

GERAK SAGA SDN BHD

L-70-7, KK Times Square, Off Jalan Coastal,
88100 Kota Kinabalu, Sabah.

TEL: 088 – 438 021 FAX: 088 – 486241



ENVIRONMENTAL COMPLIANCE REPORT

For

**FOREST MANAGEMENT OF BENGKOKA AND
TAMBALUGU FOREST RESERVES (6,467 HA), PITAS,
SABAH.**

1ST REPORT OF YEAR 2026

JANUARY - APRIL	MAY - AUGUST	SEPTEMBER - DECEMBER
√		

AEC Ref. No. : JPAS/PP/15/600-1/01/3/60(46)
Report Reference : CK/MO411/1197-1/26
Date of Report : 24th April 2026



**CHEMSAIN KONSULTANT
SDN BHD** 198401018349 (130904-U)

ENVIRONMENTAL CONSULTANCY
ENVIRONMENTAL ENGINEERING
WATER INFRASTRUCTURE
INFORMATION TECHNOLOGY

ON SITE TESTING & SAMPLING
OCCUPATIONAL SAFETY & HEALTH
LABORATORY
TRAINING & DEVELOPMENT

KUCHING

172 Rock Road,
93200 Kuching, Sarawak, Malaysia.
Phone +6082 548 366
Fax +6082 548 388, 548 399
Email enquiries@chemsain.com

BINTULU

Sublot No. 153, Lot 8226,
Bintulu Sentral, Jalan Kidurong,
97000 Bintulu, Sarawak, Malaysia.
Phone +6086 337 668 **Fax** +6086 337 730
Email bintulu@chemsain.com

SHAH ALAM (Bukit Jelutong - Main Office)

No. 9, Jalan Astaka U8/83
Bukit Jelutong, Seksyen U8,
40150 Shah Alam, Selangor, Malaysia.
Phone +603 7859 7769 **Fax** +603 7859 7782
Email sj@chemsain.com

SHAH ALAM (Bukit Jelutong - Laboratory)

No. 29, Jalan Astaka U8/84A,
Bukit Jelutong, Seksyen U8,
40150 Shah Alam, Selangor, Malaysia.
Phone +603 7734 3473 **Fax** +603 7831 8817
Email shahalam@chemsain.com

MIRI (Senadin - Laboratory)

Lots 1942 & 1943, Block 5, Jalan Maigold,
Desa Senadin Industrial Area, Kuala Baram,
98000 Miri, Sarawak, Malaysia.
Phone +6085 652 102 **Fax** +6085 657 102
Email laboratory.miri@chemsain.com

KEMAMAN

Lot PT 21702, Jalan Kubang Kurus,
Kawasan Perindustrian Jakar 2,
24000 Kemaman, Terengganu, Malaysia.
Phone +609 858 1396 **Fax** +609 858 1167
Email kemaman@chemsain.com

MIRI (Eastwood - Field Services)

Lot 1681, Eastwood Valley Industrial Park,
98000, 98000 Miri, Sarawak.
Phone +6085 425 176 **Fax** +6085 415 176
Email kk@chemsain.com

JOHOR

No. 50 & 52, Jalan Pelepas 4/9,
Taman Perindustrian Tanjung Pelepas (I-PARC),
81550 Gelang Patah, Johor, Malaysia.
Phone +607 509 5538 **Fax** +607 510 2459
Email jb@chemsain.com

KOTA KINABALU

Lots 2 & 7, Lorong Suria, Off Lorong Buah Duku 1,
Taman Perindustrian Suria, Jalan Kolombong,
88450 Kota Kinabalu, Sabah, Malaysia.
Phone +6088 381 277, 381 278 **Fax** +6088 381 280
Email kk@chemsain.com

BRUNEI

No. 3, Blk A, 1st Floor, Taman Alam Complex,
Jalan Telanai, BE1118, Bandar Seri Bagawan,
Brunei Darussalam.
Phone +673 265 6896, 265 6897 **Fax** +673 265 6897
Email brunei@chemsain.com

LABUAN

Lot No. 31, Blok D, Lazenda Warehouse Phase 3,
Jalan Ranche - Ranche,
87000 WP Labuan, Malaysia.
Phone +6087 424 277 **Fax** +6087 425 277
Email labuan@chemsain.com

TABLE OF CONTENTS

CONTENTS	PAGE
1.0 INTRODUCTION	2
1.1 Monitoring Information	2
1.2 Project Proponent Information	2
1.3 Post-EIA Consultant Information	2
1.4 Other Approvals	2
1.5 Project Status*	3
1.6 Chronology of Events	3
2.0 LEGAL REQUIREMENT	3
3.0 CHANGES TO PROJECT CONCEPT / ENVIRONMENT	3
3.1 Project Concept	3
3.2 Surrounding Environment	3
4.0 MONITORING LOCATION	4
5.0 COMPLIANCE STATUS, OBSERVATION & RECOMMENDATION	7
6.0 CONCLUSION	18
6.1 Overall Compliance for <i>January – April 2026</i>	18

LIST OF TABLES

Table 1.0: Chronology of Events	3
Table 2.0: Environmental Sampling particulars	4

LIST OF FIGURES

Figure 1.0: Mitigation Measures and Monitoring Locations	5
Figure 2.0: Monitoring Plates	6

LIST OF APPENDICES

- Appendix A: Plates
- Appendix B: Environmental Monitoring Report
- Appendix C:
 - Water Quality Test Report
 - National Water Quality Standards of Malaysia

GERAK SAGA SDN BHD

ENVIRONMENTAL COMPLIANCE REPORT

1.0 INTRODUCTION

The project site encompasses an area of approximately 6,467 hectares, consisting of 6,270 hectares within the Bengkoka Forest Reserve and 197 hectares within the Tambalugu Forest Reserve. For operational efficiency, these two forest reserves are managed as a single Forest Management Unit (FMU), which is divided into four coupes: Coupes 1 to 3 within Bengkoka and Coupe 4 within Tambalugu. The project proponent holds a management and operation license for both forest reserves under the Industrial Tree Plantation (TPP) program.

1.1 Monitoring Information

Project Title : Forest Management of Bengkoka and Tambalugu Forest Reserves (6,467 Ha), Pitas, Sabah
EIA Letter Approval Ref. : JPAS/PP/15/600-1/01/3/60(36) dated 1st November 2017
Monitoring Period : January – April 2026
Date of Monitoring : Compliance Audit : 29 January 2026
Water Sampling : 29 January 2026
EIA Consultant : Chemsain Konsultant Sdn. Bhd.

1.2 Project Proponent Information

Project Proponent : Gerak Saga Sdn. Bhd.
Contact Person : Mr. Thondik Venantius
Tel. No. : 088 – 663 494
Fax No. : 088 – 662 494
Environmental Officer : Ms. Chrystalyziana Lisa Venchin
Contact No. : 013 – 881 8127 (Mobile)
E-mail : c.venchin@forestsolutions.com.my

1.3 Post-EIA Consultant Information

Post-EIA Consultant : Chemsain Konsultant Sdn. Bhd.
Tel. No. : Office : 088 – 381 277 / 278
Fax No. : 088 – 381 280
Contact Person : Jessica Malagkas / Vianah Boman
Email : jessica.malagkas@chemsain.com/vianah.boman@chemsain.com

1.4 Other Approvals

Development Plan Ref. : NIL
Earthwork Plan Ref. : NIL
Drainage Plan Ref. : NIL
ESCP Ref. : NIL

1.5 Project Status*

Total planted area : 3796.8 Ha

Harvested : 3,618.20 Ha

(*) Project progress status is as of 10 March 2026.

Figures reported by the project proponent are based on the declared production area and remain subject to verification by the Quantity Surveyor (QS) and issuance of the Quality Control (QC).

1.6 Chronology of Events

Table 1.0: Chronology of Events

No.	Event	Date
1.0	Signing of AEC Ref. No.: JPAS/PP/15/600-1/01/3/60	06 th December 2017

2.0 LEGAL REQUIREMENT

The Project is classified as a prescribed activity under the **Second Schedule** of the **Environment Protection Enactment (Prescribed Activities) (Environmental Impact Assessment) Order 2005** under **Item 2 (i) & 2 (ii)**.

Environmental compliance audits carried out every four (4) months are reported in accordance with the Approval Conditions as specified in the **Syarat-Syarat Alam Sekitar [Seksyen 12(1) dan 20, Enakmen Perlindungan Alam Sekitar 2002]** of the EPD ref: JPAS/PP/15/600-1/01/3/60 dated **06th December 2017**.

3.0 CHANGES TO PROJECT CONCEPT / ENVIRONMENT

3.1 Project Concept

No.	Item	Changes
1.	Project Component	Nil
2.	Changes to Land Lot	Nil
3.	Land Area	Nil

3.2 Surrounding Environment

No.	Item	Changes
1.	Land Use	Nil
2.	River / Coastal Morphology	Nil

4.0 MONITORING LOCATION

Designated sampling locations are shown in **Figure 1.0** with details tabulated in **Table 2.0**.

Table 2.0: Environmental Sampling particulars

Monitoring Component	Key	GPS Coordinates (Datum: Timbalai)	Location Description
Surface Water Quality	W1	N 06° 51' 18.9" E 117° 06' 41.1"	Unnamed stream downstream of Bengkoka Forest Reserve at Kg. Kandang
	W2	N 06° 50' 40.6" E 117° 09' 18.6"	Unnamed stream downstream of Bengkoka Forest Reserve at Kg. Gumpa
	W3	N 06° 50' 40.1" E 117° 10' 38.2"	Sg. Bongkol of Safoda Dam within Bengkoka Forest Reserve
	W4	N 06° 51' 10.4" E 117° 08' 52.6"	Sg. Kakarangan downstream of Bengkoka Forest Reserve
	W5	N 06° 52' 39.3" E 117° 09' 49.8"	Unnamed stream downstream of Bengkoka Forest Reserve
	W6	(refer to Figure 1)	Coupe 4 (refer to Figure 1)

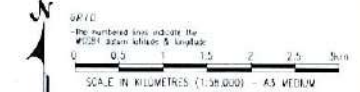
ENVIRONMENTAL MONITORING AND COMPLIANCE AUDIT

Forest Management of Bengkoka and Tambalugu Forest Reserves (16,467 Ha), Pitas, Sabah

LEGEND:

- Project Boundary (Bengkoka Forest Reserve and Tambalugu Forest Reserve)
- Forest Reserve Boundary
- Road
- River/Stream
- W 1-W 6 Water Monitoring Points
- 30m Riparian Reserve
- 50m Mangrove Forest Buffer Zone
- 50m Water Reservoir Buffer Zone
- 5m Riparian Reserve
- Traffic Signage
- Mangrove Forest
- Water Catchment - Approx. 371 Ha (to be confirmed through ground assessment)
- Water Reservoir - Approx. 72 Ha (to be confirmed through ground assessment)
- >25° Slope - Approx. 17 Ha (to be confirmed through ground assessment)
- Coupe 1
- Coupe 2
- Coupe 3
- Coupe 4
- Oil Palm Plantation
- Existing Fire Towers

Point	Coordinate	Point	Coordinate
1	6 55 15.06N 117 12 11.10E	28	6 54 10.06N 117 08 47.51E
2	6 55 05.56N 117 11 18.64E	29	6 54 15.34N 117 07 41.24E
3	6 54 17.64N 117 11 04.24E	30	6 54 30.82N 117 07 45.36E
4	6 54 31.12N 117 10 22.52E	31	6 54 11.82N 117 09 08.85E
5	6 54 30.66N 117 10 22.22E	32	6 54 40.77N 117 12 30.18E
6	6 54 12.12N 117 10 22.10E	33	6 54 56.18N 117 12 34.81E
7	6 54 21.06N 117 10 40.02E	34	6 54 10.25N 117 12 17.71E
8	6 54 50.14N 117 11 17.52E	35	6 54 16.81N 117 12 27.02E
9	6 54 28.44N 117 11 41.24E	36	6 54 32.83N 117 12 34.81E
10	6 52 50.16N 117 11 40.40E	37	6 54 32.87N 117 12 23.22E
11	6 54 52.00N 117 11 15.40E	38	6 54 17.82N 117 12 19.88E
12	6 51 43.64N 117 12 36.52E	39	6 54 47.14N 117 13 04.61E
13	6 51 25.68N 117 12 47.02E	40	6 54 42.84N 117 12 32.20E
14	6 52 08.60N 117 12 17.12E	41	6 54 10.54N 117 08 51.51E
15	6 52 11.18N 117 11 46.52E	42	6 54 10.81N 117 08 18.65E
16	6 51 07.92N 117 11 42.00E	43	6 54 37.74N 117 09 33.88E
17	6 50 39.87N 117 10 59.64E	44	6 54 10.81N 117 10 23.14E
18	6 50 29.86N 117 10 44.42E		
19	6 51 32.48N 117 08 52.46E		
20	6 51 43.64N 117 08 46.10E		
21	6 51 59.72N 117 08 51.24E		
22	6 51 43.64N 117 08 46.10E		
23	6 51 43.64N 117 08 43.20E		
24	6 51 04.26N 117 08 27.05E		
25	6 51 08.91N 117 08 47.64E		
26	6 51 26.16N 117 10 22.52E		
27	6 51 10.38N 117 09 25.22E		



Mitigation Measures and Monitoring Locations

Figure: 1.0

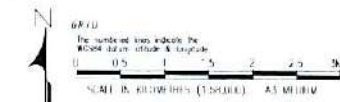
ENVIRONMENTAL MONITORING AND COMPLIANCE AUDIT

Forest Management of Bengkoka and Tambalugu Forest Reserves (6,467 Ha), Pitas, Sabah.

LEGEND:

- Project Boundary (Bengkoka Forest Reserve and Tambalugu Forest Reserve)
- Forest Reserve Boundary
- Road
- River Stream
- W1-W6 Water Monitoring Points
- 30m Riparian Reserve
- 50m Mangrove Forest Buffer Zone
- 50m Water Reservoir Buffer Zone
- 5m Riparian Reserve
- ▲ Traffic Signage
- Mangrove Forest
- Water Catchment - Approx. 371 Ha (to be confirmed through ground assessment)
- Water Reservoir - Approx. 72 Ha (to be confirmed through ground assessment)
- >25° Slope - Approx. 17 Ha (to be confirmed through ground assessment)
- Coupe 1
- Coupe 2
- Coupe 3
- Coupe 4
- Oil Palm Plantation
- ▲ Existing Fire Towers

Point	Coordinates	Point	Coordinates
1	6°58'55.50"N 117°04'17.00"E	40	6°58'55.50"N 117°04'17.00"E
2	6°58'55.50"N 117°04'17.00"E	41	6°58'55.50"N 117°04'17.00"E
3	6°58'55.50"N 117°04'17.00"E	42	6°58'55.50"N 117°04'17.00"E
4	6°58'55.50"N 117°04'17.00"E	43	6°58'55.50"N 117°04'17.00"E
5	6°58'55.50"N 117°04'17.00"E	44	6°58'55.50"N 117°04'17.00"E
6	6°58'55.50"N 117°04'17.00"E	45	6°58'55.50"N 117°04'17.00"E
7	6°58'55.50"N 117°04'17.00"E	46	6°58'55.50"N 117°04'17.00"E
8	6°58'55.50"N 117°04'17.00"E	47	6°58'55.50"N 117°04'17.00"E
9	6°58'55.50"N 117°04'17.00"E	48	6°58'55.50"N 117°04'17.00"E
10	6°58'55.50"N 117°04'17.00"E	49	6°58'55.50"N 117°04'17.00"E
11	6°58'55.50"N 117°04'17.00"E	50	6°58'55.50"N 117°04'17.00"E
12	6°58'55.50"N 117°04'17.00"E	51	6°58'55.50"N 117°04'17.00"E
13	6°58'55.50"N 117°04'17.00"E	52	6°58'55.50"N 117°04'17.00"E
14	6°58'55.50"N 117°04'17.00"E	53	6°58'55.50"N 117°04'17.00"E
15	6°58'55.50"N 117°04'17.00"E	54	6°58'55.50"N 117°04'17.00"E
16	6°58'55.50"N 117°04'17.00"E	55	6°58'55.50"N 117°04'17.00"E
17	6°58'55.50"N 117°04'17.00"E	56	6°58'55.50"N 117°04'17.00"E
18	6°58'55.50"N 117°04'17.00"E	57	6°58'55.50"N 117°04'17.00"E
19	6°58'55.50"N 117°04'17.00"E	58	6°58'55.50"N 117°04'17.00"E
20	6°58'55.50"N 117°04'17.00"E	59	6°58'55.50"N 117°04'17.00"E
21	6°58'55.50"N 117°04'17.00"E	60	6°58'55.50"N 117°04'17.00"E
22	6°58'55.50"N 117°04'17.00"E	61	6°58'55.50"N 117°04'17.00"E
23	6°58'55.50"N 117°04'17.00"E	62	6°58'55.50"N 117°04'17.00"E
24	6°58'55.50"N 117°04'17.00"E	63	6°58'55.50"N 117°04'17.00"E
25	6°58'55.50"N 117°04'17.00"E	64	6°58'55.50"N 117°04'17.00"E
26	6°58'55.50"N 117°04'17.00"E	65	6°58'55.50"N 117°04'17.00"E
27	6°58'55.50"N 117°04'17.00"E	66	6°58'55.50"N 117°04'17.00"E



Monitoring Plates

Figure: 2.0

5.0 COMPLIANCE STATUS, OBSERVATION & RECOMMENDATION

Nama Projek	: Forest Management of Bengkoka and Tambalugu Forest Reserves (6,467 Ha), Pitas, Sabah
Nama Pemaju	: Gerak Saga Sdn Bhd
Rujukan fail jabatan ini	: JPAS/PP/15/600-1/01/3/60 (36)
Tarikh Akujanji	: 1 st November 2017
Penyedia laporan pematuhan ini	: Chemsain Konsultant Sdn. Bhd.
Tempoh diliputi oleh laporan ini	: January – April 2026

AEC No.	Approved Environmental Condition	Status	Observation / Comment	Plate No.	Corrective Action and Completion Date
5.1	Kawalan Tapak Pembangunan				
5.1.1	Kawalan Kawasan Perladangan Hutan				
i.	Satu (1) salinan pelan penyukatan sempadan kawasan projek seluas 6,467 hektar dalam kawasan Hutan Simpan Bengkoka dan Tambalugu, Daerah Pitas sebagaimana ditunjukkan pada "Figure 6.2.1" dalam Perjanjian Syarat-syarat Alam Sekitar ini hendaklah dikemukakan ke JPAS sebelum aktiviti perladangan hutan dimulakan.	Comply	The Project Demarcation Plan was submitted to the Environment Protection Department (EPD) as Appendix D of the 1st Environmental Compliance Audit Report (EMCAR) for 2019.	-	-
ii.	Sempadan kawasan projek yang telah diukur hendaklah ditanda di lapangan serta dipasang dengan papan tanda di lokasi-lokasi yang mudah dilihat sebelum aktiviti perladangan hutan dimulakan.	Comply	A signboard, entrance (barrier) gate, red-painted trees, and red-painted wooden pegs were observed in place, clearly demarcating the project coupes and blocks.	3 - 12	-
iii	Semua tanda sempadan tapak projek hendaklah tidak ditimbus, dihalang, dirosakkan atau diganggu daripada kedudukan asal.	Comply	The signboard and entrance (barrier) gate were observed to be in good condition during the site visit.	4, 6 – 9 11-12	-

AEC No.	Approved Environmental Condition	Status	Observation / Comment	Plate No.	Corrective Action and Completion Date
iv	Aktiviti perladangan hutan adalah <u>tidak dibenarkan</u> di dalam kawasan tadahan air, takungan air dan "water intake point" sebagaimana dinyatakan dan masing-masing ditandakan sebagai "Water Catchment", "Water Reservoir" dan "Water Intake" dalam maklumat tambahan rujukan CK/EV403-4278/0199/17 bertarikh 13 April 2017 dan ditunjukkan pada "Figure 6.2.1" dalam Perjanjian Syarat-syarat Alam Sekitar ini.	Comply	- Project development was observed to be confined within the designated coupes, as shown in Figure 1.0. - According to the project proponent, water catchments, the water reservoir, and water intake points have been excluded from development activities. - Additionally, the project proponent has carried out enrichment planting using local tree species along the riparian reserves of the water reservoir area.	1 – 2, 5, 12	-
v	Zon penampungan dengan kelebaran tidak kurang 50 meter hendaklah disediakan di sempadan kawasan projek yang bersempadan dengan Hutan Simpan Bakau Semenanjung Bengkoka (Kelas V) dan di sempadan kawasan "Water Reservoir" sebagaimana ditunjukkan pada "Figure 6.2.1" dalam Perjanjian Syarat-syarat Alam Sekitar ini.	Comply	According to the project proponent, a 50-meter buffer zone has been established for the mangrove forest area at Coupe 4.	-	-
vi	Sebarang aktiviti perladangan hutan <u>tidak dibenarkan</u> dalam kawasan zon penampungan.	Comply	As stated by the project proponent, the 50-meter buffer zone is excluded from project development activities.	-	-
vii	Sebarang aktiviti perladangan hutan <u>tidak dibenarkan</u> dalam kawasan berkecerunan 25 darjah atau lebih sebagaimana ditunjukkan pada "Figure 6.2.1" dalam Perjanjian Syarat-syarat Alam Sekitar ini.	Comply	Development within the steep (protected) area ($\geq 25^\circ$ slopes) was not sighted during the visit.	10	-

AEC No.	Approved Environmental Condition	Status	Observation / Comment	Plate No.	Corrective Action and Completion Date
viii	Sempadan kawasan tadahan air, takungan air dan "water intake point", zon penampungan dan kawasan berkecerunan 25 darjah atau lebih yang dilindungi hendaklah ditanda di lapangan dan dipasang dengan papan tanda di lokasi-lokasi yang mudah dilihat sebelum aktiviti perladangan hutan dimulakan.	Comply	Signboards sighted in place demarcating onsite buffer zone.	5, 10, 12, 21-22	-
5.1.2 Kawalan Pembinaan Jalan					
i	Pembinaan jalan hendaklah dikawal dengan meminimalkan aktiviti kerja tanah.	Comply	Existing access roads were fully utilized.	14 - 15	
ii	Jalan sedia ada hendaklah digunakan bagi mengurangkan gangguan terhadap tanah.	Comply	Refer to the comments in AEC 5.1.2 (i) .	14 - 15	-
iii	Sistem perparitan hendaklah disediakan bagi mengalirkan air keluar dari struktur jalan dan dilencongkan ke kawasan yang mempunyai tumbuhan.	Comply	The existing access road was observed to be equipped with earth drainage, directing surface runoff toward the nearest vegetated area.	14 - 15	-
iv	Aktiviti pelupusan atau pembuangan bahan tanah berlebihan tidak dibenarkan dalam parit, sungai atau alur air.	Comply	Disposal of overburden into the nearest natural waterways was not sighted.	-	-
5.1.3 Pembinaan Rumah Pekerja, Kem Pekerja Atau Bengkel					
i	Sebarang aktiviti kerja tanah dan pembersihan kawasan bagi pembinaan rumah pekerja, kem pekerja atau bengkel hendaklah diminimalkan.	Comply	Workers' quarters and the nursery at the base camp were observed to be fully utilized.	16 - 20	-

AEC No.	Approved Environmental Condition	Status	Observation / Comment	Plate No.	Corrective Action and Completion Date
			- No project workshop was observed to be constructed within the project site. - According to the project proponent, maintenance of project vehicles is carried out at an external workshop.		
ii	<i>Sistem perparitan yang berkesan hendaklah disediakan bagi mengawal larian air permukaan dan air buangan dari kawasan rumah pekerja, kem pekerja atau bengkel dan hendaklah dilencongkan ke kawasan yang mempunyai tumbuhan dan tidak dibenarkan dialir terus ke dalam sungai atau alur air.</i>	Comply	The workers' quarters and nursery were observed to be equipped with proper concrete drainage, effectively diverting surface runoff toward the nearest vegetated area.	19	-
iii	<i>Kedudukan rumah pekerja atau kem pekerja hendaklah terletak pada jarak mendatar tidak kurang 30 meter dari tebing sungai atau alur air.</i>	Comply	The workers' quarters were observed to be located more than 30 meters from the nearest natural waterway.	16 - 17	-
iv	<i>Kedudukan bengkel hendaklah terletak pada jarak mendatar tidak kurang 50 meter dari tebing sungai atau alur air.</i>	Not Applicable	Refer to the comments in AEC 5.1.3 (i) .	-	-
v	<i>Semua rumah pekerja, kem pekerja atau bengkel sedia ada yang tidak mematuhi peraturan-peraturan yang dinyatakan dalam Perjanjian Syarat-syarat Alam Sekitar ini hendaklah dipindahkan dan dikawal sebagaimana ditetapkan.</i>	Comply	Siting of these facilities sighted in compliance with the AEC.	-	-

AEC No.	Approved Environmental Condition	Status	Observation / Comment	Plate No.	Corrective Action and Completion Date						
5.1.4	Rehabilitasi Tanah Yang Terdedah										
i	Semua kawasan tanah dan cerun yang terdedah hendaklah distabilkan dan direhabilitasi dengan menanam spesies tumbuhan yang diluluskan oleh Jabatan Perhutanan Negeri Sabah.	Comply	- Revegetation was carried out on exposed slopes to reduce the risk of soil erosion. - Existing vegetation in inactive and idle project areas was retained and remains undisturbed.	10 -12	-						
5.2	Perlindungan Sungai										
i	Simpanan sungai berikut hendaklah dilindungi dan ditanda di lapangan: <table><tr><th>Nama Sungai</th><th>Simpanan Sungai</th></tr><tr><td>Sungai Kisorong, Sungai Bongkol, Sungai Kakarangan dan anak sungai, Sungai Malubang dan anak sungai, Sungai Kandang dan anak sungai, Sungai Liu, sungai A hingga K serta semua sungai yang mempunyai kelebaran 5 meter atau lebih.</td><td>Sekurang-kurangnya selebar 30 meter pada jarak mendatar dari tebing sungai.</td></tr><tr><td>Sungai L dan M serta semua sungai yang mempunyai kelebaran kurang daripada 5 meter</td><td>Sekurang-kurangnya selebar 5 meter pada jarak mendatar dari tebing sungai.</td></tr></table>	Nama Sungai	Simpanan Sungai	Sungai Kisorong, Sungai Bongkol, Sungai Kakarangan dan anak sungai, Sungai Malubang dan anak sungai, Sungai Kandang dan anak sungai, Sungai Liu, sungai A hingga K serta semua sungai yang mempunyai kelebaran 5 meter atau lebih.	Sekurang-kurangnya selebar 30 meter pada jarak mendatar dari tebing sungai.	Sungai L dan M serta semua sungai yang mempunyai kelebaran kurang daripada 5 meter	Sekurang-kurangnya selebar 5 meter pada jarak mendatar dari tebing sungai.	Comply	Identified riparian reserves within the project site were observed to be demarcated with signboards, and tree trunks were marked with blue paint.	21, 22	
Nama Sungai	Simpanan Sungai										
Sungai Kisorong, Sungai Bongkol, Sungai Kakarangan dan anak sungai, Sungai Malubang dan anak sungai, Sungai Kandang dan anak sungai, Sungai Liu, sungai A hingga K serta semua sungai yang mempunyai kelebaran 5 meter atau lebih.	Sekurang-kurangnya selebar 30 meter pada jarak mendatar dari tebing sungai.										
Sungai L dan M serta semua sungai yang mempunyai kelebaran kurang daripada 5 meter	Sekurang-kurangnya selebar 5 meter pada jarak mendatar dari tebing sungai.										

AEC No.	Approved Environmental Condition	Status	Observation / Comment	Plate No.	Corrective Action and Completion Date
ii	Sebarang aktiviti pembersihan dan perladangan hutan adalah <u>tidak dibenarkan</u> dalam simpanan sungai sebagaimana ditunjukkan pada "Figure 6.2.1" dalam Perjanjian Syarat-syarat Alam Sekitar ini.	Comply	No development activities were observed within the riparian reserves.	21,22	-
iii	Sempadan simpanan sungai hendaklah ditanda di lapangan dengan cat merah serta dipasang dengan papan tanda di lokasi-lokasi yang mudah dilihat sebelum aktiviti pembersihan dan perladangan hutan dimulakan.	Comply	Refer to the comments in AEC 5.2 (i) .	21, 22	-
iv	Sebarang pembinaan rumah pekerja, kem pekerja, bengkel, tandas atau struktur bangunan lain <u>tidak dibenarkan</u> dalam simpanan sungai.	Comply	No construction of structures was observed within the riparian reserves.	-	-
v	Sebarang penyimpanan bahan minyak atau bahan toksik <u>tidak dibenarkan</u> dalam simpanan sungai.	Comply	• Storage of oils and toxic material within the riparian reserves was not sighted. • Fertilizer bags were observed to be properly stacked inside the fertilizer store.	23 -33	-
vi	Sebarang bahan tanah lebihan, sisa pepejal, sisa biomas, kumbahan, bahan minyak, kimia atau bahan-bahan toksik <u>tidak dibenarkan</u> dilupuskan dalam simpanan sungai.	Comply	Disposal of overburden, biomass or any types of wastes (i.e. sewage, oil and chemical, etc.) within the riparian reserves was not sighted.	-	-

AEC No.	Approved Environmental Condition	Status	Observation / Comment	Plate No.	Corrective Action and Completion Date				
5.2.1.2	Laporan pemantauan kualiti air juga hendaklah dikemukakan ke JPAS bersama dengan Laporan Pematuhan tersebut. Lokasi dan parameter yang perlu dianalisa adalah seperti berikut: <table><tr><th>Lokasi</th><th>Parameter</th></tr><tr><td>Sebagaimana ditunjukkan pada "Figure 6.2.1" dalam Perjanjian Syarat-syarat Alam Sekitar ini.</td><td>Turbidity, Total Suspended Solid, Oil & Grease, Total Coliform Count.</td></tr></table>	Lokasi	Parameter	Sebagaimana ditunjukkan pada "Figure 6.2.1" dalam Perjanjian Syarat-syarat Alam Sekitar ini.	Turbidity, Total Suspended Solid, Oil & Grease, Total Coliform Count.	Comply	Surface water sampling activity was conducted at location W6, as shown in Figure 1.0. Sampling at W1 to W5 could not be carried out due to the following reasons: i. W1 to W4 – Inaccessibility of the sampling locations due to flood. ii. W5 – No ongoing operations in this area.	45	-
Lokasi	Parameter								
Sebagaimana ditunjukkan pada "Figure 6.2.1" dalam Perjanjian Syarat-syarat Alam Sekitar ini.	Turbidity, Total Suspended Solid, Oil & Grease, Total Coliform Count.								
5.3	Bahan Minyak Dan Sisa Toksik								
i	Bahan minyak dan sisa toksik adalah <u>tidak dibenarkan</u> dilupuskan atau dibiarkan mengalir ke dalam parit, sungai atau alur air.	Comply	Disposal of oils and toxic material into natural waterways was not sighted.	-	-				
ii	Bahan minyak dan sisa toksik hendaklah dikumpul dan disimpan dalam bekas yang kukuh dan tidak mudah bocor. Bekas-bekas penyimpanan tersebut hendaklah dilabel.	Comply	- A skid tank containing diesel was observed in place. - Oils were stored in HDPE containers and properly arranged within the oil and lubricant storage shed. - Agrochemicals were observed to be stored in appropriate containers, clearly labelled, and neatly arranged. - Containers used for storing scheduled wastes were labelled with the appropriate Scheduled	27- 35	-				

AEC No.	Approved Environmental Condition	Status	Observation / Comment	Plate No.	Corrective Action and Completion Date
			Waste (SW) codes, in compliance with the requirements stipulated under Regulation 10 of the Environmental Quality (Scheduled Wastes) Regulations 2005 .		
iii	<i>Kawasan penyimpanan bahan minyak dan sisa toksik tersebut hendaklah terlindung dari hujan dan terletak pada jarak mendatar tidak kurang 50 meter dari tebing sungai atau alur air.</i>	Comply	The skid tank, generator and oil storage, chemical storage, and the scheduled waste shed were all observed to be sheltered from weather exposure and located more than 50 meters from the nearest natural waterway.	27 - 35	-
iv	<i>Kawasan penyimpanan bahan minyak dan sisa toksik hendaklah disediakan dengan sistem saliran serta perangkap minyak.</i>	Comply	- The diesel skid tank is equipped with an oil trap, with the fuel dispensing nozzle installed just above a containment chamber filled with sand to prevent oil from seeping directly into the ground. - The generator, as well as the oil and lubricant storage shed, were observed to have oil traps in place next to their respective structures.	28, 30 & 33	-
v	<i>Bahan minyak dan sisa toksik tersebut hendaklah dilupuskan mengikut keperluan Peraturan-peraturan Kualiti Alam Sekeliling (Buangan Terjadual) 2005.</i>	Comply	The project proponent informed that a DOE-licensed contractor, Kualiti Alam SB, has been appointed to manage the disposal of scheduled waste generated on-site.	-	-

AEC No.	Approved Environmental Condition	Status	Observation / Comment	Plate No.	Corrective Action and Completion Date
5.4	Kawalan Sisa Pepejal Dan Biomas				
i	Sebarang aktiviti pelupusan sisa pepejal dan biomas <u>tidak dibenarkan</u> dalam parit, sungai atau alur air.	Comply	No disposal of solid waste or biomass into natural waterways was observed.	-	-
ii	Kemudahan mengumpul dan mengutip sisa pepejal dan biomas hendaklah disediakan. Lokasi kawasan pengumpulan hendaklah terletak pada jarak mendatar tidak kurang 30-meter dari tebing sungai atau alur air.	Comply	- Garbage bins were observed in place at the workers' quarters area and near the chemical storage room. - According to the project proponent, all solid waste generated is currently transported and disposed of at the nearest designated waste collection centre located outside the project site, following the closure of the previously used on-site dumping pit.	38-40	-
iii	Semua sisa pepejal seperti botol, tin, plastik dan besi hendaklah dikumpul secara berasingan dan dikitar semula.	Comply	- Recycling bins were provided to facilitate on-site solid waste segregation. - A separate collection bin for metal scrap was observed in place.	36 - 37	The project proponent is reminded to monitor this area regularly and ensure timely collection of recyclable materials.
iv	Sekiranya tiada kawasan pelupusan yang sesuai dalam kawasan projek, sisa pepejal dan biomas hendaklah dilupuskan di kawasan yang diluluskan oleh pihak berkuasa tempatan yang berkaitan.	Comply	Refer to the comments in AEC 5. 4 (ii) .	-	-

AEC No.	Approved Environmental Condition	Status	Observation / Comment	Plate No.	Corrective Action and Completion Date
5.5	Kawalan Sisa Kumbahan / Sisa Cecair				
i	Kemudahan sistem sanitasi dan sistem perawatan kumbahan / sisa cecair hendaklah disediakan di kawasan projek.	Comply	Toilets within the base camp were observed to be equipped with septic tanks.	40 - 41	-
ii	Sebarang pelepasan atau pelupusan terus sisa kumbahan / sisa cecair tidak dibenarkan dalam sungai atau alur air.	Comply	No direct discharge of sewage into natural waterways was observed.	-	-
iii	Sebarang effluen kumbahan yang dihasilkan hendaklah mematuhi sekurang-kurangnya Piawai B, Peraturan –Peraturan Kualiti Alam Sekeliling (Kumbahan) 2009 .	Not Applicable	No Sewage Treatment Plant (STP) has been constructed within the project site.	-	-
5.6	Kawalan Kualiti Udara Dan Kebakaran				
i	Pembakaran terbuka adalah tidak dibenarkan .	Comply	- The project proponent affirmed its commitment to a strict zero open burning policy. - Firefighting facilities were observed on-site, including a fire depot, fire indicator signage, and a fire lookout tower. - According to the project proponent, signboards prohibiting open burning have been installed at strategic locations for notification purposes.	42-44	-
ii	Pelan pengurusan dan pencegahan kebakaran kawasan projek hendaklah disediakan dan	Comply	The Fire Management and Prevention Plan was included as Appendix C in the 3 rd	-	-

AEC No.	Approved Environmental Condition	Status	Observation / Comment	Plate No.	Corrective Action and Completion Date
	<i>dilaksanakan serta satu (1) salinan pelan tersebut hendaklah dikemukakan ke JPAS.</i>		Environmental Compliance Audit Report (EMCAR) of 2019.		
5.7	<i>Penghentian Atau Penamatan Projek</i>				
<i>i</i>	<i>Semua struktur binaan yang tidak digunakan hendaklah dibuka secara teratur apabila berlaku penghentian atau penamatan projek tersebut.</i>	Not Applicable	Not applicable at the current stage of development as the Project is still on-going.	-	-
<i>ii</i>	<i>Semua struktur binaan yang didapati tidak selamat atau yang tidak dapat dipastikan selamat hendaklah dibuka.</i>	Not Applicable	Refer to the comment in AEC 5.7 (i) .	-	-
<i>iii</i>	<i>Satu Laporan Pematuhan Alam Sekitar dengan format dan kandungan laporan sebagaimana dinyatakan dalam Lampiran 1 hendaklah dikemukakan apabila berlaku penghentian atau penamatan projek tersebut.</i>	Not Applicable	Refer to the comment in AEC 5.7 (i) .	-	-

6.0 CONCLUSION

6.1 Overall Compliance for *January – April 2026*

The project (Forest Management of Bengkoka and Tambalugu Forest Reserves [6,467 ha], Pitas, Sabah) was found to follow the EIA approval conditions, with no non-compliances recorded.

APPENDIX B

Environmental Monitoring Report



1.0 WATER QUALITY ANALYSIS

1.1 MONITORING LOCATION

Surface water sampling was scheduled to be carried out on the 29th of January 2026 at six (6) monitoring locations, W1 to W6 as shown in Figure 1.0. However, sampling could only be done at W6 because W1 - W4 were inaccessible due to flood while W5 was not yet operational during the site audit.

The weather was generally favourable on the scheduled sampling date, although heavy rainfall had occurred in the period preceding the sampling.

1.2 ANALYTICAL RESULTS

Analytical results for monitoring stations W1, W2, W3 and W6 are summarized in Table 3.0 and compared to Class IIB of the National Water Quality Standards for Malaysia (NWQSM). The laboratory test reports are presented in **Appendix C**.

Table 3.0: Surface Water Quality Monitoring Results

Monitoring Location Sampling Date/ Sampling Time	W1 29/1/26 -	W2 29/1/26 -	W3 29/1/26 -	W4 29/1/26 -	W6 29/01/26 12.01 pm	LIMITS (Class IIB)
Physical / Chemical Analysis						
Total Suspended Solids (TSS), mg/L	NS	NS	NS	NS	<u>75.0</u>	50.0
Turbidity, NTU	NS	NS	NS	NS	<u>210</u>	50.0
Oil & Grease, mg/L	NS	NS	NS	NS	<1.50	40; N
Microbiological Analysis						
Total Coliform Count (TCC), MPN/100mL	NS	NS	NS	NS	<u>>1.6 x 10⁴</u>	5000

Notes: < > Below / above detection limit; NS - No sample available

1.3 DISCUSSION

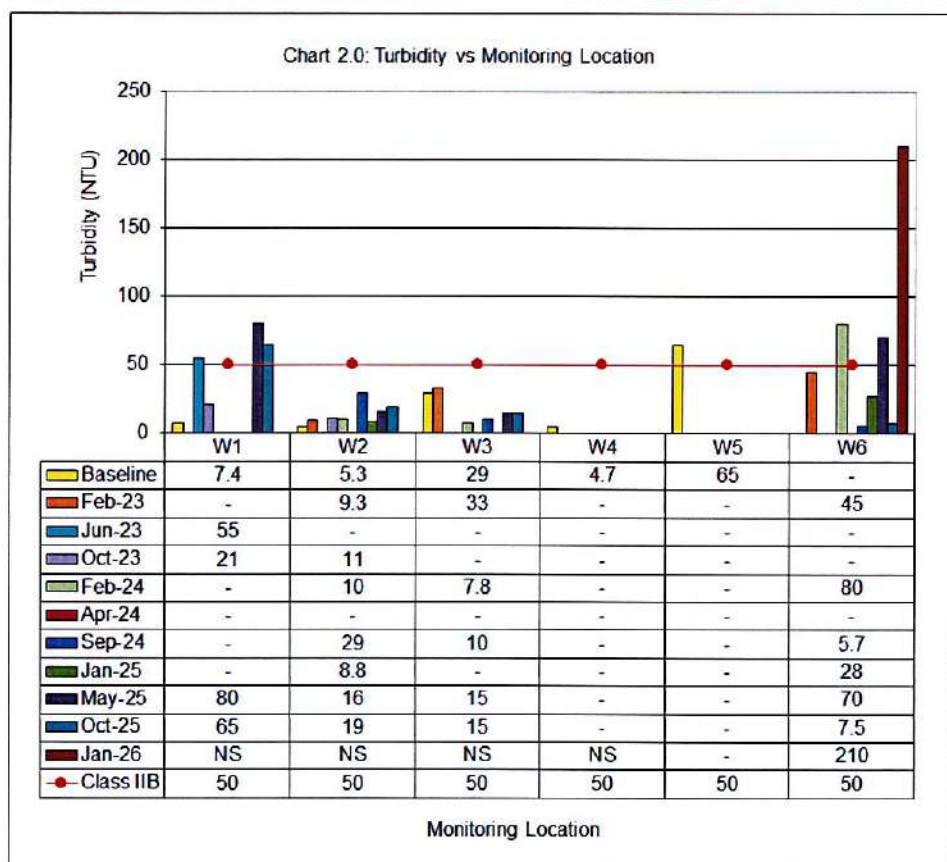
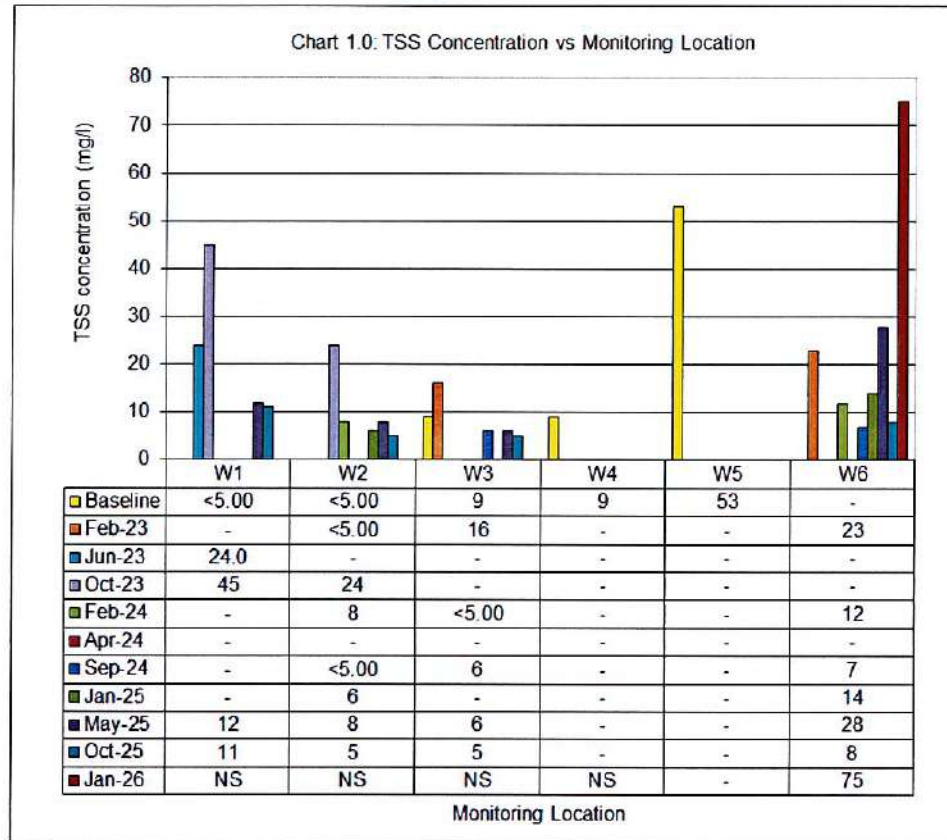
Water quality monitoring results for Location W6 indicate that several parameters exceeded the Class IIB limits. Total Suspended Solids (TSS) and turbidity were recorded above the allowable limits, while the Total Coliform Count was significantly higher than the Class IIB standard. The elevated levels of TSS and turbidity are likely attributed to surface runoff and sediment disturbance following the heavy rainfall experienced prior to the monitoring date. The increased Total Coliform Count may also be associated with runoff carrying organic matter and contaminants into the water body during the rainfall event.

The historical water quality results are presented in **Chart 1.0 to 4.0**.

1.4 RECOMMENDED MITIGATION MEASURES

- Construction of sedimentation ponds or drainage system within existing waterway or river reserve is strictly prohibited.
- Vegetation clearing shall be carried out in stages and confined to areas that are essential for Project development. Existing vegetation shall be retained to reduce runoff velocity and act as a natural barrier to minimize soil erosion.
- Re-vegetation or planting of cover crops shall be carried out in tandem with the field establishment works. This is to avoid prolonged and unnecessary exposure of bare ground elements such as rainfall, wind, and surface runoffs.
- Usage of agro chemicals is minimized and strictly adhered to the rules and regulations as stipulated under the Pesticides Act 1974. Disposal of agrochemicals such as pesticides and herbicides into existing streams or any waterway is strictly prohibited.

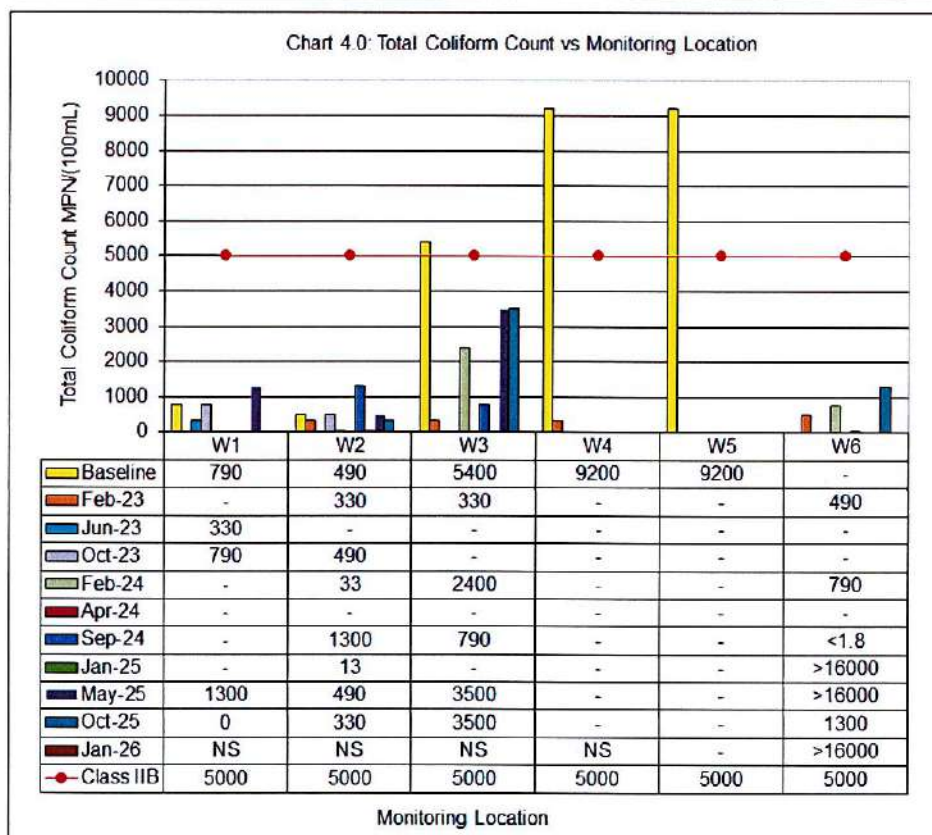
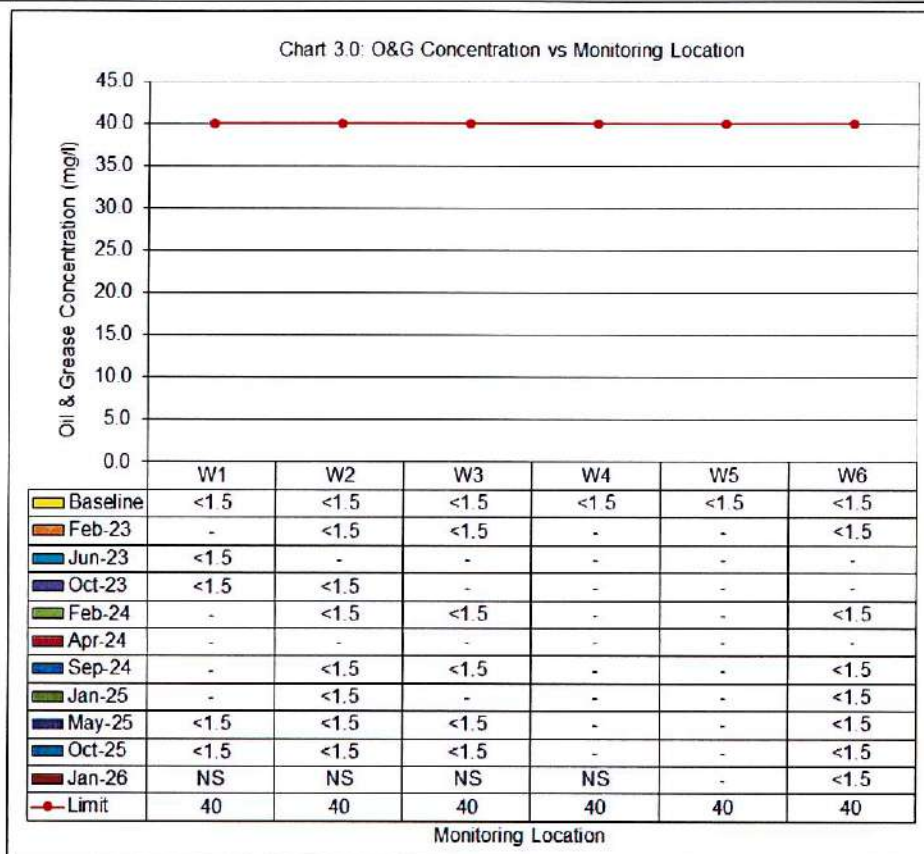
HISTORICAL SURFACE WATER QUALITY GRAPHICAL REPRESENTATION

**Notes:**

* Baseline data extracted from EIA for Forest Management of Bengkoka and Tambalugu Forest Reserves (6,467 Ha), Pitas, Sabah.

(-) denotes No Sample Available

HISTORICAL SURFACE WATER QUALITY GRAPHICAL REPRESENTATION



Notes:

* Baseline data extracted from EIA for Forest Management of Bengkoka and Tambalugu Forest Reserves (6,467 Ha), Pitas, Sabah.

(-) denotes No Sample Available

APPENDIX C

Water Quality Test Reports
National Water Quality Standards for Malaysia (NWQSM)





Test Report

Not for Advertisement Purposes

Customer : Gerak Saga Sdn Bhd
L-70-7, KK Times Square,
Off Coastal Highway,
88100 Kota Kinabalu, Sabah

Lab No. : CK/CL405/0556/26
Type (No.) of Sample : River Water (1)
Date Received : 02nd February 2026
Date of Report : 20th February 2026
Project Code : CK/MO411/1197/26

Parameter(s)	W6 Date: 29/01/26 Time: 12.01 pm	Date of Analysis	Test Method	**Standard Limit
*Turbidity, NTU	210	03/02/26	APHA 2130 B, 2023	50
Total Suspended Solids, mg/L	75.0	18/02/26	APHA 2540 D, 2023	50
Oil & Grease, mg/L	<1.5	09/02/26	APHA 5520 B, 2023	N

**Class IIB Interim National Water Quality Standards for Malaysia (INWQM)

Remarks: Sample information (sampling location, date and time) is provided by project team.

Sample(s) were not cooled to the required temperature ($\leq 6^{\circ}\text{C}$) upon receipt and result(s) reported may be influenced by the variation.

*Exceed holding time upon receipt and result(s) reported may be influenced by the variation.

End

ChM. NURAZWANI BINTI GHANI
B. Sc. (Hons)
MMIC (4882/6367/12/18)
SENIOR CHEMIST



Note:

1. This Test Report shall not be reproduced, except in full, without the approval of the laboratory.
2. The above result(s) apply to the sample(s) as received.
3. The above result(s) relate only to the sample tested.





Test Report

Not for Advertisement Purposes

Customer : Gerak Saga Sdn Bhd	Lab No. :	CK/ML405/0557/26
L-70-7, KK Times Square,	Type (No.) of Sample :	River Water (1)
Off Coastal Highway,	Date Received :	02 nd February 2026
88100 Kota Kinabalu, Sabah	Date of Analysis Commenced :	02 nd February 2026
	Date of Report :	12 th February 2026
	Project Code :	CK/MO411/1197/26

<u>Parameter(s)</u>	W6 Date: 29/01/26 Time: 12.01 pm	<u>Test Method</u>	<u>*Standard Limit</u>
Total Coliform Count MPN/100ml, 35±0.5°C/48 h	>1.6 x 10 ⁴	APHA 9221 B, 2023	5,000

*Class IIB Interim National Water Quality Standards for Malaysia (INWQM)

Remarks: Sample information (sampling location, date and time) is provided by project team.

Sample(s) were not cooled to the required temperature (<10°C) and has exceeded the holding time upon receipt.

Result(s) reported may be influenced by these variations.

----- End -----

ANIS IDAYU BINTI ZAKARIA

B. Sc. (Hons)

MJMM0152

SENIOR FOOD TECHNOLOGIST



Note:

1. This Test Report shall not be reproduced, except in full, without the approval of the laboratory.
2. The above result(s) apply to the sample(s) as received.
3. The above result(s) relate only to the sample tested.



NATIONAL WATER QUALITY STANDARDS FOR MALAYSIA

Parameters	Unit	Classes					
		I	IIA	IIB	III	IV	V
Ammoniacal-N.	mg/l	0.1	0.3	0.3	0.9	2.7	>2.7
BOD	mg/l	1	3	3	6	12	>12
COD	mg/l	10	25	25	50	100	>100
DO	mg/l	7.0	5.0 – 7.0	5.0 – 7.0	3.0 – 5.0	<3.0	<1.0
pH		6.5 – 8.5	6.0 – 9.0	6.0 – 9.0	5.0 – 9.0	5.0 – 9.0	-
Colour	TCU	15	150	150	-	-	-
Elec. Cond*	µS/cm	1000	1000	-	-	6000	-
Floatables		N	N	N	-	-	-
Odour		N	N	N	-	-	-
Salinity*	%	0.5	1	-	-	2	-
Taste		N	N	N	-	-	-
Tot. Diss. Sol.*	mg/l	500	1000	-	-	4000	-
Tot. Susp. Sol.	mg/l	25	50	50	150	300	>300
Temperature	°C	-	Normal±2	-	Normal±2	-	-
Turbidity	NTU	5	50	50	-	-	-
F. Coliform**	counts/100ml	10	100	400	5000 (20000) ^a	5000 (20000) ^a	-
Total Coliform	counts/100ml	100	5000	5000	50000	50000	>50000

N = No visible floatable material / debris; or no objectionable odour; or no objectionable taste.

* = Related parameters, only one recommended for use

** = Geometric mean

± = Maximum not to be exceeded

CLASS USES

- I represent water body of excellent quality. Standards are set for the conservation of natural environment in its undisturbed state. Water bodies such as those in the national park areas, fountainheads, and in high land and undisturbed areas come under this category where strictly no discharge of any kind is permitted. Water bodies in this category meet the most stringent requirements for human health and aquatic life protection.
- IIA / IIB represents water bodies of good quality. Most existing raw water supply sources come under this category. In practice, no body contact activity is allowed in this water for prevention of probable human pathogens. There is a need to introduce another class for water bodies not used for water supply but of similar quality which may be referred to as **Class IIB**. The determination of **Class IIB** standard is based on criteria for recreational use and protection of sensitive aquatic species.
- III is defined with the primary objective of protecting common and moderately tolerant aquatic species of economic value. Water under this classification may be used for water supply with extensive / advance treatment. This class of water is also defined to suit livestock drinking needs.
- IV defines water quality required for major agricultural irrigation activities which may not cover minor applications to sensitive crops.
- V represents other waters which do not meet any of the above uses.