.09	22	<0.10	7.4	23	15	<5		0.7
	28/03/2023	4.2	68	<5	8	130	<0.01	<0.01	17	<0.10	<0.25	14	25	<5		1.5
	18/04/2023	4.6	130	16	9.1	190	0.01	0.03	32	<0.02	0.5	21	8.7	<5		0.3
	18/05/2023	3.6	1,200	42	8	1,800	0.03	1.2	26	<0.02	1.15	53	1,000	<5		38.5
	15/06/2023	4.2	140	160	7.7	200	1.5	0.44	44	<0.02	12	24	<2	8		0.02
	24/07/2023	3.6	1,600	21	9	2,400	0.02	1.5	180	<0.02	3.4	78	5,700	<5		31.7
	21/08/2023	3.3	2,400	5.7	7.5	3,700	<0.01	2.8	33	<0.02	3.4	97	850	5.3		25.8
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.2	2,100	<5	9	3,500	0.03	0.8	4.7	<0.01	1.1	63	400	<5		85.1
	19/12/2023	3.0	3,200	15	0.8	3,700	<0.01	0.44	34	<0.02	4.5	100	980	<5		28.8
	23/01/2024	3.1	1,600	23	7.8	2,500	<0.01	0.19	27	<0.02	0.5	54	730	<5		27.0
	26/02/2024	3.1	1,000	11	7.8	1,200	0.03	0.31	14	<0.02	1.5	30	570	<5		40.7
	26/03/2024	3.2	900	5.7	9.6	1,300	<0.01	0.36	21	<0.02	0.9	30	710	<5		33.8
	18/04/2024	3.1	980	67	7.5	1,900	0.03	0.42	15	<0.02	0.8	33	1,000	27	310	66.7
	20/05/2024	3.3	630	8	8.3	1,100	<0.01	0.3	11	<0.02	0.7	25	500	<5	190	45.5
	25/06/2024	3.2	1,000	5.4	8.6	1,600	0.01	0.4	13	<0.02	1	27	270	<5	160	20.8
	10/07/2024	3.5	420	<5	7.9	870	<0.01	0.24	11	<0.02	0.6	21	450	<5	150	40.9
	6/08/2024	3.3	1,300	38	8.7	1,700	0.04	0.03	13	<0.02	1.1	28	860	7.8	230	66.2
	15/08/2024	3.9	240	<5	9.3	390	0.02	0.13	13	<0.02	0.8	16	150	<5	40	11.5
	11/09/2024	3.4	460	<5	6.9	690	0.01	0.05	8.7	<0.02	<0.2	17	390	15	77	44.8
	24/09/2024 - Additional	3.5	750	-	-	1,300	-	-	-	-	-	-	-	-	-	-
	9/10/2024	3.1	810	<5	9	1,200	0.02	<0.01	10	<0.02	0.8	26	580	<5	<10	58.0
	6/11/2024	3.3	440	23	6.4	660	0.05	<0.01	10	<0.02	1	18	310	<5	15	31.0
	16/12/2024	5.7	210	420	0.2	360	0.1	0.25	13	<0.02	13	12	110	7	25	8.5
	14/01/2025	4.1	310	120	4.9	460	0.13	0.03	6.3	<0.02	1.3	11	64	<5	<10	10.2
	11/02/2025	7.6	700	<5	8.8	1000	0.01	0.03	5.8	<0.02	1.3	21	150	7.7	<10	25.9
	24/03/2025	3.9	390	21	7.4	470	0.03	0.03	18	<0.02	1.5	24	180	8.1	<10	10.0
	31/03/2025	6.3	260	70	10	370	<0.01	0.1	11	<0.02	0.8	16	160	<5	<10	14.5
	8/04/2025	6.0	430	43	4.1	470	0.09	0.27	11	0.04	2.3	18	240	<10	16	21.8
	9/05/2025	6.5	270	260	-	570	<0.01	0.02	10	<0.02	4.5	16	250	160	<10	25.0
	25/06/2025	6.7	410	67	6.1	590	0.6	0.01	8.3	<0.02	0.6	16	160	6.5	28	19.2
	8/07/2025	4.0	140	180	6.1	160	0.21	<0.01	21	<0.02	6.2	17	<2	7.6	43	21.0
	14/08/2025	6.5	180	250	6.6	290	0.47	-	9.4	-	-	14	86	<5	13	9.4
	11/09/2025	6.5	260	1,400	0.2	460	0.03	0.31	7.3	<0.02	38	16	150	10	22	7.3
	13/10/2025	7.3	580	14	8.3	760	0.04	<0.01	4	<0.02	0.8	16	230	20	<10	4.0
	20/11/2025	6.9	280	35	2.1	490	0.08	0.05	8.4	<0.02	1.0	15	150	2.7	<10	8.4
	16/12/2025	7	370	170	6.0	550	0.05	0.21	14	<0.5	1.0	87	140	<5	39	14.0
SW04 Baseline		**4.2 – 4.5**	**112**	**293**	**-**	**165**	**0.5**	**0.693**	**90**	**0.052**	**4.5**	**20**	**3**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW04	29/09/2022	1.3	0.001	<0.0002	1.6	0.005	0.001	2.7	0.001	2.6	<0.0001	0.002	1	0.027	<1
	20/10/2022	1.1	<0.001	<0.0002	1.3	0.004	0.001	2.4	0.001	2.3	<0.0001	0.002	1	0.024	<1
	14/11/2022	No surface water located at monitoring site – no sample collected													
	14/12/2022	1.2	<0.001	<0.002	<5	<0.001	<0.01	3.2	<0.01	<5	<0.001	<0.01	<5	0.084	<1
	18/01/2023	No surface water located at monitoring site – no sample collected													
	20/02/2023	1.6	0.002	<0.0002	2.7	0.005	0.05	0.002	0.002	3.9	<0.001	0.003	1.6	0.039	<1
	28/03/2023	1.1	<0.01	<0.002	<5	0.002	<0.01	2.7	<0.01	<5	<0.0001	0.01	<5	<0.05	<1
	18/04/2023	0.85	<0.001	<0.0002	1.8	<0.01	<0.001	<0.001	<0.001	2.7	<0.0001	0.001	0.8	0.034	<1
	18/05/2023	41	<0.001	0.0005	200	<0.001	0.003	16	0.003	31	<0.0001	0.11	5.7	0.4	<1
	15/06/2023	3.1	0.002	<0.0002	2.2	0.007	0.007	6.3	0.005	4.5	<0.0001	0.003	1.4	0.075	1.41
	24/07/2023	50	<0.001	0.0002	330	<0.001	0.003	3.9	0.002	51	<0.0001	0.13	9	0.18	<1
	21/08/2023	72	0.002	0.0004	560	<0.001	0.003	3.4	0.002	83	<0.0001	0.23	13	0.34	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	3	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	91	0.003	0.0007	380	0.001	0.003	4.3	0.003	52	<0.0001	0.27	7.2	0.55	<1
	19/12/2023	110	0.005	0.0022	570	0.002	0.005	11	0.007	90	0.001	0.39	4.3	0.7	<1
	23/01/2024	55	0.002	0.0003	260	0.002	0.003	9.7	0.002	35	<0.0001	0.19	6.1	0.33	<1
	26/02/2024	23	<0.001	<0.0002	140	<0.001	<0.001	5.1	<0.001	20	<0.0001	0.083	3.9	0.18	<1
	26/03/2024	20	<0.001	<0.0002	130	<0.001	<0.001	3.1	<0.001	19	<0.0001	0.068	4.9	0.1	<1
	18/04/2024	32	<0.001	<0.0002	190	0.001	0.002	7	<0.001	26	<0.0001	0.1	3.6	0.18	<1
	20/05/2024	20	<0.001	<0.0002	100	<0.001	<0.001	5.7	<0.001	14	<0.0001	0.064	2.6	0.13	<1
	25/06/2024	16	<0.001	<0.0002	210	<0.001	<0.001	5.3	<0.001	23	<0.0001	0.059	3.7	0.09	<1
	10/07/2024	12	<0.001	<0.0002	110	<0.001	0.001	2.5	<0.001	12	<0.0001	0.051	2.2	0.11	<1
	6/08/2024	17	<0.001	<0.0002	200	<0.001	0.001	5.5	<0.001	24	<0.0001	0.059	2.5	0.1	<1
	15/08/2024	2	<0.001	<0.0002	36	<0.001	<0.001	0.81	<0.001	6	<0.0001	0.015	2.5	0.057	<1
	11/09/2024	5.6	<0.001	<0.0002	87	<0.001	<0.001	3.6	<0.001	11	<0.0001	0.026	1.6	0.061	<1
	24/09/2024 - Additional	-	<0.001	<0.0001	-	<0.001	0.0001	-	<0.001	-	<0.0001	0.032	-	0.043	-
	9/10/2024	14	<0.001	<0.0002	140	<0.001	0.002	8.1	<0.001	17	<0.0001	0.057	2.7	0.12	<1
	6/11/2024	2.8	<0.001	<0.0002	81	<0.001	<0.001	6.1	<0.001	11	<0.0001	0.02	<0.5	0.034	<1
	16/12/2024	4.4	0.007	<0.0002	29	0.009	0.006	170	0.003	4.5	<0.0001	0.009	1.3	0.035	<1
	14/01/2025	1.2	<0.001	<0.0002	53	<0.001	0.001	5.8	<0.001	5.8	<0.0001	0.014	0.8	0.039	<1
	11/02/2025	<0.05	<0.001	<0.0002	200	<0.001	<0.001	0.14	<0.001	18	<0.0001	0.004	<0.5	0.033	<1
	24/03/2025	1.1	<0.001	<0.0002	52	<0.001	0.002	6.6	<0.001	8.5	<0.0001	0.012	2.3	0.1	<1
	31/03/2025	0.5	0.003	<0.0002	50	<0.001	0.001	17	<0.001	7.6	<0.0001	0.007	2.4	0.047	<1
	8/04/2025	0.36	0.004	<0.0002	70	<0.001	<0.001	38	<0.001	9.8	<0.0001	0.006	2.3	0.014	<1
	9/05/2025	0.64	<0.001	<0.0002	61	<0.001	0.001	34	<0.001	7.9	<0.0001	0.001	1.9	0.032	<1
	25/06/2025	0.35	<0.001	<0.0002	85	<0.001	<0.001	7.3	<0.001	8.5	<0.0001	0.004	1.3	0.013	<1
	8/07/2025	0.92	<0.001	<0.0002	0.6	0.004	0.002	1.8	<0.001	1.5	<0.0001	0.001	0.8	0.042	<1
	14/08/2025	0.34	<0.001	<0.0002	38	<0.001	<0.001	17	<0.001	5.7	<0.0001	0.002	1	0.018	<1
	11/09/2025	8.7	0.031	<0.002	120	0.017	0.011	830	<0.01	12	<0.001	0.027	<5	0.1	<1
	13/10/2025	0.31	0.002	<0.0002	130	<0.001	<0.001	12	<0.001	14	<0.0001	0.004	1.5	<0.005	<1
	20/11/2025	0.26	<0.001	<0.0002	69	<0.001	0.002	7.6	0.001	8.5	<0.0001	0.003	0.6	0.016	<1
	16/12/2025	13	0.002	<0.0002	57	0.003	<0.001	47	0.002	38	<0.0001	0.032	2.4	0.039	<1
SW04 Baseline		**1.4**	**0.002**	**0.001**	**3.2**	**0.007**	**0.002**	**2.8**	**0.002**	**2.3**	**0.0005**	**0.005**	**2.9**	**0.028**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW04	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	No flow - No sample collected									
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	No flow - No sample collected									
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No flow - No sample collected									
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	160	160	<100	<100	<20	<50	<100	<100	160	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Additional	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW04 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW05	29/09/2022	5.9	480	5.2	7.7	510	0.12	0.17	220	<0.20	3	140	11	<5		0.05
	20/10/2022	6.2	650	7.2	8.9	690	0.06	0.24	180	<0.20	0.5	160	8.6	<5		0.05
	14/11/2022	6.2	820	13	4.7	1,000	0.06	<0.05	310	<0.10	8.1	260	100	<5		0.32
	14/12/2022	6.2	830	16	7.5	1,100	0.05	0.05	330	<0.10	3.1	240	40	<5		0.12
	18/01/2023	6.3	2,800	33	7	<5	0.09	0.09	1,300	<0.02	3.38	820	160	<5		0.12
	20/02/2023	6.7	18	18	5.4	2,300	0.1	0.07	2,000	<0.10	3.4	4700	890	<5		0.45
	28/03/2023	5.6	470	<5	9.4	760	0.02	0.08	200	<0.10	<0.02	110	23	6.7		0.12
	18/04/2023	6.4	4,000	16	8.5	5,300	0.1	0.12	2,000	<0.02	80	1100	230	<5		0.12
	18/05/2023	5.8	260	17	5.7	460	0.08	<0.01	110	<0.02	<0.2	64	25	<5		0.23
	15/06/2023	6.2	1,100	<5	8.8	1,400	0.58	0.14	450	<0.02	1.1	250	40	<5		0.09
	24/07/2023	6.5	1,600	<5	9.3	2,800	0.05	0.17	1,500	<0.5	1.1	440	1,200	<5		0.80
	21/08/2023	6.6	1,600	<5	6.3	2,900	0.06	0.15	1,500	<0.02	1.28	480	190	<5		0.13
	18/09/2023	6.6	2,500	13	6.4	3,800	0.06	0.11	1,200	<0.02	1.3	650	210	<5		0.18
	18/10/2023	6.9	4,800	6.6	6.5	7,700	0.06	0.05	2,700	<0.02	<0.2	1,300	730	10		0.27
	20/11/2023	6.8	2,100	12	4.8	3,700	0.18	0.46	1,100	<0.01	0.6	460	1,200	<5		1.09
	19/12/2023	6.7	3,300	14	5.3	5,400	0.19	0.77	1,700	<0.02	<2	1,000	64	<5		0.04
	23/01/2024	6.2	1,100	13	9.3	1,000	0.09	0.05	440	<0.02	2.3	260	220	<5		0.50
	26/02/2024	6.3	970	16	8.6	1,200	0.11	0.03	330	<0.02	1.5	200	130	<5		0.39
	26/03/2024	6.6	1,100	9.1	5.6	1,700	0.03	0.09	910	<0.02	2	290	420	<5		0.46
	18/04/2024	6.5	560	8.4	5.8	830	0.07	0.16	160	<0.02	1.7	110	160	5.4	<10	1.00
	20/05/2024	6.7	240	<5	5.8	350	<0.01	0.03	68	<0.02	0.4	47	140	<5	15	2.06
	25/06/2024	6.5	1,000	16	7.7	1,800	0.06	0.1	500	<0.02	1.2	300	29	<5	16	0.06
	10/07/2024	6.2	950	5.6	6.3	1,700	0.02	0.16	170	<0.02	0.9	280	130	<5	11	0.76
	6/08/2024	6.3	3,300	9	8.9	5,800	0.05	0.11	1500	<0.02	1.2	820	210	<5	27	0.14
	15/08/2024	6.2	300	<5	7.1	430	0.08	0.03	30	<0.02	<0.2	80	27	<5	12	0.90
	11/09/2024	6.4	710	8.2	5.5	1,200	0.03	0.4	450	<0.02	1.1	230	72	<5	12	0.16
	9/10/2024	6.4	700	11	9	1,100	0.15	0.15	320	<0.1	<0.25	180	53	<5	14	0.17
	6/11/2024	7.1	930	15	6.1	1,300	0.08	0.16	440	<0.02	1	250	56	<5	<10	0.13
	16/12/2024	7.4	31,000	26	9.3	44,000	0.02	0.14	1,400	<0.02	0.4	<0.5	2,000	<5	<10	1.43
	14/01/2025	7.1	19,000	9.4	6.2	30,000	0.04	0.04	12,000	<0.02	0.3	5,500	500	<5	<10	0.04
	11/02/2025	7.5	24,000	9.1	8.5	35,000	0.03	0.06	6,300	<0.02	<0.2	6,900	260	<5	<10	0.04
	24/03/2024	6.3	1,600	<5	7	2,500	<0.1	0.12	790	<0.02	4.4	440	140	<5	<10	0.18
	31/03/2025	7.0	210	8	9.2	260	0.08	<10	72	<0.02	2.3	41	9.5	<5	<10	0.13
	8/04/2025	6.3	610	8.3	6.7	760	0.08	0.44	230	<0.2	<1	140	29	<10	<10	0.13
	9/05/2025	6.8	340	<5	-	480	0.08	<0.1	120	<0.2	1.7	71	40	<5	<10	0.33
	25/06/2025	6.2	2,000	6.6	5.9	3,500	<0.2	0.07	1,700	<0.2	<0.2	510	250	<5	17	0.14
	8/07/2025	6.0	470	<5	8	910	0.05	0.03	230	0.07	<0.2	130	41	<5	13	0.18
	14/08/2025	6.2	570	16	6.1	930	0.08	0.03	550	<0.02	16	140	62	6.5	13	0.11
	11/09/2025	6.5	940	5.4	6.9	1,700	0.04	0.05	440	<0.02	1.7	260	61	<5	9	0.14
	13/10/2025	6.8	6,600	<5	5.4	11,000	0.05	0.1	3,300	<0.02	1.7	1,800	370	<5	12	0.11
	20/11/2025	6.6	4,600	<5	4.3	9,000	0.10	0.21	2,600	<0.02	0.4	1,400	320	<5	12	0.12
	16/12/2025	6.8	11,000	18	4.1	18,000	0.07	0.28	6,100	<0.5	1.2	2,800	720	<5	34	0.12
SW05 Baseline		**5.1 – 7.2**	**4710**	**136**	**-**	**6,927**	**0.21**	**0.592**	**980**	**0.02**	**2.2**	**1,667**	**115**	**63**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW05	29/09/2022	0.83	<0.001	<0.0002	9.4	0.002	<0.001	4.6	<0.001	17	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.66	<0.001	<0.0002	11	0.001	<0.001	3.5	0.001	19	<0.0001	0.002	7.9	0.007	<1
	14/11/2022	0.75	<0.001	<0.002	18	<0.001	0.002	5.4	<0.01	27	<0.001	<0.001	11	0.12	<1
	14/12/2022	0.93	<0.001	<0.002	16	<0.01	<0.01	6.1	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.73	<0.01	<0.002	<2	<0.01	<0.01	6.2	<0.01	96	<0.001	<0.01	41	<0.05	<1
	20/02/2023	0.22	0.002	<0.0002	190	0.001	0.01	<0.001	<0.001	550	<0.001	0.001	170	0.008	<1
	28/03/2023	0.77	<0.01	<0.002	9.4	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.4	<0.05	<1
	18/04/2023	1	<0.001	<0.0002	42	0.001	<0.001	<0.001	<0.001	110	<0.0001	0.003	37	0.008	<1
	18/05/2023	0.6	<0.001	<0.0002	5.2	<0.001	<0.001	2.4	<0.001	9.1	<0.0001	0.002	4.9	0.009	<1
	15/06/2023	0.32	<0.001	<0.0002	14	0.001	2	2	<0.001	27	<0.0001	0.001	14	0.01	<1
	24/07/2023	0.33	<0.001	<0.0002	22	<0.001	<0.001	1.9	<0.001	52	<0.0001	0.002	25	0.006	<1
	21/08/2023	0.41	<0.001	<0.0002	23	<0.001	0.002	2.2	<0.001	54	<0.0001	0.002	29	0.005	<1
	18/09/2023	0.28	<0.001	<0.0002	29	<0.001	<0.001	2.6	<0.001	70	<0.0001	0.001	42	<0.005	<1
	18/10/2023	0.27	<0.001	<0.0002	61	<0.001	<0.001	2	<0.001	160	<0.0001	<0.001	76	<0.005	<1
	20/11/2023	0.51	0.001	<0.0002	25	0.001	<0.001	4.3	<0.001	56	<0.0001	0.002	27	<0.005	<1
	19/12/2023	0.54	0.005	0.0028	46	0.001	0.001	4.2	0.001	120	0.002	0.002	47	0.009	<1
	23/01/2024	0.9	0.003	<0.0002	16	0.002	0.001	7.8	<0.001	32	<0.0001	0.001	16	0.012	<1
	26/02/2024	0.63	0.001	<0.0002	13	0.001	<0.001	3.7	<0.001	23	<0.0001	0.002	10	0.029	<1
	26/03/2024	0.64	<0.001	<0.0002	16	0.001	<0.001	3.3	<0.001	33	<0.0001	0.002	14	0.008	<1
	18/04/2024	0.69	<0.001	<0.0002	8.3	0.002	0.001	<0.001	<0.001	14	<0.0001	0.008	6.7	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.6	<0.001	0.001	2.5	<0.001	5.1	<0.0001	0.002	3.5	0.008	<1
	25/06/2024	0.2	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	31	<0.0001	0.002	12	0.012	<1
	10/07/2024	0.48	<0.001	<0.0002	17	<0.001	<0.001	2.9	<0.001	31	<0.0001	0.002	11	0.008	<1
	6/08/2024	0.28	<0.001	<0.0002	37	<0.001	<0.001	<0.001	<0.001	100	<0.0001	0.001	30	0.007	<1
	15/08/2024	0.5	<0.001	<0.0002	5	0.001	<0.001	1.6	<0.001	8	<0.0001	0.001	4.6	0.01	<1
	11/09/2024	0.52	<0.001	<0.0002	14	<0.001	<0.001	2.9	<0.001	25	<0.0001	0.002	10	0.011	<1
	9/10/2024	0.85	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.5	0.016	<1
	6/11/2024	0.68	<0.001	<0.0002	17	0.002	<0.001	3.8	<0.001	29	<0.0001	0.002	12	0.008	<1
	16/12/2024	<0.05	<0.001	<0.0002	<0.5	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.24	0.002	<0.0002	230	0.002	<0.001	0.64	<0.001	660	<0.0001	<0.001	210	0.006	<1
	11/02/2025	0.12	0.002	<0.0002	290	0.001	<0.001	0.5	<0.001	820	<0.0001	<0.001	260	0.047	<1
	24/03/2024	0.54	<0.001	<0.0002	22	<0.001	0.001	3.2	<0.001	53	<0.0001	0.002	17	0.32	<1
	31/03/2025	0.58	<0.001	<0.0002	4.2	<0.001	<0.001	3.7	<0.001	5.2	<0.0001	0.002	3.5	0.062	<1
	8/04/2025	0.77	<0.001	<0.0002	9.9	0.001	<0.001	4.2	<0.001	18	<0.0001	0.002	6	0.011	<1
	9/05/2025	0.75	<0.001	<0.0002	6.3	0.001	<0.001	3.2	<0.001	8.5	<0.0001	0.002	3.7	0.015	<1
	25/06/2025	0.46	<0.001	<0.0002	26	<0.001	<0.001	2	<0.001	63	<0.0001	0.001	19	0.01	<1
	8/07/2025	0.68	<0.001	<0.0002	9.1	0.001	<0.001	3	<0.001	16	<0.0001	0.002	4.9	0.008	<1
	14/08/2025	0.46	<0.001	<0.0002	8.6	<0.001	<0.001	2.6	<0.001	17	<0.0001	0.001	6.2	0.008	<1
	11/09/2025	0.55	<0.001	<0.0002	15	<0.001	<0.001	3.2	<0.001	33	<0.0001	0.001	11	0.01	<1
	13/10/2025	0.21	<0.001	<0.0002	77	<0.001	<0.001	2	<0.001	220	<0.0001	<0.001	69	<0.005	<1
	20/11/2025	0.32	0.001	<0.0002	63	0.001	<0.001	2.7	<0.001	180	<0.0001	0.001	53	<0.005	<1
	16/12/2025	0.20	0.001	<0.0002	120	0.001	0.001	1.4	<0.001	340	<0.0001	0.001	110	0.008	<1
SW05 Baseline		**2.1**	**0.002**	**0.001**	**57**	**0.002**	**0.003**	**12.3**	0.001	**130**	**0.0005**	**0.011**	**58**	**0.026**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW05	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	70	70	-	-	<20	60	100	-	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	120	120	<100	120	<20	<50	120	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW05 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW06	29/09/2022	6.0	480	<5	7.8	580	0.13	0.16	220	<0.02	8.6	140	11	5.1		0.05
	20/10/2022	6.3	580	16	8.7	730	0.05	0.19	330	<0.02	0.5	110	7.5	6.2		0.02
	14/11/2022	6.2	840	13	<5	1000	0.04	0.36	310	<0.10	1.1	270	100	<5		0.32
	14/12/2022	6.3	840	16	8.3	1200	0.1	0.05	340	<0.10	5.8	240	44	<5		0.13
	18/01/2023	6.4	3,700	31	6.8	5,400	0.07	0.04	1,800	<0.02	2.5	1,000	200	<5		0.11
	20/02/2023	6.8	19	89	5.1	14,000	0.09	0.11	22	<0.10	4.1	4,000	1,200	<5		54.55
	28/03/2023	5.6	400	6.2	8.3	730	0.03	0.07	180	<0.20	<0.20	110	18	9.7		0.10
	18/04/2023	6.7	6,400	18	7.4	6,700	0.07	1.2	3,200	<0.02	1.26	1,700	360	<10		0.11
	18/05/2023	5.9	280	17	6.3	470	0.08	0.06	120	<0.02	0.4	370	21	<5		0.18
	15/06/2023	6.4	1,100	<5	7.4	1,400	0.55	0.18	440	<0.02	0.7	250	38	<5		0.09
	24/07/2023	6.7	2,100	5.8	6.6	3,500	0.07	0.23	1,800	<0.2	0.6	540	620	<5		0.34
	21/08/2023	6.6	2,800	<5	6.1	5,400	0.19	0.16	1,300	<0.02	0.78	870	59	<5		0.05
	18/09/2023	6.7	2,900	24	6.5	4,600	0.06	0.12	1,500	<0.02	0.4	1,300	200	<5		0.13
	18/10/2023	6.9	7,900	6.3	6.4	9,700	0.05	0.05	3,700	<0.02	<0.2	1,600	430	<5		0.12
	20/11/2023	6.6	2,200	9.9	4.6	4,000	0.18	0.43	1,200	<0.01	1.2	490	720	<5		0.60
	19/12/2023	6.8	3,300	9.3	5.6	6,600	0.09	0.82	2,300	<0.02	<2	1,300	94	<5		0.04
	23/01/2024	6.2	4,300	15	2.1	4,300	0.18	0.08	2,800	<0.02	1.4	1,100	330	<5		0.12
	26/02/2024	6.4	880	17	9	1,200	0.11	0.02	60	<0.02	1.7	200	10	<5		0.17
	26/03/2024	6.8	1,300	9.9	5.9	1,900	0.05	0.07	760	0.05	1.2	300	120	<5		0.16
	18/04/2024	6.6	520	5.8	6	840	0.06	0.16	170	<0.02	<1	110	31	<5	17	0.18
	20/05/2024	6.3	240	<5	6.1	290	<0.01	0.05	59	<0.02	1	42	47	<5	15	0.80
	25/06/2024	6.7	960	17	9.2	1,900	0.06	0.09	500	<0.02	5.3	270	21	<5	19	0.04
	10/07/2024	6.2	880	<5	6.2	1,600	0.03	0.13	170	<0.02	1.4	250	33	<5	15	0.19
	6/08/2024	6.3	4,500	6.8	7.6	8,400	0.08	0.15	2,100	<0.02	1.6	1,200	270	<5	24	0.13
	15/08/2024	6.2	160	<5	7	240	0.1	0.03	57	<0.02	<0.2	38	15	<5	14	0.26
	11/09/2024	6.7	710	7	6.6	1,000	0.04	0.28	370	<0.02	1.8	180	54	<5	11	0.15
	9/10/2024	6.5	720	14	8.5	1,000	0.15	<0.01	310	<0.1	4.3	180	33	18	<10	0.11
	6/11/2024	6.9	1,900	37	5.6	2,400	0.1	0.11	890	<0.02	1.6	490	160	<5	<10	0.18
	16/12/2024	7.7	33,000	13	9.5	47,000	0.01	0.18	16,000	<0.02	<0.2	<0.5	2,100	<5	<10	0.13
	14/01/2025	7.2	25,000	11	6.3	38,000	0.03	0.06	15,000	<0.02	0.7	7,200	600	<5	<10	0.04
	11/02/2025	7.6	24,000	11	7.2	34,000	0.003	0.06	6,100	<0.02	<0.2	7,200	240	5.9	<10	0.04
	24/03/2025	6.5	1,700	<5	6.8	2,500	<0.1	0.12	820	<0.02	4.2	450	110	<5	<10	0.13
	31/03/2025	6.7	250	11	9.5	250	0.08	<10	68	<0.02	<1	42	9.7	<5	<10	0.14
	8/04/2025	6.4	610	7.6	9.4	740	0.08	0.28	260	<0.2	<1	140	31	<10	<10	0.12
	9/05/2025	6.6	260	<5	-	490	0.07	<0.1	120	<0.2	<1	70	28	<5	<10	0.23
	25/06/2025	6.2	2,000	7.4	5.9	3,600	1.4	0.08	1,700	<0.2	1.4	520	260	<5	20	1.50
	8/07/2025	6.0	470	<5	8.2	910	0.05	0.02	230	<0.02	<0.2	130	28	<5	13	0.12
	14/08/2025	6.3	590	31	6.1	910	0.07	0.03	340	<0.02	0.3	140	37	<5	13	0.11
	11/09/2025	6.6	1,299	6.8	7.1	2,200	0.04	0.05	590	<0.02	5.6	340	67	<5	<10	0.11
	13/10/2025	6.8	14,000	5.9	4.9	23,000	0.04	0.29	7,400	<0.02	0.6	4,100	830	5.9	14	0.11
	20/11/2025	6.7	8,400	<5	4.5	14,000	0.09	0.22	4,800	<0.02	0.7	2,300	1,100	<5	12	0.23
	16/12/2025	6.9	12,000	20	3.8	19,000	0.09	0.32	6,100	<0.5	1.8	2,900	750	7	28	0.12
ANZG (2018): 95% Slightly Disturbed		**6.5 – 8.0**	**-**	**<50**	**-**	**<2200**	**<0.05**	**-**	**-**	**-**	**<0.50**	**-**	**-**	**5**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW06	29/09/2022	0.78	<0.001	<0.0002	9.4	0.002	<0.001	4.5	<0.001	18	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.54	<0.001	<0.0002	9.1	0.001	<0.001	2.7	0.001	13	<0.0001	0.002	5.8	0.012	<1
	14/11/2022	0.68	<0.001	<0.002	18	<0.001	0.012	5.3	<0.01	29	<0.001	<0.01	12	0.11	<1
	14/12/2022	0.75	<0.001	<0.002	16	<0.01	<0.01	5.4	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.63	<0.010	<0.001	<2	<0.01	<0.01	0.01	<0.01	120	<0.001	<0.01	47	<0.05	<1
	20/02/2023	0.34	0.002	<0.0002	170	0.001	0.01	<0.001	<0.001	480	<0.001	0.002	160	0.008	<1
	28/03/2023	1.1	<0.01	<0.002	11	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.3	<0.05	<1
	18/04/2023	0.54	<0.001	<0.0002	68	0.001	<0.001	<0.001	<0.001	200	<0.0001	0.002	63	0.009	<1
	18/05/2023	0.44	0.003	<0.0002	14	<0.001	<0.001	0.13	<0.001	4.8	<0.0001	0.008	3.3	<0.005	<1
	15/06/2023	0.36	<0.001	<0.0002	15	<0.001	2.1	2.1	<0.001	28	28	0.001	14	<0.005	<1
	24/07/2023	0.36	<0.001	<0.0002	26	<0.001	<0.001	1.9	0.001	65	<0.0001	0.002	29	0.007	<1
	21/08/2023	0.41	<0.001	<0.0002	39	0.001	<0.001	1.9	<0.001	100	<0.0001	0.002	46	<0.005	<1
	18/09/2023	0.3	<0.001	<0.0002	56	<0.001	<0.001	2.4	<0.001	150	<0.0001	0.001	64	<0.005	<1
	18/10/2023	0.2	<0.001	<0.0002	73	<0.001	<0.001	1.7	<0.001	190	<0.0001	<0.001	85	<0.005	<1
	20/11/2023	0.63	0.001	<0.0002	27	0.001	<0.001	4.5	<0.001	60	<0.0001	0.003	28	0.01	<1
	19/12/2023	0.62	0.002	0.0007	56	0.001	0.002	3.4	<0.001	150	0.0005	0.002	55	0.008	<1
	23/01/2024	0.71	0.003	<0.0002	50	0.002	<0.001	5.7	<0.001	140	<0.0001	<0.001	46	0.008	<1
	26/02/2024	0.61	<0.001	<0.0002	14	0.003	<0.001	3.5	<0.001	24	<0.0001	0.005	10	0.025	<1
	26/03/2024	0.61	<0.001	<0.0002	17	0.001	<0.001	3.1	<0.001	34	<0.0001	0.002	15	0.008	<1
	18/04/2024	0.71	<0.001	<0.0002	10	0.001	<0.001	<0.001	<0.001	13	<0.0001	0.008	7.6	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.7	<0.001	<0.001	2.3	<0.001	4.8	<0.0001	0.002	3.2	0.009	<1
	25/06/2024	0.23	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	28	<0.0001	0.002	11	0.016	<1
	10/07/2024	0.5	<0.001	<0.0002	17	<0.001	<0.001	2.6	<0.001	28	<0.0001	0.002	10	0.01	<1
	6/08/2024	0.31	<0.001	<0.0002	50	<0.001	<0.001	<0.001	<0.001	140	<0.0001	0.002	40	0.011	<1
	15/08/2024	0.51	<0.001	<0.0002	4.8	<0.001	0.001	1.6	<0.001	4.6	<0.0001	0.002	3	0.011	<1
	11/09/2024	0.46	<0.001	<0.0002	14	<0.001	<0.001	2.1	<0.001	20	<0.0001	0.002	11	0.012	<1
	9/10/2024	0.84	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.7	0.009	<1
	6/11/2024	0.79	<0.001	<0.0002	25	0.002	<0.001	4.1	<0.001	60	<0.0001	0.002	20	0.01	<1
	16/12/2024	4.4	0.007	<0.0002	29	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.15	0.002	<0.0002	300	0.002	<0.001	0.3	<0.001	860	<0.0001	<0.001	270	<0.005	<1
	11/02/2025	0.09	0.002	<0.0002	300	0.001	<0.001	0.38	<0.001	850	<0.0001	<0.001	270	0.048	<1
	24/03/2025	0.55	<0.001	<0.0002	22	<0.001	<0.001	3.4	<0.001	54	<0.0001	0.002	17	0.027	<1
	31/03/2025	0.59	0.001	<0.0002	4.2	<0.001	<0.001	3.3	<0.001	5.3	<0.0001	0.002	3.5	0.044	<1
	8/04/2025	0.8	<0.001	<0.0002	9.9	0.003	<0.001	4.1	<0.001	18	<0.0001	0.002	6	0.007	<1
	9/05/2025	0.74	<0.001	<0.0002	6.3	0.001	0.001	2.8	<0.001	8.5	<0.0001	0.002	3.7	0.01	<1
	25/06/2025	0.7	<0.001	<0.0002	26	<0.001	<0.001	2.6	<0.001	64	<0.0001	0.002	20	0.008	<1
	8/07/2025	0.55	<0.001	<0.0002	11	0.001	0.001	2.3	<0.001	13	<0.0001	0.002	6.3	0.008	<1
	14/08/2025	0.43	<0.001	<0.0002	9.1	<0.001	<0.001	2.4	<0.001	16	<0.0001	0.001	6.3	0.011	<1
	11/09/2025	0.51	<0.001	<0.0002	19	0.001	<0.001	2.9	<0.001	42	<0.0001	0.001	14	0.008	<1
	13/10/2025	0.12	0.001	<0.0002	170	<0.001	<0.001	1.2	<0.001	500	<0.0001	<0.001	150	0.006	<1
	20/11/2025	0.26	0.001	<0.0002	99	0.001	<0.001	1.9	<0.001	280	<0.0001	0.001	86	0.006	<1
	16/12/2025	0.17	0.001	<0.0002	120	<0.001	<0.001	1.3	0.001	340	<0.0001	0.001	110	<0.005	<1
ANZG (2018): 95% Slightly Disturbed		**0.055**	**0.013**	**0.0002**	-	**0.0033**	**0.0018**	**0.3**	**0.0034**	-	**0.0006**	**0.011**	-	**0.008**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW06	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	-	-	<20	<50	<100	<100	-	<100
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	90	90	<100	<100	<20	160	<100	<100	160	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<100	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	2.1	2.1	<100	<100	<20	<50	0.9	<100	0.9	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
ANZG (2018): 95% Slightly Disturbed		-	-	-	-	-	-	-	-	-	-

APPENDIX D

Photolog

PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
1	17/12/2025

Description

Surface water monitoring location SW04.



Photo No.	Date
2	17/12/2025

Description

Surface water monitoring location SW05.



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
3	17/12/2025

Description

Surface water monitoring location SW03.



Photo No.	Date
4	17/12/2025

Description

Surface water monitoring location SW02.



MONTHLY WATER QUALITY MONITORING REPORT

Harvest Estate Urban Development

Monitoring Event: 21st January 2026

Ewingsdale Road, Byron Bay, NSW, 2481

Job Number: 217140

For:

Planit Consulting

By:

ENV Services Pty Ltd

Date:

06/02/2026

ENV Services Pty Ltd

313 River Street, Ballina NSW 2478

T: 1300 861 325

E: admin@envsolutions.com.au

www.envsolutions.com.au

DOCUMENT CONTROL

Job No:	Job Number: 217140
Client:	Planit Consulting
Filename:	217140_Harvest Estate_WQ_January_2026

	Name:	**Date:**	**Signature:**
Prepared By:	Jemma Attkins Environmental Scientist	3/02/2026	
Reviewed By:	Kingsley Baldwin Environmental Team Leader	6/02/2026	

Revision:	**Date:**	**Details:**

SCOPE OF ENGAGEMENT AND LIMITATIONS

This report has been prepared by ENV Services at the request of Planit Consulting for the purpose of consolidating and assessing water quality monitoring (surface water and ground water) data to determine impact associated with the development of the Harvest Estate. No other parties may rely on the contents of this report for any purposes except those stated.

This report has been prepared based on the information provided to us and from other information obtained as a result of enquiries made by us. ENV accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this document for a purpose other than that described above.

No part of this report may be reproduced, stored, or transmitted in any form without the prior consent of ENV.

ENV declares that it does not have, nor expects to have, a beneficial interest in the subject project.

To avoid this advice being used inappropriately, it is recommended that you consult with ENV before conveying the information to another who may not fully understand the objectives of the report. This report is meant only for the subject site/project and should not be applied to any other.

1 INTRODUCTION

ENV Services Pty Ltd (ENV) was engaged by Planit Consulting to prepare a Monthly Water Quality Report (MWQR) to meet requirements outlined in the Harvest Estate Development Conditions of Consent (11b - d, 32, 33 & 78) and Section 6.2 and 6.4 of the Planit Construction Environmental Management Plan (CEMP). Monitoring has been undertaken in accordance with the following approved plans.

- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate Groundwater Management Plan.* Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Belongil Creek Plan of Management*. Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate West Byron Urban Release Area; Acid Frog Management Plan.* Dated August 2020.

Baseline water quality parameters outlined in this report have been derived from mean or range values calculated over a 12-month sampling period undertaken between 25 May 2020 and 17 May 2021. This baseline water quality monitoring was carried out by Australian Wetlands Consulting (AWC) and undertaken in accordance with the Harvest Estate Groundwater Management Plan (AWC 2020) and the Harvest Estate – Belongil Creek Plan of Management (AWC 2020).

Guideline water quality trigger values have been derived from the ANZG (2018) Water Quality Guidelines and ANZECC (2000) guidelines for Fresh and Marine Water Quality. These guidelines define Belongil Creek as a lowland river of South-Eastern Australia, with trigger values chosen to reflect this. In assessing human disturbance, this report recognises Belongil Creek as being slight to moderately disturbed. On this basis, for toxicants in water, 95% species protection default guideline values have been presented for assessed toxicants.

No construction works were being undertaken during this monitoring period, with major civil earthworks associated with Stage 1 of the Project completed in November 2023.

2 MONITORING RESULTS & OBSERVATIONS

2.1 Monthly Groundwater Monitoring

Monthly groundwater monitoring at five (5) groundwater wells (MW2 – MW5 & MW7) was carried out to assess for impact within the underlying aquifer. This monitoring was conducted in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.2 of the Planit Construction Environmental Management Plan (CEMP). Groundwater monitoring locations are presented in Appendix A.

An assessment of the monthly analytical results presented in Appendix B, Table 1, identified the following observations:

Site	Observation	Comments
MW2	EC, TDS, TN and cations/anions (Na and Al) were recorded outside of baseline ranges.	EC and TDS values are likely to be associated with partial oxidation of sediments and mobilisation of salts (sulfate) through natural fluctuations in REDOX conditions (e.g. during seasonal drawdown). No site related impacts identified at this location.
MW3	Dry well	No groundwater encountered during monitoring round. Maintenance required at monitoring well (clearing out sediments) to allow recharge. Monitoring infrastructure may be impaired.
MW4	All parameters were within baseline ranges with the exception of Al which was outside of guidelines values.	No site related impacts identified at this location. There are no site-specific baseline values for Al.
MW5	pH, EC, TDS and several cations/anions (Na, SO_4, Ca, Mg and Al) concentrations were outside baseline ranges or guideline values (Al only).	Low pH and elevated analytes (EC, TDS, and cations/anions) at this site indicate the presence of oxidising acid sulfate soils (ASS) proximal to the monitoring well. Localised impacts continue to be reported at this site.
MW7	All parameters were within baseline ranges with the exception of pH, TDS and TN.	pH and TDS values are likely to be associated with partial oxidation of sediments and mobilisation of salts (sulfate) through natural fluctuations in REDOX conditions (e.g. during seasonal drawdown). No site related impacts identified at this location.

2.2 Monthly Surface Water Monitoring

Monthly surface water sampling (SW01 – SW06) was carried out to assess for impact from site activities on the receiving environment. Monitoring was carried out in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.4 of the Planit Construction Environmental Management Plan (CEMP), which require assessment of the following analytes; physiochemical parameters, nutrient, metals, cation/anion and total recoverable hydrocarbon (TRH).

Surface water monitoring locations are presented in Appendix A and the coordinates (GDA94) of all locations tabulated and presented in Table 1. Tabulated analytical results are presented in Appendix C. Select photos of the surface water sampling programme are presented in Appendix D.

Table 1: Surface Water Monitoring Coordinates

Monitoring Location	Location	Easting	Northing
SW01	Upstream of development - Southern Swale Drain	0556852	6831954
SW02	Upstream of development - Northern Main Drain	0557145	6831963
SW03	Downstream of development - Northern Main Drain	0557411	6831604
SW04	Downstream of development - Southern Swale Drain	0557397	6831429
SW05	Receiving environment - Outlet of Southern Swale Drain	0557992	6830881
SW06	Receiving environment - Outlet of Northern Main Drain	0558257	6831214

2.2.1 Assessment of Analytical Results

An assessment of the monthly analytical results presented in Appendix C, identified the following observations:

Site	Observation	Comments
SW01	All parameters were within baseline ranges, with the exception of EC, Cu and Fe.	This site is located at an upstream location, receiving water from off-site. Based on information provided to ENV by Planit Consulting, it is understood that sediment laden surface water derived from imported fill emplaced on the adjacent construction site entered the site after heavy rain. It is understood that the event occurred between the December and January monitoring rounds. Elevated copper and iron within surface water at this location is likely to be attributed to the uncontrolled sediment laden water movement from the adjacent site.
SW02	pH, TDS, Na and SO_4 and cations/anions (Ca, Mg and K) were recorded outside of baselines ranges.	Water quality is poor compared to the previous monitoring round however is within historic norms. No site related impacts identified.

Site	Observation	Comments
SW03	pH, TDS, SO_4, and cations/anions (Na, Mg and K) were recorded outside of baseline ranges.	This site is located within the Northern Main Drain, downstream of Stage 1 works and SW02. Water quality parameters are consistent with upstream location SW02. No site related impacts identified.
SW04	pH, TDS, EC, SO_4 and cations/anions (Ca, Fe and Mg) were outside baseline ranges.	This site is located downstream of Stage 1 works, within the Southern Swale Drain. Parameters have overall marginally improved when compared to the previous monitoring round. However, water quality remains poor at this location when compared to 'upstream' (SW01) and baseline values.
SW05	pH, EC, TDS, SO_4 and several cations/anions (Cl, Na, Ca, Mg and K).	Elevated EC and cation/anions associated with tidal influences. No site related impacts identified.
SW06	EC, Total Nitrogen, Chlorophyll-a, Al and Fe were recorded outside ANZG default guideline values (95% for slightly disturbed river systems).	Water quality appears relatively consistent with upstream location SW05. Elevated EC and cation/anions associated with tidal influences. No site related impacts observed.

3 RAINFALL

During this monitoring period (17/12/2025 – 21/01/2025), 244.4 mm of rain was recorded in the area (Byron Bay, Cape Byron Lighthouse, Bureau of Meteorology).

4 CONCLUSION & RECOMMENDATIONS

4.1 Conclusion

Monitoring results indicate that impacts associated with exposure of ASS continue to improve at surface water location SW04 (Southern Swale Drain) as indicated by analyte concentrations trending lower since the completion of Stage 1 of the development.

Similarly, water quality reported at SW03 is noted to be consistent with results reported from the upstream catchment (SW02), inferring no discernible site related impacts. However, water quality has reduced on-site consistent with parameters recorded at SW02.

The groundwater monitoring network continues to present indicators of localised impact from ASS adjacent to MW5 and at MW2, however the trend analysis of several analytes has identified gradual improvements in water quality.

4.2 Recommendations

Based on the conclusions of this monitoring report, the following recommendations are to be implemented with respect to improving water quality throughout the site:

- Given pH across the site is within or above the baseline water quality values, no corrective actions are required.
- Continue to monitor trends at monitoring locations within the southern swale drain (SW01 and SW04) for potential impact derived from construction activities occurring adjacent to the site.

APPENDIX A

Figures



Legend

Site Location

0 0.5 1km

Figure 1 – Site Location
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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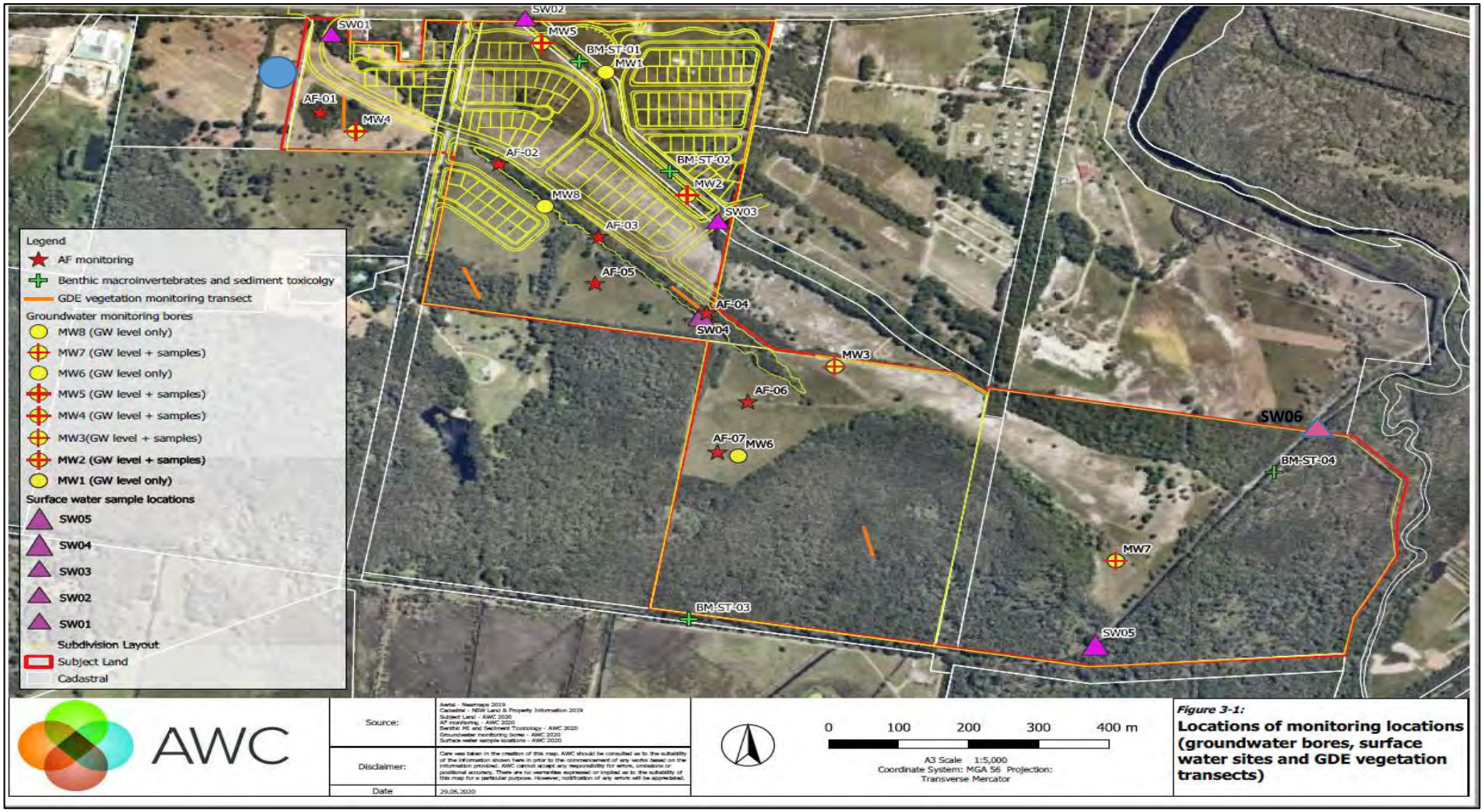


Figure 2 – AWC Monitoring Locations
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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APPENDIX B

Groundwater Quality Analytical Results

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW2	29/09/22	5.8	54	92	<5	0.12	0.51	14	0.02	0.5	30	< 2	< 0.5	0.8	2.4			0.1
	20/10/22	5.6	100	110	<5	0.09	0.24	13	0.02	2	28	< 2	<0.5	0.8	2.2			0.1
	14/11/22	6.0	100	240	<5	0.07	0.24	19	<0.10	<0.2	30	< 2	1.3	1.4	2.4			0.1
	14/12/22	5.6	110	170	<5	0.02	<0.05	15	<0.10	3.1	29	5	<5	<5	<5			0.3
	18/01/23	4.6	130	76	9.2	0.12	0.09	17	<0.05	2.5	29	7	<5	<5	<5			0.4
	20/02/23	6.0	100	160	5.3	0.09	0.1	27	<0.25	0.25	27	3.7	<0.5	0.7	3.1			0.1
	28/03/23	5.9	140	92	17	0.02	0.12	15	<0.02	<0.2	21	7.2	<5	<5	<5			0.5
	18/04/23	6.2	170	88	<5	0.08	1.2	15	<0.02	7.7	18	5.2	<5	<5	<5			0.3
	18/05/23	5.9	130	76	10	0.09	0.1	13	<0.02	9	28	2.1	0.6	0.9	2.6			0.2
	25/06/23	3.3	4,500	3,000	250	0.26	1.6	45	<0.02	8.1	86	3,800	440	82	7.9			84.4
	24/07/23	6.2	220	150	<5	0.03	0.16	12	<0.2	1	24	12	<0.5	0.8	2.5			1.0
	21/08/23	5.7	120	84	<5	0.08	0.14	15	<0.02	1.7	30	2.3	<5	<5	<5			0.2
	18/09/23	5.9	120	130	11	0.04	0.15	13	<0.02	1.2	25	<2	<0.5	0.9	2.7			0.1
	18/10/23	5.6	110	73	6.6	0.3	0.11	15	<0.02	0.3	25	3	<0.5	0.9	2.8			0.2
	20/11/23	6.0	160	70	<5	0.11	0.17	16	<0.01	0.8	28	4.2	<0.5	0.8	2.6			0.3
	19/12/23	6.3	110	100	<5	0.05	0.48	16	<0.02	2.8	28	2.1	0.5	0.9	2.9			0.1
	20/01/24	6.2	150	88	<5	0.05	0.08	13	<0.02	1.1	26	<2	<0.5	0.8	3			0.1
	26/02/24	5.1	150	340	7.4	0.07	0.09	15	<0.02	8.6	36	14	0.6	1	2.7			0.9
	26/03/24	5.7	180	310	<5	0.07	0.13	16	<0.02	<1	27	6.9	<0.5	0.8	2.7			0.4
	18/04/24	5.7	170	<5	<5	0.05	0.09	15	<0.02	1.8	29	2.6	<0.5	0.9	2.8	3.6	<1	0.17
	20/05/24	5.6	160	120	<5	0.11	0.1	19	<0.02	1	32	2.9	<0.5	0.8	2.8	3.9	<1	0.2
	25/06/24	5.5	170	170	12	0.09	<0.01	21	<0.02	2.7	30	<2	<0.5	0.8	2.3	3.8	<1	0.0
	10/07/24	5.8	150	190	<5	0.03	0.11	15	<0.02	<1	28	2.2	<0.5	0.7	2.7	2.8	<1	0.1
	06/08/24	5.9	170	90	6.9	0.16	0.12	20	<0.1	2.4	25	3.3	<0.5	0.6	2.1	3.4	<1	0.2
	11/09/24	5.7	140	110	<5	0.02	0.83	21	<0.2	<1	28	<2	<0.5	0.7	2.4	2.8	<1	0.0
	09/10/24	5.9	150	210	6.3	0.21	<0.01	17	0.02	<0.2	30	2.8	<0.5	<0.5	2.6	2.4	<1	0.1
	06/11/24	5.7	120	190	6.6	2	0.02	17	-	2.3	33	<2	1	1	3.1	3.6	<1	0.1
	16/12/24	6.0	120	60	8.0	0.05	<0.1	16	<0.2	0.9	30	5.3	0.14	0.8	2.8	3.5	<1	0.3
	14/01/25	6.4	150	94	610.0	0.03	<0.05	15	<0.1	<0.25	31	<2	<0.5	0.6	2.4	2.7	1	0.1
	11/02/25	5.7	170	150	<5	0.04	<0.1	13	<0.02	<0.5	29	2.8	<0.5	0.6	2.4	2.8	<1	0.2
	24/03/25	5.7	120	190	<5	<0.05	0.05	36	0.02	4.2	28	5.8	<0.5	0.7	2.4	2.7	<1	0.2
	08/04/25	5.7	120	220	<5	0.02	0.03	16	0.03	<2	31	4.2	<0.5	0.7	2.6	3.5	<1	0.3
	09/05/25	6.0	150	210	<5	0.01	<0.1	17	<0.2	1.1	29	7	1.3	0.7	2.6	3.2	<1	0.4
	25/06/25	5.6	180	200	<5	0.06	<0.01	15	<0.02	0.8	33	22	<0.5	0.7	2.6	1.7	<1	1.5
	08/07/25	5.5	190	180	<5	0.04	0.13	14	<0.2	1.6	32	24	<0.5	0.8	2.5	1.7	<1	1.7
	14/08/25	5.8	180	160	12.0	0.07	0.11	15	<0.02	1.9	30	33	<0.5	0.8	2.5	0.82	<1	2.2
	11/09/25	5.7	190	100	<5	0.03	0.09	17	<0.02	3.1	33	31	<0.5	0.8	2.6	0.84	<1	1.8
	13/10/25	5.6	170	180	<5	0.16	0.16	18	<0.2	0.6	33	24	<0.5	0.8	2.5	2	<1	1.3
	20/11/25	5.8	180	210	6	0.08	0.25	14	<0.2	0.7	35	8.1	<0.5	0.8	2.6	1.1	<1	0.6
	17/12/25	5.7	170	100	6.8	0.09	0.17	15	<0.2	1.0	35	9.3	<0.5	0.9	2.5	0.99	<1	0.6
	21/01/26	5.8	160	220	<5	0.04	0.12	16	<0.02	3.5	34	7.1	<0.5	0.9	2.7	2.3	<1	0.4
MW2 Baseline		**4.2 - 5.7**	**152**	**103**	**483**	**0.45**	**0.338**	**189**	**0.07**	**2.03**	**29.7**	**9.8**	**0.7**	**1.4**	**4.2**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

ENV
ENVIRONMENTAL | ASBESTOS | REMEDIATION | RESOURCE RECOVERY

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW3	29/09/22	4.2	53	40	370	0.09	0.05	8.8	0.02	0.5	7	<2	< 0.5	1	0.6			0.1
	20/10/22	4.1	64	62	130	0.01	0.2	8	0.02	0.5	7	<2	0.5	0.9	<0.5			0.1
	14/11/22	4.6	57	84	170	0.03	0.27	7.4	<0.02	<0.2	7.1	<2	0.8	0.6	<0.5			0.1
	14/12/22	4.3	43	32	280	<0.01	<0.01	5.2	<0.02	1.1	6	<2	<5	<5	<5			0.2
	18/01/23	4.3	54	28	670	0.03	<0.01	4.1	<0.05	1.4	<5	4.1	<5	<5	<5			1.0
	20/02/23	4.2	36	40	76	0.02	<0.10	6.8	0.06	7.26	7.6	<2	<0.5	1	<0.5			0.1
	28/03/23	4.1	70	44	<5	<0.01	<0.01	7.9	<0.02	0.22	4.8	2.2	<0.5	1	0.6			0.3
	18/04/23	4.6	89	54	110	0.02	0.1	9.6	<0.02	5.7	4.3	4.3	<0.5	0.6	<0.5			0.4
	18/05/23	4.5	60	40	450	0.02	0.04	5.8	<0.02	1	4.8	2.1	0.6	0.8	<0.5			0.4
	15/06/23	4.0	84	48	22	0.27	0.4	5.5	<0.02	1.96	5	63	<0.5	0.8	<0.5			11.5
	24/07/23	4.5	85	59	160	0.04	<0.01	9.5	<0.02	<0.2	5.6	12	<0.5	0.8	<0.5			1.3
	21/08/23	3.9	110	52	100	0.01	<0.01	6.3	<0.02	<0.2	6.6	3	<0.5	1.1	<0.5			0.5
	18/09/23	Dry – no sample collected																
	18/10/23	Dry – no sample collected																
	20/11/23	4.0	96	46	120	0.03	<0.02	7.8	<0.01	0.7	5.8	5	<0.5	0.7	<0.5			0.6
	19/12/23	4.0	46	30	92	<0.01	0.04	13	<0.02	<0.2	9.7	5.6	<0.5	1.3	0.6			0.4
	20/01/24	4.2	70	28	270	0.01	<0.01	5.4	<0.02	0.6	5.5	<2	<0.5	0.8	<0.5			0.2
	26/02/24	4.5	70	50	29	0.01	0.02	10	<0.02	16	5	4.5	<0.5	0.6	<0.5			0.5
	26/03/24	4.1	67	56	110	<0.01	0.06	5.1	<0.02	0.3	4.4	6.1	<0.5	0.8	<0.5			1.2
	18/04/24	3.7	150	< 5	<5	0.05	0.01	4.6	<0.02	0.7	4	12	<0.5	0.8	<0.5	0.99	<1	0.3
	20/05/24	4.5	36	30	26	0.03	<0.01	31	<0.02	0.3	3	3.9	0.6	<0.5	<0.5	1.1	<1	0.1
	25/06/24	3.5	160	90	120	0.17	<0.01	2.8	<0.02	<0.2	3.1	5	<0.5	<0.5	<0.5	0.7	<1	0.1
	10/07/24	4.4	42	40	300	<0.01	<0.01	4.2	<0.02	0.5	3.5	2.5	<0.5	<0.5	<0.5	0.7	<1	0.6
	06/08/24	4.3	45	22	310	0.03	0.01	4.4	<0.02	3.2	2.5	<2	<.5	<0.5	<0.5	1	<1	0.2
	11/09/24	4.2	44	28	720	0.02	<0.1	5	<0.02	<1	3.7	<2	<0.5	<0.5	<0.5	1.3	<1	0.2
	09/10/24	4.2	50	32	430	0.1	<0.01	5.3	<0.02	<0.2	4.1	2.8	2.9	0.6	0.6	0.48	<1	0.2
	06/11/24	4.3	38	20	370	<0.01	0.09	4.8	-	0.9	4.6	<2	0.6	0.7	<0.5	0.84		0.2
	16/12/24	4.3	35	24	63	0.02	<0.01	4.4	<0.02	0.5	3.8	2.2	<0.5	0.7	<0.5	0.75	<1	0.5
	14/01/25	4.5	40	20	38	0.03	0.01	3.3	<0.02	0.5	2.8	<2	<0.5	<0.5	<0.5	0.75	<1	0.3
	11/02/25	4.2	64	36	8.2	<0.01	<0.01	2.9	<0.02	<0.2	3.1	4.4	<0.5	<0.5	<0.5	1.1	<1	1.5
	24/03/25	4.0	79	50	150	0.02	<0.01	13	<0.02	0.9	5.8	3.9	0.8	1.1	<0.5	0.52	1.5	0.3
	08/04/25	4.2	71	38	160	<0.01	0.02	11	<0.02	0.9	7.3	4.1	0.9	1.4	2.6	0.58	1.5	0.4
	09/05/25	4.5	73	74	210	<0.01	0.02	9.9	<0.02	0.8	7	3.1	0.7	0.9	<0.5	0.74	<1	0.3
	25/06/25	4.5	42	44	170	0.05	<0.01	4.4	<0.02	1.9	5	4.3	<0.5	<0.5	<0.5	1	<1	1.0
	08/07/25	4.5	47	25	670	0.02	0.03	4.5	0.03	0.6	4.9	2.5	<0.5	<0.5	<0.5	1	<1	0.6
	14/08/25	4.8	34	38	550	0.06	0.06	3.8	0.02	5.7	3.6	4	<0.5	<0.5	<0.5	0.5	<1	1.0
	11/09/25	4.6	42	28	2,500	0.02	0.3	4.7	0.11	2.1	4.7	3.5	<0.5	<0.5	<0.5	0.49	<1	0.7
	13/10/25	Dry – no sample collected																
	20/11/25	Dry – no sample collected																
	17/12/25	Dry – no sample collected																
	21/01/26	Dry – no sample collected																
MW3 Baseline		**4.0 - 5.3**	**206**	**140**	**5223**	**1.57**	**0.294**	**121**	**0.167**	**4.14**	**26.4**	**13.4**	**3.8**	**5.3**	**3.1**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

ENV
ENVIRONMENTAL | ASBESTOS | REMEDIATION | RESOURCE RECOVERY

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW4	29/09/22	4.5	100	88	350	0.03	0.16	22	0.1	1.5	19	<2	3.6	3.7	0.9			0.0
	20/10/22	4.5	110	100	69	0.02	0.78	20	0.04	1	14	<2	3.9	2.1	<0.5			0.1
	14/11/22	4.2	130	340	16	0.01	0.13	30	<0.10	7	22	5	2.6	4.8	1.1			0.2
	14/12/22	4.2	140	140	60	<0.01	<0.05	23	<0.10	3	21	7.8	<5	<5	<5			0.3
	18/01/23	5.7	170	110	170	0.02	0.16	26	<0.50	2.4	20	6.6	<5	<5	<5			0.3
	20/02/23	3.9	87	110	31	0.04	<0.05	15	0.28	3.88	15	5.8	3.5	5.4	0.9			0.4
	28/03/23	4.7	180	120	190	0.04	0.08	28	<0.02	22	18	6	8.8	5.1	<5			0.2
	18/04/23	3.7	500	280	340	0.11	0.07	27	<0.02	0.9	19	130	3.4	5	<0.5			4.8
	18/05/23	5.4	110	72	70	0.03	<0.01	14	<0.02	2.89	11	10	5.7	3.7	<0.5			0.7
	15/06/23	3.8	200	150	130	1.4	0.29	29	<0.02	0.9	21	12	<5	6	<5			0.4
	24/07/23	4.1	170	94	58	0.03	<0.1	24	<0.2	1	20	17	2.8	6.2	0.6			0.7
	21/08/23	3.8	200	120	75	0.03	0.07	18	0.65	1.76	15	3.6	2	5	<0.5			0.2
	18/09/23	3.8	160	86	21	0.02	0.11	19	0.02	1.1	17	10	1.5	4.1	<0.5			0.5
	18/10/23	3.8	190	110	31	0.08	0.08	25	<0.02	0.9	18	9.3	1.7	4.5	0.5			0.4
	20/11/23	4.4	160	870	28	0.05	0.1	22	<0.01	2.2	15	5.8	3.3	4	0.7			0.3
	19/12/23	4.0	190	130	27	0.03	0.41	38	<0.02	1.5	22	13	3.3	7.8	1			0.3
	20/01/24	4.2	170	120	27	0.01	0.02	24	<0.02	1.2	17	2.9	5.4	5.1	<0.5			0.1
	26/02/24	3.6	290	190	96	0.03	0.07	27	<0.02	6.9	17	38	10	4.1	<0.5			1.4
	26/03/24	5.6	150	140	18	0.02	0.58	25	<0.02	1.1	15	7	9.3	3.8	<0.5			0.3
	18/04/24	4.3	140	90	12	0.02	0.04	17	<0.02	24	13	6.7	3.2	3.6	<0.5	1.1	2.9	0.4
	20/05/24	5.9	200	180	9.4	0.01	0.83	15	<0.02	1.1	10	5.6	9.6	2.1	<0.5	1.5	6.4	0.4
	25/06/24	4.2	120	100	33	0.1	<0.01	15	<0.02	1.4	9.1	2.3	3.5	2.2	<0.5	1.7	<1	0.2
	10/07/24	6.3	79	46	16	0.02	0.12	8.7	<0.02	1.4	6.4	4	9.7	1	<0.5	0.55	<1	0.5
	06/08/24	4.4	170	100	24	0.02	0.12	26	<0.02	2.4	12	5.5	1.5	3.2	<0.5	0.86	<1	0.2
	11/09/24	5.2	110	74	27	0.02	0.14	21	<0.02	0.6	12	2.5	7.2	2.9	<0.5	1.3	<1	0.1
	09/10/24	4.1	150	140	190	0.1	0.07	25	0.03	0.9	15	6.2	2.9	4	0.7	1.2	<1	0.2
	06/11/24	4.4	130	180	40	0.51	0.04	22	-	1.9	15	2.3	4.7	4.8	<0.5	1.4	3.4	0.1
	16/12/24	5.7	80	70	<5	0.02	<0.1	18	<0.2	1	11	4.1	8.1	3	<0.5	0.99	7.2	0.2
	14/01/25	4.1	180	120	86	0.02	1.3	26	<0.02	1.2	14	2.4	4.4	3.8	<0.5	1.6	<1	0.1
	11/02/25	4.1	170	150	<5	0.01	<0.1	25	<0.02	<0.5	16	3.1	2.5	4.8	<0.5	1.8	<1	0.1
	24/03/25	5.0	110	84	39	<0.05	0.04	22	0.02	5	13	7.6	4.9	3.4	<0.5	0.85	5.8	0.3
	08/04/25	5.2	90	130	22	<0.01	0.03	16	<0.02	1	10	3.7	6.9	2.7	<0.5	0.58	12	0.2
	09/05/25	6.0	110	140	45	-	-	14	<0.2	-	8.7	2.7	11.0	2	<0.5	0.8	14	0.2
	25/06/25	5.4	98	140	130	0.06	0.01	12	0.2	1.6	8.8	8.2	8.6	1.6	<0.5	0.98	8.8	0.7
	08/07/25	5.0	110	100	300	0.01	0.23	15	<0.2	<0.5	11	9.4	5.7	2.4	<0.5	1.7	3.4	0.6
	14/08/25	5.7	110	150	600	0.11	0.12	15	0.04	4.7	9.6	4.3	10.0	2	<0.5	0.64	<1	0.3
	11/09/25	4.4	140	89	290	0.02	0.15	25	0.07	4.2	15	7.3	4.0	3.5	0.9	1.1	3.6	0.3
	13/10/25	4.3	160	210	120	0.11	0.42	30	<0.2	<2	18	2.8	2.9	4.5	0.8	2.2	1.3	0.1
	20/11/25	4.2	160	220	140	0.06	0.22	22	<0.2	1.1	16	2.2	2.7	4.1	0.6	1.2	2.3	0.1
	17/12/25	4.1	170	110	170	0.02	<0.1	26	<0.2	1.9	20	2.9	1.4	5.6	0.9	1.1	1.3	0.1
	21/01/26	4.5	120	190	370	0.25	0.04	14	0.03	3.5	12	5.1	4.9	3.4	<0.5	1.5	3.3	0.4
MW4 Baseline		**4.0 - 5.8**	**890**	**605**	**1220**	**0.43**	**1.392**	**199**	**0.185**	**4.36**	**146.3**	**19.2**	**11.3**	**15.6**	**5.4**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW5	29/09/22	4.5	59	68	630	0.13	0.41	18	0.02	6.33	14	<2	2	3	0.6			0.1
	20/10/22	4.4	75	82	92	0.02	0.1	15	0.02	0.5	12	<2	2	2	0.5			0.1
	14/11/22	4.6	120	270	150	0.08	0.52	29	<0.10	7.8	26	<2	5	6	1.4			0.0
	14/12/22	4.5	150	150	230	0.02	<0.060	29	<0.05	11	24	10	<5	<5	<5			0.3
	18/01/23	2.8	1,600	1,100	480	0.05	1.7	43	<0.05	5.7	49	7	90	72	<5			0.2
	20/02/23	2.6	2,700	3,200	310	0.03	4.2	27	<0.05	3.2	47	750	390	76	7.8			27.8
	28/03/23	3.0	5,200	3,700	130	0.02	5.9	28	<0.02	11	34	1,100	440	57	7.1			39.3
	18/04/23	2.9	3,800	5,100	300	0.01	4	44	<0.02	4	49	3,800	380	120	4.7			86.4
	18/05/23	3.4	3,100	3,400	150	<0.01	<0.01	15	<0.02	4.9	23	2,200	240	31	4.2			146.7
	15/06/23	2.9	3,000	1,800	640	0.3	2.9	28	<0.02	2.66	64	2,100	410	130	6.5			75.0
	24/07/23	5.5	2,800	1,600	6	0.07	0.19	1,400	<0.2	0.5	450	380	25	54	25.0			0.3
	21/08/23	3.3	5,200	3,400	13	0.03	4.6	67	<0.02	5	89	2,200	420	200	9.9			32.8
	18/09/23	3.3	4,500	5,800	6.1	0.01	4	51	0.02	3.7	67	4,300	360	140	7.9			84.3
	18/10/23	3.2	4,700	4,900	96	0.03	1.3	58	<0.02	2.1	68	710	380	130	7.3			12.2
	20/11/23	2.8	5,900	7,500	29	0.06	2.7	55	<0.01	11	60	6,600	310	100	6.8			120.0
	19/12/23	2.9	3,100	2,700	230	0.01	4.6	80	<0.02	5	80	3,500	290	86	6.9			43.8
	20/01/24	3.2	4,900	6,600	74	0.03	<0.01	52	<0.02	4.5	68	1,000	370	84	7.9			19.2
	26/02/24	2.6	3,400	4,500	180	0.03	0.59	25	<0.02	5.4	51	3,000	290	46	4.0			120.0
	26/03/24	3.2	4,400	3,500	17	0.02	1.8	140	<0.02	2.5	54	11,000	360	77	6.0			78.6
	18/04/24	3.3	4,200	2,200	39	<0.01	0.02	49	0.05	5.1	50	3,300	310	47	4.0	210	1.5	67.3
	20/05/24	3.4	3,100	1,600	8.8	0.03	3.1	53	<0.02	2.9	27	2,900	200	22	2.8	140	1.42	54.7
	25/06/24	3.2	4,100	2,700	310	0.03	<0.01	76	<0.02	7.2	75	1,400	290	60	4.3	320	<1	18.4
	10/07/24	3.5	2,300	2,600	49	0.02	<0.01	14	<0.02	3.9	20	1,900	240	20	2.4	130	<1	135.7
	06/08/24	3.3	170	3,500	14	0.19	4.6	62	<0.02	7.7	56	3,600	310	54	4.2	250	<1	58.1
	11/09/24	3.5	1,700	1,000	38	<0.01	3.9	27	<0.2	4.9	27	750	290	29	3.2	94	<1	27.8
	09/10/24	3.5	1,300	930	46	0.03	<0.01	27	<0.02	1.5	22	870	120	17	1.6	35	<1	32.2
	06/11/24	3.3	2,000	1,300	31	<0.01	4.8	44	-	5	59	680	300	62	4.9	90	3.33	15.5
	16/12/24	3.2	1,800	1,100	53	0.02	21	32	<0.2	2.8	25	980	180	21	2.4	35	5.1	30.6
	14/01/25	3.7	1,600	1,400	190	<0.01	1.3	19	<0.02	2.1	16	320	210	16	1.8	25	8.4	16.8
	11/02/25	3.5	2,000	1,700	69	0.01	2.6	160	<0.02	14	110	860	110	50	2.8	56	1.96	5.4
	24/03/25	3.6	1,000	890	38	<0.05	0.06	20	<0.02	3.3	14	570	140	8.5	1.7	17	8.24	28.5
	08/04/25	3.7	790	700	73	<0.01	0.85	36	<0.02	5.2	42	390	86	16.0	<0.5	13	6.6	10.8
	09/05/25	3.7	1,300	1,200	200	<0.01	1.2	87	<0.2	3.3	24	470	87	11.0	1.5	9.6	9.06	5.4
	25/06/25	3.7	1,300	840	140	0.21	1.5	26	<0.02	2	18	580	140	17.0	1.7	17	8.3	22.3
	08/07/25	4.0	720	480	170	<0.010	0.81	21	<0.2	5.4	20	280	58	10.0	0.9	11	5.3	13.3
	14/08/25	3.8	530	300	230	0.02	0.55	19	<0.02	5.5	11	230	28	4.3	0.5	4.5	6.2	12.1
	11/09/25	3.8	630	430	110	<0.01	0.73	41	0.04	14	35	240	33	9.7	1.3	4.4	7.5	5.9
	13/10/25	4.0	1,200	970	260	0.11	2.8	120	<0.2	<2	76	420	68	32	2.2	13	5.2	3.5
	20/11/25	3.6	1,400	1000	59	0.05	2.4	64	<0.02	2.4	43	270	83	34	2	13	6.4	4.2
	17/12/25	3.7	1,300	650	290	0.02	2.0	120	<0.2	<10	19	180	83	11	<0.5	10.0	8.3	1.5
	21/01/26	3.8	1,000	980	300	0.12	1.8	49	<0.02	7.3	35	200	42	29	1.7	13	3.2	4.1
MW5 Baseline		**4.3 - 5.5**	**191**	**130**	**3003**	**0.97**	**13.4**	**82**	**0.117**	**13.4**	**27.2**	**8.3**	**6**	**8.4**	**5.4**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW7	29/09/22	4.6	26	40	190	0.1	0.3	8.5	0.02	2.5	8.5	<2	1	0.9	0.6			0.1
	20/10/22	4.5	86	70	120	0.01	0.4	12	0.04	2.9	8.5	<2	1.7	1.7	0.5			0.1
	14/11/22	4.5	44	170	<100	0.03	0.01	9.7	<0.10	<2.00	9.7	<2	1.9	1.4	1.4			0.1
	14/12/22	4.6	56	92	23	0.04	<0.10	7.5	<0.20	11	8.7	2.5	<5	<5	<5			0.3
	18/01/23	4.4	63	32	390	0.09	<0.05	7.5	<0.025	2	11	31	<5	<5	<5			4.1
	20/02/23	4.1	87	60	30	0.02	<0.05	9.1	0.42	4.9	5.8	5.7	1.4	1.9	1.1			0.6
	28/03/23	4.5	160	94	18	0.02	0.02	21	<0.02	4.4	12	66	2	2	0.6			3.1
	18/04/23	4.9	150	58	7.4	<0.01	0.11	11	<0.02	<0.20	9.8	120	1.9	0.8	<0.5			10.9
	18/05/23	4.9	78	56	130	0.03	<0.01	11	<0.02	0.89	9.3	9.3	1.4	0.9	<0.5			0.8
	15/06/23	4.6	77	50	30	0.28	0.25	11	<0.02	<0.20	9.2	62	<5	<5	<5			5.6
	24/07/23	5.1	140	100	90	0.12	<0.1	10	<0.2	1	8.5	14	1.9	1.4	0.9			1.4
	21/08/23	5.3	67	34	29	0.08	0.06	8.4	<0.02	0.8	9	45	1.8	1.7	0.8			5.4
	18/09/23	5.1	57	78	25	<0.01	0.07	9.6	<0.02	0.8	9.4	83	1.6	2	0.8			8.6
	18/10/23	5.2	61	46	10	0.04	0.1	11	<0.02	<0.2	10	160	1.6	2.1	0.8			14.5
	20/11/23	4.1	210	64	13	0.04	<0.02	8.4	<0.01	2.2	8.1	280	2.5	2.2	0.7			33.3
	19/12/23	4.6	91	62	11	0.03	0.09	19	<0.02	0.7	11	5.6	4.4	2.3	0.9			0.3
	20/01/24	4.2	170	130	34	0.01	0.09	21	<0.02	0.3	15	160	2.8	1.4	<0.5			7.6
	26/02/24	4.0	210	190	23	0.03	0.51	44	<0.02	5.8	24	7.5	3.6	2.1	0.5			0.2
	26/03/24	4.4	320	100	22	0.02	0.18	320	<0.02	<1	13	590	1.6	0.9	0.9			1.8
	18/04/24	4.3	100	98	17	0.02	0.07	8.9	<0.02	3	9	380	1.4	1.2	<0.5	1.7	<1	42.7
	20/05/24	4.4	77	56	11	0.05	0.38	6.4	<0.02	1.2	5.4	170	1.3	1	<0.5	2.3	<1	26.6
	25/06/24	4.6	66	36	33	<0.01	<0.01	<0.01	<0.02	0.6	6.7	48	1.1	0.9	<0.5	1.5	<1	0.0
	10/07/24	4.5	74	58	29	<0.01	0.22	6.5	<0.02	2.1	6.2	270	2	1.3	<0.5	0.73	<1	41.5
	06/08/24	4.8	4,600	180	19	0.04	0.06	9.1	<0.02	0.5	5.3	36	1.4	0.9	<0.5	1	<1	4.0
	11/09/24	4.4	75	50	6.4	0.04	<0.1	11	<0.02	1..0	7.1	5.2	1.3	1.1	<0.5	1.4	<1	0.5
	09/10/24	4.3	73	42	71	0.54	<0.01	8	<0.02	1.6	5.8	12	1.3	1.2	<0.5	0.94	<1	1.5
	06/11/24	4.5	59	32	35	0.02	0.03	11	-	1.3	7.8	4.4	1.3	1.4	<0.5	1.6	<1	0.4
	16/12/24	4.3	58	68	29	0.04	<0.1	12	<0.2	1.3	8.5	42	1.6	1.3	<0.5	1.9	<1	3.5
	14/01/25	4.7	63	36	120	0.04	0.02	8.6	0.03	1.3	6.8	7	1.7	1.2	0.5	2.4	1.4	0.8
	11/02/25	4.6	68	70	13	0.07	<0.1	9.2	<0.02	1.2	8.4	2	1.5	1.5	0.8	2.7	<1	0.2
	24/03/25	4.1	0	56	28	<0.05	0.02	15	<0.02	1.8	7.7	43	2.3	1.4	<0.5	1.2	1.91	2.9
	08/04/25	4.4	76	70	14	<0.01	0.03	14	<0.02	<1	8.1	31	2.8	1.1	2.1	1.4	2	2.2
	09/05/25	4.7	81	110	24	<0.01	0.03	13	<0.2	1.2	8.1	28	1.5	0.9	<0.5	1.6	<1	2.2
	25/06/25	4.6	65	70	39	0.07	<0.01	8.3	<0.02	<0.2	6.7	56	1.2	0.8	<0.5	1.2	1	6.7
	08/07/25	4.6	65	44	130	0.02	0.14	7.9	<0.02	<0.5	6.3	37	1.4	0.9	<0.5	2.6	<1	4.7
	14/08/25	4.7	60	70	140	0.06	0.01	8.9	0.04	2.2	5.7	15	0.9	0.5	<0.5	0.93	3	1.7
	11/09/25	4.4	75	51	100	0.03	0.06	12	0.04	1.1	7.2	18	1.8	1.1	0.6	0.86	2.09	1.5
	13/10/25	4.8	66	110	66	0.02	0.12	11	<0.2	<1	7.4	20	2.1	1.5	<0.5	1.3	1.6	1.8
	20/11/25	4.4	84	78	64	0.05	0.12	12	<0.2	1.1	7.8	17	1.9	1.2	<0.5	0.86	2.2	1.4
	17/12/25	4.6	79	10	75	0.04	<0.1	13	<0.2	3.1	9.0	11	2.1	1.7	0.5	1.0	2.1	0.8
	21/01/26	4.3	87	110	110	0.1	0.02	11	0.02	4.3	8.2	4.4	1.9	1.4	<0.5	2	1.0	0.4
MW7 Baseline		**4.6 - 5.6**	**147**	**100**	**3140**	**0.71**	**0.471**	**172**	**0.048**	**4.15**	**31**	**7.3**	**3.4**	**2.2**	**3.1**	**<1.0***	**<1***	**<0.5***

APPENDIX C

Surface Water Quality Analytical Results

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW01	29/09/2022	6.9	180	11	3.1	140	0.47	<0.01	14	<0.02	5.2	30	3.4	450		0.2
	20/10/2022	6.6	320	30	4.7	400	0.03	0.03	22	<0.02	<0.02	31	33	43		1.5
	14/11/2022	6.0	780	4,900	0.2	920	3.1	6.9	25	<0.02	14	200	3.7	67		0.1
	14/12/2022	4.5	800	210	3.6	1,100	0.15	0.05	24	<0.10	23	54	560	88		23
	18/01/2023	6.3	380	120	4.7	25	0.047	0.087	24	<0.02	5.2	40	180	25		7.5
	20/02/2023	3.4	1,100	32	3.8	1,300	0.42	0.37	28	<0.02	8.9	57	350	<5		13
	28/03/2023	3.0	2,000	100	7.7	3,000	<0.01	2.1	29	<0.02	1.29	47	880	<5		30
	18/04/2023	7.7	130	33	8.6	320	0.06	0.01	24	<0.02	8.4	16	14	8.8		0.6
	18/05/2023	7.4	130	6	4.4	250	0.21	0.14	11	<0.02	0.9	14	10	<5		0.9
	15/06/2023	3.2	1,900	6.8	7.6	2,700	0.03	1.6	59	<0.02	2.1	61	1,500	<5		25
	24/07/2023	7.9	84	<5	8.4	140	0.11	<0.01	6.4	<0.02	0.3	13	4	<5		0.6
	21/08/2023	6.9	120	25	3	190	0.34	0.01	5.6	<0.02	0.4	18	<2	<5		0.2
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	No surface water located at monitoring site – no sample collected														
	20/11/2023	7.2	230	6.5	2.9	480	2	<0.02	56	<0.01	<0.2	43	160	<5		2.9
	19/12/2023	No surface water located at monitoring site – no sample collected														
	23/01/2024	7.0	160	130	2.2	160	3.7	0.06	14	<0.02	1.3	21	69	<5		4.9
	26/02/2024	6.2	160	47	7.2	200	0.35	<0.01	9	<0.02	3	12	59	<5		6.6
	26/03/2024	6.9	26	7.5	8.3	78	0.25	<0.01	6.7	<0.02	0.4	7.5	3.4	<5		0.5
	18/04/2024	7.2	220	23	0.5	390	0.06	0.24	25	<0.02	0.7	32	110	180	13	4.4
	20/05/3034	6.7	160	<5	3.8	260	0.16	0.01	13	<0.02	0.5	19	33	56	231	2.5
	25/06/2024	6.3	440	15	5.9	710	<0.01	<0.01	12	<0.02	<0.2	23	100	5.7	15	8.3
	10/07/2024	7.0	120	29	5.5	240	0.07	0.01	14	<0.02	1.1	17	6.9	39	12	0.5
	6/08/2024	4.0	760	19	7.6	950	0.08	<0.01	14	<0.02	1.3	23	470	<5	12	34
	15/08/2024	6.7	64	<5	7.3	100	0.04	0.01	6.1	<0.02	<0.2	7.2	5.5	<5	<10	0.9
	11/09/2024	6.9	120	250	0.2	190	1.1	0.11	8.9	<0.02	4.1	13	2.6	<10	17	0.3
	24/09/2024 - Investigation	6.3	170	-	-	280	-	-	-	-	-	-	-	-	-	-
	9/10/2024	7.4	190	11	8.9	290	0.38	0.01	14	<0.02	<0.2	20	3.4	<5	<10	0.2
	6/11/2024	7.1	92	400	0.4	140	13	<0.01	8.1	<0.02	2.8	12	2.2	<5	<10	0.3
	16/12/2024	6.9	90	190	3.3	140	0.36	<0.01	8.2	<0.02	0.02	11	5.4	170	<10	0.7
	14/01/2025	6.7	48	7.2	3.5	89	0.14	<0.1	4.8	<0.02	0.6	5.4	<5	<5	<10	0.0
	11/02/2025	7.5	390	<5	8.3	620	0.06	0.03	110	<0.02	0.8	16	16	12	<10	0.1
	24/03/2025	6.9	58	<5	8.6	64	0.32	0.02	6.1	<0.02	0.8	7.9	2.4	48	<10	0.4
	31/03/2025	7.1	170	5.8	9.2	200	0.14	<0.01	14	<0.02	1.1	15	6.4	<5	<10	0.5
	8/04/2025	7.2	200	9.4	8.8	230	0.37	0.04	14	<0.02	0.4	18	3.6	<5	<10	0.3
	9/05/2025	7.5	170	<5	-	200	0.2	0.03	10	<0.02	0.8	13	4.5	<5	<10	0.5
	25/06/2025	6.9	130	24	7.5	190	1.1	0.07	6.2	<0.02	1.1	12	7.1	12	22	1.1
	8/07/2025	6.9	150	<5	8	260	0.12	0.18	8	<0.02	0.8	16	5	28	34	1.6
	14/08/2025	7.3	140	7.1	6.9	240	0.17	0.03	11	<0.02	1	16	6	<5	15	1.8
	11/09/2025	7.2	150	5.2	3.9	260	0.22	0.01	13	<0.02	1.4	19	5.2	<5	16	2.5
	13/10/2025	7.2	350	14	0.3	520	0.61	0.26	39	<0.02	0.5	58	30	<5	14	1.3
	20/11/2025	7	110	8.9	5.2	200	0.24	0.03	9.1	<0.02	0.7	14	4.5	<5	16	2.0
	17/12/2025	7.2	150	30	6.1	240	0.14	0.19	27	<0.5	1.2	22	9.3	<5	37	2.9
	21/01/2026	6.8	98	30	3.5	170	0.49	0.05	17	0.017	0.6	15	4.9	<0.005	27	3.5
SW01 Baseline		**6.2 – 7.0**	**291**	**73**	**-**	**428**	**3.52**	**0.164**	**118**	**0.039**	**3.5**	**51**	**9**	**768**		**<0.5**

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW01	29/09/2022	1.5	0.003	<0.0002	22	0.002	0.32	2.7	0.005	14	<0.0001	0.015	3	0.071	<1
	20/10/2022	0.66	2	<0.0002	24	0.002	0.16	2.4	0.003	9.1	<0.0001	0.009	2.9	0.042	<1
	14/11/2022	130	1.3	<0.02	280	<0.10	1	130	0.1	73	<0.001	0.3	<50	4.7	<1
	14/12/2022	22	0.0016	<0.002	180	0.014	0.2	1.6	0.015	43	<0.001	0.077	6.8	0.68	<1
	18/01/2023	0.7	<0.010	<0.002	<2	<0.010	<0.01	3.2	<0.01	13	<0.01	<0.01	<5	<0.05	<1
	20/02/2023	37	0.027	0.0004	170	0.019	0.07	0.049	0.049	57	0.002	0.16	6.3	0.35	<1
	28/03/2023	150	0.002	0.0008	290	0.002	0.003	36	0.003	38	0.0001	0.46	5.1	0.97	<1
	18/04/2023	0.53	0.002	<0.0002	13	0.005	0.005	0.002	0.002	2.7	<0.0001	0.002	0.8	0.15	<1
	18/05/2023	0.16	0.002	<0.0002	23	<0.001	0.002	0.24	<0.001	7.5	<0.0001	0.002	2.3	0.02	<1
	15/06/2023	120	0.002	0.0003	350	<0.001	0.004	15	0.003	42	<0.0001	0.24	8.1	0.35	<1
	24/07/2023	0.08	0.003	<0.0002	13	<0.001	0.003	0.38	0.002	4.1	<0.0001	0.002	0.8	0.037	<1
	21/08/2023	0.52	0.001	<0.0002	17	0.001	0.002	1.2	0.001	6.3	<0.0001	0.003	<0.5	0.014	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	No surface water located at monitoring site – no sample collected													
	20/11/2023	0.13	<0.001	<0.0002	26	<0.001	0.002	5.7	<0.001	7.9	<0.0001	0.003	2.2	0.006	<1
	19/12/2023	No surface water located at monitoring site – no sample collected													
	23/01/2024	<0.05	<0.001	<0.0002	30	0.001	<0.001	1.8	<0.001	10	<0.0001	<0.001	3.4	0.006	<1
	26/02/2024	<0.005	<0.001	<0.0002	14.00	<0.001	<0.001	0.93	<0.001	4.60	<0.0001	<0.001	1.70	0.05	<1
	26/03/2024	0.11	<0.001	<0.0002	7.4	<0.001	0.002	0.38	<0.001	2	<0.0001	<0.001	1.5	0.013	<1
	18/04/2024	0.06	<0.001	<0.0002	32	<0.001	<0.001	1.4	<0.001	9.5	<0.0001	0.002	2	<0.005	<1
	20/05/3034	0.06	<0.001	<0.0002	26	<0.001	0.001	0.86	<0.001	7	<0.0001	0.002	1.7	0.014	<1
	25/06/2024	0.69	<0.001	<0.0002	94	<0.001	0.002	0.28	<0.001	15	<0.0001	0.008	2.3	0.055	<1
	10/07/2024	0.25	0.002	<0.0002	28	<0.001	0.003	2.1	<0.001	6.6	<0.0001	0.002	2	0.037	<1
	6/08/2024	0.85	<0.001	<0.0002	120	<0.001	0.004	1.3	<0.001	14	<0.0001	0.021	2.3	0.1	<1
	15/08/2024	0.24	<0.001	<0.0002	12	<0.001	0.004	0.33	<0.001	2.8	<0.0001	0.001	1.2	0.027	<1
	11/09/2024	9.1	0.009	0.0005	36	0.023	0.11	49	0.031	8.1	0.0001	0.019	5.2	0.72	<1
	24/09/2024 - Investigation	-	<0.001	<0.001	-	<0.001	0.001	-	<0.001	<0.0001	-	0.004	-	0.04	-
	9/10/2024	0.14	0.001	<0.0002	27	<0.001	0.002	1.7	<0.001	8.1	<0.0001	0.002	1.5	0.017	<1
	6/11/2024	1.2	0.004	<0.0002	26	0.005	0.011	54	0.003	6.1	<0.0001	0.004	2.8	0.041	<1
	16/12/2024	2.4	0.004	<0.0002	22	0.006	0.019	38	0.006	4.5	<0.0001	0.004	2.8	0.092	<1
	14/01/2025	0.15	<0.001	<0.0002	8.8	0.001	0.003	0.34	<0.001	1.8	<0.0001	0.001	0.6	0.018	<1
	11/02/2025	0.58	0.002	<0.0002	13.00	<0.001	<0.001	6.10	<0.001	3.50	<0.0001	0.002	1.00	0.015	<1
	24/03/2025	0.13	<0.001	<0.0002	5.20	<0.001	0.002	0.35	<0.001	1.40	<0.0001	<0.001	1.20	0.037	<1
	31/03/2025	0.1	0.002	<0.0002	22	<0.001	0.003	1.2	<0.001	6.8	<0.0001	0.002	2.4	0.066	<1
	8/04/2025	<0.05	0.002	<0.0002	29	<0.001	<0.001	2.2	<0.001	8.1	<0.0001	0.002	2.4	0.008	<1
	9/05/2025	0.27	<0.001	<0.0002	20	<0.001	0.002	1.6	<0.001	5.9	<0.0001	0.002	1.7	0.03	<1
	25/06/2025	0.11	<0.001	<0.0002	19	<0.001	0.002	0.72	<0.001	4.4	<0.0001	0.002	<0.5	0.032	<1
	8/07/2025	0.05	<0.001	<0.0002	26	<0.001	0.002	0.49	<0.001	7.2	<0.0001	0.002	<0.5	0.024	<1
	14/08/2025	0.14	<0.001	<0.0002	26	<0.001	0.003	0.69	<0.001	6.8	<0.0001	0.002	1.8	0.019	<1
	11/09/2025	0.05	0.001	<0.0002	24	<0.001	0.002	1.5	<0.001	6.8	<0.0001	0.002	1.6	0.014	<1
	13/10/2025	0.07	0.002	<0.0002	37	<0.001	0.01	0.69	<0.001	10	<0.0001	0.005	4.8	0.055	<1
	20/11/2025	<0.05	0.001	<0.0002	19	<0.001	0.002	0.0015	0.001	4.7	<0.0001	0.002	0.9	0.012	<1
	17/12/2025	0.26	0.001	<0.0002	16	<0.001	0.001	0.89	<0.001	3.8	<0.0001	0.001	1.5	0.017	<1
	21/01/2026	0.2	<0.001	<0.0002	12	<0.001	3	2.2	<1	2.9	<0.0001	0.001	0.7	0.031	<1
SW01 Baseline		**0.5**	**0.003**	**0.001**	**22**	**0.002**	**0.041**	**1.2**	**0.001**	**16**	**0.0005**	**0.006**	**6**	**0.058**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW01	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	220	220	<100	<100	<20	250	<100	<100	250	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	<50	<50	20	-	<20	<50	100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No surface water located at monitoring site – no sample collected									
	18/10/2023	No surface water located at monitoring site – no sample collected									
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	No surface water located at monitoring site – no sample collected									
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/3034	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Investigation	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	160	160	300	<100	<20	110	300	<100	410	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	17/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW01 Baseline		**60**	**-**	**24**	**100**	**-**	**50**	**130**	**90**	**170**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW02	29/09/2022	6.9	170	8.8	8	160	0.04	0.03	29	<0.02	1.3	27	2.8	22		0.1
	20/10/2022	6.5	120	6.2	8.7	140	0.02	0.01	17	<0.02	<0.20	16	2.9	<5		0.2
	14/11/2022	6.4	150	210	0.1	190	0.18	<0.01	54	<0.02	13	62	18	24		0.3
	14/12/2022	6.3	110	870	0.1	200	0.27	0.05	26	<0.10	2.7	25	29	14		1.1
	18/01/2023	6.6	220	190	0.1	61	0.79	0.049	31	<0.20	21	27	6.2	61		0.2
	20/02/2023	6.5	240	29	4.4	1300	0.023	0.31	26	<0.10	1.9	29	24	<5		0.9
	28/03/2023	4.8	310	370	5.7	370	1.5	0.19	22	<0.02	<0.20	17	92	<10		4.2
	18/04/2023	6.2	300	60	7.3	410	0.05	0.16	32	<0.02	1.38	25	120	<5		3.8
	18/05/2023	6.5	130	39	6	270	0.06	0.09	25	<0.02	<0.2	18	29	<5		1.2
	15/06/2023	6.4	190	25	8.9	280	0.37	0.23	34	<0.02	1.2	25	38	<5		1.1
	21/08/2023	6.1	430	20	5.7	690	0.02	0.5	36	<0.02	1.2	38	75	<5		2.1
	18/09/2023	7.2	180	15	8.1	260	0.06	0.04	31	<0.02	0.8	28	39	<5		1.3
	18/10/2023	6.8	150	11	8.1	240	0.05	0.02	40	<0.02	<0.2	28	13	<5		0.3
	20/11/2023	6.9	180	18	4.9	350	0.07	0.04	37	<0.01	0.3	26	50	<5		1.4
	19/12/2023	6.7	140	15	4.6	240	0.05	0.03	37	<0.02	0.7	29	11	<5		0.3
	23/01/2024	6.8	210	27	9.7	350	0.06	0.02	35	<0.02	0.5	31	25	<5		0.7
	26/02/2024	4.5	140	43	7.1	190	0.05	0.03	9	<0.02	0.6	8.5	65	<5		7.2
	26/03/2024	6.7	44	12	6.8	99	0.07	<0.01	9.5	<0.02	0.5	8.8	8.7	<5		0.9
	18/04/2024	7.6	350	<5	6.4	630	0.03	0.9	93	<0.02	0.6	78	56	<5	<10	0.6
	20/05/2024	6.7	130	27	2.1	210	0.04	0.05	20	<0.02	1.1	18	16	<5	11	0.8
	25/06/2024	6.7	180	9.7	8.8	330	0.03	<0.01	42	0.03	<0.2	35	10	<5	11	0.2
	10/07/2024	7.0	150	8.2	6.1	220	0.01	0.11	22	<0.02	1.9	18	21	<5	<10	1.0
	6/08/2024	6.5	220	8.5	7	280	0.06	0.02	39	<0.02	1.7	24	19	<5	20	0.5
	15/08/2024	6.6	48	<5	7.8	80	0.07	0.01	8	<0.02	<0.2	7	6.9	18	<10	0.9
	11/09/2024	7.1	250	<5	6.1	450	0.02	0.05	90	<0.02	0.3	71	48	<5	<10	0.5
	9/10/2024	7.0	260	<5	8.9	500	0.12	0.03	88	<0.02	0.6	73	35	<5	<10	0.4
	6/11/2024	7.5	300	6.4	6	500	0.07	<0.01	89	<0.02	1	72	34	<5	<10	0.4
	16/12/2024	6.4	200	110	8.8	310	1.1	<0.01	55	<0.02	0.4	11	19	6.6	<10	0.3
	14/01/2025	6.9	170	<5	4.6	340	0.08	<0.01	51	<0.02	0.9	44	7.7	<5	<10	0.2
	11/02/2025	7.1	96	5.6	6.1	150	0.08	<0.01	14	<0.02	1.9	91	3.9	190	<10	0.3
	24/03/2024	3.2	420	7.2	8.6	670	<0.05	0.02	17	<0.02	2.8	17	250	<5	<10	15
	31/03/2025	7.2	160	<5	9.8	200	0.14	0.05	14	<0.02	<0.4	16	7	<5	<10	0.5
	8/04/2025	7.2	150	12	6.2	230	0.37	0.03	14	<0.02	0.7	18	3.4	<5	<10	0.2
	9/05/2025	3.9	320	1,100	-	560	1.5	0.23	31	<0.02	2.8	18	150	<20	34	4.8
	25/06/2025	7.1	400	9.4	9.8	580	1.5	0.01	88	<0.03	1.5	74	38	38	14	0.4
	8/07/2025	6.9	300	14	8.4	600	0.34	0.58	96	<0.02	0.9	73	38	19	21	2.5
	14/08/2025	7.2	330	6.1	8.6	600	0.05	0.03	120	<0.02	0.7	85	31	<5	<10	3.9
	11/09/2025	7.0	320	6.1	7.9	530	0.05	0.11	87	<0.02	2.8	69	36	<5	<10	2.4
	13/10/2025	6.9	270	6.3	8.1	470	0.12	<0.01	73	0.11	1.9	60	29	<5	14	2.5
	20/11/2025	6.8	190	11	5.2	300	0.19	0.16	33	<0.02	0.9	30	16	<5	<10	2.1
	16/12/2025	7.0	520	8	7.2	240	0.11	0.13	26	<0.5	<0.5	23	9.1	<5	19	2.9
	21/01/2026	7.3	350	<5	6	680	0.07	<0.01	100	0.1	0.4	85	36	<0.005	15	2.8
SW02 Baseline		**6.3 – 7.0**	**199**	**495**	**-**	**292**	**1.88**	**0.261**	**161**	**0.06**	**8.6**	**32**	**10**	**182**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW02	29/09/2022	0.42	0.003	<0.0002	19	0.002	0.004	1.5	0.001	5.8	<0.0001	0.002	1.9	0.057	<1
	20/10/2022	0.22	0.001	<0.0002	12	0.001	0.003	0.62	<0.001	3.4	<0.0001	0.001	1.7	0.032	<1
	14/11/2022	1.8	0.037	<0.002	47	<0.001	0.015	53	<0.01	11	<0.001	<0.01	<5	0.096	<1
	14/12/2022	13	0.066	<0.002	38	0.034	0.094	9.7	0.071	5.9	<0.001	0.013	5.1	1	<1
	18/01/2023	3.3	0.023	<0.002	<2	<0.01	0.015	45	0.014	5.8	<0.001	<0.010	<5	0.15	<1
	20/02/2023	12	0.033	0.0002	38	0.009	0.09	0.013	0.013	11	<0.001	0.018	4.1	0.28	<1
	28/03/2023	3.4	0.002	0.0003	43	0.002	0.003	2.5	0.001	8.4	<0.0001	0.024	4.1	0.63	<1
	18/04/2023	0.86	<0.001	<0.0002	20	0.002	0.002	<0.001	<0.001	4	<0.0001	0.006	2.7	0.089	<1
	18/05/2023	0.72	0.002	<0.0002	17	0.002	0.006	1	0.002	4.3	<0.0001	0.003	2.4	0.081	<1
	15/06/2023	1.7	0.001	<0.0002	22	0.001	0.004	2.1	0.001	5.5	<0.0001	0.005	1.9	0.037	<1
	21/08/2023	1.1	<0.001	<0.0002	71	<0.001	<0.001	8	<0.001	16	<0.0001	0.024	5.7	0.057	<1
	18/09/2023	1.7	0.003	<0.0002	19	0.002	0.004	3	0.002	6.3	<0.0001	0.005	3	0.023	<1
	18/10/2023	0.88	0.002	<0.0002	17	0.001	0.003	2.2	0.001	5.5	<0.0001	0.002	1.9	0.014	<1
	20/11/2023	2.3	0.002	<0.0002	19	0.002	0.002	2.6	<0.001	6.7	<0.0001	0.007	1.4	0.032	<1
	19/12/2023	1.1	0.002	<0.0002	19	0.001	0.001	4.8	<0.001	6.5	0.0002	0.004	2.9	0.012	<1
	23/01/2024	2.9	0.003	<0.0002	23	0.002	0.001	5.8	<0.001	7.8	<0.0001	0.007	3.3	0.031	<1
	26/02/2024	1.5	0.001	<0.0002	9.7	0.001	0.003	1.7	<0.001	2.5	<0.0001	0.004	1.4	0.027	<1
	26/03/2024	0.34	<0.001	<0.0002	6.9	0.001	0.003	0.67	<0.001	1.9	<0.0001	0.001	1.8	0.021	<1
	18/04/2024	0.09	<0.001	<0.0002	20	<0.001	<0.001	0.39	<0.001	5.4	<0.0001	<0.001	14	0.014	<1
	20/05/2024	0.71	0.004	<0.0002	19	0.002	0.003	5.6	<0.001	3.8	<0.0001	0.003	3	0.015	<1
	25/06/2024	1.1	<0.001	<0.0002	21	<0.001	0.001	1.4	<0.001	4.6	<0.0001	0.004	4.5	0.022	<1
	10/07/2024	1.1	0.002	<0.0002	20	<0.001	0.004	1.2	<0.001	4.2	<0.0001	0.004	2.3	0.047	<1
	6/08/2024	0.61	0.001	<0.0002	17	0.001	0.002	1.4	<0.001	3.7	<0.0001	0.002	3	0.019	<1
	15/08/2024	0.31	0.002	<0.0002	8	0.001	0.004	0.37	<0.001	1.5	<0.0001	0.001	1.4	0.038	<1
	11/09/2024	0.19	<0.001	<0.0002	20	<0.001	0.001	0.31	<0.001	4.8	<0.0001	0.001	14	0.021	<1
	9/10/2024	0.8	<0.001	<0.0002	23	<0.001	0.001	1.5	<0.001	5	<0.0001	0.003	15	0.032	<1
	6/11/2024	0.007	0.001	<0.0002	21	<0.001	<0.001	0.7	<0.001	5.8	<0.0001	<0.001	15	0.011	<1
	16/12/2024	0.05	<0.001	<0.0002	14	<0.001	0.001	0.24	<0.001	3.1	<0.0001	<0.001	9.4	0.008	<1
	14/01/2025	0.06	<0.001	<0.0002	14	0.001	0.002	0.28	<0.001	2.7	<0.0001	0.001	9.4	0.015	<1
	11/02/2025	0.82	<0.001	<0.0002	24	<0.001	0.002	4.4	<0.001	4.8	<0.0001	0.005	19	0.058	<1
	24/03/2024	7.4	<0.001	<0.0002	56	0.002	0.001	22	<0.001	6.9	<0.0001	0.021	1.8	0.097	<1
	31/03/2025	0.25		<0.0002	23	<0.001	0.003	1.7	<0.001	7	<0.0001	0.002	2.5	0.054	<1
	8/04/2025	0.1	0.001	<0.0002	29	<0.001	0.001	2.7	<0.001	8.3	<0.0001	0.002	2.3	0.015	<1
	9/05/2025	2.3	0.007	<0.0002	34	0.005	0.002	140	<0.001	9.1	<0.0001	0.011	2.1	0.077	<1
	25/06/2025	0.3	<0.001	<0.0002	21	<0.001	0.001	1.1	<0.001	5.4	<0.0001	0.002	14	0.03	<1
	8/07/2025	0.15	<0.001	<0.0002	19	<0.001	<0.001	0.65	<0.001	5.3	<0.0001	0.001	12	0.018	<1
	14/08/2025	0.11	<0.001	<0.0002	21	<0.001	<0.001	0.39	<0.001	5.9	<0.0001	<0.001	11	0.012	<1
	11/09/2025	0.32	0.001	<0.0002	21	<0.001	0.002	1.2	<0.001	5.6	<0.0001	0.001	11	0.016	<1
	13/10/2025	0.15	0.002	<0.0002	19	<0.001	0.004	0.82	<0.001	5.2	<0.0001	0.002	11	0.054	<1
	20/11/2025	0.53	0.002	<0.0002	20	0.001	0.002	1.8	0.002	4.9	<0.0001	0.002	3.9	0.021	<1
	16/12/2025	0.26	<0.001	<0.0002	16	0.002	<0.001	1.5	0.001	4	<0.0001	0.002	1.6	0.01	<1
	21/01/2026	<0.05	<0.001	<0.0002	21	<0.001	<1	0.25	<1	5.6	<0.0001	<0.001	17	0.022	<1
SW02 Baseline		**3.8**	**0.045**	**0.001**	**17**	**0.007**	**0.012**	**71.9**	**0.02**	**5**	**0.0005**	**0.005**	**6**	**0.09**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW02	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	90	<100	<20	<50	60	30	90	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	180	180	30	-	<20	170	30	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	200	<100	<20	<50	100	<100	100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	140	140	100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW02 Baseline		**60**	**-**	**22**	**100**	**-**	**50**	**100**	**50**	**140**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW03	29/09/2022	6.8	120	<5	9.3	100	0.02	<0.01	24	<0.02	1.10	23	2	<5		0.1
	20/10/2022	5.9	650	26	7.5	870	0.03	<0.01	270	<0.02	<0.2	12	13	<5		0.0
	14/11/2022	6.5	140	260	2.6	160	0.13	<0.05	27	<0.01	7.40	36	9	<5		0.3
	14/12/2022	6.5	110	11	4.4	160	0.01	0.05	23	<0.01	3.90	18	11	<5		0.5
	18/01/2023	6.5	160	9	5.1	<5	0.02	<0.010	31	<0.02	1.30	26	17	<5		0.5
	20/02/2023	3.4	540	13	6.0	720	0.01	<0.010	22	<0.02	5.10	28	100	<5		4.5
	28/03/2023	3.3	400	7	9.9	750	0.02	0.07	14	<0.02	<0.2	16	110	<5		7.9
	18/04/2023	4.2	280	<5	7.4	450	<0.01	0.04	29	<0.02	<0.2	22	140	<5		4.8
	18/05/2023	4.3	310	37	5.5	580	0.02	0.32	22	<0.02	12.33	21	230	<5		10
	15/06/2023	3.3	580	17	8.9	870	0.04	0.68	32	<0.02	1.40	31	300	<5		9.4
	24/07/2023	3.9	290	36	9	510	0.03	0.4	17	<0.02	1	20	250	<5		15
	21/08/2023	6.8	270	5.8	7.2	350	0.04	0.04	45	<0.02	0.5	43	8	<5		0.2
	18/09/2023	4.6	410	20	7.4	540	<0.01	0.28	30	<0.02	0.4	29	230	<5		7.7
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.5	640	18	7.1	1100	0.03	0.58	32	<0.01	0.6	30	370	6.7		12
	19/12/2023	3.8	610	7.7	6.7	850	<0.01	0.86	36	<0.02	0.9	37	150	<5		4.2
	23/01/2024	3.7	460	55	4.1	880	<0.01	0.16	31	<0.02	1.6	37	100	<5		3.2
	26/02/2024	4.3	200	93	7.5	250	0.09	0.09	53	0.02	1.5	11	440	7.2		8.3
	26/03/2024	6.1	170	54	7.7	300	0.08	0.13	21	<0.02	1	20	78	<5		3.7
	18/04/2024	7.5	360	9.2	7.4	650	0.03	0.08	88	<0.02	0.8	78	64	<5	<10	0.6
	20/05/2024	4.5	300	21	5.6	450	<0.01	0.5	19	<0.02	1.2	23	190	<5	66	10
	25/06/2024	6.3	80	2300	7.2	140	0.98	<0.1	9.4	<0.2	140	9	5	<5	48	0.5
	10/07/2024	4.4	260	29	5.1	400	0.01	0.64	19	<0.02	0.7	21	10	<5	50	0.5
	6/08/2024	4.6	340	22	6.3	630	0.02	0.62	35	<0.02	1.3	29	230	<5	70	6.6
	15/08/2024	6.3	82	19	8.3	120	0.04	0.07	9.5	<0.02	<0.2	9	31	<5	11	3.3
	11/09/2024	7.1	290	<5	7.7	440	<0.01	0.11	84	<0.02	0.3	66	56	<5	<10	0.7
	9/10/2024	6.6	240	330	7.7	360	0.46	<0.01	56	<0.02	7.1	45	35	33	<10	0.6
	6/11/2024	7.2	300	49	7.5	460	0.07	<0.01	88	<0.02	1.2	72	39	<5	<10	0.4
	16/12/2024	7.2	250	5.3	19.0	370	<0.01	<0.01	70	<0.02	0.7	61	31	50	<10	0.4
	14/01/2025	6.9	220	<5	7.7	420	0.04	<0.01	66	<0.02	1.3	57	11	<5	<10	0.2
	11/02/2025	7.4	340	<5	7.5	570	0.07	0.02	99	<0.02	1.4	87	14	<5	<10	0.1
	24/03/2024	6.9	130	<5	8.1	230	0.05	<0.01	38	<0.02	0.9	32	66	<5	<10	1.7
	31/03/2025	7.0	260	9.3	9.8	440	0.06	0.19	100	<0.02	0.9	70	26	<5	<10	0.3
	8/04/2025	7.2	290	<5	8.9	470	0.04	0.07	100	<0.02	0.4	82	36	<5	<10	0.4
	9/05/2025	7.1	290	<5	-	460	<0.01	<0.1	100	<0.02	0.7	73	36	<5	<10	0.4
	25/06/2025	6.7	360	230	6.5	540	2.3	0.01	88	<0.03	2.3	68	36	46	14	0.4
	8/07/2025	6.8	300	82	9.1	570	0.15	0.48	89	<0.02	1.1	67	39	27	<10	0.4
	14/08/2025	7.2	300	16	9.1	580	0.08	0.05	110	<0.02	1	81	32	<5	<10	0.3
	11/09/2025	6.8	300	6.7	12.0	530	0.05	0.22	84	<0.02	0.7	67	43	43	11	0.5
	13/10/2025	7.2	340	7.5	9	620	0.07	<0.01	100	<0.02	0.8	83	43	16	<10	0.4
	20/11/2025	6.6	190	28	4.7	300	0.15	0.19	28	<0.02	1	28	35	<5	<10	1.3
	16/12/2025	6.3	96	400	0.3	170	0.94	0.18	14	<0.5	12	17	18	17	38	1.3
	21/01/2026	7.6	330	<5	8.6	680	0.05	<0.01	100	0.1	0.9	84	36	<0.005	<10	0.4
SW03 Baseline		**6.1 - 6.7**	**191**	**1005**	**-**	**281**	**2.14**	**0.155**	**111**	**0.041**	**4.3**	**30**	**6**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW03	29/09/2022	0.4	0.00	<0.0002	13	0.00	0.00	0.8	<0.001	4.4	<0.0001	0.002	1.00	0.034	<1
	20/10/2022	0.5	0.00	<0.0002	8	0.00	0.00	0.9	0.00	2.3	<0.0001	0.001	1.00	0.03	<1
	14/11/2022	1.1	<0.001	<0.002	18	<0.001	0.00	1.9	<0.010	5.7	<0.001	<0.01	<5	0.24	<1
	14/12/2022	0.6	<0.001	<0.002	13	<0.01	<0.010	1.3	<0.010	<5	<0.001	<0.01	<5	0.53	<1
	18/01/2023	0.5	0.01	<0.002	<2	<0.010	<0.01	0.5	<0.01	6.2	<0.001	<0.01	<5	<0.05	<1
	20/02/2023	17	0.00	<0.0002	63	0.00	0.02	0.0	0.00	14.0	<0.001	0.065	3.00	0.12	<1
	28/03/2023	15	<0.001	<0.0002	63	0.00	0.00	4.5	<0.001	11.0	<0.0001	0.065	2.30	0.15	<1
	18/04/2023	3.8	<0.001	<0.0002	30	0.00	0.00	<0.001	<0.001	5.0	<0.0001	0.023	2.10	0.048	<1
	18/05/2023	5.8	<0.001	<0.0002	48	<0.001	0.00	14.0	<0.001	10.0	<0.0001	0.033	2.80	0.16	<1
	15/06/2023	11	<0.001	<0.0002	74	<0.001	0.00	12	<0.001	15.0	<0.0001	0.058	2.7	0.15	<1
	24/07/2023	7.1	<0.001	<0.0002	39	<0.001	0.002	8.9	0.001	9.7	<0.0001	0.030	2.5	0.1	<1
	21/08/2023	0.7	0.001	<0.0002	18	0.001	0.003	1.1	<0.001	6.3	<0.0001	0.002	6.8	0.026	<1
	18/09/2023	2.8	<0.001	<0.0002	59	<0.001	<0.001	1.1	<0.001	14.0	<0.0001	0.022	3.2	0.049	<1
	18/10/2023	3.0	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12.0	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	11.0	0.002	<0.0002	75	<0.001	<0.001	17	<0.001	17.0	<0.0001	0.060	3	0.14	<1
	19/12/2023	21.0	0.003	0.0011	80	<0.001	0.002	3.6	0.001	19.0	0.0007	0.071	4.3	0.16	<1
	23/01/2024	17.0	0.002	<0.0002	63	0.002	0.001	17	<0.001	19.0	<0.0001	0.059	5.1	0.13	<1
	26/02/2024	8.8	0.003	<0.0002	17	0.003	0.005	9	0.002	4.8	<0.0001	0.016	1.8	0.05	<1
	26/03/2024	0.9	<0.001	<0.0002	24	<0.001	<0.001	1.8	<0.001	6.1	<0.0001	0.009	2.8	0.025	<1
	18/04/2024	1.1	<0.001	<0.0002	22	<0.001	<0.001	1.8	<0.001	6.0	<0.0001	0.005	13	0.018	<1
	20/05/2024	5.4	0.002	<0.0002	34	<0.001	<0.001	13	<0.001	7.3	<0.0001	0.026	3.6	0.047	<1
	25/06/2024	0.2	<0.001	<0.0002	10	<0.001	<0.001	170	<0.001	2.7	<0.0001	0.011	2.3	0.042	<1
	10/07/2024	3.6	0.001	<0.0002	34	<0.001	0.001	6.6	<0.001	6.6	<0.0001	0.019	3	0.053	<1
	6/08/2024	3.10	<0.001	<0.0002	51	<0.001	<0.001	4.8	<0.001	7.8	<0.0001	0.026	3.4	0.092	<1
	15/08/2024	1.20	0.00	<0.0002	12	<0.001	0.003	2.1	<0.001	2.2	<0.0001	0.004	1.6	0.037	<1
	11/09/2024	0.59	<0.001	<0.0002	21	<0.001	0.001	1.0	<0.001	4.9	<0.0001	0.003	13	0.021	<1
	9/10/2024	20	0.02	<0.0002	21	0.011	0.01	39.0	0.008	4.4	<0.0001	0.008	8.8	0.1	<1
	6/11/2024	3	0.00	<0.0002	23	0.002	0.002	4.5	<0.001	6.2	<0.0001	0.003	15	0.017	<1
	16/12/2024	0.29	0.001	<0.0002	19	0.001	<0.001	1.6	<0.001	4	<0.0001	0.001	12	0.009	<1
	14/01/2025	0.17	0.001	<0.0002	17	<0.001	0.001	0.74	<0.001	3.3	<0.0001	0.001	12	0.016	<1
	11/02/2025	0.45	0.001	<0.0002	23	<0.001	<0.001	2.1	<0.001	4.5	<0.0001	0.001	18	0.031	<1
	24/03/2024	0.18	0.001	<0.0002	10	<0.001	0.002	0.79	<0.001	2.6	<0.0001	0.001	6.6	0.036	<1
	31/03/2025	0.42	0.002	<0.0002	21	<0.001	0.001	3.5	<0.001	4.9	<0.0001	0.002	11	0.045	<1
	8/04/2025	0.3	<0.001	<0.0002	21	<0.001	<0.001	1.3	<0.001	5.4	<0.0001	0.002	11	0.012	<1
	9/05/2025	0.62	0.002	<0.0002	20	<0.001	0.001	2	<0.001	4.9	<0.0001	0.005	11	0.042	<1
	25/06/2025	2	0.002	<0.0002	21	<0.001	0.003	6.1	0.001	5.2	<0.0001	0.002	12	0.053	<1
	8/07/2025	0.24	<0.001	<0.0002	19	<0.001	<0.001	0.49	<0.001	5	<0.0001	0.001	11	0.015	<1
	14/08/2025	0.2	<0.001	<0.0002	20	<0.001	<0.001	0.59	<0.001	5.8	<0.0001	0.001	11	0.01	<1
	11/09/2025	2	0.003	<0.0002	19	0.002	0.004	4	0.002	5.4	<0.0001	0.003	11	0.037	<1
	13/10/2025	0.29	0.001	<0.0002	22	<0.001	0.002	0.97	<0.001	5.9	<0.0001	0.001	16	0.019	<1
	20/11/2025	2.4	0.004	<0.0002	22	0.003	0.003	8.8	0.003	4.7	<0.0001	0.003	4.4	0.015	<1
	16/12/2025	6	0.003	<0.0002	15	0.002	0.005	2.7	0.002	3.2	<0.0001	0.007	2.4	0.14	<1
	21/01/2026	0.09	<0.001	<0.0002	20	<0.001	<1	0.33	<1	5.5	<0.0001	<0.001	16	0.009	<1
SW03 Baseline		**7.9**	**0.058**	**0.001**	**21**	**0.008**	**0.028**	**85.5**	**0.028**	**5**	**0.0005**	**0.006**	**4**	**0.26**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW03	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	<50	<100	<20	<50	<100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	130	130	<100	<100	<20	<50	10	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW03 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**120**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW04	29/09/2022	4.5	68	<5	4.8	52	0.01	0.18	20	<0.02	5.1	17	<2	<5		0.05
	20/10/2022	4.2	90	<5	7.5	110	0.01	<0.10	20	<0.02	0.3	16	<2	<5		0.05
	14/11/2022	No surface water located at monitoring site – no sample collected														
	14/12/2022	3.2	190	<5	2	280	0.01	0.05	42	<0.10	3.2	20	<2	<5		0.02
	18/01/2023	No surface water located at monitoring site – no sample collected														
	20/02/2023	4.1	0.2	<5	5.9	160	0.02	0.09	22	<0.10	7.4	23	15	<5		0.7
	28/03/2023	4.2	68	<5	8	130	<0.01	<0.01	17	<0.10	<0.25	14	25	<5		1.5
	18/04/2023	4.6	130	16	9.1	190	0.01	0.03	32	<0.02	0.5	21	8.7	<5		0.3
	18/05/2023	3.6	1,200	42	8	1,800	0.03	1.2	26	<0.02	1.15	53	1,000	<5		38.5
	15/06/2023	4.2	140	160	7.7	200	1.5	0.44	44	<0.02	12	24	<2	8		0.02
	24/07/2023	3.6	1,600	21	9	2,400	0.02	1.5	180	<0.02	3.4	78	5,700	<5		31.7
	21/08/2023	3.3	2,400	5.7	7.5	3,700	<0.01	2.8	33	<0.02	3.4	97	850	5.3		25.8
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.2	2,100	<5	9	3,500	0.03	0.8	4.7	<0.01	1.1	63	400	<5		85.1
	19/12/2023	3.0	3,200	15	0.8	3,700	<0.01	0.44	34	<0.02	4.5	100	980	<5		28.8
	23/01/2024	3.1	1,600	23	7.8	2,500	<0.01	0.19	27	<0.02	0.5	54	730	<5		27.0
	26/02/2024	3.1	1,000	11	7.8	1,200	0.03	0.31	14	<0.02	1.5	30	570	<5		40.7
	26/03/2024	3.2	900	5.7	9.6	1,300	<0.01	0.36	21	<0.02	0.9	30	710	<5		33.8
	18/04/2024	3.1	980	67	7.5	1,900	0.03	0.42	15	<0.02	0.8	33	1,000	27	310	66.7
	20/05/2024	3.3	630	8	8.3	1,100	<0.01	0.3	11	<0.02	0.7	25	500	<5	190	45.5
	25/06/2024	3.2	1,000	5.4	8.6	1,600	0.01	0.4	13	<0.02	1	27	270	<5	160	20.8
	10/07/2024	3.5	420	<5	7.9	870	<0.01	0.24	11	<0.02	0.6	21	450	<5	150	40.9
	6/08/2024	3.3	1,300	38	8.7	1,700	0.04	0.03	13	<0.02	1.1	28	860	7.8	230	66.2
	15/08/2024	3.9	240	<5	9.3	390	0.02	0.13	13	<0.02	0.8	16	150	<5	40	11.5
	11/09/2024	3.4	460	<5	6.9	690	0.01	0.05	8.7	<0.02	<0.2	17	390	15	77	44.8
	24/09/2024 - Additional	3.5	750	-	-	1,300	-	-	-	-	-	-	-	-	-	-
	9/10/2024	3.1	810	<5	9	1,200	0.02	<0.01	10	<0.02	0.8	26	580	<5	<10	58.0
	6/11/2024	3.3	440	23	6.4	660	0.05	<0.01	10	<0.02	1	18	310	<5	15	31.0
	16/12/2024	5.7	210	420	0.2	360	0.1	0.25	13	<0.02	13	12	110	7	25	8.5
	14/01/2025	4.1	310	120	4.9	460	0.13	0.03	6.3	<0.02	1.3	11	64	<5	<10	10.2
	11/02/2025	7.6	700	<5	8.8	1000	0.01	0.03	5.8	<0.02	1.3	21	150	7.7	<10	25.9
	24/03/2025	3.9	390	21	7.4	470	0.03	0.03	18	<0.02	1.5	24	180	8.1	<10	10.0
	31/03/2025	6.3	260	70	10	370	<0.01	0.1	11	<0.02	0.8	16	160	<5	<10	14.5
	8/04/2025	6.0	430	43	4.1	470	0.09	0.27	11	0.04	2.3	18	240	<10	16	21.8
	9/05/2025	6.5	270	260	-	570	<0.01	0.02	10	<0.02	4.5	16	250	160	<10	25.0
	25/06/2025	6.7	410	67	6.1	590	0.6	0.01	8.3	<0.02	0.6	16	160	6.5	28	19.2
	8/07/2025	4.0	140	180	6.1	160	0.21	<0.01	21	<0.02	6.2	17	<2	7.6	43	21.0
	14/08/2025	6.5	180	250	6.6	290	0.47	-	9.4	-	-	14	86	<5	13	9.4
	11/09/2025	6.5	260	1,400	0.2	460	0.03	0.31	7.3	<0.02	38	16	150	10	22	7.3
	13/10/2025	7.3	580	14	8.3	760	0.04	<0.01	4	<0.02	0.8	16	230	20	<10	4.0
	20/11/2025	6.9	280	35	2.1	490	0.08	0.05	8.4	<0.02	1	15	150	2.7	<10	8.4
	16/12/2025	7.0	370	170	6	550	0.05	0.21	14	<0.5	1	87	140	<5	39	14.0
	21/01/2026	6.9	250	75	1.9	450	0.23	<0.01	22	0.02	0.9	16	100	<0.005	13	22.0
SW04 Baseline		**4.2 – 4.5**	**112**	**293**	**-**	**165**	**0.5**	**0.693**	**90**	**0.052**	**4.5**	**20**	**3**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW04	29/09/2022	1.3	0.001	<0.0002	1.6	0.005	0.001	2.7	0.001	2.6	<0.0001	0.002	1	0.027	<1
	20/10/2022	1.1	<0.001	<0.0002	1.3	0.004	0.001	2.4	0.001	2.3	<0.0001	0.002	1	0.024	<1
	14/11/2022	No surface water located at monitoring site – no sample collected													
	14/12/2022	1.2	<0.001	<0.002	<5	<0.001	<0.01	3.2	<0.01	<5	<0.001	<0.01	<5	0.084	<1
	18/01/2023	No surface water located at monitoring site – no sample collected													
	20/02/2023	1.6	0.002	<0.0002	2.7	0.005	0.05	0.002	0.002	3.9	<0.001	0.003	1.6	0.039	<1
	28/03/2023	1.1	<0.01	<0.002	<5	0.002	<0.01	2.7	<0.01	<5	<0.0001	0.01	<5	<0.05	<1
	18/04/2023	0.85	<0.001	<0.0002	1.8	<0.01	<0.001	<0.001	<0.001	2.7	<0.0001	0.001	0.8	0.034	<1
	18/05/2023	41	<0.001	0.0005	200	<0.001	0.003	16	0.003	31	<0.0001	0.11	5.7	0.4	<1
	15/06/2023	3.1	0.002	<0.0002	2.2	0.007	0.007	6.3	0.005	4.5	<0.0001	0.003	1.4	0.075	1.41
	24/07/2023	50	<0.001	0.0002	330	<0.001	0.003	3.9	0.002	51	<0.0001	0.13	9	0.18	<1
	21/08/2023	72	0.002	0.0004	560	<0.001	0.003	3.4	0.002	83	<0.0001	0.23	13	0.34	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	3	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	91	0.003	0.0007	380	0.001	0.003	4.3	0.003	52	<0.0001	0.27	7.2	0.55	<1
	19/12/2023	110	0.005	0.0022	570	0.002	0.005	11	0.007	90	0.001	0.39	4.3	0.7	<1
	23/01/2024	55	0.002	0.0003	260	0.002	0.003	9.7	0.002	35	<0.0001	0.19	6.1	0.33	<1
	26/02/2024	23	<0.001	<0.0002	140	<0.001	<0.001	5.1	<0.001	20	<0.0001	0.083	3.9	0.18	<1
	26/03/2024	20	<0.001	<0.0002	130	<0.001	<0.001	3.1	<0.001	19	<0.0001	0.068	4.9	0.1	<1
	18/04/2024	32	<0.001	<0.0002	190	0.001	0.002	7	<0.001	26	<0.0001	0.1	3.6	0.18	<1
	20/05/2024	20	<0.001	<0.0002	100	<0.001	<0.001	5.7	<0.001	14	<0.0001	0.064	2.6	0.13	<1
	25/06/2024	16	<0.001	<0.0002	210	<0.001	<0.001	5.3	<0.001	23	<0.0001	0.059	3.7	0.09	<1
	10/07/2024	12	<0.001	<0.0002	110	<0.001	0.001	2.5	<0.001	12	<0.0001	0.051	2.2	0.11	<1
	6/08/2024	17	<0.001	<0.0002	200	<0.001	0.001	5.5	<0.001	24	<0.0001	0.059	2.5	0.1	<1
	15/08/2024	2	<0.001	<0.0002	36	<0.001	<0.001	0.81	<0.001	6	<0.0001	0.015	2.5	0.057	<1
	11/09/2024	5.6	<0.001	<0.0002	87	<0.001	<0.001	3.6	<0.001	11	<0.0001	0.026	1.6	0.061	<1
	24/09/2024 - Additional	-	<0.001	<0.0001	-	<0.001	0.0001	-	<0.001	-	<0.0001	0.032	-	0.043	-
	9/10/2024	14	<0.001	<0.0002	140	<0.001	0.002	8.1	<0.001	17	<0.0001	0.057	2.7	0.12	<1
	6/11/2024	2.8	<0.001	<0.0002	81	<0.001	<0.001	6.1	<0.001	11	<0.0001	0.02	<0.5	0.034	<1
	16/12/2024	4.4	0.007	<0.0002	29	0.009	0.006	170	0.003	4.5	<0.0001	0.009	1.3	0.035	<1
	14/01/2025	1.2	<0.001	<0.0002	53	<0.001	0.001	5.8	<0.001	5.8	<0.0001	0.014	0.8	0.039	<1
	11/02/2025	<0.05	<0.001	<0.0002	200	<0.001	<0.001	0.14	<0.001	18	<0.0001	0.004	<0.5	0.033	<1
	24/03/2025	1.1	<0.001	<0.0002	52	<0.001	0.002	6.6	<0.001	8.5	<0.0001	0.012	2.3	0.1	<1
	31/03/2025	0.5	0.003	<0.0002	50	<0.001	0.001	17	<0.001	7.6	<0.0001	0.007	2.4	0.047	<1
	8/04/2025	0.36	0.004	<0.0002	70	<0.001	<0.001	38	<0.001	9.8	<0.0001	0.006	2.3	0.014	<1
	9/05/2025	0.64	<0.001	<0.0002	61	<0.001	0.001	34	<0.001	7.9	<0.0001	0.001	1.9	0.032	<1
	25/06/2025	0.35	<0.001	<0.0002	85	<0.001	<0.001	7.3	<0.001	8.5	<0.0001	0.004	1.3	0.013	<1
	8/07/2025	0.92	<0.001	<0.0002	0.6	0.004	0.002	1.8	<0.001	1.5	<0.0001	0.001	0.8	0.042	<1
	14/08/2025	0.34	<0.001	<0.0002	38	<0.001	<0.001	17	<0.001	5.7	<0.0001	0.002	1	0.018	<1
	11/09/2025	8.7	0.031	<0.002	120	0.017	0.011	830	<0.01	12	<0.001	0.027	<5	0.1	<1
	13/10/2025	0.31	0.002	<0.0002	130	<0.001	<0.001	12	<0.001	14	<0.0001	0.004	1.5	<0.005	<1
	20/11/2025	0.26	<0.001	<0.0002	69	<0.001	0.002	7.6	0.001	8.5	<0.0001	0.003	0.6	0.016	<1
	16/12/2025	13	0.002	<0.0002	57	0.003	<0.001	47	0.002	38	<0.0001	0.032	2.4	0.039	<1
	21/01/2026	0.07	<0.001	<0.0002	53	<0.001	<1	3	<1	7.3	<0.0001	0.001	<0.5	<0.005	<1
SW04 Baseline		**1.4**	**0.002**	**0.001**	**3.2**	**0.007**	**0.002**	**2.8**	**0.002**	**2.3**	**0.0005**	**0.005**	**2.9**	**0.028**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW04	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	No flow - No sample collected									
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	No flow - No sample collected									
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No flow - No sample collected									
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	160	160	<100	<100	<20	<50	<100	<100	160	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Additional	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW04 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW05	29/09/2022	5.9	480	5.2	7.7	510	0.12	0.17	220	<0.20	3	140	11	<5		0.05
	20/10/2022	6.2	650	7.2	8.9	690	0.06	0.24	180	<0.20	0.5	160	8.6	<5		0.05
	14/11/2022	6.2	820	13	4.7	1,000	0.06	<0.05	310	<0.10	8.1	260	100	<5		0.32
	14/12/2022	6.2	830	16	7.5	1,100	0.05	0.05	330	<0.10	3.1	240	40	<5		0.12
	18/01/2023	6.3	2,800	33	7	<5	0.09	0.09	1,300	<0.02	3.38	820	160	<5		0.12
	20/02/2023	6.7	18	18	5.4	2,300	0.1	0.07	2,000	<0.10	3.4	4700	890	<5		0.45
	28/03/2023	5.6	470	<5	9.4	760	0.02	0.08	200	<0.10	<0.02	110	23	6.7		0.12
	18/04/2023	6.4	4,000	16	8.5	5,300	0.1	0.12	2,000	<0.02	80	1100	230	<5		0.12
	18/05/2023	5.8	260	17	5.7	460	0.08	<0.01	110	<0.02	<0.2	64	25	<5		0.23
	15/06/2023	6.2	1,100	<5	8.8	1,400	0.58	0.14	450	<0.02	1.1	250	40	<5		0.09
	24/07/2023	6.5	1,600	<5	9.3	2,800	0.05	0.17	1,500	<0.5	1.1	440	1,200	<5		0.80
	21/08/2023	6.6	1,600	<5	6.3	2,900	0.06	0.15	1,500	<0.02	1.28	480	190	<5		0.13
	18/09/2023	6.6	2,500	13	6.4	3,800	0.06	0.11	1,200	<0.02	1.3	650	210	<5		0.18
	18/10/2023	6.9	4,800	6.6	6.5	7,700	0.06	0.05	2,700	<0.02	<0.2	1,300	730	10		0.27
	20/11/2023	6.8	2,100	12	4.8	3,700	0.18	0.46	1,100	<0.01	0.6	460	1,200	<5		1.09
	19/12/2023	6.7	3,300	14	5.3	5,400	0.19	0.77	1,700	<0.02	<2	1,000	64	<5		0.04
	23/01/2024	6.2	1,100	13	9.3	1,000	0.09	0.05	440	<0.02	2.3	260	220	<5		0.50
	26/02/2024	6.3	970	16	8.6	1,200	0.11	0.03	330	<0.02	1.5	200	130	<5		0.39
	26/03/2024	6.6	1,100	9.1	5.6	1,700	0.03	0.09	910	<0.02	2	290	420	<5		0.46
	18/04/2024	6.5	560	8.4	5.8	830	0.07	0.16	160	<0.02	1.7	110	160	5.4	<10	1.00
	20/05/2024	6.7	240	<5	5.8	350	<0.01	0.03	68	<0.02	0.4	47	140	<5	15	2.06
	25/06/2024	6.5	1,000	16	7.7	1,800	0.06	0.1	500	<0.02	1.2	300	29	<5	16	0.06
	10/07/2024	6.2	950	5.6	6.3	1,700	0.02	0.16	170	<0.02	0.9	280	130	<5	11	0.76
	6/08/2024	6.3	3,300	9	8.9	5,800	0.05	0.11	1500	<0.02	1.2	820	210	<5	27	0.14
	15/08/2024	6.2	300	<5	7.1	430	0.08	0.03	30	<0.02	<0.2	80	27	<5	12	0.90
	11/09/2024	6.4	710	8.2	5.5	1,200	0.03	0.4	450	<0.02	1.1	230	72	<5	12	0.16
	9/10/2024	6.4	700	11	9	1,100	0.15	0.15	320	<0.1	<0.25	180	53	<5	14	0.17
	6/11/2024	7.1	930	15	6.1	1,300	0.08	0.16	440	<0.02	1	250	56	<5	<10	0.13
	16/12/2024	7.4	31,000	26	9.3	44,000	0.02	0.14	1,400	<0.02	0.4	<0.5	2,000	<5	<10	1.43
	14/01/2025	7.1	19,000	9.4	6.2	30,000	0.04	0.04	12,000	<0.02	0.3	5,500	500	<5	<10	0.04
	11/02/2025	7.5	24,000	9.1	8.5	35,000	0.03	0.06	6,300	<0.02	<0.2	6,900	260	<5	<10	0.04
	24/03/2024	6.3	1,600	<5	7	2,500	<0.1	0.12	790	<0.02	4.4	440	140	<5	<10	0.18
	31/03/2025	7.0	210	8	9.2	260	0.08	<10	72	<0.02	2.3	41	9.5	<5	<10	0.13
	8/04/2025	6.3	610	8.3	6.7	760	0.08	0.44	230	<0.2	<1	140	29	<10	<10	0.13
	9/05/2025	6.8	340	<5	-	480	0.08	<0.1	120	<0.2	1.7	71	40	<5	<10	0.33
	25/06/2025	6.2	2,000	6.6	5.9	3,500	<0.2	0.07	1,700	<0.2	<0.2	510	250	<5	17	0.14
	8/07/2025	6.0	470	<5	8	910	0.05	0.03	230	0.07	<0.2	130	41	<5	13	0.18
	14/08/2025	6.2	570	16	6.1	930	0.08	0.03	550	<0.02	16	140	62	6.5	13	0.11
	11/09/2025	6.5	940	5.4	6.9	1,700	0.04	0.05	440	<0.02	1.7	260	61	<5	9	0.14
	13/10/2025	6.8	6,600	<5	5.4	11,000	0.05	0.1	3,300	<0.02	1.7	1,800	370	<5	12	0.11
	20/11/2025	6.6	4,600	<5	4.3	9,000	0.1	0.21	2,600	<0.02	0.4	1,400	320	<5	12	0.12
	16/12/2025	6.8	11,000	18	4.1	18,000	0.07	0.28	6,100	<0.5	1.2	2,800	720	<5	34	0.12
	21/01/2026	7.4	25,000	9.5	7.8	37,000	0.03	0.02	12,000	12	1.1	6,300	1,500	<0.005	14	0.13
SW05 Baseline		**5.1 – 7.2**	**4710**	**136**	**-**	**6,927**	**0.21**	**0.592**	**980**	**0.02**	**2.2**	**1,667**	**115**	**63**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW05	29/09/2022	0.83	<0.001	<0.0002	9.4	0.002	<0.001	4.6	<0.001	17	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.66	<0.001	<0.0002	11	0.001	<0.001	3.5	0.001	19	<0.0001	0.002	7.9	0.007	<1
	14/11/2022	0.75	<0.001	<0.002	18	<0.001	0.002	5.4	<0.01	27	<0.001	<0.001	11	0.12	<1
	14/12/2022	0.93	<0.001	<0.002	16	<0.01	<0.01	6.1	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.73	<0.01	<0.002	<2	<0.01	<0.01	6.2	<0.01	96	<0.001	<0.01	41	<0.05	<1
	20/02/2023	0.22	0.002	<0.0002	190	0.001	0.01	<0.001	<0.001	550	<0.001	0.001	170	0.008	<1
	28/03/2023	0.77	<0.01	<0.002	9.4	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.4	<0.05	<1
	18/04/2023	1	<0.001	<0.0002	42	0.001	<0.001	<0.001	<0.001	110	<0.0001	0.003	37	0.008	<1
	18/05/2023	0.6	<0.001	<0.0002	5.2	<0.001	<0.001	2.4	<0.001	9.1	<0.0001	0.002	4.9	0.009	<1
	15/06/2023	0.32	<0.001	<0.0002	14	0.001	2	2	<0.001	27	<0.0001	0.001	14	0.01	<1
	24/07/2023	0.33	<0.001	<0.0002	22	<0.001	<0.001	1.9	<0.001	52	<0.0001	0.002	25	0.006	<1
	21/08/2023	0.41	<0.001	<0.0002	23	<0.001	0.002	2.2	<0.001	54	<0.0001	0.002	29	0.005	<1
	18/09/2023	0.28	<0.001	<0.0002	29	<0.001	<0.001	2.6	<0.001	70	<0.0001	0.001	42	<0.005	<1
	18/10/2023	0.27	<0.001	<0.0002	61	<0.001	<0.001	2	<0.001	160	<0.0001	<0.001	76	<0.005	<1
	20/11/2023	0.51	0.001	<0.0002	25	0.001	<0.001	4.3	<0.001	56	<0.0001	0.002	27	<0.005	<1
	19/12/2023	0.54	0.005	0.0028	46	0.001	0.001	4.2	0.001	120	0.002	0.002	47	0.009	<1
	23/01/2024	0.9	0.003	<0.0002	16	0.002	0.001	7.8	<0.001	32	<0.0001	0.001	16	0.012	<1
	26/02/2024	0.63	0.001	<0.0002	13	0.001	<0.001	3.7	<0.001	23	<0.0001	0.002	10	0.029	<1
	26/03/2024	0.64	<0.001	<0.0002	16	0.001	<0.001	3.3	<0.001	33	<0.0001	0.002	14	0.008	<1
	18/04/2024	0.69	<0.001	<0.0002	8.3	0.002	0.001	<0.001	<0.001	14	<0.0001	0.008	6.7	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.6	<0.001	0.001	2.5	<0.001	5.1	<0.0001	0.002	3.5	0.008	<1
	25/06/2024	0.2	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	31	<0.0001	0.002	12	0.012	<1
	10/07/2024	0.48	<0.001	<0.0002	17	<0.001	<0.001	2.9	<0.001	31	<0.0001	0.002	11	0.008	<1
	6/08/2024	0.28	<0.001	<0.0002	37	<0.001	<0.001	<0.001	<0.001	100	<0.0001	0.001	30	0.007	<1
	15/08/2024	0.5	<0.001	<0.0002	5	0.001	<0.001	1.6	<0.001	8	<0.0001	0.001	4.6	0.01	<1
	11/09/2024	0.52	<0.001	<0.0002	14	<0.001	<0.001	2.9	<0.001	25	<0.0001	0.002	10	0.011	<1
	9/10/2024	0.85	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.5	0.016	<1
	6/11/2024	0.68	<0.001	<0.0002	17	0.002	<0.001	3.8	<0.001	29	<0.0001	0.002	12	0.008	<1
	16/12/2024	<0.05	<0.001	<0.0002	<0.5	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.24	0.002	<0.0002	230	0.002	<0.001	0.64	<0.001	660	<0.0001	<0.001	210	0.006	<1
	11/02/2025	0.12	0.002	<0.0002	290	0.001	<0.001	0.5	<0.001	820	<0.0001	<0.001	260	0.047	<1
	24/03/2024	0.54	<0.001	<0.0002	22	<0.001	0.001	3.2	<0.001	53	<0.0001	0.002	17	0.32	<1
	31/03/2025	0.58	<0.001	<0.0002	4.2	<0.001	<0.001	3.7	<0.001	5.2	<0.0001	0.002	3.5	0.062	<1
	8/04/2025	0.77	<0.001	<0.0002	9.9	0.001	<0.001	4.2	<0.001	18	<0.0001	0.002	6	0.011	<1
	9/05/2025	0.75	<0.001	<0.0002	6.3	0.001	<0.001	3.2	<0.001	8.5	<0.0001	0.002	3.7	0.015	<1
	25/06/2025	0.46	<0.001	<0.0002	26	<0.001	<0.001	2	<0.001	63	<0.0001	0.001	19	0.01	<1
	8/07/2025	0.68	<0.001	<0.0002	9.1	0.001	<0.001	3	<0.001	16	<0.0001	0.002	4.9	0.008	<1
	14/08/2025	0.46	<0.001	<0.0002	8.6	<0.001	<0.001	2.6	<0.001	17	<0.0001	0.001	6.2	0.008	<1
	11/09/2025	0.55	<0.001	<0.0002	15	<0.001	<0.001	3.2	<0.001	33	<0.0001	0.001	11	0.01	<1
	13/10/2025	0.21	<0.001	<0.0002	77	<0.001	<0.001	2	<0.001	220	<0.0001	<0.001	69	<0.005	<1
	20/11/2025	0.32	0.001	<0.0002	63	0.001	<0.001	2.7	<0.001	180	<0.0001	0.001	53	<0.005	<1
	16/12/2025	0.2	0.001	<0.0002	120	0.001	0.001	1.4	<0.001	340	<0.0001	0.001	110	0.008	<1
	21/01/2026	0.08	0.002	<0.0002	250	0.001	<1	0.47	<1	760	<0.0001	<0.001	240	0.009	<1
SW05 Baseline		**2.1**	**0.002**	**0.001**	**57**	**0.002**	**0.003**	**12.3**	0.001	**130**	**0.0005**	**0.011**	**58**	**0.026**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW05	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	70	70	-	-	<20	60	100	-	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	120	120	<100	120	<20	<50	120	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
SW05 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW06	29/09/2022	6.0	480	<5	7.8	580	0.13	0.16	220	<0.02	8.6	140	11	5.1		0.05
	20/10/2022	6.3	580	16	8.7	730	0.05	0.19	330	<0.02	0.5	110	7.5	6.2		0.02
	14/11/2022	6.2	840	13	<5	1000	0.04	0.36	310	<0.10	1.1	270	100	<5		0.32
	14/12/2022	6.3	840	16	8.3	1200	0.1	0.05	340	<0.10	5.8	240	44	<5		0.13
	18/01/2023	6.4	3,700	31	6.8	5,400	0.07	0.04	1,800	<0.02	2.5	1,000	200	<5		0.11
	20/02/2023	6.8	19	89	5.1	14,000	0.09	0.11	22	<0.10	4.1	4,000	1,200	<5		54.55
	28/03/2023	5.6	400	6.2	8.3	730	0.03	0.07	180	<0.20	<0.20	110	18	9.7		0.10
	18/04/2023	6.7	6,400	18	7.4	6,700	0.07	1.2	3,200	<0.02	1.26	1,700	360	<10		0.11
	18/05/2023	5.9	280	17	6.3	470	0.08	0.06	120	<0.02	0.4	370	21	<5		0.18
	15/06/2023	6.4	1,100	<5	7.4	1,400	0.55	0.18	440	<0.02	0.7	250	38	<5		0.09
	24/07/2023	6.7	2,100	5.8	6.6	3,500	0.07	0.23	1,800	<0.2	0.6	540	620	<5		0.34
	21/08/2023	6.6	2,800	<5	6.1	5,400	0.19	0.16	1,300	<0.02	0.78	870	59	<5		0.05
	18/09/2023	6.7	2,900	24	6.5	4,600	0.06	0.12	1,500	<0.02	0.4	1,300	200	<5		0.13
	18/10/2023	6.9	7,900	6.3	6.4	9,700	0.05	0.05	3,700	<0.02	<0.2	1,600	430	<5		0.12
	20/11/2023	6.6	2,200	9.9	4.6	4,000	0.18	0.43	1,200	<0.01	1.2	490	720	<5		0.60
	19/12/2023	6.8	3,300	9.3	5.6	6,600	0.09	0.82	2,300	<0.02	<2	1,300	94	<5		0.04
	23/01/2024	6.2	4,300	15	2.1	4,300	0.18	0.08	2,800	<0.02	1.4	1,100	330	<5		0.12
	26/02/2024	6.4	880	17	9	1,200	0.11	0.02	60	<0.02	1.7	200	10	<5		0.17
	26/03/2024	6.8	1,300	9.9	5.9	1,900	0.05	0.07	760	0.05	1.2	300	120	<5		0.16
	18/04/2024	6.6	520	5.8	6	840	0.06	0.16	170	<0.02	<1	110	31	<5	17	0.18
	20/05/2024	6.3	240	<5	6.1	290	<0.01	0.05	59	<0.02	1	42	47	<5	15	0.80
	25/06/2024	6.7	960	17	9.2	1,900	0.06	0.09	500	<0.02	5.3	270	21	<5	19	0.04
	10/07/2024	6.2	880	<5	6.2	1,600	0.03	0.13	170	<0.02	1.4	250	33	<5	15	0.19
	6/08/2024	6.3	4,500	6.8	7.6	8,400	0.08	0.15	2,100	<0.02	1.6	1,200	270	<5	24	0.13
	15/08/2024	6.2	160	<5	7	240	0.1	0.03	57	<0.02	<0.2	38	15	<5	14	0.26
	11/09/2024	6.7	710	7	6.6	1,000	0.04	0.28	370	<0.02	1.8	180	54	<5	11	0.15
	9/10/2024	6.5	720	14	8.5	1,000	0.15	<0.01	310	<0.1	4.3	180	33	18	<10	0.11
	6/11/2024	6.9	1,900	37	5.6	2,400	0.1	0.11	890	<0.02	1.6	490	160	<5	<10	0.18
	16/12/2024	7.7	33,000	13	9.5	47,000	0.01	0.18	16,000	<0.02	<0.2	<0.5	2,100	<5	<10	0.13
	14/01/2025	7.2	25,000	11	6.3	38,000	0.03	0.06	15,000	<0.02	0.7	7,200	600	<5	<10	0.04
	11/02/2025	7.6	24,000	11	7.2	34,000	0.003	0.06	6,100	<0.02	<0.2	7,200	240	5.9	<10	0.04
	24/03/2025	6.5	1,700	<5	6.8	2,500	<0.1	0.12	820	<0.02	4.2	450	110	<5	<10	0.13
	31/03/2025	6.7	250	11	9.5	250	0.08	<10	68	<0.02	<1	42	9.7	<5	<10	0.14
	8/04/2025	6.4	610	7.6	9.4	740	0.08	0.28	260	<0.2	<1	140	31	<10	<10	0.12
	9/05/2025	6.6	260	<5	-	490	0.07	<0.1	120	<0.2	<1	70	28	<5	<10	0.23
	25/06/2025	6.2	2,000	7.4	5.9	3,600	1.4	0.08	1,700	<0.2	1.4	520	260	<5	20	1.50
	8/07/2025	6.0	470	<5	8.2	910	0.05	0.02	230	<0.02	<0.2	130	28	<5	13	0.12
	14/08/2025	6.3	590	31	6.1	910	0.07	0.03	340	<0.02	0.3	140	37	<5	13	0.11
	11/09/2025	6.6	1,299	6.8	7.1	2,200	0.04	0.05	590	<0.02	5.6	340	67	<5	<10	0.11
	13/10/2025	6.8	14,000	5.9	4.9	23,000	0.04	0.29	7,400	<0.02	0.6	4,100	830	5.9	14	0.11
	20/11/2025	6.7	8,400	<5	4.5	14,000	0.09	0.22	4,800	<0.02	0.7	2,300	1,100	<5	12	0.23
	16/12/2025	6.9	12,000	20	3.8	19,000	0.09	0.32	6,100	<0.5	1.8	2,900	750	7	28	0.12
	21/01/2026	7.4	18,000	7.1	7.4	28,000	0.03	<0.01	8,400	8.4	1	4,700	1,000	<0.005	12	0.12
ANZG (2018): 95% Slightly Disturbed		**6.5 – 8.0**	-	**<50**	-	**<2200**	**<0.05**	-	-	-	**<0.50**	-	-	**5**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW06	29/09/2022	0.78	<0.001	<0.0002	9.4	0.002	<0.001	4.5	<0.001	18	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.54	<0.001	<0.0002	9.1	0.001	<0.001	2.7	0.001	13	<0.0001	0.002	5.8	0.012	<1
	14/11/2022	0.68	<0.001	<0.002	18	<0.001	0.012	5.3	<0.01	29	<0.001	<0.01	12	0.11	<1
	14/12/2022	0.75	<0.001	<0.002	16	<0.01	<0.01	5.4	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.63	<0.010	<0.001	<2	<0.01	<0.01	0.01	<0.01	120	<0.001	<0.01	47	<0.05	<1
	20/02/2023	0.34	0.002	<0.0002	170	0.001	0.01	<0.001	<0.001	480	<0.001	0.002	160	0.008	<1
	28/03/2023	1.1	<0.01	<0.002	11	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.3	<0.05	<1
	18/04/2023	0.54	<0.001	<0.0002	68	0.001	<0.001	<0.001	<0.001	200	<0.0001	0.002	63	0.009	<1
	18/05/2023	0.44	0.003	<0.0002	14	<0.001	<0.001	0.13	<0.001	4.8	<0.0001	0.008	3.3	<0.005	<1
	15/06/2023	0.36	<0.001	<0.0002	15	<0.001	2.1	2.1	<0.001	28	28	0.001	14	<0.005	<1
	24/07/2023	0.36	<0.001	<0.0002	26	<0.001	<0.001	1.9	0.001	65	<0.0001	0.002	29	0.007	<1
	21/08/2023	0.41	<0.001	<0.0002	39	0.001	<0.001	1.9	<0.001	100	<0.0001	0.002	46	<0.005	<1
	18/09/2023	0.3	<0.001	<0.0002	56	<0.001	<0.001	2.4	<0.001	150	<0.0001	0.001	64	<0.005	<1
	18/10/2023	0.2	<0.001	<0.0002	73	<0.001	<0.001	1.7	<0.001	190	<0.0001	<0.001	85	<0.005	<1
	20/11/2023	0.63	0.001	<0.0002	27	0.001	<0.001	4.5	<0.001	60	<0.0001	0.003	28	0.01	<1
	19/12/2023	0.62	0.002	0.0007	56	0.001	0.002	3.4	<0.001	150	0.0005	0.002	55	0.008	<1
	23/01/2024	0.71	0.003	<0.0002	50	0.002	<0.001	5.7	<0.001	140	<0.0001	<0.001	46	0.008	<1
	26/02/2024	0.61	<0.001	<0.0002	14	0.003	<0.001	3.5	<0.001	24	<0.0001	0.005	10	0.025	<1
	26/03/2024	0.61	<0.001	<0.0002	17	0.001	<0.001	3.1	<0.001	34	<0.0001	0.002	15	0.008	<1
	18/04/2024	0.71	<0.001	<0.0002	10	0.001	<0.001	<0.001	<0.001	13	<0.0001	0.008	7.6	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.7	<0.001	<0.001	2.3	<0.001	4.8	<0.0001	0.002	3.2	0.009	<1
	25/06/2024	0.23	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	28	<0.0001	0.002	11	0.016	<1
	10/07/2024	0.5	<0.001	<0.0002	17	<0.001	<0.001	2.6	<0.001	28	<0.0001	0.002	10	0.01	<1
	6/08/2024	0.31	<0.001	<0.0002	50	<0.001	<0.001	<0.001	<0.001	140	<0.0001	0.002	40	0.011	<1
	15/08/2024	0.51	<0.001	<0.0002	4.8	<0.001	0.001	1.6	<0.001	4.6	<0.0001	0.002	3	0.011	<1
	11/09/2024	0.46	<0.001	<0.0002	14	<0.001	<0.001	2.1	<0.001	20	<0.0001	0.002	11	0.012	<1
	9/10/2024	0.84	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.7	0.009	<1
	6/11/2024	0.79	<0.001	<0.0002	25	0.002	<0.001	4.1	<0.001	60	<0.0001	0.002	20	0.01	<1
	16/12/2024	4.4	0.007	<0.0002	29	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.15	0.002	<0.0002	300	0.002	<0.001	0.3	<0.001	860	<0.0001	<0.001	270	<0.005	<1
	11/02/2025	0.09	0.002	<0.0002	300	0.001	<0.001	0.38	<0.001	850	<0.0001	<0.001	270	0.048	<1
	24/03/2025	0.55	<0.001	<0.0002	22	<0.001	<0.001	3.4	<0.001	54	<0.0001	0.002	17	0.027	<1
	31/03/2025	0.59	0.001	<0.0002	4.2	<0.001	<0.001	3.3	<0.001	5.3	<0.0001	0.002	3.5	0.044	<1
	8/04/2025	0.8	<0.001	<0.0002	9.9	0.003	<0.001	4.1	<0.001	18	<0.0001	0.002	6	0.007	<1
	9/05/2025	0.74	<0.001	<0.0002	6.3	0.001	0.001	2.8	<0.001	8.5	<0.0001	0.002	3.7	0.01	<1
	25/06/2025	0.7	<0.001	<0.0002	26	<0.001	<0.001	2.6	<0.001	64	<0.0001	0.002	20	0.008	<1
	8/07/2025	0.55	<0.001	<0.0002	11	0.001	0.001	2.3	<0.001	13	<0.0001	0.002	6.3	0.008	<1
	14/08/2025	0.43	<0.001	<0.0002	9.1	<0.001	<0.001	2.4	<0.001	16	<0.0001	0.001	6.3	0.011	<1
	11/09/2025	0.51	<0.001	<0.0002	19	0.001	<0.001	2.9	<0.001	42	<0.0001	0.001	14	0.008	<1
	13/10/2025	0.12	0.001	<0.0002	170	<0.001	<0.001	1.2	<0.001	500	<0.0001	<0.001	150	0.006	<1
	20/11/2025	0.26	0.001	<0.0002	99	0.001	<0.001	1.9	<0.001	280	<0.0001	0.001	86	0.006	<1
	16/12/2025	0.17	0.001	<0.0002	120	<0.001	<0.001	1.3	0.001	340	<0.0001	0.001	110	<0.005	<1
	21/01/2026	0.1	0.002	<0.0002	200	<0.001	<1	0.35	<1	560	<0.0001	<0.001	180	0.006	<1
ANZG (2018): 95% Slightly Disturbed		**0.055**	**0.013**	**0.0002**	**-**	**0.0033**	**0.0018**	**0.3**	**0.0034**	**-**	**0.0006**	**0.011**	**-**	**0.008**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW06	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	-	-	<20	<50	<100	<100	-	<100
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	90	90	<100	<100	<20	160	<100	<100	160	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<100	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	2.1	2.1	<100	<100	<20	<50	0.9	<100	0.9	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
ANZG (2018): 95% Slightly Disturbed		-	-	-	-	-	-	-	-	-	-

APPENDIX D

Photolog

PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
1	21/01/2026

Description

Surface water monitoring location SW02.



Photo No.	Date
2	21/01/2026

Description

Surface water monitoring location SW05.



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
3	21/01/2026

Description

Surface water monitoring location SW04.



Photo No.	Date
4	21/01/2026

Description

Surface water monitoring location SW03.



MONTHLY WATER QUALITY MONITORING REPORT

Harvest Estate Urban Development

Monitoring Event: 20th February 2026

Ewingsdale Road, Byron Bay, NSW, 2481

Job Number: 217140

For:

Planit Consulting

By:

ENV Services Pty Ltd

Date:

10/03/2026

ENV Services Pty Ltd

313 River Street, Ballina NSW 2478

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DOCUMENT CONTROL

Job No:	Job Number: 217140
Client:	Planit Consulting
Filename:	217140_Harvest Estate_WQ_February_2026

	Name:	**Date:**	**Signature:**
Prepared By:	Austin Metcalfe-Smith Environmental Scientist	10/03/2026	
Reviewed By:	Kingsley Baldwin Environmental Team Leader	10/03/2026	

Revision:	**Date:**	**Details:**

SCOPE OF ENGAGEMENT AND LIMITATIONS

This report has been prepared by ENV Services at the request of Planit Consulting for the purpose of consolidating and assessing water quality monitoring (surface water and ground water) data to determine impact associated with the development of the Harvest Estate. No other parties may rely on the contents of this report for any purposes except those stated.

This report has been prepared based on the information provided to us and from other information obtained as a result of enquiries made by us. ENV accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this document for a purpose other than that described above.

No part of this report may be reproduced, stored, or transmitted in any form without the prior consent of ENV.

ENV declares that it does not have, nor expects to have, a beneficial interest in the subject project.

To avoid this advice being used inappropriately, it is recommended that you consult with ENV before conveying the information to another who may not fully understand the objectives of the report. This report is meant only for the subject site/project and should not be applied to any other.

1 INTRODUCTION

ENV Services Pty Ltd (ENV) was engaged by Planit Consulting to prepare a Monthly Water Quality Report (MWQR) to meet requirements outlined in the Harvest Estate Development Conditions of Consent (11b - d, 32, 33 & 78) and Section 6.2 and 6.4 of the Planit Construction Environmental Management Plan (CEMP). Monitoring has been undertaken in accordance with the following approved plans.

- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate Groundwater Management Plan.* Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Belongil Creek Plan of Management*. Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate West Byron Urban Release Area; Acid Frog Management Plan.* Dated August 2020.

Baseline water quality parameters outlined in this report have been derived from mean or range values calculated over a 12-month sampling period undertaken between 25 May 2020 and 17 May 2021. This baseline water quality monitoring was carried out by Australian Wetlands Consulting (AWC) and undertaken in accordance with the Harvest Estate Groundwater Management Plan (AWC 2020) and the Harvest Estate – Belongil Creek Plan of Management (AWC 2020).

Guideline water quality trigger values have been derived from the ANZG (2018) Water Quality Guidelines and ANZECC (2000) guidelines for Fresh and Marine Water Quality. These guidelines define Belongil Creek as a lowland river of South-Eastern Australia, with trigger values chosen to reflect this. In assessing human disturbance, this report recognises Belongil Creek as being slight to moderately disturbed. On this basis, for toxicants in water, 95% species protection default guideline values have been presented for assessed toxicants.

No construction works were being undertaken during this monitoring period, with major civil earthworks associated with Stage 1 of the Project completed in November 2023.

2 MONITORING RESULTS & OBSERVATIONS

2.1 Monthly Groundwater Monitoring

Monthly groundwater monitoring at five (5) groundwater wells (MW2 – MW5 & MW7) was carried out to assess for impact within the underlying aquifer. This monitoring was conducted in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.2 of the Planit Construction Environmental Management Plan (CEMP). Groundwater monitoring locations are presented in Appendix A.

An assessment of the monthly analytical results presented in Appendix B, Table 1, identified the following observations:

Site	Observation	Comments
MW2	EC, TDS and cations/anions (SO_4, Na and Al) were recorded outside of baseline ranges.	EC and TDS values remain elevated, however has improved since the reporting period. Sulfate levels are likely due to the oxidisation of sulfide minerals. Groundwater had sulfuric odour typical of oxidising ASS terrains. No site related impacts identified at this location.
MW3	Dry well	No groundwater encountered during monitoring round.
MW4	All parameters were within baseline ranges with the exception of SO_4, which was outside of guidelines values.	Elevated SO_4 readings paired with a spike in the sulfate:chloride ratio identifies potential ASS oxidation. Further monitoring will be required to confirm. Site is in proximity to Southern Swale Drain where acid sulfate soils (ASS) have been identified. pH is within guideline values. Groundwater had sulfuric odour typical of oxidising ASS terrains. No site related impacts identified at this location.
MW5	pH, EC, TDS and several cations/anions (Na, SO_4, Ca, Mg and Al) concentrations were outside baseline ranges or guideline values (Al only).	Low pH and elevated analytes (EC, TDS, and cations/anions) at this site indicate the presence of oxidising acid sulfate soils (ASS) proximal to the monitoring well. Groundwater had sulfuric odour typical of oxidising ASS terrains. Localised impacts continue to be reported at this site.
MW7	All parameters were within baseline ranges	Elevated levels of ammonia, sulfate and increase in the sulfate: chloride ratio are likely to be associated with partial oxidation of sediments and mobilisation of sulfide minerals through natural

	with the exception of NH_3 and SO_4.	fluctuations in REDOX conditions (e.g. during seasonal drawdown). This is supported with the groundwater at its lowest recorded level since October 2023. pH was within guideline values. No site related impacts identified at this location.

2.2 Monthly Surface Water Monitoring

Monthly surface water sampling (SW01 – SW06) was carried out to assess for impact from site activities on the receiving environment. Monitoring was carried out in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.4 of the Planit Construction Environmental Management Plan (CEMP), which require assessment of the following analytes; physiochemical parameters, nutrient, metals, cation/anion and total recoverable hydrocarbon (TRH).

Surface water monitoring locations are presented in Appendix A and the coordinates (GDA94) of all locations tabulated and presented in Table 1. Tabulated analytical results are presented in Appendix C. Select photos of the surface water sampling programme are presented in Appendix D.

Table 1: Surface Water Monitoring Coordinates

Monitoring Location	Location	Easting	Northing
SW01	Upstream of development - Southern Swale Drain	0556852	6831954
SW02	Upstream of development - Northern Main Drain	0557145	6831963
SW03	Downstream of development - Northern Main Drain	0557411	6831604
SW04	Downstream of development - Southern Swale Drain	0557397	6831429
SW05	Receiving environment - Outlet of Southern Swale Drain	0557992	6830881
SW06	Receiving environment - Outlet of Northern Main Drain	0558257	6831214

2.2.1 Assessment of Analytical Results

An assessment of the monthly analytical results presented in Appendix C, identified the following observations:

Site	Observation	Comments
SW01	All parameters were within baseline ranges with the exception of NH_3, Nitrite as well as Fe and Hydrocarbons.	This site is located at an upstream location, receiving water from off-site. Hydrocarbons identified within the samples are likely to be derived from the existing road corridor (Ewingsdale Road) and development adjacent to site. Elevated levels of Ammonia, Nitrite and Iron are likely associated with the previous uncontrolled movement iron rich of sediment from the adjacent development. No discernible impacts have been identified at receiving locations.

Site	Observation	Comments
SW02	EC, TDS, Na and SO_4 and cations/anions (Ca, Mg and K) were recorded outside of baselines ranges.	Water quality has improved compared to the previous monitoring round. All elevated values are typical of the geological (ASS) setting. No site related impacts identified.
SW03	pH, TDS, SO_4, and cations/anions (Ca, Na, Mg and K) were recorded outside of baseline ranges.	This site is located within the Northern Main Drain, downstream of Stage 1 works and SW02. Water quality parameters are consistent with upstream location SW02. No site related impacts identified.
SW04	pH, TDS, EC, SO_4 and cations/anions (Ca, Fe and Mg) were outside baseline ranges.	This site is located downstream of Stage 1 works, within the Southern Swale Drain. Parameters are consistent with the previous monitoring round. Higher Iron and total dissolved solids concentrations likely associated with sediments linked to the uncontrolled movement of sediment from the adjacent development located upstream. Water quality remains poor at this location when compared to 'upstream' (SW01) and baseline values.
SW05	EC, TDS, SO_4 and several cations/anions (Cl, Na, Ca, Mg and K) were outside of baseline ranges.	Elevated EC and cation/anions associated with tidal influences. Water quality has improved since the previous monitoring round. No site related impacts identified.
SW06	EC, Al and Fe and Zn were recorded outside ANZG default guideline values (95% for slightly disturbed river systems).	Water quality appears relatively consistent with upstream location SW05. Elevated EC and cation/anions associated with tidal influences. No site related impacts observed.

3 RAINFALL

During this monitoring period (21/01/2026 – 20/02/2026), 37.2 mm of rain was recorded in the area (Byron Bay, Cape Byron Lighthouse, Bureau of Meteorology).

4 CONCLUSION & RECOMMENDATIONS

4.1 Conclusion

Monitoring results indicate that impacts associated with exposure of ASS continue to improvement at surface water location SW04 (Southern Swale Drain) as indicated by analyte concentrations trending lower since the completion of Stage 1 of the development.

Similarly, water quality reported at SW03 is noted to be consistent with results reported from the upstream catchment (SW02), inferring no discernible site related impacts.

The monitoring period incurred low rainfall (37.2 mm)

The groundwater monitoring network continues to present indicators of localised impact from ASS adjacent to MW5 and at MW2, however the trend analysis of several analytes has identified gradual improvements in water quality. There have been new indicators of ASS oxidation at MW2 and MW5 which will be reassessed next reporting period.

4.2 Recommendations

Based on the conclusions of this monitoring report, the following recommendations are to be implemented with respect to improving water and monitoring well quality throughout the site:

- Given pH across the site is within or above the baseline water quality values, no corrective actions are required.
- Continue to monitor trends at receiving locations (SW01 and SW02) for potential impact from runoff from filling activities north of the site.
- Monitor any potential movement of Hydrocarbons downstream into the site.
- Continue to monitor signs of ASS oxidation at all MW locations.

APPENDIX A

Figures



Legend

Site Location

0 0.5 1km

Figure 1 – Site Location
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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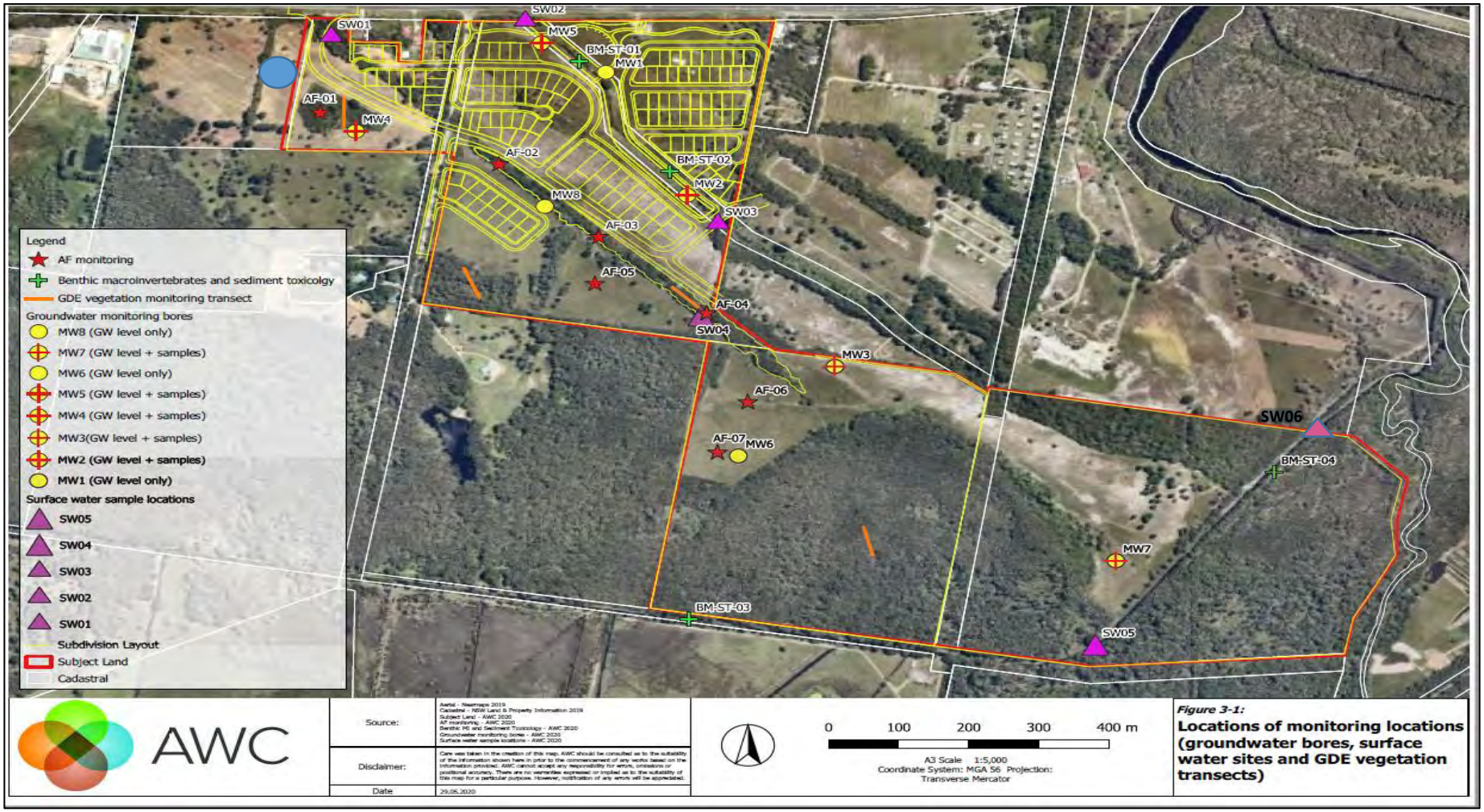


Figure 2 – AWC Monitoring Locations
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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APPENDIX B

Groundwater Quality Analytical Results

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW2	29/09/22	5.8	54	92	<5	0.12	0.51	14	0.02	0.5	30	< 2	< 0.5	0.8	2.4			0.1
	20/10/22	5.6	100	110	<5	0.09	0.24	13	0.02	2	28	< 2	<0.5	0.8	2.2			0.1
	14/11/22	6.0	100	240	<5	0.07	0.24	19	<0.10	<0.2	30	< 2	1.3	1.4	2.4			0.1
	14/12/22	5.6	110	170	<5	0.02	<0.05	15	<0.10	3.1	29	5	<5	<5	<5			0.3
	18/01/23	4.6	130	76	9.2	0.12	0.09	17	<0.05	2.5	29	7	<5	<5	<5			0.4
	20/02/23	6.0	100	160	5.3	0.09	0.1	27	<0.25	0.25	27	3.7	<0.5	0.7	3.1			0.1
	28/03/23	5.9	140	92	17	0.02	0.12	15	<0.02	<0.2	21	7.2	<5	<5	<5			0.5
	18/04/23	6.2	170	88	<5	0.08	1.2	15	<0.02	7.7	18	5.2	<5	<5	<5			0.3
	18/05/23	5.9	130	76	10	0.09	0.1	13	<0.02	9	28	2.1	0.6	0.9	2.6			0.2
	25/06/23	3.3	4,500	3,000	250	0.26	1.6	45	<0.02	8.1	86	3,800	440	82	7.9			84.4
	24/07/23	6.2	220	150	<5	0.03	0.16	12	<0.2	1	24	12	<0.5	0.8	2.5			1.0
	21/08/23	5.7	120	84	<5	0.08	0.14	15	<0.02	1.7	30	2.3	<5	<5	<5			0.2
	18/09/23	5.9	120	130	11	0.04	0.15	13	<0.02	1.2	25	<2	<0.5	0.9	2.7			0.1
	18/10/23	5.6	110	73	6.6	0.3	0.11	15	<0.02	0.3	25	3	<0.5	0.9	2.8			0.2
	20/11/23	6.0	160	70	<5	0.11	0.17	16	<0.01	0.8	28	4.2	<0.5	0.8	2.6			0.3
	19/12/23	6.3	110	100	<5	0.05	0.48	16	<0.02	2.8	28	2.1	0.5	0.9	2.9			0.1
	20/01/24	6.2	150	88	<5	0.05	0.08	13	<0.02	1.1	26	<2	<0.5	0.8	3			0.1
	26/02/24	5.1	150	340	7.4	0.07	0.09	15	<0.02	8.6	36	14	0.6	1	2.7			0.9
	26/03/24	5.7	180	310	<5	0.07	0.13	16	<0.02	<1	27	6.9	<0.5	0.8	2.7			0.4
	18/04/24	5.7	170	<5	<5	0.05	0.09	15	<0.02	1.8	29	2.6	<0.5	0.9	2.8	3.6	<1	0.17
	20/05/24	5.6	160	120	<5	0.11	0.1	19	<0.02	1	32	2.9	<0.5	0.8	2.8	3.9	<1	0.2
	25/06/24	5.5	170	170	12	0.09	<0.01	21	<0.02	2.7	30	<2	<0.5	0.8	2.3	3.8	<1	0.0
	10/07/24	5.8	150	190	<5	0.03	0.11	15	<0.02	<1	28	2.2	<0.5	0.7	2.7	2.8	<1	0.1
	06/08/24	5.9	170	90	6.9	0.16	0.12	20	<0.1	2.4	25	3.3	<0.5	0.6	2.1	3.4	<1	0.2
	11/09/24	5.7	140	110	<5	0.02	0.83	21	<0.2	<1	28	<2	<0.5	0.7	2.4	2.8	<1	0.0
	09/10/24	5.9	150	210	6.3	0.21	<0.01	17	0.02	<0.2	30	2.8	<0.5	<0.5	2.6	2.4	<1	0.1
	06/11/24	5.7	120	190	6.6	2	0.02	17	-	2.3	33	<2	1	1	3.1	3.6	<1	0.1
	16/12/24	6.0	120	60	8.0	0.05	<0.1	16	<0.2	0.9	30	5.3	0.14	0.8	2.8	3.5	<1	0.3
	14/01/25	6.4	150	94	610.0	0.03	<0.05	15	<0.1	<0.25	31	<2	<0.5	0.6	2.4	2.7	1	0.1
	11/02/25	5.7	170	150	<5	0.04	<0.1	13	<0.02	<0.5	29	2.8	<0.5	0.6	2.4	2.8	<1	0.2
	24/03/25	5.7	120	190	<5	<0.05	0.05	36	0.02	4.2	28	5.8	<0.5	0.7	2.4	2.7	<1	0.2
	08/04/25	5.7	120	220	<5	0.02	0.03	16	0.03	<2	31	4.2	<0.5	0.7	2.6	3.5	<1	0.3
	09/05/25	6.0	150	210	<5	0.01	<0.1	17	<0.2	1.1	29	7	1.3	0.7	2.6	3.2	<1	0.4
	25/06/25	5.6	180	200	<5	0.06	<0.01	15	<0.02	0.8	33	22	<0.5	0.7	2.6	1.7	<1	1.5
	08/07/25	5.5	190	180	<5	0.04	0.13	14	<0.2	1.6	32	24	<0.5	0.8	2.5	1.7	<1	1.7
	14/08/25	5.8	180	160	12.0	0.07	0.11	15	<0.02	1.9	30	33	<0.5	0.8	2.5	0.82	<1	2.2
	11/09/25	5.7	190	100	<5	0.03	0.09	17	<0.02	3.1	33	31	<0.5	0.8	2.6	0.84	<1	1.8
	13/10/25	5.6	170	180	<5	0.16	0.16	18	<0.2	0.6	33	24	<0.5	0.8	2.5	2	<1	1.3
	20/11/25	5.8	180	210	6	0.08	0.25	14	<0.2	0.7	35	8.1	<0.5	0.8	2.6	1.1	<1	0.6
	17/12/25	5.7	170	100	6.8	0.09	0.17	15	<0.2	1	35	9.3	<0.5	0.9	2.5	0.99	<1	0.6
	21/01/26	5.8	160	220	<5	0.04	0.12	16	<0.02	3.5	34	7.1	<0.5	0.9	2.7	2.3	<1	0.4
	20/02/26	5.9	170	190	<5	0.08	0.03	16	<0.02	1.9	31	20	<0.5	0.7	0.7	1.1	<2	1.3
MW2 Baseline		**4.2 - 5.7**	**152**	**103**	**483**	**0.45**	**0.338**	**189**	**0.07**	**2.03**	**29.7**	**9.8**	**0.7**	**1.4**	**4.2**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW3	29/09/22	4.2	53	40	370	0.09	0.05	8.8	0.02	0.5	7	<2	< 0.5	1	0.6			0.1
	20/10/22	4.1	64	62	130	0.01	0.2	8	0.02	0.5	7	<2	0.5	0.9	<0.5			0.1
	14/11/22	4.6	57	84	170	0.03	0.27	7.4	<0.02	<0.2	7.1	<2	0.8	0.6	<0.5			0.1
	14/12/22	4.3	43	32	280	<0.01	<0.01	5.2	<0.02	1.1	6	<2	<5	<5	<5			0.2
	18/01/23	4.3	54	28	670	0.03	<0.01	4.1	<0.05	1.4	<5	4.1	<5	<5	<5			1.0
	20/02/23	4.2	36	40	76	0.02	<0.10	6.8	0.06	7.26	7.6	<2	<0.5	1	<0.5			0.1
	28/03/23	4.1	70	44	<5	<0.01	<0.01	7.9	<0.02	0.22	4.8	2.2	<0.5	1	0.6			0.3
	18/04/23	4.6	89	54	110	0.02	0.1	9.6	<0.02	5.7	4.3	4.3	<0.5	0.6	<0.5			0.4
	18/05/23	4.5	60	40	450	0.02	0.04	5.8	<0.02	1	4.8	2.1	0.6	0.8	<0.5			0.4
	15/06/23	4.0	84	48	22	0.27	0.4	5.5	<0.02	1.96	5	63	<0.5	0.8	<0.5			11.5
	24/07/23	4.5	85	59	160	0.04	<0.01	9.5	<0.02	<0.2	5.6	12	<0.5	0.8	<0.5			1.3
	21/08/23	3.9	110	52	100	0.01	<0.01	6.3	<0.02	<0.2	6.6	3	<0.5	1.1	<0.5			0.5
	18/09/23	Dry – no sample collected																
	18/10/23	Dry – no sample collected																
	20/11/23	4.0	96	46	120	0.03	<0.02	7.8	<0.01	0.7	5.8	5	<0.5	0.7	<0.5			0.6
	19/12/23	4.0	46	30	92	<0.01	0.04	13	<0.02	<0.2	9.7	5.6	<0.5	1.3	0.6			0.4
	20/01/24	4.2	70	28	270	0.01	<0.01	5.4	<0.02	0.6	5.5	<2	<0.5	0.8	<0.5			0.2
	26/02/24	4.5	70	50	29	0.01	0.02	10	<0.02	16	5	4.5	<0.5	0.6	<0.5			0.5
	26/03/24	4.1	67	56	110	<0.01	0.06	5.1	<0.02	0.3	4.4	6.1	<0.5	0.8	<0.5			1.2
	18/04/24	3.7	150	< 5	<5	0.05	0.01	4.6	<0.02	0.7	4	12	<0.5	0.8	<0.5	0.99	<1	0.3
	20/05/24	4.5	36	30	26	0.03	<0.01	31	<0.02	0.3	3	3.9	0.6	<0.5	<0.5	1.1	<1	0.1
	25/06/24	3.5	160	90	120	0.17	<0.01	2.8	<0.02	<0.2	3.1	5	<0.5	<0.5	<0.5	0.7	<1	0.1
	10/07/24	4.4	42	40	300	<0.01	<0.01	4.2	<0.02	0.5	3.5	2.5	<0.5	<0.5	<0.5	0.7	<1	0.6
	06/08/24	4.3	45	22	310	0.03	0.01	4.4	<0.02	3.2	2.5	<2	<.5	<0.5	<0.5	1	<1	0.2
	11/09/24	4.2	44	28	720	0.02	<0.1	5	<0.02	<1	3.7	<2	<0.5	<0.5	<0.5	1.3	<1	0.2
	09/10/24	4.2	50	32	430	0.1	<0.01	5.3	<0.02	<0.2	4.1	2.8	2.9	0.6	0.6	0.48	<1	0.2
	06/11/24	4.3	38	20	370	<0.01	0.09	4.8	-	0.9	4.6	<2	0.6	0.7	<0.5	0.84		0.2
	16/12/24	4.3	35	24	63	0.02	<0.01	4.4	<0.02	0.5	3.8	2.2	<0.5	0.7	<0.5	0.75	<1	0.5
	14/01/25	4.5	40	20	38	0.03	0.01	3.3	<0.02	0.5	2.8	<2	<0.5	<0.5	<0.5	0.75	<1	0.3
	11/02/25	4.2	64	36	8.2	<0.01	<0.01	2.9	<0.02	<0.2	3.1	4.4	<0.5	<0.5	<0.5	1.1	<1	1.5
	24/03/25	4.0	79	50	150	0.02	<0.01	13	<0.02	0.9	5.8	3.9	0.8	1.1	<0.5	0.52	1.5	0.3
	08/04/25	4.2	71	38	160	<0.01	0.02	11	<0.02	0.9	7.3	4.1	0.9	1.4	2.6	0.58	1.5	0.4
	09/05/25	4.5	73	74	210	<0.01	0.02	9.9	<0.02	0.8	7	3.1	0.7	0.9	<0.5	0.74	<1	0.3
	25/06/25	4.5	42	44	170	0.05	<0.01	4.4	<0.02	1.9	5	4.3	<0.5	<0.5	<0.5	1	<1	1.0
	08/07/25	4.5	47	25	670	0.02	0.03	4.5	0.03	0.6	4.9	2.5	<0.5	<0.5	<0.5	1	<1	0.6
	14/08/25	4.8	34	38	550	0.06	0.06	3.8	0.02	5.7	3.6	4	<0.5	<0.5	<0.5	0.5	<1	1.0
	11/09/25	4.6	42	28	2,500	0.02	0.3	4.7	0.11	2.1	4.7	3.5	<0.5	<0.5	<0.5	0.49	<1	0.7
	13/10/25	Dry – no sample collected																
	20/11/25	Dry – no sample collected																
	17/12/25	Dry – no sample collected																
	21/01/26	Dry – no sample collected																
	20/02/26	Dry – no sample collected																
MW3 Baseline		**4.0 - 5.3**	**206**	**140**	**5223**	**1.57**	**0.294**	**121**	**0.167**	**4.14**	**26.4**	**13.4**	**3.8**	**5.3**	**3.1**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW4	29/09/22	4.5	100	88	350	0.03	0.16	22	0.1	1.5	19	<2	3.6	3.7	0.9			0.0
	20/10/22	4.5	110	100	69	0.02	0.78	20	0.04	1	14	<2	3.9	2.1	<0.5			0.1
	14/11/22	4.2	130	340	16	0.01	0.13	30	<0.10	7	22	5	2.6	4.8	1.1			0.2
	14/12/22	4.2	140	140	60	<0.01	<0.05	23	<0.10	3	21	7.8	<5	<5	<5			0.3
	18/01/23	5.7	170	110	170	0.02	0.16	26	<0.50	2.4	20	6.6	<5	<5	<5			0.3
	20/02/23	3.9	87	110	31	0.04	<0.05	15	0.28	3.88	15	5.8	3.5	5.4	0.9			0.4
	28/03/23	4.7	180	120	190	0.04	0.08	28	<0.02	22	18	6	8.8	5.1	<5			0.2
	18/04/23	3.7	500	280	340	0.11	0.07	27	<0.02	0.9	19	130	3.4	5	<0.5			4.8
	18/05/23	5.4	110	72	70	0.03	<0.01	14	<0.02	2.89	11	10	5.7	3.7	<0.5			0.7
	15/06/23	3.8	200	150	130	1.4	0.29	29	<0.02	0.9	21	12	<5	6	<5			0.4
	24/07/23	4.1	170	94	58	0.03	<0.1	24	<0.2	1	20	17	2.8	6.2	0.6			0.7
	21/08/23	3.8	200	120	75	0.03	0.07	18	0.65	1.76	15	3.6	2	5	<0.5			0.2
	18/09/23	3.8	160	86	21	0.02	0.11	19	0.02	1.1	17	10	1.5	4.1	<0.5			0.5
	18/10/23	3.8	190	110	31	0.08	0.08	25	<0.02	0.9	18	9.3	1.7	4.5	0.5			0.4
	20/11/23	4.4	160	870	28	0.05	0.1	22	<0.01	2.2	15	5.8	3.3	4	0.7			0.3
	19/12/23	4.0	190	130	27	0.03	0.41	38	<0.02	1.5	22	13	3.3	7.8	1			0.3
	20/01/24	4.2	170	120	27	0.01	0.02	24	<0.02	1.2	17	2.9	5.4	5.1	<0.5			0.1
	26/02/24	3.6	290	190	96	0.03	0.07	27	<0.02	6.9	17	38	10	4.1	<0.5			1.4
	26/03/24	5.6	150	140	18	0.02	0.58	25	<0.02	1.1	15	7	9.3	3.8	<0.5			0.3
	18/04/24	4.3	140	90	12	0.02	0.04	17	<0.02	24	13	6.7	3.2	3.6	<0.5	1.1	2.9	0.4
	20/05/24	5.9	200	180	9.4	0.01	0.83	15	<0.02	1.1	10	5.6	9.6	2.1	<0.5	1.5	6.4	0.4
	25/06/24	4.2	120	100	33	0.1	<0.01	15	<0.02	1.4	9.1	2.3	3.5	2.2	<0.5	1.7	<1	0.2
	10/07/24	6.3	79	46	16	0.02	0.12	8.7	<0.02	1.4	6.4	4	9.7	1	<0.5	0.55	<1	0.5
	06/08/24	4.4	170	100	24	0.02	0.12	26	<0.02	2.4	12	5.5	1.5	3.2	<0.5	0.86	<1	0.2
	11/09/24	5.2	110	74	27	0.02	0.14	21	<0.02	0.6	12	2.5	7.2	2.9	<0.5	1.3	<1	0.1
	09/10/24	4.1	150	140	190	0.1	0.07	25	0.03	0.9	15	6.2	2.9	4	0.7	1.2	<1	0.2
	06/11/24	4.4	130	180	40	0.51	0.04	22	-	1.9	15	2.3	4.7	4.8	<0.5	1.4	3.4	0.1
	16/12/24	5.7	80	70	<5	0.02	<0.1	18	<0.2	1	11	4.1	8.1	3	<0.5	0.99	7.2	0.2
	14/01/25	4.1	180	120	86	0.02	1.3	26	<0.02	1.2	14	2.4	4.4	3.8	<0.5	1.6	<1	0.1
	11/02/25	4.1	170	150	<5	0.01	<0.1	25	<0.02	<0.5	16	3.1	2.5	4.8	<0.5	1.8	<1	0.1
	24/03/25	5.0	110	84	39	<0.05	0.04	22	0.02	5	13	7.6	4.9	3.4	<0.5	0.85	5.8	0.3
	08/04/25	5.2	90	130	22	<0.01	0.03	16	<0.02	1	10	3.7	6.9	2.7	<0.5	0.58	12	0.2
	09/05/25	6.0	110	140	45	-	-	14	<0.2	-	8.7	2.7	11.0	2	<0.5	0.8	14	0.2
	25/06/25	5.4	98	140	130	0.06	0.01	12	0.2	1.6	8.8	8.2	8.6	1.6	<0.5	0.98	8.8	0.7
	08/07/25	5.0	110	100	300	0.01	0.23	15	<0.2	<0.5	11	9.4	5.7	2.4	<0.5	1.7	3.4	0.6
	14/08/25	5.7	110	150	600	0.11	0.12	15	0.04	4.7	9.6	4.3	10.0	2	<0.5	0.64	<1	0.3
	11/09/25	4.4	140	89	290	0.02	0.15	25	0.07	4.2	15	7.3	4.0	3.5	0.9	1.1	3.6	0.3
	13/10/25	4.3	160	210	120	0.11	0.42	30	<0.2	<2	18	2.8	2.9	4.5	0.8	2.2	1.3	0.1
	20/11/25	4.2	160	220	140	0.06	0.22	22	<0.2	1.1	16	2.2	2.7	4.1	0.6	1.2	2.3	0.1
	17/12/25	4.1	170	110	170	0.02	<0.1	26	<0.2	1.9	20	2.9	1.4	5.6	0.9	1.1	1.3	0.1
	21/01/26	4.5	120	190	370	0.25	0.04	14	0.03	3.5	12	5.1	4.9	3.4	<0.5	1.5	3.3	0.4
	20/02/26	4.1	280	290	200	0.1	<0.1	28	<0.2	1.8	24	42	5.8	11	0.8	0.99	5.9	1.5
MW4 Baseline		**4.0 - 5.8**	**890**	**605**	**1220**	**0.43**	**1.392**	**199**	**0.185**	**4.36**	**146.3**	**19.2**	**11.3**	**15.6**	**5.4**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW5	29/09/22	4.5	59	68	630	0.13	0.41	18	0.02	6.33	14	<2	2	3	0.6			0.1
	20/10/22	4.4	75	82	92	0.02	0.1	15	0.02	0.5	12	<2	2	2	0.5			0.1
	14/11/22	4.6	120	270	150	0.08	0.52	29	<0.10	7.8	26	<2	5	6	1.4			0.0
	14/12/22	4.5	150	150	230	0.02	<0.060	29	<0.05	11	24	10	<5	<5	<5			0.3
	18/01/23	2.8	1,600	1,100	480	0.05	1.7	43	<0.05	5.7	49	7	90	72	<5			0.2
	20/02/23	2.6	2,700	3,200	310	0.03	4.2	27	<0.05	3.2	47	750	390	76	7.8			27.8
	28/03/23	3.0	5,200	3,700	130	0.02	5.9	28	<0.02	11	34	1,100	440	57	7.1			39.3
	18/04/23	2.9	3,800	5,100	300	0.01	4	44	<0.02	4	49	3,800	380	120	4.7			86.4
	18/05/23	3.4	3,100	3,400	150	<0.01	<0.01	15	<0.02	4.9	23	2,200	240	31	4.2			146.7
	15/06/23	2.9	3,000	1,800	640	0.3	2.9	28	<0.02	2.66	64	2,100	410	130	6.5			75.0
	24/07/23	5.5	2,800	1,600	6	0.07	0.19	1,400	<0.2	0.5	450	380	25	54	25.0			0.3
	21/08/23	3.3	5,200	3,400	13	0.03	4.6	67	<0.02	5	89	2,200	420	200	9.9			32.8
	18/09/23	3.3	4,500	5,800	6.1	0.01	4	51	0.02	3.7	67	4,300	360	140	7.9			84.3
	18/10/23	3.2	4,700	4,900	96	0.03	1.3	58	<0.02	2.1	68	710	380	130	7.3			12.2
	20/11/23	2.8	5,900	7,500	29	0.06	2.7	55	<0.01	11	60	6,600	310	100	6.8			120.0
	19/12/23	2.9	3,100	2,700	230	0.01	4.6	80	<0.02	5	80	3,500	290	86	6.9			43.8
	20/01/24	3.2	4,900	6,600	74	0.03	<0.01	52	<0.02	4.5	68	1,000	370	84	7.9			19.2
	26/02/24	2.6	3,400	4,500	180	0.03	0.59	25	<0.02	5.4	51	3,000	290	46	4.0			120.0
	26/03/24	3.2	4,400	3,500	17	0.02	1.8	140	<0.02	2.5	54	11,000	360	77	6.0			78.6
	18/04/24	3.3	4,200	2,200	39	<0.01	0.02	49	0.05	5.1	50	3,300	310	47	4.0	210	1.5	67.3
	20/05/24	3.4	3,100	1,600	8.8	0.03	3.1	53	<0.02	2.9	27	2,900	200	22	2.8	140	1.42	54.7
	25/06/24	3.2	4,100	2,700	310	0.03	<0.01	76	<0.02	7.2	75	1,400	290	60	4.3	320	<1	18.4
	10/07/24	3.5	2,300	2,600	49	0.02	<0.01	14	<0.02	3.9	20	1,900	240	20	2.4	130	<1	135.7
	06/08/24	3.3	170	3,500	14	0.19	4.6	62	<0.02	7.7	56	3,600	310	54	4.2	250	<1	58.1
	11/09/24	3.5	1,700	1,000	38	<0.01	3.9	27	<0.2	4.9	27	750	290	29	3.2	94	<1	27.8
	09/10/24	3.5	1,300	930	46	0.03	<0.01	27	<0.02	1.5	22	870	120	17	1.6	35	<1	32.2
	06/11/24	3.3	2,000	1,300	31	<0.01	4.8	44	-	5	59	680	300	62	4.9	90	3.33	15.5
	16/12/24	3.2	1,800	1,100	53	0.02	21	32	<0.2	2.8	25	980	180	21	2.4	35	5.1	30.6
	14/01/25	3.7	1,600	1,400	190	<0.01	1.3	19	<0.02	2.1	16	320	210	16	1.8	25	8.4	16.8
	11/02/25	3.5	2,000	1,700	69	0.01	2.6	160	<0.02	14	110	860	110	50	2.8	56	1.96	5.4
	24/03/25	3.6	1,000	890	38	<0.05	0.06	20	<0.02	3.3	14	570	140	8.5	1.7	17	8.24	28.5
	08/04/25	3.7	790	700	73	<0.01	0.85	36	<0.02	5.2	42	390	86	16	<0.5	13	6.6	10.8
	09/05/25	3.7	1,300	1,200	200	<0.01	1.2	87	<0.2	3.3	24	470	87	11	1.5	9.6	9.06	5.4
	25/06/25	3.7	1,300	840	140	0.21	1.5	26	<0.02	2	18	580	140	17	1.7	17	8.3	22.3
	08/07/25	4.0	720	480	170	<0.010	0.81	21	<0.2	5.4	20	280	58	10	0.9	11	5.3	13.3
	14/08/25	3.8	530	300	230	0.02	0.55	19	<0.02	5.5	11	230	28	4.3	0.5	4.5	6.2	12.1
	11/09/25	3.8	630	430	110	<0.01	0.73	41	0.04	14	35	240	33	9.7	1.3	4.4	7.5	5.9
	13/10/25	4.0	1,200	970	260	0.11	2.8	120	<0.2	<2	76	420	68	32	2.2	13	5.2	3.5
	20/11/25	3.6	1,400	1,000	59	0.05	2.4	64	<0.02	2.4	43	270	83	34	2	13	6.4	4.2
	17/12/25	3.7	1,300	650	290	0.02	2	120	<0.2	<10	19	180	83	11	<0.5	10	8.3	1.5
	21/01/26	3.8	1,000	980	300	0.12	1.8	49	<0.02	7.3	35	200	42	29	1.7	13	3.2	4.1
	20/02/26	3.7	1,500	1,500	280	0.08	3	46	<0.2	8.3	58	700	76	65	3.3	12	6.3	15.2
MW5 Baseline		**4.3 - 5.5**	**191**	**130**	**3003**	**0.97**	**13.4**	**82**	**0.117**	**13.4**	**27.2**	**8.3**	**6**	**8.4**	**5.4**	**<1.0***	**<1***	**<0.5***

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW7	29/09/22	4.6	26	40	190	0.1	0.3	8.5	0.02	2.5	8.5	<2	1	0.9	0.6			0.1
	20/10/22	4.5	86	70	120	0.01	0.4	12	0.04	2.9	8.5	<2	1.7	1.7	0.5			0.1
	14/11/22	4.5	44	170	<100	0.03	0.01	9.7	<0.10	<2.00	9.7	<2	1.9	1.4	1.4			0.1
	14/12/22	4.6	56	92	23	0.04	<0.10	7.5	<0.20	11	8.7	2.5	<5	<5	<5			0.3
	18/01/23	4.4	63	32	390	0.09	<0.05	7.5	<0.025	2	11	31	<5	<5	<5			4.1
	20/02/23	4.1	87	60	30	0.02	<0.05	9.1	0.42	4.9	5.8	5.7	1.4	1.9	1.1			0.6
	28/03/23	4.5	160	94	18	0.02	0.02	21	<0.02	4.4	12	66	2	2	0.6			3.1
	18/04/23	4.9	150	58	7.4	<0.01	0.11	11	<0.02	<0.20	9.8	120	1.9	0.8	<0.5			10.9
	18/05/23	4.9	78	56	130	0.03	<0.01	11	<0.02	0.89	9.3	9.3	1.4	0.9	<0.5			0.8
	15/06/23	4.6	77	50	30	0.28	0.25	11	<0.02	<0.20	9.2	62	<5	<5	<5			5.6
	24/07/23	5.1	140	100	90	0.12	<0.1	10	<0.2	1	8.5	14	1.9	1.4	0.9			1.4
	21/08/23	5.3	67	34	29	0.08	0.06	8.4	<0.02	0.8	9	45	1.8	1.7	0.8			5.4
	18/09/23	5.1	57	78	25	<0.01	0.07	9.6	<0.02	0.8	9.4	83	1.6	2	0.8			8.6
	18/10/23	5.2	61	46	10	0.04	0.1	11	<0.02	<0.2	10	160	1.6	2.1	0.8			14.5
	20/11/23	4.1	210	64	13	0.04	<0.02	8.4	<0.01	2.2	8.1	280	2.5	2.2	0.7			33.3
	19/12/23	4.6	91	62	11	0.03	0.09	19	<0.02	0.7	11	5.6	4.4	2.3	0.9			0.3
	20/01/24	4.2	170	130	34	0.01	0.09	21	<0.02	0.3	15	160	2.8	1.4	<0.5			7.6
	26/02/24	4.0	210	190	23	0.03	0.51	44	<0.02	5.8	24	7.5	3.6	2.1	0.5			0.2
	26/03/24	4.4	320	100	22	0.02	0.18	320	<0.02	<1	13	590	1.6	0.9	0.9			1.8
	18/04/24	4.3	100	98	17	0.02	0.07	8.9	<0.02	3	9	380	1.4	1.2	<0.5	1.7	<1	42.7
	20/05/24	4.4	77	56	11	0.05	0.38	6.4	<0.02	1.2	5.4	170	1.3	1	<0.5	2.3	<1	26.6
	25/06/24	4.6	66	36	33	<0.01	<0.01	<0.01	<0.02	0.6	6.7	48	1.1	0.9	<0.5	1.5	<1	0.0
	10/07/24	4.5	74	58	29	<0.01	0.22	6.5	<0.02	2.1	6.2	270	2	1.3	<0.5	0.73	<1	41.5
	06/08/24	4.8	4,600	180	19	0.04	0.06	9.1	<0.02	0.5	5.3	36	1.4	0.9	<0.5	1	<1	4.0
	11/09/24	4.4	75	50	6.4	0.04	<0.1	11	<0.02	1..0	7.1	5.2	1.3	1.1	<0.5	1.4	<1	0.5
	09/10/24	4.3	73	42	71	0.54	<0.01	8	<0.02	1.6	5.8	12	1.3	1.2	<0.5	0.94	<1	1.5
	06/11/24	4.5	59	32	35	0.02	0.03	11	-	1.3	7.8	4.4	1.3	1.4	<0.5	1.6	<1	0.4
	16/12/24	4.3	58	68	29	0.04	<0.1	12	<0.2	1.3	8.5	42	1.6	1.3	<0.5	1.9	<1	3.5
	14/01/25	4.7	63	36	120	0.04	0.02	8.6	0.03	1.3	6.8	7	1.7	1.2	0.5	2.4	1.4	0.8
	11/02/25	4.6	68	70	13	0.07	<0.1	9.2	<0.02	1.2	8.4	2	1.5	1.5	0.8	2.7	<1	0.2
	24/03/25	4.1	0	56	28	<0.05	0.02	15	<0.02	1.8	7.7	43	2.3	1.4	<0.5	1.2	1.91	2.9
	08/04/25	4.4	76	70	14	<0.01	0.03	14	<0.02	<1	8.1	31	2.8	1.1	2.1	1.4	2	2.2
	09/05/25	4.7	81	110	24	<0.01	0.03	13	<0.2	1.2	8.1	28	1.5	0.9	<0.5	1.6	<1	2.2
	25/06/25	4.6	65	70	39	0.07	<0.01	8.3	<0.02	<0.2	6.7	56	1.2	0.8	<0.5	1.2	1	6.7
	08/07/25	4.6	65	44	130	0.02	0.14	7.9	<0.02	<0.5	6.3	37	1.4	0.9	<0.5	2.6	<1	4.7
	14/08/25	4.7	60	70	140	0.06	0.01	8.9	0.04	2.2	5.7	15	0.9	0.5	<0.5	0.93	3	1.7
	11/09/25	4.4	75	51	100	0.03	0.06	12	0.04	1.1	7.2	18	1.8	1.1	0.6	0.86	2.09	1.5
	13/10/25	4.8	66	110	66	0.02	0.12	11	<0.2	<1	7.4	20	2.1	1.5	<0.5	1.3	1.6	1.8
	20/11/25	4.4	84	78	64	0.05	0.12	12	<0.2	1.1	7.8	17	1.9	1.2	<0.5	0.86	2.2	1.4
	17/12/25	4.6	79	10	75	0.04	<0.1	13	<0.2	3.1	9	11	2.1	1.7	0.5	1	2.1	0.8
	21/01/26	4.3	87	110	110	0.1	0.02	11	0.02	4.3	8.2	4.4	1.9	1.4	<0.5	2	1.0	0.4
	20/02/26	4.8	71	68	120	0.18	0.49	13	<0.2	1.5	8.3	70	2	1.8	1	1.2	1.7	5.4
MW7 Baseline		**4.6 - 5.6**	**147**	**100**	**3140**	**0.71**	**0.471**	**172**	**0.048**	**4.15**	**31**	**7.3**	**3.4**	**2.2**	**3.1**	**<1.0***	**<1***	**<0.5***

APPENDIX C

Surface Water Quality Analytical Results

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW01	29/09/2022	6.9	180	11	3.1	140	0.47	<0.01	14	<0.02	5.2	30	3.4	450		0.2
	20/10/2022	6.6	320	30	4.7	400	0.03	0.03	22	<0.02	<0.02	31	33	43		1.5
	14/11/2022	6.0	780	4,900	0.2	920	3.1	6.9	25	<0.02	14	200	3.7	67		0.1
	14/12/2022	4.5	800	210	3.6	1,100	0.15	0.05	24	<0.10	23	54	560	88		23
	18/01/2023	6.3	380	120	4.7	25	0.047	0.087	24	<0.02	5.2	40	180	25		7.5
	20/02/2023	3.4	1,100	32	3.8	1,300	0.42	0.37	28	<0.02	8.9	57	350	<5		13
	28/03/2023	3.0	2,000	100	7.7	3,000	<0.01	2.1	29	<0.02	1.29	47	880	<5		30
	18/04/2023	7.7	130	33	8.6	320	0.06	0.01	24	<0.02	8.4	16	14	8.8		0.6
	18/05/2023	7.4	130	6	4.4	250	0.21	0.14	11	<0.02	0.9	14	10	<5		0.9
	15/06/2023	3.2	1,900	6.8	7.6	2,700	0.03	1.6	59	<0.02	2.1	61	1,500	<5		25
	24/07/2023	7.9	84	<5	8.4	140	0.11	<0.01	6.4	<0.02	0.3	13	4	<5		0.6
	21/08/2023	6.9	120	25	3	190	0.34	0.01	5.6	<0.02	0.4	18	<2	<5		0.2
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	No surface water located at monitoring site – no sample collected														
	20/11/2023	7.2	230	6.5	2.9	480	2	<0.02	56	<0.01	<0.2	43	160	<5		2.9
	19/12/2023	No surface water located at monitoring site – no sample collected														
	23/01/2024	7.0	160	130	2.2	160	3.7	0.06	14	<0.02	1.3	21	69	<5		4.9
	26/02/2024	6.2	160	47	7.2	200	0.35	<0.01	9	<0.02	3	12	59	<5		6.6
	26/03/2024	6.9	26	7.5	8.3	78	0.25	<0.01	6.7	<0.02	0.4	7.5	3.4	<5		0.5
	18/04/2024	7.2	220	23	0.5	390	0.06	0.24	25	<0.02	0.7	32	110	180	13	4.4
	20/05/3034	6.7	160	<5	3.8	260	0.16	0.01	13	<0.02	0.5	19	33	56	231	2.5
	25/06/2024	6.3	440	15	5.9	710	<0.01	<0.01	12	<0.02	<0.2	23	100	5.7	15	8.3
	10/07/2024	7.0	120	29	5.5	240	0.07	0.01	14	<0.02	1.1	17	6.9	39	12	0.5
	6/08/2024	4.0	760	19	7.6	950	0.08	<0.01	14	<0.02	1.3	23	470	<5	12	34
	15/08/2024	6.7	64	<5	7.3	100	0.04	0.01	6.1	<0.02	<0.2	7.2	5.5	<5	<10	0.9
	11/09/2024	6.9	120	250	0.2	190	1.1	0.11	8.9	<0.02	4.1	13	2.6	<10	17	0.3
	24/09/2024 - Investigation	6.3	170	-	-	280	-	-	-	-	-	-	-	-	-	-
	9/10/2024	7.4	190	11	8.9	290	0.38	0.01	14	<0.02	<0.2	20	3.4	<5	<10	0.2
	6/11/2024	7.1	92	400	0.4	140	13	<0.01	8.1	<0.02	2.8	12	2.2	<5	<10	0.3
	16/12/2024	6.9	90	190	3.3	140	0.36	<0.01	8.2	<0.02	0.02	11	5.4	170	<10	0.7
	14/01/2025	6.7	48	7.2	3.5	89	0.14	<0.1	4.8	<0.02	0.6	5.4	<5	<5	<10	0.0
	11/02/2025	7.5	390	<5	8.3	620	0.06	0.03	110	<0.02	0.8	16	16	12	<10	0.1
	24/03/2025	6.9	58	<5	8.6	64	0.32	0.02	6.1	<0.02	0.8	7.9	2.4	48	<10	0.4
	31/03/2025	7.1	170	5.8	9.2	200	0.14	<0.01	14	<0.02	1.1	15	6.4	<5	<10	0.5
	8/04/2025	7.2	200	9.4	8.8	230	0.37	0.04	14	<0.02	0.4	18	3.6	<5	<10	0.3
	9/05/2025	7.5	170	<5	-	200	0.2	0.03	10	<0.02	0.8	13	4.5	<5	<10	0.5
	25/06/2025	6.9	130	24	7.5	190	1.1	0.07	6.2	<0.02	1.1	12	7.1	12	22	1.1
	8/07/2025	6.9	150	<5	8	260	0.12	0.18	8	<0.02	0.8	16	5	28	34	1.6
	14/08/2025	7.3	140	7.1	6.9	240	0.17	0.03	11	<0.02	1	16	6	<5	15	1.8
	11/09/2025	7.2	150	5.2	3.9	260	0.22	0.01	13	<0.02	1.4	19	5.2	<5	16	2.5
	13/10/2025	7.2	350	14	0.3	520	0.61	0.26	39	<0.02	0.5	58	30	<5	14	1.3
	20/11/2025	7	110	8.9	5.2	200	0.24	0.03	9.1	<0.02	0.7	14	4.5	<5	16	2.0
	17/12/2025	7.2	150	30	6.1	240	0.14	0.19	27	<0.5	1.2	22	9.3	<5	37	2.9
	21/01/2026	6.8	98	30	3.5	170	0.49	0.05	17	0.017	0.6	15	4.9	<0.005	27	3.5
	20/02/2026	6.8	130	22	2.4	230	0.33	0.91	17	1.2	1.2	19	8.5	<0.005	<10	2.0
SW01 Baseline		**6.2 – 7.0**	**291**	**73**	**-**	**428**	**3.52**	**0.164**	**118**	**0.039**	**3.5**	**51**	**9**	**768**		**<0.5**

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW01	29/09/2022	1.5	0.003	<0.0002	22	0.002	0.32	2.7	0.005	14	<0.0001	0.015	3	0.071	<1
	20/10/2022	0.66	2	<0.0002	24	0.002	0.16	2.4	0.003	9.1	<0.0001	0.009	2.9	0.042	<1
	14/11/2022	130	1.3	<0.02	280	<0.10	1	130	0.1	73	<0.001	0.3	<50	4.7	<1
	14/12/2022	22	0.0016	<0.002	180	0.014	0.2	1.6	0.015	43	<0.001	0.077	6.8	0.68	<1
	18/01/2023	0.7	<0.010	<0.002	<2	<0.010	<0.01	3.2	<0.01	13	<0.01	<0.01	<5	<0.05	<1
	20/02/2023	37	0.027	0.0004	170	0.019	0.07	0.049	0.049	57	0.002	0.16	6.3	0.35	<1
	28/03/2023	150	0.002	0.0008	290	0.002	0.003	36	0.003	38	0.0001	0.46	5.1	0.97	<1
	18/04/2023	0.53	0.002	<0.0002	13	0.005	0.005	0.002	0.002	2.7	<0.0001	0.002	0.8	0.15	<1
	18/05/2023	0.16	0.002	<0.0002	23	<0.001	0.002	0.24	<0.001	7.5	<0.0001	0.002	2.3	0.02	<1
	15/06/2023	120	0.002	0.0003	350	<0.001	0.004	15	0.003	42	<0.0001	0.24	8.1	0.35	<1
	24/07/2023	0.08	0.003	<0.0002	13	<0.001	0.003	0.38	0.002	4.1	<0.0001	0.002	0.8	0.037	<1
	21/08/2023	0.52	0.001	<0.0002	17	0.001	0.002	1.2	0.001	6.3	<0.0001	0.003	<0.5	0.014	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	No surface water located at monitoring site – no sample collected													
	20/11/2023	0.13	<0.001	<0.0002	26	<0.001	0.002	5.7	<0.001	7.9	<0.0001	0.003	2.2	0.006	<1
	19/12/2023	No surface water located at monitoring site – no sample collected													
	23/01/2024	<0.05	<0.001	<0.0002	30	0.001	<0.001	1.8	<0.001	10	<0.0001	<0.001	3.4	0.006	<1
	26/02/2024	<0.005	<0.001	<0.0002	14.00	<0.001	<0.001	0.93	<0.001	4.60	<0.0001	<0.001	1.70	0.05	<1
	26/03/2024	0.11	<0.001	<0.0002	7.4	<0.001	0.002	0.38	<0.001	2	<0.0001	<0.001	1.5	0.013	<1
	18/04/2024	0.06	<0.001	<0.0002	32	<0.001	<0.001	1.4	<0.001	9.5	<0.0001	0.002	2	<0.005	<1
	20/05/3034	0.06	<0.001	<0.0002	26	<0.001	0.001	0.86	<0.001	7	<0.0001	0.002	1.7	0.014	<1
	25/06/2024	0.69	<0.001	<0.0002	94	<0.001	0.002	0.28	<0.001	15	<0.0001	0.008	2.3	0.055	<1
	10/07/2024	0.25	0.002	<0.0002	28	<0.001	0.003	2.1	<0.001	6.6	<0.0001	0.002	2	0.037	<1
	6/08/2024	0.85	<0.001	<0.0002	120	<0.001	0.004	1.3	<0.001	14	<0.0001	0.021	2.3	0.1	<1
	15/08/2024	0.24	<0.001	<0.0002	12	<0.001	0.004	0.33	<0.001	2.8	<0.0001	0.001	1.2	0.027	<1
	11/09/2024	9.1	0.009	0.0005	36	0.023	0.11	49	0.031	8.1	0.0001	0.019	5.2	0.72	<1
	24/09/2024 - Investigation	-	<0.001	<0.001	-	<0.001	0.001	-	<0.001	<0.0001	-	0.004	-	0.04	-
	9/10/2024	0.14	0.001	<0.0002	27	<0.001	0.002	1.7	<0.001	8.1	<0.0001	0.002	1.5	0.017	<1
	6/11/2024	1.2	0.004	<0.0002	26	0.005	0.011	54	0.003	6.1	<0.0001	0.004	2.8	0.041	<1
	16/12/2024	2.4	0.004	<0.0002	22	0.006	0.019	38	0.006	4.5	<0.0001	0.004	2.8	0.092	<1
	14/01/2025	0.15	<0.001	<0.0002	8.8	0.001	0.003	0.34	<0.001	1.8	<0.0001	0.001	0.6	0.018	<1
	11/02/2025	0.58	0.002	<0.0002	13.00	<0.001	<0.001	6.10	<0.001	3.50	<0.0001	0.002	1.00	0.015	<1
	24/03/2025	0.13	<0.001	<0.0002	5.20	<0.001	0.002	0.35	<0.001	1.40	<0.0001	<0.001	1.20	0.037	<1
	31/03/2025	0.1	0.002	<0.0002	22	<0.001	0.003	1.2	<0.001	6.8	<0.0001	0.002	2.4	0.066	<1
	8/04/2025	<0.05	0.002	<0.0002	29	<0.001	<0.001	2.2	<0.001	8.1	<0.0001	0.002	2.4	0.008	<1
	9/05/2025	0.27	<0.001	<0.0002	20	<0.001	0.002	1.6	<0.001	5.9	<0.0001	0.002	1.7	0.03	<1
	25/06/2025	0.11	<0.001	<0.0002	19	<0.001	0.002	0.72	<0.001	4.4	<0.0001	0.002	<0.5	0.032	<1
	8/07/2025	0.05	<0.001	<0.0002	26	<0.001	0.002	0.49	<0.001	7.2	<0.0001	0.002	<0.5	0.024	<1
	14/08/2025	0.14	<0.001	<0.0002	26	<0.001	0.003	0.69	<0.001	6.8	<0.0001	0.002	1.8	0.019	<1
	11/09/2025	0.05	0.001	<0.0002	24	<0.001	0.002	1.5	<0.001	6.8	<0.0001	0.002	1.6	0.014	<1
	13/10/2025	0.07	0.002	<0.0002	37	<0.001	0.01	0.69	<0.001	10	<0.0001	0.005	4.8	0.055	<1
	20/11/2025	<0.05	0.001	<0.0002	19	<0.001	0.002	0.0015	0.001	4.7	<0.0001	0.002	0.9	0.012	<1
	17/12/2025	0.26	0.001	<0.0002	16	<0.001	0.001	0.89	<0.001	3.8	<0.0001	0.001	1.5	0.017	<1
	21/01/2026	0.2	<0.001	<0.0002	12	<0.001	3	2.2	<1	2.9	<0.0001	0.001	0.7	0.031	<1
	20/02/2026	0.23	0.002	<0.0002	18	<0.001	0.003	5	<0.001	4.5	<0.0001	0.003	0.6	0.032	<2
SW01 Baseline		**0.5**	**0.003**	**0.001**	**22**	**0.002**	**0.041**	**1.2**	**0.001**	**16**	**0.0005**	**0.006**	**6**	**0.058**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW01	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	220	220	<100	<100	<20	250	<100	<100	250	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	<50	<50	20	-	<20	<50	100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No surface water located at monitoring site – no sample collected									
	18/10/2023	No surface water located at monitoring site – no sample collected									
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	No surface water located at monitoring site – no sample collected									
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/3034	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Investigation	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	160	160	300	<100	<20	110	300	<100	410	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	17/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	120	<50	<100	<100	110	<50	<100	<100	<100	<0.01
SW01 Baseline		**60**	**-**	**24**	**100**	**-**	**50**	**130**	**90**	**170**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW02	29/09/2022	6.9	170	8.8	8	160	0.04	0.03	29	<0.02	1.3	27	2.8	22		0.1
	20/10/2022	6.5	120	6.2	8.7	140	0.02	0.01	17	<0.02	<0.20	16	2.9	<5		0.2
	14/11/2022	6.4	150	210	0.1	190	0.18	<0.01	54	<0.02	13	62	18	24		0.3
	14/12/2022	6.3	110	870	0.1	200	0.27	0.05	26	<0.10	2.7	25	29	14		1.1
	18/01/2023	6.6	220	190	0.1	61	0.79	0.049	31	<0.20	21	27	6.2	61		0.2
	20/02/2023	6.5	240	29	4.4	1300	0.023	0.31	26	<0.10	1.9	29	24	<5		0.9
	28/03/2023	4.8	310	370	5.7	370	1.5	0.19	22	<0.02	<0.20	17	92	<10		4.2
	18/04/2023	6.2	300	60	7.3	410	0.05	0.16	32	<0.02	1.38	25	120	<5		3.8
	18/05/2023	6.5	130	39	6	270	0.06	0.09	25	<0.02	<0.2	18	29	<5		1.2
	15/06/2023	6.4	190	25	8.9	280	0.37	0.23	34	<0.02	1.2	25	38	<5		1.1
	21/08/2023	6.1	430	20	5.7	690	0.02	0.5	36	<0.02	1.2	38	75	<5		2.1
	18/09/2023	7.2	180	15	8.1	260	0.06	0.04	31	<0.02	0.8	28	39	<5		1.3
	18/10/2023	6.8	150	11	8.1	240	0.05	0.02	40	<0.02	<0.2	28	13	<5		0.3
	20/11/2023	6.9	180	18	4.9	350	0.07	0.04	37	<0.01	0.3	26	50	<5		1.4
	19/12/2023	6.7	140	15	4.6	240	0.05	0.03	37	<0.02	0.7	29	11	<5		0.3
	23/01/2024	6.8	210	27	9.7	350	0.06	0.02	35	<0.02	0.5	31	25	<5		0.7
	26/02/2024	4.5	140	43	7.1	190	0.05	0.03	9	<0.02	0.6	8.5	65	<5		7.2
	26/03/2024	6.7	44	12	6.8	99	0.07	<0.01	9.5	<0.02	0.5	8.8	8.7	<5		0.9
	18/04/2024	7.6	350	<5	6.4	630	0.03	0.9	93	<0.02	0.6	78	56	<5	<10	0.6
	20/05/2024	6.7	130	27	2.1	210	0.04	0.05	20	<0.02	1.1	18	16	<5	11	0.8
	25/06/2024	6.7	180	9.7	8.8	330	0.03	<0.01	42	0.03	<0.2	35	10	<5	11	0.2
	10/07/2024	7.0	150	8.2	6.1	220	0.01	0.11	22	<0.02	1.9	18	21	<5	<10	1.0
	6/08/2024	6.5	220	8.5	7	280	0.06	0.02	39	<0.02	1.7	24	19	<5	20	0.5
	15/08/2024	6.6	48	<5	7.8	80	0.07	0.01	8	<0.02	<0.2	7	6.9	18	<10	0.9
	11/09/2024	7.1	250	<5	6.1	450	0.02	0.05	90	<0.02	0.3	71	48	<5	<10	0.5
	9/10/2024	7.0	260	<5	8.9	500	0.12	0.03	88	<0.02	0.6	73	35	<5	<10	0.4
	6/11/2024	7.5	300	6.4	6	500	0.07	<0.01	89	<0.02	1	72	34	<5	<10	0.4
	16/12/2024	6.4	200	110	8.8	310	1.1	<0.01	55	<0.02	0.4	11	19	6.6	<10	0.3
	14/01/2025	6.9	170	<5	4.6	340	0.08	<0.01	51	<0.02	0.9	44	7.7	<5	<10	0.2
	11/02/2025	7.1	96	5.6	6.1	150	0.08	<0.01	14	<0.02	1.9	91	3.9	190	<10	0.3
	24/03/2024	3.2	420	7.2	8.6	670	<0.05	0.02	17	<0.02	2.8	17	250	<5	<10	15
	31/03/2025	7.2	160	<5	9.8	200	0.14	0.05	14	<0.02	<0.4	16	7	<5	<10	0.5
	8/04/2025	7.2	150	12	6.2	230	0.37	0.03	14	<0.02	0.7	18	3.4	<5	<10	0.2
	9/05/2025	3.9	320	1,100	-	560	1.5	0.23	31	<0.02	2.8	18	150	<20	34	4.8
	25/06/2025	7.1	400	9.4	9.8	580	1.5	0.01	88	<0.03	1.5	74	38	38	14	0.4
	8/07/2025	6.9	300	14	8.4	600	0.34	0.58	96	<0.02	0.9	73	38	19	21	2.5
	14/08/2025	7.2	330	6.1	8.6	600	0.05	0.03	120	<0.02	0.7	85	31	<5	<10	3.9
	11/09/2025	7.0	320	6.1	7.9	530	0.05	0.11	87	<0.02	2.8	69	36	<5	<10	2.4
	13/10/2025	6.9	270	6.3	8.1	470	0.12	<0.01	73	0.11	1.9	60	29	<5	14	2.5
	20/11/2025	6.8	190	11	5.2	300	0.19	0.16	33	<0.02	0.9	30	16	<5	<10	2.1
	16/12/2025	7.0	520	8	7.2	240	0.11	0.13	26	<0.5	<0.5	23	9.1	<5	19	2.9
	21/01/2026	7.3	350	<5	6	680	0.07	<0.01	100	0.1	0.4	85	36	<0.005	15	2.8
	20/02/2026	7	470	<5	3.6	720	0.08	<0.01	130	<0.02	0.5	95	17	<0.005	<10	7.6
SW02 Baseline		**6.3 – 7.0**	**199**	**495**	**-**	**292**	**1.88**	**0.261**	**161**	**0.06**	**8.6**	**32**	**10**	**182**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW02	29/09/2022	0.42	0.003	<0.0002	19	0.002	0.004	1.5	0.001	5.8	<0.0001	0.002	1.9	0.057	<1
	20/10/2022	0.22	0.001	<0.0002	12	0.001	0.003	0.62	<0.001	3.4	<0.0001	0.001	1.7	0.032	<1
	14/11/2022	1.8	0.037	<0.002	47	<0.001	0.015	53	<0.01	11	<0.001	<0.01	<5	0.096	<1
	14/12/2022	13	0.066	<0.002	38	0.034	0.094	9.7	0.071	5.9	<0.001	0.013	5.1	1	<1
	18/01/2023	3.3	0.023	<0.002	<2	<0.01	0.015	45	0.014	5.8	<0.001	<0.010	<5	0.15	<1
	20/02/2023	12	0.033	0.0002	38	0.009	0.09	0.013	0.013	11	<0.001	0.018	4.1	0.28	<1
	28/03/2023	3.4	0.002	0.0003	43	0.002	0.003	2.5	0.001	8.4	<0.0001	0.024	4.1	0.63	<1
	18/04/2023	0.86	<0.001	<0.0002	20	0.002	0.002	<0.001	<0.001	4	<0.0001	0.006	2.7	0.089	<1
	18/05/2023	0.72	0.002	<0.0002	17	0.002	0.006	1	0.002	4.3	<0.0001	0.003	2.4	0.081	<1
	15/06/2023	1.7	0.001	<0.0002	22	0.001	0.004	2.1	0.001	5.5	<0.0001	0.005	1.9	0.037	<1
	21/08/2023	1.1	<0.001	<0.0002	71	<0.001	<0.001	8	<0.001	16	<0.0001	0.024	5.7	0.057	<1
	18/09/2023	1.7	0.003	<0.0002	19	0.002	0.004	3	0.002	6.3	<0.0001	0.005	3	0.023	<1
	18/10/2023	0.88	0.002	<0.0002	17	0.001	0.003	2.2	0.001	5.5	<0.0001	0.002	1.9	0.014	<1
	20/11/2023	2.3	0.002	<0.0002	19	0.002	0.002	2.6	<0.001	6.7	<0.0001	0.007	1.4	0.032	<1
	19/12/2023	1.1	0.002	<0.0002	19	0.001	0.001	4.8	<0.001	6.5	0.0002	0.004	2.9	0.012	<1
	23/01/2024	2.9	0.003	<0.0002	23	0.002	0.001	5.8	<0.001	7.8	<0.0001	0.007	3.3	0.031	<1
	26/02/2024	1.5	0.001	<0.0002	9.7	0.001	0.003	1.7	<0.001	2.5	<0.0001	0.004	1.4	0.027	<1
	26/03/2024	0.34	<0.001	<0.0002	6.9	0.001	0.003	0.67	<0.001	1.9	<0.0001	0.001	1.8	0.021	<1
	18/04/2024	0.09	<0.001	<0.0002	20	<0.001	<0.001	0.39	<0.001	5.4	<0.0001	<0.001	14	0.014	<1
	20/05/2024	0.71	0.004	<0.0002	19	0.002	0.003	5.6	<0.001	3.8	<0.0001	0.003	3	0.015	<1
	25/06/2024	1.1	<0.001	<0.0002	21	<0.001	0.001	1.4	<0.001	4.6	<0.0001	0.004	4.5	0.022	<1
	10/07/2024	1.1	0.002	<0.0002	20	<0.001	0.004	1.2	<0.001	4.2	<0.0001	0.004	2.3	0.047	<1
	6/08/2024	0.61	0.001	<0.0002	17	0.001	0.002	1.4	<0.001	3.7	<0.0001	0.002	3	0.019	<1
	15/08/2024	0.31	0.002	<0.0002	8	0.001	0.004	0.37	<0.001	1.5	<0.0001	0.001	1.4	0.038	<1
	11/09/2024	0.19	<0.001	<0.0002	20	<0.001	0.001	0.31	<0.001	4.8	<0.0001	0.001	14	0.021	<1
	9/10/2024	0.8	<0.001	<0.0002	23	<0.001	0.001	1.5	<0.001	5	<0.0001	0.003	15	0.032	<1
	6/11/2024	0.007	0.001	<0.0002	21	<0.001	<0.001	0.7	<0.001	5.8	<0.0001	<0.001	15	0.011	<1
	16/12/2024	0.05	<0.001	<0.0002	14	<0.001	0.001	0.24	<0.001	3.1	<0.0001	<0.001	9.4	0.008	<1
	14/01/2025	0.06	<0.001	<0.0002	14	0.001	0.002	0.28	<0.001	2.7	<0.0001	0.001	9.4	0.015	<1
	11/02/2025	0.82	<0.001	<0.0002	24	<0.001	0.002	4.4	<0.001	4.8	<0.0001	0.005	19	0.058	<1
	24/03/2024	7.4	<0.001	<0.0002	56	0.002	0.001	22	<0.001	6.9	<0.0001	0.021	1.8	0.097	<1
	31/03/2025	0.25		<0.0002	23	<0.001	0.003	1.7	<0.001	7	<0.0001	0.002	2.5	0.054	<1
	8/04/2025	0.1	0.001	<0.0002	29	<0.001	0.001	2.7	<0.001	8.3	<0.0001	0.002	2.3	0.015	<1
	9/05/2025	2.3	0.007	<0.0002	34	0.005	0.002	140	<0.001	9.1	<0.0001	0.011	2.1	0.077	<1
	25/06/2025	0.3	<0.001	<0.0002	21	<0.001	0.001	1.1	<0.001	5.4	<0.0001	0.002	14	0.03	<1
	8/07/2025	0.15	<0.001	<0.0002	19	<0.001	<0.001	0.65	<0.001	5.3	<0.0001	0.001	12	0.018	<1
	14/08/2025	0.11	<0.001	<0.0002	21	<0.001	<0.001	0.39	<0.001	5.9	<0.0001	<0.001	11	0.012	<1
	11/09/2025	0.32	0.001	<0.0002	21	<0.001	0.002	1.2	<0.001	5.6	<0.0001	0.001	11	0.016	<1
	13/10/2025	0.15	0.002	<0.0002	19	<0.001	0.004	0.82	<0.001	5.2	<0.0001	0.002	11	0.054	<1
	20/11/2025	0.53	0.002	<0.0002	20	0.001	0.002	1.8	0.002	4.9	<0.0001	0.002	3.9	0.021	<1
	16/12/2025	0.26	<0.001	<0.0002	16	0.002	<0.001	1.5	0.001	4	<0.0001	0.002	1.6	0.01	<1
	21/01/2026	<0.05	<0.001	<0.0002	21	<0.001	<1	0.25	<1	5.6	<0.0001	<0.001	17	0.022	<1
	20/02/2026	<0.05	<0.001	<0.0002	22	<0.001	<0.001	0.46	<0.001	6.1	<0.0001	<0.001	23	0.027	<2
SW02 Baseline		**3.8**	**0.045**	**0.001**	**17**	**0.007**	**0.012**	**71.9**	**0.02**	**5**	**0.0005**	**0.005**	**6**	**0.09**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW02	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	90	<100	<20	<50	60	30	90	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	180	180	30	-	<20	170	30	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	200	<100	<20	<50	100	<100	100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	140	140	100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<20	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW02 Baseline		**60**	**-**	**22**	**100**	**-**	**50**	**100**	**50**	**140**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW03	29/09/2022	6.8	120	<5	9.3	100	0.02	<0.01	24	<0.02	1.10	23	2	<5		0.1
	20/10/2022	5.9	650	26	7.5	870	0.03	<0.01	270	<0.02	<0.2	12	13	<5		0.0
	14/11/2022	6.5	140	260	2.6	160	0.13	<0.05	27	<0.01	7.40	36	9	<5		0.3
	14/12/2022	6.5	110	11	4.4	160	0.01	0.05	23	<0.01	3.90	18	11	<5		0.5
	18/01/2023	6.5	160	9	5.1	<5	0.02	<0.010	31	<0.02	1.30	26	17	<5		0.5
	20/02/2023	3.4	540	13	6.0	720	0.01	<0.010	22	<0.02	5.10	28	100	<5		4.5
	28/03/2023	3.3	400	7	9.9	750	0.02	0.07	14	<0.02	<0.2	16	110	<5		7.9
	18/04/2023	4.2	280	<5	7.4	450	<0.01	0.04	29	<0.02	<0.2	22	140	<5		4.8
	18/05/2023	4.3	310	37	5.5	580	0.02	0.32	22	<0.02	12.33	21	230	<5		10
	15/06/2023	3.3	580	17	8.9	870	0.04	0.68	32	<0.02	1.40	31	300	<5		9.4
	24/07/2023	3.9	290	36	9	510	0.03	0.4	17	<0.02	1	20	250	<5		15
	21/08/2023	6.8	270	5.8	7.2	350	0.04	0.04	45	<0.02	0.5	43	8	<5		0.2
	18/09/2023	4.6	410	20	7.4	540	<0.01	0.28	30	<0.02	0.4	29	230	<5		7.7
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.5	640	18	7.1	1100	0.03	0.58	32	<0.01	0.6	30	370	6.7		12
	19/12/2023	3.8	610	7.7	6.7	850	<0.01	0.86	36	<0.02	0.9	37	150	<5		4.2
	23/01/2024	3.7	460	55	4.1	880	<0.01	0.16	31	<0.02	1.6	37	100	<5		3.2
	26/02/2024	4.3	200	93	7.5	250	0.09	0.09	53	0.02	1.5	11	440	7.2		8.3
	26/03/2024	6.1	170	54	7.7	300	0.08	0.13	21	<0.02	1	20	78	<5		3.7
	18/04/2024	7.5	360	9.2	7.4	650	0.03	0.08	88	<0.02	0.8	78	64	<5	<10	0.6
	20/05/2024	4.5	300	21	5.6	450	<0.01	0.5	19	<0.02	1.2	23	190	<5	66	10
	25/06/2024	6.3	80	2300	7.2	140	0.98	<0.1	9.4	<0.2	140	9	5	<5	48	0.5
	10/07/2024	4.4	260	29	5.1	400	0.01	0.64	19	<0.02	0.7	21	10	<5	50	0.5
	6/08/2024	4.6	340	22	6.3	630	0.02	0.62	35	<0.02	1.3	29	230	<5	70	6.6
	15/08/2024	6.3	82	19	8.3	120	0.04	0.07	9.5	<0.02	<0.2	9	31	<5	11	3.3
	11/09/2024	7.1	290	<5	7.7	440	<0.01	0.11	84	<0.02	0.3	66	56	<5	<10	0.7
	9/10/2024	6.6	240	330	7.7	360	0.46	<0.01	56	<0.02	7.1	45	35	33	<10	0.6
	6/11/2024	7.2	300	49	7.5	460	0.07	<0.01	88	<0.02	1.2	72	39	<5	<10	0.4
	16/12/2024	7.2	250	5.3	19.0	370	<0.01	<0.01	70	<0.02	0.7	61	31	50	<10	0.4
	14/01/2025	6.9	220	<5	7.7	420	0.04	<0.01	66	<0.02	1.3	57	11	<5	<10	0.2
	11/02/2025	7.4	340	<5	7.5	570	0.07	0.02	99	<0.02	1.4	87	14	<5	<10	0.1
	24/03/2024	6.9	130	<5	8.1	230	0.05	<0.01	38	<0.02	0.9	32	66	<5	<10	1.7
	31/03/2025	7.0	260	9.3	9.8	440	0.06	0.19	100	<0.02	0.9	70	26	<5	<10	0.3
	8/04/2025	7.2	290	<5	8.9	470	0.04	0.07	100	<0.02	0.4	82	36	<5	<10	0.4
	9/05/2025	7.1	290	<5	-	460	<0.01	<0.1	100	<0.02	0.7	73	36	<5	<10	0.4
	25/06/2025	6.7	360	230	6.5	540	2.3	0.01	88	<0.03	2.3	68	36	46	14	0.4
	8/07/2025	6.8	300	82	9.1	570	0.15	0.48	89	<0.02	1.1	67	39	27	<10	0.4
	14/08/2025	7.2	300	16	9.1	580	0.08	0.05	110	<0.02	1	81	32	<5	<10	0.3
	11/09/2025	6.8	300	6.7	12.0	530	0.05	0.22	84	<0.02	0.7	67	43	43	11	0.5
	13/10/2025	7.2	340	7.5	9	620	0.07	<0.01	100	<0.02	0.8	83	43	16	<10	0.4
	20/11/2025	6.6	190	28	4.7	300	0.15	0.19	28	<0.02	1	28	35	<5	<10	1.3
	16/12/2025	6.3	96	400	0.3	170	0.94	0.18	14	<0.5	12	17	18	17	38	1.3
	21/01/2026	7.6	330	<5	8.6	680	0.05	<0.01	100	0.1	0.9	84	36	<0.005	<10	0.4
	20/02/2026	7.2	390	10	4.6	580	0.06	0.02	93	<0.02	0.5	69	11	<0.005	<10	0.1
SW03 Baseline		**6.1 - 6.7**	**191**	**1005**	**-**	**281**	**2.14**	**0.155**	**111**	**0.041**	**4.3**	**30**	**6**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW03	29/09/2022	0.4	0.00	<0.0002	13	0.00	0.00	0.8	<0.001	4.4	<0.0001	0.002	1.00	0.034	<1
	20/10/2022	0.5	0.00	<0.0002	8	0.00	0.00	0.9	0.00	2.3	<0.0001	0.001	1.00	0.03	<1
	14/11/2022	1.1	<0.001	<0.002	18	<0.001	0.00	1.9	<0.010	5.7	<0.001	<0.01	<5	0.24	<1
	14/12/2022	0.6	<0.001	<0.002	13	<0.01	<0.010	1.3	<0.010	<5	<0.001	<0.01	<5	0.53	<1
	18/01/2023	0.5	0.01	<0.002	<2	<0.010	<0.01	0.5	<0.01	6.2	<0.001	<0.01	<5	<0.05	<1
	20/02/2023	17	0.00	<0.0002	63	0.00	0.02	0.0	0.00	14.0	<0.001	0.065	3.00	0.12	<1
	28/03/2023	15	<0.001	<0.0002	63	0.00	0.00	4.5	<0.001	11.0	<0.0001	0.065	2.30	0.15	<1
	18/04/2023	3.8	<0.001	<0.0002	30	0.00	0.00	<0.001	<0.001	5.0	<0.0001	0.023	2.10	0.048	<1
	18/05/2023	5.8	<0.001	<0.0002	48	<0.001	0.00	14.0	<0.001	10.0	<0.0001	0.033	2.80	0.16	<1
	15/06/2023	11	<0.001	<0.0002	74	<0.001	0.00	12	<0.001	15.0	<0.0001	0.058	2.7	0.15	<1
	24/07/2023	7.1	<0.001	<0.0002	39	<0.001	0.002	8.9	0.001	9.7	<0.0001	0.030	2.5	0.1	<1
	21/08/2023	0.7	0.001	<0.0002	18	0.001	0.003	1.1	<0.001	6.3	<0.0001	0.002	6.8	0.026	<1
	18/09/2023	2.8	<0.001	<0.0002	59	<0.001	<0.001	1.1	<0.001	14.0	<0.0001	0.022	3.2	0.049	<1
	18/10/2023	3.0	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12.0	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	11.0	0.002	<0.0002	75	<0.001	<0.001	17	<0.001	17.0	<0.0001	0.060	3	0.14	<1
	19/12/2023	21.0	0.003	0.0011	80	<0.001	0.002	3.6	0.001	19.0	0.0007	0.071	4.3	0.16	<1
	23/01/2024	17.0	0.002	<0.0002	63	0.002	0.001	17	<0.001	19.0	<0.0001	0.059	5.1	0.13	<1
	26/02/2024	8.8	0.003	<0.0002	17	0.003	0.005	9	0.002	4.8	<0.0001	0.016	1.8	0.05	<1
	26/03/2024	0.9	<0.001	<0.0002	24	<0.001	<0.001	1.8	<0.001	6.1	<0.0001	0.009	2.8	0.025	<1
	18/04/2024	1.1	<0.001	<0.0002	22	<0.001	<0.001	1.8	<0.001	6.0	<0.0001	0.005	13	0.018	<1
	20/05/2024	5.4	0.002	<0.0002	34	<0.001	<0.001	13	<0.001	7.3	<0.0001	0.026	3.6	0.047	<1
	25/06/2024	0.2	<0.001	<0.0002	10	<0.001	<0.001	170	<0.001	2.7	<0.0001	0.011	2.3	0.042	<1
	10/07/2024	3.6	0.001	<0.0002	34	<0.001	0.001	6.6	<0.001	6.6	<0.0001	0.019	3	0.053	<1
	6/08/2024	3.10	<0.001	<0.0002	51	<0.001	<0.001	4.8	<0.001	7.8	<0.0001	0.026	3.4	0.092	<1
	15/08/2024	1.20	0.00	<0.0002	12	<0.001	0.003	2.1	<0.001	2.2	<0.0001	0.004	1.6	0.037	<1
	11/09/2024	0.59	<0.001	<0.0002	21	<0.001	0.001	1.0	<0.001	4.9	<0.0001	0.003	13	0.021	<1
	9/10/2024	20	0.02	<0.0002	21	0.011	0.01	39.0	0.008	4.4	<0.0001	0.008	8.8	0.1	<1
	6/11/2024	3	0.00	<0.0002	23	0.002	0.002	4.5	<0.001	6.2	<0.0001	0.003	15	0.017	<1
	16/12/2024	0.29	0.001	<0.0002	19	0.001	<0.001	1.6	<0.001	4	<0.0001	0.001	12	0.009	<1
	14/01/2025	0.17	0.001	<0.0002	17	<0.001	0.001	0.74	<0.001	3.3	<0.0001	0.001	12	0.016	<1
	11/02/2025	0.45	0.001	<0.0002	23	<0.001	<0.001	2.1	<0.001	4.5	<0.0001	0.001	18	0.031	<1
	24/03/2024	0.18	0.001	<0.0002	10	<0.001	0.002	0.79	<0.001	2.6	<0.0001	0.001	6.6	0.036	<1
	31/03/2025	0.42	0.002	<0.0002	21	<0.001	0.001	3.5	<0.001	4.9	<0.0001	0.002	11	0.045	<1
	8/04/2025	0.3	<0.001	<0.0002	21	<0.001	<0.001	1.3	<0.001	5.4	<0.0001	0.002	11	0.012	<1
	9/05/2025	0.62	0.002	<0.0002	20	<0.001	0.001	2	<0.001	4.9	<0.0001	0.005	11	0.042	<1
	25/06/2025	2	0.002	<0.0002	21	<0.001	0.003	6.1	0.001	5.2	<0.0001	0.002	12	0.053	<1
	8/07/2025	0.24	<0.001	<0.0002	19	<0.001	<0.001	0.49	<0.001	5	<0.0001	0.001	11	0.015	<1
	14/08/2025	0.2	<0.001	<0.0002	20	<0.001	<0.001	0.59	<0.001	5.8	<0.0001	0.001	11	0.01	<1
	11/09/2025	2	0.003	<0.0002	19	0.002	0.004	4	0.002	5.4	<0.0001	0.003	11	0.037	<1
	13/10/2025	0.29	0.001	<0.0002	22	<0.001	0.002	0.97	<0.001	5.9	<0.0001	0.001	16	0.019	<1
	20/11/2025	2.4	0.004	<0.0002	22	0.003	0.003	8.8	0.003	4.7	<0.0001	0.003	4.4	0.015	<1
	16/12/2025	6	0.003	<0.0002	15	0.002	0.005	2.7	0.002	3.2	<0.0001	0.007	2.4	0.14	<1
	21/01/2026	0.09	<0.001	<0.0002	20	<0.001	<1	0.33	<1	5.5	<0.0001	<0.001	16	0.009	<1
	20/02/2026	0.27	0.001	<0.0002	23	<0.001	<0.001	1.3	<0.001	5.8	<0.0001	0.001	15	0.01	<2
SW03 Baseline		**7.9**	**0.058**	**0.001**	**21**	**0.008**	**0.028**	**85.5**	**0.028**	**5**	**0.0005**	**0.006**	**4**	**0.26**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW03	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	<50	<100	<20	<50	<100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	130	130	<100	<100	<20	<50	10	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW03 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**120**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW04	29/09/2022	4.5	68	<5	4.8	52	0.01	0.18	20	<0.02	5.1	17	<2	<5		0.05
	20/10/2022	4.2	90	<5	7.5	110	0.01	<0.10	20	<0.02	0.3	16	<2	<5		0.05
	14/11/2022	No surface water located at monitoring site – no sample collected														
	14/12/2022	3.2	190	<5	2	280	0.01	0.05	42	<0.10	3.2	20	<2	<5		0.02
	18/01/2023	No surface water located at monitoring site – no sample collected														
	20/02/2023	4.1	0.2	<5	5.9	160	0.02	0.09	22	<0.10	7.4	23	15	<5		0.7
	28/03/2023	4.2	68	<5	8	130	<0.01	<0.01	17	<0.10	<0.25	14	25	<5		1.5
	18/04/2023	4.6	130	16	9.1	190	0.01	0.03	32	<0.02	0.5	21	8.7	<5		0.3
	18/05/2023	3.6	1,200	42	8	1,800	0.03	1.2	26	<0.02	1.15	53	1,000	<5		38.5
	15/06/2023	4.2	140	160	7.7	200	1.5	0.44	44	<0.02	12	24	<2	8		0.02
	24/07/2023	3.6	1,600	21	9	2,400	0.02	1.5	180	<0.02	3.4	78	5,700	<5		31.7
	21/08/2023	3.3	2,400	5.7	7.5	3,700	<0.01	2.8	33	<0.02	3.4	97	850	5.3		25.8
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.2	2,100	<5	9	3,500	0.03	0.8	4.7	<0.01	1.1	63	400	<5		85.1
	19/12/2023	3.0	3,200	15	0.8	3,700	<0.01	0.44	34	<0.02	4.5	100	980	<5		28.8
	23/01/2024	3.1	1,600	23	7.8	2,500	<0.01	0.19	27	<0.02	0.5	54	730	<5		27.0
	26/02/2024	3.1	1,000	11	7.8	1,200	0.03	0.31	14	<0.02	1.5	30	570	<5		40.7
	26/03/2024	3.2	900	5.7	9.6	1,300	<0.01	0.36	21	<0.02	0.9	30	710	<5		33.8
	18/04/2024	3.1	980	67	7.5	1,900	0.03	0.42	15	<0.02	0.8	33	1,000	27	310	66.7
	20/05/2024	3.3	630	8	8.3	1,100	<0.01	0.3	11	<0.02	0.7	25	500	<5	190	45.5
	25/06/2024	3.2	1,000	5.4	8.6	1,600	0.01	0.4	13	<0.02	1	27	270	<5	160	20.8
	10/07/2024	3.5	420	<5	7.9	870	<0.01	0.24	11	<0.02	0.6	21	450	<5	150	40.9
	6/08/2024	3.3	1,300	38	8.7	1,700	0.04	0.03	13	<0.02	1.1	28	860	7.8	230	66.2
	15/08/2024	3.9	240	<5	9.3	390	0.02	0.13	13	<0.02	0.8	16	150	<5	40	11.5
	11/09/2024	3.4	460	<5	6.9	690	0.01	0.05	8.7	<0.02	<0.2	17	390	15	77	44.8
	24/09/2024 - Additional	3.5	750	-	-	1,300	-	-	-	-	-	-	-	-	-	-
	9/10/2024	3.1	810	<5	9	1,200	0.02	<0.01	10	<0.02	0.8	26	580	<5	<10	58.0
	6/11/2024	3.3	440	23	6.4	660	0.05	<0.01	10	<0.02	1	18	310	<5	15	31.0
	16/12/2024	5.7	210	420	0.2	360	0.1	0.25	13	<0.02	13	12	110	7	25	8.5
	14/01/2025	4.1	310	120	4.9	460	0.13	0.03	6.3	<0.02	1.3	11	64	<5	<10	10.2
	11/02/2025	7.6	700	<5	8.8	1000	0.01	0.03	5.8	<0.02	1.3	21	150	7.7	<10	25.9
	24/03/2025	3.9	390	21	7.4	470	0.03	0.03	18	<0.02	1.5	24	180	8.1	<10	10.0
	31/03/2025	6.3	260	70	10	370	<0.01	0.1	11	<0.02	0.8	16	160	<5	<10	14.5
	8/04/2025	6.0	430	43	4.1	470	0.09	0.27	11	0.04	2.3	18	240	<10	16	21.8
	9/05/2025	6.5	270	260	-	570	<0.01	0.02	10	<0.02	4.5	16	250	160	<10	25.0
	25/06/2025	6.7	410	67	6.1	590	0.6	0.01	8.3	<0.02	0.6	16	160	6.5	28	19.2
	8/07/2025	4.0	140	180	6.1	160	0.21	<0.01	21	<0.02	6.2	17	<2	7.6	43	21.0
	14/08/2025	6.5	180	250	6.6	290	0.47	-	9.4	-	-	14	86	<5	13	9.4
	11/09/2025	6.5	260	1,400	0.2	460	0.03	0.31	7.3	<0.02	38	16	150	10	22	7.3
	13/10/2025	7.3	580	14	8.3	760	0.04	<0.01	4	<0.02	0.8	16	230	20	<10	4.0
	20/11/2025	6.9	280	35	2.1	490	0.08	0.05	8.4	<0.02	1	15	150	2.7	<10	8.4
	16/12/2025	7.0	370	170	6	550	0.05	0.21	14	<0.5	1	87	140	<5	39	14.0
	21/01/2026	6.9	250	75	1.9	450	0.23	<0.01	22	0.02	0.9	16	100	<0.005	13	22.0
	20/02/2026	6.9	320	42	1.5	480	0.03	<0.01	29	<0.02	2.6	18	30	0.17	16	29.0
SW04 Baseline		**4.2 – 4.5**	**112**	**293**	**-**	**165**	**0.5**	**0.693**	**90**	**0.052**	**4.5**	**20**	**3**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW04	29/09/2022	1.3	0.001	<0.0002	1.6	0.005	0.001	2.7	0.001	2.6	<0.0001	0.002	1	0.027	<1
	20/10/2022	1.1	<0.001	<0.0002	1.3	0.004	0.001	2.4	0.001	2.3	<0.0001	0.002	1	0.024	<1
	14/11/2022	No surface water located at monitoring site – no sample collected													
	14/12/2022	1.2	<0.001	<0.002	<5	<0.001	<0.01	3.2	<0.01	<5	<0.001	<0.01	<5	0.084	<1
	18/01/2023	No surface water located at monitoring site – no sample collected													
	20/02/2023	1.6	0.002	<0.0002	2.7	0.005	0.05	0.002	0.002	3.9	<0.001	0.003	1.6	0.039	<1
	28/03/2023	1.1	<0.01	<0.002	<5	0.002	<0.01	2.7	<0.01	<5	<0.0001	0.01	<5	<0.05	<1
	18/04/2023	0.85	<0.001	<0.0002	1.8	<0.01	<0.001	<0.001	<0.001	2.7	<0.0001	0.001	0.8	0.034	<1
	18/05/2023	41	<0.001	0.0005	200	<0.001	0.003	16	0.003	31	<0.0001	0.11	5.7	0.4	<1
	15/06/2023	3.1	0.002	<0.0002	2.2	0.007	0.007	6.3	0.005	4.5	<0.0001	0.003	1.4	0.075	1.41
	24/07/2023	50	<0.001	0.0002	330	<0.001	0.003	3.9	0.002	51	<0.0001	0.13	9	0.18	<1
	21/08/2023	72	0.002	0.0004	560	<0.001	0.003	3.4	0.002	83	<0.0001	0.23	13	0.34	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	3	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	91	0.003	0.0007	380	0.001	0.003	4.3	0.003	52	<0.0001	0.27	7.2	0.55	<1
	19/12/2023	110	0.005	0.0022	570	0.002	0.005	11	0.007	90	0.001	0.39	4.3	0.7	<1
	23/01/2024	55	0.002	0.0003	260	0.002	0.003	9.7	0.002	35	<0.0001	0.19	6.1	0.33	<1
	26/02/2024	23	<0.001	<0.0002	140	<0.001	<0.001	5.1	<0.001	20	<0.0001	0.083	3.9	0.18	<1
	26/03/2024	20	<0.001	<0.0002	130	<0.001	<0.001	3.1	<0.001	19	<0.0001	0.068	4.9	0.1	<1
	18/04/2024	32	<0.001	<0.0002	190	0.001	0.002	7	<0.001	26	<0.0001	0.1	3.6	0.18	<1
	20/05/2024	20	<0.001	<0.0002	100	<0.001	<0.001	5.7	<0.001	14	<0.0001	0.064	2.6	0.13	<1
	25/06/2024	16	<0.001	<0.0002	210	<0.001	<0.001	5.3	<0.001	23	<0.0001	0.059	3.7	0.09	<1
	10/07/2024	12	<0.001	<0.0002	110	<0.001	0.001	2.5	<0.001	12	<0.0001	0.051	2.2	0.11	<1
	6/08/2024	17	<0.001	<0.0002	200	<0.001	0.001	5.5	<0.001	24	<0.0001	0.059	2.5	0.1	<1
	15/08/2024	2	<0.001	<0.0002	36	<0.001	<0.001	0.81	<0.001	6	<0.0001	0.015	2.5	0.057	<1
	11/09/2024	5.6	<0.001	<0.0002	87	<0.001	<0.001	3.6	<0.001	11	<0.0001	0.026	1.6	0.061	<1
	24/09/2024 - Additional	-	<0.001	<0.0001	-	<0.001	0.0001	-	<0.001	-	<0.0001	0.032	-	0.043	-
	9/10/2024	14	<0.001	<0.0002	140	<0.001	0.002	8.1	<0.001	17	<0.0001	0.057	2.7	0.12	<1
	6/11/2024	2.8	<0.001	<0.0002	81	<0.001	<0.001	6.1	<0.001	11	<0.0001	0.02	<0.5	0.034	<1
	16/12/2024	4.4	0.007	<0.0002	29	0.009	0.006	170	0.003	4.5	<0.0001	0.009	1.3	0.035	<1
	14/01/2025	1.2	<0.001	<0.0002	53	<0.001	0.001	5.8	<0.001	5.8	<0.0001	0.014	0.8	0.039	<1
	11/02/2025	<0.05	<0.001	<0.0002	200	<0.001	<0.001	0.14	<0.001	18	<0.0001	0.004	<0.5	0.033	<1
	24/03/2025	1.1	<0.001	<0.0002	52	<0.001	0.002	6.6	<0.001	8.5	<0.0001	0.012	2.3	0.1	<1
	31/03/2025	0.5	0.003	<0.0002	50	<0.001	0.001	17	<0.001	7.6	<0.0001	0.007	2.4	0.047	<1
	8/04/2025	0.36	0.004	<0.0002	70	<0.001	<0.001	38	<0.001	9.8	<0.0001	0.006	2.3	0.014	<1
	9/05/2025	0.64	<0.001	<0.0002	61	<0.001	0.001	34	<0.001	7.9	<0.0001	0.001	1.9	0.032	<1
	25/06/2025	0.35	<0.001	<0.0002	85	<0.001	<0.001	7.3	<0.001	8.5	<0.0001	0.004	1.3	0.013	<1
	8/07/2025	0.92	<0.001	<0.0002	0.6	0.004	0.002	1.8	<0.001	1.5	<0.0001	0.001	0.8	0.042	<1
	14/08/2025	0.34	<0.001	<0.0002	38	<0.001	<0.001	17	<0.001	5.7	<0.0001	0.002	1	0.018	<1
	11/09/2025	8.7	0.031	<0.002	120	0.017	0.011	830	<0.01	12	<0.001	0.027	<5	0.1	<1
	13/10/2025	0.31	0.002	<0.0002	130	<0.001	<0.001	12	<0.001	14	<0.0001	0.004	1.5	<0.005	<1
	20/11/2025	0.26	<0.001	<0.0002	69	<0.001	0.002	7.6	0.001	8.5	<0.0001	0.003	0.6	0.016	<1
	16/12/2025	13	0.002	<0.0002	57	0.003	<0.001	47	0.002	38	<0.0001	0.032	2.4	0.039	<1
	21/01/2026	0.07	<0.001	<0.0002	53	<0.001	<1	3	<1	7.3	<0.0001	0.001	<0.5	<0.005	<1
	20/02/2026	0.33	0.003	<0.0002	63	<0.001	<0.001	37	<0.001	8.2	<0.0001	0.002	1.6	0.013	<2
SW04 Baseline		**1.4**	**0.002**	**0.001**	**3.2**	**0.007**	**0.002**	**2.8**	**0.002**	**2.3**	**0.0005**	**0.005**	**2.9**	**0.028**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW04	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	No flow - No sample collected									
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	No flow - No sample collected									
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No flow - No sample collected									
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	160	160	<100	<100	<20	<50	<100	<100	160	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Additional	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW04 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW05	29/09/2022	5.9	480	5.2	7.7	510	0.12	0.17	220	<0.20	3	140	11	<5		0.05
	20/10/2022	6.2	650	7.2	8.9	690	0.06	0.24	180	<0.20	0.5	160	8.6	<5		0.05
	14/11/2022	6.2	820	13	4.7	1,000	0.06	<0.05	310	<0.10	8.1	260	100	<5		0.32
	14/12/2022	6.2	830	16	7.5	1,100	0.05	0.05	330	<0.10	3.1	240	40	<5		0.12
	18/01/2023	6.3	2,800	33	7	<5	0.09	0.09	1,300	<0.02	3.38	820	160	<5		0.12
	20/02/2023	6.7	18	18	5.4	2,300	0.1	0.07	2,000	<0.10	3.4	4700	890	<5		0.45
	28/03/2023	5.6	470	<5	9.4	760	0.02	0.08	200	<0.10	<0.02	110	23	6.7		0.12
	18/04/2023	6.4	4,000	16	8.5	5,300	0.1	0.12	2,000	<0.02	80	1100	230	<5		0.12
	18/05/2023	5.8	260	17	5.7	460	0.08	<0.01	110	<0.02	<0.2	64	25	<5		0.23
	15/06/2023	6.2	1,100	<5	8.8	1,400	0.58	0.14	450	<0.02	1.1	250	40	<5		0.09
	24/07/2023	6.5	1,600	<5	9.3	2,800	0.05	0.17	1,500	<0.5	1.1	440	1,200	<5		0.80
	21/08/2023	6.6	1,600	<5	6.3	2,900	0.06	0.15	1,500	<0.02	1.28	480	190	<5		0.13
	18/09/2023	6.6	2,500	13	6.4	3,800	0.06	0.11	1,200	<0.02	1.3	650	210	<5		0.18
	18/10/2023	6.9	4,800	6.6	6.5	7,700	0.06	0.05	2,700	<0.02	<0.2	1,300	730	10		0.27
	20/11/2023	6.8	2,100	12	4.8	3,700	0.18	0.46	1,100	<0.01	0.6	460	1,200	<5		1.09
	19/12/2023	6.7	3,300	14	5.3	5,400	0.19	0.77	1,700	<0.02	<2	1,000	64	<5		0.04
	23/01/2024	6.2	1,100	13	9.3	1,000	0.09	0.05	440	<0.02	2.3	260	220	<5		0.50
	26/02/2024	6.3	970	16	8.6	1,200	0.11	0.03	330	<0.02	1.5	200	130	<5		0.39
	26/03/2024	6.6	1,100	9.1	5.6	1,700	0.03	0.09	910	<0.02	2	290	420	<5		0.46
	18/04/2024	6.5	560	8.4	5.8	830	0.07	0.16	160	<0.02	1.7	110	160	5.4	<10	1.00
	20/05/2024	6.7	240	<5	5.8	350	<0.01	0.03	68	<0.02	0.4	47	140	<5	15	2.06
	25/06/2024	6.5	1,000	16	7.7	1,800	0.06	0.1	500	<0.02	1.2	300	29	<5	16	0.06
	10/07/2024	6.2	950	5.6	6.3	1,700	0.02	0.16	170	<0.02	0.9	280	130	<5	11	0.76
	6/08/2024	6.3	3,300	9	8.9	5,800	0.05	0.11	1500	<0.02	1.2	820	210	<5	27	0.14
	15/08/2024	6.2	300	<5	7.1	430	0.08	0.03	30	<0.02	<0.2	80	27	<5	12	0.90
	11/09/2024	6.4	710	8.2	5.5	1,200	0.03	0.4	450	<0.02	1.1	230	72	<5	12	0.16
	9/10/2024	6.4	700	11	9	1,100	0.15	0.15	320	<0.1	<0.25	180	53	<5	14	0.17
	6/11/2024	7.1	930	15	6.1	1,300	0.08	0.16	440	<0.02	1	250	56	<5	<10	0.13
	16/12/2024	7.4	31,000	26	9.3	44,000	0.02	0.14	1,400	<0.02	0.4	<0.5	2,000	<5	<10	1.43
	14/01/2025	7.1	19,000	9.4	6.2	30,000	0.04	0.04	12,000	<0.02	0.3	5,500	500	<5	<10	0.04
	11/02/2025	7.5	24,000	9.1	8.5	35,000	0.03	0.06	6,300	<0.02	<0.2	6,900	260	<5	<10	0.04
	24/03/2024	6.3	1,600	<5	7	2,500	<0.1	0.12	790	<0.02	4.4	440	140	<5	<10	0.18
	31/03/2025	7.0	210	8	9.2	260	0.08	<10	72	<0.02	2.3	41	9.5	<5	<10	0.13
	8/04/2025	6.3	610	8.3	6.7	760	0.08	0.44	230	<0.2	<1	140	29	<10	<10	0.13
	9/05/2025	6.8	340	<5	-	480	0.08	<0.1	120	<0.2	1.7	71	40	<5	<10	0.33
	25/06/2025	6.2	2,000	6.6	5.9	3,500	<0.2	0.07	1,700	<0.2	<0.2	510	250	<5	17	0.14
	8/07/2025	6.0	470	<5	8	910	0.05	0.03	230	0.07	<0.2	130	41	<5	13	0.18
	14/08/2025	6.2	570	16	6.1	930	0.08	0.03	550	<0.02	16	140	62	6.5	13	0.11
	11/09/2025	6.5	940	5.4	6.9	1,700	0.04	0.05	440	<0.02	1.7	260	61	<5	9	0.14
	13/10/2025	6.8	6,600	<5	5.4	11,000	0.05	0.1	3,300	<0.02	1.7	1,800	370	<5	12	0.11
	20/11/2025	6.6	4,600	<5	4.3	9,000	0.1	0.21	2,600	<0.02	0.4	1,400	320	<5	12	0.12
	16/12/2025	6.8	11,000	18	4.1	18,000	0.07	0.28	6,100	<0.5	1.2	2,800	720	<5	34	0.12
	21/01/2026	7.4	25,000	9.5	7.8	37,000	0.03	0.02	12,000	12	1.1	6,300	1,500	<0.005	14	0.13
	20/02/2026	6.9	21,000	8.4	4.9	32,000	0.02	<0.01	10,000	<0.02	0.8	5,400	410	<0.005	10	0.04
SW05 Baseline		**5.1 – 7.2**	**4710**	**136**	**-**	**6,927**	**0.21**	**0.592**	**980**	**0.02**	**2.2**	**1,667**	**115**	**63**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW05	29/09/2022	0.83	<0.001	<0.0002	9.4	0.002	<0.001	4.6	<0.001	17	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.66	<0.001	<0.0002	11	0.001	<0.001	3.5	0.001	19	<0.0001	0.002	7.9	0.007	<1
	14/11/2022	0.75	<0.001	<0.002	18	<0.001	0.002	5.4	<0.01	27	<0.001	<0.001	11	0.12	<1
	14/12/2022	0.93	<0.001	<0.002	16	<0.01	<0.01	6.1	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.73	<0.01	<0.002	<2	<0.01	<0.01	6.2	<0.01	96	<0.001	<0.01	41	<0.05	<1
	20/02/2023	0.22	0.002	<0.0002	190	0.001	0.01	<0.001	<0.001	550	<0.001	0.001	170	0.008	<1
	28/03/2023	0.77	<0.01	<0.002	9.4	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.4	<0.05	<1
	18/04/2023	1	<0.001	<0.0002	42	0.001	<0.001	<0.001	<0.001	110	<0.0001	0.003	37	0.008	<1
	18/05/2023	0.6	<0.001	<0.0002	5.2	<0.001	<0.001	2.4	<0.001	9.1	<0.0001	0.002	4.9	0.009	<1
	15/06/2023	0.32	<0.001	<0.0002	14	0.001	2	2	<0.001	27	<0.0001	0.001	14	0.01	<1
	24/07/2023	0.33	<0.001	<0.0002	22	<0.001	<0.001	1.9	<0.001	52	<0.0001	0.002	25	0.006	<1
	21/08/2023	0.41	<0.001	<0.0002	23	<0.001	0.002	2.2	<0.001	54	<0.0001	0.002	29	0.005	<1
	18/09/2023	0.28	<0.001	<0.0002	29	<0.001	<0.001	2.6	<0.001	70	<0.0001	0.001	42	<0.005	<1
	18/10/2023	0.27	<0.001	<0.0002	61	<0.001	<0.001	2	<0.001	160	<0.0001	<0.001	76	<0.005	<1
	20/11/2023	0.51	0.001	<0.0002	25	0.001	<0.001	4.3	<0.001	56	<0.0001	0.002	27	<0.005	<1
	19/12/2023	0.54	0.005	0.0028	46	0.001	0.001	4.2	0.001	120	0.002	0.002	47	0.009	<1
	23/01/2024	0.9	0.003	<0.0002	16	0.002	0.001	7.8	<0.001	32	<0.0001	0.001	16	0.012	<1
	26/02/2024	0.63	0.001	<0.0002	13	0.001	<0.001	3.7	<0.001	23	<0.0001	0.002	10	0.029	<1
	26/03/2024	0.64	<0.001	<0.0002	16	0.001	<0.001	3.3	<0.001	33	<0.0001	0.002	14	0.008	<1
	18/04/2024	0.69	<0.001	<0.0002	8.3	0.002	0.001	<0.001	<0.001	14	<0.0001	0.008	6.7	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.6	<0.001	0.001	2.5	<0.001	5.1	<0.0001	0.002	3.5	0.008	<1
	25/06/2024	0.2	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	31	<0.0001	0.002	12	0.012	<1
	10/07/2024	0.48	<0.001	<0.0002	17	<0.001	<0.001	2.9	<0.001	31	<0.0001	0.002	11	0.008	<1
	6/08/2024	0.28	<0.001	<0.0002	37	<0.001	<0.001	<0.001	<0.001	100	<0.0001	0.001	30	0.007	<1
	15/08/2024	0.5	<0.001	<0.0002	5	0.001	<0.001	1.6	<0.001	8	<0.0001	0.001	4.6	0.01	<1
	11/09/2024	0.52	<0.001	<0.0002	14	<0.001	<0.001	2.9	<0.001	25	<0.0001	0.002	10	0.011	<1
	9/10/2024	0.85	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.5	0.016	<1
	6/11/2024	0.68	<0.001	<0.0002	17	0.002	<0.001	3.8	<0.001	29	<0.0001	0.002	12	0.008	<1
	16/12/2024	<0.05	<0.001	<0.0002	<0.5	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.24	0.002	<0.0002	230	0.002	<0.001	0.64	<0.001	660	<0.0001	<0.001	210	0.006	<1
	11/02/2025	0.12	0.002	<0.0002	290	0.001	<0.001	0.5	<0.001	820	<0.0001	<0.001	260	0.047	<1
	24/03/2024	0.54	<0.001	<0.0002	22	<0.001	0.001	3.2	<0.001	53	<0.0001	0.002	17	0.32	<1
	31/03/2025	0.58	<0.001	<0.0002	4.2	<0.001	<0.001	3.7	<0.001	5.2	<0.0001	0.002	3.5	0.062	<1
	8/04/2025	0.77	<0.001	<0.0002	9.9	0.001	<0.001	4.2	<0.001	18	<0.0001	0.002	6	0.011	<1
	9/05/2025	0.75	<0.001	<0.0002	6.3	0.001	<0.001	3.2	<0.001	8.5	<0.0001	0.002	3.7	0.015	<1
	25/06/2025	0.46	<0.001	<0.0002	26	<0.001	<0.001	2	<0.001	63	<0.0001	0.001	19	0.01	<1
	8/07/2025	0.68	<0.001	<0.0002	9.1	0.001	<0.001	3	<0.001	16	<0.0001	0.002	4.9	0.008	<1
	14/08/2025	0.46	<0.001	<0.0002	8.6	<0.001	<0.001	2.6	<0.001	17	<0.0001	0.001	6.2	0.008	<1
	11/09/2025	0.55	<0.001	<0.0002	15	<0.001	<0.001	3.2	<0.001	33	<0.0001	0.001	11	0.01	<1
	13/10/2025	0.21	<0.001	<0.0002	77	<0.001	<0.001	2	<0.001	220	<0.0001	<0.001	69	<0.005	<1
	20/11/2025	0.32	0.001	<0.0002	63	0.001	<0.001	2.7	<0.001	180	<0.0001	0.001	53	<0.005	<1
	16/12/2025	0.2	0.001	<0.0002	120	0.001	0.001	1.4	<0.001	340	<0.0001	0.001	110	0.008	<1
	21/01/2026	0.08	0.002	<0.0002	250	0.001	<1	0.47	<1	760	<0.0001	<0.001	240	0.009	<1
	20/02/2026	0.1	0.002	<0.0002	220	<0.001	<0.001	1.4	<0.001	640	<0.0001	<0.001	260	0.006	<2
SW05 Baseline		**2.1**	**0.002**	**0.001**	**57**	**0.002**	**0.003**	**12.3**	0.001	**130**	**0.0005**	**0.011**	**58**	**0.026**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW05	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	70	70	-	-	<20	60	100	-	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	120	120	<100	120	<20	<50	120	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW05 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW06	29/09/2022	6.0	480	<5	7.8	580	0.13	0.16	220	<0.02	8.6	140	11	5.1		0.05
	20/10/2022	6.3	580	16	8.7	730	0.05	0.19	330	<0.02	0.5	110	7.5	6.2		0.02
	14/11/2022	6.2	840	13	<5	1000	0.04	0.36	310	<0.10	1.1	270	100	<5		0.32
	14/12/2022	6.3	840	16	8.3	1200	0.1	0.05	340	<0.10	5.8	240	44	<5		0.13
	18/01/2023	6.4	3,700	31	6.8	5,400	0.07	0.04	1,800	<0.02	2.5	1,000	200	<5		0.11
	20/02/2023	6.8	19	89	5.1	14,000	0.09	0.11	22	<0.10	4.1	4,000	1,200	<5		54.55
	28/03/2023	5.6	400	6.2	8.3	730	0.03	0.07	180	<0.20	<0.20	110	18	9.7		0.10
	18/04/2023	6.7	6,400	18	7.4	6,700	0.07	1.2	3,200	<0.02	1.26	1,700	360	<10		0.11
	18/05/2023	5.9	280	17	6.3	470	0.08	0.06	120	<0.02	0.4	370	21	<5		0.18
	15/06/2023	6.4	1,100	<5	7.4	1,400	0.55	0.18	440	<0.02	0.7	250	38	<5		0.09
	24/07/2023	6.7	2,100	5.8	6.6	3,500	0.07	0.23	1,800	<0.2	0.6	540	620	<5		0.34
	21/08/2023	6.6	2,800	<5	6.1	5,400	0.19	0.16	1,300	<0.02	0.78	870	59	<5		0.05
	18/09/2023	6.7	2,900	24	6.5	4,600	0.06	0.12	1,500	<0.02	0.4	1,300	200	<5		0.13
	18/10/2023	6.9	7,900	6.3	6.4	9,700	0.05	0.05	3,700	<0.02	<0.2	1,600	430	<5		0.12
	20/11/2023	6.6	2,200	9.9	4.6	4,000	0.18	0.43	1,200	<0.01	1.2	490	720	<5		0.60
	19/12/2023	6.8	3,300	9.3	5.6	6,600	0.09	0.82	2,300	<0.02	<2	1,300	94	<5		0.04
	23/01/2024	6.2	4,300	15	2.1	4,300	0.18	0.08	2,800	<0.02	1.4	1,100	330	<5		0.12
	26/02/2024	6.4	880	17	9	1,200	0.11	0.02	60	<0.02	1.7	200	10	<5		0.17
	26/03/2024	6.8	1,300	9.9	5.9	1,900	0.05	0.07	760	0.05	1.2	300	120	<5		0.16
	18/04/2024	6.6	520	5.8	6	840	0.06	0.16	170	<0.02	<1	110	31	<5	17	0.18
	20/05/2024	6.3	240	<5	6.1	290	<0.01	0.05	59	<0.02	1	42	47	<5	15	0.80
	25/06/2024	6.7	960	17	9.2	1,900	0.06	0.09	500	<0.02	5.3	270	21	<5	19	0.04
	10/07/2024	6.2	880	<5	6.2	1,600	0.03	0.13	170	<0.02	1.4	250	33	<5	15	0.19
	6/08/2024	6.3	4,500	6.8	7.6	8,400	0.08	0.15	2,100	<0.02	1.6	1,200	270	<5	24	0.13
	15/08/2024	6.2	160	<5	7	240	0.1	0.03	57	<0.02	<0.2	38	15	<5	14	0.26
	11/09/2024	6.7	710	7	6.6	1,000	0.04	0.28	370	<0.02	1.8	180	54	<5	11	0.15
	9/10/2024	6.5	720	14	8.5	1,000	0.15	<0.01	310	<0.1	4.3	180	33	18	<10	0.11
	6/11/2024	6.9	1,900	37	5.6	2,400	0.1	0.11	890	<0.02	1.6	490	160	<5	<10	0.18
	16/12/2024	7.7	33,000	13	9.5	47,000	0.01	0.18	16,000	<0.02	<0.2	<0.5	2,100	<5	<10	0.13
	14/01/2025	7.2	25,000	11	6.3	38,000	0.03	0.06	15,000	<0.02	0.7	7,200	600	<5	<10	0.04
	11/02/2025	7.6	24,000	11	7.2	34,000	0.003	0.06	6,100	<0.02	<0.2	7,200	240	5.9	<10	0.04
	24/03/2025	6.5	1,700	<5	6.8	2,500	<0.1	0.12	820	<0.02	4.2	450	110	<5	<10	0.13
	31/03/2025	6.7	250	11	9.5	250	0.08	<10	68	<0.02	<1	42	9.7	<5	<10	0.14
	8/04/2025	6.4	610	7.6	9.4	740	0.08	0.28	260	<0.2	<1	140	31	<10	<10	0.12
	9/05/2025	6.6	260	<5	-	490	0.07	<0.1	120	<0.2	<1	70	28	<5	<10	0.23
	25/06/2025	6.2	2,000	7.4	5.9	3,600	1.4	0.08	1,700	<0.2	1.4	520	260	<5	20	1.50
	8/07/2025	6.0	470	<5	8.2	910	0.05	0.02	230	<0.02	<0.2	130	28	<5	13	0.12
	14/08/2025	6.3	590	31	6.1	910	0.07	0.03	340	<0.02	0.3	140	37	<5	13	0.11
	11/09/2025	6.6	1,299	6.8	7.1	2,200	0.04	0.05	590	<0.02	5.6	340	67	<5	<10	0.11
	13/10/2025	6.8	14,000	5.9	4.9	23,000	0.04	0.29	7,400	<0.02	0.6	4,100	830	5.9	14	0.11
	20/11/2025	6.7	8,400	<5	4.5	14,000	0.09	0.22	4,800	<0.02	0.7	2,300	1,100	<5	12	0.23
	16/12/2025	6.9	12,000	20	3.8	19,000	0.09	0.32	6,100	<0.5	1.8	2,900	750	7	28	0.12
	21/01/2026	7.4	18,000	7.1	7.4	28,000	0.03	<0.01	8,400	8.4	1	4,700	1,000	<0.005	12	0.12
	20/02/2026	7	19,000	<5	5.9	33,000	0.02	0.05	12,000	<0.02	0.3	5,800	520	0.0058	17	0.04
ANZG (2018): 95% Slightly Disturbed		**6.5 – 8.0**	**-**	**<50**	**-**	**<2200**	**<0.05**	**-**	**-**	**-**	**<0.50**	**-**	**-**	**5**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total)	As	Cd	Ca	Cr	Cu	Fe (total)	Pb	Mg	Hg	Ni	K	Zn	Aluminium : Calcium ratio
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	:
SW06	29/09/2022	0.78	<0.001	<0.0002	9.4	0.002	<0.001	4.5	<0.001	18	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.54	<0.001	<0.0002	9.1	0.001	<0.001	2.7	0.001	13	<0.0001	0.002	5.8	0.012	<1
	14/11/2022	0.68	<0.001	<0.002	18	<0.001	0.012	5.3	<0.01	29	<0.001	<0.01	12	0.11	<1
	14/12/2022	0.75	<0.001	<0.002	16	<0.01	<0.01	5.4	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.63	<0.010	<0.001	<2	<0.01	<0.01	0.01	<0.01	120	<0.001	<0.01	47	<0.05	<1
	20/02/2023	0.34	0.002	<0.0002	170	0.001	0.01	<0.001	<0.001	480	<0.001	0.002	160	0.008	<1
	28/03/2023	1.1	<0.01	<0.002	11	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.3	<0.05	<1
	18/04/2023	0.54	<0.001	<0.0002	68	0.001	<0.001	<0.001	<0.001	200	<0.0001	0.002	63	0.009	<1
	18/05/2023	0.44	0.003	<0.0002	14	<0.001	<0.001	0.13	<0.001	4.8	<0.0001	0.008	3.3	<0.005	<1
	15/06/2023	0.36	<0.001	<0.0002	15	<0.001	2.1	2.1	<0.001	28	28	0.001	14	<0.005	<1
	24/07/2023	0.36	<0.001	<0.0002	26	<0.001	<0.001	1.9	0.001	65	<0.0001	0.002	29	0.007	<1
	21/08/2023	0.41	<0.001	<0.0002	39	0.001	<0.001	1.9	<0.001	100	<0.0001	0.002	46	<0.005	<1
	18/09/2023	0.3	<0.001	<0.0002	56	<0.001	<0.001	2.4	<0.001	150	<0.0001	0.001	64	<0.005	<1
	18/10/2023	0.2	<0.001	<0.0002	73	<0.001	<0.001	1.7	<0.001	190	<0.0001	<0.001	85	<0.005	<1
	20/11/2023	0.63	0.001	<0.0002	27	0.001	<0.001	4.5	<0.001	60	<0.0001	0.003	28	0.01	<1
	19/12/2023	0.62	0.002	0.0007	56	0.001	0.002	3.4	<0.001	150	0.0005	0.002	55	0.008	<1
	23/01/2024	0.71	0.003	<0.0002	50	0.002	<0.001	5.7	<0.001	140	<0.0001	<0.001	46	0.008	<1
	26/02/2024	0.61	<0.001	<0.0002	14	0.003	<0.001	3.5	<0.001	24	<0.0001	0.005	10	0.025	<1
	26/03/2024	0.61	<0.001	<0.0002	17	0.001	<0.001	3.1	<0.001	34	<0.0001	0.002	15	0.008	<1
	18/04/2024	0.71	<0.001	<0.0002	10	0.001	<0.001	<0.001	<0.001	13	<0.0001	0.008	7.6	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.7	<0.001	<0.001	2.3	<0.001	4.8	<0.0001	0.002	3.2	0.009	<1
	25/06/2024	0.23	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	28	<0.0001	0.002	11	0.016	<1
	10/07/2024	0.5	<0.001	<0.0002	17	<0.001	<0.001	2.6	<0.001	28	<0.0001	0.002	10	0.01	<1
	6/08/2024	0.31	<0.001	<0.0002	50	<0.001	<0.001	<0.001	<0.001	140	<0.0001	0.002	40	0.011	<1
	15/08/2024	0.51	<0.001	<0.0002	4.8	<0.001	0.001	1.6	<0.001	4.6	<0.0001	0.002	3	0.011	<1
	11/09/2024	0.46	<0.001	<0.0002	14	<0.001	<0.001	2.1	<0.001	20	<0.0001	0.002	11	0.012	<1
	9/10/2024	0.84	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.7	0.009	<1
	6/11/2024	0.79	<0.001	<0.0002	25	0.002	<0.001	4.1	<0.001	60	<0.0001	0.002	20	0.01	<1
	16/12/2024	4.4	0.007	<0.0002	29	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.15	0.002	<0.0002	300	0.002	<0.001	0.3	<0.001	860	<0.0001	<0.001	270	<0.005	<1
	11/02/2025	0.09	0.002	<0.0002	300	0.001	<0.001	0.38	<0.001	850	<0.0001	<0.001	270	0.048	<1
	24/03/2025	0.55	<0.001	<0.0002	22	<0.001	<0.001	3.4	<0.001	54	<0.0001	0.002	17	0.027	<1
	31/03/2025	0.59	0.001	<0.0002	4.2	<0.001	<0.001	3.3	<0.001	5.3	<0.0001	0.002	3.5	0.044	<1
	8/04/2025	0.8	<0.001	<0.0002	9.9	0.003	<0.001	4.1	<0.001	18	<0.0001	0.002	6	0.007	<1
	9/05/2025	0.74	<0.001	<0.0002	6.3	0.001	0.001	2.8	<0.001	8.5	<0.0001	0.002	3.7	0.01	<1
	25/06/2025	0.7	<0.001	<0.0002	26	<0.001	<0.001	2.6	<0.001	64	<0.0001	0.002	20	0.008	<1
	8/07/2025	0.55	<0.001	<0.0002	11	0.001	0.001	2.3	<0.001	13	<0.0001	0.002	6.3	0.008	<1
	14/08/2025	0.43	<0.001	<0.0002	9.1	<0.001	<0.001	2.4	<0.001	16	<0.0001	0.001	6.3	0.011	<1
	11/09/2025	0.51	<0.001	<0.0002	19	0.001	<0.001	2.9	<0.001	42	<0.0001	0.001	14	0.008	<1
	13/10/2025	0.12	0.001	<0.0002	170	<0.001	<0.001	1.2	<0.001	500	<0.0001	<0.001	150	0.006	<1
	20/11/2025	0.26	0.001	<0.0002	99	0.001	<0.001	1.9	<0.001	280	<0.0001	0.001	86	0.006	<1
	16/12/2025	0.17	0.001	<0.0002	120	<0.001	<0.001	1.3	0.001	340	<0.0001	0.001	110	<0.005	<1
	21/01/2026	0.1	0.002	<0.0002	200	<0.001	<1	0.35	<1	560	<0.0001	<0.001	180	0.006	<1
	20/02/2026	0.1	0.002	<0.0002	240	<0.001	<0.001	0.58	<0.001	690	<0.0001	<0.001	280	0.028	<2
ANZG (2018): 95% Slightly Disturbed		**0.055**	**0.013**	**0.0002**	**-**	**0.0033**	**0.0018**	**0.3**	**0.0034**	**-**	**0.0006**	**0.011**	**-**	**0.008**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW06	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	-	-	<20	<50	<100	<100	-	<100
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	90	90	<100	<100	<20	160	<100	<100	160	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<100	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	2.1	2.1	<100	<100	<20	<50	0.9	<100	0.9	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
ANZG (2018): 95% Slightly Disturbed		-	-	-	-	-	-	-	-	-	-

APPENDIX D

Photolog

PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
1	20/02/2026

Description

Surface water monitoring location SW02.



Photo No.	Date
2	20/02/2026

Description

Surface water monitoring location SW05.



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
3	20/02/2026

Description

Surface water monitoring location SW04.



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
4	20/02/2026

Description

Surface water monitoring location SW03.



Photo No.	Date
5	20/02/2026

Description

Surface water monitoring location SW06.



Photo No.	Date
6	20/02/2026

Description

PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Groundwater at MW5



Photo No.	Date
7	20/02/2026

Description

Surface water monitoring location SW01



MONTHLY WATER QUALITY MONITORING REPORT

Harvest Estate Urban Development

Monitoring Event: 20th March 2026

Ewingsdale Road, Byron Bay, NSW, 2481

Job Number: 217140

For:

Planit Consulting

By:

ENV Services Pty Ltd

Date:

09/04/2026

ENV Services Pty Ltd

313 River Street, Ballina NSW 2478

T: 1300 861 325

E: admin@envsolutions.com.au

www.envsolutions.com.au

DOCUMENT CONTROL

Job No:	Job Number: 217140
Client:	Planit Consulting
Filename:	217140_Harvest Estate_WQ_March_2026

	Name:	**Date:**	**Signature:**
Prepared By:	Austin Metcalfe-Smith Environmental Scientist	09/04/2026	
Reviewed By:	Kingsley Baldwin Environmental Team Leader	14/04/2026	

Revision:	**Date:**	**Details:**

SCOPE OF ENGAGEMENT AND LIMITATIONS

This report has been prepared by ENV Services at the request of Planit Consulting for the purpose of consolidating and assessing water quality monitoring (surface water and ground water) data to determine impact associated with the development of the Harvest Estate. No other parties may rely on the contents of this report for any purposes except those stated.

This report has been prepared based on the information provided to us and from other information obtained as a result of enquiries made by us. ENV accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this document for a purpose other than that described above.

No part of this report may be reproduced, stored, or transmitted in any form without the prior consent of ENV.

ENV declares that it does not have, nor expects to have, a beneficial interest in the subject project.

To avoid this advice being used inappropriately, it is recommended that you consult with ENV before conveying the information to another who may not fully understand the objectives of the report. This report is meant only for the subject site/project and should not be applied to any other.

1 INTRODUCTION

ENV Services Pty Ltd (ENV) was engaged by Planit Consulting to prepare a Monthly Water Quality Report (MWQR) to meet requirements outlined in the Harvest Estate Development Conditions of Consent (11b - d, 32, 33 & 78) and Section 6.2 and 6.4 of the Planit Construction Environmental Management Plan (CEMP). Monitoring has been undertaken in accordance with the following approved plans.

- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate Groundwater Management Plan.* Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Belongil Creek Plan of Management*. Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate West Byron Urban Release Area; Acid Frog Management Plan.* Dated August 2020.

Baseline water quality parameters outlined in this report have been derived from mean or range values calculated over a 12-month sampling period undertaken between 25 May 2020 and 17 May 2021. This baseline water quality monitoring was carried out by Australian Wetlands Consulting (AWC) and undertaken in accordance with the Harvest Estate Groundwater Management Plan (AWC 2020) and the Harvest Estate – Belongil Creek Plan of Management (AWC 2020).

Guideline water quality trigger values have been derived from the ANZG (2018) Water Quality Guidelines and ANZECC (2000) guidelines for Fresh and Marine Water Quality. These guidelines define Belongil Creek as a lowland river of South-Eastern Australia, with trigger values chosen to reflect this. In assessing human disturbance, this report recognises Belongil Creek as being slight to moderately disturbed. On this basis, for toxicants in water, 95% species protection default guideline values have been presented for assessed toxicants.

No construction works were being undertaken during this monitoring period, with major civil earthworks associated with Stage 1 of the Project completed in November 2023.

2 MONITORING RESULTS & OBSERVATIONS

2.1 Monthly Groundwater Monitoring

Monthly groundwater monitoring at five (5) groundwater wells (MW2 – MW5 & MW7) was carried out to assess for impact within the underlying aquifer. This monitoring was conducted in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.2 of the Planit Construction Environmental Management Plan (CEMP). Groundwater monitoring locations are presented in Appendix A.

An assessment of the monthly analytical results presented in Appendix B, Table 1, identified the following observations:

Site	Observation	Comments
MW2	pH, EC, TDS and Al were recorded outside of baseline ranges.	pH, EC and TDS values remain elevated, however water quality is improving since the last reporting period. Groundwater had sulfuric odour typical of oxidising ASS terrains. No site related impacts identified at this location.
MW3	All parameters were recorded within baseline ranges.	Groundwater appears to be recharging after seasonal rain. No site related impacts identified at this location.
MW4	All parameters were recorded within baseline ranges except for Ca.	Indicators of ASS oxidation have improved since the previous reporting period. Groundwater had sulfuric odour typical of oxidising ASS terrains. No site related impacts identified at this location.
MW5	pH, EC, TDS and several cations/anions (SO_4, Ca and Al) concentrations were outside baseline ranges or guideline values (Al only).	Low pH and elevated EC, TDS and dissolved ions are consistent with the presence of oxidising acid sulfate soils in the vicinity of the monitoring well. These results suggest oxidation of sulfidic sediments and associated mobilisation of dissolved constituents within the groundwater system. The observed improvement since the previous reporting period indicates that the severity of these conditions has decreased, potentially in response to reduced oxidation and/or dilution, buffering or flushing processes. Groundwater had sulfuric odour typical of oxidising ASS terrains. Localised impacts continue to be reported at this site.
MW7	All parameters were within baseline ranges with the exception of pH and SO_4.	Elevated sulfate concentrations are likely associated with the oxidation of sulfide-bearing sediments (e.g. pyrite) under fluctuating REDOX conditions, such as those induced by seasonal groundwater drawdown and rewetting cycles. The observed reduction in sulfate

	concentrations since the previous reporting period suggests a return to more reducing conditions and/or dilution and flushing processes within the system. No site related impacts identified at this location.

2.2 Monthly Surface Water Monitoring

Monthly surface water sampling (SW01 – SW06) was carried out to assess for impact from site activities on the receiving environment. Monitoring was carried out in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.4 of the Planit Construction Environmental Management Plan (CEMP), which require assessment of the following analytes; physiochemical parameters, nutrient, metals, cation/anion and total recoverable hydrocarbon (TRH).

Surface water monitoring locations are presented in Appendix A and the coordinates (GDA94) of all locations tabulated and presented in Table 1. Tabulated analytical results are presented in Appendix C. Select photos of the surface water sampling programme are presented in Appendix D.

Table 1: Surface Water Monitoring Coordinates

Monitoring Location	Location	Easting	Northing
SW01	Upstream of development - Southern Swale Drain	0556852	6831954
SW02	Upstream of development - Northern Main Drain	0557145	6831963
SW03	Downstream of development - Northern Main Drain	0557411	6831604
SW04	Downstream of development - Southern Swale Drain	0557397	6831429
SW05	Receiving environment - Outlet of Southern Swale Drain	0557992	6830881
SW06	Receiving environment - Outlet of Northern Main Drain	0558257	6831214

2.2.1 Assessment of Analytical Results

An assessment of the monthly analytical results presented in Appendix C, identified the following observations:

Site	Observation	Comments
SW01	All parameters were within baseline ranges with the exception of Al and Fe.	This site is located at an upstream location, receiving water from off-site. Elevated concentrations of iron and aluminium are likely attributable to the emplacement of basaltic sediments from the adjacent development, which are enriched in iron and aluminium oxides derived from the weathering of feldspar and pyroxene. Further monitoring is required to better understand the extent of impacts and to determine whether they are short-term or require mitigation measures.

Site	Observation	Comments
SW02	EC, TDS and SO_4 and cations/anions (Na, Ca, Mg and K) were recorded outside of baselines ranges.	All elevated values are typical of the geological (ASS) setting. No site related impacts identified.
SW03	pH, EC, TDS, SO_4, and cations/anions (Na, Mg and K) were recorded outside of baseline ranges.	This site is located within the Northern Main Drain, downstream of Stage 1 works and SW02. Water quality parameters are consistent with upstream location SW02. No site related impacts identified.
SW04	pH, TDS, EC, SO_4 and cations/anions (Ca, Fe and Mg) were outside baseline ranges.	This site is located downstream of Stage 1 works, within the Southern Swale Drain. Higher iron and total dissolved solids concentrations likely associated with the uncontrolled movement of sediment from the adjacent development located upstream. Water quality remains poor at this location when compared to 'upstream' (SW01) and baseline values.
SW05	All parameters were within baseline ranges except for P.	Elevated phosphorous levels associated with tidal influences. No site related impacts identified.
SW06	pH, EC, nutrients (P, N) and metals (Al, Fe and Zn) were recorded outside ANZG default guideline values (95%ile for slightly disturbed Freshwater Ecosystems).	Water quality appears relatively consistent with upstream location SW05. Elevated EC and cation/anions are associated with tidal influences. No site related impacts observed.

3 RAINFALL

During this monitoring period (21/02/2026 – 20/03/2026), 128 mm of rain was recorded in the area (Byron Bay, Cape Byron Lighthouse, Bureau of Meteorology).

4 CONCLUSION & RECOMMENDATIONS

4.1 Conclusion

Monitoring results indicate that impacts associated with exposure of acid sulfate soils (ASS) at surface water location SW04 (Southern Swale Drain) continue to diminish, with analyte concentrations exhibiting a downward trend since completion of Stage 1 of the development.

Similarly, water quality reported at SW03 is noted to be consistent with results reported from the upstream catchment (SW02), inferring no discernible site related impacts.

No hydrocarbon concentrations were detected at SW01 or at any downstream receiving locations during the monitoring period.

The monitoring period was characterised by moderate to high rainfall (128 mm), which may have influenced observed water quality trends.

Groundwater monitoring results indicate continued improvement in indicators of localised ASS-related impacts in the vicinity of MW5 and at MW2, with trend analysis demonstrating a gradual improvement in water quality across several key analytes.

4.2 Recommendations

Based on the findings of this monitoring program, the following recommendations are provided to support ongoing management of site water quality:

- Given that pH across the site is generally within, or above, baseline water quality conditions (with the exception of MW5), no corrective actions are currently warranted.
- Continue to monitor trends at receiving locations (SW01 and SW02) for potential impact from runoff from filling activities north of the site.
- Continue to monitor signs of ASS oxidation at all MW locations.

APPENDIX A

Figures



Legend

Site Location

0 0.5 1km

Figure 1 – Site Location
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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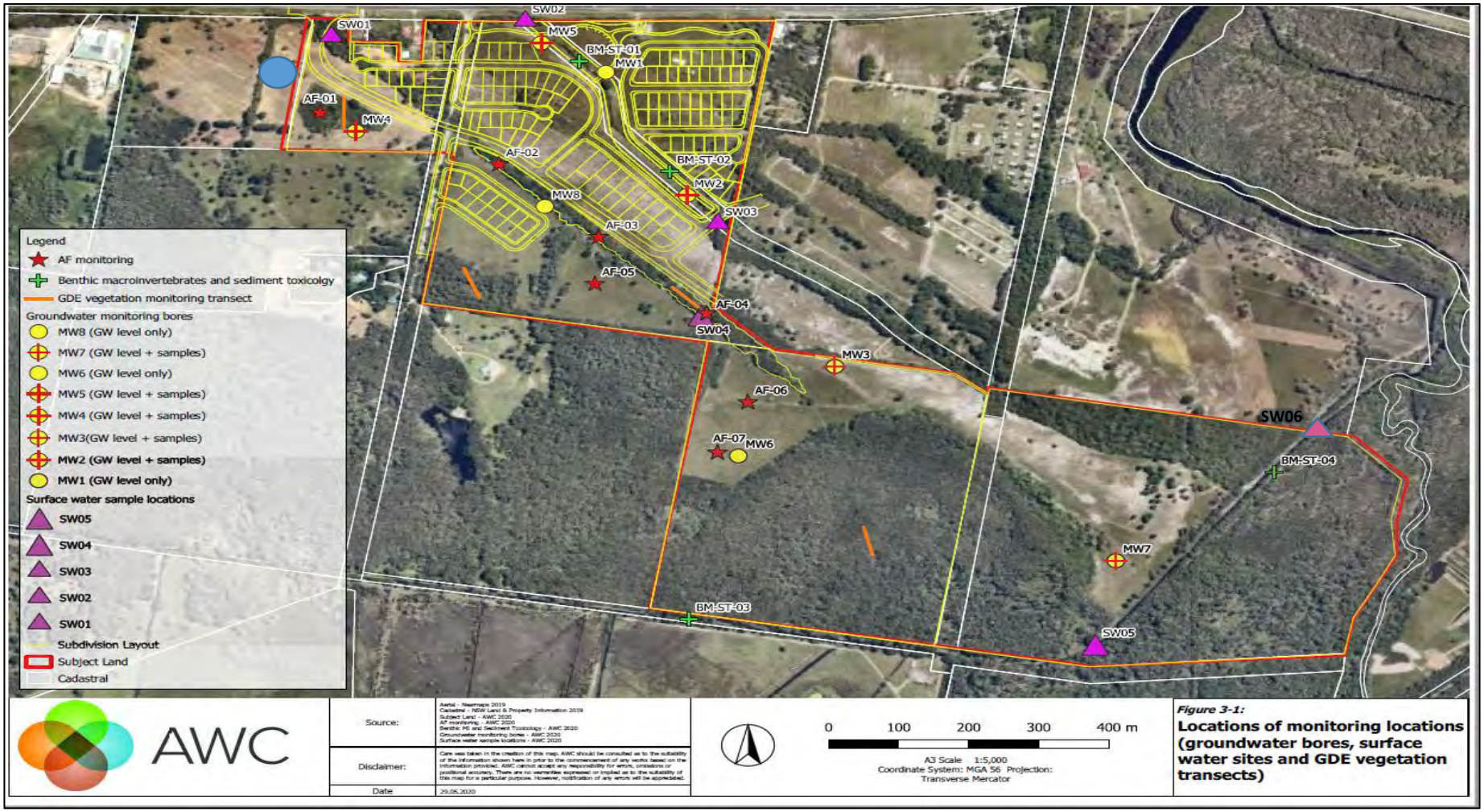


Figure 2 – AWC Monitoring Locations
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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APPENDIX B

Groundwater Quality Analytical Results

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW2	29/09/22	5.8	54	92	<5	0.12	0.51	14	0.02	0.5	30	< 2	< 0.5	0.8	2.4			0.1
	20/10/22	5.6	100	110	<5	0.09	0.24	13	0.02	2	28	< 2	<0.5	0.8	2.2			0.1
	14/11/22	6.0	100	240	<5	0.07	0.24	19	<0.10	<0.2	30	< 2	1.3	1.4	2.4			0.1
	14/12/22	5.6	110	170	<5	0.02	<0.05	15	<0.10	3.1	29	5	<5	<5	<5			0.3
	18/01/23	4.6	130	76	9.2	0.12	0.09	17	<0.05	2.5	29	7	<5	<5	<5			0.4
	20/02/23	6.0	100	160	5.3	0.09	0.1	27	<0.25	0.25	27	3.7	<0.5	0.7	3.1			0.1
	28/03/23	5.9	140	92	17	0.02	0.12	15	<0.02	<0.2	21	7.2	<5	<5	<5			0.5
	18/04/23	6.2	170	88	<5	0.08	1.2	15	<0.02	7.7	18	5.2	<5	<5	<5			0.3
	18/05/23	5.9	130	76	10	0.09	0.1	13	<0.02	9	28	2.1	0.6	0.9	2.6			0.2
	25/06/23	3.3	4,500	3,000	250	0.26	1.6	45	<0.02	8.1	86	3,800	440	82	7.9			84.4
	24/07/23	6.2	220	150	<5	0.03	0.16	12	<0.2	1	24	12	<0.5	0.8	2.5			1.0
	21/08/23	5.7	120	84	<5	0.08	0.14	15	<0.02	1.7	30	2.3	<5	<5	<5			0.2
	18/09/23	5.9	120	130	11	0.04	0.15	13	<0.02	1.2	25	<2	<0.5	0.9	2.7			0.1
	18/10/23	5.6	110	73	6.6	0.3	0.11	15	<0.02	0.3	25	3	<0.5	0.9	2.8			0.2
	20/11/23	6.0	160	70	<5	0.11	0.17	16	<0.01	0.8	28	4.2	<0.5	0.8	2.6			0.3
	19/12/23	6.3	110	100	<5	0.05	0.48	16	<0.02	2.8	28	2.1	0.5	0.9	2.9			0.1
	20/01/24	6.2	150	88	<5	0.05	0.08	13	<0.02	1.1	26	<2	<0.5	0.8	3			0.1
	26/02/24	5.1	150	340	7.4	0.07	0.09	15	<0.02	8.6	36	14	0.6	1	2.7			0.9
	26/03/24	5.7	180	310	<5	0.07	0.13	16	<0.02	<1	27	6.9	<0.5	0.8	2.7			0.4
	18/04/24	5.7	170	<5	<5	0.05	0.09	15	<0.02	1.8	29	2.6	<0.5	0.9	2.8	3.6	<1	0.17
	20/05/24	5.6	160	120	<5	0.11	0.1	19	<0.02	1	32	2.9	<0.5	0.8	2.8	3.9	<1	0.2
	25/06/24	5.5	170	170	12	0.09	<0.01	21	<0.02	2.7	30	<2	<0.5	0.8	2.3	3.8	<1	0.0
	10/07/24	5.8	150	190	<5	0.03	0.11	15	<0.02	<1	28	2.2	<0.5	0.7	2.7	2.8	<1	0.1
	06/08/24	5.9	170	90	6.9	0.16	0.12	20	<0.1	2.4	25	3.3	<0.5	0.6	2.1	3.4	<1	0.2
	11/09/24	5.7	140	110	<5	0.02	0.83	21	<0.2	<1	28	<2	<0.5	0.7	2.4	2.8	<1	0.0
	09/10/24	5.9	150	210	6.3	0.21	<0.01	17	0.02	<0.2	30	2.8	<0.5	<0.5	2.6	2.4	<1	0.1
	06/11/24	5.7	120	190	6.6	2	0.02	17	-	2.3	33	<2	1	1	3.1	3.6	<1	0.1
	16/12/24	6.0	120	60	8.0	0.05	<0.1	16	<0.2	0.9	30	5.3	0.14	0.8	2.8	3.5	<1	0.3
	14/01/25	6.4	150	94	610.0	0.03	<0.05	15	<0.1	<0.25	31	<2	<0.5	0.6	2.4	2.7	1	0.1
	11/02/25	5.7	170	150	<5	0.04	<0.1	13	<0.02	<0.5	29	2.8	<0.5	0.6	2.4	2.8	<1	0.2
	24/03/25	5.7	120	190	<5	<0.05	0.05	36	0.02	4.2	28	5.8	<0.5	0.7	2.4	2.7	<1	0.2
	08/04/25	5.7	120	220	<5	0.02	0.03	16	0.03	<2	31	4.2	<0.5	0.7	2.6	3.5	<1	0.3
	09/05/25	6.0	150	210	<5	0.01	<0.1	17	<0.2	1.1	29	7	1.3	0.7	2.6	3.2	<1	0.4
	25/06/25	5.6	180	200	<5	0.06	<0.01	15	<0.02	0.8	33	22	<0.5	0.7	2.6	1.7	<1	1.5
	08/07/25	5.5	190	180	<5	0.04	0.13	14	<0.2	1.6	32	24	<0.5	0.8	2.5	1.7	<1	1.7
	14/08/25	5.8	180	160	12.0	0.07	0.11	15	<0.02	1.9	30	33	<0.5	0.8	2.5	0.82	<1	2.2
	11/09/25	5.7	190	100	<5	0.03	0.09	17	<0.02	3.1	33	31	<0.5	0.8	2.6	0.84	<1	1.8
	13/10/25	5.6	170	180	<5	0.16	0.16	18	<0.2	0.6	33	24	<0.5	0.8	2.5	2	<1	1.3
	20/11/25	5.8	180	210	6	0.08	0.25	14	<0.2	0.7	35	8.1	<0.5	0.8	2.6	1.1	<1	0.6
	17/12/25	5.7	170	100	6.8	0.09	0.17	15	<0.2	1	35	9.3	<0.5	0.9	2.5	0.99	<1	0.6
	21/01/26	5.8	160	220	<5	0.04	0.12	16	<0.02	3.5	34	7.1	<0.5	0.9	2.7	2.3	<1	0.4
	20/02/26	5.9	170	190	<5	0.08	0.03	16	<0.02	1.9	31	20	<0.5	0.7	0.7	1.1	<2	1.3
	20/03/26	5.9	170	110	7.90	0.08	0.04	17	<0.02	2.9	29	6.7	<0.5	0.7	2.4	1.3	<1	0.4
MW2 Baseline		**4.2 - 5.7**	**152**	**103**	**483**	**0.45**	**0.338**	**189**	**0.07**	**2.03**	**29.7**	**9.8**	**0.7**	**1.4**	**4.2**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW3	29/09/22	4.2	53	40	370	0.09	0.05	8.8	0.02	0.5	7	<2	< 0.5	1	0.6			0.1
	20/10/22	4.1	64	62	130	0.01	0.2	8	0.02	0.5	7	<2	0.5	0.9	<0.5			0.1
	14/11/22	4.6	57	84	170	0.03	0.27	7.4	<0.02	<0.2	7.1	<2	0.8	0.6	<0.5			0.1
	14/12/22	4.3	43	32	280	<0.01	<0.01	5.2	<0.02	1.1	6	<2	<5	<5	<5			0.2
	18/01/23	4.3	54	28	670	0.03	<0.01	4.1	<0.05	1.4	<5	4.1	<5	<5	<5			1.0
	20/02/23	4.2	36	40	76	0.02	<0.10	6.8	0.06	7.26	7.6	<2	<0.5	1	<0.5			0.1
	28/03/23	4.1	70	44	<5	<0.01	<0.01	7.9	<0.02	0.22	4.8	2.2	<0.5	1	0.6			0.3
	18/04/23	4.6	89	54	110	0.02	0.1	9.6	<0.02	5.7	4.3	4.3	<0.5	0.6	<0.5			0.4
	18/05/23	4.5	60	40	450	0.02	0.04	5.8	<0.02	1	4.8	2.1	0.6	0.8	<0.5			0.4
	15/06/23	4.0	84	48	22	0.27	0.4	5.5	<0.02	1.96	5	63	<0.5	0.8	<0.5			11.5
	24/07/23	4.5	85	59	160	0.04	<0.01	9.5	<0.02	<0.2	5.6	12	<0.5	0.8	<0.5			1.3
	21/08/23	3.9	110	52	100	0.01	<0.01	6.3	<0.02	<0.2	6.6	3	<0.5	1.1	<0.5			0.5
	18/09/23	Dry – no sample collected																
	18/10/23	Dry – no sample collected																
	20/11/23	4.0	96	46	120	0.03	<0.02	7.8	<0.01	0.7	5.8	5	<0.5	0.7	<0.5			0.6
	19/12/23	4.0	46	30	92	<0.01	0.04	13	<0.02	<0.2	9.7	5.6	<0.5	1.3	0.6			0.4
	20/01/24	4.2	70	28	270	0.01	<0.01	5.4	<0.02	0.6	5.5	<2	<0.5	0.8	<0.5			0.2
	26/02/24	4.5	70	50	29	0.01	0.02	10	<0.02	16	5	4.5	<0.5	0.6	<0.5			0.5
	26/03/24	4.1	67	56	110	<0.01	0.06	5.1	<0.02	0.3	4.4	6.1	<0.5	0.8	<0.5			1.2
	18/04/24	3.7	150	< 5	<5	0.05	0.01	4.6	<0.02	0.7	4	12	<0.5	0.8	<0.5	0.99	<1	0.3
	20/05/24	4.5	36	30	26	0.03	<0.01	31	<0.02	0.3	3	3.9	0.6	<0.5	<0.5	1.1	<1	0.1
	25/06/24	3.5	160	90	120	0.17	<0.01	2.8	<0.02	<0.2	3.1	5	<0.5	<0.5	<0.5	0.7	<1	0.1
	10/07/24	4.4	42	40	300	<0.01	<0.01	4.2	<0.02	0.5	3.5	2.5	<0.5	<0.5	<0.5	0.7	<1	0.6
	06/08/24	4.3	45	22	310	0.03	0.01	4.4	<0.02	3.2	2.5	<2	<.5	<0.5	<0.5	1	<1	0.2
	11/09/24	4.2	44	28	720	0.02	<0.1	5	<0.02	<1	3.7	<2	<0.5	<0.5	<0.5	1.3	<1	0.2
	09/10/24	4.2	50	32	430	0.1	<0.01	5.3	<0.02	<0.2	4.1	2.8	2.9	0.6	0.6	0.48	<1	0.2
	06/11/24	4.3	38	20	370	<0.01	0.09	4.8	-	0.9	4.6	<2	0.6	0.7	<0.5	0.84		0.2
	16/12/24	4.3	35	24	63	0.02	<0.01	4.4	<0.02	0.5	3.8	2.2	<0.5	0.7	<0.5	0.75	<1	0.5
	14/01/25	4.5	40	20	38	0.03	0.01	3.3	<0.02	0.5	2.8	<2	<0.5	<0.5	<0.5	0.75	<1	0.3
	11/02/25	4.2	64	36	8.2	<0.01	<0.01	2.9	<0.02	<0.2	3.1	4.4	<0.5	<0.5	<0.5	1.1	<1	1.5
	24/03/25	4.0	79	50	150	0.02	<0.01	13	<0.02	0.9	5.8	3.9	0.8	1.1	<0.5	0.52	1.5	0.3
	08/04/25	4.2	71	38	160	<0.01	0.02	11	<0.02	0.9	7.3	4.1	0.9	1.4	2.6	0.58	1.5	0.4
	09/05/25	4.5	73	74	210	<0.01	0.02	9.9	<0.02	0.8	7	3.1	0.7	0.9	<0.5	0.74	<1	0.3
	25/06/25	4.5	42	44	170	0.05	<0.01	4.4	<0.02	1.9	5	4.3	<0.5	<0.5	<0.5	1	<1	1.0
	08/07/25	4.5	47	25	670	0.02	0.03	4.5	0.03	0.6	4.9	2.5	<0.5	<0.5	<0.5	1	<1	0.6
	14/08/25	4.8	34	38	550	0.06	0.06	3.8	0.02	5.7	3.6	4	<0.5	<0.5	<0.5	0.5	<1	1.0
	11/09/25	4.6	42	28	2,500	0.02	0.3	4.7	0.11	2.1	4.7	3.5	<0.5	<0.5	<0.5	0.49	<1	0.7
	13/10/25	Dry – no sample collected																
	20/11/25	Dry – no sample collected																
	17/12/25	Dry – no sample collected																
	21/01/26	Dry – no sample collected																
	20/02/26	Dry – no sample collected																
	20/03/26	4.2	81	50	780	0.8	<0.1	10	<0.02	<0.02	5.1	<2	<0.5	1.6	<0.5	0.63	<1	0.2
MW3 Baseline		**4.0 - 5.3**	**206**	**140**	**5223**	**1.57**	**0.294**	**121**	**0.167**	**4.14**	**26.4**	**13.4**	**3.8**	**5.3**	**3.1**	**<1.0***	**<1***	**<0.5***

Harvest Estate
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Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW4	29/09/22	4.5	100	88	350	0.03	0.16	22	0.1	1.5	19	<2	3.6	3.7	0.9			0.0
	20/10/22	4.5	110	100	69	0.02	0.78	20	0.04	1	14	<2	3.9	2.1	<0.5			0.1
	14/11/22	4.2	130	340	16	0.01	0.13	30	<0.10	7	22	5	2.6	4.8	1.1			0.2
	14/12/22	4.2	140	140	60	<0.01	<0.05	23	<0.10	3	21	7.8	<5	<5	<5			0.3
	18/01/23	5.7	170	110	170	0.02	0.16	26	<0.50	2.4	20	6.6	<5	<5	<5			0.3
	20/02/23	3.9	87	110	31	0.04	<0.05	15	0.28	3.88	15	5.8	3.5	5.4	0.9			0.4
	28/03/23	4.7	180	120	190	0.04	0.08	28	<0.02	22	18	6	8.8	5.1	<5			0.2
	18/04/23	3.7	500	280	340	0.11	0.07	27	<0.02	0.9	19	130	3.4	5	<0.5			4.8
	18/05/23	5.4	110	72	70	0.03	<0.01	14	<0.02	2.89	11	10	5.7	3.7	<0.5			0.7
	15/06/23	3.8	200	150	130	1.4	0.29	29	<0.02	0.9	21	12	<5	6	<5			0.4
	24/07/23	4.1	170	94	58	0.03	<0.1	24	<0.2	1	20	17	2.8	6.2	0.6			0.7
	21/08/23	3.8	200	120	75	0.03	0.07	18	0.65	1.76	15	3.6	2	5	<0.5			0.2
	18/09/23	3.8	160	86	21	0.02	0.11	19	0.02	1.1	17	10	1.5	4.1	<0.5			0.5
	18/10/23	3.8	190	110	31	0.08	0.08	25	<0.02	0.9	18	9.3	1.7	4.5	0.5			0.4
	20/11/23	4.4	160	870	28	0.05	0.1	22	<0.01	2.2	15	5.8	3.3	4	0.7			0.3
	19/12/23	4.0	190	130	27	0.03	0.41	38	<0.02	1.5	22	13	3.3	7.8	1			0.3
	20/01/24	4.2	170	120	27	0.01	0.02	24	<0.02	1.2	17	2.9	5.4	5.1	<0.5			0.1
	26/02/24	3.6	290	190	96	0.03	0.07	27	<0.02	6.9	17	38	10	4.1	<0.5			1.4
	26/03/24	5.6	150	140	18	0.02	0.58	25	<0.02	1.1	15	7	9.3	3.8	<0.5			0.3
	18/04/24	4.3	140	90	12	0.02	0.04	17	<0.02	24	13	6.7	3.2	3.6	<0.5	1.1	2.9	0.4
	20/05/24	5.9	200	180	9.4	0.01	0.83	15	<0.02	1.1	10	5.6	9.6	2.1	<0.5	1.5	6.4	0.4
	25/06/24	4.2	120	100	33	0.1	<0.01	15	<0.02	1.4	9.1	2.3	3.5	2.2	<0.5	1.7	<1	0.2
	10/07/24	6.3	79	46	16	0.02	0.12	8.7	<0.02	1.4	6.4	4	9.7	1	<0.5	0.55	<1	0.5
	06/08/24	4.4	170	100	24	0.02	0.12	26	<0.02	2.4	12	5.5	1.5	3.2	<0.5	0.86	<1	0.2
	11/09/24	5.2	110	74	27	0.02	0.14	21	<0.02	0.6	12	2.5	7.2	2.9	<0.5	1.3	<1	0.1
	09/10/24	4.1	150	140	190	0.1	0.07	25	0.03	0.9	15	6.2	2.9	4	0.7	1.2	<1	0.2
	06/11/24	4.4	130	180	40	0.51	0.04	22	-	1.9	15	2.3	4.7	4.8	<0.5	1.4	3.4	0.1
	16/12/24	5.7	80	70	<5	0.02	<0.1	18	<0.2	1	11	4.1	8.1	3	<0.5	0.99	7.2	0.2
	14/01/25	4.1	180	120	86	0.02	1.3	26	<0.02	1.2	14	2.4	4.4	3.8	<0.5	1.6	<1	0.1
	11/02/25	4.1	170	150	<5	0.01	<0.1	25	<0.02	<0.5	16	3.1	2.5	4.8	<0.5	1.8	<1	0.1
	24/03/25	5.0	110	84	39	<0.05	0.04	22	0.02	5	13	7.6	4.9	3.4	<0.5	0.85	5.8	0.3
	08/04/25	5.2	90	130	22	<0.01	0.03	16	<0.02	1	10	3.7	6.9	2.7	<0.5	0.58	12	0.2
	09/05/25	6.0	110	140	45	-	-	14	<0.2	-	8.7	2.7	11.0	2	<0.5	0.8	14	0.2
	25/06/25	5.4	98	140	130	0.06	0.01	12	0.2	1.6	8.8	8.2	8.6	1.6	<0.5	0.98	8.8	0.7
	08/07/25	5.0	110	100	300	0.01	0.23	15	<0.2	<0.5	11	9.4	5.7	2.4	<0.5	1.7	3.4	0.6
	14/08/25	5.7	110	150	600	0.11	0.12	15	0.04	4.7	9.6	4.3	10.0	2	<0.5	0.64	<1	0.3
	11/09/25	4.4	140	89	290	0.02	0.15	25	0.07	4.2	15	7.3	4.0	3.5	0.9	1.1	3.6	0.3
	13/10/25	4.3	160	210	120	0.11	0.42	30	<0.2	<2	18	2.8	2.9	4.5	0.8	2.2	1.3	0.1
	20/11/25	4.2	160	220	140	0.06	0.22	22	<0.2	1.1	16	2.2	2.7	4.1	0.6	1.2	2.3	0.1
	17/12/25	4.1	170	110	170	0.02	<0.1	26	<0.2	1.9	20	2.9	1.4	5.6	0.9	1.1	1.3	0.1
	21/01/26	4.5	120	190	370	0.25	0.04	14	0.03	3.5	12	5.1	4.9	3.4	<0.5	1.5	3.3	0.4
	20/02/26	4.1	280	290	200	0.1	<0.1	28	<0.2	1.8	24	42	5.8	11	0.8	0.99	5.9	1.5
	20/03/26	5.1	270	170	130	0.13	<0.1	23	<0.2	2.8	20	19	16	7.9	<0.5	0.74	21.6	0.8
MW4 Baseline		**4.0 - 5.8**	**890**	**605**	**1220**	**0.43**	**1.392**	**199**	**0.185**	**4.36**	**146.3**	**19.2**	**11.3**	**15.6**	**5.4**	**<1.0***	**<1***	**<0.5***

Harvest Estate
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Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW5	29/09/22	4.5	59	68	630	0.13	0.41	18	0.02	6.33	14	<2	2	3	0.6			0.1
	20/10/22	4.4	75	82	92	0.02	0.1	15	0.02	0.5	12	<2	2	2	0.5			0.1
	14/11/22	4.6	120	270	150	0.08	0.52	29	<0.10	7.8	26	<2	5	6	1.4			0.0
	14/12/22	4.5	150	150	230	0.02	<0.060	29	<0.05	11	24	10	<5	<5	<5			0.3
	18/01/23	2.8	1,600	1,100	480	0.05	1.7	43	<0.05	5.7	49	7	90	72	<5			0.2
	20/02/23	2.6	2,700	3,200	310	0.03	4.2	27	<0.05	3.2	47	750	390	76	7.8			27.8
	28/03/23	3.0	5,200	3,700	130	0.02	5.9	28	<0.02	11	34	1,100	440	57	7.1			39.3
	18/04/23	2.9	3,800	5,100	300	0.01	4	44	<0.02	4	49	3,800	380	120	4.7			86.4
	18/05/23	3.4	3,100	3,400	150	<0.01	<0.01	15	<0.02	4.9	23	2,200	240	31	4.2			146.7
	15/06/23	2.9	3,000	1,800	640	0.3	2.9	28	<0.02	2.66	64	2,100	410	130	6.5			75.0
	24/07/23	5.5	2,800	1,600	6	0.07	0.19	1,400	<0.2	0.5	450	380	25	54	25.0			0.3
	21/08/23	3.3	5,200	3,400	13	0.03	4.6	67	<0.02	5	89	2,200	420	200	9.9			32.8
	18/09/23	3.3	4,500	5,800	6.1	0.01	4	51	0.02	3.7	67	4,300	360	140	7.9			84.3
	18/10/23	3.2	4,700	4,900	96	0.03	1.3	58	<0.02	2.1	68	710	380	130	7.3			12.2
	20/11/23	2.8	5,900	7,500	29	0.06	2.7	55	<0.01	11	60	6,600	310	100	6.8			120.0
	19/12/23	2.9	3,100	2,700	230	0.01	4.6	80	<0.02	5	80	3,500	290	86	6.9			43.8
	20/01/24	3.2	4,900	6,600	74	0.03	<0.01	52	<0.02	4.5	68	1,000	370	84	7.9			19.2
	26/02/24	2.6	3,400	4,500	180	0.03	0.59	25	<0.02	5.4	51	3,000	290	46	4.0			120.0
	26/03/24	3.2	4,400	3,500	17	0.02	1.8	140	<0.02	2.5	54	11,000	360	77	6.0			78.6
	18/04/24	3.3	4,200	2,200	39	<0.01	0.02	49	0.05	5.1	50	3,300	310	47	4.0	210	1.5	67.3
	20/05/24	3.4	3,100	1,600	8.8	0.03	3.1	53	<0.02	2.9	27	2,900	200	22	2.8	140	1.42	54.7
	25/06/24	3.2	4,100	2,700	310	0.03	<0.01	76	<0.02	7.2	75	1,400	290	60	4.3	320	<1	18.4
	10/07/24	3.5	2,300	2,600	49	0.02	<0.01	14	<0.02	3.9	20	1,900	240	20	2.4	130	<1	135.7
	06/08/24	3.3	170	3,500	14	0.19	4.6	62	<0.02	7.7	56	3,600	310	54	4.2	250	<1	58.1
	11/09/24	3.5	1,700	1,000	38	<0.01	3.9	27	<0.2	4.9	27	750	290	29	3.2	94	<1	27.8
	09/10/24	3.5	1,300	930	46	0.03	<0.01	27	<0.02	1.5	22	870	120	17	1.6	35	<1	32.2
	06/11/24	3.3	2,000	1,300	31	<0.01	4.8	44	-	5	59	680	300	62	4.9	90	3.33	15.5
	16/12/24	3.2	1,800	1,100	53	0.02	21	32	<0.2	2.8	25	980	180	21	2.4	35	5.1	30.6
	14/01/25	3.7	1,600	1,400	190	<0.01	1.3	19	<0.02	2.1	16	320	210	16	1.8	25	8.4	16.8
	11/02/25	3.5	2,000	1,700	69	0.01	2.6	160	<0.02	14	110	860	110	50	2.8	56	1.96	5.4
	24/03/25	3.6	1,000	890	38	<0.05	0.06	20	<0.02	3.3	14	570	140	8.5	1.7	17	8.24	28.5
	08/04/25	3.7	790	700	73	<0.01	0.85	36	<0.02	5.2	42	390	86	16	<0.5	13	6.6	10.8
	09/05/25	3.7	1,300	1,200	200	<0.01	1.2	87	<0.2	3.3	24	470	87	11	1.5	9.6	9.06	5.4
	25/06/25	3.7	1,300	840	140	0.21	1.5	26	<0.02	2	18	580	140	17	1.7	17	8.3	22.3
	08/07/25	4.0	720	480	170	<0.010	0.81	21	<0.2	5.4	20	280	58	10	0.9	11	5.3	13.3
	14/08/25	3.8	530	300	230	0.02	0.55	19	<0.02	5.5	11	230	28	4.3	0.5	4.5	6.2	12.1
	11/09/25	3.8	630	430	110	<0.01	0.73	41	0.04	14	35	240	33	9.7	1.3	4.4	7.5	5.9
	13/10/25	4.0	1,200	970	260	0.11	2.8	120	<0.2	<2	76	420	68	32	2.2	13	5.2	3.5
	20/11/25	3.6	1,400	1,000	59	0.05	2.4	64	<0.02	2.4	43	270	83	34	2	13	6.4	4.2
	17/12/25	3.7	1,300	650	290	0.02	2	120	<0.2	<10	19	180	83	11	<0.5	10	8.3	1.5
	21/01/26	3.8	1,000	980	300	0.12	1.8	49	<0.02	7.3	35	200	42	29	1.7	13	3.2	4.1
	20/02/26	3.7	1,500	1,500	280	0.08	3	46	<0.2	8.3	58	700	76	65	3.3	12	6.3	15.2
	20/03/26	3.7	560	330	38	0.03	0.52	33	0.03	3.1	14	62	22	7.6	0.9	11	2.0	1.9
MW5 Baseline		**4.3 - 5.5**	**191**	**130**	**3003**	**0.97**	**13.4**	**82**	**0.117**	**13.4**	**27.2**	**8.3**	**6**	**8.4**	**5.4**	**<1.0***	**<1***	**<0.5***

Harvest Estate
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Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW7	29/09/22	4.6	26	40	190	0.1	0.3	8.5	0.02	2.5	8.5	<2	1	0.9	0.6			0.1
	20/10/22	4.5	86	70	120	0.01	0.4	12	0.04	2.9	8.5	<2	1.7	1.7	0.5			0.1
	14/11/22	4.5	44	170	<100	0.03	0.01	9.7	<0.10	<2.00	9.7	<2	1.9	1.4	1.4			0.1
	14/12/22	4.6	56	92	23	0.04	<0.10	7.5	<0.20	11	8.7	2.5	<5	<5	<5			0.3
	18/01/23	4.4	63	32	390	0.09	<0.05	7.5	<0.025	2	11	31	<5	<5	<5			4.1
	20/02/23	4.1	87	60	30	0.02	<0.05	9.1	0.42	4.9	5.8	5.7	1.4	1.9	1.1			0.6
	28/03/23	4.5	160	94	18	0.02	0.02	21	<0.02	4.4	12	66	2	2	0.6			3.1
	18/04/23	4.9	150	58	7.4	<0.01	0.11	11	<0.02	<0.20	9.8	120	1.9	0.8	<0.5			10.9
	18/05/23	4.9	78	56	130	0.03	<0.01	11	<0.02	0.89	9.3	9.3	1.4	0.9	<0.5			0.8
	15/06/23	4.6	77	50	30	0.28	0.25	11	<0.02	<0.20	9.2	62	<5	<5	<5			5.6
	24/07/23	5.1	140	100	90	0.12	<0.1	10	<0.2	1	8.5	14	1.9	1.4	0.9			1.4
	21/08/23	5.3	67	34	29	0.08	0.06	8.4	<0.02	0.8	9	45	1.8	1.7	0.8			5.4
	18/09/23	5.1	57	78	25	<0.01	0.07	9.6	<0.02	0.8	9.4	83	1.6	2	0.8			8.6
	18/10/23	5.2	61	46	10	0.04	0.1	11	<0.02	<0.2	10	160	1.6	2.1	0.8			14.5
	20/11/23	4.1	210	64	13	0.04	<0.02	8.4	<0.01	2.2	8.1	280	2.5	2.2	0.7			33.3
	19/12/23	4.6	91	62	11	0.03	0.09	19	<0.02	0.7	11	5.6	4.4	2.3	0.9			0.3
	20/01/24	4.2	170	130	34	0.01	0.09	21	<0.02	0.3	15	160	2.8	1.4	<0.5			7.6
	26/02/24	4.0	210	190	23	0.03	0.51	44	<0.02	5.8	24	7.5	3.6	2.1	0.5			0.2
	26/03/24	4.4	320	100	22	0.02	0.18	320	<0.02	<1	13	590	1.6	0.9	0.9			1.8
	18/04/24	4.3	100	98	17	0.02	0.07	8.9	<0.02	3	9	380	1.4	1.2	<0.5	1.7	<1	42.7
	20/05/24	4.4	77	56	11	0.05	0.38	6.4	<0.02	1.2	5.4	170	1.3	1	<0.5	2.3	<1	26.6
	25/06/24	4.6	66	36	33	<0.01	<0.01	<0.01	<0.02	0.6	6.7	48	1.1	0.9	<0.5	1.5	<1	0.0
	10/07/24	4.5	74	58	29	<0.01	0.22	6.5	<0.02	2.1	6.2	270	2	1.3	<0.5	0.73	<1	41.5
	06/08/24	4.8	4,600	180	19	0.04	0.06	9.1	<0.02	0.5	5.3	36	1.4	0.9	<0.5	1	<1	4.0
	11/09/24	4.4	75	50	6.4	0.04	<0.1	11	<0.02	1..0	7.1	5.2	1.3	1.1	<0.5	1.4	<1	0.5
	09/10/24	4.3	73	42	71	0.54	<0.01	8	<0.02	1.6	5.8	12	1.3	1.2	<0.5	0.94	<1	1.5
	06/11/24	4.5	59	32	35	0.02	0.03	11	-	1.3	7.8	4.4	1.3	1.4	<0.5	1.6	<1	0.4
	16/12/24	4.3	58	68	29	0.04	<0.1	12	<0.2	1.3	8.5	42	1.6	1.3	<0.5	1.9	<1	3.5
	14/01/25	4.7	63	36	120	0.04	0.02	8.6	0.03	1.3	6.8	7	1.7	1.2	0.5	2.4	1.4	0.8
	11/02/25	4.6	68	70	13	0.07	<0.1	9.2	<0.02	1.2	8.4	2	1.5	1.5	0.8	2.7	<1	0.2
	24/03/25	4.1	0	56	28	<0.05	0.02	15	<0.02	1.8	7.7	43	2.3	1.4	<0.5	1.2	1.91	2.9
	08/04/25	4.4	76	70	14	<0.01	0.03	14	<0.02	<1	8.1	31	2.8	1.1	2.1	1.4	2	2.2
	09/05/25	4.7	81	110	24	<0.01	0.03	13	<0.2	1.2	8.1	28	1.5	0.9	<0.5	1.6	<1	2.2
	25/06/25	4.6	65	70	39	0.07	<0.01	8.3	<0.02	<0.2	6.7	56	1.2	0.8	<0.5	1.2	1	6.7
	08/07/25	4.6	65	44	130	0.02	0.14	7.9	<0.02	<0.5	6.3	37	1.4	0.9	<0.5	2.6	<1	4.7
	14/08/25	4.7	60	70	140	0.06	0.01	8.9	0.04	2.2	5.7	15	0.9	0.5	<0.5	0.93	3	1.7
	11/09/25	4.4	75	51	100	0.03	0.06	12	0.04	1.1	7.2	18	1.8	1.1	0.6	0.86	2.09	1.5
	13/10/25	4.8	66	110	66	0.02	0.12	11	<0.2	<1	7.4	20	2.1	1.5	<0.5	1.3	1.6	1.8
	20/11/25	4.4	84	78	64	0.05	0.12	12	<0.2	1.1	7.8	17	1.9	1.2	<0.5	0.86	2.2	1.4
	17/12/25	4.6	79	10	75	0.04	<0.1	13	<0.2	3.1	9	11	2.1	1.7	0.5	1	2.1	0.8
	21/01/26	4.3	87	110	110	0.1	0.02	11	0.02	4.3	8.2	4.4	1.9	1.4	<0.5	2	1.0	0.4
	20/02/26	4.8	71	68	120	0.18	0.49	13	<0.2	1.5	8.3	70	2	1.8	1	1.2	1.7	5.4
	20/03/26	4.4	91	60	50	0.1	<0.1	13	<0.02	<0.02	8	42	1.6	1.4	<0.5	1	1.6	3.2
MW7 Baseline		**4.6 - 5.6**	**147**	**100**	**3140**	**0.71**	**0.471**	**172**	**0.048**	**4.15**	**31**	**7.3**	**3.4**	**2.2**	**3.1**	**<1.0***	**<1***	**<0.5***

Note: * derived from Interim Target Criteria within BCPoM, GWMP and AFMP (AWC 2020)

APPENDIX C

Surface Water Quality Analytical Results

Harvest Estate
ENV 217140

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW01	29/09/2022	6.9	180	11	3.1	140	0.47	<0.01	14	<0.02	5.2	30	3.4	450		0.2
	20/10/2022	6.6	320	30	4.7	400	0.03	0.03	22	<0.02	<0.02	31	33	43		1.5
	14/11/2022	6.0	780	4,900	0.2	920	3.1	6.9	25	<0.02	14	200	3.7	67		0.1
	14/12/2022	4.5	800	210	3.6	1,100	0.15	0.05	24	<0.10	23	54	560	88		23
	18/01/2023	6.3	380	120	4.7	25	0.047	0.087	24	<0.02	5.2	40	180	25		7.5
	20/02/2023	3.4	1,100	32	3.8	1,300	0.42	0.37	28	<0.02	8.9	57	350	<5		13
	28/03/2023	3.0	2,000	100	7.7	3,000	<0.01	2.1	29	<0.02	1.29	47	880	<5		30
	18/04/2023	7.7	130	33	8.6	320	0.06	0.01	24	<0.02	8.4	16	14	8.8		0.6
	18/05/2023	7.4	130	6	4.4	250	0.21	0.14	11	<0.02	0.9	14	10	<5		0.9
	15/06/2023	3.2	1,900	6.8	7.6	2,700	0.03	1.6	59	<0.02	2.1	61	1,500	<5		25
	24/07/2023	7.9	84	<5	8.4	140	0.11	<0.01	6.4	<0.02	0.3	13	4	<5		0.6
	21/08/2023	6.9	120	25	3	190	0.34	0.01	5.6	<0.02	0.4	18	<2	<5		0.2
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	No surface water located at monitoring site – no sample collected														
	20/11/2023	7.2	230	6.5	2.9	480	2	<0.02	56	<0.01	<0.2	43	160	<5		2.9
	19/12/2023	No surface water located at monitoring site – no sample collected														
	23/01/2024	7.0	160	130	2.2	160	3.7	0.06	14	<0.02	1.3	21	69	<5		4.9
	26/02/2024	6.2	160	47	7.2	200	0.35	<0.01	9	<0.02	3	12	59	<5		6.6
	26/03/2024	6.9	26	7.5	8.3	78	0.25	<0.01	6.7	<0.02	0.4	7.5	3.4	<5		0.5
	18/04/2024	7.2	220	23	0.5	390	0.06	0.24	25	<0.02	0.7	32	110	180	13	4.4
	20/05/3034	6.7	160	<5	3.8	260	0.16	0.01	13	<0.02	0.5	19	33	56	231	2.5
	25/06/2024	6.3	440	15	5.9	710	<0.01	<0.01	12	<0.02	<0.2	23	100	5.7	15	8.3
	10/07/2024	7.0	120	29	5.5	240	0.07	0.01	14	<0.02	1.1	17	6.9	39	12	0.5
	6/08/2024	4.0	760	19	7.6	950	0.08	<0.01	14	<0.02	1.3	23	470	<5	12	34
	15/08/2024	6.7	64	<5	7.3	100	0.04	0.01	6.1	<0.02	<0.2	7.2	5.5	<5	<10	0.9
	11/09/2024	6.9	120	250	0.2	190	1.1	0.11	8.9	<0.02	4.1	13	2.6	<10	17	0.3
	24/09/2024 - Investigation	6.3	170	-	-	280	-	-	-	-	-	-	-	-	-	-
	9/10/2024	7.4	190	11	8.9	290	0.38	0.01	14	<0.02	<0.2	20	3.4	<5	<10	0.2
	6/11/2024	7.1	92	400	0.4	140	13	<0.01	8.1	<0.02	2.8	12	2.2	<5	<10	0.3
	16/12/2024	6.9	90	190	3.3	140	0.36	<0.01	8.2	<0.02	0.02	11	5.4	170	<10	0.7
	14/01/2025	6.7	48	7.2	3.5	89	0.14	<0.1	4.8	<0.02	0.6	5.4	<5	<5	<10	0.0
	11/02/2025	7.5	390	<5	8.3	620	0.06	0.03	110	<0.02	0.8	16	16	12	<10	0.1
	24/03/2025	6.9	58	<5	8.6	64	0.32	0.02	6.1	<0.02	0.8	7.9	2.4	48	<10	0.4
	31/03/2025	7.1	170	5.8	9.2	200	0.14	<0.01	14	<0.02	1.1	15	6.4	<5	<10	0.5
	8/04/2025	7.2	200	9.4	8.8	230	0.37	0.04	14	<0.02	0.4	18	3.6	<5	<10	0.3
	9/05/2025	7.5	170	<5	-	200	0.2	0.03	10	<0.02	0.8	13	4.5	<5	<10	0.5
	25/06/2025	6.9	130	24	7.5	190	1.1	0.07	6.2	<0.02	1.1	12	7.1	12	22	1.1
	8/07/2025	6.9	150	<5	8	260	0.12	0.18	8	<0.02	0.8	16	5	28	34	1.6
	14/08/2025	7.3	140	7.1	6.9	240	0.17	0.03	11	<0.02	1	16	6	<5	15	1.8
	11/09/2025	7.2	150	5.2	3.9	260	0.22	0.01	13	<0.02	1.4	19	5.2	<5	16	2.5
	13/10/2025	7.2	350	14	0.3	520	0.61	0.26	39	<0.02	0.5	58	30	<5	14	1.3
	20/11/2025	7	110	8.9	5.2	200	0.24	0.03	9.1	<0.02	0.7	14	4.5	<5	16	2.0
	17/12/2025	7.2	150	30	6.1	240	0.14	0.19	27	<0.5	1.2	22	9.3	<5	37	2.9
	21/01/2026	6.8	98	30	3.5	170	0.49	0.05	17	0.017	0.6	15	4.9	<0.005	27	3.5
	20/02/2026	6.8	130	22	2.4	230	0.33	0.03	17	< 0.02	1.2	19	8.5	<0.005	<10	2.0
	20/03/2026	6.8	86	37	3.4	150	0.48	0.04	15	<0.02	1.1	11	6.6	0.015	<10	2.3
SW01 Baseline		**6.2 – 7.0**	**291**	**73**	**-**	**428**	**3.52**	**0.164**	**118**	**0.039**	**3.5**	**51**	**9**	**768**		**<0.5**

Harvest Estate
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Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW01	29/09/2022	1.5	0.003	<0.0002	22	0.002	0.32	2.7	0.005	14	<0.0001	0.015	3	0.071	<1
	20/10/2022	0.66	2	<0.0002	24	0.002	0.16	2.4	0.003	9.1	<0.0001	0.009	2.9	0.042	<1
	14/11/2022	130	1.3	<0.02	280	<0.10	1	130	0.1	73	<0.001	0.3	<50	4.7	<1
	14/12/2022	22	0.0016	<0.002	180	0.014	0.2	1.6	0.015	43	<0.001	0.077	6.8	0.68	<1
	18/01/2023	0.7	<0.010	<0.002	<2	<0.010	<0.01	3.2	<0.01	13	<0.01	<0.01	<5	<0.05	<1
	20/02/2023	37	0.027	0.0004	170	0.019	0.07	0.049	0.049	57	0.002	0.16	6.3	0.35	<1
	28/03/2023	150	0.002	0.0008	290	0.002	0.003	36	0.003	38	0.0001	0.46	5.1	0.97	<1
	18/04/2023	0.53	0.002	<0.0002	13	0.005	0.005	0.002	0.002	2.7	<0.0001	0.002	0.8	0.15	<1
	18/05/2023	0.16	0.002	<0.0002	23	<0.001	0.002	0.24	<0.001	7.5	<0.0001	0.002	2.3	0.02	<1
	15/06/2023	120	0.002	0.0003	350	<0.001	0.004	15	0.003	42	<0.0001	0.24	8.1	0.35	<1
	24/07/2023	0.08	0.003	<0.0002	13	<0.001	0.003	0.38	0.002	4.1	<0.0001	0.002	0.8	0.037	<1
	21/08/2023	0.52	0.001	<0.0002	17	0.001	0.002	1.2	0.001	6.3	<0.0001	0.003	<0.5	0.014	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	No surface water located at monitoring site – no sample collected													
	20/11/2023	0.13	<0.001	<0.0002	26	<0.001	0.002	5.7	<0.001	7.9	<0.0001	0.003	2.2	0.006	<1
	19/12/2023	No surface water located at monitoring site – no sample collected													
	23/01/2024	<0.05	<0.001	<0.0002	30	0.001	<0.001	1.8	<0.001	10	<0.0001	<0.001	3.4	0.006	<1
	26/02/2024	<0.005	<0.001	<0.0002	14.00	<0.001	<0.001	0.93	<0.001	4.60	<0.0001	<0.001	1.70	0.05	<1
	26/03/2024	0.11	<0.001	<0.0002	7.4	<0.001	0.002	0.38	<0.001	2	<0.0001	<0.001	1.5	0.013	<1
	18/04/2024	0.06	<0.001	<0.0002	32	<0.001	<0.001	1.4	<0.001	9.5	<0.0001	0.002	2	<0.005	<1
	20/05/3034	0.06	<0.001	<0.0002	26	<0.001	0.001	0.86	<0.001	7	<0.0001	0.002	1.7	0.014	<1
	25/06/2024	0.69	<0.001	<0.0002	94	<0.001	0.002	0.28	<0.001	15	<0.0001	0.008	2.3	0.055	<1
	10/07/2024	0.25	0.002	<0.0002	28	<0.001	0.003	2.1	<0.001	6.6	<0.0001	0.002	2	0.037	<1
	6/08/2024	0.85	<0.001	<0.0002	120	<0.001	0.004	1.3	<0.001	14	<0.0001	0.021	2.3	0.1	<1
	15/08/2024	0.24	<0.001	<0.0002	12	<0.001	0.004	0.33	<0.001	2.8	<0.0001	0.001	1.2	0.027	<1
	11/09/2024	9.1	0.009	0.0005	36	0.023	0.11	49	0.031	8.1	0.0001	0.019	5.2	0.72	<1
	24/09/2024 - Investigation	-	<0.001	<0.001	-	<0.001	0.001	-	<0.001	<0.0001	-	0.004	-	0.04	-
	9/10/2024	0.14	0.001	<0.0002	27	<0.001	0.002	1.7	<0.001	8.1	<0.0001	0.002	1.5	0.017	<1
	6/11/2024	1.2	0.004	<0.0002	26	0.005	0.011	54	0.003	6.1	<0.0001	0.004	2.8	0.041	<1
	16/12/2024	2.4	0.004	<0.0002	22	0.006	0.019	38	0.006	4.5	<0.0001	0.004	2.8	0.092	<1
	14/01/2025	0.15	<0.001	<0.0002	8.8	0.001	0.003	0.34	<0.001	1.8	<0.0001	0.001	0.6	0.018	<1
	11/02/2025	0.58	0.002	<0.0002	13.00	<0.001	<0.001	6.10	<0.001	3.50	<0.0001	0.002	1.00	0.015	<1
	24/03/2025	0.13	<0.001	<0.0002	5.20	<0.001	0.002	0.35	<0.001	1.40	<0.0001	<0.001	1.20	0.037	<1
	31/03/2025	0.1	0.002	<0.0002	22	<0.001	0.003	1.2	<0.001	6.8	<0.0001	0.002	2.4	0.066	<1
	8/04/2025	<0.05	0.002	<0.0002	29	<0.001	<0.001	2.2	<0.001	8.1	<0.0001	0.002	2.4	0.008	<1
	9/05/2025	0.27	<0.001	<0.0002	20	<0.001	0.002	1.6	<0.001	5.9	<0.0001	0.002	1.7	0.03	<1
	25/06/2025	0.11	<0.001	<0.0002	19	<0.001	0.002	0.72	<0.001	4.4	<0.0001	0.002	<0.5	0.032	<1
	8/07/2025	0.05	<0.001	<0.0002	26	<0.001	0.002	0.49	<0.001	7.2	<0.0001	0.002	<0.5	0.024	<1
	14/08/2025	0.14	<0.001	<0.0002	26	<0.001	0.003	0.69	<0.001	6.8	<0.0001	0.002	1.8	0.019	<1
	11/09/2025	0.05	0.001	<0.0002	24	<0.001	0.002	1.5	<0.001	6.8	<0.0001	0.002	1.6	0.014	<1
	13/10/2025	0.07	0.002	<0.0002	37	<0.001	0.01	0.69	<0.001	10	<0.0001	0.005	4.8	0.055	<1
	20/11/2025	<0.05	0.001	<0.0002	19	<0.001	0.002	0.0015	0.001	4.7	<0.0001	0.002	0.9	0.012	<1
	17/12/2025	0.26	0.001	<0.0002	16	<0.001	0.001	0.89	<0.001	3.8	<0.0001	0.001	1.5	0.017	<1
	21/01/2026	0.2	<0.001	<0.0002	12	<0.001	3	2.2	<1	2.9	<0.0001	0.001	0.7	0.031	<1
	20/02/2026	0.23	0.002	<0.0002	18	<0.001	0.003	5	<0.001	4.5	<0.0001	0.003	0.6	0.032	<2
	20/03/2026	0.83	<0.001	<0.0002	11	<0.001	0.006	3.5	0.002	3	<0.0001	0.002	1.5	0.043	<1
SW01 Baseline		**0.5**	**0.003**	**0.001**	**22**	**0.002**	**0.041**	**1.2**	**0.001**	**16**	**0.0005**	**0.006**	**6**	**0.058**	**<1***

Harvest Estate
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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW01	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	220	220	<100	<100	<20	250	<100	<100	250	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	<50	<50	20	-	<20	<50	100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No surface water located at monitoring site – no sample collected									
	18/10/2023	No surface water located at monitoring site – no sample collected									
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	No surface water located at monitoring site – no sample collected									
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/3034	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Investigation	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	160	160	300	<100	<20	110	300	<100	410	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	17/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	120	<50	<100	<100	110	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW01 Baseline		**60**	**-**	**24**	**100**	**-**	**50**	**130**	**90**	**170**	**-**

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Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW02	29/09/2022	6.9	170	8.8	8	160	0.04	0.03	29	<0.02	1.3	27	2.8	22		0.1
	20/10/2022	6.5	120	6.2	8.7	140	0.02	0.01	17	<0.02	<0.20	16	2.9	<5		0.2
	14/11/2022	6.4	150	210	0.1	190	0.18	<0.01	54	<0.02	13	62	18	24		0.3
	14/12/2022	6.3	110	870	0.1	200	0.27	0.05	26	<0.10	2.7	25	29	14		1.1
	18/01/2023	6.6	220	190	0.1	61	0.79	0.049	31	<0.20	21	27	6.2	61		0.2
	20/02/2023	6.5	240	29	4.4	1300	0.023	0.31	26	<0.10	1.9	29	24	<5		0.9
	28/03/2023	4.8	310	370	5.7	370	1.5	0.19	22	<0.02	<0.20	17	92	<10		4.2
	18/04/2023	6.2	300	60	7.3	410	0.05	0.16	32	<0.02	1.38	25	120	<5		3.8
	18/05/2023	6.5	130	39	6	270	0.06	0.09	25	<0.02	<0.2	18	29	<5		1.2
	15/06/2023	6.4	190	25	8.9	280	0.37	0.23	34	<0.02	1.2	25	38	<5		1.1
	21/08/2023	6.1	430	20	5.7	690	0.02	0.5	36	<0.02	1.2	38	75	<5		2.1
	18/09/2023	7.2	180	15	8.1	260	0.06	0.04	31	<0.02	0.8	28	39	<5		1.3
	18/10/2023	6.8	150	11	8.1	240	0.05	0.02	40	<0.02	<0.2	28	13	<5		0.3
	20/11/2023	6.9	180	18	4.9	350	0.07	0.04	37	<0.01	0.3	26	50	<5		1.4
	19/12/2023	6.7	140	15	4.6	240	0.05	0.03	37	<0.02	0.7	29	11	<5		0.3
	23/01/2024	6.8	210	27	9.7	350	0.06	0.02	35	<0.02	0.5	31	25	<5		0.7
	26/02/2024	4.5	140	43	7.1	190	0.05	0.03	9	<0.02	0.6	8.5	65	<5		7.2
	26/03/2024	6.7	44	12	6.8	99	0.07	<0.01	9.5	<0.02	0.5	8.8	8.7	<5		0.9
	18/04/2024	7.6	350	<5	6.4	630	0.03	0.9	93	<0.02	0.6	78	56	<5	<10	0.6
	20/05/2024	6.7	130	27	2.1	210	0.04	0.05	20	<0.02	1.1	18	16	<5	11	0.8
	25/06/2024	6.7	180	9.7	8.8	330	0.03	<0.01	42	0.03	<0.2	35	10	<5	11	0.2
	10/07/2024	7.0	150	8.2	6.1	220	0.01	0.11	22	<0.02	1.9	18	21	<5	<10	1.0
	6/08/2024	6.5	220	8.5	7	280	0.06	0.02	39	<0.02	1.7	24	19	<5	20	0.5
	15/08/2024	6.6	48	<5	7.8	80	0.07	0.01	8	<0.02	<0.2	7	6.9	18	<10	0.9
	11/09/2024	7.1	250	<5	6.1	450	0.02	0.05	90	<0.02	0.3	71	48	<5	<10	0.5
	9/10/2024	7.0	260	<5	8.9	500	0.12	0.03	88	<0.02	0.6	73	35	<5	<10	0.4
	6/11/2024	7.5	300	6.4	6	500	0.07	<0.01	89	<0.02	1	72	34	<5	<10	0.4
	16/12/2024	6.4	200	110	8.8	310	1.1	<0.01	55	<0.02	0.4	11	19	6.6	<10	0.3
	14/01/2025	6.9	170	<5	4.6	340	0.08	<0.01	51	<0.02	0.9	44	7.7	<5	<10	0.2
	11/02/2025	7.1	96	5.6	6.1	150	0.08	<0.01	14	<0.02	1.9	91	3.9	190	<10	0.3
	24/03/2024	3.2	420	7.2	8.6	670	<0.05	0.02	17	<0.02	2.8	17	250	<5	<10	15
	31/03/2025	7.2	160	<5	9.8	200	0.14	0.05	14	<0.02	<0.4	16	7	<5	<10	0.5
	8/04/2025	7.2	150	12	6.2	230	0.37	0.03	14	<0.02	0.7	18	3.4	<5	<10	0.2
	9/05/2025	3.9	320	1,100	-	560	1.5	0.23	31	<0.02	2.8	18	150	<20	34	4.8
	25/06/2025	7.1	400	9.4	9.8	580	1.5	0.01	88	<0.03	1.5	74	38	38	14	0.4
	8/07/2025	6.9	300	14	8.4	600	0.34	0.58	96	<0.02	0.9	73	38	19	21	2.5
	14/08/2025	7.2	330	6.1	8.6	600	0.05	0.03	120	<0.02	0.7	85	31	<5	<10	3.9
	11/09/2025	7.0	320	6.1	7.9	530	0.05	0.11	87	<0.02	2.8	69	36	<5	<10	2.4
	13/10/2025	6.9	270	6.3	8.1	470	0.12	<0.01	73	0.11	1.9	60	29	<5	14	2.5
	20/11/2025	6.8	190	11	5.2	300	0.19	0.16	33	<0.02	0.9	30	16	<5	<10	2.1
	16/12/2025	7.0	520	8	7.2	240	0.11	0.13	26	<0.5	<0.5	23	9.1	<5	19	2.9
	21/01/2026	7.3	350	<5	6	680	0.07	<0.01	100	0.1	0.4	85	36	<0.005	15	2.8
	20/02/2026	7	470	<5	3.6	720	0.08	<0.01	130	<0.02	0.5	95	17	<0.005	<10	7.6
	20/03/2026	7	370	6.1	5.6	710	0.1	0.06	130	<0.02	0.8	90	42	<0.005	<10	3.1
SW02 Baseline		**6.3 – 7.0**	**199**	**495**	**-**	**292**	**1.88**	**0.261**	**161**	**0.06**	**8.6**	**32**	**10**	**182**		**<0.5***

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Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW02	29/09/2022	0.42	0.003	<0.0002	19	0.002	0.004	1.5	0.001	5.8	<0.0001	0.002	1.9	0.057	<1
	20/10/2022	0.22	0.001	<0.0002	12	0.001	0.003	0.62	<0.001	3.4	<0.0001	0.001	1.7	0.032	<1
	14/11/2022	1.8	0.037	<0.002	47	<0.001	0.015	53	<0.01	11	<0.001	<0.01	<5	0.096	<1
	14/12/2022	13	0.066	<0.002	38	0.034	0.094	9.7	0.071	5.9	<0.001	0.013	5.1	1	<1
	18/01/2023	3.3	0.023	<0.002	<2	<0.01	0.015	45	0.014	5.8	<0.001	<0.010	<5	0.15	<1
	20/02/2023	12	0.033	0.0002	38	0.009	0.09	0.013	0.013	11	<0.001	0.018	4.1	0.28	<1
	28/03/2023	3.4	0.002	0.0003	43	0.002	0.003	2.5	0.001	8.4	<0.0001	0.024	4.1	0.63	<1
	18/04/2023	0.86	<0.001	<0.0002	20	0.002	0.002	<0.001	<0.001	4	<0.0001	0.006	2.7	0.089	<1
	18/05/2023	0.72	0.002	<0.0002	17	0.002	0.006	1	0.002	4.3	<0.0001	0.003	2.4	0.081	<1
	15/06/2023	1.7	0.001	<0.0002	22	0.001	0.004	2.1	0.001	5.5	<0.0001	0.005	1.9	0.037	<1
	21/08/2023	1.1	<0.001	<0.0002	71	<0.001	<0.001	8	<0.001	16	<0.0001	0.024	5.7	0.057	<1
	18/09/2023	1.7	0.003	<0.0002	19	0.002	0.004	3	0.002	6.3	<0.0001	0.005	3	0.023	<1
	18/10/2023	0.88	0.002	<0.0002	17	0.001	0.003	2.2	0.001	5.5	<0.0001	0.002	1.9	0.014	<1
	20/11/2023	2.3	0.002	<0.0002	19	0.002	0.002	2.6	<0.001	6.7	<0.0001	0.007	1.4	0.032	<1
	19/12/2023	1.1	0.002	<0.0002	19	0.001	0.001	4.8	<0.001	6.5	0.0002	0.004	2.9	0.012	<1
	23/01/2024	2.9	0.003	<0.0002	23	0.002	0.001	5.8	<0.001	7.8	<0.0001	0.007	3.3	0.031	<1
	26/02/2024	1.5	0.001	<0.0002	9.7	0.001	0.003	1.7	<0.001	2.5	<0.0001	0.004	1.4	0.027	<1
	26/03/2024	0.34	<0.001	<0.0002	6.9	0.001	0.003	0.67	<0.001	1.9	<0.0001	0.001	1.8	0.021	<1
	18/04/2024	0.09	<0.001	<0.0002	20	<0.001	<0.001	0.39	<0.001	5.4	<0.0001	<0.001	14	0.014	<1
	20/05/2024	0.71	0.004	<0.0002	19	0.002	0.003	5.6	<0.001	3.8	<0.0001	0.003	3	0.015	<1
	25/06/2024	1.1	<0.001	<0.0002	21	<0.001	0.001	1.4	<0.001	4.6	<0.0001	0.004	4.5	0.022	<1
	10/07/2024	1.1	0.002	<0.0002	20	<0.001	0.004	1.2	<0.001	4.2	<0.0001	0.004	2.3	0.047	<1
	6/08/2024	0.61	0.001	<0.0002	17	0.001	0.002	1.4	<0.001	3.7	<0.0001	0.002	3	0.019	<1
	15/08/2024	0.31	0.002	<0.0002	8	0.001	0.004	0.37	<0.001	1.5	<0.0001	0.001	1.4	0.038	<1
	11/09/2024	0.19	<0.001	<0.0002	20	<0.001	0.001	0.31	<0.001	4.8	<0.0001	0.001	14	0.021	<1
	9/10/2024	0.8	<0.001	<0.0002	23	<0.001	0.001	1.5	<0.001	5	<0.0001	0.003	15	0.032	<1
	6/11/2024	0.007	0.001	<0.0002	21	<0.001	<0.001	0.7	<0.001	5.8	<0.0001	<0.001	15	0.011	<1
	16/12/2024	0.05	<0.001	<0.0002	14	<0.001	0.001	0.24	<0.001	3.1	<0.0001	<0.001	9.4	0.008	<1
	14/01/2025	0.06	<0.001	<0.0002	14	0.001	0.002	0.28	<0.001	2.7	<0.0001	0.001	9.4	0.015	<1
	11/02/2025	0.82	<0.001	<0.0002	24	<0.001	0.002	4.4	<0.001	4.8	<0.0001	0.005	19	0.058	<1
	24/03/2024	7.4	<0.001	<0.0002	56	0.002	0.001	22	<0.001	6.9	<0.0001	0.021	1.8	0.097	<1
	31/03/2025	0.25		<0.0002	23	<0.001	0.003	1.7	<0.001	7	<0.0001	0.002	2.5	0.054	<1
	8/04/2025	0.1	0.001	<0.0002	29	<0.001	0.001	2.7	<0.001	8.3	<0.0001	0.002	2.3	0.015	<1
	9/05/2025	2.3	0.007	<0.0002	34	0.005	0.002	140	<0.001	9.1	<0.0001	0.011	2.1	0.077	<1
	25/06/2025	0.3	<0.001	<0.0002	21	<0.001	0.001	1.1	<0.001	5.4	<0.0001	0.002	14	0.03	<1
	8/07/2025	0.15	<0.001	<0.0002	19	<0.001	<0.001	0.65	<0.001	5.3	<0.0001	0.001	12	0.018	<1
	14/08/2025	0.11	<0.001	<0.0002	21	<0.001	<0.001	0.39	<0.001	5.9	<0.0001	<0.001	11	0.012	<1
	11/09/2025	0.32	0.001	<0.0002	21	<0.001	0.002	1.2	<0.001	5.6	<0.0001	0.001	11	0.016	<1
	13/10/2025	0.15	0.002	<0.0002	19	<0.001	0.004	0.82	<0.001	5.2	<0.0001	0.002	11	0.054	<1
	20/11/2025	0.53	0.002	<0.0002	20	0.001	0.002	1.8	0.002	4.9	<0.0001	0.002	3.9	0.021	<1
	16/12/2025	0.26	<0.001	<0.0002	16	0.002	<0.001	1.5	0.001	4	<0.0001	0.002	1.6	0.01	<1
	21/01/2026	<0.05	<0.001	<0.0002	21	<0.001	<1	0.25	<1	5.6	<0.0001	<0.001	17	0.022	<1
	20/02/2026	<0.05	<0.001	<0.0002	22	<0.001	<0.001	0.46	<0.001	6.1	<0.0001	<0.001	23	0.027	<1
	20/03/2026	0.15	<0.001	<0.0002	21	<0.001	<0.001	0.21	<0.001	5.8	<0.0001	0.001	15	0.013	<1
SW02 Baseline		**3.8**	**0.045**	**0.001**	**17**	**0.007**	**0.012**	**71.9**	**0.02**	**5**	**0.0005**	**0.005**	**6**	**0.09**	**<1***

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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW02	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	90	<100	<20	<50	60	30	90	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	180	180	30	-	<20	170	30	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	200	<100	<20	<50	100	<100	100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	140	140	100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<20	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW02 Baseline		**60**	**-**	**22**	**100**	**-**	**50**	**100**	**50**	**140**	**-**

Harvest Estate
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Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW03	29/09/2022	6.8	120	<5	9.3	100	0.02	<0.01	24	<0.02	1.10	23	2	<5		0.1
	20/10/2022	5.9	650	26	7.5	870	0.03	<0.01	270	<0.02	<0.2	12	13	<5		0.0
	14/11/2022	6.5	140	260	2.6	160	0.13	<0.05	27	<0.01	7.40	36	9	<5		0.3
	14/12/2022	6.5	110	11	4.4	160	0.01	0.05	23	<0.01	3.90	18	11	<5		0.5
	18/01/2023	6.5	160	9	5.1	<5	0.02	<0.010	31	<0.02	1.30	26	17	<5		0.5
	20/02/2023	3.4	540	13	6.0	720	0.01	<0.010	22	<0.02	5.10	28	100	<5		4.5
	28/03/2023	3.3	400	7	9.9	750	0.02	0.07	14	<0.02	<0.2	16	110	<5		7.9
	18/04/2023	4.2	280	<5	7.4	450	<0.01	0.04	29	<0.02	<0.2	22	140	<5		4.8
	18/05/2023	4.3	310	37	5.5	580	0.02	0.32	22	<0.02	12.33	21	230	<5		10
	15/06/2023	3.3	580	17	8.9	870	0.04	0.68	32	<0.02	1.40	31	300	<5		9.4
	24/07/2023	3.9	290	36	9	510	0.03	0.4	17	<0.02	1	20	250	<5		15
	21/08/2023	6.8	270	5.8	7.2	350	0.04	0.04	45	<0.02	0.5	43	8	<5		0.2
	18/09/2023	4.6	410	20	7.4	540	<0.01	0.28	30	<0.02	0.4	29	230	<5		7.7
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.5	640	18	7.1	1100	0.03	0.58	32	<0.01	0.6	30	370	6.7		12
	19/12/2023	3.8	610	7.7	6.7	850	<0.01	0.86	36	<0.02	0.9	37	150	<5		4.2
	23/01/2024	3.7	460	55	4.1	880	<0.01	0.16	31	<0.02	1.6	37	100	<5		3.2
	26/02/2024	4.3	200	93	7.5	250	0.09	0.09	53	0.02	1.5	11	440	7.2		8.3
	26/03/2024	6.1	170	54	7.7	300	0.08	0.13	21	<0.02	1	20	78	<5		3.7
	18/04/2024	7.5	360	9.2	7.4	650	0.03	0.08	88	<0.02	0.8	78	64	<5	<10	0.6
	20/05/2024	4.5	300	21	5.6	450	<0.01	0.5	19	<0.02	1.2	23	190	<5	66	10
	25/06/2024	6.3	80	2300	7.2	140	0.98	<0.1	9.4	<0.2	140	9	5	<5	48	0.5
	10/07/2024	4.4	260	29	5.1	400	0.01	0.64	19	<0.02	0.7	21	10	<5	50	0.5
	6/08/2024	4.6	340	22	6.3	630	0.02	0.62	35	<0.02	1.3	29	230	<5	70	6.6
	15/08/2024	6.3	82	19	8.3	120	0.04	0.07	9.5	<0.02	<0.2	9	31	<5	11	3.3
	11/09/2024	7.1	290	<5	7.7	440	<0.01	0.11	84	<0.02	0.3	66	56	<5	<10	0.7
	9/10/2024	6.6	240	330	7.7	360	0.46	<0.01	56	<0.02	7.1	45	35	33	<10	0.6
	6/11/2024	7.2	300	49	7.5	460	0.07	<0.01	88	<0.02	1.2	72	39	<5	<10	0.4
	16/12/2024	7.2	250	5.3	19.0	370	<0.01	<0.01	70	<0.02	0.7	61	31	50	<10	0.4
	14/01/2025	6.9	220	<5	7.7	420	0.04	<0.01	66	<0.02	1.3	57	11	<5	<10	0.2
	11/02/2025	7.4	340	<5	7.5	570	0.07	0.02	99	<0.02	1.4	87	14	<5	<10	0.1
	24/03/2024	6.9	130	<5	8.1	230	0.05	<0.01	38	<0.02	0.9	32	66	<5	<10	1.7
	31/03/2025	7.0	260	9.3	9.8	440	0.06	0.19	100	<0.02	0.9	70	26	<5	<10	0.3
	8/04/2025	7.2	290	<5	8.9	470	0.04	0.07	100	<0.02	0.4	82	36	<5	<10	0.4
	9/05/2025	7.1	290	<5	-	460	<0.01	<0.1	100	<0.02	0.7	73	36	<5	<10	0.4
	25/06/2025	6.7	360	230	6.5	540	2.3	0.01	88	<0.03	2.3	68	36	46	14	0.4
	8/07/2025	6.8	300	82	9.1	570	0.15	0.48	89	<0.02	1.1	67	39	27	<10	0.4
	14/08/2025	7.2	300	16	9.1	580	0.08	0.05	110	<0.02	1	81	32	<5	<10	0.3
	11/09/2025	6.8	300	6.7	12.0	530	0.05	0.22	84	<0.02	0.7	67	43	43	11	0.5
	13/10/2025	7.2	340	7.5	9	620	0.07	<0.01	100	<0.02	0.8	83	43	16	<10	0.4
	20/11/2025	6.6	190	28	4.7	300	0.15	0.19	28	<0.02	1	28	35	<5	<10	1.3
	16/12/2025	6.3	96	400	0.3	170	0.94	0.18	14	<0.5	12	17	18	17	38	1.3
	21/01/2026	7.6	330	<5	8.6	680	0.05	<0.01	100	0.1	0.9	84	36	<0.005	<10	0.4
	20/02/2026	7.2	390	10	4.6	580	0.06	0.02	93	<0.02	0.5	69	11	<0.005	<10	0.1
	20/03/2026	6.9	330	<5	5.3	610	0.1	0.04	110	<0.02	0.8	77	36	0.012	<10	0.3
SW03 Baseline		**6.1 - 6.7**	**191**	**1005**	**-**	**281**	**2.14**	**0.155**	**111**	**0.041**	**4.3**	**30**	**6**	**86**		**<0.5***

Harvest Estate
ENV 217140

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW03	29/09/2022	0.4	0.00	<0.0002	13	0.00	0.00	0.8	<0.001	4.4	<0.0001	0.002	1.00	0.034	<1
	20/10/2022	0.5	0.00	<0.0002	8	0.00	0.00	0.9	0.00	2.3	<0.0001	0.001	1.00	0.03	<1
	14/11/2022	1.1	<0.001	<0.002	18	<0.001	0.00	1.9	<0.010	5.7	<0.001	<0.01	<5	0.24	<1
	14/12/2022	0.6	<0.001	<0.002	13	<0.01	<0.010	1.3	<0.010	<5	<0.001	<0.01	<5	0.53	<1
	18/01/2023	0.5	0.01	<0.002	<2	<0.010	<0.01	0.5	<0.01	6.2	<0.001	<0.01	<5	<0.05	<1
	20/02/2023	17	0.00	<0.0002	63	0.00	0.02	0.0	0.00	14.0	<0.001	0.065	3.00	0.12	<1
	28/03/2023	15	<0.001	<0.0002	63	0.00	0.00	4.5	<0.001	11.0	<0.0001	0.065	2.30	0.15	<1
	18/04/2023	3.8	<0.001	<0.0002	30	0.00	0.00	<0.001	<0.001	5.0	<0.0001	0.023	2.10	0.048	<1
	18/05/2023	5.8	<0.001	<0.0002	48	<0.001	0.00	14.0	<0.001	10.0	<0.0001	0.033	2.80	0.16	<1
	15/06/2023	11	<0.001	<0.0002	74	<0.001	0.00	12	<0.001	15.0	<0.0001	0.058	2.7	0.15	<1
	24/07/2023	7.1	<0.001	<0.0002	39	<0.001	0.002	8.9	0.001	9.7	<0.0001	0.030	2.5	0.1	<1
	21/08/2023	0.7	0.001	<0.0002	18	0.001	0.003	1.1	<0.001	6.3	<0.0001	0.002	6.8	0.026	<1
	18/09/2023	2.8	<0.001	<0.0002	59	<0.001	<0.001	1.1	<0.001	14.0	<0.0001	0.022	3.2	0.049	<1
	18/10/2023	3.0	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12.0	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	11.0	0.002	<0.0002	75	<0.001	<0.001	17	<0.001	17.0	<0.0001	0.060	3	0.14	<1
	19/12/2023	21.0	0.003	0.0011	80	<0.001	0.002	3.6	0.001	19.0	0.0007	0.071	4.3	0.16	<1
	23/01/2024	17.0	0.002	<0.0002	63	0.002	0.001	17	<0.001	19.0	<0.0001	0.059	5.1	0.13	<1
	26/02/2024	8.8	0.003	<0.0002	17	0.003	0.005	9	0.002	4.8	<0.0001	0.016	1.8	0.05	<1
	26/03/2024	0.9	<0.001	<0.0002	24	<0.001	<0.001	1.8	<0.001	6.1	<0.0001	0.009	2.8	0.025	<1
	18/04/2024	1.1	<0.001	<0.0002	22	<0.001	<0.001	1.8	<0.001	6.0	<0.0001	0.005	13	0.018	<1
	20/05/2024	5.4	0.002	<0.0002	34	<0.001	<0.001	13	<0.001	7.3	<0.0001	0.026	3.6	0.047	<1
	25/06/2024	0.2	<0.001	<0.0002	10	<0.001	<0.001	170	<0.001	2.7	<0.0001	0.011	2.3	0.042	<1
	10/07/2024	3.6	0.001	<0.0002	34	<0.001	0.001	6.6	<0.001	6.6	<0.0001	0.019	3	0.053	<1
	6/08/2024	3.10	<0.001	<0.0002	51	<0.001	<0.001	4.8	<0.001	7.8	<0.0001	0.026	3.4	0.092	<1
	15/08/2024	1.20	0.00	<0.0002	12	<0.001	0.003	2.1	<0.001	2.2	<0.0001	0.004	1.6	0.037	<1
	11/09/2024	0.59	<0.001	<0.0002	21	<0.001	0.001	1.0	<0.001	4.9	<0.0001	0.003	13	0.021	<1
	9/10/2024	20	0.02	<0.0002	21	0.011	0.01	39.0	0.008	4.4	<0.0001	0.008	8.8	0.1	<1
	6/11/2024	3	0.00	<0.0002	23	0.002	0.002	4.5	<0.001	6.2	<0.0001	0.003	15	0.017	<1
	16/12/2024	0.29	0.001	<0.0002	19	0.001	<0.001	1.6	<0.001	4	<0.0001	0.001	12	0.009	<1
	14/01/2025	0.17	0.001	<0.0002	17	<0.001	0.001	0.74	<0.001	3.3	<0.0001	0.001	12	0.016	<1
	11/02/2025	0.45	0.001	<0.0002	23	<0.001	<0.001	2.1	<0.001	4.5	<0.0001	0.001	18	0.031	<1
	24/03/2024	0.18	0.001	<0.0002	10	<0.001	0.002	0.79	<0.001	2.6	<0.0001	0.001	6.6	0.036	<1
	31/03/2025	0.42	0.002	<0.0002	21	<0.001	0.001	3.5	<0.001	4.9	<0.0001	0.002	11	0.045	<1
	8/04/2025	0.3	<0.001	<0.0002	21	<0.001	<0.001	1.3	<0.001	5.4	<0.0001	0.002	11	0.012	<1
	9/05/2025	0.62	0.002	<0.0002	20	<0.001	0.001	2	<0.001	4.9	<0.0001	0.005	11	0.042	<1
	25/06/2025	2	0.002	<0.0002	21	<0.001	0.003	6.1	0.001	5.2	<0.0001	0.002	12	0.053	<1
	8/07/2025	0.24	<0.001	<0.0002	19	<0.001	<0.001	0.49	<0.001	5	<0.0001	0.001	11	0.015	<1
	14/08/2025	0.2	<0.001	<0.0002	20	<0.001	<0.001	0.59	<0.001	5.8	<0.0001	0.001	11	0.01	<1
	11/09/2025	2	0.003	<0.0002	19	0.002	0.004	4	0.002	5.4	<0.0001	0.003	11	0.037	<1
	13/10/2025	0.29	0.001	<0.0002	22	<0.001	0.002	0.97	<0.001	5.9	<0.0001	0.001	16	0.019	<1
	20/11/2025	2.4	0.004	<0.0002	22	0.003	0.003	8.8	0.003	4.7	<0.0001	0.003	4.4	0.015	<1
	16/12/2025	6	0.003	<0.0002	15	0.002	0.005	2.7	0.002	3.2	<0.0001	0.007	2.4	0.14	<1
	21/01/2026	0.09	<0.001	<0.0002	20	<0.001	<1	0.33	<1	5.5	<0.0001	<0.001	16	0.009	<1
	20/02/2026	0.27	0.001	<0.0002	23	<0.001	<0.001	1.3	<0.001	5.8	<0.0001	0.001	15	0.01	<1
	20/03/2026	0.22	<0.001	<0.0002	18	<0.001	0.001	0.58	<0.001	5.1	<0.0001	0.001	12	0.016	<1
SW03 Baseline		**7.9**	**0.058**	**0.001**	**21**	**0.008**	**0.028**	**85.5**	**0.028**	**5**	**0.0005**	**0.006**	**4**	**0.26**	**<1***

Harvest Estate
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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW03	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	<50	<100	<20	<50	<100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	130	130	<100	<100	<20	<50	10	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW03 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**120**	**-**

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Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW04	29/09/2022	4.5	68	<5	4.8	52	0.01	0.18	20	<0.02	5.1	17	<2	<5		0.05
	20/10/2022	4.2	90	<5	7.5	110	0.01	<0.10	20	<0.02	0.3	16	<2	<5		0.05
	14/11/2022	No surface water located at monitoring site – no sample collected														
	14/12/2022	3.2	190	<5	2	280	0.01	0.05	42	<0.10	3.2	20	<2	<5		0.02
	18/01/2023	No surface water located at monitoring site – no sample collected														
	20/02/2023	4.1	0.2	<5	5.9	160	0.02	0.09	22	<0.10	7.4	23	15	<5		0.7
	28/03/2023	4.2	68	<5	8	130	<0.01	<0.01	17	<0.10	<0.25	14	25	<5		1.5
	18/04/2023	4.6	130	16	9.1	190	0.01	0.03	32	<0.02	0.5	21	8.7	<5		0.3
	18/05/2023	3.6	1,200	42	8	1,800	0.03	1.2	26	<0.02	1.15	53	1,000	<5		38.5
	15/06/2023	4.2	140	160	7.7	200	1.5	0.44	44	<0.02	12	24	<2	8		0.02
	24/07/2023	3.6	1,600	21	9	2,400	0.02	1.5	180	<0.02	3.4	78	5,700	<5		31.7
	21/08/2023	3.3	2,400	5.7	7.5	3,700	<0.01	2.8	33	<0.02	3.4	97	850	5.3		25.8
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.2	2,100	<5	9	3,500	0.03	0.8	4.7	<0.01	1.1	63	400	<5		85.1
	19/12/2023	3.0	3,200	15	0.8	3,700	<0.01	0.44	34	<0.02	4.5	100	980	<5		28.8
	23/01/2024	3.1	1,600	23	7.8	2,500	<0.01	0.19	27	<0.02	0.5	54	730	<5		27.0
	26/02/2024	3.1	1,000	11	7.8	1,200	0.03	0.31	14	<0.02	1.5	30	570	<5		40.7
	26/03/2024	3.2	900	5.7	9.6	1,300	<0.01	0.36	21	<0.02	0.9	30	710	<5		33.8
	18/04/2024	3.1	980	67	7.5	1,900	0.03	0.42	15	<0.02	0.8	33	1,000	27	310	66.7
	20/05/2024	3.3	630	8	8.3	1,100	<0.01	0.3	11	<0.02	0.7	25	500	<5	190	45.5
	25/06/2024	3.2	1,000	5.4	8.6	1,600	0.01	0.4	13	<0.02	1	27	270	<5	160	20.8
	10/07/2024	3.5	420	<5	7.9	870	<0.01	0.24	11	<0.02	0.6	21	450	<5	150	40.9
	6/08/2024	3.3	1,300	38	8.7	1,700	0.04	0.03	13	<0.02	1.1	28	860	7.8	230	66.2
	15/08/2024	3.9	240	<5	9.3	390	0.02	0.13	13	<0.02	0.8	16	150	<5	40	11.5
	11/09/2024	3.4	460	<5	6.9	690	0.01	0.05	8.7	<0.02	<0.2	17	390	15	77	44.8
	24/09/2024 - Additional	3.5	750	-	-	1,300	-	-	-	-	-	-	-	-	-	-
	9/10/2024	3.1	810	<5	9	1,200	0.02	<0.01	10	<0.02	0.8	26	580	<5	<10	58.0
	6/11/2024	3.3	440	23	6.4	660	0.05	<0.01	10	<0.02	1	18	310	<5	15	31.0
	16/12/2024	5.7	210	420	0.2	360	0.1	0.25	13	<0.02	13	12	110	7	25	8.5
	14/01/2025	4.1	310	120	4.9	460	0.13	0.03	6.3	<0.02	1.3	11	64	<5	<10	10.2
	11/02/2025	7.6	700	<5	8.8	1000	0.01	0.03	5.8	<0.02	1.3	21	150	7.7	<10	25.9
	24/03/2025	3.9	390	21	7.4	470	0.03	0.03	18	<0.02	1.5	24	180	8.1	<10	10.0
	31/03/2025	6.3	260	70	10	370	<0.01	0.1	11	<0.02	0.8	16	160	<5	<10	14.5
	8/04/2025	6.0	430	43	4.1	470	0.09	0.27	11	0.04	2.3	18	240	<10	16	21.8
	9/05/2025	6.5	270	260	-	570	<0.01	0.02	10	<0.02	4.5	16	250	160	<10	25.0
	25/06/2025	6.7	410	67	6.1	590	0.6	0.01	8.3	<0.02	0.6	16	160	6.5	28	19.2
	8/07/2025	4.0	140	180	6.1	160	0.21	<0.01	21	<0.02	6.2	17	<2	7.6	43	21.0
	14/08/2025	6.5	180	250	6.6	290	0.47	-	9.4	-	-	14	86	<5	13	9.4
	11/09/2025	6.5	260	1,400	0.2	460	0.03	0.31	7.3	<0.02	38	16	150	10	22	7.3
	13/10/2025	7.3	580	14	8.3	760	0.04	<0.01	4	<0.02	0.8	16	230	20	<10	4.0
	20/11/2025	6.9	280	35	2.1	490	0.08	0.05	8.4	<0.02	1	15	150	2.7	<10	8.4
	16/12/2025	7.0	370	170	6	550	0.05	0.21	14	<0.5	1	87	140	<5	39	14.0
	21/01/2026	6.9	250	75	1.9	450	0.23	<0.01	22	0.02	0.9	16	100	<0.005	13	22.0
	20/02/2026	6.9	320	42	1.5	480	0.03	<0.01	29	<0.02	2.6	18	30	0.17	16	29.0
	20/03/2026	6.7	250	110	7.7	420	0.11	0.04	18	<0.02	1.9	20	120	<0.005	<10	18.0
SW04 Baseline		**4.2 – 4.5**	**112**	**293**	**-**	**165**	**0.5**	**0.693**	**90**	**0.052**	**4.5**	**20**	**3**	**86**		**<0.5***

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Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW04	29/09/2022	1.3	0.001	<0.0002	1.6	0.005	0.001	2.7	0.001	2.6	<0.0001	0.002	1	0.027	<1
	20/10/2022	1.1	<0.001	<0.0002	1.3	0.004	0.001	2.4	0.001	2.3	<0.0001	0.002	1	0.024	<1
	14/11/2022	No surface water located at monitoring site – no sample collected													
	14/12/2022	1.2	<0.001	<0.002	<5	<0.001	<0.01	3.2	<0.01	<5	<0.001	<0.01	<5	0.084	<1
	18/01/2023	No surface water located at monitoring site – no sample collected													
	20/02/2023	1.6	0.002	<0.0002	2.7	0.005	0.05	0.002	0.002	3.9	<0.001	0.003	1.6	0.039	<1
	28/03/2023	1.1	<0.01	<0.002	<5	0.002	<0.01	2.7	<0.01	<5	<0.0001	0.01	<5	<0.05	<1
	18/04/2023	0.85	<0.001	<0.0002	1.8	<0.01	<0.001	<0.001	<0.001	2.7	<0.0001	0.001	0.8	0.034	<1
	18/05/2023	41	<0.001	0.0005	200	<0.001	0.003	16	0.003	31	<0.0001	0.11	5.7	0.4	<1
	15/06/2023	3.1	0.002	<0.0002	2.2	0.007	0.007	6.3	0.005	4.5	<0.0001	0.003	1.4	0.075	1.41
	24/07/2023	50	<0.001	0.0002	330	<0.001	0.003	3.9	0.002	51	<0.0001	0.13	9	0.18	<1
	21/08/2023	72	0.002	0.0004	560	<0.001	0.003	3.4	0.002	83	<0.0001	0.23	13	0.34	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	3	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	91	0.003	0.0007	380	0.001	0.003	4.3	0.003	52	<0.0001	0.27	7.2	0.55	<1
	19/12/2023	110	0.005	0.0022	570	0.002	0.005	11	0.007	90	0.001	0.39	4.3	0.7	<1
	23/01/2024	55	0.002	0.0003	260	0.002	0.003	9.7	0.002	35	<0.0001	0.19	6.1	0.33	<1
	26/02/2024	23	<0.001	<0.0002	140	<0.001	<0.001	5.1	<0.001	20	<0.0001	0.083	3.9	0.18	<1
	26/03/2024	20	<0.001	<0.0002	130	<0.001	<0.001	3.1	<0.001	19	<0.0001	0.068	4.9	0.1	<1
	18/04/2024	32	<0.001	<0.0002	190	0.001	0.002	7	<0.001	26	<0.0001	0.1	3.6	0.18	<1
	20/05/2024	20	<0.001	<0.0002	100	<0.001	<0.001	5.7	<0.001	14	<0.0001	0.064	2.6	0.13	<1
	25/06/2024	16	<0.001	<0.0002	210	<0.001	<0.001	5.3	<0.001	23	<0.0001	0.059	3.7	0.09	<1
	10/07/2024	12	<0.001	<0.0002	110	<0.001	0.001	2.5	<0.001	12	<0.0001	0.051	2.2	0.11	<1
	6/08/2024	17	<0.001	<0.0002	200	<0.001	0.001	5.5	<0.001	24	<0.0001	0.059	2.5	0.1	<1
	15/08/2024	2	<0.001	<0.0002	36	<0.001	<0.001	0.81	<0.001	6	<0.0001	0.015	2.5	0.057	<1
	11/09/2024	5.6	<0.001	<0.0002	87	<0.001	<0.001	3.6	<0.001	11	<0.0001	0.026	1.6	0.061	<1
	24/09/2024 - Additional	-	<0.001	<0.0001	-	<0.001	0.0001	-	<0.001	-	<0.0001	0.032	-	0.043	-
	9/10/2024	14	<0.001	<0.0002	140	<0.001	0.002	8.1	<0.001	17	<0.0001	0.057	2.7	0.12	<1
	6/11/2024	2.8	<0.001	<0.0002	81	<0.001	<0.001	6.1	<0.001	11	<0.0001	0.02	<0.5	0.034	<1
	16/12/2024	4.4	0.007	<0.0002	29	0.009	0.006	170	0.003	4.5	<0.0001	0.009	1.3	0.035	<1
	14/01/2025	1.2	<0.001	<0.0002	53	<0.001	0.001	5.8	<0.001	5.8	<0.0001	0.014	0.8	0.039	<1
	11/02/2025	<0.05	<0.001	<0.0002	200	<0.001	<0.001	0.14	<0.001	18	<0.0001	0.004	<0.5	0.033	<1
	24/03/2025	1.1	<0.001	<0.0002	52	<0.001	0.002	6.6	<0.001	8.5	<0.0001	0.012	2.3	0.1	<1
	31/03/2025	0.5	0.003	<0.0002	50	<0.001	0.001	17	<0.001	7.6	<0.0001	0.007	2.4	0.047	<1
	8/04/2025	0.36	0.004	<0.0002	70	<0.001	<0.001	38	<0.001	9.8	<0.0001	0.006	2.3	0.014	<1
	9/05/2025	0.64	<0.001	<0.0002	61	<0.001	0.001	34	<0.001	7.9	<0.0001	0.001	1.9	0.032	<1
	25/06/2025	0.35	<0.001	<0.0002	85	<0.001	<0.001	7.3	<0.001	8.5	<0.0001	0.004	1.3	0.013	<1
	8/07/2025	0.92	<0.001	<0.0002	0.6	0.004	0.002	1.8	<0.001	1.5	<0.0001	0.001	0.8	0.042	<1
	14/08/2025	0.34	<0.001	<0.0002	38	<0.001	<0.001	17	<0.001	5.7	<0.0001	0.002	1	0.018	<1
	11/09/2025	8.7	0.031	<0.002	120	0.017	0.011	830	<0.01	12	<0.001	0.027	<5	0.1	<1
	13/10/2025	0.31	0.002	<0.0002	130	<0.001	<0.001	12	<0.001	14	<0.0001	0.004	1.5	<0.005	<1
	20/11/2025	0.26	<0.001	<0.0002	69	<0.001	0.002	7.6	0.001	8.5	<0.0001	0.003	0.6	0.016	<1
	16/12/2025	13	0.002	<0.0002	57	0.003	<0.001	47	0.002	38	<0.0001	0.032	2.4	0.039	<1
	21/01/2026	0.07	<0.001	<0.0002	53	<0.001	<1	3	<1	7.3	<0.0001	0.001	<0.5	<0.005	<1
	20/02/2026	0.33	0.003	<0.0002	63	<0.001	<0.001	37	<0.001	8.2	<0.0001	0.002	1.6	0.013	<1
	20/03/2026	1	0.002	<0.0002	44	<0.001	0.002	21	<0.001	7.4	<0.0001	0.004	1.7	0.021	<1
SW04 Baseline		**1.4**	**0.002**	**0.001**	**3.2**	**0.007**	**0.002**	**2.8**	**0.002**	**2.3**	**0.0005**	**0.005**	**2.9**	**0.028**	**<1***

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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW04	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	No flow - No sample collected									
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	No flow - No sample collected									
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No flow - No sample collected									
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	160	160	<100	<100	<20	<50	<100	<100	160	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Additional	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW04 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Harvest Estate
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Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW05	29/09/2022	5.9	480	5.2	7.7	510	0.12	0.17	220	<0.20	3	140	11	<5		0.05
	20/10/2022	6.2	650	7.2	8.9	690	0.06	0.24	180	<0.20	0.5	160	8.6	<5		0.05
	14/11/2022	6.2	820	13	4.7	1,000	0.06	<0.05	310	<0.10	8.1	260	100	<5		0.32
	14/12/2022	6.2	830	16	7.5	1,100	0.05	0.05	330	<0.10	3.1	240	40	<5		0.12
	18/01/2023	6.3	2,800	33	7	<5	0.09	0.09	1,300	<0.02	3.38	820	160	<5		0.12
	20/02/2023	6.7	18	18	5.4	2,300	0.1	0.07	2,000	<0.10	3.4	4700	890	<5		0.45
	28/03/2023	5.6	470	<5	9.4	760	0.02	0.08	200	<0.10	<0.02	110	23	6.7		0.12
	18/04/2023	6.4	4,000	16	8.5	5,300	0.1	0.12	2,000	<0.02	80	1100	230	<5		0.12
	18/05/2023	5.8	260	17	5.7	460	0.08	<0.01	110	<0.02	<0.2	64	25	<5		0.23
	15/06/2023	6.2	1,100	<5	8.8	1,400	0.58	0.14	450	<0.02	1.1	250	40	<5		0.09
	24/07/2023	6.5	1,600	<5	9.3	2,800	0.05	0.17	1,500	<0.5	1.1	440	1,200	<5		0.80
	21/08/2023	6.6	1,600	<5	6.3	2,900	0.06	0.15	1,500	<0.02	1.28	480	190	<5		0.13
	18/09/2023	6.6	2,500	13	6.4	3,800	0.06	0.11	1,200	<0.02	1.3	650	210	<5		0.18
	18/10/2023	6.9	4,800	6.6	6.5	7,700	0.06	0.05	2,700	<0.02	<0.2	1,300	730	10		0.27
	20/11/2023	6.8	2,100	12	4.8	3,700	0.18	0.46	1,100	<0.01	0.6	460	1,200	<5		1.09
	19/12/2023	6.7	3,300	14	5.3	5,400	0.19	0.77	1,700	<0.02	<2	1,000	64	<5		0.04
	23/01/2024	6.2	1,100	13	9.3	1,000	0.09	0.05	440	<0.02	2.3	260	220	<5		0.50
	26/02/2024	6.3	970	16	8.6	1,200	0.11	0.03	330	<0.02	1.5	200	130	<5		0.39
	26/03/2024	6.6	1,100	9.1	5.6	1,700	0.03	0.09	910	<0.02	2	290	420	<5		0.46
	18/04/2024	6.5	560	8.4	5.8	830	0.07	0.16	160	<0.02	1.7	110	160	5.4	<10	1.00
	20/05/2024	6.7	240	<5	5.8	350	<0.01	0.03	68	<0.02	0.4	47	140	<5	15	2.06
	25/06/2024	6.5	1,000	16	7.7	1,800	0.06	0.1	500	<0.02	1.2	300	29	<5	16	0.06
	10/07/2024	6.2	950	5.6	6.3	1,700	0.02	0.16	170	<0.02	0.9	280	130	<5	11	0.76
	6/08/2024	6.3	3,300	9	8.9	5,800	0.05	0.11	1500	<0.02	1.2	820	210	<5	27	0.14
	15/08/2024	6.2	300	<5	7.1	430	0.08	0.03	30	<0.02	<0.2	80	27	<5	12	0.90
	11/09/2024	6.4	710	8.2	5.5	1,200	0.03	0.4	450	<0.02	1.1	230	72	<5	12	0.16
	9/10/2024	6.4	700	11	9	1,100	0.15	0.15	320	<0.1	<0.25	180	53	<5	14	0.17
	6/11/2024	7.1	930	15	6.1	1,300	0.08	0.16	440	<0.02	1	250	56	<5	<10	0.13
	16/12/2024	7.4	31,000	26	9.3	44,000	0.02	0.14	1,400	<0.02	0.4	<0.5	2,000	<5	<10	1.43
	14/01/2025	7.1	19,000	9.4	6.2	30,000	0.04	0.04	12,000	<0.02	0.3	5,500	500	<5	<10	0.04
	11/02/2025	7.5	24,000	9.1	8.5	35,000	0.03	0.06	6,300	<0.02	<0.2	6,900	260	<5	<10	0.04
	24/03/2024	6.3	1,600	<5	7	2,500	<0.1	0.12	790	<0.02	4.4	440	140	<5	<10	0.18
	31/03/2025	7.0	210	8	9.2	260	0.08	<10	72	<0.02	2.3	41	9.5	<5	<10	0.13
	8/04/2025	6.3	610	8.3	6.7	760	0.08	0.44	230	<0.2	<1	140	29	<10	<10	0.13
	9/05/2025	6.8	340	<5	-	480	0.08	<0.1	120	<0.2	1.7	71	40	<5	<10	0.33
	25/06/2025	6.2	2,000	6.6	5.9	3,500	<0.2	0.07	1,700	<0.2	<0.2	510	250	<5	17	0.14
	8/07/2025	6.0	470	<5	8	910	0.05	0.03	230	0.07	<0.2	130	41	<5	13	0.18
	14/08/2025	6.2	570	16	6.1	930	0.08	0.03	550	<0.02	16	140	62	6.5	13	0.11
	11/09/2025	6.5	940	5.4	6.9	1,700	0.04	0.05	440	<0.02	1.7	260	61	<5	9	0.14
	13/10/2025	6.8	6,600	<5	5.4	11,000	0.05	0.1	3,300	<0.02	1.7	1,800	370	<5	12	0.11
	20/11/2025	6.6	4,600	<5	4.3	9,000	0.1	0.21	2,600	<0.02	0.4	1,400	320	<5	12	0.12
	16/12/2025	6.8	11,000	18	4.1	18,000	0.07	0.28	6,100	<0.5	1.2	2,800	720	<5	34	0.12
	21/01/2026	7.4	25,000	9.5	7.8	37,000	0.03	0.02	12,000	12	1.1	6,300	1,500	<0.005	14	0.13
	20/02/2026	6.9	21,000	8.4	4.9	32,000	0.02	<0.01	10,000	<0.02	0.8	5,400	410	<0.005	10	0.04
	20/03/2026	6.3	1,400	25	5.5	2,700	0.28	0.09	720	<0.02	1.7	370	98	<0.005	<10	0.14
SW05 Baseline		**5.1 – 7.2**	**4710**	**136**	**-**	**6,927**	**0.21**	**0.592**	**980**	**0.02**	**2.2**	**1,667**	**115**	**63**		**<0.5***

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Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW05	29/09/2022	0.83	<0.001	<0.0002	9.4	0.002	<0.001	4.6	<0.001	17	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.66	<0.001	<0.0002	11	0.001	<0.001	3.5	0.001	19	<0.0001	0.002	7.9	0.007	<1
	14/11/2022	0.75	<0.001	<0.002	18	<0.001	0.002	5.4	<0.01	27	<0.001	<0.001	11	0.12	<1
	14/12/2022	0.93	<0.001	<0.002	16	<0.01	<0.01	6.1	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.73	<0.01	<0.002	<2	<0.01	<0.01	6.2	<0.01	96	<0.001	<0.01	41	<0.05	<1
	20/02/2023	0.22	0.002	<0.0002	190	0.001	0.01	<0.001	<0.001	550	<0.001	0.001	170	0.008	<1
	28/03/2023	0.77	<0.01	<0.002	9.4	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.4	<0.05	<1
	18/04/2023	1	<0.001	<0.0002	42	0.001	<0.001	<0.001	<0.001	110	<0.0001	0.003	37	0.008	<1
	18/05/2023	0.6	<0.001	<0.0002	5.2	<0.001	<0.001	2.4	<0.001	9.1	<0.0001	0.002	4.9	0.009	<1
	15/06/2023	0.32	<0.001	<0.0002	14	0.001	2	2	<0.001	27	<0.0001	0.001	14	0.01	<1
	24/07/2023	0.33	<0.001	<0.0002	22	<0.001	<0.001	1.9	<0.001	52	<0.0001	0.002	25	0.006	<1
	21/08/2023	0.41	<0.001	<0.0002	23	<0.001	0.002	2.2	<0.001	54	<0.0001	0.002	29	0.005	<1
	18/09/2023	0.28	<0.001	<0.0002	29	<0.001	<0.001	2.6	<0.001	70	<0.0001	0.001	42	<0.005	<1
	18/10/2023	0.27	<0.001	<0.0002	61	<0.001	<0.001	2	<0.001	160	<0.0001	<0.001	76	<0.005	<1
	20/11/2023	0.51	0.001	<0.0002	25	0.001	<0.001	4.3	<0.001	56	<0.0001	0.002	27	<0.005	<1
	19/12/2023	0.54	0.005	0.0028	46	0.001	0.001	4.2	0.001	120	0.002	0.002	47	0.009	<1
	23/01/2024	0.9	0.003	<0.0002	16	0.002	0.001	7.8	<0.001	32	<0.0001	0.001	16	0.012	<1
	26/02/2024	0.63	0.001	<0.0002	13	0.001	<0.001	3.7	<0.001	23	<0.0001	0.002	10	0.029	<1
	26/03/2024	0.64	<0.001	<0.0002	16	0.001	<0.001	3.3	<0.001	33	<0.0001	0.002	14	0.008	<1
	18/04/2024	0.69	<0.001	<0.0002	8.3	0.002	0.001	<0.001	<0.001	14	<0.0001	0.008	6.7	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.6	<0.001	0.001	2.5	<0.001	5.1	<0.0001	0.002	3.5	0.008	<1
	25/06/2024	0.2	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	31	<0.0001	0.002	12	0.012	<1
	10/07/2024	0.48	<0.001	<0.0002	17	<0.001	<0.001	2.9	<0.001	31	<0.0001	0.002	11	0.008	<1
	6/08/2024	0.28	<0.001	<0.0002	37	<0.001	<0.001	<0.001	<0.001	100	<0.0001	0.001	30	0.007	<1
	15/08/2024	0.5	<0.001	<0.0002	5	0.001	<0.001	1.6	<0.001	8	<0.0001	0.001	4.6	0.01	<1
	11/09/2024	0.52	<0.001	<0.0002	14	<0.001	<0.001	2.9	<0.001	25	<0.0001	0.002	10	0.011	<1
	9/10/2024	0.85	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.5	0.016	<1
	6/11/2024	0.68	<0.001	<0.0002	17	0.002	<0.001	3.8	<0.001	29	<0.0001	0.002	12	0.008	<1
	16/12/2024	<0.05	<0.001	<0.0002	<0.5	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.24	0.002	<0.0002	230	0.002	<0.001	0.64	<0.001	660	<0.0001	<0.001	210	0.006	<1
	11/02/2025	0.12	0.002	<0.0002	290	0.001	<0.001	0.5	<0.001	820	<0.0001	<0.001	260	0.047	<1
	24/03/2024	0.54	<0.001	<0.0002	22	<0.001	0.001	3.2	<0.001	53	<0.0001	0.002	17	0.32	<1
	31/03/2025	0.58	<0.001	<0.0002	4.2	<0.001	<0.001	3.7	<0.001	5.2	<0.0001	0.002	3.5	0.062	<1
	8/04/2025	0.77	<0.001	<0.0002	9.9	0.001	<0.001	4.2	<0.001	18	<0.0001	0.002	6	0.011	<1
	9/05/2025	0.75	<0.001	<0.0002	6.3	0.001	<0.001	3.2	<0.001	8.5	<0.0001	0.002	3.7	0.015	<1
	25/06/2025	0.46	<0.001	<0.0002	26	<0.001	<0.001	2	<0.001	63	<0.0001	0.001	19	0.01	<1
	8/07/2025	0.68	<0.001	<0.0002	9.1	0.001	<0.001	3	<0.001	16	<0.0001	0.002	4.9	0.008	<1
	14/08/2025	0.46	<0.001	<0.0002	8.6	<0.001	<0.001	2.6	<0.001	17	<0.0001	0.001	6.2	0.008	<1
	11/09/2025	0.55	<0.001	<0.0002	15	<0.001	<0.001	3.2	<0.001	33	<0.0001	0.001	11	0.01	<1
	13/10/2025	0.21	<0.001	<0.0002	77	<0.001	<0.001	2	<0.001	220	<0.0001	<0.001	69	<0.005	<1
	20/11/2025	0.32	0.001	<0.0002	63	0.001	<0.001	2.7	<0.001	180	<0.0001	0.001	53	<0.005	<1
	16/12/2025	0.2	0.001	<0.0002	120	0.001	0.001	1.4	<0.001	340	<0.0001	0.001	110	0.008	<1
	21/01/2026	0.08	0.002	<0.0002	250	0.001	<1	0.47	<1	760	<0.0001	<0.001	240	0.009	<1
	20/02/2026	0.1	0.002	<0.0002	220	<0.001	<0.001	1.4	<0.001	640	<0.0001	<0.001	260	0.006	<1
	20/03/2026	0.53	<0.001	<0.0002	22	<0.001	0.001	4.6	<0.001	46	<0.0001	0.002	17	0.011	<1
SW05 Baseline		**2.1**	**0.002**	**0.001**	**57**	**0.002**	**0.003**	**12.3**	0.001	**130**	**0.0005**	**0.011**	**58**	**0.026**	**<1***

Harvest Estate
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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW05	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	70	70	-	-	<20	60	100	-	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	120	120	<100	120	<20	<50	120	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW05 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Harvest Estate
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Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW06	29/09/2022	6.0	480	<5	7.8	580	0.13	0.16	220	<0.02	8.6	140	11	5.1		0.05
	20/10/2022	6.3	580	16	8.7	730	0.05	0.19	330	<0.02	0.5	110	7.5	6.2		0.02
	14/11/2022	6.2	840	13	<5	1000	0.04	0.36	310	<0.10	1.1	270	100	<5		0.32
	14/12/2022	6.3	840	16	8.3	1200	0.1	0.05	340	<0.10	5.8	240	44	<5		0.13
	18/01/2023	6.4	3,700	31	6.8	5,400	0.07	0.04	1,800	<0.02	2.5	1,000	200	<5		0.11
	20/02/2023	6.8	19	89	5.1	14,000	0.09	0.11	22	<0.10	4.1	4,000	1,200	<5		54.55
	28/03/2023	5.6	400	6.2	8.3	730	0.03	0.07	180	<0.20	<0.20	110	18	9.7		0.10
	18/04/2023	6.7	6,400	18	7.4	6,700	0.07	1.2	3,200	<0.02	1.26	1,700	360	<10		0.11
	18/05/2023	5.9	280	17	6.3	470	0.08	0.06	120	<0.02	0.4	370	21	<5		0.18
	15/06/2023	6.4	1,100	<5	7.4	1,400	0.55	0.18	440	<0.02	0.7	250	38	<5		0.09
	24/07/2023	6.7	2,100	5.8	6.6	3,500	0.07	0.23	1,800	<0.2	0.6	540	620	<5		0.34
	21/08/2023	6.6	2,800	<5	6.1	5,400	0.19	0.16	1,300	<0.02	0.78	870	59	<5		0.05
	18/09/2023	6.7	2,900	24	6.5	4,600	0.06	0.12	1,500	<0.02	0.4	1,300	200	<5		0.13
	18/10/2023	6.9	7,900	6.3	6.4	9,700	0.05	0.05	3,700	<0.02	<0.2	1,600	430	<5		0.12
	20/11/2023	6.6	2,200	9.9	4.6	4,000	0.18	0.43	1,200	<0.01	1.2	490	720	<5		0.60
	19/12/2023	6.8	3,300	9.3	5.6	6,600	0.09	0.82	2,300	<0.02	<2	1,300	94	<5		0.04
	23/01/2024	6.2	4,300	15	2.1	4,300	0.18	0.08	2,800	<0.02	1.4	1,100	330	<5		0.12
	26/02/2024	6.4	880	17	9	1,200	0.11	0.02	60	<0.02	1.7	200	10	<5		0.17
	26/03/2024	6.8	1,300	9.9	5.9	1,900	0.05	0.07	760	0.05	1.2	300	120	<5		0.16
	18/04/2024	6.6	520	5.8	6	840	0.06	0.16	170	<0.02	<1	110	31	<5	17	0.18
	20/05/2024	6.3	240	<5	6.1	290	<0.01	0.05	59	<0.02	1	42	47	<5	15	0.80
	25/06/2024	6.7	960	17	9.2	1,900	0.06	0.09	500	<0.02	5.3	270	21	<5	19	0.04
	10/07/2024	6.2	880	<5	6.2	1,600	0.03	0.13	170	<0.02	1.4	250	33	<5	15	0.19
	6/08/2024	6.3	4,500	6.8	7.6	8,400	0.08	0.15	2,100	<0.02	1.6	1,200	270	<5	24	0.13
	15/08/2024	6.2	160	<5	7	240	0.1	0.03	57	<0.02	<0.2	38	15	<5	14	0.26
	11/09/2024	6.7	710	7	6.6	1,000	0.04	0.28	370	<0.02	1.8	180	54	<5	11	0.15
	9/10/2024	6.5	720	14	8.5	1,000	0.15	<0.01	310	<0.1	4.3	180	33	18	<10	0.11
	6/11/2024	6.9	1,900	37	5.6	2,400	0.1	0.11	890	<0.02	1.6	490	160	<5	<10	0.18
	16/12/2024	7.7	33,000	13	9.5	47,000	0.01	0.18	16,000	<0.02	<0.2	<0.5	2,100	<5	<10	0.13
	14/01/2025	7.2	25,000	11	6.3	38,000	0.03	0.06	15,000	<0.02	0.7	7,200	600	<5	<10	0.04
	11/02/2025	7.6	24,000	11	7.2	34,000	0.003	0.06	6,100	<0.02	<0.2	7,200	240	5.9	<10	0.04
	24/03/2025	6.5	1,700	<5	6.8	2,500	<0.1	0.12	820	<0.02	4.2	450	110	<5	<10	0.13
	31/03/2025	6.7	250	11	9.5	250	0.08	<10	68	<0.02	<1	42	9.7	<5	<10	0.14
	8/04/2025	6.4	610	7.6	9.4	740	0.08	0.28	260	<0.2	<1	140	31	<10	<10	0.12
	9/05/2025	6.6	260	<5	-	490	0.07	<0.1	120	<0.2	<1	70	28	<5	<10	0.23
	25/06/2025	6.2	2,000	7.4	5.9	3,600	1.4	0.08	1,700	<0.2	1.4	520	260	<5	20	1.50
	8/07/2025	6.0	470	<5	8.2	910	0.05	0.02	230	<0.02	<0.2	130	28	<5	13	0.12
	14/08/2025	6.3	590	31	6.1	910	0.07	0.03	340	<0.02	0.3	140	37	<5	13	0.11
	11/09/2025	6.6	1,299	6.8	7.1	2,200	0.04	0.05	590	<0.02	5.6	340	67	<5	<10	0.11
	13/10/2025	6.8	14,000	5.9	4.9	23,000	0.04	0.29	7,400	<0.02	0.6	4,100	830	5.9	14	0.11
	20/11/2025	6.7	8,400	<5	4.5	14,000	0.09	0.22	4,800	<0.02	0.7	2,300	1,100	<5	12	0.23
	16/12/2025	6.9	12,000	20	3.8	19,000	0.09	0.32	6,100	<0.5	1.8	2,900	750	7	28	0.12
	21/01/2026	7.4	18,000	7.1	7.4	28,000	0.03	<0.01	8,400	8.4	1	4,700	1,000	<0.005	12	0.12
	20/02/2026	7	19,000	<5	5.9	33,000	0.02	0.05	12,000	<0.02	0.3	5,800	520	0.0058	17	0.04
	20/03/2026	6.4	1,400	20	4.3	2,800	0.16	0.13	770	<0.02	2.4	390	100	<0.005	<10	0.13
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		**6.5 – 8.0**	**-**	**<50**	**-**	**<2200**	**<0.05**	**-**	**-**	**-**	**<0.50**	**-**	**-**	**5**		**<0.5***

Note: * derived from Interim Target Criteria within BCPoM, GWMP and AFMP (AWC 2020)

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Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW06	29/09/2022	0.78	<0.001	<0.0002	9.4	0.002	<0.001	4.5	<0.001	18	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.54	<0.001	<0.0002	9.1	0.001	<0.001	2.7	0.001	13	<0.0001	0.002	5.8	0.012	<1
	14/11/2022	0.68	<0.001	<0.002	18	<0.001	0.012	5.3	<0.01	29	<0.001	<0.01	12	0.11	<1
	14/12/2022	0.75	<0.001	<0.002	16	<0.01	<0.01	5.4	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.63	<0.010	<0.001	<2	<0.01	<0.01	0.01	<0.01	120	<0.001	<0.01	47	<0.05	<1
	20/02/2023	0.34	0.002	<0.0002	170	0.001	0.01	<0.001	<0.001	480	<0.001	0.002	160	0.008	<1
	28/03/2023	1.1	<0.01	<0.002	11	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.3	<0.05	<1
	18/04/2023	0.54	<0.001	<0.0002	68	0.001	<0.001	<0.001	<0.001	200	<0.0001	0.002	63	0.009	<1
	18/05/2023	0.44	0.003	<0.0002	14	<0.001	<0.001	0.13	<0.001	4.8	<0.0001	0.008	3.3	<0.005	<1
	15/06/2023	0.36	<0.001	<0.0002	15	<0.001	2.1	2.1	<0.001	28	28	0.001	14	<0.005	<1
	24/07/2023	0.36	<0.001	<0.0002	26	<0.001	<0.001	1.9	0.001	65	<0.0001	0.002	29	0.007	<1
	21/08/2023	0.41	<0.001	<0.0002	39	0.001	<0.001	1.9	<0.001	100	<0.0001	0.002	46	<0.005	<1
	18/09/2023	0.3	<0.001	<0.0002	56	<0.001	<0.001	2.4	<0.001	150	<0.0001	0.001	64	<0.005	<1
	18/10/2023	0.2	<0.001	<0.0002	73	<0.001	<0.001	1.7	<0.001	190	<0.0001	<0.001	85	<0.005	<1
	20/11/2023	0.63	0.001	<0.0002	27	0.001	<0.001	4.5	<0.001	60	<0.0001	0.003	28	0.01	<1
	19/12/2023	0.62	0.002	0.0007	56	0.001	0.002	3.4	<0.001	150	0.0005	0.002	55	0.008	<1
	23/01/2024	0.71	0.003	<0.0002	50	0.002	<0.001	5.7	<0.001	140	<0.0001	<0.001	46	0.008	<1
	26/02/2024	0.61	<0.001	<0.0002	14	0.003	<0.001	3.5	<0.001	24	<0.0001	0.005	10	0.025	<1
	26/03/2024	0.61	<0.001	<0.0002	17	0.001	<0.001	3.1	<0.001	34	<0.0001	0.002	15	0.008	<1
	18/04/2024	0.71	<0.001	<0.0002	10	0.001	<0.001	<0.001	<0.001	13	<0.0001	0.008	7.6	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.7	<0.001	<0.001	2.3	<0.001	4.8	<0.0001	0.002	3.2	0.009	<1
	25/06/2024	0.23	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	28	<0.0001	0.002	11	0.016	<1
	10/07/2024	0.5	<0.001	<0.0002	17	<0.001	<0.001	2.6	<0.001	28	<0.0001	0.002	10	0.01	<1
	6/08/2024	0.31	<0.001	<0.0002	50	<0.001	<0.001	<0.001	<0.001	140	<0.0001	0.002	40	0.011	<1
	15/08/2024	0.51	<0.001	<0.0002	4.8	<0.001	0.001	1.6	<0.001	4.6	<0.0001	0.002	3	0.011	<1
	11/09/2024	0.46	<0.001	<0.0002	14	<0.001	<0.001	2.1	<0.001	20	<0.0001	0.002	11	0.012	<1
	9/10/2024	0.84	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.7	0.009	<1
	6/11/2024	0.79	<0.001	<0.0002	25	0.002	<0.001	4.1	<0.001	60	<0.0001	0.002	20	0.01	<1
	16/12/2024	4.4	0.007	<0.0002	29	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.15	0.002	<0.0002	300	0.002	<0.001	0.3	<0.001	860	<0.0001	<0.001	270	<0.005	<1
	11/02/2025	0.09	0.002	<0.0002	300	0.001	<0.001	0.38	<0.001	850	<0.0001	<0.001	270	0.048	<1
	24/03/2025	0.55	<0.001	<0.0002	22	<0.001	<0.001	3.4	<0.001	54	<0.0001	0.002	17	0.027	<1
	31/03/2025	0.59	0.001	<0.0002	4.2	<0.001	<0.001	3.3	<0.001	5.3	<0.0001	0.002	3.5	0.044	<1
	8/04/2025	0.8	<0.001	<0.0002	9.9	0.003	<0.001	4.1	<0.001	18	<0.0001	0.002	6	0.007	<1
	9/05/2025	0.74	<0.001	<0.0002	6.3	0.001	0.001	2.8	<0.001	8.5	<0.0001	0.002	3.7	0.01	<1
	25/06/2025	0.7	<0.001	<0.0002	26	<0.001	<0.001	2.6	<0.001	64	<0.0001	0.002	20	0.008	<1
	8/07/2025	0.55	<0.001	<0.0002	11	0.001	0.001	2.3	<0.001	13	<0.0001	0.002	6.3	0.008	<1
	14/08/2025	0.43	<0.001	<0.0002	9.1	<0.001	<0.001	2.4	<0.001	16	<0.0001	0.001	6.3	0.011	<1
	11/09/2025	0.51	<0.001	<0.0002	19	0.001	<0.001	2.9	<0.001	42	<0.0001	0.001	14	0.008	<1
	13/10/2025	0.12	0.001	<0.0002	170	<0.001	<0.001	1.2	<0.001	500	<0.0001	<0.001	150	0.006	<1
	20/11/2025	0.26	0.001	<0.0002	99	0.001	<0.001	1.9	<0.001	280	<0.0001	0.001	86	0.006	<1
	16/12/2025	0.17	0.001	<0.0002	120	<0.001	<0.001	1.3	0.001	340	<0.0001	0.001	110	<0.005	<1
	21/01/2026	0.1	0.002	<0.0002	200	<0.001	<1	0.35	<1	560	<0.0001	<0.001	180	0.006	<1
	20/02/2026	0.1	0.002	<0.0002	240	<0.001	<0.001	0.58	<0.001	690	<0.0001	<0.001	280	0.028	<1
	20/03/2026	0.6	0.001	<0.0002	24	0.001	0.002	4.8	<0.001	48	<0.0001	0.002	18	0.014	<1
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		**0.055**	**0.013**	**0.0002**	**-**	**0.0033**	**0.0018**	**0.3**	**0.0034**	**-**	**0.0006**	**0.011**	**-**	**0.008**	**<1***

Note: * derived from Interim Target Cri

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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW06	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	-	-	<20	<50	<100	<100	-	<100
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	90	90	<100	<100	<20	160	<100	<100	160	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<100	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	2.1	2.1	<100	<100	<20	<50	0.9	<100	0.9	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		-	-	-	-	-	-	-	-	-	-

Note: * derived from Interim Target Cri

APPENDIX D

Photolog

PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
1	20/03/2026

Description

Surface water monitoring location SW02.



Photo No.	Date
2	20/03/2026

Description

Surface water monitoring location SW05.



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
3	20/03/2026

Description

Surface water monitoring location SW03.



Photo No.	Date
4	20/03/2026

Description

Groundwater monitoring location MW3



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
5	20/03/2026

Description

Surface water monitoring location SW01



Photo No.	Date
6	20/03/2026

Description

Groundwater water monitoring location MW7.



MONTHLY WATER QUALITY MONITORING REPORT

Harvest Estate Urban Development

Monitoring Event: 21st April 2026

Ewingsdale Road, Byron Bay, NSW, 2481

Job Number: 217140

For:

Planit Consulting

By:

ENV Services Pty Ltd

Date:

13/05/2026

ENV Services Pty Ltd

313 River Street, Ballina NSW 2478

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E: admin@envsolutions.com.au

www.envsolutions.com.au

DOCUMENT CONTROL

Job No:	Job Number: 217140
Client:	Planit Consulting
Filename:	217140_Harvest Estate_WQ_March_2026

	Name:	**Date:**	**Signature:**
Prepared By:	Austin Metcalfe-Smith Environmental Scientist	13/05/2026	
Reviewed By:	Kingsley Baldwin Environmental Team Leader	15/05/2026	

Revision:	**Date:**	**Details:**

SCOPE OF ENGAGEMENT AND LIMITATIONS

This report has been prepared by ENV Services at the request of Planit Consulting for the purpose of consolidating and assessing water quality monitoring (surface water and ground water) data to determine impact associated with the development of the Harvest Estate. No other parties may rely on the contents of this report for any purposes except those stated.

This report has been prepared based on the information provided to us and from other information obtained as a result of enquiries made by us. ENV accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this document for a purpose other than that described above.

No part of this report may be reproduced, stored, or transmitted in any form without the prior consent of ENV.

ENV declares that it does not have, nor expects to have, a beneficial interest in the subject project.

To avoid this advice being used inappropriately, it is recommended that you consult with ENV before conveying the information to another who may not fully understand the objectives of the report. This report is meant only for the subject site/project and should not be applied to any other.

1 INTRODUCTION

ENV Services Pty Ltd (ENV) was engaged by Planit Consulting to prepare a Monthly Water Quality Report (MWQR) to meet requirements outlined in the Harvest Estate Development Conditions of Consent (11b - d, 32, 33 & 78) and Section 6.2 and 6.4 of the Planit Construction Environmental Management Plan (CEMP). Monitoring has been undertaken in accordance with the following approved plans.

- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate Groundwater Management Plan.* Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Belongil Creek Plan of Management*. Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate West Byron Urban Release Area; Acid Frog Management Plan.* Dated August 2020.

Baseline water quality parameters outlined in this report have been derived from mean or range values calculated over a 12-month sampling period undertaken between 25 May 2020 and 17 May 2021. This baseline water quality monitoring was carried out by Australian Wetlands Consulting (AWC) and undertaken in accordance with the Harvest Estate Groundwater Management Plan (AWC 2020) and the Harvest Estate – Belongil Creek Plan of Management (AWC 2020).

Guideline water quality trigger values have been derived from the ANZG (2018) Water Quality Guidelines and ANZECC (2000) guidelines for Fresh and Marine Water Quality. These guidelines define Belongil Creek as a lowland river of South-Eastern Australia, with trigger values chosen to reflect this. In assessing human disturbance, this report recognises Belongil Creek as being slight to moderately disturbed. On this basis, for toxicants in water, 95% species protection default guideline values have been presented for assessed toxicants.

No construction works were being undertaken during this monitoring period, with major civil earthworks associated with Stage 1 of the Project completed in November 2023.

2 MONITORING RESULTS & OBSERVATIONS

2.1 Monthly Groundwater Monitoring

Monthly groundwater monitoring at five (5) groundwater wells (MW2 – MW5 & MW7) was carried out to assess for impact within the underlying aquifer. This monitoring was conducted in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.2 of the Planit Construction Environmental Management Plan (CEMP). Groundwater monitoring locations are presented in Appendix A.

An assessment of the monthly analytical results presented in Appendix B, Table 1, identified the following observations:

Site	Observation	Comments
MW2	pH, EC, TDS, Na, SO_4 and Al were recorded outside of baseline ranges.	pH, EC and TDS values remain elevated; Sulfate concentrations are likely associated with the oxidation of sulfide-bearing sediments (e.g. pyrite, marcasite) under fluctuating REDOX conditions, such as those induced by seasonal groundwater drawdown and rewetting cycles. Groundwater had sulfuric odour typical of oxidising ASS terrains. No site related impacts identified at this location.
MW3	Dry well	No groundwater encountered during monitoring round.
MW4	All parameters were recorded within baseline ranges with the exception SO_4	Sulfate exceedances are likely due to the oxidisation of sulfide minerals. Groundwater had sulfuric odour typical of oxidising ASS terrains. No site related impacts identified at this location.
MW5	EC, TDS and several cations/anions (SO_4, Ca, Mg and Al) concentrations were outside baseline ranges or guideline values (Al only).	Elevated EC, TDS and dissolved ions are consistent with the presence of oxidising acid sulfate soils in the vicinity of the monitoring well. These results suggest oxidation of sulfidic sediments and associated mobilisation of dissolved constituents within the groundwater system. Groundwater had sulfuric odour typical of oxidising ASS terrains. Localised impacts continue to be reported at this site.
MW7	All parameters were within baseline ranges with the exception of Al.	The observed continued reduction in sulfate concentrations since the previous reporting period suggests a return to more reducing conditions and/or dilution and flushing processes within the system. No site related impacts identified at this location.

2.2 Monthly Surface Water Monitoring

Monthly surface water sampling (SW01 – SW06) was carried out to assess for impact from site activities on the receiving environment. Monitoring was carried out in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.4 of the Planit Construction Environmental Management Plan (CEMP), which require assessment of the following analytes; physiochemical parameters, nutrient, metals, cation/anion and total recoverable hydrocarbon (TRH).

Surface water monitoring locations are presented in Appendix A and the coordinates (GDA94) of all locations tabulated and presented in Table 1. Tabulated analytical results are presented in Appendix C. Select photos of the surface water sampling programme are presented in Appendix D.

Table 1: Surface Water Monitoring Coordinates

Monitoring Location	Location	Easting	Northing
SW01	Upstream of development - Southern Swale Drain	0556852	6831954
SW02	Upstream of development - Northern Main Drain	0557145	6831963
SW03	Downstream of development - Northern Main Drain	0557411	6831604
SW04	Downstream of development - Southern Swale Drain	0557397	6831429
SW05	Receiving environment - Outlet of Southern Swale Drain	0557992	6830881
SW06	Receiving environment - Outlet of Northern Main Drain	0558257	6831214

2.2.1 Assessment of Analytical Results

An assessment of the monthly analytical results presented in Appendix C, identified the following observations:

Site	Observation	Comments
SW01	All parameters were within baseline ranges.	This site is located at an upstream location, receiving water from off-site. Previously elevated concentrations of iron and aluminium likely attributable to the emplacement of basaltic sediments from the adjacent development have returned to within baseline ranges.
SW02	All parameters were within baseline ranges.	Previously elevated levels typical of the geological (ASS) setting have improved since the previous reporting period. No site related impacts identified.

Site	Observation	Comments
SW03	All parameters were recorded within baseline ranges with the exception of pH and K.	This site is located within the Northern Main Drain, downstream of Stage 1 works and SW02. Water quality parameters are mostly consistent with upstream location SW02 and has improved since the previous reporting round. No site related impacts observed.
SW04	pH, TDS, TSS, EC, P, and cations/anions (SO_4, Na, Al, As, Ca, Fe and Mg, Cu, Pb, Ni, K and Zn) were outside baseline ranges.	This site is located downstream of Stage 1 works, within the Southern Swale Drain. Surface water observed to be very shallow (<4cm) and inundated by vegetation. Elevated TSS and nutrient concentrations are attributed to organic debris collected within the shallow water at the sampling point. No site related impacts identified.
SW05	TDS, EC, NH_3 and cations/anions (Cl, Na, SO_4, Ca, Mg) were recorded outside of baseline ranges.	Elevated concentrations associated with tidal influences. No site related impacts observed.
SW06	TSS, N and cation/anions (Al, Fe, Pb, Zn) were recorded outside ANZG default guideline values (95%ile for slightly disturbed Freshwater Ecosystems).	Water quality appears relatively consistent with upstream location SW05. No site related impacts observed.

3 RAINFALL

During this monitoring period (21/03/2026 – 21/04/2026), 84 mm of rain was recorded in the area (Byron Bay, Cape Byron Lighthouse, Bureau of Meteorology).

4 CONCLUSION & RECOMMENDATIONS

4.1 Conclusion

Monitoring results indicate that impacts associated with exposure of acid sulfate soils (ASS) and vegetation overgrowth at surface water location SW04 (Southern Swale Drain) are impacting analyte concentrations exhibiting a rise since the previous reporting period.

Water quality reported at SW03 is noted to be consistent with results reported from the upstream catchment (SW02), with the exception of potassium inferring no discernible site related impacts.

The monitoring period was characterised by moderate rainfall (84 mm), which may have influenced observed water quality trends.

Groundwater monitoring results suggest indicators of localised ASS-related impacts are fluctuating in the vicinity of MW5 and at MW2, with trend analysis reflecting seasonal groundwater drawdown and rewetting cycles.

4.2 Recommendations

Based on the findings of this monitoring program, the following recommendations are provided to support ongoing management of site water quality:

- Given that pH across the site is generally within, or above, baseline water quality conditions, no corrective actions are currently warranted.
- Due to the current vegetation overgrowth at SW04, it is recommended to clear a designated sampling zone which ENV can conduct prior to the next sampling event.
- Continue to monitor signs of ASS oxidation at all MW locations.

APPENDIX A

Figures



Legend

Site Location

0 0.5 1km

Figure 1 – Site Location
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

ENV Solutions
ENVIRONMENTAL | ASBESTOS | REMEDIATION | RESOURCE RECOVERY

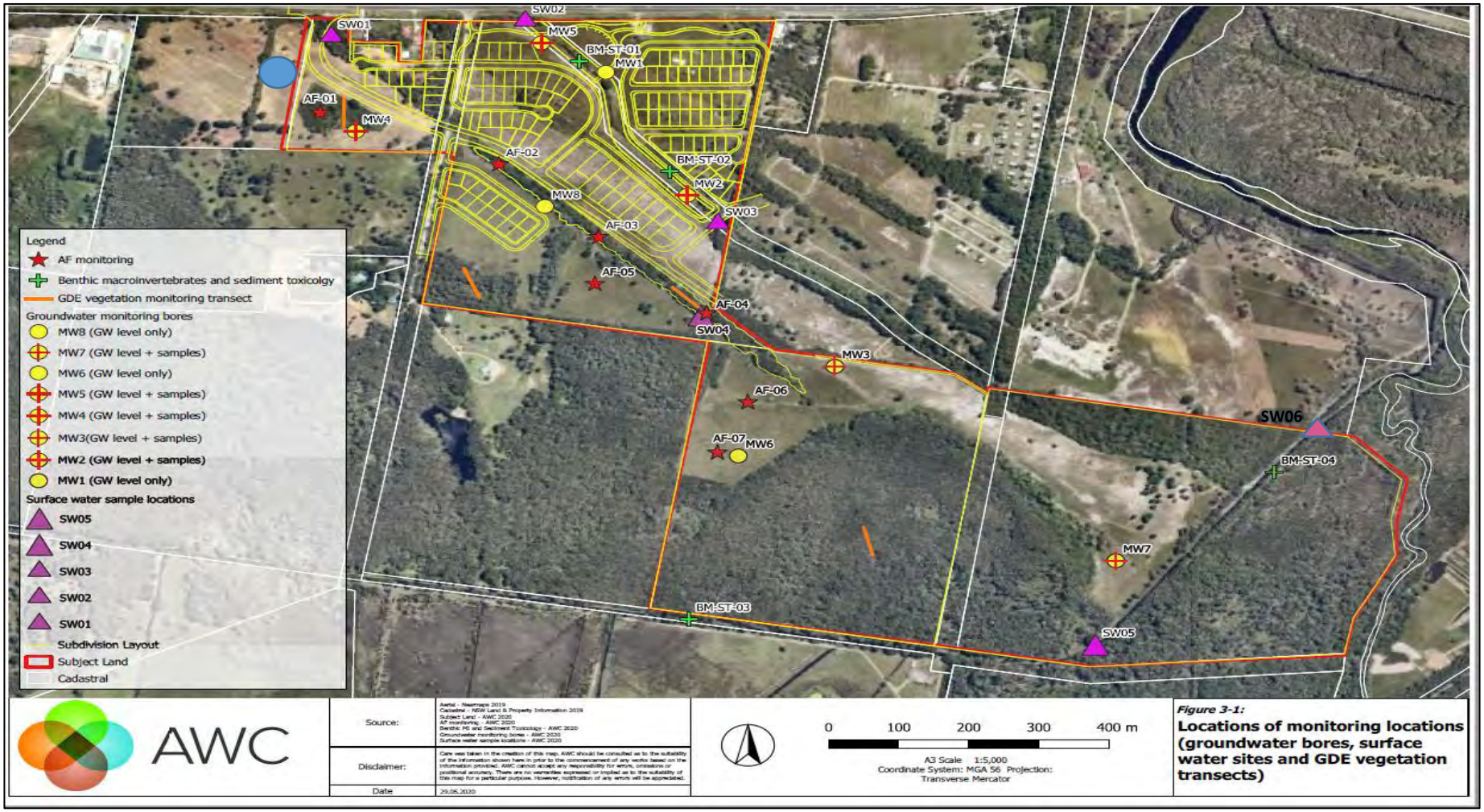


Figure 2 – AWC Monitoring Locations
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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APPENDIX B

Groundwater Quality Analytical Results

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW2	29/09/22	5.8	54	92	<5	0.12	0.51	14	0.02	0.5	30	< 2	< 0.5	0.8	2.4			0.1
	20/10/22	5.6	100	110	<5	0.09	0.24	13	0.02	2	28	< 2	<0.5	0.8	2.2			0.1
	14/11/22	6.0	100	240	<5	0.07	0.24	19	<0.10	<0.2	30	< 2	1.3	1.4	2.4			0.1
	14/12/22	5.6	110	170	<5	0.02	<0.05	15	<0.10	3.1	29	5	<5	<5	<5			0.3
	18/01/23	4.6	130	76	9.2	0.12	0.09	17	<0.05	2.5	29	7	<5	<5	<5			0.4
	20/02/23	6.0	100	160	5.3	0.09	0.1	27	<0.25	0.25	27	3.7	<0.5	0.7	3.1			0.1
	28/03/23	5.9	140	92	17	0.02	0.12	15	<0.02	<0.2	21	7.2	<5	<5	<5			0.5
	18/04/23	6.2	170	88	<5	0.08	1.2	15	<0.02	7.7	18	5.2	<5	<5	<5			0.3
	18/05/23	5.9	130	76	10	0.09	0.1	13	<0.02	9	28	2.1	0.6	0.9	2.6			0.2
	25/06/23	3.3	4,500	3,000	250	0.26	1.6	45	<0.02	8.1	86	3,800	440	82	7.9			84.4
	24/07/23	6.2	220	150	<5	0.03	0.16	12	<0.2	1	24	12	<0.5	0.8	2.5			1.0
	21/08/23	5.7	120	84	<5	0.08	0.14	15	<0.02	1.7	30	2.3	<5	<5	<5			0.2
	18/09/23	5.9	120	130	11	0.04	0.15	13	<0.02	1.2	25	<2	<0.5	0.9	2.7			0.1
	18/10/23	5.6	110	73	6.6	0.3	0.11	15	<0.02	0.3	25	3	<0.5	0.9	2.8			0.2
	20/11/23	6.0	160	70	<5	0.11	0.17	16	<0.01	0.8	28	4.2	<0.5	0.8	2.6			0.3
	19/12/23	6.3	110	100	<5	0.05	0.48	16	<0.02	2.8	28	2.1	0.5	0.9	2.9			0.1
	20/01/24	6.2	150	88	<5	0.05	0.08	13	<0.02	1.1	26	<2	<0.5	0.8	3			0.1
	26/02/24	5.1	150	340	7.4	0.07	0.09	15	<0.02	8.6	36	14	0.6	1	2.7			0.9
	26/03/24	5.7	180	310	<5	0.07	0.13	16	<0.02	<1	27	6.9	<0.5	0.8	2.7			0.4
	18/04/24	5.7	170	<5	<5	0.05	0.09	15	<0.02	1.8	29	2.6	<0.5	0.9	2.8	3.6	<1	0.17
	20/05/24	5.6	160	120	<5	0.11	0.1	19	<0.02	1	32	2.9	<0.5	0.8	2.8	3.9	<1	0.2
	25/06/24	5.5	170	170	12	0.09	<0.01	21	<0.02	2.7	30	<2	<0.5	0.8	2.3	3.8	<1	0.0
	10/07/24	5.8	150	190	<5	0.03	0.11	15	<0.02	<1	28	2.2	<0.5	0.7	2.7	2.8	<1	0.1
	06/08/24	5.9	170	90	6.9	0.16	0.12	20	<0.1	2.4	25	3.3	<0.5	0.6	2.1	3.4	<1	0.2
	11/09/24	5.7	140	110	<5	0.02	0.83	21	<0.2	<1	28	<2	<0.5	0.7	2.4	2.8	<1	0.0
	09/10/24	5.9	150	210	6.3	0.21	<0.01	17	0.02	<0.2	30	2.8	<0.5	<0.5	2.6	2.4	<1	0.1
	06/11/24	5.7	120	190	6.6	2	0.02	17	-	2.3	33	<2	1	1	3.1	3.6	<1	0.1
	16/12/24	6.0	120	60	8.0	0.05	<0.1	16	<0.2	0.9	30	5.3	0.14	0.8	2.8	3.5	<1	0.3
	14/01/25	6.4	150	94	610.0	0.03	<0.05	15	<0.1	<0.25	31	<2	<0.5	0.6	2.4	2.7	1	0.1
	11/02/25	5.7	170	150	<5	0.04	<0.1	13	<0.02	<0.5	29	2.8	<0.5	0.6	2.4	2.8	<1	0.2
	24/03/25	5.7	120	190	<5	<0.05	0.05	36	0.02	4.2	28	5.8	<0.5	0.7	2.4	2.7	<1	0.2
	08/04/25	5.7	120	220	<5	0.02	0.03	16	0.03	<2	31	4.2	<0.5	0.7	2.6	3.5	<1	0.3
	09/05/25	6.0	150	210	<5	0.01	<0.1	17	<0.2	1.1	29	7	1.3	0.7	2.6	3.2	<1	0.4
	25/06/25	5.6	180	200	<5	0.06	<0.01	15	<0.02	0.8	33	22	<0.5	0.7	2.6	1.7	<1	1.5
	08/07/25	5.5	190	180	<5	0.04	0.13	14	<0.2	1.6	32	24	<0.5	0.8	2.5	1.7	<1	1.7
	14/08/25	5.8	180	160	12.0	0.07	0.11	15	<0.02	1.9	30	33	<0.5	0.8	2.5	0.82	<1	2.2
	11/09/25	5.7	190	100	<5	0.03	0.09	17	<0.02	3.1	33	31	<0.5	0.8	2.6	0.84	<1	1.8
	13/10/25	5.6	170	180	<5	0.16	0.16	18	<0.2	0.6	33	24	<0.5	0.8	2.5	2	<1	1.3
	20/11/25	5.8	180	210	6	0.08	0.25	14	<0.2	0.7	35	8.1	<0.5	0.8	2.6	1.1	<1	0.6
	17/12/25	5.7	170	100	6.8	0.09	0.17	15	<0.2	1	35	9.3	<0.5	0.9	2.5	0.99	<1	0.6
	21/01/26	5.8	160	220	<5	0.04	0.12	16	<0.02	3.5	34	7.1	<0.5	0.9	2.7	2.3	<1	0.4
	20/02/26	5.9	170	190	<5	0.08	0.03	16	<0.02	1.9	31	20	<0.5	0.7	0.7	1.1	<2	1.3
	20/03/26	5.9	170	110	7.90	0.08	0.04	17	<0.02	2.9	29	6.7	<0.5	0.7	2.4	1.3	<1	0.4
	21/04/26	6.05	170	200	<5	0.04	<0.01	16	<0.02	1.6	32	43	<0.5	0.8	2.5	1.1	<1	2.7
MW2 Baseline		**4.2 - 5.7**	**152**	**103**	**483**	**0.45**	**0.338**	**189**	**0.07**	**2.03**	**29.7**	**9.8**	**0.7**	**1.4**	**4.2**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW3	29/09/22	4.2	53	40	370	0.09	0.05	8.8	0.02	0.5	7	<2	< 0.5	1	0.6			0.1
	20/10/22	4.1	64	62	130	0.01	0.2	8	0.02	0.5	7	<2	0.5	0.9	<0.5			0.1
	14/11/22	4.6	57	84	170	0.03	0.27	7.4	<0.02	<0.2	7.1	<2	0.8	0.6	<0.5			0.1
	14/12/22	4.3	43	32	280	<0.01	<0.01	5.2	<0.02	1.1	6	<2	<5	<5	<5			0.2
	18/01/23	4.3	54	28	670	0.03	<0.01	4.1	<0.05	1.4	<5	4.1	<5	<5	<5			1.0
	20/02/23	4.2	36	40	76	0.02	<0.10	6.8	0.06	7.26	7.6	<2	<0.5	1	<0.5			0.1
	28/03/23	4.1	70	44	<5	<0.01	<0.01	7.9	<0.02	0.22	4.8	2.2	<0.5	1	0.6			0.3
	18/04/23	4.6	89	54	110	0.02	0.1	9.6	<0.02	5.7	4.3	4.3	<0.5	0.6	<0.5			0.4
	18/05/23	4.5	60	40	450	0.02	0.04	5.8	<0.02	1	4.8	2.1	0.6	0.8	<0.5			0.4
	15/06/23	4.0	84	48	22	0.27	0.4	5.5	<0.02	1.96	5	63	<0.5	0.8	<0.5			11.5
	24/07/23	4.5	85	59	160	0.04	<0.01	9.5	<0.02	<0.2	5.6	12	<0.5	0.8	<0.5			1.3
	21/08/23	3.9	110	52	100	0.01	<0.01	6.3	<0.02	<0.2	6.6	3	<0.5	1.1	<0.5			0.5
	18/09/23	Dry – no sample collected																
	18/10/23	Dry – no sample collected																
	20/11/23	4.0	96	46	120	0.03	<0.02	7.8	<0.01	0.7	5.8	5	<0.5	0.7	<0.5			0.6
	19/12/23	4.0	46	30	92	<0.01	0.04	13	<0.02	<0.2	9.7	5.6	<0.5	1.3	0.6			0.4
	20/01/24	4.2	70	28	270	0.01	<0.01	5.4	<0.02	0.6	5.5	<2	<0.5	0.8	<0.5			0.2
	26/02/24	4.5	70	50	29	0.01	0.02	10	<0.02	16	5	4.5	<0.5	0.6	<0.5			0.5
	26/03/24	4.1	67	56	110	<0.01	0.06	5.1	<0.02	0.3	4.4	6.1	<0.5	0.8	<0.5			1.2
	18/04/24	3.7	150	< 5	<5	0.05	0.01	4.6	<0.02	0.7	4	12	<0.5	0.8	<0.5	0.99	<1	0.3
	20/05/24	4.5	36	30	26	0.03	<0.01	31	<0.02	0.3	3	3.9	0.6	<0.5	<0.5	1.1	<1	0.1
	25/06/24	3.5	160	90	120	0.17	<0.01	2.8	<0.02	<0.2	3.1	5	<0.5	<0.5	<0.5	0.7	<1	0.1
	10/07/24	4.4	42	40	300	<0.01	<0.01	4.2	<0.02	0.5	3.5	2.5	<0.5	<0.5	<0.5	0.7	<1	0.6
	06/08/24	4.3	45	22	310	0.03	0.01	4.4	<0.02	3.2	2.5	<2	<.5	<0.5	<0.5	1	<1	0.2
	11/09/24	4.2	44	28	720	0.02	<0.1	5	<0.02	<1	3.7	<2	<0.5	<0.5	<0.5	1.3	<1	0.2
	09/10/24	4.2	50	32	430	0.1	<0.01	5.3	<0.02	<0.2	4.1	2.8	2.9	0.6	0.6	0.48	<1	0.2
	06/11/24	4.3	38	20	370	<0.01	0.09	4.8	-	0.9	4.6	<2	0.6	0.7	<0.5	0.84		0.2
	16/12/24	4.3	35	24	63	0.02	<0.01	4.4	<0.02	0.5	3.8	2.2	<0.5	0.7	<0.5	0.75	<1	0.5
	14/01/25	4.5	40	20	38	0.03	0.01	3.3	<0.02	0.5	2.8	<2	<0.5	<0.5	<0.5	0.75	<1	0.3
	11/02/25	4.2	64	36	8.2	<0.01	<0.01	2.9	<0.02	<0.2	3.1	4.4	<0.5	<0.5	<0.5	1.1	<1	1.5
	24/03/25	4.0	79	50	150	0.02	<0.01	13	<0.02	0.9	5.8	3.9	0.8	1.1	<0.5	0.52	1.5	0.3
	08/04/25	4.2	71	38	160	<0.01	0.02	11	<0.02	0.9	7.3	4.1	0.9	1.4	2.6	0.58	1.5	0.4
	09/05/25	4.5	73	74	210	<0.01	0.02	9.9	<0.02	0.8	7	3.1	0.7	0.9	<0.5	0.74	<1	0.3
	25/06/25	4.5	42	44	170	0.05	<0.01	4.4	<0.02	1.9	5	4.3	<0.5	<0.5	<0.5	1	<1	1.0
	08/07/25	4.5	47	25	670	0.02	0.03	4.5	0.03	0.6	4.9	2.5	<0.5	<0.5	<0.5	1	<1	0.6
	14/08/25	4.8	34	38	550	0.06	0.06	3.8	0.02	5.7	3.6	4	<0.5	<0.5	<0.5	0.5	<1	1.0
	11/09/25	4.6	42	28	2,500	0.02	0.3	4.7	0.11	2.1	4.7	3.5	<0.5	<0.5	<0.5	0.49	<1	0.7
	13/10/25	Dry – no sample collected																
	20/11/25	Dry – no sample collected																
	17/12/25	Dry – no sample collected																
	21/01/26	Dry – no sample collected																
	20/02/26																	
	20/03/26	4.2	81	50	780	0.8	<0.1	10	<0.02	<0.02	5.1	<2	<0.5	1.6	<0.5	0.63	<1	0.2
	21/04/26	Dry – no sample collected																
MW3 Baseline		**4.0 - 5.3**	**206**	**140**	**5223**	**1.57**	**0.294**	**121**	**0.167**	**4.14**	**26.4**	**13.4**	**3.8**	**5.3**	**3.1**	**<1.0***	**<1***	**<0.5***

Harvest Estate
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Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW4	29/09/22	4.5	100	88	350	0.03	0.16	22	0.1	1.5	19	<2	3.6	3.7	0.9			0.0
	20/10/22	4.5	110	100	69	0.02	0.78	20	0.04	1	14	<2	3.9	2.1	<0.5			0.1
	14/11/22	4.2	130	340	16	0.01	0.13	30	<0.10	7	22	5	2.6	4.8	1.1			0.2
	14/12/22	4.2	140	140	60	<0.01	<0.05	23	<0.10	3	21	7.8	<5	<5	<5			0.3
	18/01/23	5.7	170	110	170	0.02	0.16	26	<0.50	2.4	20	6.6	<5	<5	<5			0.3
	20/02/23	3.9	87	110	31	0.04	<0.05	15	0.28	3.88	15	5.8	3.5	5.4	0.9			0.4
	28/03/23	4.7	180	120	190	0.04	0.08	28	<0.02	22	18	6	8.8	5.1	<5			0.2
	18/04/23	3.7	500	280	340	0.11	0.07	27	<0.02	0.9	19	130	3.4	5	<0.5			4.8
	18/05/23	5.4	110	72	70	0.03	<0.01	14	<0.02	2.89	11	10	5.7	3.7	<0.5			0.7
	15/06/23	3.8	200	150	130	1.4	0.29	29	<0.02	0.9	21	12	<5	6	<5			0.4
	24/07/23	4.1	170	94	58	0.03	<0.1	24	<0.2	1	20	17	2.8	6.2	0.6			0.7
	21/08/23	3.8	200	120	75	0.03	0.07	18	0.65	1.76	15	3.6	2	5	<0.5			0.2
	18/09/23	3.8	160	86	21	0.02	0.11	19	0.02	1.1	17	10	1.5	4.1	<0.5			0.5
	18/10/23	3.8	190	110	31	0.08	0.08	25	<0.02	0.9	18	9.3	1.7	4.5	0.5			0.4
	20/11/23	4.4	160	870	28	0.05	0.1	22	<0.01	2.2	15	5.8	3.3	4	0.7			0.3
	19/12/23	4.0	190	130	27	0.03	0.41	38	<0.02	1.5	22	13	3.3	7.8	1			0.3
	20/01/24	4.2	170	120	27	0.01	0.02	24	<0.02	1.2	17	2.9	5.4	5.1	<0.5			0.1
	26/02/24	3.6	290	190	96	0.03	0.07	27	<0.02	6.9	17	38	10	4.1	<0.5			1.4
	26/03/24	5.6	150	140	18	0.02	0.58	25	<0.02	1.1	15	7	9.3	3.8	<0.5			0.3
	18/04/24	4.3	140	90	12	0.02	0.04	17	<0.02	24	13	6.7	3.2	3.6	<0.5	1.1	2.9	0.4
	20/05/24	5.9	200	180	9.4	0.01	0.83	15	<0.02	1.1	10	5.6	9.6	2.1	<0.5	1.5	6.4	0.4
	25/06/24	4.2	120	100	33	0.1	<0.01	15	<0.02	1.4	9.1	2.3	3.5	2.2	<0.5	1.7	<1	0.2
	10/07/24	6.3	79	46	16	0.02	0.12	8.7	<0.02	1.4	6.4	4	9.7	1	<0.5	0.55	<1	0.5
	06/08/24	4.4	170	100	24	0.02	0.12	26	<0.02	2.4	12	5.5	1.5	3.2	<0.5	0.86	<1	0.2
	11/09/24	5.2	110	74	27	0.02	0.14	21	<0.02	0.6	12	2.5	7.2	2.9	<0.5	1.3	<1	0.1
	09/10/24	4.1	150	140	190	0.1	0.07	25	0.03	0.9	15	6.2	2.9	4	0.7	1.2	<1	0.2
	06/11/24	4.4	130	180	40	0.51	0.04	22	-	1.9	15	2.3	4.7	4.8	<0.5	1.4	3.4	0.1
	16/12/24	5.7	80	70	<5	0.02	<0.1	18	<0.2	1	11	4.1	8.1	3	<0.5	0.99	7.2	0.2
	14/01/25	4.1	180	120	86	0.02	1.3	26	<0.02	1.2	14	2.4	4.4	3.8	<0.5	1.6	<1	0.1
	11/02/25	4.1	170	150	<5	0.01	<0.1	25	<0.02	<0.5	16	3.1	2.5	4.8	<0.5	1.8	<1	0.1
	24/03/25	5.0	110	84	39	<0.05	0.04	22	0.02	5	13	7.6	4.9	3.4	<0.5	0.85	5.8	0.3
	08/04/25	5.2	90	130	22	<0.01	0.03	16	<0.02	1	10	3.7	6.9	2.7	<0.5	0.58	12	0.2
	09/05/25	6.0	110	140	45	-	-	14	<0.2	-	8.7	2.7	11.0	2	<0.5	0.8	14	0.2
	25/06/25	5.4	98	140	130	0.06	0.01	12	0.2	1.6	8.8	8.2	8.6	1.6	<0.5	0.98	8.8	0.7
	08/07/25	5.0	110	100	300	0.01	0.23	15	<0.2	<0.5	11	9.4	5.7	2.4	<0.5	1.7	3.4	0.6
	14/08/25	5.7	110	150	600	0.11	0.12	15	0.04	4.7	9.6	4.3	10.0	2	<0.5	0.64	<1	0.3
	11/09/25	4.4	140	89	290	0.02	0.15	25	0.07	4.2	15	7.3	4.0	3.5	0.9	1.1	3.6	0.3
	13/10/25	4.3	160	210	120	0.11	0.42	30	<0.2	<2	18	2.8	2.9	4.5	0.8	2.2	1.3	0.1
	20/11/25	4.2	160	220	140	0.06	0.22	22	<0.2	1.1	16	2.2	2.7	4.1	0.6	1.2	2.3	0.1
	17/12/25	4.1	170	110	170	0.02	<0.1	26	<0.2	1.9	20	2.9	1.4	5.6	0.9	1.1	1.3	0.1
	21/01/26	4.5	120	190	370	0.25	0.04	14	0.03	3.5	12	5.1	4.9	3.4	<0.5	1.5	3.3	0.4
	20/02/26	4.1	280	290	200	0.1	<0.1	28	<0.2	1.8	24	42	5.8	11	0.8	0.99	5.9	1.5
	20/03/26	5.1	270	170	130	0.13	<0.1	23	<0.2	2.8	20	19	16	7.9	<0.5	0.74	21.6	0.8
	21/04/26	4.99	300	230	110	0.04	<0.01	24	<0.02	1.5	19	86	6.3	8.2	<0.5	0.87	7.2	3.6
MW4 Baseline		**4.0 - 5.8**	**890**	**605**	**1220**	**0.43**	**1.392**	**199**	**0.185**	**4.36**	**146.3**	**19.2**	**11.3**	**15.6**	**5.4**	**<1.0***	**<1***	**<0.5***

Harvest Estate
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Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW5	29/09/22	4.5	59	68	630	0.13	0.41	18	0.02	6.33	14	<2	2	3	0.6			0.1
	20/10/22	4.4	75	82	92	0.02	0.1	15	0.02	0.5	12	<2	2	2	0.5			0.1
	14/11/22	4.6	120	270	150	0.08	0.52	29	<0.10	7.8	26	<2	5	6	1.4			0.0
	14/12/22	4.5	150	150	230	0.02	<0.060	29	<0.05	11	24	10	<5	<5	<5			0.3
	18/01/23	2.8	1,600	1,100	480	0.05	1.7	43	<0.05	5.7	49	7	90	72	<5			0.2
	20/02/23	2.6	2,700	3,200	310	0.03	4.2	27	<0.05	3.2	47	750	390	76	7.8			27.8
	28/03/23	3.0	5,200	3,700	130	0.02	5.9	28	<0.02	11	34	1,100	440	57	7.1			39.3
	18/04/23	2.9	3,800	5,100	300	0.01	4	44	<0.02	4	49	3,800	380	120	4.7			86.4
	18/05/23	3.4	3,100	3,400	150	<0.01	<0.01	15	<0.02	4.9	23	2,200	240	31	4.2			146.7
	15/06/23	2.9	3,000	1,800	640	0.3	2.9	28	<0.02	2.66	64	2,100	410	130	6.5			75.0
	24/07/23	5.5	2,800	1,600	6	0.07	0.19	1,400	<0.2	0.5	450	380	25	54	25.0			0.3
	21/08/23	3.3	5,200	3,400	13	0.03	4.6	67	<0.02	5	89	2,200	420	200	9.9			32.8
	18/09/23	3.3	4,500	5,800	6.1	0.01	4	51	0.02	3.7	67	4,300	360	140	7.9			84.3
	18/10/23	3.2	4,700	4,900	96	0.03	1.3	58	<0.02	2.1	68	710	380	130	7.3			12.2
	20/11/23	2.8	5,900	7,500	29	0.06	2.7	55	<0.01	11	60	6,600	310	100	6.8			120.0
	19/12/23	2.9	3,100	2,700	230	0.01	4.6	80	<0.02	5	80	3,500	290	86	6.9			43.8
	20/01/24	3.2	4,900	6,600	74	0.03	<0.01	52	<0.02	4.5	68	1,000	370	84	7.9			19.2
	26/02/24	2.6	3,400	4,500	180	0.03	0.59	25	<0.02	5.4	51	3,000	290	46	4.0			120.0
	26/03/24	3.2	4,400	3,500	17	0.02	1.8	140	<0.02	2.5	54	11,000	360	77	6.0			78.6
	18/04/24	3.3	4,200	2,200	39	<0.01	0.02	49	0.05	5.1	50	3,300	310	47	4.0	210	1.5	67.3
	20/05/24	3.4	3,100	1,600	8.8	0.03	3.1	53	<0.02	2.9	27	2,900	200	22	2.8	140	1.42	54.7
	25/06/24	3.2	4,100	2,700	310	0.03	<0.01	76	<0.02	7.2	75	1,400	290	60	4.3	320	<1	18.4
	10/07/24	3.5	2,300	2,600	49	0.02	<0.01	14	<0.02	3.9	20	1,900	240	20	2.4	130	<1	135.7
	06/08/24	3.3	170	3,500	14	0.19	4.6	62	<0.02	7.7	56	3,600	310	54	4.2	250	<1	58.1
	11/09/24	3.5	1,700	1,000	38	<0.01	3.9	27	<0.2	4.9	27	750	290	29	3.2	94	<1	27.8
	09/10/24	3.5	1,300	930	46	0.03	<0.01	27	<0.02	1.5	22	870	120	17	1.6	35	<1	32.2
	06/11/24	3.3	2,000	1,300	31	<0.01	4.8	44	-	5	59	680	300	62	4.9	90	3.33	15.5
	16/12/24	3.2	1,800	1,100	53	0.02	21	32	<0.2	2.8	25	980	180	21	2.4	35	5.1	30.6
	14/01/25	3.7	1,600	1,400	190	<0.01	1.3	19	<0.02	2.1	16	320	210	16	1.8	25	8.4	16.8
	11/02/25	3.5	2,000	1,700	69	0.01	2.6	160	<0.02	14	110	860	110	50	2.8	56	1.96	5.4
	24/03/25	3.6	1,000	890	38	<0.05	0.06	20	<0.02	3.3	14	570	140	8.5	1.7	17	8.24	28.5
	08/04/25	3.7	790	700	73	<0.01	0.85	36	<0.02	5.2	42	390	86	16	<0.5	13	6.6	10.8
	09/05/25	3.7	1,300	1,200	200	<0.01	1.2	87	<0.2	3.3	24	470	87	11	1.5	9.6	9.06	5.4
	25/06/25	3.7	1,300	840	140	0.21	1.5	26	<0.02	2	18	580	140	17	1.7	17	8.3	22.3
	08/07/25	4.0	720	480	170	<0.010	0.81	21	<0.2	5.4	20	280	58	10	0.9	11	5.3	13.3
	14/08/25	3.8	530	300	230	0.02	0.55	19	<0.02	5.5	11	230	28	4.3	0.5	4.5	6.2	12.1
	11/09/25	3.8	630	430	110	<0.01	0.73	41	0.04	14	35	240	33	9.7	1.3	4.4	7.5	5.9
	13/10/25	4.0	1,200	970	260	0.11	2.8	120	<0.2	<2	76	420	68	32	2.2	13	5.2	3.5
	20/11/25	3.6	1,400	1,000	59	0.05	2.4	64	<0.02	2.4	43	270	83	34	2	13	6.4	4.2
	17/12/25	3.7	1,300	650	290	0.02	2	120	<0.2	<10	19	180	83	11	<0.5	10	8.3	1.5
	21/01/26	3.8	1,000	980	300	0.12	1.8	49	<0.02	7.3	35	200	42	29	1.7	13	3.2	4.1
	20/02/26	3.7	1,500	1,500	280	0.08	3	46	<0.2	8.3	58	700	76	65	3.3	12	6.3	15.2
	20/03/26	3.7	560	330	38	0.03	0.52	33	0.03	3.1	14	62	22	7.6	0.9	11	2.0	1.9
	21/04/26	4.5	870	590	15	0.05	1.8	34	<0.02	2.9	27	400	28	23	1.8	4	15.6	11.8
MW5 Baseline		**4.3 - 5.5**	**191**	**130**	**3003**	**0.97**	**13.4**	**82**	**0.117**	**13.4**	**27.2**	**8.3**	**6**	**8.4**	**5.4**	**<1.0***	**<1***	**<0.5***

Harvest Estate
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Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW7	29/09/22	4.6	26	40	190	0.1	0.3	8.5	0.02	2.5	8.5	<2	1	0.9	0.6			0.1
	20/10/22	4.5	86	70	120	0.01	0.4	12	0.04	2.9	8.5	<2	1.7	1.7	0.5			0.1
	14/11/22	4.5	44	170	<100	0.03	0.01	9.7	<0.10	<2.00	9.7	<2	1.9	1.4	1.4			0.1
	14/12/22	4.6	56	92	23	0.04	<0.10	7.5	<0.20	11	8.7	2.5	<5	<5	<5			0.3
	18/01/23	4.4	63	32	390	0.09	<0.05	7.5	<0.025	2	11	31	<5	<5	<5			4.1
	20/02/23	4.1	87	60	30	0.02	<0.05	9.1	0.42	4.9	5.8	5.7	1.4	1.9	1.1			0.6
	28/03/23	4.5	160	94	18	0.02	0.02	21	<0.02	4.4	12	66	2	2	0.6			3.1
	18/04/23	4.9	150	58	7.4	<0.01	0.11	11	<0.02	<0.20	9.8	120	1.9	0.8	<0.5			10.9
	18/05/23	4.9	78	56	130	0.03	<0.01	11	<0.02	0.89	9.3	9.3	1.4	0.9	<0.5			0.8
	15/06/23	4.6	77	50	30	0.28	0.25	11	<0.02	<0.20	9.2	62	<5	<5	<5			5.6
	24/07/23	5.1	140	100	90	0.12	<0.1	10	<0.2	1	8.5	14	1.9	1.4	0.9			1.4
	21/08/23	5.3	67	34	29	0.08	0.06	8.4	<0.02	0.8	9	45	1.8	1.7	0.8			5.4
	18/09/23	5.1	57	78	25	<0.01	0.07	9.6	<0.02	0.8	9.4	83	1.6	2	0.8			8.6
	18/10/23	5.2	61	46	10	0.04	0.1	11	<0.02	<0.2	10	160	1.6	2.1	0.8			14.5
	20/11/23	4.1	210	64	13	0.04	<0.02	8.4	<0.01	2.2	8.1	280	2.5	2.2	0.7			33.3
	19/12/23	4.6	91	62	11	0.03	0.09	19	<0.02	0.7	11	5.6	4.4	2.3	0.9			0.3
	20/01/24	4.2	170	130	34	0.01	0.09	21	<0.02	0.3	15	160	2.8	1.4	<0.5			7.6
	26/02/24	4.0	210	190	23	0.03	0.51	44	<0.02	5.8	24	7.5	3.6	2.1	0.5			0.2
	26/03/24	4.4	320	100	22	0.02	0.18	320	<0.02	<1	13	590	1.6	0.9	0.9			1.8
	18/04/24	4.3	100	98	17	0.02	0.07	8.9	<0.02	3	9	380	1.4	1.2	<0.5	1.7	<1	42.7
	20/05/24	4.4	77	56	11	0.05	0.38	6.4	<0.02	1.2	5.4	170	1.3	1	<0.5	2.3	<1	26.6
	25/06/24	4.6	66	36	33	<0.01	<0.01	<0.01	<0.02	0.6	6.7	48	1.1	0.9	<0.5	1.5	<1	0.0
	10/07/24	4.5	74	58	29	<0.01	0.22	6.5	<0.02	2.1	6.2	270	2	1.3	<0.5	0.73	<1	41.5
	06/08/24	4.8	4,600	180	19	0.04	0.06	9.1	<0.02	0.5	5.3	36	1.4	0.9	<0.5	1	<1	4.0
	11/09/24	4.4	75	50	6.4	0.04	<0.1	11	<0.02	1..0	7.1	5.2	1.3	1.1	<0.5	1.4	<1	0.5
	09/10/24	4.3	73	42	71	0.54	<0.01	8	<0.02	1.6	5.8	12	1.3	1.2	<0.5	0.94	<1	1.5
	06/11/24	4.5	59	32	35	0.02	0.03	11	-	1.3	7.8	4.4	1.3	1.4	<0.5	1.6	<1	0.4
	16/12/24	4.3	58	68	29	0.04	<0.1	12	<0.2	1.3	8.5	42	1.6	1.3	<0.5	1.9	<1	3.5
	14/01/25	4.7	63	36	120	0.04	0.02	8.6	0.03	1.3	6.8	7	1.7	1.2	0.5	2.4	1.4	0.8
	11/02/25	4.6	68	70	13	0.07	<0.1	9.2	<0.02	1.2	8.4	2	1.5	1.5	0.8	2.7	<1	0.2
	24/03/25	4.1	0	56	28	<0.05	0.02	15	<0.02	1.8	7.7	43	2.3	1.4	<0.5	1.2	1.91	2.9
	08/04/25	4.4	76	70	14	<0.01	0.03	14	<0.02	<1	8.1	31	2.8	1.1	2.1	1.4	2	2.2
	09/05/25	4.7	81	110	24	<0.01	0.03	13	<0.2	1.2	8.1	28	1.5	0.9	<0.5	1.6	<1	2.2
	25/06/25	4.6	65	70	39	0.07	<0.01	8.3	<0.02	<0.2	6.7	56	1.2	0.8	<0.5	1.2	1	6.7
	08/07/25	4.6	65	44	130	0.02	0.14	7.9	<0.02	<0.5	6.3	37	1.4	0.9	<0.5	2.6	<1	4.7
	14/08/25	4.7	60	70	140	0.06	0.01	8.9	0.04	2.2	5.7	15	0.9	0.5	<0.5	0.93	3	1.7
	11/09/25	4.4	75	51	100	0.03	0.06	12	0.04	1.1	7.2	18	1.8	1.1	0.6	0.86	2.09	1.5
	13/10/25	4.8	66	110	66	0.02	0.12	11	<0.2	<1	7.4	20	2.1	1.5	<0.5	1.3	1.6	1.8
	20/11/25	4.4	84	78	64	0.05	0.12	12	<0.2	1.1	7.8	17	1.9	1.2	<0.5	0.86	2.2	1.4
	17/12/25	4.6	79	10	75	0.04	<0.1	13	<0.2	3.1	9	11	2.1	1.7	0.5	1	2.1	0.8
	21/01/26	4.3	87	110	110	0.1	0.02	11	0.02	4.3	8.2	4.4	1.9	1.4	<0.5	2	1.0	0.4
	20/02/26	4.8	71	68	120	0.18	0.49	13	<0.2	1.5	8.3	70	2	1.8	1	1.2	1.7	5.4
	20/03/26	4.4	91	60	50	0.1	<0.1	13	<0.02	<0.02	8	42	1.6	1.4	<0.5	1	1.6	3.2
	21/04/26	4.98	110	100	71	0.07	<0.01	15	<0.02	2.70	9.5	7.3	2.5	1.5	<0.5	1.9	1.3	0.5
MW7 Baseline		**4.6 - 5.6**	**147**	**100**	**3140**	**0.71**	**0.471**	**172**	**0.048**	**4.15**	**31**	**7.3**	**3.4**	**2.2**	**3.1**	**<1.0***	**<1***	**<0.5***

Note: * derived from Interim Target Criteria within BCPoM, GWMP and AFMP (AWC 2020)

APPENDIX C

Surface Water Quality Analytical Results

Harvest Estate
ENV 217140

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW01	29/09/2022	6.9	180	11	3.1	140	0.47	<0.01	14	<0.02	5.2	30	3.4	450		0.2
	20/10/2022	6.6	320	30	4.7	400	0.03	0.03	22	<0.02	<0.02	31	33	43		1.5
	14/11/2022	6.0	780	4,900	0.2	920	3.1	6.9	25	<0.02	14	200	3.7	67		0.1
	14/12/2022	4.5	800	210	3.6	1,100	0.15	0.05	24	<0.10	23	54	560	88		23
	18/01/2023	6.3	380	120	4.7	25	0.047	0.087	24	<0.02	5.2	40	180	25		7.5
	20/02/2023	3.4	1,100	32	3.8	1,300	0.42	0.37	28	<0.02	8.9	57	350	<5		13
	28/03/2023	3.0	2,000	100	7.7	3,000	<0.01	2.1	29	<0.02	1.29	47	880	<5		30
	18/04/2023	7.7	130	33	8.6	320	0.06	0.01	24	<0.02	8.4	16	14	8.8		0.6
	18/05/2023	7.4	130	6	4.4	250	0.21	0.14	11	<0.02	0.9	14	10	<5		0.9
	15/06/2023	3.2	1,900	6.8	7.6	2,700	0.03	1.6	59	<0.02	2.1	61	1,500	<5		25
	24/07/2023	7.9	84	<5	8.4	140	0.11	<0.01	6.4	<0.02	0.3	13	4	<5		0.6
	21/08/2023	6.9	120	25	3	190	0.34	0.01	5.6	<0.02	0.4	18	<2	<5		0.2
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	No surface water located at monitoring site – no sample collected														
	20/11/2023	7.2	230	6.5	2.9	480	2	<0.02	56	<0.01	<0.2	43	160	<5		2.9
	19/12/2023	No surface water located at monitoring site – no sample collected														
	23/01/2024	7.0	160	130	2.2	160	3.7	0.06	14	<0.02	1.3	21	69	<5		4.9
	26/02/2024	6.2	160	47	7.2	200	0.35	<0.01	9	<0.02	3	12	59	<5		6.6
	26/03/2024	6.9	26	7.5	8.3	78	0.25	<0.01	6.7	<0.02	0.4	7.5	3.4	<5		0.5
	18/04/2024	7.2	220	23	0.5	390	0.06	0.24	25	<0.02	0.7	32	110	180	13	4.4
	20/05/3034	6.7	160	<5	3.8	260	0.16	0.01	13	<0.02	0.5	19	33	56	231	2.5
	25/06/2024	6.3	440	15	5.9	710	<0.01	<0.01	12	<0.02	<0.2	23	100	5.7	15	8.3
	10/07/2024	7.0	120	29	5.5	240	0.07	0.01	14	<0.02	1.1	17	6.9	39	12	0.5
	6/08/2024	4.0	760	19	7.6	950	0.08	<0.01	14	<0.02	1.3	23	470	<5	12	34
	15/08/2024	6.7	64	<5	7.3	100	0.04	0.01	6.1	<0.02	<0.2	7.2	5.5	<5	<10	0.9
	11/09/2024	6.9	120	250	0.2	190	1.1	0.11	8.9	<0.02	4.1	13	2.6	<10	17	0.3
	24/09/2024 - Investigation	6.3	170	-	-	280	-	-	-	-	-	-	-	-	-	-
	9/10/2024	7.4	190	11	8.9	290	0.38	0.01	14	<0.02	<0.2	20	3.4	<5	<10	0.2
	6/11/2024	7.1	92	400	0.4	140	13	<0.01	8.1	<0.02	2.8	12	2.2	<5	<10	0.3
	16/12/2024	6.9	90	190	3.3	140	0.36	<0.01	8.2	<0.02	0.02	11	5.4	170	<10	0.7
	14/01/2025	6.7	48	7.2	3.5	89	0.14	<0.1	4.8	<0.02	0.6	5.4	<5	<5	<10	0.0
	11/02/2025	7.5	390	<5	8.3	620	0.06	0.03	110	<0.02	0.8	16	16	12	<10	0.1
	24/03/2025	6.9	58	<5	8.6	64	0.32	0.02	6.1	<0.02	0.8	7.9	2.4	48	<10	0.4
	31/03/2025	7.1	170	5.8	9.2	200	0.14	<0.01	14	<0.02	1.1	15	6.4	<5	<10	0.5
	8/04/2025	7.2	200	9.4	8.8	230	0.37	0.04	14	<0.02	0.4	18	3.6	<5	<10	0.3
	9/05/2025	7.5	170	<5	-	200	0.2	0.03	10	<0.02	0.8	13	4.5	<5	<10	0.5
	25/06/2025	6.9	130	24	7.5	190	1.1	0.07	6.2	<0.02	1.1	12	7.1	12	22	1.1
	8/07/2025	6.9	150	<5	8	260	0.12	0.18	8	<0.02	0.8	16	5	28	34	1.6
	14/08/2025	7.3	140	7.1	6.9	240	0.17	0.03	11	<0.02	1	16	6	<5	15	1.8
	11/09/2025	7.2	150	5.2	3.9	260	0.22	0.01	13	<0.02	1.4	19	5.2	<5	16	2.5
	13/10/2025	7.2	350	14	0.3	520	0.61	0.26	39	<0.02	0.5	58	30	<5	14	1.3
	20/11/2025	7	110	8.9	5.2	200	0.24	0.03	9.1	<0.02	0.7	14	4.5	<5	16	2.0
	17/12/2025	7.2	150	30	6.1	240	0.14	0.19	27	<0.5	1.2	22	9.3	<5	37	2.9
	21/01/2026	6.8	98	30	3.5	170	0.49	0.05	17	0.017	0.6	15	4.9	<0.005	27	3.5
	20/02/2026	6.8	130	22	2.4	230	0.33	0.03	17	< 0.02	1.2	19	8.5	<0.005	<10	2.0
	20/03/2026	6.8	86	37	3.4	150	0.48	0.04	15	<0.02	1.1	11	6.6	0.015	<10	2.3
	21/04/2026	6.7	160	18	4	190	0.58	<0.01	22	<0.02	<0.4	21	2.7	<0.005	12	8.1
SW01 Baseline		**6.2 – 7.0**	**291**	**73**	**-**	**428**	**3.52**	**0.164**	**118**	**0.039**	**3.5**	**51**	**9**	**768**		**<0.5**

Harvest Estate
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Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW01	29/09/2022	1.5	0.003	<0.0002	22	0.002	0.32	2.7	0.005	14	<0.0001	0.015	3	0.071	<1
	20/10/2022	0.66	2	<0.0002	24	0.002	0.16	2.4	0.003	9.1	<0.0001	0.009	2.9	0.042	<1
	14/11/2022	130	1.3	<0.02	280	<0.10	1	130	0.1	73	<0.001	0.3	<50	4.7	<1
	14/12/2022	22	0.0016	<0.002	180	0.014	0.2	1.6	0.015	43	<0.001	0.077	6.8	0.68	<1
	18/01/2023	0.7	<0.010	<0.002	<2	<0.010	<0.01	3.2	<0.01	13	<0.01	<0.01	<5	<0.05	<1
	20/02/2023	37	0.027	0.0004	170	0.019	0.07	0.049	0.049	57	0.002	0.16	6.3	0.35	<1
	28/03/2023	150	0.002	0.0008	290	0.002	0.003	36	0.003	38	0.0001	0.46	5.1	0.97	<1
	18/04/2023	0.53	0.002	<0.0002	13	0.005	0.005	0.002	0.002	2.7	<0.0001	0.002	0.8	0.15	<1
	18/05/2023	0.16	0.002	<0.0002	23	<0.001	0.002	0.24	<0.001	7.5	<0.0001	0.002	2.3	0.02	<1
	15/06/2023	120	0.002	0.0003	350	<0.001	0.004	15	0.003	42	<0.0001	0.24	8.1	0.35	<1
	24/07/2023	0.08	0.003	<0.0002	13	<0.001	0.003	0.38	0.002	4.1	<0.0001	0.002	0.8	0.037	<1
	21/08/2023	0.52	0.001	<0.0002	17	0.001	0.002	1.2	0.001	6.3	<0.0001	0.003	<0.5	0.014	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	No surface water located at monitoring site – no sample collected													
	20/11/2023	0.13	<0.001	<0.0002	26	<0.001	0.002	5.7	<0.001	7.9	<0.0001	0.003	2.2	0.006	<1
	19/12/2023	No surface water located at monitoring site – no sample collected													
	23/01/2024	<0.05	<0.001	<0.0002	30	0.001	<0.001	1.8	<0.001	10	<0.0001	<0.001	3.4	0.006	<1
	26/02/2024	<0.005	<0.001	<0.0002	14.00	<0.001	<0.001	0.93	<0.001	4.60	<0.0001	<0.001	1.70	0.05	<1
	26/03/2024	0.11	<0.001	<0.0002	7.4	<0.001	0.002	0.38	<0.001	2	<0.0001	<0.001	1.5	0.013	<1
	18/04/2024	0.06	<0.001	<0.0002	32	<0.001	<0.001	1.4	<0.001	9.5	<0.0001	0.002	2	<0.005	<1
	20/05/3034	0.06	<0.001	<0.0002	26	<0.001	0.001	0.86	<0.001	7	<0.0001	0.002	1.7	0.014	<1
	25/06/2024	0.69	<0.001	<0.0002	94	<0.001	0.002	0.28	<0.001	15	<0.0001	0.008	2.3	0.055	<1
	10/07/2024	0.25	0.002	<0.0002	28	<0.001	0.003	2.1	<0.001	6.6	<0.0001	0.002	2	0.037	<1
	6/08/2024	0.85	<0.001	<0.0002	120	<0.001	0.004	1.3	<0.001	14	<0.0001	0.021	2.3	0.1	<1
	15/08/2024	0.24	<0.001	<0.0002	12	<0.001	0.004	0.33	<0.001	2.8	<0.0001	0.001	1.2	0.027	<1
	11/09/2024	9.1	0.009	0.0005	36	0.023	0.11	49	0.031	8.1	0.0001	0.019	5.2	0.72	<1
	24/09/2024 - Investigation	-	<0.001	<0.001	-	<0.001	0.001	-	<0.001	<0.0001	-	0.004	-	0.04	-
	9/10/2024	0.14	0.001	<0.0002	27	<0.001	0.002	1.7	<0.001	8.1	<0.0001	0.002	1.5	0.017	<1
	6/11/2024	1.2	0.004	<0.0002	26	0.005	0.011	54	0.003	6.1	<0.0001	0.004	2.8	0.041	<1
	16/12/2024	2.4	0.004	<0.0002	22	0.006	0.019	38	0.006	4.5	<0.0001	0.004	2.8	0.092	<1
	14/01/2025	0.15	<0.001	<0.0002	8.8	0.001	0.003	0.34	<0.001	1.8	<0.0001	0.001	0.6	0.018	<1
	11/02/2025	0.58	0.002	<0.0002	13.00	<0.001	<0.001	6.10	<0.001	3.50	<0.0001	0.002	1.00	0.015	<1
	24/03/2025	0.13	<0.001	<0.0002	5.20	<0.001	0.002	0.35	<0.001	1.40	<0.0001	<0.001	1.20	0.037	<1
	31/03/2025	0.1	0.002	<0.0002	22	<0.001	0.003	1.2	<0.001	6.8	<0.0001	0.002	2.4	0.066	<1
	8/04/2025	<0.05	0.002	<0.0002	29	<0.001	<0.001	2.2	<0.001	8.1	<0.0001	0.002	2.4	0.008	<1
	9/05/2025	0.27	<0.001	<0.0002	20	<0.001	0.002	1.6	<0.001	5.9	<0.0001	0.002	1.7	0.03	<1
	25/06/2025	0.11	<0.001	<0.0002	19	<0.001	0.002	0.72	<0.001	4.4	<0.0001	0.002	<0.5	0.032	<1
	8/07/2025	0.05	<0.001	<0.0002	26	<0.001	0.002	0.49	<0.001	7.2	<0.0001	0.002	<0.5	0.024	<1
	14/08/2025	0.14	<0.001	<0.0002	26	<0.001	0.003	0.69	<0.001	6.8	<0.0001	0.002	1.8	0.019	<1
	11/09/2025	0.05	0.001	<0.0002	24	<0.001	0.002	1.5	<0.001	6.8	<0.0001	0.002	1.6	0.014	<1
	13/10/2025	0.07	0.002	<0.0002	37	<0.001	0.01	0.69	<0.001	10	<0.0001	0.005	4.8	0.055	<1
	20/11/2025	<0.05	0.001	<0.0002	19	<0.001	0.002	0.0015	0.001	4.7	<0.0001	0.002	0.9	0.012	<1
	17/12/2025	0.26	0.001	<0.0002	16	<0.001	0.001	0.89	<0.001	3.8	<0.0001	0.001	1.5	0.017	<1
	21/01/2026	0.2	<0.001	<0.0002	12	<0.001	3	2.2	<1	2.9	<0.0001	0.001	0.7	0.031	<1
	20/02/2026	0.23	0.002	<0.0002	18	<0.001	0.003	5	<0.001	4.5	<0.0001	0.003	0.6	0.032	<2
	20/03/2026	0.83	<0.001	<0.0002	11	<0.001	0.006	3.5	0.002	3	<0.0001	0.002	1.5	0.043	<1
	21/04/2026	0.1	0.001	<0.0002	10	<0.001	0.005	0.91	<0.001	2.8	<0.0001	<0.001	2.8	0.023	<1
SW01 Baseline		**0.5**	**0.003**	**0.001**	**22**	**0.002**	**0.041**	**1.2**	**0.001**	**16**	**0.0005**	**0.006**	**6**	**0.058**	**<1***

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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW01	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	220	220	<100	<100	<20	250	<100	<100	250	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	<50	<50	20	-	<20	<50	100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No surface water located at monitoring site – no sample collected									
	18/10/2023	No surface water located at monitoring site – no sample collected									
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	No surface water located at monitoring site – no sample collected									
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/3034	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Investigation	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	160	160	300	<100	<20	110	300	<100	410	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	17/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	120	<50	<100	<100	110	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW01 Baseline		**60**	**-**	**24**	**100**	**-**	**50**	**130**	**90**	**170**	**-**

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Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW02	29/09/2022	6.9	170	8.8	8	160	0.04	0.03	29	<0.02	1.3	27	2.8	22		0.1
	20/10/2022	6.5	120	6.2	8.7	140	0.02	0.01	17	<0.02	<0.20	16	2.9	<5		0.2
	14/11/2022	6.4	150	210	0.1	190	0.18	<0.01	54	<0.02	13	62	18	24		0.3
	14/12/2022	6.3	110	870	0.1	200	0.27	0.05	26	<0.10	2.7	25	29	14		1.1
	18/01/2023	6.6	220	190	0.1	61	0.79	0.049	31	<0.20	21	27	6.2	61		0.2
	20/02/2023	6.5	240	29	4.4	1300	0.023	0.31	26	<0.10	1.9	29	24	<5		0.9
	28/03/2023	4.8	310	370	5.7	370	1.5	0.19	22	<0.02	<0.20	17	92	<10		4.2
	18/04/2023	6.2	300	60	7.3	410	0.05	0.16	32	<0.02	1.38	25	120	<5		3.8
	18/05/2023	6.5	130	39	6	270	0.06	0.09	25	<0.02	<0.2	18	29	<5		1.2
	15/06/2023	6.4	190	25	8.9	280	0.37	0.23	34	<0.02	1.2	25	38	<5		1.1
	21/08/2023	6.1	430	20	5.7	690	0.02	0.5	36	<0.02	1.2	38	75	<5		2.1
	18/09/2023	7.2	180	15	8.1	260	0.06	0.04	31	<0.02	0.8	28	39	<5		1.3
	18/10/2023	6.8	150	11	8.1	240	0.05	0.02	40	<0.02	<0.2	28	13	<5		0.3
	20/11/2023	6.9	180	18	4.9	350	0.07	0.04	37	<0.01	0.3	26	50	<5		1.4
	19/12/2023	6.7	140	15	4.6	240	0.05	0.03	37	<0.02	0.7	29	11	<5		0.3
	23/01/2024	6.8	210	27	9.7	350	0.06	0.02	35	<0.02	0.5	31	25	<5		0.7
	26/02/2024	4.5	140	43	7.1	190	0.05	0.03	9	<0.02	0.6	8.5	65	<5		7.2
	26/03/2024	6.7	44	12	6.8	99	0.07	<0.01	9.5	<0.02	0.5	8.8	8.7	<5		0.9
	18/04/2024	7.6	350	<5	6.4	630	0.03	0.9	93	<0.02	0.6	78	56	<5	<10	0.6
	20/05/2024	6.7	130	27	2.1	210	0.04	0.05	20	<0.02	1.1	18	16	<5	11	0.8
	25/06/2024	6.7	180	9.7	8.8	330	0.03	<0.01	42	0.03	<0.2	35	10	<5	11	0.2
	10/07/2024	7.0	150	8.2	6.1	220	0.01	0.11	22	<0.02	1.9	18	21	<5	<10	1.0
	6/08/2024	6.5	220	8.5	7	280	0.06	0.02	39	<0.02	1.7	24	19	<5	20	0.5
	15/08/2024	6.6	48	<5	7.8	80	0.07	0.01	8	<0.02	<0.2	7	6.9	18	<10	0.9
	11/09/2024	7.1	250	<5	6.1	450	0.02	0.05	90	<0.02	0.3	71	48	<5	<10	0.5
	9/10/2024	7.0	260	<5	8.9	500	0.12	0.03	88	<0.02	0.6	73	35	<5	<10	0.4
	6/11/2024	7.5	300	6.4	6	500	0.07	<0.01	89	<0.02	1	72	34	<5	<10	0.4
	16/12/2024	6.4	200	110	8.8	310	1.1	<0.01	55	<0.02	0.4	11	19	6.6	<10	0.3
	14/01/2025	6.9	170	<5	4.6	340	0.08	<0.01	51	<0.02	0.9	44	7.7	<5	<10	0.2
	11/02/2025	7.1	96	5.6	6.1	150	0.08	<0.01	14	<0.02	1.9	91	3.9	190	<10	0.3
	24/03/2024	3.2	420	7.2	8.6	670	<0.05	0.02	17	<0.02	2.8	17	250	<5	<10	15
	31/03/2025	7.2	160	<5	9.8	200	0.14	0.05	14	<0.02	<0.4	16	7	<5	<10	0.5
	8/04/2025	7.2	150	12	6.2	230	0.37	0.03	14	<0.02	0.7	18	3.4	<5	<10	0.2
	9/05/2025	3.9	320	1,100	-	560	1.5	0.23	31	<0.02	2.8	18	150	<20	34	4.8
	25/06/2025	7.1	400	9.4	9.8	580	1.5	0.01	88	<0.03	1.5	74	38	38	14	0.4
	8/07/2025	6.9	300	14	8.4	600	0.34	0.58	96	<0.02	0.9	73	38	19	21	2.5
	14/08/2025	7.2	330	6.1	8.6	600	0.05	0.03	120	<0.02	0.7	85	31	<5	<10	3.9
	11/09/2025	7.0	320	6.1	7.9	530	0.05	0.11	87	<0.02	2.8	69	36	<5	<10	2.4
	13/10/2025	6.9	270	6.3	8.1	470	0.12	<0.01	73	0.11	1.9	60	29	<5	14	2.5
	20/11/2025	6.8	190	11	5.2	300	0.19	0.16	33	<0.02	0.9	30	16	<5	<10	2.1
	16/12/2025	7.0	520	8	7.2	240	0.11	0.13	26	<0.5	<0.5	23	9.1	<5	19	2.9
	21/01/2026	7.3	350	<5	6	680	0.07	<0.01	100	0.1	0.4	85	36	<0.005	15	2.8
	20/02/2026	7	470	<5	3.6	720	0.08	<0.01	130	<0.02	0.5	95	17	<0.005	<10	7.6
	20/03/2026	7	370	6.1	5.6	710	0.1	0.06	130	<0.02	0.8	90	42	<0.005	<10	3.1
	21/04/2026	6.7	100	<5	6.2	170	0.08	0.01	24	<0.02	<0.2	17	3.1	<0.005	11	7.7
SW02 Baseline		**6.3 – 7.0**	**199**	**495**	**-**	**292**	**1.88**	**0.261**	**161**	**0.06**	**8.6**	**32**	**10**	**182**		**<0.5***

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Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW02	29/09/2022	0.42	0.003	<0.0002	19	0.002	0.004	1.5	0.001	5.8	<0.0001	0.002	1.9	0.057	<1
	20/10/2022	0.22	0.001	<0.0002	12	0.001	0.003	0.62	<0.001	3.4	<0.0001	0.001	1.7	0.032	<1
	14/11/2022	1.8	0.037	<0.002	47	<0.001	0.015	53	<0.01	11	<0.001	<0.01	<5	0.096	<1
	14/12/2022	13	0.066	<0.002	38	0.034	0.094	9.7	0.071	5.9	<0.001	0.013	5.1	1	<1
	18/01/2023	3.3	0.023	<0.002	<2	<0.01	0.015	45	0.014	5.8	<0.001	<0.010	<5	0.15	<1
	20/02/2023	12	0.033	0.0002	38	0.009	0.09	0.013	0.013	11	<0.001	0.018	4.1	0.28	<1
	28/03/2023	3.4	0.002	0.0003	43	0.002	0.003	2.5	0.001	8.4	<0.0001	0.024	4.1	0.63	<1
	18/04/2023	0.86	<0.001	<0.0002	20	0.002	0.002	<0.001	<0.001	4	<0.0001	0.006	2.7	0.089	<1
	18/05/2023	0.72	0.002	<0.0002	17	0.002	0.006	1	0.002	4.3	<0.0001	0.003	2.4	0.081	<1
	15/06/2023	1.7	0.001	<0.0002	22	0.001	0.004	2.1	0.001	5.5	<0.0001	0.005	1.9	0.037	<1
	21/08/2023	1.1	<0.001	<0.0002	71	<0.001	<0.001	8	<0.001	16	<0.0001	0.024	5.7	0.057	<1
	18/09/2023	1.7	0.003	<0.0002	19	0.002	0.004	3	0.002	6.3	<0.0001	0.005	3	0.023	<1
	18/10/2023	0.88	0.002	<0.0002	17	0.001	0.003	2.2	0.001	5.5	<0.0001	0.002	1.9	0.014	<1
	20/11/2023	2.3	0.002	<0.0002	19	0.002	0.002	2.6	<0.001	6.7	<0.0001	0.007	1.4	0.032	<1
	19/12/2023	1.1	0.002	<0.0002	19	0.001	0.001	4.8	<0.001	6.5	0.0002	0.004	2.9	0.012	<1
	23/01/2024	2.9	0.003	<0.0002	23	0.002	0.001	5.8	<0.001	7.8	<0.0001	0.007	3.3	0.031	<1
	26/02/2024	1.5	0.001	<0.0002	9.7	0.001	0.003	1.7	<0.001	2.5	<0.0001	0.004	1.4	0.027	<1
	26/03/2024	0.34	<0.001	<0.0002	6.9	0.001	0.003	0.67	<0.001	1.9	<0.0001	0.001	1.8	0.021	<1
	18/04/2024	0.09	<0.001	<0.0002	20	<0.001	<0.001	0.39	<0.001	5.4	<0.0001	<0.001	14	0.014	<1
	20/05/2024	0.71	0.004	<0.0002	19	0.002	0.003	5.6	<0.001	3.8	<0.0001	0.003	3	0.015	<1
	25/06/2024	1.1	<0.001	<0.0002	21	<0.001	0.001	1.4	<0.001	4.6	<0.0001	0.004	4.5	0.022	<1
	10/07/2024	1.1	0.002	<0.0002	20	<0.001	0.004	1.2	<0.001	4.2	<0.0001	0.004	2.3	0.047	<1
	6/08/2024	0.61	0.001	<0.0002	17	0.001	0.002	1.4	<0.001	3.7	<0.0001	0.002	3	0.019	<1
	15/08/2024	0.31	0.002	<0.0002	8	0.001	0.004	0.37	<0.001	1.5	<0.0001	0.001	1.4	0.038	<1
	11/09/2024	0.19	<0.001	<0.0002	20	<0.001	0.001	0.31	<0.001	4.8	<0.0001	0.001	14	0.021	<1
	9/10/2024	0.8	<0.001	<0.0002	23	<0.001	0.001	1.5	<0.001	5	<0.0001	0.003	15	0.032	<1
	6/11/2024	0.007	0.001	<0.0002	21	<0.001	<0.001	0.7	<0.001	5.8	<0.0001	<0.001	15	0.011	<1
	16/12/2024	0.05	<0.001	<0.0002	14	<0.001	0.001	0.24	<0.001	3.1	<0.0001	<0.001	9.4	0.008	<1
	14/01/2025	0.06	<0.001	<0.0002	14	0.001	0.002	0.28	<0.001	2.7	<0.0001	0.001	9.4	0.015	<1
	11/02/2025	0.82	<0.001	<0.0002	24	<0.001	0.002	4.4	<0.001	4.8	<0.0001	0.005	19	0.058	<1
	24/03/2024	7.4	<0.001	<0.0002	56	0.002	0.001	22	<0.001	6.9	<0.0001	0.021	1.8	0.097	<1
	31/03/2025	0.25		<0.0002	23	<0.001	0.003	1.7	<0.001	7	<0.0001	0.002	2.5	0.054	<1
	8/04/2025	0.1	0.001	<0.0002	29	<0.001	0.001	2.7	<0.001	8.3	<0.0001	0.002	2.3	0.015	<1
	9/05/2025	2.3	0.007	<0.0002	34	0.005	0.002	140	<0.001	9.1	<0.0001	0.011	2.1	0.077	<1
	25/06/2025	0.3	<0.001	<0.0002	21	<0.001	0.001	1.1	<0.001	5.4	<0.0001	0.002	14	0.03	<1
	8/07/2025	0.15	<0.001	<0.0002	19	<0.001	<0.001	0.65	<0.001	5.3	<0.0001	0.001	12	0.018	<1
	14/08/2025	0.11	<0.001	<0.0002	21	<0.001	<0.001	0.39	<0.001	5.9	<0.0001	<0.001	11	0.012	<1
	11/09/2025	0.32	0.001	<0.0002	21	<0.001	0.002	1.2	<0.001	5.6	<0.0001	0.001	11	0.016	<1
	13/10/2025	0.15	0.002	<0.0002	19	<0.001	0.004	0.82	<0.001	5.2	<0.0001	0.002	11	0.054	<1
	20/11/2025	0.53	0.002	<0.0002	20	0.001	0.002	1.8	0.002	4.9	<0.0001	0.002	3.9	0.021	<1
	16/12/2025	0.26	<0.001	<0.0002	16	0.002	<0.001	1.5	0.001	4	<0.0001	0.002	1.6	0.01	<1
	21/01/2026	<0.05	<0.001	<0.0002	21	<0.001	<1	0.25	<1	5.6	<0.0001	<0.001	17	0.022	<1
	20/02/2026	<0.05	<0.001	<0.0002	22	<0.001	<0.001	0.46	<0.001	6.1	<0.0001	<0.001	23	0.027	<1
	20/03/2026	0.15	<0.001	<0.0002	21	<0.001	<0.001	0.21	<0.001	5.8	<0.0001	0.001	15	0.013	<1
	21/04/2026	0.07	<0.001	<0.0002	8.9	<0.001	0.003	0.33	<0.001	2.2	<0.0001	<0.001	3.6	0.01	<1
SW02 Baseline		**3.8**	**0.045**	**0.001**	**17**	**0.007**	**0.012**	**71.9**	**0.02**	**5**	**0.0005**	**0.005**	**6**	**0.09**	**<1***

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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW02	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	90	<100	<20	<50	60	30	90	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	180	180	30	-	<20	170	30	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	200	<100	<20	<50	100	<100	100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	140	140	100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<20	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW02 Baseline		**60**	**-**	**22**	**100**	**-**	**50**	**100**	**50**	**140**	**-**

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Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW03	29/09/2022	6.8	120	<5	9.3	100	0.02	<0.01	24	<0.02	1.10	23	2	<5		0.1
	20/10/2022	5.9	650	26	7.5	870	0.03	<0.01	270	<0.02	<0.2	12	13	<5		0.0
	14/11/2022	6.5	140	260	2.6	160	0.13	<0.05	27	<0.01	7.40	36	9	<5		0.3
	14/12/2022	6.5	110	11	4.4	160	0.01	0.05	23	<0.01	3.90	18	11	<5		0.5
	18/01/2023	6.5	160	9	5.1	<5	0.02	<0.010	31	<0.02	1.30	26	17	<5		0.5
	20/02/2023	3.4	540	13	6.0	720	0.01	<0.010	22	<0.02	5.10	28	100	<5		4.5
	28/03/2023	3.3	400	7	9.9	750	0.02	0.07	14	<0.02	<0.2	16	110	<5		7.9
	18/04/2023	4.2	280	<5	7.4	450	<0.01	0.04	29	<0.02	<0.2	22	140	<5		4.8
	18/05/2023	4.3	310	37	5.5	580	0.02	0.32	22	<0.02	12.33	21	230	<5		10
	15/06/2023	3.3	580	17	8.9	870	0.04	0.68	32	<0.02	1.40	31	300	<5		9.4
	24/07/2023	3.9	290	36	9	510	0.03	0.4	17	<0.02	1	20	250	<5		15
	21/08/2023	6.8	270	5.8	7.2	350	0.04	0.04	45	<0.02	0.5	43	8	<5		0.2
	18/09/2023	4.6	410	20	7.4	540	<0.01	0.28	30	<0.02	0.4	29	230	<5		7.7
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.5	640	18	7.1	1100	0.03	0.58	32	<0.01	0.6	30	370	6.7		12
	19/12/2023	3.8	610	7.7	6.7	850	<0.01	0.86	36	<0.02	0.9	37	150	<5		4.2
	23/01/2024	3.7	460	55	4.1	880	<0.01	0.16	31	<0.02	1.6	37	100	<5		3.2
	26/02/2024	4.3	200	93	7.5	250	0.09	0.09	53	0.02	1.5	11	440	7.2		8.3
	26/03/2024	6.1	170	54	7.7	300	0.08	0.13	21	<0.02	1	20	78	<5		3.7
	18/04/2024	7.5	360	9.2	7.4	650	0.03	0.08	88	<0.02	0.8	78	64	<5	<10	0.6
	20/05/2024	4.5	300	21	5.6	450	<0.01	0.5	19	<0.02	1.2	23	190	<5	66	10
	25/06/2024	6.3	80	2300	7.2	140	0.98	<0.1	9.4	<0.2	140	9	5	<5	48	0.5
	10/07/2024	4.4	260	29	5.1	400	0.01	0.64	19	<0.02	0.7	21	10	<5	50	0.5
	6/08/2024	4.6	340	22	6.3	630	0.02	0.62	35	<0.02	1.3	29	230	<5	70	6.6
	15/08/2024	6.3	82	19	8.3	120	0.04	0.07	9.5	<0.02	<0.2	9	31	<5	11	3.3
	11/09/2024	7.1	290	<5	7.7	440	<0.01	0.11	84	<0.02	0.3	66	56	<5	<10	0.7
	9/10/2024	6.6	240	330	7.7	360	0.46	<0.01	56	<0.02	7.1	45	35	33	<10	0.6
	6/11/2024	7.2	300	49	7.5	460	0.07	<0.01	88	<0.02	1.2	72	39	<5	<10	0.4
	16/12/2024	7.2	250	5.3	19.0	370	<0.01	<0.01	70	<0.02	0.7	61	31	50	<10	0.4
	14/01/2025	6.9	220	<5	7.7	420	0.04	<0.01	66	<0.02	1.3	57	11	<5	<10	0.2
	11/02/2025	7.4	340	<5	7.5	570	0.07	0.02	99	<0.02	1.4	87	14	<5	<10	0.1
	24/03/2024	6.9	130	<5	8.1	230	0.05	<0.01	38	<0.02	0.9	32	66	<5	<10	1.7
	31/03/2025	7.0	260	9.3	9.8	440	0.06	0.19	100	<0.02	0.9	70	26	<5	<10	0.3
	8/04/2025	7.2	290	<5	8.9	470	0.04	0.07	100	<0.02	0.4	82	36	<5	<10	0.4
	9/05/2025	7.1	290	<5	-	460	<0.01	<0.1	100	<0.02	0.7	73	36	<5	<10	0.4
	25/06/2025	6.7	360	230	6.5	540	2.3	0.01	88	<0.03	2.3	68	36	46	14	0.4
	8/07/2025	6.8	300	82	9.1	570	0.15	0.48	89	<0.02	1.1	67	39	27	<10	0.4
	14/08/2025	7.2	300	16	9.1	580	0.08	0.05	110	<0.02	1	81	32	<5	<10	0.3
	11/09/2025	6.8	300	6.7	12.0	530	0.05	0.22	84	<0.02	0.7	67	43	43	11	0.5
	13/10/2025	7.2	340	7.5	9	620	0.07	<0.01	100	<0.02	0.8	83	43	16	<10	0.4
	20/11/2025	6.6	190	28	4.7	300	0.15	0.19	28	<0.02	1	28	35	<5	<10	1.3
	16/12/2025	6.3	96	400	0.3	170	0.94	0.18	14	<0.5	12	17	18	17	38	1.3
	21/01/2026	7.6	330	<5	8.6	680	0.05	<0.01	100	0.1	0.9	84	36	<0.005	<10	0.4
	20/02/2026	7.2	390	10	4.6	580	0.06	0.02	93	<0.02	0.5	69	11	<0.005	<10	0.1
	20/03/2026	6.9	330	<5	5.3	610	0.1	0.04	110	<0.02	0.8	77	36	0.012	<10	0.3
	21/04/2026	6.8	190	<5	7.4	250	0.04	0.012	24	<0.02	1.7	26	4	<0.005	11	0.2
SW03 Baseline		**6.1 - 6.7**	**191**	**1005**	**-**	**281**	**2.14**	**0.155**	**111**	**0.041**	**4.3**	**30**	**6**	**86**		**<0.5***

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Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW03	29/09/2022	0.4	0.00	<0.0002	13	0.00	0.00	0.8	<0.001	4.4	<0.0001	0.002	1.00	0.034	<1
	20/10/2022	0.5	0.00	<0.0002	8	0.00	0.00	0.9	0.00	2.3	<0.0001	0.001	1.00	0.03	<1
	14/11/2022	1.1	<0.001	<0.002	18	<0.001	0.00	1.9	<0.010	5.7	<0.001	<0.01	<5	0.24	<1
	14/12/2022	0.6	<0.001	<0.002	13	<0.01	<0.010	1.3	<0.010	<5	<0.001	<0.01	<5	0.53	<1
	18/01/2023	0.5	0.01	<0.002	<2	<0.010	<0.01	0.5	<0.01	6.2	<0.001	<0.01	<5	<0.05	<1
	20/02/2023	17	0.00	<0.0002	63	0.00	0.02	0.0	0.00	14.0	<0.001	0.065	3.00	0.12	<1
	28/03/2023	15	<0.001	<0.0002	63	0.00	0.00	4.5	<0.001	11.0	<0.0001	0.065	2.30	0.15	<1
	18/04/2023	3.8	<0.001	<0.0002	30	0.00	0.00	<0.001	<0.001	5.0	<0.0001	0.023	2.10	0.048	<1
	18/05/2023	5.8	<0.001	<0.0002	48	<0.001	0.00	14.0	<0.001	10.0	<0.0001	0.033	2.80	0.16	<1
	15/06/2023	11	<0.001	<0.0002	74	<0.001	0.00	12	<0.001	15.0	<0.0001	0.058	2.7	0.15	<1
	24/07/2023	7.1	<0.001	<0.0002	39	<0.001	0.002	8.9	0.001	9.7	<0.0001	0.030	2.5	0.1	<1
	21/08/2023	0.7	0.001	<0.0002	18	0.001	0.003	1.1	<0.001	6.3	<0.0001	0.002	6.8	0.026	<1
	18/09/2023	2.8	<0.001	<0.0002	59	<0.001	<0.001	1.1	<0.001	14.0	<0.0001	0.022	3.2	0.049	<1
	18/10/2023	3.0	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12.0	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	11.0	0.002	<0.0002	75	<0.001	<0.001	17	<0.001	17.0	<0.0001	0.060	3	0.14	<1
	19/12/2023	21.0	0.003	0.0011	80	<0.001	0.002	3.6	0.001	19.0	0.0007	0.071	4.3	0.16	<1
	23/01/2024	17.0	0.002	<0.0002	63	0.002	0.001	17	<0.001	19.0	<0.0001	0.059	5.1	0.13	<1
	26/02/2024	8.8	0.003	<0.0002	17	0.003	0.005	9	0.002	4.8	<0.0001	0.016	1.8	0.05	<1
	26/03/2024	0.9	<0.001	<0.0002	24	<0.001	<0.001	1.8	<0.001	6.1	<0.0001	0.009	2.8	0.025	<1
	18/04/2024	1.1	<0.001	<0.0002	22	<0.001	<0.001	1.8	<0.001	6.0	<0.0001	0.005	13	0.018	<1
	20/05/2024	5.4	0.002	<0.0002	34	<0.001	<0.001	13	<0.001	7.3	<0.0001	0.026	3.6	0.047	<1
	25/06/2024	0.2	<0.001	<0.0002	10	<0.001	<0.001	170	<0.001	2.7	<0.0001	0.011	2.3	0.042	<1
	10/07/2024	3.6	0.001	<0.0002	34	<0.001	0.001	6.6	<0.001	6.6	<0.0001	0.019	3	0.053	<1
	6/08/2024	3.10	<0.001	<0.0002	51	<0.001	<0.001	4.8	<0.001	7.8	<0.0001	0.026	3.4	0.092	<1
	15/08/2024	1.20	0.00	<0.0002	12	<0.001	0.003	2.1	<0.001	2.2	<0.0001	0.004	1.6	0.037	<1
	11/09/2024	0.59	<0.001	<0.0002	21	<0.001	0.001	1.0	<0.001	4.9	<0.0001	0.003	13	0.021	<1
	9/10/2024	20	0.02	<0.0002	21	0.011	0.01	39.0	0.008	4.4	<0.0001	0.008	8.8	0.1	<1
	6/11/2024	3	0.00	<0.0002	23	0.002	0.002	4.5	<0.001	6.2	<0.0001	0.003	15	0.017	<1
	16/12/2024	0.29	0.001	<0.0002	19	0.001	<0.001	1.6	<0.001	4	<0.0001	0.001	12	0.009	<1
	14/01/2025	0.17	0.001	<0.0002	17	<0.001	0.001	0.74	<0.001	3.3	<0.0001	0.001	12	0.016	<1
	11/02/2025	0.45	0.001	<0.0002	23	<0.001	<0.001	2.1	<0.001	4.5	<0.0001	0.001	18	0.031	<1
	24/03/2024	0.18	0.001	<0.0002	10	<0.001	0.002	0.79	<0.001	2.6	<0.0001	0.001	6.6	0.036	<1
	31/03/2025	0.42	0.002	<0.0002	21	<0.001	0.001	3.5	<0.001	4.9	<0.0001	0.002	11	0.045	<1
	8/04/2025	0.3	<0.001	<0.0002	21	<0.001	<0.001	1.3	<0.001	5.4	<0.0001	0.002	11	0.012	<1
	9/05/2025	0.62	0.002	<0.0002	20	<0.001	0.001	2	<0.001	4.9	<0.0001	0.005	11	0.042	<1
	25/06/2025	2	0.002	<0.0002	21	<0.001	0.003	6.1	0.001	5.2	<0.0001	0.002	12	0.053	<1
	8/07/2025	0.24	<0.001	<0.0002	19	<0.001	<0.001	0.49	<0.001	5	<0.0001	0.001	11	0.015	<1
	14/08/2025	0.2	<0.001	<0.0002	20	<0.001	<0.001	0.59	<0.001	5.8	<0.0001	0.001	11	0.01	<1
	11/09/2025	2	0.003	<0.0002	19	0.002	0.004	4	0.002	5.4	<0.0001	0.003	11	0.037	<1
	13/10/2025	0.29	0.001	<0.0002	22	<0.001	0.002	0.97	<0.001	5.9	<0.0001	0.001	16	0.019	<1
	20/11/2025	2.4	0.004	<0.0002	22	0.003	0.003	8.8	0.003	4.7	<0.0001	0.003	4.4	0.015	<1
	16/12/2025	6	0.003	<0.0002	15	0.002	0.005	2.7	0.002	3.2	<0.0001	0.007	2.4	0.14	<1
	21/01/2026	0.09	<0.001	<0.0002	20	<0.001	<1	0.33	<1	5.5	<0.0001	<0.001	16	0.009	<1
	20/02/2026	0.27	0.001	<0.0002	23	<0.001	<0.001	1.3	<0.001	5.8	<0.0001	0.001	15	0.01	<1
	20/03/2026	0.22	<0.001	<0.0002	18	<0.001	0.001	0.58	<0.001	5.1	<0.0001	0.001	12	0.016	<1
	21/04/2026	0.29	<0.001	<0.0002	12	<0.001	0.002	0.64	<0.001	3.3	<0.0001	<0.001	5.5	0.01	<1
SW03 Baseline		**7.9**	**0.058**	**0.001**	**21**	**0.008**	**0.028**	**85.5**	**0.028**	**5**	**0.0005**	**0.006**	**4**	**0.26**	**<1***

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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW03	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	<50	<100	<20	<50	<100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	130	130	<100	<100	<20	<50	10	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW03 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**120**	**-**

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Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW04	29/09/2022	4.5	68	<5	4.8	52	0.01	0.18	20	<0.02	5.1	17	<2	<5		0.05
	20/10/2022	4.2	90	<5	7.5	110	0.01	<0.10	20	<0.02	0.3	16	<2	<5		0.05
	14/11/2022	No surface water located at monitoring site – no sample collected														
	14/12/2022	3.2	190	<5	2	280	0.01	0.05	42	<0.10	3.2	20	<2	<5		0.02
	18/01/2023	No surface water located at monitoring site – no sample collected														
	20/02/2023	4.1	0.2	<5	5.9	160	0.02	0.09	22	<0.10	7.4	23	15	<5		0.7
	28/03/2023	4.2	68	<5	8	130	<0.01	<0.01	17	<0.10	<0.25	14	25	<5		1.5
	18/04/2023	4.6	130	16	9.1	190	0.01	0.03	32	<0.02	0.5	21	8.7	<5		0.3
	18/05/2023	3.6	1,200	42	8	1,800	0.03	1.2	26	<0.02	1.15	53	1,000	<5		38.5
	15/06/2023	4.2	140	160	7.7	200	1.5	0.44	44	<0.02	12	24	<2	8		0.02
	24/07/2023	3.6	1,600	21	9	2,400	0.02	1.5	180	<0.02	3.4	78	5,700	<5		31.7
	21/08/2023	3.3	2,400	5.7	7.5	3,700	<0.01	2.8	33	<0.02	3.4	97	850	5.3		25.8
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.2	2,100	<5	9	3,500	0.03	0.8	4.7	<0.01	1.1	63	400	<5		85.1
	19/12/2023	3.0	3,200	15	0.8	3,700	<0.01	0.44	34	<0.02	4.5	100	980	<5		28.8
	23/01/2024	3.1	1,600	23	7.8	2,500	<0.01	0.19	27	<0.02	0.5	54	730	<5		27.0
	26/02/2024	3.1	1,000	11	7.8	1,200	0.03	0.31	14	<0.02	1.5	30	570	<5		40.7
	26/03/2024	3.2	900	5.7	9.6	1,300	<0.01	0.36	21	<0.02	0.9	30	710	<5		33.8
	18/04/2024	3.1	980	67	7.5	1,900	0.03	0.42	15	<0.02	0.8	33	1,000	27	310	66.7
	20/05/2024	3.3	630	8	8.3	1,100	<0.01	0.3	11	<0.02	0.7	25	500	<5	190	45.5
	25/06/2024	3.2	1,000	5.4	8.6	1,600	0.01	0.4	13	<0.02	1	27	270	<5	160	20.8
	10/07/2024	3.5	420	<5	7.9	870	<0.01	0.24	11	<0.02	0.6	21	450	<5	150	40.9
	6/08/2024	3.3	1,300	38	8.7	1,700	0.04	0.03	13	<0.02	1.1	28	860	7.8	230	66.2
	15/08/2024	3.9	240	<5	9.3	390	0.02	0.13	13	<0.02	0.8	16	150	<5	40	11.5
	11/09/2024	3.4	460	<5	6.9	690	0.01	0.05	8.7	<0.02	<0.2	17	390	15	77	44.8
	24/09/2024 - Additional	3.5	750	-	-	1,300	-	-	-	-	-	-	-	-	-	-
	9/10/2024	3.1	810	<5	9	1,200	0.02	<0.01	10	<0.02	0.8	26	580	<5	<10	58.0
	6/11/2024	3.3	440	23	6.4	660	0.05	<0.01	10	<0.02	1	18	310	<5	15	31.0
	16/12/2024	5.7	210	420	0.2	360	0.1	0.25	13	<0.02	13	12	110	7	25	8.5
	14/01/2025	4.1	310	120	4.9	460	0.13	0.03	6.3	<0.02	1.3	11	64	<5	<10	10.2
	11/02/2025	7.6	700	<5	8.8	1000	0.01	0.03	5.8	<0.02	1.3	21	150	7.7	<10	25.9
	24/03/2025	3.9	390	21	7.4	470	0.03	0.03	18	<0.02	1.5	24	180	8.1	<10	10.0
	31/03/2025	6.3	260	70	10	370	<0.01	0.1	11	<0.02	0.8	16	160	<5	<10	14.5
	8/04/2025	6.0	430	43	4.1	470	0.09	0.27	11	0.04	2.3	18	240	<10	16	21.8
	9/05/2025	6.5	270	260	-	570	<0.01	0.02	10	<0.02	4.5	16	250	160	<10	25.0
	25/06/2025	6.7	410	67	6.1	590	0.6	0.01	8.3	<0.02	0.6	16	160	6.5	28	19.2
	8/07/2025	4.0	140	180	6.1	160	0.21	<0.01	21	<0.02	6.2	17	<2	7.6	43	21.0
	14/08/2025	6.5	180	250	6.6	290	0.47	-	9.4	-	-	14	86	<5	13	9.4
	11/09/2025	6.5	260	1,400	0.2	460	0.03	0.31	7.3	<0.02	38	16	150	10	22	7.3
	13/10/2025	7.3	580	14	8.3	760	0.04	<0.01	4	<0.02	0.8	16	230	20	<10	4.0
	20/11/2025	6.9	280	35	2.1	490	0.08	0.05	8.4	<0.02	1	15	150	2.7	<10	8.4
	16/12/2025	7.0	370	170	6	550	0.05	0.21	14	<0.5	1	87	140	<5	39	14.0
	21/01/2026	6.9	250	75	1.9	450	0.23	<0.01	22	0.02	0.9	16	100	<0.005	13	22.0
	20/02/2026	6.9	320	42	1.5	480	0.03	<0.01	29	<0.02	2.6	18	30	0.17	16	29.0
	20/03/2026	6.7	250	110	7.7	420	0.11	0.04	18	<0.02	1.9	20	120	<0.005	<10	18.0
	21/04/2026	6.9	300	590	1.2	410	1.3	0.12	20	<0.02	2.1	23	22	<0.0065	11	20.0
SW04 Baseline		**4.2 – 4.5**	**112**	**293**	**-**	**165**	**0.5**	**0.693**	**90**	**0.052**	**4.5**	**20**	**3**	**86**		**<0.5***

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Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW04	29/09/2022	1.3	0.001	<0.0002	1.6	0.005	0.001	2.7	0.001	2.6	<0.0001	0.002	1	0.027	<1
	20/10/2022	1.1	<0.001	<0.0002	1.3	0.004	0.001	2.4	0.001	2.3	<0.0001	0.002	1	0.024	<1
	14/11/2022	No surface water located at monitoring site – no sample collected													
	14/12/2022	1.2	<0.001	<0.002	<5	<0.001	<0.01	3.2	<0.01	<5	<0.001	<0.01	<5	0.084	<1
	18/01/2023	No surface water located at monitoring site – no sample collected													
	20/02/2023	1.6	0.002	<0.0002	2.7	0.005	0.05	0.002	0.002	3.9	<0.001	0.003	1.6	0.039	<1
	28/03/2023	1.1	<0.01	<0.002	<5	0.002	<0.01	2.7	<0.01	<5	<0.0001	0.01	<5	<0.05	<1
	18/04/2023	0.85	<0.001	<0.0002	1.8	<0.01	<0.001	<0.001	<0.001	2.7	<0.0001	0.001	0.8	0.034	<1
	18/05/2023	41	<0.001	0.0005	200	<0.001	0.003	16	0.003	31	<0.0001	0.11	5.7	0.4	<1
	15/06/2023	3.1	0.002	<0.0002	2.2	0.007	0.007	6.3	0.005	4.5	<0.0001	0.003	1.4	0.075	1.41
	24/07/2023	50	<0.001	0.0002	330	<0.001	0.003	3.9	0.002	51	<0.0001	0.13	9	0.18	<1
	21/08/2023	72	0.002	0.0004	560	<0.001	0.003	3.4	0.002	83	<0.0001	0.23	13	0.34	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	3	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	91	0.003	0.0007	380	0.001	0.003	4.3	0.003	52	<0.0001	0.27	7.2	0.55	<1
	19/12/2023	110	0.005	0.0022	570	0.002	0.005	11	0.007	90	0.001	0.39	4.3	0.7	<1
	23/01/2024	55	0.002	0.0003	260	0.002	0.003	9.7	0.002	35	<0.0001	0.19	6.1	0.33	<1
	26/02/2024	23	<0.001	<0.0002	140	<0.001	<0.001	5.1	<0.001	20	<0.0001	0.083	3.9	0.18	<1
	26/03/2024	20	<0.001	<0.0002	130	<0.001	<0.001	3.1	<0.001	19	<0.0001	0.068	4.9	0.1	<1
	18/04/2024	32	<0.001	<0.0002	190	0.001	0.002	7	<0.001	26	<0.0001	0.1	3.6	0.18	<1
	20/05/2024	20	<0.001	<0.0002	100	<0.001	<0.001	5.7	<0.001	14	<0.0001	0.064	2.6	0.13	<1
	25/06/2024	16	<0.001	<0.0002	210	<0.001	<0.001	5.3	<0.001	23	<0.0001	0.059	3.7	0.09	<1
	10/07/2024	12	<0.001	<0.0002	110	<0.001	0.001	2.5	<0.001	12	<0.0001	0.051	2.2	0.11	<1
	6/08/2024	17	<0.001	<0.0002	200	<0.001	0.001	5.5	<0.001	24	<0.0001	0.059	2.5	0.1	<1
	15/08/2024	2	<0.001	<0.0002	36	<0.001	<0.001	0.81	<0.001	6	<0.0001	0.015	2.5	0.057	<1
	11/09/2024	5.6	<0.001	<0.0002	87	<0.001	<0.001	3.6	<0.001	11	<0.0001	0.026	1.6	0.061	<1
	24/09/2024 - Additional	-	<0.001	<0.0001	-	<0.001	0.0001	-	<0.001	-	<0.0001	0.032	-	0.043	-
	9/10/2024	14	<0.001	<0.0002	140	<0.001	0.002	8.1	<0.001	17	<0.0001	0.057	2.7	0.12	<1
	6/11/2024	2.8	<0.001	<0.0002	81	<0.001	<0.001	6.1	<0.001	11	<0.0001	0.02	<0.5	0.034	<1
	16/12/2024	4.4	0.007	<0.0002	29	0.009	0.006	170	0.003	4.5	<0.0001	0.009	1.3	0.035	<1
	14/01/2025	1.2	<0.001	<0.0002	53	<0.001	0.001	5.8	<0.001	5.8	<0.0001	0.014	0.8	0.039	<1
	11/02/2025	<0.05	<0.001	<0.0002	200	<0.001	<0.001	0.14	<0.001	18	<0.0001	0.004	<0.5	0.033	<1
	24/03/2025	1.1	<0.001	<0.0002	52	<0.001	0.002	6.6	<0.001	8.5	<0.0001	0.012	2.3	0.1	<1
	31/03/2025	0.5	0.003	<0.0002	50	<0.001	0.001	17	<0.001	7.6	<0.0001	0.007	2.4	0.047	<1
	8/04/2025	0.36	0.004	<0.0002	70	<0.001	<0.001	38	<0.001	9.8	<0.0001	0.006	2.3	0.014	<1
	9/05/2025	0.64	<0.001	<0.0002	61	<0.001	0.001	34	<0.001	7.9	<0.0001	0.001	1.9	0.032	<1
	25/06/2025	0.35	<0.001	<0.0002	85	<0.001	<0.001	7.3	<0.001	8.5	<0.0001	0.004	1.3	0.013	<1
	8/07/2025	0.92	<0.001	<0.0002	0.6	0.004	0.002	1.8	<0.001	1.5	<0.0001	0.001	0.8	0.042	<1
	14/08/2025	0.34	<0.001	<0.0002	38	<0.001	<0.001	17	<0.001	5.7	<0.0001	0.002	1	0.018	<1
	11/09/2025	8.7	0.031	<0.002	120	0.017	0.011	830	<0.01	12	<0.001	0.027	<5	0.1	<1
	13/10/2025	0.31	0.002	<0.0002	130	<0.001	<0.001	12	<0.001	14	<0.0001	0.004	1.5	<0.005	<1
	20/11/2025	0.26	<0.001	<0.0002	69	<0.001	0.002	7.6	0.001	8.5	<0.0001	0.003	0.6	0.016	<1
	16/12/2025	13	0.002	<0.0002	57	0.003	<0.001	47	0.002	38	<0.0001	0.032	2.4	0.039	<1
	21/01/2026	0.07	<0.001	<0.0002	53	<0.001	<1	3	<1	7.3	<0.0001	0.001	<0.5	<0.005	<1
	20/02/2026	0.33	0.003	<0.0002	63	<0.001	<0.001	37	<0.001	8.2	<0.0001	0.002	1.6	0.013	<1
	20/03/2026	1	0.002	<0.0002	44	<0.001	0.002	21	<0.001	7.4	<0.0001	0.004	1.7	0.021	<1
	21/04/2026	4.2	0.005	<0.0002	54	0.004	0.01	56	0.004	7.6	<0.0001	0.014	3.1	0.065	<1
SW04 Baseline		**1.4**	**0.002**	**0.001**	**3.2**	**0.007**	**0.002**	**2.8**	**0.002**	**2.3**	**0.0005**	**0.005**	**2.9**	**0.028**	**<1***

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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW04	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	No flow - No sample collected									
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	No flow - No sample collected									
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No flow - No sample collected									
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	160	160	<100	<100	<20	<50	<100	<100	160	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Additional	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW04 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

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Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW05	29/09/2022	5.9	480	5.2	7.7	510	0.12	0.17	220	<0.20	3	140	11	<5		0.05
	20/10/2022	6.2	650	7.2	8.9	690	0.06	0.24	180	<0.20	0.5	160	8.6	<5		0.05
	14/11/2022	6.2	820	13	4.7	1,000	0.06	<0.05	310	<0.10	8.1	260	100	<5		0.32
	14/12/2022	6.2	830	16	7.5	1,100	0.05	0.05	330	<0.10	3.1	240	40	<5		0.12
	18/01/2023	6.3	2,800	33	7	<5	0.09	0.09	1,300	<0.02	3.38	820	160	<5		0.12
	20/02/2023	6.7	18	18	5.4	2,300	0.1	0.07	2,000	<0.10	3.4	4700	890	<5		0.45
	28/03/2023	5.6	470	<5	9.4	760	0.02	0.08	200	<0.10	<0.02	110	23	6.7		0.12
	18/04/2023	6.4	4,000	16	8.5	5,300	0.1	0.12	2,000	<0.02	80	1100	230	<5		0.12
	18/05/2023	5.8	260	17	5.7	460	0.08	<0.01	110	<0.02	<0.2	64	25	<5		0.23
	15/06/2023	6.2	1,100	<5	8.8	1,400	0.58	0.14	450	<0.02	1.1	250	40	<5		0.09
	24/07/2023	6.5	1,600	<5	9.3	2,800	0.05	0.17	1,500	<0.5	1.1	440	1,200	<5		0.80
	21/08/2023	6.6	1,600	<5	6.3	2,900	0.06	0.15	1,500	<0.02	1.28	480	190	<5		0.13
	18/09/2023	6.6	2,500	13	6.4	3,800	0.06	0.11	1,200	<0.02	1.3	650	210	<5		0.18
	18/10/2023	6.9	4,800	6.6	6.5	7,700	0.06	0.05	2,700	<0.02	<0.2	1,300	730	10		0.27
	20/11/2023	6.8	2,100	12	4.8	3,700	0.18	0.46	1,100	<0.01	0.6	460	1,200	<5		1.09
	19/12/2023	6.7	3,300	14	5.3	5,400	0.19	0.77	1,700	<0.02	<2	1,000	64	<5		0.04
	23/01/2024	6.2	1,100	13	9.3	1,000	0.09	0.05	440	<0.02	2.3	260	220	<5		0.50
	26/02/2024	6.3	970	16	8.6	1,200	0.11	0.03	330	<0.02	1.5	200	130	<5		0.39
	26/03/2024	6.6	1,100	9.1	5.6	1,700	0.03	0.09	910	<0.02	2	290	420	<5		0.46
	18/04/2024	6.5	560	8.4	5.8	830	0.07	0.16	160	<0.02	1.7	110	160	5.4	<10	1.00
	20/05/2024	6.7	240	<5	5.8	350	<0.01	0.03	68	<0.02	0.4	47	140	<5	15	2.06
	25/06/2024	6.5	1,000	16	7.7	1,800	0.06	0.1	500	<0.02	1.2	300	29	<5	16	0.06
	10/07/2024	6.2	950	5.6	6.3	1,700	0.02	0.16	170	<0.02	0.9	280	130	<5	11	0.76
	6/08/2024	6.3	3,300	9	8.9	5,800	0.05	0.11	1500	<0.02	1.2	820	210	<5	27	0.14
	15/08/2024	6.2	300	<5	7.1	430	0.08	0.03	30	<0.02	<0.2	80	27	<5	12	0.90
	11/09/2024	6.4	710	8.2	5.5	1,200	0.03	0.4	450	<0.02	1.1	230	72	<5	12	0.16
	9/10/2024	6.4	700	11	9	1,100	0.15	0.15	320	<0.1	<0.25	180	53	<5	14	0.17
	6/11/2024	7.1	930	15	6.1	1,300	0.08	0.16	440	<0.02	1	250	56	<5	<10	0.13
	16/12/2024	7.4	31,000	26	9.3	44,000	0.02	0.14	1,400	<0.02	0.4	<0.5	2,000	<5	<10	1.43
	14/01/2025	7.1	19,000	9.4	6.2	30,000	0.04	0.04	12,000	<0.02	0.3	5,500	500	<5	<10	0.04
	11/02/2025	7.5	24,000	9.1	8.5	35,000	0.03	0.06	6,300	<0.02	<0.2	6,900	260	<5	<10	0.04
	24/03/2024	6.3	1,600	<5	7	2,500	<0.1	0.12	790	<0.02	4.4	440	140	<5	<10	0.18
	31/03/2025	7.0	210	8	9.2	260	0.08	<10	72	<0.02	2.3	41	9.5	<5	<10	0.13
	8/04/2025	6.3	610	8.3	6.7	760	0.08	0.44	230	<0.2	<1	140	29	<10	<10	0.13
	9/05/2025	6.8	340	<5	-	480	0.08	<0.1	120	<0.2	1.7	71	40	<5	<10	0.33
	25/06/2025	6.2	2,000	6.6	5.9	3,500	<0.2	0.07	1,700	<0.2	<0.2	510	250	<5	17	0.14
	8/07/2025	6.0	470	<5	8	910	0.05	0.03	230	0.07	<0.2	130	41	<5	13	0.18
	14/08/2025	6.2	570	16	6.1	930	0.08	0.03	550	<0.02	16	140	62	6.5	13	0.11
	11/09/2025	6.5	940	5.4	6.9	1,700	0.04	0.05	440	<0.02	1.7	260	61	<5	9	0.14
	13/10/2025	6.8	6,600	<5	5.4	11,000	0.05	0.1	3,300	<0.02	1.7	1,800	370	<5	12	0.11
	20/11/2025	6.6	4,600	<5	4.3	9,000	0.1	0.21	2,600	<0.02	0.4	1,400	320	<5	12	0.12
	16/12/2025	6.8	11,000	18	4.1	18,000	0.07	0.28	6,100	<0.5	1.2	2,800	720	<5	34	0.12
	21/01/2026	7.4	25,000	9.5	7.8	37,000	0.03	0.02	12,000	12	1.1	6,300	1,500	<0.005	14	0.13
	20/02/2026	6.9	21,000	8.4	4.9	32,000	0.02	<0.01	10,000	<0.02	0.8	5,400	410	<0.005	10	0.04
	20/03/2026	6.3	1,400	25	5.5	2,700	0.28	0.09	720	<0.02	1.7	370	98	<0.005	<10	0.14
	21/04/2026	6.5	14,000	8.4	6.8	22,000	0.07	0.74	7,500	<0.02	1	3,500	320	<0.005	<10	0.04
SW05 Baseline		**5.1 – 7.2**	**4710**	**136**	**-**	**6,927**	**0.21**	**0.592**	**980**	**0.02**	**2.2**	**1,667**	**115**	**63**		**<0.5***

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Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW05	29/09/2022	0.83	<0.001	<0.0002	9.4	0.002	<0.001	4.6	<0.001	17	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.66	<0.001	<0.0002	11	0.001	<0.001	3.5	0.001	19	<0.0001	0.002	7.9	0.007	<1
	14/11/2022	0.75	<0.001	<0.002	18	<0.001	0.002	5.4	<0.01	27	<0.001	<0.001	11	0.12	<1
	14/12/2022	0.93	<0.001	<0.002	16	<0.01	<0.01	6.1	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.73	<0.01	<0.002	<2	<0.01	<0.01	6.2	<0.01	96	<0.001	<0.01	41	<0.05	<1
	20/02/2023	0.22	0.002	<0.0002	190	0.001	0.01	<0.001	<0.001	550	<0.001	0.001	170	0.008	<1
	28/03/2023	0.77	<0.01	<0.002	9.4	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.4	<0.05	<1
	18/04/2023	1	<0.001	<0.0002	42	0.001	<0.001	<0.001	<0.001	110	<0.0001	0.003	37	0.008	<1
	18/05/2023	0.6	<0.001	<0.0002	5.2	<0.001	<0.001	2.4	<0.001	9.1	<0.0001	0.002	4.9	0.009	<1
	15/06/2023	0.32	<0.001	<0.0002	14	0.001	2	2	<0.001	27	<0.0001	0.001	14	0.01	<1
	24/07/2023	0.33	<0.001	<0.0002	22	<0.001	<0.001	1.9	<0.001	52	<0.0001	0.002	25	0.006	<1
	21/08/2023	0.41	<0.001	<0.0002	23	<0.001	0.002	2.2	<0.001	54	<0.0001	0.002	29	0.005	<1
	18/09/2023	0.28	<0.001	<0.0002	29	<0.001	<0.001	2.6	<0.001	70	<0.0001	0.001	42	<0.005	<1
	18/10/2023	0.27	<0.001	<0.0002	61	<0.001	<0.001	2	<0.001	160	<0.0001	<0.001	76	<0.005	<1
	20/11/2023	0.51	0.001	<0.0002	25	0.001	<0.001	4.3	<0.001	56	<0.0001	0.002	27	<0.005	<1
	19/12/2023	0.54	0.005	0.0028	46	0.001	0.001	4.2	0.001	120	0.002	0.002	47	0.009	<1
	23/01/2024	0.9	0.003	<0.0002	16	0.002	0.001	7.8	<0.001	32	<0.0001	0.001	16	0.012	<1
	26/02/2024	0.63	0.001	<0.0002	13	0.001	<0.001	3.7	<0.001	23	<0.0001	0.002	10	0.029	<1
	26/03/2024	0.64	<0.001	<0.0002	16	0.001	<0.001	3.3	<0.001	33	<0.0001	0.002	14	0.008	<1
	18/04/2024	0.69	<0.001	<0.0002	8.3	0.002	0.001	<0.001	<0.001	14	<0.0001	0.008	6.7	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.6	<0.001	0.001	2.5	<0.001	5.1	<0.0001	0.002	3.5	0.008	<1
	25/06/2024	0.2	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	31	<0.0001	0.002	12	0.012	<1
	10/07/2024	0.48	<0.001	<0.0002	17	<0.001	<0.001	2.9	<0.001	31	<0.0001	0.002	11	0.008	<1
	6/08/2024	0.28	<0.001	<0.0002	37	<0.001	<0.001	<0.001	<0.001	100	<0.0001	0.001	30	0.007	<1
	15/08/2024	0.5	<0.001	<0.0002	5	0.001	<0.001	1.6	<0.001	8	<0.0001	0.001	4.6	0.01	<1
	11/09/2024	0.52	<0.001	<0.0002	14	<0.001	<0.001	2.9	<0.001	25	<0.0001	0.002	10	0.011	<1
	9/10/2024	0.85	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.5	0.016	<1
	6/11/2024	0.68	<0.001	<0.0002	17	0.002	<0.001	3.8	<0.001	29	<0.0001	0.002	12	0.008	<1
	16/12/2024	<0.05	<0.001	<0.0002	<0.5	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.24	0.002	<0.0002	230	0.002	<0.001	0.64	<0.001	660	<0.0001	<0.001	210	0.006	<1
	11/02/2025	0.12	0.002	<0.0002	290	0.001	<0.001	0.5	<0.001	820	<0.0001	<0.001	260	0.047	<1
	24/03/2024	0.54	<0.001	<0.0002	22	<0.001	0.001	3.2	<0.001	53	<0.0001	0.002	17	0.32	<1
	31/03/2025	0.58	<0.001	<0.0002	4.2	<0.001	<0.001	3.7	<0.001	5.2	<0.0001	0.002	3.5	0.062	<1
	8/04/2025	0.77	<0.001	<0.0002	9.9	0.001	<0.001	4.2	<0.001	18	<0.0001	0.002	6	0.011	<1
	9/05/2025	0.75	<0.001	<0.0002	6.3	0.001	<0.001	3.2	<0.001	8.5	<0.0001	0.002	3.7	0.015	<1
	25/06/2025	0.46	<0.001	<0.0002	26	<0.001	<0.001	2	<0.001	63	<0.0001	0.001	19	0.01	<1
	8/07/2025	0.68	<0.001	<0.0002	9.1	0.001	<0.001	3	<0.001	16	<0.0001	0.002	4.9	0.008	<1
	14/08/2025	0.46	<0.001	<0.0002	8.6	<0.001	<0.001	2.6	<0.001	17	<0.0001	0.001	6.2	0.008	<1
	11/09/2025	0.55	<0.001	<0.0002	15	<0.001	<0.001	3.2	<0.001	33	<0.0001	0.001	11	0.01	<1
	13/10/2025	0.21	<0.001	<0.0002	77	<0.001	<0.001	2	<0.001	220	<0.0001	<0.001	69	<0.005	<1
	20/11/2025	0.32	0.001	<0.0002	63	0.001	<0.001	2.7	<0.001	180	<0.0001	0.001	53	<0.005	<1
	16/12/2025	0.2	0.001	<0.0002	120	0.001	0.001	1.4	<0.001	340	<0.0001	0.001	110	0.008	<1
	21/01/2026	0.08	0.002	<0.0002	250	0.001	<1	0.47	<1	760	<0.0001	<0.001	240	0.009	<1
	20/02/2026	0.1	0.002	<0.0002	220	<0.001	<0.001	1.4	<0.001	640	<0.0001	<0.001	260	0.006	<1
	20/03/2026	0.53	<0.001	<0.0002	22	<0.001	0.001	4.6	<0.001	46	<0.0001	0.002	17	0.011	<1
	21/04/2026	0.18	0.001	<0.0002	150	<0.001	0.001	1.2	<0.001	430	<0.0001	0.001	130	0.022	<1
SW05 Baseline		**2.1**	**0.002**	**0.001**	**57**	**0.002**	**0.003**	**12.3**	0.001	**130**	**0.0005**	**0.011**	**58**	**0.026**	**<1***

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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW05	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	70	70	-	-	<20	60	100	-	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	120	120	<100	120	<20	<50	120	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW05 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

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Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW06	29/09/2022	6.0	480	<5	7.8	580	0.13	0.16	220	<0.02	8.6	140	11	5.1		0.05
	20/10/2022	6.3	580	16	8.7	730	0.05	0.19	330	<0.02	0.5	110	7.5	6.2		0.02
	14/11/2022	6.2	840	13	<5	1000	0.04	0.36	310	<0.10	1.1	270	100	<5		0.32
	14/12/2022	6.3	840	16	8.3	1200	0.1	0.05	340	<0.10	5.8	240	44	<5		0.13
	18/01/2023	6.4	3,700	31	6.8	5,400	0.07	0.04	1,800	<0.02	2.5	1,000	200	<5		0.11
	20/02/2023	6.8	19	89	5.1	14,000	0.09	0.11	22	<0.10	4.1	4,000	1,200	<5		54.55
	28/03/2023	5.6	400	6.2	8.3	730	0.03	0.07	180	<0.20	<0.20	110	18	9.7		0.10
	18/04/2023	6.7	6,400	18	7.4	6,700	0.07	1.2	3,200	<0.02	1.26	1,700	360	<10		0.11
	18/05/2023	5.9	280	17	6.3	470	0.08	0.06	120	<0.02	0.4	370	21	<5		0.18
	15/06/2023	6.4	1,100	<5	7.4	1,400	0.55	0.18	440	<0.02	0.7	250	38	<5		0.09
	24/07/2023	6.7	2,100	5.8	6.6	3,500	0.07	0.23	1,800	<0.2	0.6	540	620	<5		0.34
	21/08/2023	6.6	2,800	<5	6.1	5,400	0.19	0.16	1,300	<0.02	0.78	870	59	<5		0.05
	18/09/2023	6.7	2,900	24	6.5	4,600	0.06	0.12	1,500	<0.02	0.4	1,300	200	<5		0.13
	18/10/2023	6.9	7,900	6.3	6.4	9,700	0.05	0.05	3,700	<0.02	<0.2	1,600	430	<5		0.12
	20/11/2023	6.6	2,200	9.9	4.6	4,000	0.18	0.43	1,200	<0.01	1.2	490	720	<5		0.60
	19/12/2023	6.8	3,300	9.3	5.6	6,600	0.09	0.82	2,300	<0.02	<2	1,300	94	<5		0.04
	23/01/2024	6.2	4,300	15	2.1	4,300	0.18	0.08	2,800	<0.02	1.4	1,100	330	<5		0.12
	26/02/2024	6.4	880	17	9	1,200	0.11	0.02	60	<0.02	1.7	200	10	<5		0.17
	26/03/2024	6.8	1,300	9.9	5.9	1,900	0.05	0.07	760	0.05	1.2	300	120	<5		0.16
	18/04/2024	6.6	520	5.8	6	840	0.06	0.16	170	<0.02	<1	110	31	<5	17	0.18
	20/05/2024	6.3	240	<5	6.1	290	<0.01	0.05	59	<0.02	1	42	47	<5	15	0.80
	25/06/2024	6.7	960	17	9.2	1,900	0.06	0.09	500	<0.02	5.3	270	21	<5	19	0.04
	10/07/2024	6.2	880	<5	6.2	1,600	0.03	0.13	170	<0.02	1.4	250	33	<5	15	0.19
	6/08/2024	6.3	4,500	6.8	7.6	8,400	0.08	0.15	2,100	<0.02	1.6	1,200	270	<5	24	0.13
	15/08/2024	6.2	160	<5	7	240	0.1	0.03	57	<0.02	<0.2	38	15	<5	14	0.26
	11/09/2024	6.7	710	7	6.6	1,000	0.04	0.28	370	<0.02	1.8	180	54	<5	11	0.15
	9/10/2024	6.5	720	14	8.5	1,000	0.15	<0.01	310	<0.1	4.3	180	33	18	<10	0.11
	6/11/2024	6.9	1,900	37	5.6	2,400	0.1	0.11	890	<0.02	1.6	490	160	<5	<10	0.18
	16/12/2024	7.7	33,000	13	9.5	47,000	0.01	0.18	16,000	<0.02	<0.2	<0.5	2,100	<5	<10	0.13
	14/01/2025	7.2	25,000	11	6.3	38,000	0.03	0.06	15,000	<0.02	0.7	7,200	600	<5	<10	0.04
	11/02/2025	7.6	24,000	11	7.2	34,000	0.003	0.06	6,100	<0.02	<0.2	7,200	240	5.9	<10	0.04
	24/03/2025	6.5	1,700	<5	6.8	2,500	<0.1	0.12	820	<0.02	4.2	450	110	<5	<10	0.13
	31/03/2025	6.7	250	11	9.5	250	0.08	<10	68	<0.02	<1	42	9.7	<5	<10	0.14
	8/04/2025	6.4	610	7.6	9.4	740	0.08	0.28	260	<0.2	<1	140	31	<10	<10	0.12
	9/05/2025	6.6	260	<5	-	490	0.07	<0.1	120	<0.2	<1	70	28	<5	<10	0.23
	25/06/2025	6.2	2,000	7.4	5.9	3,600	1.4	0.08	1,700	<0.2	1.4	520	260	<5	20	1.50
	8/07/2025	6.0	470	<5	8.2	910	0.05	0.02	230	<0.02	<0.2	130	28	<5	13	0.12
	14/08/2025	6.3	590	31	6.1	910	0.07	0.03	340	<0.02	0.3	140	37	<5	13	0.11
	11/09/2025	6.6	1,299	6.8	7.1	2,200	0.04	0.05	590	<0.02	5.6	340	67	<5	<10	0.11
	13/10/2025	6.8	14,000	5.9	4.9	23,000	0.04	0.29	7,400	<0.02	0.6	4,100	830	5.9	14	0.11
	20/11/2025	6.7	8,400	<5	4.5	14,000	0.09	0.22	4,800	<0.02	0.7	2,300	1,100	<5	12	0.23
	16/12/2025	6.9	12,000	20	3.8	19,000	0.09	0.32	6,100	<0.5	1.8	2,900	750	7	28	0.12
	21/01/2026	7.4	18,000	7.1	7.4	28,000	0.03	<0.01	8,400	8.4	1	4,700	1,000	<0.005	12	0.12
	20/02/2026	7	19,000	<5	5.9	33,000	0.02	0.05	12,000	<0.02	0.3	5,800	520	0.0058	17	0.04
	20/03/2026	6.4	1,400	20	4.3	2,800	0.16	0.13	770	<0.02	2.4	390	100	<0.005	<10	0.13
	21/04/2026	6.5	12,000	<5	7.4	19,000	0.03	0.1	5,900	<0.02	1.2	3,100	270	<0.005	16	0.05
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		**6.5 – 8.0**	**-**	**<50**	**-**	**<2200**	**<0.05**	**-**	**-**	**-**	**<0.50**	**-**	**-**	**5**		**<0.5***

Note: * derived from Interim Target Criteria within BCPoM, GWMP and AFMP (AWC 2020)

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Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW06	29/09/2022	0.78	<0.001	<0.0002	9.4	0.002	<0.001	4.5	<0.001	18	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.54	<0.001	<0.0002	9.1	0.001	<0.001	2.7	0.001	13	<0.0001	0.002	5.8	0.012	<1
	14/11/2022	0.68	<0.001	<0.002	18	<0.001	0.012	5.3	<0.01	29	<0.001	<0.01	12	0.11	<1
	14/12/2022	0.75	<0.001	<0.002	16	<0.01	<0.01	5.4	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.63	<0.010	<0.001	<2	<0.01	<0.01	0.01	<0.01	120	<0.001	<0.01	47	<0.05	<1
	20/02/2023	0.34	0.002	<0.0002	170	0.001	0.01	<0.001	<0.001	480	<0.001	0.002	160	0.008	<1
	28/03/2023	1.1	<0.01	<0.002	11	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.3	<0.05	<1
	18/04/2023	0.54	<0.001	<0.0002	68	0.001	<0.001	<0.001	<0.001	200	<0.0001	0.002	63	0.009	<1
	18/05/2023	0.44	0.003	<0.0002	14	<0.001	<0.001	0.13	<0.001	4.8	<0.0001	0.008	3.3	<0.005	<1
	15/06/2023	0.36	<0.001	<0.0002	15	<0.001	2.1	2.1	<0.001	28	28	0.001	14	<0.005	<1
	24/07/2023	0.36	<0.001	<0.0002	26	<0.001	<0.001	1.9	0.001	65	<0.0001	0.002	29	0.007	<1
	21/08/2023	0.41	<0.001	<0.0002	39	0.001	<0.001	1.9	<0.001	100	<0.0001	0.002	46	<0.005	<1
	18/09/2023	0.3	<0.001	<0.0002	56	<0.001	<0.001	2.4	<0.001	150	<0.0001	0.001	64	<0.005	<1
	18/10/2023	0.2	<0.001	<0.0002	73	<0.001	<0.001	1.7	<0.001	190	<0.0001	<0.001	85	<0.005	<1
	20/11/2023	0.63	0.001	<0.0002	27	0.001	<0.001	4.5	<0.001	60	<0.0001	0.003	28	0.01	<1
	19/12/2023	0.62	0.002	0.0007	56	0.001	0.002	3.4	<0.001	150	0.0005	0.002	55	0.008	<1
	23/01/2024	0.71	0.003	<0.0002	50	0.002	<0.001	5.7	<0.001	140	<0.0001	<0.001	46	0.008	<1
	26/02/2024	0.61	<0.001	<0.0002	14	0.003	<0.001	3.5	<0.001	24	<0.0001	0.005	10	0.025	<1
	26/03/2024	0.61	<0.001	<0.0002	17	0.001	<0.001	3.1	<0.001	34	<0.0001	0.002	15	0.008	<1
	18/04/2024	0.71	<0.001	<0.0002	10	0.001	<0.001	<0.001	<0.001	13	<0.0001	0.008	7.6	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.7	<0.001	<0.001	2.3	<0.001	4.8	<0.0001	0.002	3.2	0.009	<1
	25/06/2024	0.23	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	28	<0.0001	0.002	11	0.016	<1
	10/07/2024	0.5	<0.001	<0.0002	17	<0.001	<0.001	2.6	<0.001	28	<0.0001	0.002	10	0.01	<1
	6/08/2024	0.31	<0.001	<0.0002	50	<0.001	<0.001	<0.001	<0.001	140	<0.0001	0.002	40	0.011	<1
	15/08/2024	0.51	<0.001	<0.0002	4.8	<0.001	0.001	1.6	<0.001	4.6	<0.0001	0.002	3	0.011	<1
	11/09/2024	0.46	<0.001	<0.0002	14	<0.001	<0.001	2.1	<0.001	20	<0.0001	0.002	11	0.012	<1
	9/10/2024	0.84	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.7	0.009	<1
	6/11/2024	0.79	<0.001	<0.0002	25	0.002	<0.001	4.1	<0.001	60	<0.0001	0.002	20	0.01	<1
	16/12/2024	4.4	0.007	<0.0002	29	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.15	0.002	<0.0002	300	0.002	<0.001	0.3	<0.001	860	<0.0001	<0.001	270	<0.005	<1
	11/02/2025	0.09	0.002	<0.0002	300	0.001	<0.001	0.38	<0.001	850	<0.0001	<0.001	270	0.048	<1
	24/03/2025	0.55	<0.001	<0.0002	22	<0.001	<0.001	3.4	<0.001	54	<0.0001	0.002	17	0.027	<1
	31/03/2025	0.59	0.001	<0.0002	4.2	<0.001	<0.001	3.3	<0.001	5.3	<0.0001	0.002	3.5	0.044	<1
	8/04/2025	0.8	<0.001	<0.0002	9.9	0.003	<0.001	4.1	<0.001	18	<0.0001	0.002	6	0.007	<1
	9/05/2025	0.74	<0.001	<0.0002	6.3	0.001	0.001	2.8	<0.001	8.5	<0.0001	0.002	3.7	0.01	<1
	25/06/2025	0.7	<0.001	<0.0002	26	<0.001	<0.001	2.6	<0.001	64	<0.0001	0.002	20	0.008	<1
	8/07/2025	0.55	<0.001	<0.0002	11	0.001	0.001	2.3	<0.001	13	<0.0001	0.002	6.3	0.008	<1
	14/08/2025	0.43	<0.001	<0.0002	9.1	<0.001	<0.001	2.4	<0.001	16	<0.0001	0.001	6.3	0.011	<1
	11/09/2025	0.51	<0.001	<0.0002	19	0.001	<0.001	2.9	<0.001	42	<0.0001	0.001	14	0.008	<1
	13/10/2025	0.12	0.001	<0.0002	170	<0.001	<0.001	1.2	<0.001	500	<0.0001	<0.001	150	0.006	<1
	20/11/2025	0.26	0.001	<0.0002	99	0.001	<0.001	1.9	<0.001	280	<0.0001	0.001	86	0.006	<1
	16/12/2025	0.17	0.001	<0.0002	120	<0.001	<0.001	1.3	0.001	340	<0.0001	0.001	110	<0.005	<1
	21/01/2026	0.1	0.002	<0.0002	200	<0.001	<1	0.35	<1	560	<0.0001	<0.001	180	0.006	<1
	20/02/2026	0.1	0.002	<0.0002	240	<0.001	<0.001	0.58	<0.001	690	<0.0001	<0.001	280	0.028	<1
	20/03/2026	0.6	0.001	<0.0002	24	0.001	0.002	4.8	<0.001	48	<0.0001	0.002	18	0.014	<1
	21/04/2026	0.14	0.001	<0.0002	130	<0.001	0.002	0.87	0.008	380	<0.0001	<0.001	120	0.017	<1
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		**0.055**	**0.013**	**0.0002**	**-**	**0.0033**	**0.0018**	**0.3**	**0.0034**	**-**	**0.0006**	**0.011**	**-**	**0.008**	**<1***

Note: * derived from Interim Target Cri

Harvest Estate
ENV 217140

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW06	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	-	-	<20	<50	<100	<100	-	<100
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	90	90	<100	<100	<20	160	<100	<100	160	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<100	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	2.1	2.1	<100	<100	<20	<50	0.9	<100	0.9	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		-	-	-	-	-	-	-	-	-	-

Note: * derived from Interim Target Cri

APPENDIX D

Photolog

PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
1	21/04/2026

Description

Surface water monitoring location SW02.



Photo No.	Date
2	21/04/2026

Description

Surface water monitoring location SW05.



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
3	21/04/2026

Description

Surface water monitoring location SW03.



Photo No.	Date
4	21/04/2026

Description

Surface water location SW4



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
5	21/04/2026

Description

Surface water monitoring location SW01



Photo No.	Date
6	21/04/2026

Description

Groundwater water monitoring location MW7.



MONTHLY WATER QUALITY MONITORING REPORT

Harvest Estate Urban Development

Monitoring Event: 29th May 2026

Ewingsdale Road, Byron Bay, NSW, 2481

Job Number: 217140

For:

Planit Consulting

By:

ENV Services

Date:

23/06/2026

ENV Services Pty Ltd

313 River Street, Ballina NSW 2478

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E: admin@envsolutions.com.au

www.envsolutions.com.au

DOCUMENT CONTROL

Job No:	Job Number: 217140
Client:	Planit Consulting
Filename:	217140_Harvest Estate_WQ_May_2026

	Name:	**Date:**	**Signature:**
Prepared By:	Austin Metcalfe-Smith Environmental Scientist	17/06/2026	
Reviewed By:	Kingsley Baldwin Environmental Team Leader	23/06/2026	

Revision:	**Date:**	**Details:**

SCOPE OF ENGAGEMENT AND LIMITATIONS

This report has been prepared by ENV Services at the request of Planit Consulting for the purpose of consolidating and assessing water quality monitoring (surface water and ground water) data to determine impact associated with the development of the Harvest Estate. No other parties may rely on the contents of this report for any purposes except those stated.

This report has been prepared based on the information provided to us and from other information obtained as a result of enquiries made by us. ENV accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this document for a purpose other than that described above.

No part of this report may be reproduced, stored, or transmitted in any form without the prior consent of ENV.

ENV declares that it does not have, nor expects to have, a beneficial interest in the subject project.

To avoid this advice being used inappropriately, it is recommended that you consult with ENV before conveying the information to another who may not fully understand the objectives of the report. This report is meant only for the subject site/project and should not be applied to any other.

1 INTRODUCTION

ENV Services Pty Ltd (ENV) was engaged by Planit Consulting to prepare a Monthly Water Quality Report (MWQR) to meet requirements outlined in the Harvest Estate Development Conditions of Consent (11b - d, 32, 33 & 78) and Section 6.2 and 6.4 of the Planit Construction Environmental Management Plan (CEMP). Monitoring has been undertaken in accordance with the following approved plans.

- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate Groundwater Management Plan.* Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Belongil Creek Plan of Management*. Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate West Byron Urban Release Area; Acid Frog Management Plan.* Dated August 2020.

Baseline water quality parameters outlined in this report have been derived from mean or range values calculated over a 12-month sampling period undertaken between 25 May 2020 and 17 May 2021. This baseline water quality monitoring was carried out by Australian Wetlands Consulting (AWC) and undertaken in accordance with the Harvest Estate Groundwater Management Plan (AWC 2020) and the Harvest Estate – Belongil Creek Plan of Management (AWC 2020).

Guideline water quality trigger values have been derived from the ANZG (2018) Water Quality Guidelines and ANZECC (2000) guidelines for Fresh and Marine Water Quality. These guidelines define Belongil Creek as a lowland river of South-Eastern Australia, with trigger values chosen to reflect this. In assessing human disturbance, this report recognises Belongil Creek as being slight to moderately disturbed. On this basis, for toxicants in water, 95% species protection default guideline values have been presented for assessed toxicants.

No construction works were being undertaken during this monitoring period, with major civil earthworks associated with Stage 1 of the Project completed in November 2023.

2 MONITORING RESULTS & OBSERVATIONS

2.1 Monthly Groundwater Monitoring

Monthly groundwater monitoring at five (5) groundwater wells (MW2 – MW5 & MW7) was carried out to assess for impact within the underlying aquifer. This monitoring was conducted in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.2 of the Planit Construction Environmental Management Plan (CEMP). Groundwater monitoring locations are presented in Appendix A.

An assessment of the monthly analytical results presented in Appendix B, Table 1, identified the following observations:

Site	Observation	Comments
MW2	pH, EC, TDS, and SO_4 were recorded outside of baseline ranges.	pH, EC and TDS values remain elevated however have improved since the previous reporting period. Sulfate concentrations are likely associated with the oxidation of sulfide-bearing sediments (e.g. pyrite, marcasite) under fluctuating REDOX conditions, such as those induced by seasonal groundwater drawdown and rewetting cycles. Groundwater had sulfuric odour typical of oxidising ASS terrains. No site related impacts identified at this location.
MW3	All parameters were recorded within baseline ranges.	No site related impacts identified at this location.
MW4	All parameters were recorded within baseline ranges with the exception of SO_4.	Sulfate exceedances are likely due to the oxidisation of sulfide minerals. Groundwater had sulfuric odour typical of oxidising ASS terrains. No site related impacts identified at this location.
MW5	EC and several cations/anions (SO_4, Ca, and Al) concentrations were outside baseline ranges or guideline values (Al only).	Localised groundwater conditions continue to steadily improve with all elevated concentrations outside of baseline water quality objectives trending lower. As pH stabilises toward more neutral conditions, acid generation is expected to be increasingly buffered. This should reduce the dissolution of minerals within the soil profile and, over time, contribute to lower dissolved ion concentrations in groundwater. A sulfur odour typical of oxidising ASS terrains was noted at this location. Localised impacts continue to be reported at this site.

MW7	pH, EC, SO_4 and Al were recorded outside of baseline ranges.	Elevated sulfate and aluminium concentrations are likely associated with the oxidation of sulfide-bearing sediments (e.g. pyrite) under fluctuating REDOX conditions, such as those induced by seasonal groundwater drawdown and rewetting cycles. He reduction in pH created leads to the release of aluminium from aluminium-bearing minerals into the porewaters. No site related impacts identified at this location.

2.2 Monthly Surface Water Monitoring

Monthly surface water sampling (SW01 – SW06) was carried out to assess for impact from site activities on the receiving environment. Monitoring was carried out in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.4 of the Planit Construction Environmental Management Plan (CEMP), which require assessment of the following analytes; physiochemical parameters, nutrient, metals, cation/anion and total recoverable hydrocarbon (TRH).

Surface water monitoring locations are presented in Appendix A and the coordinates (GDA94) of all locations tabulated and presented in Table 1. Tabulated analytical results are presented in Appendix C. Select photos of the surface water sampling programme are presented in Appendix D.

Table 1: Surface Water Monitoring Coordinates

Monitoring Location	Location	Easting	Northing
SW01	Upstream of development - Southern Swale Drain	0556852	6831954
SW02	Upstream of development - Northern Main Drain	0557145	6831963
SW03	Downstream of development - Northern Main Drain	0557411	6831604
SW04	Downstream of development - Southern Swale Drain	0557397	6831429
SW05	Receiving environment - Outlet of Southern Swale Drain	0557992	6830881
SW06	Receiving environment - Outlet of Northern Main Drain	0558257	6831214

2.2.1 Assessment of Analytical Results

An assessment of the monthly analytical results presented in Appendix C, identified the following observations:

Site	Observation	Comments
SW01	All parameters were within baseline ranges with the exception of pH, SO_4 and Fe.	This site is located at an upstream location, receiving water from off-site. Elevated concentrations of iron are likely attributable to the emplacement of basaltic sediments from the adjacent development after heavy rainfall during the reporting period. No site related impacts identified.

Site	Observation	Comments
SW02	TDS, EC, SO_4, Na, Ca and K were recorded outside baseline ranges.	All elevated values are typical of the geological (ASS) setting. No site related impacts identified.
SW03	TDS, EC, NO_2^-, Na, and SO_4 were recorded outside of baseline ranges.	This site is located within the Northern Main Drain, downstream of Stage 1 works and SW02. Water quality parameters are mostly consistent with upstream location SW02. No site related impacts observed.
SW04	pH, TDS, EC, TN, and cations/anions (SO_4, Ca, Fe and Mg,) were outside baseline ranges.	This site is located downstream of Stage 1 works, within the Southern Swale Drain. Surface water observed to be very shallow (<4cm) and inundated by vegetation which is likely to increase the nitrogen content within the sample. Water quality has improved since previous reporting period. No site related impacts identified.
SW05	All parameters were recorded within baseline ranges with the exception of Zn.	Elevated zinc concentrations associated with tidal influences. No site related impacts observed.
SW06	pH, P, N and cation/anions (Al, Fe, Zn) were recorded outside ANZG default guideline values (95th percentile for slightly disturbed Freshwater Ecosystems).	Water quality appears relatively consistent with upstream location SW05. No site related impacts observed.

3 RAINFALL

During this monitoring period (21/04/2026 – 29/05/2026), 420.6 mm of rain was recorded in the area (Byron Bay, Cape Byron Lighthouse, Bureau of Meteorology).

4 CONCLUSION & RECOMMENDATIONS

4.1 Conclusion

Monitoring results indicate that impacts associated with exposure of acid sulfate soils (ASS) and vegetation overgrowth at surface water location SW04 (Southern Swale Drain) continues to impact analyte concentrations leading to elevated readings.

Water quality reported at SW03 is noted to be consistent with results reported from the upstream catchment (SW02), inferring no discernible site related impacts.

The monitoring period was characterised by high rainfall (420.6 mm), which may have influenced observed water quality trends.

Groundwater monitoring results suggest indicators of localised ASS-related impacts are fluctuating in the vicinity of monitoring well locations with the exception of MW3, with trend analysis reflecting seasonal groundwater drawdown and rewetting cycles.

4.2 Recommendations

Based on the findings of this monitoring program, the following recommendations are provided to support ongoing management of site water quality:

- Given that pH across the site is generally within, or above, baseline water quality conditions, no corrective actions are currently warranted.
- Due to the current vegetation overgrowth at SW04, it is recommended to clear a designated sampling zone which ENV can conduct during the next sampling event.
- Continue to monitor signs of ASS oxidation at all MW locations.

APPENDIX A

Figures



Legend

Site Location

0 0.5 1km

Figure 1 – Site Location
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

ENV Solutions
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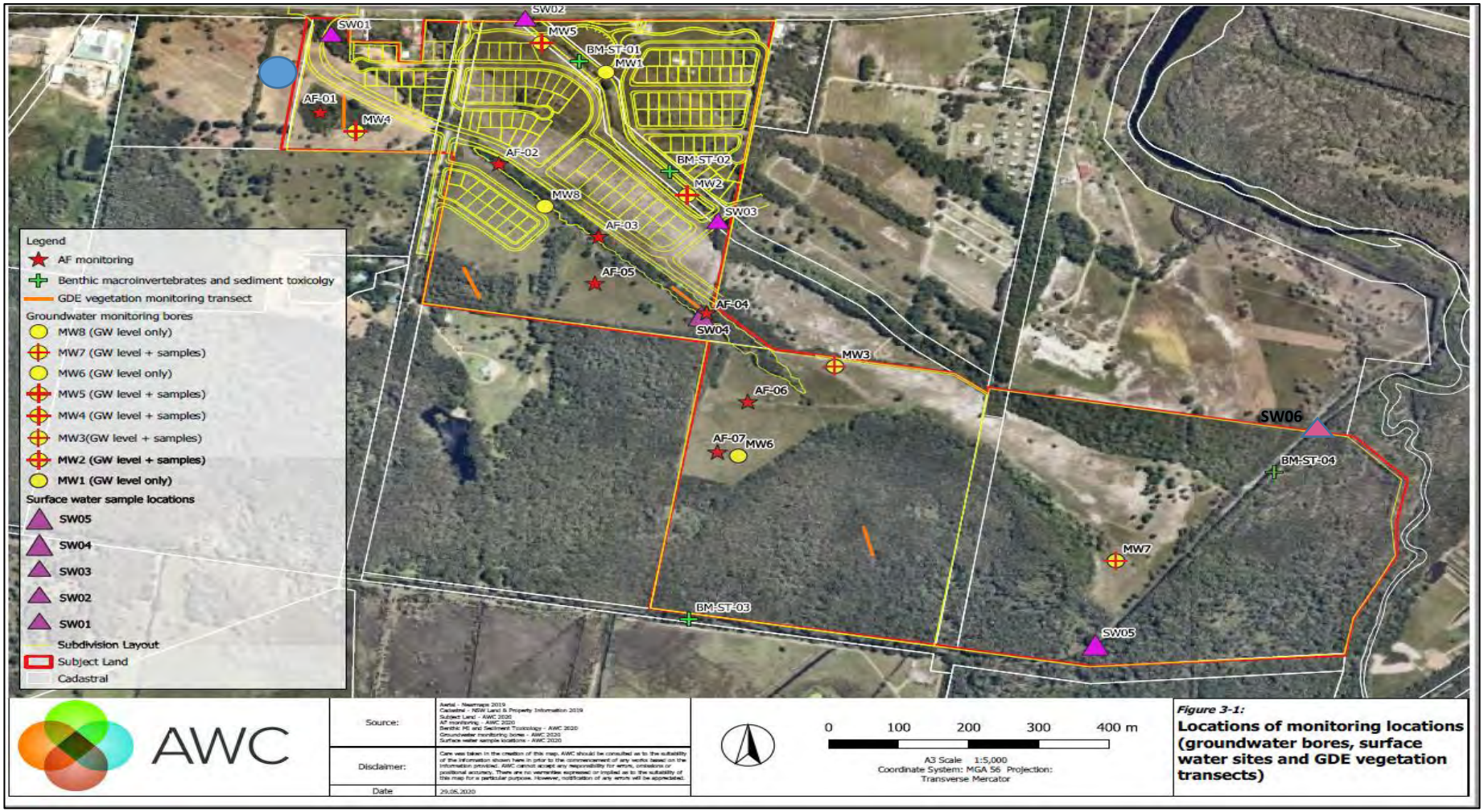


Figure 2 – AWC Monitoring Locations
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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APPENDIX B

Groundwater Quality Analytical Results

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW2	29/09/22	5.8	54	92	<5	0.12	0.51	14	0.02	0.5	30	< 2	< 0.5	0.8	2.4			0.1
	20/10/22	5.6	100	110	<5	0.09	0.24	13	0.02	2	28	< 2	<0.5	0.8	2.2			0.1
	14/11/22	6.0	100	240	<5	0.07	0.24	19	<0.10	<0.2	30	< 2	1.3	1.4	2.4			0.1
	14/12/22	5.6	110	170	<5	0.02	<0.05	15	<0.10	3.1	29	5	<5	<5	<5			0.3
	18/01/23	4.6	130	76	9.2	0.12	0.09	17	<0.05	2.5	29	7	<5	<5	<5			0.4
	20/02/23	6.0	100	160	5.3	0.09	0.1	27	<0.25	0.25	27	3.7	<0.5	0.7	3.1			0.1
	28/03/23	5.9	140	92	17	0.02	0.12	15	<0.02	<0.2	21	7.2	<5	<5	<5			0.5
	18/04/23	6.2	170	88	<5	0.08	1.2	15	<0.02	7.7	18	5.2	<5	<5	<5			0.3
	18/05/23	5.9	130	76	10	0.09	0.1	13	<0.02	9	28	2.1	0.6	0.9	2.6			0.2
	25/06/23	3.3	4,500	3,000	250	0.26	1.6	45	<0.02	8.1	86	3,800	440	82	7.9			84.4
	24/07/23	6.2	220	150	<5	0.03	0.16	12	<0.2	1	24	12	<0.5	0.8	2.5			1.0
	21/08/23	5.7	120	84	<5	0.08	0.14	15	<0.02	1.7	30	2.3	<5	<5	<5			0.2
	18/09/23	5.9	120	130	11	0.04	0.15	13	<0.02	1.2	25	<2	<0.5	0.9	2.7			0.1
	18/10/23	5.6	110	73	6.6	0.3	0.11	15	<0.02	0.3	25	3	<0.5	0.9	2.8			0.2
	20/11/23	6.0	160	70	<5	0.11	0.17	16	<0.01	0.8	28	4.2	<0.5	0.8	2.6			0.3
	19/12/23	6.3	110	100	<5	0.05	0.48	16	<0.02	2.8	28	2.1	0.5	0.9	2.9			0.1
	20/01/24	6.2	150	88	<5	0.05	0.08	13	<0.02	1.1	26	<2	<0.5	0.8	3			0.1
	26/02/24	5.1	150	340	7.4	0.07	0.09	15	<0.02	8.6	36	14	0.6	1	2.7			0.9
	26/03/24	5.7	180	310	<5	0.07	0.13	16	<0.02	<1	27	6.9	<0.5	0.8	2.7			0.4
	18/04/24	5.7	170	<5	<5	0.05	0.09	15	<0.02	1.8	29	2.6	<0.5	0.9	2.8	3.6	<1	0.17
	20/05/24	5.6	160	120	<5	0.11	0.1	19	<0.02	1	32	2.9	<0.5	0.8	2.8	3.9	<1	0.2
	25/06/24	5.5	170	170	12	0.09	<0.01	21	<0.02	2.7	30	<2	<0.5	0.8	2.3	3.8	<1	0.0
	10/07/24	5.8	150	190	<5	0.03	0.11	15	<0.02	<1	28	2.2	<0.5	0.7	2.7	2.8	<1	0.1
	06/08/24	5.9	170	90	6.9	0.16	0.12	20	<0.1	2.4	25	3.3	<0.5	0.6	2.1	3.4	<1	0.2
	11/09/24	5.7	140	110	<5	0.02	0.83	21	<0.2	<1	28	<2	<0.5	0.7	2.4	2.8	<1	0.0
	09/10/24	5.9	150	210	6.3	0.21	<0.01	17	0.02	<0.2	30	2.8	<0.5	<0.5	2.6	2.4	<1	0.1
	06/11/24	5.7	120	190	6.6	2	0.02	17	-	2.3	33	<2	1	1	3.1	3.6	<1	0.1
	16/12/24	6.0	120	60	8.0	0.05	<0.1	16	<0.2	0.9	30	5.3	0.14	0.8	2.8	3.5	<1	0.3
	14/01/25	6.4	150	94	610.0	0.03	<0.05	15	<0.1	<0.25	31	<2	<0.5	0.6	2.4	2.7	1	0.1
	11/02/25	5.7	170	150	<5	0.04	<0.1	13	<0.02	<0.5	29	2.8	<0.5	0.6	2.4	2.8	<1	0.2
	24/03/25	5.7	120	190	<5	<0.05	0.05	36	0.02	4.2	28	5.8	<0.5	0.7	2.4	2.7	<1	0.2
	08/04/25	5.7	120	220	<5	0.02	0.03	16	0.03	<2	31	4.2	<0.5	0.7	2.6	3.5	<1	0.3
	09/05/25	6.0	150	210	<5	0.01	<0.1	17	<0.2	1.1	29	7	1.3	0.7	2.6	3.2	<1	0.4
	25/06/25	5.6	180	200	<5	0.06	<0.01	15	<0.02	0.8	33	22	<0.5	0.7	2.6	1.7	<1	1.5
	08/07/25	5.5	190	180	<5	0.04	0.13	14	<0.2	1.6	32	24	<0.5	0.8	2.5	1.7	<1	1.7
	14/08/25	5.8	180	160	12.0	0.07	0.11	15	<0.02	1.9	30	33	<0.5	0.8	2.5	0.82	<1	2.2
	11/09/25	5.7	190	100	<5	0.03	0.09	17	<0.02	3.1	33	31	<0.5	0.8	2.6	0.84	<1	1.8
	13/10/25	5.6	170	180	<5	0.16	0.16	18	<0.2	0.6	33	24	<0.5	0.8	2.5	2	<1	1.3
	20/11/25	5.8	180	210	6	0.08	0.25	14	<0.2	0.7	35	8.1	<0.5	0.8	2.6	1.1	<1	0.6
	17/12/25	5.7	170	100	6.8	0.09	0.17	15	<0.2	1	35	9.3	<0.5	0.9	2.5	0.99	<1	0.6
	21/01/26	5.8	160	220	<5	0.04	0.12	16	<0.02	3.5	34	7.1	<0.5	0.9	2.7	2.3	<1	0.4
	20/02/26	5.9	170	190	<5	0.08	0.03	16	<0.02	1.9	31	20	<0.5	0.7	0.7	1.1	<2	1.3
	20/03/26	5.9	170	110	7.90	0.08	0.04	17	<0.02	2.9	29	6.7	<0.5	0.7	2.4	1.3	<1	0.4
	21/04/26	6.05	170	200	<5	0.04	<0.01	16	<0.02	1.6	32	43	<0.5	0.8	2.5	1.1	<1	2.7
	29/05/26	6.3	160	110	<5	0.04	0.06	20	<0.02	1.1	29	23	<0.5	0.6	2.4	0.96	<1	1.2
MW2 Baseline		**4.2 - 5.7**	**152**	**103**	**483**	**0.45**	**0.338**	**189**	**0.07**	**2.03**	**29.7**	**9.8**	**0.7**	**1.4**	**4.2**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW3	29/09/22	4.2	53	40	370	0.09	0.05	8.8	0.02	0.5	7	<2	< 0.5	1	0.6			0.1
	20/10/22	4.1	64	62	130	0.01	0.2	8	0.02	0.5	7	<2	0.5	0.9	<0.5			0.1
	14/11/22	4.6	57	84	170	0.03	0.27	7.4	<0.02	<0.2	7.1	<2	0.8	0.6	<0.5			0.1
	14/12/22	4.3	43	32	280	<0.01	<0.01	5.2	<0.02	1.1	6	<2	<5	<5	<5			0.2
	18/01/23	4.3	54	28	670	0.03	<0.01	4.1	<0.05	1.4	<5	4.1	<5	<5	<5			1.0
	20/02/23	4.2	36	40	76	0.02	<0.10	6.8	0.06	7.26	7.6	<2	<0.5	1	<0.5			0.1
	28/03/23	4.1	70	44	<5	<0.01	<0.01	7.9	<0.02	0.22	4.8	2.2	<0.5	1	0.6			0.3
	18/04/23	4.6	89	54	110	0.02	0.1	9.6	<0.02	5.7	4.3	4.3	<0.5	0.6	<0.5			0.4
	18/05/23	4.5	60	40	450	0.02	0.04	5.8	<0.02	1	4.8	2.1	0.6	0.8	<0.5			0.4
	15/06/23	4.0	84	48	22	0.27	0.4	5.5	<0.02	1.96	5	63	<0.5	0.8	<0.5			11.5
	24/07/23	4.5	85	59	160	0.04	<0.01	9.5	<0.02	<0.2	5.6	12	<0.5	0.8	<0.5			1.3
	21/08/23	3.9	110	52	100	0.01	<0.01	6.3	<0.02	<0.2	6.6	3	<0.5	1.1	<0.5			0.5
	18/09/23	Dry – no sample collected																
	18/10/23	Dry – no sample collected																
	20/11/23	4.0	96	46	120	0.03	<0.02	7.8	<0.01	0.7	5.8	5	<0.5	0.7	<0.5			0.6
	19/12/23	4.0	46	30	92	<0.01	0.04	13	<0.02	<0.2	9.7	5.6	<0.5	1.3	0.6			0.4
	20/01/24	4.2	70	28	270	0.01	<0.01	5.4	<0.02	0.6	5.5	<2	<0.5	0.8	<0.5			0.2
	26/02/24	4.5	70	50	29	0.01	0.02	10	<0.02	16	5	4.5	<0.5	0.6	<0.5			0.5
	26/03/24	4.1	67	56	110	<0.01	0.06	5.1	<0.02	0.3	4.4	6.1	<0.5	0.8	<0.5			1.2
	18/04/24	3.7	150	< 5	<5	0.05	0.01	4.6	<0.02	0.7	4	12	<0.5	0.8	<0.5	0.99	<1	0.3
	20/05/24	4.5	36	30	26	0.03	<0.01	31	<0.02	0.3	3	3.9	0.6	<0.5	<0.5	1.1	<1	0.1
	25/06/24	3.5	160	90	120	0.17	<0.01	2.8	<0.02	<0.2	3.1	5	<0.5	<0.5	<0.5	0.7	<1	0.1
	10/07/24	4.4	42	40	300	<0.01	<0.01	4.2	<0.02	0.5	3.5	2.5	<0.5	<0.5	<0.5	0.7	<1	0.6
	06/08/24	4.3	45	22	310	0.03	0.01	4.4	<0.02	3.2	2.5	<2	<.5	<0.5	<0.5	1	<1	0.2
	11/09/24	4.2	44	28	720	0.02	<0.1	5	<0.02	<1	3.7	<2	<0.5	<0.5	<0.5	1.3	<1	0.2
	09/10/24	4.2	50	32	430	0.1	<0.01	5.3	<0.02	<0.2	4.1	2.8	2.9	0.6	0.6	0.48	<1	0.2
	06/11/24	4.3	38	20	370	<0.01	0.09	4.8	-	0.9	4.6	<2	0.6	0.7	<0.5	0.84		0.2
	16/12/24	4.3	35	24	63	0.02	<0.01	4.4	<0.02	0.5	3.8	2.2	<0.5	0.7	<0.5	0.75	<1	0.5
	14/01/25	4.5	40	20	38	0.03	0.01	3.3	<0.02	0.5	2.8	<2	<0.5	<0.5	<0.5	0.75	<1	0.3
	11/02/25	4.2	64	36	8.2	<0.01	<0.01	2.9	<0.02	<0.2	3.1	4.4	<0.5	<0.5	<0.5	1.1	<1	1.5
	24/03/25	4.0	79	50	150	0.02	<0.01	13	<0.02	0.9	5.8	3.9	0.8	1.1	<0.5	0.52	1.5	0.3
	08/04/25	4.2	71	38	160	<0.01	0.02	11	<0.02	0.9	7.3	4.1	0.9	1.4	2.6	0.58	1.5	0.4
	09/05/25	4.5	73	74	210	<0.01	0.02	9.9	<0.02	0.8	7	3.1	0.7	0.9	<0.5	0.74	<1	0.3
	25/06/25	4.5	42	44	170	0.05	<0.01	4.4	<0.02	1.9	5	4.3	<0.5	<0.5	<0.5	1	<1	1.0
	08/07/25	4.5	47	25	670	0.02	0.03	4.5	0.03	0.6	4.9	2.5	<0.5	<0.5	<0.5	1	<1	0.6
	14/08/25	4.8	34	38	550	0.06	0.06	3.8	0.02	5.7	3.6	4	<0.5	<0.5	<0.5	0.5	<1	1.0
	11/09/25	4.6	42	28	2,500	0.02	0.3	4.7	0.11	2.1	4.7	3.5	<0.5	<0.5	<0.5	0.49	<1	0.7
	13/10/25	Dry – no sample collected																
	20/11/25	Dry – no sample collected																
	17/12/25	Dry – no sample collected																
	21/01/26	Dry – no sample collected																
	20/02/26																	
	20/03/26	4.2	81	50	780	0.8	<0.1	10	<0.02	<0.02	5.1	<2	<0.5	1.6	<0.5	0.63	<1	0.2
	21/04/26	Dry – no sample collected																
	29/05/26	5.17	66	36	290	0.09	<0.1	9.6	<0.02	0.7	6.4	8.6	0.6	0.8	0.5	0.43	<1	0.2
MW3 Baseline		**4.0 - 5.3**	**206**	**140**	**5223**	**1.57**	**0.294**	**121**	**0.167**	**4.14**	**26.4**	**13.4**	**3.8**	**5.3**	**3.1**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW4	29/09/22	4.5	100	88	350	0.03	0.16	22	0.1	1.5	19	<2	3.6	3.7	0.9			0.0
	20/10/22	4.5	110	100	69	0.02	0.78	20	0.04	1	14	<2	3.9	2.1	<0.5			0.1
	14/11/22	4.2	130	340	16	0.01	0.13	30	<0.10	7	22	5	2.6	4.8	1.1			0.2
	14/12/22	4.2	140	140	60	<0.01	<0.05	23	<0.10	3	21	7.8	<5	<5	<5			0.3
	18/01/23	5.7	170	110	170	0.02	0.16	26	<0.50	2.4	20	6.6	<5	<5	<5			0.3
	20/02/23	3.9	87	110	31	0.04	<0.05	15	0.28	3.88	15	5.8	3.5	5.4	0.9			0.4
	28/03/23	4.7	180	120	190	0.04	0.08	28	<0.02	22	18	6	8.8	5.1	<5			0.2
	18/04/23	3.7	500	280	340	0.11	0.07	27	<0.02	0.9	19	130	3.4	5	<0.5			4.8
	18/05/23	5.4	110	72	70	0.03	<0.01	14	<0.02	2.89	11	10	5.7	3.7	<0.5			0.7
	15/06/23	3.8	200	150	130	1.4	0.29	29	<0.02	0.9	21	12	<5	6	<5			0.4
	24/07/23	4.1	170	94	58	0.03	<0.1	24	<0.2	1	20	17	2.8	6.2	0.6			0.7
	21/08/23	3.8	200	120	75	0.03	0.07	18	0.65	1.76	15	3.6	2	5	<0.5			0.2
	18/09/23	3.8	160	86	21	0.02	0.11	19	0.02	1.1	17	10	1.5	4.1	<0.5			0.5
	18/10/23	3.8	190	110	31	0.08	0.08	25	<0.02	0.9	18	9.3	1.7	4.5	0.5			0.4
	20/11/23	4.4	160	870	28	0.05	0.1	22	<0.01	2.2	15	5.8	3.3	4	0.7			0.3
	19/12/23	4.0	190	130	27	0.03	0.41	38	<0.02	1.5	22	13	3.3	7.8	1			0.3
	20/01/24	4.2	170	120	27	0.01	0.02	24	<0.02	1.2	17	2.9	5.4	5.1	<0.5			0.1
	26/02/24	3.6	290	190	96	0.03	0.07	27	<0.02	6.9	17	38	10	4.1	<0.5			1.4
	26/03/24	5.6	150	140	18	0.02	0.58	25	<0.02	1.1	15	7	9.3	3.8	<0.5			0.3
	18/04/24	4.3	140	90	12	0.02	0.04	17	<0.02	24	13	6.7	3.2	3.6	<0.5	1.1	2.9	0.4
	20/05/24	5.9	200	180	9.4	0.01	0.83	15	<0.02	1.1	10	5.6	9.6	2.1	<0.5	1.5	6.4	0.4
	25/06/24	4.2	120	100	33	0.1	<0.01	15	<0.02	1.4	9.1	2.3	3.5	2.2	<0.5	1.7	<1	0.2
	10/07/24	6.3	79	46	16	0.02	0.12	8.7	<0.02	1.4	6.4	4	9.7	1	<0.5	0.55	<1	0.5
	06/08/24	4.4	170	100	24	0.02	0.12	26	<0.02	2.4	12	5.5	1.5	3.2	<0.5	0.86	<1	0.2
	11/09/24	5.2	110	74	27	0.02	0.14	21	<0.02	0.6	12	2.5	7.2	2.9	<0.5	1.3	<1	0.1
	09/10/24	4.1	150	140	190	0.1	0.07	25	0.03	0.9	15	6.2	2.9	4	0.7	1.2	<1	0.2
	06/11/24	4.4	130	180	40	0.51	0.04	22	-	1.9	15	2.3	4.7	4.8	<0.5	1.4	3.4	0.1
	16/12/24	5.7	80	70	<5	0.02	<0.1	18	<0.2	1	11	4.1	8.1	3	<0.5	0.99	7.2	0.2
	14/01/25	4.1	180	120	86	0.02	1.3	26	<0.02	1.2	14	2.4	4.4	3.8	<0.5	1.6	<1	0.1
	11/02/25	4.1	170	150	<5	0.01	<0.1	25	<0.02	<0.5	16	3.1	2.5	4.8	<0.5	1.8	<1	0.1
	24/03/25	5.0	110	84	39	<0.05	0.04	22	0.02	5	13	7.6	4.9	3.4	<0.5	0.85	5.8	0.3
	08/04/25	5.2	90	130	22	<0.01	0.03	16	<0.02	1	10	3.7	6.9	2.7	<0.5	0.58	12	0.2
	09/05/25	6.0	110	140	45	-	-	14	<0.2	-	8.7	2.7	11.0	2	<0.5	0.8	14	0.2
	25/06/25	5.4	98	140	130	0.06	0.01	12	0.2	1.6	8.8	8.2	8.6	1.6	<0.5	0.98	8.8	0.7
	08/07/25	5.0	110	100	300	0.01	0.23	15	<0.2	<0.5	11	9.4	5.7	2.4	<0.5	1.7	3.4	0.6
	14/08/25	5.7	110	150	600	0.11	0.12	15	0.04	4.7	9.6	4.3	10.0	2	<0.5	0.64	<1	0.3
	11/09/25	4.4	140	89	290	0.02	0.15	25	0.07	4.2	15	7.3	4.0	3.5	0.9	1.1	3.6	0.3
	13/10/25	4.3	160	210	120	0.11	0.42	30	<0.2	<2	18	2.8	2.9	4.5	0.8	2.2	1.3	0.1
	20/11/25	4.2	160	220	140	0.06	0.22	22	<0.2	1.1	16	2.2	2.7	4.1	0.6	1.2	2.3	0.1
	17/12/25	4.1	170	110	170	0.02	<0.1	26	<0.2	1.9	20	2.9	1.4	5.6	0.9	1.1	1.3	0.1
	21/01/26	4.5	120	190	370	0.25	0.04	14	0.03	3.5	12	5.1	4.9	3.4	<0.5	1.5	3.3	0.4
	20/02/26	4.1	280	290	200	0.1	<0.1	28	<0.2	1.8	24	42	5.8	11	0.8	0.99	5.9	1.5
	20/03/26	5.1	270	170	130	0.13	<0.1	23	<0.2	2.8	20	19	16	7.9	<0.5	0.74	21.6	0.8
	21/04/26	4.99	300	230	110	0.04	<0.01	24	<0.02	1.5	19	86	6.3	8.2	<0.5	0.87	7.2	3.6
	29/05/26	4.8	180	150	210	0.04	<0.1	23	<0.02	1.9	13	23	9.6	4.2	<0.5	0.82	11.7	1.0
MW4 Baseline		**4.0 - 5.8**	**890**	**605**	**1220**	**0.43**	**1.392**	**199**	**0.185**	**4.36**	**146.3**	**19.2**	**11.3**	**15.6**	**5.4**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW5	29/09/22	4.5	59	68	630	0.13	0.41	18	0.02	6.33	14	<2	2	3	0.6			0.1
	20/10/22	4.4	75	82	92	0.02	0.1	15	0.02	0.5	12	<2	2	2	0.5			0.1
	14/11/22	4.6	120	270	150	0.08	0.52	29	<0.10	7.8	26	<2	5	6	1.4			0.0
	14/12/22	4.5	150	150	230	0.02	<0.060	29	<0.05	11	24	10	<5	<5	<5			0.3
	18/01/23	2.8	1,600	1,100	480	0.05	1.7	43	<0.05	5.7	49	7	90	72	<5			0.2
	20/02/23	2.6	2,700	3,200	310	0.03	4.2	27	<0.05	3.2	47	750	390	76	7.8			27.8
	28/03/23	3.0	5,200	3,700	130	0.02	5.9	28	<0.02	11	34	1,100	440	57	7.1			39.3
	18/04/23	2.9	3,800	5,100	300	0.01	4	44	<0.02	4	49	3,800	380	120	4.7			86.4
	18/05/23	3.4	3,100	3,400	150	<0.01	<0.01	15	<0.02	4.9	23	2,200	240	31	4.2			146.7
	15/06/23	2.9	3,000	1,800	640	0.3	2.9	28	<0.02	2.66	64	2,100	410	130	6.5			75.0
	24/07/23	5.5	2,800	1,600	6	0.07	0.19	1,400	<0.2	0.5	450	380	25	54	25.0			0.3
	21/08/23	3.3	5,200	3,400	13	0.03	4.6	67	<0.02	5	89	2,200	420	200	9.9			32.8
	18/09/23	3.3	4,500	5,800	6.1	0.01	4	51	0.02	3.7	67	4,300	360	140	7.9			84.3
	18/10/23	3.2	4,700	4,900	96	0.03	1.3	58	<0.02	2.1	68	710	380	130	7.3			12.2
	20/11/23	2.8	5,900	7,500	29	0.06	2.7	55	<0.01	11	60	6,600	310	100	6.8			120.0
	19/12/23	2.9	3,100	2,700	230	0.01	4.6	80	<0.02	5	80	3,500	290	86	6.9			43.8
	20/01/24	3.2	4,900	6,600	74	0.03	<0.01	52	<0.02	4.5	68	1,000	370	84	7.9			19.2
	26/02/24	2.6	3,400	4,500	180	0.03	0.59	25	<0.02	5.4	51	3,000	290	46	4.0			120.0
	26/03/24	3.2	4,400	3,500	17	0.02	1.8	140	<0.02	2.5	54	11,000	360	77	6.0			78.6
	18/04/24	3.3	4,200	2,200	39	<0.01	0.02	49	0.05	5.1	50	3,300	310	47	4.0	210	1.5	67.3
	20/05/24	3.4	3,100	1,600	8.8	0.03	3.1	53	<0.02	2.9	27	2,900	200	22	2.8	140	1.42	54.7
	25/06/24	3.2	4,100	2,700	310	0.03	<0.01	76	<0.02	7.2	75	1,400	290	60	4.3	320	<1	18.4
	10/07/24	3.5	2,300	2,600	49	0.02	<0.01	14	<0.02	3.9	20	1,900	240	20	2.4	130	<1	135.7
	06/08/24	3.3	170	3,500	14	0.19	4.6	62	<0.02	7.7	56	3,600	310	54	4.2	250	<1	58.1
	11/09/24	3.5	1,700	1,000	38	<0.01	3.9	27	<0.2	4.9	27	750	290	29	3.2	94	<1	27.8
	09/10/24	3.5	1,300	930	46	0.03	<0.01	27	<0.02	1.5	22	870	120	17	1.6	35	<1	32.2
	06/11/24	3.3	2,000	1,300	31	<0.01	4.8	44	-	5	59	680	300	62	4.9	90	3.33	15.5
	16/12/24	3.2	1,800	1,100	53	0.02	21	32	<0.2	2.8	25	980	180	21	2.4	35	5.1	30.6
	14/01/25	3.7	1,600	1,400	190	<0.01	1.3	19	<0.02	2.1	16	320	210	16	1.8	25	8.4	16.8
	11/02/25	3.5	2,000	1,700	69	0.01	2.6	160	<0.02	14	110	860	110	50	2.8	56	1.96	5.4
	24/03/25	3.6	1,000	890	38	<0.05	0.06	20	<0.02	3.3	14	570	140	8.5	1.7	17	8.24	28.5
	08/04/25	3.7	790	700	73	<0.01	0.85	36	<0.02	5.2	42	390	86	16	<0.5	13	6.6	10.8
	09/05/25	3.7	1,300	1,200	200	<0.01	1.2	87	<0.2	3.3	24	470	87	11	1.5	9.6	9.06	5.4
	25/06/25	3.7	1,300	840	140	0.21	1.5	26	<0.02	2	18	580	140	17	1.7	17	8.3	22.3
	08/07/25	4.0	720	480	170	<0.010	0.81	21	<0.2	5.4	20	280	58	10	0.9	11	5.3	13.3
	14/08/25	3.8	530	300	230	0.02	0.55	19	<0.02	5.5	11	230	28	4.3	0.5	4.5	6.2	12.1
	11/09/25	3.8	630	430	110	<0.01	0.73	41	0.04	14	35	240	33	9.7	1.3	4.4	7.5	5.9
	13/10/25	4.0	1,200	970	260	0.11	2.8	120	<0.2	<2	76	420	68	32	2.2	13	5.2	3.5
	20/11/25	3.6	1,400	1,000	59	0.05	2.4	64	<0.02	2.4	43	270	83	34	2	13	6.4	4.2
	17/12/25	3.7	1,300	650	290	0.02	2	120	<0.2	<10	19	180	83	11	<0.5	10	8.3	1.5
	21/01/26	3.8	1,000	980	300	0.12	1.8	49	<0.02	7.3	35	200	42	29	1.7	13	3.2	4.1
	20/02/26	3.7	1,500	1,500	280	0.08	3	46	<0.2	8.3	58	700	76	65	3.3	12	6.3	15.2
	20/03/26	3.7	560	330	38	0.03	0.52	33	0.03	3.1	14	62	22	7.6	0.9	11	2.0	1.9
	21/04/26	4.5	870	590	15	0.05	1.8	34	<0.02	2.9	27	400	28	23	1.8	4	15.6	11.8
	29/05/26	5.4	300	170	26	0.03	0.24	16	<0.02	1.5	16	94	12	7.8	0.9	2.3	13.3	5.9
MW5 Baseline		**4.3 - 5.5**	**191**	**130**	**3003**	**0.97**	**13.4**	**82**	**0.117**	**13.4**	**27.2**	**8.3**	**6**	**8.4**	**5.4**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW7	29/09/22	4.6	26	40	190	0.1	0.3	8.5	0.02	2.5	8.5	<2	1	0.9	0.6			0.1
	20/10/22	4.5	86	70	120	0.01	0.4	12	0.04	2.9	8.5	<2	1.7	1.7	0.5			0.1
	14/11/22	4.5	44	170	<100	0.03	0.01	9.7	<0.10	<2.00	9.7	<2	1.9	1.4	1.4			0.1
	14/12/22	4.6	56	92	23	0.04	<0.10	7.5	<0.20	11	8.7	2.5	<5	<5	<5			0.3
	18/01/23	4.4	63	32	390	0.09	<0.05	7.5	<0.025	2	11	31	<5	<5	<5			4.1
	20/02/23	4.1	87	60	30	0.02	<0.05	9.1	0.42	4.9	5.8	5.7	1.4	1.9	1.1			0.6
	28/03/23	4.5	160	94	18	0.02	0.02	21	<0.02	4.4	12	66	2	2	0.6			3.1
	18/04/23	4.9	150	58	7.4	<0.01	0.11	11	<0.02	<0.20	9.8	120	1.9	0.8	<0.5			10.9
	18/05/23	4.9	78	56	130	0.03	<0.01	11	<0.02	0.89	9.3	9.3	1.4	0.9	<0.5			0.8
	15/06/23	4.6	77	50	30	0.28	0.25	11	<0.02	<0.20	9.2	62	<5	<5	<5			5.6
	24/07/23	5.1	140	100	90	0.12	<0.1	10	<0.2	1	8.5	14	1.9	1.4	0.9			1.4
	21/08/23	5.3	67	34	29	0.08	0.06	8.4	<0.02	0.8	9	45	1.8	1.7	0.8			5.4
	18/09/23	5.1	57	78	25	<0.01	0.07	9.6	<0.02	0.8	9.4	83	1.6	2	0.8			8.6
	18/10/23	5.2	61	46	10	0.04	0.1	11	<0.02	<0.2	10	160	1.6	2.1	0.8			14.5
	20/11/23	4.1	210	64	13	0.04	<0.02	8.4	<0.01	2.2	8.1	280	2.5	2.2	0.7			33.3
	19/12/23	4.6	91	62	11	0.03	0.09	19	<0.02	0.7	11	5.6	4.4	2.3	0.9			0.3
	20/01/24	4.2	170	130	34	0.01	0.09	21	<0.02	0.3	15	160	2.8	1.4	<0.5			7.6
	26/02/24	4.0	210	190	23	0.03	0.51	44	<0.02	5.8	24	7.5	3.6	2.1	0.5			0.2
	26/03/24	4.4	320	100	22	0.02	0.18	320	<0.02	<1	13	590	1.6	0.9	0.9			1.8
	18/04/24	4.3	100	98	17	0.02	0.07	8.9	<0.02	3	9	380	1.4	1.2	<0.5	1.7	<1	42.7
	20/05/24	4.4	77	56	11	0.05	0.38	6.4	<0.02	1.2	5.4	170	1.3	1	<0.5	2.3	<1	26.6
	25/06/24	4.6	66	36	33	<0.01	<0.01	<0.01	<0.02	0.6	6.7	48	1.1	0.9	<0.5	1.5	<1	0.0
	10/07/24	4.5	74	58	29	<0.01	0.22	6.5	<0.02	2.1	6.2	270	2	1.3	<0.5	0.73	<1	41.5
	06/08/24	4.8	4,600	180	19	0.04	0.06	9.1	<0.02	0.5	5.3	36	1.4	0.9	<0.5	1	<1	4.0
	11/09/24	4.4	75	50	6.4	0.04	<0.1	11	<0.02	1..0	7.1	5.2	1.3	1.1	<0.5	1.4	<1	0.5
	09/10/24	4.3	73	42	71	0.54	<0.01	8	<0.02	1.6	5.8	12	1.3	1.2	<0.5	0.94	<1	1.5
	06/11/24	4.5	59	32	35	0.02	0.03	11	-	1.3	7.8	4.4	1.3	1.4	<0.5	1.6	<1	0.4
	16/12/24	4.3	58	68	29	0.04	<0.1	12	<0.2	1.3	8.5	42	1.6	1.3	<0.5	1.9	<1	3.5
	14/01/25	4.7	63	36	120	0.04	0.02	8.6	0.03	1.3	6.8	7	1.7	1.2	0.5	2.4	1.4	0.8
	11/02/25	4.6	68	70	13	0.07	<0.1	9.2	<0.02	1.2	8.4	2	1.5	1.5	0.8	2.7	<1	0.2
	24/03/25	4.1	0	56	28	<0.05	0.02	15	<0.02	1.8	7.7	43	2.3	1.4	<0.5	1.2	1.91	2.9
	08/04/25	4.4	76	70	14	<0.01	0.03	14	<0.02	<1	8.1	31	2.8	1.1	2.1	1.4	2	2.2
	09/05/25	4.7	81	110	24	<0.01	0.03	13	<0.2	1.2	8.1	28	1.5	0.9	<0.5	1.6	<1	2.2
	25/06/25	4.6	65	70	39	0.07	<0.01	8.3	<0.02	<0.2	6.7	56	1.2	0.8	<0.5	1.2	1	6.7
	08/07/25	4.6	65	44	130	0.02	0.14	7.9	<0.02	<0.5	6.3	37	1.4	0.9	<0.5	2.6	<1	4.7
	14/08/25	4.7	60	70	140	0.06	0.01	8.9	0.04	2.2	5.7	15	0.9	0.5	<0.5	0.93	3	1.7
	11/09/25	4.4	75	51	100	0.03	0.06	12	0.04	1.1	7.2	18	1.8	1.1	0.6	0.86	2.09	1.5
	13/10/25	4.8	66	110	66	0.02	0.12	11	<0.2	<1	7.4	20	2.1	1.5	<0.5	1.3	1.6	1.8
	20/11/25	4.4	84	78	64	0.05	0.12	12	<0.2	1.1	7.8	17	1.9	1.2	<0.5	0.86	2.2	1.4
	17/12/25	4.6	79	10	75	0.04	<0.1	13	<0.2	3.1	9	11	2.1	1.7	0.5	1	2.1	0.8
	21/01/26	4.3	87	110	110	0.1	0.02	11	0.02	4.3	8.2	4.4	1.9	1.4	<0.5	2	1.0	0.4
	20/02/26	4.8	71	68	120	0.18	0.49	13	<0.2	1.5	8.3	70	2	1.8	1	1.2	1.7	5.4
	20/03/26	4.4	91	60	50	0.1	<0.1	13	<0.02	<0.02	8	42	1.6	1.4	<0.5	1	1.6	3.2
	21/04/26	4.98	110	100	71	0.07	<0.01	15	<0.02	2.70	9.5	7.3	2.5	1.5	<0.5	1.9	1.3	0.5
	29/05/26	4.12	150	94	68	0.03	0.01	29	<0.02	1.20	12	18	2	1.7	<0.5	1.2	1.7	0.6
MW7 Baseline		**4.6 - 5.6**	**147**	**100**	**3140**	**0.71**	**0.471**	**172**	**0.048**	**4.15**	**31**	**7.3**	**3.4**	**2.2**	**3.1**	**<1.0***	**<1***	**<0.5***

Note: * derived from Interim Target Criteria within BCPoM, GWMP and AFMP (AWC 2020)

APPENDIX C

Surface Water Quality Analytical Results

Harvest Estate
ENV 217140

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW01	29/09/2022	6.9	180	11	3.1	140	0.47	<0.01	14	<0.02	5.2	30	3.4	450		0.2
	20/10/2022	6.6	320	30	4.7	400	0.03	0.03	22	<0.02	<0.02	31	33	43		1.5
	14/11/2022	6.0	780	4,900	0.2	920	3.1	6.9	25	<0.02	14	200	3.7	67		0.1
	14/12/2022	4.5	800	210	3.6	1,100	0.15	0.05	24	<0.10	23	54	560	88		23
	18/01/2023	6.3	380	120	4.7	25	0.047	0.087	24	<0.02	5.2	40	180	25		7.5
	20/02/2023	3.4	1,100	32	3.8	1,300	0.42	0.37	28	<0.02	8.9	57	350	<5		13
	28/03/2023	3.0	2,000	100	7.7	3,000	<0.01	2.1	29	<0.02	1.29	47	880	<5		30
	18/04/2023	7.7	130	33	8.6	320	0.06	0.01	24	<0.02	8.4	16	14	8.8		0.6
	18/05/2023	7.4	130	6	4.4	250	0.21	0.14	11	<0.02	0.9	14	10	<5		0.9
	15/06/2023	3.2	1,900	6.8	7.6	2,700	0.03	1.6	59	<0.02	2.1	61	1,500	<5		25
	24/07/2023	7.9	84	<5	8.4	140	0.11	<0.01	6.4	<0.02	0.3	13	4	<5		0.6
	21/08/2023	6.9	120	25	3	190	0.34	0.01	5.6	<0.02	0.4	18	<2	<5		0.2
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	No surface water located at monitoring site – no sample collected														
	20/11/2023	7.2	230	6.5	2.9	480	2	<0.02	56	<0.01	<0.2	43	160	<5		2.9
	19/12/2023	No surface water located at monitoring site – no sample collected														
	23/01/2024	7.0	160	130	2.2	160	3.7	0.06	14	<0.02	1.3	21	69	<5		4.9
	26/02/2024	6.2	160	47	7.2	200	0.35	<0.01	9	<0.02	3	12	59	<5		6.6
	26/03/2024	6.9	26	7.5	8.3	78	0.25	<0.01	6.7	<0.02	0.4	7.5	3.4	<5		0.5
	18/04/2024	7.2	220	23	0.5	390	0.06	0.24	25	<0.02	0.7	32	110	180	13	4.4
	20/05/3034	6.7	160	<5	3.8	260	0.16	0.01	13	<0.02	0.5	19	33	56	231	2.5
	25/06/2024	6.3	440	15	5.9	710	<0.01	<0.01	12	<0.02	<0.2	23	100	5.7	15	8.3
	10/07/2024	7.0	120	29	5.5	240	0.07	0.01	14	<0.02	1.1	17	6.9	39	12	0.5
	6/08/2024	4.0	760	19	7.6	950	0.08	<0.01	14	<0.02	1.3	23	470	<5	12	34
	15/08/2024	6.7	64	<5	7.3	100	0.04	0.01	6.1	<0.02	<0.2	7.2	5.5	<5	<10	0.9
	11/09/2024	6.9	120	250	0.2	190	1.1	0.11	8.9	<0.02	4.1	13	2.6	<10	17	0.3
	24/09/2024 - Investigation	6.3	170	-	-	280	-	-	-	-	-	-	-	-	-	-
	9/10/2024	7.4	190	11	8.9	290	0.38	0.01	14	<0.02	<0.2	20	3.4	<5	<10	0.2
	6/11/2024	7.1	92	400	0.4	140	13	<0.01	8.1	<0.02	2.8	12	2.2	<5	<10	0.3
	16/12/2024	6.9	90	190	3.3	140	0.36	<0.01	8.2	<0.02	0.02	11	5.4	170	<10	0.7
	14/01/2025	6.7	48	7.2	3.5	89	0.14	<0.1	4.8	<0.02	0.6	5.4	<5	<5	<10	0.0
	11/02/2025	7.5	390	<5	8.3	620	0.06	0.03	110	<0.02	0.8	16	16	12	<10	0.1
	24/03/2025	6.9	58	<5	8.6	64	0.32	0.02	6.1	<0.02	0.8	7.9	2.4	48	<10	0.4
	31/03/2025	7.1	170	5.8	9.2	200	0.14	<0.01	14	<0.02	1.1	15	6.4	<5	<10	0.5
	8/04/2025	7.2	200	9.4	8.8	230	0.37	0.04	14	<0.02	0.4	18	3.6	<5	<10	0.3
	9/05/2025	7.5	170	<5	-	200	0.2	0.03	10	<0.02	0.8	13	4.5	<5	<10	0.5
	25/06/2025	6.9	130	24	7.5	190	1.1	0.07	6.2	<0.02	1.1	12	7.1	12	22	1.1
	8/07/2025	6.9	150	<5	8	260	0.12	0.18	8	<0.02	0.8	16	5	28	34	1.6
	14/08/2025	7.3	140	7.1	6.9	240	0.17	0.03	11	<0.02	1	16	6	<5	15	1.8
	11/09/2025	7.2	150	5.2	3.9	260	0.22	0.01	13	<0.02	1.4	19	5.2	<5	16	2.5
	13/10/2025	7.2	350	14	0.3	520	0.61	0.26	39	<0.02	0.5	58	30	<5	14	1.3
	20/11/2025	7	110	8.9	5.2	200	0.24	0.03	9.1	<0.02	0.7	14	4.5	<5	16	2.0
	17/12/2025	7.2	150	30	6.1	240	0.14	0.19	27	<0.5	1.2	22	9.3	<5	37	2.9
	21/01/2026	6.8	98	30	3.5	170	0.49	0.05	17	0.017	0.6	15	4.9	<0.005	27	3.5
	20/02/2026	6.8	130	22	2.4	230	0.33	0.03	17	< 0.02	1.2	19	8.5	<0.005	<10	2.0
	20/03/2026	6.8	86	37	3.4	150	0.48	0.04	15	<0.02	1.1	11	6.6	0.015	<10	2.3
	21/04/2026	6.7	160	18	4	190	0.58	<0.01	22	<0.02	<0.4	21	2.7	<0.005	12	8.1
	29/05/2026	7.41	80	35	3.6	150	0.49	<0.01	9.9	0.33	1.1	9.2	14	0.086	16	0.7
SW01 Baseline		**6.2 – 7.0**	**291**	**73**	**-**	**428**	**3.52**	**0.164**	**118**	**0.039**	**3.5**	**51**	**9**	**768**		**<0.5**

Harvest Estate
ENV 217140

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW01	29/09/2022	1.5	0.003	<0.0002	22	0.002	0.32	2.7	0.005	14	<0.0001	0.015	3	0.071	<1
	20/10/2022	0.66	2	<0.0002	24	0.002	0.16	2.4	0.003	9.1	<0.0001	0.009	2.9	0.042	<1
	14/11/2022	130	1.3	<0.02	280	<0.10	1	130	0.1	73	<0.001	0.3	<50	4.7	<1
	14/12/2022	22	0.0016	<0.002	180	0.014	0.2	1.6	0.015	43	<0.001	0.077	6.8	0.68	<1
	18/01/2023	0.7	<0.010	<0.002	<2	<0.010	<0.01	3.2	<0.01	13	<0.01	<0.01	<5	<0.05	<1
	20/02/2023	37	0.027	0.0004	170	0.019	0.07	0.049	0.049	57	0.002	0.16	6.3	0.35	<1
	28/03/2023	150	0.002	0.0008	290	0.002	0.003	36	0.003	38	0.0001	0.46	5.1	0.97	<1
	18/04/2023	0.53	0.002	<0.0002	13	0.005	0.005	0.002	0.002	2.7	<0.0001	0.002	0.8	0.15	<1
	18/05/2023	0.16	0.002	<0.0002	23	<0.001	0.002	0.24	<0.001	7.5	<0.0001	0.002	2.3	0.02	<1
	15/06/2023	120	0.002	0.0003	350	<0.001	0.004	15	0.003	42	<0.0001	0.24	8.1	0.35	<1
	24/07/2023	0.08	0.003	<0.0002	13	<0.001	0.003	0.38	0.002	4.1	<0.0001	0.002	0.8	0.037	<1
	21/08/2023	0.52	0.001	<0.0002	17	0.001	0.002	1.2	0.001	6.3	<0.0001	0.003	<0.5	0.014	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	No surface water located at monitoring site – no sample collected													
	20/11/2023	0.13	<0.001	<0.0002	26	<0.001	0.002	5.7	<0.001	7.9	<0.0001	0.003	2.2	0.006	<1
	19/12/2023	No surface water located at monitoring site – no sample collected													
	23/01/2024	<0.05	<0.001	<0.0002	30	0.001	<0.001	1.8	<0.001	10	<0.0001	<0.001	3.4	0.006	<1
	26/02/2024	<0.005	<0.001	<0.0002	14.00	<0.001	<0.001	0.93	<0.001	4.60	<0.0001	<0.001	1.70	0.05	<1
	26/03/2024	0.11	<0.001	<0.0002	7.4	<0.001	0.002	0.38	<0.001	2	<0.0001	<0.001	1.5	0.013	<1
	18/04/2024	0.06	<0.001	<0.0002	32	<0.001	<0.001	1.4	<0.001	9.5	<0.0001	0.002	2	<0.005	<1
	20/05/3034	0.06	<0.001	<0.0002	26	<0.001	0.001	0.86	<0.001	7	<0.0001	0.002	1.7	0.014	<1
	25/06/2024	0.69	<0.001	<0.0002	94	<0.001	0.002	0.28	<0.001	15	<0.0001	0.008	2.3	0.055	<1
	10/07/2024	0.25	0.002	<0.0002	28	<0.001	0.003	2.1	<0.001	6.6	<0.0001	0.002	2	0.037	<1
	6/08/2024	0.85	<0.001	<0.0002	120	<0.001	0.004	1.3	<0.001	14	<0.0001	0.021	2.3	0.1	<1
	15/08/2024	0.24	<0.001	<0.0002	12	<0.001	0.004	0.33	<0.001	2.8	<0.0001	0.001	1.2	0.027	<1
	11/09/2024	9.1	0.009	0.0005	36	0.023	0.11	49	0.031	8.1	0.0001	0.019	5.2	0.72	<1
	24/09/2024 - Investigation	-	<0.001	<0.001	-	<0.001	0.001	-	<0.001	<0.0001	-	0.004	-	0.04	-
	9/10/2024	0.14	0.001	<0.0002	27	<0.001	0.002	1.7	<0.001	8.1	<0.0001	0.002	1.5	0.017	<1
	6/11/2024	1.2	0.004	<0.0002	26	0.005	0.011	54	0.003	6.1	<0.0001	0.004	2.8	0.041	<1
	16/12/2024	2.4	0.004	<0.0002	22	0.006	0.019	38	0.006	4.5	<0.0001	0.004	2.8	0.092	<1
	14/01/2025	0.15	<0.001	<0.0002	8.8	0.001	0.003	0.34	<0.001	1.8	<0.0001	0.001	0.6	0.018	<1
	11/02/2025	0.58	0.002	<0.0002	13.00	<0.001	<0.001	6.10	<0.001	3.50	<0.0001	0.002	1.00	0.015	<1
	24/03/2025	0.13	<0.001	<0.0002	5.20	<0.001	0.002	0.35	<0.001	1.40	<0.0001	<0.001	1.20	0.037	<1
	31/03/2025	0.1	0.002	<0.0002	22	<0.001	0.003	1.2	<0.001	6.8	<0.0001	0.002	2.4	0.066	<1
	8/04/2025	<0.05	0.002	<0.0002	29	<0.001	<0.001	2.2	<0.001	8.1	<0.0001	0.002	2.4	0.008	<1
	9/05/2025	0.27	<0.001	<0.0002	20	<0.001	0.002	1.6	<0.001	5.9	<0.0001	0.002	1.7	0.03	<1
	25/06/2025	0.11	<0.001	<0.0002	19	<0.001	0.002	0.72	<0.001	4.4	<0.0001	0.002	<0.5	0.032	<1
	8/07/2025	0.05	<0.001	<0.0002	26	<0.001	0.002	0.49	<0.001	7.2	<0.0001	0.002	<0.5	0.024	<1
	14/08/2025	0.14	<0.001	<0.0002	26	<0.001	0.003	0.69	<0.001	6.8	<0.0001	0.002	1.8	0.019	<1
	11/09/2025	0.05	0.001	<0.0002	24	<0.001	0.002	1.5	<0.001	6.8	<0.0001	0.002	1.6	0.014	<1
	13/10/2025	0.07	0.002	<0.0002	37	<0.001	0.01	0.69	<0.001	10	<0.0001	0.005	4.8	0.055	<1
	20/11/2025	<0.05	0.001	<0.0002	19	<0.001	0.002	0.0015	0.001	4.7	<0.0001	0.002	0.9	0.012	<1
	17/12/2025	0.26	0.001	<0.0002	16	<0.001	0.001	0.89	<0.001	3.8	<0.0001	0.001	1.5	0.017	<1
	21/01/2026	0.2	<0.001	<0.0002	12	<0.001	3	2.2	<1	2.9	<0.0001	0.001	0.7	0.031	<1
	20/02/2026	0.23	0.002	<0.0002	18	<0.001	0.003	5	<0.001	4.5	<0.0001	0.003	0.6	0.032	<2
	20/03/2026	0.83	<0.001	<0.0002	11	<0.001	0.006	3.5	0.002	3	<0.0001	0.002	1.5	0.043	<1
	21/04/2026	0.1	0.001	<0.0002	10	<0.001	0.005	0.91	<0.001	2.8	<0.0001	<0.001	2.8	0.023	<1
	29/05/2026	0.4	0.001	<0.0002	13	<0.001	0.005	4.8	<0.001	4	<0.0001	0.002	1.3	0.029	<2
SW01 Baseline		**0.5**	**0.003**	**0.001**	**22**	**0.002**	**0.041**	**1.2**	**0.001**	**16**	**0.0005**	**0.006**	**6**	**0.058**	**<1***

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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH) (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW01	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	220	220	<100	<100	<20	250	<100	<100	250	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	<50	<50	20	-	<20	<50	100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No surface water located at monitoring site – no sample collected									
	18/10/2023	No surface water located at monitoring site – no sample collected									
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	No surface water located at monitoring site – no sample collected									
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/3034	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Investigation	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	160	160	300	<100	<20	110	300	<100	410	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	17/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	120	<50	<100	<100	110	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW01 Baseline		**60**	**-**	**24**	**100**	**-**	**50**	**130**	**90**	**170**	**-**

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Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW02	29/09/2022	6.9	170	8.8	8	160	0.04	0.03	29	<0.02	1.3	27	2.8	22		0.1
	20/10/2022	6.5	120	6.2	8.7	140	0.02	0.01	17	<0.02	<0.20	16	2.9	<5		0.2
	14/11/2022	6.4	150	210	0.1	190	0.18	<0.01	54	<0.02	13	62	18	24		0.3
	14/12/2022	6.3	110	870	0.1	200	0.27	0.05	26	<0.10	2.7	25	29	14		1.1
	18/01/2023	6.6	220	190	0.1	61	0.79	0.049	31	<0.20	21	27	6.2	61		0.2
	20/02/2023	6.5	240	29	4.4	1300	0.023	0.31	26	<0.10	1.9	29	24	<5		0.9
	28/03/2023	4.8	310	370	5.7	370	1.5	0.19	22	<0.02	<0.20	17	92	<10		4.2
	18/04/2023	6.2	300	60	7.3	410	0.05	0.16	32	<0.02	1.38	25	120	<5		3.8
	18/05/2023	6.5	130	39	6	270	0.06	0.09	25	<0.02	<0.2	18	29	<5		1.2
	15/06/2023	6.4	190	25	8.9	280	0.37	0.23	34	<0.02	1.2	25	38	<5		1.1
	21/08/2023	6.1	430	20	5.7	690	0.02	0.5	36	<0.02	1.2	38	75	<5		2.1
	18/09/2023	7.2	180	15	8.1	260	0.06	0.04	31	<0.02	0.8	28	39	<5		1.3
	18/10/2023	6.8	150	11	8.1	240	0.05	0.02	40	<0.02	<0.2	28	13	<5		0.3
	20/11/2023	6.9	180	18	4.9	350	0.07	0.04	37	<0.01	0.3	26	50	<5		1.4
	19/12/2023	6.7	140	15	4.6	240	0.05	0.03	37	<0.02	0.7	29	11	<5		0.3
	23/01/2024	6.8	210	27	9.7	350	0.06	0.02	35	<0.02	0.5	31	25	<5		0.7
	26/02/2024	4.5	140	43	7.1	190	0.05	0.03	9	<0.02	0.6	8.5	65	<5		7.2
	26/03/2024	6.7	44	12	6.8	99	0.07	<0.01	9.5	<0.02	0.5	8.8	8.7	<5		0.9
	18/04/2024	7.6	350	<5	6.4	630	0.03	0.9	93	<0.02	0.6	78	56	<5	<10	0.6
	20/05/2024	6.7	130	27	2.1	210	0.04	0.05	20	<0.02	1.1	18	16	<5	11	0.8
	25/06/2024	6.7	180	9.7	8.8	330	0.03	<0.01	42	0.03	<0.2	35	10	<5	11	0.2
	10/07/2024	7.0	150	8.2	6.1	220	0.01	0.11	22	<0.02	1.9	18	21	<5	<10	1.0
	6/08/2024	6.5	220	8.5	7	280	0.06	0.02	39	<0.02	1.7	24	19	<5	20	0.5
	15/08/2024	6.6	48	<5	7.8	80	0.07	0.01	8	<0.02	<0.2	7	6.9	18	<10	0.9
	11/09/2024	7.1	250	<5	6.1	450	0.02	0.05	90	<0.02	0.3	71	48	<5	<10	0.5
	9/10/2024	7.0	260	<5	8.9	500	0.12	0.03	88	<0.02	0.6	73	35	<5	<10	0.4
	6/11/2024	7.5	300	6.4	6	500	0.07	<0.01	89	<0.02	1	72	34	<5	<10	0.4
	16/12/2024	6.4	200	110	8.8	310	1.1	<0.01	55	<0.02	0.4	11	19	6.6	<10	0.3
	14/01/2025	6.9	170	<5	4.6	340	0.08	<0.01	51	<0.02	0.9	44	7.7	<5	<10	0.2
	11/02/2025	7.1	96	5.6	6.1	150	0.08	<0.01	14	<0.02	1.9	91	3.9	190	<10	0.3
	24/03/2024	3.2	420	7.2	8.6	670	<0.05	0.02	17	<0.02	2.8	17	250	<5	<10	14.7
	31/03/2025	7.2	160	<5	9.8	200	0.14	0.05	14	<0.02	<0.4	16	7	<5	<10	0.5
	8/04/2025	7.2	150	12	6.2	230	0.37	0.03	14	<0.02	0.7	18	3.4	<5	<10	0.2
	9/05/2025	3.9	320	1,100	-	560	1.5	0.23	31	<0.02	2.8	18	150	<20	34	4.8
	25/06/2025	7.1	400	9.4	9.8	580	1.5	0.01	88	<0.03	1.5	74	38	38	14	0.4
	8/07/2025	6.9	300	14	8.4	600	0.34	0.58	96	<0.02	0.9	73	38	19	21	2.5
	14/08/2025	7.2	330	6.1	8.6	600	0.05	0.03	120	<0.02	0.7	85	31	<5	<10	3.9
	11/09/2025	7.0	320	6.1	7.9	530	0.05	0.11	87	<0.02	2.8	69	36	<5	<10	2.4
	13/10/2025	6.9	270	6.3	8.1	470	0.12	<0.01	73	0.11	1.9	60	29	<5	14	2.5
	20/11/2025	6.8	190	11	5.2	300	0.19	0.16	33	<0.02	0.9	30	16	<5	<10	2.1
	16/12/2025	7.0	520	8	7.2	240	0.11	0.13	26	<0.5	<0.5	23	9.1	<5	19	2.9
	21/01/2026	7.3	350	<5	6	680	0.07	<0.01	100	0.1	0.4	85	36	<0.005	15	2.8
	20/02/2026	7	470	<5	3.6	720	0.08	<0.01	130	<0.02	0.5	95	17	<0.005	<10	7.6
	20/03/2026	7	370	6.1	5.6	710	0.1	0.06	130	<0.02	0.8	90	42	<0.005	<10	3.1
	21/04/2026	6.7	100	<5	6.2	170	0.08	0.01	24	<0.02	<0.2	17	3.1	<0.005	11	7.7
	29/05/2026	6.65	280	24	6.6	520	<0.01	0.03	92	0.05	4.8	65	32	<0.005	23	2.9
SW02 Baseline		**6.3 – 7.0**	**199**	**495**	**-**	**292**	**1.88**	**0.261**	**161**	**0.06**	**8.6**	**32**	**10**	**182**		**<0.5***

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Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW02	29/09/2022	0.42	0.003	<0.0002	19	0.002	0.004	1.5	0.001	5.8	<0.0001	0.002	1.9	0.057	<1
	20/10/2022	0.22	0.001	<0.0002	12	0.001	0.003	0.62	<0.001	3.4	<0.0001	0.001	1.7	0.032	<1
	14/11/2022	1.8	0.037	<0.002	47	<0.001	0.015	53	<0.01	11	<0.001	<0.01	<5	0.096	<1
	14/12/2022	13	0.066	<0.002	38	0.034	0.094	9.7	0.071	5.9	<0.001	0.013	5.1	1	<1
	18/01/2023	3.3	0.023	<0.002	<2	<0.01	0.015	45	0.014	5.8	<0.001	<0.010	<5	0.15	<1
	20/02/2023	12	0.033	0.0002	38	0.009	0.09	0.013	0.013	11	<0.001	0.018	4.1	0.28	<1
	28/03/2023	3.4	0.002	0.0003	43	0.002	0.003	2.5	0.001	8.4	<0.0001	0.024	4.1	0.63	<1
	18/04/2023	0.86	<0.001	<0.0002	20	0.002	0.002	<0.001	<0.001	4	<0.0001	0.006	2.7	0.089	<1
	18/05/2023	0.72	0.002	<0.0002	17	0.002	0.006	1	0.002	4.3	<0.0001	0.003	2.4	0.081	<1
	15/06/2023	1.7	0.001	<0.0002	22	0.001	0.004	2.1	0.001	5.5	<0.0001	0.005	1.9	0.037	<1
	21/08/2023	1.1	<0.001	<0.0002	71	<0.001	<0.001	8	<0.001	16	<0.0001	0.024	5.7	0.057	<1
	18/09/2023	1.7	0.003	<0.0002	19	0.002	0.004	3	0.002	6.3	<0.0001	0.005	3	0.023	<1
	18/10/2023	0.88	0.002	<0.0002	17	0.001	0.003	2.2	0.001	5.5	<0.0001	0.002	1.9	0.014	<1
	20/11/2023	2.3	0.002	<0.0002	19	0.002	0.002	2.6	<0.001	6.7	<0.0001	0.007	1.4	0.032	<1
	19/12/2023	1.1	0.002	<0.0002	19	0.001	0.001	4.8	<0.001	6.5	0.0002	0.004	2.9	0.012	<1
	23/01/2024	2.9	0.003	<0.0002	23	0.002	0.001	5.8	<0.001	7.8	<0.0001	0.007	3.3	0.031	<1
	26/02/2024	1.5	0.001	<0.0002	9.7	0.001	0.003	1.7	<0.001	2.5	<0.0001	0.004	1.4	0.027	<1
	26/03/2024	0.34	<0.001	<0.0002	6.9	0.001	0.003	0.67	<0.001	1.9	<0.0001	0.001	1.8	0.021	<1
	18/04/2024	0.09	<0.001	<0.0002	20	<0.001	<0.001	0.39	<0.001	5.4	<0.0001	<0.001	14	0.014	<1
	20/05/2024	0.71	0.004	<0.0002	19	0.002	0.003	5.6	<0.001	3.8	<0.0001	0.003	3	0.015	<1
	25/06/2024	1.1	<0.001	<0.0002	21	<0.001	0.001	1.4	<0.001	4.6	<0.0001	0.004	4.5	0.022	<1
	10/07/2024	1.1	0.002	<0.0002	20	<0.001	0.004	1.2	<0.001	4.2	<0.0001	0.004	2.3	0.047	<1
	6/08/2024	0.61	0.001	<0.0002	17	0.001	0.002	1.4	<0.001	3.7	<0.0001	0.002	3	0.019	<1
	15/08/2024	0.31	0.002	<0.0002	8	0.001	0.004	0.37	<0.001	1.5	<0.0001	0.001	1.4	0.038	<1
	11/09/2024	0.19	<0.001	<0.0002	20	<0.001	0.001	0.31	<0.001	4.8	<0.0001	0.001	14	0.021	<1
	9/10/2024	0.8	<0.001	<0.0002	23	<0.001	0.001	1.5	<0.001	5	<0.0001	0.003	15	0.032	<1
	6/11/2024	0.007	0.001	<0.0002	21	<0.001	<0.001	0.7	<0.001	5.8	<0.0001	<0.001	15	0.011	<1
	16/12/2024	0.05	<0.001	<0.0002	14	<0.001	0.001	0.24	<0.001	3.1	<0.0001	<0.001	9.4	0.008	<1
	14/01/2025	0.06	<0.001	<0.0002	14	0.001	0.002	0.28	<0.001	2.7	<0.0001	0.001	9.4	0.015	<1
	11/02/2025	0.82	<0.001	<0.0002	24	<0.001	0.002	4.4	<0.001	4.8	<0.0001	0.005	19	0.058	<1
	24/03/2024	7.4	<0.001	<0.0002	56	0.002	0.001	22	<0.001	6.9	<0.0001	0.021	1.8	0.097	<1
	31/03/2025	0.25		<0.0002	23	<0.001	0.003	1.7	<0.001	7	<0.0001	0.002	2.5	0.054	<1
	8/04/2025	0.1	0.001	<0.0002	29	<0.001	0.001	2.7	<0.001	8.3	<0.0001	0.002	2.3	0.015	<1
	9/05/2025	2.3	0.007	<0.0002	34	0.005	0.002	140	<0.001	9.1	<0.0001	0.011	2.1	0.077	<1
	25/06/2025	0.3	<0.001	<0.0002	21	<0.001	0.001	1.1	<0.001	5.4	<0.0001	0.002	14	0.03	<1
	8/07/2025	0.15	<0.001	<0.0002	19	<0.001	<0.001	0.65	<0.001	5.3	<0.0001	0.001	12	0.018	<1
	14/08/2025	0.11	<0.001	<0.0002	21	<0.001	<0.001	0.39	<0.001	5.9	<0.0001	<0.001	11	0.012	<1
	11/09/2025	0.32	0.001	<0.0002	21	<0.001	0.002	1.2	<0.001	5.6	<0.0001	0.001	11	0.016	<1
	13/10/2025	0.15	0.002	<0.0002	19	<0.001	0.004	0.82	<0.001	5.2	<0.0001	0.002	11	0.054	<1
	20/11/2025	0.53	0.002	<0.0002	20	0.001	0.002	1.8	0.002	4.9	<0.0001	0.002	3.9	0.021	<1
	16/12/2025	0.26	<0.001	<0.0002	16	0.002	<0.001	1.5	0.001	4	<0.0001	0.002	1.6	0.01	<1
	21/01/2026	<0.05	<0.001	<0.0002	21	<0.001	<1	0.25	<1	5.6	<0.0001	<0.001	17	0.022	<1
	20/02/2026	<0.05	<0.001	<0.0002	22	<0.001	<0.001	0.46	<0.001	6.1	<0.0001	<0.001	23	0.027	<1
	20/03/2026	0.15	<0.001	<0.0002	21	<0.001	<0.001	0.21	<0.001	5.8	<0.0001	0.001	15	0.013	<1
	21/04/2026	0.07	<0.001	<0.0002	8.9	<0.001	0.003	0.33	<0.001	2.2	<0.0001	<0.001	3.6	0.01	<1
	29/05/2026	0.08	<0.001	<0.0002	18	<0.001	<0.001	0.39	<0.001	4.8	<0.0001	<0.001	10	0.01	<1
SW02 Baseline		**3.8**	**0.045**	**0.001**	**17**	**0.007**	**0.012**	**71.9**	**0.02**	**5**	**0.0005**	**0.005**	**6**	**0.09**	**<1***

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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW02	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	90	<100	<20	<50	60	30	90	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	180	180	30	-	<20	170	30	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	200	<100	<20	<50	100	<100	100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	140	140	100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<20	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW02 Baseline		**60**	**-**	**22**	**100**	**-**	**50**	**100**	**50**	**140**	**-**

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Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW03	29/09/2022	6.8	120	<5	9.3	100	0.02	<0.01	24	<0.02	1.10	23	2	<5		0.1
	20/10/2022	5.9	650	26	7.5	870	0.03	<0.01	270	<0.02	<0.2	12	13	<5		0.0
	14/11/2022	6.5	140	260	2.6	160	0.13	<0.05	27	<0.01	7.40	36	9	<5		0.3
	14/12/2022	6.5	110	11	4.4	160	0.01	0.05	23	<0.01	3.90	18	11	<5		0.5
	18/01/2023	6.5	160	9	5.1	<5	0.02	<0.010	31	<0.02	1.30	26	17	<5		0.5
	20/02/2023	3.4	540	13	6.0	720	0.01	<0.010	22	<0.02	5.10	28	100	<5		4.5
	28/03/2023	3.3	400	7	9.9	750	0.02	0.07	14	<0.02	<0.2	16	110	<5		7.9
	18/04/2023	4.2	280	<5	7.4	450	<0.01	0.04	29	<0.02	<0.2	22	140	<5		4.8
	18/05/2023	4.3	310	37	5.5	580	0.02	0.32	22	<0.02	12.33	21	230	<5		10
	15/06/2023	3.3	580	17	8.9	870	0.04	0.68	32	<0.02	1.40	31	300	<5		9.4
	24/07/2023	3.9	290	36	9	510	0.03	0.4	17	<0.02	1	20	250	<5		15
	21/08/2023	6.8	270	5.8	7.2	350	0.04	0.04	45	<0.02	0.5	43	8	<5		0.2
	18/09/2023	4.6	410	20	7.4	540	<0.01	0.28	30	<0.02	0.4	29	230	<5		7.7
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.5	640	18	7.1	1100	0.03	0.58	32	<0.01	0.6	30	370	6.7		12
	19/12/2023	3.8	610	7.7	6.7	850	<0.01	0.86	36	<0.02	0.9	37	150	<5		4.2
	23/01/2024	3.7	460	55	4.1	880	<0.01	0.16	31	<0.02	1.6	37	100	<5		3.2
	26/02/2024	4.3	200	93	7.5	250	0.09	0.09	53	0.02	1.5	11	440	7.2		8.3
	26/03/2024	6.1	170	54	7.7	300	0.08	0.13	21	<0.02	1	20	78	<5		3.7
	18/04/2024	7.5	360	9.2	7.4	650	0.03	0.08	88	<0.02	0.8	78	64	<5	<10	0.6
	20/05/2024	4.5	300	21	5.6	450	<0.01	0.5	19	<0.02	1.2	23	190	<5	66	10
	25/06/2024	6.3	80	2300	7.2	140	0.98	<0.1	9.4	<0.2	140	9	5	<5	48	0.5
	10/07/2024	4.4	260	29	5.1	400	0.01	0.64	19	<0.02	0.7	21	10	<5	50	0.5
	6/08/2024	4.6	340	22	6.3	630	0.02	0.62	35	<0.02	1.3	29	230	<5	70	6.6
	15/08/2024	6.3	82	19	8.3	120	0.04	0.07	9.5	<0.02	<0.2	9	31	<5	11	3.3
	11/09/2024	7.1	290	<5	7.7	440	<0.01	0.11	84	<0.02	0.3	66	56	<5	<10	0.7
	9/10/2024	6.6	240	330	7.7	360	0.46	<0.01	56	<0.02	7.1	45	35	33	<10	0.6
	6/11/2024	7.2	300	49	7.5	460	0.07	<0.01	88	<0.02	1.2	72	39	<5	<10	0.4
	16/12/2024	7.2	250	5.3	19.0	370	<0.01	<0.01	70	<0.02	0.7	61	31	50	<10	0.4
	14/01/2025	6.9	220	<5	7.7	420	0.04	<0.01	66	<0.02	1.3	57	11	<5	<10	0.2
	11/02/2025	7.4	340	<5	7.5	570	0.07	0.02	99	<0.02	1.4	87	14	<5	<10	0.1
	24/03/2024	6.9	130	<5	8.1	230	0.05	<0.01	38	<0.02	0.9	32	66	<5	<10	1.7
	31/03/2025	7.0	260	9.3	9.8	440	0.06	0.19	100	<0.02	0.9	70	26	<5	<10	0.3
	8/04/2025	7.2	290	<5	8.9	470	0.04	0.07	100	<0.02	0.4	82	36	<5	<10	0.4
	9/05/2025	7.1	290	<5	-	460	<0.01	<0.1	100	<0.02	0.7	73	36	<5	<10	0.4
	25/06/2025	6.7	360	230	6.5	540	2.3	0.01	88	<0.03	2.3	68	36	46	14	0.4
	8/07/2025	6.8	300	82	9.1	570	0.15	0.48	89	<0.02	1.1	67	39	27	<10	0.4
	14/08/2025	7.2	300	16	9.1	580	0.08	0.05	110	<0.02	1	81	32	<5	<10	0.3
	11/09/2025	6.8	300	6.7	12.0	530	0.05	0.22	84	<0.02	0.7	67	43	43	11	0.5
	13/10/2025	7.2	340	7.5	9	620	0.07	<0.01	100	<0.02	0.8	83	43	16	<10	0.4
	20/11/2025	6.6	190	28	4.7	300	0.15	0.19	28	<0.02	1	28	35	<5	<10	1.3
	16/12/2025	6.3	96	400	0.3	170	0.94	0.18	14	<0.5	12	17	18	17	38	1.3
	21/01/2026	7.6	330	<5	8.6	680	0.05	<0.01	100	0.1	0.9	84	36	<0.005	<10	0.4
	20/02/2026	7.2	390	10	4.6	580	0.06	0.02	93	<0.02	0.5	69	11	<0.005	<10	0.1
	20/03/2026	6.9	330	<5	5.3	610	0.1	0.04	110	<0.02	0.8	77	36	0.012	<10	0.3
	21/04/2026	6.8	190	<5	7.4	250	0.04	0.012	24	<0.02	1.7	26	4	<0.005	11	0.2
	29/05/2026	6.24	350	<5	7.6	500	0.02	<0.01	85	0.047	1	61	31	<0.005	17	0.4
SW03 Baseline		**6.1 - 6.7**	**191**	**1005**	**-**	**281**	**2.14**	**0.155**	**111**	**0.041**	**4.3**	**30**	**6**	**86**		**<0.5***

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Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW03	29/09/2022	0.4	0.00	<0.0002	13	0.00	0.00	0.8	<0.001	4.4	<0.0001	0.002	1.00	0.034	<1
	20/10/2022	0.5	0.00	<0.0002	8	0.00	0.00	0.9	0.00	2.3	<0.0001	0.001	1.00	0.03	<1
	14/11/2022	1.1	<0.001	<0.002	18	<0.001	0.00	1.9	<0.010	5.7	<0.001	<0.01	<5	0.24	<1
	14/12/2022	0.6	<0.001	<0.002	13	<0.01	<0.010	1.3	<0.010	<5	<0.001	<0.01	<5	0.53	<1
	18/01/2023	0.5	0.01	<0.002	<2	<0.010	<0.01	0.5	<0.01	6.2	<0.001	<0.01	<5	<0.05	<1
	20/02/2023	17	0.00	<0.0002	63	0.00	0.02	0.0	0.00	14.0	<0.001	0.065	3.00	0.12	<1
	28/03/2023	15	<0.001	<0.0002	63	0.00	0.00	4.5	<0.001	11.0	<0.0001	0.065	2.30	0.15	<1
	18/04/2023	3.8	<0.001	<0.0002	30	0.00	0.00	<0.001	<0.001	5.0	<0.0001	0.023	2.10	0.048	<1
	18/05/2023	5.8	<0.001	<0.0002	48	<0.001	0.00	14.0	<0.001	10.0	<0.0001	0.033	2.80	0.16	<1
	15/06/2023	11	<0.001	<0.0002	74	<0.001	0.00	12	<0.001	15.0	<0.0001	0.058	2.7	0.15	<1
	24/07/2023	7.1	<0.001	<0.0002	39	<0.001	0.002	8.9	0.001	9.7	<0.0001	0.030	2.5	0.1	<1
	21/08/2023	0.7	0.001	<0.0002	18	0.001	0.003	1.1	<0.001	6.3	<0.0001	0.002	6.8	0.026	<1
	18/09/2023	2.8	<0.001	<0.0002	59	<0.001	<0.001	1.1	<0.001	14.0	<0.0001	0.022	3.2	0.049	<1
	18/10/2023	3.0	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12.0	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	11.0	0.002	<0.0002	75	<0.001	<0.001	17	<0.001	17.0	<0.0001	0.060	3	0.14	<1
	19/12/2023	21.0	0.003	0.0011	80	<0.001	0.002	3.6	0.001	19.0	0.0007	0.071	4.3	0.16	<1
	23/01/2024	17.0	0.002	<0.0002	63	0.002	0.001	17	<0.001	19.0	<0.0001	0.059	5.1	0.13	<1
	26/02/2024	8.8	0.003	<0.0002	17	0.003	0.005	9	0.002	4.8	<0.0001	0.016	1.8	0.05	<1
	26/03/2024	0.9	<0.001	<0.0002	24	<0.001	<0.001	1.8	<0.001	6.1	<0.0001	0.009	2.8	0.025	<1
	18/04/2024	1.1	<0.001	<0.0002	22	<0.001	<0.001	1.8	<0.001	6.0	<0.0001	0.005	13	0.018	<1
	20/05/2024	5.4	0.002	<0.0002	34	<0.001	<0.001	13	<0.001	7.3	<0.0001	0.026	3.6	0.047	<1
	25/06/2024	0.2	<0.001	<0.0002	10	<0.001	<0.001	170	<0.001	2.7	<0.0001	0.011	2.3	0.042	<1
	10/07/2024	3.6	0.001	<0.0002	34	<0.001	0.001	6.6	<0.001	6.6	<0.0001	0.019	3	0.053	<1
	6/08/2024	3.10	<0.001	<0.0002	51	<0.001	<0.001	4.8	<0.001	7.8	<0.0001	0.026	3.4	0.092	<1
	15/08/2024	1.20	0.00	<0.0002	12	<0.001	0.003	2.1	<0.001	2.2	<0.0001	0.004	1.6	0.037	<1
	11/09/2024	0.59	<0.001	<0.0002	21	<0.001	0.001	1.0	<0.001	4.9	<0.0001	0.003	13	0.021	<1
	9/10/2024	20	0.02	<0.0002	21	0.011	0.01	39.0	0.008	4.4	<0.0001	0.008	8.8	0.1	<1
	6/11/2024	3	0.00	<0.0002	23	0.002	0.002	4.5	<0.001	6.2	<0.0001	0.003	15	0.017	<1
	16/12/2024	0.29	0.001	<0.0002	19	0.001	<0.001	1.6	<0.001	4	<0.0001	0.001	12	0.009	<1
	14/01/2025	0.17	0.001	<0.0002	17	<0.001	0.001	0.74	<0.001	3.3	<0.0001	0.001	12	0.016	<1
	11/02/2025	0.45	0.001	<0.0002	23	<0.001	<0.001	2.1	<0.001	4.5	<0.0001	0.001	18	0.031	<1
	24/03/2024	0.18	0.001	<0.0002	10	<0.001	0.002	0.79	<0.001	2.6	<0.0001	0.001	6.6	0.036	<1
	31/03/2025	0.42	0.002	<0.0002	21	<0.001	0.001	3.5	<0.001	4.9	<0.0001	0.002	11	0.045	<1
	8/04/2025	0.3	<0.001	<0.0002	21	<0.001	<0.001	1.3	<0.001	5.4	<0.0001	0.002	11	0.012	<1
	9/05/2025	0.62	0.002	<0.0002	20	<0.001	0.001	2	<0.001	4.9	<0.0001	0.005	11	0.042	<1
	25/06/2025	2	0.002	<0.0002	21	<0.001	0.003	6.1	0.001	5.2	<0.0001	0.002	12	0.053	<1
	8/07/2025	0.24	<0.001	<0.0002	19	<0.001	<0.001	0.49	<0.001	5	<0.0001	0.001	11	0.015	<1
	14/08/2025	0.2	<0.001	<0.0002	20	<0.001	<0.001	0.59	<0.001	5.8	<0.0001	0.001	11	0.01	<1
	11/09/2025	2	0.003	<0.0002	19	0.002	0.004	4	0.002	5.4	<0.0001	0.003	11	0.037	<1
	13/10/2025	0.29	0.001	<0.0002	22	<0.001	0.002	0.97	<0.001	5.9	<0.0001	0.001	16	0.019	<1
	20/11/2025	2.4	0.004	<0.0002	22	0.003	0.003	8.8	0.003	4.7	<0.0001	0.003	4.4	0.015	<1
	16/12/2025	6	0.003	<0.0002	15	0.002	0.005	2.7	0.002	3.2	<0.0001	0.007	2.4	0.14	<1
	21/01/2026	0.09	<0.001	<0.0002	20	<0.001	<1	0.33	<1	5.5	<0.0001	<0.001	16	0.009	<1
	20/02/2026	0.27	0.001	<0.0002	23	<0.001	<0.001	1.3	<0.001	5.8	<0.0001	0.001	15	0.01	<1
	20/03/2026	0.22	<0.001	<0.0002	18	<0.001	0.001	0.58	<0.001	5.1	<0.0001	0.001	12	0.016	<1
	21/04/2026	0.29	<0.001	<0.0002	12	<0.001	0.002	0.64	<0.001	3.3	<0.0001	<0.001	5.5	0.01	<1
	29/05/2026	0.11	<0.001	<0.0002	17	<0.001	0.001	0.4	<0.001	4.7	<0.0001	0.001	9.6	0.024	<1
SW03 Baseline		**7.9**	**0.058**	**0.001**	**21**	**0.008**	**0.028**	**85.5**	**0.028**	**5**	**0.0005**	**0.006**	**4**	**0.26**	**<1***

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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW03	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	<50	<100	<20	<50	<100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	130	130	<100	<100	<20	<50	10	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW03 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**120**	**-**

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Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW04	29/09/2022	4.5	68	<5	4.8	52	0.01	0.18	20	<0.02	5.1	17	<2	<5		0.05
	20/10/2022	4.2	90	<5	7.5	110	0.01	<0.10	20	<0.02	0.3	16	<2	<5		0.05
	14/11/2022	No surface water located at monitoring site – no sample collected														
	14/12/2022	3.2	190	<5	2	280	0.01	0.05	42	<0.10	3.2	20	<2	<5		0.02
	18/01/2023	No surface water located at monitoring site – no sample collected														
	20/02/2023	4.1	0.2	<5	5.9	160	0.02	0.09	22	<0.10	7.4	23	15	<5		0.7
	28/03/2023	4.2	68	<5	8	130	<0.01	<0.01	17	<0.10	<0.25	14	25	<5		1.5
	18/04/2023	4.6	130	16	9.1	190	0.01	0.03	32	<0.02	0.5	21	8.7	<5		0.3
	18/05/2023	3.6	1,200	42	8	1,800	0.03	1.2	26	<0.02	1.15	53	1,000	<5		38.5
	15/06/2023	4.2	140	160	7.7	200	1.5	0.44	44	<0.02	12	24	<2	8		0.02
	24/07/2023	3.6	1,600	21	9	2,400	0.02	1.5	180	<0.02	3.4	78	5,700	<5		31.7
	21/08/2023	3.3	2,400	5.7	7.5	3,700	<0.01	2.8	33	<0.02	3.4	97	850	5.3		25.8
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.2	2,100	<5	9	3,500	0.03	0.8	4.7	<0.01	1.1	63	400	<5		85.1
	19/12/2023	3.0	3,200	15	0.8	3,700	<0.01	0.44	34	<0.02	4.5	100	980	<5		28.8
	23/01/2024	3.1	1,600	23	7.8	2,500	<0.01	0.19	27	<0.02	0.5	54	730	<5		27.0
	26/02/2024	3.1	1,000	11	7.8	1,200	0.03	0.31	14	<0.02	1.5	30	570	<5		40.7
	26/03/2024	3.2	900	5.7	9.6	1,300	<0.01	0.36	21	<0.02	0.9	30	710	<5		33.8
	18/04/2024	3.1	980	67	7.5	1,900	0.03	0.42	15	<0.02	0.8	33	1,000	27	310	66.7
	20/05/2024	3.3	630	8	8.3	1,100	<0.01	0.3	11	<0.02	0.7	25	500	<5	190	45.5
	25/06/2024	3.2	1,000	5.4	8.6	1,600	0.01	0.4	13	<0.02	1	27	270	<5	160	20.8
	10/07/2024	3.5	420	<5	7.9	870	<0.01	0.24	11	<0.02	0.6	21	450	<5	150	40.9
	6/08/2024	3.3	1,300	38	8.7	1,700	0.04	0.03	13	<0.02	1.1	28	860	7.8	230	66.2
	15/08/2024	3.9	240	<5	9.3	390	0.02	0.13	13	<0.02	0.8	16	150	<5	40	11.5
	11/09/2024	3.4	460	<5	6.9	690	0.01	0.05	8.7	<0.02	<0.2	17	390	15	77	44.8
	24/09/2024 - Additional	3.5	750	-	-	1,300	-	-	-	-	-	-	-	-	-	-
	9/10/2024	3.1	810	<5	9	1,200	0.02	<0.01	10	<0.02	0.8	26	580	<5	<10	58.0
	6/11/2024	3.3	440	23	6.4	660	0.05	<0.01	10	<0.02	1	18	310	<5	15	31.0
	16/12/2024	5.7	210	420	0.2	360	0.1	0.25	13	<0.02	13	12	110	7	25	8.5
	14/01/2025	4.1	310	120	4.9	460	0.13	0.03	6.3	<0.02	1.3	11	64	<5	<10	10.2
	11/02/2025	7.6	700	<5	8.8	1000	0.01	0.03	5.8	<0.02	1.3	21	150	7.7	<10	25.9
	24/03/2025	3.9	390	21	7.4	470	0.03	0.03	18	<0.02	1.5	24	180	8.1	<10	10.0
	31/03/2025	6.3	260	70	10	370	<0.01	0.1	11	<0.02	0.8	16	160	<5	<10	14.5
	8/04/2025	6.0	430	43	4.1	470	0.09	0.27	11	0.04	2.3	18	240	<10	16	21.8
	9/05/2025	6.5	270	260	-	570	<0.01	0.02	10	<0.02	4.5	16	250	160	<10	25.0
	25/06/2025	6.7	410	67	6.1	590	0.6	0.01	8.3	<0.02	0.6	16	160	6.5	28	19.2
	8/07/2025	4.0	140	180	6.1	160	0.21	<0.01	21	<0.02	6.2	17	<2	7.6	43	21.0
	14/08/2025	6.5	180	250	6.6	290	0.47	-	9.4	-	-	14	86	<5	13	9.4
	11/09/2025	6.5	260	1,400	0.2	460	0.03	0.31	7.3	<0.02	38	16	150	10	22	7.3
	13/10/2025	7.3	580	14	8.3	760	0.04	<0.01	4	<0.02	0.8	16	230	20	<10	4.0
	20/11/2025	6.9	280	35	2.1	490	0.08	0.05	8.4	<0.02	1	15	150	2.7	<10	8.4
	16/12/2025	7.0	370	170	6	550	0.05	0.21	14	<0.5	1	87	140	<5	39	14.0
	21/01/2026	6.9	250	75	1.9	450	0.23	<0.01	22	0.02	0.9	16	100	<0.005	13	22.0
	20/02/2026	6.9	320	42	1.5	480	0.03	<0.01	29	<0.02	2.6	18	30	0.17	16	29.0
	20/03/2026	6.7	250	110	7.7	420	0.11	0.04	18	<0.02	1.9	20	120	<0.005	<10	18.0
	21/04/2026	6.9	300	590	1.2	410	1.3	0.12	20	<0.02	2.1	23	22	<0.0065	11	20.0
	29/05/2026	5.62	130	59	4.7	200	0.08	<0.01	23	<0.02	4.7	16	15	<0.005	19	23.0
SW04 Baseline		**4.2 – 4.5**	**112**	**293**	**-**	**165**	**0.5**	**0.693**	**90**	**0.052**	**4.5**	**20**	**3**	**86**		**<0.5***

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Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW04	29/09/2022	1.3	0.001	<0.0002	1.6	0.005	0.001	2.7	0.001	2.6	<0.0001	0.002	1	0.027	<1
	20/10/2022	1.1	<0.001	<0.0002	1.3	0.004	0.001	2.4	0.001	2.3	<0.0001	0.002	1	0.024	<1
	14/11/2022	No surface water located at monitoring site – no sample collected													
	14/12/2022	1.2	<0.001	<0.002	<5	<0.001	<0.01	3.2	<0.01	<5	<0.001	<0.01	<5	0.084	<1
	18/01/2023	No surface water located at monitoring site – no sample collected													
	20/02/2023	1.6	0.002	<0.0002	2.7	0.005	0.05	0.002	0.002	3.9	<0.001	0.003	1.6	0.039	<1
	28/03/2023	1.1	<0.01	<0.002	<5	0.002	<0.01	2.7	<0.01	<5	<0.0001	0.01	<5	<0.05	<1
	18/04/2023	0.85	<0.001	<0.0002	1.8	<0.01	<0.001	<0.001	<0.001	2.7	<0.0001	0.001	0.8	0.034	<1
	18/05/2023	41	<0.001	0.0005	200	<0.001	0.003	16	0.003	31	<0.0001	0.11	5.7	0.4	<1
	15/06/2023	3.1	0.002	<0.0002	2.2	0.007	0.007	6.3	0.005	4.5	<0.0001	0.003	1.4	0.075	1.41
	24/07/2023	50	<0.001	0.0002	330	<0.001	0.003	3.9	0.002	51	<0.0001	0.13	9	0.18	<1
	21/08/2023	72	0.002	0.0004	560	<0.001	0.003	3.4	0.002	83	<0.0001	0.23	13	0.34	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	3	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12	<0.0001	0.009	2.7	0.027	<1
	20/11/2023	91	0.003	0.0007	380	0.001	0.003	4.3	0.003	52	<0.0001	0.27	7.2	0.55	<1
	19/12/2023	110	0.005	0.0022	570	0.002	0.005	11	0.007	90	0.001	0.39	4.3	0.7	<1
	23/01/2024	55	0.002	0.0003	260	0.002	0.003	9.7	0.002	35	<0.0001	0.19	6.1	0.33	<1
	26/02/2024	23	<0.001	<0.0002	140	<0.001	<0.001	5.1	<0.001	20	<0.0001	0.083	3.9	0.18	<1
	26/03/2024	20	<0.001	<0.0002	130	<0.001	<0.001	3.1	<0.001	19	<0.0001	0.068	4.9	0.1	<1
	18/04/2024	32	<0.001	<0.0002	190	0.001	0.002	7	<0.001	26	<0.0001	0.1	3.6	0.18	<1
	20/05/2024	20	<0.001	<0.0002	100	<0.001	<0.001	5.7	<0.001	14	<0.0001	0.064	2.6	0.13	<1
	25/06/2024	16	<0.001	<0.0002	210	<0.001	<0.001	5.3	<0.001	23	<0.0001	0.059	3.7	0.09	<1
	10/07/2024	12	<0.001	<0.0002	110	<0.001	0.001	2.5	<0.001	12	<0.0001	0.051	2.2	0.11	<1
	6/08/2024	17	<0.001	<0.0002	200	<0.001	0.001	5.5	<0.001	24	<0.0001	0.059	2.5	0.1	<1
	15/08/2024	2	<0.001	<0.0002	36	<0.001	<0.001	0.81	<0.001	6	<0.0001	0.015	2.5	0.057	<1
	11/09/2024	5.6	<0.001	<0.0002	87	<0.001	<0.001	3.6	<0.001	11	<0.0001	0.026	1.6	0.061	<1
	24/09/2024 - Additional	-	<0.001	<0.0001	-	<0.001	0.0001	-	<0.001	-	<0.0001	0.032	-	0.043	-
	9/10/2024	14	<0.001	<0.0002	140	<0.001	0.002	8.1	<0.001	17	<0.0001	0.057	2.7	0.12	<1
	6/11/2024	2.8	<0.001	<0.0002	81	<0.001	<0.001	6.1	<0.001	11	<0.0001	0.02	<0.5	0.034	<1
	16/12/2024	4.4	0.007	<0.0002	29	0.009	0.006	170	0.003	4.5	<0.0001	0.009	1.3	0.035	<1
	14/01/2025	1.2	<0.001	<0.0002	53	<0.001	0.001	5.8	<0.001	5.8	<0.0001	0.014	0.8	0.039	<1
	11/02/2025	<0.05	<0.001	<0.0002	200	<0.001	<0.001	0.14	<0.001	18	<0.0001	0.004	<0.5	0.033	<1
	24/03/2025	1.1	<0.001	<0.0002	52	<0.001	0.002	6.6	<0.001	8.5	<0.0001	0.012	2.3	0.1	<1
	31/03/2025	0.5	0.003	<0.0002	50	<0.001	0.001	17	<0.001	7.6	<0.0001	0.007	2.4	0.047	<1
	8/04/2025	0.36	0.004	<0.0002	70	<0.001	<0.001	38	<0.001	9.8	<0.0001	0.006	2.3	0.014	<1
	9/05/2025	0.64	<0.001	<0.0002	61	<0.001	0.001	34	<0.001	7.9	<0.0001	0.001	1.9	0.032	<1
	25/06/2025	0.35	<0.001	<0.0002	85	<0.001	<0.001	7.3	<0.001	8.5	<0.0001	0.004	1.3	0.013	<1
	8/07/2025	0.92	<0.001	<0.0002	0.6	0.004	0.002	1.8	<0.001	1.5	<0.0001	0.001	0.8	0.042	<1
	14/08/2025	0.34	<0.001	<0.0002	38	<0.001	<0.001	17	<0.001	5.7	<0.0001	0.002	1	0.018	<1
	11/09/2025	8.7	0.031	<0.002	120	0.017	0.011	830	<0.01	12	<0.001	0.027	<5	0.1	<1
	13/10/2025	0.31	0.002	<0.0002	130	<0.001	<0.001	12	<0.001	14	<0.0001	0.004	1.5	<0.005	<1
	20/11/2025	0.26	<0.001	<0.0002	69	<0.001	0.002	7.6	0.001	8.5	<0.0001	0.003	0.6	0.016	<1
	16/12/2025	13	0.002	<0.0002	57	0.003	<0.001	47	0.002	38	<0.0001	0.032	2.4	0.039	<1
	21/01/2026	0.07	<0.001	<0.0002	53	<0.001	<1	3	<1	7.3	<0.0001	0.001	<0.5	<0.005	<1
	20/02/2026	0.33	0.003	<0.0002	63	<0.001	<0.001	37	<0.001	8.2	<0.0001	0.002	1.6	0.013	<1
	20/03/2026	1	0.002	<0.0002	44	<0.001	0.002	21	<0.001	7.4	<0.0001	0.004	1.7	0.021	<1
	21/04/2026	4.2	0.005	<0.0002	54	0.004	0.01	56	0.004	7.6	<0.0001	0.014	3.1	0.065	<1
	29/05/2026	0.62	<0.001	<0.0002	10	0.002	<0.001	3.3	<0.001	2.7	<0.0001	0.002	1.1	0.014	
SW04 Baseline		**1.4**	**0.002**	**0.001**	**3.2**	**0.007**	**0.002**	**2.8**	**0.002**	**2.3**	**0.0005**	**0.005**	**2.9**	**0.028**	**<1***

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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW04	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	No flow - No sample collected									
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	No flow - No sample collected									
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No flow - No sample collected									
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	160	160	<100	<100	<20	<50	<100	<100	160	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Additional	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW04 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

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Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW05	29/09/2022	5.9	480	5.2	7.7	510	0.12	0.17	220	<0.20	3	140	11	<5		0.05
	20/10/2022	6.2	650	7.2	8.9	690	0.06	0.24	180	<0.20	0.5	160	8.6	<5		0.05
	14/11/2022	6.2	820	13	4.7	1,000	0.06	<0.05	310	<0.10	8.1	260	100	<5		0.32
	14/12/2022	6.2	830	16	7.5	1,100	0.05	0.05	330	<0.10	3.1	240	40	<5		0.12
	18/01/2023	6.3	2,800	33	7	<5	0.09	0.09	1,300	<0.02	3.38	820	160	<5		0.12
	20/02/2023	6.7	18	18	5.4	2,300	0.1	0.07	2,000	<0.10	3.4	4700	890	<5		0.45
	28/03/2023	5.6	470	<5	9.4	760	0.02	0.08	200	<0.10	<0.02	110	23	6.7		0.12
	18/04/2023	6.4	4,000	16	8.5	5,300	0.1	0.12	2,000	<0.02	80	1100	230	<5		0.12
	18/05/2023	5.8	260	17	5.7	460	0.08	<0.01	110	<0.02	<0.2	64	25	<5		0.23
	15/06/2023	6.2	1,100	<5	8.8	1,400	0.58	0.14	450	<0.02	1.1	250	40	<5		0.09
	24/07/2023	6.5	1,600	<5	9.3	2,800	0.05	0.17	1,500	<0.5	1.1	440	1,200	<5		0.80
	21/08/2023	6.6	1,600	<5	6.3	2,900	0.06	0.15	1,500	<0.02	1.28	480	190	<5		0.13
	18/09/2023	6.6	2,500	13	6.4	3,800	0.06	0.11	1,200	<0.02	1.3	650	210	<5		0.18
	18/10/2023	6.9	4,800	6.6	6.5	7,700	0.06	0.05	2,700	<0.02	<0.2	1,300	730	10		0.27
	20/11/2023	6.8	2,100	12	4.8	3,700	0.18	0.46	1,100	<0.01	0.6	460	1,200	<5		1.09
	19/12/2023	6.7	3,300	14	5.3	5,400	0.19	0.77	1,700	<0.02	<2	1,000	64	<5		0.04
	23/01/2024	6.2	1,100	13	9.3	1,000	0.09	0.05	440	<0.02	2.3	260	220	<5		0.50
	26/02/2024	6.3	970	16	8.6	1,200	0.11	0.03	330	<0.02	1.5	200	130	<5		0.39
	26/03/2024	6.6	1,100	9.1	5.6	1,700	0.03	0.09	910	<0.02	2	290	420	<5		0.46
	18/04/2024	6.5	560	8.4	5.8	830	0.07	0.16	160	<0.02	1.7	110	160	5.4	<10	1.00
	20/05/2024	6.7	240	<5	5.8	350	<0.01	0.03	68	<0.02	0.4	47	140	<5	15	2.06
	25/06/2024	6.5	1,000	16	7.7	1,800	0.06	0.1	500	<0.02	1.2	300	29	<5	16	0.06
	10/07/2024	6.2	950	5.6	6.3	1,700	0.02	0.16	170	<0.02	0.9	280	130	<5	11	0.76
	6/08/2024	6.3	3,300	9	8.9	5,800	0.05	0.11	1500	<0.02	1.2	820	210	<5	27	0.14
	15/08/2024	6.2	300	<5	7.1	430	0.08	0.03	30	<0.02	<0.2	80	27	<5	12	0.90
	11/09/2024	6.4	710	8.2	5.5	1,200	0.03	0.4	450	<0.02	1.1	230	72	<5	12	0.16
	9/10/2024	6.4	700	11	9	1,100	0.15	0.15	320	<0.1	<0.25	180	53	<5	14	0.17
	6/11/2024	7.1	930	15	6.1	1,300	0.08	0.16	440	<0.02	1	250	56	<5	<10	0.13
	16/12/2024	7.4	31,000	26	9.3	44,000	0.02	0.14	1,400	<0.02	0.4	<0.5	2,000	<5	<10	1.43
	14/01/2025	7.1	19,000	9.4	6.2	30,000	0.04	0.04	12,000	<0.02	0.3	5,500	500	<5	<10	0.04
	11/02/2025	7.5	24,000	9.1	8.5	35,000	0.03	0.06	6,300	<0.02	<0.2	6,900	260	<5	<10	0.04
	24/03/2024	6.3	1,600	<5	7	2,500	<0.1	0.12	790	<0.02	4.4	440	140	<5	<10	0.18
	31/03/2025	7.0	210	8	9.2	260	0.08	<10	72	<0.02	2.3	41	9.5	<5	<10	0.13
	8/04/2025	6.3	610	8.3	6.7	760	0.08	0.44	230	<0.2	<1	140	29	<10	<10	0.13
	9/05/2025	6.8	340	<5	-	480	0.08	<0.1	120	<0.2	1.7	71	40	<5	<10	0.33
	25/06/2025	6.2	2,000	6.6	5.9	3,500	<0.2	0.07	1,700	<0.2	<0.2	510	250	<5	17	0.14
	8/07/2025	6.0	470	<5	8	910	0.05	0.03	230	0.07	<0.2	130	41	<5	13	0.18
	14/08/2025	6.2	570	16	6.1	930	0.08	0.03	550	<0.02	16	140	62	6.5	13	0.11
	11/09/2025	6.5	940	5.4	6.9	1,700	0.04	0.05	440	<0.02	1.7	260	61	<5	9	0.14
	13/10/2025	6.8	6,600	<5	5.4	11,000	0.05	0.1	3,300	<0.02	1.7	1,800	370	<5	12	0.11
	20/11/2025	6.6	4,600	<5	4.3	9,000	0.1	0.21	2,600	<0.02	0.4	1,400	320	<5	12	0.12
	16/12/2025	6.8	11,000	18	4.1	18,000	0.07	0.28	6,100	<0.5	1.2	2,800	720	<5	34	0.12
	21/01/2026	7.4	25,000	9.5	7.8	37,000	0.03	0.02	12,000	12	1.1	6,300	1,500	<0.005	14	0.13
	20/02/2026	6.9	21,000	8.4	4.9	32,000	0.02	<0.01	10,000	<0.02	0.8	5,400	410	<0.005	10	0.04
	20/03/2026	6.3	1,400	25	5.5	2,700	0.28	0.09	720	<0.02	1.7	370	98	<0.005	<10	0.14
	21/04/2026	6.5	14,000	8.4	6.8	22,000	0.07	0.74	7,500	<0.02	1	3,500	320	<0.005	<10	0.04
	29/05/2026	5.78	260	<5	7.1	340	0.06	0.1	78	<0.02	1.3	46	10	<0.005	22	0.13
SW05 Baseline		**5.1 – 7.2**	**4710**	**136**	**-**	**6,927**	**0.21**	**0.592**	**980**	**0.02**	**2.2**	**1,667**	**115**	**63**		**<0.5***

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Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW05	29/09/2022	0.83	<0.001	<0.0002	9.4	0.002	<0.001	4.6	<0.001	17	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.66	<0.001	<0.0002	11	0.001	<0.001	3.5	0.001	19	<0.0001	0.002	7.9	0.007	<1
	14/11/2022	0.75	<0.001	<0.002	18	<0.001	0.002	5.4	<0.01	27	<0.001	<0.001	11	0.12	<1
	14/12/2022	0.93	<0.001	<0.002	16	<0.01	<0.01	6.1	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.73	<0.01	<0.002	<2	<0.01	<0.01	6.2	<0.01	96	<0.001	<0.01	41	<0.05	<1
	20/02/2023	0.22	0.002	<0.0002	190	0.001	0.01	<0.001	<0.001	550	<0.001	0.001	170	0.008	<1
	28/03/2023	0.77	<0.01	<0.002	9.4	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.4	<0.05	<1
	18/04/2023	1	<0.001	<0.0002	42	0.001	<0.001	<0.001	<0.001	110	<0.0001	0.003	37	0.008	<1
	18/05/2023	0.6	<0.001	<0.0002	5.2	<0.001	<0.001	2.4	<0.001	9.1	<0.0001	0.002	4.9	0.009	<1
	15/06/2023	0.32	<0.001	<0.0002	14	0.001	2	2	<0.001	27	<0.0001	0.001	14	0.01	<1
	24/07/2023	0.33	<0.001	<0.0002	22	<0.001	<0.001	1.9	<0.001	52	<0.0001	0.002	25	0.006	<1
	21/08/2023	0.41	<0.001	<0.0002	23	<0.001	0.002	2.2	<0.001	54	<0.0001	0.002	29	0.005	<1
	18/09/2023	0.28	<0.001	<0.0002	29	<0.001	<0.001	2.6	<0.001	70	<0.0001	0.001	42	<0.005	<1
	18/10/2023	0.27	<0.001	<0.0002	61	<0.001	<0.001	2	<0.001	160	<0.0001	<0.001	76	<0.005	<1
	20/11/2023	0.51	0.001	<0.0002	25	0.001	<0.001	4.3	<0.001	56	<0.0001	0.002	27	<0.005	<1
	19/12/2023	0.54	0.005	0.0028	46	0.001	0.001	4.2	0.001	120	0.002	0.002	47	0.009	<1
	23/01/2024	0.9	0.003	<0.0002	16	0.002	0.001	7.8	<0.001	32	<0.0001	0.001	16	0.012	<1
	26/02/2024	0.63	0.001	<0.0002	13	0.001	<0.001	3.7	<0.001	23	<0.0001	0.002	10	0.029	<1
	26/03/2024	0.64	<0.001	<0.0002	16	0.001	<0.001	3.3	<0.001	33	<0.0001	0.002	14	0.008	<1
	18/04/2024	0.69	<0.001	<0.0002	8.3	0.002	0.001	<0.001	<0.001	14	<0.0001	0.008	6.7	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.6	<0.001	0.001	2.5	<0.001	5.1	<0.0001	0.002	3.5	0.008	<1
	25/06/2024	0.2	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	31	<0.0001	0.002	12	0.012	<1
	10/07/2024	0.48	<0.001	<0.0002	17	<0.001	<0.001	2.9	<0.001	31	<0.0001	0.002	11	0.008	<1
	6/08/2024	0.28	<0.001	<0.0002	37	<0.001	<0.001	<0.001	<0.001	100	<0.0001	0.001	30	0.007	<1
	15/08/2024	0.5	<0.001	<0.0002	5	0.001	<0.001	1.6	<0.001	8	<0.0001	0.001	4.6	0.01	<1
	11/09/2024	0.52	<0.001	<0.0002	14	<0.001	<0.001	2.9	<0.001	25	<0.0001	0.002	10	0.011	<1
	9/10/2024	0.85	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.5	0.016	<1
	6/11/2024	0.68	<0.001	<0.0002	17	0.002	<0.001	3.8	<0.001	29	<0.0001	0.002	12	0.008	<1
	16/12/2024	<0.05	<0.001	<0.0002	<0.5	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.24	0.002	<0.0002	230	0.002	<0.001	0.64	<0.001	660	<0.0001	<0.001	210	0.006	<1
	11/02/2025	0.12	0.002	<0.0002	290	0.001	<0.001	0.5	<0.001	820	<0.0001	<0.001	260	0.047	<1
	24/03/2024	0.54	<0.001	<0.0002	22	<0.001	0.001	3.2	<0.001	53	<0.0001	0.002	17	0.32	<1
	31/03/2025	0.58	<0.001	<0.0002	4.2	<0.001	<0.001	3.7	<0.001	5.2	<0.0001	0.002	3.5	0.062	<1
	8/04/2025	0.77	<0.001	<0.0002	9.9	0.001	<0.001	4.2	<0.001	18	<0.0001	0.002	6	0.011	<1
	9/05/2025	0.75	<0.001	<0.0002	6.3	0.001	<0.001	3.2	<0.001	8.5	<0.0001	0.002	3.7	0.015	<1
	25/06/2025	0.46	<0.001	<0.0002	26	<0.001	<0.001	2	<0.001	63	<0.0001	0.001	19	0.01	<1
	8/07/2025	0.68	<0.001	<0.0002	9.1	0.001	<0.001	3	<0.001	16	<0.0001	0.002	4.9	0.008	<1
	14/08/2025	0.46	<0.001	<0.0002	8.6	<0.001	<0.001	2.6	<0.001	17	<0.0001	0.001	6.2	0.008	<1
	11/09/2025	0.55	<0.001	<0.0002	15	<0.001	<0.001	3.2	<0.001	33	<0.0001	0.001	11	0.01	<1
	13/10/2025	0.21	<0.001	<0.0002	77	<0.001	<0.001	2	<0.001	220	<0.0001	<0.001	69	<0.005	<1
	20/11/2025	0.32	0.001	<0.0002	63	0.001	<0.001	2.7	<0.001	180	<0.0001	0.001	53	<0.005	<1
	16/12/2025	0.2	0.001	<0.0002	120	0.001	0.001	1.4	<0.001	340	<0.0001	0.001	110	0.008	<1
	21/01/2026	0.08	0.002	<0.0002	250	0.001	<1	0.47	<1	760	<0.0001	<0.001	240	0.009	<1
	20/02/2026	0.1	0.002	<0.0002	220	<0.001	<0.001	1.4	<0.001	640	<0.0001	<0.001	260	0.006	<1
	20/03/2026	0.53	<0.001	<0.0002	22	<0.001	0.001	4.6	<0.001	46	<0.0001	0.002	17	0.011	<1
	21/04/2026	0.18	0.001	<0.0002	150	<0.001	0.001	1.2	<0.001	430	<0.0001	0.001	130	0.022	<1
	29/05/2026	0.65	<0.001	<0.0002	4.9	<0.001	<0.001	2.9	<0.001	6	<0.0001	0.002	2.7	0.04	<1
SW05 Baseline		**2.1**	**0.002**	**0.001**	**57**	**0.002**	**0.003**	**12.3**	0.001	**130**	**0.0005**	**0.011**	**58**	**0.026**	**<1***

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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW05	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	70	70	-	-	<20	60	100	-	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	120	120	<100	120	<20	<50	120	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW05 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

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Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW06	29/09/2022	6.0	480	<5	7.8	580	0.13	0.16	220	<0.02	8.6	140	11	5.1		0.05
	20/10/2022	6.3	580	16	8.7	730	0.05	0.19	330	<0.02	0.5	110	7.5	6.2		0.02
	14/11/2022	6.2	840	13	<5	1000	0.04	0.36	310	<0.10	1.1	270	100	<5		0.32
	14/12/2022	6.3	840	16	8.3	1200	0.1	0.05	340	<0.10	5.8	240	44	<5		0.13
	18/01/2023	6.4	3,700	31	6.8	5,400	0.07	0.04	1,800	<0.02	2.5	1,000	200	<5		0.11
	20/02/2023	6.8	19	89	5.1	14,000	0.09	0.11	22	<0.10	4.1	4,000	1,200	<5		54.55
	28/03/2023	5.6	400	6.2	8.3	730	0.03	0.07	180	<0.20	<0.20	110	18	9.7		0.10
	18/04/2023	6.7	6,400	18	7.4	6,700	0.07	1.2	3,200	<0.02	1.26	1,700	360	<10		0.11
	18/05/2023	5.9	280	17	6.3	470	0.08	0.06	120	<0.02	0.4	370	21	<5		0.18
	15/06/2023	6.4	1,100	<5	7.4	1,400	0.55	0.18	440	<0.02	0.7	250	38	<5		0.09
	24/07/2023	6.7	2,100	5.8	6.6	3,500	0.07	0.23	1,800	<0.2	0.6	540	620	<5		0.34
	21/08/2023	6.6	2,800	<5	6.1	5,400	0.19	0.16	1,300	<0.02	0.78	870	59	<5		0.05
	18/09/2023	6.7	2,900	24	6.5	4,600	0.06	0.12	1,500	<0.02	0.4	1,300	200	<5		0.13
	18/10/2023	6.9	7,900	6.3	6.4	9,700	0.05	0.05	3,700	<0.02	<0.2	1,600	430	<5		0.12
	20/11/2023	6.6	2,200	9.9	4.6	4,000	0.18	0.43	1,200	<0.01	1.2	490	720	<5		0.60
	19/12/2023	6.8	3,300	9.3	5.6	6,600	0.09	0.82	2,300	<0.02	<2	1,300	94	<5		0.04
	23/01/2024	6.2	4,300	15	2.1	4,300	0.18	0.08	2,800	<0.02	1.4	1,100	330	<5		0.12
	26/02/2024	6.4	880	17	9	1,200	0.11	0.02	60	<0.02	1.7	200	10	<5		0.17
	26/03/2024	6.8	1,300	9.9	5.9	1,900	0.05	0.07	760	0.05	1.2	300	120	<5		0.16
	18/04/2024	6.6	520	5.8	6	840	0.06	0.16	170	<0.02	<1	110	31	<5	17	0.18
	20/05/2024	6.3	240	<5	6.1	290	<0.01	0.05	59	<0.02	1	42	47	<5	15	0.80
	25/06/2024	6.7	960	17	9.2	1,900	0.06	0.09	500	<0.02	5.3	270	21	<5	19	0.04
	10/07/2024	6.2	880	<5	6.2	1,600	0.03	0.13	170	<0.02	1.4	250	33	<5	15	0.19
	6/08/2024	6.3	4,500	6.8	7.6	8,400	0.08	0.15	2,100	<0.02	1.6	1,200	270	<5	24	0.13
	15/08/2024	6.2	160	<5	7	240	0.1	0.03	57	<0.02	<0.2	38	15	<5	14	0.26
	11/09/2024	6.7	710	7	6.6	1,000	0.04	0.28	370	<0.02	1.8	180	54	<5	11	0.15
	9/10/2024	6.5	720	14	8.5	1,000	0.15	<0.01	310	<0.1	4.3	180	33	18	<10	0.11
	6/11/2024	6.9	1,900	37	5.6	2,400	0.1	0.11	890	<0.02	1.6	490	160	<5	<10	0.18
	16/12/2024	7.7	33,000	13	9.5	47,000	0.01	0.18	16,000	<0.02	<0.2	<0.5	2,100	<5	<10	0.13
	14/01/2025	7.2	25,000	11	6.3	38,000	0.03	0.06	15,000	<0.02	0.7	7,200	600	<5	<10	0.04
	11/02/2025	7.6	24,000	11	7.2	34,000	0.003	0.06	6,100	<0.02	<0.2	7,200	240	5.9	<10	0.04
	24/03/2025	6.5	1,700	<5	6.8	2,500	<0.1	0.12	820	<0.02	4.2	450	110	<5	<10	0.13
	31/03/2025	6.7	250	11	9.5	250	0.08	<10	68	<0.02	<1	42	9.7	<5	<10	0.14
	8/04/2025	6.4	610	7.6	9.4	740	0.08	0.28	260	<0.2	<1	140	31	<10	<10	0.12
	9/05/2025	6.6	260	<5	-	490	0.07	<0.1	120	<0.2	<1	70	28	<5	<10	0.23
	25/06/2025	6.2	2,000	7.4	5.9	3,600	1.4	0.08	1,700	<0.2	1.4	520	260	<5	20	1.50
	8/07/2025	6.0	470	<5	8.2	910	0.05	0.02	230	<0.02	<0.2	130	28	<5	13	0.12
	14/08/2025	6.3	590	31	6.1	910	0.07	0.03	340	<0.02	0.3	140	37	<5	13	0.11
	11/09/2025	6.6	1,299	6.8	7.1	2,200	0.04	0.05	590	<0.02	5.6	340	67	<5	<10	0.11
	13/10/2025	6.8	14,000	5.9	4.9	23,000	0.04	0.29	7,400	<0.02	0.6	4,100	830	5.9	14	0.11
	20/11/2025	6.7	8,400	<5	4.5	14,000	0.09	0.22	4,800	<0.02	0.7	2,300	1,100	<5	12	0.23
	16/12/2025	6.9	12,000	20	3.8	19,000	0.09	0.32	6,100	<0.5	1.8	2,900	750	7	28	0.12
	21/01/2026	7.4	18,000	7.1	7.4	28,000	0.03	<0.01	8,400	8.4	1	4,700	1,000	<0.005	12	0.12
	20/02/2026	7	19,000	<5	5.9	33,000	0.02	0.05	12,000	<0.02	0.3	5,800	520	0.0058	17	0.04
	20/03/2026	6.4	1,400	20	4.3	2,800	0.16	0.13	770	<0.02	2.4	390	100	<0.005	<10	0.13
	21/04/2026	6.5	12,000	<5	7.4	19,000	0.03	0.1	5,900	<0.02	1.2	3,100	270	<0.005	16	0.05
	29/05/2026	5.81	190	5.7	6.1	370	0.06	<0.01	74	<0.02	2	46	10	<0.005	20	0.14
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		**6.5 – 8.0**	**-**	**<50**	**-**	**<2200**	**<0.05**	**-**	**-**	**-**	**<0.50**	**-**	**-**	**5**		**<0.5***

Note: * derived from Interim Target Criteria within BCPoM, GWMP and AFMP (AWC 2020)

Harvest Estate
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Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW06	29/09/2022	0.78	<0.001	<0.0002	9.4	0.002	<0.001	4.5	<0.001	18	<0.0001	0.002	7.7	0.008	<1
	20/10/2022	0.54	<0.001	<0.0002	9.1	0.001	<0.001	2.7	0.001	13	<0.0001	0.002	5.8	0.012	<1
	14/11/2022	0.68	<0.001	<0.002	18	<0.001	0.012	5.3	<0.01	29	<0.001	<0.01	12	0.11	<1
	14/12/2022	0.75	<0.001	<0.002	16	<0.01	<0.01	5.4	<0.01	21	<0.001	<0.01	13	<0.05	<1
	18/01/2023	0.63	<0.010	<0.001	<2	<0.01	<0.01	0.01	<0.01	120	<0.001	<0.01	47	<0.05	<1
	20/02/2023	0.34	0.002	<0.0002	170	0.001	0.01	<0.001	<0.001	480	<0.001	0.002	160	0.008	<1
	28/03/2023	1.1	<0.01	<0.002	11	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.3	<0.05	<1
	18/04/2023	0.54	<0.001	<0.0002	68	0.001	<0.001	<0.001	<0.001	200	<0.0001	0.002	63	0.009	<1
	18/05/2023	0.44	0.003	<0.0002	14	<0.001	<0.001	0.13	<0.001	4.8	<0.0001	0.008	3.3	<0.005	<1
	15/06/2023	0.36	<0.001	<0.0002	15	<0.001	2.1	2.1	<0.001	28	28	0.001	14	<0.005	<1
	24/07/2023	0.36	<0.001	<0.0002	26	<0.001	<0.001	1.9	0.001	65	<0.0001	0.002	29	0.007	<1
	21/08/2023	0.41	<0.001	<0.0002	39	0.001	<0.001	1.9	<0.001	100	<0.0001	0.002	46	<0.005	<1
	18/09/2023	0.3	<0.001	<0.0002	56	<0.001	<0.001	2.4	<0.001	150	<0.0001	0.001	64	<0.005	<1
	18/10/2023	0.2	<0.001	<0.0002	73	<0.001	<0.001	1.7	<0.001	190	<0.0001	<0.001	85	<0.005	<1
	20/11/2023	0.63	0.001	<0.0002	27	0.001	<0.001	4.5	<0.001	60	<0.0001	0.003	28	0.01	<1
	19/12/2023	0.62	0.002	0.0007	56	0.001	0.002	3.4	<0.001	150	0.0005	0.002	55	0.008	<1
	23/01/2024	0.71	0.003	<0.0002	50	0.002	<0.001	5.7	<0.001	140	<0.0001	<0.001	46	0.008	<1
	26/02/2024	0.61	<0.001	<0.0002	14	0.003	<0.001	3.5	<0.001	24	<0.0001	0.005	10	0.025	<1
	26/03/2024	0.61	<0.001	<0.0002	17	0.001	<0.001	3.1	<0.001	34	<0.0001	0.002	15	0.008	<1
	18/04/2024	0.71	<0.001	<0.0002	10	0.001	<0.001	<0.001	<0.001	13	<0.0001	0.008	7.6	0.008	<1
	20/05/2024	0.72	<0.001	<0.0002	5.7	<0.001	<0.001	2.3	<0.001	4.8	<0.0001	0.002	3.2	0.009	<1
	25/06/2024	0.23	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	28	<0.0001	0.002	11	0.016	<1
	10/07/2024	0.5	<0.001	<0.0002	17	<0.001	<0.001	2.6	<0.001	28	<0.0001	0.002	10	0.01	<1
	6/08/2024	0.31	<0.001	<0.0002	50	<0.001	<0.001	<0.001	<0.001	140	<0.0001	0.002	40	0.011	<1
	15/08/2024	0.51	<0.001	<0.0002	4.8	<0.001	0.001	1.6	<0.001	4.6	<0.0001	0.002	3	0.011	<1
	11/09/2024	0.46	<0.001	<0.0002	14	<0.001	<0.001	2.1	<0.001	20	<0.0001	0.002	11	0.012	<1
	9/10/2024	0.84	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.7	0.009	<1
	6/11/2024	0.79	<0.001	<0.0002	25	0.002	<0.001	4.1	<0.001	60	<0.0001	0.002	20	0.01	<1
	16/12/2024	4.4	0.007	<0.0002	29	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.15	0.002	<0.0002	300	0.002	<0.001	0.3	<0.001	860	<0.0001	<0.001	270	<0.005	<1
	11/02/2025	0.09	0.002	<0.0002	300	0.001	<0.001	0.38	<0.001	850	<0.0001	<0.001	270	0.048	<1
	24/03/2025	0.55	<0.001	<0.0002	22	<0.001	<0.001	3.4	<0.001	54	<0.0001	0.002	17	0.027	<1
	31/03/2025	0.59	0.001	<0.0002	4.2	<0.001	<0.001	3.3	<0.001	5.3	<0.0001	0.002	3.5	0.044	<1
	8/04/2025	0.8	<0.001	<0.0002	9.9	0.003	<0.001	4.1	<0.001	18	<0.0001	0.002	6	0.007	<1
	9/05/2025	0.74	<0.001	<0.0002	6.3	0.001	0.001	2.8	<0.001	8.5	<0.0001	0.002	3.7	0.01	<1
	25/06/2025	0.7	<0.001	<0.0002	26	<0.001	<0.001	2.6	<0.001	64	<0.0001	0.002	20	0.008	<1
	8/07/2025	0.55	<0.001	<0.0002	11	0.001	0.001	2.3	<0.001	13	<0.0001	0.002	6.3	0.008	<1
	14/08/2025	0.43	<0.001	<0.0002	9.1	<0.001	<0.001	2.4	<0.001	16	<0.0001	0.001	6.3	0.011	<1
	11/09/2025	0.51	<0.001	<0.0002	19	0.001	<0.001	2.9	<0.001	42	<0.0001	0.001	14	0.008	<1
	13/10/2025	0.12	0.001	<0.0002	170	<0.001	<0.001	1.2	<0.001	500	<0.0001	<0.001	150	0.006	<1
	20/11/2025	0.26	0.001	<0.0002	99	0.001	<0.001	1.9	<0.001	280	<0.0001	0.001	86	0.006	<1
	16/12/2025	0.17	0.001	<0.0002	120	<0.001	<0.001	1.3	0.001	340	<0.0001	0.001	110	<0.005	<1
	21/01/2026	0.1	0.002	<0.0002	200	<0.001	<1	0.35	<1	560	<0.0001	<0.001	180	0.006	<1
	20/02/2026	0.1	0.002	<0.0002	240	<0.001	<0.001	0.58	<0.001	690	<0.0001	<0.001	280	0.028	<1
	20/03/2026	0.6	0.001	<0.0002	24	0.001	0.002	4.8	<0.001	48	<0.0001	0.002	18	0.014	<1
	21/04/2026	0.14	0.001	<0.0002	130	<0.001	0.002	0.87	0.008	380	<0.0001	<0.001	120	0.017	
	29/05/2026	0.69	<0.001	<0.0002	4.9	<0.001	<0.001	2.9	0.002	5.9	<0.0001	0.002	2.7	0.01	<1
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		**0.055**	**0.013**	**0.0002**	**-**	**0.0033**	**0.0018**	**0.3**	**0.0034**	**-**	**0.0006**	**0.011**	**-**	**0.008**	**<1***

Note: * derived from Interim Target Crite

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Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW06	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	-	-	<20	<50	<100	<100	-	<100
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	90	90	<100	<100	<20	160	<100	<100	160	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<100	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	2.1	2.1	<100	<100	<20	<50	0.9	<100	0.9	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		-	-	-	-	-	-	-	-	-	-

Note: * derived from Interim Target Crite

APPENDIX D

Photolog

PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
1	29/05/2026

Description

Surface water monitoring location SW02.



Photo No.	Date
2	29/05/2026

Description

Surface water monitoring location SW05.



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
3	29/05/2026

Description

Surface water monitoring location SW03.



Photo No.	Date
4	29/05/2026

Description

Surface water location SW4



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
5	29/05/2026

Description

Surface water monitoring location SW01



Photo No.	Date
6	29/05/2026

Description

Groundwater water monitoring location MW7.



MONTHLY WATER QUALITY MONITORING REPORT

Harvest Estate Urban Development

Monitoring Event: 23rd June 2026

Ewingsdale Road, Byron Bay, NSW, 2481

Job Number: 217140

For:

Planit Consulting

By:

ENV Services

Date:

07/07/2026

ENV Services Pty Ltd

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DOCUMENT CONTROL

Job No:	Job Number: 217140
Client:	Planit Consulting
Filename:	217140_Harvest Estate_WQ_June_2026

	Name:	**Date:**	**Signature:**
Prepared By:	Austin Metcalfe-Smith Environmental Scientist	07/07/2026	
Reviewed By:	Kingsley Baldwin Environmental Team Leader	09/07/2026	

Revision:	**Date:**	**Details:**

SCOPE OF ENGAGEMENT AND LIMITATIONS

This report has been prepared by ENV Services at the request of Planit Consulting for the purpose of consolidating and assessing water quality monitoring (surface water and ground water) data to determine impact associated with the development of the Harvest Estate. No other parties may rely on the contents of this report for any purposes except those stated.

This report has been prepared based on the information provided to us and from other information obtained as a result of enquiries made by us. ENV accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this document for a purpose other than that described above.

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ENV declares that it does not have, nor expects to have, a beneficial interest in the subject project.

To avoid this advice being used inappropriately, it is recommended that you consult with ENV before conveying the information to another who may not fully understand the objectives of the report. This report is meant only for the subject site/project and should not be applied to any other.

1 INTRODUCTION

ENV Services Pty Ltd (ENV) was engaged by Planit Consulting to prepare a Monthly Water Quality Report (MWQR) to meet requirements outlined in the Harvest Estate Development Conditions of Consent (11b - d, 32, 33 & 78) and Section 6.2 and 6.4 of the Planit Construction Environmental Management Plan (CEMP). Monitoring has been undertaken in accordance with the following approved plans.

- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate Groundwater Management Plan.* Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Belongil Creek Plan of Management*. Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate West Byron Urban Release Area; Acid Frog Management Plan.* Dated August 2020.

Baseline water quality parameters outlined in this report have been derived from mean or range values calculated over a 12-month sampling period undertaken between 25 May 2020 and 17 May 2021. This baseline water quality monitoring was carried out by Australian Wetlands Consulting (AWC) and undertaken in accordance with the Harvest Estate Groundwater Management Plan (AWC 2020) and the Harvest Estate – Belongil Creek Plan of Management (AWC 2020).

Guideline water quality trigger values have been derived from the ANZG (2018) Water Quality Guidelines and ANZECC (2000) guidelines for Fresh and Marine Water Quality. These guidelines define Belongil Creek as a lowland river of South-Eastern Australia, with trigger values chosen to reflect this. In assessing human disturbance, this report recognises Belongil Creek as being slight to moderately disturbed. On this basis, for toxicants in water, 95% species protection default guideline values have been presented for assessed toxicants.

No construction works were being undertaken during this monitoring period, with major civil earthworks associated with Stage 1 of the Project completed in November 2023.

2 MONITORING RESULTS & OBSERVATIONS

2.1 Monthly Groundwater Monitoring

Monthly groundwater monitoring at five (5) groundwater wells (MW2 – MW5 & MW7) was carried out to assess for impact within the underlying aquifer. This monitoring was conducted in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.2 of the Planit Construction Environmental Management Plan (CEMP). Groundwater monitoring locations are presented in Appendix A.

An assessment of the monthly analytical results presented in Appendix B, Table 1, identified the following observations:

Site	Observation	Comments
MW2	EC, TDS, Na and SO_4 were recorded outside of baseline ranges.	EC and TDS values remain elevated. Sulfate concentrations are likely associated with the oxidation of sulfide-bearing sediments (e.g. pyrite, marcasite) under fluctuating REDOX conditions, such as those induced by seasonal groundwater drawdown and rewetting cycles. Groundwater had sulfuric odour typical of oxidising ASS terrains. No site related impacts identified at this location.
MW3	All parameters were recorded within baseline ranges.	No site related impacts identified at this location.
MW4	All parameters were recorded within baseline ranges.	Groundwater had sulfuric odour typical of oxidising ASS terrains. No site related impacts identified at this location.
MW5	pH, EC TDS and several cations/anions (Na, SO_4, Ca, Mg and Al) concentrations were outside baseline ranges or guideline values (Al only).	Localised groundwater quality continues to display some variability in analyte concentrations that are likely attributed to seasonal fluctuations. A review of data collated over the monitoring rounds continues to indicate a general trend towards baseline water quality values. As pH stabilises toward more neutral conditions, acid generation is expected to be increasingly buffered. This should reduce the dissolution of minerals within the soil profile and, over time, contribute to lower dissolved ion concentrations in groundwater. A sulfur odour typical of oxidising ASS terrains was noted at this location. Localised impacts continue to be reported at this site.

MW7	pH, SO_4 and Al were recorded outside of baseline ranges.	Elevated sulfate and aluminium concentrations are likely associated with the oxidation of sulfide-bearing sediments (e.g. pyrite) under fluctuating REDOX conditions, such as those induced by seasonal groundwater drawdown and rewetting cycles. He reduction in pH created leads to the release of aluminium from aluminium-bearing minerals into the porewaters. No site related impacts identified at this location.

2.2 Monthly Surface Water Monitoring

Monthly surface water sampling (SW01 – SW06) was carried out to assess for impact from site activities on the receiving environment. Monitoring was carried out in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.4 of the Planit Construction Environmental Management Plan (CEMP), which require assessment of the following analytes; physiochemical parameters, nutrient, metals, cation/anion and total recoverable hydrocarbon (TRH).

Surface water monitoring locations are presented in Appendix A and the coordinates (GDA94) of all locations tabulated and presented in Table 1. Tabulated analytical results are presented in Appendix C. Select photos of the surface water sampling programme are presented in Appendix D.

Table 1: Surface Water Monitoring Coordinates

Monitoring Location	Location	Easting	Northing
SW01	Upstream of development - Southern Swale Drain	0556852	6831954
SW02	Upstream of development - Northern Main Drain	0557145	6831963
SW03	Downstream of development - Northern Main Drain	0557411	6831604
SW04	Downstream of development - Southern Swale Drain	0557397	6831429
SW05	Receiving environment - Outlet of Southern Swale Drain	0557992	6830881
SW06	Receiving environment - Outlet of Northern Main Drain	0558257	6831214

2.2.1 Assessment of Analytical Results

An assessment of the monthly analytical results presented in Appendix C, identified the following observations:

Site	Observation	Comments
SW01	All parameters were within baseline ranges with the exception of Al, Ca, Fe, Pb and Zn.	This site is located at an upstream location, receiving water from off-site. An increase in vegetation growth/decay causing higher organic matter content within the sample likely increasing analyte concentrations. No site related impacts identified.

Site	Observation	Comments
SW02	pH, TDS, EC, Na, SO_4, Ca, Mg, K and Zn were recorded outside baseline ranges.	All elevated values are typical of the geological (ASS) setting. No site related impacts identified.
SW03	pH, TDS, EC, Na, SO_4, Mg and K were recorded outside of baseline ranges.	This site is located within the Northern Main Drain, downstream of Stage 1 works and SW02. Water quality parameters are consistent with upstream location SW02. No site related impacts observed.
SW04	pH, TDS, TSS, EC, TP, and cations/anions (SO_4, Na, Al, As, Ca, Fe, Mg and Ni) were outside baseline ranges.	This site is located downstream of Stage 1 works, within the Southern Swale Drain. Water quality parameters are consistent with upstream location SW02 with the exception of metals concentrations which are slightly elevated in reference to the upstream site. These elevated values are likely to be attributed to metals mobilisation during previous acidification events (seasonal lowering of water table) that are subsequently flushed during rainfall events. No site related impacts identified.
SW05	All parameters were recorded within baseline ranges with the exception of Zn.	Elevated zinc concentrations associated with tidal influences. No site related impacts observed.
SW06	pH and cation/anions (Al, Fe, Zn) were recorded outside ANZG default guideline values (95th percentile for slightly disturbed Freshwater Ecosystems).	Water quality appears relatively consistent with upstream location SW05. No site related impacts observed.

3 RAINFALL

During this monitoring period (29/05/2026 – 23/06/2026), 74 mm of rain was recorded in the area (Byron Bay, Cape Byron Lighthouse, Bureau of Meteorology).

4 CONCLUSION & RECOMMENDATIONS

4.1 Conclusion

Monitoring results indicate that impacts associated with exposure of acid sulfate soils (ASS) and vegetation overgrowth at surface water location SW04 (Southern Swale Drain) continues to impact analyte concentrations leading to elevated readings. An attempt to clear a designated sampling zone was conducted and will be monitored during the next reporting period.

Water quality reported at SW03 is noted to be consistent with results reported from the upstream catchment (SW02), inferring no discernible site related impacts.

The monitoring period was characterised by low to moderate rainfall (74 mm), which may have influenced observed water quality trends.

Groundwater monitoring results suggest indicators of localised ASS-related impacts are fluctuating in the vicinity of monitoring well locations with the exception of MW3 and MW4, with trend analysis reflecting seasonal groundwater drawdown and rewetting cycles with continued improvements to water quality.

4.2 Recommendations

Based on the findings of this monitoring program, the following recommendations are provided to support ongoing management of site water quality:

- Given that pH across the site is generally within, or above, baseline water quality conditions, no corrective actions are currently warranted.
- Monitor designated sampling location at SW4, conducting further clearing if required.
- Continue to monitor signs of ASS oxidation at all MW locations.

APPENDIX A

Figures



Legend

Site Location

0 0.5 1km

Figure 1 – Site Location
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

ENV Solutions
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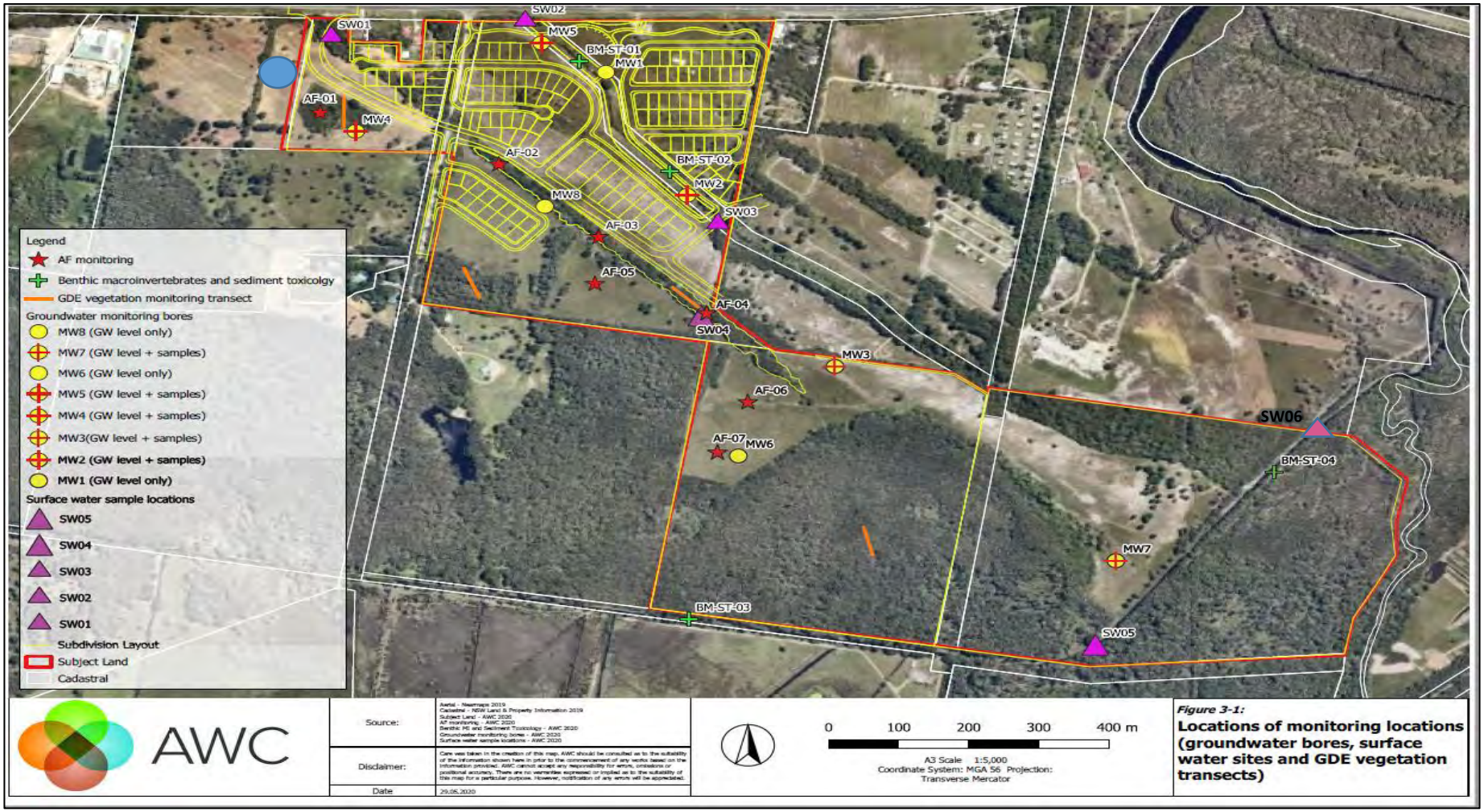


Figure 2 – AWC Monitoring Locations
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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APPENDIX B

Groundwater Quality Analytical Results

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW2	29/09/22	5.8	54	92	<5	0.12	0.51	14	0.02	0.5	30	< 2	< 0.5	0.8	2.4			0.1
	20/10/22	5.6	100	110	<5	0.09	0.24	13	0.02	2	28	< 2	<0.5	0.8	2.2			0.1
	14/11/22	6.0	100	240	<5	0.07	0.24	19	<0.10	<0.2	30	< 2	1.3	1.4	2.4			0.1
	14/12/22	5.6	110	170	<5	0.02	<0.05	15	<0.10	3.1	29	5	<5	<5	<5			0.3
	18/01/23	4.6	130	76	9.2	0.12	0.09	17	<0.05	2.5	29	7	<5	<5	<5			0.4
	20/02/23	6.0	100	160	5.3	0.09	0.1	27	<0.25	0.25	27	3.7	<0.5	0.7	3.1			0.1
	28/03/23	5.9	140	92	17	0.02	0.12	15	<0.02	<0.2	21	7.2	<5	<5	<5			0.5
	18/04/23	6.2	170	88	<5	0.08	1.2	15	<0.02	7.7	18	5.2	<5	<5	<5			0.3
	18/05/23	5.9	130	76	10	0.09	0.1	13	<0.02	9	28	2.1	0.6	0.9	2.6			0.2
	25/06/23	3.3	4,500	3,000	250	0.26	1.6	45	<0.02	8.1	86	3,800	440	82	7.9			84.4
	24/07/23	6.2	220	150	<5	0.03	0.16	12	<0.2	1	24	12	<0.5	0.8	2.5			1.0
	21/08/23	5.7	120	84	<5	0.08	0.14	15	<0.02	1.7	30	2.3	<5	<5	<5			0.2
	18/09/23	5.9	120	130	11	0.04	0.15	13	<0.02	1.2	25	<2	<0.5	0.9	2.7			0.1
	18/10/23	5.6	110	73	6.6	0.3	0.11	15	<0.02	0.3	25	3	<0.5	0.9	2.8			0.2
	20/11/23	6.0	160	70	<5	0.11	0.17	16	<0.01	0.8	28	4.2	<0.5	0.8	2.6			0.3
	19/12/23	6.3	110	100	<5	0.05	0.48	16	<0.02	2.8	28	2.1	0.5	0.9	2.9			0.1
	20/01/24	6.2	150	88	<5	0.05	0.08	13	<0.02	1.1	26	<2	<0.5	0.8	3			0.1
	26/02/24	5.1	150	340	7.4	0.07	0.09	15	<0.02	8.6	36	14	0.6	1	2.7			0.9
	26/03/24	5.7	180	310	<5	0.07	0.13	16	<0.02	<1	27	6.9	<0.5	0.8	2.7			0.4
	18/04/24	5.7	170	<5	<5	0.05	0.09	15	<0.02	1.8	29	2.6	<0.5	0.9	2.8	3.6	<1	0.17
	20/05/24	5.6	160	120	<5	0.11	0.1	19	<0.02	1	32	2.9	<0.5	0.8	2.8	3.9	<1	0.2
	25/06/24	5.5	170	170	12	0.09	<0.01	21	<0.02	2.7	30	<2	<0.5	0.8	2.3	3.8	<1	0.0
	10/07/24	5.8	150	190	<5	0.03	0.11	15	<0.02	<1	28	2.2	<0.5	0.7	2.7	2.8	<1	0.1
	06/08/24	5.9	170	90	6.9	0.16	0.12	20	<0.1	2.4	25	3.3	<0.5	0.6	2.1	3.4	<1	0.2
	11/09/24	5.7	140	110	<5	0.02	0.83	21	<0.2	<1	28	<2	<0.5	0.7	2.4	2.8	<1	0.0
	09/10/24	5.9	150	210	6.3	0.21	<0.01	17	0.02	<0.2	30	2.8	<0.5	<0.5	2.6	2.4	<1	0.1
	06/11/24	5.7	120	190	6.6	2	0.02	17	-	2.3	33	<2	1	1	3.1	3.6	<1	0.1
	16/12/24	6.0	120	60	8.0	0.05	<0.1	16	<0.2	0.9	30	5.3	0.14	0.8	2.8	3.5	<1	0.3
	14/01/25	6.4	150	94	610.0	0.03	<0.05	15	<0.1	<0.25	31	<2	<0.5	0.6	2.4	2.7	1	0.1
	11/02/25	5.7	170	150	<5	0.04	<0.1	13	<0.02	<0.5	29	2.8	<0.5	0.6	2.4	2.8	<1	0.2
	24/03/25	5.7	120	190	<5	<0.05	0.05	36	0.02	4.2	28	5.8	<0.5	0.7	2.4	2.7	<1	0.2
	08/04/25	5.7	120	220	<5	0.02	0.03	16	0.03	<2	31	4.2	<0.5	0.7	2.6	3.5	<1	0.3
	09/05/25	6.0	150	210	<5	0.01	<0.1	17	<0.2	1.1	29	7	1.3	0.7	2.6	3.2	<1	0.4
	25/06/25	5.6	180	200	<5	0.06	<0.01	15	<0.02	0.8	33	22	<0.5	0.7	2.6	1.7	<1	1.5
	08/07/25	5.5	190	180	<5	0.04	0.13	14	<0.2	1.6	32	24	<0.5	0.8	2.5	1.7	<1	1.7
	14/08/25	5.8	180	160	12.0	0.07	0.11	15	<0.02	1.9	30	33	<0.5	0.8	2.5	0.82	<1	2.2
	11/09/25	5.7	190	100	<5	0.03	0.09	17	<0.02	3.1	33	31	<0.5	0.8	2.6	0.84	<1	1.8
	13/10/25	5.6	170	180	<5	0.16	0.16	18	<0.2	0.6	33	24	<0.5	0.8	2.5	2	<1	1.3
	20/11/25	5.8	180	210	6	0.08	0.25	14	<0.2	0.7	35	8.1	<0.5	0.8	2.6	1.1	<1	0.6
	17/12/25	5.7	170	100	6.8	0.09	0.17	15	<0.2	1	35	9.3	<0.5	0.9	2.5	0.99	<1	0.6
	21/01/26	5.8	160	220	<5	0.04	0.12	16	<0.02	3.5	34	7.1	<0.5	0.9	2.7	2.3	<1	0.4
	20/02/26	5.9	170	190	<5	0.08	0.03	16	<0.02	1.9	31	20	<0.5	0.7	0.7	1.1	<2	1.3
	20/03/26	5.9	170	110	7.90	0.08	0.04	17	<0.02	2.9	29	6.7	<0.5	0.7	2.4	1.3	<1	0.4
	21/04/26	6.05	170	200	<5	0.04	<0.01	16	<0.02	1.6	32	43	<0.5	0.8	2.5	1.1	<1	2.7
	29/05/26	6.3	160	110	<5	0.04	0.06	20	<0.02	1.1	29	23	<0.5	0.6	2.4	0.96	<1	1.2
	23/06/26	5.6	160	170	<5	0.05	0.07	16	<0.02	0.9	32	19	0.6	0.7	2.9	0.93	0.6	1.2
MW2 Baseline		**4.2 - 5.7**	**152**	**103**	**483**	**0.45**	**0.338**	**189**	**0.07**	**2.03**	**29.7**	**9.8**	**0.7**	**1.4**	**4.2**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW3	29/09/22	4.2	53	40	370	0.09	0.05	8.8	0.02	0.5	7	<2	< 0.5	1	0.6			0.1
	20/10/22	4.1	64	62	130	0.01	0.2	8	0.02	0.5	7	<2	0.5	0.9	<0.5			0.1
	14/11/22	4.6	57	84	170	0.03	0.27	7.4	<0.02	<0.2	7.1	<2	0.8	0.6	<0.5			0.1
	14/12/22	4.3	43	32	280	<0.01	<0.01	5.2	<0.02	1.1	6	<2	<5	<5	<5			0.2
	18/01/23	4.3	54	28	670	0.03	<0.01	4.1	<0.05	1.4	<5	4.1	<5	<5	<5			1.0
	20/02/23	4.2	36	40	76	0.02	<0.10	6.8	0.06	7.26	7.6	<2	<0.5	1	<0.5			0.1
	28/03/23	4.1	70	44	<5	<0.01	<0.01	7.9	<0.02	0.22	4.8	2.2	<0.5	1	0.6			0.3
	18/04/23	4.6	89	54	110	0.02	0.1	9.6	<0.02	5.7	4.3	4.3	<0.5	0.6	<0.5			0.4
	18/05/23	4.5	60	40	450	0.02	0.04	5.8	<0.02	1	4.8	2.1	0.6	0.8	<0.5			0.4
	15/06/23	4.0	84	48	22	0.27	0.4	5.5	<0.02	1.96	5	63	<0.5	0.8	<0.5			11.5
	24/07/23	4.5	85	59	160	0.04	<0.01	9.5	<0.02	<0.2	5.6	12	<0.5	0.8	<0.5			1.3
	21/08/23	3.9	110	52	100	0.01	<0.01	6.3	<0.02	<0.2	6.6	3	<0.5	1.1	<0.5			0.5
	18/09/23	Dry – no sample collected																
	18/10/23	Dry – no sample collected																
	20/11/23	4.0	96	46	120	0.03	<0.02	7.8	<0.01	0.7	5.8	5	<0.5	0.7	<0.5			0.6
	19/12/23	4.0	46	30	92	<0.01	0.04	13	<0.02	<0.2	9.7	5.6	<0.5	1.3	0.6			0.4
	20/01/24	4.2	70	28	270	0.01	<0.01	5.4	<0.02	0.6	5.5	<2	<0.5	0.8	<0.5			0.2
	26/02/24	4.5	70	50	29	0.01	0.02	10	<0.02	16	5	4.5	<0.5	0.6	<0.5			0.5
	26/03/24	4.1	67	56	110	<0.01	0.06	5.1	<0.02	0.3	4.4	6.1	<0.5	0.8	<0.5			1.2
	18/04/24	3.7	150	< 5	<5	0.05	0.01	4.6	<0.02	0.7	4	12	<0.5	0.8	<0.5	0.99	<1	0.3
	20/05/24	4.5	36	30	26	0.03	<0.01	31	<0.02	0.3	3	3.9	0.6	<0.5	<0.5	1.1	<1	0.1
	25/06/24	3.5	160	90	120	0.17	<0.01	2.8	<0.02	<0.2	3.1	5	<0.5	<0.5	<0.5	0.7	<1	0.1
	10/07/24	4.4	42	40	300	<0.01	<0.01	4.2	<0.02	0.5	3.5	2.5	<0.5	<0.5	<0.5	0.7	<1	0.6
	06/08/24	4.3	45	22	310	0.03	0.01	4.4	<0.02	3.2	2.5	<2	<.5	<0.5	<0.5	1	<1	0.2
	11/09/24	4.2	44	28	720	0.02	<0.1	5	<0.02	<1	3.7	<2	<0.5	<0.5	<0.5	1.3	<1	0.2
	09/10/24	4.2	50	32	430	0.1	<0.01	5.3	<0.02	<0.2	4.1	2.8	2.9	0.6	0.6	0.48	<1	0.2
	06/11/24	4.3	38	20	370	<0.01	0.09	4.8	-	0.9	4.6	<2	0.6	0.7	<0.5	0.84		0.2
	16/12/24	4.3	35	24	63	0.02	<0.01	4.4	<0.02	0.5	3.8	2.2	<0.5	0.7	<0.5	0.75	<1	0.5
	14/01/25	4.5	40	20	38	0.03	0.01	3.3	<0.02	0.5	2.8	<2	<0.5	<0.5	<0.5	0.75	<1	0.3
	11/02/25	4.2	64	36	8.2	<0.01	<0.01	2.9	<0.02	<0.2	3.1	4.4	<0.5	<0.5	<0.5	1.1	<1	1.5
	24/03/25	4.0	79	50	150	0.02	<0.01	13	<0.02	0.9	5.8	3.9	0.8	1.1	<0.5	0.52	1.5	0.3
	08/04/25	4.2	71	38	160	<0.01	0.02	11	<0.02	0.9	7.3	4.1	0.9	1.4	2.6	0.58	1.5	0.4
	09/05/25	4.5	73	74	210	<0.01	0.02	9.9	<0.02	0.8	7	3.1	0.7	0.9	<0.5	0.74	<1	0.3
	25/06/25	4.5	42	44	170	0.05	<0.01	4.4	<0.02	1.9	5	4.3	<0.5	<0.5	<0.5	1	<1	1.0
	08/07/25	4.5	47	25	670	0.02	0.03	4.5	0.03	0.6	4.9	2.5	<0.5	<0.5	<0.5	1	<1	0.6
	14/08/25	4.8	34	38	550	0.06	0.06	3.8	0.02	5.7	3.6	4	<0.5	<0.5	<0.5	0.5	<1	1.0
	11/09/25	4.6	42	28	2,500	0.02	0.3	4.7	0.11	2.1	4.7	3.5	<0.5	<0.5	<0.5	0.49	<1	0.7
	13/10/25	Dry – no sample collected																
	20/11/25	Dry – no sample collected																
	17/12/25	Dry – no sample collected																
	21/01/26	Dry – no sample collected																
	20/02/26																	
	20/03/26	4.2	81	50	780	0.8	<0.1	10	<0.02	<0.02	5.1	<2	<0.5	1.6	<0.5	0.63	<1	0.2
	21/04/26	Dry – no sample collected																
	29/05/26	5.17	66	36	290	0.09	<0.1	9.6	<0.02	0.7	6.4	8.6	0.6	0.8	0.5	0.43	<1	0.2
	23/06/26	4.7	51	61	130	0.1	<0.01	6.6	<0.02	0.8	8.5	7.7	0.6	0.6	0.9	0.73	0.8	0.3
MW3 Baseline		**4.0 - 5.3**	**206**	**140**	**5223**	**1.57**	**0.294**	**121**	**0.167**	**4.14**	**26.4**	**13.4**	**3.8**	**5.3**	**3.1**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW4	29/09/22	4.5	100	88	350	0.03	0.16	22	0.1	1.5	19	<2	3.6	3.7	0.9			0.0
	20/10/22	4.5	110	100	69	0.02	0.78	20	0.04	1	14	<2	3.9	2.1	<0.5			0.1
	14/11/22	4.2	130	340	16	0.01	0.13	30	<0.10	7	22	5	2.6	4.8	1.1			0.2
	14/12/22	4.2	140	140	60	<0.01	<0.05	23	<0.10	3	21	7.8	<5	<5	<5			0.3
	18/01/23	5.7	170	110	170	0.02	0.16	26	<0.50	2.4	20	6.6	<5	<5	<5			0.3
	20/02/23	3.9	87	110	31	0.04	<0.05	15	0.28	3.88	15	5.8	3.5	5.4	0.9			0.4
	28/03/23	4.7	180	120	190	0.04	0.08	28	<0.02	22	18	6	8.8	5.1	<5			0.2
	18/04/23	3.7	500	280	340	0.11	0.07	27	<0.02	0.9	19	130	3.4	5	<0.5			4.8
	18/05/23	5.4	110	72	70	0.03	<0.01	14	<0.02	2.89	11	10	5.7	3.7	<0.5			0.7
	15/06/23	3.8	200	150	130	1.4	0.29	29	<0.02	0.9	21	12	<5	6	<5			0.4
	24/07/23	4.1	170	94	58	0.03	<0.1	24	<0.2	1	20	17	2.8	6.2	0.6			0.7
	21/08/23	3.8	200	120	75	0.03	0.07	18	0.65	1.76	15	3.6	2	5	<0.5			0.2
	18/09/23	3.8	160	86	21	0.02	0.11	19	0.02	1.1	17	10	1.5	4.1	<0.5			0.5
	18/10/23	3.8	190	110	31	0.08	0.08	25	<0.02	0.9	18	9.3	1.7	4.5	0.5			0.4
	20/11/23	4.4	160	870	28	0.05	0.1	22	<0.01	2.2	15	5.8	3.3	4	0.7			0.3
	19/12/23	4.0	190	130	27	0.03	0.41	38	<0.02	1.5	22	13	3.3	7.8	1			0.3
	20/01/24	4.2	170	120	27	0.01	0.02	24	<0.02	1.2	17	2.9	5.4	5.1	<0.5			0.1
	26/02/24	3.6	290	190	96	0.03	0.07	27	<0.02	6.9	17	38	10	4.1	<0.5			1.4
	26/03/24	5.6	150	140	18	0.02	0.58	25	<0.02	1.1	15	7	9.3	3.8	<0.5			0.3
	18/04/24	4.3	140	90	12	0.02	0.04	17	<0.02	24	13	6.7	3.2	3.6	<0.5	1.1	2.9	0.4
	20/05/24	5.9	200	180	9.4	0.01	0.83	15	<0.02	1.1	10	5.6	9.6	2.1	<0.5	1.5	6.4	0.4
	25/06/24	4.2	120	100	33	0.1	<0.01	15	<0.02	1.4	9.1	2.3	3.5	2.2	<0.5	1.7	<1	0.2
	10/07/24	6.3	79	46	16	0.02	0.12	8.7	<0.02	1.4	6.4	4	9.7	1	<0.5	0.55	<1	0.5
	06/08/24	4.4	170	100	24	0.02	0.12	26	<0.02	2.4	12	5.5	1.5	3.2	<0.5	0.86	<1	0.2
	11/09/24	5.2	110	74	27	0.02	0.14	21	<0.02	0.6	12	2.5	7.2	2.9	<0.5	1.3	<1	0.1
	09/10/24	4.1	150	140	190	0.1	0.07	25	0.03	0.9	15	6.2	2.9	4	0.7	1.2	<1	0.2
	06/11/24	4.4	130	180	40	0.51	0.04	22	-	1.9	15	2.3	4.7	4.8	<0.5	1.4	3.4	0.1
	16/12/24	5.7	80	70	<5	0.02	<0.1	18	<0.2	1	11	4.1	8.1	3	<0.5	0.99	7.2	0.2
	14/01/25	4.1	180	120	86	0.02	1.3	26	<0.02	1.2	14	2.4	4.4	3.8	<0.5	1.6	<1	0.1
	11/02/25	4.1	170	150	<5	0.01	<0.1	25	<0.02	<0.5	16	3.1	2.5	4.8	<0.5	1.8	<1	0.1
	24/03/25	5.0	110	84	39	<0.05	0.04	22	0.02	5	13	7.6	4.9	3.4	<0.5	0.85	5.8	0.3
	08/04/25	5.2	90	130	22	<0.01	0.03	16	<0.02	1	10	3.7	6.9	2.7	<0.5	0.58	12	0.2
	09/05/25	6.0	110	140	45	-	-	14	<0.2	-	8.7	2.7	11.0	2	<0.5	0.8	14	0.2
	25/06/25	5.4	98	140	130	0.06	0.01	12	0.2	1.6	8.8	8.2	8.6	1.6	<0.5	0.98	8.8	0.7
	08/07/25	5.0	110	100	300	0.01	0.23	15	<0.2	<0.5	11	9.4	5.7	2.4	<0.5	1.7	3.4	0.6
	14/08/25	5.7	110	150	600	0.11	0.12	15	0.04	4.7	9.6	4.3	10.0	2	<0.5	0.64	<1	0.3
	11/09/25	4.4	140	89	290	0.02	0.15	25	0.07	4.2	15	7.3	4.0	3.5	0.9	1.1	3.6	0.3
	13/10/25	4.3	160	210	120	0.11	0.42	30	<0.2	<2	18	2.8	2.9	4.5	0.8	2.2	1.3	0.1
	20/11/25	4.2	160	220	140	0.06	0.22	22	<0.2	1.1	16	2.2	2.7	4.1	0.6	1.2	2.3	0.1
	17/12/25	4.1	170	110	170	0.02	<0.1	26	<0.2	1.9	20	2.9	1.4	5.6	0.9	1.1	1.3	0.1
	21/01/26	4.5	120	190	370	0.25	0.04	14	0.03	3.5	12	5.1	4.9	3.4	<0.5	1.5	3.3	0.4
	20/02/26	4.1	280	290	200	0.1	<0.1	28	<0.2	1.8	24	42	5.8	11	0.8	0.99	5.9	1.5
	20/03/26	5.1	270	170	130	0.13	<0.1	23	<0.2	2.8	20	19	16	7.9	<0.5	0.74	21.6	0.8
	21/04/26	4.99	300	230	110	0.04	<0.01	24	<0.02	1.5	19	86	6.3	8.2	<0.5	0.87	7.2	3.6
	29/05/26	4.8	180	150	210	0.04	<0.1	23	<0.02	1.9	13	23	9.6	4.2	<0.5	0.82	11.7	1.0
	23/06/26	4.7	160	170	150	0.08	0.02	23	<0.02	2.4	17	13	7.3	4.5	0.9	0.85	8.6	0.6
MW4 Baseline		**4.0 - 5.8**	**890**	**605**	**1220**	**0.43**	**1.392**	**199**	**0.185**	**4.36**	**146.3**	**19.2**	**11.3**	**15.6**	**5.4**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW5	29/09/22	4.5	59	68	630	0.13	0.41	18	0.02	6.33	14	<2	2	3	0.6			0.1
	20/10/22	4.4	75	82	92	0.02	0.1	15	0.02	0.5	12	<2	2	2	0.5			0.1
	14/11/22	4.6	120	270	150	0.08	0.52	29	<0.10	7.8	26	<2	5	6	1.4			0.0
	14/12/22	4.5	150	150	230	0.02	<0.060	29	<0.05	11	24	10	<5	<5	<5			0.3
	18/01/23	2.8	1,600	1,100	480	0.05	1.7	43	<0.05	5.7	49	7	90	72	<5			0.2
	20/02/23	2.6	2,700	3,200	310	0.03	4.2	27	<0.05	3.2	47	750	390	76	7.8			27.8
	28/03/23	3.0	5,200	3,700	130	0.02	5.9	28	<0.02	11	34	1,100	440	57	7.1			39.3
	18/04/23	2.9	3,800	5,100	300	0.01	4	44	<0.02	4	49	3,800	380	120	4.7			86.4
	18/05/23	3.4	3,100	3,400	150	<0.01	<0.01	15	<0.02	4.9	23	2,200	240	31	4.2			146.7
	15/06/23	2.9	3,000	1,800	640	0.3	2.9	28	<0.02	2.66	64	2,100	410	130	6.5			75.0
	24/07/23	5.5	2,800	1,600	6	0.07	0.19	1,400	<0.2	0.5	450	380	25	54	25.0			0.3
	21/08/23	3.3	5,200	3,400	13	0.03	4.6	67	<0.02	5	89	2,200	420	200	9.9			32.8
	18/09/23	3.3	4,500	5,800	6.1	0.01	4	51	0.02	3.7	67	4,300	360	140	7.9			84.3
	18/10/23	3.2	4,700	4,900	96	0.03	1.3	58	<0.02	2.1	68	710	380	130	7.3			12.2
	20/11/23	2.8	5,900	7,500	29	0.06	2.7	55	<0.01	11	60	6,600	310	100	6.8			120.0
	19/12/23	2.9	3,100	2,700	230	0.01	4.6	80	<0.02	5	80	3,500	290	86	6.9			43.8
	20/01/24	3.2	4,900	6,600	74	0.03	<0.01	52	<0.02	4.5	68	1,000	370	84	7.9			19.2
	26/02/24	2.6	3,400	4,500	180	0.03	0.59	25	<0.02	5.4	51	3,000	290	46	4.0			120.0
	26/03/24	3.2	4,400	3,500	17	0.02	1.8	140	<0.02	2.5	54	11,000	360	77	6.0			78.6
	18/04/24	3.3	4,200	2,200	39	<0.01	0.02	49	0.05	5.1	50	3,300	310	47	4.0	210	1.5	67.3
	20/05/24	3.4	3,100	1,600	8.8	0.03	3.1	53	<0.02	2.9	27	2,900	200	22	2.8	140	1.42	54.7
	25/06/24	3.2	4,100	2,700	310	0.03	<0.01	76	<0.02	7.2	75	1,400	290	60	4.3	320	<1	18.4
	10/07/24	3.5	2,300	2,600	49	0.02	<0.01	14	<0.02	3.9	20	1,900	240	20	2.4	130	<1	135.7
	06/08/24	3.3	170	3,500	14	0.19	4.6	62	<0.02	7.7	56	3,600	310	54	4.2	250	<1	58.1
	11/09/24	3.5	1,700	1,000	38	<0.01	3.9	27	<0.2	4.9	27	750	290	29	3.2	94	<1	27.8
	09/10/24	3.5	1,300	930	46	0.03	<0.01	27	<0.02	1.5	22	870	120	17	1.6	35	<1	32.2
	06/11/24	3.3	2,000	1,300	31	<0.01	4.8	44	-	5	59	680	300	62	4.9	90	3.33	15.5
	16/12/24	3.2	1,800	1,100	53	0.02	21	32	<0.2	2.8	25	980	180	21	2.4	35	5.1	30.6
	14/01/25	3.7	1,600	1,400	190	<0.01	1.3	19	<0.02	2.1	16	320	210	16	1.8	25	8.4	16.8
	11/02/25	3.5	2,000	1,700	69	0.01	2.6	160	<0.02	14	110	860	110	50	2.8	56	1.96	5.4
	24/03/25	3.6	1,000	890	38	<0.05	0.06	20	<0.02	3.3	14	570	140	8.5	1.7	17	8.24	28.5
	08/04/25	3.7	790	700	73	<0.01	0.85	36	<0.02	5.2	42	390	86	16	<0.5	13	6.6	10.8
	09/05/25	3.7	1,300	1,200	200	<0.01	1.2	87	<0.2	3.3	24	470	87	11	1.5	9.6	9.06	5.4
	25/06/25	3.7	1,300	840	140	0.21	1.5	26	<0.02	2	18	580	140	17	1.7	17	8.3	22.3
	08/07/25	4.0	720	480	170	<0.010	0.81	21	<0.2	5.4	20	280	58	10	0.9	11	5.3	13.3
	14/08/25	3.8	530	300	230	0.02	0.55	19	<0.02	5.5	11	230	28	4.3	0.5	4.5	6.2	12.1
	11/09/25	3.8	630	430	110	<0.01	0.73	41	0.04	14	35	240	33	9.7	1.3	4.4	7.5	5.9
	13/10/25	4.0	1,200	970	260	0.11	2.8	120	<0.2	<2	76	420	68	32	2.2	13	5.2	3.5
	20/11/25	3.6	1,400	1,000	59	0.05	2.4	64	<0.02	2.4	43	270	83	34	2	13	6.4	4.2
	17/12/25	3.7	1,300	650	290	0.02	2	120	<0.2	<10	19	180	83	11	<0.5	10	8.3	1.5
	21/01/26	3.8	1,000	980	300	0.12	1.8	49	<0.02	7.3	35	200	42	29	1.7	13	3.2	4.1
	20/02/26	3.7	1,500	1,500	280	0.08	3	46	<0.2	8.3	58	700	76	65	3.3	12	6.3	15.2
	20/03/26	3.7	560	330	38	0.03	0.52	33	0.03	3.1	14	62	22	7.6	0.9	11	2.0	1.9
	21/04/26	4.5	870	590	15	0.05	1.8	34	<0.02	2.9	27	400	28	23	1.8	4	15.6	11.8
	29/05/26	5.4	300	170	26	0.03	0.24	16	<0.02	1.5	16	94	12	7.8	0.9	2.3	13.3	5.9
	23/06/26	3.9	580	380	86	0.04	0.87	37	<0.02	3.2	28	190	20	15	1.9	4.8	10.5	5.1
MW5 Baseline		**4.3 - 5.5**	**191**	**130**	**3003**	**0.97**	**13.4**	**82**	**0.117**	**13.4**	**27.2**	**8.3**	**6**	**8.4**	**5.4**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW7	29/09/22	4.6	26	40	190	0.1	0.3	8.5	0.02	2.5	8.5	<2	1	0.9	0.6			0.1
	20/10/22	4.5	86	70	120	0.01	0.4	12	0.04	2.9	8.5	<2	1.7	1.7	0.5			0.1
	14/11/22	4.5	44	170	<100	0.03	0.01	9.7	<0.10	<2.00	9.7	<2	1.9	1.4	1.4			0.1
	14/12/22	4.6	56	92	23	0.04	<0.10	7.5	<0.20	11	8.7	2.5	<5	<5	<5			0.3
	18/01/23	4.4	63	32	390	0.09	<0.05	7.5	<0.025	2	11	31	<5	<5	<5			4.1
	20/02/23	4.1	87	60	30	0.02	<0.05	9.1	0.42	4.9	5.8	5.7	1.4	1.9	1.1			0.6
	28/03/23	4.5	160	94	18	0.02	0.02	21	<0.02	4.4	12	66	2	2	0.6			3.1
	18/04/23	4.9	150	58	7.4	<0.01	0.11	11	<0.02	<0.20	9.8	120	1.9	0.8	<0.5			10.9
	18/05/23	4.9	78	56	130	0.03	<0.01	11	<0.02	0.89	9.3	9.3	1.4	0.9	<0.5			0.8
	15/06/23	4.6	77	50	30	0.28	0.25	11	<0.02	<0.20	9.2	62	<5	<5	<5			5.6
	24/07/23	5.1	140	100	90	0.12	<0.1	10	<0.2	1	8.5	14	1.9	1.4	0.9			1.4
	21/08/23	5.3	67	34	29	0.08	0.06	8.4	<0.02	0.8	9	45	1.8	1.7	0.8			5.4
	18/09/23	5.1	57	78	25	<0.01	0.07	9.6	<0.02	0.8	9.4	83	1.6	2	0.8			8.6
	18/10/23	5.2	61	46	10	0.04	0.1	11	<0.02	<0.2	10	160	1.6	2.1	0.8			14.5
	20/11/23	4.1	210	64	13	0.04	<0.02	8.4	<0.01	2.2	8.1	280	2.5	2.2	0.7			33.3
	19/12/23	4.6	91	62	11	0.03	0.09	19	<0.02	0.7	11	5.6	4.4	2.3	0.9			0.3
	20/01/24	4.2	170	130	34	0.01	0.09	21	<0.02	0.3	15	160	2.8	1.4	<0.5			7.6
	26/02/24	4.0	210	190	23	0.03	0.51	44	<0.02	5.8	24	7.5	3.6	2.1	0.5			0.2
	26/03/24	4.4	320	100	22	0.02	0.18	320	<0.02	<1	13	590	1.6	0.9	0.9			1.8
	18/04/24	4.3	100	98	17	0.02	0.07	8.9	<0.02	3	9	380	1.4	1.2	<0.5	1.7	<1	42.7
	20/05/24	4.4	77	56	11	0.05	0.38	6.4	<0.02	1.2	5.4	170	1.3	1	<0.5	2.3	<1	26.6
	25/06/24	4.6	66	36	33	<0.01	<0.01	<0.01	<0.02	0.6	6.7	48	1.1	0.9	<0.5	1.5	<1	0.0
	10/07/24	4.5	74	58	29	<0.01	0.22	6.5	<0.02	2.1	6.2	270	2	1.3	<0.5	0.73	<1	41.5
	06/08/24	4.8	4,600	180	19	0.04	0.06	9.1	<0.02	0.5	5.3	36	1.4	0.9	<0.5	1	<1	4.0
	11/09/24	4.4	75	50	6.4	0.04	<0.1	11	<0.02	1..0	7.1	5.2	1.3	1.1	<0.5	1.4	<1	0.5
	09/10/24	4.3	73	42	71	0.54	<0.01	8	<0.02	1.6	5.8	12	1.3	1.2	<0.5	0.94	<1	1.5
	06/11/24	4.5	59	32	35	0.02	0.03	11	-	1.3	7.8	4.4	1.3	1.4	<0.5	1.6	<1	0.4
	16/12/24	4.3	58	68	29	0.04	<0.1	12	<0.2	1.3	8.5	42	1.6	1.3	<0.5	1.9	<1	3.5
	14/01/25	4.7	63	36	120	0.04	0.02	8.6	0.03	1.3	6.8	7	1.7	1.2	0.5	2.4	1.4	0.8
	11/02/25	4.6	68	70	13	0.07	<0.1	9.2	<0.02	1.2	8.4	2	1.5	1.5	0.8	2.7	<1	0.2
	24/03/25	4.1	0	56	28	<0.05	0.02	15	<0.02	1.8	7.7	43	2.3	1.4	<0.5	1.2	1.91	2.9
	08/04/25	4.4	76	70	14	<0.01	0.03	14	<0.02	<1	8.1	31	2.8	1.1	2.1	1.4	2	2.2
	09/05/25	4.7	81	110	24	<0.01	0.03	13	<0.2	1.2	8.1	28	1.5	0.9	<0.5	1.6	<1	2.2
	25/06/25	4.6	65	70	39	0.07	<0.01	8.3	<0.02	<0.2	6.7	56	1.2	0.8	<0.5	1.2	1	6.7
	08/07/25	4.6	65	44	130	0.02	0.14	7.9	<0.02	<0.5	6.3	37	1.4	0.9	<0.5	2.6	<1	4.7
	14/08/25	4.7	60	70	140	0.06	0.01	8.9	0.04	2.2	5.7	15	0.9	0.5	<0.5	0.93	3	1.7
	11/09/25	4.4	75	51	100	0.03	0.06	12	0.04	1.1	7.2	18	1.8	1.1	0.6	0.86	2.09	1.5
	13/10/25	4.8	66	110	66	0.02	0.12	11	<0.2	<1	7.4	20	2.1	1.5	<0.5	1.3	1.6	1.8
	20/11/25	4.4	84	78	64	0.05	0.12	12	<0.2	1.1	7.8	17	1.9	1.2	<0.5	0.86	2.2	1.4
	17/12/25	4.6	79	10	75	0.04	<0.1	13	<0.2	3.1	9	11	2.1	1.7	0.5	1	2.1	0.8
	21/01/26	4.3	87	110	110	0.1	0.02	11	0.02	4.3	8.2	4.4	1.9	1.4	<0.5	2	1.0	0.4
	20/02/26	4.8	71	68	120	0.18	0.49	13	<0.2	1.5	8.3	70	2	1.8	1	1.2	1.7	5.4
	20/03/26	4.4	91	60	50	0.1	<0.1	13	<0.02	<0.02	8	42	1.6	1.4	<0.5	1	1.6	3.2
	21/04/26	4.98	110	100	71	0.07	<0.01	15	<0.02	2.70	9.5	7.3	2.5	1.5	<0.5	1.9	1.3	0.5
	29/05/26	4.12	150	94	68	0.03	0.01	29	<0.02	1.20	12	18	2	1.7	<0.5	1.2	1.7	0.6
	23/06/26	4	140	100	48	0.04	<0.01	27	<0.02	1.7	16	21	2	1.7	0.9	5	0.4	0.8
MW7 Baseline		**4.6 - 5.6**	**147**	**100**	**3140**	**0.71**	**0.471**	**172**	**0.048**	**4.15**	**31**	**7.3**	**3.4**	**2.2**	**3.1**	**<1.0***	**<1***	**<0.5***

Note: * derived from Interim Target Criteria within BCPoM, GWMP and AFMP (AWC 2020)

APPENDIX C

Surface Water Quality Analytical Results

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW01	29/09/2022	6.9	180	11	3.1	140	0.47	<0.01	14	<0.02	5.2	30	3.4	450		0.2
	20/10/2022	6.6	320	30	4.7	400	0.03	0.03	22	<0.02	<0.02	31	33	43		1.5
	14/11/2022	6.0	780	4,900	0.2	920	3.1	6.9	25	<0.02	14	200	3.7	67		0.1
	14/12/2022	4.5	800	210	3.6	1,100	0.15	0.05	24	<0.10	23	54	560	88		23.3
	18/01/2023	6.3	380	120	4.7	25	0.047	0.087	24	<0.02	5.2	40	180	25		7.5
	20/02/2023	3.4	1,100	32	3.8	1,300	0.42	0.37	28	<0.02	8.9	57	350	<5		12.5
	28/03/2023	3.0	2,000	100	7.7	3,000	<0.01	2.1	29	<0.02	1.29	47	880	<5		30.3
	18/04/2023	7.7	130	33	8.6	320	0.06	0.01	24	<0.02	8.4	16	14	8.8		0.6
	18/05/2023	7.4	130	6	4.4	250	0.21	0.14	11	<0.02	0.9	14	10	<5		0.9
	15/06/2023	3.2	1,900	6.8	7.6	2,700	0.03	1.6	59	<0.02	2.1	61	1,500	<5		25.4
	24/07/2023	7.9	84	<5	8.4	140	0.11	<0.01	6.4	<0.02	0.3	13	4	<5		0.6
	21/08/2023	6.9	120	25	3	190	0.34	0.01	5.6	<0.02	0.4	18	<2	<5		<0.5
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	No surface water located at monitoring site – no sample collected														
	20/11/2023	7.2	230	6.5	2.9	480	2	<0.02	56	<0.01	<0.2	43	160	<5		2.9
	19/12/2023	No surface water located at monitoring site – no sample collected														
	23/01/2024	7.0	160	130	2.2	160	3.7	0.06	14	<0.02	1.3	21	69	<5		4.9
	26/02/2024	6.2	160	47	7.2	200	0.35	<0.01	9	<0.02	3	12	59	<5		6.6
	26/03/2024	6.9	26	7.5	8.3	78	0.25	<0.01	6.7	<0.02	0.4	7.5	3.4	<5		0.5
	18/04/2024	7.2	220	23	0.5	390	0.06	0.24	25	<0.02	0.7	32	110	180	13	4.4
	20/05/3034	6.7	160	<5	3.8	260	0.16	0.01	13	<0.02	0.5	19	33	56	231	2.5
	25/06/2024	6.3	440	15	5.9	710	<0.01	<0.01	12	<0.02	<0.2	23	100	5.7	15	8.3
	10/07/2024	7.0	120	29	5.5	240	0.07	0.01	14	<0.02	1.1	17	6.9	39	12	0.5
	6/08/2024	4.0	760	19	7.6	950	0.08	<0.01	14	<0.02	1.3	23	470	<5	12	33.6
	15/08/2024	6.7	64	<5	7.3	100	0.04	0.01	6.1	<0.02	<0.2	7.2	5.5	<5	<10	0.9
	11/09/2024	6.9	120	250	0.2	190	1.1	0.11	8.9	<0.02	4.1	13	2.6	<10	17	0.3
	24/09/2024 - Investigation	6.3	170	-	-	280	-	-	-	-	-	-	-	-	-	<0.5
	9/10/2024	7.4	190	11	8.9	290	0.38	0.01	14	<0.02	<0.2	20	3.4	<5	<10	0.2
	6/11/2024	7.1	92	400	0.4	140	13	<0.01	8.1	<0.02	2.8	12	2.2	<5	<10	0.3
	16/12/2024	6.9	90	190	3.3	140	0.36	<0.01	8.2	<0.02	0.02	11	5.4	170	<10	0.7
	14/01/2025	6.7	48	7.2	3.5	89	0.14	<0.1	4.8	<0.02	0.6	5.4	<5	<5	<10	<0.5
	11/02/2025	7.5	390	<5	8.3	620	0.06	0.03	110	<0.02	0.8	16	16	12	<10	0.1
	24/03/2025	6.9	58	<5	8.6	64	0.32	0.02	6.1	<0.02	0.8	7.9	2.4	48	<10	0.4
	31/03/2025	7.1	170	5.8	9.2	200	0.14	<0.01	14	<0.02	1.1	15	6.4	<5	<10	0.5
	8/04/2025	7.2	200	9.4	8.8	230	0.37	0.04	14	<0.02	0.4	18	3.6	<5	<10	0.3
	9/05/2025	7.5	170	<5	-	200	0.2	0.03	10	<0.02	0.8	13	4.5	<5	<10	0.5
	25/06/2025	6.9	130	24	7.5	190	1.1	0.07	6.2	<0.02	1.1	12	7.1	12	22	1.1
	8/07/2025	6.9	150	<5	8	260	0.12	0.18	8	<0.02	0.8	16	5	28	34	0.6
	14/08/2025	7.3	140	7.1	6.9	240	0.17	0.03	11	<0.02	1	16	6	<5	15	0.5
	11/09/2025	7.2	150	5.2	3.9	260	0.22	0.01	13	<0.02	1.4	19	5.2	<5	16	0.4
	13/10/2025	7.2	350	14	0.3	520	0.61	0.26	39	<0.02	0.5	58	30	<5	14	0.8
	20/11/2025	7	110	8.9	5.2	200	0.24	0.03	9.1	<0.02	0.7	14	4.5	<5	16	0.5
	17/12/2025	7.2	150	30	6.1	240	0.14	0.19	27	<0.5	1.2	22	9.3	<5	37	0.3
	21/01/2026	6.8	98	30	3.5	170	0.49	0.05	17	0.017	0.6	15	4.9	<0.005	27	0.3
	20/02/2026	6.8	130	22	2.4	230	0.33	0.03	17	< 0.02	1.2	19	8.5	<0.005	<10	0.5
	20/03/2026	6.8	86	37	3.4	150	0.48	0.04	15	<0.02	1.1	11	6.6	0.015	<10	0.4
	21/04/2026	6.7	160	18	4	190	0.58	<0.01	22	<0.02	<0.4	21	2.7	<0.005	12	0.1
	29/05/2026	7.41	80	35	3.6	150	0.49	<0.01	9.9	0.33	1.1	9.2	14	0.086	16	1.4
	23/06/2026	7	220	39	3.5	290	0.35	0.03	16	<0.02	1.1	23	6	0.07	12	0.4
SW01 Baseline		**6.2 – 7.0**	**291**	**73**	**-**	**428**	**3.52**	**0.164**	**118**	**0.039**	**3.5**	**51**	**9**	**768**		**<0.5**

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW01	29/09/2022	1.5	0.003	<0.0002	22	0.002	0.32	2.7	0.005	14	<0.0001	0.015	3	0.071	<1
	20/10/2022	0.66	2	<0.0002	24	0.002	0.16	2.4	0.003	9.1	<0.0001	0.009	2.9	0.042	<1
	14/11/2022	130	1.3	<0.02	280	<0.10	1	130	0.1	73	<0.001	0.3	<50	4.7	<1
	14/12/2022	22	0.0016	<0.002	180	0.014	0.2	1.6	0.015	43	<0.001	0.077	6.8	0.68	<1
	18/01/2023	0.7	<0.010	<0.002	<2	<0.010	<0.01	3.2	<0.01	13	<0.01	<0.01	<5	<0.05	<1
	20/02/2023	37	0.027	0.0004	170	0.019	0.07	0.049	0.049	57	0.002	0.16	6.3	0.35	<1
	28/03/2023	150	0.002	0.0008	290	0.002	0.003	36	0.003	38	0.0001	0.46	5.1	0.97	<1
	18/04/2023	0.53	0.002	<0.0002	13	0.005	0.005	0.002	0.002	2.7	<0.0001	0.002	0.8	0.15	<1
	18/05/2023	0.16	0.002	<0.0002	23	<0.001	0.002	0.24	<0.001	7.5	<0.0001	0.002	2.3	0.02	<1
	15/06/2023	120	0.002	0.0003	350	<0.001	0.004	15	0.003	42	<0.0001	0.24	8.1	0.35	<1
	24/07/2023	0.08	0.003	<0.0002	13	<0.001	0.003	0.38	0.002	4.1	<0.0001	0.002	0.8	0.037	<1
	21/08/2023	0.52	0.001	<0.0002	17	0.001	0.002	1.2	0.001	6.3	<0.0001	0.003	<0.5	0.014	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	No surface water located at monitoring site – no sample collected													
	20/11/2023	0.13	<0.001	<0.0002	26	<0.001	0.002	5.7	<0.001	7.9	<0.0001	0.003	2.2	0.006	<1
	19/12/2023	No surface water located at monitoring site – no sample collected													
	23/01/2024	<0.05	<0.001	<0.0002	30	0.001	<0.001	1.8	<0.001	10	<0.0001	<0.001	3.4	0.006	<1
	26/02/2024	<0.005	<0.001	<0.0002	14.00	<0.001	<0.001	0.93	<0.001	4.60	<0.0001	<0.001	1.70	0.05	<1
	26/03/2024	0.11	<0.001	<0.0002	7.4	<0.001	0.002	0.38	<0.001	2	<0.0001	<0.001	1.5	0.013	0.01
	18/04/2024	0.06	<0.001	<0.0002	32	<0.001	<0.001	1.4	<0.001	9.5	<0.0001	0.002	2	<0.005	0.00
	20/05/3034	0.06	<0.001	<0.0002	26	<0.001	0.001	0.86	<0.001	7	<0.0001	0.002	1.7	0.014	0.00
	25/06/2024	0.69	<0.001	<0.0002	94	<0.001	0.002	0.28	<0.001	15	<0.0001	0.008	2.3	0.055	0.01
	10/07/2024	0.25	0.002	<0.0002	28	<0.001	0.003	2.1	<0.001	6.6	<0.0001	0.002	2	0.037	0.01
	6/08/2024	0.85	<0.001	<0.0002	120	<0.001	0.004	1.3	<0.001	14	<0.0001	0.021	2.3	0.1	0.01
	15/08/2024	0.24	<0.001	<0.0002	12	<0.001	0.004	0.33	<0.001	2.8	<0.0001	0.001	1.2	0.027	0.02
	11/09/2024	9.1	0.009	0.0005	36	0.023	0.11	49	0.031	8.1	0.0001	0.019	5.2	0.72	0.25
	24/09/2024 - Investigation	-	<0.001	<0.001	-	<0.001	0.001	-	<0.001	<0.0001	-	0.004	-	0.04	<1
	9/10/2024	0.14	0.001	<0.0002	27	<0.001	0.002	1.7	<0.001	8.1	<0.0001	0.002	1.5	0.017	0.01
	6/11/2024	1.2	0.004	<0.0002	26	0.005	0.011	54	0.003	6.1	<0.0001	0.004	2.8	0.041	0.05
	16/12/2024	2.4	0.004	<0.0002	22	0.006	0.019	38	0.006	4.5	<0.0001	0.004	2.8	0.092	0.11
	14/01/2025	0.15	<0.001	<0.0002	8.8	0.001	0.003	0.34	<0.001	1.8	<0.0001	0.001	0.6	0.018	0.02
	11/02/2025	0.58	0.002	<0.0002	13.00	<0.001	<0.001	6.10	<0.001	3.50	<0.0001	0.002	1.00	0.015	0.04
	24/03/2025	0.13	<0.001	<0.0002	5.20	<0.001	0.002	0.35	<0.001	1.40	<0.0001	<0.001	1.20	0.037	0.03
	31/03/2025	0.1	0.002	<0.0002	22	<0.001	0.003	1.2	<0.001	6.8	<0.0001	0.002	2.4	0.066	0.00
	8/04/2025	<0.05	0.002	<0.0002	29	<0.001	<0.001	2.2	<0.001	8.1	<0.0001	0.002	2.4	0.008	<1
	9/05/2025	0.27	<0.001	<0.0002	20	<0.001	0.002	1.6	<0.001	5.9	<0.0001	0.002	1.7	0.03	0.01
	25/06/2025	0.11	<0.001	<0.0002	19	<0.001	0.002	0.72	<0.001	4.4	<0.0001	0.002	<0.5	0.032	0.01
	8/07/2025	0.05	<0.001	<0.0002	26	<0.001	0.002	0.49	<0.001	7.2	<0.0001	0.002	<0.5	0.024	0.00
	14/08/2025	0.14	<0.001	<0.0002	26	<0.001	0.003	0.69	<0.001	6.8	<0.0001	0.002	1.8	0.019	0.01
	11/09/2025	0.05	0.001	<0.0002	24	<0.001	0.002	1.5	<0.001	6.8	<0.0001	0.002	1.6	0.014	0.00
	13/10/2025	0.07	0.002	<0.0002	37	<0.001	0.01	0.69	<0.001	10	<0.0001	0.005	4.8	0.055	0.00
	20/11/2025	<0.05	0.001	<0.0002	19	<0.001	0.002	0.0015	0.001	4.7	<0.0001	0.002	0.9	0.012	<1
	17/12/2025	0.26	0.001	<0.0002	16	<0.001	0.001	0.89	<0.001	3.8	<0.0001	0.001	1.5	0.017	0.02
	21/01/2026	0.2	<0.001	<0.0002	12	<0.001	3	2.2	<1	2.9	<0.0001	0.001	0.7	0.031	0.02
	20/02/2026	0.23	0.002	<0.0002	18	<0.001	0.003	5	<0.001	4.5	<0.0001	0.003	0.6	0.032	0.01
	20/03/2026	0.83	<0.001	<0.0002	11	<0.001	0.006	3.5	0.002	3	<0.0001	0.002	1.5	0.043	0.08
	21/04/2026	0.1	0.001	<0.0002	10	<0.001	0.005	0.91	<0.001	2.8	<0.0001	<0.001	2.8	0.023	0.01
	29/05/2026	0.4	0.001	<0.0002	13	<0.001	0.005	4.8	<0.001	4	<0.0001	0.002	1.3	0.029	0.03
	23/06/2026	0.75	0.002	<0.0002	29	0.002	0.004	11	0.002	8.4	<0.0001	0.003	2.2	0.22	0.03
SW01 Baseline		**0.5**	**0.003**	**0.001**	**22**	**0.002**	**0.041**	**1.2**	**0.001**	**16**	**0.0005**	**0.006**	**6**	**0.058**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW01	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	220	220	<100	<100	<20	250	<100	<100	250	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	<50	<50	20	-	<20	<50	100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No surface water located at monitoring site – no sample collected									
	18/10/2023	No surface water located at monitoring site – no sample collected									
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	No surface water located at monitoring site – no sample collected									
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/3034	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Investigation	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	160	160	300	<100	<20	110	300	<100	410	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	17/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	120	<50	<100	<100	110	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW01 Baseline		**60**	**-**	**24**	**100**	**-**	**50**	**130**	**90**	**170**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW02	29/09/2022	6.9	170	8.8	8	160	0.04	0.03	29	<0.02	1.3	27	2.8	22		0.1
	20/10/2022	6.5	120	6.2	8.7	140	0.02	0.01	17	<0.02	<0.20	16	2.9	<5		0.2
	14/11/2022	6.4	150	210	0.1	190	0.18	<0.01	54	<0.02	13	62	18	24		0.3
	14/12/2022	6.3	110	870	0.1	200	0.27	0.05	26	<0.10	2.7	25	29	14		1.1
	18/01/2023	6.6	220	190	0.1	61	0.79	0.049	31	<0.20	21	27	6.2	61		0.2
	20/02/2023	6.5	240	29	4.4	1300	0.023	0.31	26	<0.10	1.9	29	24	<5		0.9
	28/03/2023	4.8	310	370	5.7	370	1.5	0.19	22	<0.02	<0.20	17	92	<10		4.2
	18/04/2023	6.2	300	60	7.3	410	0.05	0.16	32	<0.02	1.38	25	120	<5		3.8
	18/05/2023	6.5	130	39	6	270	0.06	0.09	25	<0.02	<0.2	18	29	<5		1.2
	15/06/2023	6.4	190	25	8.9	280	0.37	0.23	34	<0.02	1.2	25	38	<5		1.1
	21/08/2023	6.1	430	20	5.7	690	0.02	0.5	36	<0.02	1.2	38	75	<5		2.1
	18/09/2023	7.2	180	15	8.1	260	0.06	0.04	31	<0.02	0.8	28	39	<5		1.3
	18/10/2023	6.8	150	11	8.1	240	0.05	0.02	40	<0.02	<0.2	28	13	<5		0.3
	20/11/2023	6.9	180	18	4.9	350	0.07	0.04	37	<0.01	0.3	26	50	<5		1.4
	19/12/2023	6.7	140	15	4.6	240	0.05	0.03	37	<0.02	0.7	29	11	<5		0.3
	23/01/2024	6.8	210	27	9.7	350	0.06	0.02	35	<0.02	0.5	31	25	<5		0.7
	26/02/2024	4.5	140	43	7.1	190	0.05	0.03	9	<0.02	0.6	8.5	65	<5		7.2
	26/03/2024	6.7	44	12	6.8	99	0.07	<0.01	9.5	<0.02	0.5	8.8	8.7	<5		0.9
	18/04/2024	7.6	350	<5	6.4	630	0.03	0.9	93	<0.02	0.6	78	56	<5	<10	0.6
	20/05/2024	6.7	130	27	2.1	210	0.04	0.05	20	<0.02	1.1	18	16	<5	11	0.8
	25/06/2024	6.7	180	9.7	8.8	330	0.03	<0.01	42	0.03	<0.2	35	10	<5	11	0.2
	10/07/2024	7.0	150	8.2	6.1	220	0.01	0.11	22	<0.02	1.9	18	21	<5	<10	1.0
	6/08/2024	6.5	220	8.5	7	280	0.06	0.02	39	<0.02	1.7	24	19	<5	20	0.5
	15/08/2024	6.6	48	<5	7.8	80	0.07	0.01	8	<0.02	<0.2	7	6.9	18	<10	0.9
	11/09/2024	7.1	250	<5	6.1	450	0.02	0.05	90	<0.02	0.3	71	48	<5	<10	0.5
	9/10/2024	7.0	260	<5	8.9	500	0.12	0.03	88	<0.02	0.6	73	35	<5	<10	0.4
	6/11/2024	7.5	300	6.4	6	500	0.07	<0.01	89	<0.02	1	72	34	<5	<10	0.4
	16/12/2024	6.4	200	110	8.8	310	1.1	<0.01	55	<0.02	0.4	11	19	6.6	<10	0.3
	14/01/2025	6.9	170	<5	4.6	340	0.08	<0.01	51	<0.02	0.9	44	7.7	<5	<10	0.2
	11/02/2025	7.1	96	5.6	6.1	150	0.08	<0.01	14	<0.02	1.9	91	3.9	190	<10	0.3
	24/03/2024	3.2	420	7.2	8.6	670	<0.05	0.02	17	<0.02	2.8	17	250	<5	<10	14.7
	31/03/2025	7.2	160	<5	9.8	200	0.14	0.05	14	<0.02	<0.4	16	7	<5	<10	0.5
	8/04/2025	7.2	150	12	6.2	230	0.37	0.03	14	<0.02	0.7	18	3.4	<5	<10	0.2
	9/05/2025	3.9	320	1,100	-	560	1.5	0.23	31	<0.02	2.8	18	150	<20	34	4.8
	25/06/2025	7.1	400	9.4	9.8	580	1.5	0.01	88	<0.03	1.5	74	38	38	14	0.4
	8/07/2025	6.9	300	14	8.4	600	0.34	0.58	96	<0.02	0.9	73	38	19	21	0.4
	14/08/2025	7.2	330	6.1	8.6	600	0.05	0.03	120	<0.02	0.7	85	31	<5	<10	0.3
	11/09/2025	7.0	320	6.1	7.9	530	0.05	0.11	87	<0.02	2.8	69	36	<5	<10	0.4
	13/10/2025	6.9	270	6.3	8.1	470	0.12	<0.01	73	0.11	1.9	60	29	<5	14	0.4
	20/11/2025	6.8	190	11	5.2	300	0.19	0.16	33	<0.02	0.9	30	16	<5	<10	0.5
	16/12/2025	7.0	520	8	7.2	240	0.11	0.13	26	<0.5	<0.5	23	9.1	<5	19	0.4
	21/01/2026	7.3	350	<5	6	680	0.07	<0.01	100	0.1	0.4	85	36	<0.005	15	0.4
	20/02/2026	7	470	<5	3.6	720	0.08	<0.01	130	<0.02	0.5	95	17	<0.005	<10	0.1
	20/03/2026	7	370	6.1	5.6	710	0.1	0.06	130	<0.02	0.8	90	42	<0.005	<10	0.3
	21/04/2026	6.7	100	<5	6.2	170	0.08	0.01	24	<0.02	<0.2	17	3.1	<0.005	11	0.1
	29/05/2026	6.65	280	24	6.6	520	<0.01	0.03	92	0.05	4.8	65	32	<0.005	23	0.3
	23/06/2026	7.1	350	<5	7.9	580	0.03	<0.01	100	<0.02	0.4	81	33	0.0052	<10	0.3
SW02 Baseline		**6.3 – 7.0**	**199**	**495**	**-**	**292**	**1.88**	**0.261**	**161**	**0.06**	**8.6**	**32**	**10**	**182**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW02	29/09/2022	0.42	0.003	<0.0002	19	0.002	0.004	1.5	0.001	5.8	<0.0001	0.002	1.9	0.057	0.02
	20/10/2022	0.22	0.001	<0.0002	12	0.001	0.003	0.62	<0.001	3.4	<0.0001	0.001	1.7	0.032	0.02
	14/11/2022	1.8	0.037	<0.002	47	<0.001	0.015	53	<0.01	11	<0.001	<0.01	<5	0.096	0.04
	14/12/2022	13	0.066	<0.002	38	0.034	0.094	9.7	0.071	5.9	<0.001	0.013	5.1	1	0.34
	18/01/2023	3.3	0.023	<0.002	<2	<0.01	0.015	45	0.014	5.8	<0.001	<0.010	<5	0.15	<1
	20/02/2023	12	0.033	0.0002	38	0.009	0.09	0.013	0.013	11	<0.001	0.018	4.1	0.28	0.32
	28/03/2023	3.4	0.002	0.0003	43	0.002	0.003	2.5	0.001	8.4	<0.0001	0.024	4.1	0.63	0.08
	18/04/2023	0.86	<0.001	<0.0002	20	0.002	0.002	<0.001	<0.001	4	<0.0001	0.006	2.7	0.089	0.04
	18/05/2023	0.72	0.002	<0.0002	17	0.002	0.006	1	0.002	4.3	<0.0001	0.003	2.4	0.081	0.04
	15/06/2023	1.7	0.001	<0.0002	22	0.001	0.004	2.1	0.001	5.5	<0.0001	0.005	1.9	0.037	0.08
	21/08/2023	1.1	<0.001	<0.0002	71	<0.001	<0.001	8	<0.001	16	<0.0001	0.024	5.7	0.057	0.02
	18/09/2023	1.7	0.003	<0.0002	19	0.002	0.004	3	0.002	6.3	<0.0001	0.005	3	0.023	0.09
	18/10/2023	0.88	0.002	<0.0002	17	0.001	0.003	2.2	0.001	5.5	<0.0001	0.002	1.9	0.014	0.05
	20/11/2023	2.3	0.002	<0.0002	19	0.002	0.002	2.6	<0.001	6.7	<0.0001	0.007	1.4	0.032	0.12
	19/12/2023	1.1	0.002	<0.0002	19	0.001	0.001	4.8	<0.001	6.5	0.0002	0.004	2.9	0.012	0.06
	23/01/2024	2.9	0.003	<0.0002	23	0.002	0.001	5.8	<0.001	7.8	<0.0001	0.007	3.3	0.031	0.13
	26/02/2024	1.5	0.001	<0.0002	9.7	0.001	0.003	1.7	<0.001	2.5	<0.0001	0.004	1.4	0.027	0.15
	26/03/2024	0.34	<0.001	<0.0002	6.9	0.001	0.003	0.67	<0.001	1.9	<0.0001	0.001	1.8	0.021	0.05
	18/04/2024	0.09	<0.001	<0.0002	20	<0.001	<0.001	0.39	<0.001	5.4	<0.0001	<0.001	14	0.014	0.00
	20/05/2024	0.71	0.004	<0.0002	19	0.002	0.003	5.6	<0.001	3.8	<0.0001	0.003	3	0.015	0.04
	25/06/2024	1.1	<0.001	<0.0002	21	<0.001	0.001	1.4	<0.001	4.6	<0.0001	0.004	4.5	0.022	0.05
	10/07/2024	1.1	0.002	<0.0002	20	<0.001	0.004	1.2	<0.001	4.2	<0.0001	0.004	2.3	0.047	0.06
	6/08/2024	0.61	0.001	<0.0002	17	0.001	0.002	1.4	<0.001	3.7	<0.0001	0.002	3	0.019	0.04
	15/08/2024	0.31	0.002	<0.0002	8	0.001	0.004	0.37	<0.001	1.5	<0.0001	0.001	1.4	0.038	0.04
	11/09/2024	0.19	<0.001	<0.0002	20	<0.001	0.001	0.31	<0.001	4.8	<0.0001	0.001	14	0.021	0.01
	9/10/2024	0.8	<0.001	<0.0002	23	<0.001	0.001	1.5	<0.001	5	<0.0001	0.003	15	0.032	0.03
	6/11/2024	0.007	0.001	<0.0002	21	<0.001	<0.001	0.7	<0.001	5.8	<0.0001	<0.001	15	0.011	0.00
	16/12/2024	0.05	<0.001	<0.0002	14	<0.001	0.001	0.24	<0.001	3.1	<0.0001	<0.001	9.4	0.008	0.00
	14/01/2025	0.06	<0.001	<0.0002	14	0.001	0.002	0.28	<0.001	2.7	<0.0001	0.001	9.4	0.015	0.00
	11/02/2025	0.82	<0.001	<0.0002	24	<0.001	0.002	4.4	<0.001	4.8	<0.0001	0.005	19	0.058	0.03
	24/03/2024	7.4	<0.001	<0.0002	56	0.002	0.001	22	<0.001	6.9	<0.0001	0.021	1.8	0.097	0.13
	31/03/2025	0.25		<0.0002	23	<0.001	0.003	1.7	<0.001	7	<0.0001	0.002	2.5	0.054	0.01
	8/04/2025	0.1	0.001	<0.0002	29	<0.001	0.001	2.7	<0.001	8.3	<0.0001	0.002	2.3	0.015	0.00
	9/05/2025	2.3	0.007	<0.0002	34	0.005	0.002	140	<0.001	9.1	<0.0001	0.011	2.1	0.077	0.07
	25/06/2025	0.3	<0.001	<0.0002	21	<0.001	0.001	1.1	<0.001	5.4	<0.0001	0.002	14	0.03	0.01
	8/07/2025	0.15	<0.001	<0.0002	19	<0.001	<0.001	0.65	<0.001	5.3	<0.0001	0.001	12	0.018	0.01
	14/08/2025	0.11	<0.001	<0.0002	21	<0.001	<0.001	0.39	<0.001	5.9	<0.0001	<0.001	11	0.012	0.01
	11/09/2025	0.32	0.001	<0.0002	21	<0.001	0.002	1.2	<0.001	5.6	<0.0001	0.001	11	0.016	0.02
	13/10/2025	0.15	0.002	<0.0002	19	<0.001	0.004	0.82	<0.001	5.2	<0.0001	0.002	11	0.054	0.01
	20/11/2025	0.53	0.002	<0.0002	20	0.001	0.002	1.8	0.002	4.9	<0.0001	0.002	3.9	0.021	0.03
	16/12/2025	0.26	<0.001	<0.0002	16	0.002	<0.001	1.5	0.001	4	<0.0001	0.002	1.6	0.01	0.02
	21/01/2026	<0.05	<0.001	<0.0002	21	<0.001	<1	0.25	<1	5.6	<0.0001	<0.001	17	0.022	<1
	20/02/2026	<0.05	<0.001	<0.0002	22	<0.001	<0.001	0.46	<0.001	6.1	<0.0001	<0.001	23	0.027	<1
	20/03/2026	0.15	<0.001	<0.0002	21	<0.001	<0.001	0.21	<0.001	5.8	<0.0001	0.001	15	0.013	0.01
	21/04/2026	0.07	<0.001	<0.0002	8.9	<0.001	0.003	0.33	<0.001	2.2	<0.0001	<0.001	3.6	0.01	0.01
	29/05/2026	0.08	<0.001	<0.0002	18	<0.001	<0.001	0.39	<0.001	4.8	<0.0001	<0.001	10	0.01	0.00
	23/06/2026	0.2	<0.001	<0.0002	21	<0.001	<0.001	0.43	<0.001	5.6	<0.0001	<0.001	15	0.22	0.01
SW02 Baseline		**3.8**	**0.045**	**0.001**	**17**	**0.007**	**0.012**	**71.9**	**0.02**	**5**	**0.0005**	**0.005**	**6**	**0.09**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW02	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	90	<100	<20	<50	60	30	90	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	180	180	30	-	<20	170	30	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	200	<100	<20	<50	100	<100	100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	140	140	100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<20	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW02 Baseline		**60**	**-**	**22**	**100**	**-**	**50**	**100**	**50**	**140**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW03	29/09/2022	6.8	120	<5	9.3	100	0.02	<0.01	24	<0.02	1.10	23	2	<5		0.1
	20/10/2022	5.9	650	26	7.5	870	0.03	<0.01	270	<0.02	<0.2	12	13	<5		0.0
	14/11/2022	6.5	140	260	2.6	160	0.13	<0.05	27	<0.01	7.40	36	9	<5		0.3
	14/12/2022	6.5	110	11	4.4	160	0.01	0.05	23	<0.01	3.90	18	11	<5		0.5
	18/01/2023	6.5	160	9	5.1	<5	0.02	<0.010	31	<0.02	1.30	26	17	<5		0.5
	20/02/2023	3.4	540	13	6.0	720	0.01	<0.010	22	<0.02	5.10	28	100	<5		4.5
	28/03/2023	3.3	400	7	9.9	750	0.02	0.07	14	<0.02	<0.2	16	110	<5		7.9
	18/04/2023	4.2	280	<5	7.4	450	<0.01	0.04	29	<0.02	<0.2	22	140	<5		4.8
	18/05/2023	4.3	310	37	5.5	580	0.02	0.32	22	<0.02	12.33	21	230	<5		10
	15/06/2023	3.3	580	17	8.9	870	0.04	0.68	32	<0.02	1.40	31	300	<5		9.4
	24/07/2023	3.9	290	36	9	510	0.03	0.4	17	<0.02	1	20	250	<5		15
	21/08/2023	6.8	270	5.8	7.2	350	0.04	0.04	45	<0.02	0.5	43	8	<5		0.2
	18/09/2023	4.6	410	20	7.4	540	<0.01	0.28	30	<0.02	0.4	29	230	<5		7.7
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.5	640	18	7.1	1100	0.03	0.58	32	<0.01	0.6	30	370	6.7		12
	19/12/2023	3.8	610	7.7	6.7	850	<0.01	0.86	36	<0.02	0.9	37	150	<5		4.2
	23/01/2024	3.7	460	55	4.1	880	<0.01	0.16	31	<0.02	1.6	37	100	<5		3.2
	26/02/2024	4.3	200	93	7.5	250	0.09	0.09	53	0.02	1.5	11	440	7.2		8.3
	26/03/2024	6.1	170	54	7.7	300	0.08	0.13	21	<0.02	1	20	78	<5		3.7
	18/04/2024	7.5	360	9.2	7.4	650	0.03	0.08	88	<0.02	0.8	78	64	<5	<10	0.6
	20/05/2024	4.5	300	21	5.6	450	<0.01	0.5	19	<0.02	1.2	23	190	<5	66	10
	25/06/2024	6.3	80	2300	7.2	140	0.98	<0.1	9.4	<0.2	140	9	5	<5	48	0.5
	10/07/2024	4.4	260	29	5.1	400	0.01	0.64	19	<0.02	0.7	21	10	<5	50	0.5
	6/08/2024	4.6	340	22	6.3	630	0.02	0.62	35	<0.02	1.3	29	230	<5	70	6.6
	15/08/2024	6.3	82	19	8.3	120	0.04	0.07	9.5	<0.02	<0.2	9	31	<5	11	3.3
	11/09/2024	7.1	290	<5	7.7	440	<0.01	0.11	84	<0.02	0.3	66	56	<5	<10	0.7
	9/10/2024	6.6	240	330	7.7	360	0.46	<0.01	56	<0.02	7.1	45	35	33	<10	0.6
	6/11/2024	7.2	300	49	7.5	460	0.07	<0.01	88	<0.02	1.2	72	39	<5	<10	0.4
	16/12/2024	7.2	250	5.3	19.0	370	<0.01	<0.01	70	<0.02	0.7	61	31	50	<10	0.4
	14/01/2025	6.9	220	<5	7.7	420	0.04	<0.01	66	<0.02	1.3	57	11	<5	<10	0.2
	11/02/2025	7.4	340	<5	7.5	570	0.07	0.02	99	<0.02	1.4	87	14	<5	<10	0.1
	24/03/2024	6.9	130	<5	8.1	230	0.05	<0.01	38	<0.02	0.9	32	66	<5	<10	1.7
	31/03/2025	7.0	260	9.3	9.8	440	0.06	0.19	100	<0.02	0.9	70	26	<5	<10	0.3
	8/04/2025	7.2	290	<5	8.9	470	0.04	0.07	100	<0.02	0.4	82	36	<5	<10	0.4
	9/05/2025	7.1	290	<5	-	460	<0.01	<0.1	100	<0.02	0.7	73	36	<5	<10	0.4
	25/06/2025	6.7	360	230	6.5	540	2.3	0.01	88	<0.03	2.3	68	36	46	14	0.4
	8/07/2025	6.8	300	82	9.1	570	0.15	0.48	89	<0.02	1.1	67	39	27	<10	0.4
	14/08/2025	7.2	300	16	9.1	580	0.08	0.05	110	<0.02	1	81	32	<5	<10	0.3
	11/09/2025	6.8	300	6.7	12.0	530	0.05	0.22	84	<0.02	0.7	67	43	43	11	0.5
	13/10/2025	7.2	340	7.5	9	620	0.07	<0.01	100	<0.02	0.8	83	43	16	<10	0.4
	20/11/2025	6.6	190	28	4.7	300	0.15	0.19	28	<0.02	1	28	35	<5	<10	1.3
	16/12/2025	6.3	96	400	0.3	170	0.94	0.18	14	<0.5	12	17	18	17	38	1.3
	21/01/2026	7.6	330	<5	8.6	680	0.05	<0.01	100	0.1	0.9	84	36	<0.005	<10	0.4
	20/02/2026	7.2	390	10	4.6	580	0.06	0.02	93	<0.02	0.5	69	11	<0.005	<10	0.1
	20/03/2026	6.9	330	<5	5.3	610	0.1	0.04	110	<0.02	0.8	77	36	0.012	<10	0.3
	21/04/2026	6.8	190	<5	7.4	250	0.04	0.012	24	<0.02	1.7	26	4	<0.005	11	0.2
	29/05/2026	6.24	350	<5	7.6	500	0.02	<0.01	85	0.047	1	61	31	<0.005	17	0.4
	23/06/2026	7.2	350	<5	9.9	570	0.02	<0.01	100	<0.02	<0.5	79	34	<0.005	<10	0.3
SW03 Baseline		**6.1 - 6.7**	**191**	**1005**	**-**	**281**	**2.14**	**0.155**	**111**	**0.041**	**4.3**	**30**	**6**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW03	29/09/2022	0.4	0.00	<0.0002	13	0.00	0.00	0.8	<0.001	4.4	<0.0001	0.002	1.00	0.034	0.03
	20/10/2022	0.5	0.00	<0.0002	8	0.00	0.00	0.9	0.00	2.3	<0.0001	0.001	1.00	0.03	0.06
	14/11/2022	1.1	<0.001	<0.002	18	<0.001	0.00	1.9	<0.010	5.7	<0.001	<0.01	<5	0.24	0.06
	14/12/2022	0.6	<0.001	<0.002	13	<0.01	<0.010	1.3	<0.010	<5	<0.001	<0.01	<5	0.53	0.05
	18/01/2023	0.5	0.01	<0.002	<2	<0.010	<0.01	0.5	<0.01	6.2	<0.001	<0.01	<5	<0.05	<1
	20/02/2023	17	0.00	<0.0002	63	0.00	0.02	0.0	0.00	14.0	<0.001	0.065	3.00	0.12	0.27
	28/03/2023	15	<0.001	<0.0002	63	0.00	0.00	4.5	<0.001	11.0	<0.0001	0.065	2.30	0.15	0.24
	18/04/2023	3.8	<0.001	<0.0002	30	0.00	0.00	<0.001	<0.001	5.0	<0.0001	0.023	2.10	0.048	0.13
	18/05/2023	5.8	<0.001	<0.0002	48	<0.001	0.00	14.0	<0.001	10.0	<0.0001	0.033	2.80	0.16	0.12
	15/06/2023	11	<0.001	<0.0002	74	<0.001	0.00	12	<0.001	15.0	<0.0001	0.058	2.7	0.15	0.15
	24/07/2023	7.1	<0.001	<0.0002	39	<0.001	0.002	8.9	0.001	9.7	<0.0001	0.030	2.5	0.1	0.18
	21/08/2023	0.7	0.001	<0.0002	18	0.001	0.003	1.1	<0.001	6.3	<0.0001	0.002	6.8	0.026	0.04
	18/09/2023	2.8	<0.001	<0.0002	59	<0.001	<0.001	1.1	<0.001	14.0	<0.0001	0.022	3.2	0.049	0.05
	18/10/2023	3.0	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12.0	<0.0001	0.009	2.7	0.027	0.05
	20/11/2023	11.0	0.002	<0.0002	75	<0.001	<0.001	17	<0.001	17.0	<0.0001	0.060	3	0.14	0.15
	19/12/2023	21.0	0.003	0.0011	80	<0.001	0.002	3.6	0.001	19.0	0.0007	0.071	4.3	0.16	0.26
	23/01/2024	17.0	0.002	<0.0002	63	0.002	0.001	17	<0.001	19.0	<0.0001	0.059	5.1	0.13	0.27
	26/02/2024	8.8	0.003	<0.0002	17	0.003	0.005	9	0.002	4.8	<0.0001	0.016	1.8	0.05	0.52
	26/03/2024	0.9	<0.001	<0.0002	24	<0.001	<0.001	1.8	<0.001	6.1	<0.0001	0.009	2.8	0.025	0.04
	18/04/2024	1.1	<0.001	<0.0002	22	<0.001	<0.001	1.8	<0.001	6.0	<0.0001	0.005	13	0.018	0.05
	20/05/2024	5.4	0.002	<0.0002	34	<0.001	<0.001	13	<0.001	7.3	<0.0001	0.026	3.6	0.047	0.16
	25/06/2024	0.2	<0.001	<0.0002	10	<0.001	<0.001	170	<0.001	2.7	<0.0001	0.011	2.3	0.042	0.02
	10/07/2024	3.6	0.001	<0.0002	34	<0.001	0.001	6.6	<0.001	6.6	<0.0001	0.019	3	0.053	0.11
	6/08/2024	3.10	<0.001	<0.0002	51	<0.001	<0.001	4.8	<0.001	7.8	<0.0001	0.026	3.4	0.092	0.06
	15/08/2024	1.20	0.00	<0.0002	12	<0.001	0.003	2.1	<0.001	2.2	<0.0001	0.004	1.6	0.037	0.10
	11/09/2024	0.59	<0.001	<0.0002	21	<0.001	0.001	1.0	<0.001	4.9	<0.0001	0.003	13	0.021	0.03
	9/10/2024	20	0.02	<0.0002	21	0.011	0.01	39.0	0.008	4.4	<0.0001	0.008	8.8	0.1	0.95
	6/11/2024	3	0.00	<0.0002	23	0.002	0.002	4.5	<0.001	6.2	<0.0001	0.003	15	0.017	0.13
	16/12/2024	0.29	0.001	<0.0002	19	0.001	<0.001	1.6	<0.001	4	<0.0001	0.001	12	0.009	0.02
	14/01/2025	0.17	0.001	<0.0002	17	<0.001	0.001	0.74	<0.001	3.3	<0.0001	0.001	12	0.016	0.01
	11/02/2025	0.45	0.001	<0.0002	23	<0.001	<0.001	2.1	<0.001	4.5	<0.0001	0.001	18	0.031	0.02
	24/03/2024	0.18	0.001	<0.0002	10	<0.001	0.002	0.79	<0.001	2.6	<0.0001	0.001	6.6	0.036	0.02
	31/03/2025	0.42	0.002	<0.0002	21	<0.001	0.001	3.5	<0.001	4.9	<0.0001	0.002	11	0.045	0.02
	8/04/2025	0.3	<0.001	<0.0002	21	<0.001	<0.001	1.3	<0.001	5.4	<0.0001	0.002	11	0.012	0.01
	9/05/2025	0.62	0.002	<0.0002	20	<0.001	0.001	2	<0.001	4.9	<0.0001	0.005	11	0.042	0.03
	25/06/2025	2	0.002	<0.0002	21	<0.001	0.003	6.1	0.001	5.2	<0.0001	0.002	12	0.053	0.10
	8/07/2025	0.24	<0.001	<0.0002	19	<0.001	<0.001	0.49	<0.001	5	<0.0001	0.001	11	0.015	0.01
	14/08/2025	0.2	<0.001	<0.0002	20	<0.001	<0.001	0.59	<0.001	5.8	<0.0001	0.001	11	0.01	0.01
	11/09/2025	2	0.003	<0.0002	19	0.002	0.004	4	0.002	5.4	<0.0001	0.003	11	0.037	0.11
	13/10/2025	0.29	0.001	<0.0002	22	<0.001	0.002	0.97	<0.001	5.9	<0.0001	0.001	16	0.019	0.01
	20/11/2025	2.4	0.004	<0.0002	22	0.003	0.003	8.8	0.003	4.7	<0.0001	0.003	4.4	0.015	0.11
	16/12/2025	6	0.003	<0.0002	15	0.002	0.005	2.7	0.002	3.2	<0.0001	0.007	2.4	0.14	0.40
	21/01/2026	0.09	<0.001	<0.0002	20	<0.001	<1	0.33	<1	5.5	<0.0001	<0.001	16	0.009	0.00
	20/02/2026	0.27	0.001	<0.0002	23	<0.001	<0.001	1.3	<0.001	5.8	<0.0001	0.001	15	0.01	0.01
	20/03/2026	0.22	<0.001	<0.0002	18	<0.001	0.001	0.58	<0.001	5.1	<0.0001	0.001	12	0.016	0.01
	21/04/2026	0.29	<0.001	<0.0002	12	<0.001	0.002	0.64	<0.001	3.3	<0.0001	<0.001	5.5	0.01	0.02
	29/05/2026	0.11	<0.001	<0.0002	17	<0.001	0.001	0.4	<0.001	4.7	<0.0001	0.001	9.6	0.024	0.01
	23/06/2026	0.19	<0.001	<0.0002	21	<0.001	<0.001	0.19	<0.001	5.4	<0.0001	<0.001	14	0.22	0.01
SW03 Baseline		**7.9**	**0.058**	**0.001**	**21**	**0.008**	**0.028**	**85.5**	**0.028**	**5**	**0.0005**	**0.006**	**4**	**0.26**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW03	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	<50	<100	<20	<50	<100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	130	130	<100	<100	<20	<50	10	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW03 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**120**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW04	29/09/2022	4.5	68	<5	4.8	52	0.01	0.18	20	<0.02	5.1	17	<2	<5		0.05
	20/10/2022	4.2	90	<5	7.5	110	0.01	<0.10	20	<0.02	0.3	16	<2	<5		0.05
	14/11/2022	No surface water located at monitoring site – no sample collected														
	14/12/2022	3.2	190	<5	2	280	0.01	0.05	42	<0.10	3.2	20	<2	<5		0.02
	18/01/2023	No surface water located at monitoring site – no sample collected														
	20/02/2023	4.1	0.2	<5	5.9	160	0.02	0.09	22	<0.10	7.4	23	15	<5		0.7
	28/03/2023	4.2	68	<5	8	130	<0.01	<0.01	17	<0.10	<0.25	14	25	<5		1.5
	18/04/2023	4.6	130	16	9.1	190	0.01	0.03	32	<0.02	0.5	21	8.7	<5		0.3
	18/05/2023	3.6	1,200	42	8	1,800	0.03	1.2	26	<0.02	1.15	53	1,000	<5		38.5
	15/06/2023	4.2	140	160	7.7	200	1.5	0.44	44	<0.02	12	24	<2	8		0.02
	24/07/2023	3.6	1,600	21	9	2,400	0.02	1.5	180	<0.02	3.4	78	5,700	<5		31.7
	21/08/2023	3.3	2,400	5.7	7.5	3,700	<0.01	2.8	33	<0.02	3.4	97	850	5.3		25.8
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.2	2,100	<5	9	3,500	0.03	0.8	4.7	<0.01	1.1	63	400	<5		85.1
	19/12/2023	3.0	3,200	15	0.8	3,700	<0.01	0.44	34	<0.02	4.5	100	980	<5		28.8
	23/01/2024	3.1	1,600	23	7.8	2,500	<0.01	0.19	27	<0.02	0.5	54	730	<5		27.0
	26/02/2024	3.1	1,000	11	7.8	1,200	0.03	0.31	14	<0.02	1.5	30	570	<5		40.7
	26/03/2024	3.2	900	5.7	9.6	1,300	<0.01	0.36	21	<0.02	0.9	30	710	<5		33.8
	18/04/2024	3.1	980	67	7.5	1,900	0.03	0.42	15	<0.02	0.8	33	1,000	27	310	66.7
	20/05/2024	3.3	630	8	8.3	1,100	<0.01	0.3	11	<0.02	0.7	25	500	<5	190	45.5
	25/06/2024	3.2	1,000	5.4	8.6	1,600	0.01	0.4	13	<0.02	1	27	270	<5	160	20.8
	10/07/2024	3.5	420	<5	7.9	870	<0.01	0.24	11	<0.02	0.6	21	450	<5	150	40.9
	6/08/2024	3.3	1,300	38	8.7	1,700	0.04	0.03	13	<0.02	1.1	28	860	7.8	230	66.2
	15/08/2024	3.9	240	<5	9.3	390	0.02	0.13	13	<0.02	0.8	16	150	<5	40	11.5
	11/09/2024	3.4	460	<5	6.9	690	0.01	0.05	8.7	<0.02	<0.2	17	390	15	77	44.8
	24/09/2024 - Additional	3.5	750	-	-	1,300	-	-	-	-	-	-	-	-	-	-
	9/10/2024	3.1	810	<5	9	1,200	0.02	<0.01	10	<0.02	0.8	26	580	<5	<10	58.0
	6/11/2024	3.3	440	23	6.4	660	0.05	<0.01	10	<0.02	1	18	310	<5	15	31.0
	16/12/2024	5.7	210	420	0.2	360	0.1	0.25	13	<0.02	13	12	110	7	25	8.5
	14/01/2025	4.1	310	120	4.9	460	0.13	0.03	6.3	<0.02	1.3	11	64	<5	<10	10.2
	11/02/2025	7.6	700	<5	8.8	1000	0.01	0.03	5.8	<0.02	1.3	21	150	7.7	<10	25.9
	24/03/2025	3.9	390	21	7.4	470	0.03	0.03	18	<0.02	1.5	24	180	8.1	<10	10.0
	31/03/2025	6.3	260	70	10	370	<0.01	0.1	11	<0.02	0.8	16	160	<5	<10	14.5
	8/04/2025	6.0	430	43	4.1	470	0.09	0.27	11	0.04	2.3	18	240	<10	16	21.8
	9/05/2025	6.5	270	260	-	570	<0.01	0.02	10	<0.02	4.5	16	250	160	<10	25.0
	25/06/2025	6.7	410	67	6.1	590	0.6	0.01	8.3	<0.02	0.6	16	160	6.5	28	19.3
	8/07/2025	4.0	140	180	6.1	160	0.21	<0.01	21	<0.02	6.2	17	<2	7.6	43	21.0
	14/08/2025	6.5	180	250	6.6	290	0.47	-	9.4	-	-	14	86	<5	13	9.1
	11/09/2025	6.5	260	1,400	0.2	460	0.03	0.31	7.3	<0.02	38	16	150	10	22	20.5
	13/10/2025	7.3	580	14	8.3	760	0.04	<0.01	4	<0.02	0.8	16	230	20	<10	57.5
	20/11/2025	6.9	280	35	2.1	490	0.08	0.05	8.4	<0.02	1	15	150	2.7	<10	17.9
	16/12/2025	7.0	370	170	6	550	0.05	0.21	14	<0.5	1	87	140	<5	39	10.0
	21/01/2026	6.9	250	75	1.9	450	0.23	<0.01	22	0.02	0.9	16	100	<0.005	13	4.5
	20/02/2026	6.9	320	42	1.5	480	0.03	<0.01	29	<0.02	2.6	18	30	0.17	16	1.0
	20/03/2026	6.7	250	110	7.7	420	0.11	0.04	18	<0.02	1.9	20	120	<0.005	<10	6.7
	21/04/2026	6.9	300	590	1.2	410	1.3	0.12	20	<0.02	2.1	23	22	<0.0065	11	1.1
	29/05/2026	5.62	130	59	4.7	200	0.08	<0.01	23	<0.02	4.7	16	15	<0.005	19	0.7
	23/06/2026	6.5	200	670	1.6	270	0.54	<0.01	26	<0.02	1.3	23	37	<0.005	<10	1.4
SW04 Baseline		**4.2 – 4.5**	**112**	**293**	**-**	**165**	**0.5**	**0.693**	**90**	**0.052**	**4.5**	**20**	**3**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW04	29/09/2022	1.3	0.001	<0.0002	1.6	0.005	0.001	2.7	0.001	2.6	<0.0001	0.002	1	0.027	<1
	20/10/2022	1.1	<0.001	<0.0002	1.3	0.004	0.001	2.4	0.001	2.3	<0.0001	0.002	1	0.024	<1
	14/11/2022	No surface water located at monitoring site – no sample collected													
	14/12/2022	1.2	<0.001	<0.002	<5	<0.001	<0.01	3.2	<0.01	<5	<0.001	<0.01	<5	0.084	<1
	18/01/2023	No surface water located at monitoring site – no sample collected													
	20/02/2023	1.6	0.002	<0.0002	2.7	0.005	0.05	0.002	0.002	3.9	<0.001	0.003	1.6	0.039	<1
	28/03/2023	1.1	<0.01	<0.002	<5	0.002	<0.01	2.7	<0.01	<5	<0.0001	0.01	<5	<0.05	<1
	18/04/2023	0.85	<0.001	<0.0002	1.8	<0.01	<0.001	<0.001	<0.001	2.7	<0.0001	0.001	0.8	0.034	<1
	18/05/2023	41	<0.001	0.0005	200	<0.001	0.003	16	0.003	31	<0.0001	0.11	5.7	0.4	<1
	15/06/2023	3.1	0.002	<0.0002	2.2	0.007	0.007	6.3	0.005	4.5	<0.0001	0.003	1.4	0.075	1.41
	24/07/2023	50	<0.001	0.0002	330	<0.001	0.003	3.9	0.002	51	<0.0001	0.13	9	0.18	0.15
	21/08/2023	72	0.002	0.0004	560	<0.001	0.003	3.4	0.002	83	<0.0001	0.23	13	0.34	0.13
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	3	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12	<0.0001	0.009	2.7	0.027	0.05
	20/11/2023	91	0.003	0.0007	380	0.001	0.003	4.3	0.003	52	<0.0001	0.27	7.2	0.55	0.24
	19/12/2023	110	0.005	0.0022	570	0.002	0.005	11	0.007	90	0.001	0.39	4.3	0.7	0.19
	23/01/2024	55	0.002	0.0003	260	0.002	0.003	9.7	0.002	35	<0.0001	0.19	6.1	0.33	0.21
	26/02/2024	23	<0.001	<0.0002	140	<0.001	<0.001	5.1	<0.001	20	<0.0001	0.083	3.9	0.18	0.16
	26/03/2024	20	<0.001	<0.0002	130	<0.001	<0.001	3.1	<0.001	19	<0.0001	0.068	4.9	0.1	0.15
	18/04/2024	32	<0.001	<0.0002	190	0.001	0.002	7	<0.001	26	<0.0001	0.1	3.6	0.18	0.17
	20/05/2024	20	<0.001	<0.0002	100	<0.001	<0.001	5.7	<0.001	14	<0.0001	0.064	2.6	0.13	0.20
	25/06/2024	16	<0.001	<0.0002	210	<0.001	<0.001	5.3	<0.001	23	<0.0001	0.059	3.7	0.09	0.08
	10/07/2024	12	<0.001	<0.0002	110	<0.001	0.001	2.5	<0.001	12	<0.0001	0.051	2.2	0.11	0.11
	6/08/2024	17	<0.001	<0.0002	200	<0.001	0.001	5.5	<0.001	24	<0.0001	0.059	2.5	0.1	0.09
	15/08/2024	2	<0.001	<0.0002	36	<0.001	<0.001	0.81	<0.001	6	<0.0001	0.015	2.5	0.057	0.06
	11/09/2024	5.6	<0.001	<0.0002	87	<0.001	<0.001	3.6	<0.001	11	<0.0001	0.026	1.6	0.061	0.06
	24/09/2024 - Additional	-	<0.001	<0.0001	-	<0.001	0.0001	-	<0.001	-	<0.0001	0.032	-	0.043	<1
	9/10/2024	14	<0.001	<0.0002	140	<0.001	0.002	8.1	<0.001	17	<0.0001	0.057	2.7	0.12	0.10
	6/11/2024	2.8	<0.001	<0.0002	81	<0.001	<0.001	6.1	<0.001	11	<0.0001	0.02	<0.5	0.034	0.03
	16/12/2024	4.4	0.007	<0.0002	29	0.009	0.006	170	0.003	4.5	<0.0001	0.009	1.3	0.035	0.15
	14/01/2025	1.2	<0.001	<0.0002	53	<0.001	0.001	5.8	<0.001	5.8	<0.0001	0.014	0.8	0.039	0.02
	11/02/2025	<0.05	<0.001	<0.0002	200	<0.001	<0.001	0.14	<0.001	18	<0.0001	0.004	<0.5	0.033	<1
	24/03/2025	1.1	<0.001	<0.0002	52	<0.001	0.002	6.6	<0.001	8.5	<0.0001	0.012	2.3	0.1	0.02
	31/03/2025	0.5	0.003	<0.0002	50	<0.001	0.001	17	<0.001	7.6	<0.0001	0.007	2.4	0.047	0.01
	8/04/2025	0.36	0.004	<0.0002	70	<0.001	<0.001	38	<0.001	9.8	<0.0001	0.006	2.3	0.014	0.01
	9/05/2025	0.64	<0.001	<0.0002	61	<0.001	0.001	34	<0.001	7.9	<0.0001	0.001	1.9	0.032	0.01
	25/06/2025	0.35	<0.001	<0.0002	85	<0.001	<0.001	7.3	<0.001	8.5	<0.0001	0.004	1.3	0.013	0.00
	8/07/2025	0.92	<0.001	<0.0002	0.6	0.004	0.002	1.8	<0.001	1.5	<0.0001	0.001	0.8	0.042	1.53
	14/08/2025	0.34	<0.001	<0.0002	38	<0.001	<0.001	17	<0.001	5.7	<0.0001	0.002	1	0.018	0.01
	11/09/2025	8.7	0.031	<0.002	120	0.017	0.011	830	<0.01	12	<0.001	0.027	<5	0.1	0.07
	13/10/2025	0.31	0.002	<0.0002	130	<0.001	<0.001	12	<0.001	14	<0.0001	0.004	1.5	<0.005	0.00
	20/11/2025	0.26	<0.001	<0.0002	69	<0.001	0.002	7.6	0.001	8.5	<0.0001	0.003	0.6	0.016	0.00
	16/12/2025	13	0.002	<0.0002	57	0.003	<0.001	47	0.002	38	<0.0001	0.032	2.4	0.039	0.23
	21/01/2026	0.07	<0.001	<0.0002	53	<0.001	<1	3	<1	7.3	<0.0001	0.001	<0.5	<0.005	0.00
	20/02/2026	0.33	0.003	<0.0002	63	<0.001	<0.001	37	<0.001	8.2	<0.0001	0.002	1.6	0.013	0.01
	20/03/2026	1	0.002	<0.0002	44	<0.001	0.002	21	<0.001	7.4	<0.0001	0.004	1.7	0.021	0.02
	21/04/2026	4.2	0.005	<0.0002	54	0.004	0.01	56	0.004	7.6	<0.0001	0.014	3.1	0.065	0.08
	29/05/2026	0.62	<0.001	<0.0002	10	0.002	<0.001	3.3	<0.001	2.7	<0.0001	0.002	1.1	0.014	0.06
	23/06/2026	6.4	0.004	<0.0002	35	0.007	0.012	37	0.007	6.1	<0.0001	0.013	0.9	0.25	0.18
SW04 Baseline		**1.4**	**0.002**	**0.001**	**3.2**	**0.007**	**0.002**	**2.8**	**0.002**	**2.3**	**0.0005**	**0.005**	**2.9**	**0.028**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW04	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	No flow - No sample collected									
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	No flow - No sample collected									
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No flow - No sample collected									
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	160	160	<100	<100	<20	<50	<100	<100	160	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Additional	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW04 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW05	29/09/2022	5.9	480	5.2	7.7	510	0.12	0.17	220	<0.20	3	140	11	<5		0.05
	20/10/2022	6.2	650	7.2	8.9	690	0.06	0.24	180	<0.20	0.5	160	8.6	<5		0.05
	14/11/2022	6.2	820	13	4.7	1,000	0.06	<0.05	310	<0.10	8.1	260	100	<5		0.32
	14/12/2022	6.2	830	16	7.5	1,100	0.05	0.05	330	<0.10	3.1	240	40	<5		0.12
	18/01/2023	6.3	2,800	33	7	<5	0.09	0.09	1,300	<0.02	3.38	820	160	<5		0.12
	20/02/2023	6.7	18	18	5.4	2,300	0.1	0.07	2,000	<0.10	3.4	4700	890	<5		0.45
	28/03/2023	5.6	470	<5	9.4	760	0.02	0.08	200	<0.10	<0.02	110	23	6.7		0.12
	18/04/2023	6.4	4,000	16	8.5	5,300	0.1	0.12	2,000	<0.02	80	1100	230	<5		0.12
	18/05/2023	5.8	260	17	5.7	460	0.08	<0.01	110	<0.02	<0.2	64	25	<5		0.23
	15/06/2023	6.2	1,100	<5	8.8	1,400	0.58	0.14	450	<0.02	1.1	250	40	<5		0.09
	24/07/2023	6.5	1,600	<5	9.3	2,800	0.05	0.17	1,500	<0.5	1.1	440	1,200	<5		0.80
	21/08/2023	6.6	1,600	<5	6.3	2,900	0.06	0.15	1,500	<0.02	1.28	480	190	<5		0.13
	18/09/2023	6.6	2,500	13	6.4	3,800	0.06	0.11	1,200	<0.02	1.3	650	210	<5		0.18
	18/10/2023	6.9	4,800	6.6	6.5	7,700	0.06	0.05	2,700	<0.02	<0.2	1,300	730	10		0.27
	20/11/2023	6.8	2,100	12	4.8	3,700	0.18	0.46	1,100	<0.01	0.6	460	1,200	<5		1.09
	19/12/2023	6.7	3,300	14	5.3	5,400	0.19	0.77	1,700	<0.02	<2	1,000	64	<5		0.04
	23/01/2024	6.2	1,100	13	9.3	1,000	0.09	0.05	440	<0.02	2.3	260	220	<5		0.50
	26/02/2024	6.3	970	16	8.6	1,200	0.11	0.03	330	<0.02	1.5	200	130	<5		0.39
	26/03/2024	6.6	1,100	9.1	5.6	1,700	0.03	0.09	910	<0.02	2	290	420	<5		0.46
	18/04/2024	6.5	560	8.4	5.8	830	0.07	0.16	160	<0.02	1.7	110	160	5.4	<10	1.00
	20/05/2024	6.7	240	<5	5.8	350	<0.01	0.03	68	<0.02	0.4	47	140	<5	15	2.06
	25/06/2024	6.5	1,000	16	7.7	1,800	0.06	0.1	500	<0.02	1.2	300	29	<5	16	0.06
	10/07/2024	6.2	950	5.6	6.3	1,700	0.02	0.16	170	<0.02	0.9	280	130	<5	11	0.76
	6/08/2024	6.3	3,300	9	8.9	5,800	0.05	0.11	1500	<0.02	1.2	820	210	<5	27	0.14
	15/08/2024	6.2	300	<5	7.1	430	0.08	0.03	30	<0.02	<0.2	80	27	<5	12	0.90
	11/09/2024	6.4	710	8.2	5.5	1,200	0.03	0.4	450	<0.02	1.1	230	72	<5	12	0.16
	9/10/2024	6.4	700	11	9	1,100	0.15	0.15	320	<0.1	<0.25	180	53	<5	14	0.17
	6/11/2024	7.1	930	15	6.1	1,300	0.08	0.16	440	<0.02	1	250	56	<5	<10	0.13
	16/12/2024	7.4	31,000	26	9.3	44,000	0.02	0.14	1,400	<0.02	0.4	<0.5	2,000	<5	<10	1.43
	14/01/2025	7.1	19,000	9.4	6.2	30,000	0.04	0.04	12,000	<0.02	0.3	5,500	500	<5	<10	0.04
	11/02/2025	7.5	24,000	9.1	8.5	35,000	0.03	0.06	6,300	<0.02	<0.2	6,900	260	<5	<10	0.04
	24/03/2024	6.3	1,600	<5	7	2,500	<0.1	0.12	790	<0.02	4.4	440	140	<5	<10	0.18
	31/03/2025	7.0	210	8	9.2	260	0.08	<10	72	<0.02	2.3	41	9.5	<5	<10	0.13
	8/04/2025	6.3	610	8.3	6.7	760	0.08	0.44	230	<0.2	<1	140	29	<10	<10	0.13
	9/05/2025	6.8	340	<5	-	480	0.08	<0.1	120	<0.2	1.7	71	40	<5	<10	0.33
	25/06/2025	6.2	2,000	6.6	5.9	3,500	<0.2	0.07	1,700	<0.2	<0.2	510	250	<5	17	0.14
	8/07/2025	6.0	470	<5	8	910	0.05	0.03	230	0.07	<0.2	130	41	<5	13	0.18
	14/08/2025	6.2	570	16	6.1	930	0.08	0.03	550	<0.02	16	140	62	6.5	13	0.11
	11/09/2025	6.5	940	5.4	6.9	1,700	0.04	0.05	440	<0.02	1.7	260	61	<5	9	0.14
	13/10/2025	6.8	6,600	<5	5.4	11,000	0.05	0.1	3,300	<0.02	1.7	1,800	370	<5	12	0.11
	20/11/2025	6.6	4,600	<5	4.3	9,000	0.1	0.21	2,600	<0.02	0.4	1,400	320	<5	12	0.12
	16/12/2025	6.8	11,000	18	4.1	18,000	0.07	0.28	6,100	<0.5	1.2	2,800	720	<5	34	0.12
	21/01/2026	7.4	25,000	9.5	7.8	37,000	0.03	0.02	12,000	12	1.1	6,300	1,500	<0.005	14	0.13
	20/02/2026	6.9	21,000	8.4	4.9	32,000	0.02	<0.01	10,000	<0.02	0.8	5,400	410	<0.005	10	0.04
	20/03/2026	6.3	1,400	25	5.5	2,700	0.28	0.09	720	<0.02	1.7	370	98	<0.005	<10	0.14
	21/04/2026	6.5	14,000	8.4	6.8	22,000	0.07	0.74	7,500	<0.02	1	3,500	320	<0.005	<10	0.04
	29/05/2026	5.78	260	<5	7.1	340	0.06	0.1	78	<0.02	1.3	46	10	<0.005	22	0.13
	23/06/2026	6.2	820	<5	5.7	1,300	0.06	0.09	340	<0.02	1.3	190	42	<0.005	12	0.12
SW05 Baseline		**5.1 – 7.2**	**4710**	**136**	**-**	**6,927**	**0.21**	**0.592**	**980**	**0.02**	**2.2**	**1,667**	**115**	**63**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW05	29/09/2022	0.83	<0.001	<0.0002	9.4	0.002	<0.001	4.6	<0.001	17	<0.0001	0.002	7.7	0.008	0.09
	20/10/2022	0.66	<0.001	<0.0002	11	0.001	<0.001	3.5	0.001	19	<0.0001	0.002	7.9	0.007	0.06
	14/11/2022	0.75	<0.001	<0.002	18	<0.001	0.002	5.4	<0.01	27	<0.001	<0.001	11	0.12	0.04
	14/12/2022	0.93	<0.001	<0.002	16	<0.01	<0.01	6.1	<0.01	21	<0.001	<0.01	13	<0.05	0.06
	18/01/2023	0.73	<0.01	<0.002	<2	<0.01	<0.01	6.2	<0.01	96	<0.001	<0.01	41	<0.05	<1
	20/02/2023	0.22	0.002	<0.0002	190	0.001	0.01	<0.001	<0.001	550	<0.001	0.001	170	0.008	0.00
	28/03/2023	0.77	<0.01	<0.002	9.4	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.4	<0.05	0.08
	18/04/2023	1	<0.001	<0.0002	42	0.001	<0.001	<0.001	<0.001	110	<0.0001	0.003	37	0.008	0.02
	18/05/2023	0.6	<0.001	<0.0002	5.2	<0.001	<0.001	2.4	<0.001	9.1	<0.0001	0.002	4.9	0.009	0.12
	15/06/2023	0.32	<0.001	<0.0002	14	0.001	2	2	<0.001	27	<0.0001	0.001	14	0.01	0.02
	24/07/2023	0.33	<0.001	<0.0002	22	<0.001	<0.001	1.9	<0.001	52	<0.0001	0.002	25	0.006	0.02
	21/08/2023	0.41	<0.001	<0.0002	23	<0.001	0.002	2.2	<0.001	54	<0.0001	0.002	29	0.005	0.02
	18/09/2023	0.28	<0.001	<0.0002	29	<0.001	<0.001	2.6	<0.001	70	<0.0001	0.001	42	<0.005	0.01
	18/10/2023	0.27	<0.001	<0.0002	61	<0.001	<0.001	2	<0.001	160	<0.0001	<0.001	76	<0.005	0.00
	20/11/2023	0.51	0.001	<0.0002	25	0.001	<0.001	4.3	<0.001	56	<0.0001	0.002	27	<0.005	0.02
	19/12/2023	0.54	0.005	0.0028	46	0.001	0.001	4.2	0.001	120	0.002	0.002	47	0.009	0.01
	23/01/2024	0.9	0.003	<0.0002	16	0.002	0.001	7.8	<0.001	32	<0.0001	0.001	16	0.012	0.06
	26/02/2024	0.63	0.001	<0.0002	13	0.001	<0.001	3.7	<0.001	23	<0.0001	0.002	10	0.029	0.05
	26/03/2024	0.64	<0.001	<0.0002	16	0.001	<0.001	3.3	<0.001	33	<0.0001	0.002	14	0.008	0.04
	18/04/2024	0.69	<0.001	<0.0002	8.3	0.002	0.001	<0.001	<0.001	14	<0.0001	0.008	6.7	0.008	0.08
	20/05/2024	0.72	<0.001	<0.0002	5.6	<0.001	0.001	2.5	<0.001	5.1	<0.0001	0.002	3.5	0.008	0.13
	25/06/2024	0.2	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	31	<0.0001	0.002	12	0.012	0.01
	10/07/2024	0.48	<0.001	<0.0002	17	<0.001	<0.001	2.9	<0.001	31	<0.0001	0.002	11	0.008	0.03
	6/08/2024	0.28	<0.001	<0.0002	37	<0.001	<0.001	<0.001	<0.001	100	<0.0001	0.001	30	0.007	0.01
	15/08/2024	0.5	<0.001	<0.0002	5	0.001	<0.001	1.6	<0.001	8	<0.0001	0.001	4.6	0.01	0.10
	11/09/2024	0.52	<0.001	<0.0002	14	<0.001	<0.001	2.9	<0.001	25	<0.0001	0.002	10	0.011	0.04
	9/10/2024	0.85	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.5	0.016	0.07
	6/11/2024	0.68	<0.001	<0.0002	17	0.002	<0.001	3.8	<0.001	29	<0.0001	0.002	12	0.008	0.04
	16/12/2024	<0.05	<0.001	<0.0002	<0.5	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.24	0.002	<0.0002	230	0.002	<0.001	0.64	<0.001	660	<0.0001	<0.001	210	0.006	0.00
	11/02/2025	0.12	0.002	<0.0002	290	0.001	<0.001	0.5	<0.001	820	<0.0001	<0.001	260	0.047	0.00
	24/03/2024	0.54	<0.001	<0.0002	22	<0.001	0.001	3.2	<0.001	53	<0.0001	0.002	17	0.32	0.02
	31/03/2025	0.58	<0.001	<0.0002	4.2	<0.001	<0.001	3.7	<0.001	5.2	<0.0001	0.002	3.5	0.062	0.14
	8/04/2025	0.77	<0.001	<0.0002	9.9	0.001	<0.001	4.2	<0.001	18	<0.0001	0.002	6	0.011	0.08
	9/05/2025	0.75	<0.001	<0.0002	6.3	0.001	<0.001	3.2	<0.001	8.5	<0.0001	0.002	3.7	0.015	0.12
	25/06/2025	0.46	<0.001	<0.0002	26	<0.001	<0.001	2	<0.001	63	<0.0001	0.001	19	0.01	0.02
	8/07/2025	0.68	<0.001	<0.0002	9.1	0.001	<0.001	3	<0.001	16	<0.0001	0.002	4.9	0.008	0.07
	14/08/2025	0.46	<0.001	<0.0002	8.6	<0.001	<0.001	2.6	<0.001	17	<0.0001	0.001	6.2	0.008	0.05
	11/09/2025	0.55	<0.001	<0.0002	15	<0.001	<0.001	3.2	<0.001	33	<0.0001	0.001	11	0.01	0.04
	13/10/2025	0.21	<0.001	<0.0002	77	<0.001	<0.001	2	<0.001	220	<0.0001	<0.001	69	<0.005	0.00
	20/11/2025	0.32	0.001	<0.0002	63	0.001	<0.001	2.7	<0.001	180	<0.0001	0.001	53	<0.005	0.01
	16/12/2025	0.2	0.001	<0.0002	120	0.001	0.001	1.4	<0.001	340	<0.0001	0.001	110	0.008	0.00
	21/01/2026	0.08	0.002	<0.0002	250	0.001	<1	0.47	<1	760	<0.0001	<0.001	240	0.009	0.00
	20/02/2026	0.1	0.002	<0.0002	220	<0.001	<0.001	1.4	<0.001	640	<0.0001	<0.001	260	0.006	0.00
	20/03/2026	0.53	<0.001	<0.0002	22	<0.001	0.001	4.6	<0.001	46	<0.0001	0.002	17	0.011	0.02
	21/04/2026	0.18	0.001	<0.0002	150	<0.001	0.001	1.2	<0.001	430	<0.0001	0.001	130	0.022	0.00
	29/05/2026	0.65	<0.001	<0.0002	4.9	<0.001	<0.001	2.9	<0.001	6	<0.0001	0.002	2.7	0.04	0.13
	23/06/2026	0.81	<0.001	<0.0002	13	0.001	<0.001	3.6	<0.001	25	<0.0001	0.002	7.5	0.2	0.06
SW05 Baseline		**2.1**	**0.002**	**0.001**	**57**	**0.002**	**0.003**	**12.3**	0.001	**130**	**0.0005**	**0.011**	**58**	**0.026**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW05	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	70	70	-	-	<20	60	100	-	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	120	120	<100	120	<20	<50	120	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW05 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW06	29/09/2022	6.0	480	<5	7.8	580	0.13	0.16	220	<0.02	8.6	140	11	5.1		0.05
	20/10/2022	6.3	580	16	8.7	730	0.05	0.19	330	<0.02	0.5	110	7.5	6.2		0.02
	14/11/2022	6.2	840	13	<5	1000	0.04	0.36	310	<0.10	1.1	270	100	<5		0.32
	14/12/2022	6.3	840	16	8.3	1200	0.1	0.05	340	<0.10	5.8	240	44	<5		0.13
	18/01/2023	6.4	3,700	31	6.8	5,400	0.07	0.04	1,800	<0.02	2.5	1,000	200	<5		0.11
	20/02/2023	6.8	19	89	5.1	14,000	0.09	0.11	22	<0.10	4.1	4,000	1,200	<5		54.55
	28/03/2023	5.6	400	6.2	8.3	730	0.03	0.07	180	<0.20	<0.20	110	18	9.7		0.10
	18/04/2023	6.7	6,400	18	7.4	6,700	0.07	1.2	3,200	<0.02	1.26	1,700	360	<10		0.11
	18/05/2023	5.9	280	17	6.3	470	0.08	0.06	120	<0.02	0.4	370	21	<5		0.18
	15/06/2023	6.4	1,100	<5	7.4	1,400	0.55	0.18	440	<0.02	0.7	250	38	<5		0.09
	24/07/2023	6.7	2,100	5.8	6.6	3,500	0.07	0.23	1,800	<0.2	0.6	540	620	<5		0.34
	21/08/2023	6.6	2,800	<5	6.1	5,400	0.19	0.16	1,300	<0.02	0.78	870	59	<5		0.05
	18/09/2023	6.7	2,900	24	6.5	4,600	0.06	0.12	1,500	<0.02	0.4	1,300	200	<5		0.13
	18/10/2023	6.9	7,900	6.3	6.4	9,700	0.05	0.05	3,700	<0.02	<0.2	1,600	430	<5		0.12
	20/11/2023	6.6	2,200	9.9	4.6	4,000	0.18	0.43	1,200	<0.01	1.2	490	720	<5		0.60
	19/12/2023	6.8	3,300	9.3	5.6	6,600	0.09	0.82	2,300	<0.02	<2	1,300	94	<5		0.04
	23/01/2024	6.2	4,300	15	2.1	4,300	0.18	0.08	2,800	<0.02	1.4	1,100	330	<5		0.12
	26/02/2024	6.4	880	17	9	1,200	0.11	0.02	60	<0.02	1.7	200	10	<5		0.17
	26/03/2024	6.8	1,300	9.9	5.9	1,900	0.05	0.07	760	0.05	1.2	300	120	<5		0.16
	18/04/2024	6.6	520	5.8	6	840	0.06	0.16	170	<0.02	<1	110	31	<5	17	0.18
	20/05/2024	6.3	240	<5	6.1	290	<0.01	0.05	59	<0.02	1	42	47	<5	15	0.80
	25/06/2024	6.7	960	17	9.2	1,900	0.06	0.09	500	<0.02	5.3	270	21	<5	19	0.04
	10/07/2024	6.2	880	<5	6.2	1,600	0.03	0.13	170	<0.02	1.4	250	33	<5	15	0.19
	6/08/2024	6.3	4,500	6.8	7.6	8,400	0.08	0.15	2,100	<0.02	1.6	1,200	270	<5	24	0.13
	15/08/2024	6.2	160	<5	7	240	0.1	0.03	57	<0.02	<0.2	38	15	<5	14	0.26
	11/09/2024	6.7	710	7	6.6	1,000	0.04	0.28	370	<0.02	1.8	180	54	<5	11	0.15
	9/10/2024	6.5	720	14	8.5	1,000	0.15	<0.01	310	<0.1	4.3	180	33	18	<10	0.11
	6/11/2024	6.9	1,900	37	5.6	2,400	0.1	0.11	890	<0.02	1.6	490	160	<5	<10	0.18
	16/12/2024	7.7	33,000	13	9.5	47,000	0.01	0.18	16,000	<0.02	<0.2	<0.5	2,100	<5	<10	0.13
	14/01/2025	7.2	25,000	11	6.3	38,000	0.03	0.06	15,000	<0.02	0.7	7,200	600	<5	<10	0.04
	11/02/2025	7.6	24,000	11	7.2	34,000	0.003	0.06	6,100	<0.02	<0.2	7,200	240	5.9	<10	0.04
	24/03/2025	6.5	1,700	<5	6.8	2,500	<0.1	0.12	820	<0.02	4.2	450	110	<5	<10	0.13
	31/03/2025	6.7	250	11	9.5	250	0.08	<10	68	<0.02	<1	42	9.7	<5	<10	0.14
	8/04/2025	6.4	610	7.6	9.4	740	0.08	0.28	260	<0.2	<1	140	31	<10	<10	0.12
	9/05/2025	6.6	260	<5	-	490	0.07	<0.1	120	<0.2	<1	70	28	<5	<10	0.23
	25/06/2025	6.2	2,000	7.4	5.9	3,600	1.4	0.08	1,700	<0.2	1.4	520	260	<5	20	1.50
	8/07/2025	6.0	470	<5	8.2	910	0.05	0.02	230	<0.02	<0.2	130	28	<5	13	0.12
	14/08/2025	6.3	590	31	6.1	910	0.07	0.03	340	<0.02	0.3	140	37	<5	13	0.11
	11/09/2025	6.6	1,299	6.8	7.1	2,200	0.04	0.05	590	<0.02	5.6	340	67	<5	<10	0.11
	13/10/2025	6.8	14,000	5.9	4.9	23,000	0.04	0.29	7,400	<0.02	0.6	4,100	830	5.9	14	0.11
	20/11/2025	6.7	8,400	<5	4.5	14,000	0.09	0.22	4,800	<0.02	0.7	2,300	1,100	<5	12	0.23
	16/12/2025	6.9	12,000	20	3.8	19,000	0.09	0.32	6,100	<0.5	1.8	2,900	750	7	28	0.12
	21/01/2026	7.4	18,000	7.1	7.4	28,000	0.03	<0.01	8,400	8.4	1	4,700	1,000	<0.005	12	0.12
	20/02/2026	7	19,000	<5	5.9	33,000	0.02	0.05	12,000	<0.02	0.3	5,800	520	0.0058	17	0.04
	20/03/2026	6.4	1,400	20	4.3	2,800	0.16	0.13	770	<0.02	2.4	390	100	<0.005	<10	0.13
	21/04/2026	6.5	12,000	<5	7.4	19,000	0.03	0.1	5,900	<0.02	1.2	3,100	270	<0.005	16	0.05
	29/05/2026	5.81	190	5.7	6.1	370	0.06	<0.01	74	<0.02	2	46	10	<0.005	20	0.14
	23/06/2026	6.1	820	<5	6.8	1,300	0.05	0.09	320	<0.02	<1	200	39	<0.005	11	0.12
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		**6.5 – 8.0**	**-**	**<50**	**-**	**<2200**	**<0.05**	**-**	**-**	**-**	**<0.50**	**-**	**-**	**5**		**<0.5***

Note: * derived from Interim Target Criteria within BCPoM, GWMP and AFMP (AWC 2020)

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW06	29/09/2022	0.78	<0.001	<0.0002	9.4	0.002	<0.001	4.5	<0.001	18	<0.0001	0.002	7.7	0.008	0.08
	20/10/2022	0.54	<0.001	<0.0002	9.1	0.001	<0.001	2.7	0.001	13	<0.0001	0.002	5.8	0.012	0.06
	14/11/2022	0.68	<0.001	<0.002	18	<0.001	0.012	5.3	<0.01	29	<0.001	<0.01	12	0.11	0.04
	14/12/2022	0.75	<0.001	<0.002	16	<0.01	<0.01	5.4	<0.01	21	<0.001	<0.01	13	<0.05	0.05
	18/01/2023	0.63	<0.010	<0.001	<2	<0.01	<0.01	0.01	<0.01	120	<0.001	<0.01	47	<0.05	<1
	20/02/2023	0.34	0.002	<0.0002	170	0.001	0.01	<0.001	<0.001	480	<0.001	0.002	160	0.008	0.00
	28/03/2023	1.1	<0.01	<0.002	11	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.3	<0.05	0.10
	18/04/2023	0.54	<0.001	<0.0002	68	0.001	<0.001	<0.001	<0.001	200	<0.0001	0.002	63	0.009	0.01
	18/05/2023	0.44	0.003	<0.0002	14	<0.001	<0.001	0.13	<0.001	4.8	<0.0001	0.008	3.3	<0.005	0.03
	15/06/2023	0.36	<0.001	<0.0002	15	<0.001	2.1	2.1	<0.001	28	28	0.001	14	<0.005	0.02
	24/07/2023	0.36	<0.001	<0.0002	26	<0.001	<0.001	1.9	0.001	65	<0.0001	0.002	29	0.007	0.01
	21/08/2023	0.41	<0.001	<0.0002	39	0.001	<0.001	1.9	<0.001	100	<0.0001	0.002	46	<0.005	0.01
	18/09/2023	0.3	<0.001	<0.0002	56	<0.001	<0.001	2.4	<0.001	150	<0.0001	0.001	64	<0.005	0.01
	18/10/2023	0.2	<0.001	<0.0002	73	<0.001	<0.001	1.7	<0.001	190	<0.0001	<0.001	85	<0.005	0.00
	20/11/2023	0.63	0.001	<0.0002	27	0.001	<0.001	4.5	<0.001	60	<0.0001	0.003	28	0.01	0.02
	19/12/2023	0.62	0.002	0.0007	56	0.001	0.002	3.4	<0.001	150	0.0005	0.002	55	0.008	0.01
	23/01/2024	0.71	0.003	<0.0002	50	0.002	<0.001	5.7	<0.001	140	<0.0001	<0.001	46	0.008	0.01
	26/02/2024	0.61	<0.001	<0.0002	14	0.003	<0.001	3.5	<0.001	24	<0.0001	0.005	10	0.025	0.04
	26/03/2024	0.61	<0.001	<0.0002	17	0.001	<0.001	3.1	<0.001	34	<0.0001	0.002	15	0.008	0.04
	18/04/2024	0.71	<0.001	<0.0002	10	0.001	<0.001	<0.001	<0.001	13	<0.0001	0.008	7.6	0.008	0.07
	20/05/2024	0.72	<0.001	<0.0002	5.7	<0.001	<0.001	2.3	<0.001	4.8	<0.0001	0.002	3.2	0.009	0.13
	25/06/2024	0.23	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	28	<0.0001	0.002	11	0.016	0.01
	10/07/2024	0.5	<0.001	<0.0002	17	<0.001	<0.001	2.6	<0.001	28	<0.0001	0.002	10	0.01	0.03
	6/08/2024	0.31	<0.001	<0.0002	50	<0.001	<0.001	<0.001	<0.001	140	<0.0001	0.002	40	0.011	0.01
	15/08/2024	0.51	<0.001	<0.0002	4.8	<0.001	0.001	1.6	<0.001	4.6	<0.0001	0.002	3	0.011	0.11
	11/09/2024	0.46	<0.001	<0.0002	14	<0.001	<0.001	2.1	<0.001	20	<0.0001	0.002	11	0.012	0.03
	9/10/2024	0.84	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.7	0.009	0.07
	6/11/2024	0.79	<0.001	<0.0002	25	0.002	<0.001	4.1	<0.001	60	<0.0001	0.002	20	0.01	0.03
	16/12/2024	4.4	0.007	<0.0002	29	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	0.15
	14/01/2025	0.15	0.002	<0.0002	300	0.002	<0.001	0.3	<0.001	860	<0.0001	<0.001	270	<0.005	0.00
	11/02/2025	0.09	0.002	<0.0002	300	0.001	<0.001	0.38	<0.001	850	<0.0001	<0.001	270	0.048	0.00
	24/03/2025	0.55	<0.001	<0.0002	22	<0.001	<0.001	3.4	<0.001	54	<0.0001	0.002	17	0.027	0.03
	31/03/2025	0.59	0.001	<0.0002	4.2	<0.001	<0.001	3.3	<0.001	5.3	<0.0001	0.002	3.5	0.044	0.14
	8/04/2025	0.8	<0.001	<0.0002	9.9	0.003	<0.001	4.1	<0.001	18	<0.0001	0.002	6	0.007	0.08
	9/05/2025	0.74	<0.001	<0.0002	6.3	0.001	0.001	2.8	<0.001	8.5	<0.0001	0.002	3.7	0.01	0.12
	25/06/2025	0.7	<0.001	<0.0002	26	<0.001	<0.001	2.6	<0.001	64	<0.0001	0.002	20	0.008	0.03
	8/07/2025	0.55	<0.001	<0.0002	11	0.001	0.001	2.3	<0.001	13	<0.0001	0.002	6.3	0.008	0.05
	14/08/2025	0.43	<0.001	<0.0002	9.1	<0.001	<0.001	2.4	<0.001	16	<0.0001	0.001	6.3	0.011	0.05
	11/09/2025	0.51	<0.001	<0.0002	19	0.001	<0.001	2.9	<0.001	42	<0.0001	0.001	14	0.008	0.03
	13/10/2025	0.12	0.001	<0.0002	170	<0.001	<0.001	1.2	<0.001	500	<0.0001	<0.001	150	0.006	0.00
	20/11/2025	0.26	0.001	<0.0002	99	0.001	<0.001	1.9	<0.001	280	<0.0001	0.001	86	0.006	0.00
	16/12/2025	0.17	0.001	<0.0002	120	<0.001	<0.001	1.3	0.001	340	<0.0001	0.001	110	<0.005	0.00
	21/01/2026	0.1	0.002	<0.0002	200	<0.001	<1	0.35	<1	560	<0.0001	<0.001	180	0.006	0.00
	20/02/2026	0.1	0.002	<0.0002	240	<0.001	<0.001	0.58	<0.001	690	<0.0001	<0.001	280	0.028	0.00
	20/03/2026	0.6	0.001	<0.0002	24	0.001	0.002	4.8	<0.001	48	<0.0001	0.002	18	0.014	0.03
	21/04/2026	0.14	0.001	<0.0002	130	<0.001	0.002	0.87	0.008	380	<0.0001	<0.001	120	0.017	0.00
	29/05/2026	0.69	<0.001	<0.0002	4.9	<0.001	<0.001	2.9	0.002	5.9	<0.0001	0.002	2.7	0.01	0.14
	23/06/2026	0.84	<0.001	<0.0002	13	0.001	<0.001	3.6	<0.001	25	<0.0001	0.002	7.8	0.19	0.06
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		**0.055**	**0.013**	**0.0002**	**-**	**0.0033**	**0.0018**	**0.3**	**0.0034**	**-**	**0.0006**	**0.011**	**-**	**0.008**	**<1***

Note: * derived from Interim Target Cri

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW06	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	-	-	<20	<50	<100	<100	-	<100
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	90	90	<100	<100	<20	160	<100	<100	160	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<100	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	2.1	2.1	<100	<100	<20	<50	0.9	<100	0.9	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		-	-	-	-	-	-	-	-	-	-

Note: * derived from Interim Target Cri

APPENDIX D

Photolog

PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
1	23/06/2026

Description

Surface water monitoring location SW01.



Photo No.	Date
2	23/06/2026

Description

Image of high organic matter content in surface water location SW01.



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
3	23/06/2026

Description

Surface water monitoring location SW03.



Photo No.	Date
4	23/06/2026

Description

Surface water location SW4



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
5	23/06/2026

Description

Surface water monitoring location SW05.



Photo No.	Date
6	23/06/2026

Description

Groundwater water monitoring location MW4.



MONTHLY WATER QUALITY MONITORING REPORT

Harvest Estate Urban Development

Monitoring Event: 14th July 2026

Ewingsdale Road, Byron Bay, NSW, 2481

Job Number: 217140

For:

Planit Consulting

By:

ENV Services

Date:

7/08/2026

ENV Services Pty Ltd

313 River Street, Ballina NSW 2478

T: 1300 861 325

E: admin@envsolutions.com.au

www.envsolutions.com.au

DOCUMENT CONTROL

Job No:	Job Number: 217140
Client:	Planit Consulting
Filename:	217140_Harvest Estate_WQ_July_2026

	Name:	**Date:**	**Signature:**
Prepared By:	Austin Metcalfe-Smith Environmental Scientist	07/08/2026	
Reviewed By:	Kingsley Baldwin Environmental Team Leader	11/08/2026	

Revision:	**Date:**	**Details:**

SCOPE OF ENGAGEMENT AND LIMITATIONS

This report has been prepared by ENV Services at the request of Planit Consulting for the purpose of consolidating and assessing water quality monitoring (surface water and ground water) data to determine impact associated with the development of the Harvest Estate. No other parties may rely on the contents of this report for any purposes except those stated.

This report has been prepared based on the information provided to us and from other information obtained as a result of enquiries made by us. ENV accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this document for a purpose other than that described above.

No part of this report may be reproduced, stored, or transmitted in any form without the prior consent of ENV.

ENV declares that it does not have, nor expects to have, a beneficial interest in the subject project.

To avoid this advice being used inappropriately, it is recommended that you consult with ENV before conveying the information to another who may not fully understand the objectives of the report. This report is meant only for the subject site/project and should not be applied to any other.

1 INTRODUCTION

ENV Services Pty Ltd (ENV) was engaged by Planit Consulting to prepare a Monthly Water Quality Report (MWQR) to meet requirements outlined in the Harvest Estate Development Conditions of Consent (11b - d, 32, 33 & 78) and Section 6.2 and 6.4 of the Planit Construction Environmental Management Plan (CEMP). Monitoring has been undertaken in accordance with the following approved plans.

- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate Groundwater Management Plan.* Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Belongil Creek Plan of Management*. Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate West Byron Urban Release Area; Acid Frog Management Plan.* Dated August 2020.

Baseline water quality parameters outlined in this report have been derived from mean or range values calculated over a 12-month sampling period undertaken between 25 May 2020 and 17 May 2021. This baseline water quality monitoring was carried out by Australian Wetlands Consulting (AWC) and undertaken in accordance with the Harvest Estate Groundwater Management Plan (AWC 2020) and the Harvest Estate – Belongil Creek Plan of Management (AWC 2020).

Guideline water quality trigger values have been derived from the ANZG (2018) Water Quality Guidelines and ANZECC (2000) guidelines for Fresh and Marine Water Quality. These guidelines define Belongil Creek as a lowland river of South-Eastern Australia, with trigger values chosen to reflect this. In assessing human disturbance, this report recognises Belongil Creek as being slight to moderately disturbed. On this basis, for toxicants in water, 95% species protection default guideline values have been presented for assessed toxicants.

No construction works were being undertaken during this monitoring period, with major civil earthworks associated with Stage 1 of the Project completed in November 2023.

2 MONITORING RESULTS & OBSERVATIONS

2.1 Monthly Groundwater Monitoring

Monthly groundwater monitoring at five (5) groundwater wells (MW2 – MW5 & MW7) was carried out to assess for impact within the underlying aquifer. This monitoring was conducted in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.2 of the Planit Construction Environmental Management Plan (CEMP). Groundwater monitoring locations are presented in Appendix A.

An assessment of the monthly analytical results presented in Appendix B, Table 1, identified the following observations:

Site	Observation	Comments
MW2	TDS, N and SO_4 were recorded outside of baseline ranges.	TDS values remain elevated. Sulfate concentrations are likely associated with the oxidation of sulfide-bearing sediments (e.g. pyrite, marcasite) under fluctuating REDOX conditions, such as those induced by seasonal groundwater drawdown and rewetting cycles. Groundwater had sulfuric odour typical of oxidising ASS terrains. No site related impacts identified at this location.
MW3	All parameters were recorded within baseline ranges.	No site related impacts identified at this location.
MW4	All parameters were recorded within baseline ranges.	Groundwater had sulfuric odour typical of oxidising ASS terrains. No site related impacts identified at this location.
MW5	pH, EC TDS and several cations/anions (SO_4, Ca, Mg and Al) concentrations were outside baseline ranges or guideline values (Al only).	Localised groundwater quality continues to display some variability in analyte concentrations A review of historic data collated over the monitoring rounds continues to indicate a general trend towards baseline water quality values. As pH stabilises toward more neutral conditions, acid generation is expected to be increasingly buffered. This should reduce the dissolution of minerals within the soil profile and, over time, contribute to lower dissolved ion concentrations in groundwater. A sulfur odour typical of oxidising ASS terrains was noted at this location. Localised impacts continue to be reported at this site.

MW7	pH, TDS, N, and Al were recorded outside of baseline ranges.	Elevated aluminium concentrations are likely associated with the oxidation of sulfide-bearing sediments (e.g. pyrite) under fluctuating REDOX conditions, such as those induced by seasonal groundwater drawdown and rewetting cycles. The reduction in pH created leads to the release of aluminium from aluminium-bearing minerals into the porewaters. No site related impacts identified at this location.

2.2 Monthly Surface Water Monitoring

Monthly surface water sampling (SW01 – SW06) was carried out to assess for impact from site activities on the receiving environment. Monitoring was carried out in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.4 of the Planit Construction Environmental Management Plan (CEMP), which require assessment of the following analytes; physiochemical parameters, nutrient, metals, cation/anion and total recoverable hydrocarbon (TRH).

Surface water monitoring locations are presented in Appendix A and the coordinates (GDA94) of all locations tabulated and presented in Table 1. Tabulated analytical results are presented in Appendix C. Select photos of the surface water sampling programme are presented in Appendix D.

It is noted that over a 24-hour period between the 26th and 27th of June, 26 mm of rain was recorded which triggered a post-rain surface water sampling round. This round was conducted on June 29, with results presented in Appendix C. No significant differences were observed, with results reported being consistent with historical values and all receiving locations displaying results reflective of their upstream locations.

Table 1: Surface Water Monitoring Coordinates

Monitoring Location	Location	Easting	Northing
SW01	Upstream of development - Southern Swale Drain	0556852	6831954
SW02	Upstream of development - Northern Main Drain	0557145	6831963
SW03	Downstream of development - Northern Main Drain	0557411	6831604
SW04	Downstream of development - Southern Swale Drain	0557397	6831429
SW05	Receiving environment - Outlet of Southern Swale Drain	0557992	6830881
SW06	Receiving environment - Outlet of Northern Main Drain	0558257	6831214

2.2.1 Assessment of Analytical Results

An assessment of the monthly analytical results presented in Appendix C, identified the following observations:

Site	Observation	Comments
SW01	Al, Ca, Fe, Pb and Zn were recorded outside of baseline ranges.	This site is located at an upstream location, receiving water from off-site.

Site	Observation	Comments
		Continued increase in vegetation growth/decay causing higher organic matter content within the sample likely increasing analyte concentrations. No site related impacts identified.
SW02	pH, TDS, EC, Na, SO_4, Ca, and K were recorded outside baseline ranges.	All elevated values are typical of the geological (ASS) setting. No site related impacts identified.
SW03	pH, TDS, EC, Na, SO_4, and K were recorded outside of baseline ranges.	This site is located within the Northern Main Drain, downstream of Stage 1 works and SW02. Water quality parameters are consistent with upstream location SW02. No site related impacts observed.
SW04	pH, TDS, EC, TP, and cations/anions (SO_4, Al, Ca, Cu, Fe, Mg and Ni) were outside baseline ranges.	This site is located downstream of Stage 1 works, within the Southern Swale Drain. Water quality parameters are consistent with upstream location SW01 with the exception of metals concentrations which are slightly elevated in reference to the upstream site. These elevated values are likely to be attributed to metals mobilisation during previous acidification events (seasonal lowering of water table) that are subsequently flushed during rainfall events. Water observed to be very turbid due to shallow profile and decaying vegetation. No site related impacts identified.
SW05	All parameters were recorded within baseline ranges.	No site related impacts observed.
SW06	pH, N and cation/anions (Al, Fe, Zn) were recorded outside ANZG default guideline values (95th percentile for slightly disturbed Freshwater Ecosystems).	Water quality appears relatively consistent with upstream location SW05. No site related impacts observed.

3 RAINFALL

During this monitoring period (23/06/2026 – 14/07/2026), 91.4 mm of rain was recorded in the area (Byron Bay, Cape Byron Lighthouse, Bureau of Meteorology).

4 CONCLUSION & RECOMMENDATIONS

4.1 Conclusion

Monitoring results indicate that impacts associated with exposure of acid sulfate soils (ASS) and vegetation overgrowth at surface water location SW04 (Southern Swale Drain) continues to impact analyte concentrations leading to elevated readings. The cleared sampling zone at SW04 remains effective; however, during periods of low rainfall, the resulting shallow sampling depth can increase turbidity. This occurs as the surface soil layers are disturbed to collect sufficient sample volume for analysis.

Water quality reported at SW03 is noted to be consistent with results reported from the upstream catchment (SW02), inferring no discernible site related impacts.

The monitoring period was characterised by low to moderate rainfall (91.4 mm), which may have influenced observed water quality trends.

Groundwater monitoring results suggest indicators of localised ASS-related impacts are fluctuating in the vicinity of monitoring well locations with the exception of MW3 and MW4, with trend analysis reflecting seasonal groundwater drawdown and rewetting cycles with continued improvements to water quality.

4.2 Recommendations

Based on the findings of this monitoring program, the following recommendations are provided to support ongoing management of site water quality:

- Given that pH across the site is generally within, or above, baseline water quality conditions, no corrective actions are currently warranted.
- Monitor designated sampling location at SW4.
- Continue to monitor signs of ASS oxidation at all MW locations.

APPENDIX A

Figures



Legend

Site Location

0 0.5 1km

Figure 1 – Site Location
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

ENV Solutions
ENVIRONMENTAL | ASBESTOS | REMEDIATION | RESOURCE RECOVERY

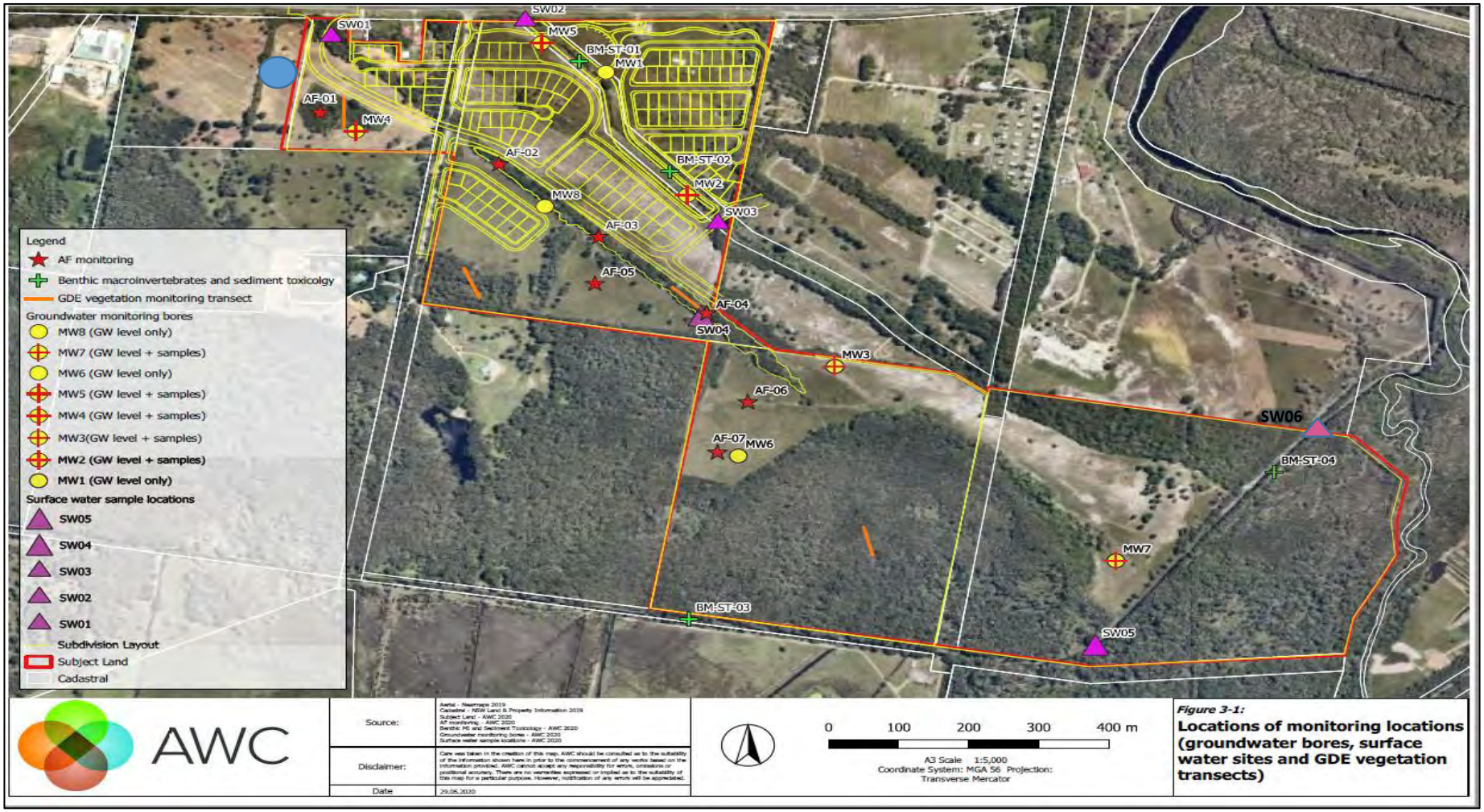


Figure 2 – AWC Monitoring Locations
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

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APPENDIX B

Groundwater Quality Analytical Results

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW2	29/09/22	5.8	54	92	<5	0.12	0.51	14	0.02	0.5	30	< 2	< 0.5	0.8	2.4			0.1
	20/10/22	5.6	100	110	<5	0.09	0.24	13	0.02	2	28	< 2	<0.5	0.8	2.2			0.1
	14/11/22	6.0	100	240	<5	0.07	0.24	19	<0.10	<0.2	30	< 2	1.3	1.4	2.4			0.1
	14/12/22	5.6	110	170	<5	0.02	<0.05	15	<0.10	3.1	29	5	<5	<5	<5			0.3
	18/01/23	4.6	130	76	9.2	0.12	0.09	17	<0.05	2.5	29	7	<5	<5	<5			0.4
	20/02/23	6.0	100	160	5.3	0.09	0.1	27	<0.25	0.25	27	3.7	<0.5	0.7	3.1			0.1
	28/03/23	5.9	140	92	17	0.02	0.12	15	<0.02	<0.2	21	7.2	<5	<5	<5			0.5
	18/04/23	6.2	170	88	<5	0.08	1.2	15	<0.02	7.7	18	5.2	<5	<5	<5			0.3
	18/05/23	5.9	130	76	10	0.09	0.1	13	<0.02	9	28	2.1	0.6	0.9	2.6			0.2
	25/06/23	3.3	4,500	3,000	250	0.26	1.6	45	<0.02	8.1	86	3,800	440	82	7.9			84.4
	24/07/23	6.2	220	150	<5	0.03	0.16	12	<0.2	1	24	12	<0.5	0.8	2.5			1.0
	21/08/23	5.7	120	84	<5	0.08	0.14	15	<0.02	1.7	30	2.3	<5	<5	<5			0.2
	18/09/23	5.9	120	130	11	0.04	0.15	13	<0.02	1.2	25	<2	<0.5	0.9	2.7			0.1
	18/10/23	5.6	110	73	6.6	0.3	0.11	15	<0.02	0.3	25	3	<0.5	0.9	2.8			0.2
	20/11/23	6.0	160	70	<5	0.11	0.17	16	<0.01	0.8	28	4.2	<0.5	0.8	2.6			0.3
	19/12/23	6.3	110	100	<5	0.05	0.48	16	<0.02	2.8	28	2.1	0.5	0.9	2.9			0.1
	20/01/24	6.2	150	88	<5	0.05	0.08	13	<0.02	1.1	26	<2	<0.5	0.8	3			0.1
	26/02/24	5.1	150	340	7.4	0.07	0.09	15	<0.02	8.6	36	14	0.6	1	2.7			0.9
	26/03/24	5.7	180	310	<5	0.07	0.13	16	<0.02	<1	27	6.9	<0.5	0.8	2.7			0.4
	18/04/24	5.7	170	<5	<5	0.05	0.09	15	<0.02	1.8	29	2.6	<0.5	0.9	2.8	3.6	<1	0.17
	20/05/24	5.6	160	120	<5	0.11	0.1	19	<0.02	1	32	2.9	<0.5	0.8	2.8	3.9	<1	0.2
	25/06/24	5.5	170	170	12	0.09	<0.01	21	<0.02	2.7	30	<2	<0.5	0.8	2.3	3.8	<1	0.0
	10/07/24	5.8	150	190	<5	0.03	0.11	15	<0.02	<1	28	2.2	<0.5	0.7	2.7	2.8	<1	0.1
	06/08/24	5.9	170	90	6.9	0.16	0.12	20	<0.1	2.4	25	3.3	<0.5	0.6	2.1	3.4	<1	0.2
	11/09/24	5.7	140	110	<5	0.02	0.83	21	<0.2	<1	28	<2	<0.5	0.7	2.4	2.8	<1	0.0
	09/10/24	5.9	150	210	6.3	0.21	<0.01	17	0.02	<0.2	30	2.8	<0.5	<0.5	2.6	2.4	<1	0.1
	06/11/24	5.7	120	190	6.6	2	0.02	17	-	2.3	33	<2	1	1	3.1	3.6	<1	0.1
	16/12/24	6.0	120	60	8.0	0.05	<0.1	16	<0.2	0.9	30	5.3	0.14	0.8	2.8	3.5	<1	0.3
	14/01/25	6.4	150	94	610.0	0.03	<0.05	15	<0.1	<0.25	31	<2	<0.5	0.6	2.4	2.7	1	0.1
	11/02/25	5.7	170	150	<5	0.04	<0.1	13	<0.02	<0.5	29	2.8	<0.5	0.6	2.4	2.8	<1	0.2
	24/03/25	5.7	120	190	<5	<0.05	0.05	36	0.02	4.2	28	5.8	<0.5	0.7	2.4	2.7	<1	0.2
	08/04/25	5.7	120	220	<5	0.02	0.03	16	0.03	<2	31	4.2	<0.5	0.7	2.6	3.5	<1	0.3
	09/05/25	6.0	150	210	<5	0.01	<0.1	17	<0.2	1.1	29	7	1.3	0.7	2.6	3.2	<1	0.4
	25/06/25	5.6	180	200	<5	0.06	<0.01	15	<0.02	0.8	33	22	<0.5	0.7	2.6	1.7	<1	1.5
	08/07/25	5.5	190	180	<5	0.04	0.13	14	<0.2	1.6	32	24	<0.5	0.8	2.5	1.7	<1	1.7
	14/08/25	5.8	180	160	12.0	0.07	0.11	15	<0.02	1.9	30	33	<0.5	0.8	2.5	0.82	<1	2.2
	11/09/25	5.7	190	100	<5	0.03	0.09	17	<0.02	3.1	33	31	<0.5	0.8	2.6	0.84	<1	1.8
	13/10/25	5.6	170	180	<5	0.16	0.16	18	<0.2	0.6	33	24	<0.5	0.8	2.5	2	<1	1.3
	20/11/25	5.8	180	210	6	0.08	0.25	14	<0.2	0.7	35	8.1	<0.5	0.8	2.6	1.1	<1	0.6
	17/12/25	5.7	170	100	6.8	0.09	0.17	15	<0.2	1	35	9.3	<0.5	0.9	2.5	0.99	<1	0.6
	21/01/26	5.8	160	220	<5	0.04	0.12	16	<0.02	3.5	34	7.1	<0.5	0.9	2.7	2.3	<1	0.4
	20/02/26	5.9	170	190	<5	0.08	0.03	16	<0.02	1.9	31	20	<0.5	0.7	0.7	1.1	<2	1.3
	20/03/26	5.9	170	110	7.90	0.08	0.04	17	<0.02	2.9	29	6.7	<0.5	0.7	2.4	1.3	<1	0.4
	21/04/26	6.05	170	200	<5	0.04	<0.01	16	<0.02	1.6	32	43	<0.5	0.8	2.5	1.1	<1	2.7
	29/05/26	6.3	160	110	<5	0.04	0.06	20	<0.02	1.1	29	23	<0.5	0.6	2.4	0.96	<1	1.2
	23/06/26	5.6	160	170	<5	0.05	0.07	16	<0.02	0.9	32	19	0.6	0.7	2.9	0.93	0.6	1.2
	14/07/26	5.69	150	190	<5	0.02	0.09	18	<0.02	3.4	28	20	<0.5	0.6	2.3	0.98	<1	1.1
MW2 Baseline		**4.2 - 5.7**	**152**	**103**	**483**	**0.45**	**0.338**	**189**	**0.07**	**2.03**	**29.7**	**9.8**	**0.7**	**1.4**	**4.2**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW3	29/09/22	4.2	53	40	370	0.09	0.05	8.8	0.02	0.5	7	<2	< 0.5	1	0.6			0.1
	20/10/22	4.1	64	62	130	0.01	0.2	8	0.02	0.5	7	<2	0.5	0.9	<0.5			0.1
	14/11/22	4.6	57	84	170	0.03	0.27	7.4	<0.02	<0.2	7.1	<2	0.8	0.6	<0.5			0.1
	14/12/22	4.3	43	32	280	<0.01	<0.01	5.2	<0.02	1.1	6	<2	<5	<5	<5			0.2
	18/01/23	4.3	54	28	670	0.03	<0.01	4.1	<0.05	1.4	<5	4.1	<5	<5	<5			1.0
	20/02/23	4.2	36	40	76	0.02	<0.10	6.8	0.06	7.26	7.6	<2	<0.5	1	<0.5			0.1
	28/03/23	4.1	70	44	<5	<0.01	<0.01	7.9	<0.02	0.22	4.8	2.2	<0.5	1	0.6			0.3
	18/04/23	4.6	89	54	110	0.02	0.1	9.6	<0.02	5.7	4.3	4.3	<0.5	0.6	<0.5			0.4
	18/05/23	4.5	60	40	450	0.02	0.04	5.8	<0.02	1	4.8	2.1	0.6	0.8	<0.5			0.4
	15/06/23	4.0	84	48	22	0.27	0.4	5.5	<0.02	1.96	5	63	<0.5	0.8	<0.5			11.5
	24/07/23	4.5	85	59	160	0.04	<0.01	9.5	<0.02	<0.2	5.6	12	<0.5	0.8	<0.5			1.3
	21/08/23	3.9	110	52	100	0.01	<0.01	6.3	<0.02	<0.2	6.6	3	<0.5	1.1	<0.5			0.5
	18/09/23	Dry – no sample collected																
	18/10/23	Dry – no sample collected																
	20/11/23	4.0	96	46	120	0.03	<0.02	7.8	<0.01	0.7	5.8	5	<0.5	0.7	<0.5			0.6
	19/12/23	4.0	46	30	92	<0.01	0.04	13	<0.02	<0.2	9.7	5.6	<0.5	1.3	0.6			0.4
	20/01/24	4.2	70	28	270	0.01	<0.01	5.4	<0.02	0.6	5.5	<2	<0.5	0.8	<0.5			0.2
	26/02/24	4.5	70	50	29	0.01	0.02	10	<0.02	16	5	4.5	<0.5	0.6	<0.5			0.5
	26/03/24	4.1	67	56	110	<0.01	0.06	5.1	<0.02	0.3	4.4	6.1	<0.5	0.8	<0.5			1.2
	18/04/24	3.7	150	< 5	<5	0.05	0.01	4.6	<0.02	0.7	4	12	<0.5	0.8	<0.5	0.99	<1	0.3
	20/05/24	4.5	36	30	26	0.03	<0.01	31	<0.02	0.3	3	3.9	0.6	<0.5	<0.5	1.1	<1	0.1
	25/06/24	3.5	160	90	120	0.17	<0.01	2.8	<0.02	<0.2	3.1	5	<0.5	<0.5	<0.5	0.7	<1	0.1
	10/07/24	4.4	42	40	300	<0.01	<0.01	4.2	<0.02	0.5	3.5	2.5	<0.5	<0.5	<0.5	0.7	<1	0.6
	06/08/24	4.3	45	22	310	0.03	0.01	4.4	<0.02	3.2	2.5	<2	<.5	<0.5	<0.5	1	<1	0.2
	11/09/24	4.2	44	28	720	0.02	<0.1	5	<0.02	<1	3.7	<2	<0.5	<0.5	<0.5	1.3	<1	0.2
	09/10/24	4.2	50	32	430	0.1	<0.01	5.3	<0.02	<0.2	4.1	2.8	2.9	0.6	0.6	0.48	<1	0.2
	06/11/24	4.3	38	20	370	<0.01	0.09	4.8	-	0.9	4.6	<2	0.6	0.7	<0.5	0.84		0.2
	16/12/24	4.3	35	24	63	0.02	<0.01	4.4	<0.02	0.5	3.8	2.2	<0.5	0.7	<0.5	0.75	<1	0.5
	14/01/25	4.5	40	20	38	0.03	0.01	3.3	<0.02	0.5	2.8	<2	<0.5	<0.5	<0.5	0.75	<1	0.3
	11/02/25	4.2	64	36	8.2	<0.01	<0.01	2.9	<0.02	<0.2	3.1	4.4	<0.5	<0.5	<0.5	1.1	<1	1.5
	24/03/25	4.0	79	50	150	0.02	<0.01	13	<0.02	0.9	5.8	3.9	0.8	1.1	<0.5	0.52	1.5	0.3
	08/04/25	4.2	71	38	160	<0.01	0.02	11	<0.02	0.9	7.3	4.1	0.9	1.4	2.6	0.58	1.5	0.4
	09/05/25	4.5	73	74	210	<0.01	0.02	9.9	<0.02	0.8	7	3.1	0.7	0.9	<0.5	0.74	<1	0.3
	25/06/25	4.5	42	44	170	0.05	<0.01	4.4	<0.02	1.9	5	4.3	<0.5	<0.5	<0.5	1	<1	1.0
	08/07/25	4.5	47	25	670	0.02	0.03	4.5	0.03	0.6	4.9	2.5	<0.5	<0.5	<0.5	1	<1	0.6
	14/08/25	4.8	34	38	550	0.06	0.06	3.8	0.02	5.7	3.6	4	<0.5	<0.5	<0.5	0.5	<1	1.0
	11/09/25	4.6	42	28	2,500	0.02	0.3	4.7	0.11	2.1	4.7	3.5	<0.5	<0.5	<0.5	0.49	<1	0.7
	13/10/25	Dry – no sample collected																
	20/11/25	Dry – no sample collected																
	17/12/25	Dry – no sample collected																
	21/01/26	Dry – no sample collected																
	20/02/26																	
	20/03/26	4.2	81	50	780	0.8	<0.1	10	<0.02	<0.02	5.1	<2	<0.5	1.6	<0.5	0.63	<1	0.2
	21/04/26	Dry – no sample collected																
	29/05/26	5.17	66	36	290	0.09	<0.1	9.6	<0.02	0.7	6.4	8.6	0.6	0.8	0.5	0.43	<1	0.2
	23/06/26	4.7	51	61	130	0.1	<0.01	6.6	<0.02	0.8	8.5	7.7	0.6	0.6	0.9	0.73	0.8	0.3
	14/07/26	4.5	41	28	52	0.04	0.01	5.9	<0.02	0.7	4.7	<2	<0.5	<0.5	<0.5	0.47	<1	0.3
MW3 Baseline		**4.0 - 5.3**	**206**	**140**	**5223**	**1.57**	**0.294**	**121**	**0.167**	**4.14**	**26.4**	**13.4**	**3.8**	**5.3**	**3.1**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW4	29/09/22	4.5	100	88	350	0.03	0.16	22	0.1	1.5	19	<2	3.6	3.7	0.9			0.0
	20/10/22	4.5	110	100	69	0.02	0.78	20	0.04	1	14	<2	3.9	2.1	<0.5			0.1
	14/11/22	4.2	130	340	16	0.01	0.13	30	<0.10	7	22	5	2.6	4.8	1.1			0.2
	14/12/22	4.2	140	140	60	<0.01	<0.05	23	<0.10	3	21	7.8	<5	<5	<5			0.3
	18/01/23	5.7	170	110	170	0.02	0.16	26	<0.50	2.4	20	6.6	<5	<5	<5			0.3
	20/02/23	3.9	87	110	31	0.04	<0.05	15	0.28	3.88	15	5.8	3.5	5.4	0.9			0.4
	28/03/23	4.7	180	120	190	0.04	0.08	28	<0.02	22	18	6	8.8	5.1	<5			0.2
	18/04/23	3.7	500	280	340	0.11	0.07	27	<0.02	0.9	19	130	3.4	5	<0.5			4.8
	18/05/23	5.4	110	72	70	0.03	<0.01	14	<0.02	2.89	11	10	5.7	3.7	<0.5			0.7
	15/06/23	3.8	200	150	130	1.4	0.29	29	<0.02	0.9	21	12	<5	6	<5			0.4
	24/07/23	4.1	170	94	58	0.03	<0.1	24	<0.2	1	20	17	2.8	6.2	0.6			0.7
	21/08/23	3.8	200	120	75	0.03	0.07	18	0.65	1.76	15	3.6	2	5	<0.5			0.2
	18/09/23	3.8	160	86	21	0.02	0.11	19	0.02	1.1	17	10	1.5	4.1	<0.5			0.5
	18/10/23	3.8	190	110	31	0.08	0.08	25	<0.02	0.9	18	9.3	1.7	4.5	0.5			0.4
	20/11/23	4.4	160	870	28	0.05	0.1	22	<0.01	2.2	15	5.8	3.3	4	0.7			0.3
	19/12/23	4.0	190	130	27	0.03	0.41	38	<0.02	1.5	22	13	3.3	7.8	1			0.3
	20/01/24	4.2	170	120	27	0.01	0.02	24	<0.02	1.2	17	2.9	5.4	5.1	<0.5			0.1
	26/02/24	3.6	290	190	96	0.03	0.07	27	<0.02	6.9	17	38	10	4.1	<0.5			1.4
	26/03/24	5.6	150	140	18	0.02	0.58	25	<0.02	1.1	15	7	9.3	3.8	<0.5			0.3
	18/04/24	4.3	140	90	12	0.02	0.04	17	<0.02	24	13	6.7	3.2	3.6	<0.5	1.1	2.9	0.4
	20/05/24	5.9	200	180	9.4	0.01	0.83	15	<0.02	1.1	10	5.6	9.6	2.1	<0.5	1.5	6.4	0.4
	25/06/24	4.2	120	100	33	0.1	<0.01	15	<0.02	1.4	9.1	2.3	3.5	2.2	<0.5	1.7	<1	0.2
	10/07/24	6.3	79	46	16	0.02	0.12	8.7	<0.02	1.4	6.4	4	9.7	1	<0.5	0.55	<1	0.5
	06/08/24	4.4	170	100	24	0.02	0.12	26	<0.02	2.4	12	5.5	1.5	3.2	<0.5	0.86	<1	0.2
	11/09/24	5.2	110	74	27	0.02	0.14	21	<0.02	0.6	12	2.5	7.2	2.9	<0.5	1.3	<1	0.1
	09/10/24	4.1	150	140	190	0.1	0.07	25	0.03	0.9	15	6.2	2.9	4	0.7	1.2	<1	0.2
	06/11/24	4.4	130	180	40	0.51	0.04	22	-	1.9	15	2.3	4.7	4.8	<0.5	1.4	3.4	0.1
	16/12/24	5.7	80	70	<5	0.02	<0.1	18	<0.2	1	11	4.1	8.1	3	<0.5	0.99	7.2	0.2
	14/01/25	4.1	180	120	86	0.02	1.3	26	<0.02	1.2	14	2.4	4.4	3.8	<0.5	1.6	<1	0.1
	11/02/25	4.1	170	150	<5	0.01	<0.1	25	<0.02	<0.5	16	3.1	2.5	4.8	<0.5	1.8	<1	0.1
	24/03/25	5.0	110	84	39	<0.05	0.04	22	0.02	5	13	7.6	4.9	3.4	<0.5	0.85	5.8	0.3
	08/04/25	5.2	90	130	22	<0.01	0.03	16	<0.02	1	10	3.7	6.9	2.7	<0.5	0.58	12	0.2
	09/05/25	6.0	110	140	45	-	-	14	<0.2	-	8.7	2.7	11.0	2	<0.5	0.8	14	0.2
	25/06/25	5.4	98	140	130	0.06	0.01	12	0.2	1.6	8.8	8.2	8.6	1.6	<0.5	0.98	8.8	0.7
	08/07/25	5.0	110	100	300	0.01	0.23	15	<0.2	<0.5	11	9.4	5.7	2.4	<0.5	1.7	3.4	0.6
	14/08/25	5.7	110	150	600	0.11	0.12	15	0.04	4.7	9.6	4.3	10.0	2	<0.5	0.64	<1	0.3
	11/09/25	4.4	140	89	290	0.02	0.15	25	0.07	4.2	15	7.3	4.0	3.5	0.9	1.1	3.6	0.3
	13/10/25	4.3	160	210	120	0.11	0.42	30	<0.2	<2	18	2.8	2.9	4.5	0.8	2.2	1.3	0.1
	20/11/25	4.2	160	220	140	0.06	0.22	22	<0.2	1.1	16	2.2	2.7	4.1	0.6	1.2	2.3	0.1
	17/12/25	4.1	170	110	170	0.02	<0.1	26	<0.2	1.9	20	2.9	1.4	5.6	0.9	1.1	1.3	0.1
	21/01/26	4.5	120	190	370	0.25	0.04	14	0.03	3.5	12	5.1	4.9	3.4	<0.5	1.5	3.3	0.4
	20/02/26	4.1	280	290	200	0.1	<0.1	28	<0.2	1.8	24	42	5.8	11	0.8	0.99	5.9	1.5
	20/03/26	5.1	270	170	130	0.13	<0.1	23	<0.2	2.8	20	19	16	7.9	<0.5	0.74	21.6	0.8
	21/04/26	4.99	300	230	110	0.04	<0.01	24	<0.02	1.5	19	86	6.3	8.2	<0.5	0.87	7.2	3.6
	29/05/26	4.8	180	150	210	0.04	<0.1	23	<0.02	1.9	13	23	9.6	4.2	<0.5	0.82	11.7	1.0
	23/06/26	4.7	160	170	150	0.08	0.02	23	<0.02	2.4	17	13	7.3	4.5	0.9	0.85	8.6	0.6
	14/07/26	5.52	120	170	31	<0.01	<0.01	16	<0.02	<1	10	5.8	11	2.8	<0.5	0.69	15.9	0.4
MW4 Baseline		**4.0 - 5.8**	**890**	**605**	**1220**	**0.43**	**1.392**	**199**	**0.185**	**4.36**	**146.3**	**19.2**	**11.3**	**15.6**	**5.4**	**<1.0***	**<1***	**<0.5***

Harvest Estate
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Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW5	29/09/22	4.5	59	68	630	0.13	0.41	18	0.02	6.33	14	<2	2	3	0.6			0.1
	20/10/22	4.4	75	82	92	0.02	0.1	15	0.02	0.5	12	<2	2	2	0.5			0.1
	14/11/22	4.6	120	270	150	0.08	0.52	29	<0.10	7.8	26	<2	5	6	1.4			0.0
	14/12/22	4.5	150	150	230	0.02	<0.060	29	<0.05	11	24	10	<5	<5	<5			0.3
	18/01/23	2.8	1,600	1,100	480	0.05	1.7	43	<0.05	5.7	49	7	90	72	<5			0.2
	20/02/23	2.6	2,700	3,200	310	0.03	4.2	27	<0.05	3.2	47	750	390	76	7.8			27.8
	28/03/23	3.0	5,200	3,700	130	0.02	5.9	28	<0.02	11	34	1,100	440	57	7.1			39.3
	18/04/23	2.9	3,800	5,100	300	0.01	4	44	<0.02	4	49	3,800	380	120	4.7			86.4
	18/05/23	3.4	3,100	3,400	150	<0.01	<0.01	15	<0.02	4.9	23	2,200	240	31	4.2			146.7
	15/06/23	2.9	3,000	1,800	640	0.3	2.9	28	<0.02	2.66	64	2,100	410	130	6.5			75.0
	24/07/23	5.5	2,800	1,600	6	0.07	0.19	1,400	<0.2	0.5	450	380	25	54	25.0			0.3
	21/08/23	3.3	5,200	3,400	13	0.03	4.6	67	<0.02	5	89	2,200	420	200	9.9			32.8
	18/09/23	3.3	4,500	5,800	6.1	0.01	4	51	0.02	3.7	67	4,300	360	140	7.9			84.3
	18/10/23	3.2	4,700	4,900	96	0.03	1.3	58	<0.02	2.1	68	710	380	130	7.3			12.2
	20/11/23	2.8	5,900	7,500	29	0.06	2.7	55	<0.01	11	60	6,600	310	100	6.8			120.0
	19/12/23	2.9	3,100	2,700	230	0.01	4.6	80	<0.02	5	80	3,500	290	86	6.9			43.8
	20/01/24	3.2	4,900	6,600	74	0.03	<0.01	52	<0.02	4.5	68	1,000	370	84	7.9			19.2
	26/02/24	2.6	3,400	4,500	180	0.03	0.59	25	<0.02	5.4	51	3,000	290	46	4.0			120.0
	26/03/24	3.2	4,400	3,500	17	0.02	1.8	140	<0.02	2.5	54	11,000	360	77	6.0			78.6
	18/04/24	3.3	4,200	2,200	39	<0.01	0.02	49	0.05	5.1	50	3,300	310	47	4.0	210	1.5	67.3
	20/05/24	3.4	3,100	1,600	8.8	0.03	3.1	53	<0.02	2.9	27	2,900	200	22	2.8	140	1.42	54.7
	25/06/24	3.2	4,100	2,700	310	0.03	<0.01	76	<0.02	7.2	75	1,400	290	60	4.3	320	<1	18.4
	10/07/24	3.5	2,300	2,600	49	0.02	<0.01	14	<0.02	3.9	20	1,900	240	20	2.4	130	<1	135.7
	06/08/24	3.3	170	3,500	14	0.19	4.6	62	<0.02	7.7	56	3,600	310	54	4.2	250	<1	58.1
	11/09/24	3.5	1,700	1,000	38	<0.01	3.9	27	<0.2	4.9	27	750	290	29	3.2	94	<1	27.8
	09/10/24	3.5	1,300	930	46	0.03	<0.01	27	<0.02	1.5	22	870	120	17	1.6	35	<1	32.2
	06/11/24	3.3	2,000	1,300	31	<0.01	4.8	44	-	5	59	680	300	62	4.9	90	3.33	15.5
	16/12/24	3.2	1,800	1,100	53	0.02	21	32	<0.2	2.8	25	980	180	21	2.4	35	5.1	30.6
	14/01/25	3.7	1,600	1,400	190	<0.01	1.3	19	<0.02	2.1	16	320	210	16	1.8	25	8.4	16.8
	11/02/25	3.5	2,000	1,700	69	0.01	2.6	160	<0.02	14	110	860	110	50	2.8	56	1.96	5.4
	24/03/25	3.6	1,000	890	38	<0.05	0.06	20	<0.02	3.3	14	570	140	8.5	1.7	17	8.24	28.5
	08/04/25	3.7	790	700	73	<0.01	0.85	36	<0.02	5.2	42	390	86	16	<0.5	13	6.6	10.8
	09/05/25	3.7	1,300	1,200	200	<0.01	1.2	87	<0.2	3.3	24	470	87	11	1.5	9.6	9.06	5.4
	25/06/25	3.7	1,300	840	140	0.21	1.5	26	<0.02	2	18	580	140	17	1.7	17	8.3	22.3
	08/07/25	4.0	720	480	170	<0.010	0.81	21	<0.2	5.4	20	280	58	10	0.9	11	5.3	13.3
	14/08/25	3.8	530	300	230	0.02	0.55	19	<0.02	5.5	11	230	28	4.3	0.5	4.5	6.2	12.1
	11/09/25	3.8	630	430	110	<0.01	0.73	41	0.04	14	35	240	33	9.7	1.3	4.4	7.5	5.9
	13/10/25	4.0	1,200	970	260	0.11	2.8	120	<0.2	<2	76	420	68	32	2.2	13	5.2	3.5
	20/11/25	3.6	1,400	1,000	59	0.05	2.4	64	<0.02	2.4	43	270	83	34	2	13	6.4	4.2
	17/12/25	3.7	1,300	650	290	0.02	2	120	<0.2	<10	19	180	83	11	<0.5	10	8.3	1.5
	21/01/26	3.8	1,000	980	300	0.12	1.8	49	<0.02	7.3	35	200	42	29	1.7	13	3.2	4.1
	20/02/26	3.7	1,500	1,500	280	0.08	3	46	<0.2	8.3	58	700	76	65	3.3	12	6.3	15.2
	20/03/26	3.7	560	330	38	0.03	0.52	33	0.03	3.1	14	62	22	7.6	0.9	11	2.0	1.9
	21/04/26	4.5	870	590	15	0.05	1.8	34	<0.02	2.9	27	400	28	23	1.8	4	15.6	11.8
	29/05/26	5.4	300	170	26	0.03	0.24	16	<0.02	1.5	16	94	12	7.8	0.9	2.3	13.3	5.9
	23/06/26	3.9	580	380	86	0.04	0.87	37	<0.02	3.2	28	190	20	15	1.9	4.8	10.5	5.1
	14/07/26	4	490	450	40	0.04	0.95	22	<0.02	1.9	21	200	21	15	1.1	4.9	19.1	9.1
MW5 Baseline		**4.3 - 5.5**	**191**	**130**	**3003**	**0.97**	**13.4**	**82**	**0.117**	**13.4**	**27.2**	**8.3**	**6**	**8.4**	**5.4**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW7	29/09/22	4.6	26	40	190	0.1	0.3	8.5	0.02	2.5	8.5	<2	1	0.9	0.6			0.1
	20/10/22	4.5	86	70	120	0.01	0.4	12	0.04	2.9	8.5	<2	1.7	1.7	0.5			0.1
	14/11/22	4.5	44	170	<100	0.03	0.01	9.7	<0.10	<2.00	9.7	<2	1.9	1.4	1.4			0.1
	14/12/22	4.6	56	92	23	0.04	<0.10	7.5	<0.20	11	8.7	2.5	<5	<5	<5			0.3
	18/01/23	4.4	63	32	390	0.09	<0.05	7.5	<0.025	2	11	31	<5	<5	<5			4.1
	20/02/23	4.1	87	60	30	0.02	<0.05	9.1	0.42	4.9	5.8	5.7	1.4	1.9	1.1			0.6
	28/03/23	4.5	160	94	18	0.02	0.02	21	<0.02	4.4	12	66	2	2	0.6			3.1
	18/04/23	4.9	150	58	7.4	<0.01	0.11	11	<0.02	<0.20	9.8	120	1.9	0.8	<0.5			10.9
	18/05/23	4.9	78	56	130	0.03	<0.01	11	<0.02	0.89	9.3	9.3	1.4	0.9	<0.5			0.8
	15/06/23	4.6	77	50	30	0.28	0.25	11	<0.02	<0.20	9.2	62	<5	<5	<5			5.6
	24/07/23	5.1	140	100	90	0.12	<0.1	10	<0.2	1	8.5	14	1.9	1.4	0.9			1.4
	21/08/23	5.3	67	34	29	0.08	0.06	8.4	<0.02	0.8	9	45	1.8	1.7	0.8			5.4
	18/09/23	5.1	57	78	25	<0.01	0.07	9.6	<0.02	0.8	9.4	83	1.6	2	0.8			8.6
	18/10/23	5.2	61	46	10	0.04	0.1	11	<0.02	<0.2	10	160	1.6	2.1	0.8			14.5
	20/11/23	4.1	210	64	13	0.04	<0.02	8.4	<0.01	2.2	8.1	280	2.5	2.2	0.7			33.3
	19/12/23	4.6	91	62	11	0.03	0.09	19	<0.02	0.7	11	5.6	4.4	2.3	0.9			0.3
	20/01/24	4.2	170	130	34	0.01	0.09	21	<0.02	0.3	15	160	2.8	1.4	<0.5			7.6
	26/02/24	4.0	210	190	23	0.03	0.51	44	<0.02	5.8	24	7.5	3.6	2.1	0.5			0.2
	26/03/24	4.4	320	100	22	0.02	0.18	320	<0.02	<1	13	590	1.6	0.9	0.9			1.8
	18/04/24	4.3	100	98	17	0.02	0.07	8.9	<0.02	3	9	380	1.4	1.2	<0.5	1.7	<1	42.7
	20/05/24	4.4	77	56	11	0.05	0.38	6.4	<0.02	1.2	5.4	170	1.3	1	<0.5	2.3	<1	26.6
	25/06/24	4.6	66	36	33	<0.01	<0.01	<0.01	<0.02	0.6	6.7	48	1.1	0.9	<0.5	1.5	<1	0.0
	10/07/24	4.5	74	58	29	<0.01	0.22	6.5	<0.02	2.1	6.2	270	2	1.3	<0.5	0.73	<1	41.5
	06/08/24	4.8	4,600	180	19	0.04	0.06	9.1	<0.02	0.5	5.3	36	1.4	0.9	<0.5	1	<1	4.0
	11/09/24	4.4	75	50	6.4	0.04	<0.1	11	<0.02	1..0	7.1	5.2	1.3	1.1	<0.5	1.4	<1	0.5
	09/10/24	4.3	73	42	71	0.54	<0.01	8	<0.02	1.6	5.8	12	1.3	1.2	<0.5	0.94	<1	1.5
	06/11/24	4.5	59	32	35	0.02	0.03	11	-	1.3	7.8	4.4	1.3	1.4	<0.5	1.6	<1	0.4
	16/12/24	4.3	58	68	29	0.04	<0.1	12	<0.2	1.3	8.5	42	1.6	1.3	<0.5	1.9	<1	3.5
	14/01/25	4.7	63	36	120	0.04	0.02	8.6	0.03	1.3	6.8	7	1.7	1.2	0.5	2.4	1.4	0.8
	11/02/25	4.6	68	70	13	0.07	<0.1	9.2	<0.02	1.2	8.4	2	1.5	1.5	0.8	2.7	<1	0.2
	24/03/25	4.1	0	56	28	<0.05	0.02	15	<0.02	1.8	7.7	43	2.3	1.4	<0.5	1.2	1.91	2.9
	08/04/25	4.4	76	70	14	<0.01	0.03	14	<0.02	<1	8.1	31	2.8	1.1	2.1	1.4	2	2.2
	09/05/25	4.7	81	110	24	<0.01	0.03	13	<0.2	1.2	8.1	28	1.5	0.9	<0.5	1.6	<1	2.2
	25/06/25	4.6	65	70	39	0.07	<0.01	8.3	<0.02	<0.2	6.7	56	1.2	0.8	<0.5	1.2	1	6.7
	08/07/25	4.6	65	44	130	0.02	0.14	7.9	<0.02	<0.5	6.3	37	1.4	0.9	<0.5	2.6	<1	4.7
	14/08/25	4.7	60	70	140	0.06	0.01	8.9	0.04	2.2	5.7	15	0.9	0.5	<0.5	0.93	3	1.7
	11/09/25	4.4	75	51	100	0.03	0.06	12	0.04	1.1	7.2	18	1.8	1.1	0.6	0.86	2.09	1.5
	13/10/25	4.8	66	110	66	0.02	0.12	11	<0.2	<1	7.4	20	2.1	1.5	<0.5	1.3	1.6	1.8
	20/11/25	4.4	84	78	64	0.05	0.12	12	<0.2	1.1	7.8	17	1.9	1.2	<0.5	0.86	2.2	1.4
	17/12/25	4.6	79	10	75	0.04	<0.1	13	<0.2	3.1	9	11	2.1	1.7	0.5	1	2.1	0.8
	21/01/26	4.3	87	110	110	0.1	0.02	11	0.02	4.3	8.2	4.4	1.9	1.4	<0.5	2	1.0	0.4
	20/02/26	4.8	71	68	120	0.18	0.49	13	<0.2	1.5	8.3	70	2	1.8	1	1.2	1.7	5.4
	20/03/26	4.4	91	60	50	0.1	<0.1	13	<0.02	<0.02	8	42	1.6	1.4	<0.5	1	1.6	3.2
	21/04/26	4.98	110	100	71	0.07	<0.01	15	<0.02	2.70	9.5	7.3	2.5	1.5	<0.5	1.9	1.3	0.5
	29/05/26	4.12	150	94	68	0.03	0.01	29	<0.02	1.20	12	18	2	1.7	<0.5	1.2	1.7	0.6
	23/06/26	4	140	100	48	0.04	<0.01	27	<0.02	1.7	16	21	2	1.7	0.9	5	0.4	0.8
	14/07/26	4.45	85	150	13	0.03	<0.01	15	<0.02	4.7	9.7	4.1	1.2	0.9	<0.5	1.3	0.9	0.3
MW7 Baseline		**4.6 - 5.6**	**147**	**100**	**3140**	**0.71**	**0.471**	**172**	**0.048**	**4.15**	**31**	**7.3**	**3.4**	**2.2**	**3.1**	**<1.0***	**<1***	**<0.5***

Note: * derived from Interim Target Criteria within BCPoM, GWMP and AFMP (AWC 2020)

APPENDIX C

Surface Water Quality Analytical Results

Surface Water Analytical Results

ENV ASBESTOS | REMEDIATION | RESOURCE RECOVERY

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW01	29/09/2022	6.9	180	11	3.1	140	0.47	<0.01	14	<0.02	5.2	30	3.4	450		0.2
	20/10/2022	6.6	320	30	4.7	400	0.03	0.03	22	<0.02	<0.02	31	33	43		1.5
	14/11/2022	6.0	780	4,900	0.2	920	3.1	6.9	25	<0.02	14	200	3.7	67		0.1
	14/12/2022	4.5	800	210	3.6	1,100	0.15	0.05	24	<0.10	23	54	560	88		23.3
	18/01/2023	6.3	380	120	4.7	25	0.047	0.087	24	<0.02	5.2	40	180	25		7.5
	20/02/2023	3.4	1,100	32	3.8	1,300	0.42	0.37	28	<0.02	8.9	57	350	<5		12.5
	28/03/2023	3.0	2,000	100	7.7	3,000	<0.01	2.1	29	<0.02	1.29	47	880	<5		30.3
	18/04/2023	7.7	130	33	8.6	320	0.06	0.01	24	<0.02	8.4	16	14	8.8		0.6
	18/05/2023	7.4	130	6	4.4	250	0.21	0.14	11	<0.02	0.9	14	10	<5		0.9
	15/06/2023	3.2	1,900	6.8	7.6	2,700	0.03	1.6	59	<0.02	2.1	61	1,500	<5		25.4
	24/07/2023	7.9	84	<5	8.4	140	0.11	<0.01	6.4	<0.02	0.3	13	4	<5		0.6
	21/08/2023	6.9	120	25	3	190	0.34	0.01	5.6	<0.02	0.4	18	<2	<5		<0.5
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	No surface water located at monitoring site – no sample collected														
	20/11/2023	7.2	230	6.5	2.9	480	2	<0.02	56	<0.01	<0.2	43	160	<5		2.9
	19/12/2023	No surface water located at monitoring site – no sample collected														
	23/01/2024	7.0	160	130	2.2	160	3.7	0.06	14	<0.02	1.3	21	69	<5		4.9
	26/02/2024	6.2	160	47	7.2	200	0.35	<0.01	9	<0.02	3	12	59	<5		6.6
	26/03/2024	6.9	26	7.5	8.3	78	0.25	<0.01	6.7	<0.02	0.4	7.5	3.4	<5		0.5
	18/04/2024	7.2	220	23	0.5	390	0.06	0.24	25	<0.02	0.7	32	110	180	13	4.4
	20/05/3034	6.7	160	<5	3.8	260	0.16	0.01	13	<0.02	0.5	19	33	56	231	2.5
	25/06/2024	6.3	440	15	5.9	710	<0.01	<0.01	12	<0.02	<0.2	23	100	5.7	15	8.3
	10/07/2024	7.0	120	29	5.5	240	0.07	0.01	14	<0.02	1.1	17	6.9	39	12	0.5
	6/08/2024	4.0	760	19	7.6	950	0.08	<0.01	14	<0.02	1.3	23	470	<5	12	33.6
	15/08/2024	6.7	64	<5	7.3	100	0.04	0.01	6.1	<0.02	<0.2	7.2	5.5	<5	<10	0.9
	11/09/2024	6.9	120	250	0.2	190	1.1	0.11	8.9	<0.02	4.1	13	2.6	<10	17	0.3
	24/09/2024 - Investigation	6.3	170	-	-	280	-	-	-	-	-	-	-	-	-	<0.5
	9/10/2024	7.4	190	11	8.9	290	0.38	0.01	14	<0.02	<0.2	20	3.4	<5	<10	0.2
	6/11/2024	7.1	92	400	0.4	140	13	<0.01	8.1	<0.02	2.8	12	2.2	<5	<10	0.3
	16/12/2024	6.9	90	190	3.3	140	0.36	<0.01	8.2	<0.02	0.02	11	5.4	170	<10	0.7
	14/01/2025	6.7	48	7.2	3.5	89	0.14	<0.1	4.8	<0.02	0.6	5.4	<5	<5	<10	<0.5
	11/02/2025	7.5	390	<5	8.3	620	0.06	0.03	110	<0.02	0.8	16	16	12	<10	0.1
	24/03/2025	6.9	58	<5	8.6	64	0.32	0.02	6.1	<0.02	0.8	7.9	2.4	48	<10	0.4
	31/03/2025	7.1	170	5.8	9.2	200	0.14	<0.01	14	<0.02	1.1	15	6.4	<5	<10	0.5
	8/04/2025	7.2	200	9.4	8.8	230	0.37	0.04	14	<0.02	0.4	18	3.6	<5	<10	0.3
	9/05/2025	7.5	170	<5	-	200	0.2	0.03	10	<0.02	0.8	13	4.5	<5	<10	0.5
	25/06/2025	6.9	130	24	7.5	190	1.1	0.07	6.2	<0.02	1.1	12	7.1	12	22	1.1
	8/07/2025	6.9	150	<5	8	260	0.12	0.18	8	<0.02	0.8	16	5	28	34	0.6
	14/08/2025	7.3	140	7.1	6.9	240	0.17	0.03	11	<0.02	1	16	6	<5	15	0.5
	11/09/2025	7.2	150	5.2	3.9	260	0.22	0.01	13	<0.02	1.4	19	5.2	<5	16	0.4
	13/10/2025	7.2	350	14	0.3	520	0.61	0.26	39	<0.02	0.5	58	30	<5	14	0.8
	20/11/2025	7	110	8.9	5.2	200	0.24	0.03	9.1	<0.02	0.7	14	4.5	<5	16	0.5
	17/12/2025	7.2	150	30	6.1	240	0.14	0.19	27	<0.5	1.2	22	9.3	<5	37	0.3
	21/01/2026	6.8	98	30	3.5	170	0.49	0.05	17	0.017	0.6	15	4.9	<0.005	27	0.3
	20/02/2026	6.8	130	22	2.4	230	0.33	0.03	17	< 0.02	1.2	19	8.5	<0.005	<10	0.5
	20/03/2026	6.8	86	37	3.4	150	0.48	0.04	15	<0.02	1.1	11	6.6	0.015	<10	0.4
	21/04/2026	6.7	160	18	4	190	0.58	<0.01	22	<0.02	<0.4	21	2.7	<0.005	12	0.1
	29/05/2026	7.41	80	35	3.6	150	0.49	<0.01	9.9	0.33	1.1	9.2	14	0.086	16	1.4
	23/06/2026	7	220	39	3.5	290	0.35	0.03	16	<0.02	1.1	23	6	0.07	12	0.4
	29/06/2026	7	76	8.7	4.6	160	0.16	0.02	12	<0.02	16	13	5.4	0.015	<10	0.5
	14/07/2026	6.85	130	<5	3.6	270	0.1	0.08	21	<0.02	<0.2	17	6.9	0.041	<10	0.3
SW01 Baseline		**6.2 – 7.0**	**291**	**73**	**-**	**428**	**3.52**	**0.164**	**118**	**0.039**	**3.5**	**51**	**9**	**768**		**<0.5**

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW01	29/09/2022	1.5	0.003	<0.0002	22	0.002	0.32	2.7	0.005	14	<0.0001	0.015	3	0.071	<1
	20/10/2022	0.66	2	<0.0002	24	0.002	0.16	2.4	0.003	9.1	<0.0001	0.009	2.9	0.042	<1
	14/11/2022	130	1.3	<0.02	280	<0.10	1	130	0.1	73	<0.001	0.3	<50	4.7	<1
	14/12/2022	22	0.0016	<0.002	180	0.014	0.2	1.6	0.015	43	<0.001	0.077	6.8	0.68	<1
	18/01/2023	0.7	<0.010	<0.002	<2	<0.010	<0.01	3.2	<0.01	13	<0.01	<0.01	<5	<0.05	<1
	20/02/2023	37	0.027	0.0004	170	0.019	0.07	0.049	0.049	57	0.002	0.16	6.3	0.35	<1
	28/03/2023	150	0.002	0.0008	290	0.002	0.003	36	0.003	38	0.0001	0.46	5.1	0.97	<1
	18/04/2023	0.53	0.002	<0.0002	13	0.005	0.005	0.002	0.002	2.7	<0.0001	0.002	0.8	0.15	<1
	18/05/2023	0.16	0.002	<0.0002	23	<0.001	0.002	0.24	<0.001	7.5	<0.0001	0.002	2.3	0.02	<1
	15/06/2023	120	0.002	0.0003	350	<0.001	0.004	15	0.003	42	<0.0001	0.24	8.1	0.35	<1
	24/07/2023	0.08	0.003	<0.0002	13	<0.001	0.003	0.38	0.002	4.1	<0.0001	0.002	0.8	0.037	<1
	21/08/2023	0.52	0.001	<0.0002	17	0.001	0.002	1.2	0.001	6.3	<0.0001	0.003	<0.5	0.014	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	No surface water located at monitoring site – no sample collected													
	20/11/2023	0.13	<0.001	<0.0002	26	<0.001	0.002	5.7	<0.001	7.9	<0.0001	0.003	2.2	0.006	<1
	19/12/2023	No surface water located at monitoring site – no sample collected													
	23/01/2024	<0.05	<0.001	<0.0002	30	0.001	<0.001	1.8	<0.001	10	<0.0001	<0.001	3.4	0.006	<1
	26/02/2024	<0.005	<0.001	<0.0002	14.00	<0.001	<0.001	0.93	<0.001	4.60	<0.0001	<0.001	1.70	0.05	<1
	26/03/2024	0.11	<0.001	<0.0002	7.4	<0.001	0.002	0.38	<0.001	2	<0.0001	<0.001	1.5	0.013	0.01
	18/04/2024	0.06	<0.001	<0.0002	32	<0.001	<0.001	1.4	<0.001	9.5	<0.0001	0.002	2	<0.005	0.00
	20/05/3034	0.06	<0.001	<0.0002	26	<0.001	0.001	0.86	<0.001	7	<0.0001	0.002	1.7	0.014	0.00
	25/06/2024	0.69	<0.001	<0.0002	94	<0.001	0.002	0.28	<0.001	15	<0.0001	0.008	2.3	0.055	0.01
	10/07/2024	0.25	0.002	<0.0002	28	<0.001	0.003	2.1	<0.001	6.6	<0.0001	0.002	2	0.037	0.01
	6/08/2024	0.85	<0.001	<0.0002	120	<0.001	0.004	1.3	<0.001	14	<0.0001	0.021	2.3	0.1	0.01
	15/08/2024	0.24	<0.001	<0.0002	12	<0.001	0.004	0.33	<0.001	2.8	<0.0001	0.001	1.2	0.027	0.02
	11/09/2024	9.1	0.009	0.0005	36	0.023	0.11	49	0.031	8.1	0.0001	0.019	5.2	0.72	0.25
	24/09/2024 - Investigation	-	<0.001	<0.001	-	<0.001	0.001	-	<0.001	<0.0001	-	0.004	-	0.04	<1
	9/10/2024	0.14	0.001	<0.0002	27	<0.001	0.002	1.7	<0.001	8.1	<0.0001	0.002	1.5	0.017	0.01
	6/11/2024	1.2	0.004	<0.0002	26	0.005	0.011	54	0.003	6.1	<0.0001	0.004	2.8	0.041	0.05
	16/12/2024	2.4	0.004	<0.0002	22	0.006	0.019	38	0.006	4.5	<0.0001	0.004	2.8	0.092	0.11
	14/01/2025	0.15	<0.001	<0.0002	8.8	0.001	0.003	0.34	<0.001	1.8	<0.0001	0.001	0.6	0.018	0.02
	11/02/2025	0.58	0.002	<0.0002	13.00	<0.001	<0.001	6.10	<0.001	3.50	<0.0001	0.002	1.00	0.015	0.04
	24/03/2025	0.13	<0.001	<0.0002	5.20	<0.001	0.002	0.35	<0.001	1.40	<0.0001	<0.001	1.20	0.037	0.03
	31/03/2025	0.1	0.002	<0.0002	22	<0.001	0.003	1.2	<0.001	6.8	<0.0001	0.002	2.4	0.066	0.00
	8/04/2025	<0.05	0.002	<0.0002	29	<0.001	<0.001	2.2	<0.001	8.1	<0.0001	0.002	2.4	0.008	<1
	9/05/2025	0.27	<0.001	<0.0002	20	<0.001	0.002	1.6	<0.001	5.9	<0.0001	0.002	1.7	0.03	0.01
	25/06/2025	0.11	<0.001	<0.0002	19	<0.001	0.002	0.72	<0.001	4.4	<0.0001	0.002	<0.5	0.032	0.01
	8/07/2025	0.05	<0.001	<0.0002	26	<0.001	0.002	0.49	<0.001	7.2	<0.0001	0.002	<0.5	0.024	0.00
	14/08/2025	0.14	<0.001	<0.0002	26	<0.001	0.003	0.69	<0.001	6.8	<0.0001	0.002	1.8	0.019	0.01
	11/09/2025	0.05	0.001	<0.0002	24	<0.001	0.002	1.5	<0.001	6.8	<0.0001	0.002	1.6	0.014	0.00
	13/10/2025	0.07	0.002	<0.0002	37	<0.001	0.01	0.69	<0.001	10	<0.0001	0.005	4.8	0.055	0.00
	20/11/2025	<0.05	0.001	<0.0002	19	<0.001	0.002	0.0015	0.001	4.7	<0.0001	0.002	0.9	0.012	<1
	17/12/2025	0.26	0.001	<0.0002	16	<0.001	0.001	0.89	<0.001	3.8	<0.0001	0.001	1.5	0.017	0.02
	21/01/2026	0.2	<0.001	<0.0002	12	<0.001	3	2.2	<1	2.9	<0.0001	0.001	0.7	0.031	0.02
	20/02/2026	0.23	0.002	<0.0002	18	<0.001	0.003	5	<0.001	4.5	<0.0001	0.003	0.6	0.032	0.01
	20/03/2026	0.83	<0.001	<0.0002	11	<0.001	0.006	3.5	0.002	3	<0.0001	0.002	1.5	0.043	0.08
	21/04/2026	0.1	0.001	<0.0002	10	<0.001	0.005	0.91	<0.001	2.8	<0.0001	<0.001	2.8	0.023	0.01
	29/05/2026	0.4	0.001	<0.0002	13	<0.001	0.005	4.8	<0.001	4	<0.0001	0.002	1.3	0.029	0.03
	23/06/2026	0.75	0.002	<0.0002	29	0.002	0.004	11	0.002	8.4	<0.0001	0.003	2.2	0.22	0.03
	29/06/2026	0.47	0.001	<0.0002	15	0.001	0.005	5.6	0.001	4.3	<0.0001	0.001	1.6	0.03	0.03
	14/07/2026	0.99	0.003	<0.0002	28	0.002	0.007	14	0.003	7.6	<0.0001	0.004	1.6	0.06	0.04
SW01 Baseline		**0.5**	**0.003**	**0.001**	**22**	**0.002**	**0.041**	**1.2**	**0.001**	**16**	**0.0005**	**0.006**	**6**	**0.058**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW01	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	220	220	<100	<100	<20	250	<100	<100	250	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	<50	<50	20	-	<20	<50	100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No surface water located at monitoring site – no sample collected									
	18/10/2023	No surface water located at monitoring site – no sample collected									
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	No surface water located at monitoring site – no sample collected									
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/3034	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Investigation	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	160	160	300	<100	<20	110	300	<100	410	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	17/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	120	<50	<100	<100	110	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	14/07/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW01 Baseline		**60**	**-**	**24**	**100**	**-**	**50**	**130**	**90**	**170**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW02	29/09/2022	6.9	170	8.8	8	160	0.04	0.03	29	<0.02	1.3	27	2.8	22		0.1
	20/10/2022	6.5	120	6.2	8.7	140	0.02	0.01	17	<0.02	<0.20	16	2.9	<5		0.2
	14/11/2022	6.4	150	210	0.1	190	0.18	<0.01	54	<0.02	13	62	18	24		0.3
	14/12/2022	6.3	110	870	0.1	200	0.27	0.05	26	<0.10	2.7	25	29	14		1.1
	18/01/2023	6.6	220	190	0.1	61	0.79	0.049	31	<0.20	21	27	6.2	61		0.2
	20/02/2023	6.5	240	29	4.4	1300	0.023	0.31	26	<0.10	1.9	29	24	<5		0.9
	28/03/2023	4.8	310	370	5.7	370	1.5	0.19	22	<0.02	<0.20	17	92	<10		4.2
	18/04/2023	6.2	300	60	7.3	410	0.05	0.16	32	<0.02	1.38	25	120	<5		3.8
	18/05/2023	6.5	130	39	6	270	0.06	0.09	25	<0.02	<0.2	18	29	<5		1.2
	15/06/2023	6.4	190	25	8.9	280	0.37	0.23	34	<0.02	1.2	25	38	<5		1.1
	21/08/2023	6.1	430	20	5.7	690	0.02	0.5	36	<0.02	1.2	38	75	<5		2.1
	18/09/2023	7.2	180	15	8.1	260	0.06	0.04	31	<0.02	0.8	28	39	<5		1.3
	18/10/2023	6.8	150	11	8.1	240	0.05	0.02	40	<0.02	<0.2	28	13	<5		0.3
	20/11/2023	6.9	180	18	4.9	350	0.07	0.04	37	<0.01	0.3	26	50	<5		1.4
	19/12/2023	6.7	140	15	4.6	240	0.05	0.03	37	<0.02	0.7	29	11	<5		0.3
	23/01/2024	6.8	210	27	9.7	350	0.06	0.02	35	<0.02	0.5	31	25	<5		0.7
	26/02/2024	4.5	140	43	7.1	190	0.05	0.03	9	<0.02	0.6	8.5	65	<5		7.2
	26/03/2024	6.7	44	12	6.8	99	0.07	<0.01	9.5	<0.02	0.5	8.8	8.7	<5		0.9
	18/04/2024	7.6	350	<5	6.4	630	0.03	0.9	93	<0.02	0.6	78	56	<5	<10	0.6
	20/05/2024	6.7	130	27	2.1	210	0.04	0.05	20	<0.02	1.1	18	16	<5	11	0.8
	25/06/2024	6.7	180	9.7	8.8	330	0.03	<0.01	42	0.03	<0.2	35	10	<5	11	0.2
	10/07/2024	7.0	150	8.2	6.1	220	0.01	0.11	22	<0.02	1.9	18	21	<5	<10	1.0
	6/08/2024	6.5	220	8.5	7	280	0.06	0.02	39	<0.02	1.7	24	19	<5	20	0.5
	15/08/2024	6.6	48	<5	7.8	80	0.07	0.01	8	<0.02	<0.2	7	6.9	18	<10	0.9
	11/09/2024	7.1	250	<5	6.1	450	0.02	0.05	90	<0.02	0.3	71	48	<5	<10	0.5
	9/10/2024	7.0	260	<5	8.9	500	0.12	0.03	88	<0.02	0.6	73	35	<5	<10	0.4
	6/11/2024	7.5	300	6.4	6	500	0.07	<0.01	89	<0.02	1	72	34	<5	<10	0.4
	16/12/2024	6.4	200	110	8.8	310	1.1	<0.01	55	<0.02	0.4	11	19	6.6	<10	0.3
	14/01/2025	6.9	170	<5	4.6	340	0.08	<0.01	51	<0.02	0.9	44	7.7	<5	<10	0.2
	11/02/2025	7.1	96	5.6	6.1	150	0.08	<0.01	14	<0.02	1.9	91	3.9	190	<10	0.3
	24/03/2024	3.2	420	7.2	8.6	670	<0.05	0.02	17	<0.02	2.8	17	250	<5	<10	14.7
	31/03/2025	7.2	160	<5	9.8	200	0.14	0.05	14	<0.02	<0.4	16	7	<5	<10	0.5
	8/04/2025	7.2	150	12	6.2	230	0.37	0.03	14	<0.02	0.7	18	3.4	<5	<10	0.2
	9/05/2025	3.9	320	1,100	-	560	1.5	0.23	31	<0.02	2.8	18	150	<20	34	4.8
	25/06/2025	7.1	400	9.4	9.8	580	1.5	0.01	88	<0.03	1.5	74	38	38	14	0.4
	8/07/2025	6.9	300	14	8.4	600	0.34	0.58	96	<0.02	0.9	73	38	19	21	0.4
	14/08/2025	7.2	330	6.1	8.6	600	0.05	0.03	120	<0.02	0.7	85	31	<5	<10	0.3
	11/09/2025	7.0	320	6.1	7.9	530	0.05	0.11	87	<0.02	2.8	69	36	<5	<10	0.4
	13/10/2025	6.9	270	6.3	8.1	470	0.12	<0.01	73	0.11	1.9	60	29	<5	14	0.4
	20/11/2025	6.8	190	11	5.2	300	0.19	0.16	33	<0.02	0.9	30	16	<5	<10	0.5
	16/12/2025	7.0	520	8	7.2	240	0.11	0.13	26	<0.5	<0.5	23	9.1	<5	19	0.4
	21/01/2026	7.3	350	<5	6	680	0.07	<0.01	100	0.1	0.4	85	36	<0.005	15	0.4
	20/02/2026	7	470	<5	3.6	720	0.08	<0.01	130	<0.02	0.5	95	17	<0.005	<10	0.1
	20/03/2026	7	370	6.1	5.6	710	0.1	0.06	130	<0.02	0.8	90	42	<0.005	<10	0.3
	21/04/2026	6.7	100	<5	6.2	170	0.08	0.01	24	<0.02	<0.2	17	3.1	<0.005	11	0.1
	29/05/2026	6.65	280	24	6.6	520	<0.01	0.03	92	0.05	4.8	65	32	<0.005	23	0.3
	23/06/2026	7.1	350	<5	7.9	580	0.03	<0.01	100	<0.02	0.4	81	33	0.0052	<10	0.3
	29/06/2026	7.1	270	<5	7.2	520	0.05	<0.01	89	<0.02	0.9	67	34	<0.005	<10	0.4
	14/07/2026	7.07	370	<5	7.4	590	0.08	0.02	100	<0.02	0.9	76	35	<0.005	<10	0.4
SW02 Baseline		**6.3 – 7.0**	**199**	**495**	**-**	**292**	**1.88**	**0.261**	**161**	**0.06**	**8.6**	**32**	**10**	**182**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW02	29/09/2022	0.42	0.003	<0.0002	19	0.002	0.004	1.5	0.001	5.8	<0.0001	0.002	1.9	0.057	0.02
	20/10/2022	0.22	0.001	<0.0002	12	0.001	0.003	0.62	<0.001	3.4	<0.0001	0.001	1.7	0.032	0.02
	14/11/2022	1.8	0.037	<0.002	47	<0.001	0.015	53	<0.01	11	<0.001	<0.01	<5	0.096	0.04
	14/12/2022	13	0.066	<0.002	38	0.034	0.094	9.7	0.071	5.9	<0.001	0.013	5.1	1	0.34
	18/01/2023	3.3	0.023	<0.002	<2	<0.01	0.015	45	0.014	5.8	<0.001	<0.010	<5	0.15	<1
	20/02/2023	12	0.033	0.0002	38	0.009	0.09	0.013	0.013	11	<0.001	0.018	4.1	0.28	0.32
	28/03/2023	3.4	0.002	0.0003	43	0.002	0.003	2.5	0.001	8.4	<0.0001	0.024	4.1	0.63	0.08
	18/04/2023	0.86	<0.001	<0.0002	20	0.002	0.002	<0.001	<0.001	4	<0.0001	0.006	2.7	0.089	0.04
	18/05/2023	0.72	0.002	<0.0002	17	0.002	0.006	1	0.002	4.3	<0.0001	0.003	2.4	0.081	0.04
	15/06/2023	1.7	0.001	<0.0002	22	0.001	0.004	2.1	0.001	5.5	<0.0001	0.005	1.9	0.037	0.08
	21/08/2023	1.1	<0.001	<0.0002	71	<0.001	<0.001	8	<0.001	16	<0.0001	0.024	5.7	0.057	0.02
	18/09/2023	1.7	0.003	<0.0002	19	0.002	0.004	3	0.002	6.3	<0.0001	0.005	3	0.023	0.09
	18/10/2023	0.88	0.002	<0.0002	17	0.001	0.003	2.2	0.001	5.5	<0.0001	0.002	1.9	0.014	0.05
	20/11/2023	2.3	0.002	<0.0002	19	0.002	0.002	2.6	<0.001	6.7	<0.0001	0.007	1.4	0.032	0.12
	19/12/2023	1.1	0.002	<0.0002	19	0.001	0.001	4.8	<0.001	6.5	0.0002	0.004	2.9	0.012	0.06
	23/01/2024	2.9	0.003	<0.0002	23	0.002	0.001	5.8	<0.001	7.8	<0.0001	0.007	3.3	0.031	0.13
	26/02/2024	1.5	0.001	<0.0002	9.7	0.001	0.003	1.7	<0.001	2.5	<0.0001	0.004	1.4	0.027	0.15
	26/03/2024	0.34	<0.001	<0.0002	6.9	0.001	0.003	0.67	<0.001	1.9	<0.0001	0.001	1.8	0.021	0.05
	18/04/2024	0.09	<0.001	<0.0002	20	<0.001	<0.001	0.39	<0.001	5.4	<0.0001	<0.001	14	0.014	0.00
	20/05/2024	0.71	0.004	<0.0002	19	0.002	0.003	5.6	<0.001	3.8	<0.0001	0.003	3	0.015	0.04
	25/06/2024	1.1	<0.001	<0.0002	21	<0.001	0.001	1.4	<0.001	4.6	<0.0001	0.004	4.5	0.022	0.05
	10/07/2024	1.1	0.002	<0.0002	20	<0.001	0.004	1.2	<0.001	4.2	<0.0001	0.004	2.3	0.047	0.06
	6/08/2024	0.61	0.001	<0.0002	17	0.001	0.002	1.4	<0.001	3.7	<0.0001	0.002	3	0.019	0.04
	15/08/2024	0.31	0.002	<0.0002	8	0.001	0.004	0.37	<0.001	1.5	<0.0001	0.001	1.4	0.038	0.04
	11/09/2024	0.19	<0.001	<0.0002	20	<0.001	0.001	0.31	<0.001	4.8	<0.0001	0.001	14	0.021	0.01
	9/10/2024	0.8	<0.001	<0.0002	23	<0.001	0.001	1.5	<0.001	5	<0.0001	0.003	15	0.032	0.03
	6/11/2024	0.007	0.001	<0.0002	21	<0.001	<0.001	0.7	<0.001	5.8	<0.0001	<0.001	15	0.011	0.00
	16/12/2024	0.05	<0.001	<0.0002	14	<0.001	0.001	0.24	<0.001	3.1	<0.0001	<0.001	9.4	0.008	0.00
	14/01/2025	0.06	<0.001	<0.0002	14	0.001	0.002	0.28	<0.001	2.7	<0.0001	0.001	9.4	0.015	0.00
	11/02/2025	0.82	<0.001	<0.0002	24	<0.001	0.002	4.4	<0.001	4.8	<0.0001	0.005	19	0.058	0.03
	24/03/2024	7.4	<0.001	<0.0002	56	0.002	0.001	22	<0.001	6.9	<0.0001	0.021	1.8	0.097	0.13
	31/03/2025	0.25		<0.0002	23	<0.001	0.003	1.7	<0.001	7	<0.0001	0.002	2.5	0.054	0.01
	8/04/2025	0.1	0.001	<0.0002	29	<0.001	0.001	2.7	<0.001	8.3	<0.0001	0.002	2.3	0.015	0.00
	9/05/2025	2.3	0.007	<0.0002	34	0.005	0.002	140	<0.001	9.1	<0.0001	0.011	2.1	0.077	0.07
	25/06/2025	0.3	<0.001	<0.0002	21	<0.001	0.001	1.1	<0.001	5.4	<0.0001	0.002	14	0.03	0.01
	8/07/2025	0.15	<0.001	<0.0002	19	<0.001	<0.001	0.65	<0.001	5.3	<0.0001	0.001	12	0.018	0.01
	14/08/2025	0.11	<0.001	<0.0002	21	<0.001	<0.001	0.39	<0.001	5.9	<0.0001	<0.001	11	0.012	0.01
	11/09/2025	0.32	0.001	<0.0002	21	<0.001	0.002	1.2	<0.001	5.6	<0.0001	0.001	11	0.016	0.02
	13/10/2025	0.15	0.002	<0.0002	19	<0.001	0.004	0.82	<0.001	5.2	<0.0001	0.002	11	0.054	0.01
	20/11/2025	0.53	0.002	<0.0002	20	0.001	0.002	1.8	0.002	4.9	<0.0001	0.002	3.9	0.021	0.03
	16/12/2025	0.26	<0.001	<0.0002	16	0.002	<0.001	1.5	0.001	4	<0.0001	0.002	1.6	0.01	0.02
	21/01/2026	<0.05	<0.001	<0.0002	21	<0.001	<1	0.25	<1	5.6	<0.0001	<0.001	17	0.022	<1
	20/02/2026	<0.05	<0.001	<0.0002	22	<0.001	<0.001	0.46	<0.001	6.1	<0.0001	<0.001	23	0.027	<1
	20/03/2026	0.15	<0.001	<0.0002	21	<0.001	<0.001	0.21	<0.001	5.8	<0.0001	0.001	15	0.013	0.01
	21/04/2026	0.07	<0.001	<0.0002	8.9	<0.001	0.003	0.33	<0.001	2.2	<0.0001	<0.001	3.6	0.01	0.01
	29/05/2026	0.08	<0.001	<0.0002	18	<0.001	<0.001	0.39	<0.001	4.8	<0.0001	<0.001	10	0.01	0.00
	23/06/2026	0.2	<0.001	<0.0002	21	<0.001	<0.001	0.43	<0.001	5.6	<0.0001	<0.001	15	0.22	0.01
	29/06/2026	<0.05	<0.001	<0.0002	19	<0.001	<0.001	0.23	<0.001	4.9	<0.0001	<0.001	12	0.01	<1
	14/07/2026	<0.05	<0.001	<0.0002	22	<0.001	<0.001	0.22	<0.001	5	<0.0001	<0.001	13	0.006	<1
SW02 Baseline		**3.8**	**0.045**	**0.001**	**17**	**0.007**	**0.012**	**71.9**	**0.02**	**5**	**0.0005**	**0.005**	**6**	**0.09**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW02	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	90	<100	<20	<50	60	30	90	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	180	180	30	-	<20	170	30	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	200	<100	<20	<50	100	<100	100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	140	140	100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<20	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	14/07/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW02 Baseline		**60**	**-**	**22**	**100**	**-**	**50**	**100**	**50**	**140**	**-**

Surface Water Analytical Results

ENV ASBESTOS | REMEDIATION | RESOURCE RECOVERY

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW03	29/09/2022	6.8	120	<5	9.3	100	0.02	<0.01	24	<0.02	1.10	23	2	<5		0.1
	20/10/2022	5.9	650	26	7.5	870	0.03	<0.01	270	<0.02	<0.2	12	13	<5		0.0
	14/11/2022	6.5	140	260	2.6	160	0.13	<0.05	27	<0.01	7.40	36	9	<5		0.3
	14/12/2022	6.5	110	11	4.4	160	0.01	0.05	23	<0.01	3.90	18	11	<5		0.5
	18/01/2023	6.5	160	9	5.1	<5	0.02	<0.010	31	<0.02	1.30	26	17	<5		0.5
	20/02/2023	3.4	540	13	6.0	720	0.01	<0.010	22	<0.02	5.10	28	100	<5		4.5
	28/03/2023	3.3	400	7	9.9	750	0.02	0.07	14	<0.02	<0.2	16	110	<5		7.9
	18/04/2023	4.2	280	<5	7.4	450	<0.01	0.04	29	<0.02	<0.2	22	140	<5		4.8
	18/05/2023	4.3	310	37	5.5	580	0.02	0.32	22	<0.02	12.33	21	230	<5		10
	15/06/2023	3.3	580	17	8.9	870	0.04	0.68	32	<0.02	1.40	31	300	<5		9.4
	24/07/2023	3.9	290	36	9	510	0.03	0.4	17	<0.02	1	20	250	<5		15
	21/08/2023	6.8	270	5.8	7.2	350	0.04	0.04	45	<0.02	0.5	43	8	<5		0.2
	18/09/2023	4.6	410	20	7.4	540	<0.01	0.28	30	<0.02	0.4	29	230	<5		7.7
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.5	640	18	7.1	1100	0.03	0.58	32	<0.01	0.6	30	370	6.7		12
	19/12/2023	3.8	610	7.7	6.7	850	<0.01	0.86	36	<0.02	0.9	37	150	<5		4.2
	23/01/2024	3.7	460	55	4.1	880	<0.01	0.16	31	<0.02	1.6	37	100	<5		3.2
	26/02/2024	4.3	200	93	7.5	250	0.09	0.09	53	0.02	1.5	11	440	7.2		8.3
	26/03/2024	6.1	170	54	7.7	300	0.08	0.13	21	<0.02	1	20	78	<5		3.7
	18/04/2024	7.5	360	9.2	7.4	650	0.03	0.08	88	<0.02	0.8	78	64	<5	<10	0.6
	20/05/2024	4.5	300	21	5.6	450	<0.01	0.5	19	<0.02	1.2	23	190	<5	66	10
	25/06/2024	6.3	80	2300	7.2	140	0.98	<0.1	9.4	<0.2	140	9	5	<5	48	0.5
	10/07/2024	4.4	260	29	5.1	400	0.01	0.64	19	<0.02	0.7	21	10	<5	50	0.5
	6/08/2024	4.6	340	22	6.3	630	0.02	0.62	35	<0.02	1.3	29	230	<5	70	6.6
	15/08/2024	6.3	82	19	8.3	120	0.04	0.07	9.5	<0.02	<0.2	9	31	<5	11	3.3
	11/09/2024	7.1	290	<5	7.7	440	<0.01	0.11	84	<0.02	0.3	66	56	<5	<10	0.7
	9/10/2024	6.6	240	330	7.7	360	0.46	<0.01	56	<0.02	7.1	45	35	33	<10	0.6
	6/11/2024	7.2	300	49	7.5	460	0.07	<0.01	88	<0.02	1.2	72	39	<5	<10	0.4
	16/12/2024	7.2	250	5.3	19.0	370	<0.01	<0.01	70	<0.02	0.7	61	31	50	<10	0.4
	14/01/2025	6.9	220	<5	7.7	420	0.04	<0.01	66	<0.02	1.3	57	11	<5	<10	0.2
	11/02/2025	7.4	340	<5	7.5	570	0.07	0.02	99	<0.02	1.4	87	14	<5	<10	0.1
	24/03/2024	6.9	130	<5	8.1	230	0.05	<0.01	38	<0.02	0.9	32	66	<5	<10	1.7
	31/03/2025	7.0	260	9.3	9.8	440	0.06	0.19	100	<0.02	0.9	70	26	<5	<10	0.3
	8/04/2025	7.2	290	<5	8.9	470	0.04	0.07	100	<0.02	0.4	82	36	<5	<10	0.4
	9/05/2025	7.1	290	<5	-	460	<0.01	<0.1	100	<0.02	0.7	73	36	<5	<10	0.4
	25/06/2025	6.7	360	230	6.5	540	2.3	0.01	88	<0.03	2.3	68	36	46	14	0.4
	8/07/2025	6.8	300	82	9.1	570	0.15	0.48	89	<0.02	1.1	67	39	27	<10	0.4
	14/08/2025	7.2	300	16	9.1	580	0.08	0.05	110	<0.02	1	81	32	<5	<10	0.3
	11/09/2025	6.8	300	6.7	12.0	530	0.05	0.22	84	<0.02	0.7	67	43	43	11	0.5
	13/10/2025	7.2	340	7.5	9	620	0.07	<0.01	100	<0.02	0.8	83	43	16	<10	0.4
	20/11/2025	6.6	190	28	4.7	300	0.15	0.19	28	<0.02	1	28	35	<5	<10	1.3
	16/12/2025	6.3	96	400	0.3	170	0.94	0.18	14	<0.5	12	17	18	17	38	1.3
	21/01/2026	7.6	330	<5	8.6	680	0.05	<0.01	100	0.1	0.9	84	36	<0.005	<10	0.4
	20/02/2026	7.2	390	10	4.6	580	0.06	0.02	93	<0.02	0.5	69	11	<0.005	<10	0.1
	20/03/2026	6.9	330	<5	5.3	610	0.1	0.04	110	<0.02	0.8	77	36	0.012	<10	0.3
	21/04/2026	6.8	190	<5	7.4	250	0.04	0.012	24	<0.02	1.7	26	4	<0.005	11	0.2
	29/05/2026	6.24	350	<5	7.6	500	0.02	<0.01	85	0.047	1	61	31	<0.005	17	0.4
	23/06/2026	7.2	350	<5	9.9	570	0.02	<0.01	100	<0.02	<0.5	79	34	<0.005	<10	0.3
	29/06/2026	7.1	250	7.2	7.7	470	0.03	<0.01	78	<0.02	0.6	60	31	<0.005	<10	0.4
	14/07/2026	6.99	320	6.5	8	590	0.06	0.02	100	<0.02	0.6	73	36	0.018	<10	0.4
SW03 Baseline		**6.1 - 6.7**	**191**	**1005**	**-**	**281**	**2.14**	**0.155**	**111**	**0.041**	**4.3**	**30**	**6**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW03	29/09/2022	0.4	0.00	<0.0002	13	0.00	0.00	0.8	<0.001	4.4	<0.0001	0.002	1.00	0.034	0.03
	20/10/2022	0.5	0.00	<0.0002	8	0.00	0.00	0.9	0.00	2.3	<0.0001	0.001	1.00	0.03	0.06
	14/11/2022	1.1	<0.001	<0.002	18	<0.001	0.00	1.9	<0.010	5.7	<0.001	<0.01	<5	0.24	0.06
	14/12/2022	0.6	<0.001	<0.002	13	<0.01	<0.010	1.3	<0.010	<5	<0.001	<0.01	<5	0.53	0.05
	18/01/2023	0.5	0.01	<0.002	<2	<0.010	<0.01	0.5	<0.01	6.2	<0.001	<0.01	<5	<0.05	<1
	20/02/2023	17	0.00	<0.0002	63	0.00	0.02	0.0	0.00	14.0	<0.001	0.065	3.00	0.12	0.27
	28/03/2023	15	<0.001	<0.0002	63	0.00	0.00	4.5	<0.001	11.0	<0.0001	0.065	2.30	0.15	0.24
	18/04/2023	3.8	<0.001	<0.0002	30	0.00	0.00	<0.001	<0.001	5.0	<0.0001	0.023	2.10	0.048	0.13
	18/05/2023	5.8	<0.001	<0.0002	48	<0.001	0.00	14.0	<0.001	10.0	<0.0001	0.033	2.80	0.16	0.12
	15/06/2023	11	<0.001	<0.0002	74	<0.001	0.00	12	<0.001	15.0	<0.0001	0.058	2.7	0.15	0.15
	24/07/2023	7.1	<0.001	<0.0002	39	<0.001	0.002	8.9	0.001	9.7	<0.0001	0.030	2.5	0.1	0.18
	21/08/2023	0.7	0.001	<0.0002	18	0.001	0.003	1.1	<0.001	6.3	<0.0001	0.002	6.8	0.026	0.04
	18/09/2023	2.8	<0.001	<0.0002	59	<0.001	<0.001	1.1	<0.001	14.0	<0.0001	0.022	3.2	0.049	0.05
	18/10/2023	3.0	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12.0	<0.0001	0.009	2.7	0.027	0.05
	20/11/2023	11.0	0.002	<0.0002	75	<0.001	<0.001	17	<0.001	17.0	<0.0001	0.060	3	0.14	0.15
	19/12/2023	21.0	0.003	0.0011	80	<0.001	0.002	3.6	0.001	19.0	0.0007	0.071	4.3	0.16	0.26
	23/01/2024	17.0	0.002	<0.0002	63	0.002	0.001	17	<0.001	19.0	<0.0001	0.059	5.1	0.13	0.27
	26/02/2024	8.8	0.003	<0.0002	17	0.003	0.005	9	0.002	4.8	<0.0001	0.016	1.8	0.05	0.52
	26/03/2024	0.9	<0.001	<0.0002	24	<0.001	<0.001	1.8	<0.001	6.1	<0.0001	0.009	2.8	0.025	0.04
	18/04/2024	1.1	<0.001	<0.0002	22	<0.001	<0.001	1.8	<0.001	6.0	<0.0001	0.005	13	0.018	0.05
	20/05/2024	5.4	0.002	<0.0002	34	<0.001	<0.001	13	<0.001	7.3	<0.0001	0.026	3.6	0.047	0.16
	25/06/2024	0.2	<0.001	<0.0002	10	<0.001	<0.001	170	<0.001	2.7	<0.0001	0.011	2.3	0.042	0.02
	10/07/2024	3.6	0.001	<0.0002	34	<0.001	0.001	6.6	<0.001	6.6	<0.0001	0.019	3	0.053	0.11
	6/08/2024	3.10	<0.001	<0.0002	51	<0.001	<0.001	4.8	<0.001	7.8	<0.0001	0.026	3.4	0.092	0.06
	15/08/2024	1.20	0.00	<0.0002	12	<0.001	0.003	2.1	<0.001	2.2	<0.0001	0.004	1.6	0.037	0.10
	11/09/2024	0.59	<0.001	<0.0002	21	<0.001	0.001	1.0	<0.001	4.9	<0.0001	0.003	13	0.021	0.03
	9/10/2024	20	0.02	<0.0002	21	0.011	0.01	39.0	0.008	4.4	<0.0001	0.008	8.8	0.1	0.95
	6/11/2024	3	0.00	<0.0002	23	0.002	0.002	4.5	<0.001	6.2	<0.0001	0.003	15	0.017	0.13
	16/12/2024	0.29	0.001	<0.0002	19	0.001	<0.001	1.6	<0.001	4	<0.0001	0.001	12	0.009	0.02
	14/01/2025	0.17	0.001	<0.0002	17	<0.001	0.001	0.74	<0.001	3.3	<0.0001	0.001	12	0.016	0.01
	11/02/2025	0.45	0.001	<0.0002	23	<0.001	<0.001	2.1	<0.001	4.5	<0.0001	0.001	18	0.031	0.02
	24/03/2024	0.18	0.001	<0.0002	10	<0.001	0.002	0.79	<0.001	2.6	<0.0001	0.001	6.6	0.036	0.02
	31/03/2025	0.42	0.002	<0.0002	21	<0.001	0.001	3.5	<0.001	4.9	<0.0001	0.002	11	0.045	0.02
	8/04/2025	0.3	<0.001	<0.0002	21	<0.001	<0.001	1.3	<0.001	5.4	<0.0001	0.002	11	0.012	0.01
	9/05/2025	0.62	0.002	<0.0002	20	<0.001	0.001	2	<0.001	4.9	<0.0001	0.005	11	0.042	0.03
	25/06/2025	2	0.002	<0.0002	21	<0.001	0.003	6.1	0.001	5.2	<0.0001	0.002	12	0.053	0.10
	8/07/2025	0.24	<0.001	<0.0002	19	<0.001	<0.001	0.49	<0.001	5	<0.0001	0.001	11	0.015	0.01
	14/08/2025	0.2	<0.001	<0.0002	20	<0.001	<0.001	0.59	<0.001	5.8	<0.0001	0.001	11	0.01	0.01
	11/09/2025	2	0.003	<0.0002	19	0.002	0.004	4	0.002	5.4	<0.0001	0.003	11	0.037	0.11
	13/10/2025	0.29	0.001	<0.0002	22	<0.001	0.002	0.97	<0.001	5.9	<0.0001	0.001	16	0.019	0.01
	20/11/2025	2.4	0.004	<0.0002	22	0.003	0.003	8.8	0.003	4.7	<0.0001	0.003	4.4	0.015	0.11
	16/12/2025	6	0.003	<0.0002	15	0.002	0.005	2.7	0.002	3.2	<0.0001	0.007	2.4	0.14	0.40
	21/01/2026	0.09	<0.001	<0.0002	20	<0.001	<1	0.33	<1	5.5	<0.0001	<0.001	16	0.009	0.00
	20/02/2026	0.27	0.001	<0.0002	23	<0.001	<0.001	1.3	<0.001	5.8	<0.0001	0.001	15	0.01	0.01
	20/03/2026	0.22	<0.001	<0.0002	18	<0.001	0.001	0.58	<0.001	5.1	<0.0001	0.001	12	0.016	0.01
	21/04/2026	0.29	<0.001	<0.0002	12	<0.001	0.002	0.64	<0.001	3.3	<0.0001	<0.001	5.5	0.01	0.02
	29/05/2026	0.11	<0.001	<0.0002	17	<0.001	0.001	0.4	<0.001	4.7	<0.0001	0.001	9.6	0.024	0.01
	23/06/2026	0.19	<0.001	<0.0002	21	<0.001	<0.001	0.19	<0.001	5.4	<0.0001	<0.001	14	0.22	0.01
	29/06/2026	0.07	<0.001	<0.0002	17	<0.001	<0.001	0.21	<0.001	4.5	<0.0001	<0.001	11	0.01	0.00
	14/07/2026	<0.05	<0.001	<0.0002	21	<0.001	<0.001	0.15	0.003	5	<0.0001	0.001	12	0.008	<1
SW03 Baseline		**7.9**	**0.058**	**0.001**	**21**	**0.008**	**0.028**	**85.5**	**0.028**	**5**	**0.0005**	**0.006**	**4**	**0.26**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW03	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	<50	<100	<20	<50	<100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	130	130	<100	<100	<20	<50	10	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	14/07/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW03 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**120**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW04	29/09/2022	4.5	68	<5	4.8	52	0.01	0.18	20	<0.02	5.1	17	<2	<5		0.05
	20/10/2022	4.2	90	<5	7.5	110	0.01	<0.10	20	<0.02	0.3	16	<2	<5		0.05
	14/11/2022	No surface water located at monitoring site – no sample collected														
	14/12/2022	3.2	190	<5	2	280	0.01	0.05	42	<0.10	3.2	20	<2	<5		0.02
	18/01/2023	No surface water located at monitoring site – no sample collected														
	20/02/2023	4.1	0.2	<5	5.9	160	0.02	0.09	22	<0.10	7.4	23	15	<5		0.7
	28/03/2023	4.2	68	<5	8	130	<0.01	<0.01	17	<0.10	<0.25	14	25	<5		1.5
	18/04/2023	4.6	130	16	9.1	190	0.01	0.03	32	<0.02	0.5	21	8.7	<5		0.3
	18/05/2023	3.6	1,200	42	8	1,800	0.03	1.2	26	<0.02	1.15	53	1,000	<5		38.5
	15/06/2023	4.2	140	160	7.7	200	1.5	0.44	44	<0.02	12	24	<2	8		0.02
	24/07/2023	3.6	1,600	21	9	2,400	0.02	1.5	180	<0.02	3.4	78	5,700	<5		31.7
	21/08/2023	3.3	2,400	5.7	7.5	3,700	<0.01	2.8	33	<0.02	3.4	97	850	5.3		25.8
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.2	2,100	<5	9	3,500	0.03	0.8	4.7	<0.01	1.1	63	400	<5		85.1
	19/12/2023	3.0	3,200	15	0.8	3,700	<0.01	0.44	34	<0.02	4.5	100	980	<5		28.8
	23/01/2024	3.1	1,600	23	7.8	2,500	<0.01	0.19	27	<0.02	0.5	54	730	<5		27.0
	26/02/2024	3.1	1,000	11	7.8	1,200	0.03	0.31	14	<0.02	1.5	30	570	<5		40.7
	26/03/2024	3.2	900	5.7	9.6	1,300	<0.01	0.36	21	<0.02	0.9	30	710	<5		33.8
	18/04/2024	3.1	980	67	7.5	1,900	0.03	0.42	15	<0.02	0.8	33	1,000	27	310	66.7
	20/05/2024	3.3	630	8	8.3	1,100	<0.01	0.3	11	<0.02	0.7	25	500	<5	190	45.5
	25/06/2024	3.2	1,000	5.4	8.6	1,600	0.01	0.4	13	<0.02	1	27	270	<5	160	20.8
	10/07/2024	3.5	420	<5	7.9	870	<0.01	0.24	11	<0.02	0.6	21	450	<5	150	40.9
	6/08/2024	3.3	1,300	38	8.7	1,700	0.04	0.03	13	<0.02	1.1	28	860	7.8	230	66.2
	15/08/2024	3.9	240	<5	9.3	390	0.02	0.13	13	<0.02	0.8	16	150	<5	40	11.5
	11/09/2024	3.4	460	<5	6.9	690	0.01	0.05	8.7	<0.02	<0.2	17	390	15	77	44.8
	24/09/2024 - Additional	3.5	750	-	-	1,300	-	-	-	-	-	-	-	-	-	-
	9/10/2024	3.1	810	<5	9	1,200	0.02	<0.01	10	<0.02	0.8	26	580	<5	<10	58.0
	6/11/2024	3.3	440	23	6.4	660	0.05	<0.01	10	<0.02	1	18	310	<5	15	31.0
	16/12/2024	5.7	210	420	0.2	360	0.1	0.25	13	<0.02	13	12	110	7	25	8.5
	14/01/2025	4.1	310	120	4.9	460	0.13	0.03	6.3	<0.02	1.3	11	64	<5	<10	10.2
	11/02/2025	7.6	700	<5	8.8	1000	0.01	0.03	5.8	<0.02	1.3	21	150	7.7	<10	25.9
	24/03/2025	3.9	390	21	7.4	470	0.03	0.03	18	<0.02	1.5	24	180	8.1	<10	10.0
	31/03/2025	6.3	260	70	10	370	<0.01	0.1	11	<0.02	0.8	16	160	<5	<10	14.5
	8/04/2025	6.0	430	43	4.1	470	0.09	0.27	11	0.04	2.3	18	240	<10	16	21.8
	9/05/2025	6.5	270	260	-	570	<0.01	0.02	10	<0.02	4.5	16	250	160	<10	25.0
	25/06/2025	6.7	410	67	6.1	590	0.6	0.01	8.3	<0.02	0.6	16	160	6.5	28	19.3
	8/07/2025	4.0	140	180	6.1	160	0.21	<0.01	21	<0.02	6.2	17	<2	7.6	43	21.0
	14/08/2025	6.5	180	250	6.6	290	0.47	-	9.4	-	-	14	86	<5	13	9.1
	11/09/2025	6.5	260	1,400	0.2	460	0.03	0.31	7.3	<0.02	38	16	150	10	22	20.5
	13/10/2025	7.3	580	14	8.3	760	0.04	<0.01	4	<0.02	0.8	16	230	20	<10	57.5
	20/11/2025	6.9	280	35	2.1	490	0.08	0.05	8.4	<0.02	1	15	150	2.7	<10	17.9
	16/12/2025	7.0	370	170	6	550	0.05	0.21	14	<0.5	1	87	140	<5	39	10.0
	21/01/2026	6.9	250	75	1.9	450	0.23	<0.01	22	0.02	0.9	16	100	<0.005	13	4.5
	20/02/2026	6.9	320	42	1.5	480	0.03	<0.01	29	<0.02	2.6	18	30	0.17	16	1.0
	20/03/2026	6.7	250	110	7.7	420	0.11	0.04	18	<0.02	1.9	20	120	<0.005	<10	6.7
	21/04/2026	6.9	300	590	1.2	410	1.3	0.12	20	<0.02	2.1	23	22	<0.0065	11	1.1
	29/05/2026	5.62	130	59	4.7	200	0.08	<0.01	23	<0.02	4.7	16	15	<0.005	19	0.7
	23/06/2026	6.5	200	670	1.6	270	0.54	<0.01	26	<0.02	1.3	23	37	<0.005	<10	1.4
	29/06/2026	6.8	190	<5	6.9	260	0.01	<0.01	22	<0.02	1.1	19	47	<0.005	<10	2.1
	14/07/2026	6.56	170	270	3.8	240	0.2	0.01	26	<0.02	1.2	19	31	0.008	10	1.2
SW04 Baseline		**4.2 – 4.5**	**112**	**293**	**-**	**165**	**0.5**	**0.693**	**90**	**0.052**	**4.5**	**20**	**3**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW04	29/09/2022	1.3	0.001	<0.0002	1.6	0.005	0.001	2.7	0.001	2.6	<0.0001	0.002	1	0.027	<1
	20/10/2022	1.1	<0.001	<0.0002	1.3	0.004	0.001	2.4	0.001	2.3	<0.0001	0.002	1	0.024	<1
	14/11/2022	No surface water located at monitoring site – no sample collected													
	14/12/2022	1.2	<0.001	<0.002	<5	<0.001	<0.01	3.2	<0.01	<5	<0.001	<0.01	<5	0.084	<1
	18/01/2023	No surface water located at monitoring site – no sample collected													
	20/02/2023	1.6	0.002	<0.0002	2.7	0.005	0.05	0.002	0.002	3.9	<0.001	0.003	1.6	0.039	<1
	28/03/2023	1.1	<0.01	<0.002	<5	0.002	<0.01	2.7	<0.01	<5	<0.0001	0.01	<5	<0.05	<1
	18/04/2023	0.85	<0.001	<0.0002	1.8	<0.01	<0.001	<0.001	<0.001	2.7	<0.0001	0.001	0.8	0.034	<1
	18/05/2023	41	<0.001	0.0005	200	<0.001	0.003	16	0.003	31	<0.0001	0.11	5.7	0.4	<1
	15/06/2023	3.1	0.002	<0.0002	2.2	0.007	0.007	6.3	0.005	4.5	<0.0001	0.003	1.4	0.075	1.41
	24/07/2023	50	<0.001	0.0002	330	<0.001	0.003	3.9	0.002	51	<0.0001	0.13	9	0.18	0.15
	21/08/2023	72	0.002	0.0004	560	<0.001	0.003	3.4	0.002	83	<0.0001	0.23	13	0.34	0.13
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	3	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12	<0.0001	0.009	2.7	0.027	0.05
	20/11/2023	91	0.003	0.0007	380	0.001	0.003	4.3	0.003	52	<0.0001	0.27	7.2	0.55	0.24
	19/12/2023	110	0.005	0.0022	570	0.002	0.005	11	0.007	90	0.001	0.39	4.3	0.7	0.19
	23/01/2024	55	0.002	0.0003	260	0.002	0.003	9.7	0.002	35	<0.0001	0.19	6.1	0.33	0.21
	26/02/2024	23	<0.001	<0.0002	140	<0.001	<0.001	5.1	<0.001	20	<0.0001	0.083	3.9	0.18	0.16
	26/03/2024	20	<0.001	<0.0002	130	<0.001	<0.001	3.1	<0.001	19	<0.0001	0.068	4.9	0.1	0.15
	18/04/2024	32	<0.001	<0.0002	190	0.001	0.002	7	<0.001	26	<0.0001	0.1	3.6	0.18	0.17
	20/05/2024	20	<0.001	<0.0002	100	<0.001	<0.001	5.7	<0.001	14	<0.0001	0.064	2.6	0.13	0.20
	25/06/2024	16	<0.001	<0.0002	210	<0.001	<0.001	5.3	<0.001	23	<0.0001	0.059	3.7	0.09	0.08
	10/07/2024	12	<0.001	<0.0002	110	<0.001	0.001	2.5	<0.001	12	<0.0001	0.051	2.2	0.11	0.11
	6/08/2024	17	<0.001	<0.0002	200	<0.001	0.001	5.5	<0.001	24	<0.0001	0.059	2.5	0.1	0.09
	15/08/2024	2	<0.001	<0.0002	36	<0.001	<0.001	0.81	<0.001	6	<0.0001	0.015	2.5	0.057	0.06
	11/09/2024	5.6	<0.001	<0.0002	87	<0.001	<0.001	3.6	<0.001	11	<0.0001	0.026	1.6	0.061	0.06
	24/09/2024 - Additional	-	<0.001	<0.0001	-	<0.001	0.0001	-	<0.001	-	<0.0001	0.032	-	0.043	<1
	9/10/2024	14	<0.001	<0.0002	140	<0.001	0.002	8.1	<0.001	17	<0.0001	0.057	2.7	0.12	0.10
	6/11/2024	2.8	<0.001	<0.0002	81	<0.001	<0.001	6.1	<0.001	11	<0.0001	0.02	<0.5	0.034	0.03
	16/12/2024	4.4	0.007	<0.0002	29	0.009	0.006	170	0.003	4.5	<0.0001	0.009	1.3	0.035	0.15
	14/01/2025	1.2	<0.001	<0.0002	53	<0.001	0.001	5.8	<0.001	5.8	<0.0001	0.014	0.8	0.039	0.02
	11/02/2025	<0.05	<0.001	<0.0002	200	<0.001	<0.001	0.14	<0.001	18	<0.0001	0.004	<0.5	0.033	<1
	24/03/2025	1.1	<0.001	<0.0002	52	<0.001	0.002	6.6	<0.001	8.5	<0.0001	0.012	2.3	0.1	0.02
	31/03/2025	0.5	0.003	<0.0002	50	<0.001	0.001	17	<0.001	7.6	<0.0001	0.007	2.4	0.047	0.01
	8/04/2025	0.36	0.004	<0.0002	70	<0.001	<0.001	38	<0.001	9.8	<0.0001	0.006	2.3	0.014	0.01
	9/05/2025	0.64	<0.001	<0.0002	61	<0.001	0.001	34	<0.001	7.9	<0.0001	0.001	1.9	0.032	0.01
	25/06/2025	0.35	<0.001	<0.0002	85	<0.001	<0.001	7.3	<0.001	8.5	<0.0001	0.004	1.3	0.013	0.00
	8/07/2025	0.92	<0.001	<0.0002	0.6	0.004	0.002	1.8	<0.001	1.5	<0.0001	0.001	0.8	0.042	1.53
	14/08/2025	0.34	<0.001	<0.0002	38	<0.001	<0.001	17	<0.001	5.7	<0.0001	0.002	1	0.018	0.01
	11/09/2025	8.7	0.031	<0.002	120	0.017	0.011	830	<0.01	12	<0.001	0.027	<5	0.1	0.07
	13/10/2025	0.31	0.002	<0.0002	130	<0.001	<0.001	12	<0.001	14	<0.0001	0.004	1.5	<0.005	0.00
	20/11/2025	0.26	<0.001	<0.0002	69	<0.001	0.002	7.6	0.001	8.5	<0.0001	0.003	0.6	0.016	0.00
	16/12/2025	13	0.002	<0.0002	57	0.003	<0.001	47	0.002	38	<0.0001	0.032	2.4	0.039	0.23
	21/01/2026	0.07	<0.001	<0.0002	53	<0.001	<1	3	<1	7.3	<0.0001	0.001	<0.5	<0.005	0.00
	20/02/2026	0.33	0.003	<0.0002	63	<0.001	<0.001	37	<0.001	8.2	<0.0001	0.002	1.6	0.013	0.01
	20/03/2026	1	0.002	<0.0002	44	<0.001	0.002	21	<0.001	7.4	<0.0001	0.004	1.7	0.021	0.02
	21/04/2026	4.2	0.005	<0.0002	54	0.004	0.01	56	0.004	7.6	<0.0001	0.014	3.1	0.065	0.08
	29/05/2026	0.62	<0.001	<0.0002	10	0.002	<0.001	3.3	<0.001	2.7	<0.0001	0.002	1.1	0.014	0.06
	23/06/2026	6.4	0.004	<0.0002	35	0.007	0.012	37	0.007	6.1	<0.0001	0.013	0.9	0.25	0.18
	29/06/2026	0.19	<0.001	<0.0002	24	<0.001	<0.001	0.69	<0.001	4.5	<0.0001	<0.001	0.9	<0.005	0.01
	14/07/2026	2.2	<0.001	<0.0002	26	0.003	0.005	14	0.002	4	<0.0001	0.006	<0.5	0.023	0.08
SW04 Baseline		**1.4**	**0.002**	**0.001**	**3.2**	**0.007**	**0.002**	**2.8**	**0.002**	**2.3**	**0.0005**	**0.005**	**2.9**	**0.028**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW04	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	No flow - No sample collected									
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	No flow - No sample collected									
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No flow - No sample collected									
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	160	160	<100	<100	<20	<50	<100	<100	160	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Additional	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	14/07/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW04 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW05	29/09/2022	5.9	480	5.2	7.7	510	0.12	0.17	220	<0.20	3	140	11	<5		0.05
	20/10/2022	6.2	650	7.2	8.9	690	0.06	0.24	180	<0.20	0.5	160	8.6	<5		0.05
	14/11/2022	6.2	820	13	4.7	1,000	0.06	<0.05	310	<0.10	8.1	260	100	<5		0.32
	14/12/2022	6.2	830	16	7.5	1,100	0.05	0.05	330	<0.10	3.1	240	40	<5		0.12
	18/01/2023	6.3	2,800	33	7	<5	0.09	0.09	1,300	<0.02	3.38	820	160	<5		0.12
	20/02/2023	6.7	18	18	5.4	2,300	0.1	0.07	2,000	<0.10	3.4	4700	890	<5		0.45
	28/03/2023	5.6	470	<5	9.4	760	0.02	0.08	200	<0.10	<0.02	110	23	6.7		0.12
	18/04/2023	6.4	4,000	16	8.5	5,300	0.1	0.12	2,000	<0.02	80	1100	230	<5		0.12
	18/05/2023	5.8	260	17	5.7	460	0.08	<0.01	110	<0.02	<0.2	64	25	<5		0.23
	15/06/2023	6.2	1,100	<5	8.8	1,400	0.58	0.14	450	<0.02	1.1	250	40	<5		0.09
	24/07/2023	6.5	1,600	<5	9.3	2,800	0.05	0.17	1,500	<0.5	1.1	440	1,200	<5		0.80
	21/08/2023	6.6	1,600	<5	6.3	2,900	0.06	0.15	1,500	<0.02	1.28	480	190	<5		0.13
	18/09/2023	6.6	2,500	13	6.4	3,800	0.06	0.11	1,200	<0.02	1.3	650	210	<5		0.18
	18/10/2023	6.9	4,800	6.6	6.5	7,700	0.06	0.05	2,700	<0.02	<0.2	1,300	730	10		0.27
	20/11/2023	6.8	2,100	12	4.8	3,700	0.18	0.46	1,100	<0.01	0.6	460	1,200	<5		1.09
	19/12/2023	6.7	3,300	14	5.3	5,400	0.19	0.77	1,700	<0.02	<2	1,000	64	<5		0.04
	23/01/2024	6.2	1,100	13	9.3	1,000	0.09	0.05	440	<0.02	2.3	260	220	<5		0.50
	26/02/2024	6.3	970	16	8.6	1,200	0.11	0.03	330	<0.02	1.5	200	130	<5		0.39
	26/03/2024	6.6	1,100	9.1	5.6	1,700	0.03	0.09	910	<0.02	2	290	420	<5		0.46
	18/04/2024	6.5	560	8.4	5.8	830	0.07	0.16	160	<0.02	1.7	110	160	5.4	<10	1.00
	20/05/2024	6.7	240	<5	5.8	350	<0.01	0.03	68	<0.02	0.4	47	140	<5	15	2.06
	25/06/2024	6.5	1,000	16	7.7	1,800	0.06	0.1	500	<0.02	1.2	300	29	<5	16	0.06
	10/07/2024	6.2	950	5.6	6.3	1,700	0.02	0.16	170	<0.02	0.9	280	130	<5	11	0.76
	6/08/2024	6.3	3,300	9	8.9	5,800	0.05	0.11	1500	<0.02	1.2	820	210	<5	27	0.14
	15/08/2024	6.2	300	<5	7.1	430	0.08	0.03	30	<0.02	<0.2	80	27	<5	12	0.90
	11/09/2024	6.4	710	8.2	5.5	1,200	0.03	0.4	450	<0.02	1.1	230	72	<5	12	0.16
	9/10/2024	6.4	700	11	9	1,100	0.15	0.15	320	<0.1	<0.25	180	53	<5	14	0.17
	6/11/2024	7.1	930	15	6.1	1,300	0.08	0.16	440	<0.02	1	250	56	<5	<10	0.13
	16/12/2024	7.4	31,000	26	9.3	44,000	0.02	0.14	1,400	<0.02	0.4	<0.5	2,000	<5	<10	1.43
	14/01/2025	7.1	19,000	9.4	6.2	30,000	0.04	0.04	12,000	<0.02	0.3	5,500	500	<5	<10	0.04
	11/02/2025	7.5	24,000	9.1	8.5	35,000	0.03	0.06	6,300	<0.02	<0.2	6,900	260	<5	<10	0.04
	24/03/2024	6.3	1,600	<5	7	2,500	<0.1	0.12	790	<0.02	4.4	440	140	<5	<10	0.18
	31/03/2025	7.0	210	8	9.2	260	0.08	<10	72	<0.02	2.3	41	9.5	<5	<10	0.13
	8/04/2025	6.3	610	8.3	6.7	760	0.08	0.44	230	<0.2	<1	140	29	<10	<10	0.13
	9/05/2025	6.8	340	<5	-	480	0.08	<0.1	120	<0.2	1.7	71	40	<5	<10	0.33
	25/06/2025	6.2	2,000	6.6	5.9	3,500	<0.2	0.07	1,700	<0.2	<0.2	510	250	<5	17	0.14
	8/07/2025	6.0	470	<5	8	910	0.05	0.03	230	0.07	<0.2	130	41	<5	13	0.18
	14/08/2025	6.2	570	16	6.1	930	0.08	0.03	550	<0.02	16	140	62	6.5	13	0.11
	11/09/2025	6.5	940	5.4	6.9	1,700	0.04	0.05	440	<0.02	1.7	260	61	<5	9	0.14
	13/10/2025	6.8	6,600	<5	5.4	11,000	0.05	0.1	3,300	<0.02	1.7	1,800	370	<5	12	0.11
	20/11/2025	6.6	4,600	<5	4.3	9,000	0.1	0.21	2,600	<0.02	0.4	1,400	320	<5	12	0.12
	16/12/2025	6.8	11,000	18	4.1	18,000	0.07	0.28	6,100	<0.5	1.2	2,800	720	<5	34	0.12
	21/01/2026	7.4	25,000	9.5	7.8	37,000	0.03	0.02	12,000	12	1.1	6,300	1,500	<0.005	14	0.13
	20/02/2026	6.9	21,000	8.4	4.9	32,000	0.02	<0.01	10,000	<0.02	0.8	5,400	410	<0.005	10	0.04
	20/03/2026	6.3	1,400	25	5.5	2,700	0.28	0.09	720	<0.02	1.7	370	98	<0.005	<10	0.14
	21/04/2026	6.5	14,000	8.4	6.8	22,000	0.07	0.74	7,500	<0.02	1	3,500	320	<0.005	<10	0.04
	29/05/2026	5.78	260	<5	7.1	340	0.06	0.1	78	<0.02	1.3	46	10	<0.005	22	0.13
	23/06/2026	6.2	820	<5	5.7	1,300	0.06	0.09	340	<0.02	1.3	190	42	<0.005	12	0.12
	29/06/2026	6.4	610	<5	6.7	920	0.04	0.05	220	<0.02	1.7	130	33	<0.005	12	0.15
	14/07/2026	6.21	760	<5	7.1	1,300	0.02	0.06	350	0.02	1.4	190	46	<0.005	16	0.13
SW05 Baseline		**5.1 – 7.2**	**4710**	**136**	**-**	**6,927**	**0.21**	**0.592**	**980**	**0.02**	**2.2**	**1,667**	**115**	**63**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW05	29/09/2022	0.83	<0.001	<0.0002	9.4	0.002	<0.001	4.6	<0.001	17	<0.0001	0.002	7.7	0.008	0.09
	20/10/2022	0.66	<0.001	<0.0002	11	0.001	<0.001	3.5	0.001	19	<0.0001	0.002	7.9	0.007	0.06
	14/11/2022	0.75	<0.001	<0.002	18	<0.001	0.002	5.4	<0.01	27	<0.001	<0.001	11	0.12	0.04
	14/12/2022	0.93	<0.001	<0.002	16	<0.01	<0.01	6.1	<0.01	21	<0.001	<0.01	13	<0.05	0.06
	18/01/2023	0.73	<0.01	<0.002	<2	<0.01	<0.01	6.2	<0.01	96	<0.001	<0.01	41	<0.05	<1
	20/02/2023	0.22	0.002	<0.0002	190	0.001	0.01	<0.001	<0.001	550	<0.001	0.001	170	0.008	0.00
	28/03/2023	0.77	<0.01	<0.002	9.4	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.4	<0.05	0.08
	18/04/2023	1	<0.001	<0.0002	42	0.001	<0.001	<0.001	<0.001	110	<0.0001	0.003	37	0.008	0.02
	18/05/2023	0.6	<0.001	<0.0002	5.2	<0.001	<0.001	2.4	<0.001	9.1	<0.0001	0.002	4.9	0.009	0.12
	15/06/2023	0.32	<0.001	<0.0002	14	0.001	2	2	<0.001	27	<0.0001	0.001	14	0.01	0.02
	24/07/2023	0.33	<0.001	<0.0002	22	<0.001	<0.001	1.9	<0.001	52	<0.0001	0.002	25	0.006	0.02
	21/08/2023	0.41	<0.001	<0.0002	23	<0.001	0.002	2.2	<0.001	54	<0.0001	0.002	29	0.005	0.02
	18/09/2023	0.28	<0.001	<0.0002	29	<0.001	<0.001	2.6	<0.001	70	<0.0001	0.001	42	<0.005	0.01
	18/10/2023	0.27	<0.001	<0.0002	61	<0.001	<0.001	2	<0.001	160	<0.0001	<0.001	76	<0.005	0.00
	20/11/2023	0.51	0.001	<0.0002	25	0.001	<0.001	4.3	<0.001	56	<0.0001	0.002	27	<0.005	0.02
	19/12/2023	0.54	0.005	0.0028	46	0.001	0.001	4.2	0.001	120	0.002	0.002	47	0.009	0.01
	23/01/2024	0.9	0.003	<0.0002	16	0.002	0.001	7.8	<0.001	32	<0.0001	0.001	16	0.012	0.06
	26/02/2024	0.63	0.001	<0.0002	13	0.001	<0.001	3.7	<0.001	23	<0.0001	0.002	10	0.029	0.05
	26/03/2024	0.64	<0.001	<0.0002	16	0.001	<0.001	3.3	<0.001	33	<0.0001	0.002	14	0.008	0.04
	18/04/2024	0.69	<0.001	<0.0002	8.3	0.002	0.001	<0.001	<0.001	14	<0.0001	0.008	6.7	0.008	0.08
	20/05/2024	0.72	<0.001	<0.0002	5.6	<0.001	0.001	2.5	<0.001	5.1	<0.0001	0.002	3.5	0.008	0.13
	25/06/2024	0.2	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	31	<0.0001	0.002	12	0.012	0.01
	10/07/2024	0.48	<0.001	<0.0002	17	<0.001	<0.001	2.9	<0.001	31	<0.0001	0.002	11	0.008	0.03
	6/08/2024	0.28	<0.001	<0.0002	37	<0.001	<0.001	<0.001	<0.001	100	<0.0001	0.001	30	0.007	0.01
	15/08/2024	0.5	<0.001	<0.0002	5	0.001	<0.001	1.6	<0.001	8	<0.0001	0.001	4.6	0.01	0.10
	11/09/2024	0.52	<0.001	<0.0002	14	<0.001	<0.001	2.9	<0.001	25	<0.0001	0.002	10	0.011	0.04
	9/10/2024	0.85	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.5	0.016	0.07
	6/11/2024	0.68	<0.001	<0.0002	17	0.002	<0.001	3.8	<0.001	29	<0.0001	0.002	12	0.008	0.04
	16/12/2024	<0.05	<0.001	<0.0002	<0.5	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.24	0.002	<0.0002	230	0.002	<0.001	0.64	<0.001	660	<0.0001	<0.001	210	0.006	0.00
	11/02/2025	0.12	0.002	<0.0002	290	0.001	<0.001	0.5	<0.001	820	<0.0001	<0.001	260	0.047	0.00
	24/03/2024	0.54	<0.001	<0.0002	22	<0.001	0.001	3.2	<0.001	53	<0.0001	0.002	17	0.32	0.02
	31/03/2025	0.58	<0.001	<0.0002	4.2	<0.001	<0.001	3.7	<0.001	5.2	<0.0001	0.002	3.5	0.062	0.14
	8/04/2025	0.77	<0.001	<0.0002	9.9	0.001	<0.001	4.2	<0.001	18	<0.0001	0.002	6	0.011	0.08
	9/05/2025	0.75	<0.001	<0.0002	6.3	0.001	<0.001	3.2	<0.001	8.5	<0.0001	0.002	3.7	0.015	0.12
	25/06/2025	0.46	<0.001	<0.0002	26	<0.001	<0.001	2	<0.001	63	<0.0001	0.001	19	0.01	0.02
	8/07/2025	0.68	<0.001	<0.0002	9.1	0.001	<0.001	3	<0.001	16	<0.0001	0.002	4.9	0.008	0.07
	14/08/2025	0.46	<0.001	<0.0002	8.6	<0.001	<0.001	2.6	<0.001	17	<0.0001	0.001	6.2	0.008	0.05
	11/09/2025	0.55	<0.001	<0.0002	15	<0.001	<0.001	3.2	<0.001	33	<0.0001	0.001	11	0.01	0.04
	13/10/2025	0.21	<0.001	<0.0002	77	<0.001	<0.001	2	<0.001	220	<0.0001	<0.001	69	<0.005	0.00
	20/11/2025	0.32	0.001	<0.0002	63	0.001	<0.001	2.7	<0.001	180	<0.0001	0.001	53	<0.005	0.01
	16/12/2025	0.2	0.001	<0.0002	120	0.001	0.001	1.4	<0.001	340	<0.0001	0.001	110	0.008	0.00
	21/01/2026	0.08	0.002	<0.0002	250	0.001	<1	0.47	<1	760	<0.0001	<0.001	240	0.009	0.00
	20/02/2026	0.1	0.002	<0.0002	220	<0.001	<0.001	1.4	<0.001	640	<0.0001	<0.001	260	0.006	0.00
	20/03/2026	0.53	<0.001	<0.0002	22	<0.001	0.001	4.6	<0.001	46	<0.0001	0.002	17	0.011	0.02
	21/04/2026	0.18	0.001	<0.0002	150	<0.001	0.001	1.2	<0.001	430	<0.0001	0.001	130	0.022	0.00
	29/05/2026	0.65	<0.001	<0.0002	4.9	<0.001	<0.001	2.9	<0.001	6	<0.0001	0.002	2.7	0.04	0.13
	23/06/2026	0.81	<0.001	<0.0002	13	0.001	<0.001	3.6	<0.001	25	<0.0001	0.002	7.5	0.2	0.06
	29/06/2026	0.54	<0.001	<0.0002	8.5	<0.001	<0.001	2.3	<0.001	17	<0.0001	<0.001	4.9	0.01	0.06
	14/07/2026	0.55	<0.001	<0.0002	12	<0.001	<0.001	1.9	<0.001	22	<0.0001	0.002	7	0.009	0.05
SW05 Baseline		**2.1**	**0.002**	**0.001**	**57**	**0.002**	**0.003**	**12.3**	0.001	**130**	**0.0005**	**0.011**	**58**	**0.026**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW05	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	70	70	-	-	<20	60	100	-	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	120	120	<100	120	<20	<50	120	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	14/07/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW05 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW06	29/09/2022	6.0	480	<5	7.8	580	0.13	0.16	220	<0.02	8.6	140	11	5.1		0.05
	20/10/2022	6.3	580	16	8.7	730	0.05	0.19	330	<0.02	0.5	110	7.5	6.2		0.02
	14/11/2022	6.2	840	13	<5	1000	0.04	0.36	310	<0.10	1.1	270	100	<5		0.32
	14/12/2022	6.3	840	16	8.3	1200	0.1	0.05	340	<0.10	5.8	240	44	<5		0.13
	18/01/2023	6.4	3,700	31	6.8	5,400	0.07	0.04	1,800	<0.02	2.5	1,000	200	<5		0.11
	20/02/2023	6.8	19	89	5.1	14,000	0.09	0.11	22	<0.10	4.1	4,000	1,200	<5		54.55
	28/03/2023	5.6	400	6.2	8.3	730	0.03	0.07	180	<0.20	<0.20	110	18	9.7		0.10
	18/04/2023	6.7	6,400	18	7.4	6,700	0.07	1.2	3,200	<0.02	1.26	1,700	360	<10		0.11
	18/05/2023	5.9	280	17	6.3	470	0.08	0.06	120	<0.02	0.4	370	21	<5		0.18
	15/06/2023	6.4	1,100	<5	7.4	1,400	0.55	0.18	440	<0.02	0.7	250	38	<5		0.09
	24/07/2023	6.7	2,100	5.8	6.6	3,500	0.07	0.23	1,800	<0.2	0.6	540	620	<5		0.34
	21/08/2023	6.6	2,800	<5	6.1	5,400	0.19	0.16	1,300	<0.02	0.78	870	59	<5		0.05
	18/09/2023	6.7	2,900	24	6.5	4,600	0.06	0.12	1,500	<0.02	0.4	1,300	200	<5		0.13
	18/10/2023	6.9	7,900	6.3	6.4	9,700	0.05	0.05	3,700	<0.02	<0.2	1,600	430	<5		0.12
	20/11/2023	6.6	2,200	9.9	4.6	4,000	0.18	0.43	1,200	<0.01	1.2	490	720	<5		0.60
	19/12/2023	6.8	3,300	9.3	5.6	6,600	0.09	0.82	2,300	<0.02	<2	1,300	94	<5		0.04
	23/01/2024	6.2	4,300	15	2.1	4,300	0.18	0.08	2,800	<0.02	1.4	1,100	330	<5		0.12
	26/02/2024	6.4	880	17	9	1,200	0.11	0.02	60	<0.02	1.7	200	10	<5		0.17
	26/03/2024	6.8	1,300	9.9	5.9	1,900	0.05	0.07	760	0.05	1.2	300	120	<5		0.16
	18/04/2024	6.6	520	5.8	6	840	0.06	0.16	170	<0.02	<1	110	31	<5	17	0.18
	20/05/2024	6.3	240	<5	6.1	290	<0.01	0.05	59	<0.02	1	42	47	<5	15	0.80
	25/06/2024	6.7	960	17	9.2	1,900	0.06	0.09	500	<0.02	5.3	270	21	<5	19	0.04
	10/07/2024	6.2	880	<5	6.2	1,600	0.03	0.13	170	<0.02	1.4	250	33	<5	15	0.19
	6/08/2024	6.3	4,500	6.8	7.6	8,400	0.08	0.15	2,100	<0.02	1.6	1,200	270	<5	24	0.13
	15/08/2024	6.2	160	<5	7	240	0.1	0.03	57	<0.02	<0.2	38	15	<5	14	0.26
	11/09/2024	6.7	710	7	6.6	1,000	0.04	0.28	370	<0.02	1.8	180	54	<5	11	0.15
	9/10/2024	6.5	720	14	8.5	1,000	0.15	<0.01	310	<0.1	4.3	180	33	18	<10	0.11
	6/11/2024	6.9	1,900	37	5.6	2,400	0.1	0.11	890	<0.02	1.6	490	160	<5	<10	0.18
	16/12/2024	7.7	33,000	13	9.5	47,000	0.01	0.18	16,000	<0.02	<0.2	<0.5	2,100	<5	<10	0.13
	14/01/2025	7.2	25,000	11	6.3	38,000	0.03	0.06	15,000	<0.02	0.7	7,200	600	<5	<10	0.04
	11/02/2025	7.6	24,000	11	7.2	34,000	0.003	0.06	6,100	<0.02	<0.2	7,200	240	5.9	<10	0.04
	24/03/2025	6.5	1,700	<5	6.8	2,500	<0.1	0.12	820	<0.02	4.2	450	110	<5	<10	0.13
	31/03/2025	6.7	250	11	9.5	250	0.08	<10	68	<0.02	<1	42	9.7	<5	<10	0.14
	8/04/2025	6.4	610	7.6	9.4	740	0.08	0.28	260	<0.2	<1	140	31	<10	<10	0.12
	9/05/2025	6.6	260	<5	-	490	0.07	<0.1	120	<0.2	<1	70	28	<5	<10	0.23
	25/06/2025	6.2	2,000	7.4	5.9	3,600	1.4	0.08	1,700	<0.2	1.4	520	260	<5	20	1.50
	8/07/2025	6.0	470	<5	8.2	910	0.05	0.02	230	<0.02	<0.2	130	28	<5	13	0.12
	14/08/2025	6.3	590	31	6.1	910	0.07	0.03	340	<0.02	0.3	140	37	<5	13	0.11
	11/09/2025	6.6	1,299	6.8	7.1	2,200	0.04	0.05	590	<0.02	5.6	340	67	<5	<10	0.11
	13/10/2025	6.8	14,000	5.9	4.9	23,000	0.04	0.29	7,400	<0.02	0.6	4,100	830	5.9	14	0.11
	20/11/2025	6.7	8,400	<5	4.5	14,000	0.09	0.22	4,800	<0.02	0.7	2,300	1,100	<5	12	0.23
	16/12/2025	6.9	12,000	20	3.8	19,000	0.09	0.32	6,100	<0.5	1.8	2,900	750	7	28	0.12
	21/01/2026	7.4	18,000	7.1	7.4	28,000	0.03	<0.01	8,400	8.4	1	4,700	1,000	<0.005	12	0.12
	20/02/2026	7	19,000	<5	5.9	33,000	0.02	0.05	12,000	<0.02	0.3	5,800	520	0.0058	17	0.04
	20/03/2026	6.4	1,400	20	4.3	2,800	0.16	0.13	770	<0.02	2.4	390	100	<0.005	<10	0.13
	21/04/2026	6.5	12,000	<5	7.4	19,000	0.03	0.1	5,900	<0.02	1.2	3,100	270	<0.005	16	0.05
	29/05/2026	5.81	190	5.7	6.1	370	0.06	<0.01	74	<0.02	2	46	10	<0.005	20	0.14
	23/06/2026	6.1	820	<5	6.8	1,300	0.05	0.09	320	<0.02	<1	200	39	<0.005	11	0.12
	29/06/2026	6.6	400	<5	8.4	740	0.03	0.03	180	<0.02	1.4	110	29	<0.005	<10	0.16
	14/07/2026	6.46	620	<5	7.1	1,200	0.02	0.04	300	0.02	1.4	170	43	<0.005	10	0.14
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		**6.5 – 8.0**	**-**	**<50**	**-**	**<2200**	**<0.05**	**-**	**-**	**-**	**<0.50**	**-**	**-**	**5**		**<0.5***

Note: * derived from Interim Target Criteria within BCPoM, GWMP and AFMP (AWC 2020)

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW06	29/09/2022	0.78	<0.001	<0.0002	9.4	0.002	<0.001	4.5	<0.001	18	<0.0001	0.002	7.7	0.008	0.08
	20/10/2022	0.54	<0.001	<0.0002	9.1	0.001	<0.001	2.7	0.001	13	<0.0001	0.002	5.8	0.012	0.06
	14/11/2022	0.68	<0.001	<0.002	18	<0.001	0.012	5.3	<0.01	29	<0.001	<0.01	12	0.11	0.04
	14/12/2022	0.75	<0.001	<0.002	16	<0.01	<0.01	5.4	<0.01	21	<0.001	<0.01	13	<0.05	0.05
	18/01/2023	0.63	<0.010	<0.001	<2	<0.01	<0.01	0.01	<0.01	120	<0.001	<0.01	47	<0.05	<1
	20/02/2023	0.34	0.002	<0.0002	170	0.001	0.01	<0.001	<0.001	480	<0.001	0.002	160	0.008	0.00
	28/03/2023	1.1	<0.01	<0.002	11	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.3	<0.05	0.10
	18/04/2023	0.54	<0.001	<0.0002	68	0.001	<0.001	<0.001	<0.001	200	<0.0001	0.002	63	0.009	0.01
	18/05/2023	0.44	0.003	<0.0002	14	<0.001	<0.001	0.13	<0.001	4.8	<0.0001	0.008	3.3	<0.005	0.03
	15/06/2023	0.36	<0.001	<0.0002	15	<0.001	2.1	2.1	<0.001	28	28	0.001	14	<0.005	0.02
	24/07/2023	0.36	<0.001	<0.0002	26	<0.001	<0.001	1.9	0.001	65	<0.0001	0.002	29	0.007	0.01
	21/08/2023	0.41	<0.001	<0.0002	39	0.001	<0.001	1.9	<0.001	100	<0.0001	0.002	46	<0.005	0.01
	18/09/2023	0.3	<0.001	<0.0002	56	<0.001	<0.001	2.4	<0.001	150	<0.0001	0.001	64	<0.005	0.01
	18/10/2023	0.2	<0.001	<0.0002	73	<0.001	<0.001	1.7	<0.001	190	<0.0001	<0.001	85	<0.005	0.00
	20/11/2023	0.63	0.001	<0.0002	27	0.001	<0.001	4.5	<0.001	60	<0.0001	0.003	28	0.01	0.02
	19/12/2023	0.62	0.002	0.0007	56	0.001	0.002	3.4	<0.001	150	0.0005	0.002	55	0.008	0.01
	23/01/2024	0.71	0.003	<0.0002	50	0.002	<0.001	5.7	<0.001	140	<0.0001	<0.001	46	0.008	0.01
	26/02/2024	0.61	<0.001	<0.0002	14	0.003	<0.001	3.5	<0.001	24	<0.0001	0.005	10	0.025	0.04
	26/03/2024	0.61	<0.001	<0.0002	17	0.001	<0.001	3.1	<0.001	34	<0.0001	0.002	15	0.008	0.04
	18/04/2024	0.71	<0.001	<0.0002	10	0.001	<0.001	<0.001	<0.001	13	<0.0001	0.008	7.6	0.008	0.07
	20/05/2024	0.72	<0.001	<0.0002	5.7	<0.001	<0.001	2.3	<0.001	4.8	<0.0001	0.002	3.2	0.009	0.13
	25/06/2024	0.23	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	28	<0.0001	0.002	11	0.016	0.01
	10/07/2024	0.5	<0.001	<0.0002	17	<0.001	<0.001	2.6	<0.001	28	<0.0001	0.002	10	0.01	0.03
	6/08/2024	0.31	<0.001	<0.0002	50	<0.001	<0.001	<0.001	<0.001	140	<0.0001	0.002	40	0.011	0.01
	15/08/2024	0.51	<0.001	<0.0002	4.8	<0.001	0.001	1.6	<0.001	4.6	<0.0001	0.002	3	0.011	0.11
	11/09/2024	0.46	<0.001	<0.0002	14	<0.001	<0.001	2.1	<0.001	20	<0.0001	0.002	11	0.012	0.03
	9/10/2024	0.84	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.7	0.009	0.07
	6/11/2024	0.79	<0.001	<0.0002	25	0.002	<0.001	4.1	<0.001	60	<0.0001	0.002	20	0.01	0.03
	16/12/2024	4.4	0.007	<0.0002	29	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	0.15
	14/01/2025	0.15	0.002	<0.0002	300	0.002	<0.001	0.3	<0.001	860	<0.0001	<0.001	270	<0.005	0.00
	11/02/2025	0.09	0.002	<0.0002	300	0.001	<0.001	0.38	<0.001	850	<0.0001	<0.001	270	0.048	0.00
	24/03/2025	0.55	<0.001	<0.0002	22	<0.001	<0.001	3.4	<0.001	54	<0.0001	0.002	17	0.027	0.03
	31/03/2025	0.59	0.001	<0.0002	4.2	<0.001	<0.001	3.3	<0.001	5.3	<0.0001	0.002	3.5	0.044	0.14
	8/04/2025	0.8	<0.001	<0.0002	9.9	0.003	<0.001	4.1	<0.001	18	<0.0001	0.002	6	0.007	0.08
	9/05/2025	0.74	<0.001	<0.0002	6.3	0.001	0.001	2.8	<0.001	8.5	<0.0001	0.002	3.7	0.01	0.12
	25/06/2025	0.7	<0.001	<0.0002	26	<0.001	<0.001	2.6	<0.001	64	<0.0001	0.002	20	0.008	0.03
	8/07/2025	0.55	<0.001	<0.0002	11	0.001	0.001	2.3	<0.001	13	<0.0001	0.002	6.3	0.008	0.05
	14/08/2025	0.43	<0.001	<0.0002	9.1	<0.001	<0.001	2.4	<0.001	16	<0.0001	0.001	6.3	0.011	0.05
	11/09/2025	0.51	<0.001	<0.0002	19	0.001	<0.001	2.9	<0.001	42	<0.0001	0.001	14	0.008	0.03
	13/10/2025	0.12	0.001	<0.0002	170	<0.001	<0.001	1.2	<0.001	500	<0.0001	<0.001	150	0.006	0.00
	20/11/2025	0.26	0.001	<0.0002	99	0.001	<0.001	1.9	<0.001	280	<0.0001	0.001	86	0.006	0.00
	16/12/2025	0.17	0.001	<0.0002	120	<0.001	<0.001	1.3	0.001	340	<0.0001	0.001	110	<0.005	0.00
	21/01/2026	0.1	0.002	<0.0002	200	<0.001	<1	0.35	<1	560	<0.0001	<0.001	180	0.006	0.00
	20/02/2026	0.1	0.002	<0.0002	240	<0.001	<0.001	0.58	<0.001	690	<0.0001	<0.001	280	0.028	0.00
	20/03/2026	0.6	0.001	<0.0002	24	0.001	0.002	4.8	<0.001	48	<0.0001	0.002	18	0.014	0.03
	21/04/2026	0.14	0.001	<0.0002	130	<0.001	0.002	0.87	0.008	380	<0.0001	<0.001	120	0.017	0.00
	29/05/2026	0.69	<0.001	<0.0002	4.9	<0.001	<0.001	2.9	0.002	5.9	<0.0001	0.002	2.7	0.01	0.14
	23/06/2026	0.84	<0.001	<0.0002	13	0.001	<0.001	3.6	<0.001	25	<0.0001	0.002	7.8	0.19	0.06
	29/06/2026	0.4	<0.001	<0.0002	11	<0.001	<0.001	1.6	<0.001	12	<0.0001	<0.001	6.6	0.007	0.04
	14/07/2026	0.5	<0.001	<0.0002	14	0.001	0.001	1.5	<0.001	19	<0.0001	0.002	9	0.011	0.04
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		**0.055**	**0.013**	**0.0002**	**-**	**0.0033**	**0.0018**	**0.3**	**0.0034**	**-**	**0.0006**	**0.011**	**-**	**0.008**	**<1***

Note: * derived from Interim Target Cri

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW06	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	-	-	<20	<50	<100	<100	-	<100
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	90	90	<100	<100	<20	160	<100	<100	160	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<100	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	2.1	2.1	<100	<100	<20	<50	0.9	<100	0.9	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	14/07/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		-	-	-	-	-	-	-	-	-	-

Note: * derived from Interim Target Cri

APPENDIX D

Photolog

PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
1	14/07/2026

Description

Surface water monitoring location SW01.



Photo No.	Date
2	14/07/2026

Description

Surface water monitoring location SW02.



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
3	14/07/2026

Description

Surface water monitoring location SW03.



Photo No.	Date
4	14/07/2026

Description

Surface water location SW04



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
5	14/07/2026

Description

Surface water monitoring location SW06.



Photo No.	Date
6	14/07/2026

Description

Groundwater water monitoring location MW7.



MONTHLY WATER QUALITY MONITORING REPORT

Harvest Estate Urban Development

Monitoring Event: 11th August 2026

Ewingsdale Road, Byron Bay, NSW, 2481

Job Number: 217140

For:

Planit Consulting

By:

ENV Services

Date:

07/09/2026

ENV Services Pty Ltd

313 River Street, Ballina NSW 2478

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DOCUMENT CONTROL

Job No:	Job Number: 217140
Client:	Planit Consulting
Filename:	217140_Harvest Estate_WQ_August_2026

	Name:	**Date:**	**Signature:**
Prepared By:	Austin Metcalfe-Smith Environmental Scientist	07/09/2026	
Reviewed By:	Kingsley Baldwin Environmental Team Leader	14/09/2026	

Revision:	**Date:**	**Details:**

SCOPE OF ENGAGEMENT AND LIMITATIONS

This report has been prepared by ENV Services at the request of Planit Consulting for the purpose of consolidating and assessing water quality monitoring (surface water and ground water) data to determine impact associated with the development of the Harvest Estate. No other parties may rely on the contents of this report for any purposes except those stated.

This report has been prepared based on the information provided to us and from other information obtained as a result of enquiries made by us. ENV accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this document for a purpose other than that described above.

No part of this report may be reproduced, stored, or transmitted in any form without the prior consent of ENV.

ENV declares that it does not have, nor expects to have, a beneficial interest in the subject project.

To avoid this advice being used inappropriately, it is recommended that you consult with ENV before conveying the information to another who may not fully understand the objectives of the report. This report is meant only for the subject site/project and should not be applied to any other.

1 INTRODUCTION

ENV Services Pty Ltd (ENV) was engaged by Planit Consulting to prepare a Monthly Water Quality Report (MWQR) to meet requirements outlined in the Harvest Estate Development Conditions of Consent (11b - d, 32, 33 & 78) and Section 6.2 and 6.4 of the Planit Construction Environmental Management Plan (CEMP). Monitoring has been undertaken in accordance with the following approved plans.

- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate Groundwater Management Plan.* Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Belongil Creek Plan of Management*. Dated August 2020.
- Australian Wetlands Consulting Pty Ltd (AWC) (2020). *Harvest Estate West Byron Urban Release Area; Acid Frog Management Plan.* Dated August 2020.

Baseline water quality parameters outlined in this report have been derived from mean or range values calculated over a 12-month sampling period undertaken between 25 May 2020 and 17 May 2021. This baseline water quality monitoring was carried out by Australian Wetlands Consulting (AWC) and undertaken in accordance with the Harvest Estate Groundwater Management Plan (AWC 2020) and the Harvest Estate – Belongil Creek Plan of Management (AWC 2020).

Guideline water quality trigger values have been derived from the ANZG (2018) Water Quality Guidelines and ANZECC (2000) guidelines for Fresh and Marine Water Quality. These guidelines define Belongil Creek as a lowland river of South-Eastern Australia, with trigger values chosen to reflect this. In assessing human disturbance, this report recognises Belongil Creek as being slight to moderately disturbed. On this basis, for toxicants in water, 95% species protection default guideline values have been presented for assessed toxicants.

No construction works were being undertaken during this monitoring period, with major civil earthworks associated with Stage 1 of the Project completed in November 2023.

2 MONITORING RESULTS & OBSERVATIONS

2.1 Monthly Groundwater Monitoring

Monthly groundwater monitoring at five (5) groundwater wells (MW2 – MW5 & MW7) was carried out to assess for impact within the underlying aquifer. This monitoring was conducted in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.2 of the Planit Construction Environmental Management Plan (CEMP). Groundwater monitoring locations are presented in Appendix A.

An assessment of the monthly analytical results presented in Appendix B, Table 1, identified the following observations:

Site	Observation	Comments
MW2	pH, N and SO_4 were recorded outside of baseline ranges.	Sulfate concentrations are likely associated with the oxidation of sulfide-bearing sediments (e.g. pyrite, marcasite) under fluctuating REDOX conditions, such as those induced by seasonal groundwater drawdown and rewetting cycles. Groundwater had sulfuric odour typical of oxidising ASS terrains. No site related impacts identified at this location.
MW3	All parameters were recorded within baseline ranges.	No site related impacts identified at this location.
MW4	All parameters were recorded within baseline ranges with the exception of SO_4 and Al.	Groundwater had sulfuric odour typical of oxidising ASS terrains. No site related impacts identified at this location.
MW5	pH, EC TDS and several cations/anions (SO_4, Ca, Mg, Na and Al) concentrations were outside baseline ranges or guideline values (Al only).	Localised groundwater quality continues to display some variability in analyte concentrations. A review of historic data collated over the monitoring rounds continues to indicate a general trend towards baseline water quality values. As pH stabilises toward more neutral conditions, acid generation is expected to be increasingly buffered. This should reduce the dissolution of minerals within the soil profile and, over time, contribute to lower dissolved ion concentrations in groundwater. A sulfur odour typical of oxidising ASS terrains was noted at this location. Localised impacts continue to be reported at this site.

MW7	All parameters were recorded within baseline ranges with the exception of Al	Elevated aluminium concentrations are likely associated with the oxidation of sulfide-bearing sediments (e.g. pyrite) under fluctuating REDOX conditions, such as those induced by seasonal groundwater drawdown and rewetting cycles. The reduction in pH created leads to the release of aluminium from aluminium-bearing minerals into the porewaters. Groundwater had sulfuric odour typical of oxidising ASS terrains. No site related impacts identified at this location.

2.2 Monthly Surface Water Monitoring

Monthly surface water sampling (SW01 – SW06) was carried out to assess for impact from site activities on the receiving environment. Monitoring was carried out in accordance with the site's Conditions of Consent, along with monitoring requirements outlined in Chapter 6.4 of the Planit Construction Environmental Management Plan (CEMP), which require assessment of the following analytes; physiochemical parameters, nutrient, metals, cation/anion and total recoverable hydrocarbon (TRH).

Surface water monitoring locations are presented in Appendix A and the coordinates (GDA94) of all locations tabulated and presented in Table 1. Tabulated analytical results are presented in Appendix C. Select photos of the surface water sampling programme are presented in Appendix D.

Table 1: Surface Water Monitoring Coordinates

Monitoring Location	Location	Easting	Northing
SW01	Upstream of development - Southern Swale Drain	0556852	6831954
SW02	Upstream of development - Northern Main Drain	0557145	6831963
SW03	Downstream of development - Northern Main Drain	0557411	6831604
SW04	Downstream of development - Southern Swale Drain	0557397	6831429
SW05	Receiving environment - Outlet of Southern Swale Drain	0557992	6830881
SW06	Receiving environment - Outlet of Northern Main Drain	0558257	6831214

2.2.1 Assessment of Analytical Results

An assessment of the monthly analytical results presented in Appendix C, identified the following observations:

Site	Observation	Comments
SW01	N, Al, Ca, Cr, Fe and Pb were recorded outside of baseline ranges.	This site is located at an upstream location, receiving water from off-site. Continued increase in vegetation growth/decay causing higher organic matter content within the sample likely increasing analyte concentrations. No site related impacts identified.

Site	Observation	Comments
SW02	pH, TDS, EC, Na, SO_4, Ca, Mg and K were recorded outside baseline ranges.	All elevated values are typical of the geological (ASS) setting. No site related impacts identified.
SW03	pH, TDS, EC, Na, SO_4, Ca, Mg, and K were recorded outside of baseline ranges.	This site is located within the Northern Main Drain, downstream of Stage 1 works and SW02. Water quality parameters are consistent with upstream location SW02. No site related impacts observed.
SW04	pH, TDS, EC, TN, and cations/anions (SO_4, Al, Ca, Cu, Fe and Mg) were outside baseline ranges.	This site is located downstream of Stage 1 works, within the Southern Swale Drain. Water quality parameters are consistent with upstream location SW01 with the exception of metals concentrations which are slightly elevated in reference to the upstream site. These elevated values are likely to be attributed to metals mobilisation during previous acidification events (seasonal lowering of water table) that are subsequently flushed during rainfall events. Water remains very turbid due to shallow profile and decaying vegetation. No site related impacts identified.
SW05	All parameters were recorded within baseline ranges with the exception of N.	No site related impacts observed.
SW06	TN and cation/anions (Al and Fe) were recorded outside ANZG default guideline values (95th percentile for slightly disturbed Freshwater Ecosystems).	Water quality appears relatively consistent with upstream location SW05. No site related impacts observed.

3 RAINFALL

During this monitoring period (14/07/2026 – 11/08/2026), 104.4 mm of rain was recorded in the area (Byron Bay, Cape Byron Lighthouse, Bureau of Meteorology).

4 CONCLUSION & RECOMMENDATIONS

4.1 Conclusion

Monitoring results indicate that impacts associated with exposure of acid sulfate soils (ASS) and vegetation overgrowth at surface water location SW04 (Southern Swale Drain) continues to impact analyte concentrations leading to elevated readings. The cleared sampling zone at SW04 remains effective; however, during periods of low rainfall, the resulting shallow sampling depth can increase turbidity. This occurs as the surface soil layers are disturbed to collect sufficient sample volume for analysis.

Water quality reported at SW03 is noted to be consistent with results reported from the upstream catchment (SW02), inferring no discernible site related impacts.

The monitoring period was characterised by low to moderate rainfall (104.4 mm), which may have influenced observed water quality trends.

Groundwater monitoring results suggest indicators of localised ASS-related impacts are fluctuating in the vicinity of monitoring well locations with the exception of MW3 and MW4, with trend analysis reflecting seasonal groundwater drawdown and rewetting cycles with continued improvements to water quality.

4.2 Recommendations

Based on the findings of this monitoring program, the following recommendations are provided to support ongoing management of site water quality:

- Given that pH across the site is generally within, or above, baseline water quality conditions, no corrective actions are currently warranted.
- Monitor designated sampling location at SW4.
- Continue to monitor signs of ASS oxidation at all MW locations.

APPENDIX A

Figures



Legend

Site Location

0 0.5 1km

Figure 1 – Site Location
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

ENV Solutions
ENVIRONMENTAL | ASBESTOS | REMEDIATION | RESOURCE RECOVERY

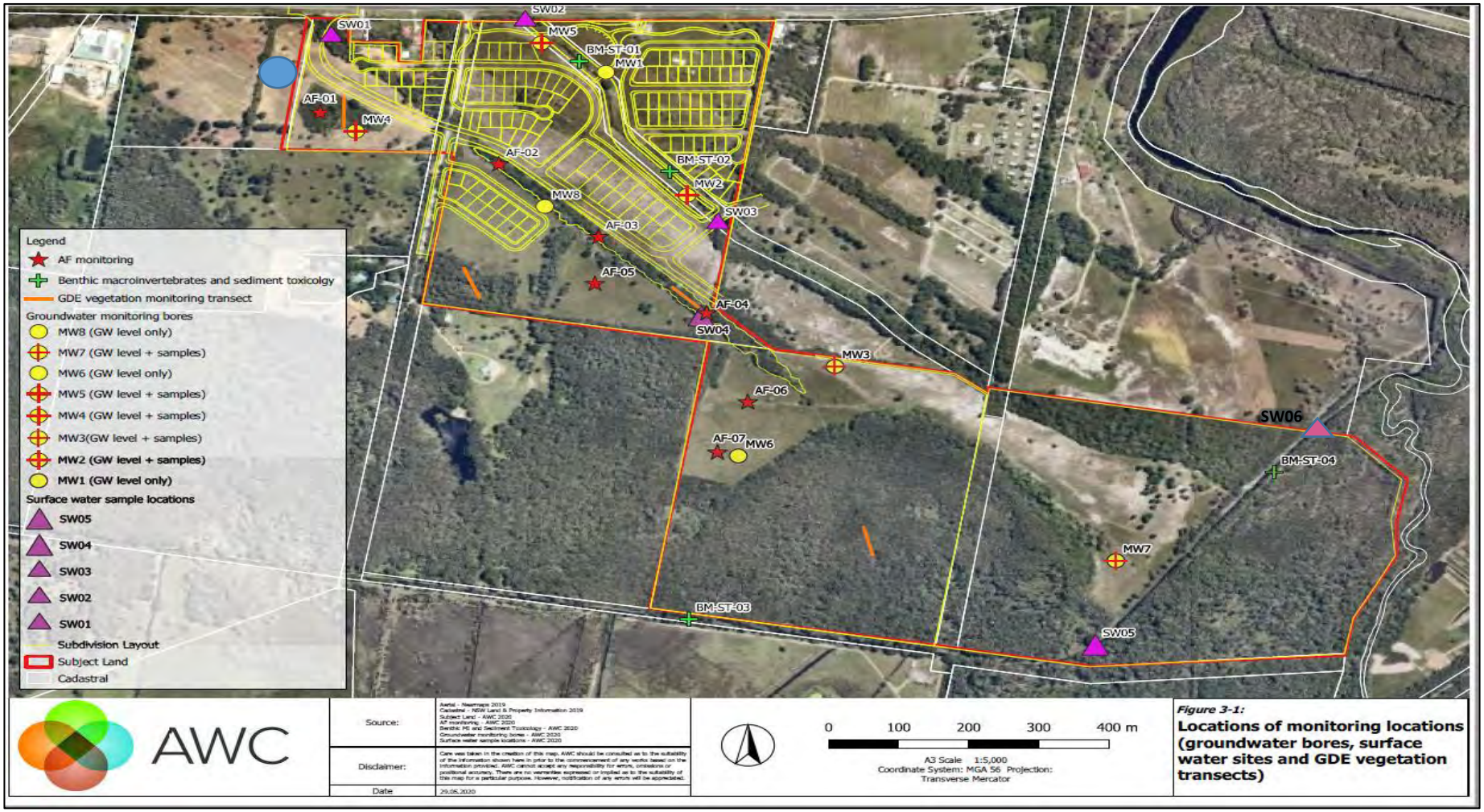


Figure 2 – AWC Monitoring Locations
342 Ewingsdale Road, Byron Bay, NSW, 2481

Project: Monthly Water Quality Monitoring
Client: Planit
ENV Project Number: 217140

ENV Solutions
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APPENDIX B

Groundwater Quality Analytical Results

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW2	29/09/22	5.8	54	92	<5	0.12	0.51	14	0.02	0.5	30	< 2	< 0.5	0.8	2.4			0.1
	20/10/22	5.6	100	110	<5	0.09	0.24	13	0.02	2	28	< 2	<0.5	0.8	2.2			0.1
	14/11/22	6.0	100	240	<5	0.07	0.24	19	<0.10	<0.2	30	< 2	1.3	1.4	2.4			0.1
	14/12/22	5.6	110	170	<5	0.02	<0.05	15	<0.10	3.1	29	5	<5	<5	<5			0.3
	18/01/23	4.6	130	76	9.2	0.12	0.09	17	<0.05	2.5	29	7	<5	<5	<5			0.4
	20/02/23	6.0	100	160	5.3	0.09	0.1	27	<0.25	0.25	27	3.7	<0.5	0.7	3.1			0.1
	28/03/23	5.9	140	92	17	0.02	0.12	15	<0.02	<0.2	21	7.2	<5	<5	<5			0.5
	18/04/23	6.2	170	88	<5	0.08	1.2	15	<0.02	7.7	18	5.2	<5	<5	<5			0.3
	18/05/23	5.9	130	76	10	0.09	0.1	13	<0.02	9	28	2.1	0.6	0.9	2.6			0.2
	25/06/23	3.3	4,500	3,000	250	0.26	1.6	45	<0.02	8.1	86	3,800	440	82	7.9			84.4
	24/07/23	6.2	220	150	<5	0.03	0.16	12	<0.2	1	24	12	<0.5	0.8	2.5			1.0
	21/08/23	5.7	120	84	<5	0.08	0.14	15	<0.02	1.7	30	2.3	<5	<5	<5			0.2
	18/09/23	5.9	120	130	11	0.04	0.15	13	<0.02	1.2	25	<2	<0.5	0.9	2.7			0.1
	18/10/23	5.6	110	73	6.6	0.3	0.11	15	<0.02	0.3	25	3	<0.5	0.9	2.8			0.2
	20/11/23	6.0	160	70	<5	0.11	0.17	16	<0.01	0.8	28	4.2	<0.5	0.8	2.6			0.3
	19/12/23	6.3	110	100	<5	0.05	0.48	16	<0.02	2.8	28	2.1	0.5	0.9	2.9			0.1
	20/01/24	6.2	150	88	<5	0.05	0.08	13	<0.02	1.1	26	<2	<0.5	0.8	3			0.1
	26/02/24	5.1	150	340	7.4	0.07	0.09	15	<0.02	8.6	36	14	0.6	1	2.7			0.9
	26/03/24	5.7	180	310	<5	0.07	0.13	16	<0.02	<1	27	6.9	<0.5	0.8	2.7			0.4
	18/04/24	5.7	170	<5	<5	0.05	0.09	15	<0.02	1.8	29	2.6	<0.5	0.9	2.8	3.6	<1	0.17
	20/05/24	5.6	160	120	<5	0.11	0.1	19	<0.02	1	32	2.9	<0.5	0.8	2.8	3.9	<1	0.2
	25/06/24	5.5	170	170	12	0.09	<0.01	21	<0.02	2.7	30	<2	<0.5	0.8	2.3	3.8	<1	0.0
	10/07/24	5.8	150	190	<5	0.03	0.11	15	<0.02	<1	28	2.2	<0.5	0.7	2.7	2.8	<1	0.1
	06/08/24	5.9	170	90	6.9	0.16	0.12	20	<0.1	2.4	25	3.3	<0.5	0.6	2.1	3.4	<1	0.2
	11/09/24	5.7	140	110	<5	0.02	0.83	21	<0.2	<1	28	<2	<0.5	0.7	2.4	2.8	<1	0.0
	09/10/24	5.9	150	210	6.3	0.21	<0.01	17	0.02	<0.2	30	2.8	<0.5	<0.5	2.6	2.4	<1	0.1
	06/11/24	5.7	120	190	6.6	2	0.02	17	-	2.3	33	<2	1	1	3.1	3.6	<1	0.1
	16/12/24	6.0	120	60	8.0	0.05	<0.1	16	<0.2	0.9	30	5.3	0.14	0.8	2.8	3.5	<1	0.3
	14/01/25	6.4	150	94	610.0	0.03	<0.05	15	<0.1	<0.25	31	<2	<0.5	0.6	2.4	2.7	1	0.1
	11/02/25	5.7	170	150	<5	0.04	<0.1	13	<0.02	<0.5	29	2.8	<0.5	0.6	2.4	2.8	<1	0.2
	24/03/25	5.7	120	190	<5	<0.05	0.05	36	0.02	4.2	28	5.8	<0.5	0.7	2.4	2.7	<1	0.2
	08/04/25	5.7	120	220	<5	0.02	0.03	16	0.03	<2	31	4.2	<0.5	0.7	2.6	3.5	<1	0.3
	09/05/25	6.0	150	210	<5	0.01	<0.1	17	<0.2	1.1	29	7	1.3	0.7	2.6	3.2	<1	0.4
	25/06/25	5.6	180	200	<5	0.06	<0.01	15	<0.02	0.8	33	22	<0.5	0.7	2.6	1.7	<1	1.5
	08/07/25	5.5	190	180	<5	0.04	0.13	14	<0.2	1.6	32	24	<0.5	0.8	2.5	1.7	<1	1.7
	14/08/25	5.8	180	160	12.0	0.07	0.11	15	<0.02	1.9	30	33	<0.5	0.8	2.5	0.82	<1	2.2
	11/09/25	5.7	190	100	<5	0.03	0.09	17	<0.02	3.1	33	31	<0.5	0.8	2.6	0.84	<1	1.8
	13/10/25	5.6	170	180	<5	0.16	0.16	18	<0.2	0.6	33	24	<0.5	0.8	2.5	2	<1	1.3
	20/11/25	5.8	180	210	6	0.08	0.25	14	<0.2	0.7	35	8.1	<0.5	0.8	2.6	1.1	<1	0.6
	17/12/25	5.7	170	100	6.8	0.09	0.17	15	<0.2	1	35	9.3	<0.5	0.9	2.5	0.99	<1	0.6
	21/01/26	5.8	160	220	<5	0.04	0.12	16	<0.02	3.5	34	7.1	<0.5	0.9	2.7	2.3	<1	0.4
	20/02/26	5.9	170	190	<5	0.08	0.03	16	<0.02	1.9	31	20	<0.5	0.7	0.7	1.1	<2	1.3
	20/03/26	5.9	170	110	7.90	0.08	0.04	17	<0.02	2.9	29	6.7	<0.5	0.7	2.4	1.3	<1	0.4
	21/04/26	6.05	170	200	<5	0.04	<0.01	16	<0.02	1.6	32	43	<0.5	0.8	2.5	1.1	<1	2.7
	29/05/26	6.3	160	110	<5	0.04	0.06	20	<0.02	1.1	29	23	<0.5	0.6	2.4	0.96	<1	1.2
	23/06/26	5.6	160	170	<5	0.05	0.07	16	<0.02	0.9	32	19	0.6	0.7	2.9	0.93	0.6	1.2
	14/07/26	5.69	150	190	<5	0.02	0.09	18	<0.02	3.4	28	20	<0.5	0.6	2.3	0.98	<1	1.1
	11/08/26	5.8	140	73	<5	0.02	0.11	17	<0.02	3.6	29	40	<0.5	0.7	2.2	0.99	<1	2.4
MW2 Baseline		**4.2 - 5.7**	**152**	**103**	**483**	**0.45**	**0.338**	**189**	**0.07**	**2.03**	**29.7**	**9.8**	**0.7**	**1.4**	**4.2**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW3	29/09/22	4.2	53	40	370	0.09	0.05	8.8	0.02	0.5	7	<2	< 0.5	1	0.6			0.1
	20/10/22	4.1	64	62	130	0.01	0.2	8	0.02	0.5	7	<2	0.5	0.9	<0.5			0.1
	14/11/22	4.6	57	84	170	0.03	0.27	7.4	<0.02	<0.2	7.1	<2	0.8	0.6	<0.5			0.1
	14/12/22	4.3	43	32	280	<0.01	<0.01	5.2	<0.02	1.1	6	<2	<5	<5	<5			0.2
	18/01/23	4.3	54	28	670	0.03	<0.01	4.1	<0.05	1.4	<5	4.1	<5	<5	<5			1.0
	20/02/23	4.2	36	40	76	0.02	<0.10	6.8	0.06	7.26	7.6	<2	<0.5	1	<0.5			0.1
	28/03/23	4.1	70	44	<5	<0.01	<0.01	7.9	<0.02	0.22	4.8	2.2	<0.5	1	0.6			0.3
	18/04/23	4.6	89	54	110	0.02	0.1	9.6	<0.02	5.7	4.3	4.3	<0.5	0.6	<0.5			0.4
	18/05/23	4.5	60	40	450	0.02	0.04	5.8	<0.02	1	4.8	2.1	0.6	0.8	<0.5			0.4
	15/06/23	4.0	84	48	22	0.27	0.4	5.5	<0.02	1.96	5	63	<0.5	0.8	<0.5			11.5
	24/07/23	4.5	85	59	160	0.04	<0.01	9.5	<0.02	<0.2	5.6	12	<0.5	0.8	<0.5			1.3
	21/08/23	3.9	110	52	100	0.01	<0.01	6.3	<0.02	<0.2	6.6	3	<0.5	1.1	<0.5			0.5
	18/09/23	Dry – no sample collected																
	18/10/23	Dry – no sample collected																
	20/11/23	4.0	96	46	120	0.03	<0.02	7.8	<0.01	0.7	5.8	5	<0.5	0.7	<0.5			0.6
	19/12/23	4.0	46	30	92	<0.01	0.04	13	<0.02	<0.2	9.7	5.6	<0.5	1.3	0.6			0.4
	20/01/24	4.2	70	28	270	0.01	<0.01	5.4	<0.02	0.6	5.5	<2	<0.5	0.8	<0.5			0.2
	26/02/24	4.5	70	50	29	0.01	0.02	10	<0.02	16	5	4.5	<0.5	0.6	<0.5			0.5
	26/03/24	4.1	67	56	110	<0.01	0.06	5.1	<0.02	0.3	4.4	6.1	<0.5	0.8	<0.5			1.2
	18/04/24	3.7	150	< 5	<5	0.05	0.01	4.6	<0.02	0.7	4	12	<0.5	0.8	<0.5	0.99	<1	0.3
	20/05/24	4.5	36	30	26	0.03	<0.01	31	<0.02	0.3	3	3.9	0.6	<0.5	<0.5	1.1	<1	0.1
	25/06/24	3.5	160	90	120	0.17	<0.01	2.8	<0.02	<0.2	3.1	5	<0.5	<0.5	<0.5	0.7	<1	0.1
	10/07/24	4.4	42	40	300	<0.01	<0.01	4.2	<0.02	0.5	3.5	2.5	<0.5	<0.5	<0.5	0.7	<1	0.6
	06/08/24	4.3	45	22	310	0.03	0.01	4.4	<0.02	3.2	2.5	<2	<.5	<0.5	<0.5	1	<1	0.2
	11/09/24	4.2	44	28	720	0.02	<0.1	5	<0.02	<1	3.7	<2	<0.5	<0.5	<0.5	1.3	<1	0.2
	09/10/24	4.2	50	32	430	0.1	<0.01	5.3	<0.02	<0.2	4.1	2.8	2.9	0.6	0.6	0.48	<1	0.2
	06/11/24	4.3	38	20	370	<0.01	0.09	4.8	-	0.9	4.6	<2	0.6	0.7	<0.5	0.84		0.2
	16/12/24	4.3	35	24	63	0.02	<0.01	4.4	<0.02	0.5	3.8	2.2	<0.5	0.7	<0.5	0.75	<1	0.5
	14/01/25	4.5	40	20	38	0.03	0.01	3.3	<0.02	0.5	2.8	<2	<0.5	<0.5	<0.5	0.75	<1	0.3
	11/02/25	4.2	64	36	8.2	<0.01	<0.01	2.9	<0.02	<0.2	3.1	4.4	<0.5	<0.5	<0.5	1.1	<1	1.5
	24/03/25	4.0	79	50	150	0.02	<0.01	13	<0.02	0.9	5.8	3.9	0.8	1.1	<0.5	0.52	1.5	0.3
	08/04/25	4.2	71	38	160	<0.01	0.02	11	<0.02	0.9	7.3	4.1	0.9	1.4	2.6	0.58	1.5	0.4
	09/05/25	4.5	73	74	210	<0.01	0.02	9.9	<0.02	0.8	7	3.1	0.7	0.9	<0.5	0.74	<1	0.3
	25/06/25	4.5	42	44	170	0.05	<0.01	4.4	<0.02	1.9	5	4.3	<0.5	<0.5	<0.5	1	<1	1.0
	08/07/25	4.5	47	25	670	0.02	0.03	4.5	0.03	0.6	4.9	2.5	<0.5	<0.5	<0.5	1	<1	0.6
	14/08/25	4.8	34	38	550	0.06	0.06	3.8	0.02	5.7	3.6	4	<0.5	<0.5	<0.5	0.5	<1	1.0
	11/09/25	4.6	42	28	2,500	0.02	0.3	4.7	0.11	2.1	4.7	3.5	<0.5	<0.5	<0.5	0.49	<1	0.7
	13/10/25	Dry – no sample collected																
	20/11/25	Dry – no sample collected																
	17/12/25	Dry – no sample collected																
	21/01/26	Dry – no sample collected																
	20/02/26																	
	20/03/26	4.2	81	50	780	0.8	<0.1	10	<0.02	<0.02	5.1	<2	<0.5	1.6	<0.5	0.63	<1	0.2
	21/04/26	Dry – no sample collected																
	29/05/26	5.17	66	36	290	0.09	<0.1	9.6	<0.02	0.7	6.4	8.6	0.6	0.8	0.5	0.43	<1	0.2
	23/06/26	4.7	51	61	130	0.1	<0.01	6.6	<0.02	0.8	8.5	7.7	0.6	0.6	0.9	0.73	0.8	0.3
	14/07/26	4.5	41	28	52	0.04	0.01	5.9	<0.02	0.7	4.7	<2	<0.5	<0.5	<0.5	0.47	<1	0.3
	11/08/26	4.8	38	18	100	0.02	0.06	5.4	<0.02	1.9	4.5	<2	<0.5	0.7	<0.5	0.47	<1	0.3
MW3 Baseline		**4.0 - 5.3**	**206**	**140**	**5223**	**1.57**	**0.294**	**121**	**0.167**	**4.14**	**26.4**	**13.4**	**3.8**	**5.3**	**3.1**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW4	29/09/22	4.5	100	88	350	0.03	0.16	22	0.1	1.5	19	<2	3.6	3.7	0.9			0.0
	20/10/22	4.5	110	100	69	0.02	0.78	20	0.04	1	14	<2	3.9	2.1	<0.5			0.1
	14/11/22	4.2	130	340	16	0.01	0.13	30	<0.10	7	22	5	2.6	4.8	1.1			0.2
	14/12/22	4.2	140	140	60	<0.01	<0.05	23	<0.10	3	21	7.8	<5	<5	<5			0.3
	18/01/23	5.7	170	110	170	0.02	0.16	26	<0.50	2.4	20	6.6	<5	<5	<5			0.3
	20/02/23	3.9	87	110	31	0.04	<0.05	15	0.28	3.88	15	5.8	3.5	5.4	0.9			0.4
	28/03/23	4.7	180	120	190	0.04	0.08	28	<0.02	22	18	6	8.8	5.1	<5			0.2
	18/04/23	3.7	500	280	340	0.11	0.07	27	<0.02	0.9	19	130	3.4	5	<0.5			4.8
	18/05/23	5.4	110	72	70	0.03	<0.01	14	<0.02	2.89	11	10	5.7	3.7	<0.5			0.7
	15/06/23	3.8	200	150	130	1.4	0.29	29	<0.02	0.9	21	12	<5	6	<5			0.4
	24/07/23	4.1	170	94	58	0.03	<0.1	24	<0.2	1	20	17	2.8	6.2	0.6			0.7
	21/08/23	3.8	200	120	75	0.03	0.07	18	0.65	1.76	15	3.6	2	5	<0.5			0.2
	18/09/23	3.8	160	86	21	0.02	0.11	19	0.02	1.1	17	10	1.5	4.1	<0.5			0.5
	18/10/23	3.8	190	110	31	0.08	0.08	25	<0.02	0.9	18	9.3	1.7	4.5	0.5			0.4
	20/11/23	4.4	160	870	28	0.05	0.1	22	<0.01	2.2	15	5.8	3.3	4	0.7			0.3
	19/12/23	4.0	190	130	27	0.03	0.41	38	<0.02	1.5	22	13	3.3	7.8	1			0.3
	20/01/24	4.2	170	120	27	0.01	0.02	24	<0.02	1.2	17	2.9	5.4	5.1	<0.5			0.1
	26/02/24	3.6	290	190	96	0.03	0.07	27	<0.02	6.9	17	38	10	4.1	<0.5			1.4
	26/03/24	5.6	150	140	18	0.02	0.58	25	<0.02	1.1	15	7	9.3	3.8	<0.5			0.3
	18/04/24	4.3	140	90	12	0.02	0.04	17	<0.02	24	13	6.7	3.2	3.6	<0.5	1.1	2.9	0.4
	20/05/24	5.9	200	180	9.4	0.01	0.83	15	<0.02	1.1	10	5.6	9.6	2.1	<0.5	1.5	6.4	0.4
	25/06/24	4.2	120	100	33	0.1	<0.01	15	<0.02	1.4	9.1	2.3	3.5	2.2	<0.5	1.7	<1	0.2
	10/07/24	6.3	79	46	16	0.02	0.12	8.7	<0.02	1.4	6.4	4	9.7	1	<0.5	0.55	<1	0.5
	06/08/24	4.4	170	100	24	0.02	0.12	26	<0.02	2.4	12	5.5	1.5	3.2	<0.5	0.86	<1	0.2
	11/09/24	5.2	110	74	27	0.02	0.14	21	<0.02	0.6	12	2.5	7.2	2.9	<0.5	1.3	<1	0.1
	09/10/24	4.1	150	140	190	0.1	0.07	25	0.03	0.9	15	6.2	2.9	4	0.7	1.2	<1	0.2
	06/11/24	4.4	130	180	40	0.51	0.04	22	-	1.9	15	2.3	4.7	4.8	<0.5	1.4	3.4	0.1
	16/12/24	5.7	80	70	<5	0.02	<0.1	18	<0.2	1	11	4.1	8.1	3	<0.5	0.99	7.2	0.2
	14/01/25	4.1	180	120	86	0.02	1.3	26	<0.02	1.2	14	2.4	4.4	3.8	<0.5	1.6	<1	0.1
	11/02/25	4.1	170	150	<5	0.01	<0.1	25	<0.02	<0.5	16	3.1	2.5	4.8	<0.5	1.8	<1	0.1
	24/03/25	5.0	110	84	39	<0.05	0.04	22	0.02	5	13	7.6	4.9	3.4	<0.5	0.85	5.8	0.3
	08/04/25	5.2	90	130	22	<0.01	0.03	16	<0.02	1	10	3.7	6.9	2.7	<0.5	0.58	12	0.2
	09/05/25	6.0	110	140	45	-	-	14	<0.2	-	8.7	2.7	11.0	2	<0.5	0.8	14	0.2
	25/06/25	5.4	98	140	130	0.06	0.01	12	0.2	1.6	8.8	8.2	8.6	1.6	<0.5	0.98	8.8	0.7
	08/07/25	5.0	110	100	300	0.01	0.23	15	<0.2	<0.5	11	9.4	5.7	2.4	<0.5	1.7	3.4	0.6
	14/08/25	5.7	110	150	600	0.11	0.12	15	0.04	4.7	9.6	4.3	10.0	2	<0.5	0.64	<1	0.3
	11/09/25	4.4	140	89	290	0.02	0.15	25	0.07	4.2	15	7.3	4.0	3.5	0.9	1.1	3.6	0.3
	13/10/25	4.3	160	210	120	0.11	0.42	30	<0.2	<2	18	2.8	2.9	4.5	0.8	2.2	1.3	0.1
	20/11/25	4.2	160	220	140	0.06	0.22	22	<0.2	1.1	16	2.2	2.7	4.1	0.6	1.2	2.3	0.1
	17/12/25	4.1	170	110	170	0.02	<0.1	26	<0.2	1.9	20	2.9	1.4	5.6	0.9	1.1	1.3	0.1
	21/01/26	4.5	120	190	370	0.25	0.04	14	0.03	3.5	12	5.1	4.9	3.4	<0.5	1.5	3.3	0.4
	20/02/26	4.1	280	290	200	0.1	<0.1	28	<0.2	1.8	24	42	5.8	11	0.8	0.99	5.9	1.5
	20/03/26	5.1	270	170	130	0.13	<0.1	23	<0.2	2.8	20	19	16	7.9	<0.5	0.74	21.6	0.8
	21/04/26	4.99	300	230	110	0.04	<0.01	24	<0.02	1.5	19	86	6.3	8.2	<0.5	0.87	7.2	3.6
	29/05/26	4.8	180	150	210	0.04	<0.1	23	<0.02	1.9	13	23	9.6	4.2	<0.5	0.82	11.7	1.0
	23/06/26	4.7	160	170	150	0.08	0.02	23	<0.02	2.4	17	13	7.3	4.5	0.9	0.85	8.6	0.6
	14/07/26	5.52	120	170	31	<0.01	<0.01	16	<0.02	<1	10	5.8	11	2.8	<0.5	0.69	15.9	0.4
	11/08/26	4.3	200	120	38	0.03	<0.01	31	<0.02	3.2	18	23	7.8	6.5	<0.5	1.2	6.5	0.7
MW4 Baseline		**4.0 - 5.8**	**890**	**605**	**1220**	**0.43**	**1.392**	**199**	**0.185**	**4.36**	**146.3**	**19.2**	**11.3**	**15.6**	**5.4**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW5	29/09/22	4.5	59	68	630	0.13	0.41	18	0.02	6.33	14	<2	2	3	0.6			0.1
	20/10/22	4.4	75	82	92	0.02	0.1	15	0.02	0.5	12	<2	2	2	0.5			0.1
	14/11/22	4.6	120	270	150	0.08	0.52	29	<0.10	7.8	26	<2	5	6	1.4			0.0
	14/12/22	4.5	150	150	230	0.02	<0.060	29	<0.05	11	24	10	<5	<5	<5			0.3
	18/01/23	2.8	1,600	1,100	480	0.05	1.7	43	<0.05	5.7	49	7	90	72	<5			0.2
	20/02/23	2.6	2,700	3,200	310	0.03	4.2	27	<0.05	3.2	47	750	390	76	7.8			27.8
	28/03/23	3.0	5,200	3,700	130	0.02	5.9	28	<0.02	11	34	1,100	440	57	7.1			39.3
	18/04/23	2.9	3,800	5,100	300	0.01	4	44	<0.02	4	49	3,800	380	120	4.7			86.4
	18/05/23	3.4	3,100	3,400	150	<0.01	<0.01	15	<0.02	4.9	23	2,200	240	31	4.2			146.7
	15/06/23	2.9	3,000	1,800	640	0.3	2.9	28	<0.02	2.66	64	2,100	410	130	6.5			75.0
	24/07/23	5.5	2,800	1,600	6	0.07	0.19	1,400	<0.2	0.5	450	380	25	54	25.0			0.3
	21/08/23	3.3	5,200	3,400	13	0.03	4.6	67	<0.02	5	89	2,200	420	200	9.9			32.8
	18/09/23	3.3	4,500	5,800	6.1	0.01	4	51	0.02	3.7	67	4,300	360	140	7.9			84.3
	18/10/23	3.2	4,700	4,900	96	0.03	1.3	58	<0.02	2.1	68	710	380	130	7.3			12.2
	20/11/23	2.8	5,900	7,500	29	0.06	2.7	55	<0.01	11	60	6,600	310	100	6.8			120.0
	19/12/23	2.9	3,100	2,700	230	0.01	4.6	80	<0.02	5	80	3,500	290	86	6.9			43.8
	20/01/24	3.2	4,900	6,600	74	0.03	<0.01	52	<0.02	4.5	68	1,000	370	84	7.9			19.2
	26/02/24	2.6	3,400	4,500	180	0.03	0.59	25	<0.02	5.4	51	3,000	290	46	4.0			120.0
	26/03/24	3.2	4,400	3,500	17	0.02	1.8	140	<0.02	2.5	54	11,000	360	77	6.0			78.6
	18/04/24	3.3	4,200	2,200	39	<0.01	0.02	49	0.05	5.1	50	3,300	310	47	4.0	210	1.5	67.3
	20/05/24	3.4	3,100	1,600	8.8	0.03	3.1	53	<0.02	2.9	27	2,900	200	22	2.8	140	1.42	54.7
	25/06/24	3.2	4,100	2,700	310	0.03	<0.01	76	<0.02	7.2	75	1,400	290	60	4.3	320	<1	18.4
	10/07/24	3.5	2,300	2,600	49	0.02	<0.01	14	<0.02	3.9	20	1,900	240	20	2.4	130	<1	135.7
	06/08/24	3.3	170	3,500	14	0.19	4.6	62	<0.02	7.7	56	3,600	310	54	4.2	250	<1	58.1
	11/09/24	3.5	1,700	1,000	38	<0.01	3.9	27	<0.2	4.9	27	750	290	29	3.2	94	<1	27.8
	09/10/24	3.5	1,300	930	46	0.03	<0.01	27	<0.02	1.5	22	870	120	17	1.6	35	<1	32.2
	06/11/24	3.3	2,000	1,300	31	<0.01	4.8	44	-	5	59	680	300	62	4.9	90	3.33	15.5
	16/12/24	3.2	1,800	1,100	53	0.02	21	32	<0.2	2.8	25	980	180	21	2.4	35	5.1	30.6
	14/01/25	3.7	1,600	1,400	190	<0.01	1.3	19	<0.02	2.1	16	320	210	16	1.8	25	8.4	16.8
	11/02/25	3.5	2,000	1,700	69	0.01	2.6	160	<0.02	14	110	860	110	50	2.8	56	1.96	5.4
	24/03/25	3.6	1,000	890	38	<0.05	0.06	20	<0.02	3.3	14	570	140	8.5	1.7	17	8.24	28.5
	08/04/25	3.7	790	700	73	<0.01	0.85	36	<0.02	5.2	42	390	86	16	<0.5	13	6.6	10.8
	09/05/25	3.7	1,300	1,200	200	<0.01	1.2	87	<0.2	3.3	24	470	87	11	1.5	9.6	9.06	5.4
	25/06/25	3.7	1,300	840	140	0.21	1.5	26	<0.02	2	18	580	140	17	1.7	17	8.3	22.3
	08/07/25	4.0	720	480	170	<0.010	0.81	21	<0.2	5.4	20	280	58	10	0.9	11	5.3	13.3
	14/08/25	3.8	530	300	230	0.02	0.55	19	<0.02	5.5	11	230	28	4.3	0.5	4.5	6.2	12.1
	11/09/25	3.8	630	430	110	<0.01	0.73	41	0.04	14	35	240	33	9.7	1.3	4.4	7.5	5.9
	13/10/25	4.0	1,200	970	260	0.11	2.8	120	<0.2	<2	76	420	68	32	2.2	13	5.2	3.5
	20/11/25	3.6	1,400	1,000	59	0.05	2.4	64	<0.02	2.4	43	270	83	34	2	13	6.4	4.2
	17/12/25	3.7	1,300	650	290	0.02	2	120	<0.2	<10	19	180	83	11	<0.5	10	8.3	1.5
	21/01/26	3.8	1,000	980	300	0.12	1.8	49	<0.02	7.3	35	200	42	29	1.7	13	3.2	4.1
	20/02/26	3.7	1,500	1,500	280	0.08	3	46	<0.2	8.3	58	700	76	65	3.3	12	6.3	15.2
	20/03/26	3.7	560	330	38	0.03	0.52	33	0.03	3.1	14	62	22	7.6	0.9	11	2.0	1.9
	21/04/26	4.5	870	590	15	0.05	1.8	34	<0.02	2.9	27	400	28	23	1.8	4	15.6	11.8
	29/05/26	5.4	300	170	26	0.03	0.24	16	<0.02	1.5	16	94	12	7.8	0.9	2.3	13.3	5.9
	23/06/26	3.9	580	380	86	0.04	0.87	37	<0.02	3.2	28	190	20	15	1.9	4.8	10.5	5.1
	14/07/26	4	490	450	40	0.04	0.95	22	<0.02	1.9	21	200	21	15	1.1	4.9	19.1	9.1
	11/08/26	4	700	310	300	0.06	1.4	44	<0.02	8.1	42	290	26	24	1.6	7.1	16.3	6.6
MW5 Baseline		**4.3 - 5.5**	**191**	**130**	**3003**	**0.97**	**13.4**	**82**	**0.117**	**13.4**	**27.2**	**8.3**	**6**	**8.4**	**5.4**	**<1.0***	**<1***	**<0.5***

Harvest Estate
ENV 217140

Monthly Groundwater Analytical Results

Site	Date	pH	EC (µδ/cm)	TDS (mg/L)	TSS (mg/L)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 (as S) (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Total Al (mg/L)	Calcium : Aluminium ratio	Sulphate : Chloride Ratio
MW7	29/09/22	4.6	26	40	190	0.1	0.3	8.5	0.02	2.5	8.5	<2	1	0.9	0.6			0.1
	20/10/22	4.5	86	70	120	0.01	0.4	12	0.04	2.9	8.5	<2	1.7	1.7	0.5			0.1
	14/11/22	4.5	44	170	<100	0.03	0.01	9.7	<0.10	<2.00	9.7	<2	1.9	1.4	1.4			0.1
	14/12/22	4.6	56	92	23	0.04	<0.10	7.5	<0.20	11	8.7	2.5	<5	<5	<5			0.3
	18/01/23	4.4	63	32	390	0.09	<0.05	7.5	<0.025	2	11	31	<5	<5	<5			4.1
	20/02/23	4.1	87	60	30	0.02	<0.05	9.1	0.42	4.9	5.8	5.7	1.4	1.9	1.1			0.6
	28/03/23	4.5	160	94	18	0.02	0.02	21	<0.02	4.4	12	66	2	2	0.6			3.1
	18/04/23	4.9	150	58	7.4	<0.01	0.11	11	<0.02	<0.20	9.8	120	1.9	0.8	<0.5			10.9
	18/05/23	4.9	78	56	130	0.03	<0.01	11	<0.02	0.89	9.3	9.3	1.4	0.9	<0.5			0.8
	15/06/23	4.6	77	50	30	0.28	0.25	11	<0.02	<0.20	9.2	62	<5	<5	<5			5.6
	24/07/23	5.1	140	100	90	0.12	<0.1	10	<0.2	1	8.5	14	1.9	1.4	0.9			1.4
	21/08/23	5.3	67	34	29	0.08	0.06	8.4	<0.02	0.8	9	45	1.8	1.7	0.8			5.4
	18/09/23	5.1	57	78	25	<0.01	0.07	9.6	<0.02	0.8	9.4	83	1.6	2	0.8			8.6
	18/10/23	5.2	61	46	10	0.04	0.1	11	<0.02	<0.2	10	160	1.6	2.1	0.8			14.5
	20/11/23	4.1	210	64	13	0.04	<0.02	8.4	<0.01	2.2	8.1	280	2.5	2.2	0.7			33.3
	19/12/23	4.6	91	62	11	0.03	0.09	19	<0.02	0.7	11	5.6	4.4	2.3	0.9			0.3
	20/01/24	4.2	170	130	34	0.01	0.09	21	<0.02	0.3	15	160	2.8	1.4	<0.5			7.6
	26/02/24	4.0	210	190	23	0.03	0.51	44	<0.02	5.8	24	7.5	3.6	2.1	0.5			0.2
	26/03/24	4.4	320	100	22	0.02	0.18	320	<0.02	<1	13	590	1.6	0.9	0.9			1.8
	18/04/24	4.3	100	98	17	0.02	0.07	8.9	<0.02	3	9	380	1.4	1.2	<0.5	1.7	<1	42.7
	20/05/24	4.4	77	56	11	0.05	0.38	6.4	<0.02	1.2	5.4	170	1.3	1	<0.5	2.3	<1	26.6
	25/06/24	4.6	66	36	33	<0.01	<0.01	<0.01	<0.02	0.6	6.7	48	1.1	0.9	<0.5	1.5	<1	0.0
	10/07/24	4.5	74	58	29	<0.01	0.22	6.5	<0.02	2.1	6.2	270	2	1.3	<0.5	0.73	<1	41.5
	06/08/24	4.8	4,600	180	19	0.04	0.06	9.1	<0.02	0.5	5.3	36	1.4	0.9	<0.5	1	<1	4.0
	11/09/24	4.4	75	50	6.4	0.04	<0.1	11	<0.02	1..0	7.1	5.2	1.3	1.1	<0.5	1.4	<1	0.5
	09/10/24	4.3	73	42	71	0.54	<0.01	8	<0.02	1.6	5.8	12	1.3	1.2	<0.5	0.94	<1	1.5
	06/11/24	4.5	59	32	35	0.02	0.03	11	-	1.3	7.8	4.4	1.3	1.4	<0.5	1.6	<1	0.4
	16/12/24	4.3	58	68	29	0.04	<0.1	12	<0.2	1.3	8.5	42	1.6	1.3	<0.5	1.9	<1	3.5
	14/01/25	4.7	63	36	120	0.04	0.02	8.6	0.03	1.3	6.8	7	1.7	1.2	0.5	2.4	1.4	0.8
	11/02/25	4.6	68	70	13	0.07	<0.1	9.2	<0.02	1.2	8.4	2	1.5	1.5	0.8	2.7	<1	0.2
	24/03/25	4.1	0	56	28	<0.05	0.02	15	<0.02	1.8	7.7	43	2.3	1.4	<0.5	1.2	1.91	2.9
	08/04/25	4.4	76	70	14	<0.01	0.03	14	<0.02	<1	8.1	31	2.8	1.1	2.1	1.4	2	2.2
	09/05/25	4.7	81	110	24	<0.01	0.03	13	<0.2	1.2	8.1	28	1.5	0.9	<0.5	1.6	<1	2.2
	25/06/25	4.6	65	70	39	0.07	<0.01	8.3	<0.02	<0.2	6.7	56	1.2	0.8	<0.5	1.2	1	6.7
	08/07/25	4.6	65	44	130	0.02	0.14	7.9	<0.02	<0.5	6.3	37	1.4	0.9	<0.5	2.6	<1	4.7
	14/08/25	4.7	60	70	140	0.06	0.01	8.9	0.04	2.2	5.7	15	0.9	0.5	<0.5	0.93	3	1.7
	11/09/25	4.4	75	51	100	0.03	0.06	12	0.04	1.1	7.2	18	1.8	1.1	0.6	0.86	2.09	1.5
	13/10/25	4.8	66	110	66	0.02	0.12	11	<0.2	<1	7.4	20	2.1	1.5	<0.5	1.3	1.6	1.8
	20/11/25	4.4	84	78	64	0.05	0.12	12	<0.2	1.1	7.8	17	1.9	1.2	<0.5	0.86	2.2	1.4
	17/12/25	4.6	79	10	75	0.04	<0.1	13	<0.2	3.1	9	11	2.1	1.7	0.5	1	2.1	0.8
	21/01/26	4.3	87	110	110	0.1	0.02	11	0.02	4.3	8.2	4.4	1.9	1.4	<0.5	2	1.0	0.4
	20/02/26	4.8	71	68	120	0.18	0.49	13	<0.2	1.5	8.3	70	2	1.8	1	1.2	1.7	5.4
	20/03/26	4.4	91	60	50	0.1	<0.1	13	<0.02	<0.02	8	42	1.6	1.4	<0.5	1	1.6	3.2
	21/04/26	4.98	110	100	71	0.07	<0.01	15	<0.02	2.70	9.5	7.3	2.5	1.5	<0.5	1.9	1.3	0.5
	29/05/26	4.12	150	94	68	0.03	0.01	29	<0.02	1.20	12	18	2	1.7	<0.5	1.2	1.7	0.6
	23/06/26	4	140	100	48	0.04	<0.01	27	<0.02	1.7	16	21	2	1.7	0.9	5	0.4	0.8
	14/07/26	4.45	85	150	13	0.03	<0.01	15	<0.02	4.7	9.7	4.1	1.2	0.9	<0.5	1.3	0.9	0.3
	11/08/26	4.7	59	34	35	0.04	<0.01	9.7	<0.02	3.1	7	6.4	1	0.8	<0.5	1.3	0.8	0.7
MW7 Baseline		**4.6 - 5.6**	**147**	**100**	**3140**	**0.71**	**0.471**	**172**	**0.048**	**4.15**	**31**	**7.3**	**3.4**	**2.2**	**3.1**	**<1.0***	**<1***	**<0.5***

Note: * derived from Interim Target Criteria within BCPoM, GWMP and AFMP (AWC 2020)

APPENDIX C

Surface Water Quality Analytical Results

Surface Water Analytical Results

ENV ASBESTOS | REMEDIATION | RESOURCE RECOVERY

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW01	29/09/2022	6.9	180	11	3.1	140	0.47	<0.01	14	<0.02	5.2	30	3.4	450		0.2
	20/10/2022	6.6	320	30	4.7	400	0.03	0.03	22	<0.02	<0.02	31	33	43		1.5
	14/11/2022	6.0	780	4,900	0.2	920	3.1	6.9	25	<0.02	14	200	3.7	67		0.1
	14/12/2022	4.5	800	210	3.6	1,100	0.15	0.05	24	<0.10	23	54	560	88		23.3
	18/01/2023	6.3	380	120	4.7	25	0.047	0.087	24	<0.02	5.2	40	180	25		7.5
	20/02/2023	3.4	1,100	32	3.8	1,300	0.42	0.37	28	<0.02	8.9	57	350	<5		12.5
	28/03/2023	3.0	2,000	100	7.7	3,000	<0.01	2.1	29	<0.02	1.29	47	880	<5		30.3
	18/04/2023	7.7	130	33	8.6	320	0.06	0.01	24	<0.02	8.4	16	14	8.8		0.6
	18/05/2023	7.4	130	6	4.4	250	0.21	0.14	11	<0.02	0.9	14	10	<5		0.9
	15/06/2023	3.2	1,900	6.8	7.6	2,700	0.03	1.6	59	<0.02	2.1	61	1,500	<5		25.4
	24/07/2023	7.9	84	<5	8.4	140	0.11	<0.01	6.4	<0.02	0.3	13	4	<5		0.6
	21/08/2023	6.9	120	25	3	190	0.34	0.01	5.6	<0.02	0.4	18	<2	<5		<0.5
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	No surface water located at monitoring site – no sample collected														
	20/11/2023	7.2	230	6.5	2.9	480	2	<0.02	56	<0.01	<0.2	43	160	<5		2.9
	19/12/2023	No surface water located at monitoring site – no sample collected														
	23/01/2024	7.0	160	130	2.2	160	3.7	0.06	14	<0.02	1.3	21	69	<5		4.9
	26/02/2024	6.2	160	47	7.2	200	0.35	<0.01	9	<0.02	3	12	59	<5		6.6
	26/03/2024	6.9	26	7.5	8.3	78	0.25	<0.01	6.7	<0.02	0.4	7.5	3.4	<5		0.5
	18/04/2024	7.2	220	23	0.5	390	0.06	0.24	25	<0.02	0.7	32	110	180	13	4.4
	20/05/3034	6.7	160	<5	3.8	260	0.16	0.01	13	<0.02	0.5	19	33	56	231	2.5
	25/06/2024	6.3	440	15	5.9	710	<0.01	<0.01	12	<0.02	<0.2	23	100	5.7	15	8.3
	10/07/2024	7.0	120	29	5.5	240	0.07	0.01	14	<0.02	1.1	17	6.9	39	12	0.5
	6/08/2024	4.0	760	19	7.6	950	0.08	<0.01	14	<0.02	1.3	23	470	<5	12	33.6
	15/08/2024	6.7	64	<5	7.3	100	0.04	0.01	6.1	<0.02	<0.2	7.2	5.5	<5	<10	0.9
	11/09/2024	6.9	120	250	0.2	190	1.1	0.11	8.9	<0.02	4.1	13	2.6	<10	17	0.3
	24/09/2024 - Investigation	6.3	170	-	-	280	-	-	-	-	-	-	-	-	-	<0.5
	9/10/2024	7.4	190	11	8.9	290	0.38	0.01	14	<0.02	<0.2	20	3.4	<5	<10	0.2
	6/11/2024	7.1	92	400	0.4	140	13	<0.01	8.1	<0.02	2.8	12	2.2	<5	<10	0.3
	16/12/2024	6.9	90	190	3.3	140	0.36	<0.01	8.2	<0.02	0.02	11	5.4	170	<10	0.7
	14/01/2025	6.7	48	7.2	3.5	89	0.14	<0.1	4.8	<0.02	0.6	5.4	<5	<5	<10	<0.5
	11/02/2025	7.5	390	<5	8.3	620	0.06	0.03	110	<0.02	0.8	16	16	12	<10	0.1
	24/03/2025	6.9	58	<5	8.6	64	0.32	0.02	6.1	<0.02	0.8	7.9	2.4	48	<10	0.4
	31/03/2025	7.1	170	5.8	9.2	200	0.14	<0.01	14	<0.02	1.1	15	6.4	<5	<10	0.5
	8/04/2025	7.2	200	9.4	8.8	230	0.37	0.04	14	<0.02	0.4	18	3.6	<5	<10	0.3
	9/05/2025	7.5	170	<5	-	200	0.2	0.03	10	<0.02	0.8	13	4.5	<5	<10	0.5
	25/06/2025	6.9	130	24	7.5	190	1.1	0.07	6.2	<0.02	1.1	12	7.1	12	22	1.1
	8/07/2025	6.9	150	<5	8	260	0.12	0.18	8	<0.02	0.8	16	5	28	34	0.6
	14/08/2025	7.3	140	7.1	6.9	240	0.17	0.03	11	<0.02	1	16	6	<5	15	0.5
	11/09/2025	7.2	150	5.2	3.9	260	0.22	0.01	13	<0.02	1.4	19	5.2	<5	16	0.4
	13/10/2025	7.2	350	14	0.3	520	0.61	0.26	39	<0.02	0.5	58	30	<5	14	0.8
	20/11/2025	7	110	8.9	5.2	200	0.24	0.03	9.1	<0.02	0.7	14	4.5	<5	16	0.5
	17/12/2025	7.2	150	30	6.1	240	0.14	0.19	27	<0.5	1.2	22	9.3	<5	37	0.3
	21/01/2026	6.8	98	30	3.5	170	0.49	0.05	17	0.017	0.6	15	4.9	<0.005	27	0.3
	20/02/2026	6.8	130	22	2.4	230	0.33	0.03	17	< 0.02	1.2	19	8.5	<0.005	<10	0.5
	20/03/2026	6.8	86	37	3.4	150	0.48	0.04	15	<0.02	1.1	11	6.6	0.015	<10	0.4
	21/04/2026	6.7	160	18	4	190	0.58	<0.01	22	<0.02	<0.4	21	2.7	<0.005	12	0.1
	29/05/2026	7.41	80	35	3.6	150	0.49	<0.01	9.9	0.33	1.1	9.2	14	0.086	16	1.4
	23/06/2026	7	220	39	3.5	290	0.35	0.03	16	<0.02	1.1	23	6	0.07	12	0.4
	29/06/2026	7	76	8.7	4.6	160	0.16	0.02	12	<0.02	16	13	5.4	0.015	<10	0.5
	14/07/2026	6.85	130	<5	3.6	270	0.1	0.08	21	<0.02	<0.2	17	6.9	0.041	<10	0.3
	11/08/2026	6.9	250	24	2.1	230	2.5	<0.01	13	<0.02	6.9	21	4.7	0.012	20	0.4
SW01 Baseline		**6.2 – 7.0**	**291**	**73**	**-**	**428**	**3.52**	**0.164**	**118**	**0.039**	**3.5**	**51**	**9**	**768**		**<0.5**

Surface Water Analytical Results

ENV ASBESTOS | REMEDIATION | RESOURCE RECOVERY

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW01	29/09/2022	1.5	0.003	<0.0002	22	0.002	0.32	2.7	0.005	14	<0.0001	0.015	3	0.071	<1
	20/10/2022	0.66	2	<0.0002	24	0.002	0.16	2.4	0.003	9.1	<0.0001	0.009	2.9	0.042	<1
	14/11/2022	130	1.3	<0.02	280	<0.10	1	130	0.1	73	<0.001	0.3	<50	4.7	<1
	14/12/2022	22	0.0016	<0.002	180	0.014	0.2	1.6	0.015	43	<0.001	0.077	6.8	0.68	<1
	18/01/2023	0.7	<0.010	<0.002	<2	<0.010	<0.01	3.2	<0.01	13	<0.01	<0.01	<5	<0.05	<1
	20/02/2023	37	0.027	0.0004	170	0.019	0.07	0.049	0.049	57	0.002	0.16	6.3	0.35	<1
	28/03/2023	150	0.002	0.0008	290	0.002	0.003	36	0.003	38	0.0001	0.46	5.1	0.97	<1
	18/04/2023	0.53	0.002	<0.0002	13	0.005	0.005	0.002	0.002	2.7	<0.0001	0.002	0.8	0.15	<1
	18/05/2023	0.16	0.002	<0.0002	23	<0.001	0.002	0.24	<0.001	7.5	<0.0001	0.002	2.3	0.02	<1
	15/06/2023	120	0.002	0.0003	350	<0.001	0.004	15	0.003	42	<0.0001	0.24	8.1	0.35	<1
	24/07/2023	0.08	0.003	<0.0002	13	<0.001	0.003	0.38	0.002	4.1	<0.0001	0.002	0.8	0.037	<1
	21/08/2023	0.52	0.001	<0.0002	17	0.001	0.002	1.2	0.001	6.3	<0.0001	0.003	<0.5	0.014	<1
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	No surface water located at monitoring site – no sample collected													
	20/11/2023	0.13	<0.001	<0.0002	26	<0.001	0.002	5.7	<0.001	7.9	<0.0001	0.003	2.2	0.006	<1
	19/12/2023	No surface water located at monitoring site – no sample collected													
	23/01/2024	<0.05	<0.001	<0.0002	30	0.001	<0.001	1.8	<0.001	10	<0.0001	<0.001	3.4	0.006	<1
	26/02/2024	<0.005	<0.001	<0.0002	14.00	<0.001	<0.001	0.93	<0.001	4.60	<0.0001	<0.001	1.70	0.05	<1
	26/03/2024	0.11	<0.001	<0.0002	7.4	<0.001	0.002	0.38	<0.001	2	<0.0001	<0.001	1.5	0.013	0.01
	18/04/2024	0.06	<0.001	<0.0002	32	<0.001	<0.001	1.4	<0.001	9.5	<0.0001	0.002	2	<0.005	0.00
	20/05/3034	0.06	<0.001	<0.0002	26	<0.001	0.001	0.86	<0.001	7	<0.0001	0.002	1.7	0.014	0.00
	25/06/2024	0.69	<0.001	<0.0002	94	<0.001	0.002	0.28	<0.001	15	<0.0001	0.008	2.3	0.055	0.01
	10/07/2024	0.25	0.002	<0.0002	28	<0.001	0.003	2.1	<0.001	6.6	<0.0001	0.002	2	0.037	0.01
	6/08/2024	0.85	<0.001	<0.0002	120	<0.001	0.004	1.3	<0.001	14	<0.0001	0.021	2.3	0.1	0.01
	15/08/2024	0.24	<0.001	<0.0002	12	<0.001	0.004	0.33	<0.001	2.8	<0.0001	0.001	1.2	0.027	0.02
	11/09/2024	9.1	0.009	0.0005	36	0.023	0.11	49	0.031	8.1	0.0001	0.019	5.2	0.72	0.25
	24/09/2024 - Investigation	-	<0.001	<0.001	-	<0.001	0.001	-	<0.001	<0.0001	-	0.004	-	0.04	<1
	9/10/2024	0.14	0.001	<0.0002	27	<0.001	0.002	1.7	<0.001	8.1	<0.0001	0.002	1.5	0.017	0.01
	6/11/2024	1.2	0.004	<0.0002	26	0.005	0.011	54	0.003	6.1	<0.0001	0.004	2.8	0.041	0.05
	16/12/2024	2.4	0.004	<0.0002	22	0.006	0.019	38	0.006	4.5	<0.0001	0.004	2.8	0.092	0.11
	14/01/2025	0.15	<0.001	<0.0002	8.8	0.001	0.003	0.34	<0.001	1.8	<0.0001	0.001	0.6	0.018	0.02
	11/02/2025	0.58	0.002	<0.0002	13.00	<0.001	<0.001	6.10	<0.001	3.50	<0.0001	0.002	1.00	0.015	0.04
	24/03/2025	0.13	<0.001	<0.0002	5.20	<0.001	0.002	0.35	<0.001	1.40	<0.0001	<0.001	1.20	0.037	0.03
	31/03/2025	0.1	0.002	<0.0002	22	<0.001	0.003	1.2	<0.001	6.8	<0.0001	0.002	2.4	0.066	0.00
	8/04/2025	<0.05	0.002	<0.0002	29	<0.001	<0.001	2.2	<0.001	8.1	<0.0001	0.002	2.4	0.008	<1
	9/05/2025	0.27	<0.001	<0.0002	20	<0.001	0.002	1.6	<0.001	5.9	<0.0001	0.002	1.7	0.03	0.01
	25/06/2025	0.11	<0.001	<0.0002	19	<0.001	0.002	0.72	<0.001	4.4	<0.0001	0.002	<0.5	0.032	0.01
	8/07/2025	0.05	<0.001	<0.0002	26	<0.001	0.002	0.49	<0.001	7.2	<0.0001	0.002	<0.5	0.024	0.00
	14/08/2025	0.14	<0.001	<0.0002	26	<0.001	0.003	0.69	<0.001	6.8	<0.0001	0.002	1.8	0.019	0.01
	11/09/2025	0.05	0.001	<0.0002	24	<0.001	0.002	1.5	<0.001	6.8	<0.0001	0.002	1.6	0.014	0.00
	13/10/2025	0.07	0.002	<0.0002	37	<0.001	0.01	0.69	<0.001	10	<0.0001	0.005	4.8	0.055	0.00
	20/11/2025	<0.05	0.001	<0.0002	19	<0.001	0.002	0.0015	0.001	4.7	<0.0001	0.002	0.9	0.012	<1
	17/12/2025	0.26	0.001	<0.0002	16	<0.001	0.001	0.89	<0.001	3.8	<0.0001	0.001	1.5	0.017	0.02
	21/01/2026	0.2	<0.001	<0.0002	12	<0.001	3	2.2	<1	2.9	<0.0001	0.001	0.7	0.031	0.02
	20/02/2026	0.23	0.002	<0.0002	18	<0.001	0.003	5	<0.001	4.5	<0.0001	0.003	0.6	0.032	0.01
	20/03/2026	0.83	<0.001	<0.0002	11	<0.001	0.006	3.5	0.002	3	<0.0001	0.002	1.5	0.043	0.08
	21/04/2026	0.1	0.001	<0.0002	10	<0.001	0.005	0.91	<0.001	2.8	<0.0001	<0.001	2.8	0.023	0.01
	29/05/2026	0.4	0.001	<0.0002	13	<0.001	0.005	4.8	<0.001	4	<0.0001	0.002	1.3	0.029	0.03
	23/06/2026	0.75	0.002	<0.0002	29	0.002	0.004	11	0.002	8.4	<0.0001	0.003	2.2	0.22	0.03
	29/06/2026	0.47	0.001	<0.0002	15	0.001	0.005	5.6	0.001	4.3	<0.0001	0.001	1.6	0.03	0.03
	14/07/2026	0.99	0.003	<0.0002	28	0.002	0.007	14	0.003	7.6	<0.0001	0.004	1.6	0.06	0.04
	11/08/2026	1.4	0.003	<0.0002	24	0.003	0.008	14	0.004	7.5	<0.0001	0.004	0.9	0.057	0.06
SW01 Baseline		**0.5**	**0.003**	**0.001**	**22**	**0.002**	**0.041**	**1.2**	**0.001**	**16**	**0.0005**	**0.006**	**6**	**0.058**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW01	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	220	220	<100	<100	<20	250	<100	<100	250	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	<50	<50	20	-	<20	<50	100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No surface water located at monitoring site – no sample collected									
	18/10/2023	No surface water located at monitoring site – no sample collected									
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	No surface water located at monitoring site – no sample collected									
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/3034	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Investigation	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	160	160	300	<100	<20	110	300	<100	410	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	17/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	120	<50	<100	<100	110	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	14/07/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	11/08/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW01 Baseline		**60**	**-**	**24**	**100**	**-**	**50**	**130**	**90**	**170**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW02	29/09/2022	6.9	170	8.8	8	160	0.04	0.03	29	<0.02	1.3	27	2.8	22		0.1
	20/10/2022	6.5	120	6.2	8.7	140	0.02	0.01	17	<0.02	<0.20	16	2.9	<5		0.2
	14/11/2022	6.4	150	210	0.1	190	0.18	<0.01	54	<0.02	13	62	18	24		0.3
	14/12/2022	6.3	110	870	0.1	200	0.27	0.05	26	<0.10	2.7	25	29	14		1.1
	18/01/2023	6.6	220	190	0.1	61	0.79	0.049	31	<0.20	21	27	6.2	61		0.2
	20/02/2023	6.5	240	29	4.4	1300	0.023	0.31	26	<0.10	1.9	29	24	<5		0.9
	28/03/2023	4.8	310	370	5.7	370	1.5	0.19	22	<0.02	<0.20	17	92	<10		4.2
	18/04/2023	6.2	300	60	7.3	410	0.05	0.16	32	<0.02	1.38	25	120	<5		3.8
	18/05/2023	6.5	130	39	6	270	0.06	0.09	25	<0.02	<0.2	18	29	<5		1.2
	15/06/2023	6.4	190	25	8.9	280	0.37	0.23	34	<0.02	1.2	25	38	<5		1.1
	21/08/2023	6.1	430	20	5.7	690	0.02	0.5	36	<0.02	1.2	38	75	<5		2.1
	18/09/2023	7.2	180	15	8.1	260	0.06	0.04	31	<0.02	0.8	28	39	<5		1.3
	18/10/2023	6.8	150	11	8.1	240	0.05	0.02	40	<0.02	<0.2	28	13	<5		0.3
	20/11/2023	6.9	180	18	4.9	350	0.07	0.04	37	<0.01	0.3	26	50	<5		1.4
	19/12/2023	6.7	140	15	4.6	240	0.05	0.03	37	<0.02	0.7	29	11	<5		0.3
	23/01/2024	6.8	210	27	9.7	350	0.06	0.02	35	<0.02	0.5	31	25	<5		0.7
	26/02/2024	4.5	140	43	7.1	190	0.05	0.03	9	<0.02	0.6	8.5	65	<5		7.2
	26/03/2024	6.7	44	12	6.8	99	0.07	<0.01	9.5	<0.02	0.5	8.8	8.7	<5		0.9
	18/04/2024	7.6	350	<5	6.4	630	0.03	0.9	93	<0.02	0.6	78	56	<5	<10	0.6
	20/05/2024	6.7	130	27	2.1	210	0.04	0.05	20	<0.02	1.1	18	16	<5	11	0.8
	25/06/2024	6.7	180	9.7	8.8	330	0.03	<0.01	42	0.03	<0.2	35	10	<5	11	0.2
	10/07/2024	7.0	150	8.2	6.1	220	0.01	0.11	22	<0.02	1.9	18	21	<5	<10	1.0
	6/08/2024	6.5	220	8.5	7	280	0.06	0.02	39	<0.02	1.7	24	19	<5	20	0.5
	15/08/2024	6.6	48	<5	7.8	80	0.07	0.01	8	<0.02	<0.2	7	6.9	18	<10	0.9
	11/09/2024	7.1	250	<5	6.1	450	0.02	0.05	90	<0.02	0.3	71	48	<5	<10	0.5
	9/10/2024	7.0	260	<5	8.9	500	0.12	0.03	88	<0.02	0.6	73	35	<5	<10	0.4
	6/11/2024	7.5	300	6.4	6	500	0.07	<0.01	89	<0.02	1	72	34	<5	<10	0.4
	16/12/2024	6.4	200	110	8.8	310	1.1	<0.01	55	<0.02	0.4	11	19	6.6	<10	0.3
	14/01/2025	6.9	170	<5	4.6	340	0.08	<0.01	51	<0.02	0.9	44	7.7	<5	<10	0.2
	11/02/2025	7.1	96	5.6	6.1	150	0.08	<0.01	14	<0.02	1.9	91	3.9	190	<10	0.3
	24/03/2024	3.2	420	7.2	8.6	670	<0.05	0.02	17	<0.02	2.8	17	250	<5	<10	14.7
	31/03/2025	7.2	160	<5	9.8	200	0.14	0.05	14	<0.02	<0.4	16	7	<5	<10	0.5
	8/04/2025	7.2	150	12	6.2	230	0.37	0.03	14	<0.02	0.7	18	3.4	<5	<10	0.2
	9/05/2025	3.9	320	1,100	-	560	1.5	0.23	31	<0.02	2.8	18	150	<20	34	4.8
	25/06/2025	7.1	400	9.4	9.8	580	1.5	0.01	88	<0.03	1.5	74	38	38	14	0.4
	8/07/2025	6.9	300	14	8.4	600	0.34	0.58	96	<0.02	0.9	73	38	19	21	0.4
	14/08/2025	7.2	330	6.1	8.6	600	0.05	0.03	120	<0.02	0.7	85	31	<5	<10	0.3
	11/09/2025	7.0	320	6.1	7.9	530	0.05	0.11	87	<0.02	2.8	69	36	<5	<10	0.4
	13/10/2025	6.9	270	6.3	8.1	470	0.12	<0.01	73	0.11	1.9	60	29	<5	14	0.4
	20/11/2025	6.8	190	11	5.2	300	0.19	0.16	33	<0.02	0.9	30	16	<5	<10	0.5
	16/12/2025	7.0	520	8	7.2	240	0.11	0.13	26	<0.5	<0.5	23	9.1	<5	19	0.4
	21/01/2026	7.3	350	<5	6	680	0.07	<0.01	100	0.1	0.4	85	36	<0.005	15	0.4
	20/02/2026	7	470	<5	3.6	720	0.08	<0.01	130	<0.02	0.5	95	17	<0.005	<10	0.1
	20/03/2026	7	370	6.1	5.6	710	0.1	0.06	130	<0.02	0.8	90	42	<0.005	<10	0.3
	21/04/2026	6.7	100	<5	6.2	170	0.08	0.01	24	<0.02	<0.2	17	3.1	<0.005	11	0.1
	29/05/2026	6.65	280	24	6.6	520	<0.01	0.03	92	0.05	4.8	65	32	<0.005	23	0.3
	23/06/2026	7.1	350	<5	7.9	580	0.03	<0.01	100	<0.02	0.4	81	33	0.0052	<10	0.3
	29/06/2026	7.1	270	<5	7.2	520	0.05	<0.01	89	<0.02	0.9	67	34	<0.005	<10	0.4
	14/07/2026	7.07	370	<5	7.4	590	0.08	0.02	100	<0.02	0.9	76	35	<0.005	<10	0.4
	11/08/2026	7.3	330	<5	7.2	560	0.03	<0.01	100	<0.02	1.2	79	42	<0.005	<10	0.4
SW02 Baseline		**6.3 – 7.0**	**199**	**495**	**-**	**292**	**1.88**	**0.261**	**161**	**0.06**	**8.6**	**32**	**10**	**182**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW02	29/09/2022	0.42	0.003	<0.0002	19	0.002	0.004	1.5	0.001	5.8	<0.0001	0.002	1.9	0.057	0.02
	20/10/2022	0.22	0.001	<0.0002	12	0.001	0.003	0.62	<0.001	3.4	<0.0001	0.001	1.7	0.032	0.02
	14/11/2022	1.8	0.037	<0.002	47	<0.001	0.015	53	<0.01	11	<0.001	<0.01	<5	0.096	0.04
	14/12/2022	13	0.066	<0.002	38	0.034	0.094	9.7	0.071	5.9	<0.001	0.013	5.1	1	0.34
	18/01/2023	3.3	0.023	<0.002	<2	<0.01	0.015	45	0.014	5.8	<0.001	<0.010	<5	0.15	<1
	20/02/2023	12	0.033	0.0002	38	0.009	0.09	0.013	0.013	11	<0.001	0.018	4.1	0.28	0.32
	28/03/2023	3.4	0.002	0.0003	43	0.002	0.003	2.5	0.001	8.4	<0.0001	0.024	4.1	0.63	0.08
	18/04/2023	0.86	<0.001	<0.0002	20	0.002	0.002	<0.001	<0.001	4	<0.0001	0.006	2.7	0.089	0.04
	18/05/2023	0.72	0.002	<0.0002	17	0.002	0.006	1	0.002	4.3	<0.0001	0.003	2.4	0.081	0.04
	15/06/2023	1.7	0.001	<0.0002	22	0.001	0.004	2.1	0.001	5.5	<0.0001	0.005	1.9	0.037	0.08
	21/08/2023	1.1	<0.001	<0.0002	71	<0.001	<0.001	8	<0.001	16	<0.0001	0.024	5.7	0.057	0.02
	18/09/2023	1.7	0.003	<0.0002	19	0.002	0.004	3	0.002	6.3	<0.0001	0.005	3	0.023	0.09
	18/10/2023	0.88	0.002	<0.0002	17	0.001	0.003	2.2	0.001	5.5	<0.0001	0.002	1.9	0.014	0.05
	20/11/2023	2.3	0.002	<0.0002	19	0.002	0.002	2.6	<0.001	6.7	<0.0001	0.007	1.4	0.032	0.12
	19/12/2023	1.1	0.002	<0.0002	19	0.001	0.001	4.8	<0.001	6.5	0.0002	0.004	2.9	0.012	0.06
	23/01/2024	2.9	0.003	<0.0002	23	0.002	0.001	5.8	<0.001	7.8	<0.0001	0.007	3.3	0.031	0.13
	26/02/2024	1.5	0.001	<0.0002	9.7	0.001	0.003	1.7	<0.001	2.5	<0.0001	0.004	1.4	0.027	0.15
	26/03/2024	0.34	<0.001	<0.0002	6.9	0.001	0.003	0.67	<0.001	1.9	<0.0001	0.001	1.8	0.021	0.05
	18/04/2024	0.09	<0.001	<0.0002	20	<0.001	<0.001	0.39	<0.001	5.4	<0.0001	<0.001	14	0.014	0.00
	20/05/2024	0.71	0.004	<0.0002	19	0.002	0.003	5.6	<0.001	3.8	<0.0001	0.003	3	0.015	0.04
	25/06/2024	1.1	<0.001	<0.0002	21	<0.001	0.001	1.4	<0.001	4.6	<0.0001	0.004	4.5	0.022	0.05
	10/07/2024	1.1	0.002	<0.0002	20	<0.001	0.004	1.2	<0.001	4.2	<0.0001	0.004	2.3	0.047	0.06
	6/08/2024	0.61	0.001	<0.0002	17	0.001	0.002	1.4	<0.001	3.7	<0.0001	0.002	3	0.019	0.04
	15/08/2024	0.31	0.002	<0.0002	8	0.001	0.004	0.37	<0.001	1.5	<0.0001	0.001	1.4	0.038	0.04
	11/09/2024	0.19	<0.001	<0.0002	20	<0.001	0.001	0.31	<0.001	4.8	<0.0001	0.001	14	0.021	0.01
	9/10/2024	0.8	<0.001	<0.0002	23	<0.001	0.001	1.5	<0.001	5	<0.0001	0.003	15	0.032	0.03
	6/11/2024	0.007	0.001	<0.0002	21	<0.001	<0.001	0.7	<0.001	5.8	<0.0001	<0.001	15	0.011	0.00
	16/12/2024	0.05	<0.001	<0.0002	14	<0.001	0.001	0.24	<0.001	3.1	<0.0001	<0.001	9.4	0.008	0.00
	14/01/2025	0.06	<0.001	<0.0002	14	0.001	0.002	0.28	<0.001	2.7	<0.0001	0.001	9.4	0.015	0.00
	11/02/2025	0.82	<0.001	<0.0002	24	<0.001	0.002	4.4	<0.001	4.8	<0.0001	0.005	19	0.058	0.03
	24/03/2024	7.4	<0.001	<0.0002	56	0.002	0.001	22	<0.001	6.9	<0.0001	0.021	1.8	0.097	0.13
	31/03/2025	0.25		<0.0002	23	<0.001	0.003	1.7	<0.001	7	<0.0001	0.002	2.5	0.054	0.01
	8/04/2025	0.1	0.001	<0.0002	29	<0.001	0.001	2.7	<0.001	8.3	<0.0001	0.002	2.3	0.015	0.00
	9/05/2025	2.3	0.007	<0.0002	34	0.005	0.002	140	<0.001	9.1	<0.0001	0.011	2.1	0.077	0.07
	25/06/2025	0.3	<0.001	<0.0002	21	<0.001	0.001	1.1	<0.001	5.4	<0.0001	0.002	14	0.03	0.01
	8/07/2025	0.15	<0.001	<0.0002	19	<0.001	<0.001	0.65	<0.001	5.3	<0.0001	0.001	12	0.018	0.01
	14/08/2025	0.11	<0.001	<0.0002	21	<0.001	<0.001	0.39	<0.001	5.9	<0.0001	<0.001	11	0.012	0.01
	11/09/2025	0.32	0.001	<0.0002	21	<0.001	0.002	1.2	<0.001	5.6	<0.0001	0.001	11	0.016	0.02
	13/10/2025	0.15	0.002	<0.0002	19	<0.001	0.004	0.82	<0.001	5.2	<0.0001	0.002	11	0.054	0.01
	20/11/2025	0.53	0.002	<0.0002	20	0.001	0.002	1.8	0.002	4.9	<0.0001	0.002	3.9	0.021	0.03
	16/12/2025	0.26	<0.001	<0.0002	16	0.002	<0.001	1.5	0.001	4	<0.0001	0.002	1.6	0.01	0.02
	21/01/2026	<0.05	<0.001	<0.0002	21	<0.001	<1	0.25	<1	5.6	<0.0001	<0.001	17	0.022	<1
	20/02/2026	<0.05	<0.001	<0.0002	22	<0.001	<0.001	0.46	<0.001	6.1	<0.0001	<0.001	23	0.027	<1
	20/03/2026	0.15	<0.001	<0.0002	21	<0.001	<0.001	0.21	<0.001	5.8	<0.0001	0.001	15	0.013	0.01
	21/04/2026	0.07	<0.001	<0.0002	8.9	<0.001	0.003	0.33	<0.001	2.2	<0.0001	<0.001	3.6	0.01	0.01
	29/05/2026	0.08	<0.001	<0.0002	18	<0.001	<0.001	0.39	<0.001	4.8	<0.0001	<0.001	10	0.01	0.00
	23/06/2026	0.2	<0.001	<0.0002	21	<0.001	<0.001	0.43	<0.001	5.6	<0.0001	<0.001	15	0.22	0.01
	29/06/2026	<0.05	<0.001	<0.0002	19	<0.001	<0.001	0.23	<0.001	4.9	<0.0001	<0.001	12	0.01	<1
	14/07/2026	<0.05	<0.001	<0.0002	22	<0.001	<0.001	0.22	<0.001	5	<0.0001	<0.001	13	0.006	<1
	11/08/2026	<0.05	<0.001	<0.0002	23	<0.001	<0.001	0.25	<0.001	5.6	<0.0001	<0.001	14	0.008	<1
SW02 Baseline		**3.8**	**0.045**	**0.001**	**17**	**0.007**	**0.012**	**71.9**	**0.02**	**5**	**0.0005**	**0.005**	**6**	**0.09**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW02	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	90	<100	<20	<50	60	30	90	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	180	180	30	-	<20	170	30	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	200	<100	<20	<50	100	<100	100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	140	140	100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<20	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	14/07/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	11/08/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW02 Baseline		**60**	**-**	**22**	**100**	**-**	**50**	**100**	**50**	**140**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS	TSS	DO	EC	TP	NH_3	Cl	Nitrite	TN	Na	SO_4 as S	Chlorophyll a	Acidity (as CaCO3)	Sulphate : Chloride Ratio
			(mg/L)	(mg/L)	(mg/L)	(µδ/cm)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	mg/L	:
SW03	29/09/2022	6.8	120	<5	9.3	100	0.02	<0.01	24	<0.02	1.10	23	2	<5		0.1
	20/10/2022	5.9	650	26	7.5	870	0.03	<0.01	270	<0.02	<0.2	12	13	<5		0.0
	14/11/2022	6.5	140	260	2.6	160	0.13	<0.05	27	<0.01	7.40	36	9	<5		0.3
	14/12/2022	6.5	110	11	4.4	160	0.01	0.05	23	<0.01	3.90	18	11	<5		0.5
	18/01/2023	6.5	160	9	5.1	<5	0.02	<0.010	31	<0.02	1.30	26	17	<5		0.5
	20/02/2023	3.4	540	13	6.0	720	0.01	<0.010	22	<0.02	5.10	28	100	<5		4.5
	28/03/2023	3.3	400	7	9.9	750	0.02	0.07	14	<0.02	<0.2	16	110	<5		7.9
	18/04/2023	4.2	280	<5	7.4	450	<0.01	0.04	29	<0.02	<0.2	22	140	<5		4.8
	18/05/2023	4.3	310	37	5.5	580	0.02	0.32	22	<0.02	12.33	21	230	<5		10
	15/06/2023	3.3	580	17	8.9	870	0.04	0.68	32	<0.02	1.40	31	300	<5		9.4
	24/07/2023	3.9	290	36	9	510	0.03	0.4	17	<0.02	1	20	250	<5		15
	21/08/2023	6.8	270	5.8	7.2	350	0.04	0.04	45	<0.02	0.5	43	8	<5		0.2
	18/09/2023	4.6	410	20	7.4	540	<0.01	0.28	30	<0.02	0.4	29	230	<5		7.7
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.5	640	18	7.1	1100	0.03	0.58	32	<0.01	0.6	30	370	6.7		12
	19/12/2023	3.8	610	7.7	6.7	850	<0.01	0.86	36	<0.02	0.9	37	150	<5		4.2
	23/01/2024	3.7	460	55	4.1	880	<0.01	0.16	31	<0.02	1.6	37	100	<5		3.2
	26/02/2024	4.3	200	93	7.5	250	0.09	0.09	53	0.02	1.5	11	440	7.2		8.3
	26/03/2024	6.1	170	54	7.7	300	0.08	0.13	21	<0.02	1	20	78	<5		3.7
	18/04/2024	7.5	360	9.2	7.4	650	0.03	0.08	88	<0.02	0.8	78	64	<5	<10	0.6
	20/05/2024	4.5	300	21	5.6	450	<0.01	0.5	19	<0.02	1.2	23	190	<5	66	10
	25/06/2024	6.3	80	2300	7.2	140	0.98	<0.1	9.4	<0.2	140	9	5	<5	48	0.5
	10/07/2024	4.4	260	29	5.1	400	0.01	0.64	19	<0.02	0.7	21	10	<5	50	0.5
	6/08/2024	4.6	340	22	6.3	630	0.02	0.62	35	<0.02	1.3	29	230	<5	70	6.6
	15/08/2024	6.3	82	19	8.3	120	0.04	0.07	9.5	<0.02	<0.2	9	31	<5	11	3.3
	11/09/2024	7.1	290	<5	7.7	440	<0.01	0.11	84	<0.02	0.3	66	56	<5	<10	0.7
	9/10/2024	6.6	240	330	7.7	360	0.46	<0.01	56	<0.02	7.1	45	35	33	<10	0.6
	6/11/2024	7.2	300	49	7.5	460	0.07	<0.01	88	<0.02	1.2	72	39	<5	<10	0.4
	16/12/2024	7.2	250	5.3	19.0	370	<0.01	<0.01	70	<0.02	0.7	61	31	50	<10	0.4
	14/01/2025	6.9	220	<5	7.7	420	0.04	<0.01	66	<0.02	1.3	57	11	<5	<10	0.2
	11/02/2025	7.4	340	<5	7.5	570	0.07	0.02	99	<0.02	1.4	87	14	<5	<10	0.1
	24/03/2024	6.9	130	<5	8.1	230	0.05	<0.01	38	<0.02	0.9	32	66	<5	<10	1.7
	31/03/2025	7.0	260	9.3	9.8	440	0.06	0.19	100	<0.02	0.9	70	26	<5	<10	0.3
	8/04/2025	7.2	290	<5	8.9	470	0.04	0.07	100	<0.02	0.4	82	36	<5	<10	0.4
	9/05/2025	7.1	290	<5	-	460	<0.01	<0.1	100	<0.02	0.7	73	36	<5	<10	0.4
	25/06/2025	6.7	360	230	6.5	540	2.3	0.01	88	<0.03	2.3	68	36	46	14	0.4
	8/07/2025	6.8	300	82	9.1	570	0.15	0.48	89	<0.02	1.1	67	39	27	<10	0.4
	14/08/2025	7.2	300	16	9.1	580	0.08	0.05	110	<0.02	1	81	32	<5	<10	0.3
	11/09/2025	6.8	300	6.7	12.0	530	0.05	0.22	84	<0.02	0.7	67	43	43	11	0.5
	13/10/2025	7.2	340	7.5	9	620	0.07	<0.01	100	<0.02	0.8	83	43	16	<10	0.4
	20/11/2025	6.6	190	28	4.7	300	0.15	0.19	28	<0.02	1	28	35	<5	<10	1.3
	16/12/2025	6.3	96	400	0.3	170	0.94	0.18	14	<0.5	12	17	18	17	38	1.3
	21/01/2026	7.6	330	<5	8.6	680	0.05	<0.01	100	0.1	0.9	84	36	<0.005	<10	0.4
	20/02/2026	7.2	390	10	4.6	580	0.06	0.02	93	<0.02	0.5	69	11	<0.005	<10	0.1
	20/03/2026	6.9	330	<5	5.3	610	0.1	0.04	110	<0.02	0.8	77	36	0.012	<10	0.3
	21/04/2026	6.8	190	<5	7.4	250	0.04	0.012	24	<0.02	1.7	26	4	<0.005	11	0.2
	29/05/2026	6.24	350	<5	7.6	500	0.02	<0.01	85	0.047	1	61	31	<0.005	17	0.4
	23/06/2026	7.2	350	<5	9.9	570	0.02	<0.01	100	<0.02	<0.5	79	34	<0.005	<10	0.3
	29/06/2026	7.1	250	7.2	7.7	470	0.03	<0.01	78	<0.02	0.6	60	31	<0.005	<10	0.4
	14/07/2026	6.99	320	6.5	8	590	0.06	0.02	100	<0.02	0.6	73	36	0.018	<10	0.4
	11/08/2026	7.2	330	<5	9.1	560	0.02	<0.01	94	<0.02	0.9	80	40	<0.005	<10	0.4
SW03 Baseline		**6.1 - 6.7**	**191**	**1005**	**-**	**281**	**2.14**	**0.155**	**111**	**0.041**	**4.3**	**30**	**6**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW03	29/09/2022	0.4	0.00	<0.0002	13	0.00	0.00	0.8	<0.001	4.4	<0.0001	0.002	1.00	0.034	0.03
	20/10/2022	0.5	0.00	<0.0002	8	0.00	0.00	0.9	0.00	2.3	<0.0001	0.001	1.00	0.03	0.06
	14/11/2022	1.1	<0.001	<0.002	18	<0.001	0.00	1.9	<0.010	5.7	<0.001	<0.01	<5	0.24	0.06
	14/12/2022	0.6	<0.001	<0.002	13	<0.01	<0.010	1.3	<0.010	<5	<0.001	<0.01	<5	0.53	0.05
	18/01/2023	0.5	0.01	<0.002	<2	<0.010	<0.01	0.5	<0.01	6.2	<0.001	<0.01	<5	<0.05	<1
	20/02/2023	17	0.00	<0.0002	63	0.00	0.02	0.0	0.00	14.0	<0.001	0.065	3.00	0.12	0.27
	28/03/2023	15	<0.001	<0.0002	63	0.00	0.00	4.5	<0.001	11.0	<0.0001	0.065	2.30	0.15	0.24
	18/04/2023	3.8	<0.001	<0.0002	30	0.00	0.00	<0.001	<0.001	5.0	<0.0001	0.023	2.10	0.048	0.13
	18/05/2023	5.8	<0.001	<0.0002	48	<0.001	0.00	14.0	<0.001	10.0	<0.0001	0.033	2.80	0.16	0.12
	15/06/2023	11	<0.001	<0.0002	74	<0.001	0.00	12	<0.001	15.0	<0.0001	0.058	2.7	0.15	0.15
	24/07/2023	7.1	<0.001	<0.0002	39	<0.001	0.002	8.9	0.001	9.7	<0.0001	0.030	2.5	0.1	0.18
	21/08/2023	0.7	0.001	<0.0002	18	0.001	0.003	1.1	<0.001	6.3	<0.0001	0.002	6.8	0.026	0.04
	18/09/2023	2.8	<0.001	<0.0002	59	<0.001	<0.001	1.1	<0.001	14.0	<0.0001	0.022	3.2	0.049	0.05
	18/10/2023	3.0	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12.0	<0.0001	0.009	2.7	0.027	0.05
	20/11/2023	11.0	0.002	<0.0002	75	<0.001	<0.001	17	<0.001	17.0	<0.0001	0.060	3	0.14	0.15
	19/12/2023	21.0	0.003	0.0011	80	<0.001	0.002	3.6	0.001	19.0	0.0007	0.071	4.3	0.16	0.26
	23/01/2024	17.0	0.002	<0.0002	63	0.002	0.001	17	<0.001	19.0	<0.0001	0.059	5.1	0.13	0.27
	26/02/2024	8.8	0.003	<0.0002	17	0.003	0.005	9	0.002	4.8	<0.0001	0.016	1.8	0.05	0.52
	26/03/2024	0.9	<0.001	<0.0002	24	<0.001	<0.001	1.8	<0.001	6.1	<0.0001	0.009	2.8	0.025	0.04
	18/04/2024	1.1	<0.001	<0.0002	22	<0.001	<0.001	1.8	<0.001	6.0	<0.0001	0.005	13	0.018	0.05
	20/05/2024	5.4	0.002	<0.0002	34	<0.001	<0.001	13	<0.001	7.3	<0.0001	0.026	3.6	0.047	0.16
	25/06/2024	0.2	<0.001	<0.0002	10	<0.001	<0.001	170	<0.001	2.7	<0.0001	0.011	2.3	0.042	0.02
	10/07/2024	3.6	0.001	<0.0002	34	<0.001	0.001	6.6	<0.001	6.6	<0.0001	0.019	3	0.053	0.11
	6/08/2024	3.10	<0.001	<0.0002	51	<0.001	<0.001	4.8	<0.001	7.8	<0.0001	0.026	3.4	0.092	0.06
	15/08/2024	1.20	0.00	<0.0002	12	<0.001	0.003	2.1	<0.001	2.2	<0.0001	0.004	1.6	0.037	0.10
	11/09/2024	0.59	<0.001	<0.0002	21	<0.001	0.001	1.0	<0.001	4.9	<0.0001	0.003	13	0.021	0.03
	9/10/2024	20	0.02	<0.0002	21	0.011	0.01	39.0	0.008	4.4	<0.0001	0.008	8.8	0.1	0.95
	6/11/2024	3	0.00	<0.0002	23	0.002	0.002	4.5	<0.001	6.2	<0.0001	0.003	15	0.017	0.13
	16/12/2024	0.29	0.001	<0.0002	19	0.001	<0.001	1.6	<0.001	4	<0.0001	0.001	12	0.009	0.02
	14/01/2025	0.17	0.001	<0.0002	17	<0.001	0.001	0.74	<0.001	3.3	<0.0001	0.001	12	0.016	0.01
	11/02/2025	0.45	0.001	<0.0002	23	<0.001	<0.001	2.1	<0.001	4.5	<0.0001	0.001	18	0.031	0.02
	24/03/2024	0.18	0.001	<0.0002	10	<0.001	0.002	0.79	<0.001	2.6	<0.0001	0.001	6.6	0.036	0.02
	31/03/2025	0.42	0.002	<0.0002	21	<0.001	0.001	3.5	<0.001	4.9	<0.0001	0.002	11	0.045	0.02
	8/04/2025	0.3	<0.001	<0.0002	21	<0.001	<0.001	1.3	<0.001	5.4	<0.0001	0.002	11	0.012	0.01
	9/05/2025	0.62	0.002	<0.0002	20	<0.001	0.001	2	<0.001	4.9	<0.0001	0.005	11	0.042	0.03
	25/06/2025	2	0.002	<0.0002	21	<0.001	0.003	6.1	0.001	5.2	<0.0001	0.002	12	0.053	0.10
	8/07/2025	0.24	<0.001	<0.0002	19	<0.001	<0.001	0.49	<0.001	5	<0.0001	0.001	11	0.015	0.01
	14/08/2025	0.2	<0.001	<0.0002	20	<0.001	<0.001	0.59	<0.001	5.8	<0.0001	0.001	11	0.01	0.01
	11/09/2025	2	0.003	<0.0002	19	0.002	0.004	4	0.002	5.4	<0.0001	0.003	11	0.037	0.11
	13/10/2025	0.29	0.001	<0.0002	22	<0.001	0.002	0.97	<0.001	5.9	<0.0001	0.001	16	0.019	0.01
	20/11/2025	2.4	0.004	<0.0002	22	0.003	0.003	8.8	0.003	4.7	<0.0001	0.003	4.4	0.015	0.11
	16/12/2025	6	0.003	<0.0002	15	0.002	0.005	2.7	0.002	3.2	<0.0001	0.007	2.4	0.14	0.40
	21/01/2026	0.09	<0.001	<0.0002	20	<0.001	<1	0.33	<1	5.5	<0.0001	<0.001	16	0.009	0.00
	20/02/2026	0.27	0.001	<0.0002	23	<0.001	<0.001	1.3	<0.001	5.8	<0.0001	0.001	15	0.01	0.01
	20/03/2026	0.22	<0.001	<0.0002	18	<0.001	0.001	0.58	<0.001	5.1	<0.0001	0.001	12	0.016	0.01
	21/04/2026	0.29	<0.001	<0.0002	12	<0.001	0.002	0.64	<0.001	3.3	<0.0001	<0.001	5.5	0.01	0.02
	29/05/2026	0.11	<0.001	<0.0002	17	<0.001	0.001	0.4	<0.001	4.7	<0.0001	0.001	9.6	0.024	0.01
	23/06/2026	0.19	<0.001	<0.0002	21	<0.001	<0.001	0.19	<0.001	5.4	<0.0001	<0.001	14	0.22	0.01
	29/06/2026	0.07	<0.001	<0.0002	17	<0.001	<0.001	0.21	<0.001	4.5	<0.0001	<0.001	11	0.01	0.00
	14/07/2026	<0.05	<0.001	<0.0002	21	<0.001	<0.001	0.15	0.003	5	<0.0001	0.001	12	0.008	<1
	11/08/2026	<0.05	<0.001	<0.0002	23	<0.001	<0.001	0.14	<0.001	5.8	<0.0001	<0.001	14	0.008	<1
SW03 Baseline		**7.9**	**0.058**	**0.001**	**21**	**0.008**	**0.028**	**85.5**	**0.028**	**5**	**0.0005**	**0.006**	**4**	**0.26**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW03	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	<50	<100	<20	<50	<100	100	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<50	<100	-	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	130	130	<100	<100	<20	<50	10	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	14/07/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	11/08/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW03 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**120**	**-**

Surface Water Analytical Results

ENV ASBESTOS | REMEDIATION | RESOURCE RECOVERY

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW04	29/09/2022	4.5	68	<5	4.8	52	0.01	0.18	20	<0.02	5.1	17	<2	<5		0.05
	20/10/2022	4.2	90	<5	7.5	110	0.01	<0.10	20	<0.02	0.3	16	<2	<5		0.05
	14/11/2022	No surface water located at monitoring site – no sample collected														
	14/12/2022	3.2	190	<5	2	280	0.01	0.05	42	<0.10	3.2	20	<2	<5		0.02
	18/01/2023	No surface water located at monitoring site – no sample collected														
	20/02/2023	4.1	0.2	<5	5.9	160	0.02	0.09	22	<0.10	7.4	23	15	<5		0.7
	28/03/2023	4.2	68	<5	8	130	<0.01	<0.01	17	<0.10	<0.25	14	25	<5		1.5
	18/04/2023	4.6	130	16	9.1	190	0.01	0.03	32	<0.02	0.5	21	8.7	<5		0.3
	18/05/2023	3.6	1,200	42	8	1,800	0.03	1.2	26	<0.02	1.15	53	1,000	<5		38.5
	15/06/2023	4.2	140	160	7.7	200	1.5	0.44	44	<0.02	12	24	<2	8		0.02
	24/07/2023	3.6	1,600	21	9	2,400	0.02	1.5	180	<0.02	3.4	78	5,700	<5		31.7
	21/08/2023	3.3	2,400	5.7	7.5	3,700	<0.01	2.8	33	<0.02	3.4	97	850	5.3		25.8
	18/09/2023	No surface water located at monitoring site – no sample collected														
	18/10/2023	6.3	350	44	5.6	490	0.04	0.38	38	<0.02	<0.2	30	170	9.9		4.5
	20/11/2023	3.2	2,100	<5	9	3,500	0.03	0.8	4.7	<0.01	1.1	63	400	<5		85.1
	19/12/2023	3.0	3,200	15	0.8	3,700	<0.01	0.44	34	<0.02	4.5	100	980	<5		28.8
	23/01/2024	3.1	1,600	23	7.8	2,500	<0.01	0.19	27	<0.02	0.5	54	730	<5		27.0
	26/02/2024	3.1	1,000	11	7.8	1,200	0.03	0.31	14	<0.02	1.5	30	570	<5		40.7
	26/03/2024	3.2	900	5.7	9.6	1,300	<0.01	0.36	21	<0.02	0.9	30	710	<5		33.8
	18/04/2024	3.1	980	67	7.5	1,900	0.03	0.42	15	<0.02	0.8	33	1,000	27	310	66.7
	20/05/2024	3.3	630	8	8.3	1,100	<0.01	0.3	11	<0.02	0.7	25	500	<5	190	45.5
	25/06/2024	3.2	1,000	5.4	8.6	1,600	0.01	0.4	13	<0.02	1	27	270	<5	160	20.8
	10/07/2024	3.5	420	<5	7.9	870	<0.01	0.24	11	<0.02	0.6	21	450	<5	150	40.9
	6/08/2024	3.3	1,300	38	8.7	1,700	0.04	0.03	13	<0.02	1.1	28	860	7.8	230	66.2
	15/08/2024	3.9	240	<5	9.3	390	0.02	0.13	13	<0.02	0.8	16	150	<5	40	11.5
	11/09/2024	3.4	460	<5	6.9	690	0.01	0.05	8.7	<0.02	<0.2	17	390	15	77	44.8
	24/09/2024 - Additional	3.5	750	-	-	1,300	-	-	-	-	-	-	-	-	-	-
	9/10/2024	3.1	810	<5	9	1,200	0.02	<0.01	10	<0.02	0.8	26	580	<5	<10	58.0
	6/11/2024	3.3	440	23	6.4	660	0.05	<0.01	10	<0.02	1	18	310	<5	15	31.0
	16/12/2024	5.7	210	420	0.2	360	0.1	0.25	13	<0.02	13	12	110	7	25	8.5
	14/01/2025	4.1	310	120	4.9	460	0.13	0.03	6.3	<0.02	1.3	11	64	<5	<10	10.2
	11/02/2025	7.6	700	<5	8.8	1000	0.01	0.03	5.8	<0.02	1.3	21	150	7.7	<10	25.9
	24/03/2025	3.9	390	21	7.4	470	0.03	0.03	18	<0.02	1.5	24	180	8.1	<10	10.0
	31/03/2025	6.3	260	70	10	370	<0.01	0.1	11	<0.02	0.8	16	160	<5	<10	14.5
	8/04/2025	6.0	430	43	4.1	470	0.09	0.27	11	0.04	2.3	18	240	<10	16	21.8
	9/05/2025	6.5	270	260	-	570	<0.01	0.02	10	<0.02	4.5	16	250	160	<10	25.0
	25/06/2025	6.7	410	67	6.1	590	0.6	0.01	8.3	<0.02	0.6	16	160	6.5	28	19.3
	8/07/2025	4.0	140	180	6.1	160	0.21	<0.01	21	<0.02	6.2	17	<2	7.6	43	21.0
	14/08/2025	6.5	180	250	6.6	290	0.47	-	9.4	-	-	14	86	<5	13	9.1
	11/09/2025	6.5	260	1,400	0.2	460	0.03	0.31	7.3	<0.02	38	16	150	10	22	20.5
	13/10/2025	7.3	580	14	8.3	760	0.04	<0.01	4	<0.02	0.8	16	230	20	<10	57.5
	20/11/2025	6.9	280	35	2.1	490	0.08	0.05	8.4	<0.02	1	15	150	2.7	<10	17.9
	16/12/2025	7.0	370	170	6	550	0.05	0.21	14	<0.5	1	87	140	<5	39	10.0
	21/01/2026	6.9	250	75	1.9	450	0.23	<0.01	22	0.02	0.9	16	100	<0.005	13	4.5
	20/02/2026	6.9	320	42	1.5	480	0.03	<0.01	29	<0.02	2.6	18	30	0.17	16	1.0
	20/03/2026	6.7	250	110	7.7	420	0.11	0.04	18	<0.02	1.9	20	120	<0.005	<10	6.7
	21/04/2026	6.9	300	590	1.2	410	1.3	0.12	20	<0.02	2.1	23	22	<0.0065	11	1.1
	29/05/2026	5.62	130	59	4.7	200	0.08	<0.01	23	<0.02	4.7	16	15	<0.005	19	0.7
	23/06/2026	6.5	200	670	1.6	270	0.54	<0.01	26	<0.02	1.3	23	37	<0.005	<10	1.4
	29/06/2026	6.8	190	<5	6.9	260	0.01	<0.01	22	<0.02	1.1	19	47	<0.005	<10	2.1
	14/07/2026	6.56	170	270	3.8	240	0.2	0.01	26	<0.02	1.2	19	31	0.008	10	1.2
	11/08/2026	6.7	250	39	3.2	310	<0.01	<0.01	26	<0.02	7.2	22	65	0.0058	15	2.5
SW04 Baseline		**4.2 – 4.5**	**112**	**293**	**-**	**165**	**0.5**	**0.693**	**90**	**0.052**	**4.5**	**20**	**3**	**86**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW04	29/09/2022	1.3	0.001	<0.0002	1.6	0.005	0.001	2.7	0.001	2.6	<0.0001	0.002	1	0.027	<1
	20/10/2022	1.1	<0.001	<0.0002	1.3	0.004	0.001	2.4	0.001	2.3	<0.0001	0.002	1	0.024	<1
	14/11/2022	No surface water located at monitoring site – no sample collected													
	14/12/2022	1.2	<0.001	<0.002	<5	<0.001	<0.01	3.2	<0.01	<5	<0.001	<0.01	<5	0.084	<1
	18/01/2023	No surface water located at monitoring site – no sample collected													
	20/02/2023	1.6	0.002	<0.0002	2.7	0.005	0.05	0.002	0.002	3.9	<0.001	0.003	1.6	0.039	<1
	28/03/2023	1.1	<0.01	<0.002	<5	0.002	<0.01	2.7	<0.01	<5	<0.0001	0.01	<5	<0.05	<1
	18/04/2023	0.85	<0.001	<0.0002	1.8	<0.01	<0.001	<0.001	<0.001	2.7	<0.0001	0.001	0.8	0.034	<1
	18/05/2023	41	<0.001	0.0005	200	<0.001	0.003	16	0.003	31	<0.0001	0.11	5.7	0.4	<1
	15/06/2023	3.1	0.002	<0.0002	2.2	0.007	0.007	6.3	0.005	4.5	<0.0001	0.003	1.4	0.075	1.41
	24/07/2023	50	<0.001	0.0002	330	<0.001	0.003	3.9	0.002	51	<0.0001	0.13	9	0.18	0.15
	21/08/2023	72	0.002	0.0004	560	<0.001	0.003	3.4	0.002	83	<0.0001	0.23	13	0.34	0.13
	18/09/2023	No surface water located at monitoring site – no sample collected													
	18/10/2023	3	0.001	<0.0002	55	0.002	0.001	5.6	<0.001	12	<0.0001	0.009	2.7	0.027	0.05
	20/11/2023	91	0.003	0.0007	380	0.001	0.003	4.3	0.003	52	<0.0001	0.27	7.2	0.55	0.24
	19/12/2023	110	0.005	0.0022	570	0.002	0.005	11	0.007	90	0.001	0.39	4.3	0.7	0.19
	23/01/2024	55	0.002	0.0003	260	0.002	0.003	9.7	0.002	35	<0.0001	0.19	6.1	0.33	0.21
	26/02/2024	23	<0.001	<0.0002	140	<0.001	<0.001	5.1	<0.001	20	<0.0001	0.083	3.9	0.18	0.16
	26/03/2024	20	<0.001	<0.0002	130	<0.001	<0.001	3.1	<0.001	19	<0.0001	0.068	4.9	0.1	0.15
	18/04/2024	32	<0.001	<0.0002	190	0.001	0.002	7	<0.001	26	<0.0001	0.1	3.6	0.18	0.17
	20/05/2024	20	<0.001	<0.0002	100	<0.001	<0.001	5.7	<0.001	14	<0.0001	0.064	2.6	0.13	0.20
	25/06/2024	16	<0.001	<0.0002	210	<0.001	<0.001	5.3	<0.001	23	<0.0001	0.059	3.7	0.09	0.08
	10/07/2024	12	<0.001	<0.0002	110	<0.001	0.001	2.5	<0.001	12	<0.0001	0.051	2.2	0.11	0.11
	6/08/2024	17	<0.001	<0.0002	200	<0.001	0.001	5.5	<0.001	24	<0.0001	0.059	2.5	0.1	0.09
	15/08/2024	2	<0.001	<0.0002	36	<0.001	<0.001	0.81	<0.001	6	<0.0001	0.015	2.5	0.057	0.06
	11/09/2024	5.6	<0.001	<0.0002	87	<0.001	<0.001	3.6	<0.001	11	<0.0001	0.026	1.6	0.061	0.06
	24/09/2024 - Additional	-	<0.001	<0.0001	-	<0.001	0.0001	-	<0.001	-	<0.0001	0.032	-	0.043	<1
	9/10/2024	14	<0.001	<0.0002	140	<0.001	0.002	8.1	<0.001	17	<0.0001	0.057	2.7	0.12	0.10
	6/11/2024	2.8	<0.001	<0.0002	81	<0.001	<0.001	6.1	<0.001	11	<0.0001	0.02	<0.5	0.034	0.03
	16/12/2024	4.4	0.007	<0.0002	29	0.009	0.006	170	0.003	4.5	<0.0001	0.009	1.3	0.035	0.15
	14/01/2025	1.2	<0.001	<0.0002	53	<0.001	0.001	5.8	<0.001	5.8	<0.0001	0.014	0.8	0.039	0.02
	11/02/2025	<0.05	<0.001	<0.0002	200	<0.001	<0.001	0.14	<0.001	18	<0.0001	0.004	<0.5	0.033	<1
	24/03/2025	1.1	<0.001	<0.0002	52	<0.001	0.002	6.6	<0.001	8.5	<0.0001	0.012	2.3	0.1	0.02
	31/03/2025	0.5	0.003	<0.0002	50	<0.001	0.001	17	<0.001	7.6	<0.0001	0.007	2.4	0.047	0.01
	8/04/2025	0.36	0.004	<0.0002	70	<0.001	<0.001	38	<0.001	9.8	<0.0001	0.006	2.3	0.014	0.01
	9/05/2025	0.64	<0.001	<0.0002	61	<0.001	0.001	34	<0.001	7.9	<0.0001	0.001	1.9	0.032	0.01
	25/06/2025	0.35	<0.001	<0.0002	85	<0.001	<0.001	7.3	<0.001	8.5	<0.0001	0.004	1.3	0.013	0.00
	8/07/2025	0.92	<0.001	<0.0002	0.6	0.004	0.002	1.8	<0.001	1.5	<0.0001	0.001	0.8	0.042	1.53
	14/08/2025	0.34	<0.001	<0.0002	38	<0.001	<0.001	17	<0.001	5.7	<0.0001	0.002	1	0.018	0.01
	11/09/2025	8.7	0.031	<0.002	120	0.017	0.011	830	<0.01	12	<0.001	0.027	<5	0.1	0.07
	13/10/2025	0.31	0.002	<0.0002	130	<0.001	<0.001	12	<0.001	14	<0.0001	0.004	1.5	<0.005	0.00
	20/11/2025	0.26	<0.001	<0.0002	69	<0.001	0.002	7.6	0.001	8.5	<0.0001	0.003	0.6	0.016	0.00
	16/12/2025	13	0.002	<0.0002	57	0.003	<0.001	47	0.002	38	<0.0001	0.032	2.4	0.039	0.23
	21/01/2026	0.07	<0.001	<0.0002	53	<0.001	<1	3	<1	7.3	<0.0001	0.001	<0.5	<0.005	0.00
	20/02/2026	0.33	0.003	<0.0002	63	<0.001	<0.001	37	<0.001	8.2	<0.0001	0.002	1.6	0.013	0.01
	20/03/2026	1	0.002	<0.0002	44	<0.001	0.002	21	<0.001	7.4	<0.0001	0.004	1.7	0.021	0.02
	21/04/2026	4.2	0.005	<0.0002	54	0.004	0.01	56	0.004	7.6	<0.0001	0.014	3.1	0.065	0.08
	29/05/2026	0.62	<0.001	<0.0002	10	0.002	<0.001	3.3	<0.001	2.7	<0.0001	0.002	1.1	0.014	0.06
	23/06/2026	6.4	0.004	<0.0002	35	0.007	0.012	37	0.007	6.1	<0.0001	0.013	0.9	0.25	0.18
	29/06/2026	0.19	<0.001	<0.0002	24	<0.001	<0.001	0.69	<0.001	4.5	<0.0001	<0.001	0.9	<0.005	0.01
	14/07/2026	2.2	<0.001	<0.0002	26	0.003	0.005	14	0.002	4	<0.0001	0.006	<0.5	0.023	0.08
	11/08/2026	1.9	0.001	<0.0002	35	0.002	0.004	8.7	0.002	6.4	<0.0001	0.004	<0.5	0.019	0.05
SW04 Baseline		**1.4**	**0.002**	**0.001**	**3.2**	**0.007**	**0.002**	**2.8**	**0.002**	**2.3**	**0.0005**	**0.005**	**2.9**	**0.028**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW04	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	No flow - No sample collected									
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	No flow - No sample collected									
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	No flow - No sample collected									
	18/10/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<0.05	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	160	160	<100	<100	<20	<50	<100	<100	160	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/09/2024 - Additional	<60	<60	-	<500	<40	<50	<200	<200	-	<0.1
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	14/07/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	11/08/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW04 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW05	29/09/2022	5.9	480	5.2	7.7	510	0.12	0.17	220	<0.20	3	140	11	<5		0.05
	20/10/2022	6.2	650	7.2	8.9	690	0.06	0.24	180	<0.20	0.5	160	8.6	<5		0.05
	14/11/2022	6.2	820	13	4.7	1,000	0.06	<0.05	310	<0.10	8.1	260	100	<5		0.32
	14/12/2022	6.2	830	16	7.5	1,100	0.05	0.05	330	<0.10	3.1	240	40	<5		0.12
	18/01/2023	6.3	2,800	33	7	<5	0.09	0.09	1,300	<0.02	3.38	820	160	<5		0.12
	20/02/2023	6.7	18	18	5.4	2,300	0.1	0.07	2,000	<0.10	3.4	4700	890	<5		0.45
	28/03/2023	5.6	470	<5	9.4	760	0.02	0.08	200	<0.10	<0.02	110	23	6.7		0.12
	18/04/2023	6.4	4,000	16	8.5	5,300	0.1	0.12	2,000	<0.02	80	1100	230	<5		0.12
	18/05/2023	5.8	260	17	5.7	460	0.08	<0.01	110	<0.02	<0.2	64	25	<5		0.23
	15/06/2023	6.2	1,100	<5	8.8	1,400	0.58	0.14	450	<0.02	1.1	250	40	<5		0.09
	24/07/2023	6.5	1,600	<5	9.3	2,800	0.05	0.17	1,500	<0.5	1.1	440	1,200	<5		0.80
	21/08/2023	6.6	1,600	<5	6.3	2,900	0.06	0.15	1,500	<0.02	1.28	480	190	<5		0.13
	18/09/2023	6.6	2,500	13	6.4	3,800	0.06	0.11	1,200	<0.02	1.3	650	210	<5		0.18
	18/10/2023	6.9	4,800	6.6	6.5	7,700	0.06	0.05	2,700	<0.02	<0.2	1,300	730	10		0.27
	20/11/2023	6.8	2,100	12	4.8	3,700	0.18	0.46	1,100	<0.01	0.6	460	1,200	<5		1.09
	19/12/2023	6.7	3,300	14	5.3	5,400	0.19	0.77	1,700	<0.02	<2	1,000	64	<5		0.04
	23/01/2024	6.2	1,100	13	9.3	1,000	0.09	0.05	440	<0.02	2.3	260	220	<5		0.50
	26/02/2024	6.3	970	16	8.6	1,200	0.11	0.03	330	<0.02	1.5	200	130	<5		0.39
	26/03/2024	6.6	1,100	9.1	5.6	1,700	0.03	0.09	910	<0.02	2	290	420	<5		0.46
	18/04/2024	6.5	560	8.4	5.8	830	0.07	0.16	160	<0.02	1.7	110	160	5.4	<10	1.00
	20/05/2024	6.7	240	<5	5.8	350	<0.01	0.03	68	<0.02	0.4	47	140	<5	15	2.06
	25/06/2024	6.5	1,000	16	7.7	1,800	0.06	0.1	500	<0.02	1.2	300	29	<5	16	0.06
	10/07/2024	6.2	950	5.6	6.3	1,700	0.02	0.16	170	<0.02	0.9	280	130	<5	11	0.76
	6/08/2024	6.3	3,300	9	8.9	5,800	0.05	0.11	1500	<0.02	1.2	820	210	<5	27	0.14
	15/08/2024	6.2	300	<5	7.1	430	0.08	0.03	30	<0.02	<0.2	80	27	<5	12	0.90
	11/09/2024	6.4	710	8.2	5.5	1,200	0.03	0.4	450	<0.02	1.1	230	72	<5	12	0.16
	9/10/2024	6.4	700	11	9	1,100	0.15	0.15	320	<0.1	<0.25	180	53	<5	14	0.17
	6/11/2024	7.1	930	15	6.1	1,300	0.08	0.16	440	<0.02	1	250	56	<5	<10	0.13
	16/12/2024	7.4	31,000	26	9.3	44,000	0.02	0.14	1,400	<0.02	0.4	<0.5	2,000	<5	<10	1.43
	14/01/2025	7.1	19,000	9.4	6.2	30,000	0.04	0.04	12,000	<0.02	0.3	5,500	500	<5	<10	0.04
	11/02/2025	7.5	24,000	9.1	8.5	35,000	0.03	0.06	6,300	<0.02	<0.2	6,900	260	<5	<10	0.04
	24/03/2024	6.3	1,600	<5	7	2,500	<0.1	0.12	790	<0.02	4.4	440	140	<5	<10	0.18
	31/03/2025	7.0	210	8	9.2	260	0.08	<10	72	<0.02	2.3	41	9.5	<5	<10	0.13
	8/04/2025	6.3	610	8.3	6.7	760	0.08	0.44	230	<0.2	<1	140	29	<10	<10	0.13
	9/05/2025	6.8	340	<5	-	480	0.08	<0.1	120	<0.2	1.7	71	40	<5	<10	0.33
	25/06/2025	6.2	2,000	6.6	5.9	3,500	<0.2	0.07	1,700	<0.2	<0.2	510	250	<5	17	0.14
	8/07/2025	6.0	470	<5	8	910	0.05	0.03	230	0.07	<0.2	130	41	<5	13	0.18
	14/08/2025	6.2	570	16	6.1	930	0.08	0.03	550	<0.02	16	140	62	6.5	13	0.11
	11/09/2025	6.5	940	5.4	6.9	1,700	0.04	0.05	440	<0.02	1.7	260	61	<5	9	0.14
	13/10/2025	6.8	6,600	<5	5.4	11,000	0.05	0.1	3,300	<0.02	1.7	1,800	370	<5	12	0.11
	20/11/2025	6.6	4,600	<5	4.3	9,000	0.1	0.21	2,600	<0.02	0.4	1,400	320	<5	12	0.12
	16/12/2025	6.8	11,000	18	4.1	18,000	0.07	0.28	6,100	<0.5	1.2	2,800	720	<5	34	0.12
	21/01/2026	7.4	25,000	9.5	7.8	37,000	0.03	0.02	12,000	12	1.1	6,300	1,500	<0.005	14	0.13
	20/02/2026	6.9	21,000	8.4	4.9	32,000	0.02	<0.01	10,000	<0.02	0.8	5,400	410	<0.005	10	0.04
	20/03/2026	6.3	1,400	25	5.5	2,700	0.28	0.09	720	<0.02	1.7	370	98	<0.005	<10	0.14
	21/04/2026	6.5	14,000	8.4	6.8	22,000	0.07	0.74	7,500	<0.02	1	3,500	320	<0.005	<10	0.04
	29/05/2026	5.78	260	<5	7.1	340	0.06	0.1	78	<0.02	1.3	46	10	<0.005	22	0.13
	23/06/2026	6.2	820	<5	5.7	1,300	0.06	0.09	340	<0.02	1.3	190	42	<0.005	12	0.12
	29/06/2026	6.4	610	<5	6.7	920	0.04	0.05	220	<0.02	1.7	130	33	<0.005	12	0.15
	14/07/2026	6.21	760	<5	7.1	1,300	0.02	0.06	350	0.02	1.4	190	46	<0.005	16	0.13
	11/08/2026	6.4	1200	11	7.8	2,000	0.03	0.05	580	<0.02	3.7	330	78	<0.005	12	0.13
SW05 Baseline		**5.1 – 7.2**	**4710**	**136**	**-**	**6,927**	**0.21**	**0.592**	**980**	**0.02**	**2.2**	**1,667**	**115**	**63**		**<0.5***

Surface Water Analytical Results

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW05	29/09/2022	0.83	<0.001	<0.0002	9.4	0.002	<0.001	4.6	<0.001	17	<0.0001	0.002	7.7	0.008	0.09
	20/10/2022	0.66	<0.001	<0.0002	11	0.001	<0.001	3.5	0.001	19	<0.0001	0.002	7.9	0.007	0.06
	14/11/2022	0.75	<0.001	<0.002	18	<0.001	0.002	5.4	<0.01	27	<0.001	<0.001	11	0.12	0.04
	14/12/2022	0.93	<0.001	<0.002	16	<0.01	<0.01	6.1	<0.01	21	<0.001	<0.01	13	<0.05	0.06
	18/01/2023	0.73	<0.01	<0.002	<2	<0.01	<0.01	6.2	<0.01	96	<0.001	<0.01	41	<0.05	<1
	20/02/2023	0.22	0.002	<0.0002	190	0.001	0.01	<0.001	<0.001	550	<0.001	0.001	170	0.008	0.00
	28/03/2023	0.77	<0.01	<0.002	9.4	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.4	<0.05	0.08
	18/04/2023	1	<0.001	<0.0002	42	0.001	<0.001	<0.001	<0.001	110	<0.0001	0.003	37	0.008	0.02
	18/05/2023	0.6	<0.001	<0.0002	5.2	<0.001	<0.001	2.4	<0.001	9.1	<0.0001	0.002	4.9	0.009	0.12
	15/06/2023	0.32	<0.001	<0.0002	14	0.001	2	2	<0.001	27	<0.0001	0.001	14	0.01	0.02
	24/07/2023	0.33	<0.001	<0.0002	22	<0.001	<0.001	1.9	<0.001	52	<0.0001	0.002	25	0.006	0.02
	21/08/2023	0.41	<0.001	<0.0002	23	<0.001	0.002	2.2	<0.001	54	<0.0001	0.002	29	0.005	0.02
	18/09/2023	0.28	<0.001	<0.0002	29	<0.001	<0.001	2.6	<0.001	70	<0.0001	0.001	42	<0.005	0.01
	18/10/2023	0.27	<0.001	<0.0002	61	<0.001	<0.001	2	<0.001	160	<0.0001	<0.001	76	<0.005	0.00
	20/11/2023	0.51	0.001	<0.0002	25	0.001	<0.001	4.3	<0.001	56	<0.0001	0.002	27	<0.005	0.02
	19/12/2023	0.54	0.005	0.0028	46	0.001	0.001	4.2	0.001	120	0.002	0.002	47	0.009	0.01
	23/01/2024	0.9	0.003	<0.0002	16	0.002	0.001	7.8	<0.001	32	<0.0001	0.001	16	0.012	0.06
	26/02/2024	0.63	0.001	<0.0002	13	0.001	<0.001	3.7	<0.001	23	<0.0001	0.002	10	0.029	0.05
	26/03/2024	0.64	<0.001	<0.0002	16	0.001	<0.001	3.3	<0.001	33	<0.0001	0.002	14	0.008	0.04
	18/04/2024	0.69	<0.001	<0.0002	8.3	0.002	0.001	<0.001	<0.001	14	<0.0001	0.008	6.7	0.008	0.08
	20/05/2024	0.72	<0.001	<0.0002	5.6	<0.001	0.001	2.5	<0.001	5.1	<0.0001	0.002	3.5	0.008	0.13
	25/06/2024	0.2	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	31	<0.0001	0.002	12	0.012	0.01
	10/07/2024	0.48	<0.001	<0.0002	17	<0.001	<0.001	2.9	<0.001	31	<0.0001	0.002	11	0.008	0.03
	6/08/2024	0.28	<0.001	<0.0002	37	<0.001	<0.001	<0.001	<0.001	100	<0.0001	0.001	30	0.007	0.01
	15/08/2024	0.5	<0.001	<0.0002	5	0.001	<0.001	1.6	<0.001	8	<0.0001	0.001	4.6	0.01	0.10
	11/09/2024	0.52	<0.001	<0.0002	14	<0.001	<0.001	2.9	<0.001	25	<0.0001	0.002	10	0.011	0.04
	9/10/2024	0.85	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.5	0.016	0.07
	6/11/2024	0.68	<0.001	<0.0002	17	0.002	<0.001	3.8	<0.001	29	<0.0001	0.002	12	0.008	0.04
	16/12/2024	<0.05	<0.001	<0.0002	<0.5	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	<1
	14/01/2025	0.24	0.002	<0.0002	230	0.002	<0.001	0.64	<0.001	660	<0.0001	<0.001	210	0.006	0.00
	11/02/2025	0.12	0.002	<0.0002	290	0.001	<0.001	0.5	<0.001	820	<0.0001	<0.001	260	0.047	0.00
	24/03/2024	0.54	<0.001	<0.0002	22	<0.001	0.001	3.2	<0.001	53	<0.0001	0.002	17	0.32	0.02
	31/03/2025	0.58	<0.001	<0.0002	4.2	<0.001	<0.001	3.7	<0.001	5.2	<0.0001	0.002	3.5	0.062	0.14
	8/04/2025	0.77	<0.001	<0.0002	9.9	0.001	<0.001	4.2	<0.001	18	<0.0001	0.002	6	0.011	0.08
	9/05/2025	0.75	<0.001	<0.0002	6.3	0.001	<0.001	3.2	<0.001	8.5	<0.0001	0.002	3.7	0.015	0.12
	25/06/2025	0.46	<0.001	<0.0002	26	<0.001	<0.001	2	<0.001	63	<0.0001	0.001	19	0.01	0.02
	8/07/2025	0.68	<0.001	<0.0002	9.1	0.001	<0.001	3	<0.001	16	<0.0001	0.002	4.9	0.008	0.07
	14/08/2025	0.46	<0.001	<0.0002	8.6	<0.001	<0.001	2.6	<0.001	17	<0.0001	0.001	6.2	0.008	0.05
	11/09/2025	0.55	<0.001	<0.0002	15	<0.001	<0.001	3.2	<0.001	33	<0.0001	0.001	11	0.01	0.04
	13/10/2025	0.21	<0.001	<0.0002	77	<0.001	<0.001	2	<0.001	220	<0.0001	<0.001	69	<0.005	0.00
	20/11/2025	0.32	0.001	<0.0002	63	0.001	<0.001	2.7	<0.001	180	<0.0001	0.001	53	<0.005	0.01
	16/12/2025	0.2	0.001	<0.0002	120	0.001	0.001	1.4	<0.001	340	<0.0001	0.001	110	0.008	0.00
	21/01/2026	0.08	0.002	<0.0002	250	0.001	<1	0.47	<1	760	<0.0001	<0.001	240	0.009	0.00
	20/02/2026	0.1	0.002	<0.0002	220	<0.001	<0.001	1.4	<0.001	640	<0.0001	<0.001	260	0.006	0.00
	20/03/2026	0.53	<0.001	<0.0002	22	<0.001	0.001	4.6	<0.001	46	<0.0001	0.002	17	0.011	0.02
	21/04/2026	0.18	0.001	<0.0002	150	<0.001	0.001	1.2	<0.001	430	<0.0001	0.001	130	0.022	0.00
	29/05/2026	0.65	<0.001	<0.0002	4.9	<0.001	<0.001	2.9	<0.001	6	<0.0001	0.002	2.7	0.04	0.13
	23/06/2026	0.81	<0.001	<0.0002	13	0.001	<0.001	3.6	<0.001	25	<0.0001	0.002	7.5	0.2	0.06
	29/06/2026	0.54	<0.001	<0.0002	8.5	<0.001	<0.001	2.3	<0.001	17	<0.0001	<0.001	4.9	0.01	0.06
	14/07/2026	0.55	<0.001	<0.0002	12	<0.001	<0.001	1.9	<0.001	22	<0.0001	0.002	7	0.009	0.05
	11/08/2026	0.6	<0.001	<0.0002	18	<0.001	<0.001	3.5	<0.001	43	<0.0001	0.002	11	<0.005	0.03
SW05 Baseline		**2.1**	**0.002**	**0.001**	**57**	**0.002**	**0.003**	**12.3**	0.001	**130**	**0.0005**	**0.011**	**58**	**0.026**	**<1***

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW05	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/11/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/12/2022	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/01/2023	70	70	-	-	<20	60	100	-	-	<100
	20/02/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	28/03/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/05/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/06/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	50	50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	120	120	<100	120	<20	<50	120	<100	130	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	14/07/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	11/08/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
SW05 Baseline		**60**	**-**	**200**	**100**	**-**	**50**	**100**	**60**	**100**	**-**

Surface Water Analytical Results

Site	Date	pH	TDS (mg/L)	TSS (mg/L)	DO (mg/L)	EC (µδ/cm)	TP (mg/L)	NH_3 (mg/L)	Cl (mg/L)	Nitrite (mg/L)	TN (mg/L)	Na (mg/L)	SO_4 as S (mg/L)	Chlorophyll a (µg/L)	Acidity (as CaCO3) mg/L	Sulphate : Chloride Ratio :
SW06	29/09/2022	6.0	480	<5	7.8	580	0.13	0.16	220	<0.02	8.6	140	11	5.1		0.05
	20/10/2022	6.3	580	16	8.7	730	0.05	0.19	330	<0.02	0.5	110	7.5	6.2		0.02
	14/11/2022	6.2	840	13	<5	1000	0.04	0.36	310	<0.10	1.1	270	100	<5		0.32
	14/12/2022	6.3	840	16	8.3	1200	0.1	0.05	340	<0.10	5.8	240	44	<5		0.13
	18/01/2023	6.4	3,700	31	6.8	5,400	0.07	0.04	1,800	<0.02	2.5	1,000	200	<5		0.11
	20/02/2023	6.8	19	89	5.1	14,000	0.09	0.11	22	<0.10	4.1	4,000	1,200	<5		54.55
	28/03/2023	5.6	400	6.2	8.3	730	0.03	0.07	180	<0.20	<0.20	110	18	9.7		0.10
	18/04/2023	6.7	6,400	18	7.4	6,700	0.07	1.2	3,200	<0.02	1.26	1,700	360	<10		0.11
	18/05/2023	5.9	280	17	6.3	470	0.08	0.06	120	<0.02	0.4	370	21	<5		0.18
	15/06/2023	6.4	1,100	<5	7.4	1,400	0.55	0.18	440	<0.02	0.7	250	38	<5		0.09
	24/07/2023	6.7	2,100	5.8	6.6	3,500	0.07	0.23	1,800	<0.2	0.6	540	620	<5		0.34
	21/08/2023	6.6	2,800	<5	6.1	5,400	0.19	0.16	1,300	<0.02	0.78	870	59	<5		0.05
	18/09/2023	6.7	2,900	24	6.5	4,600	0.06	0.12	1,500	<0.02	0.4	1,300	200	<5		0.13
	18/10/2023	6.9	7,900	6.3	6.4	9,700	0.05	0.05	3,700	<0.02	<0.2	1,600	430	<5		0.12
	20/11/2023	6.6	2,200	9.9	4.6	4,000	0.18	0.43	1,200	<0.01	1.2	490	720	<5		0.60
	19/12/2023	6.8	3,300	9.3	5.6	6,600	0.09	0.82	2,300	<0.02	<2	1,300	94	<5		0.04
	23/01/2024	6.2	4,300	15	2.1	4,300	0.18	0.08	2,800	<0.02	1.4	1,100	330	<5		0.12
	26/02/2024	6.4	880	17	9	1,200	0.11	0.02	60	<0.02	1.7	200	10	<5		0.17
	26/03/2024	6.8	1,300	9.9	5.9	1,900	0.05	0.07	760	0.05	1.2	300	120	<5		0.16
	18/04/2024	6.6	520	5.8	6	840	0.06	0.16	170	<0.02	<1	110	31	<5	17	0.18
	20/05/2024	6.3	240	<5	6.1	290	<0.01	0.05	59	<0.02	1	42	47	<5	15	0.80
	25/06/2024	6.7	960	17	9.2	1,900	0.06	0.09	500	<0.02	5.3	270	21	<5	19	0.04
	10/07/2024	6.2	880	<5	6.2	1,600	0.03	0.13	170	<0.02	1.4	250	33	<5	15	0.19
	6/08/2024	6.3	4,500	6.8	7.6	8,400	0.08	0.15	2,100	<0.02	1.6	1,200	270	<5	24	0.13
	15/08/2024	6.2	160	<5	7	240	0.1	0.03	57	<0.02	<0.2	38	15	<5	14	0.26
	11/09/2024	6.7	710	7	6.6	1,000	0.04	0.28	370	<0.02	1.8	180	54	<5	11	0.15
	9/10/2024	6.5	720	14	8.5	1,000	0.15	<0.01	310	<0.1	4.3	180	33	18	<10	0.11
	6/11/2024	6.9	1,900	37	5.6	2,400	0.1	0.11	890	<0.02	1.6	490	160	<5	<10	0.18
	16/12/2024	7.7	33,000	13	9.5	47,000	0.01	0.18	16,000	<0.02	<0.2	<0.5	2,100	<5	<10	0.13
	14/01/2025	7.2	25,000	11	6.3	38,000	0.03	0.06	15,000	<0.02	0.7	7,200	600	<5	<10	0.04
	11/02/2025	7.6	24,000	11	7.2	34,000	0.003	0.06	6,100	<0.02	<0.2	7,200	240	5.9	<10	0.04
	24/03/2025	6.5	1,700	<5	6.8	2,500	<0.1	0.12	820	<0.02	4.2	450	110	<5	<10	0.13
	31/03/2025	6.7	250	11	9.5	250	0.08	<10	68	<0.02	<1	42	9.7	<5	<10	0.14
	8/04/2025	6.4	610	7.6	9.4	740	0.08	0.28	260	<0.2	<1	140	31	<10	<10	0.12
	9/05/2025	6.6	260	<5	-	490	0.07	<0.1	120	<0.2	<1	70	28	<5	<10	0.23
	25/06/2025	6.2	2,000	7.4	5.9	3,600	1.4	0.08	1,700	<0.2	1.4	520	260	<5	20	1.50
	8/07/2025	6.0	470	<5	8.2	910	0.05	0.02	230	<0.02	<0.2	130	28	<5	13	0.12
	14/08/2025	6.3	590	31	6.1	910	0.07	0.03	340	<0.02	0.3	140	37	<5	13	0.11
	11/09/2025	6.6	1,299	6.8	7.1	2,200	0.04	0.05	590	<0.02	5.6	340	67	<5	<10	0.11
	13/10/2025	6.8	14,000	5.9	4.9	23,000	0.04	0.29	7,400	<0.02	0.6	4,100	830	5.9	14	0.11
	20/11/2025	6.7	8,400	<5	4.5	14,000	0.09	0.22	4,800	<0.02	0.7	2,300	1,100	<5	12	0.23
	16/12/2025	6.9	12,000	20	3.8	19,000	0.09	0.32	6,100	<0.5	1.8	2,900	750	7	28	0.12
	21/01/2026	7.4	18,000	7.1	7.4	28,000	0.03	<0.01	8,400	8.4	1	4,700	1,000	<0.005	12	0.12
	20/02/2026	7	19,000	<5	5.9	33,000	0.02	0.05	12,000	<0.02	0.3	5,800	520	0.0058	17	0.04
	20/03/2026	6.4	1,400	20	4.3	2,800	0.16	0.13	770	<0.02	2.4	390	100	<0.005	<10	0.13
	21/04/2026	6.5	12,000	<5	7.4	19,000	0.03	0.1	5,900	<0.02	1.2	3,100	270	<0.005	16	0.05
	29/05/2026	5.81	190	5.7	6.1	370	0.06	<0.01	74	<0.02	2	46	10	<0.005	20	0.14
	23/06/2026	6.1	820	<5	6.8	1,300	0.05	0.09	320	<0.02	<1	200	39	<0.005	11	0.12
	29/06/2026	6.6	400	<5	8.4	740	0.03	0.03	180	<0.02	1.4	110	29	<0.005	<10	0.16
	14/07/2026	6.46	620	<5	7.1	1,200	0.02	0.04	300	0.02	1.4	170	43	<0.005	10	0.14
	11/08/2026	7.1	930	<5	8	1,500	<0.1	0.03	400	<0.02	4.1	230	66	<0.005	<10	0.17
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		**6.5 – 8.0**	**-**	**<50**	**-**	**<2200**	**<0.05**	**-**	**-**	**-**	**<0.50**	**-**	**-**	**5**		**<0.5***

Note: * derived from Interim Target Criteria within BCPoM, GWMP and AFMP (AWC 2020)

Surface Water Analytical Results

ENV ASBESTOS | REMEDIATION | RESOURCE RECOVERY

Site	Date	Al (total) (mg/L)	As (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (total) (mg/L)	Pb (mg/L)	Mg (mg/L)	Hg (mg/L)	Ni (mg/L)	K (mg/L)	Zn (mg/L)	Aluminium : Calcium ratio :
SW06	29/09/2022	0.78	<0.001	<0.0002	9.4	0.002	<0.001	4.5	<0.001	18	<0.0001	0.002	7.7	0.008	0.08
	20/10/2022	0.54	<0.001	<0.0002	9.1	0.001	<0.001	2.7	0.001	13	<0.0001	0.002	5.8	0.012	0.06
	14/11/2022	0.68	<0.001	<0.002	18	<0.001	0.012	5.3	<0.01	29	<0.001	<0.01	12	0.11	0.04
	14/12/2022	0.75	<0.001	<0.002	16	<0.01	<0.01	5.4	<0.01	21	<0.001	<0.01	13	<0.05	0.05
	18/01/2023	0.63	<0.010	<0.001	<2	<0.01	<0.01	0.01	<0.01	120	<0.001	<0.01	47	<0.05	<1
	20/02/2023	0.34	0.002	<0.0002	170	0.001	0.01	<0.001	<0.001	480	<0.001	0.002	160	0.008	0.00
	28/03/2023	1.1	<0.01	<0.002	11	<0.01	<0.01	3.8	<0.01	14	<0.001	<0.01	6.3	<0.05	0.10
	18/04/2023	0.54	<0.001	<0.0002	68	0.001	<0.001	<0.001	<0.001	200	<0.0001	0.002	63	0.009	0.01
	18/05/2023	0.44	0.003	<0.0002	14	<0.001	<0.001	0.13	<0.001	4.8	<0.0001	0.008	3.3	<0.005	0.03
	15/06/2023	0.36	<0.001	<0.0002	15	<0.001	2.1	2.1	<0.001	28	28	0.001	14	<0.005	0.02
	24/07/2023	0.36	<0.001	<0.0002	26	<0.001	<0.001	1.9	0.001	65	<0.0001	0.002	29	0.007	0.01
	21/08/2023	0.41	<0.001	<0.0002	39	0.001	<0.001	1.9	<0.001	100	<0.0001	0.002	46	<0.005	0.01
	18/09/2023	0.3	<0.001	<0.0002	56	<0.001	<0.001	2.4	<0.001	150	<0.0001	0.001	64	<0.005	0.01
	18/10/2023	0.2	<0.001	<0.0002	73	<0.001	<0.001	1.7	<0.001	190	<0.0001	<0.001	85	<0.005	0.00
	20/11/2023	0.63	0.001	<0.0002	27	0.001	<0.001	4.5	<0.001	60	<0.0001	0.003	28	0.01	0.02
	19/12/2023	0.62	0.002	0.0007	56	0.001	0.002	3.4	<0.001	150	0.0005	0.002	55	0.008	0.01
	23/01/2024	0.71	0.003	<0.0002	50	0.002	<0.001	5.7	<0.001	140	<0.0001	<0.001	46	0.008	0.01
	26/02/2024	0.61	<0.001	<0.0002	14	0.003	<0.001	3.5	<0.001	24	<0.0001	0.005	10	0.025	0.04
	26/03/2024	0.61	<0.001	<0.0002	17	0.001	<0.001	3.1	<0.001	34	<0.0001	0.002	15	0.008	0.04
	18/04/2024	0.71	<0.001	<0.0002	10	0.001	<0.001	<0.001	<0.001	13	<0.0001	0.008	7.6	0.008	0.07
	20/05/2024	0.72	<0.001	<0.0002	5.7	<0.001	<0.001	2.3	<0.001	4.8	<0.0001	0.002	3.2	0.009	0.13
	25/06/2024	0.23	<0.001	<0.0002	16	<0.001	<0.001	1.1	<0.001	28	<0.0001	0.002	11	0.016	0.01
	10/07/2024	0.5	<0.001	<0.0002	17	<0.001	<0.001	2.6	<0.001	28	<0.0001	0.002	10	0.01	0.03
	6/08/2024	0.31	<0.001	<0.0002	50	<0.001	<0.001	<0.001	<0.001	140	<0.0001	0.002	40	0.011	0.01
	15/08/2024	0.51	<0.001	<0.0002	4.8	<0.001	0.001	1.6	<0.001	4.6	<0.0001	0.002	3	0.011	0.11
	11/09/2024	0.46	<0.001	<0.0002	14	<0.001	<0.001	2.1	<0.001	20	<0.0001	0.002	11	0.012	0.03
	9/10/2024	0.84	<0.001	<0.0002	12	0.001	<0.001	4.8	<0.001	20	<0.0001	0.002	7.7	0.009	0.07
	6/11/2024	0.79	<0.001	<0.0002	25	0.002	<0.001	4.1	<0.001	60	<0.0001	0.002	20	0.01	0.03
	16/12/2024	4.4	0.007	<0.0002	29	<0.001	<0.001	<0.05	<0.001	<0.5	<0.0001	<0.001	<0.5	<0.005	0.15
	14/01/2025	0.15	0.002	<0.0002	300	0.002	<0.001	0.3	<0.001	860	<0.0001	<0.001	270	<0.005	0.00
	11/02/2025	0.09	0.002	<0.0002	300	0.001	<0.001	0.38	<0.001	850	<0.0001	<0.001	270	0.048	0.00
	24/03/2025	0.55	<0.001	<0.0002	22	<0.001	<0.001	3.4	<0.001	54	<0.0001	0.002	17	0.027	0.03
	31/03/2025	0.59	0.001	<0.0002	4.2	<0.001	<0.001	3.3	<0.001	5.3	<0.0001	0.002	3.5	0.044	0.14
	8/04/2025	0.8	<0.001	<0.0002	9.9	0.003	<0.001	4.1	<0.001	18	<0.0001	0.002	6	0.007	0.08
	9/05/2025	0.74	<0.001	<0.0002	6.3	0.001	0.001	2.8	<0.001	8.5	<0.0001	0.002	3.7	0.01	0.12
	25/06/2025	0.7	<0.001	<0.0002	26	<0.001	<0.001	2.6	<0.001	64	<0.0001	0.002	20	0.008	0.03
	8/07/2025	0.55	<0.001	<0.0002	11	0.001	0.001	2.3	<0.001	13	<0.0001	0.002	6.3	0.008	0.05
	14/08/2025	0.43	<0.001	<0.0002	9.1	<0.001	<0.001	2.4	<0.001	16	<0.0001	0.001	6.3	0.011	0.05
	11/09/2025	0.51	<0.001	<0.0002	19	0.001	<0.001	2.9	<0.001	42	<0.0001	0.001	14	0.008	0.03
	13/10/2025	0.12	0.001	<0.0002	170	<0.001	<0.001	1.2	<0.001	500	<0.0001	<0.001	150	0.006	0.00
	20/11/2025	0.26	0.001	<0.0002	99	0.001	<0.001	1.9	<0.001	280	<0.0001	0.001	86	0.006	0.00
	16/12/2025	0.17	0.001	<0.0002	120	<0.001	<0.001	1.3	0.001	340	<0.0001	0.001	110	<0.005	0.00
	21/01/2026	0.1	0.002	<0.0002	200	<0.001	<1	0.35	<1	560	<0.0001	<0.001	180	0.006	0.00
	20/02/2026	0.1	0.002	<0.0002	240	<0.001	<0.001	0.58	<0.001	690	<0.0001	<0.001	280	0.028	0.00
	20/03/2026	0.6	0.001	<0.0002	24	0.001	0.002	4.8	<0.001	48	<0.0001	0.002	18	0.014	0.03
	21/04/2026	0.14	0.001	<0.0002	130	<0.001	0.002	0.87	0.008	380	<0.0001	<0.001	120	0.017	0.00
	29/05/2026	0.69	<0.001	<0.0002	4.9	<0.001	<0.001	2.9	0.002	5.9	<0.0001	0.002	2.7	0.01	0.14
	23/06/2026	0.84	<0.001	<0.0002	13	0.001	<0.001	3.6	<0.001	25	<0.0001	0.002	7.8	0.19	0.06
	29/06/2026	0.4	<0.001	<0.0002	11	<0.001	<0.001	1.6	<0.001	12	<0.0001	<0.001	6.6	0.007	0.04
	14/07/2026	0.5	<0.001	<0.0002	14	0.001	0.001	1.5	<0.001	19	<0.0001	0.002	9	0.011	0.04
	11/08/2026	0.34	<0.001	<0.0002	20	<0.001	<0.001	1.8	<0.001	27	<0.0001	0.001	13	0.008	0.02
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		**0.055**	**0.013**	**0.0002**	**-**	**0.0033**	**0.0018**	**0.3**	**0.0034**	**-**	**0.0006**	**0.011**	**-**	**0.008**	**<1***

Note: * derived from Interim Target Cri

Surface Water Analytical Results

Site	Date	Total Recoverable Hydrocarbons (TRH (µg/L)				Total Petroleum Hydrocarbons (TPH) (µg/L)					BTEXN (µg/L)
		C10 – C16	C10 – C16 less Naphthalene	C16 – C34	C34 – C40	C6 – C9	C10 – C14	C15 – C28	C29 – C36	C10 – C36 Sum	Naphthalene
SW06	29/09/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	20/10/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/11/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	14/12/2022	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/01/2023	<50	<50	-	-	<20	<50	<100	<100	-	<100
	20/02/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	28/03/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/04/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	18/05/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	15/06/2023	<50	<50	<50	<100	<20	<50	<100	<100	<20	<100
	24/07/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/08/2023	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/09/2023	<20	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/10/2023	90	90	<100	<100	<20	160	<100	<100	160	<100
	20/11/2023	<500	<500	<1,000	<1,000	<20	<500	<100	<1,000	<1,000	<100
	19/12/2023	<500	<500	<1,000	<1,000	<20	<500	<1,000	<1,000	<1,000	<100
	23/01/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/02/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	26/03/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	18/04/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/05/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	10/07/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	15/08/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2024	2.1	2.1	<100	<100	<20	<50	0.9	<100	0.9	<100
	9/10/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	6/11/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2024	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/01/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/02/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	24/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	31/03/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/04/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	9/05/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	25/06/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	8/07/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	14/08/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	11/09/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	13/10/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/11/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	16/12/2025	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	21/01/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<100
	20/02/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	20/03/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	21/04/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/05/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	23/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	29/06/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	14/07/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
	11/08/2026	<50	<50	<100	<100	<20	<50	<100	<100	<100	<0.01
ANZG (2018): 95% Slightly Disturbed Freshwater Ecosystem		-	-	-	-	-	-	-	-	-	-

Note: * derived from Interim Target Cri

APPENDIX D

Photolog

PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
1	11/08/2026

Description

Surface water monitoring location SW01.



Photo No.	Date
2	11/08/2026

Description

Surface water monitoring location SW02.



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
3	11/08/2026

Description

Surface water monitoring location SW03.



Photo No.	Date
4	11/08/2026

Description

Surface water location SW04



PHOTOGRAPHIC LOG

Client Name	Site Location	Project
Planit Consulting	Harvest Estate, Melaleuca Drive, Byron Bay, NSW 2481	ENV217140

Photo No.	Date
5	11/08/2026

Description

Surface water monitoring location SW06.



Photo No.	Date
6	11/08/2026

Description

Groundwater water monitoring location MW7.



Appendix E – Letter to DCCEEW – Reporting and Incident

Level 1, 11-13 Pearl Street, Kingscliff NSW 2487
PO Box 1623, Kingscliff NSW 2487
(02) 6674 5001
administration@planitconsulting.com.au
www.planitconsulting.com.au

Our Reference: J7148

Wednesday, 18 March 2026

Department of Climate Change, Energy, the Environment and Water

Environment Compliance Branch Division

GPO Box 3090

Canberra ACT 2601

Via email: environment.compliance@dcceew.gov.au

Dear Sir/Madam,

Harvest Estate, West Byron Urban Release Area, Ewingsdale Road, Byron Bay NSW (EPBC 2018/8166)

Reporting an Incident

I refer to the EPBC Act Approval issued over the above-mentioned site, which, by way of approval conditions, require notification to the Department of any incidents / potential incidents.

In accordance with Condition 16 of the approval, the approval holder must provide the Department in writing of any incident and/or potential non-compliance and/or non-compliance.

Although the exact dates are currently unknown, sometime in December 2025 and January 2026 a section of Harvest Estate's restoration area was cleared/impacted, specifically to Rehabilitation Zones 4 and 6 (refer to **Attachment 1**).

Machinery came through from the neighbouring property to the north to access water lines. Areas were cleared to create access tracks with some road base brought in the gain access across the creek. Part way along this cleared zone, a 4wd track has been made through plantings/restoration areas. These tracks are approximately 3-4m in width.

It is understood that Byron Shire Council were working on a burst repair on the water main crossing the east section of the Harvest Estate property.

The approximate location of these tracks is illustrated within **Attachment 2**. Images of these cleared tracks are also provided below.



Images of Recently Cleared Access Track



Images of Recently Cleared Access Track

It is noted that the landowner / approval holder was not aware of the works at the time of it happening.

At this current stage, it is undetermined as to what remedial measures will be undertake to those impacted areas within the restoration area. Negotiations are still ongoing between Byron Shire Council and the landowner to resolve this matter.

It is noted that while these works have impacted areas retained and rehabilitated under an approved Vegetation Management Plan subject to Council conditions, these works have not impacted any Existing Habitat or Habitat Creation Areas subject to the Rehabilitation Plan, as defined within the EPBC Act approval (EPBC 2018/8166).

The clearing occurred approximately 450m east of the protected frog habitat zones and habitat creation areas for acid frogs. As such, it is considered highly unlikely that these works affected these habitat areas subject to the Rehabilitation Plan.

As a precautionary measure, notification of the incident is still provided to the Department.

Should you have any questions regarding the above, please do not hesitate to contact me via email on tomy@planitconsulting.com.au.

Yours sincerely



Tomy Rados
Senior Ecologist

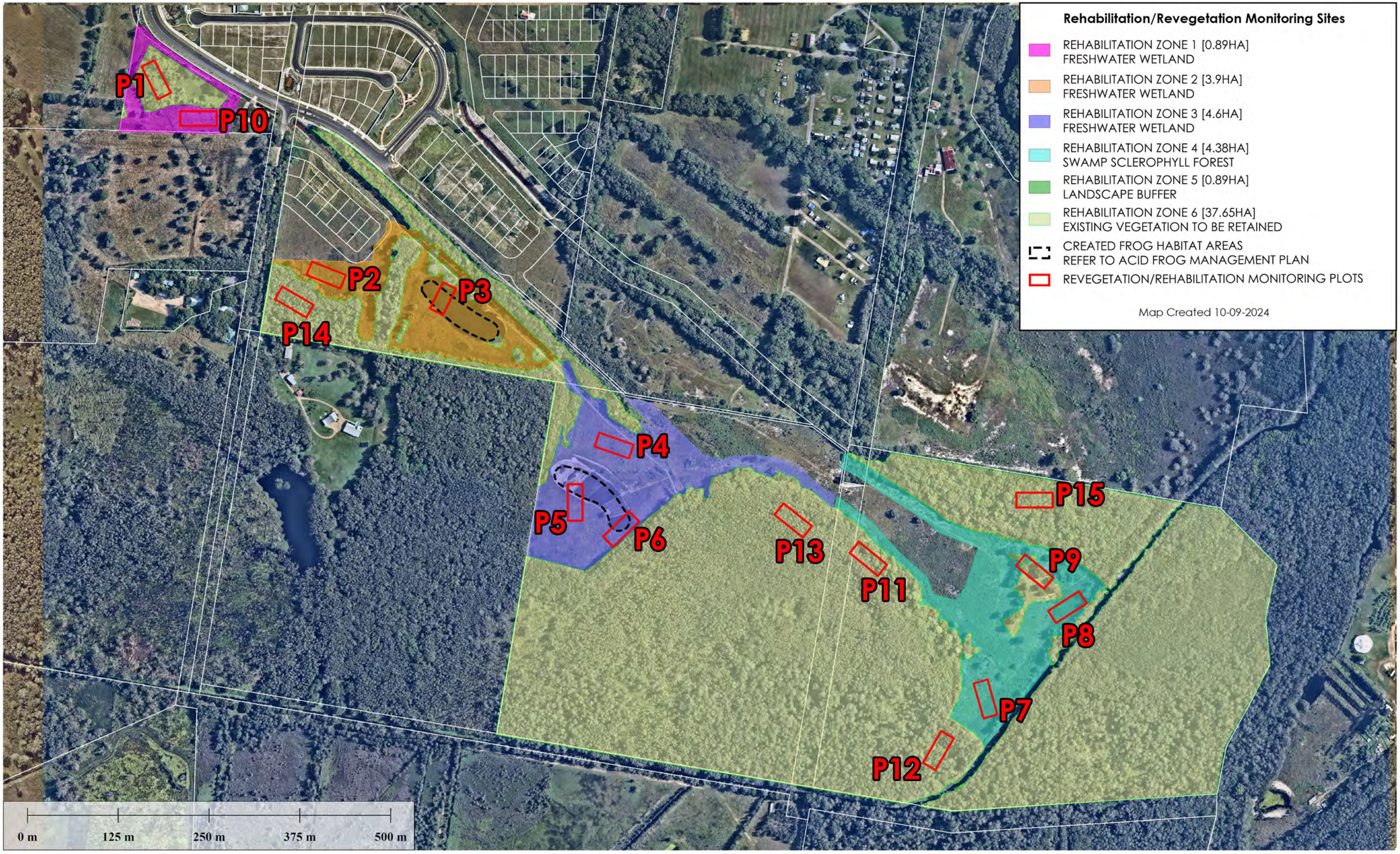
Attachments

Attachment 1: Harvest Estate Rehabilitation / Revegetation Monitoring Sites Plan
Attachment 2: Approved Rehabilitation Plan (EPBC 2018/8166) With Cleared Access Track Location Shown
Attachment 3: EPBC Act Conditions of Approval (EPBC 2018/8166)

PLANIT
CONSULTING

Attachment 1

Harvest Estate Rehabilitation / Revegetation Monitoring Sites Plan



Rehabilitation/Revegetation Monitoring Sites

- REHABILITATION ZONE 1 [0.89HA] FRESHWATER WETLAND
- REHABILITATION ZONE 2 [3.9HA] FRESHWATER WETLAND
- REHABILITATION ZONE 3 [4.6HA] FRESHWATER WETLAND
- REHABILITATION ZONE 4 [4.38HA] SWAMP SCLEROPHYLL FOREST
- REHABILITATION ZONE 5 [0.89HA] LANDSCAPE BUFFER
- REHABILITATION ZONE 6 [37.65HA] EXISTING VEGETATION TO BE RETAINED
- CREATED FROG HABITAT AREAS REFER TO ACID FROG MANAGEMENT PLAN
- REVEGETATION/REHABILITATION MONITORING PLOTS

Map Created 10-09-2024

Harvest Estate, Byron Bay

REHABILITATION / REVEGETATION MONITORING SITES

SCALE: AS SHOWN
DATE: 09/24
REV: 01

DRAWN: TR
CHECKED: TR
DRAWN NO: HE_RRMS_1

N

Level 1 2247 Gold Coast Hwy
Nobby Beach
PO Box 206 Nobby Beach QLD 4218

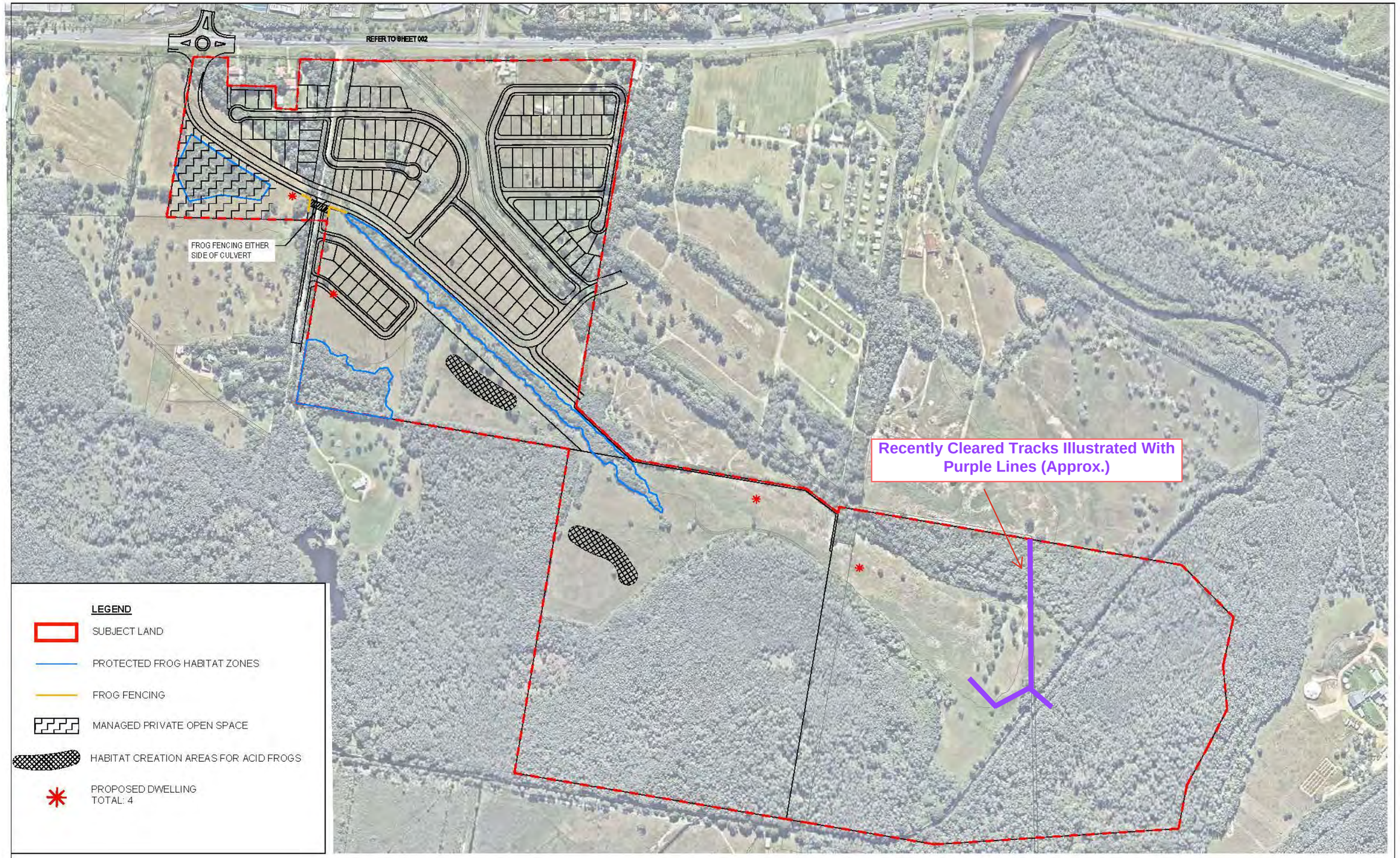
Telephone: 07 5526 1500
Fax: 07 5526 1502
admin@planitconsulting.com.au

PLANIT CONSULTING

Attachment 2

Approved Rehabilitation Plan (EPBC 2018/8166) With Cleared Access Track Location Shown

Attachment B: Habitat Creation Areas for Acid Frogs



SHEET 02

PROJECT:
THREATENED SPECIES MANAGEMENT PLAN

DRAWING TITLE:
HABITAT CREATION AREAS FOR ACID FROGS

01	LANDSCAPE MANAGEMENT PLAN FOR INFORMATION	13.05.20	AH	AH	JA
02	LANDSCAPE OPW FOR INFORMATION	18.08.20	AH	AH	LT

JOB NO: J5644 | DWG NO: J5644_02

SCALE: 1:2500 @ A1

CLIENT: Tower Holdings Pty Ltd

Australian Institute of Landscape Architects

PLANIT
Level 1 2247 Gold Coast Hwy
PO Box 206
Nobby Beach QLD 4218
Telephone: 07 5526 1500
ABN: 20 011 261 711
Email: admin@planitconsulting.com.au

Attachment 3

EPBC Act Conditions of Approval (EPBC 2018/8166)