



## CONSULTING SERVICE REPORT

<b>CUSTOMER: SERCO MIDDLE EAST</b>	<b>TO: MR. MUHAMMED ASHAR OPERATIONS ENGINEER</b>	<b>DATE: 15-07-2019</b>
<b>SITE: ZAYED UNIVERSITY, ABU DHABI</b>	<b>COPY: MOHAMED AFSER</b>	<b>LOCATION: CONVENTION CENTER</b>

### WATER FEATURE ANALYSIS

PARAMETER	CONTROL LIMITS	Water Fountain			
pH	7.2 - 7.6	7.51			
Conductivity, µs/cm		986			
TDS, ppm	Max 1500	640			
'P' Alkalinity, ppm as CaCO <sub>3</sub>	70 - 100	74			
Total Hardness, ppm as CaCO <sub>3</sub>					
Calcium Hardness, ppm as CaCO <sub>3</sub>	100 - 500	298			
Chloride, ppm as Cl <sup>-</sup>					
Iron, ppm as Fe					

#### Treatment Residuals

Silica, ppm					
CaH Balance					
Dipslide	<10 <sup>3</sup>	ND			
Phosphate/Phosphonate					
Free Residual Chlorine as Cl	1.0 - 2.0	1.20			
Cyanuric Acid	20 - 60	24			

All test results expressed in parts per million (ppm) as CaCO<sub>3</sub> except pH and conductivity (µmhos).

#### COMMENTS:

#### ACTION:

The pH levels are found satisfactory	⇒	No Action Recommended.
Chlorine levels & Cyanuric acid levels are found satisfactory	⇒	No Action Recommended.
Calcium hardness and alkalinity found satisfactory	⇒	No Action Recommended.

**No action recommended. Kindly maintain the same dosage to maintain the desired control parameters in the system**

#### INVENTORY LEVELS

#### DOSAGE SCHEDULE

Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Chlorine Tablets			--	
Pool Acid			--	
Crystal Care			--	

Service Engineer:	MR. MURUGARAJ	Client:	MR. MUHAMMED THAYYIL
Signature:		Signature:	





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<b>CUSTOMER: SERCO MIDDLE EAST</b>	<b>TO: MR. MUHAMMED ASHAR OPERATIONS ENGINEER</b>	<b>DATE: 15-07-2019</b>
<b>SITE: ZAYED UNIVERSITY, ABU DHABI</b>	<b>COPY: MOHAMED AFSER</b>	<b>LOCATION: F4, PROMENADE</b>

### WATER FEATURE ANALYSIS

PARAMETER	CONTROL LIMITS	Water Fountain			
pH	7.2 - 7.6	7.94			
Conductivity, $\mu\text{s}/\text{cm}$		814			
TDS, ppm	Max 1500	529			
'P' Alkalinity, ppm as $\text{CaCO}_3$	70 - 100	69			
Total Hardness, ppm as $\text{CaCO}_3$					
Calcium Hardness, ppm as $\text{CaCO}_3$	100 - 500	184			
Chloride, ppm as $\text{Cl}^-$					
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	1.69			
Cyanuric Acid	20 - 60	18			

*All test results expressed in parts per million (ppm) as  $\text{CaCO}_3$  except pH and conductivity ( $\mu\text{mhos}$ ).*

#### COMMENTS:

#### ACTION:

The pH levels are found satisfactory	⇒	No Action Recommended.
Chlorine levels & calcium hardness levels are found satisfactory	⇒	No Action Recommended.
Cyanuric acid and alkalinity found slightly low.	⇒	Kindly increase the dosage of chemicals.

**No action recommended. Kindly maintain the same dosage to maintain the desired control parameters in the system**

#### INVENTORY LEVELS

#### DOSAGE SCHEDULE

Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Chlorine Tablets			--	
Pool Acid			--	
Crystal Care			--	

Service Engineer:	MR. MURUGARAJ	Client:	MR. MUHAMMED THAYYIL
Signature:		Signature:	



## CONSULTING SERVICE REPORT

<b>CUSTOMER: SERCO MIDDLE EAST</b>	<b>TO: MR. MUHAMMED ASHAR OPERATIONS ENGINEER</b>	<b>DATE: 15-07-2019</b>
<b>SITE: ZAYED UNIVERSITY, ABU DHABI</b>	<b>COPY: MOHAMED AFSER</b>	<b>LOCATION: F3, PROMENADE</b>

### WATER FEATURE ANALYSIS

PARAMETER	CONTROL LIMITS	Water Fountain			
pH	7.2 - 7.6	7.43			
Conductivity, $\mu\text{s}/\text{cm}$		1108			
TDS, ppm	Max 1500	720			
'P' Alkalinity, ppm as $\text{CaCO}_3$	70 - 100	85			
Total Hardness, ppm as $\text{CaCO}_3$					
Calcium Hardness, ppm as $\text{CaCO}_3$	100 - 500	212			
Chloride, ppm as $\text{Cl}^-$					
Iron, ppm as Fe					

#### Treatment Residuals

Silica, ppm					
CaH Balance					
Dipslide	<10 <sup>3</sup>	ND			
Phosphate/Phosphonate					
Free Residual Chlorine as Cl	1.0 - 2.0	1.48			
Cyanuric Acid	20 - 60	26			

*All test results expressed in parts per million (ppm) as  $\text{CaCO}_3$  except pH and conductivity ( $\mu\text{mhos}$ ).*

#### COMMENTS:

#### ACTION:

The pH levels are found satisfactory $\Rightarrow$	No Action Recommended.
Chlorine levels & Cyanuric acid levels are found satisfactory $\Rightarrow$	No Action Recommended.
Calcium hardness and alkalinity found satisfactory $\Rightarrow$	No Action Recommended.

**No action recommended. Kindly maintain the same dosage to maintain the desired control parameters in the system**

#### INVENTORY LEVELS

#### DOSAGE SCHEDULE

Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Chlorine Tablets			--	
Pool Acid			--	
Crystal Care			--	

Service Engineer:	MR. MURUGARAJ	Client:	MR. MUHAMMED THAYYIL
Signature:		Signature:	





## CONSULTING SERVICE REPORT

<b>CUSTOMER: SERCO MIDDLE EAST</b>	<b>TO: MR. MUHAMMED ASHAR OPERATIONS ENGINEER</b>	<b>DATE: 15-07-2019</b>
<b>SITE: ZAYED UNIVERSITY, ABU DHABI</b>	<b>COPY: MOHAMED AFSER</b>	<b>LOCATION: FF2, CENTRAL AREA</b>

### WATER FEATURE ANALYSIS

PARAMETER	CONTROL LIMITS	Water Fountain			
pH	7.2 - 7.6	7.51			
Conductivity, $\mu\text{s}/\text{cm}$		948			
TDS, ppm	Max 1500	616			
'P' Alkalinity, ppm as $\text{CaCO}_3$	70 - 100	74			
Total Hardness, ppm as $\text{CaCO}_3$					
Calcium Hardness, ppm as $\text{CaCO}_3$	100 - 500	162			
Chloride, ppm as $\text{Cl}^-$					
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	0.83			
Cyanuric Acid	20 - 60	24			

*All test results expressed in parts per million (ppm) as  $\text{CaCO}_3$  except pH and conductivity ( $\mu\text{mhos}$ ).*

#### COMMENTS:

#### ACTION:

The pH levels are found satisfactory $\Rightarrow$	No Action Recommended.
Chlorine levels & Cyanuric acid levels are found satisfactory $\Rightarrow$	No Action Recommended.
Calcium hardness and alkalinity found satisfactory $\Rightarrow$	No Action Recommended.

**No action recommended. Kindly maintain the same dosage to maintain the desired control parameters in the system**

#### INVENTORY LEVELS

#### DOSAGE SCHEDULE

Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Chlorine Tablets			--	
Pool Acid			--	
Crystal Care			--	

Service Engineer:	MR. MURUGARAJ	Client:	MR. MUHAMMED THAYYIL
Signature:		Signature:	





## CONSULTING SERVICE REPORT

<b>CUSTOMER: SERCO MIDDLE EAST</b>	<b>TO: MR. MUHAMMED ASHAR OPERATIONS ENGINEER</b>	<b>DATE: 15-07-2019</b>
<b>SITE: ZAYED UNIVERSITY, ABU DHABI</b>	<b>COPY: MOHAMED AFSER</b>	<b>LOCATION: FF3, CENTRAL AREA</b>

### WATER FEATURE ANALYSIS

PARAMETER	CONTROL LIMITS	Water Fountain			
pH	7.2 - 7.6	7.31			
Conductivity, $\mu\text{s}/\text{cm}$		1057			
TDS, ppm	Max 1500	687			
'P' Alkalinity, ppm as $\text{CaCO}_3$	70 - 100	83			
Total Hardness, ppm as $\text{CaCO}_3$					
Calcium Hardness, ppm as $\text{CaCO}_3$	100 - 500	214			
Chloride, ppm as $\text{Cl}^-$					
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	1.82			
Cyanuric Acid	20 - 60	21			

*All test results expressed in parts per million (ppm) as  $\text{CaCO}_3$  except pH and conductivity ( $\mu\text{mhos}$ ).*

#### COMMENTS:

#### ACTION:

The pH levels are found satisfactory $\Rightarrow$	No Action Recommended.
Chlorine levels & Cyanuric acid levels are found satisfactory $\Rightarrow$	No Action Recommended.
Calcium hardness and alkalinity found satisfactory $\Rightarrow$	No Action Recommended.

**No action recommended. Kindly maintain the same dosage to maintain the desired control parameters in the system**

#### INVENTORY LEVELS

#### DOSAGE SCHEDULE

Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Chlorine Tablets			--	
Pool Acid			--	
Crystal Care			--	

Service Engineer:	MR. MURUGARAJ	Client:	MR. MUHAMMED THAYYIL
Signature:		Signature:	



## CONSULTING SERVICE REPORT

<b>CUSTOMER: SERCO MIDDLE EAST</b>	<b>TO: MR. MUHAMMED ASHAR OPERATIONS ENGINEER</b>	<b>DATE: 15-07-2019</b>
<b>SITE: ZAYED UNIVERSITY, ABU DHABI</b>	<b>COPY: MOHAMED AFSER</b>	<b>LOCATION: MF2, CENTRAL AREA</b>

### WATER FEATURE ANALYSIS

PARAMETER	CONTROL LIMITS	Water Fountain			
pH	7.2 - 7.6	7.54			
Conductivity, $\mu\text{s}/\text{cm}$		1361			
TDS, ppm	Max 1500	884			
'P' Alkalinity, ppm as $\text{CaCO}_3$	70 - 100	85			
Total Hardness, ppm as $\text{CaCO}_3$					
Calcium Hardness, ppm as $\text{CaCO}_3$	100 - 500	306			
Chloride, ppm as $\text{Cl}^-$					
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	1.47			
Cyanuric Acid	20 - 60	28			

*All test results expressed in parts per million (ppm) as  $\text{CaCO}_3$  except pH and conductivity ( $\mu\text{mhos}$ ).*

#### COMMENTS:

#### ACTION:

The pH levels are found satisfactory $\Rightarrow$	No Action Recommended.
Chlorine levels & Cyanuric acid levels are found satisfactory $\Rightarrow$	No Action Recommended.
Calcium hardness and alkalinity found satisfactory $\Rightarrow$	No Action Recommended.

**No action recommended. Kindly maintain the same dosage to maintain the desired control parameters in the system**

#### INVENTORY LEVELS

#### DOSAGE SCHEDULE

Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Chlorine Tablets			--	
Pool Acid			--	
Crystal Care			--	

Service Engineer:	MR. MURUGARAJ	Client:	MR. MUHAMMED THAYYIL
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Signature:

P. M. Murugaraaj



Signature:



## CONSULTING SERVICE REPORT

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<b>SITE: ZAYED UNIVERSITY, ABU DHABI</b>	<b>COPY: MOHAMED AFSER</b>	<b>LOCATION: MF3, CENTRAL AREA</b>

### WATER FEATURE ANALYSIS

PARAMETER	CONTROL LIMITS	Water Fountain			
pH	7.2 - 7.6	7.40			
Conductivity, µs/cm		1211			
TDS, ppm	Max 1500	787			
'P' Alkalinity, ppm as CaCO <sub>3</sub>	70 - 100	74			
Total Hardness, ppm as CaCO <sub>3</sub>					
Calcium Hardness, ppm as CaCO <sub>3</sub>	100 - 500	288			
Chloride, ppm as Cl <sup>-</sup>					
Iron, ppm as Fe					

#### Treatment Residuals

Silica, ppm					
CaH Balance					
Dipslide	<10 <sup>3</sup>	ND			
Phosphate/Phosphonate					
Free Residual Chlorine as Cl	1.0 - 2.0	0.80			
Cyanuric Acid	20 - 60	26			

*All test results expressed in parts per million (ppm) as CaCO<sub>3</sub> except pH and conductivity (µmhos).*

#### COMMENTS:

#### ACTION:

The pH levels are found satisfactory	⇒	No Action Recommended.
Chlorine levels & Cyanuric acid levels are found satisfactory	⇒	No Action Recommended.
Calcium hardness and alkalinity found satisfactory	⇒	No Action Recommended.

**No action recommended. Kindly maintain the same dosage to maintain the desired control parameters in the system**

#### INVENTORY LEVELS

#### DOSAGE SCHEDULE

Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Chlorine Tablets			--	
Pool Acid			--	
Crystal Care			--	

<b>Service Engineer:</b>	<b>MR. MURUGARAJ</b>	<b>Client:</b>	<b>MR. MUHAMMED THAYYIL</b>
<b>Signature:</b>		<b>Signature:</b>	





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<b>SITE: ZAYED UNIVERSITY, ABU DHABI</b>	<b>COPY: MOHAMED AFSER</b>	<b>LOCATION: M1, PROMENADE</b>

### WATER FEATURE ANALYSIS

PARAMETER	CONTROL LIMITS	Water Fountain			
pH	7.2 - 7.6	7.22			
Conductivity, $\mu\text{s}/\text{cm}$		1538			
TDS, ppm	Max 1500	1003			
'P' Alkalinity, ppm as $\text{CaCO}_3$	80 - 120	74			
Total Hardness, ppm as $\text{CaCO}_3$					
Calcium Hardness, ppm as $\text{CaCO}_3$	100 - 500	348			
Chloride, ppm as $\text{Cl}^-$					
Iron, ppm as Fe					

#### Treatment Residuals

Silica, ppm					
CaH Balance					
Dipslide	<10 <sup>3</sup>	ND			
Phosphate/Phosphonate					
Free Residual Chlorine as Cl	1.0 - 2.0	1.89			
Cyanuric Acid	20 - 60	24			

All test results expressed in parts per million (ppm) as  $\text{CaCO}_3$  except pH and conductivity ( $\mu\text{mhos}$ ).

#### COMMENTS:

#### ACTION:

The pH levels are found satisfactory $\Rightarrow$	No Action Recommended.
Chlorine levels & Cyanuric acid levels are found satisfactory $\Rightarrow$	No Action Recommended.
Calcium hardness and alkalinity found satisfactory $\Rightarrow$	No Action Recommended.

**No action recommended. Kindly maintain the same dosage to maintain the desired control parameters in the system**

#### INVENTORY LEVELS

#### DOSAGE SCHEDULE

Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Chlorine Tablets			--	
Pool Acid			--	
Crystal Care			--	

Service Engineer:	MR. MURUGARAJ	Client:	MR. MUHAMMED THAYYIL
Signature:		Signature:	





## CONSULTING SERVICE REPORT

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<b>SITE: ZAYED UNIVERSITY, ABU DHABI</b>	<b>COPY: MOHAMED AFSER</b>	<b>LOCATION: M2, PROMENADE</b>

### WATER FEATURE ANALYSIS

PARAMETER	CONTROL LIMITS	Water Fountain			
pH	7.2 - 7.6	7.45			
Conductivity, $\mu\text{s}/\text{cm}$		1463			
TDS, ppm	Max 1500	950			
'P' Alkalinity, ppm as $\text{CaCO}_3$	70 - 100	83			
Total Hardness, ppm as $\text{CaCO}_3$					
Calcium Hardness, ppm as $\text{CaCO}_3$	100 - 500	164			
Chloride, ppm as $\text{Cl}^-$					
Iron, ppm as Fe					

#### Treatment Residuals

Silica, ppm					
CaH Balance					
Dipslide	<10 <sup>3</sup>	ND			
Phosphate/Phosphonate					
Free Residual Chlorine as Cl	1.0 - 2.0	1.68			
Cyanuric Acid	20 - 60	28			

*All test results expressed in parts per million (ppm) as  $\text{CaCO}_3$  except pH and conductivity ( $\mu\text{mhos}$ ).*

#### COMMENTS:

#### ACTION:

The pH levels are found satisfactory $\Rightarrow$	No Action Recommended.
Chlorine levels & Cyanuric acid levels are found satisfactory $\Rightarrow$	No Action Recommended.
Calcium hardness and alkalinity found satisfactory $\Rightarrow$	No Action Recommended.

**No action recommended. Kindly maintain the same dosage to maintain the desired control parameters in the system**

#### INVENTORY LEVELS

#### DOSAGE SCHEDULE

Chemical	Quantity	Chemical	Present Dosage	Revised Dosage
Chlorine Tablets			--	
Pool Acid			--	
Crystal Care			--	

Service Engineer:	MR. MURUGARAJ	Client:	MR. MUHAMMED THAYYIL
Signature:		Signature:	