

TEST REPORT

REPORT NO:-QMTL/R-82947

CLIENT: CRYSTALLINE ENVIRONMENTAL SERVICES		
P.O.Box.131463, Abu Dhabi, U.A.E		
Ph:02-6508930/0557167017		
ATTN:MR. JASMAN PINTO		
Product: Water	Sampling Method: APHA 9060 A	Sample ID: QMTL/S-82947
Reference: NYUAD	Sampled By: QMTL Representative	Date Received: 07.12.2019
Sample Description : Main Swimming Pool Sample Onsite Temp: 26.7°C Sample Receipt Temp: 4°C	Source: Pool	Date(s) Tested: 07-09.12.2019
	Sample Container: 1X 500 ml PB	Date Reported: 12.12.2019
	Sample Appearance: Clear	Date of Sampling/Time: 07.12.2019/09.07 AM
On-Site Treatment: NA	Tested by Emp#: 55&74	Location: AUH

TEST RESULTS

PARAMETERS	TEST METHODS (APHA 23 RD EDITION)	UNITS	SPECIFICATIONS	RESULTS
MICROBIOLOGICAL ANALYSIS				
Total Bacterial Count	APHA 9215 B	CFU/ml	1000	<1
Total Coliforms	APHA 9222 B	CFU/100ml	Zero	Zero
Faecal coliform	APHA 9222 D	CFU/100ml	Zero	Zero
Pseudomonas aeruginosa	APHA 9213 E	CFU/100ml	Zero	Zero
Escherichia coli	APHA 9222 H & I	CFU/100ml	Zero	Zero

REMARKS: The sample meets DM Water Systems quality (2010) specifications for Pool Water with respect to the above tests only.

Key Words:- CFU: Colony Forming Unit, APHA: American Public Health Association, DM: Dubai Municipality, NA: Not Applicable

Report prepared by Emp#: 75

Test Method deviation : None

The above test results are only applicable to the sample(s) referred above

Reported By

ANILA GEORGE
LABORATORY MANAGER

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END OF REPORT

TEST REPORT

REPORT NO:-QMTL/R-82945

CLIENT: CRYSTALLINE ENVIRONMENTAL SERVICES		
P.O.Box.131463, Abu Dhabi, U.A.E Ph:02-6508930/0557167017		
ATTN:MR. JASMAN PINTO		
Product: Water	Sampling Method: APHA 9060 A	Sample ID: QMTL/S-82945
Reference: NYUAD	Sampled By: QMTL Representative	Date Received: 07.12.2019
Sample Description : Faculty Pool Sample Onsite Temp: 26.4°C Sample Receipt Temp: 4°C	Source: Pool	Date(s) Tested: 07-09.12.2019
	Sample Container: 1X 500 ml PB	Date Reported: 12.12.2019
	Sample Appearance: Clear	Date of Sampling/Time: 07.12.2019/08.47 AM
On-Site Treatment: NA	Tested by Emp#: 55&74	Location: AUH

TEST RESULTS

PARAMETERS	TEST METHODS (APHA 23 RD EDITION)	UNITS	SPECIFICATIONS	RESULTS
MICROBIOLOGICAL ANALYSIS				
Total Bacterial Count	APHA 9215 B	CFU/ml	1000	2
Total Coliforms	APHA 9222 B	CFU/100ml	Zero	Zero
Faecal coliform	APHA 9222 D	CFU/100ml	Zero	Zero
Pseudomonas aeruginosa	APHA 9213 E	CFU/100ml	Zero	Zero
Escherichia coli	APHA 9222 H & I	CFU/100ml	Zero	Zero

REMARKS: The sample meets DM Water Systems quality (2010) specifications for Pool Water with respect to the above tests only.

Key Words:- CFU: Colony Forming Unit, APHA: American Public Health Association, DM: Dubai Municipality, NA: Not Applicable

Report prepared by Emp#: 75

Test Method deviation : None

The above test results are only applicable to the sample(s) referred above

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REPORT NO:-QMTL/R-82946

CLIENT: CRYSTALLINE ENVIRONMENTAL SERVICES		
P.O.Box.131463, Abu Dhabi, U.A.E Ph:02-6508930/0557167017		
ATTN:MR. JASMAN PINTO		
Product: Water	Sampling Method: APHA 9060 A	Sample ID: QMTL/S-82946
Reference: NYUAD	Sampled By: QMTL Representative	Date Received: 07.12.2019
Sample Description : Kids Pool Sample Onsite Temp: 26.7°C Sample Receipt Temp: 4°C	Source: Pool	Date(s) Tested: 07-09.12.2019
	Sample Container: 1X 500 ml PB	Date Reported: 12.12.2019
	Sample Appearance: Clear	Date of Sampling/Time: 07.12.2019/08.56 AM
On-Site Treatment: NA	Tested by Emp#: 55&74	Location: AUH

TEST RESULTS

PARAMETERS	TEST METHODS (APHA 23 RD EDITION)	UNITS	SPECIFICATIONS	RESULTS
MICROBIOLOGICAL ANALYSIS				
Total Bacterial Count	APHA 9215 B	CFU/ml	1000	<1
Total Coliforms	APHA 9222 B	CFU/100ml	Zero	Zero
Faecal coliform	APHA 9222 D	CFU/100ml	Zero	Zero
Pseudomonas aeruginosa	APHA 9213 E	CFU/100ml	Zero	Zero
Escherichia coli	APHA 9222 H & I	CFU/100ml	Zero	Zero

REMARKS: The sample meets DM Water Systems quality (2010) specifications for Pool Water with respect to the above tests only.

Key Words:- CFU: Colony Forming Unit, APHA: American Public Health Association, DM: Dubai Municipality, NA: Not Applicable

Report prepared by Emp#: 75

Test Method deviation : None

The above test results are only applicable to the sample(s) referred above

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TEST REPORT

REPORT NO:-QMTL/R-82948

CLIENT: CRYSTALLINE ENVIRONMENTAL SERVICES		
P.O.Box.131463, Abu Dhabi, U.A.E		
Ph:02-6508930/0557167017		
ATTN:MR. JASMAN PINTO		
Product: Water	Sampling Method: APHA 9060 A	Sample ID: QMTL/S-82948
Reference: NYUAD	Sampled By: QMTL Representative	Date Received: 07.12.2019
Sample Description : Jacuzzi Cold Pool Sample Onsite Temp: 10.8°C Sample Receipt Temp: 4°C	Source: Pool	Date(s) Tested: 07-09.12.2019
	Sample Container: 1X 500 ml PB	Date Reported: 12.12.2019
	Sample Appearance: Clear	Date of Sampling/Time: 07.12.2019/09.11 AM
On-Site Treatment: NA	Tested by Emp#: 55&74	Location: AUH

TEST RESULTS

PARAMETERS	TEST METHODS (APHA 23 RD EDITION)	UNITS	SPECIFICATIONS	RESULTS
MICROBIOLOGICAL ANALYSIS				
Total Bacterial Count	APHA 9215 B	CFU/ml	1000	<1
Total Coliforms	APHA 9222 B	CFU/100ml	Zero	Zero
Faecal coliform	APHA 9222 D	CFU/100ml	Zero	Zero
Pseudomonas aeruginosa	APHA 9213 E	CFU/100ml	Zero	Zero
Escherichia coli	APHA 9222 H & I	CFU/100ml	Zero	Zero

REMARKS: The sample meets DM Water Systems quality (2010) specifications for Pool Water with respect to the above tests only.

Key Words:- CFU: Colony Forming Unit, APHA: American Public Health Association, DM: Dubai Municipality, NA: Not Applicable

Report prepared by Emp#: 75

Test Method deviation : None

The above test results are only applicable to the sample(s) referred above

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REPORT NO:-QMTL/R-82949

CLIENT: CRYSTALLINE ENVIRONMENTAL SERVICES		
P.O.Box.131463, Abu Dhabi, U.A.E		
Ph:02-6508930/0557167017		
ATTN:MR. JASMAN PINTO		
Product: Water	Sampling Method: APHA 9060 A	Sample ID: QMTL/S-82949
Reference: NYUAD	Sampled By: QMTL Representative	Date Received: 07.12.2019
Sample Description : Jacuzzi Hot Pool Sample Onsite Temp: 38.4°C Sample Receipt Temp: 4°C	Source: Pool	Date(s) Tested: 07-09.12.2019
	Sample Container: 1X 500 ml PB	Date Reported: 12.12.2019
	Sample Appearance: Clear	Date of Sampling/Time: 07.12.2019/09.24 AM
On-Site Treatment: NA	Tested by Emp#: 55&74	Location: AUH

TEST RESULTS

PARAMETERS	TEST METHODS (APHA 23 RD EDITION)	UNITS	SPECIFICATIONS	RESULTS
MICROBIOLOGICAL ANALYSIS				
Total Bacterial Count	APHA 9215 B	CFU/ml	1000	<1
Total Coliforms	APHA 9222 B	CFU/100ml	Zero	Zero
Faecal coliform	APHA 9222 D	CFU/100ml	Zero	Zero
Pseudomonas aeruginosa	APHA 9213 E	CFU/100ml	Zero	Zero
Escherichia coli	APHA 9222 H & I	CFU/100ml	Zero	Zero

REMARKS: The sample meets DM Water Systems quality (2010) specifications for Pool Water with respect to the above tests only.

Key Words:- CFU: Colony Forming Unit, APHA: American Public Health Association, DM: Dubai Municipality, NA: Not Applicable

Report prepared by Emp#: 75

Test Method deviation : None

The above test results are only applicable to the sample(s) referred above

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TEST REPORT

REPORT NO:-QMTL/R-82976

CLIENT: CRYSTALLINE ENVIRONMENTAL SERVICES		
P.O.Box.131463, Abu Dhabi, U.A.E Ph:02-6508930/0557167017		
ATTN:Mr. JASMAN PINTO		
Product: Water	Sampling Method: BS 7592	Sample ID: QMTL/S-82976
Reference: NYUAD	Sampled By: QMTL Representative	Date Received: 07.12.2019
Sample Description : Main Swimming Pool Sample Onsite Temp: 26.7°C Sample Receipt Temp: 16°C	Source: Pool	Date(s) Tested: 07-17.12.2019
	Sample Container: 1x1L PB	Date Reported: 17.12.2019
	Sample Appearance: Clear	Date of Sampling/Time: 07.12.2019/09.07 AM
On-Site Treatment: NA	Tested by Emp#: 55 & 74	Location: AUH

TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	LIMITS	RESULTS
LEGIONELLA ANALYSIS				
Legionella	CCFRA 3.9.1 (5 th Edition)	cfu/litre	<1	Not Detected
IDENTIFICATION				
Legionella Species	CCFRA 3.9.1 (5 th Edition)	-	-	Absent
Legionella pneumophila sero group 1	CCFRA 3.9.1 (5 th Edition)	-	-	Absent
Legionella pneumophila sero group 2-15	CCFRA 3.9.1 (5 th Edition)	-	-	Absent

REMARKS: The sample meets DM Water Systems quality 2010 specifications for Pool Water with respect to the above tests only.

Key Words:- CFU: Colony Forming Unit, CCFRA: Campden & Chorleywood Food Research Association, BS: British Standards, DM: Dubai Municipality, NA: Not Applicable

Report prepared by Emp#: 75

Test Method deviation : None

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TEST REPORT

REPORT NO:-QMTL/R-82974

CLIENT: CRYSTALLINE ENVIRONMENTAL SERVICES		
P.O.Box.131463, Abu Dhabi, U.A.E		
Ph:02-6508930/0557167017		
ATTN:Mr. JASMAN PINTO		
Product: Water	Sampling Method: BS 7592	Sample ID: QMTL/S-82974
Reference: NYUAD	Sampled By: QMTL Representative	Date Received: 07.12.2019
Sample Description : Faculty Pool Sample Onsite Temp: 26.4°C Sample Receipt Temp: 16°C	Source: Pool	Date(s) Tested: 07-17.12.2019
	Sample Container: 1x1L PB	Date Reported: 17.12.2019
	Sample Appearance: Clear	Date of Sampling/Time: 07.12.2019/08.47 AM
On-Site Treatment: NA	Tested by Emp#: 55 & 74	Location: AUH

TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	LIMITS	RESULTS
LEGIONELLA ANALYSIS				
Legionella	CCFRA 3.9.1 (5 th Edition)	cfu/litre	<1	Not Detected
IDENTIFICATION				
Legionella Species	CCFRA 3.9.1 (5 th Edition)	-	-	Absent
Legionella pneumophila sero group 1	CCFRA 3.9.1 (5 th Edition)	-	-	Absent
Legionella pneumophila sero group 2-15	CCFRA 3.9.1 (5 th Edition)	-	-	Absent

REMARKS: The sample meets DM Water Systems quality 2010 specifications for Pool Water with respect to the above tests only.

Key Words:- CFU: Colony Forming Unit, CCFRA: Campden & Chorleywood Food Research Association, BS: British Standards, DM: Dubai Municipality, NA: Not Applicable

Report prepared by Emp#: 75

Test Method deviation : None

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REPORT NO:-QMTL/R-82975

CLIENT: CRYSTALLINE ENVIRONMENTAL SERVICES		
P.O.Box.131463, Abu Dhabi, U.A.E Ph:02-6508930/0557167017		
ATTN:Mr. JASMAN PINTO		
Product: Water	Sampling Method: BS 7592	Sample ID: QMTL/S-82975
Reference: NYUAD	Sampled By: QMTL Representative	Date Received: 07.12.2019
Sample Description : Kids Pool Sample Onsite Temp: 26.7°C Sample Receipt Temp: 16°C	Source: Pool	Date(s) Tested: 07-17.12.2019
	Sample Container: 1x1L PB	Date Reported: 17.12.2019
	Sample Appearance: Clear	Date of Sampling/Time: 07.12.2019/08.56 AM
On-Site Treatment: NA	Tested by Emp#: 55 & 74	Location: AUH

TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	LIMITS	RESULTS
LEGIONELLA ANALYSIS				
Legionella	CCFRA 3.9.1 (5 th Edition)	cfu/litre	<1	Not Detected
IDENTIFICATION				
Legionella Species	CCFRA 3.9.1 (5 th Edition)	-	-	Absent
Legionella pneumophila sero group 1	CCFRA 3.9.1 (5 th Edition)	-	-	Absent
Legionella pneumophila sero group 2-15	CCFRA 3.9.1 (5 th Edition)	-	-	Absent

REMARKS: The sample meets DM Water Systems quality 2010 specifications for Pool Water with respect to the above tests only.

Key Words:- CFU: Colony Forming Unit, CCFRA: Campden & Chorleywood Food Research Association, BS: British Standards, DM: Dubai Municipality, NA: Not Applicable

Report prepared by Emp#: 75

Test Method deviation : None

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TEST REPORT

REPORT NO:-QMTL/R-82977

CLIENT: CRYSTALLINE ENVIRONMENTAL SERVICES		
P.O.Box.131463, Abu Dhabi, U.A.E		
Ph:02-6508930/0557167017		
ATTN:Mr. JASMAN PINTO		
Product: Water	Sampling Method: BS 7592	Sample ID: QMTL/S-82977
Reference: NYUAD	Sampled By: QMTL Representative	Date Received: 07.12.2019
Sample Description : Jacuzzi Cold Pool Sample Onsite Temp: 10.8°C Sample Receipt Temp: 16°C	Source: Pool	Date(s) Tested: 07-17.12.2019
	Sample Container: 1x1L PB	Date Reported: 17.12.2019
	Sample Appearance: Clear	Date of Sampling/Time: 07.12.2019/09.11 AM
On-Site Treatment: NA	Tested by Emp#: 55 & 74	Location: AUH

TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	LIMITS	RESULTS
LEGIONELLA ANALYSIS				
Legionella	CCFRA 3.9.1 (5 th Edition)	cfu/litre	<1	Not Detected
IDENTIFICATION				
Legionella Species	CCFRA 3.9.1 (5 th Edition)	-	-	Absent
Legionella pneumophila sero group 1	CCFRA 3.9.1 (5 th Edition)	-	-	Absent
Legionella pneumophila sero group 2-15	CCFRA 3.9.1 (5 th Edition)	-	-	Absent

REMARKS: The sample meets DM Water Systems quality 2010 specifications for Pool Water with respect to the above tests only.

Key Words:- CFU: Colony Forming Unit, CCFRA: Campden & Chorleywood Food Research Association, BS: British Standards, DM: Dubai Municipality, NA: Not Applicable

Report prepared by Emp#: 75

Test Method deviation : None

The above test results are only applicable to the sample(s) referred above

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END OF REPORT

TEST REPORT

REPORT NO:-QMTL/R-82978

CLIENT: CRYSTALLINE ENVIRONMENTAL SERVICES		
P.O.Box.131463, Abu Dhabi, U.A.E		
Ph:02-6508930/0557167017		
ATTN:Mr. JASMAN PINTO		
Product: Water	Sampling Method: BS 7592	Sample ID: QMTL/S-82978
Reference: NYUAD	Sampled By: QMTL Representative	Date Received: 07.12.2019
Sample Description : Jacuzzi Hot Pool Sample Onsite Temp: 38.4°C Sample Receipt Temp: 16°C	Source: Pool	Date(s) Tested: 07-17.12.2019
	Sample Container: 1x1L PB	Date Reported: 17.12.2019
	Sample Appearance: Clear	Date of Sampling/Time: 07.12.2019/09.24 AM
On-Site Treatment: NA	Tested by Emp#: 55 & 74	Location: AUH

TEST RESULTS

PARAMETERS	TEST METHODS	UNITS	LIMITS	RESULTS
LEGIONELLA ANALYSIS				
Legionella	CCFRA 3.9.1 (5 th Edition)	cfu/litre	<1	Not Detected
IDENTIFICATION				
Legionella Species	CCFRA 3.9.1 (5 th Edition)	-	-	Absent
Legionella pneumophila sero group 1	CCFRA 3.9.1 (5 th Edition)	-	-	Absent
Legionella pneumophila sero group 2-15	CCFRA 3.9.1 (5 th Edition)	-	-	Absent

REMARKS: The sample meets DM Water Systems quality 2010 specifications for Pool Water with respect to the above tests only.

Key Words:- CFU: Colony Forming Unit, CCFRA: Campden & Chorleywood Food Research Association, BS: British Standards, DM: Dubai Municipality, NA: Not Applicable

Report prepared by Emp#: 75

Test Method deviation : None

The above test results are only applicable to the sample(s) referred above

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END OF REPORT

CONSULTING SERVICE REPORT

CUSTOMER: SERCO - NEW YORK UNIVERSITY, ABU DHABI	To: Mr. Ratheesh Muttath Operations Engineer	DATE: 07-12-2019
CUSTOMER ID: 3003	Copy: SERCO - NYUAD	LAST VISIT: 10-11-2019

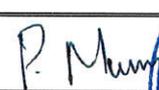
SWIMMING POOL WATER ANALYSIS

PARAMETER	CONTROL LIMITS	MAIN POOL			
pH	7.2 - 7.6	7.49			
Conductivity, $\mu\text{s}/\text{cm}$	Max 1500	681			
TDS, ppm	Max 1000	442			
'P' Alkalinity, ppm as CaCO_3	80 - 120	87			
Total Hardness, ppm as CaCO_3					
Calcium Hardness, ppm as CaCO_3	100 - 500	168			
Chloride, ppm as Cl^-	--				
Iron, ppm as Fe					

Treatment Residuals					
Silica, ppm					
CaH Balance					
Dipslide	<10 ³	ND			
Phosphate/Phosphonate					
Free Residual Chlorine as Cl	1.0 - 2.0	1.16			
Cyanuric Acid	20 - 60	---			

All test results expressed in parts per million (ppm) as CaCO_3 except pH and conductivity (μmhos).

COMMENTS:	ACTION:
The pH found satisfactory. ⇒	No Action Recommended
Chlorine levels are found satisfactory. ⇒	No Action Recommended
Calcium hardness and Alkalinity found satisfactory ⇒	No Action Recommended

INVENTORY LEVELS			DOSAGE SCHEDULE	
Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
HTH Chlorine			--	
Pool Acid			--	
Calcium Chloride				
Soda Ash				
Service Engineer:	Murugaraaj	Client:	Mr. Ratheesh Muttath	
Signature:		Signature:		



CONSULTING SERVICE REPORT

CUSTOMER: SERCO – NEW YORK UNIVERSITY, ABU DHABI	To: Mr. Ratheesh Muttath Operations Engineer	DATE: 07-12-2019
CUSTOMER ID: 3003	Copy: SERCO - NYUAD	LAST VISIT: 10-11-2019

SWIMMING POOL WATER ANALYSIS

PARAMETER	CONTROL LIMITS	FACULTY POOL			
pH	7.2 – 7.6	7.51			
Conductivity, $\mu\text{s}/\text{cm}$		1945			
TDS, ppm		1266			
'P' Alkalinity, ppm as CaCO_3	80 - 120	92			
Total Hardness, ppm as CaCO_3					
Calcium Hardness, ppm as CaCO_3	100 - 500	364			
Chloride, ppm as Cl^-	--				
Iron, ppm as Fe					

Treatment Residuals					
Silica, ppm					
CaH Balance					
Dipslide	<10 ³	ND			
Salinity in mg/l	--				
Free Residual Chlorine as Cl	1.0 – 2.0	1.12			
Cyanuric Acid	20 – 60	24			

All test results expressed in parts per million (ppm) as CaCO_3 except pH and conductivity (μmhos).

COMMENTS:	ACTION:
The pH levels are satisfactory. ⇒	No Action Recommended.
Chlorine levels are found satisfactory. ⇒	No Action Recommended.
Calcium Hardness levels are satisfactory. ⇒	No Action Recommended.

Kindly add salt granules and pool acid to maintain the desired control parameters in the pool. Sand filter multiport valve is broken and needs to be replaced. Install a standby pump (recirculation) for the faculty pool. The sand media in the filter to be replaced every 2-3 years. Also install an AC inside the plant room.
 Upgrade to a chlorine pH pool controller to maintain the chemical levels in the pool.

INVENTORY LEVELS			DOSAGE SCHEDULE	
Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Salt Granules			--	
Pool Acid			--	
Crystal Care			--	
Crystal Clear				
Calcium Chloride				
Soda Ash				
Service Engineer:	Murugaraaj	Client:	Mr. Ratheesh Muttath	
Signature:		Signature:		



CONSULTING SERVICE REPORT

CUSTOMER: SERCO - NEW YORK UNIVERSITY, ABU DHABI	To: Mr. Ratheesh Muttath Operations Engineer	DATE: 07-12-2019
CUSTOMER ID: 3003	Copy: SERCO - NYUAD	LAST VISIT: 10-11-2019

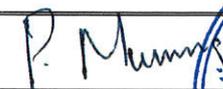
SWIMMING POOL WATER ANALYSIS

PARAMETER	CONTROL LIMITS	KIDS POOL			
pH	7.2 - 7.6	7.46			
Conductivity, $\mu\text{s}/\text{cm}$		1960			
TDS, ppm		1274			
'P' Alkalinity, ppm as CaCO_3	80 - 120	91			
Total Hardness, ppm as CaCO_3					
Calcium Hardness, ppm as CaCO_3	100 - 500	358			
Chloride, ppm as Cl^-	--				
Iron, ppm as Fe					
Treatment Residuals					
Silica, ppm					
CaH Balance					
Dipslide	<10 ³	ND			
Salinity in mg/l	--				
Free Residual Chlorine as Cl	1.0 - 2.0	1.15			
Cyanuric Acid	20 - 60	24			

All test results expressed in parts per million (ppm) as CaCO_3 except pH and conductivity (μmhos).

COMMENTS:	ACTION:
The pH levels are satisfactory. ⇒	No Action Recommended.
Chlorine levels are found satisfactory. ⇒	No Action Recommended.
Calcium Hardness levels are satisfactory. ⇒	No Action Recommended.

Kindly add salt granules and pool acid to maintain the desired control parameters in the pool. The salt chlorinator is faulty and must be replaced. Sand filter multiport valve is broken and needs to be replaced. Install a standby pump (recirculation) for the faculty pool. The sand media in the filter to be replaced every 2-3 years. Also install an AC inside the plant room.

INVENTORY LEVELS			DOSAGE SCHEDULE	
Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Salt Granules			--	
Pool Acid			--	
Crystal Care			--	
Crystal Clear				
Calcium Chloride				
Soda Ash				
Service Engineer:	Murugaraaj		Client:	Mr. Ratheesh Muttath
Signature:			Signature:	





CONSULTING SERVICE REPORT

CUSTOMER: SERCO – NEW YORK UNIVERSITY, ABU DHABI	To: Mr. Ratheesh Muttath Operations Engineer	DATE: 07-12-2019
CUSTOMER ID: 3003	Copy: SERCO - NYUAD	LAST VISIT: 10-11-2019

HYDRO POOL WATER ANALYSIS

PARAMETER	CONTROL LIMITS	HOT HYDRO POOL			
pH	7.2 – 7.6	7.56			
Conductivity, $\mu\text{s}/\text{cm}$	Max 1500	574			
TDS, ppm	Max 1000	373			
'P' Alkalinity, ppm as CaCO_3	80 - 120	36			
Total Hardness, ppm as CaCO_3					
Calcium Hardness, ppm as CaCO_3					
Chloride, ppm as Cl^-					
Iron, ppm as Fe					

Treatment Residuals

Silica, ppm					
CaH Balance					
Dipslide	<10 ³	ND			
Phosphate/Phosphonate					
Free Residual Chlorine	1.0 – 2.0	<0.05			
Cyanuric Acid	20 - 60	--			

All test results expressed in parts per million (ppm) as CaCO_3 except pH and conductivity (μmhos).

COMMENTS:	ACTION:
The pH is found are satisfactory ⇒	No Action Recommended.
Chlorine level is low ⇒	Add Chlorine tablets to maintain the chlorine.

Kindly add chorine and pool acid to maintain the desired control parameters in the Hydro Pool. There is no automatic dosing system. Kindly install an automatic dosing system to maintain the desired chemical levels in the system.

INVENTORY LEVELS			DOSAGE SCHEDULE	
Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Crystal Brome			--	
Pool Acid			--	
Crystal Care			--	
Crystal Clear				
Service Engineer:	Murugaraaj	Client:	Mr. Ratheesh Muttath	
Signature:		Signature:		



CONSULTING SERVICE REPORT

CUSTOMER: SERCO - NEW YORK UNIVERSITY, ABU DHABI	To: Mr. Ratheesh Muttath Operations Engineer	DATE: 07-12-2019
CUSTOMER ID: 3003	Copy: SERCO - NYUAD	LAST VISIT: 10-11-2019

HYDRO POOL WATER ANALYSIS

PARAMETER	CONTROL LIMITS	COLD HYDRO POOL			
pH	7.2 - 7.6	7.42			
Conductivity, $\mu\text{s}/\text{cm}$	Max 1500	235			
TDS, ppm	Max 1000	152			
'P' Alkalinity, ppm as CaCO_3	80 - 120	30			
Total Hardness, ppm as CaCO_3					
Calcium Hardness, ppm as CaCO_3					
Chloride, ppm as Cl^-					
Iron, ppm as Fe					

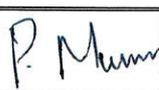
Treatment Residuals

Silica, ppm					
CaH Balance					
Dipslide	<10 ³	ND			
Phosphate/Phosphonate					
Free Residual Chlorine	1.0 - 2.0	0.21			
Cyanuric Acid	20 - 60	--			

All test results expressed in parts per million (ppm) as CaCO_3 except pH and conductivity (μmhos).

COMMENTS:	ACTION:
The pH is found are satisfactory \Rightarrow	No Action Recommended.
Chlorine levels are low \Rightarrow	Add Chlorine Tablets to maintain the chlorine.

Kindly add chorine and pool acid to maintain the desired control parameters in the Hydro Pool. There is no automatic dosing system. Kindly install an automatic dosing system to maintain the desired chemical levels in the system.

INVENTORY LEVELS			DOSAGE SCHEDULE	
Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Crystal Brome			--	
Pool Acid			--	
Crystal Care			--	
Crystal Clear				
Service Engineer:	Murugaraaj	Client:	Mr. Ratheesh Muttath	
Signature:		Signature:		

