

CONSULTING SERVICE REPORT

CUSTOMER: SERCO - NEW YORK UNIVERSITY, ABU DHABI	To: Mr. Ratheesh Muttath Operations Engineer	DATE: 05-10-2019
CUSTOMER ID: 3003	Copy: SERCO - NYUAD	LAST VISIT: 07-09-2019

SWIMMING POOL WATER ANALYSIS

PARAMETER	CONTROL LIMITS	MAIN POOL			
pH	7.2 - 7.6	7.58			
Conductivity, $\mu\text{s}/\text{cm}$	Max 1500	927			
TDS, ppm	Max 1000	602			
'P' Alkalinity, ppm as CaCO_3	80 - 120	94			
Total Hardness, ppm as CaCO_3					
Calcium Hardness, ppm as CaCO_3	100 - 500	214			
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	1.21			
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 found satisfactory. \Rightarrow	No Action Recommended
Chlorine levels are found satisfactory. \Rightarrow	No Action Recommended
Calcium hardness and Alkalinity found satisfactory \Rightarrow	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: 05-10-2019
CUSTOMER ID: 3003	Copy: SERCO - NYUAD	LAST VISIT: 07-09-2019

SWIMMING POOL WATER ANALYSIS

PARAMETER	CONTROL LIMITS	FACULTY POOL			
pH	7.2 - 7.6	7.54			
Conductivity, $\mu\text{s}/\text{cm}$		3760			
TDS, ppm		2444			
'P' Alkalinity, ppm as CaCO_3	80 - 120	102			
Total Hardness, ppm as CaCO_3					
Calcium Hardness, ppm as CaCO_3	100 - 500	548			
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	1.31			
Cyanuric Acid	20 - 60	26			

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 high	⇒ Please drain the water to maintain the desired limit

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: 05-10-2019
CUSTOMER ID: 3003	Copy: SERCO - NYUAD	LAST VISIT: 07-09-2019

SWIMMING POOL WATER ANALYSIS

PARAMETER	CONTROL LIMITS	KIDS POOL			
pH	7.2 - 7.6	7.49			
Conductivity, $\mu\text{s/cm}$		3690			
TDS, ppm		2398			
'P' Alkalinity, ppm as CaCO_3	80 - 120	98			
Total Hardness, ppm as CaCO_3					
Calcium Hardness, ppm as CaCO_3	100 - 500	536			
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	1.82			
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 high	⇒	Please drain the water to maintain the desired limit

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: 05-10-2019
CUSTOMER ID: 3003	Copy: SERCO - NYUAD	LAST VISIT: 07-09-2019

HYDRO POOL WATER ANALYSIS

PARAMETER	CONTROL LIMITS	HOT HYDRO POOL			
pH	7.2 - 7.6	7.49			
Conductivity, $\mu\text{s}/\text{cm}$	Max 1500	605			
TDS, ppm	Max 1000	393			
'P' Alkalinity, ppm as CaCO_3	80 - 120	24			
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 levels are 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: 05-10-2019
CUSTOMER ID: 3003	Copy: SERCO - NYUAD	LAST VISIT: 07-09-2019

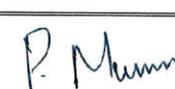
HYDRO POOL WATER ANALYSIS

PARAMETER	CONTROL LIMITS	COLD HYDRO POOL			
pH	7.2 - 7.6	7.51			
Conductivity, $\mu\text{s}/\text{cm}$	Max 1500	258			
TDS, ppm	Max 1000	167			
'P' Alkalinity, ppm as CaCO_3	80 - 120	37			
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	0.18			
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 levels are 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:		

