

SFC Umwelttechnik GmbH, Julius Welser Straße 15, 5020 Salzburg, Austria

To

WHOM IT MAY CONCERN

Salzburg, 2016-01-08

Betr./ Subj. / objet: **Certificate about Effluent Quality of C-MEM Water Treatment**

Application: C-MEM lake water treatment

Date of test: October 2015

Quantity of treated water: up to 2 m<sup>3</sup>/day

Water Source: Inya Lake / Myanmar



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Firmenbuchnr.: FN 39751 h  
UID-Nr.: ATU 39099809  
DVR-Nr.: 1031996

Bank: Salzburger Sparkasse  
IBAN: AT62 2040 4000 0007 7511  
BIC: SBGSAT2S

# Raw Water (Inya Lake):



**LABORATORY**

Laboratory Technical Consultant: U Saw Christopher Maung  
B.Sc Engg: (Civil), Dip S.E (Delft) Lecturer of YIT (Retd), Consultant (Y.C.D.C), LWSE 001.  
Former Member (UNICEF, Water quality monitoring & Surveillance Myanmar)

WTL-RE-001

Issue Date - 01-12-2012

Effective Date - 01-12-2012

Issue No - 1.0/Page 1 of 2

W1015 096

## WATER QUALITY TEST RESULTS FORM

Client Mingalar Myanmar  
Nature of Water Pond Water (Raw)  
Location Innyar  
Date and Time of collection 6.10.2015  
Date and Time of arrival at Laboratory 7.10.2015  
Date and Time of commencing examination 8.10.2015  
Date and Time of completing 10.10.2015

### Results of Water Analysis

### WHO Drinking Water Guideline (Geneva - 1993)

pH	6.6		6.5 - 8.5
Colour (True)	15	TCU	15 TCU
Turbidity	46	NTU	5 NTU
Conductivity		micro S/cm	
Total Hardness	42	mg/l as CaCO <sub>3</sub>	500 mg/l as CaCO <sub>3</sub>
Calcium Hardness		mg/l as CaCO <sub>3</sub>	
Magnesium Hardness		mg/l as CaCO <sub>3</sub>	
Total Alkalinity		mg/l as CaCO <sub>3</sub>	
Phenolphthalein Alkalinity		mg/l as CaCO <sub>3</sub>	
Carbonate (CaCO <sub>3</sub> )		mg/l as CaCO <sub>3</sub>	
Bicarbonate (HCO <sub>3</sub> )		mg/l as CaCO <sub>3</sub>	
Iron	0.57	mg/l	0.3 mg/l
Chloride (as CL)	9	mg/l	250 mg/l
Sodium chloride (as NaCL)		mg/l	
Sulphate (as SO <sub>4</sub> )	Nil	mg/l	200 mg/l
Total Solids	120	mg/l	1500 mg/l
Suspended Solids		mg/l	
Dissolved Solids	62	mg/l	1000 mg/l
Manganese	Nil	mg/l	0.05 mg/l
Phosphate		mg/l	
Phenolphthalein Acidity		mg/l	
Methyl Orange Acidity		mg/l	
Salinity		ppt	

Remark: This certificate is issued only for the receipt of the test sample.

Tested by

Signature: Zaw Hein Oo

Name: B.Sc (Chemistry)

Chemist

(a division of WEG Co., Ltd.)

ISO TECH Laboratory

Approved by

Signature: Soe Thin

Name: A.R (Civil) 1980

Technical Officer

ISO TECH Laboratory

No.18, Lanthit Road, Nanthargone Quarter, Insein Township, Yangon, Myanmar.

Ph: 01-640955, 09-73225175, 09-73242162, Fax: 01-644506, E-mail: isotechlaboratory@gmail.com, Website: weg-myanmar.com



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### Results of Water Analysis

### WHO Drinking Water Guideline (Geneva - 1993)

Temperature (°C)		°C	
Fluoride (F)		mg/l	1.5 mg/l
Lead (as Pb)		mg/l	0.01 mg/l
Arsenic (As)		mg/l	0.01 mg/l
Nitrate (N.NO <sub>3</sub> )	0.6	mg/l	50 mg/l
Chlorine (Residual)		mg/l	
Ammonia (NH <sub>3</sub> )		mg/l	
Ammonium (NH <sub>4</sub> )		mg/l	
Dissolved Oxygen (DO)		mg/l	
Chemical Oxygen Demand (COD)		mg/l	
Biochemical Oxygen Demand (BOD) (5 days at 20 °C)		mg/l	
Cyanide (CN)		mg/l	0.07 mg/l
Zinc (Zn)		mg/l	3 mg/l
Copper (Cu)		mg/l	2 mg/l
Silica (Si)		mg/l	

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### Tested by

Signature: *Hein*  
 Name: **Zaw Hein Oo**  
**B.Sc (Chemistry)**  
**Chemist**  
**ISO TECH Laboratory**

### Approved by

Signature: *Soe Hui*  
 Name: **Soe Hui**  
**B.E (Civil) 1980**  
**Technical Officer**  
**ISO TECH Laboratory**

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# Treated Water after Installation of C-MEM

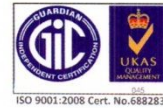


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ISO 9001:2008 Cert. No.688283

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## WATER QUALITY TEST RESULTS FORM

Client Mingalar Myanmar  
 Nature of Water Pond Water (Treated)  
 Location Innyar  
 Date and Time of collection 6.10.2015  
 Date and Time of arrival at Laboratory 7.10.2015  
 Date and Time of commencing examination 8.10.2015  
 Date and Time of completing 10.10.2015

### Results of Water Analysis

### WHO Drinking Water Guideline (Geneva - 1993)

pH	6.5		6.5 - 8.5
Colour (True)	Nil	TCU	15 TCU
Turbidity	Nil	NTU	5 NTU
Conductivity		micro S/cm	
Total Hardness	38	mg/l as CaCO <sub>3</sub>	500 mg/l as CaCO <sub>3</sub>
Calcium Hardness		mg/l as CaCO <sub>3</sub>	
Magnesium Hardness		mg/l as CaCO <sub>3</sub>	
Total Alkalinity		mg/l as CaCO <sub>3</sub>	
Phenolphthalein Alkalinity		mg/l as CaCO <sub>3</sub>	
Carbonate (CaCO <sub>3</sub> )		mg/l as CaCO <sub>3</sub>	
Bicarbonate (HCO <sub>3</sub> )		mg/l as CaCO <sub>3</sub>	
Iron	0.02	mg/l	0.3 mg/l
Chloride (as CL)	8	mg/l	250 mg/l
Sodium chloride (as NaCL)		mg/l	
Sulphate (as SO <sub>4</sub> )	Nil	mg/l	200 mg/l
Total Solids	60	mg/l	1500 mg/l
Suspended Solids		mg/l	
Dissolved Solids	60	mg/l	1000 mg/l
Manganese	Nil	mg/l	0.05 mg/l
Phosphate		mg/l	
Phenolphthalein Acidity		mg/l	
Methyl Orange Acidity		mg/l	
Salinity		ppt	

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### Results of Water Analysis

### WHO Drinking Water Guideline (Geneva - 1993)

Temperature (°C)		°C	
Fluoride (F)	0.2	mg/l	1.5 mg/l
Lead (as Pb)	Nil	mg/l	0.01 mg/l
Arsenic (As)	Nil	mg/l	0.01 mg/l
Nitrate (N.NO <sub>3</sub> )	Nil	mg/l	50 mg/l
Chlorine (Residual)		mg/l	
Ammonia (NH <sub>3</sub> )		mg/l	
Ammonium (NH <sub>4</sub> )		mg/l	
Dissolved Oxygen (DO)		mg/l	
Chemical Oxygen Demand (COD)		mg/l	
Biochemical Oxygen Demand (BOD) (5 days at 20 °C)		mg/l	
Cyanide (CN)	Nil	mg/l	0.07 mg/l
Zinc (Zn)	Nil	mg/l	3 mg/l
Copper (Cu)	Nil	mg/l	2 mg/l
Silica (Si)		mg/l	

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