



November 21, 2025

Chuck Adams  
Director of Operations  
Wrathell, Hunt and Associates  
9220 Bonita Beach Road, Suite 214  
Bonita Springs, FL 34135

This letter provides the results of the 2025 wet season water quality (WQ) sampling of four (4) stormwater treatment outfall ponds (L-24, L-37, L-52, and L-55) and one (1) additional stormwater treatment pond (L-35) located in the Mediterra CDD, as depicted on the sampling map provided as **Appendix A**. Copies of the laboratory analytical reports for the water quality samples are provided in **Appendix B**.

## **I. PURPOSE & SCOPE OF WORK**

This work was conducted as Task 01: Wet Season Surface Water Sampling of the 2025 Surface Water and Sediment Testing Analysis and Reporting contract. One (1) wet season surface water sampling event per year was conducted at each of the four (4) outfall ponds when discharge occurred over their respective control structures. Ponds L-37 (OS-Oak 1) and L-52 (OS-Oak 2) in Mediterra North discharge to Oak Creek, ponds L-24 (OS-Coco 2) and L-55 (OS-Coco 1) in Mediterra South discharge to the Cocohatchee River, and pond L-35 was selected by the CDD.

## **II. METHODOLOGY**

The water quality sampling event was conducted on September 29, 2025. Field parameters including temperature, dissolved oxygen, specific conductivity, and pH were monitored and recorded using a multi-parameter meter. In addition, field personnel conducted visual inspections and took photographs of pond conditions. Photos of each pond are provided in **Appendix C**.

Water quality samples and field parameters were collected from water discharging over the outfall structures from ponds L-37 and L-55. Outfall structures at ponds L-24 and L-52 were not discharging during the sampling event. The water quality sample and field parameters for pond L-35 were collected from the bank of the pond.

The sampling was conducted in accordance with Florida Department of Environmental Protection (FDEP) Standard Operating Procedures. Benchmark EnviroAnalytical Laboratory (BEA) provided sample containers and performed the laboratory analytical services. The samples were analyzed for nitrate + nitrite (NOX), total Kjeldahl nitrogen (TKN), total nitrogen (TN) and total phosphorus (TP).

## **III. RESULTS**

The laboratory analytical results and field parameter readings for the wet season sampling event conducted in 2025 were compared to samples from 2021, 2022, 2023, and 2024 as well as the applicable Class III Lakes and Streams State Water Quality standards (thresholds) for this region of Florida. The comparisons are shown in **Table 1** and **Table 2** and as charts in **Appendix D**. Total

Nitrogen concentrations of samples collected from ponds with control structures (L-37 and L-55) in 2025 were below the maximum threshold of 1.27 milligrams per Liter (mg/L) for lake criteria and below the maximum threshold of 1.54 mg/L for stream criteria. The selected pond by the CDD L-35 was slightly over the threshold of 1.27 mg/L for lake criteria, but below the threshold of 1.54 mg/L for stream criteria. Total Phosphorus concentrations of the samples collected from each pond in 2025 were below the maximum threshold of 0.05 mg/L for lake criteria. The 2025 water quality sample results for TN and TP were below the streams thresholds for the receiving body of water for the Peninsular region of Florida. While the water in these ponds does not have to meet the water quality standards for lakes, water leaving these ponds through the outfall structures should meet the water quality standards for streams.

**Table 1: 2021-2025 Wet Season Water Quality Values**

Pond	Total Nitrogen (mg/L)					Total Phosphorus (mg/L)				
	2021	2022	2023	2024	2025	2021	2022	2023	2024	2025
L-24	NS	NS	0.38	0.88	NS	NS	NS	0.01	0.04	NS
L-35*	1.27	<b>1.96</b>	0.88	0.84	<b>1.38</b>	0.01	0.01	0.03	<b>0.06</b>	0.04
L-37	0.94	0.99	0.47	0.77	0.88	0.01	0.02	0.01	0.03	0.02
L-52	0.75	0.81	0.27	0.64	NS	0.03	0.01	0.01	0.02	NS
L-55	0.86	0.94	0.53	1.10	1.25	<b>0.07</b>	0.01	0.02	0.05	0.04
Lake Criteria	≤ 1.27 <sup>(1)</sup>					≤ 0.05 <sup>(1)</sup>				
Stream Criteria	≤ 1.54 <sup>(1)</sup>					≤ 0.12 <sup>(1)</sup>				

\*Not an outfall pond

NS - No sample collected (site not discharging during sampling event).

(1) Annual geometric mean not to be exceeded more than once in any consecutive three-year calendar period, 62-302.530, F.A.C.

**Bold** values exceed threshold criteria

Values for the field measurements taken during the wet season surface water sampling event in 2025 are shown in **Table 2**. Each of the ponds sampled appear to be freshwater with normal pH levels. The dissolved oxygen (DO) readings taken at each of the sampled ponds in 2025 were above the minimum threshold of 38%. A DO annual comparison chart is also included in **Appendix D**.

**Table 2: 2021-2025 Wet Season Field Measurements**

Pond	pH					Specific Conductance (mS/cm)					Dissolved Oxygen (%)				
	2021	2022	2023	2024	2025	2021	2022	2023	2024	2025	2021	2022	2023	2024	2025
L-24	NS	NS	-	7.32	NS	NS	NS	-	0.48	NS	NS	NS	-	65	NS
L-35*	7.72	7.26	8.41	7.03	7.49	0.62	0.65	0.55	0.49	0.77	42	44	88	63	60
L-37	7.51	7.45	8.05	7.15	7.61	0.57	0.57	0.47	0.46	0.70	46	<b>31</b>	64	<b>29</b>	41
L-52	7.91	7.58	7.88	7.24	NS	0.48	0.52	0.44	0.44	NS	75	43	67	42	NS
L-55	7.80	7.72	7.53	7.73	7.37	0.96	0.73	0.92	0.72	0.95	53	42	<b>26</b>	84	56
<b>Class III Predominantly Freshwaters</b>											<b>≥ 38<sup>(1)</sup></b>				

\*Not an outfall pond

NS - No sample collected (site not discharging during sampling event).

(1) No more than 10% of the values shall be below the standard, 62-302.533, F.A.C.

**Bold** values are below threshold criteria

Please feel free to contact me if you have any questions regarding these sampling activities.

Sincerely,

JOHNSON ENGINEERING, LLC

A handwritten signature in black ink, appearing to read 'Abe Elizarraraz', with a long, sweeping underline.

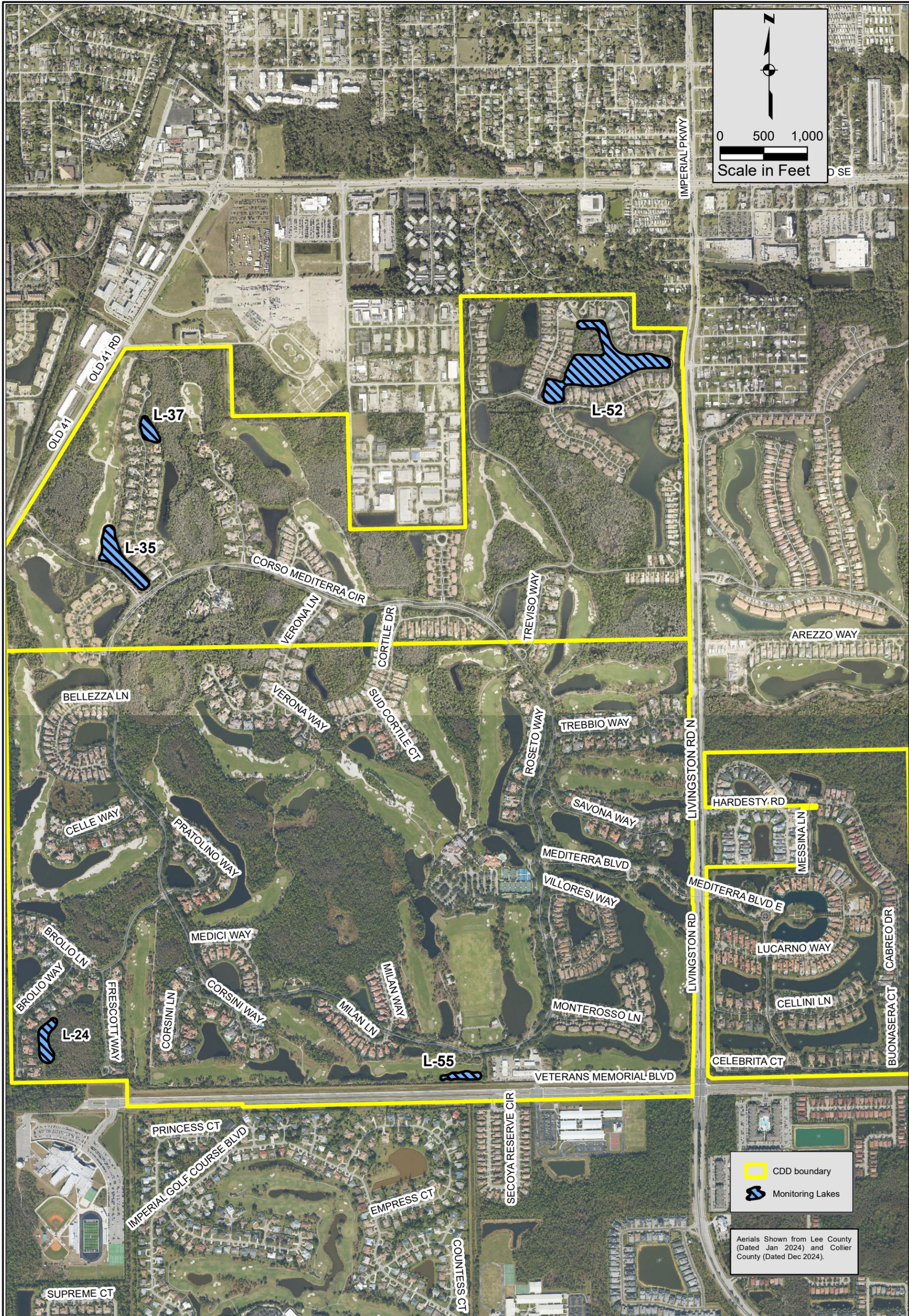
Abe Elizarraraz  
Environmental Scientist

25006372

Appendices : Appendix A – Sampling Map  
Appendix B – Laboratory Analytical Report, (October 10, 2025)  
Appendix C – Pond Photos  
Appendix D – Nutrient Concentration Charts, (2020-2025)

**APPENDIX A**  
**SAMPLING MAP**

J:\20023589-025\ArcGIS\MEDITERRA SAMPLING MAP 2025.mxd



Medterra CDD Pond Health  
Lee-Collier County, Florida

**JOHNSON**  
ENGINEERING  
— An Apex Company —

JOHNSON ENGINEERING, LLC  
2122 JOHNSON STREET  
FORT MYERS, FLORIDA 33901-1550  
PHONE (239) 334-0046  
E.B. #642 & L.B. #642

Medterra CDD Monitoring Lake Map

DATE	PROJECT NO.	FILE NO.	SCALE	SHEET
May 2025	25006372	11 - 48 - 25	AS SHOWN	1

**APPENDIX B**  
**LABORATORY ANALYTICAL REPORTS**  
**OCTOBER 10, 2025**

## ANALYTICAL TEST REPORT

THESE RESULTS MEET NELAC STANDARDS

**Submission Number :** 25091635

Johnson Engineering, Llc  
 2122 Johnson Street  
 Fort Myers, FL 33901

**Project Name :** MEDITERRA CDD POND HEALTH  
**Date Received :** 09/30/2025  
**Time Received :** 15:01  
**Project#:** 20023589-021

Tim Denison

<b>Submission Number:</b> 25091635	<b>Sample Date:</b> 09/29/2025
<b>Sample Number:</b> 001	<b>Sample Time:</b> 10:00
<b>Sample Description:</b> L-35	<b>Sample Method:</b> Grab

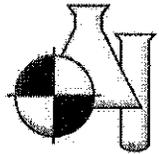
Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
TOTAL KJELDAHL NITROGEN	1.32	MG/L	0.05	0.20	351.2	10/02/2025 14:15	JS
TOTAL PHOSPHORUS AS P	0.042	MG/L	0.008	0.032	365.3	10/02/2025 16:04	KT/LM
NITRATE+NITRITE AS N	0.061	MG/L	0.006	0.024	SYSTEAS EASY	10/07/2025 12:59	SN
TOTAL NITROGEN	1.38	MG/L	0.05	0.20	SYSTEAS+351	10/07/2025 12:59	JS/SN

<b>Submission Number:</b> 25091635	<b>Sample Date:</b> 09/29/2025
<b>Sample Number:</b> 002	<b>Sample Time:</b> 12:15
<b>Sample Description:</b> L-37	<b>Sample Method:</b> Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
TOTAL KJELDAHL NITROGEN	0.707	MG/L	0.05	0.20	351.2	10/02/2025 14:17	JS
TOTAL PHOSPHORUS AS P	0.022 I	MG/L	0.008	0.032	365.3	10/02/2025 16:05	KT/LM
NITRATE+NITRITE AS N	0.172	MG/L	0.006	0.024	SYSTEAS EASY	10/07/2025 13:00	SN
TOTAL NITROGEN	0.879	MG/L	0.05	0.20	SYSTEAS+351	10/07/2025 13:00	JS/SN

<b>Submission Number:</b> 25091635	<b>Sample Date:</b> 09/29/2025
<b>Sample Number:</b> 003	<b>Sample Time:</b> 11:20
<b>Sample Description:</b> L-55	<b>Sample Method:</b> Grab

Parameter	Result	Units	MDL	PQL	Procedure	Analysis Date/Time	Analyst
TOTAL KJELDAHL NITROGEN	1.20	MG/L	0.05	0.20	351.2	10/02/2025 14:18	JS
TOTAL PHOSPHORUS AS P	0.039	MG/L	0.008	0.032	365.3	10/02/2025 16:06	KT/LM
NITRATE+NITRITE AS N	0.050	MG/L	0.006	0.024	SYSTEAS EASY	10/07/2025 13:00	SN
TOTAL NITROGEN	1.25	MG/L	0.05	0.20	SYSTEAS+351	10/07/2025 13:00	JS/SN



*Leah Lepore*

10/10/2025

Date

Dr. Dale D. Dixon      Laboratory Director

Haley Richardson      QC Manager / Leah Lepore      QC Officer

**DATA QUALIFIERS THAT MAY APPLY:**

- A = Value reported is an average of two or more determinations.
- B = Results based upon colony counts outside the ideal range.
- H = Value based on field kit determination. Results may not be accurate.
- I = Reported value is between the laboratory MDL and the PQL.
- J1 = Estimated value. Surrogate recovery limits exceeded.
- J2 = Estimated value. No quality control criteria exists for component.
- J3 = Estimated value. Quality control criteria for precision or accuracy not met.
- J4 = Estimated value. Sample matrix interference suspected.
- J5 = Estimated value. Data questionable due to improper lab or field protocols.
- K = Off-scale low. Value is known to be < the value reported.
- L = Off-scale high. Value is known to be > the value reported.
- N = Presumptive evidence of presence of material.
- O = Sampled, but analysis lost or not performed.
- Q = Sample held beyond accepted hold time.

- T = Value reported is < MDL. Reported for informational purposes only and shall not be used in statistical analysis.
- U = Analyte analyzed but not detected at the value indicated.
- V = Analyte detected in sample and method blank. Results for this analyte in associated samples may be biased high. Standard, Duplicate and Spike values are within control limits. Reported data are usable.
- Y = Analysis performed on an improperly preserved sample. Data may be inaccurate.
- Z = Too many colonies were present (TNTC). The numeric value represents the filtration volume.
- ! = Data deviate from historically established concentration ranges.
- ? = Data rejected and should not be used. Some or all of QC data were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
- \* = Not reported due to interference.
- Oil & Grease - If client does not send sufficient sample quantity for spike evaluation surface water samples are supplied by the laboratory.

**NOTES:**

- MBAS calculated as LAS; molecular weight = 340.
- PQL = 4xMDL.
- ND = Not detected at or above the adjusted reporting limit.
- G1 = Accuracy standard does not meet method control limits, but does meet lab control limits that are in agreement with USEPA generated data. USEPA letter available upon request.
- G2 = Accuracy standard exceeds acceptable control limits. Duplicate and spike values are within control limits. Reported data are usable.

**COMMENTS:**

For questions or comments regarding these results, please contact us at (941) 723-9986.

Results relate only to the samples.

**Benchmark EnviroAnalytical, Inc.**

1711 Twelfth Street East  
 Palmetto, FL 34221  
 (941) 723-9986 / (941) 723-6061 fax  
 Sample Temperature checked upon receipt at BEAS with Temperature Gun ID #7  
 Sample Temperature checked upon receipt at BEA with Temperature Gun ID #258

**Johnson Engineering, Inc**  
 Client Information:  
 2122 Johnson Street  
 Fort Myers, FL 33901  
 (239) 461-2458 (Tim Denison)  
 (239) 334-3661 (fax)

**Project Name: Mediterra CDD Pond Health (Wet Season)**

Project Number: 20023589-021

**Laboratory Submission #**

250916035

Sample Name	Sample Type / Sample Matrix	Collection		Container / Total # of Containers = 5		Preservative	Parameters for Analysis	Laboratory Sample #
		Date	Time	Qty	Capacity			
L-35	G / SW	9/29/25	1000	1	1/2 Pint	P	TKN (551.2) NO <sub>3</sub> -NO <sub>2</sub> (553.2) TP (365.3) TN (Calc.)	1
L-37	G / SW	9/29/25	1215	1	1/2 Pint	P	TKN (551.2) NO <sub>3</sub> -NO <sub>2</sub> (553.2) TP (365.3) TN (Calc.)	2
L-52	G / SW	no sample		1	1/2 Pint	P	TKN (551.2) NO <sub>3</sub> -NO <sub>2</sub> (553.2) TP (365.3) TN (Calc.)	3
L-55	G / SW	9/29/25	1120	1	1/2 Pint	P	TKN (551.2) NO <sub>3</sub> -NO <sub>2</sub> (553.2) TP (365.3) TN (Calc.)	3
	G / SW	no sample		1	1/2 Pint	P	TKN (551.2) NO <sub>3</sub> -NO <sub>2</sub> (553.2) TP (365.3) TN (Calc.)	

**Notes:**

- "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
- "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), fresh surface water (FSW), saline surface water (SSW), soil, sediment (SDMNT), or sludge (SLDG).
- "Container Type" is used to indicate whether the sample is in plastic (P) or glass (G).
- Sample must be refrigerated or stored in the dark after collection. The temperature during storage should be less than or equal to 6°C (42.8°F).
- "Under-Preservative" list any preservatives that were added to the sample container. All numbers of preservative used is specific to the bottles included in the list. NaThio, H<sub>2</sub>SO<sub>4</sub> and HNO<sub>3</sub> do not have expiration dates per the manufacturer. Micro bottles are pre-preserved at manufacturing stage. All micro bottles are pre-preserved at manufacturing stage.

**Instructions:**

- Each bottle has a label identifying sample ID, unmeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
- The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sample's name or number, and any field number or ID.
- All bottles not containing preservative must be rinsed with appropriate sample prior to collection.
- The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.
- Sample kit has been provided by BEA using new, certified bottles.

Laboratory Sample Acceptability:  
 pH < 2 ✓ BEA Temperature 0.9°C  
 BEAS Temperature:

Collector & Affiliation (Print & Sign)	Date	Time	Received By & Affiliation (Print & Sign)	Date	Time
Lily Silva Sullivan Anheca	9/29/25	1600	W. S. Beas	9/30/25	18:40
W. S. Beas	9/30/25	1208	Tim Denison	9/30/25	1208
W. S. Beas	9/30/25	1501	Kera McBaron	9/30/25	1501

**APPENDIX C**  
**POND PHOTOGRAPHS**

Appendix B: Mediterra CDD Lake Photographs (Wet Season 2025)



Photo 1: L-24 (OS-Coco 2), facing east



Photo 2: L-35 (WQ Pond), facing east

Appendix B: Mediterra CDD Lake Photographs (Wet Season 2025)



Photo 3: L-37 (OS-Oak 1), facing east



Photo 4: L-52 (OS-Oak 2), facing north

Appendix B: Mediterra CDD Lake Photographs (Wet Season 2025)

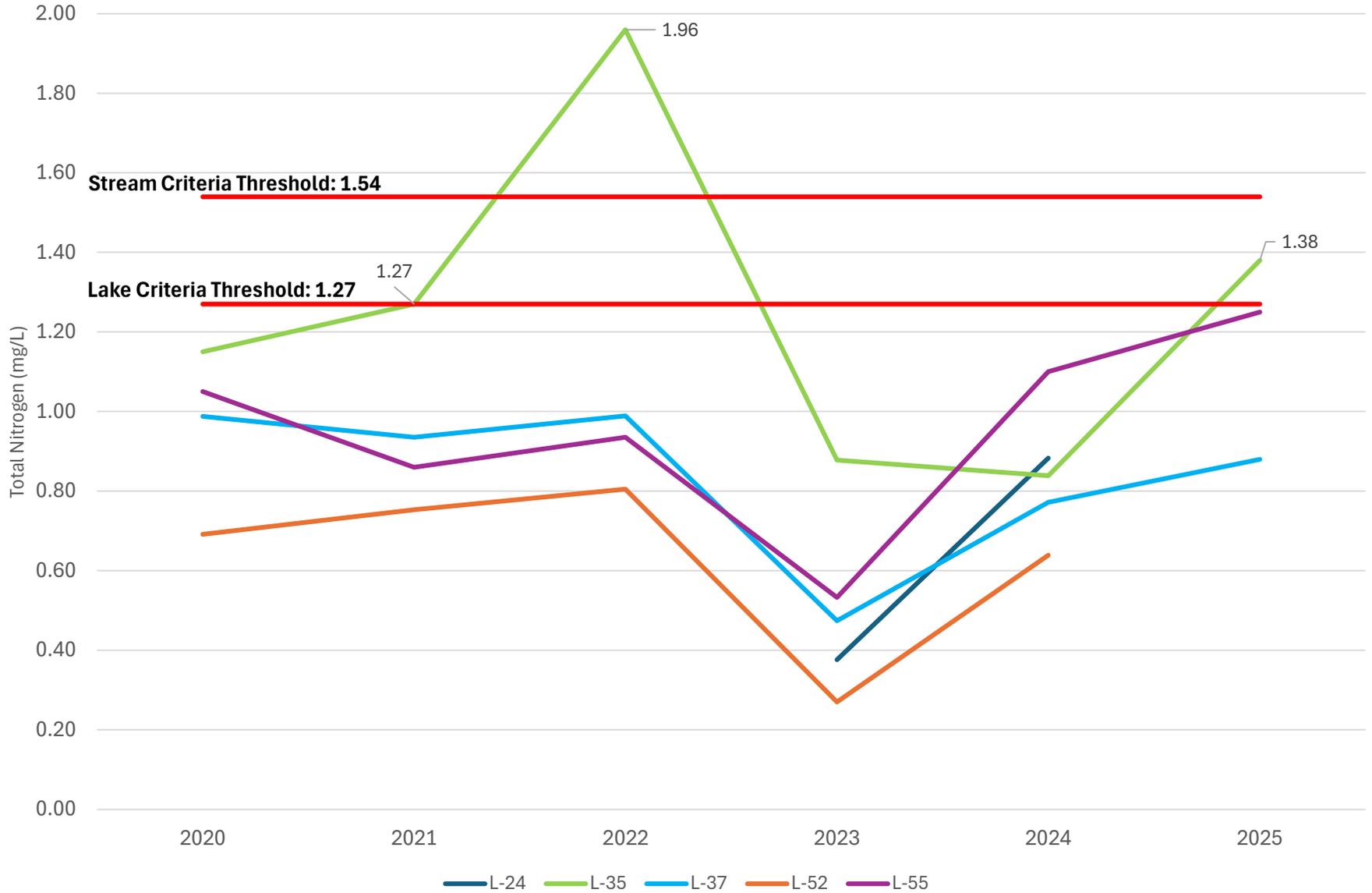


Photo 5: L-55 (OS-Coco 1), facing south

**APPENDIX D**  
**NUTRIENT CONCENTRATION CHARTS**  
**2020-2025**

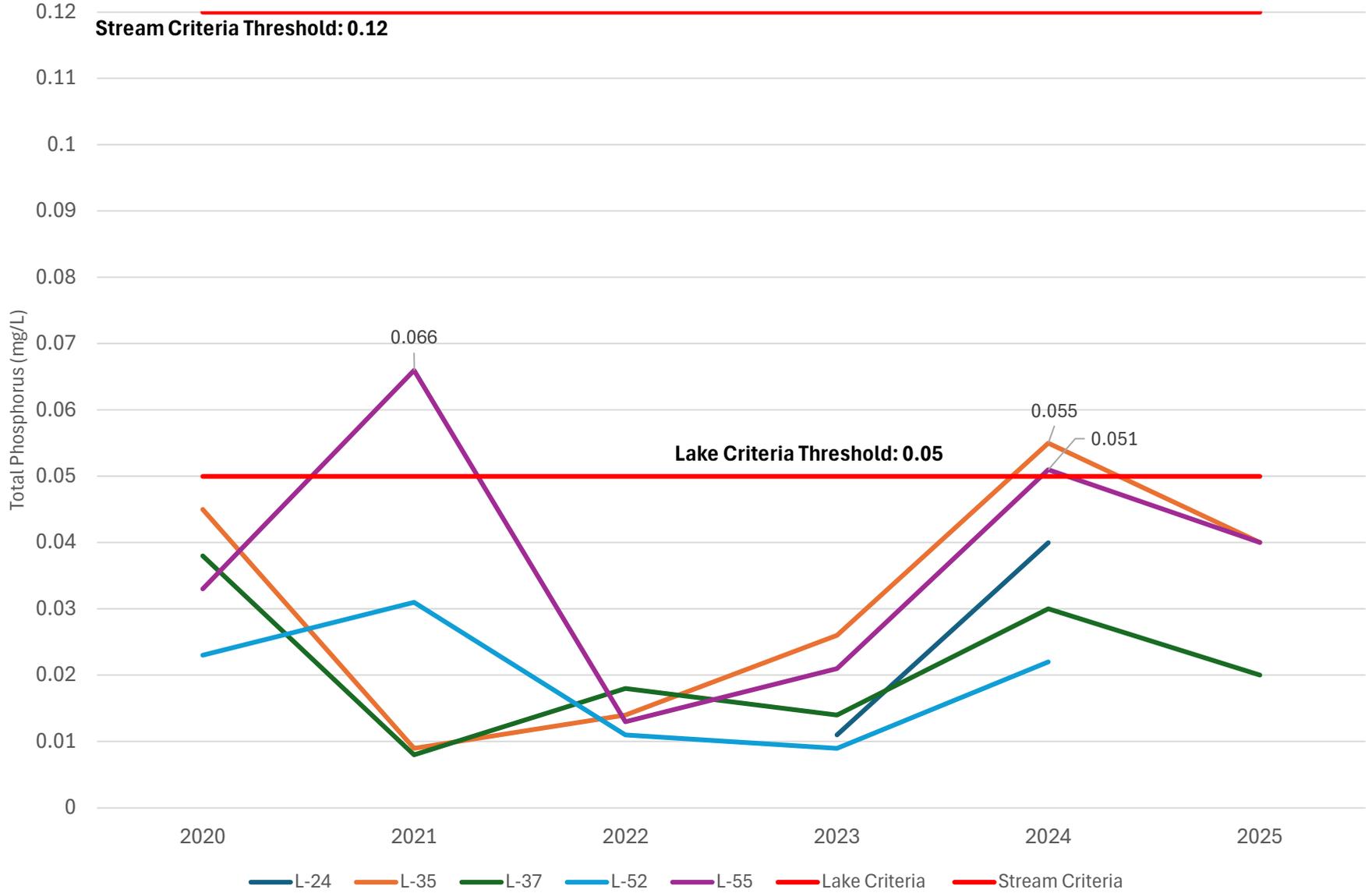
# Mediterra CDD Annual Water Quality 2020-2025

## Total Nitrogen (mg/L)



# Mediterra CDD Annual Water Quality 2020-2025

## Total Phosphorus (mg/L)



# Mediterra CDD Annual Water Quality 2020-20245

## Dissolved Oxygen (%)

