

ภาคผนวก ง

รายงานผลการตรวจวัดคุณภาพสิ่งแวดล้อม

มาตรฐานคุณภาพน้ำที่เกี่ยวข้อง

สำเนาหนังสือใบอนุญาตขึ้นทะเบียน

ห้องปฏิบัติการวิเคราะห์เอกชน

และสำเนาใบรับรองการสอบเทียบเครื่องมือ

ภาคผนวก ง.1

ผลการวิเคราะห์คุณภาพน้ำทะเล



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Lot ID: 2361108

Date Received : Jun 21, 2023

Date Reported : Jun 27, 2023

Report Number : 2663663-1



TESTING
No.0166

Page 1 of 4

Sample Number	2361108-1						
Sampled Date	Jun 20, 2023 10:48 AM						
Sample Description	Seawater						
Location	น้ำทะเล 50 ม จากแนวชายฝั่ง จุดที่ 1 บริเวณพื้นที่ก่อสร้างโรงแรม 47N 420422 871945						
Date Analysis Commenced	Jun 21, 2023						
Condition of Sample	Contained in two BOD bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
Fecal Coliform	CFU/100mL	-	-	<1	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9222 D	Songkhla
Total Coliform	MPN/100mL	-	-	<1.8	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
Dissolved Oxygen *	mg/L	-	0.1	7.0	≥4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Songkhla
Nitrate as N *	mg/L	0.003	0.02	0.02	≤0.06	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 E	Bangkok
pH at 25 degree C *	-	-	-	8.0	7.0-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Phosphate as P *	mg/L	0.005	0.01	<0.01	≤0.015	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-P (E)	Bangkok
Salinity *	ppt	-	-	31.5	Change from lower salinity not more than 10%	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2520 B	Songkhla
Temperature *	Degree C	-	-	30.5	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Songkhla

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 4)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16609-311 11MAY23

www.alsglobal.com

S:\Reports\AL_0166\16609-311

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Lot ID: 2361108

Date Received : Jun 21, 2023

Date Reported : Jun 27, 2023

Report Number : 2663663-1



TESTING
No.0166

Page 2 of 4

Sampling By : Yuttapong Rattana

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16609-311 11MAY23

www.alsglobal.com

S:\Reports\AL_0166\16609-311

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2361108

Date Received : Jun 21, 2023

Date Reported : Jun 27, 2023

Report Number : 2663663-1

Page 3 of 4

Sample Number	2361108-2						
Sampled Date	Jun 20, 2023 11:15 AM						
Sample Description	Seawater						
Location	น้ำทะเล 50 ม จากแนวชายฝั่ง จุดที่ 2 ชายฝั่งหน้าอาคารโรงแรม 47 419951 871900						
Date Analysis Commenced	Jun 21, 2023						
Condition of Sample	Contained in two BOD bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
Fecal Coliform	CFU/100mL	-	-	<1	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9222 D	Songkhla
Total Coliform	MPN/100mL	-	-	<1.8	≤1000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
Dissolved Oxygen *	mg/L	-	0.1	7.1	≥4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Songkhla
Nitrate as N *	mg/L	0.003	0.02	0.02	≤0.06	Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 E	Bangkok
pH at 25 degree C *		-	-	7.9	7.0-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Phosphate as P *	mg/L	0.005	0.01	Not Detected	≤0.015	Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-P (E)	Bangkok
Salinity *	ppt	-	-	31.3	Change from lower salinity not more than 10%	Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2520 B	Songkhla
Temperature *	Degree C	-	-	30.0	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Songkhla

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 4)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-31 (THAI)

Life Sciences

www.alsglobal.com

S:\Report_Alt_0101 (6/5/17)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2361108

Date Received : Jun 21, 2023

Date Reported : Jun 27, 2023

Report Number : 2663663-1

Page 4 of 4

Sampling By : Yuttapong Rattana

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-31 (THAI)

Life Sciences

www.alsglobal.com

S:\Report_Alt_0101 (6/5/17)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 23133842

Date Received : Dec 08, 2023
Date Reported : Dec 14, 2023
Report Number : 2858335-1

Page 1 of 4

Sample Number	23133842-1						
Sampled Date	Dec 07, 2023 2:00 PM						
Sample Description	Seawater						
Location	น้ำทะเล 50 m จากแนวชายฝั่ง จุดที่ 1 ขวามือถนนหน้าออกจากรังเรน 47N 420422 871945						
Date Analysis Commenced	Dec 08, 2023						
Condition of Sample	Contained in two BOD bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
Fecal Coliform	CFU/100mL	-	-	13	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9222 D	Songkhla
Total Coliform	MPN/100mL	-	-	23.0	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
Dissolved Oxygen *	mg/L	-	0.1	7.3	≥4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Songkhla
Nitrate as N *	mg/L	0.003	0.02	0.07	≤0.06	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 E	Bangkok
pH at 25 degree C *		-	-	8.1	7.0-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Phosphate as P *	mg/L	0.005	0.01	0.02	≤0.015	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-P (E)	Bangkok
Salinity *	ppt	-	-	30.8	Change from lower salinity not more than 10%	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2520 B	Songkhla
Temperature *	Degree C	-	-	28.4	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Songkhla

Approved by

Tuanjai Thangklang
Manager

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports_All_GL.rpt (6:49PM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 23133842

Date Received : Dec 08, 2023
Date Reported : Dec 14, 2023
Report Number : 2858335-1

Page 2 of 4

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 4)
Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Tuanjai Thangklang
Manager

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports_All_GL.rpt (6:49PM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location:



TESTING
No.0166

Lot ID: 23133842

Date Received : Dec 08, 2023
Date Reported : Dec 14, 2023
Report Number : 2858335-1

Page 3 of 4

Sample Number	23133842-2						
Sampled Date	Dec 07, 2023 2:30 PM						
Sample Description	Seawater						
Location	น้ำทะเล 50 m จากแนวชายฝั่ง จุดที่ 2 ชายฝั่งหน้าออกจากโรงแรม 47 419951 871900						
Date Analysis Commenced	Dec 08, 2023						
Condition of Sample	Contained in two BOD bottles and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
Fecal Coliform	CFU/100mL	-	-	1	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9222 D	Songkhla
Total Coliform	MPN/100mL	-	-	9.3	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
Dissolved Oxygen *	mg/L	-	0.1	7.0	≥4	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-O (C)	Songkhla
Nitrate as N *	mg/L	0.003	0.02	0.08	≤0.06	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NO3 E	Bangkok
pH at 25 degree C *		-	-	8.1	7.0-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Phosphate as P *	mg/L	0.005	0.01	<0.01	≤0.015	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-P (E)	Bangkok
Salinity *	ppt	-	-	30.7	Change from lower salinity not more than 10%	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2520 B	Songkhla
Temperature *	Degree C	-	-	28.2	Change from natural condition not more than 2 degree C	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Songkhla

Approved by

Tuanjai Thangklang
Manager

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports_All_GL.rpt (6:49PM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location:



TESTING
No.0166

Lot ID: 23133842

Date Received : Dec 08, 2023
Date Reported : Dec 14, 2023
Report Number : 2858335-1

Page 4 of 4

Guideline : Notification of the National Environmental Board, B.E.2564 : Coastal Water Quality Standard (Class 4)
Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Tuanjai Thangklang
Manager

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports_All_GL.rpt (6:49PM)

ภาคผนวก ง.2

ผลการวิเคราะห์เพลงก่ตอนพืช
เพลงก่ตอนสัตว์ และสัตว์หน้าดิน



สถานีวิจัยประมงศรีราชา

101/12 หมู่ 9 ต. บางพระ

อ. ศรีราชา จ. ชลบุรี 20110

โทร./โทรสาร. (038) 311379

Client : Emerald Bay Villa Co., Ltd.

Address : 88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

Project Name : Rosewood Phuket Residences

รายงานผลการวิเคราะห์แพลงก์ตอนพืช

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 20 มิถุนายน 2566)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)	
	2361109-1	2361109-2
Division Cyanophyta		
Class Cyanophyceae		
Order Nostocales		
Family Oscillatoriaceae		
1. <i>Oscillatoria erythraea</i>	-	343,000
Family Nostocaceae		
2. <i>Pseudanabaena</i> sp.	-	23,000
Division Chlorophyta		
Class Chlorophyceae		
Order Ulotrichales		
Family Ulotrichaceae		
3. <i>Ulothrix</i> sp.	109,000	320,000

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 20 มิถุนายน 2566)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)	
	2361109-1	2361109-2
Division Chromophyta		
Class Bacillariophyceae		
Order Biddulphiales		
Suborder Coscinodiscineae		
Family Thalassiosiraceae		
4. <i>Cyclotella striata</i>	174,000	91,000
5. <i>Planktoniella blanda</i>	44,000	-
6. <i>Thalassiosira eccentrica</i>	22,000	-
Family Coscinodiscaceae		
7. <i>Coscinodiscus radiatus</i>	-	23,000
Suborder Rhizosoleniineae		
Family Rhizosoleniaceae		
8. <i>Guinardia delicatula</i>	153,000	-
9. <i>Guinardia striata</i>	436,000	-
10. <i>Proboscia alata</i>	87,000	-
Suborder Biddulphiineae		
Family Hemiaulaceae		
11. <i>Cerataulina pelagica</i>	1,046,000	1,280,000
12. <i>Climacodium frauenfeldianum</i>	-	69,000
Family Chaetoceraceae		
13. <i>Bacteriastrum</i> sp.	44,000	-
14. <i>Chaetoceros compressus</i>	2,093,000	1,462,000
15. <i>Chaetoceros curvisetus</i>	-	69,000
16. <i>Chaetoceros radicans</i>	109,000	46,000
17. <i>Chaetoceros</i> sp.	1,395,000	914,000
18. <i>Chaetoceros tortissimus</i>	22,000	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 20 มิถุนายน 2566)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)	
	2361109-1	2361109-2
Family Lithodermaceae		
19. <i>Bellerophon malleus</i>	153,000	-
Family Eupodidae		
20. <i>Odontella aurita</i>	44,000	46,000
Order Bacillariales		
Suborder Fragilariineae		
Family Fragilariaceae		
21. <i>Asterionellopsis glacialis</i>	44,000	46,000
22. <i>Synedra ulna</i>	-	69,000
Family Rhaphoneidaceae		
23. <i>Neodelphineis indica</i>	218,000	23,000
Family Thalassionemataceae		
24. <i>Thalassionema frauenfeldii</i>	-	46,000
25. <i>Thalassionema nitzschioides</i>	240,000	411,000
Family Tabellariaceae		
26. <i>Tabellaria fenestrata</i>	218,000	-
Family Licmophoriaceae		
27. <i>Licmophora abbreviata</i>	785,000	640,000
28. <i>Licmophora flabellata</i>	87,000	-
Suborder Bacillariineae		
Family Achnantheaceae		
29. <i>Cocconeis scutellum</i>	44,000	457,000
Family Cymbellaceae		
30. <i>Cymbella pusilla</i>	65,000	-
Family Lyrellaceae		
31. <i>Lyrella lyra</i>	22,000	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 20 มิถุนายน 2566)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)	
	2361109-1	2361109-2
Family Naviculaceae		
32. <i>Amphora robusta</i>	22,000	160,000
33. <i>Amphora</i> sp.	-	69,000
34. <i>Diploneis bombus</i>	-	137,000
35. <i>Diploneis smithii</i>	-	183,000
36. <i>Navicula lanceolata</i>	349,000	-
37. <i>Pinnularia</i> sp.	-	23,000
38. <i>Pleurosigma angulatum</i>	65,000	434,000
39. <i>Pleurosigma balticum</i>	-	114,000
40. <i>Pleurosigma narmanii</i>	-	69,000
41. <i>Pleurosigma</i> sp.	196,000	-
42. <i>Trachyneis</i> sp.	22,000	206,000
Family Bacillariaceae		
43. <i>Bacillaria paxillifer</i>	-	343,000
44. <i>Cylindrotheca closterium</i>	305,000	1,097,000
45. <i>Nitzschia acicularis</i>	-	183,000
46. <i>Nitzschia lorenziana</i>	-	229,000
47. <i>Nitzschia</i> sp.	305,000	-
48. <i>Pseudo-nitzschia</i> sp.	698,000	366,000
49. <i>Tryblionella hungarica</i>	44,000	-
Family Surirellaceae		
50. <i>Campylodiscus clypeus</i>	-	69,000
51. <i>Entomoneis robusta</i>	131,000	91,000
52. <i>Surirella ovata</i>	22,000	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 20 มิถุนายน 2566)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)	
	2361109-1	2361109-2
Class Dinophyceae		
Order Prorocentrales		
Family Prorocentraceae		
53. <i>Prorocentrum micans</i>	44,000	-
54. <i>Prorocentrum schilleri</i>	174,000	548,000
Order Dinophysiales		
Family Dinophysiaceae		
55. <i>Ornithocercus heteroporus</i>	-	91,000
Order Gonyaulacales		
Family Ceratiaceae		
56. <i>Ceratium fusus</i>	22,000	-
Family Gonyaulacaceae		
57. <i>Gonyaulax scrippsae</i>	22,000	-
58. <i>Gonyaulax spinifera</i>	-	46,000
Family Pyrophacaceae		
59. <i>Pyrophacus horologium</i>	65,000	-
Order Peridiniales		
Family Peridiniaceae		
60. <i>Peridinium quinquecorne</i>	327,000	137,000
Family Protoperidiniaceae		
61. <i>Protoperidinium abei</i>	174,000	274,000
62. <i>Protoperidinium conicum</i>	-	69,000
63. <i>Protoperidinium curtipes</i>	-	137,000
64. <i>Protoperidinium depressum</i>	-	91,000
65. <i>Protoperidinium sp.</i>	-	160,000


ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 20 มิถุนายน 2566)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)	
	2361109-1	2361109-2
ชนิดแพลงก์ตอนพืช	42	44
ปริมาณแพลงก์ตอนพืช	10,641,000	11,704,000
ดัชนีความหลากหลายแพลงก์ตอนพืช	2.9621	3.2106
ดัชนีความสม่ำเสมอแพลงก์ตอนพืช	0.7925	0.8484

Sample Location : 1. สถานี 2361109-1 : น้ำทะเล 50 m จากแนวชายฝั่ง จุดที่ 1 ขวามือหันหน้าออก
จากโรงแรม (GPS 47N 420422, 871945)
2. สถานี 2361109-2 : น้ำทะเล 50 m จากแนวชายฝั่ง จุดที่ 2 ขวามือหันหน้าออก
จากโรงแรม (GPS 47N 419951, 871900)

Condition of Sample : contained in one plastic bottle, sample containers comply to pretreatment-
preservation standards (APHA, USEPA)


(นางสาวกนกวรรณ ขาวค้อน)
ผู้วิเคราะห์


(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา



สถานีวิจัยประมงศรีราชา

101/12 หมู่ 9 ต. บางพระ

อ. ศรีราชา จ. ชลบุรี 20110

โทร./โทรสาร. (038) 311379

Client : Emerald Bay Villa Co., Ltd.

Address : 88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

Project Name : Rosewood Phuket Residences

รายงานผลการวิเคราะห์แหล่งกักต่อนสัตว์

ตาราง ผลการวิเคราะห์แหล่งกักต่อนสัตว์ (เก็บตัวอย่างวันที่ 20 มิถุนายน 2566)

ชนิดแหล่งกักต่อนสัตว์	ปริมาณแหล่งกักต่อนสัตว์ (หน่วยต่อลูกบาศก์เมตร)	
	2361109-1	2361109-2
Phylum Protozoa		
Subphylum Plasmodroma		
Class Sarcodina		
Subclass Rhizopoda		
Order Testacida		
Family Diffugiidae		
1. <i>Diffugia</i> sp.	-	46,000
Family Euglyphidae		
2. <i>Euglypha rotunda</i>	-	46,000
Order Foraminiferida		
3. <i>Globorotalia</i> sp.	-	46,000

ตาราง ผลการวิเคราะห์แหล่งกักต่อนพืช (เก็บตัวอย่างวันที่ 20 มิถุนายน 2566)

(ต่อ)

ชนิดแหล่งกักต่อนสัตว์	ปริมาณแหล่งกักต่อนสัตว์ (หน่วยต่อลูกบาศก์เมตร)	
	2361109-1	2361109-2
Subphylum Ciliophora		
Class Ciliata		
Subclass Spirotricha		
Order Tintinnida		
Family Codonellidae		
4. <i>Tintinnopsis beroidea</i>	-	46,000
5. <i>Tintinnopsis</i> sp.	-	23,000
Family Codonellopsidae		
6. <i>Codonellopsis ostensfeldi</i>	-	23,000
7. <i>Laackmaniella prolunga</i>	22,000	-
8. <i>Stenosemella nivalis</i>	22,000	-
Family Undellidae		
9. <i>Proplectella</i> sp.	22,000	-
Phylum Arthropoda		
Class Crustacea		
Subclass Copepoda		
10. Copepod nauplii	262,000	708,000
Order Cyclopoida		
11. Cyclopoid copepod	-	46,000
Subclass Cirripedia		
12. Cirripede nauplii	22,000	-
Phylum Mollusca		
Class Gastropoda		
13. Gastropod larvae	-	23,000


ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 20 มิถุนายน 2566)


(ต่อ)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)	
	2361109-1	2361109-2
Phylum Chordata		
Subphylum Urochordata		
Class Larvacea		
Family Oikopleuridae		
14. <i>Oikopleura</i> sp.	22,000	-
ชนิดแพลงก์ตอนสัตว์	6	9
ปริมาณแพลงก์ตอนสัตว์	372,000	1,007,000
ดัชนีความหลากหลายแพลงก์ตอนสัตว์	1.0831	1.2115
ดัชนีความสม่ำเสมอแพลงก์ตอนสัตว์	0.6045	0.5514

Sample Location : 1. สถานี 2361109-1 : น้ำทะเล 50 m จากแนวชายฝั่ง จุดที่ 1 ขวามือหันหน้าออก
จากโรงแรม (GPS 47N 420422, 871945)
2. สถานี 2361109-2 : น้ำทะเล 50 m จากแนวชายฝั่ง จุดที่ 2 ซ้ายมือหันหน้าออก
จากโรงแรม (GPS 47N 419951, 871900)

Condition of Sample : contained in one plastic bottle, sample containers comply to pretreatment-preservation standards (APHA, USEPA)


(นางสาวกนกวรรณ ขาวด่อน)
ผู้วิเคราะห์


(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา



สถานีวิจัยประมงศรีราชา
101/12 หมู่ 9 ต. บางพระ
อ. ศรีราชา จ. ชลบุรี 20110
โทร./โทรสาร. (038) 311379

Client : Emerald Bay Villa Co., Ltd.

Address : 88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

Project Name : Rosewood Phuket Residences

รายงานผลการวิเคราะห์สัตว์หน้าดิน

ตาราง ผลการวิเคราะห์สัตว์หน้าดิน (เก็บตัวอย่างวันที่ 20 มิถุนายน 2566)

ชนิดสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัวต่อตารางเมตร)	
	2361110-1	2361110-2
Phylum Arthropoda		
Class Insecta		
Order Diptera		
Family Dolichopodidae		
<i>Thinophilus</i> sp. (ตัวอ่อนแมลงวันขาขาว)	15	-
Phylum Mollusca		
Class Gastropoda		
Order Caenogastropoda		
Family Cerithiidae		
<i>Rhinoclavis</i> sp. (หอยจั่นก)	-	60
Order Littorinimorpha		
Family Naticidae		
<i>Notocochlis</i> sp. (หอยตะกาย)	15	-

ตาราง ผลการวิเคราะห์สัตว์หน้าดิน (เก็บตัวอย่างวันที่ 20 มิถุนายน 2566)

(ต่อ)

ชนิดสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัวต่อตารางเมตร)	
	2361110-1	2361110-1
ชนิดสัตว์หน้าดิน	2	1
ปริมาณสัตว์หน้าดิน	30	60
ค่าดัชนีความหลากหลายสัตว์หน้าดิน	0.6931	0.0000

Sample Location :

- สถานี 2361110-1 : 50 m จากแนวชายฝั่ง จุดที่ 1 ขวามือหันหน้าออกจากโรงแรม
(GPS 47N 420422, 871945)
- สถานี 2361110-2 : 50 m จากแนวชายฝั่ง จุดที่ 2 ซ้ายมือหันหน้าออกจากโรงแรม
(GPS 47N 419951, 871900)

Condition of Sample : contained in one plastic zip bag

.....
(นายอรรถวุฒิ กันทะวงศ์)
ผู้วิเคราะห์

.....
(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา



Thinophilus sp. (ตัวอ่อนแมลงวันขาว)



Rhinoclavis sp. (หอยขี้นก)



Notocochlis sp. (หอยตะกาย)



สถานีวิจัยประมงศรีราชา
101/12 หมู่ 9 ต. บางพระ
อ. ศรีราชา จ. ชลบุรี 20110
โทร./โทรสาร. (038) 311379

Client : Emerald Bay Villa Co., Ltd.

Address : 88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

Project Name : Rosewood Phuket Residences

รายงานผลการวิเคราะห์แพลงก์ตอนพืช

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 7 ธันวาคม 2566)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)	
	23133857-1	23133857-2
Division Cyanophyta		
Class Cyanophyceae		
Order Nostocales		
Family Oscillatoriaceae		
1. <i>Oscillatoria erythraea</i>	52,000	-
2. <i>Oscillatoria</i> sp.	330,000	102,000
3. <i>Oscillatoria tenuis</i>	1,630,000	3,353,000
Division Chlorophyta		
Class Chlorophyceae		
Order Zygomatales		
Family Zygnemataceae		
4. <i>Spirogyra</i> sp.	-	25,000

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 7 ธันวาคม 2566)

(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)	
	23133857-1	23133857-2
Class Euglenophyceae		
Order Euglenales		
Family Euglenaceae		
5. <i>Euglena oxyuris</i>	-	25,000
Division Chromophyta		
Class Bacillariophyceae		
Order Biddulphiales		
Suborder Coscinodiscineae		
Family Thalassiosiraceae		
6. <i>Cyclotella striata</i>	52,000	-
7. <i>Stephanodiscus</i> sp.	182,000	127,000
8. <i>Thalassiosira hendeyi</i>	26,000	25,000
9. <i>Thalassiosira</i> sp.	52,000	25,000
Family Coscinodiscaceae		
10. <i>Coscinodiscus</i> sp.	26,000	-
Suborder Rhizosoleniineae		
Family Rhizosoleniaceae		
11. <i>Dactyliosolen fragillissima</i>	52,000	-
12. <i>Proboscia alata</i>	-	25,000
Suborder Biddulphiineae		
Family Hemiaulaceae		
13. <i>Cerataulina pelagica</i>	-	51,000
Family Chaetoceraceae		
14. <i>Bacteriastrum furcatum</i>	-	25,000
15. <i>Chaetoceros affinis</i>	52,000	25,000
16. <i>Chaetoceros curvisetus</i>	26,000	51,000
17. <i>Chaetoceros didymus</i>	26,000	25,000

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 7 ธันวาคม 2566)
(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)	
	23133857-1	23133857-2
18. <i>Chaetoceros laciniosus</i>	78,000	76,000
19. <i>Chaetoceros lorenzianus</i>	26,000	-
20. <i>Chaetoceros mitra</i>	-	25,000
21. <i>Chaetoceros radicans</i>	26,000	152,000
22. <i>Chaetoceros socialis</i>	29,640,000	84,582,000
23. <i>Chaetoceros</i> sp.	104,000	-
Family Lithodesmaceae		
24. <i>Bellerochea horologicalis</i>	52,000	-
Order Bacillariales		
Suborder Fragilariineae		
Family Fragilariaceae		
25. <i>Synedra ulna</i>	52,000	-
Family Thalassionemataceae		
26. <i>Thalassionema frauenfeldii</i>	26,000	-
Family Licmophoriaceae		
27. <i>Licmophora ehrenbergii</i>	26,000	25,000
Suborder Bacillariineae		
Family Eunotiaceae		
28. <i>Eunotia pectinalis</i>	26,000	-
Family Achnanthaceae		
29. <i>Cocconeis</i> sp.	26,000	-
Family Lyrellaceae		
30. <i>Lyrella lyra</i>	26,000	-
Family Naviculaceae		
31. <i>Amphora ovalis</i>	78,000	-
32. <i>Amphora robusta</i>	-	25,000
33. <i>Diploneis bombus</i>	26,000	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 7 ธันวาคม 2566)
(ต่อ)

ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)	
	23133857-1	23133857-2
34. <i>Navicula cuspidata</i>	26,000	-
35. <i>Navicula lanceolata</i>	26,000	76,000
36. <i>Navicula</i> sp.	52,000	25,000
37. <i>Pleurosigma aestuarii</i>	26,000	-
38. <i>Pleurosigma angulatum</i>	-	25,000
39. <i>Pleurosigma</i> sp.	-	25,000
Family Bacillariaceae		
40. <i>Cylindrotheca closterium</i>	52,000	127,000
41. <i>Nitzschia lorenzisna</i>	26,000	25,000
42. <i>Nitzschia reversa</i>	-	25,000
43. <i>Nitzschia sigmoidea</i>	26,000	-
Family Surirellaceae		
44. <i>Entomoneis robusta</i>	26,000	-
45. <i>Campylodiscus clypeus</i>	26,000	-
Class Dinophyceae		
Order Gonyaulacales		
Family Gonyaulacaceae		
46. <i>Gonyaulax</i> sp.	26,000	-
Family Pyrophacaceae		
47. <i>Pyrophacus</i> sp.	-	25,000
Order Peridiniales		
Family Calciodinellaceae		
48. <i>Scrippsiella trocoidea</i>	-	76,000
Family Protoperidiniaceae		
49. <i>Protoperidinium conicum</i>	26,000	-
50. <i>Protoperidinium</i> sp.	-	25,000
51. <i>Protoperidinium thorianum</i>	26,000	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนพืช (เก็บตัวอย่างวันที่ 7 ธันวาคม 2566)


(ต่อ)

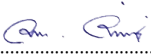
ชนิดแพลงก์ตอนพืช	ปริมาณแพลงก์ตอนพืช (หน่วยต่อลูกบาศก์เมตร)	
	23133857-1	23133857-2
ชนิดแพลงก์ตอนพืช	38	29
ปริมาณแพลงก์ตอนพืช	33,082,000	89,223,000
ดัชนีความหลากหลายแพลงก์ตอนพืช	0.5829	0.2791
ดัชนีความสม่ำเสมอแพลงก์ตอนพืช	0.1602	0.0829

Sample Location :

- สถานี 23133857-1 : น้ำทะเล 50 m จากแนวชายฝั่ง จุดที่ 1 ขวามือหันหน้าออก
จากโรงแรม (GPS 47N 420422, 871945)
- สถานี 23133857-2 : น้ำทะเล 50 m จากแนวชายฝั่ง จุดที่ 2 ซ้ายมือหันหน้าออก
จากโรงแรม (GPS 47N 419951, 871900)

Condition of Sample : contained in one plastic bottle, sample containers comply to pretreatment-preservation standards (APHA, USEPA)


.....
(นางสาวกนกวรรณ ขวาค่อน)
ผู้วิเคราะห์


.....
(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา



สถานีวิจัยประมงศรีราชา
101/12 หมู่ 9 ต. บางพระ
อ. ศรีราชา จ. ชลบุรี 20110
โทร./โทรสาร. (038) 311379

Client : Emerald Bay Villa Co., Ltd.

Address : 88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

Project Name : Rosewood Phuket Residences

รายงานผลการวิเคราะห์แพลงก์ตอนสัตว์

ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 7 ธันวาคม 2566)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)	
	23133857-1	23133857-2
Phylum Protozoa		
Subphylum Plasmodroma		
Class Sarcodina		
Subclass Rhizopoda		
Order Amoebida		
Family Amoebidae		
1. <i>Amoeba</i> sp.	-	25,000
Subphylum Ciliophora		
Class Ciliata		
Subclass Spirotricha		
Order Tintinnida		
Family Petalotrichidae		
2. <i>Metacylis pithos</i>	26,000	-

ตาราง ผลการวิเคราะห์แพลงก์ตอนสัตว์ (เก็บตัวอย่างวันที่ 7 ธันวาคม 2566)
(ต่อ)

ชนิดแพลงก์ตอนสัตว์	ปริมาณแพลงก์ตอนสัตว์ (หน่วยต่อลูกบาศก์เมตร)	
	23133857-1	23133857-2
Phylum Arthropoda		
Class Crustacea		
Subclass Branchiopoda		
Order Diplostraca		
Suborder Cladocera		
Family Moinidae		
3. Moina macrocopa	52,000	-
Subclass Ostracoda		
Order Diplostraca		
Family Cypridae		
4. Cypridopsis sp.	-	25,000
Subclass Copepoda		
5. Copepod nauplius	416,000	127,000
Order Calanoida		
6. Calanoid copepod	52,000	25,000
Order Harpacticoida		
7. Harpacticoid copepod	26,000	-
ชนิดแพลงก์ตอนสัตว์	5	4
ปริมาณแพลงก์ตอนสัตว์	572,000	202,000
ดัชนีความหลากหลายแพลงก์ตอนสัตว์	0.9486	1.0675
ดัชนีความสม่ำเสมอแพลงก์ตอนสัตว์	0.5894	0.7700

Sample Location : 1. สถานี 23133857-1 : น้ำทะเล 50 m จากแนวชายฝั่ง จุดที่ 1 ขวามือหันหน้าออก
จากโรงแรม (GPS 47N 420422, 871945)
2. สถานี 23133857-2 : น้ำทะเล 50 m จากแนวชายฝั่ง จุดที่ 2 ซ้ายมือหันหน้าออก
จากโรงแรม (GPS 47N 419951, 871900)

Condition of Sample : contained in one plastic bottle, sample containers comply to pretreatment
preservation standards (APHA, USEPA)


.....
(นางสาวกนกวรรณ ขาวดอน)
ผู้วิเคราะห์


.....
(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา



สถานีวิจัยประมงศรีราชา
101/12 หมู่ 9 ต. บางพระ
อ. ศรีราชา จ. ชลบุรี 20110
โทร./โทรสาร. (038) 311379

Client : Emerald Bay Villa Co., Ltd.

Address : 88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

Project Name : Rosewood Phuket Residences

Sample Location : 1. สถานี 23133868-1 : 50 m จากแนวชายฝั่ง จุดที่ 1 ขวามือหันหน้าออกจากโรงแรม
(GPS 47N 420422, 871945)
2. สถานี 23133868-2 : 50 m จากแนวชายฝั่ง จุดที่ 2 ซ้ายมือหันหน้าออกจากโรงแรม
(GPS 47N 419951, 871900)

Condition of Sample : contained in one plastic zip bag

.....
(นายอรฤติ กันทะวงศ์)
ผู้วิเคราะห์

.....
(นายอลงกต อินทรชาติ)
หัวหน้าสถานีวิจัยประมงศรีราชา

รายงานผลการวิเคราะห์สัตว์หน้าดิน

ตาราง ผลการวิเคราะห์สัตว์หน้าดิน (เก็บตัวอย่างวันที่ 7 ธันวาคม 2566)

สกุลสัตว์หน้าดิน	ปริมาณสัตว์หน้าดิน (ตัวต่อตารางเมตร)	
	23133868-1	23133868-2
Phylum Annelida		
Class Polychaeta		
Order Phyllodocida		
Family Nephtyidae		
Nephtys sp. (ไส้เดือนทะเล)	15	-
Family Syllidae		
Syllis sp. (ไส้เดือนทะเล)	30	-
Phylum Mollusca		
Class Bivalvia		
Order Cardiida		
Family Tellinidae		
Tellina sp. (หอยสองฝาชนิดหนึ่ง)	15	178
สกุลสัตว์หน้าดิน	3	1
ปริมาณสัตว์หน้าดิน	60	178
ค่าดัชนีความหลากหลายสัตว์หน้าดิน	1.0397	0.0000



Nephtys sp. (ไส้เดือนทะเล)



Syllis sp. (ไส้เดือนทะเล)



Tellina sp. (หอยสองฝาชนิดหนึ่ง)

ภาคผนวก ง.3

ผลการวิเคราะห์คุณภาพน้ำใช้



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 238626

Date Received : Mar 17, 2023

Date Reported : Apr 05, 2023

Report Number : 2604467-1

Page 1 of 3

Sample Number	238626-2						
Sampled Date	Mar 16, 2023 10:30 AM						
Sample Description	Clean water						
Location	ตึกหน้าของ Villa R26 (CW)						
Date Analysis Commenced	Mar 17, 2023						
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.04	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	<0.005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	121	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607311 FMA1

Life Sciences

www.alsglobal.com

S:\Report\AL_SL\pt (7-4094)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 238626

Date Received : Mar 17, 2023

Date Reported : Apr 05, 2023

Report Number : 2604467-1

Page 2 of 3

Sample Number	238626-2						
Sampled Date	Mar 16, 2023 10:30 AM						
Sample Description	Clean water						
Location	ตึกหน้าของ Villa R26 (CW)						
Date Analysis Commenced	Mar 17, 2023						
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.4	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO3	mg/L	0.3	1.0	3.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.8	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	1.6	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	18.0	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	462	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	289	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.57	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607311 FMA1

Life Sciences

www.alsglobal.com

S:\Report\AL_SL\pt (7-4094)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING
No.0166

Lot ID: 238626

Date Received : Mar 17, 2023

Date Reported : Apr 05, 2023

Report Number : 2604467-1

Page 3 of 3

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING
No.0166

Lot ID: 238626

Date Received : Mar 17, 2023

Date Reported : Mar 30, 2023

Report Number : 2604468-1

Page 1 of 1

Sample Number	238626-3						
Sampled Date	Mar 16, 2023 11:30 AM						
Sample Description	Clean water						
Location	ใกล้หน้า Villa R23 (HW)						
Date Analysis Commenced	Mar 17, 2023						
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	16	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
pH at 25 degree C		-	-	7.9	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-31/EMAN

Life Sciences

www.alsglobal.com

S:\Reports_ALS\SL\pt (7-30PM)

RIGHT SOLUTIONS RIGHT PARTNER

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Scientist (4)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-31/EMAN

Life Sciences

www.alsglobal.com

S:\Reports_ALS\SL\pt (7-30PM)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 238626

Date Received : Mar 17, 2023

Date Reported : Mar 30, 2023

Report Number : 2604469-1

Page 1 of 1

Sample Number	238626-4
Sampled Date	Mar 16, 2023 10:20 AM
Sample Description	Clean water
Location	อาคาร Villa R26 (HW)
Date Analysis Commenced	Mar 17, 2023
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^(A) <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
pH at 25 degree C		-	-	7.8	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Scientist (4)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16609-31-EMM

Life Sciences

www.alsglobal.com

S:\Report\AL_01_01 (4-13)P

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 238626

Date Received : Mar 17, 2023

Date Reported : May 31, 2023

Report Number : 2604472-1 Rev. No.1

Page 1 of 1

Sample Number	238626-7
Sampled Date	Mar 16, 2023 9:52 AM
Sample Description	Clean water
Location	Elevated Tank. (น้ำ RO)
Date Analysis Commenced	Mar 17, 2023
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^(A) <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	340	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
pH at 25 degree C		-	-	7.8	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. Microbiological Testing Result <1 mean Bacteria not found in agar plate.

2. This Analysis test report is reissued to supersede report No.2604472-1, Date Reported : Mar 30, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16609-31-EMM

Life Sciences

www.alsglobal.com

S:\Report\AL_01_01 (7-20)P

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Lot ID: 2331444

Date Received : Mar 23, 2023

Date Reported : May 31, 2023

Report Number : 2610735-1 Rev. No.1

Page 1 of 3

Sample Number	2331444-1
Sampled Date	Mar 22, 2023 10:20 AM
Sample Description	Clean water
Location	บ้านพัก Villa R23 (CW)
Date Analysis Commenced	Mar 23, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	<0.005	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	Not Detected	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	6600	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	42.9	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

S:\Reports\AL GL\pt (E-0649)

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Lot ID: 2331444

Date Received : Mar 23, 2023

Date Reported : May 31, 2023

Report Number : 2610735-1 Rev. No.1

Page 2 of 3

Sample Number	2331444-1
Sampled Date	Mar 22, 2023 10:20 AM
Sample Description	Clean water
Location	บ้านพัก Villa R23 (CW)
Date Analysis Commenced	Mar 23, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.1	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO3	mg/L	0.3	1.0	4.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.3	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	3.2	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	125	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	50	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.26	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. Microbiological Testing Result <1 mean Bacteria not found in agar plate.

2. This Analysis test report is reissued to supersede report No.2610735-1, Date Reported : Apr 08, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

S:\Reports\AL GL\pt (E-0649)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2331444

Date Received : Mar 23, 2023

Date Reported : May 31, 2023

Report Number : 2610735-1 Rev. No.1

Page 3 of 3

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2330408

Date Received : Apr 07, 2023

Date Reported : May 31, 2023

Report Number : 2632775-1 Rev. No.1

Page 1 of 3

Sample Number	2330408-1						
Sampled Date	Apr 06, 2023 1:42 PM						
Sample Description	Clean water						
Location	คลองน้ำจืด Villa R23 (CW)						
Date Analysis Commenced	Apr 07, 2023						
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.006	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	<0.005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	58.7	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

1660735-1 F0001

Life Sciences

www.alsglobal.com

S:\Report\AL\SL\pt (83646)

RIGHT SOLUTIONS RIGHT PARTNER

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

1660735-1 F0001

Life Sciences

www.alsglobal.com

S:\Report\AL\SL\pt (74244)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 2330408

Date Received : Apr 07, 2023
Date Reported : May 31, 2023
Report Number : 2632775-1 Rev. No.1

Page 2 of 3

Sample Number	2330408-1
Sampled Date	Apr 06, 2023 1:42 PM
Sample Description	Clean water
Location	วิลล่า R23 (CW)
Date Analysis Commenced	Apr 07, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.1	≤ 1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO ₃	mg/L	0.3	1.0	4.4	≤ 50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.9	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	7.2	≤ 250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	144	≤ 1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO ₃	mg/L	-	1	68	≤ 300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.35	≤ 5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. Microbiological Testing Result <1 mean Bacteria not found in agar plate.
2. This Analysis test report is reissued to supersede report No.2632775-1, Date Reported : Apr 26, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16602-31/1 FMA/1

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Report\AL_Group (7-12AM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 2330408

Date Received : Apr 07, 2023
Date Reported : May 31, 2023
Report Number : 2632775-1 Rev. No.1

Page 3 of 3

Remark :

- * LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMS: Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16602-31/1 FMA/1

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Report\AL_Group (7-12AM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2330408

Date Received : Apr 07, 2023

Date Reported : May 31, 2023

Report Number : 2632776-1 Rev. No.1

Page 1 of 3

Sample Number	2330408-2						
Sampled Date	Apr 06, 2023 1:22 PM						
Sample Description	Clean water						
Location	วิลล่าของ Villa R26 (CW)						
Date Analysis Commenced	Apr 07, 2023						
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.04	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	<0.005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	106	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchananawich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16603-SU-FMAY

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Report\AL_GA_rpt\7-13AM



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2330408

Date Received : Apr 07, 2023

Date Reported : May 31, 2023

Report Number : 2632776-1 Rev. No.1

Page 2 of 3

Sample Number	2330408-2						
Sampled Date	Apr 06, 2023 1:22 PM						
Sample Description	Clean water						
Location	วิลล่าของ Villa R26 (CW)						
Date Analysis Commenced	Apr 07, 2023						
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.3	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO ₃	mg/L	0.3	1.0	8.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.8	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	1.4	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CI (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	21.9	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	348	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Total Hardness as CaCO ₃	mg/L	-	1	220	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.53	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. Microbiological Testing Result <1 mean Bacteria not found in agar plate.

2. This Analysis test report is reissued to supersede report No.2632776-1, Date Reported : Apr 26, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchananawich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16603-SU-FMAY

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Report\AL_GA_rpt\7-13AM



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2330408

Date Received : Apr 07, 2023

Date Reported : May 31, 2023

Report Number : 2632776-1 Rev. No.1

Page 3 of 3

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2330408

Date Received : Apr 07, 2023

Date Reported : May 31, 2023

Report Number : 2632777-1 Rev. No.1

Page 1 of 2

Sample Number	2330408-3
Sampled Date	Apr 06, 2023 1:55 PM
Sample Description	Clean water
Location	ใกล้หน้าของ Villa R23 (HW)
Date Analysis Commenced	Apr 07, 2023
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
pH at 25 degree C		-	-	7.8	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

- Note :
1. Microbiological Testing Result <1 mean Bacteria not found in agar plate.
 2. This Analysis test report is reissued to supersede report No.2632777-1, Date Reported : Apr 26, 2023 due to revise guideline/specification
- Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

166001-01/THAI

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Report\AL_GLP\17-13491

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

166001-01/THAI

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Report\AL_GLP\17-13491



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2330408

Date Received : Apr 07, 2023

Date Reported : May 31, 2023

Report Number : 2632777-1 Rev. No.1

Page 2 of 2

The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2330408

Date Received : Apr 07, 2023

Date Reported : May 31, 2023

Report Number : 2632777-1 Rev. No.1

Page 1 of 2

Sample Number 2330408-4
Sampled Date Apr 06, 2023 1:17 PM
Sample Description Clean water
Location คัดน้ำของ Villa R26 (HW)
Date Analysis Commenced Apr 07, 2023
Condition of Sample Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
pH at 25 degree C		-	-	7.7	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. Microbiological Testing Result <1 mean Bacteria not found in agar plate.

2. This Analysis test report is reissued to supersede report No.2632778-1, Date Reported : Apr 26, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-SU-THAI

Life Sciences

www.alsglobal.com

S:\Reports\AL_02.jpg (7/434K)

RIGHT SOLUTIONS RIGHT PARTNER

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-SU-THAI

Life Sciences

www.alsglobal.com

S:\Reports\AL_02.jpg (7/434K)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2330408

Date Received : Apr 07, 2023

Date Reported : May 31, 2023

Report Number : 2632778-1 Rev. No.1

Page 2 of 2

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2330408

Date Received : Apr 07, 2023

Date Reported : May 31, 2023

Report Number : 2632781-1 Rev. No.1

Page 1 of 2

Sample Number 2330408-7
Sampled Date Apr 06, 2023 11:12 AM
Sample Description Clean water
Location Elevated Tank. (น้ำ RO)
Date Analysis Commenced Apr 07, 2023
Condition of Sample Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	390	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
pH at 25 degree C		-	-	7.8	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. Microbiological Testing Result <1 mean Bacteria not found in agar plate.

2. This Analysis test report is issued to supersede report No.2632781-1, Date Reported : Apr 26, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "LT" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-31/FMAR

Life Sciences

www.alsglobal.com

S:\Reports_LAB\02\pt (7-43AM)

RIGHT SOLUTIONS RIGHT PARTNER

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-31/FMAR

Life Sciences

www.alsglobal.com

S:\Reports_LAB\02\pt (7-43AM)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2330408

Date Received : Apr 07, 2023

Date Reported : May 31, 2023

Report Number : 2632781-1 Rev. No.1

Page 2 of 2

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2344312

Date Received : May 05, 2023

Date Reported : May 31, 2023

Report Number : 2658262-1 Rev. No.1

Page 1 of 3

Sample Number 2344312-1
Sampled Date May 04, 2023 2:15 PM
Sample Description Clean water
Location คลองน้ำผาว Villa R23 (CW)
Date Analysis Commenced May 05, 2023
Condition of Sample Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.02	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	Not Detected	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	310	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	43.8	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16600-30/21949

Life Sciences

www.alsglobal.com

S:\Reports\AL\GL\ref (17-4349)

RIGHT SOLUTIONS RIGHT PARTNER

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16600-30/21949

Life Sciences

www.alsglobal.com

S:\Reports\AL\GL\ref (18-3149)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 2344312
Date Received : May 05, 2023
Date Reported : May 31, 2023
Report Number : 2658262-1 Rev. No.1

Page 2 of 3

Sample Number	2344312-1
Sampled Date	May 04, 2023 2:15 PM
Sample Description	Clean water
Location	ห้องน้ำ Villa R23 (CW)
Date Analysis Commenced	May 05, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.2	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO ₃	mg/L	0.3	1.0	2.3	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.5	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	2.6	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	110	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO ₃	mg/L	-	1	42	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.36	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. Microbiological Testing Result <1 mean Bacteria not found in agar plate.
2. This Analysis test report is reissued to supersede report No.2658262-1, Date Reported : May 22, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

1660731/THAN

Life Sciences

www.alsglobal.com

S:\Report\AL_01_01\ (8-3349)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 2344312
Date Received : May 05, 2023
Date Reported : May 31, 2023
Report Number : 2658262-1 Rev. No.1

Page 3 of 3

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

1660731/THAN

Life Sciences

www.alsglobal.com

S:\Report\AL_01_01\ (8-3349)

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:

Lot ID: 2344312

Date Received : May 05, 2023

Date Reported : May 31, 2023

Report Number : 2658263-1 Rev. No.1

Page 1 of 3

Sample Number	2344312-2
Sampled Date	May 04, 2023 2:40 PM
Sample Description	Clean water
Location	คอกน้ำของ Villa R26 (CW)
Date Analysis Commenced	May 05, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.02	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	<0.005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	125	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanch Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16602/31/11401

Life Sciences

www.alsglobal.com

S:\Report\AL_GS_01 (8-3340)

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:

Lot ID: 2344312

Date Received : May 05, 2023

Date Reported : May 31, 2023

Report Number : 2658263-1 Rev. No.1

Page 2 of 3

Sample Number	2344312-2
Sampled Date	May 04, 2023 2:40 PM
Sample Description	Clean water
Location	คอกน้ำของ Villa R26 (CW)
Date Analysis Commenced	May 05, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.3	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO3	mg/L	0.3	1.0	3.4	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.6	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
Sulfate	mg/L	0.15	0.5	20.2	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	384	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	220	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.46	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. Microbiological Testing Result <1 mean Bacteria not found in agar plate.

2. This Analysis test report is reissued to supersede report No.2658263-1, Date Reported : May 22, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanch Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16602/31/11401

Life Sciences

www.alsglobal.com

S:\Report\AL_GS_01 (8-3340)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2344312

Date Received : May 05, 2023

Date Reported : May 31, 2023

Report Number : 2658263-1 Rev. No.1

Page 3 of 3

- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2344312

Date Received : May 05, 2023

Date Reported : May 31, 2023

Report Number : 2658264-1 Rev. No.1

Page 1 of 1

Sample Number	2344312-3						
Sampled Date	May 04, 2023 2:10 PM						
Sample Description	Clean water						
Location	คอกน้ำของ Villa R23 (HW)						
Date Analysis Commenced	May 05, 2023						
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
pH at 25 degree C		-	-	7.8	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. Microbiological Testing Result <1 mean Bacteria not found in agar plate.

2. This Analysis test report is reissued to supersede report No.2658264-1, Date Reported : May 22, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-33/THAIL

Life Sciences

www.alsglobal.com

S:\Reports\ALB\0166 (83349)

RIGHT SOLUTIONS RIGHT PARTNER

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-33/THAIL

Life Sciences

www.alsglobal.com

S:\Reports\ALB\0166 (83349)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2344312

Date Received : May 05, 2023

Date Reported : May 31, 2023

Report Number : 2658265-1 Rev. No.1

Page 1 of 1

Sample Number	2344312-4
Sampled Date	May 04, 2023 2:35 PM
Sample Description	Clean water
Location	วิลล่า R26 (HW)
Date Analysis Commenced	May 05, 2023
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
pH at 25 degree C		-	-	7.7	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. Microbiological Testing Result <1 mean Bacteria not found in agar plate.

2. This Analysis test report is reissued to supersede report No.2658265-1, Date Reported : May 22, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMS Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

1660731711411

Life Sciences

www.alsglobal.com

S:\Reports_LAB_GL\pt (83444)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2344312

Date Received : May 05, 2023

Date Reported : May 31, 2023

Report Number : 2658268-1 Rev. No.1

Page 1 of 1

Sample Number	2344312-7
Sampled Date	May 04, 2023 1:30 PM
Sample Description	Clean water
Location	Elevated Tank. (น้ำ RO)
Date Analysis Commenced	May 05, 2023
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	170	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
pH at 25 degree C		-	-	7.7	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. Microbiological Testing Result <1 mean Bacteria not found in agar plate.

2. This Analysis test report is reissued to supersede report No.2658268-1, Date Reported : May 22, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMS Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

1660731711411

Life Sciences

www.alsglobal.com

S:\Reports_LAB_GL\pt (83444)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Sample Number 2361272-1
Sampled Date Jun 08, 2023 12:46 PM
Sample Description Clean water
Location ห้องน้ำดื่ม Villa R23 (CW)
Date Analysis Commenced Jun 09, 2023
Condition of Sample Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	Not Detected	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	Not Detected	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
<i>Legionella spp.</i> *	CFU/L	-	-	Not Detected**	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	1400	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	5.6	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (Z)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16689-311 (10/21)

Life Sciences

www.alsglobal.com

S:\Reports_AE_GA_04_C110000

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Lot ID: 2361272

Date Received : Jun 09, 2023

Date Reported : Jul 10, 2023

Report Number : 2691160-1 Rev. No.1

Page 1 of 3



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Sample Number 2361272-1
Sampled Date Jun 08, 2023 12:46 PM
Sample Description Clean water
Location ห้องน้ำดื่ม Villa R23 (CW)
Date Analysis Commenced Jun 09, 2023
Condition of Sample Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	Not Detected	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO3	mg/L	0.3	1.0	Not Detected	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.8	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	<0.5	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	21	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	2	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.31	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. ** Not Detected mean Bacteria not found in agar plate.

2. This Analysis test report is reissued to supersede report No.2691160-1, Date Reported : Jun 26, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (Z)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16689-311 (10/21)

Life Sciences

www.alsglobal.com

S:\Reports_AE_GA_04_C110000

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2361272

Date Received : Jun 09, 2023

Date Reported : Jul 10, 2023

Report Number : 2691160-1 Rev. No.1

Page 3 of 3

- * LOD : Limit of Detection
- * "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- * Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- * [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMS Accreditation No. 1031/47.
- * The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2361272

Date Received : Jun 09, 2023

Date Reported : Jul 10, 2023

Report Number : 2691161-1 Rev. No.1

Page 1 of 3

Sample Number	2361272-2
Sample Date	Jun 08, 2023 12:25 PM
Sample Description	Clean water
Location	ใกล้บ้าน Villa R26 (CW)
Date Analysis Commenced	Jun 09, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.02	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	<0.005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
<i>Legionella spp.</i> *	CFU/L	-	-	Not Detected**	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	115	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

5/Report_A8_01_01 (1.0100)

RIGHT SOLUTIONS RIGHT PARTNER

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

5/Report_A8_01_01 (1.0100)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Sample Number 2361272-2
Sampled Date Jun 08, 2023 12:25 PM
Sample Description Clean water
Location ถัดหน้า Villa R26 (CW)
Date Analysis Commenced Jun 09, 2023
Condition of Sample Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Page 2 of 3

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^(A) Fluoride as F	mg/L	0.05	0.1	0.4	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^(A) Nitrate as NO3	mg/L	0.3	1.0	<1.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.6	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
Sulfate	mg/L	0.15	0.5	28.4	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	454	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	228	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.36	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. ** Not Detected mean Bacteria not found in agar plate.

2. This Analysis test report is reissued to supersede report No.2691161-1, Date Reported : Jun 26, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16600-312 (MAY)

Life Sciences

www.alsglobal.com

16600-312 (MAY)

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Lot ID: 2361272

Date Received : Jun 09, 2023

Date Reported : Jul 10, 2023

Report Number : 2691161-1 Rev. No.1



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Page 3 of 3



TESTING
No.0166

Lot ID: 2361272

Date Received : Jun 09, 2023

Date Reported : Jul 10, 2023

Report Number : 2691161-1 Rev. No.1

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16600-312 (MAY)

Life Sciences

www.alsglobal.com

16600-312 (MAY)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Sample Number 2361272-3
Sampled Date Jun 08, 2023 12:42 PM
Sample Description Clean water
Location ทึกน้ำดิบ Villa R23 (HW)
Date Analysis Commenced Jun 09, 2023
Condition of Sample Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
<i>Legionella spp.</i> *	CFU/L	-	-	Not Detected**	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
pH at 25 degree C		-	-	7.7	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. ** Not Detected mean Bacteria not found in agar plate.

2. This Analysis test report is reissued to supersede report No.2691162-1, Date Reported : Jun 26, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Tuanjai Thangklang
Manager

ADDRESS 114/1 Moo 8 Karnchanawarich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

S:\Report_Air_QA\qr_113099

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Lot ID: 2361272

Date Received : Jun 09, 2023

Date Reported : Jul 10, 2023

Report Number : 2691162-1 Rev. No.1

Page 1 of 1



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Sample Number 2361272-4
Sampled Date Jun 08, 2023 12:22 PM
Sample Description Clean water
Location ทึกน้ำดิบ Villa R26 (HW)
Date Analysis Commenced Jun 09, 2023
Condition of Sample Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
<i>Legionella spp.</i> *	CFU/L	-	-	Not Detected**	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
pH at 25 degree C		-	-	7.7	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. ** Not Detected mean Bacteria not found in agar plate.

2. This Analysis test report is reissued to supersede report No.2691163-1, Date Reported : Jun 26, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Tuanjai Thangklang
Manager

ADDRESS 114/1 Moo 8 Karnchanawarich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

S:\Report_Air_QA\qr_113099

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Sample Number 2361272-7
Sampled Date Jun 08, 2023 11:55 AM
Sample Description Clean water
Location Elevated Tank. (หน้า RO)
Date Analysis Commenced Jun 09, 2023
Condition of Sample Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
<i>Legionella spp.</i> *	CFU/L	-	-	Not Detected**	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	8800	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
pH at 25 degree C	-	-	-	7.7	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CI (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : This Analysis test report is reissued to supersede report No.2691166-1, Date Reported : Jun 26, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Tuanjai Thangklang
Manager

ADDRESS 114/1 Moo 8 Karnchanawanch Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16600-3111999

Life Sciences

www.alsglobal.com

16600-3111999

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Lot ID: 2361272

Date Received : Jun 09, 2023

Date Reported : Jul 10, 2023

Report Number : 2691166-1 Rev. No.1

Page 1 of 1



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Sample Number 2361272-14
Sampled Date Jun 08, 2023 11:45 AM
Sample Description Clean water
Location S1 ห้องน้ำร้อน
Date Analysis Commenced Jun 09, 2023
Condition of Sample Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.03	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	0.008	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
<i>Legionella spp.</i> *	CFU/L	-	-	Not Detected**	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	280	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
Chloride as Cl	mg/L	0.06	0.2	114	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanch Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16600-3111999

Life Sciences

www.alsglobal.com

16600-3111999

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Sample Number 2361272-14
 Sample Date Jun 08, 2023 11:45 AM
 Sample Description Clean water
 Location S1 ซอยน้ำจืด
 Date Analysis Commenced Jun 09, 2023
 Condition of Sample Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Fluoride as F	mg/L	0.05	0.1	0.4	≤1.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Nitrate as N	mg/L	0.06	0.2	0.3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.8	6.5-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
Sulfate	mg/L	0.15	0.5	28.1	≤250	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	466	≤1000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO ₃	mg/L	-	1	206	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.75	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. ** Not Detected mean Bacteria not found in agar plate.
 2. This Analysis test report is reissued to supersede report No.2691160-1, Date Reported : Jun 26, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16600-311 16602

Life Sciences

www.alsglobal.com

S:\Report\AL_G\JPL L1109M

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Lot ID: 2361272

Date Received : Jun 09, 2023

Date Reported : Jul 10, 2023

Report Number : 2691173-1 Rev. No.1

Page 2 of 3



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

- LOD : Limit of Detection
 - "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
 - Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
 - [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMS Accreditation No. 1031/47.
 - The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Fluoride as F	mg/L	0.05	0.1	0.4	≤1.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Nitrate as N	mg/L	0.06	0.2	0.3	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.8	6.5-8.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
Sulfate	mg/L	0.15	0.5	28.1	≤250	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	466	≤1000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO ₃	mg/L	-	1	206	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.75	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. ** Not Detected mean Bacteria not found in agar plate.
 2. This Analysis test report is reissued to supersede report No.2691160-1, Date Reported : Jun 26, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16600-311 16602

Life Sciences

www.alsglobal.com

S:\Report\AL_G\JPL L1109M

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:

Lot ID: 2371370

Date Received : Jul 13, 2023

Date Reported : Jul 31, 2023

Report Number : 2718581-1

Sample Number	2371370-1
Sampled Date	Jul 12, 2023 11:52 AM
Sample Description	Clean water
Location	ที่พัก Villa R23 (CW)
Date Analysis Commenced	Jul 13, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Page 1 of 3

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	<0.005	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	<0.005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	320	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	50.2	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:

Lot ID: 2371370

Date Received : Jul 13, 2023

Date Reported : Jul 31, 2023

Report Number : 2718581-1

Sample Number	2371370-1
Sampled Date	Jul 12, 2023 11:52 AM
Sample Description	Clean water
Location	ที่พัก Villa R23 (CW)
Date Analysis Commenced	Jul 13, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Page 2 of 3

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.1	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO3	mg/L	0.3	1.0	<1.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.6	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	4.3	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	140	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	37	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.33	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

Remark :

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING
No.0166

Lot ID: 2371370

Date Received : Jul 13, 2023

Date Reported : Jul 31, 2023

Report Number : 2718581-1

Page 3 of 3

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING
No.0166

Lot ID: 2371370

Date Received : Jul 13, 2023

Date Reported : Jul 31, 2023

Report Number : 2718582-1

Page 1 of 3

Sample Number 2371370-2
Sampled Date Jul 12, 2023 11:20 AM
Sample Description Clean water
Location คลองน้ำตกร Villa R26 (CW)
Date Analysis Commenced Jul 13, 2023
Condition of Sample Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.02	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	<0.005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
^[A] Escherichia coli	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] Legionella spp.	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	300	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	139	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

S:\Reports\AL CL\ref (6.0)PH

RIGHT SOLUTIONS RIGHT PARTNER

Life Sciences

www.alsglobal.com

S:\Reports\AL CL\ref (6.0)PH

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

TESTING
No.0166

Lot ID: 2371370

Date Received : Jul 13, 2023

Date Reported : Jul 31, 2023

Report Number : 2718582-1

Page 2 of 3

Sample Number	2371370-2
Sampled Date	Jul 12, 2023 11:20 AM
Sample Description	Clean water
Location	ใกล้บ้าน Villa R26 (CW)
Date Analysis Commenced	Jul 13, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.4	≤ 1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO ₃	mg/L	0.3	1.0	<1.0	≤ 50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.6	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	33.7	≤ 250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	446	≤ 1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO ₃	mg/L	-	1	182	≤ 300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.47	≤ 5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

Remark :

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

S:\Report\AL_GL\nt 4.08PM

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

TESTING
No.0166

Lot ID: 2371370

Date Received : Jul 13, 2023

Date Reported : Jul 31, 2023

Report Number : 2718582-1

Page 3 of 3

- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

S:\Report\AL_GL\nt 4.08PM

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:

Sample Number 2371370-3
 Sampled Date Jul 12, 2023 12:05 PM
 Sample Description Clean water
 Location หอพัก Villa R23 (HW)
 Date Analysis Commenced Jul 13, 2023
 Condition of Sample Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Page 1 of 1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count *	CFU/100mL	-	-	2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 D	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
pH at 25 degree C		-	-	7.6	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kanchanawarich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

S:\Reports\AL_GL-01 (6.0519)

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Lot ID: 2371370

Date Received : Jul 13, 2023

Date Reported : Jul 31, 2023

Report Number : 2718583-1



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:

Sample Number 2371370-4
 Sampled Date Jul 12, 2023 11:29 AM
 Sample Description Clean water
 Location หอพัก Villa R26 (HW)
 Date Analysis Commenced Jul 13, 2023
 Condition of Sample Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Page 1 of 1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count *	CFU/100mL	-	-	1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 D	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
pH at 25 degree C		-	-	7.5	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kanchanawarich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

S:\Reports\AL_GL-01 (6.0519)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING
No.0166

Lot ID: 2371370

Date Received : Jul 13, 2023

Date Reported : Jul 31, 2023

Report Number : 2718587-1

Page 1 of 1

Sample Number	2371370-7
Sampled Date	Jul 12, 2023 10:34 AM
Sample Description	Clean water
Location	Elevated Tank. (ห้อง RO)
Date Analysis Commenced	Jul 13, 2023
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	1400	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
pH at 25 degree C		-	-	7.7	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMS Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

S:\Reports\AL_CL_rpt (6.0099)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING
No.0166

Lot ID: 2371370

Date Received : Jul 13, 2023

Date Reported : Jul 31, 2023

Report Number : 2718594-1

Page 1 of 3

Sample Number	2371370-14
Sampled Date	Jul 12, 2023 10:52 AM
Sample Description	Clean water
Location	ถังน้ำจืดในอาคารห้องพักS1 (ห้องน้ำจืด)
Date Analysis Commenced	Jul 13, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.04	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	0.02	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	210	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	154	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

S:\Reports\AL_CL_rpt (6.0099)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2371370

Date Received : Jul 13, 2023

Date Reported : Jul 31, 2023

Report Number : 2718594-1

Page 2 of 3

Sample Number	2371370-14						
Sampled Date	Jul 12, 2023 10:52 AM						
Sample Description	Clean water						
Location	คลองน้ำจืดสาธารณะพื้นที่S1 (พ้องน้ำจืด)						
Date Analysis Commenced	Jul 13, 2023						
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^(A) Fluoride as F	mg/L	0.05	0.1	0.4	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^(A) Nitrate as NO3	mg/L	0.3	1.0	1.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.7	6.5-8.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CI (F)	Songkhla
^(A) Sulfate	mg/L	0.15	0.5	37.9	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	440	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	190	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	1.18	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
Company

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

U:\Room\AL_G\ref (6-9-23)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2371370

Date Received : Jul 13, 2023

Date Reported : Jul 31, 2023

Report Number : 2718594-1

Page 3 of 3

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

U:\Room\AL_G\ref (6-9-23)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2386475

Date Received : Aug 10, 2023

Date Reported : Aug 28, 2023

Report Number : 2758150-1

Page 1 of 3

Sample Number	2386475-1
Sampled Date	Aug 09, 2023 11:29 AM
Sample Description	Clean water
Location	ที่พัก Villa R23 (CW)
Date Analysis Commenced	Aug 10, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	<0.005	≤0.3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	Not Detected	≤0.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	46.0	≤250	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A, Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2386475

Date Received : Aug 10, 2023

Date Reported : Aug 28, 2023

Report Number : 2758150-1

Page 2 of 3

Sample Number	2386475-1
Sampled Date	Aug 09, 2023 11:29 AM
Sample Description	Clean water
Location	ที่พัก Villa R23 (CW)
Date Analysis Commenced	Aug 10, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.1	≤1.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO3	mg/L	0.3	1.0	<1.0	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.6	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	9.1	≤250	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	154	≤1000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	38	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.32	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A, Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2386475

Date Received : Aug 10, 2023

Date Reported : Aug 28, 2023

Report Number : 2758150-1

Page 3 of 3

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantization) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2386475

Date Received : Aug 10, 2023

Date Reported : Aug 28, 2023

Report Number : 2758151-1

Page 1 of 3

Page 2 of 3

Sample Number	2386475-2						
Sampled Date	Aug 09, 2023 11:02 AM						
Sample Description	Clean water						
Location	พักณำนาง Villa R26 (CW)						
Date Analysis Commenced	Aug 10, 2023						
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.01	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	<0.005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	45	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	124	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2386475

Date Received : Aug 10, 2023

Date Reported : Aug 28, 2023

Report Number : 2758151-1

Page 2 of 3

Sample Number	2386475-2
Sampled Date	Aug 09, 2023 11:02 AM
Sample Description	Clean water
Location	ใกล้บ้าน Villa R26 (CW)
Date Analysis Commenced	Aug 10, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.5	≤1.5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO3	mg/L	0.3	1.0	Not Detected	≤50	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.6	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	39.9	≤250	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	475	≤1000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	193	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.44	≤5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

S:\Report\AL_SG_198 (3.10.23)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2386475

Date Received : Aug 10, 2023

Date Reported : Aug 28, 2023

Report Number : 2758151-1

Page 3 of 3

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

S:\Report\AL_SG_198 (3.10.23)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2386475

Date Received : Aug 10, 2023

Date Reported : Aug 28, 2023

Report Number : 2758152-1

Page 1 of 2

Sample Number	2386475-3
Sampled Date	Aug 09, 2023 11:21 AM
Sample Description	Clean water
Location	ที่พักน้ำของ Villa R23 (HW)
Date Analysis Commenced	Aug 10, 2023
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count *	CFU/100mL	-	-	68	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9215 D	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
pH at 25 degree C		-	-	7.6	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

S:\Report\AL_GL\p1 (31877)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2386475

Date Received : Aug 10, 2023

Date Reported : Aug 28, 2023

Report Number : 2758152-1

Page 2 of 2

The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

S:\Report\AL_GL\p1 (31877)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2386475

Date Received : Aug 10, 2023

Date Reported : Aug 28, 2023

Report Number : 2758153-1

Page 1 of 2

Sample Number	2386475-4
Sampled Date	Aug 09, 2023 10:50 AM
Sample Description	Clean water
Location	ที่พัก Villa R26 (HW)
Date Analysis Commenced	Aug 10, 2023
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count *	CFU/100mL	-	-	47	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9215 D	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
pH at 25 degree C		-	-	7.7	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMS Accreditation No. 1031/47.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2386475

Date Received : Aug 10, 2023

Date Reported : Aug 28, 2023

Report Number : 2758153-1

Page 2 of 2

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING
No.0166

Lot ID: 2386475

Date Received : Aug 10, 2023

Date Reported : Aug 28, 2023

Report Number : 2758156-1

Page 1 of 2

Sample Number	2386475-7
Sampled Date	Aug 09, 2023 10:11 AM
Sample Description	Clean water
Location	Elevated Tank. (น้ำ RO)
Date Analysis Commenced	Aug 10, 2023
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	340	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
pH at 25 degree C		-	-	7.6	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CI (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMS Accreditation No. 1031/47.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING
No.0166

Lot ID: 2386475

Date Received : Aug 10, 2023

Date Reported : Aug 28, 2023

Report Number : 2758156-1

Page 2 of 2

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2386475

Date Received : Aug 10, 2023

Date Reported : Aug 28, 2023

Report Number : 2758163-1

Page 1 of 3

Sample Number	2386475-14
Sampled Date	Aug 09, 2023 9:58 AM
Sample Description	Clean water
Location	ฟลอร์น้ำประปาอาคารอพาร์ทเมนต์ S1 (ห้องน้ำประปา)
Date Analysis Commenced	Aug 10, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.05	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	0.02	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
^[A] Escherichia coli	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] Legionella spp.	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	40	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	122	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

S:\Report\A2_GL\ref (1) (199)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2386475

Date Received : Aug 10, 2023

Date Reported : Aug 28, 2023

Report Number : 2758163-1

Page 2 of 3

Sample Number	2386475-14
Sampled Date	Aug 09, 2023 9:58 AM
Sample Description	Clean water
Location	ฟลอร์น้ำประปาอาคารอพาร์ทเมนต์ S1 (ห้องน้ำประปา)
Date Analysis Commenced	Aug 10, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.5	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO3	mg/L	0.3	1.0	<1.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.7	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	39.7	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	476	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	214	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	1.11	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

S:\Report\A2_GL\ref (1) (199)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Sampling By : Yuttapong Rattana

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



TESTING
No.0166

Lot ID: 2386475

Date Received : Aug 10, 2023

Date Reported : Aug 28, 2023

Report Number : 2758163-1

Page 3 of 3



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Sample Number : 2398865-1
Sampled Date : Sep 14, 2023 1:30 PM
Sample Description : Clean water
Location : วิลล่า Villa R23 (CW)
Date Analysis Commenced : Sep 15, 2023
Condition of Sample : Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	Not Detected	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	<0.005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	55.6	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

3: Reports_LAB_QC_01 (3.1194)

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Lot ID: 2398865

Date Received : Sep 15, 2023

Date Reported : Oct 05, 2023

Report Number : 2792753-1 Rev. No.1

Page 1 of 3

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

3: Reports_LAB_QC_01 (3.1194)

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Lot ID: 2398865

Date Received : Sep 15, 2023

83150 Date Reported : Oct 05, 2023

P/O :

Project Name : Rosewood Phuket Residences

Project Location:

Sample Number	2398865-1
---------------	-----------

Sampled Date Sep 14, 2023 1:30 PM

Sample Description	Clean water
--------------------	-------------

Location ทิวทัศน์ของ Villa R23 (CW)

Date Analysis Commenced Sep 15, 2023

Condition of Sample Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Page 2 of 3

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^{N)} Fluoride as F	mg/L	0.05	0.1	0.3	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^{N)} Nitrate as NO3	mg/L	0.3	1.0	<1.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.6	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^{N)} Sulfate	mg/L	0.15	0.5	6.0	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	187	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	61	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.26	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : 1. Microbiological Testing Result <1 mean Bacteria not found in agar plate.

2. This Analysis test report is reissued to supersede report No.2792753-1, Date Reported : Sep 29, 2023 due to revise guideline/specification

Sampling By : Yuttapong Rattana , Thaksin Aintrom

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

SciReports | All-Gate.rpt (7/4/2017)

RIGHT SOLUTIONS. RIGHT PARTNER.



TESTING
No.0166

Lot ID: 2398865

Date Received : Sep 15, 2023

83150 Date Reported : Oct 05, 2023

P/O :

Project Name : Rosewood Phuket Residences

Project Location:

Remark :

- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd., Bangkok Branch, DMSC Accreditation No. 1031/47
- The Laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Page 3 of 3

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

3:Vignette_A3_Q.rtf (742KB)

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:

Lot ID: 2398865

Date Received : Sep 15, 2023

Date Reported : Sep 29, 2023

Report Number : 2792754-1

Page 1 of 3

Sample Number	2398865-2
Sampled Date	Sep 14, 2023 1:13 PM
Sample Description	Clean water
Location	บ้านเลขที่ Villa R26 (CW)
Date Analysis Commenced	Sep 15, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.01	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	<0.005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	117	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

File: Report_CAQ_GL_rpt (2398865)

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:

Lot ID: 2398865

Date Received : Sep 15, 2023

Date Reported : Sep 29, 2023

Report Number : 2792754-1

Page 2 of 3

Sample Number	2398865-2
Sampled Date	Sep 14, 2023 1:13 PM
Sample Description	Clean water
Location	บ้านเลขที่ Villa R26 (CW)
Date Analysis Commenced	Sep 15, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.6	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO3	mg/L	0.3	1.0	2.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.6	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	1.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	37.7	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	482	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	230	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.32	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana , Thaksin Aintrom

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

File: Report_CAQ_GL_rpt (2398865)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2398865

Date Received : Sep 15, 2023

Date Reported : Sep 29, 2023

Report Number : 2792754-1

Page 3 of 3

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 2398865

Date Received : Sep 15, 2023

Date Reported : Sep 29, 2023

Report Number : 2792755-1

Page 1 of 2

Sample Number	2398865-3						
Sampled Date	Sep 14, 2023 1:25 PM						
Sample Description	Clean water						
Location	ตึกบ้าน Villa R23 (HW)						
Date Analysis Commenced	Sep 15, 2023						
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count *	CFU/100mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 D	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
pH at 25 degree C		-	-	7.5	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karrichanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LSR000001_AE_010001 (2-2000)

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karrichanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LSR000001_AE_010001 (2-2000)

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING
No.0166

Lot ID: 2398865

Date Received : Sep 15, 2023

Date Reported : Sep 29, 2023

Report Number : 2792755-1

Page 2 of 2

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING
No.0166

Lot ID: 2398865

Date Received : Sep 15, 2023

Date Reported : Sep 29, 2023

Report Number : 2792756-1

Page 1 of 2

Sample Number 2398865-4
Sampled Date Sep 14, 2023 1:08 PM
Sample Description Clean water
Location ตึกบ้าน Villa R26 (HW)
Date Analysis Commenced Sep 15, 2023
Condition of Sample Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
^[A] Escherichia coli	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] Legionella spp.	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count *	CFU/100mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 D	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
pH at 25 degree C		-	-	7.7	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

5:\Report\ALD\ref 4 (2)4470

RIGHT SOLUTIONS RIGHT PARTNER

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

5:\Report\ALD\ref 4 (2)4470

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING
No.0166

Lot ID: 2398865

Date Received : Sep 15, 2023

Date Reported : Sep 29, 2023

Report Number : 2792756-1

Page 2 of 2

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING
No.0166

Lot ID: 2398865

Date Received : Sep 15, 2023

Date Reported : Sep 29, 2023

Report Number : 2792759-1

Page 1 of 2

Sample Number : 2398865-7
Sampled Date : Sep 14, 2023 12:46 PM
Sample Description : Clean water
Location : Elevated Tank. (ห้อง RO)
Date Analysis Commenced : Sep 15, 2023
Condition of Sample : Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	52	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
pH at 25 degree C		-	-	7.7	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana , Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Report\AR_GL\pt (23449)

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Kamchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

S:\Report\AR_GL\pt (23449)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING
No.0166

Lot ID: 2398865

Date Received : Sep 15, 2023

Date Reported : Sep 29, 2023

Report Number : 2792759-1

Page 2 of 2

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING
No.0166

Lot ID: 2398865

Date Received : Sep 15, 2023

Date Reported : Sep 29, 2023

Report Number : 2792766-1

Page 1 of 3

Sample Number 2398865-14
Sampled Date Sep 14, 2023 12:35 PM
Sample Description Clean water
Location ตึกน้ำของในอาคารอพาร์ทเมนต์
Date Analysis Commenced Sep 15, 2023
Condition of Sample Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.08	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	0.03	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
^[A] Escherichia coli	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] Legionella spp.	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	121	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

S:\Report\AR_GA.rpt (2/28/23)

RIGHT SOLUTIONS RIGHT PARTNER

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

www.alsglobal.com

S:\Report\AR_GA.rpt (2/28/23)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150
P/O :
Project Name : Rosewood Phuket Residences
Project Location:



TESTING
No.0166

Lot ID: 2398865
Date Received : Sep 15, 2023
Date Reported : Sep 29, 2023
Report Number : 2792766-1

Page 2 of 3

Sample Number 2398865-14
Sampled Date Sep 14, 2023 12:35 PM
Sample Description Clean water
Location ที่บ้านของในอาคารอพาร์ทเมนต์
Date Analysis Commenced Sep 15, 2023
Condition of Sample Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.6	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO ₃	mg/L	0.3	1.0	1.8	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.7	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	0.5	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	38.5	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	477	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO ₃	mg/L	-	1	230	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	1.07	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana , Thaksin Aintrom

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

SC-Report_AIS-01-01 (2-25/64)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150
P/O :
Project Name : Rosewood Phuket Residences
Project Location:



TESTING
No.0166

Lot ID: 2398865
Date Received : Sep 15, 2023
Date Reported : Sep 29, 2023
Report Number : 2792766-1

Page 3 of 3

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMS Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

Life Sciences

www.alsglobal.com

SC-Report_AIS-01-01 (2-25/64)

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Lot ID: 23113734

Date Received : Oct 06, 2023

Date Reported : Oct 25, 2023

Report Number : 2814272-1

Page 1 of 3

Sample Number	23113734-1						
Sampled Date	Oct 05, 2023 11:34 AM						
Sample Description	Clean water						
Location	ตึกบ้าน Villa R23 (CW)						
Date Analysis Commenced	Oct 06, 2023						
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.006	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	<0.005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
^(A) <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^(A) Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^(A) <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^(A) Standard Plate Count	CFU/mL	-	-	32	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^(A) Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
^(A) Chloride as Cl	mg/L	0.06	0.2	51.2	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-17/EMAIL

Life Sciences

www.alsglobal.com

S:\reports\AL_GLO\pt (3.32991)

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Lot ID: 23113734

Date Received : Oct 06, 2023

Date Reported : Oct 25, 2023

Report Number : 2814272-1

Page 2 of 3

Sample Number	23113734-1						
Sampled Date	Oct 05, 2023 11:34 AM						
Sample Description	Clean water						
Location	ตึกบ้าน Villa R23 (CW)						
Date Analysis Commenced	Oct 06, 2023						
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^(A) Fluoride as F	mg/L	0.05	0.1	0.2	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^(A) Nitrate as NO3	mg/L	0.3	1.0	<1.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C		-	-	7.8	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^(A) Sulfate	mg/L	0.15	0.5	5.0	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	178	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	77	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.26	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-17/EMAIL

Life Sciences

www.alsglobal.com

S:\reports\AL_GLO\pt (3.32991)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23113734

Date Received : Oct 06, 2023

Date Reported : Oct 25, 2023

Report Number : 2814272-1

Remark :

- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Page 3 of 3



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23113734

Date Received : Oct 06, 2023

Date Reported : Oct 25, 2023

Report Number : 2814273-1

Sample Number	23113734-2						
Sampled Date	Oct 05, 2023 11:12 AM						
Sample Description	Clean water						
Location	พักน้ำประปา Villa R26 (CW)						
Date Analysis Commenced	Oct 06, 2023						
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.008	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	Not Detected	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	12	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	100	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-01/EMAIL

Life Sciences

www.alsglobal.com

3/Reports/CAL/CL/pt (2.5.2019)

RIGHT SOLUTIONS RIGHT PARTNER

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-01/EMAIL

Life Sciences

www.alsglobal.com

3/Reports/CAL/CL/pt (2.5.2019)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23113734

Date Received : Oct 06, 2023

Date Reported : Oct 25, 2023

Report Number : 2814273-1

Page 2 of 3

Sample Number	23113734-2
Sampled Date	Oct 05, 2023 11:12 AM
Sample Description	Clean water
Location	ใกล้บ้าน Villa R26 (CW)
Date Analysis Commenced	Oct 06, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
[A] Fluoride as F	mg/L	0.05	0.1	0.5	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
[A] Nitrate as NO ₃	mg/L	0.3	1.0	<1.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C		-	-	7.9	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (F)	Songkhla
[A] Sulfate	mg/L	0.15	0.5	29.5	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	432	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO ₃	mg/L	-	1	234	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.27	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

1669-31 (EMAIL)
Life Sciences

www.alsglobal.com

S:\Reports\AL_Global (2) (3PM)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23113734

Date Received : Oct 06, 2023

Date Reported : Oct 25, 2023

Report Number : 2814273-1

Page 3 of 3

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

1669-31 (EMAIL)
Life Sciences

www.alsglobal.com

S:\Reports\AL_Global (2) (3PM)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Sample Number 23113734-3
Sampled Date Oct 05, 2023 11:28 AM
Sample Description Clean water
Location ต.ถ้ำน้ำลอด Villa R23 (HW)
Date Analysis Commenced Oct 06, 2023
Condition of Sample Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
pH at 25 degree C		-	-	7.8	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CI (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8, Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-312 EMAIL

Life Sciences

www.alsglobal.com

S:\Reports\AL_GLP\ (234PM)

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Lot ID: 23113734

Date Received : Oct 06, 2023

Date Reported : Oct 25, 2023

Report Number : 2814274-1

Page 1 of 2



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Page 2 of 2



TESTING
No.0166

Lot ID: 23113734

Date Received : Oct 06, 2023

Date Reported : Oct 25, 2023

Report Number : 2814274-1

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8, Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-312 EMAIL

Life Sciences

www.alsglobal.com

S:\Reports\AL_GLP\ (234PM)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23113734

Date Received : Oct 06, 2023

Date Reported : Oct 25, 2023

Report Number : 2814275-1

Page 1 of 2

Sample Number	23113734-4
Sampled Date	Oct 05, 2023 11:03 AM
Sample Description	Clean water
Location	ตึกบ้าน Villa R26 (HW)
Date Analysis Commenced	Oct 06, 2023
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
^[A] <i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
pH at 25 degree C		-	-	7.8	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-312 EMAIL

Life Sciences

www.alsglobal.com

S:\Records\AL_GLO\yk (J-36PM)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23113734

Date Received : Oct 06, 2023

Date Reported : Oct 25, 2023

Report Number : 2814275-1

Page 2 of 2

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-312 EMAIL

Life Sciences

www.alsglobal.com

S:\Records\AL_GLO\yk (J-36PM)

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Lot ID: 23113734

Date Received : Oct 06, 2023

Date Reported : Oct 25, 2023

Report Number : 2814278-1

Page 1 of 2

Sample Number	23113734-7
Sampled Date	Oct 05, 2023 10:34 AM
Sample Description	Clean water
Location	Elevated Tank. (น้ำ RO)
Date Analysis Commenced	Oct 06, 2023
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
[A] <i>Escherichia coli</i>	in 100 mL	-	-	Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
[A] Fecal Coliform	in 100 mL	-	-	Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
[A] Standard Plate Count	CFU/mL	-	-	6300	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
[A] Total Coliform	in 100 mL	-	-	Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
pH at 25 degree C		-	-	7.6	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-01/ENAIL

Life Sciences

www.alsglobal.com

S:\Reports\AL_GL_rpt (3:57PM)

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Lot ID: 23113734

Date Received : Oct 06, 2023

Date Reported : Oct 25, 2023

Report Number : 2814278-1

Page 2 of 2

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

--	--	--	--	--	--	--	--

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-01/ENAIL

Life Sciences

www.alsglobal.com

S:\Reports\AL_GL_rpt (3:57PM)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Sample Number	23113734-14
Sampled Date	Oct 05, 2023 10:10 AM
Sample Description	Clean water
Location	ห้องน้ำของอาคารอพฟิต
Date Analysis Commenced	Oct 06, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Page 1 of 3

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.06	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	0.03	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
^[A] Escherichia coli	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 F	Bangkok
^[A] Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 E	Bangkok
^[A] Legionella spp.	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
^[A] Standard Plate Count	CFU/mL	-	-	83	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Bangkok
^[A] Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Bangkok
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	103	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-317 EMAIL

Life Sciences

www.alsglobal.com

S:\Reports\ALS_Group\16607-317

RIGHT SOLUTIONS RIGHT PARTNER



TESTING
No.0166

Lot ID: 23113734

Date Received : Oct 06, 2023

Date Reported : Oct 25, 2023

Report Number : 2814285-1



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :

Sample Number	23113734-14
Sampled Date	Oct 05, 2023 10:10 AM
Sample Description	Clean water
Location	ห้องน้ำของอาคารอพฟิต
Date Analysis Commenced	Oct 06, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Page 2 of 3

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.4	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO3	mg/L	0.3	1.0	<1.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.8	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-C (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	30.8	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	432	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	217	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.99	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand PHONE +66 0 7489 5060 FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-317 EMAIL

Life Sciences

www.alsglobal.com

S:\Reports\ALS_Group\16607-317

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23113734

Date Received : Oct 06, 2023

Date Reported : Oct 25, 2023

Report Number : 2814285-1

Page 3 of 3

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23121165

Date Received : Nov 03, 2023

Date Reported : Nov 20, 2023

Report Number : 2838343-1

Page 1 of 3

Sample Number	23121165-1
Sampled Date	Nov 02, 2023 11:41 AM
Sample Description	Clean water
Location	วิลล่า Villa R23 (CW)
Date Analysis Commenced	Nov 03, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	Not Detected	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	<0.005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	2800	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	43.9	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607-01 (PMA)

16497-01 (PMA)

S:\Reports\AL_GL\pt (400PM)

S:\Reports\AL_GL\pt (283PM)

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Life Sciences

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING

No.0166

Lot ID: 23121165

Date Received : Nov 03, 2023

Date Reported : Nov 20, 2023

Report Number : 2838343-1

Page 2 of 3

Sample Number	23121165-1
Sampled Date	Nov 02, 2023 11:41 AM
Sample Description	Clean water
Location	ใกล้ห้อง Villa R23 (CW)
Date Analysis Commenced	Nov 03, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.2	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO ₃	mg/L	0.3	1.0	<1.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.6	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	4.9	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	172	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO ₃	mg/L	-	1	63	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.22	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

1660/317/THAI

Life Sciences

www.alsglobal.com

81/Report_ML-QA-01 (2/27/19)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING

No.0166

Lot ID: 23121165

Date Received : Nov 03, 2023

Date Reported : Nov 20, 2023

Report Number : 2838343-1

Page 3 of 3

Sampling By : Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

1660/317/THAI

Life Sciences

www.alsglobal.com

81/Report_ML-QA-01 (2/27/19)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23121165

Date Received : Nov 03, 2023

Date Reported : Nov 20, 2023

Report Number : 2838344-1

Page 1 of 3

Sample Number	23121165-2
Sampled Date	Nov 02, 2023 11:16 AM
Sample Description	Clean water
Location	ท่าอากาศยาน Villa R26 (CW)
Date Analysis Commenced	Nov 03, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.21	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	0.04	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	1400	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	86.8	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	10	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16402317 (FAM)

Life Sciences

www.alsglobal.com

31Reports_ALS_Grp (23/11/23)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23121165

Date Received : Nov 03, 2023

Date Reported : Nov 20, 2023

Report Number : 2838344-1

Page 2 of 3

Sample Number	23121165-2
Sampled Date	Nov 02, 2023 11:16 AM
Sample Description	Clean water
Location	ท่าอากาศยาน Villa R26 (CW)
Date Analysis Commenced	Nov 03, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.5	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO3	mg/L	0.3	1.0	<1.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.7	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	26.4	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	400	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	205	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	1.97	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16402317 (FAM)

Life Sciences

www.alsglobal.com

31Reports_ALS_Grp (23/11/23)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23121165

Date Received : Nov 03, 2023

Date Reported : Nov 20, 2023

Report Number : 2838344-1

Page 3 of 3

Sampling By : Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23121165

Date Received : Nov 03, 2023

Date Reported : Nov 18, 2023

Report Number : 2838345-1

Page 1 of 2

Sample Number	23121165-3						
Sampled Date	Nov 02, 2023 11:35 AM						
Sample Description	Clean water						
Location	ใกล้บ้าน Villa R23 (HW)						
Date Analysis Commenced	Nov 03, 2023						
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	68	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
pH at 25 degree C		-	-	7.8	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607317 (FMAI)

Life Sciences

www.alsglobal.com

SI/Report/AL_G2.rpt (2/27PM)

RIGHT SOLUTIONS RIGHT PARTNER

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16607317 (FMAI)

Life Sciences

www.alsglobal.com

SI/Report/AL_G2.rpt (1/4PM)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23121165

Date Received : Nov 03, 2023

Date Reported : Nov 18, 2023

Report Number : 2838345-1

Page 2 of 2

- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23121165

Date Received : Nov 03, 2023

Date Reported : Nov 18, 2023

Report Number : 2838346-1

Page 1 of 2

Sample Number : 23121165-4
Sampled Date : Nov 02, 2023 11:09 AM
Sample Description : Clean water
Location : อาคาร Villa R26 (HW)
Date Analysis Commenced : Nov 03, 2023
Condition of Sample : Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
pH at 25 degree C		-	-	7.8	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16602317 PMH

Life Sciences

www.alsglobal.com

3:00pm_04_04_23 (1.96PM)

RIGHT SOLUTIONS RIGHT PARTNER

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16602317 PMH

Life Sciences

www.alsglobal.com

3:00pm_04_04_23 (1.96PM)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING
No.0166

Lot ID: 23121165

Date Received : Nov 03, 2023

Date Reported : Nov 18, 2023

Report Number : 2838346-1

Page 2 of 2

- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co., Ltd. Bangkok Branch, DMS Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING
No.0166

Lot ID: 23121165

Date Received : Nov 03, 2023

Date Reported : Nov 18, 2023

Report Number : 2838349-1

Page 1 of 2

Sample Number : 23121165-7
Sampled Date : Nov 02, 2023 10:42 AM
Sample Description : Clean water
Location : Elevated Tank. (น้ำ RO)
Date Analysis Commenced : Nov 03, 2023
Condition of Sample : Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
<i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	64	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
pH at 25 degree C		-	-	7.7	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

1663/31/PHAT

Life Sciences

www.alsglobal.com

S:\Report\AL_GLP (1-46PH)

RIGHT SOLUTIONS RIGHT PARTNER

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

1663/31/PHAT

Life Sciences

www.alsglobal.com

S:\Report\AL_GLP (1-46PH)

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23121165

Date Received : Nov 03, 2023

Date Reported : Nov 18, 2023

Report Number : 2838349-1

Page 2 of 2

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23121165

Date Received : Nov 03, 2023

Date Reported : Nov 20, 2023

Report Number : 2838356-1

Page 1 of 3

Sample Number 23121165-14
Sampled Date Nov 02, 2023 9:55 AM
Sample Description Clean water
Location กรุงเทพมหานคร
Date Analysis Commenced Nov 03, 2023
Condition of Sample Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.03	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	0.01	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	33	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	88.3	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16602-311/PH01

Life Sciences

www.alsglobal.com

S:\Report\ALGL\ref (1) 16601

RIGHT SOLUTIONS RIGHT PARTNER

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16602-311/PH01

Life Sciences

www.alsglobal.com

S:\Report\ALGL\ref (2) 16601

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23121165

Date Received : Nov 03, 2023

Date Reported : Nov 20, 2023

Report Number : 2838356-1

Page 2 of 3

Sample Number	23121165-14
Sampled Date	Nov 02, 2023 9:55 AM
Sample Description	Clean water
Location	ห้องน้ำของอาคารอพาร์ทเมนต์
Date Analysis Commenced	Nov 03, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.5	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO ₃	mg/L	0.3	1.0	1.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.6	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	27.1	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	400	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO ₃	mg/L	-	1	208	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.55	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16609-317/PHU

Life Sciences

www.alsglobal.com

S:\Reports\AL_GL\01\ 231165

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23121165

Date Received : Nov 03, 2023

Date Reported : Nov 20, 2023

Report Number : 2838356-1

Page 3 of 3

Sampling By : Thaksin Aintrom

Remark :

- LOD : Limit of Detection
- "c" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

16609-317/PHU

Life Sciences

www.alsglobal.com

S:\Reports\AL_GL\01\ 231165

RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 23133823

Date Received : Dec 08, 2023
Date Reported : Dec 25, 2023
Report Number : 2872594-1

Page 1 of 3

Sample Number	23133823-1						
Sampled Date	Dec 07, 2023 11:37 AM						
Sample Description	Clean water						
Location	ตึกบ้านของ Villa R23 (CW)						
Date Analysis Commenced	Dec 08, 2023						
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	<0.005	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	Not Detected	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	25	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	46.2	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports\All_GL.rpt (6:40PM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 23133823

Date Received : Dec 08, 2023
Date Reported : Dec 25, 2023
Report Number : 2872594-1

Page 2 of 3

Sample Number	23133823-1						
Sampled Date	Dec 07, 2023 11:37 AM						
Sample Description	Clean water						
Location	ตึกบ้านของ Villa R23 (CW)						
Date Analysis Commenced	Dec 08, 2023						
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.3	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO3	mg/L	0.3	1.0	<1.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C		-	-	7.4	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	4.7	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	178	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	38	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.24	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports\All_GL.rpt (6:40PM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23133823

Date Received : Dec 08, 2023

Date Reported : Dec 25, 2023

Report Number : 2872594-1

Page 3 of 3

Sampling By : Yuttapong Rattana , Sakkarin Panpheng

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand 83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location :



TESTING
No.0166

Lot ID: 23133823

Date Received : Dec 08, 2023

Date Reported : Dec 25, 2023

Report Number : 2872595-1

Page 1 of 3

Sample Number 23133823-2
Sampled Date Dec 07, 2023 12:18 PM
Sample Description Clean water
Location ตึกหน้าของ Villa R26 (CW)
Date Analysis Commenced Dec 08, 2023
Condition of Sample Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.02	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	<0.005	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	95.3	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	<5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports_All_GL.rpt (6:40PM)

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports_All_GL.rpt (6:40PM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 23133823
Date Received : Dec 08, 2023
Date Reported : Dec 25, 2023
Report Number : 2872595-1

Page 2 of 3

Sample Number	23133823-2
Sampled Date	Dec 07, 2023 12:18 PM
Sample Description	Clean water
Location	ตึกบ้าน Villa R26 (CW)
Date Analysis Commenced	Dec 08, 2023
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.5	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO3	mg/L	0.3	1.0	<1.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C	-	-	-	7.8	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	0.3	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CI (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	24.9	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	427	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	142	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	0.26	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports\All_GL.rpt (6:40PM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 23133823
Date Received : Dec 08, 2023
Date Reported : Dec 25, 2023
Report Number : 2872595-1

Page 3 of 3

Sampling By : Yuttapong Rattana , Sakkarin Panpheng

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports\All_GL.rpt (6:40PM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 23133823
Date Received : Dec 08, 2023
Date Reported : Dec 25, 2023
Report Number : 2872596-1

Page 1 of 2

Sample Number 23133823-3
Sampled Date Dec 07, 2023 11:31 AM
Sample Description Clean water
Location ตึกหน้าห้อง Villa R23 (HW)
Date Analysis Commenced Dec 08, 2023
Condition of Sample Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count *	CFU/100mL	-	-	48	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 D	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
pH at 25 degree C		-	-	7.9	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana , Sakkarin Panpheng

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports\All_GL.rpt (6:40PM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 23133823
Date Received : Dec 08, 2023
Date Reported : Dec 25, 2023
Report Number : 2872596-1

Page 2 of 2

- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports\All_GL.rpt (6:40PM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 23133823
Date Received : Dec 08, 2023
Date Reported : Dec 25, 2023
Report Number : 2872597-1

Page 1 of 2

Sample Number	23133823-4
Sampled Date	Dec 07, 2023 12:13 PM
Sample Description	Clean water
Location	คณนำวิลล่า Villa R26 (HW)
Date Analysis Commenced	Dec 08, 2023
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count *	CFU/100mL	-	-	86	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 D	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
pH at 25 degree C		-	-	8.0	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana , Sakkarin Panpheng

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports\All_GL.rpt (6:41PM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 23133823
Date Received : Dec 08, 2023
Date Reported : Dec 25, 2023
Report Number : 2872597-1

Page 2 of 2

- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports\All_GL.rpt (6:41PM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 23133823
Date Received : Dec 08, 2023
Date Reported : Dec 25, 2023
Report Number : 2872600-1

Page 1 of 2

Sample Number	23133823-7
Sampled Date	Dec 07, 2023 10:31 AM
Sample Description	Clean water
Location	Elevated Tank. (หลัง RO)
Date Analysis Commenced	Dec 08, 2023
Condition of Sample	Contained in four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	370	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
pH at 25 degree C		-	-	8.2	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	<0.1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana , Sakkarin Panpheng

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports\All_GL.rpt (6:41PM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 23133823
Date Received : Dec 08, 2023
Date Reported : Dec 25, 2023
Report Number : 2872600-1

Page 2 of 2

- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports\All_GL.rpt (6:41PM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 23133823

Date Received : Dec 08, 2023
Date Reported : Dec 25, 2023
Report Number : 2872607-1

Page 1 of 3

Sample Number	23133823-14						
Sampled Date	Dec 07, 2023 10:50 AM						
Sample Description	Clean water						
Location	ตึกน้ำของในอาคารอพฟิต						
Date Analysis Commenced	Dec 08, 2023						
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.001	0.005	0.03	≤0.3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Manganese	mg/L	0.001	0.005	0.010	≤0.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Songkhla
Microbiological Testing							
<i>Escherichia coli</i>	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, F	Songkhla
Fecal Coliform	in 100 mL	-	-	Not Detected	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B, E	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Standard Plate Count	CFU/mL	-	-	120	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9215 B	Songkhla
Total Coliform	in 100 mL	-	-	Not Detected	Not Detected	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 9221 B	Songkhla
Water Testing							
^[A] Chloride as Cl	mg/L	0.06	0.2	92.0	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Color (Apparent) *	Color unit	-	5	5	≤15	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 B	Songkhla

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports\All_GL.rpt (6:42PM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.
88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :
Project Name : Rosewood Phuket Residences
Project Location :



TESTING
No.0166

Lot ID: 23133823

Date Received : Dec 08, 2023
Date Reported : Dec 25, 2023
Report Number : 2872607-1

Page 2 of 3

Sample Number	23133823-14						
Sampled Date	Dec 07, 2023 10:50 AM						
Sample Description	Clean water						
Location	ตึกน้ำของในอาคารอพฟิต						
Date Analysis Commenced	Dec 08, 2023						
Condition of Sample	Contained in six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
^[A] Fluoride as F	mg/L	0.05	0.1	0.4	≤1.5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
^[A] Nitrate as NO3	mg/L	0.3	1.0	<1.0	≤50	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
pH at 25 degree C		-	-	8.0	6.5-8.5	In-house method : STM 13-001 based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Songkhla
Residual Free Chlorine	mg/L	-	0.1	0.2	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Songkhla
^[A] Sulfate	mg/L	0.15	0.5	25.0	≤250	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4110 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	420	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Songkhla
Total Hardness as CaCO3	mg/L	-	1	144	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2340 C	Songkhla
Turbidity	NTU	-	0.1	1.32	≤5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2130 B	Songkhla

Guideline : Water quality standards of the Provincial Waterworks Authority B.E.2565

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

16607-31/ EMAIL

S:\Reports\All_GL.rpt (6:42PM)



Analysis / Test Report

Client : Emerald Bay Villa Co., Ltd.

88/28, 88/30-33, Muen-Ngern Rd, Tambon Patong, Amphoe Kathu, Phuket Thailand
83150

P/O :

Project Name : Rosewood Phuket Residences

Project Location:



TESTING

No.0166

Lot ID: 23133823

Date Received : Dec 08, 2023

Date Reported : Dec 25, 2023

Report Number : 2872607-1

Page 3 of 3

Sampling By : Yuttapong Rattana , Sakkarin Panpheng

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

ADDRESS 114/1 Moo 8 Karnchanawanich Road T. Ban Phru A. Hat Yai Songkhla 90250 Thailand | PHONE +66 0 7489 5060 | FAX +66 0 7489 5068

ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

LIFE SCIENCES

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER