

ภาคผนวก ค

เอกสารประกอบการปฏิบัติมาตรการฯ

ภาคผนวก ค-1

ตัวอย่าง Check Sheet ที่เกี่ยวข้องกับการดูแลระบบ
สาธารณูปโภค และระบบสุขาภิบาล

INNSIDE by Melia Bangkok Sukhumvit

ENGINEERING DEPARTMENT
DAILY CHECKLIST

DATE 21/5/67

Electric Summary 4024
Water Summary 47294 m³

Code.10 4024 Code.11 1685 Code.12 2338 Code.31 0.614

System	Description	Morning Shift	Afternoon Shift	Night Shift	Remark
MDB 1 (FL 9)	Volage (380-400Volt)	389	392.6	395	
	Amp	436	498	405	
	Power Factor 0.84-1	0.96	0.97	0.96	CAP Bank
MDB 2 (FL 9)	Volage (380-400Volt)	390	393.8	392	
	Amp	415	496.8	272	
	Power Factor 0.84-1	0.97	0.98	0.97	CAP Bank
AMCC, MDB (FL 9)	Chiller AMCC	Kwh	630294	651095	631381
BUSDUCT 11-29 (FL9)	Guest room AMCC	Kwh	116741	116494	116939
ATS (FL 9)	EMDB (2)	Kwh	810999	811945	810842
Generator (FL10)	Volage (380-400Volt)	-	-	-	
	Status	Auto/Off	A	A	
PAU (FL 10)	PAU-01	No.1 Auto/Off/Manual	A	A	A
	PAU-02	No.2 Auto/Off/Manual	A	A	A
PAD (FL 10)	Pressurized Fan	Auto/Off/Manual	A	A	A
PAD (FL 35)	Auto/Off/Manual	A	A	A	A
EAD (FL 10)	Exhaust Fan	Auto/Off/Manual	A	A	A
EAD (FL 33)	Auto/Off/Manual	A	A	A	A
EF-06 (FL 10)	hospital room	No.1 Auto/Off/Manual	A	A	A

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ENGINEERING DEPARTMENT
DAILY CHECKLIST

DATE 20/06/24

Electric Summary 4013
Water Summary 47123 m³

Code.10 4013 Code.11 1672 Code.12 2327 Code.31 0.614

INNSIDE by Melia Bangkok Sukhumvit

ENGINEERING DEPARTMENT
DAILY CHECKLIST

DATE 19/06/24

Electric Summary 4001
Water Summary 46971 m³

Code.10 4001 Code.11 1672 Code.12 2327 Code.31 0.614

System	Description	Morning Shift	Afternoon Shift	Night Shift	Remark
MDB 1 (FL 9)	Volage (380-400Volt)	389	392.6	395	
	Amp	436	498	405	
	Power Factor 0.84-1	0.96	0.97	0.96	CAP Bank
MDB 2 (FL 9)	Volage (380-400Volt)	390	393.8	392	
	Amp	415	496.8	272	
	Power Factor 0.84-1	0.97	0.98	0.97	CAP Bank
AMCC, MDB (FL 9)	Chiller AMCC	Kwh	630294	651095	631381
BUSDUCT 11-29 (FL9)	Guest room AMCC	Kwh	116741	116494	116939
ATS (FL 9)	EMDB (2)	Kwh	810999	811945	810842
Generator (FL10)	Volage (380-400Volt)	-	-	-	
	Status	Auto/Off	A	A	
PAU (FL 10)	PAU-01	No.1 Auto/Off/Manual	A	A	A
	PAU-02	No.2 Auto/Off/Manual	A	A	A
PAD (FL 10)	Pressurized Fan	Auto/Off/Manual	A	A	A
PAD (FL 35)	Auto/Off/Manual	A	A	A	A
EAD (FL 10)	Exhaust Fan	Auto/Off/Manual	A	A	A
EAD (FL 33)	Auto/Off/Manual	A	A	A	A
EF-06 (FL 10)	hospital room	No.1 Auto/Off/Manual	A	A	A
Chiller System (FL 9)	Chiller No. (v RUN) 42	No.1 Auto/Off/Manual	A	A	A
		No.2 Auto/Off/Manual	A	A	A
		No.3 Auto/Off/Manual	A	A	A
	Cooling tower (v RUN) 12496	No.1 Auto/Off/Manual	A	A	A
		No.2 Auto/Off/Manual	A	A	A
		No.3 Auto/Off/Manual	A	A	A
	CDP (v RUN)	No.1 Auto/Off/Manual	A	A	A
		No.2 Auto/Off/Manual	A	A	A
		No.3 Auto/Off/Manual	A	A	A
	CHP (v RUN)	No.1 Auto/Off/Manual	A	A	A
		No.2 Auto/Off/Manual	A	A	A
		No.3 Auto/Off/Manual	A	A	A
Hot water System (FL 33)	Heat Pump Setpoint 55.5°C	No.1 (°C)	54.9	54	55.9
		No.2 (°C)	55.1	55	55.9
	Hot water storage tank	Tank 1 (°C)	50	54	52
Cold Water system and water level (B1,33)	Fire Tank no.1 (B1)	(100 cm³) (v Normal)	/	/	/
	RAW Tank no.2 (B1)	(100 cm³) (v Normal)	/	/	/
	Under ground Tank no.3 (B1)	(100 cm³) (v Normal)	/	/	/
	Under ground Tank no.4 (B1)	(100 cm³) (v Normal)	/	/	/
	Roof Tank no.1 (FL 33)	(200cm³) (v Normal)	/	/	/
	Roof Tank no.2 (FL 33)	(200cm³) (v Normal)	/	/	/
	Booster pump (FL 33)	No.1 Auto/Off/Manual	A	A	A
		No.2 Auto/Off/Manual	A	A	A
	pump Soft (B1)	No.1 Auto/Off/Manual	A	A	A
		No.2 Auto/Off/Manual	A	A	A
	Transfer pump (B1)	No.1 Auto/Off/Manual	A	A	A
		No.2 Auto/Off/Manual	A	A	A
Diesel Fire Pump (B1)	Engine Pressure 240-255 Psi	Auto/Off/Manual	A	A	A
Electric Fire Pump (B1)	Electrical Pressure 250-255 Psi	Auto/Off/Manual	A	A	A
Jockey pump (B1)	Electrical Pressure 255-265 Psi	Auto/Off/Manual	A	A	A
Waste Water Treatment (G)	Operation System	Auto/Off/Manual	A	A	A
Gas System (G)	Line No. (Open/Closed)	(A) use / Spar / Used	SPW	SPW	SPW
		(B) use / Spar / Used	USE	USE	USE
	Pressure In-Out, Boiler, Water	20-30 PSI, / 70° C	26/72	27/72	26/72
	Gas Detector	Normal / Abnormal	N	N	N
Green Wall Machine (G)	Operation of pump (I)	Auto/Off/Manual	A	A	A
Fountain pump (FL 34)	Filter Pump	(v RUN)	/	/	/
Main Swimming Pool (FL 34)	Swimming Pool pump	No.1 (v RUN)	/	/	/
		No.2 (v RUN)	/	/	/
	Jacuzzi 1,2	(v RUN)	/	/	/
	Salt Chlorinator	(v RUN) / amount/°C	334 / 40	/	/
	PH-Alkalinity	CL 1.0-1.5 / PH 7.2-8.4	7.0 / 7.2	/	/
Hotel Sign (fl6,G,33)	In front of hotel & Roof	Normal / Abnormal	N	N	N

Supervisor engineering
Asst. chief engineering
Chief Engineering

INNSIDE by Melia
Bangkok Sukhumvit

Engineering Department
Chiller Plant Operation

250T 400T

Chiller No. 1, 2

Date: 19/05/24 2

Time			Chiller Water Setpoint Temp °C		Evaporator										Condensor										Compressor										Running Current		
		Evap Entering (°C)			Evap Leaving (°C)	Evap Approach Temp(°C)	Evap Sat Rfgt Temp(°C)	Evap Sat Rfgt Pressure(psi)	Expansion Valve Position %	Cond Entering(°C)	Cond Leaving(°C)	Cond Approach Temp(°C)	Cond Sat Rfgt Temp (°C)	Cond Rfgt Pressure(Psig)	EXV Position	Differential	Average Line Current	Compressor Starts	Compressor Running Time	Oil Pressure (Psig)	Oil Loss Level Sensor	Compressor Rfgt Discharge(°C)	Discharge Superheat(°C)	System Diff Pressure (Psig)	Evaporator Refrigerant Pressure												
NO.		44-50	55	45	5	42	45	40	90	99.5	5	100	100	%	PSID	%	Hrs	Hrs	90	Wet/Dry	105	25	55	PSIG	Amp	Amp	Amp										
23:00		1	9	10.4	9.1	2.0	6.6	35	38.4	26	48.7	1.7	30.4	48.3	38.4	32.8	57.5	203	2910	49.4	Wet	37.6	7.2	58.3	37	162	161	162									
23:00		2	9	10.4	3.8	1.7	7	39.6	31.4	26	48.7	4.4	33.1	67.3	31.4	65.6	49.1	84	609	61.8	Wet	47.1	13.7	65.3	35	192	148	130									
9:00		1	9.0	10.7	9.0	2.4	6.6	38.9	40.8	28.7	31.8	1.6	33.4	108.6	40.8	69.8	69.6	203	2899	102.6	Wet	41.2	7.8	69.5	39.1	414	112	114									
9:00		2	9.0	10.7	8.8	2.1	6.7	39.1	33.3	28.8	31.9	4.9	36.8	102.5	33.4	80.8	52	84	5079	113.2	Wet	60.9	14.2	81.0	39.2	129	147	129									
17:00		1	9	10.7	8.8	2.5	6.3	33.3	28.8	31.9	1.9	36.6	116.0	46.1	77	83	203	2907	109.1	Wet	43.2	7.6	77	38	205	984	934										
17:00		2	9	10.7	8.7	1.8	6.8	33	30	33	9.9	33	126	38	86	54	89	5082	119	Wet	32	12	87.0	34	149	166	154										

Time	Evaporator Water Inlet		Evaporator Water Outlet		Condenser Water Inlet		Condenser Water Outlet		CHP-01		CHP-02		CHP-03		CDP-01		CDP-02		CDP-03		CT-01 400 T		CT-02 400 T		CT-03 400 T		Working %
	NO.	PSI	°C	PSI	°C	PSI	°C	PSI	°C	Suct psi	Disc psi	Suct psi	Disc psi	Suct psi	Disc psi	Suct psi	Disc psi	Suct psi	Disc psi	ON	OFF	ON	OFF	ON	OFF		
23:00	1	170	10	175	8	165	25	165	29	145	180	145	180	—	—	125	175	125	175	—	—	—	—	✓	—	✓	57.4
23:00	2	170	11	165	9	165	29	165	33	145	180	145	180	—	—	125	150	125	175	—	—	—	—	✓	—	✓	69.6
9:00	1	165	12	165	8	165	28	165	31	145	180	145	180	—	—	125	150	125	175	—	—	—	—	✓	—	✓	92.1
9:00	2	190	11	160	10	165	28	165	31	145	180	145	180	—	—	125	175	125	175	—	—	—	—	✓	—	✓	83
18:00	1	165	10	165	8	165	30	165	33	145	180	145	180	—	—	125	175	125	175	—	—	—	—	✓	—	✓	54
18:00	2	175	10	165	8	165	30	165	33	145	180	145	180	—	—	125	175	125	175	—	—	—	—	✓	—	✓	54

Supervisor Morning Shift	
Supervisor Afternoon Shift	
Supervisor Night Shift	
Assistance Chief Engineer	
Chief Engineer	

Chiller	Set	Set Temp (°C)
	17.00-17.00	44
	17.00-19.00	44
	19.00-21.00	44
	21.00-00.00	44

Remark:

INNSIDE by Meliã
Bangkok Sukhumvit

Waste water treatment log sheet
Engineering Department
Floor G

Date 19/05/24

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Time	ASBR Tank										Submersible Tank						
	EFF-01	EFF-02	EJ-01	EJ-02	EJ-03	RSP-01	RSP-02	Low	High	SME-01	SME-02	SME-03	RFP-01	RFP-02	Low	High	
09.00.	A	A	A	A	A	A	A	/	=	A	A	A	A	A	/	=	
16.00.	A	A	A	A	A	A	A	/	=	A	A	A	A	A	/	=	
24.00.	A	A	A	A	A	A	A	/	=	A	A	A	A	A	/	=	

Remak :

Supervisor Morning Shift	
Supervisor Afternoon Shift	
Supervisor Night Shift	
Assistance Chief Engineer	
Chief Engineer	

INNSiDE by Meliã
Bangkok Sukhumvit

Inside sukhumvit Bangkok
Engineering Department
Pool Log Sheet

Date

19/05/24

Description	Description	Morning Shift		Afternoon shift		Night Shift	
		Normal	Abnormal	Normal	Abnormal	Normal	Abnormal
CL /ค่าคลอรีน	CL 1.0-1.5	1.0		1.0		1	
PH /ค่าความเป็นกรด-ด่าง	PH 7.2-7.6	7.2		7.2		7.2	
Check water temperature/อุณหภูมิในสระ	Degree/องศา°C	30 °c		32 °c		31 °c	
Salt/ค่าความเข้มข้นของเกลือ	Salt 3,000-4,000 ppt	3.74		3.2		3.72	
Surge Tank Level/ระดับน้ำในถังสำรอง	LO,M,H	L		L		L	
Filter Tank Pressure (15-20 psi)/ระดับแรงดันในถังกรอง (ปอนด์/ตารางนิ้ว)	Pressure (15-20 psi)	20		20		10	
Cleaning Filter Tanks/ล้างทำความสะอาดแผ่นกรองและถังกรอง	Clean/Not Clean	NC		NC		C	
Pool Pilot Machine Active No.1,2/สถานะการทำงานของเครื่องทำเกลือ	Status On/Off	ON		ON		ON	
Clean Pool/ทำความสะอาดสระน้ำ	Clean/Not Clean	NC		NC		NO	
Salt Stock /จำนวนถุงเกลือ	Salt Stock 20 bag/เกลือ	11		11		13	
Chlorine Stocks(Sacks)/จำนวนผงคลอรีนที่มีไว้ใช้งาน(ถุง)	Chlorine1 (Sacks)	1		1		1	
Hydrochloric Acid Stocks(Sacks)/จำนวนกรดเกลือที่มีไว้ใช้งาน(ถุง)	Chlorine1 (Sacks)	1		1		1	
Soda Assyrian(Sacks)/จำนวนโซดาแอสที่ที่มีไว้ใช้งาน(ถุง)	Chlorine1 (Sacks)	1		1		1	
Tile/สภาพแผ่นกระเบื้องสระน้ำ	normal/ AB normal	N		N		N	
Handrails/ราวจับ ขึ้น-ลงสระน้ำ	normal/ AB normal	N		N		N	
Light bulb/สภาพหลอดไฟ	normal/ AB normal	N		N		N	
Fountain Pond							
CL 1.0-1.5/ค่าคลอรีน	CL 1.0-1.5	1.0		1.0		1.0	
PH 7.2-7.6/ค่าความเป็นกรด-ด่าง	PH 7.2-7.6	7.2		7.2		7.2	
Cleaning Filter Tanks/ล้างทำความสะอาดถังกรอง	Clean/Not Clean	NC		NC		C	

Remark:

Morning Shift

Afternoon Shift

Night Shift

Ass't Chief Engineer

Chief Engineer

Electric Summary 4013		Code.10 4013	Code.11 1679	Code.12 2333	Code.31 0.614	
Water Summary 47123 m³						
System	Description		Morning Shift	Afternoon Shift	Night Shift	Remark
MDB 1 (FL 9)	Voltage	(380-400Volt)	396	396	397	
	Amp		460	490	500	
	Power Factor 0.84-1		0.96	0.96	0.97	CAP Bank
MDB 2 (FL 9)	Voltage	(380-400Volt)	397	390	399	
	Amp		408	233	233	
	Power Factor 0.84-1		0.98	0.98	0.97	CAP Bank
AMCC, MDB (FL 9)	Chiller AMCC	Kwh	632385	652695	633599	
BUSDUCT 11-29 (FL9)	Guest room AMCC	Kwh	117103	117165	117312	
ATS (FL 9)	EMDB (2)	Kwh	813138	813510	814444	
Generator (FL10)	Voltage	(380-400Volt)	-	-	-	
	Status	Auto/Off	A	A	A	
PAU (FL 10)	PAU-01	No.1 Auto/Off/Manual	A	A	A	
	PAU-02	No.2 Auto/Off/Manual	A	A	A	
PAD (FL 10)	Pressurized Fan	Auto/Off/Manual	A	A	A	
PAD (FL 35)		Auto/Off/Manual	A	A	A	
EAD (FL 10)	Exhaust Fan	Auto/Off/Manual	A	A	A	
EAD (FL 33)		Auto/Off/Manual	A	A	A	
EF-06 (FL 10)	hospital room	No.1 Auto/Off/Manual	A	A	A	
Chiller System (FL 9)	Chiller No.(V RUN)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
		No.3 Auto/Off/Manual	-	-	-	
	Cooling tower (V RUN)	No.1 Auto/Off/Manual	-	-	-	
		No.2 Auto/Off/Manual	A	A	A	
		No.3 Auto/Off/Manual	A	A	A	
	CDP (V RUN)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
		No.3 Auto/Off/Manual	-	-	-	
	CHP (V RUN)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
		No.3 Auto/Off/Manual	-	-	-	
Hot water System (FL 33)	Heat Pump Setpoint (55.5 °C)	No.1 (°C)	55.7	55	57.7	
		No.2 (°C)	55.8	55	57.9	
	Hot water storage tank	Tank 1 (°C)	50	56	54	
		Tank 2 (°C)	50	52	50	
Cold Water system and water level (B1,33)	Fire Tank no.1 (B1)	(100 cm³) (V Normal)	✓	✓	✓	
	RAW Tank no.2 (B1)	(100 cm³) (V Normal)	✓	✓	✓	
	Under ground Tank no.3 (B1)	(100 cm³) (V Normal)	✓	✓	✓	
	Under ground Tank no.4 (B1)	(100 cm³) (V Normal)	✓	✓	✓	
	Roof Tank no.1 (FL 33)	(200cm³) (V Normal)	✓	✓	✓	
	Roof Tank no.2 (FL 33)	(200cm³) (V Normal)	✓	✓	✓	
	Booster pump (FL 33)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
	pump Soft (B1)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
	Transfer pump (B1)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
Diesel Fire Pump (B1)	Engine Pressure 240-255 Psi	Auto/Off/Manual	A	A	A	
Electric Fire Pump (B1)	Electrical Pressure 250-255 Psi	Auto/Off/Manual	A	A	A	
Jockey pump (B1)	Electrical Pressure 255-265 Psi	Auto/Off/Manual	A	A	A	
Waste Water Treatment (G)	Operation System	Auto/Off/Manual	A	A	A	
Gas System (G)	Line No.(Open/Closed)	(A) use/ Spar / Used	Span	Span	Span	
		(B) use/ Spar / Used	Use	Use	Use	
	Pressure In-Out, Boiler, Water	20-30 PSI. / 70° C	25 / 70	25 / 70	26 / 74	
	Gas Detector	Normal / Abnormal	N	N	N	
Green Wall Machine (G)	Operation of pump (I)	Auto/Off/Manual	A	A	A	
Fountain pump(FL 34)	Filter Pump	(V RUN)	✓	✓	✓	
Main Swimming Pool (FI 34)	Swimming Pool pump	No.1 (V RUN)	✓	✓	✓	
		No.2 (V RUN)	✓	✓	✓	
	Jacuzzi 1,2	(V RUN)	✓	✓	✓	
	Salt Chlorinator	(V RUN) / amount °C	4.5 / 30	4.5 / 30	4.5 / 30	
	PH-Alkalinity	CL 1.0-1.5 / PH 7.2-8.4	1.0 / 7.2	0.5 / 6.8	1 / 7.2	
Hotel Sign (fl6,G,33)	In front of hotel & Roof	Normal / Abnormal	N	N	N	

Supervisor engineering
Asst. chief engineering
Chief Engineering

INNSIDE by Melia
Bangkok Sukhumvit

Engineering Department
Chiller Plant Operation

250T 400T

Chiller No. 1, 2

Date: 20/05/24

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Time	Chiller Water Setpoint Temp °C		Evaporator							Condensor							Compressor										
			Evap Entering (°C)	Evap Leaving (°C)	Evap Approach Temp(°C)	Evap Sat Rfgt Temp(°C)	Evap Sat Rfgt Pressure(psi)	Expansion Valve Position %	Cond Entering(°C)	Cond Leaving(°C)	Cond Approach Temp(°C)	Cond Sat Rfgt Temp (°C)	Cond Rfgt Pressure(Psig)	EXV Position	Differential	Average Line Current	Compressor Starts	Compressor Running Time	Oil Pressure (Psig)	Oil Loss Level Sensor	Compressor Rfgt Discharge(°C)	Discharge Superheat(°C)	System Diff Pressure (Psig)	Evaporator Refrigerant Pressure	Running Current		
	NO.	44.50	55	45	5	42	45	40	90	99.5	5	100	100	%	PSID	%	Hrs	Hrs	90	Wet/Dry	105	25	55	PSIG	Amp	Amp	Amp
23:00	1	9	10.4	8.9	2.5	6.4	38.5	43.5	30.1	33.5	1.9	35.4	115.6	43.6	73.7	80.6	203	2935	109	Wet	43	7.4	77.1	39.5	229	229	226
23:00	2	9	10.7	8.6	2.2	6.5	38.7	32.5	30.1	33.4	4.1	38.8	122.8	32.6	83.9	84.6	84	511.6	110	Wet	62.9	14.6	87.5	38.9	148	168	162
9:00	1	9.0	10.8	9.0	2.4	6.6	38.9	44.1	29.7	32.9	1.8	34.7	113	42.1	74.9	95.2	203	2921	106.9	Wet	49.4	8.0	78.8	39.0	192	182	182
9:00	2	9.0	10.8	8.8	2.9	7.1	39.6	33.7	29.6	32.9	5.0	37.9	124	33.5	86.3	55.7	84	510.2	118	Wet	61.0	12.8	86.6	39.1	147	160	151
17:00	1	9	10.8	8.7	2.4	6.5	38.8	29.9	33.4	33.4	1.9	35.3	115	45.8	76.5	81	803	2925	108	Wet	43.5	8.3	76.5	38	230	228	225
17:00	2	9	10.8	8.7	2.3	6.4	38.8	33.9	33.9	33.9	5.4	36.5	127.4	33.1	88.7	54.4	84	520.6	120	Wet	52.4	13.7	88.2	38.9	151	149	151

Time	Evaporator Water Inlet		Evaporator Water Outlet		Condenser Water Inlet		Condenser Water Outlet		CHIP-01		CHIP-02		CHIP-03		CDP-01		CDP-02		CDP-03		CT-01 400 T		CT-02 400 T		CT-03 400 T		Working %
	NO.	PSI	°C	PSI	°C	PSI	°C	PSI	°C	Suct psi	Disc psi	Suct psi	Disc psi	Suct psi	Disc psi	Suct psi	Disc psi	Suct psi	Disc psi	ON	OFF	ON	OFF	ON	OFF		
23:00	1	170	10.7	170	8.9	165	30.1	165	33.5	146	176	146	180	—	—	120	160	120	176	—	—	—	—	—	—	—	80.7
23:00	2	170	10.7	160	8.8	165	30.1	165	33.4							120	150	120	176	—	—	—	—	—	—	—	85.7
9:00	1	170	11	170	8	165	29	165	32	145	175	145	175	—	—	120	150	120	176	—	—	—	—	—	—	—	75.7
9:00	2	165	11	160	10	165	29	165	32							120	150	120	176	—	—	—	—	—	—	—	82.9
18:00	1	170	10	170	8	165	29	165	32	145	175	145	175	—	—	120	150	120	176	—	—	—	—	—	—	—	81.4
18:00	2	170	10	160	9	165	29	165	32							120	150	120	176	—	—	—	—	—	—	—	81.4

Supervisor Morning Shift	
Supervisor Afternoon Shift	
Supervisor Night Shift	
Assistance Chief Engineer	
Chief Engineer	

Chiller		Set Temp (°C)	
08:00-11:00	44		
11:00-13:00	44		
13:00-15:00	44		
15:00-18:00	44		

Remark

INSIDE by Melia Bangkok Sukhumvit

Hot water system daily log sheet
Engineering Department
Inside Sukhumvit Bangkok

Date 20/06/24

3

Time	Storage tank Temp °C	Liquid Pressure	Heat pump
Standard Number	60°C	pressure Lo-Hi	Auto/Temp °C
Morning Shift 08.00h.-11.00h.	1	Lo HI	1 2
Afternoon Shift 13.00h.-17.00h.	50	100/100	A/55.4
Night Shift 24.00h.-03.00h.	56	100/100	A/55.4

HW/RP	Hot water return pump 15.00 h											
auto/manual pressure in Psi pressure out Psi Temp °C	Floor B1		Floor 11		Floor 16		Floor 21		Floor 26		Floor 33	
	1	2	3	4	5	6	7	8	9	10	11	12
	100	90	130	130	110	110	90	90	60	60	60	60
	100	80	120	120	50	50	50	60	60	60	60	60
	92	42	42	42	45	45	32	32	43	43	43	43

Supervisor Morning Shift
Supervisor Afternoon Shift
Supervisor Night Shift
Assistance Chief Engineer
Chief Engineer

SYMBOL	
A	auto
M	manual
off	turned off

Time	ASBR Tank										Submersible Tank					
	FFP-01	FFP-02	EJ-01	EJ-02	EJ-03	RSP-01	RSP-02	Low	High	SME-01	SME-02	SME-03	RFP-01	RFP-02	Low	High
09.00.	A	A	A	A	A	A	A	✓	-	A	A	A	A	A	✓	-
16.00.	Ø	Ø	Ø	Ø	Ø	Ø	Ø	✓	-	Ø	Ø	Ø	Ø	Ø	✓	-
24.00.	A	A	Ø	A	A	A	A	✓	-	A	A	A	A	A	✓	-


Remak :

Supervisor Morning Shift	
Supervisor Afternoon Shift	
Supervisor Night Shift	
Assistance Chief Engineer	
Chief Engineer	

Date 20/05/24

Description	Description	Morning Shift		Afternoon shift		Night Shift	
		Normal	Abnormal	Normal	Abnormal	Normal	Abnormal
CL /ค่าคลอรีน	CL 1.0-1.5	1.0		0.5		L	
PH /ค่าความเป็นกรด-ด่าง	PH 7.2-7.6	7.2		6.8		7.2	
Check water temperature/อุณหภูมิในสระ	Degree/องศา°C	30 °c		32 °c		32.6c	
Salt/ค่าความเข้มข้นของเกลือ	Salt 3,000-4,000 ppt	4.5		4.5		4.54	
Surge Tank Level/ระดับน้ำในถังสำรอง	LO,M,H	L		L		L	
Filter Tank Pressure (15-20 psi)/ระดับแรงดันในถังกรอง (ปอนด์/ตารางนิ้ว)	Pressure (15-20 psi)	10		10		10	
Cleaning Filter Tanks/ล้างทำความสะอาดแผ่นกรองและถังกรอง	Clean/Not Clean	NC		NC		C	
Pool Pilot Machine Active No.1,2/สถานะการทำงานของเครื่องทำเกลือ	Status On/Off	ON		ON		ON	
Clean Pool/ทำความสะอาดสระน้ำ	Clean/Not Clean	NC		NC		C	
Salt Stock /จำนวนถุงเกลือ	Salt Stock 20 bag/เกลือ	11.5		11		13	
Chlorine Stocks(Sacks)/จำนวนผงคลอรีนที่มีไว้ใช้งาน(ถุง)	Chlorine1 (Sacks)	1		1		1	
Hydrochloric Acid Stocks(Sacks)/จำนวนกรดเกลือที่มีไว้ใช้งาน(ถุง)	Chlorine1 (Sacks)	1		1		1	
Soda Assyrian(Sacks)/จำนวนโซดาแอสที่ไว้ใช้งาน(ถุง)	Chlorine1 (Sacks)	1		1		1	
Tile/สภาพแผ่นกระเบื้องสระน้ำ	normal/ AB normal	N		N		N	
Handrails/ราวจับ ขึ้น-ลงสระน้ำ	normal/ AB normal	N		N		N	
Light bulb/สภาพหลอดไฟ	normal/ AB normal	N		N		N	
Fountain Pond							
CL 1.0-1.5/ค่าคลอรีน	CL 1.0-1.5	1.0		0.5		1	
PH 7.2-7.6/ค่าความเป็นกรด-ด่าง	PH 7.2-7.6	7.2		6.8		7.2	
Cleaning Filter Tanks/ล้างทำความสะอาดถังกรอง	Clean/Not Clean	NC		NC		C	

Remark: _____

Morning Shift	
Afternoon Shift	
Night Shift	
Ass't Chief Engineer	
Chief Engineer	

Electric Summary 4024		Code.10 4024	Code.11 1685	Code.12 2338	Code.31 0.614	Remark
Water Summary 47294 m ³						
System	Description		Morning Shift	Afternoon Shift	Night Shift	
MDB 1 (FL 9)	Volage (380-400Volt)		391.7	395.2	396	
	Amp		443.2	458.6	459	
	Power Factor 0.84-1		0.96	0.98	0.96	CAP Bank
MDB 2 (FL 9)	Volage (380-400Volt)		393.1	396.3	396	
	Amp		239.8	326.5	229	
	Power Factor 0.84-1		0.98	0.98	0.95	CAP Bank
AMCC, MDB (FL 9)	Chiller AMCC	Kwh	632370	636242	635650	
BUSDUCT 11-29 (FL9)	Guest room AMCC	Kwh	117452	118602	117676	
ATS (FL 9)	EMDB (2)	Kwh	815224	816166	816646	
Generator (FL10)	Volage (380-400Volt)		-	-	-	
	Status	Auto/Off	A	A	A	
PAU (FL 10)	PAU-01	No.1 Auto/Off/Manual	A	A	A	
	PAU-02	No.2 Auto/Off/Manual	A	A	A	
PAD (FL 10)	Pressurized Fan	Auto/Off/Manual	A	A	A	
PAD (FL 35)	Pressurized Fan	Auto/Off/Manual	A	A	A	
EAD (FL 10)	Exhaust Fan	Auto/Off/Manual	A	A	A	
EAD (FL 33)	Exhaust Fan	Auto/Off/Manual	A	A	A	
EF-06 (FL 10)	hospital room	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
Chiller System (FL 9)	Chiller No. (V RUN)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
		No.3 Auto/Off/Manual	-	-	-	
	Cooling tower (V RUN)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
		No.3 Auto/Off/Manual	A	A	A	
	CDP (V RUN)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
		No.3 Auto/Off/Manual	-	-	-	
	CHP (V RUN)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
		No.3 Auto/Off/Manual	-	-	-	
Hot water System (FL 33)	Heat Pump Setpoint (55.....°C)	No.1 (°C)	32.1	58.7	65.1	
		No.2 (°C)	32.3	58.9	45.3	
	Hot water storage tank	Tank 1 (°C)	52	50	50	
		Tank 2 (°C)	50	50	46	
Cold Water system and water level (B1,33)	Fire Tank no.1 (B1)	(100 cm ³) (V Normal)	/	/	/	
	RAW Tank no.2 (B1)	(100 cm ³) (V Normal)	/	/	/	
	Under ground Tank no.3 (B1)	(100 cm ³) (V Normal)	/	/	/	
	Under ground Tank no.4 (B1)	(100 cm ³) (V Normal)	/	/	/	
	Roof Tank no.1 (FL 33)	(200cm ³) (V Normal)	/	/	/	
	Roof Tank no.2 (FL 33)	(200cm ³) (V Normal)	/	/	/	
	Booster pump (FL 33)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
	pump Soft (B1)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
	Transfer pump (B1)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
Diesel Fire Pump (B1)	Engine Pressure 240-255 Psi	Auto/Off/Manual	A	A	A	
Electric Fire Pump (B1)	Electrical Pressure 250-255 Psi	Auto/Off/Manual	A	A	A	
Jockey pump (B1)	Electrical Pressure 255-265 Psi	Auto/Off/Manual	A	A	A	
Waste Water Treatment (G)	Operation System	Auto/Off/Manual	A	A	A	
Gas System (G)	Line No. (Open/Closed)	(A) use/ Spar / Used	SPAR	SPAR	SPAR	
		(B) use/ Spar / Used	USE	USE	USE	
	Pressure In-Out, Boiler, Water	20-30 PSI. / 70° C	26/72	26/72	26/74	
	Gas Detector	Normal / Abnormal	N	N	N	
Green Wall Machine (G)	Operation of pump (I)	Auto/Off/Manual	A	A	A	
Fountain pump (FL 34)	Filter Pump	(V RUN)	/	/	/	
Main Swimming Pool (FL 34)	Swimming Pool pump	No.1 (V RUN)	/	/	/	
		No.2 (V RUN)	/	/	/	
	Jacuzzi 1,2	(V RUN) / amount/°C	A/M 31	438/81	439/29.6	
	Salt Chlorinator	(V RUN) / amount/°C	0.5/72	0.6/72	2.0/72	
	PH-Alkalinity	CL 1.0-1.5/PH 7.2-8.4	0.5/72	0.6/72	2.0/72	
Hotel Sign (IF6,G,33)	In front of hotel & Roof	Normal / Abnormal	N	N	N	

Supervisor engineering
Asst. chief engineering
Chief Engineering

INNSIDE by Melia
Bangkok Sukhumvit

Engineering Department
Chiller Plant Operation

250t 400t

Chiller No. 12

Date:

21/5/62

Time		Evaporator										Condensor										Compressor					
Chiller Water Setpoint Temp °C		Evap Entering (°C)	Evap Leaving (°C)	Evap Approach Temp(°C)	Evap Sat Rfgt Temp(°C)	Evap Sat Rfgt Pressure(psi)	Expansion Valve Position %	Cond Entering(°C)	Cond Leaving(°C)	Cond Approach Temp(°C)	Cond Sat Rfgt Temp (°C)	Cond Rfgt Pressure(Psig)	EXV Position	Differential	Average Line Current	Compressor Starts	Compressor Running Time	Oil Pressure (Psig)	Oil Loss Level Sensor	Compressor Rfgt Discharge(°C)	Discharge Superheat(°C)	System Diff Pressure (Psig)	Evaporator Refrigerant Pressure	Running Current			
NO.	44.50	55	45	5	42	45	40	90	99.5	5	100	100	%	PSID	%	Hrs	Hrs	90	wet/dry	105	25	55	PSIG	Amp	Amp	Amp	
23:00	1	9	10.4	8.9	2.4	6.5	38.7	39	27.7	30.5	1.7	32.1	104	39	65.6	63.7	203	2859	93.8	Wet	39.5	7.4	65.6	38.2	179	179	12.8
23:00	2	9	10.4	9.7	1.5	6.9	38.6	38.5	27.6	30.4	24.2	32.6	112	30	73.5	47.9	85	5140	10.6	Wet	50.1	15.4	73.8	39.3	134	143	13.3
9:00	1	9.0	10.6	9.0	2.4	6.6	38.7	40.4	29.0	32.0	1.2	33.2	109.6	40.4	70.32	61.5	203	2744	103.5	Wet	41.4	7.3	70.35	38.7	178	175	17.6
9:00	2	9.0	10.6	8.7	1.6	7.1	39.7	32.8	29.0	32.1	2.7	36.5	180.7	32.8	81.08	51.3	85	5185	113.9	Wet	47.8	18.7	81.38	37.4	142	157	14.7
17:00	1	9.0	10.6	8.7	2.5	6.4	38.6	41.9	28.5	31.7	1.8	33.5	108.4	41.9	75.36	31.9	203	2754	103.	Wet	47.1	8.9	70.40	38.5	203	202	80.2
17:00	2	9.0	10.6	8.8	2.1	6.8	38.2	31.1	28.4	31.5	4.8	31.0	118.0	36.1	78.84	31.1	85	5135	111.5	Wet	47.2	13.0	78.70	31.2	128	153	13.7

Time	NO.	Evaporator Water Inlet		Evaporator Water Outlet		Condenser Water Inlet		Condenser Water Outlet		CHIP-01		CHIP-02		CHIP-03		CDP-01		CDP-02		CDP-03		CT-01 400 T		CT-02 400 T		CT-03 400 T		Working %
		PSI	°C	PSI	°C	PSI	°C	PSI	°C	Suct psi	Disc psi	Suct psi	Disc psi	Suct psi	Disc psi	Suct psi	Disc psi	Suct psi	Disc psi	Suct psi	Disc psi	ON	OFF	ON	OFF	ON	OFF	
23:00	1	170	10.8	165	8.9	165	27	160	30	140	150	146	150	-	-	120	150	120	176	-	-	-	-	✓	-	✓	-	63.1
23:00	2	170	10.4	166	8.7	165	27	165	31	140	150	146	150	-	-	120	150	120	176	-	-	-	-	✓	-	✓	-	47.2
9:00	1	170	10.1	170	7	160	29	163	32	145	135	145	180	-	-	125	135	125	150	-	-	-	-	✓	-	✓	-	49.5
9:00	2	175	10	160	8	160	29	165	32	145	135	145	180	-	-	125	135	125	150	-	-	-	-	✓	-	✓	-	51.3
18:00	1	170	10	170	9	160	29	165	32	145	135	145	180	-	-	125	135	125	150	-	-	-	-	✓	-	✓	-	47.7
18:00	2	175	10	160	8	160	29	165	32	145	135	145	180	-	-	125	135	125	150	-	-	-	-	✓	-	✓	-	50.1

Supervisor Morning Shift
Supervisor Afternoon Shift
Supervisor Night Shift
Assistance Chief Engineer
Chief Engineer

Chiller		Set Temp (°C)	
Room 11:00	44	Room 11:00	44
Room 12:00	44	Room 12:00	44
Room 13:00	44	Room 13:00	44
Room 14:00	44	Room 14:00	44
Room 15:00	44	Room 15:00	44

Remark:

INSIDE by Melia
Bangkok Sukhumvit
Hot water system daily log sheet
Engineering Department
Inside Sukumvit Bangkok

Date 21/5/62

Time		Storage tank Temp °C	Liquid Pressure		Heat pump		HWRP	Hot water return pump 15.00 u											
Standard	60°C	pressure Lo-Hi	Auto/Temp °C	1	2	1		2	3	4	5	6	7	8	9	10	11	12	
Number	1	2	Lo	Hi	1	2		1	2	3	4	5	6	7	8	9	10	11	12
Morning Shift 08.00u.-11.00u.	52	50	150	140	57.1	57.3		auto/manual pressure in Psi	A	A	A	A	A	A	A	A	A	A	A
Afternoon Shift 13.00u.-17.00u.	52	50	150	140	57.1	57.3	pressure out Psi	A	A	A	A	A	A	A	A	A	A	A	
Night Shift 24.00u.-03.00u.	50	49	140	130	55.1	55.3	Temp °C	A	A	A	A	A	A	A	A	A	A	A	

Supervisor Morning Shift
Supervisor Afternoon Shift
Supervisor Night Shift
Assistant Chief Engineer
Chief Engineer

SYMBOL
A auto
M manual
off turned off

INNSIDE by Meliã
Bangkok Sukhumvit

Waste water treatment log sheet
Engineering Department
Floor G

Date 29/5/67

4

Time	ASBR Tank										Submersible Tank					
	FFP-01	FFP-02	EJ-01	EJ-02	EJ-03	RSP-01	RSP-02	Low	High	SME-01	SME-02	SME-03	RFP-01	RFP-02	Low	High
09.00.	A	A	A	A	A	A	A	✓	-	A	A	A	A	A	✓	-
16.00.	A	A	A	A	A	A	A	✓	-	A	A	A	A	A	✓	-
24.00.	A	A	A	A	A	A	A	✓	-	A	A	A	A	A	✓	-

Remak :

Supervisor Morning Shift	
Supervisor Afternoon Shift	
Supervisor Night Shift	
Assistance Chief Engineer	
Chief Engineer	

Date

21/5/67

Description	Description	Morning Shift		Afternoon shift		Night Shift	
		Normal	Abnormal	Normal	Abnormal	Normal	Abnormal
ค่าคลอรีน	CL 1.0-1.5	0.5		0.5		1	
H/ค่าความเป็นกรด-ด่าง	PH 7.2-7.6	7.2		7.2		7.2	
Check water temperature/อุณหภูมิในสระ	Degree/องศา°C	31 °C		31 °C		29 °C	
Salt/ค่าความเข้มข้นของเกลือ	Salt 3,000-4,000 ppt	4.77		4.88		4.77	
Surge Tank Level/ระดับน้ำในถังสำรอง	LO,M,H	L		L		L	
Filter Tank Pressure (15-20 psi)/ระดับแรงดันในถังกรอง (ปอนด์/ตารางนิ้ว)	Pressure (15-20 psi)	15		15		10	
Cleaning Filter Tanks/ล้างทำความสะอาดแผ่นกรองและถังกรอง	Clean/Not Clean	NC		NC		C	
Pool Pilot Machine Active No.1,2/สถานะการทำงานของเครื่องทำเกลือ	Status On/Off	ON		ON		ON	
Clean Pool/ทำความสะอาดสระน้ำ	Clean/Not Clean	NC		NC		C	
Salt Stock /จำนวนถุงเกลือ	Salt Stock 20 bag/เกลือ	11		4		13	
Chlorine Stocks(Sacks)/จำนวนผงคลอรีนที่มีไว้ใช้งาน(ถุง)	Chlorine1 (Sacks)	1		1		1	
Hydrochloric Acid Stocks(Sacks)/จำนวนกรดเกลือที่มีไว้ใช้งาน(ถุง)	Chlorine1 (Sacks)	1		1		1	
Soda Assyrian(Sacks)/จำนวนโซดาแอสที่มีไว้ใช้งาน(ถุง)	Chlorine1 (Sacks)	1		1		1	
Tile/สภาพแผ่นกระเบื้องสระน้ำ	normal/ AB normal	N		N		N	
Handrails/ราวจับ ขึ้น-ลงสระน้ำ	normal/ AB normal	N		N		N	
Light bulb/สภาพหลอดไฟ	normal/ AB normal	N		N		N	
Fountain Pond							
CL 1.0-1.5/ค่าคลอรีน	CL 1.0-1.5	0.5		0.5		1	
PH 7.2-7.6/ค่าความเป็นกรด-ด่าง	PH 7.2-7.6	7.2		7.2		7.2	
Cleaning Filter Tanks/ล้างทำความสะอาดถังกรอง	Clean/Not Clean	NC		NC		C	

Remark:

Morning Shift	
Afternoon Shift	
Night Shift	

Ass't Chief Engineer	
Chief Engineer	

W
1

Electric Summary 4035

Water Summary 47446 m³

Code.10

Code.11 1685

Code.12 2344

Code.31 0.614

System	Description		Morning Shift	Afternoon Shift	Night Shift	Remark
MDB 1 (FL 9)	Volage	(380-400Volt)	3.13	3.10	3.16	
	Amp		417	435	448	
	Power Factor 0.84-1		0.96	0.96	0.96	CAP Bank
MDB 2 (FL 9)	Volage	(380-400Volt)	3.87	3.94	3.96	
	Amp		237	280	287	
	Power Factor 0.84-1		0.97	0.97	0.97	CAP Bank
AMCC, MDB (FL 9)	Chiller AMCC	Kwh	636592	637229	637241	
BUSDUCT 11-29 (FL9)	Guest room AMCC	Kwh	117835	117948	118033	
ATS (FL 9)	EMDB (2)	Kwh	817523	818193	818762	
Generator (FL10)	Volage	(380-400Volt)	-	-	-	
	Status	Auto/Off	A	A	A	
PAU (FL 10)	PAU-01	No.1 Auto/Off/Manual	A	A	A	
	PAU-02	No.2 Auto/Off/Manual	A	A	A	
PAD (FL 10)	Pressurized Fan	Auto/Off/Manual	A	A	A	
PAD (FL 35)		Auto/Off/Manual	A	A	A	
EAD (FL 10)	Exhaust Fan	Auto/Off/Manual	A	A	A	
EAD (FL 33)		Auto/Off/Manual	A	A	A	
EF-06 (FL 10)	hospital room	No.1 Auto/Off/Manual	A	A	A	
Chiller System (FL 9)	Chiller No. (V RUN)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
		No.3 Auto/Off/Manual	-	-	-	
	Cooling tower (V RUN) 12637	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
		No.3 Auto/Off/Manual	A	A	A	
	CDP (V RUN)	No.1 Auto/Off/Manual	-	-	-	
		No.2 Auto/Off/Manual	A	A	A	
		No.3 Auto/Off/Manual	A	A	A	
	CHP (V RUN)	No.1 Auto/Off/Manual	-	-	-	
		No.2 Auto/Off/Manual	A	A	A	
		No.3 Auto/Off/Manual	A	A	A	
Hot water System (FL 33)	Heat Pump Setpoint (.....°C) 55	No.1 (°C)	57	52.4	56.7	
		No.2 (°C)	57	57.6	54.6	
	Hot water storage tank	Tank 1 (°C)	57	52	50	
		Tank 2 (°C)	54	52	46	
Cold Water system and water level (B1,33)	Fire Tank no.1 (B1)	(100 cm ³) (V Normal)	✓	✓	✓	
	RAW Tank no.2 (B1)	(100 cm ³) (V Normal)	✓	✓	✓	
	Under ground Tank no.3 (B1)	(100 cm ³) (V Normal)	✓	✓	✓	
	Under ground Tank no.4 (B1)	(100 cm ³) (V Normal)	✓	✓	✓	
	Roof Tank no.1 (FL 33)	(200cm ³) (V Normal)	✓	✓	✓	
	Roof Tank no.2 (FL 33)	(200cm ³) (V Normal)	✓	✓	✓	
	Booster pump (FL 33)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
	pump Soft (B1)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
	Transfer pump (B1)	No.1 Auto/Off/Manual	A	A	A	
		No.2 Auto/Off/Manual	A	A	A	
Diesel Fire Pump (B1)	Engine Pressure 240-255 Psi	Auto/Off/Manual	A	A	A	
Electric Fire Pump (B1)	Electrical Pressure 250-255 Psi	Auto/Off/Manual	A	A	A	
Jockey pump (B1)	Electrical Pressure 255-265 Psi	Auto/Off/Manual	A	A	A	
Waste Water Treatment (G)	Operation System	Auto/Off/Manual	A	A	A	
Gas System (G)	Line No. (Open/Closed)	(A) use / Spar / Used (B) use / Spar / Used	SPAR	SPAR	SPAR	
	Pressure In-Out, Boiler, Water	20-30 PSI, 70° C	26/70	26/70	26/72	
	Gas Detector	Normal / Abnormal	N	N	N	
Green Wall Machine (G)	Operation of pump (/)	Auto/Off/Manual	A	A	A	
Fountain pump (FL 34)	Filter Pump	(V RUN)	✓	✓	✓	
Main Swimming Pool (FI 34)	Swimming Pool pump	No.1 (V RUN)	✓	✓	✓	
		No.2 (V RUN)	✓	✓	✓	
	Jacuzzi 1,2	(V RUN)	✓	✓	✓	
	Salt Chlorinator	(V RUN) / amount / °C	4.41 / 28	4.46 / 40	4.03 / 30	
Hotel Sign (116,G,33)	In front of hotel & Roof	CL 1.0-1.5 / PH 7.2-8.4	2.5 / 7.2	4.0 / 7.2	1 / 7.2	
		Normal / Abnormal		N	N	

Supervisor engineering
Asst. chief engineering
Chief Engineering

INSIDE by Melia
Bangkok Sukhumvit

Engineering Department
Chiller Plant Operation

250T 400T

Chiller No. 12

Date: 22/5/67

2

Time	Evaporator					Condensor					Compressor				
	Chiller Water Setpoint Temp °C	Evap Entering (°C)	Evap Leaving (°C)	Evap Approach Temp(°C)	Evap Sat Rfgt Temp(°C)	Evap Sat Rfgt Pressure(psi)	Expansion Valve Position %	Cond Entering(°C)	Cond Leaving(°C)	Cond Approach Temp(°C)	Cond Sat Rfgt Temp (°C)	Cond Rfgt Pressure(Psig)	EXV Position	Differential	Average Line Current
23:00	1	9	10.5	2.4	6.6	36.3	39.4	23.2	30.6	1.8	32.4	105	39.3	66.3	65.3
23:00	2	9	10.5	1.5	7	38.6	32.1	23.3	30.7	4.5	35.2	114	31.9	25.3	24.4
9:00	3	9	10.4	2.4	6.5	36.7	38.3	23.5	31.4	1.8	33.1	107	38.8	68.9	66.4
9:00	4	9	10.4	1.8	7.0	39.7	3.1	23.4	31.2	4.6	35.9	116.7	3.1	72.9	55.5
17:00	1	9	11.7	2.5	6.5	38.7	39.2	23.4	31.5	1.7	33.4	107	43.1	69.1	32.9
17:00	2	9	11.7	2.1	6.6	39	36.5	23.5	31.7	5.6	32.6	103	36.5	74.2	56.6

Time	Evaporator Water Inlet		Evaporator Water Outlet		Condenser Water Inlet		Condenser Water Outlet		CHP-01		CHP-02		CHP-03		CDP-01		CDP-02		CDP-03		CT-01 400 T		CT-02 400 T		CT-03 400 T		Working	
	NO.	PSI	°C	PSI	°C	PSI	°C	PSI	°C	Suct psi	Disc psi	Suct psi	Disc psi	Suct psi	Disc psi	Suct psi	Disc psi	Suct psi	Disc psi	Suct psi	Disc psi	ON	OFF	ON	OFF	ON		OFF
23:00	1	170	10.5	16.5	8.9	16.5	23.2	16.5	30.6	140	180	145	180	-	-	120	150	125	135	-	-	-	-	-	-	-	-	85.6
23:00	2	170	10.5	16.6	8.6	16.5	23.6	16.5	30.7	150	180	150	175	-	-	125	165	125	170	-	-	-	-	-	-	-	-	46.3
9:00	1	175	10	16.0	8	170	23	16.0	32	150	180	150	175	-	-	125	165	125	170	-	-	-	-	-	-	-	-	55.5
9:00	2	170	10	16.5	8	165	15	16.0	33	140	180	145	175	-	-	125	175	125	175	-	-	-	-	-	-	-	-	64.8
18:00	1	170	11	160	9	170	26	160	33	140	180	145	175	-	-	125	175	125	175	-	-	-	-	-	-	-	-	72.7
18:00	2	170	11	160	9	170	29	160	32	140	180	145	175	-	-	125	175	125	175	-	-	-	-	-	-	-	-	26.6

San Young (C)

Supervisor Morning Shift
Supervisor Afternoon Shift
Supervisor Night Shift
Assistance Chief Engineer
Chief Engineer

Chiller		Set	Set Temp (°C)
		60.00 (1.00)	44
		11.00 (6.00)	44
		19.00 (23.00)	44
		23.00 (26.00)	44

Remark

Date 22/5/67

Time	ASBR Tank										Submersible Tank					
	FFP-01	FFP-02	EJ-01	EJ-02	EJ-03	RSP-01	RSP-02	Low	High	SME-01	SME-02	SME-03	RFP-01	RFP-02	Low	High
09.00.	A	A	A	A	A	A	A	✓	-	A	A	A	A	A	✓	-
16.00.	B	B	B	B	B	B	B	✓	A	A	B	B	B	B	✓	-
24.00.	A	A	B	A	A	A	A	✓	-	A	A	B	B	B	✓	-

Remak :

Supervisor Morning Shift
Supervisor Afternoon Shift
Supervisor Night Shift
Assistance Chief Engineer
Chief Engineer

INNSiDE by Meliã
Bangkok Sukhumvit

Innside sukhumvit Bangkok
Engineering Department
Pool Log Sheet

Date 22/5/67

Description	Description	Morning Shift		Afternoon shift		Night Shift	
		Normal	Abnormal	Normal	Abnormal	Normal	Abnormal
CL /ค่าคลอรีน	CL 1.0-1.5	7.5		1.0		1	
PH /ค่าความเป็นกรด-ด่าง	PH 7.2-7.6	7.2		7.2		7.2	
Check water temperature/อุณหภูมิในสระ	Degree/องศา°C	28 °C		30 °C		30 °C	
Salt/ค่าความเข้มข้นของเกลือ	Salt 3,000-4,000 ppt	4.41		4.46		4.03	
Surge Tank Level/ระดับน้ำในถังสำรอง	LO,M,H	L		L		L	
Filter Tank Pressure (15-20 psi)/ระดับแรงดันในถังกรอง (ปอนด์/ตารางนิ้ว)	Pressure (15-20 psi)	18		20		10	
Cleaning Filter Tanks/ล้างทำความสะอาดแผ่นกรองและถังกรอง	Clean/Not Clean	Nc		nc		C	
Pool Pilot Machine Active No.1,2/สถานะการทำงานของเครื่องทำเกลือ	Status On/Off	oh		oh		ON	
Clean Pool/ทำความสะอาดสระน้ำ	Clean/Not Clean	Nc		nc		C	
Salt Stock /จำนวนถุงเกลือ	Salt Stock 20 bag/เกลือ	10		10		12	
Chlorine Stocks(Sacks)/จำนวนผงคลอรีนที่มีไว้ใช้งาน(ถุง)	Chlorine1 (Sacks)	1		1		1	
Hydrochloric Acid Stocks(Sacks)/จำนวนกรดเกลือที่มีไว้ใช้งาน(ถุง)	Chlorine1 (Sacks)	1		1		1	
Soda Assyrian(Sacks)/จำนวนโซดาแอสที่ไว้ใช้งาน(ถุง)	Chlorine1 (Sacks)	1		1		1	
Tile/สภาพแผ่นกระเบื้องสระน้ำ	normal/ AB normal	N		N		N	
Handrails/ราวจับ ขึ้น-ลงสระน้ำ	normal/ AB normal	N		N		N	
Light bulb/สภาพหลอดไฟ	normal/ AB normal	N		N		N	
Fountain Pond							
CL 1.0-1.5/ค่าคลอรีน	CL 1.0-1.5	7.5		7.0		1	
PH 7.2-7.6/ค่าความเป็นกรด-ด่าง	PH 7.2-7.6	7.2		7.2		7.2	
Cleaning Filter Tanks/ล้างทำความสะอาดถังกรอง	Clean/Not Clean	Nc		nc		C	

Remark: _____

Morning Shift	
Afternoon Shift	
Night Shift	

Ass't Chief Engineer	
Chief Engineer	