

CULTIVATION REPORT

#002 - INDMIRA - PURWOREJO

Farm Location : JAWA TENGAH, PURWOREJO, GRABAG
Pond Quantity : 8
Cycle Period : 15 December 2022 — 15 March 2023

SUMMARY



Harvest result **not good**

The harvest result in this cycle period is not good based on the survival rate (SR) and the shrimp size. Total harvest is 7838.18 kg.



Survival rate (SR) **not good**

The survival rate (SR) is not good (< 80%).



FCR **not ideal**

The final result of feed conversion ratio (FCR) is not ideal, the feed program must be evaluated.



Water quality **stable**

The water quality is not yet stable, this can affect shrimp's appetite, growth, and survival rate (SR).



Carrying capacity **good**

Carrying capacity has been considered well, i.e. shrimp density, pond depth, and number of water wheels.



Shrimp growth **good**

Shrimp growth is at good rate, which is $\geq 0,3$ gram/day.

POND RECAP

Standard pond performance Best pond performance Worst pond performance

Pond Number	Pond Area (m ²)	DOC (day)	Total Seed	Seeds Density (ind/m ²)	Total Feed (kg)	Harvest Biomass (kg)	Harvest Size (ind/kg)	FCR	SR (%)
Kolam B1	1,064	90	118,000	110.90	1,470	1,054	45	1.395	48.612
Kolam B2	1,082	90	118,000	109.06	1,270	767	37	1.655	35.09
Kolam B3	1,680	90	192,000	114.29	2,039	1,428	43	1.427	45.809
Kolam B4	1,811	72	192,000	106.02	1,812	1,150	80	1.576	56.995
Kolam B5	1,574	94	180,000	114.36	1,555	930	54	1.672	28.907
Kolam B6	1,498	94	180,000	120.16	1,555	927	51	1.677	27.283
Kolam B7	1,516	67	180,000	118.73	854	567	99	1.507	31.234
Kolam B8	1,600	94	180,000	112.50	1,555	1,015	62	1.533	36.246
Total					12,111	7,838			

Notes

- Pond performance assessment is relative
- Assessment of ponds with good performance is based on optimal harvest result, low FCR and high SR
- Assessment of ponds with poor performance is based on low harvest result, high FCR and low SR

CULTIVATION REPORT

#002 - INDMIRA - PURWOREJO

Kolam B1







Pond performance is standard

RFID: 83F9DE1A

Farm Location	:	JAWA TENGAH, PURWOREJO, GRABAG
Pond name/number	:	Kolam B1
Started at	:	15 December 2022
Total seed (tail)	:	118,000
Seeds density (ind/m²)	:	111
Pond area (m²)	:	1,064
Pond depth (m)	:	1.1
Biomass limit (kg/m²)	:	1.25
Harvest date (DOC)	:	15 March 2023 (90)

FCR	:	1.395	Total harvest biomass (kg)	:	1,054
SR (%)	:	48.612	Total feed (kg)	:	1,470
Last MBW (gram)	:	22	Shrimp last size	:	45

SUMMARY

-  The harvest result is not good based on the survival rate (SR) and shrimp size.
-  The survival rate (SR) is not good (< 80%).
-  The final result of FCR is not ideal.
-  The water quality is not yet stable.
-  Carrying capacity has been considered well.
-  Shrimp growth rate is not good.

Input:

- Evaluate the feed program and while considering shrimp appetite.
- Perform water quality management so that it is within the optimal range for shrimp growth. The impact can increase appetite, growth, and the value of survival rate (SR).

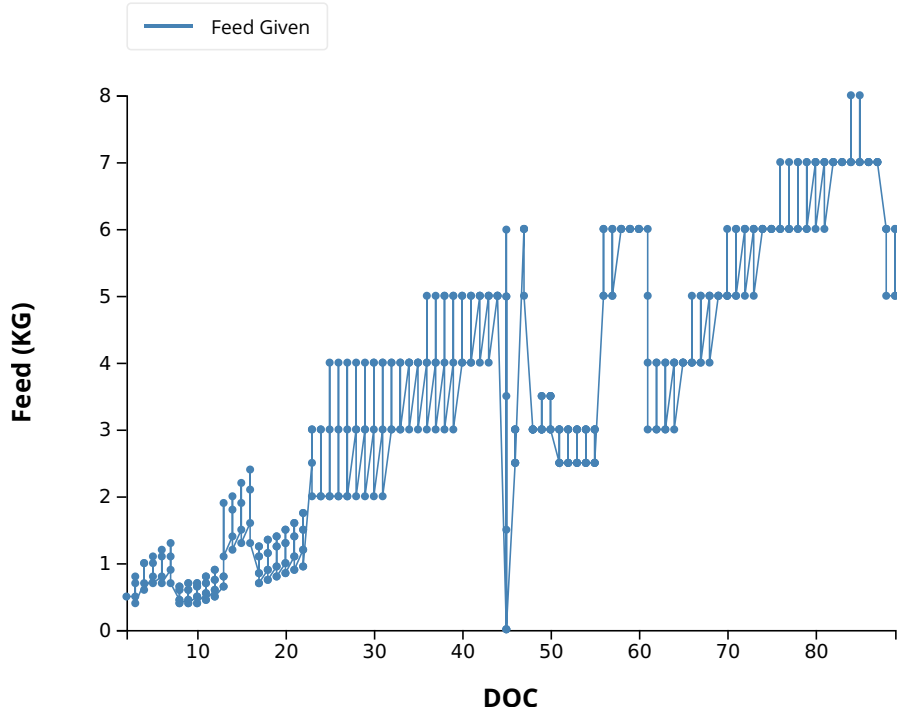
DATA SAMPLING

The following are sampling data collection. There are 9 samplings in 1 cycle with MBW and ADG calculation as follows.

Age	Date	MBW (gram)	ADG (gram/day)
30	14 Jan 2023	3.10	0.00
37	21 Jan 2023	3.70	0.09
44	28 Jan 2023	6.00	0.33
51	04 Feb 2023	8.10	0.30
58	11 Feb 2023	11.50	0.49
65	18 Feb 2023	14.80	0.47
72	25 Feb 2023	16.90	0.30
79	04 Mar 2023	19.60	0.39
86	11 Mar 2023	22.20	0.37

FEED DATA

Daily Feed Chart

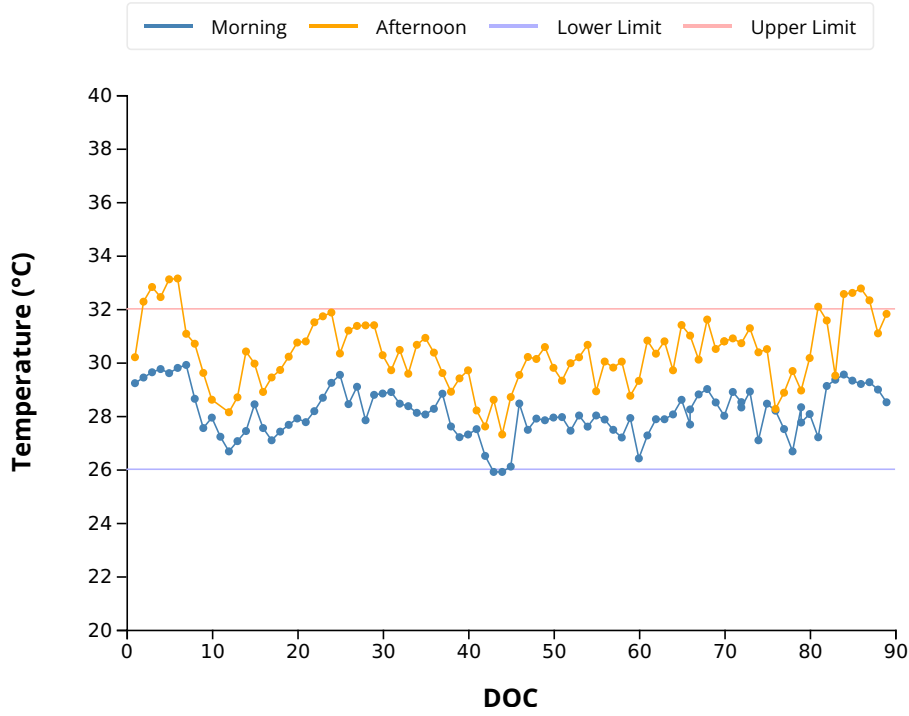


Notes

✓ Feed Accumulation **1,470 kg**

WATER QUALITY DATA

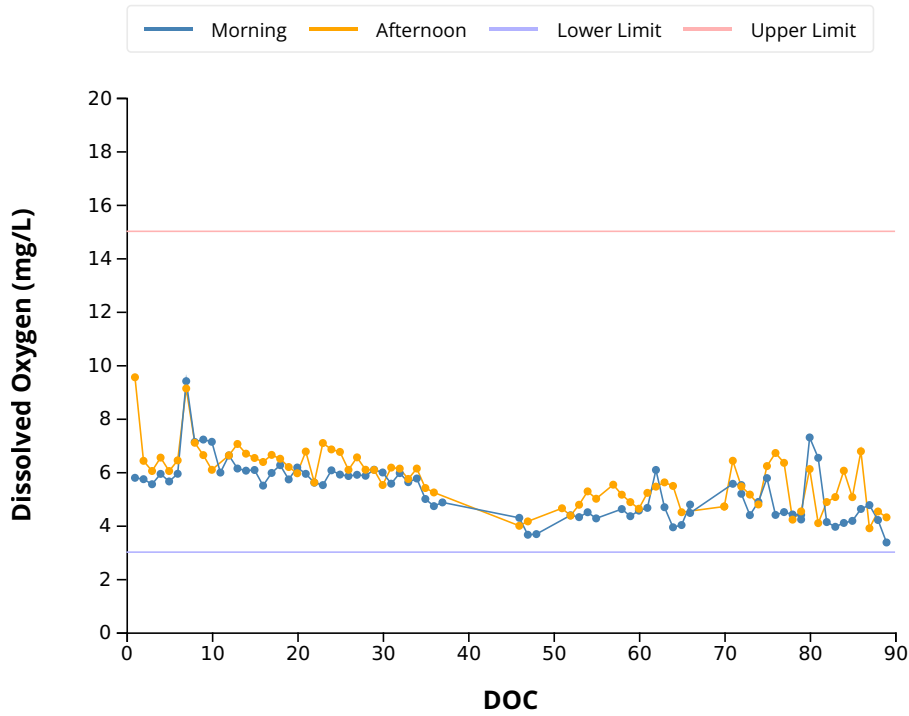
Daily Temperature Chart



Notes

✓ **Temperature is ideal**
Ideal range (26 - 32°C)

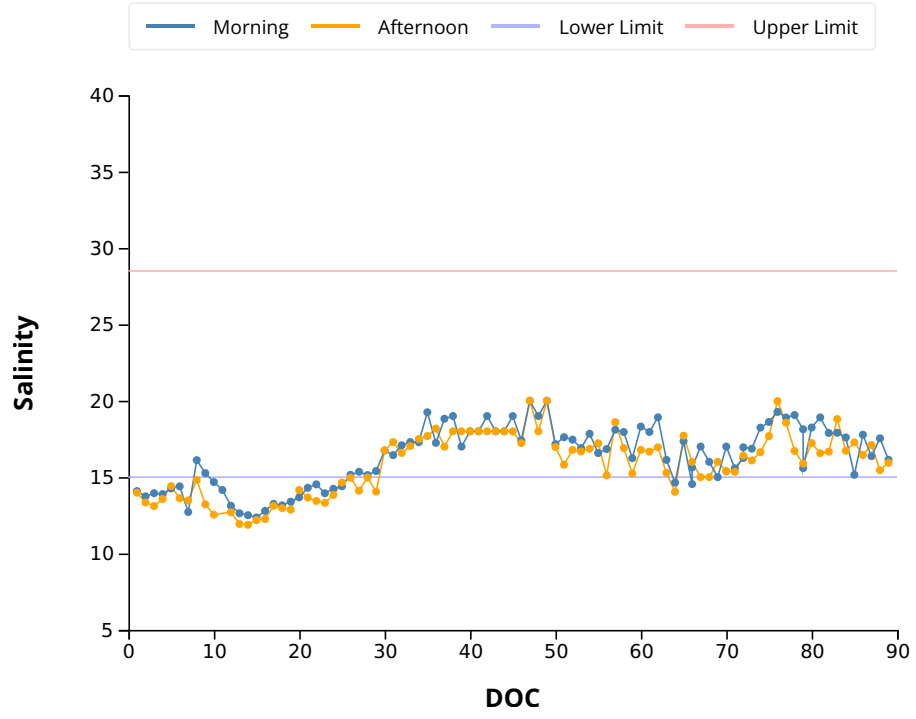
Daily Dissolved Oxygen Chart



Notes

✓ **Dissolved Oxygen is ideal**
Ideal range (3 - 15mg/L)

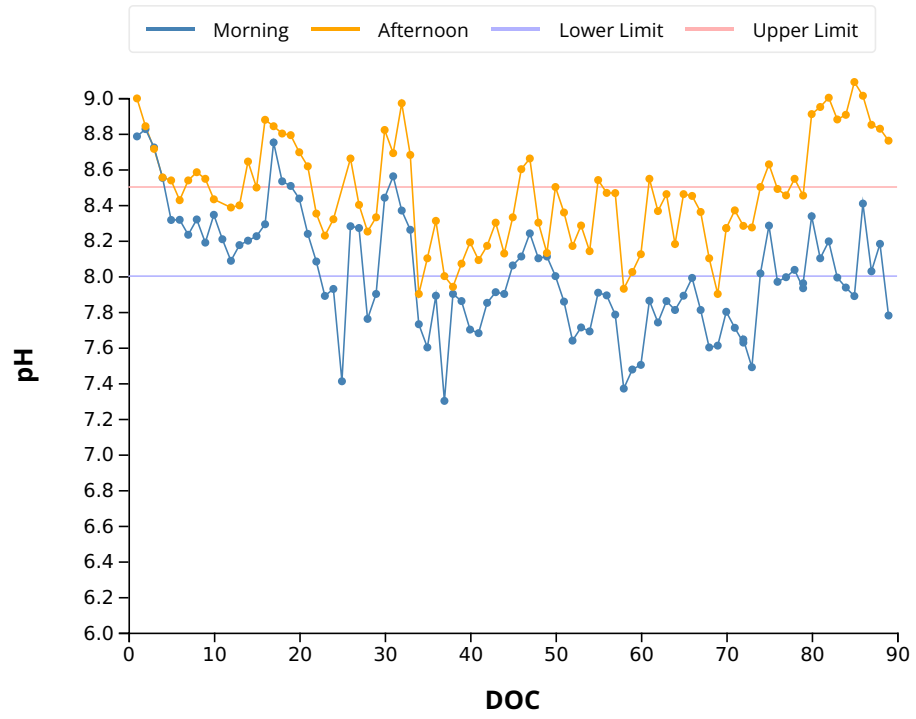
Daily Salinity Chart



Notes

salinity is less ideal
Ideal range (15 - 28.5)

Daily pH Chart



Notes

ph is less ideal
Ideal range (8 - 8.5)

CULTIVATION REPORT

#002 - INDMIRA - PURWOREJO

Kolam B2







Pond performance is standard

RFID: BAB7983C

Farm Location	:	JAWA TENGAH, PURWOREJO, GRABAG
Pond name/number	:	Kolam B2
Started at	:	15 December 2022
Total seed (tail)	:	118,000
Seeds density (ind/m ²)	:	109
Pond area (m ²)	:	1,082
Pond depth (m)	:	1.1
Biomass limit (kg/m ²)	:	1.25
Harvest date (DOC)	:	15 March 2023 (90)

FCR	:	1.655	Total harvest biomass (kg)	:	767
SR (%)	:	35.09	Total feed (kg)	:	1,270
Last MBW (gram)	:	27	Shrimp last size	:	37

SUMMARY

-  The harvest result is not good based on the survival rate (SR) and shrimp size.
-  The survival rate (SR) is not good (< 80%).
-  The final result of FCR is not ideal.
-  The water quality is not yet stable.
-  Carrying capacity has been considered well.
-  Shrimp growth rate is good.

Input:

- Evaluate the feed program and while considering shrimp appetite.
- Perform water quality management so that it is within the optimal range for shrimp growth. The impact can increase appetite, growth, and the value of survival rate (SR).

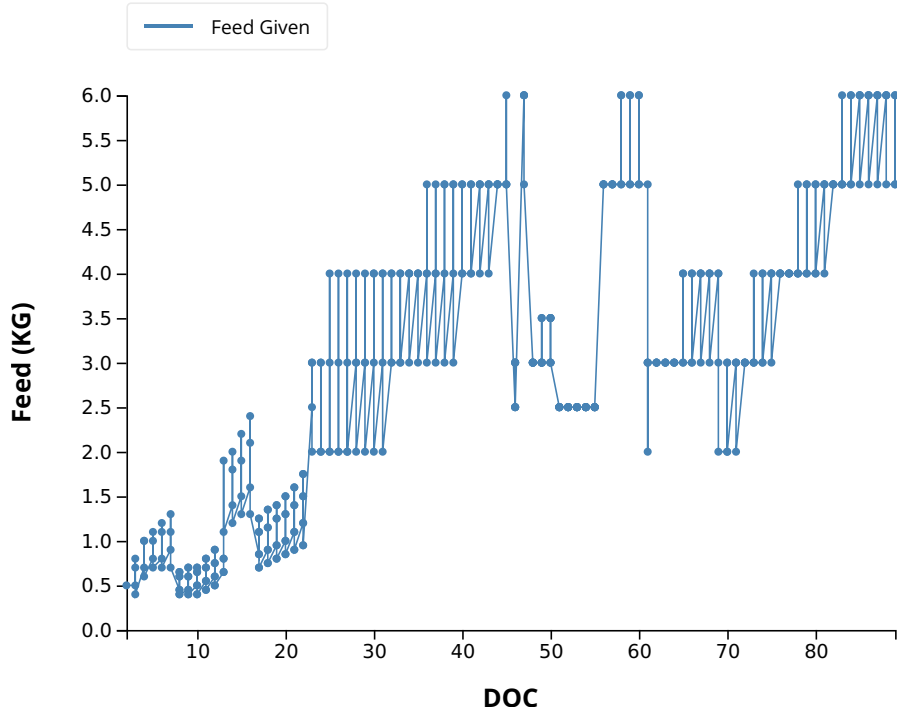
DATA SAMPLING

The following are sampling data collection. There are 9 samplings in 1 cycle with MBW and ADG calculation as follows.

Age	Date	MBW (gram)	ADG (gram/day)
30	14 Jan 2023	2.80	0.00
37	21 Jan 2023	3.60	0.11
44	28 Jan 2023	5.50	0.27
51	04 Feb 2023	7.60	0.30
58	11 Feb 2023	10.40	0.40
65	18 Feb 2023	12.80	0.34
70	23 Feb 2023	17.59	0.96
79	04 Mar 2023	20.80	0.36
86	11 Mar 2023	23.20	0.34

FEED DATA

Daily Feed Chart

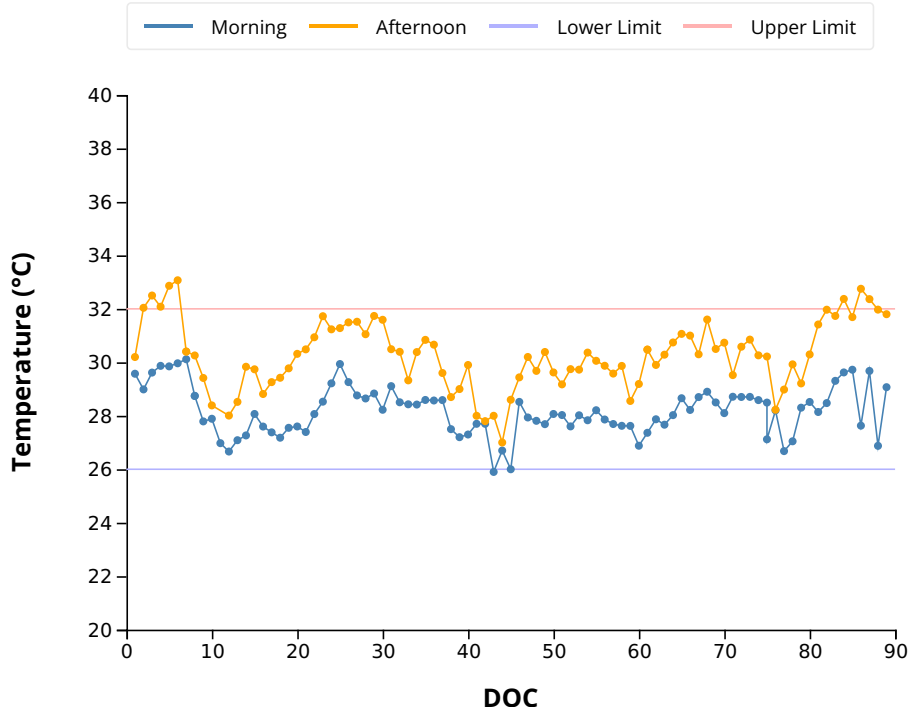


Notes

✔ Feed Accumulation **1,270 kg**

WATER QUALITY DATA

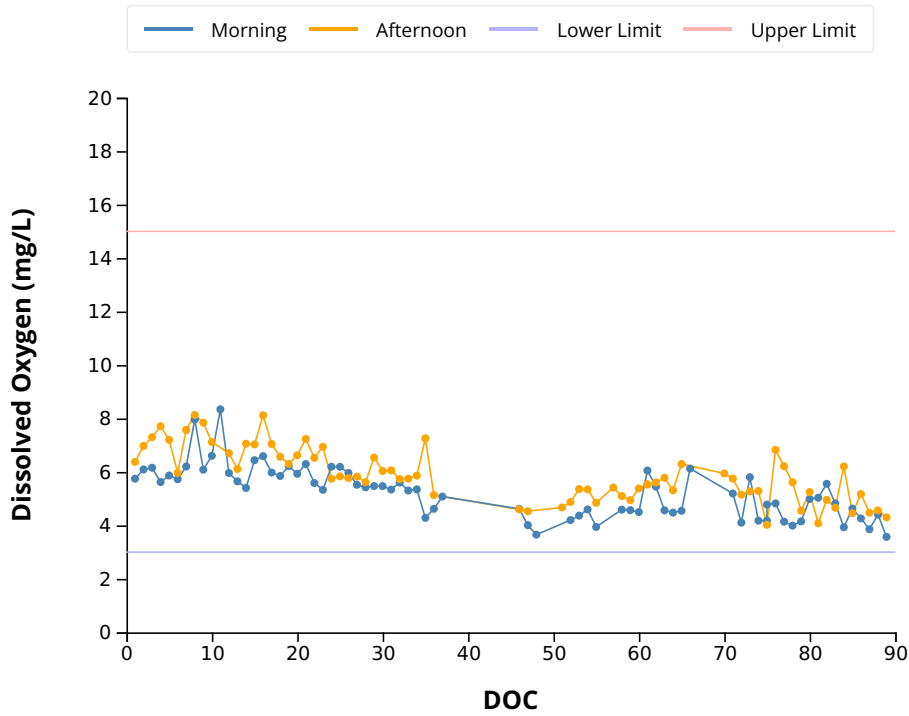
Daily Temperature Chart



Notes

✔ **Temperature is ideal**
Ideal range (26 - 32°C)

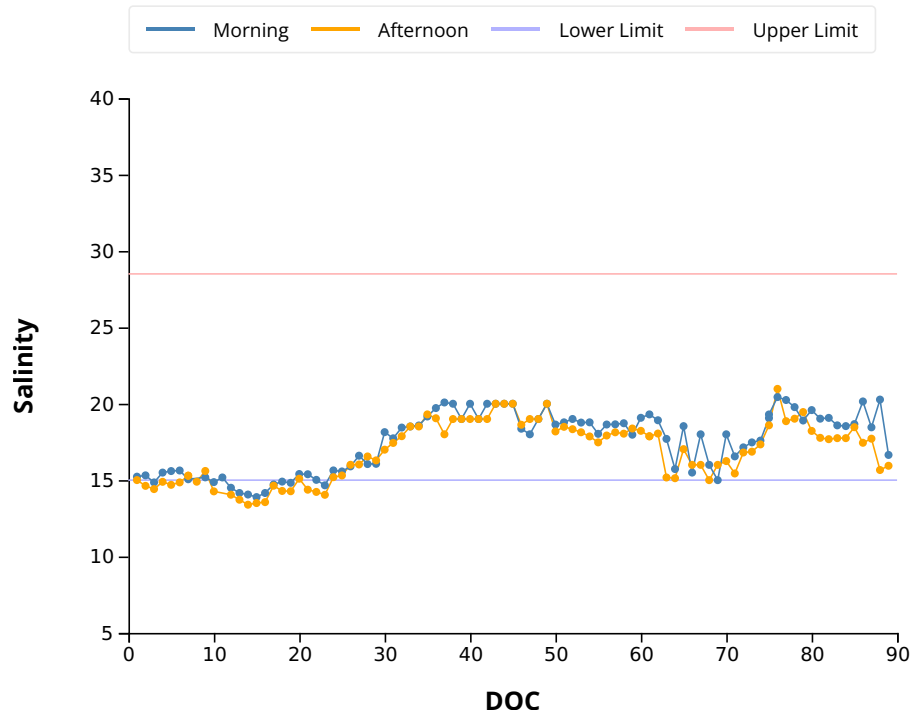
Daily Dissolved Oxygen Chart



Notes

✔ **Dissolved Oxygen is ideal**
Ideal range (3 - 15mg/L)

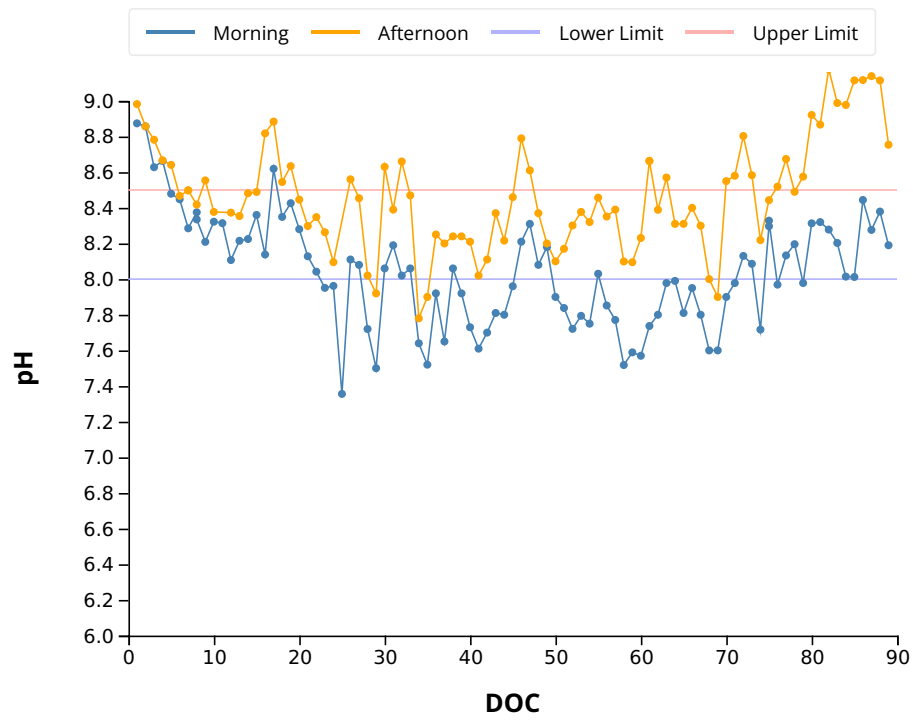
Daily Salinity Chart



Notes

✓ **Salinity is ideal**
Ideal range (15 - 28.5)

Daily pH Chart



Notes

⚠ **ph is less ideal**
Ideal range (8 - 8.5)

CULTIVATION REPORT

#002 - INDMIRA - PURWOREJO

Kolam B3







Pond performance is standard

RFID: 5AC7133C

Farm Location	:	JAWA TENGAH, PURWOREJO, GRABAG
Pond name/number	:	Kolam B3
Started at	:	15 December 2022
Total seed (tail)	:	192,000
Seeds density (ind/m ²)	:	114
Pond area (m ²)	:	1,680
Pond depth (m)	:	1.1
Biomass limit (kg/m ²)	:	1.25
Harvest date (DOC)	:	15 March 2023 (90)

FCR	:	1.427	Total harvest biomass (kg)	:	1,428
SR (%)	:	45.809	Total feed (kg)	:	2,039
Last MBW (gram)	:	23	Shrimp last size	:	43

SUMMARY

-  The harvest result is not good based on the survival rate (SR) and shrimp size.
-  The survival rate (SR) is not good (< 80%).
-  The final result of FCR is not ideal.
-  The water quality is not yet stable.
-  Carrying capacity has been considered well.
-  Shrimp growth rate is good.

Input:

- Evaluate the feed program and while considering shrimp appetite.
- Perform water quality management so that it is within the optimal range for shrimp growth. The impact can increase appetite, growth, and the value of survival rate (SR).

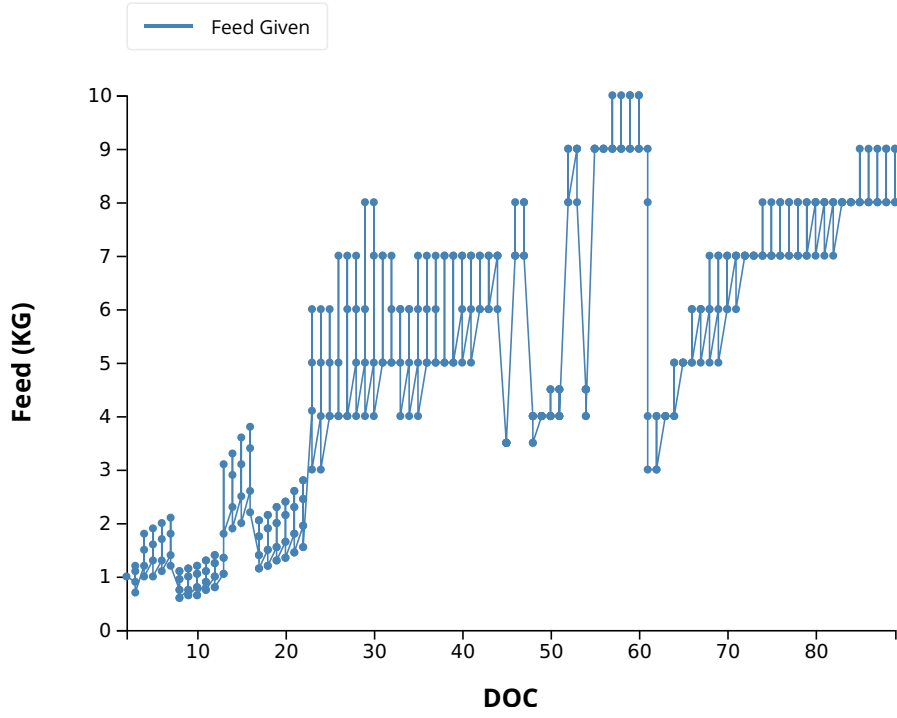
DATA SAMPLING

The following are sampling data collection. There are 9 samplings in 1 cycle with MBW and ADG calculation as follows.

Age	Date	MBW (gram)	ADG (gram/day)
30	14 Jan 2023	2.70	0.00
37	21 Jan 2023	3.40	0.10
44	28 Jan 2023	5.20	0.26
51	04 Feb 2023	7.70	0.36
58	11 Feb 2023	10.60	0.41
65	18 Feb 2023	12.90	0.33
72	25 Feb 2023	15.87	0.42
79	04 Mar 2023	18.20	0.33
86	11 Mar 2023	20.00	0.26

FEED DATA

Daily Feed Chart

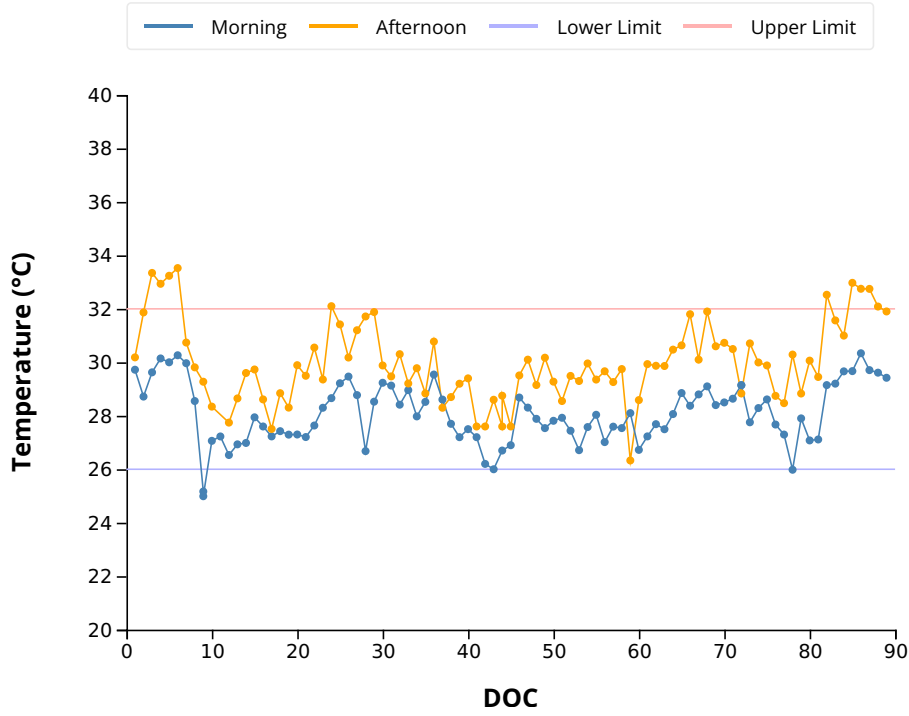


Notes

✔ Feed Accumulation **2,039 kg**

WATER QUALITY DATA

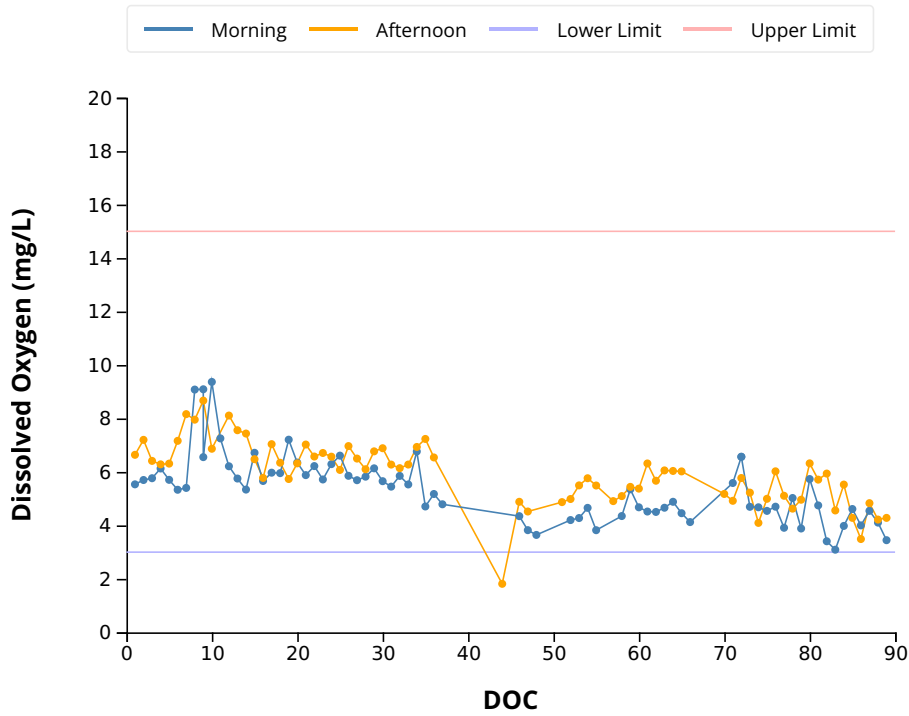
Daily Temperature Chart



Notes

✔ **Temperature is ideal**
Ideal range (26 - 32°C)

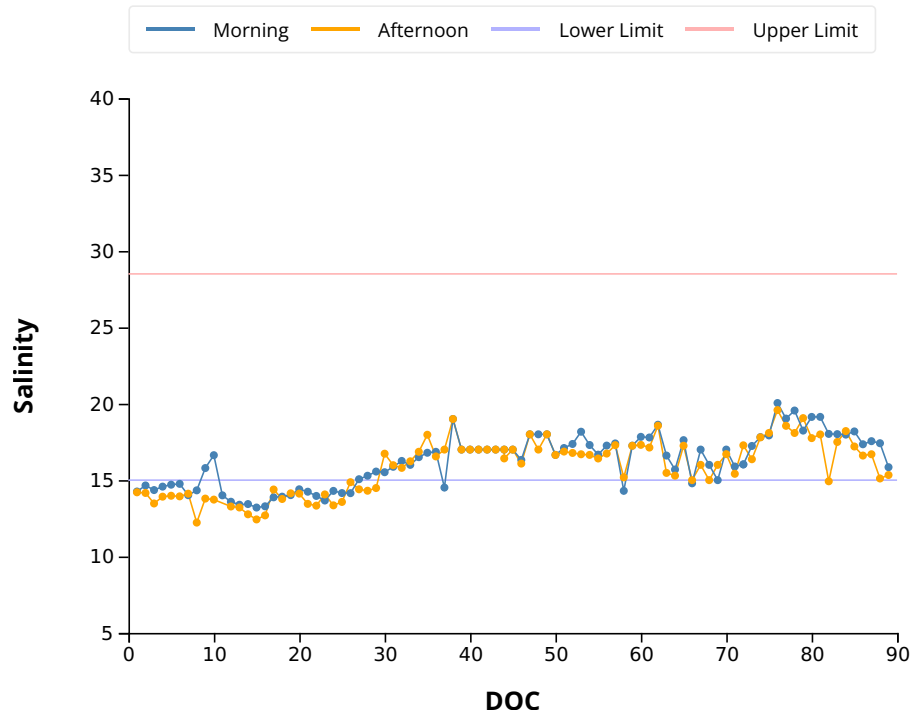
Daily Dissolved Oxygen Chart



Notes

✔ **Dissolved Oxygen is ideal**
Ideal range (3 - 15mg/L)

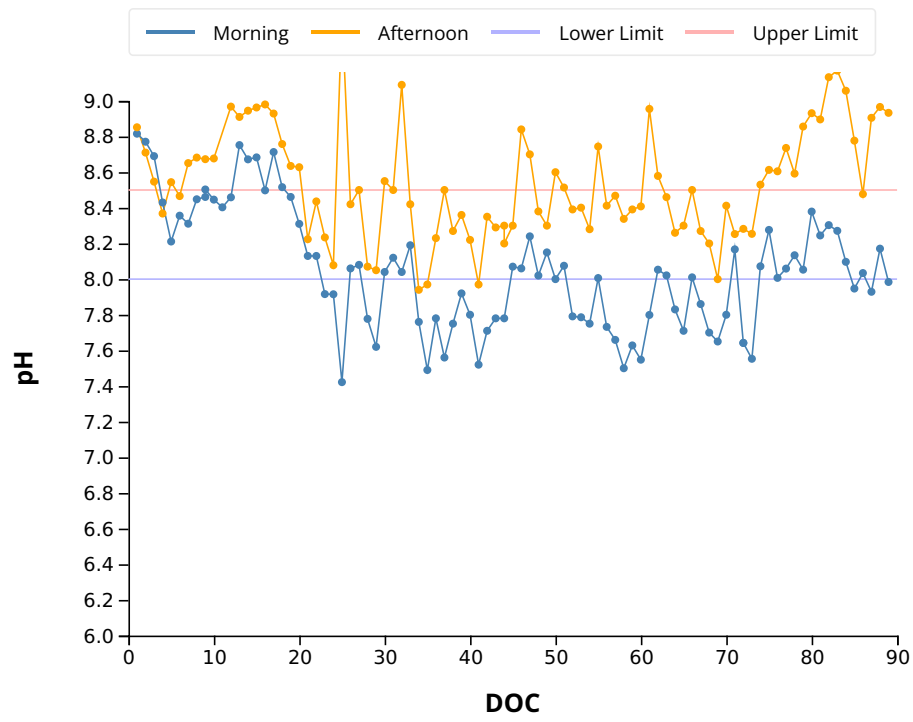
Daily Salinity Chart



Notes

▲ **salinity is less ideal**
Ideal range (15 - 28.5)

Daily pH Chart



Notes

▲ **ph is less ideal**
Ideal range (8 - 8.5)

CULTIVATION REPORT

#002 - INDMIRA - PURWOREJO

Kolam B4







Pond performance is good

RFID: 8373E01A

Farm Location	:	JAWA TENGAH, PURWOREJO, GRABAG
Pond name/number	:	Kolam B4
Started at	:	15 December 2022
Total seed (tail)	:	192,000
Seeds density (ind/m²)	:	106
Pond area (m²)	:	1,811
Pond depth (m)	:	0.9
Biomass limit (kg/m²)	:	1.25
Harvest date (DOC)	:	25 February 2023 (72)

FCR	:	1.576	Total harvest biomass (kg)	:	1,150
SR (%)	:	56.995	Total feed (kg)	:	1,812
Last MBW (gram)	:	13	Shrimp last size	:	80

SUMMARY

-  The harvest result is not good based on the survival rate (SR) and shrimp size.
-  The survival rate (SR) is not good (< 80%).
-  The final result of FCR is not ideal.
-  The water quality is not yet stable.
-  Carrying capacity has been considered well.
-  Shrimp growth rate is good.

Input:

- Evaluate the feed program and while considering shrimp appetite.
- Perform water quality management so that it is within the optimal range for shrimp growth. The impact can increase appetite, growth, and the value of survival rate (SR).

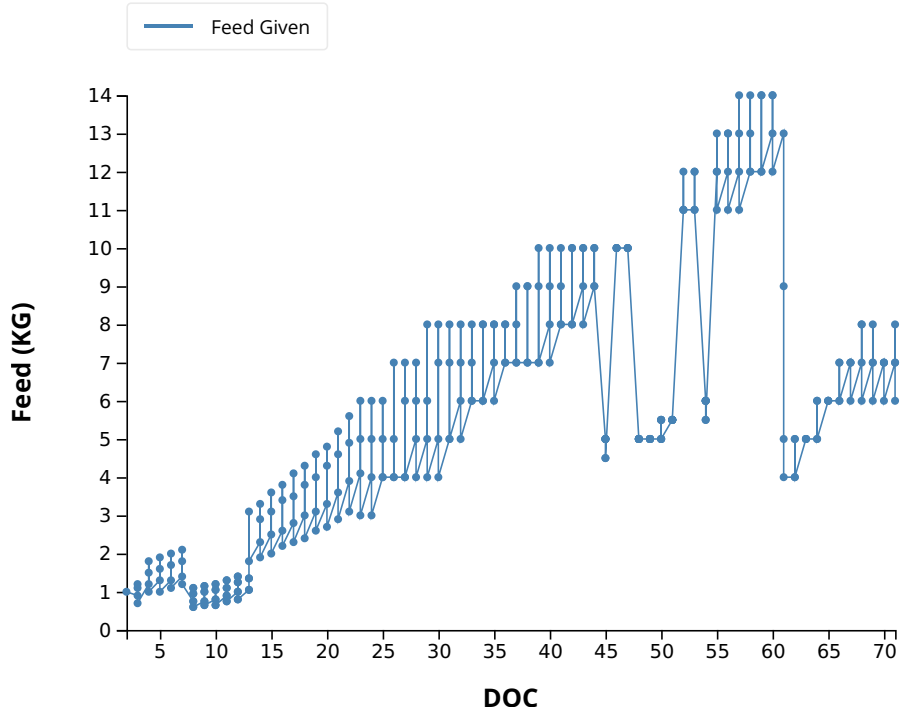
DATA SAMPLING

The following are sampling data collection. There are 7 samplings in 1 cycle with MBW and ADG calculation as follows.

Age	Date	MBW (gram)	ADG (gram/day)
30	14 Jan 2023	2.80	0.00
37	21 Jan 2023	3.60	0.11
44	28 Jan 2023	5.10	0.21
51	04 Feb 2023	7.00	0.27
58	11 Feb 2023	9.00	0.29
65	18 Feb 2023	10.90	0.27
71	24 Feb 2023	11.90	0.17

FEED DATA

Daily Feed Chart

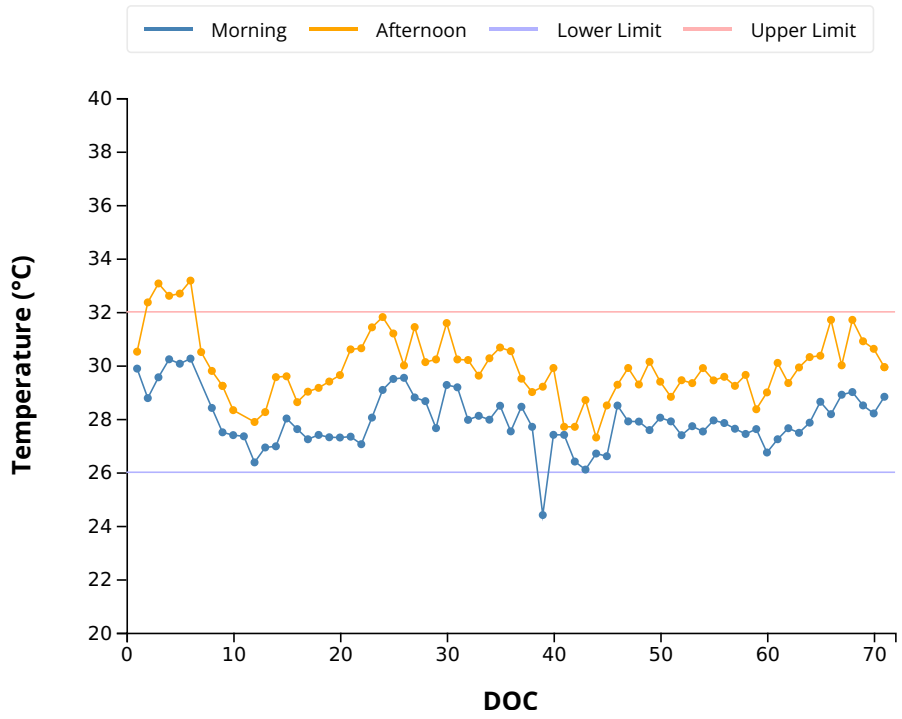


Notes

✔ Feed Accumulation **1,812 kg**

WATER QUALITY DATA

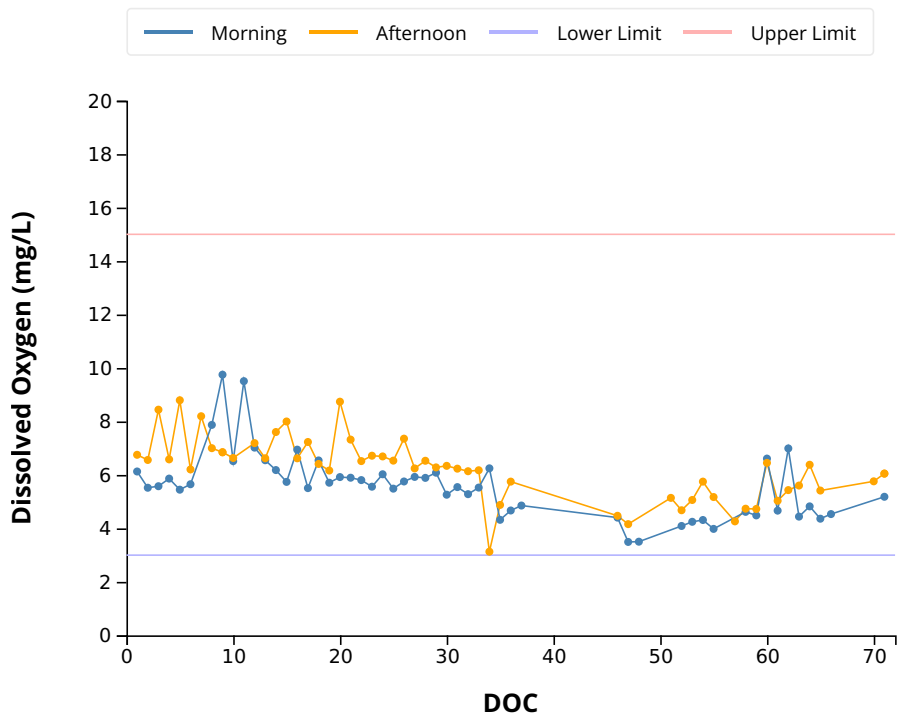
Daily Temperature Chart



Notes

✔ **Temperature is ideal**
Ideal range (26 - 32°C)

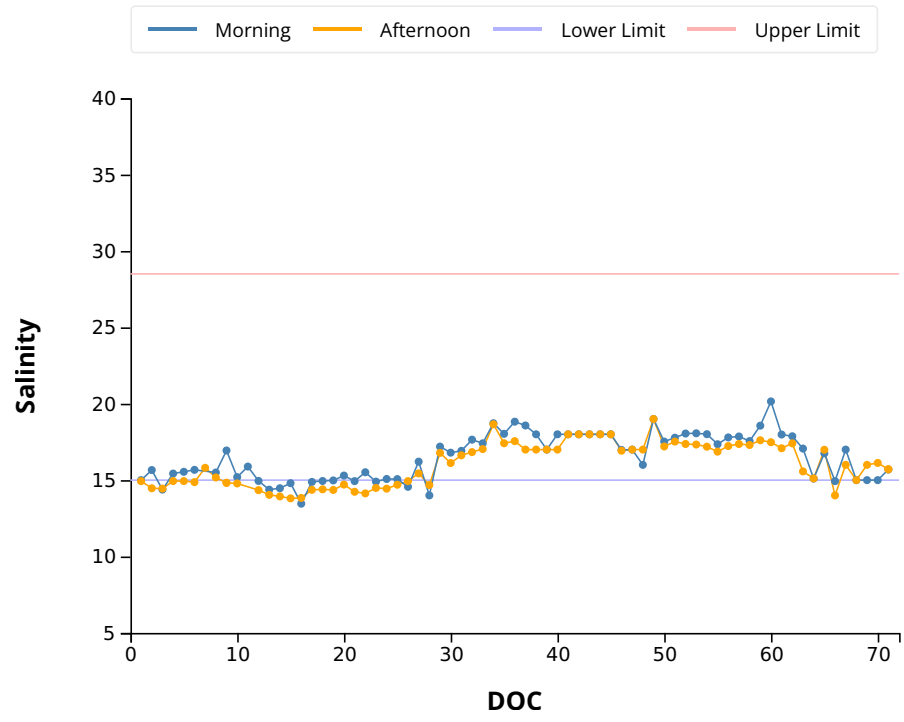
Daily Dissolved Oxygen Chart



Notes

✔ **Dissolved Oxygen is ideal**
Ideal range (3 - 15mg/L)

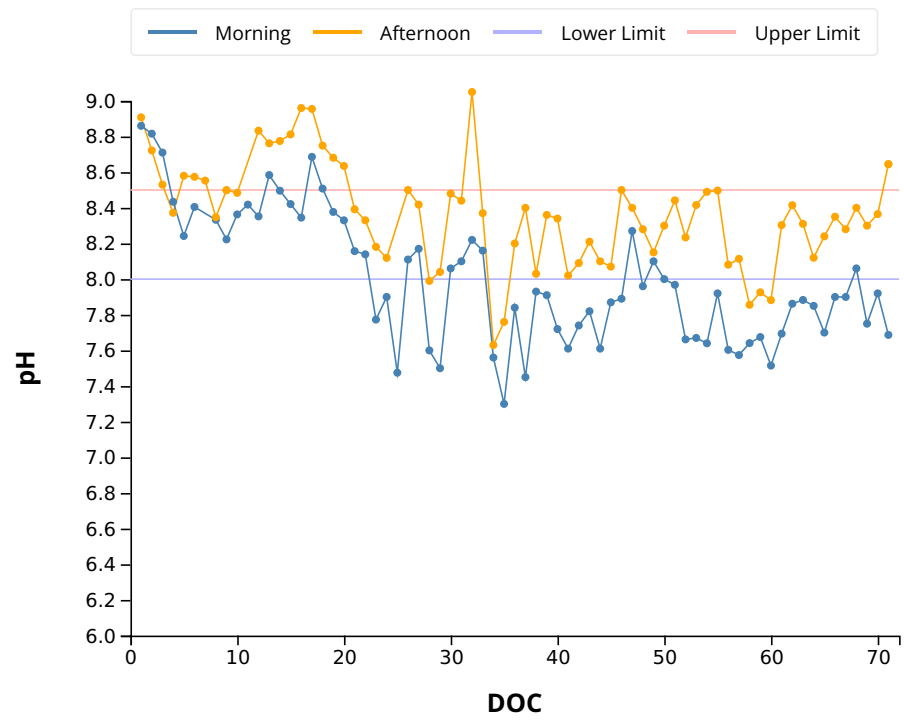
Daily Salinity Chart



Notes

▲ **salinity is less ideal**
Ideal range (15 - 28.5)

Daily pH Chart



Notes

▲ **ph is less ideal**
Ideal range (8 - 8.5)

CULTIVATION REPORT

#002 - INDMIRA - PURWOREJO

Kolam B5







Pond performance is standard

RFID: 87433563

Farm Location	:	JAWA TENGAH, PURWOREJO, GRABAG
Pond name/number	:	Kolam B5
Started at	:	07 January 2023
Total seed (tail)	:	180,000
Seeds density (ind/m ²)	:	114
Pond area (m ²)	:	1,574
Pond depth (m)	:	1.1
Biomass limit (kg/m ²)	:	1.25
Harvest date (DOC)	:	11 April 2023 (94)

FCR	:	1.672	Total harvest biomass (kg)	:	930
SR (%)	:	28.907	Total feed (kg)	:	1,555
Last MBW (gram)	:	19	Shrimp last size	:	54

SUMMARY

-  The harvest result is not good based on the survival rate (SR) and shrimp size.
-  The survival rate (SR) is not good (< 80%).
-  The final result of FCR is not ideal.
-  The water quality is not yet stable.
-  Carrying capacity has been considered well.
-  Shrimp growth rate is not good.

Input:

- Evaluate the feed program and while considering shrimp appetite.
- Perform water quality management so that it is within the optimal range for shrimp growth. The impact can increase appetite, growth, and the value of survival rate (SR).

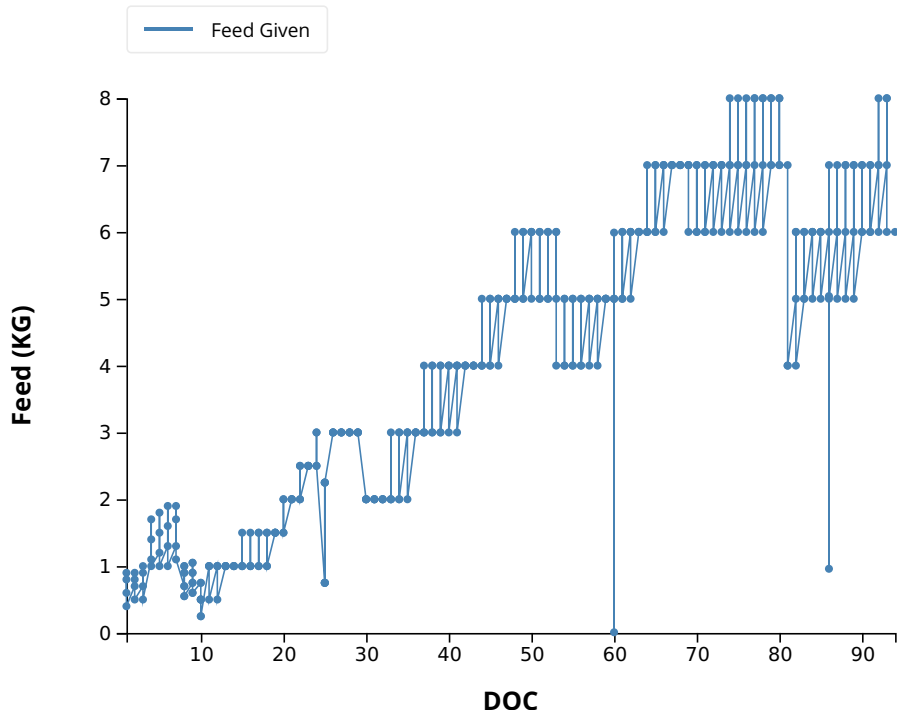
DATA SAMPLING

The following are sampling data collection. There are 11 samplings in 1 cycle with MBW and ADG calculation as follows.

Age	Date	MBW (gram)	ADG (gram/day)
30	06 Feb 2023	1.50	0.00
37	13 Feb 2023	3.30	0.26
44	20 Feb 2023	4.90	0.23
51	27 Feb 2023	6.10	0.17
58	06 Mar 2023	7.80	0.24
65	13 Mar 2023	9.90	0.30
71	19 Mar 2023	12.70	0.47
72	20 Mar 2023	12.70	0.00
79	27 Mar 2023	15.10	0.34
86	03 Apr 2023	17.20	0.30
92	09 Apr 2023	18.90	0.28

FEED DATA

Daily Feed Chart

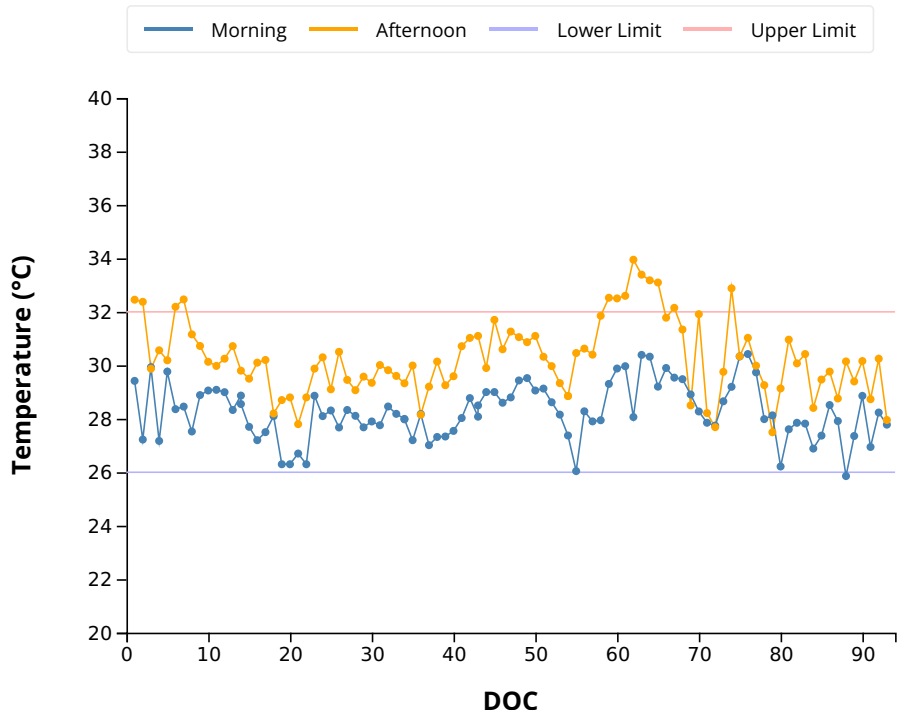


Notes

✔ Feed Accumulation **1,555 kg**

WATER QUALITY DATA

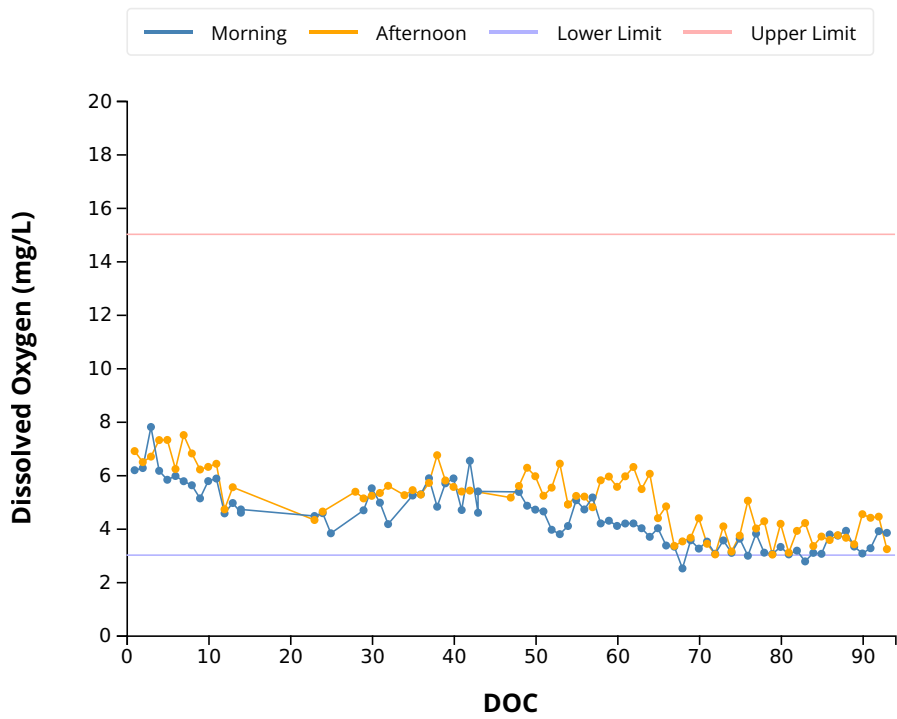
Daily Temperature Chart



Notes

✔ **Temperature is ideal**
Ideal range (26 - 32°C)

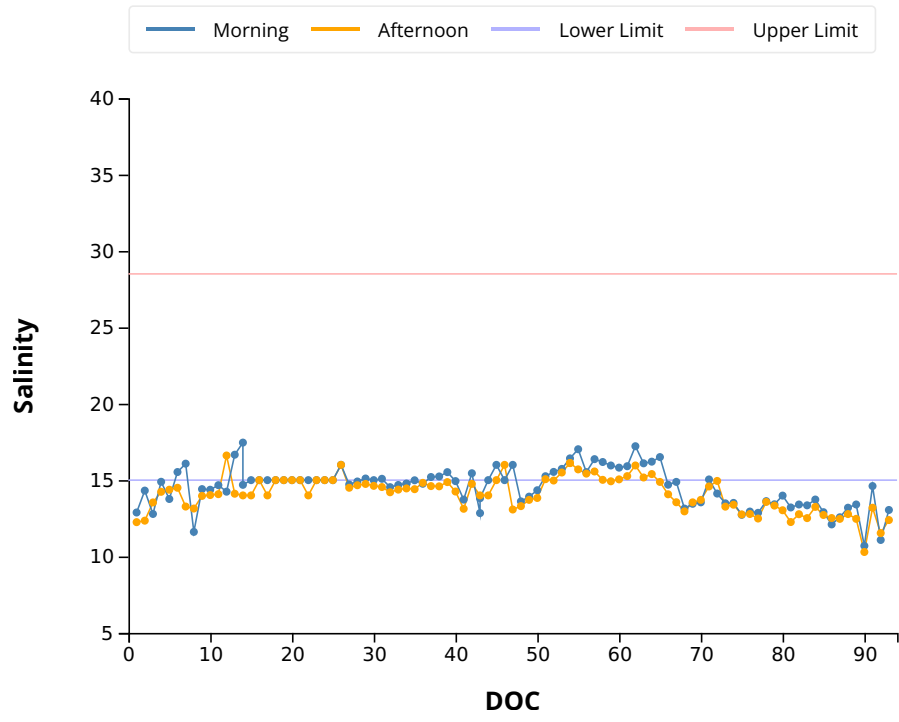
Daily Dissolved Oxygen Chart



Notes

✔ **Dissolved Oxygen is ideal**
Ideal range (3 - 15mg/L)

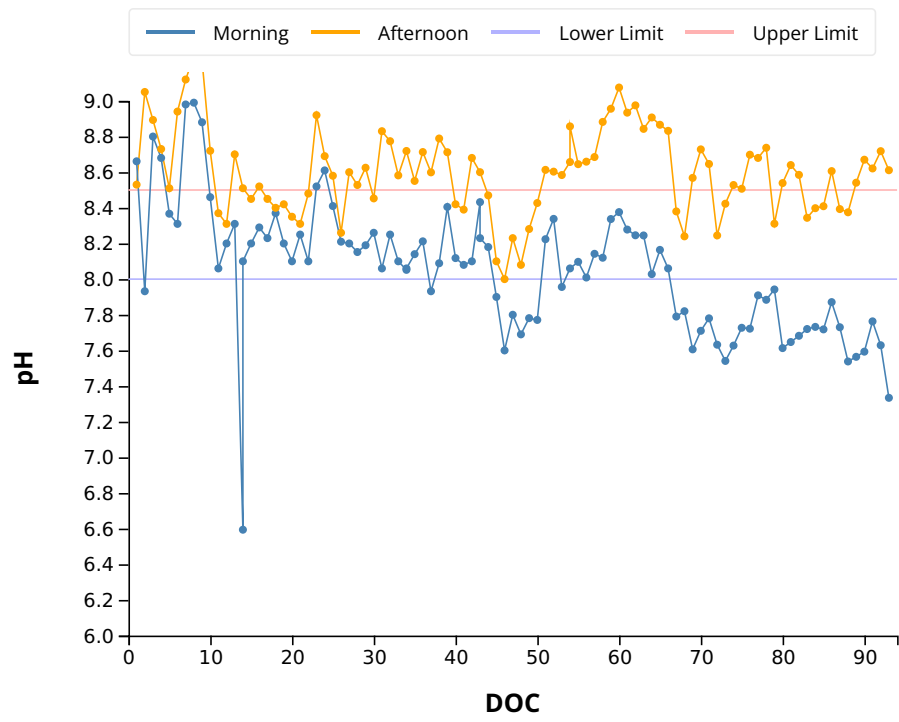
Daily Salinity Chart



Notes

▲ **salinity is less ideal**
Ideal range (15 - 28.5)

Daily pH Chart



Notes

▲ **ph is less ideal**
Ideal range (8 - 8.5)

CULTIVATION REPORT

#002 - INDMIRA - PURWOREJO

Kolam B6







Pond performance is bad

RFID: AA8A0214

Farm Location	:	JAWA TENGAH, PURWOREJO, GRABAG
Pond name/number	:	Kolam B6
Started at	:	07 January 2023
Total seed (tail)	:	180,000
Seeds density (ind/m²)	:	120
Pond area (m²)	:	1,498
Pond depth (m)	:	0.9
Biomass limit (kg/m²)	:	1.25
Harvest date (DOC)	:	11 April 2023 (94)

FCR	:	1.677	Total harvest biomass (kg)	:	927
SR (%)	:	27.283	Total feed (kg)	:	1,555
Last MBW (gram)	:	20	Shrimp last size	:	51

SUMMARY

-  The harvest result is not good based on the survival rate (SR) and shrimp size.
-  The survival rate (SR) is not good (< 80%).
-  The final result of FCR is not ideal.
-  The water quality is not yet stable.
-  Carrying capacity has been considered well.
-  Shrimp growth rate is not good.

Input:

- Evaluate the feed program and while considering shrimp appetite.
- Perform water quality management so that it is within the optimal range for shrimp growth. The impact can increase appetite, growth, and the value of survival rate (SR).

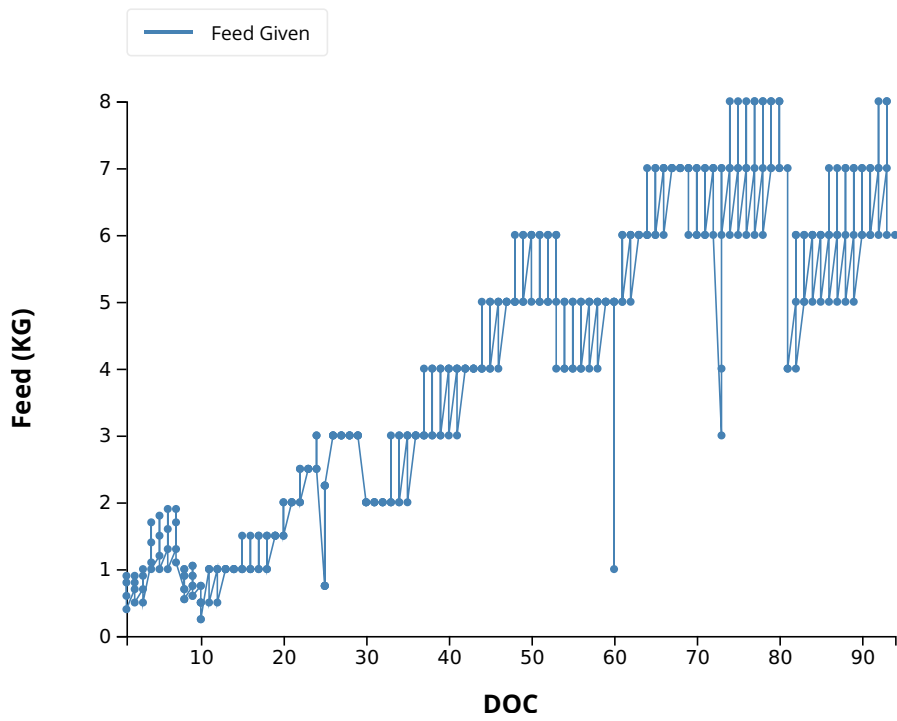
DATA SAMPLING

The following are sampling data collection. There are 11 samplings in 1 cycle with MBW and ADG calculation as follows.

Age	Date	MBW (gram)	ADG (gram/day)
30	06 Feb 2023	1.60	0.00
37	13 Feb 2023	3.00	0.20
44	20 Feb 2023	4.60	0.23
51	27 Feb 2023	6.20	0.23
58	06 Mar 2023	8.30	0.30
65	13 Mar 2023	10.50	0.31
71	19 Mar 2023	12.46	0.33
72	20 Mar 2023	12.46	0.00
79	27 Mar 2023	15.40	0.42
86	03 Apr 2023	17.50	0.30
92	09 Apr 2023	19.20	0.28

FEED DATA

Daily Feed Chart

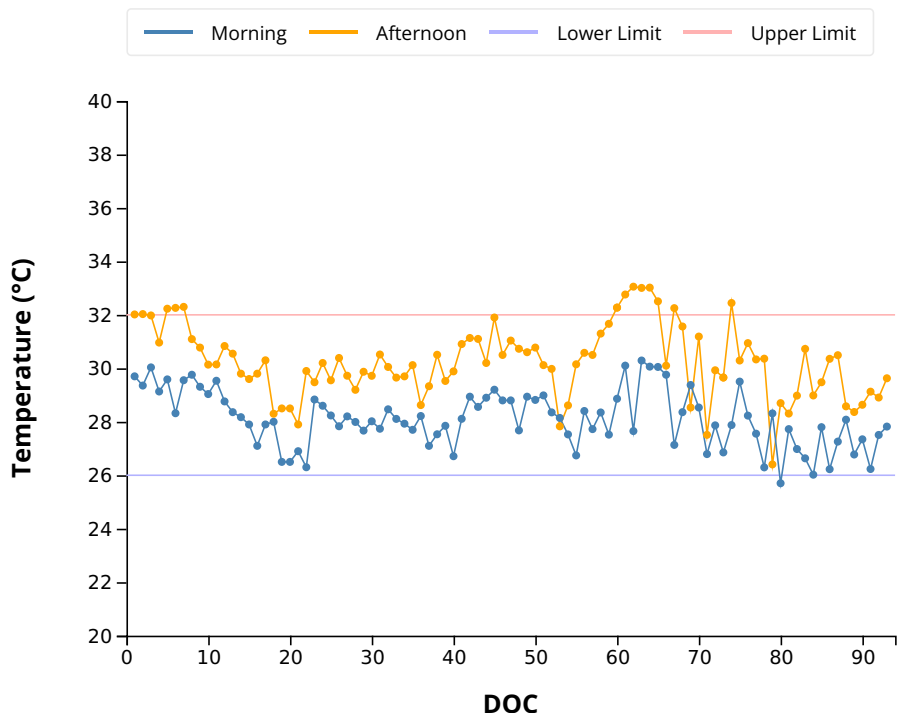


Notes

✔ Feed Accumulation **1,555 kg**

WATER QUALITY DATA

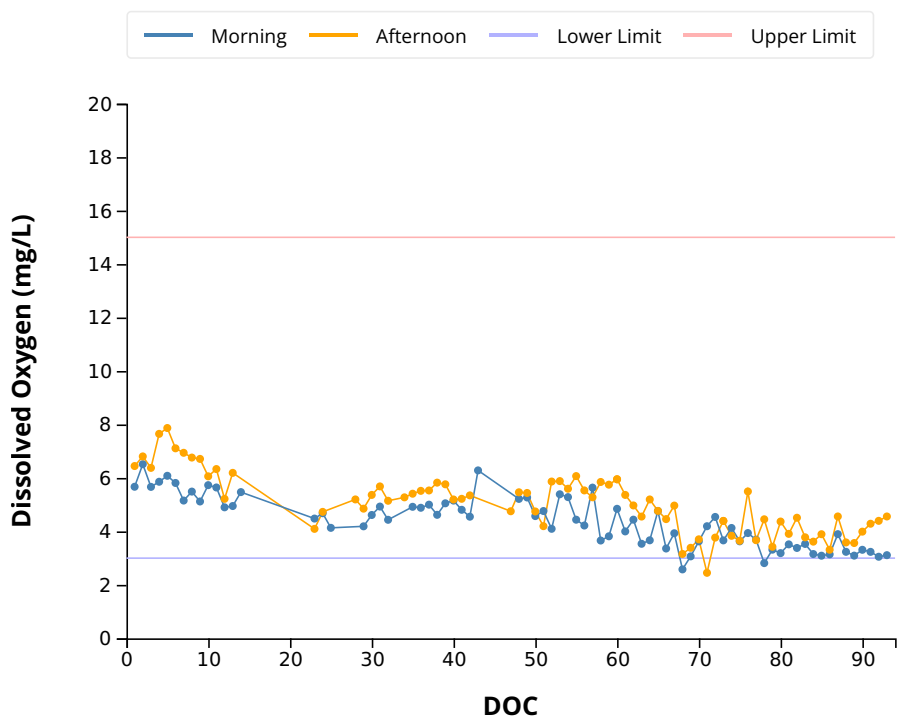
Daily Temperature Chart



Notes

✔ **Temperature is ideal**
Ideal range (26 - 32°C)

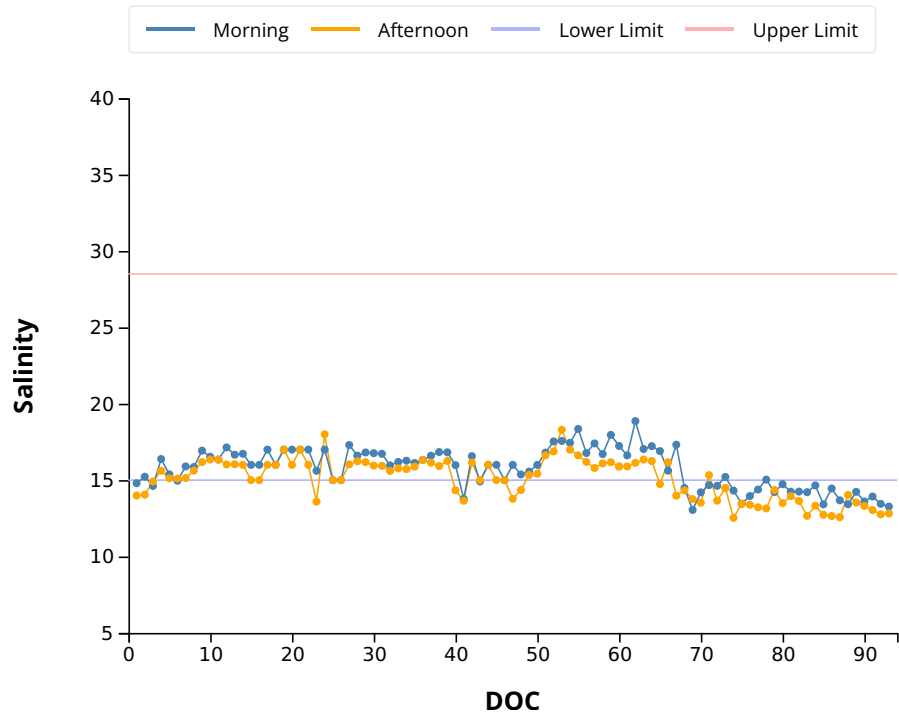
Daily Dissolved Oxygen Chart



Notes

✔ **Dissolved Oxygen is ideal**
Ideal range (3 - 15mg/L)

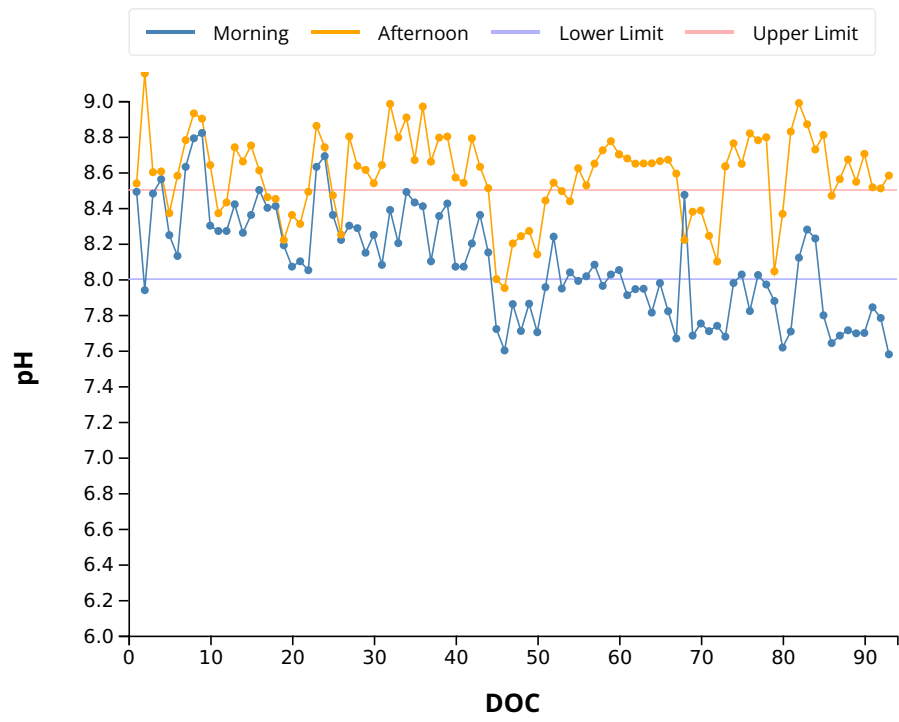
Daily Salinity Chart



Notes

salinity is less ideal
Ideal range (15 - 28.5)

Daily pH Chart



Notes

ph is less ideal
Ideal range (8 - 8.5)

CULTIVATION REPORT

#002 - INDMIRA - PURWOREJO

Kolam B7







Pond performance is standard

RFID: 2515F918

Farm Location	:	JAWA TENGAH, PURWOREJO, GRABAG
Pond name/number	:	Kolam B7
Started at	:	07 January 2023
Total seed (tail)	:	180,000
Seeds density (ind/m²)	:	119
Pond area (m²)	:	1,516
Pond depth (m)	:	1.1
Biomass limit (kg/m²)	:	1.25
Harvest date (DOC)	:	15 March 2023 (67)

FCR	:	1.507	Total harvest biomass (kg)	:	567
SR (%)	:	31.234	Total feed (kg)	:	854
Last MBW (gram)	:	10	Shrimp last size	:	99

SUMMARY

-  The harvest result is not good based on the survival rate (SR) and shrimp size.
-  The survival rate (SR) is not good (< 80%).
-  The final result of FCR is not ideal.
-  The water quality is not yet stable.
-  Carrying capacity has been considered well.
-  Shrimp growth rate is good.

Input:

- Evaluate the feed program and while considering shrimp appetite.
- Perform water quality management so that it is within the optimal range for shrimp growth. The impact can increase appetite, growth, and the value of survival rate (SR).

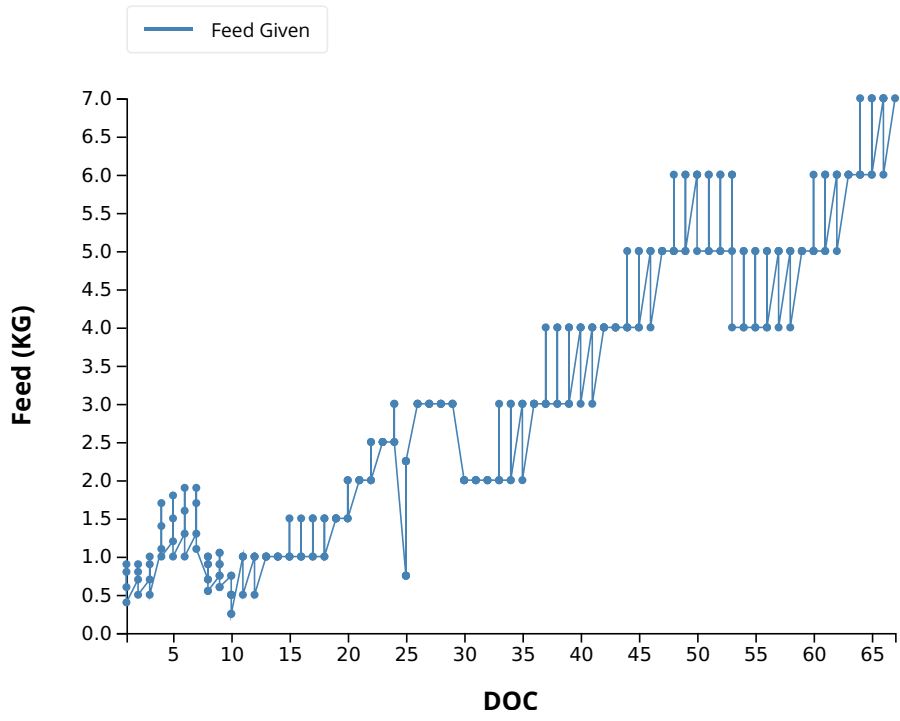
DATA SAMPLING

The following are sampling data collection. There are 6 samplings in 1 cycle with MBW and ADG calculation as follows.

Age	Date	MBW (gram)	ADG (gram/day)
30	06 Feb 2023	1.70	0.00
37	13 Feb 2023	2.90	0.17
44	20 Feb 2023	4.30	0.20
51	27 Feb 2023	5.70	0.20
58	06 Mar 2023	7.30	0.23
65	13 Mar 2023	9.50	0.31

FEED DATA

Daily Feed Chart

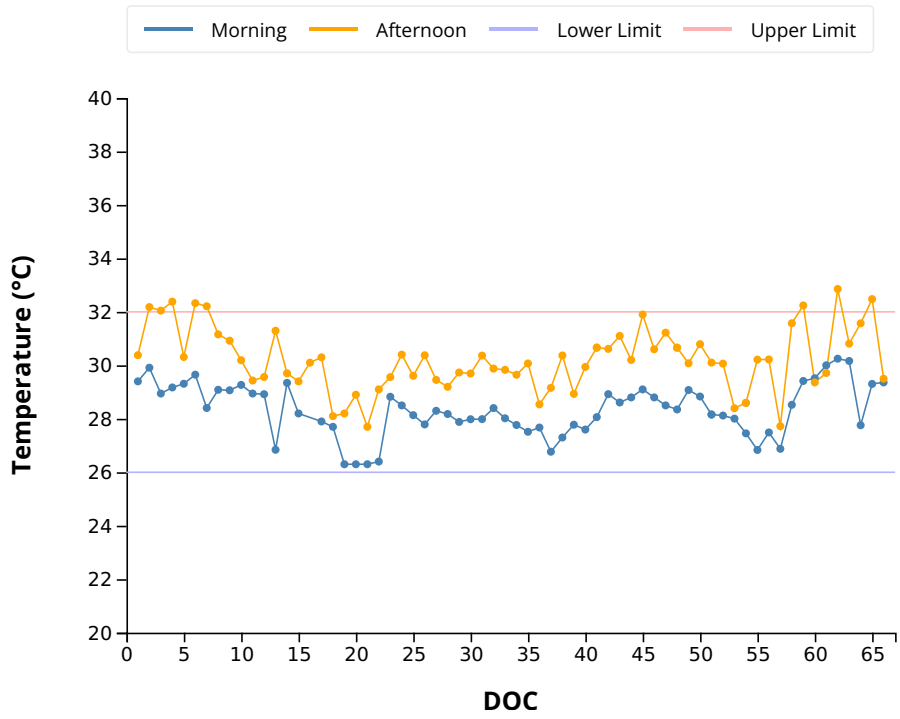


Notes

✔ Feed Accumulation **854 kg**

WATER QUALITY DATA

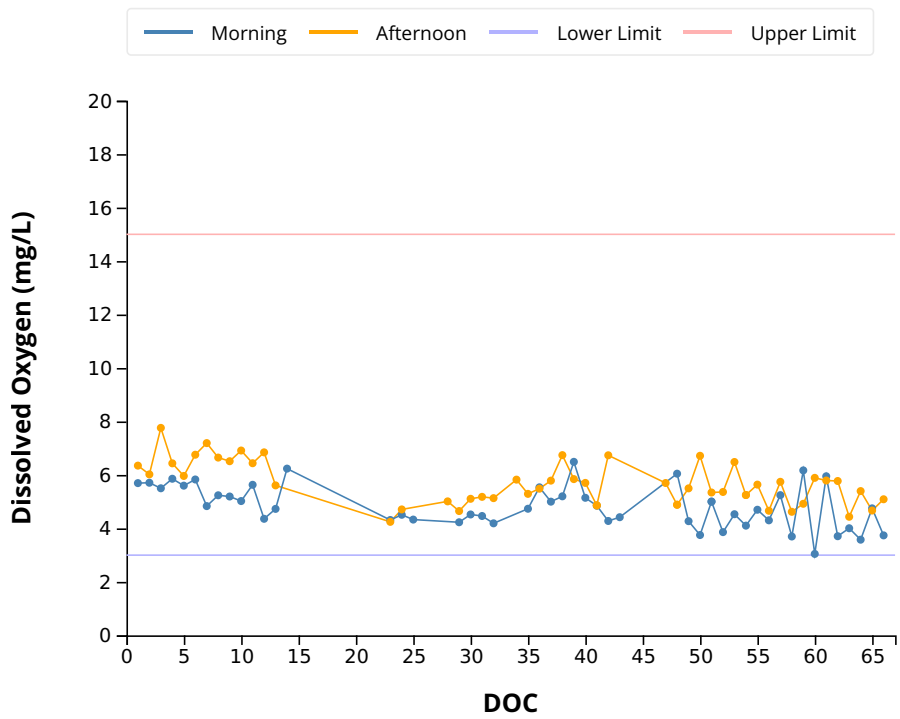
Daily Temperature Chart



Notes

✔ **Temperature is ideal**
Ideal range (26 - 32°C)

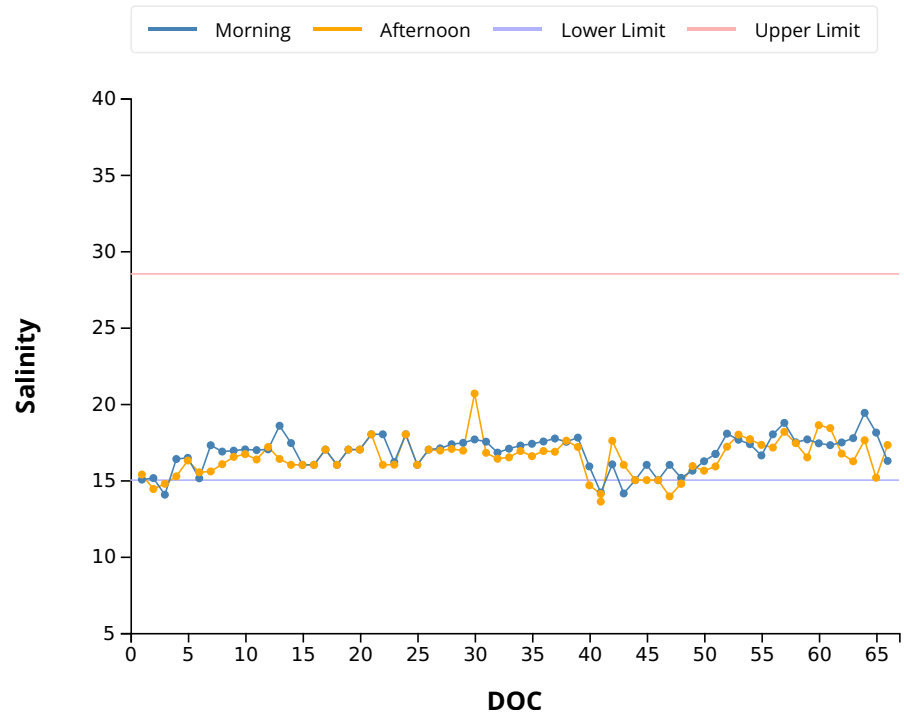
Daily Dissolved Oxygen Chart



Notes

✔ **Dissolved Oxygen is ideal**
Ideal range (3 - 15mg/L)

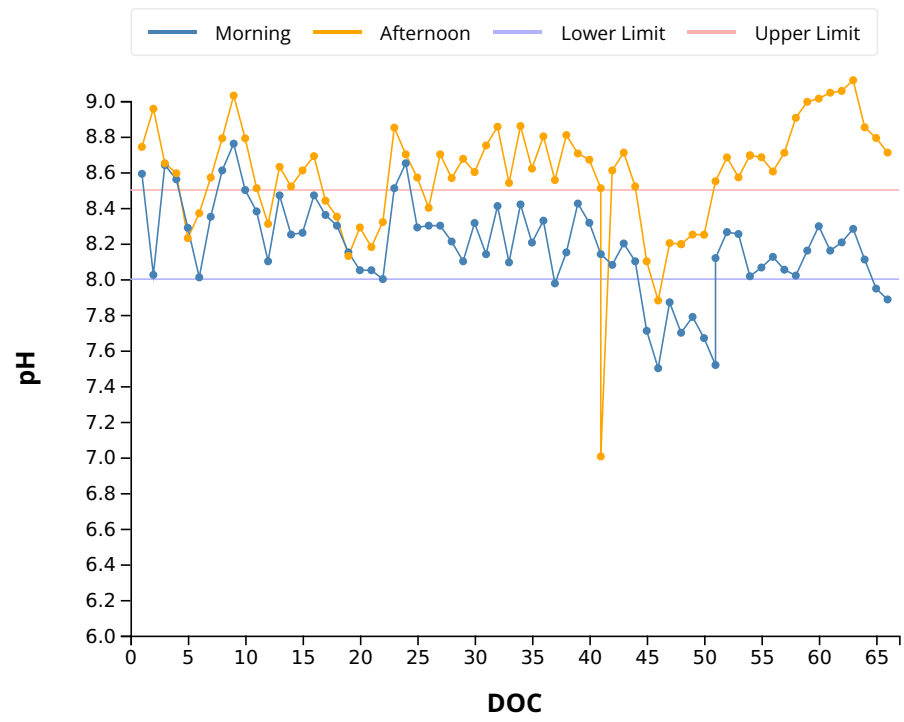
Daily Salinity Chart



Notes

✔ **Salinity is ideal**
Ideal range (15 - 28.5)

Daily pH Chart



Notes

⚠ **pH is less ideal**
Ideal range (8 - 8.5)

CULTIVATION REPORT

#002 - INDMIRA - PURWOREJO

Kolam B8







Pond performance is standard

RFID: 6E21C5DF

Farm Location	:	JAWA TENGAH, PURWOREJO, GRABAG
Pond name/number	:	Kolam B8
Started at	:	07 January 2023
Total seed (tail)	:	180,000
Seeds density (ind/m ²)	:	113
Pond area (m ²)	:	1,600
Pond depth (m)	:	1.1
Biomass limit (kg/m ²)	:	1.25
Harvest date (DOC)	:	11 April 2023 (94)

FCR	:	1.533	Total harvest biomass (kg)	:	1,015
SR (%)	:	36.246	Total feed (kg)	:	1,555
Last MBW (gram)	:	16	Shrimp last size	:	62

SUMMARY

-  The harvest result is not good based on the survival rate (SR) and shrimp size.
-  The survival rate (SR) is not good (< 80%).
-  The final result of FCR is not ideal.
-  The water quality is not yet stable.
-  Carrying capacity has been considered well.
-  Shrimp growth rate is not good.

Input:

- Evaluate the feed program and while considering shrimp appetite.
- Perform water quality management so that it is within the optimal range for shrimp growth. The impact can increase appetite, growth, and the value of survival rate (SR).

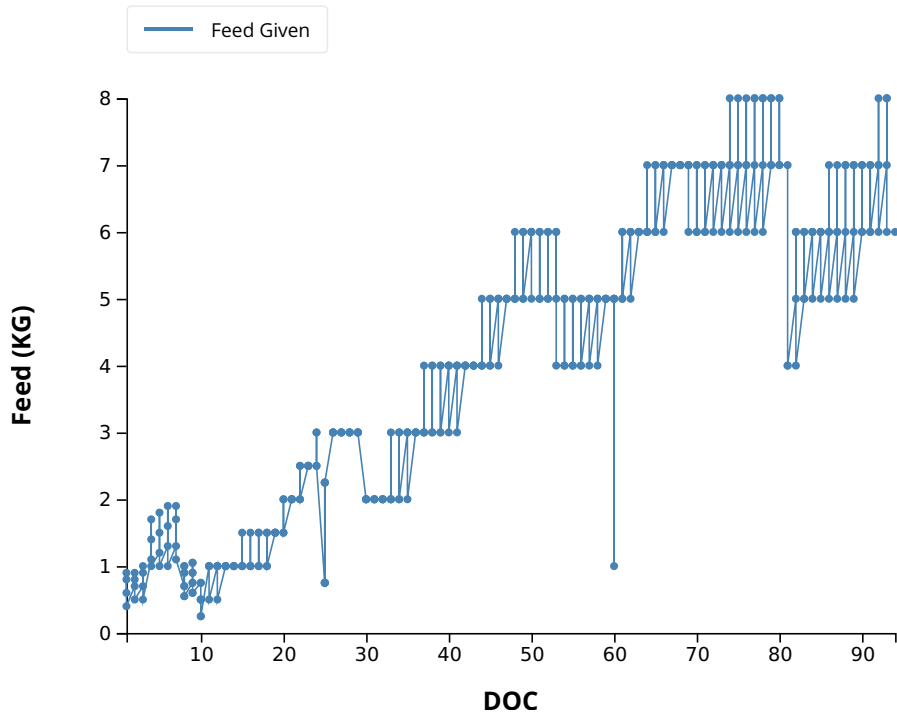
DATA SAMPLING

The following are sampling data collection. There are 11 samplings in 1 cycle with MBW and ADG calculation as follows.

Age	Date	MBW (gram)	ADG (gram/day)
30	06 Feb 2023	1.40	0.00
37	13 Feb 2023	2.60	0.17
44	20 Feb 2023	4.00	0.20
51	27 Feb 2023	5.60	0.23
58	06 Mar 2023	7.70	0.30
65	13 Mar 2023	9.70	0.29
71	19 Mar 2023	11.20	0.25
72	20 Mar 2023	11.20	0.00
79	27 Mar 2023	13.00	0.26
86	03 Apr 2023	15.40	0.34
92	09 Apr 2023	16.70	0.22

FEED DATA

Daily Feed Chart

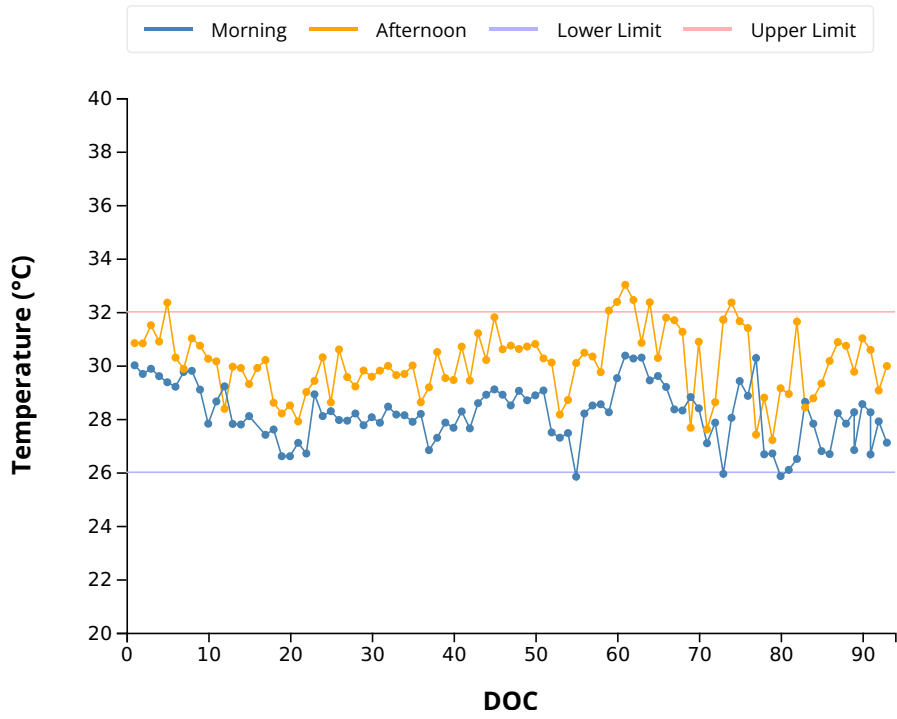


Notes

✔ Feed Accumulation **1,555 kg**

WATER QUALITY DATA

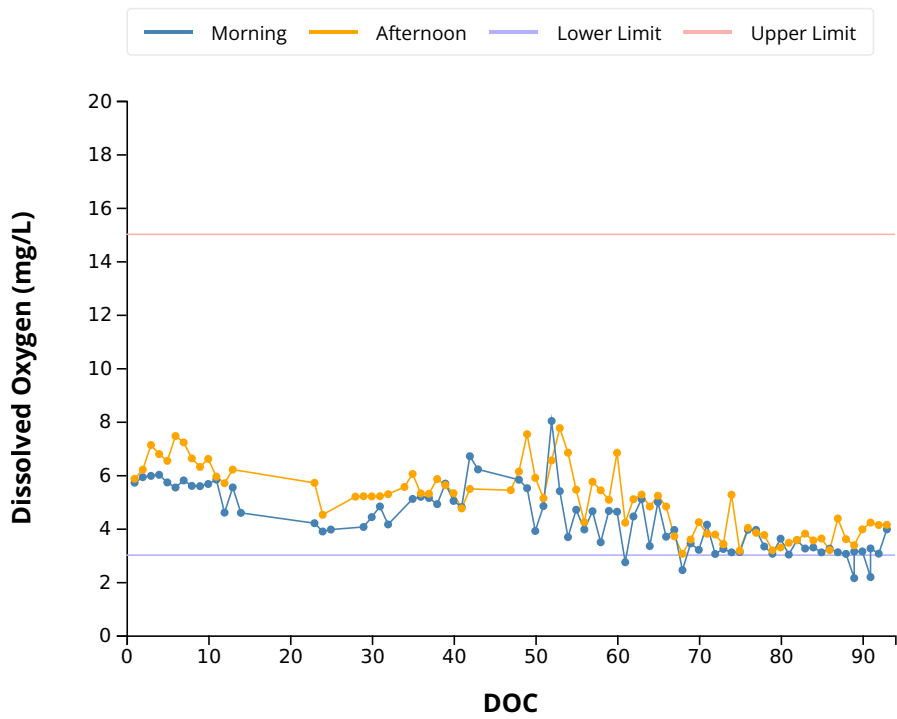
Daily Temperature Chart



Notes

✔ **Temperature is ideal**
Ideal range (26 - 32°C)

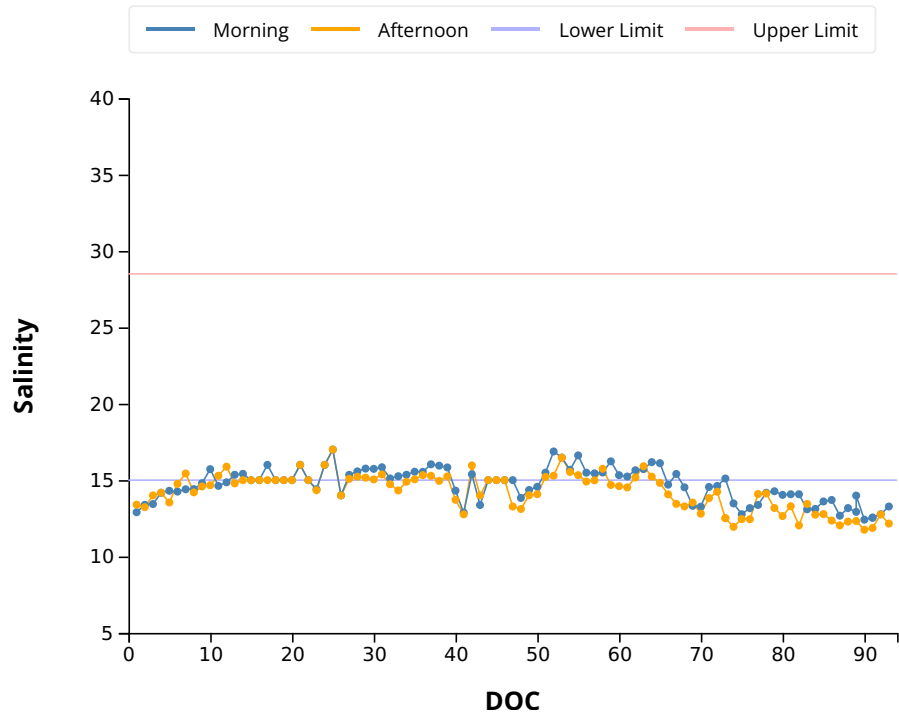
Daily Dissolved Oxygen Chart



Notes

✔ **Dissolved Oxygen is ideal**
Ideal range (3 - 15mg/L)

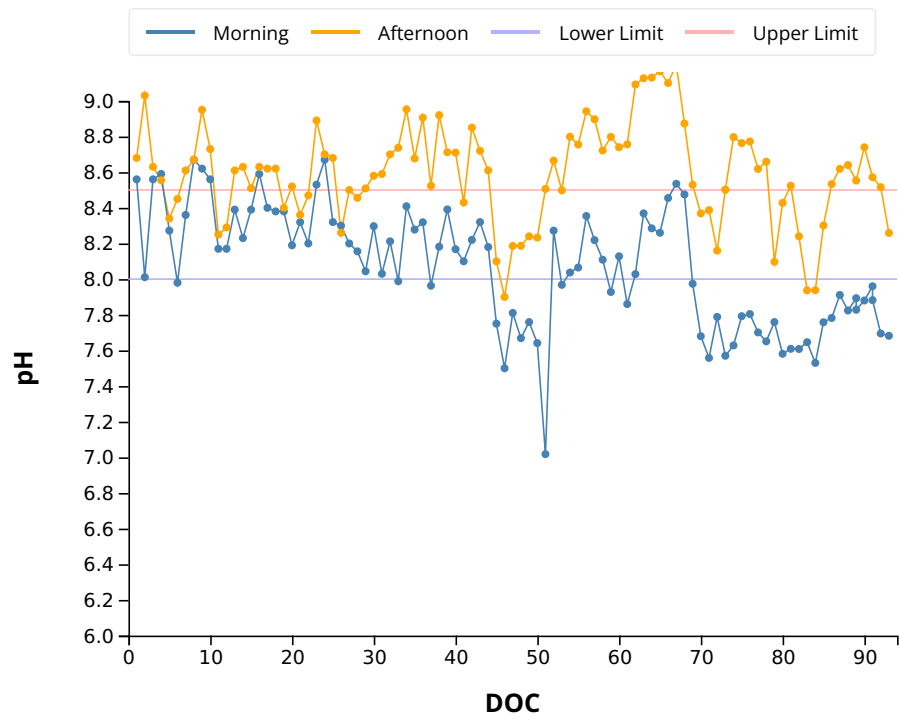
Daily Salinity Chart



Notes

salinity is less ideal
Ideal range (15 - 28.5)

Daily pH Chart

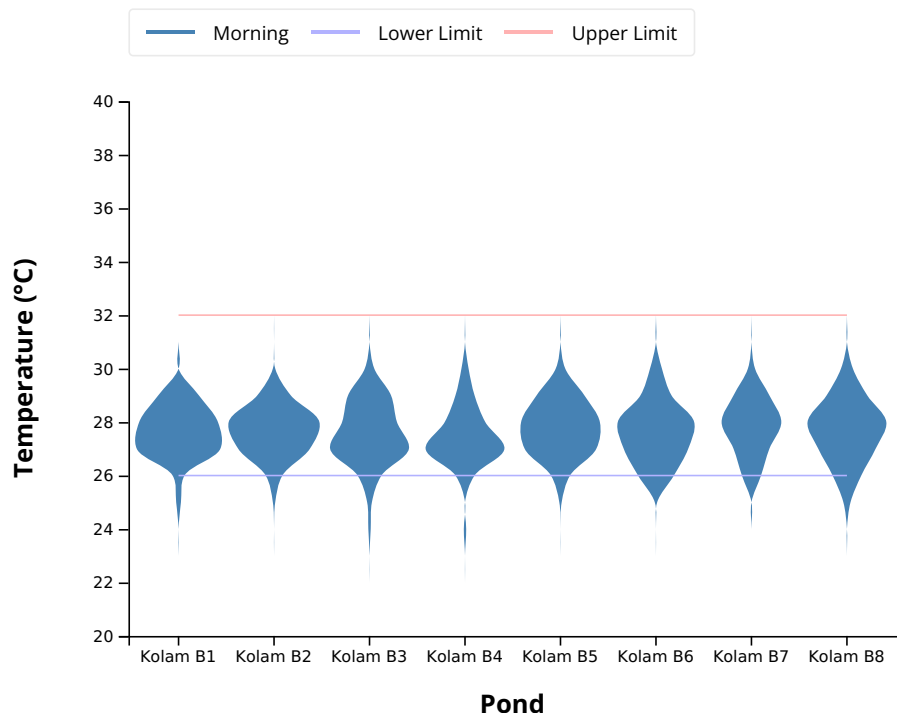


Notes

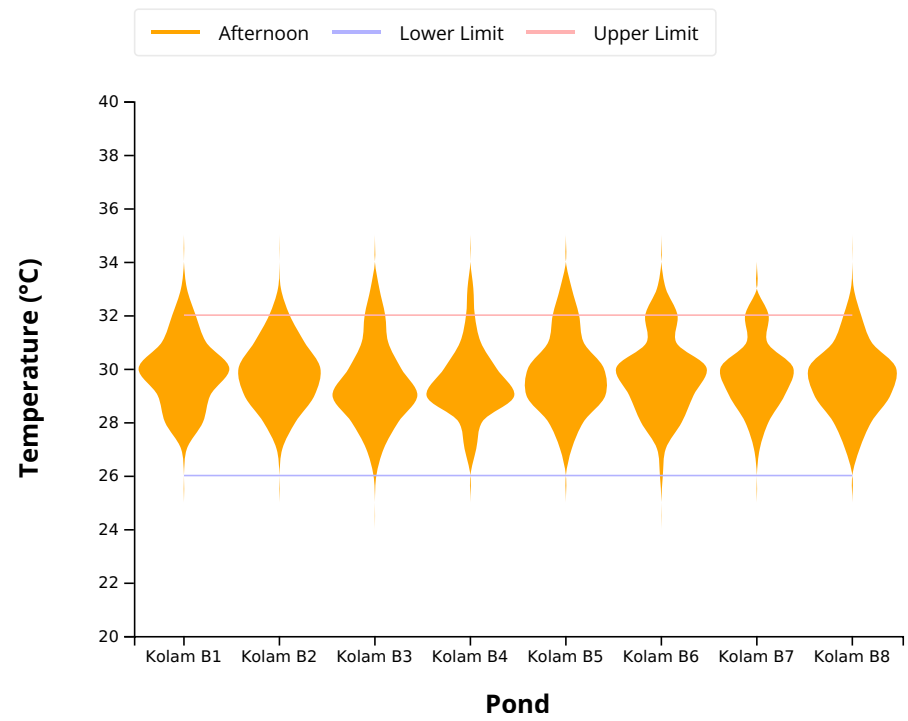
ph is less ideal
Ideal range (8 - 8.5)

ATTACHMENTS

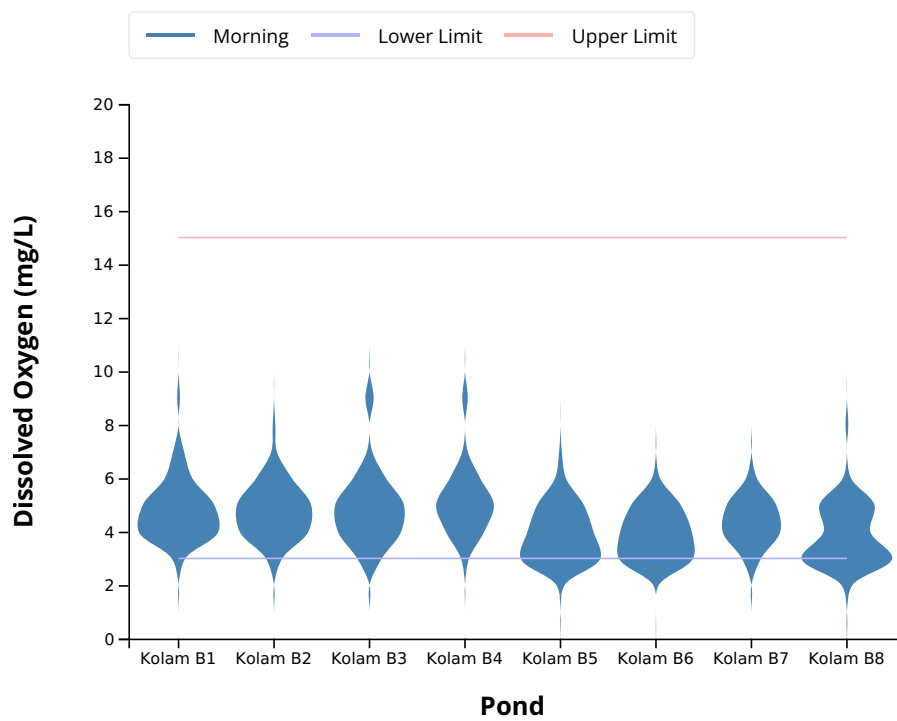
Daily Morning Temperature Measurement Density



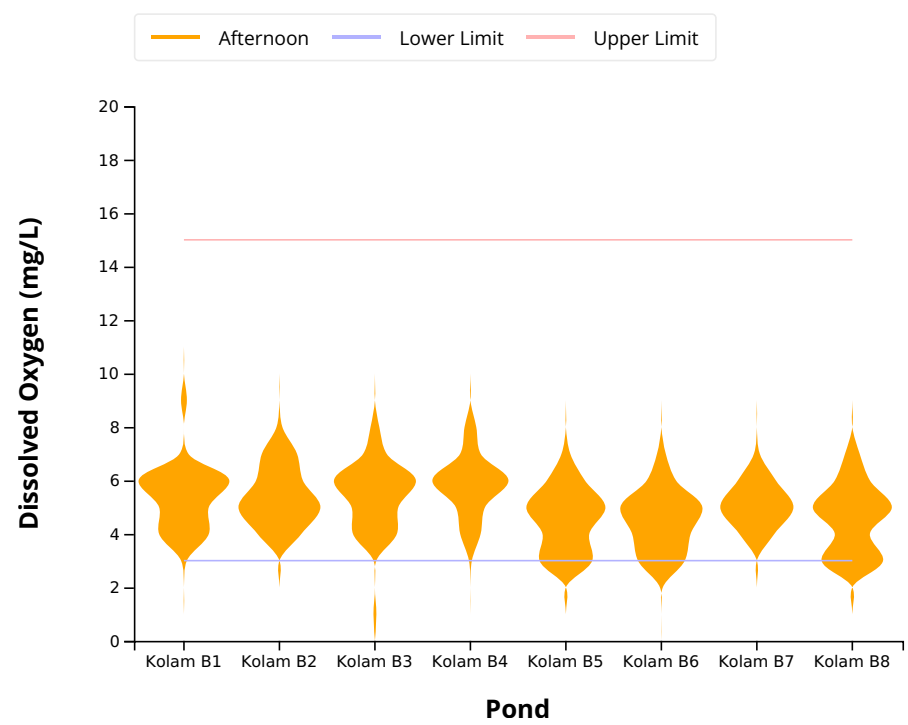
Daily Afternoon Temperature Measurement Density



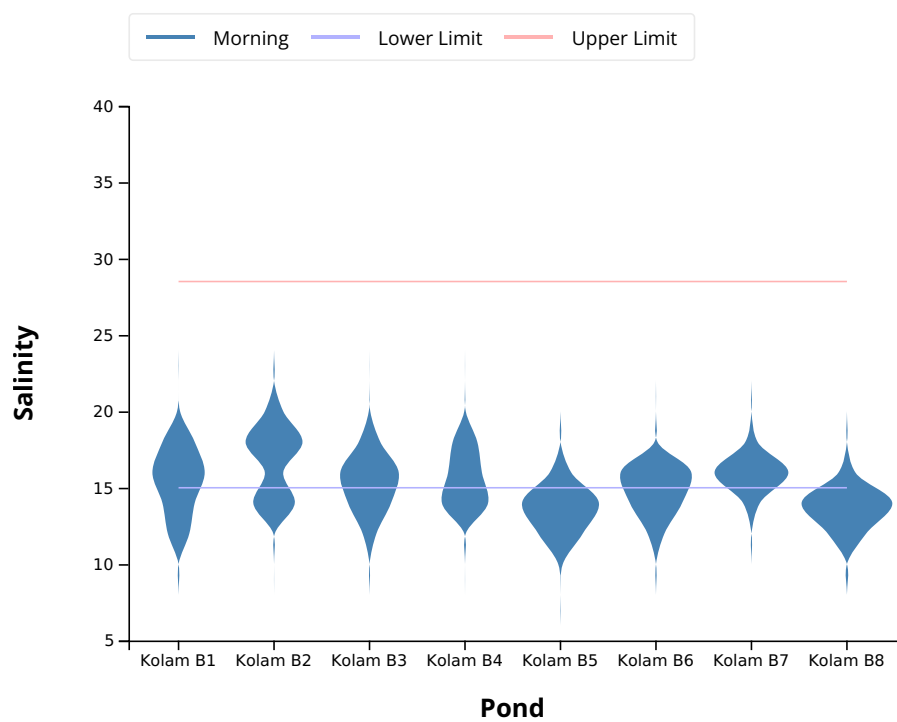
Daily Morning Dissolved Oxygen Measurement Density



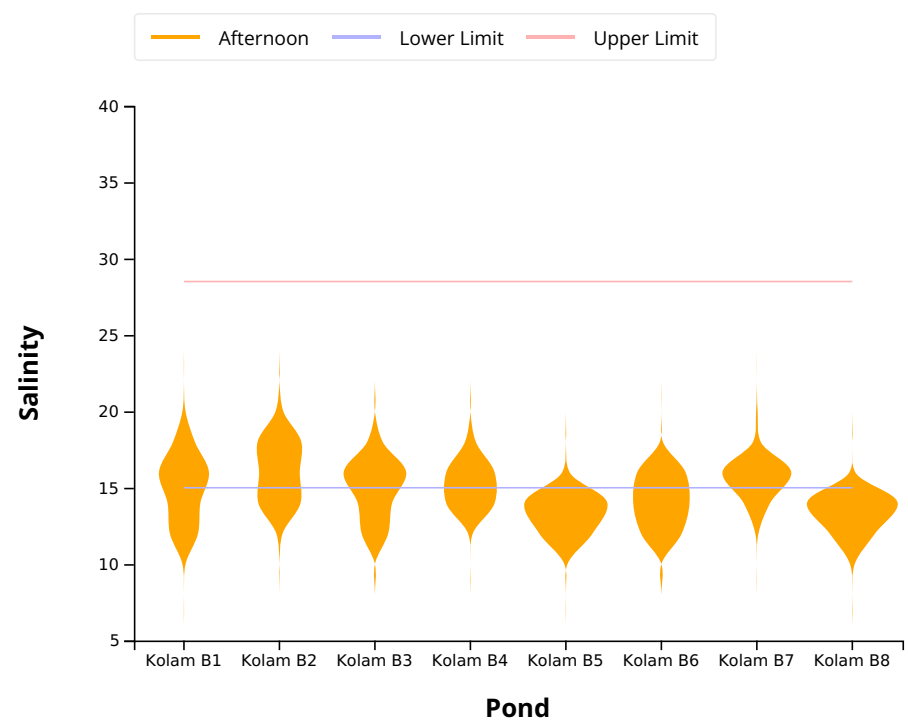
Daily Afternoon Dissolved Oxygen Measurement Density



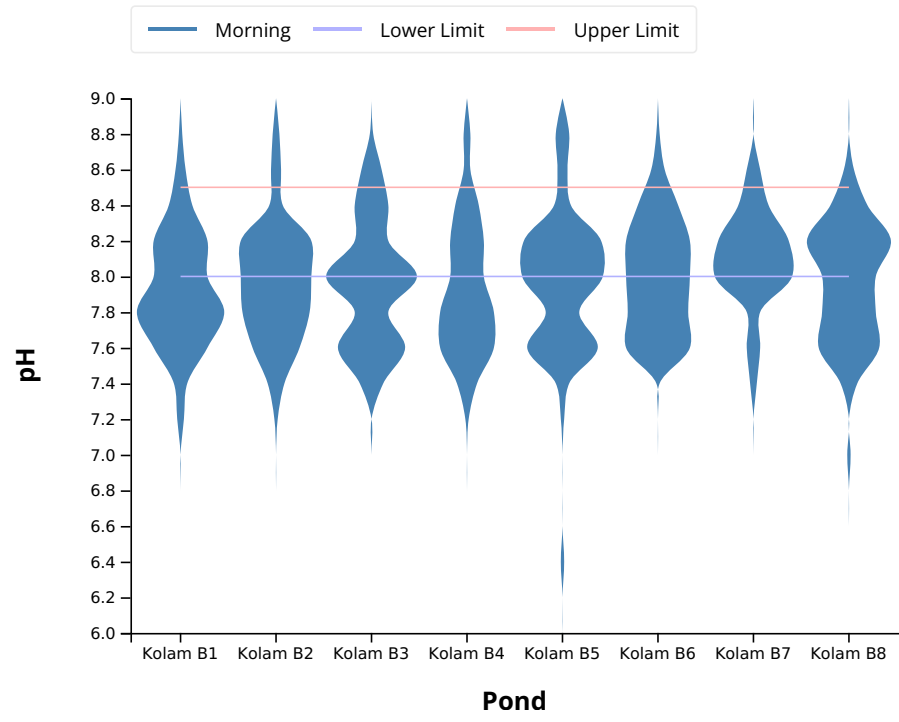
Daily Morning Salinity Measurement Density



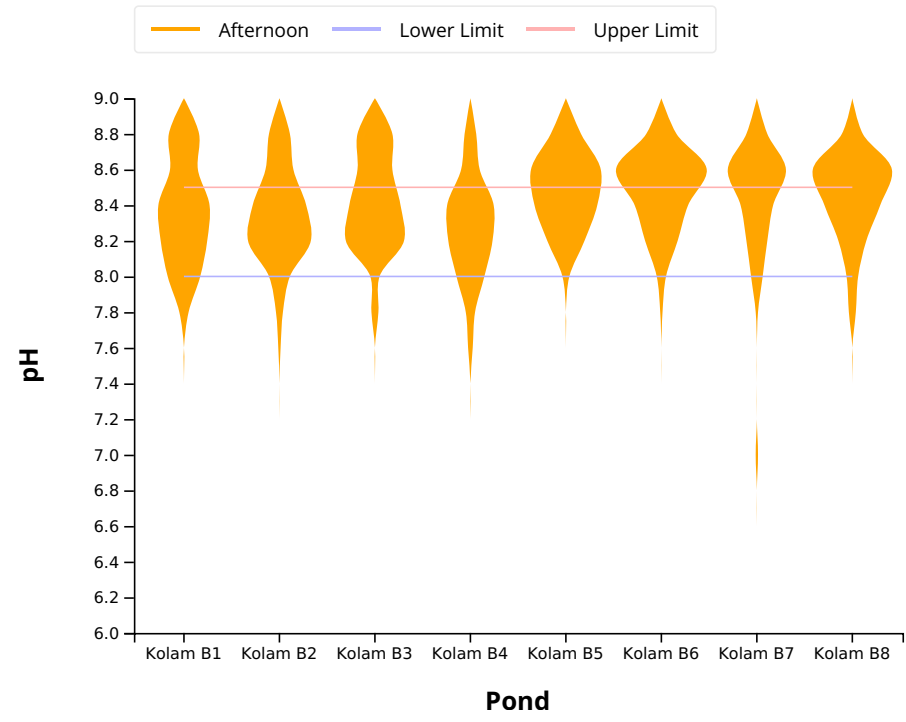
Daily Afternoon Salinity Measurement Density



Daily Morning pH Measurement Density



Daily Afternoon pH Measurement Density



Notes

1. The width of the diagram to the top shows the distribution of the measured values.
2. The width of the diagram to the side shows how often the value appears.