

ภาคผนวกที่ 2

ผลการติดตามตรวจสอบคุณภาพสิ่งแวดล้อม

ภาคผนวกที่ 2.1

ผลการตรวจวิเคราะห์คุณภาพ น้ำเสีย



TEST REPORT

CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE : Centara Grand Beach Resort Phuket SAMPLE NO. : 6807-413
SAMPLING DATE : 09/07/2025 SAMPLING TIME : 10.05 AM
SAMPLING CONDITION : Wastewater Treatment "INFLUENT" SAMPLING BY : STC
SAMPLING METHOD : GRAB (MS. JUTAPORN JUTAMAST 2-176-1-0006)
TESTED DATE : 09-23/07/2025 RECEIVED DATE : 09/07/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 24/07/2025

PARAMETER	UNIT	METHOD	INFLUENT	CRITERIA
pH at 25 °C	-	Electrometric Method	7.66	5.0 - 9.0
BOD ₅	mg/L	5-Day BOD Test, Azide modification Method	134	≤ 250
Total Suspended Solids	mg/L	Dried at 103-105 degree celcius	49.0	≤ 250
Grease & Oil	mg/L	Liquid-Liquid, Partition-Gravimetric Method	14.0	≤ 100

PHYSICAL APPEARANCE 1. Sample : ขุ่นมีตะกอนแขวนลอยสีดำ เหม็น
2. Container : normal [PE 2.0 L (2 bottles), G 0.5 L]

CRITERIA ลักษณะน้ำเสียชุมชน, น้ำเสียชุมชนและระบบบำบัดน้ำเสียชุมชน, กรมควบคุมมลพิษ กระทรวงทรัพยากร
ธรรมชาติและสิ่งแวดล้อม

Examined by

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REPORTED ANALYSIS REFER TO SUMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL LABORATORY



TEST REPORT

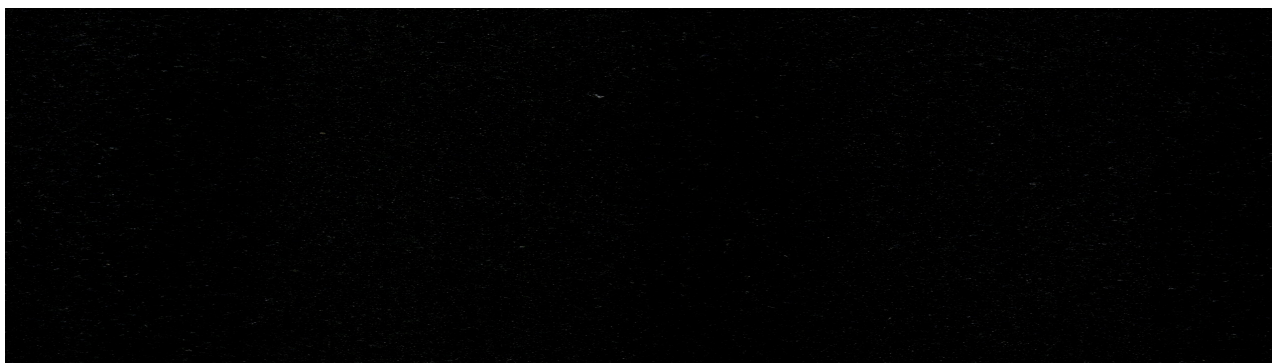
CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE : Centara Grand Beach Resort Phuket
SAMPLING DATE : 09/07/2025
SAMPLING CONDITION : Wastewater Treatment "Aeration Tank"
SAMPLING METHOD : GRAB
TESTED DATE : 09-23/07/2025
FILE NAME : Centara Grand Beach Resort Phuket

SAMPLE NO. : 6807-414
SAMPLING TIME : 10.03 AM
SAMPLING BY : STC
(MS. JUTAPORN JUTAMAST)
RECEIVED DATE : 09/07/2025
REPORTED DATE : 24/07/2025

PARAMETER	UNIT	METHOD	Wastewater in Aeration Tank	CRITERIA
pH at 25 °C	-	Electrometric Method	7.09	5.0 - 9.0
Dissolved Oxygen (DO)	mg/L	Membrane-Electrode	0.99	≥ 2
Mixed Liquor Suspended Solids	mg/L	Dried at 103-105 °C	15.0	1,500 - 3,000

PHYSICAL APPEARANCE 1. Sample : มีตะกอนแขวนลอยสีน้ำตาล
2. Container : Normal [PE 2.0 L]

CRITERIA Wastewater engineering, 3rd edition, Metcal & eddy



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TEST REPORT

CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE : Centara Grand Beach Resort Phuket SAMPLE NO. : 6807-415
SAMPLING DATE : 09/07/2025 SAMPLING TIME : 10.01 AM
SAMPLING CONDITION : Wastewater Treatment "EFFLUENT" SAMPLING BY : STC
SAMPLING METHOD : GRAB (MS. JUTAPORN JUTAMAST ๖-176-๖-0006)
TESTED DATE : 09-23/07/2025 RECEIVED DATE : 09/07/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 24/07/2025

PARAMETER	UNIT	METHOD	EFFLUENT	STANDARD
pH at 25 °C	-	Electrometric Method	7.46	5.5-9.0
BOD ₅	mg/L	5-Day BOD Test, Azide modification Method	6.0	≤ 20
Total Suspended Solids	mg/L	Dried at 103-105 degree celcius	5.0	≤ 30
Total Dissolved Solids	mg/L	Dried at 180 Celsius degree	404	≤ 1,000
Total Kjeldahl Nitrogen	mg/L	Macro-Kjeldahl,Titrimetric Method	18.34	≤ 35

PHYSICAL APPEARANCE 1. Sample : ขุ่น มีตะกอนแขวนลอยสีน้ำตาล
2. Container : normal [PE 2.0 L (2 bottles), G 0.5 L]

STANDARD : ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม พ.ศ. 2567
เรื่อง กำหนดมาตรฐานควบคุมการระบายน้ำทิ้งจากอาคาร บางประเภท และบางขนาด (ประเภท ก)

Examined by

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TEST REPORT

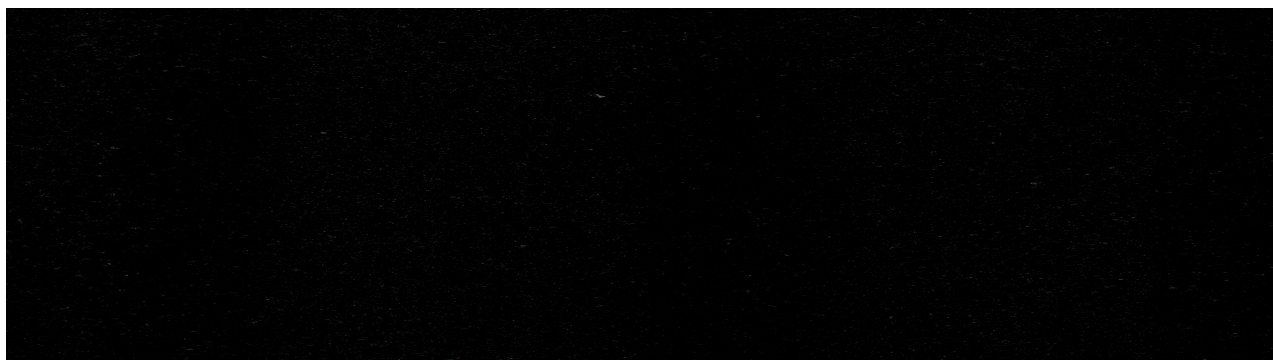
CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE : Centara Grand Beach Resort Phuket SAMPLE NO. : 6807-415
SAMPLING DATE : 09/07/2025 SAMPLING TIME : 10.01 AM
SAMPLING CONDITION : Wastewater Treatment "EFFLUENT" SAMPLING BY : STC
SAMPLING METHOD : GRAB (MS. JUTAPORN JUTAMAST)
TESTED DATE : 09-23/07/2025 RECEIVED DATE : 09/07/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 24/07/2025

PARAMETER	UNIT	METHOD	EFFLUENT	STANDARD
Grease & Oil	mg/L	Liquid-Liquid, Partition-Gravimetric Method	ND	≤ 20
Sulfide	mg/L as S ²⁻	Iodometric Method	0.27	≤ 1
Settleable Solids	mL/L	Volumetric Method	ND	-

PHYSICAL APPEARANCE 1. Sample : ขุ่น มีตะกอนแขวนลอยสีน้ำตาล
2. Container : normal [PE 2.0 L]

STANDARD : ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม พ.ศ. 2567
เรื่อง กำหนดมาตรฐานควบคุมการระบายน้ำทิ้งจากอาคาร บางประเภท และบางขนาด (ประเภท ก)

REMARK 1) ND = Not Detected (ตรวจวัดไม่พบ โดยวิธีทางห้องปฏิบัติการ)



REPORTED ANALYSIS REFER TO SUMITTED SAMPLES ONLY

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TEST REPORT

CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE : Centara Grand Beach Resort Phuket
SAMPLING DATE : 06/08/2025
SAMPLING CONDITION : Wastewater Treatment "INFLUENT"
SAMPLING METHOD : GRAB
TESTED DATE : 06/08/2025-03/09/2025
FILE NAME : Centara Grand Beach Resort Phuket

SAMPLE NO. : 6808-0192
SAMPLING TIME : 08.59 AM
SAMPLING BY : STC
(MS. JUTAPORN JUTAMAST ๖-176-๖-0006)
RECEIVED DATE : 06/08/2025
REPORTED DATE : 04/09/2025

PARAMETER	UNIT	METHOD	INFLUENT	CRITERIA
pH at 25 °C	-	Electrometric Method	6.90	5.0 - 9.0
BOD ₅	mg/L	5-Day BOD Test, Azide modification Method	134	≤ 250
Total Suspended Solids	mg/L	Dried at 103-105 °C (Part 2540D)	97	≤ 250
Grease & Oil	mg/L	Liquid-Liquid, Partition-Gravimetric Method	3.0	≤ 100

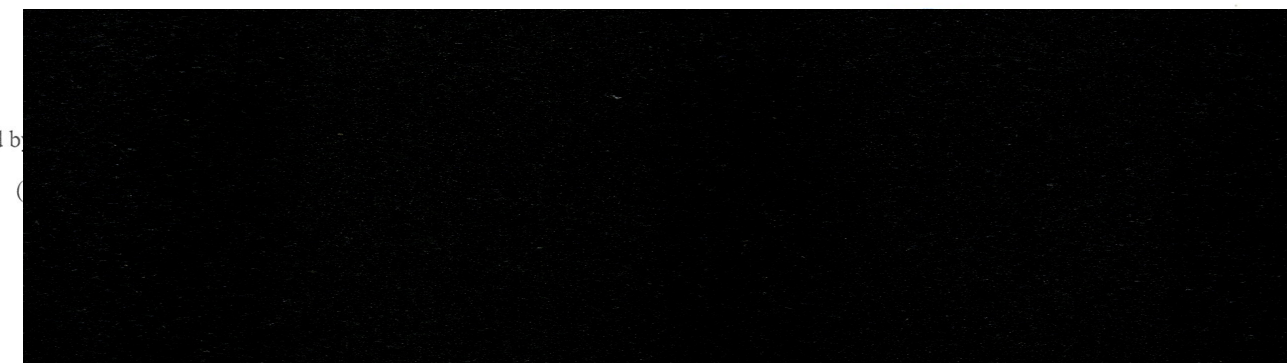
PHYSICAL APPEARANCE 1. Sample : ขุ่นมีตะกอนแขวนลอยสีดำเหม็น

2. Container : normal [PE 2.0 L (2 bottles), G 0.5 L]

CRITERIA ลักษณะน้ำเสียชุมชน, น้ำเสียชุมชนและระบบบำบัดน้ำเสียชุมชน, กรมควบคุมมลพิษ กระทรวงทรัพยากร
ธรรมชาติและสิ่งแวดล้อม

REMARK 1) Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023

Examined by



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TEST REPORT

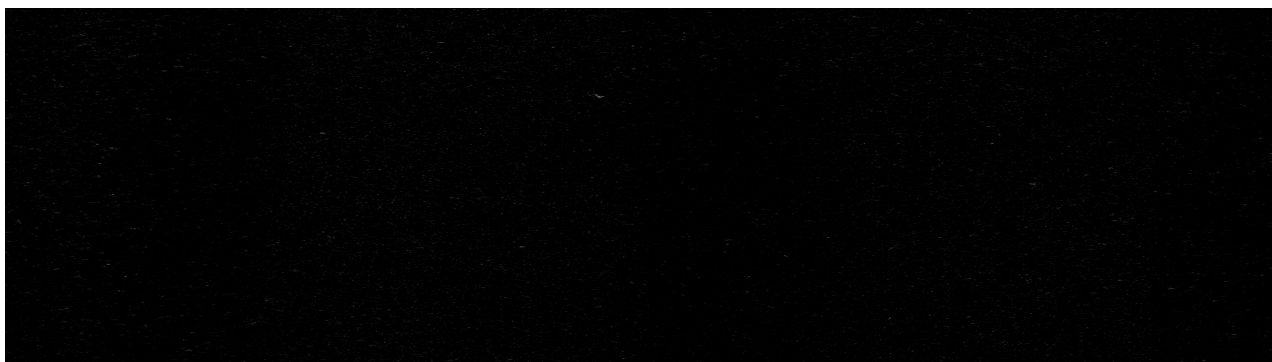
CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE : Centara Grand Beach Resort Phuket SAMPLE NO. : 6808-0193
SAMPLING DATE : 06/08/2025 SAMPLING TIME : 09.01 AM
SAMPLING CONDITION : Wastewater Treatment "Aeration Tank" SAMPLING BY : STC
SAMPLING METHOD : GRAB (MS. JUTAPORN JUTAMAST)
TESTED DATE : 06/08/2025-03/09/2025 RECEIVED DATE : 06/08/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 04/09/2025

PARAMETER	UNIT	METHOD	Wastewater in Aeration Tank	CRITERIA
pH at 25 °C	-	Electrometric Method	7.09	5.0 - 9.0
Dissolved Oxygen (DO)	mg/L	Membrane-Electrode	1.77	≥ 2
Mixed Liquor Suspended Solids	mg/L	Dried at 103-105 °C (Part 2540D)	17	1,500 - 3,000

PHYSICAL APPEARANCE 1. Sample : มีตะกอนแขวนลอยสีน้ำตาล
2. Container : Normal [PE 2.0 L]

CRITERIA Wastewater engineering, 3rd edition, Metcal & eddy

REMARK 1) Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023



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TEST REPORT

CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE : Centara Grand Beach Resort Phuket SAMPLE NO. : 6808-0194
SAMPLING DATE : 06/08/2025 SAMPLING TIME : 08.57 AM
SAMPLING CONDITION : Wastewater Treatment "EFFLUENT" SAMPLING BY : STC
SAMPLING METHOD : GRAB (MS. JUTAPORN JUTAMAST ๖-176-๖-0006)
TESTED DATE : 06/08/2025-03/09/2025 RECEIVED DATE : 06/08/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 04/09/2025

PARAMETER	UNIT	METHOD	EFFLUENT	STANDARD
pH at 25 °C	-	Electrometric Method	7.30	5.5-9.0
BOD ₅	mg/L	5-Day BOD Test, Azide modification Method	18.0	≤ 20
Total Suspended Solids	mg/L	Dried at 103-105 °C (Part 2540D)	7	≤ 30
Total Dissolved Solids	mg/L	Dried at 180 °C (Part 2540C)	430	≤ 1,000
Total Kjeldahl Nitrogen	mg/L	Macro-Kjeldahl, Titrimetric Method	15.47	≤ 35

PHYSICAL APPEARANCE 1. Sample : ขุ่น มีตะกอนแขวนลอยสีน้ำตาล

2. Container : normal [PE 2.0 L (2 bottles), G 0.5 L]

STANDARD : ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม พ.ศ. 2567

เรื่อง กำหนดมาตรฐานควบคุมการระบายน้ำทิ้งจากอาคาร บางประเภท และบางขนาด (ประเภท ก)

REMARK 1) Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023

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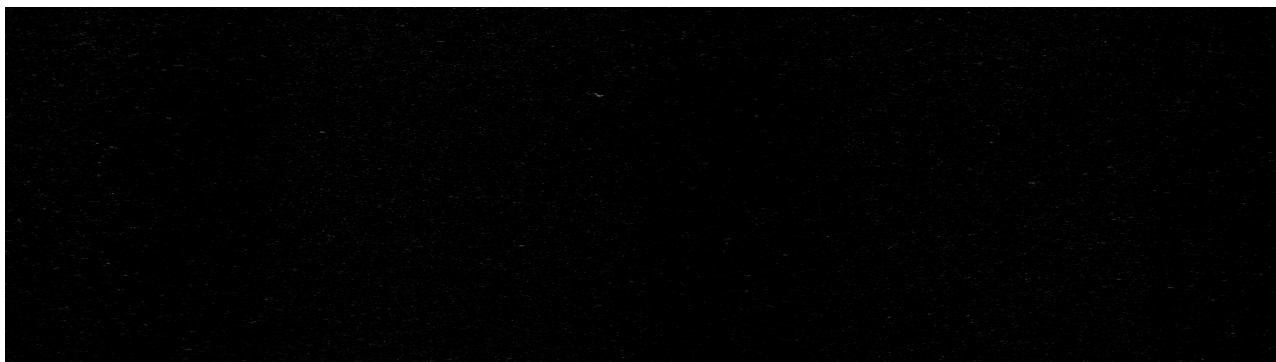
CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE : Centara Grand Beach Resort Phuket SAMPLE NO. : 6808-0194
SAMPLING DATE : 06/08/2025 SAMPLING TIME : 08.57 AM
SAMPLING CONDITION : Wastewater Treatment "EFFLUENT" SAMPLING BY : STC
SAMPLING METHOD : GRAB (MS. JUTAPORN JUTAMAST)
TESTED DATE : 06/08/2025-03/09/2025 RECEIVED DATE : 06/08/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 04/09/2025

PARAMETER	UNIT	METHOD	EFFLUENT	STANDARD
Grease & Oil	mg/L	Liquid-Liquid, Partition-Gravimetric Method	1.0	≤ 20
Sulfide	mg/L as S ²⁻	Iodometric Method	0.20	≤ 1
Settleable Solids	mL/L	Volumetric Method	0.8	-

PHYSICAL APPEARANCE 1. Sample : ขุ่น มีตะกอนแขวนลอยสีน้ำตาล
2. Container : normal [PE 2.0 L]

STANDARD : ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม พ.ศ. 2567
เรื่อง กำหนดมาตรฐานควบคุมการระบายน้ำทิ้งจากอาคาร บางประเภท และบางขนาด (ประเภท ก)

REMARK 1) Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023
2) ND = Not Detected (ตรวจวัดไม่พบโดยวิธีทางห้องปฏิบัติการ)



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TEST REPORT

CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE : Centara Grand Beach Resort Phuket SAMPLE NO. : 6809-0084
SAMPLING DATE : 02/09/2025 SAMPLING TIME : 09.22 AM
SAMPLING CONDITION : Wastewater Treatment "INFLUENT" SAMPLING BY : STC
SAMPLING METHOD : GRAB (MS. JUTAPORN JUTAMAST 3-176-3-0006)
TESTED DATE : 02-10/09/2025 RECEIVED DATE : 02/09/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 11/09/2025

PARAMETER	UNIT	METHOD	INFLUENT	CRITERIA
pH at 25 °C	-	Electrometric Method	6.97	5.0 - 9.0
BOD ₅	mg/L	5-Day BOD Test, Azide modification Method	72.0	≤ 250
Total Suspended Solids	mg/L	Dried at 103-105 °C (Part 2540D)	67	≤ 250
Grease & Oil	mg/L	Liquid-Liquid, Partition-Gravimetric Method	3.0	≤ 100

PHYSICAL APPEARANCE 1. Sample : ขุ่นมีตะกอนแขวนลอยสีดำ เหนียว

2. Container : normal [PE 2.0 L (2 bottles), G 0.5 L]

CRITERIA ลักษณะน้ำเสียชุมชน, น้ำเสียชุมชนและระบบบำบัดน้ำเสียชุมชน, กรมควบคุมมลพิษ กระทรวงทรัพยากร
ธรรมชาติและสิ่งแวดล้อม

REMARK 1) Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023

Examined by

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TEST REPORT

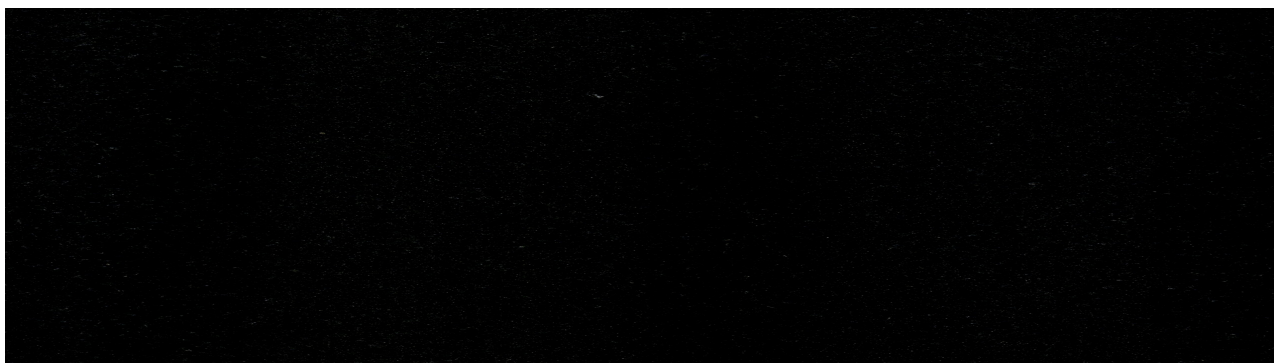
CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE : Centara Grand Beach Resort Phuket SAMPLE NO. : 6809-0085
SAMPLING DATE : 02/09/2025 SAMPLING TIME : 09.13 AM
SAMPLING CONDITION : Wastewater Treatment "Areation Tank" SAMPLING BY : STC
SAMPLING METHOD : GRAB (MS. JUTAPORN JUTAMAST)
TESTED DATE : 02-10/09/2025 RECEIVED DATE : 02/09/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 11/09/2025

PARAMETER	UNIT	METHOD	Wastewater in Areation Tank	CRITERIA
pH at 25 °C	-	Electrometric Method	7.37	5.0 - 9.0
Dissolved Oxygen (DO)	mg/L	Membrane-Electrode	1.08	≥ 2
Mixed Liquor Suspended Solids	mg/L	Dried at 103-105 °C (Part 2540D)	43	1,500 - 3,000

PHYSICAL APPEARANCE 1. Sample : มีตะกอนแขวนลอยสีน้ำตาล
2. Container : Normal [PE 2.0 L]

CRITERIA Wastewater engineering, 3rd edition, Metcal & eddy

REMARK 1) Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023



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TEST REPORT

CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE : Centara Grand Beach Resort Phuket SAMPLE NO. : 6809-0086
SAMPLING DATE : 02/09/2025 SAMPLING TIME : 09.19 AM
SAMPLING CONDITION : Wastewater Treatment "EFFLUENT" SAMPLING BY : STC
SAMPLING METHOD : GRAB (MS. JUTAPORN JUTAMAST 3-176-3-0006)
TESTED DATE : 02-10/09/2025 RECEIVED DATE : 02/09/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 11/09/2025

PARAMETER	UNIT	METHOD	EFFLUENT	STANDARD
pH at 25 °C	-	Electrometric Method	7.03	5.5-9.0
BOD ₅	mg/L	5-Day BOD Test, Azide modification Method	5.0	≤ 20
Total Suspended Solids	mg/L	Dried at 103-105 °C (Part 2540D)	5	≤ 30
Total Dissolved Solids	mg/L	Dried at 180 °C (Part 2540C)	400	≤ 1,000
Total Kjeldahl Nitrogen	mg/L	Macro-Kjeldahl, Titrimetric Method	6.39	≤ 35

PHYSICAL APPEARANCE 1. Sample : ขุ่น มีตะกอนแขวนลอยสีน้ำตาล

2. Container : normal [PE 2.0 L (2 bottles), G 0.5 L]

STANDARD : ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม พ.ศ. 2567

เรื่อง กำหนดมาตรฐานควบคุมการระบายน้ำทิ้งจากอาคาร บางประเภท และบางขนาด (ประเภท ก)

REMARK 1) Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023

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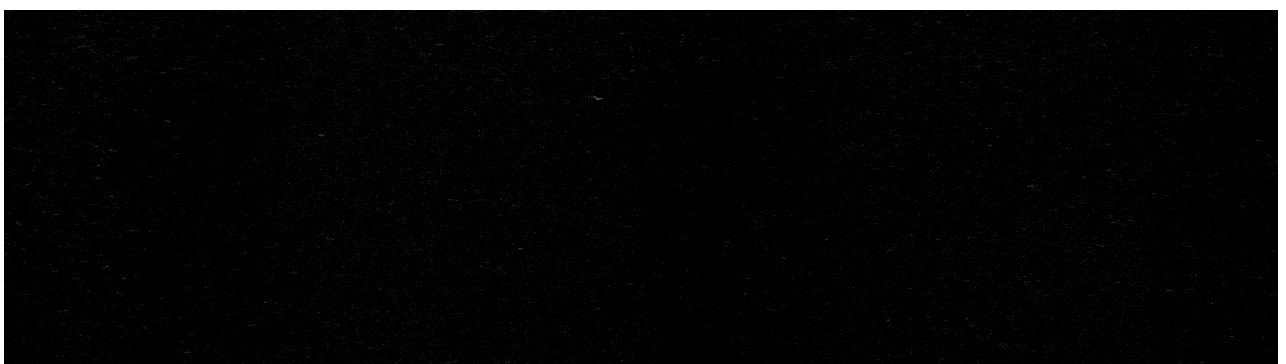
CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE : Centara Grand Beach Resort Phuket SAMPLE NO. : 6809-0086
SAMPLING DATE : 02/09/2025 SAMPLING TIME : 09.19 AM
SAMPLING CONDITION : Wastewater Treatment "EFFLUENT" SAMPLING BY : STC
SAMPLING METHOD : GRAB (MS. JUTAPORN JUTAMAST)
TESTED DATE : 02-10/09/2025 RECEIVED DATE : 02/09/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 11/09/2025

PARAMETER	UNIT	METHOD	EFFLUENT	STANDARD
Grease & Oil	mg/L	Liquid-Liquid, Partition-Gravimetric Method	ND	≤ 20
Sulfide	mg/L as S ²⁻	Iodometric Method	0.07	≤ 1
Settleable Solids	mL/L	Volumetric Method	ND	-

PHYSICAL APPEARANCE 1. Sample : ขุ่น มีตะกอนแขวนลอยสีน้ำตาล
2. Container : normal [PE 2.0 L (2 bottles), G 0.5 L]

STANDARD : ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม พ.ศ. 2567
เรื่อง กำหนดมาตรฐานควบคุมการระบายน้ำทิ้งจากอาคาร บางประเภท และบางขนาด (ประเภท ก)

REMARK 1) Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023
2) ND = Not Detected (ตรวจวัดไม่พบโดยวิธีทางห้องปฏิบัติการ)



REPORTED ANALYSIS REFER TO SUBMITTED SAMPLES ONLY

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TEST REPORT

CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE : Centara Grand Beach Resort Phuket SAMPLE NO. : 6810-0270
SAMPLING DATE : 06/10/2025 SAMPLING TIME : 09.40 AM
SAMPLING CONDITION : Wastewater Treatment "INFLUENT" SAMPLING BY : STC
SAMPLING METHOD : GRAB (MS. JUTAPORN JUTAMAST ๖-176-๖-0006)
TESTED DATE : 06-22/10/2025 RECEIVED DATE : 06/10/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 25/10/2025

PARAMETER	UNIT	METHOD	INFLUENT	CRITERIA
pH at 25 °C	-	Electrometric Method	7.34	5.0 - 9.0
BOD ₅	mg/L	5-Day BOD Test, Azide modification Method	100	≤ 250
Total Suspended Solids	mg/L	Dried at 103-105 °C (Part 2540D)	71	≤ 250
Grease & Oil	mg/L	Liquid-Liquid, Partition-Gravimetric Method	3.0	≤ 100

PHYSICAL APPEARANCE 1. Sample : ขุ่นมีตะกอนแขวนลอยสีดำเหนียว

2. Container : normal [PE 2.0 L (2 bottles), G 0.5 L]

CRITERIA ลักษณะน้ำเสียชุมชน, น้ำเสียชุมชนและระบบบำบัดน้ำเสียชุมชน, กรมควบคุมมลพิษ กระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม

REMARK 1) Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023

Examined by

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TEST REPORT

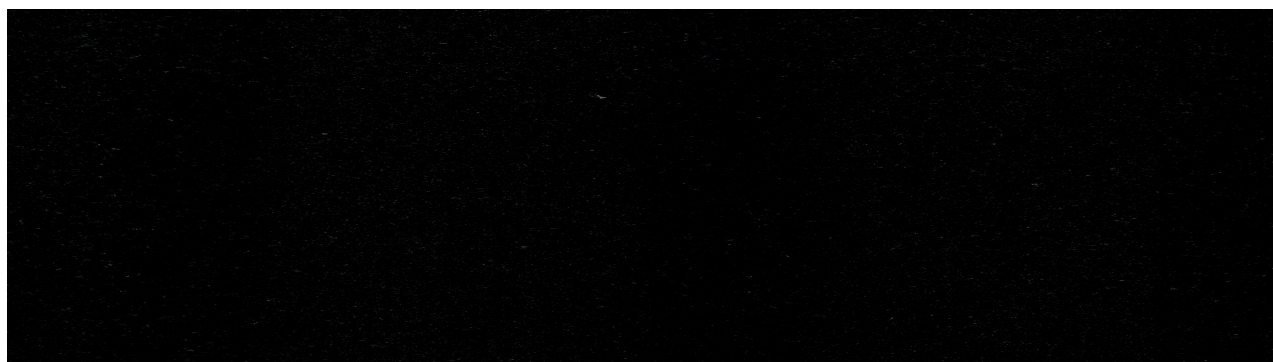
CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE : Centara Grand Beach Resort Phuket SAMPLE NO. : 6810-0271
SAMPLING DATE : 06/10/2025 SAMPLING TIME : 09.42 AM
SAMPLING CONDITION : Wastewater Treatment "Aeration Tank" SAMPLING BY : STC
SAMPLING METHOD : GRAB (MS. JUTAPORN JUTAMAST)
TESTED DATE : 06-22/10/2025 RECEIVED DATE : 06/10/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 25/10/2025

PARAMETER	UNIT	METHOD	Wastewater in Aeration Tank	CRITERIA
pH at 25 °C	-	Electrometric Method	7.13	5.0 - 9.0
Dissolved Oxygen (DO)	mg/L	Membrane-Electrode	0.97	≥ 2
Mixed Liquor Suspended Solids	mg/L	Dried at 103-105 °C (Part 2540D)	27	1,500 - 3,000

PHYSICAL APPEARANCE 1. Sample : มีตะกอนแขวนลอยสีน้ำตาล
2. Container : Normal [PE 2.0 L]

CRITERIA Wastewater engineering, 3rd edition, Metcal & eddy

REMARK 1) Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023



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TEST REPORT

CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE^{/3} : Centara Grand Beach Resort Phuket SAMPLE NO. : 6811-0193
SAMPLING DATE^{/3} : 05/11/2025 SAMPLING TIME^{/3} : 01.37 PM
SAMPLING CONDITION : Wastewater Treatment "INFLUENT" SAMPLING BY^{/3} : STC
SAMPLING METHOD^{/3} : GRAB (MS. JUTAPORN JUTAMAST ว-176-จ-0006)
TESTED DATE : 05-21/11/2025 RECEIVED DATE : 05/11/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 24/11/2025

PARAMETER	UNIT	METHOD	INFLUENT	CRITERIA
pH at 25 °C ^{/1}	-	Electrometric Method	6.92	5.0 - 9.0
BOD ₅ ^{/1}	mg/L	5-Day BOD Test, Azide modification Method	68.0	≤ 250
Total Suspended Solids	mg/L	Dried at 103-105 °C (Part 2540D)	37	≤ 250
Grease & Oil ^{/1}	mg/L	Liquid-Liquid, Partition-Gravimetric Method	3.0	≤ 100

PHYSICAL APPEARANCE 1. Sample : turbid, black SS, smelling 2. Container : normal [PE 2.0 L , G 0.5 L]

CRITERIA ลักษณะน้ำเสียชุมชน, น้ำเสียชุมชนและระบบบำบัดน้ำเสียชุมชน, กรมควบคุมมลพิษ กระทรวงทรัพยากร
ธรรมชาติและสิ่งแวดล้อม

ANALYSIS METHOD Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th edition, 2023

REMARK
1. ^{/1} : Out of accredited scope by TISI (ISO/IEC 17025:2017)
2. ^{/2} : Out of accredited scope of private analysis laboratories ว-176
3. ^{/3} : Information received from customer

Examined by

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TEST REPORT

CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE^{/3} : Centara Grand Beach Resort Phuket SAMPLE NO. : 6811-0194
SAMPLING DATE^{/3} : 05/11/2025 SAMPLING TIME^{/3} : 01.39 PM
SAMPLING CONDITION : Wastewater Treatment "Aeration Tank" SAMPLING BY^{/3} : STC
SAMPLING METHOD^{/3} : GRAB (MS. JUTAPORN JUTAMAST)
TESTED DATE : 05-21/11/2025 RECEIVED DATE : 05/11/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 24/11/2025

PARAMETER	UNIT	METHOD	Wastewater in Aeration Tank	CRITERIA
pH at 25 °C ^{/1}	-	Electrometric Method	6.96	5.0 - 9.0
Dissolved Oxygen (DO) ^{/1,2}	mg/L	Membrane-Electrode	2.45	≥ 2
Mixed Liquor Suspended Solids ^{/1,2}	mg/L	Dried at 103-105 °C (Part 2540D)	19	1,500 - 3,000

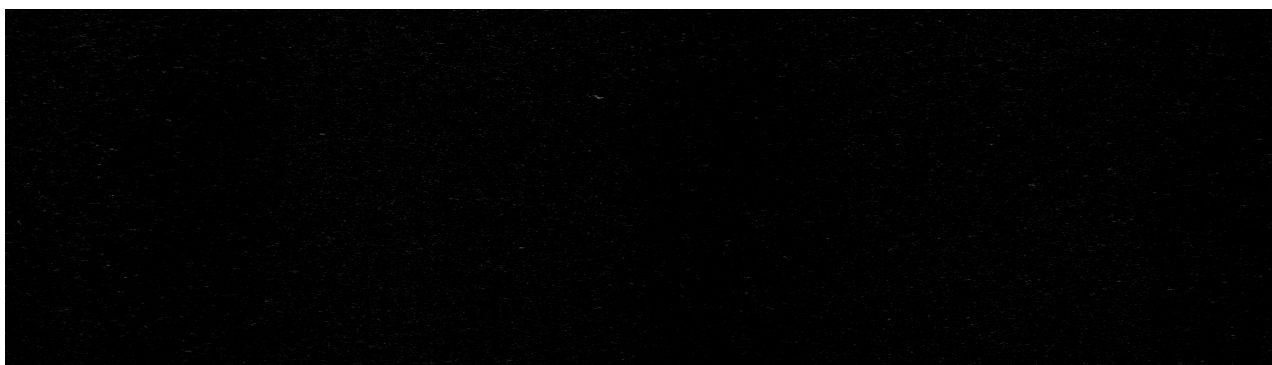
PHYSICAL APPEARANCE 1. Sample : มีตะกอนแขวนลอยสีน้ำตาล

2. Container : Normal [PE 2.0 L]

CRITERIA Wastewater engineering, 3rd edition, Metcal & eddy

ANALYSIS METHOD Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th edition, 2023

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REPORTED ANALYSIS REFER TO SUMITTED SAMPLES ONLY

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TEST REPORT

CUSTOMER	: Central Samui Beach Resort Co.,Ltd (Phuket Branch)		
ADDRESS	: 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand		
SAMPLING SOURCE ^{/3}	: Centara Grand Beach Resort Phuket	SAMPLE NO.	: 6811-0195
SAMPLING DATE ^{/3}	: 05/11/2025	SAMPLING TIME ^{/3}	: 01.35 PM
SAMPLING CONDITION	: Wastewater Treatment "EFFLUENT"	SAMPLING BY ^{/3}	: STC
SAMPLING METHOD ^{/3}	: GRAB	(MS. JUTAPORN JUTAMAST ว-176-จ-0006)	
TESTED DATE	: 05-21/11/2025	RECEIVED DATE	: 05/11/2025
FILE NAME	: Centara Grand Beach Resort Phuket	REPORTED DATE	: 24/11/2025

PARAMETER	UNIT	METHOD	EFFLUENT	STANDARD
pH at 25 °C ^{/1}	-	Electrometric Method	7.29	5.5-9.0
BOD ₅ ^{/1}	mg/L	5-Day BOD Test, Azide modification Method	22.0	≤ 20
Total Suspended Solids	mg/L	Dried at 103-105 °C (Part 2540D)	7	≤ 30
Total Dissolved Solids	mg/L	Dried at 180 °C (Part 2540C)	264	≤ 1,000
Total Kjeldahl Nitrogen ^{/1}	mg/L	Macro-Kjeldahl, Titrimetric Method	15.82	≤ 35

PHYSICAL APPEARANCE 1. Sample : turbis , brown SS

2. Container : normal [PE 2.0 L , G 0.5 L]

STANDARD : ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม พ.ศ. 2567

เรื่อง กำหนดมาตรฐานควบคุมการระบายน้ำทิ้งจากอาคาร บางประเภท และบางขนาด (ประเภท ก)

ANALYSIS METHOD Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th edition, 2023

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TEST REPORT

CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE^{/3} : Centara Grand Beach Resort Phuket SAMPLE NO. : 6811-0195
SAMPLING DATE^{/3} : 05/11/2025 SAMPLING TIME^{/3} : 01.35 PM
SAMPLING CONDITION : Wastewater Treatment "EFFLUENT" SAMPLING BY^{/3} : STC
SAMPLING METHOD^{/3} : GRAB (MS. JUTAPORN JUTAMAST)
TESTED DATE : 05-21/11/2025 RECEIVED DATE : 05/11/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 24/11/2025

PARAMETER	UNIT	METHOD	EFFLUENT	STANDARD
Sulfide ^{/1}	mg/L as S ²⁻	Iodometric Method	0.27	≤ 1
Settleable Solids ^{/1,2}	mL/L	Volumetric Method	ND	=
Grease & Oil ^{/1}	mg/L	Liquid-Liquid, Partition-Gravimetric Method	ND	≤ 20

PHYSICAL APPEARANCE 1. Sample : turbis , brown SS

2. Container : normal [PE 2.0 L , G 0.5 L]

STANDARD : ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม พ.ศ. 2567

เรื่อง กำหนดมาตรฐานควบคุมการระบายน้ำทิ้งจากอาคาร บางประเภท และบางขนาด (ประเภท ก)

ANALYSIS METHOD Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th edition, 2023

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REPORTED ANALYSIS REFER TO SUMITTED SAMPLES ONLY

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TEST REPORT

CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE^{/3} : Centara Grand Beach Resort Phuket SAMPLE NO. : 6812-0736
SAMPLING DATE^{/3} : 13/12/2025 SAMPLING TIME^{/3} : 09.27 AM
SAMPLING CONDITION : Wastewater Treatment "INFLUENT" SAMPLING BY^{/3} : STC
SAMPLING METHOD^{/3} : GRAB (MS. JUTAPORN JUTAMAST ๖-176-๖-0006)
TESTED DATE : 13-23/12/2025 RECEIVED DATE : 13/12/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 25/12/2025

PARAMETER	UNIT	METHOD	INFLUENT	CRITERIA
pH at 25 °C ^{/1}	-	Electrometric Method	7.11	5.0 - 9.0
BOD ₅ ^{/1}	mg/L	5-Day BOD Test, Azide modification Method	53.0	≤ 250
Total Suspended Solids	mg/L	Dried at 103-105 °C (Part 2540D)	56	≤ 250
Grease & Oil ^{/1}	mg/L	Liquid-Liquid, Partition-Gravimetric Method	8.0	≤ 100

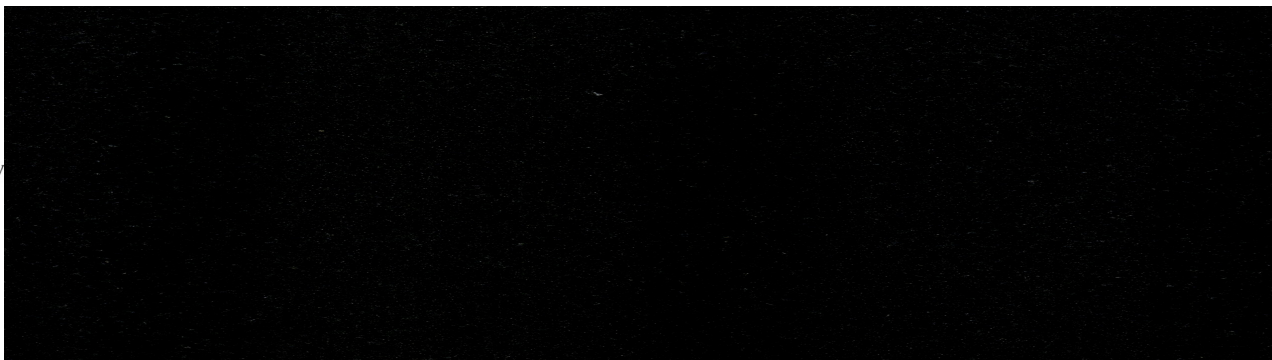
PHYSICAL APPEARANCE 1. Sample : turbid, black SS, smelling 2. Container : normal [PE 2.0 L , G 0.5 L]

CRITERIA ลักษณะน้ำเสียชุมชน, น้ำเสียชุมชนและระบบบำบัดน้ำเสียชุมชน, กรมควบคุมมลพิษ กระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม

ANALYSIS METHOD Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th edition, 2023

REMARK
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Examined by



REPORTED ANALYSIS REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN APPROVAL LABORATORY



TEST REPORT

CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE^{/3} : Centara Grand Beach Resort Phuket SAMPLE NO. : 6812-0737
SAMPLING DATE^{/3} : 13/12/2025 SAMPLING TIME^{/3} : 09.26 AM
SAMPLING CONDITION : Wastewater Treatment "Aeration Tank" SAMPLING BY^{/3} : STC
SAMPLING METHOD^{/3} : GRAB (MS. JUTAPORN JUTAMAST)
TESTED DATE : 13-23/12/2025 RECEIVED DATE : 13/12/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 25/12/2025

PARAMETER	UNIT	METHOD	Wastewater in Aeration Tank	CRITERIA
pH at 25 °C ^{/1}	-	Electrometric Method	6.88	5.0 - 9.0
Dissolved Oxygen (DO) ^{/1,2}	mg/L	Membrane-Electrode	1.70	≥ 2
Mixed Liquor Suspended Solids ^{/1,2}	mg/L	Dried at 103-105 °C (Part 2540D)	213	1,500 - 3,000

PHYSICAL APPEARANCE
1. Sample : turbid, brown SS
2. Container : Normal [PE 2.0 L]

CRITERIA
Wastewater engineering, 3rd edition, Metcal & eddy

ANALYSIS METHOD
Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th edition, 2023

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TEST REPORT

CUSTOMER	: Central Samui Beach Resort Co.,Ltd (Phuket Branch)		
ADDRESS	: 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand		
SAMPLING SOURCE ^{/3}	: Centara Grand Beach Resort Phuket	SAMPLE NO.	: 6812-0738
SAMPLING DATE ^{/3}	: 13/12/2025	SAMPLING TIME ^{/3}	: 09.22 AM
SAMPLING CONDITION	: Wastewater Treatment "EFFLUENT"	SAMPLING BY ^{/3}	: STC
SAMPLING METHOD ^{/3}	: GRAB		(MS. JUTAPORN JUTAMAST ๓-176-๖-0006)
TESTED DATE	: 13-23/12/2025	RECEIVED DATE	: 13/12/2025
FILE NAME	: Centara Grand Beach Resort Phuket	REPORTED DATE	: 25/12/2025

PARAMETER	UNIT	METHOD	EFFLUENT	STANDARD
pH at 25 °C ^{/1}	-	Electrometric Method	6.93	5.5-9.0
BOD ₅ ^{/1}	mg/L	5-Day BOD Test, Azide modification Method	38.0	≤ 20
Total Suspended Solids	mg/L	Dried at 103-105 °C (Part 2540D)	24	≤ 30
Total Dissolved Solids	mg/L	Dried at 180 °C (Part 2540C)	356	≤ 1,000
Total Kjeldahl Nitrogen ^{/1}	mg/L	Macro-Kjeldahl, Titrimetric Method	36.96	≤ 35

PHYSICAL APPEARANCE

1. Sample : turbid , brown SS

2. Container : normal [PE 2.0 L , G 0.5 L]

STANDARD

: ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม พ.ศ. 2567

เรื่อง กำหนดมาตรฐานควบคุมการระบายน้ำทิ้งจากอาคาร บางประเภท และบางขนาด (ประเภท ก)

ANALYSIS METHOD

Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th edition, 2023

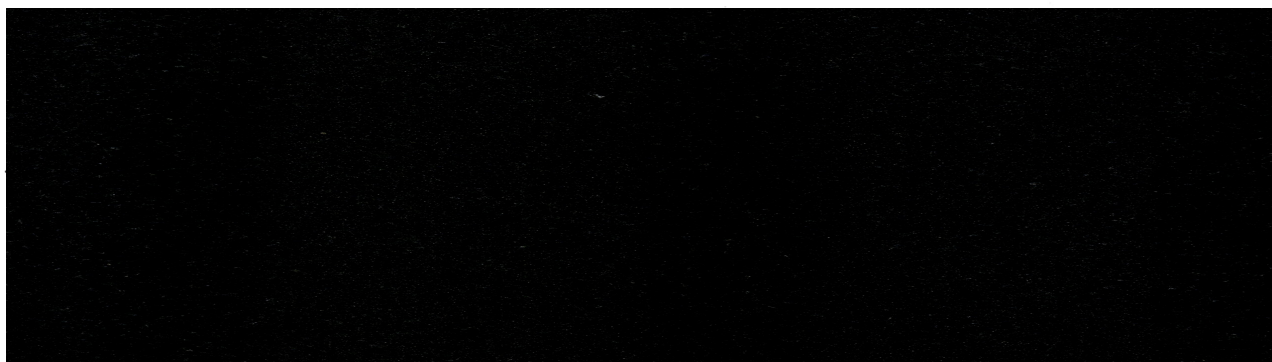
REMARK

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Examined by .



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TEST REPORT

CUSTOMER : Central Samui Beach Resort Co.,Ltd (Phuket Branch)
ADDRESS : 683 Patak Road, Karon Beach, Muang, Phuket, 83100, Thailand
SAMPLING SOURCE^{/3} : Centara Grand Beach Resort Phuket SAMPLE NO. : 6812-0738
SAMPLING DATE^{/3} : 13/12/2025 SAMPLING TIME^{/3} : 09.22 AM
SAMPLING CONDITION : Wastewater Treatment "EFFLUENT" SAMPLING BY^{/3} : STC
SAMPLING METHOD^{/3} : GRAB (MS. JUTAPORN JUTAMAST)
TESTED DATE : 13-23/12/2025 RECEIVED DATE : 13/12/2025
FILE NAME : Centara Grand Beach Resort Phuket REPORTED DATE : 25/12/2025

PARAMETER	UNIT	METHOD	EFFLUENT	STANDARD
Sulfide ^{/1}	mg/L as S ²⁻	Iodometric Method	3.87	≤ 1
Settleable Solids ^{/1,2}	mL/L	Volumetric Method	ND	=
Grease & Oil ^{/1}	mg/L	Liquid-Liquid, Partition-Gravimetric Method	2.0	≤ 20

PHYSICAL APPEARANCE 1. Sample : turbid , brown SS

2. Container : normal [PE 2.0 L , G 0.5 L]

STANDARD : ประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อม พ.ศ. 2567

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ANALYSIS METHOD Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th edition, 2023

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4. ND = Not Detected (ตรวจวัดไม่พบโดยวิธีทางห้องปฏิบัติการ)

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