

# CENTRE FOR ENVOTECH AND MANAGEMENT CONSULTANCY PVT. LTD.

An ISO 9001-2008 & OHSAS 18001:2007 Certified Company, Empanelled with OCCL, ORSAC and SPCB of Govt. of Odisha  
Accredited by NABET, QCI for EIA Studies as 'A' Category Consultant Organization. Empanelled with PCCF (Wildlife) & CWLW, Odisha  
Enlisted in Construction Industry Development Council (CIDC) established by the Planning Commission (Govt. of India)  
MoEF&CC, Govt. of India, Recognised Environment Laboratory under Environment (Protection) Act, 1986.

Report no. - CEMC/AIWTDP/101218/S1

Issued Date-10.12.2018

## SOIL TEST REPORT

Client Name and Address : **M/s. Assam Inland Water Transport Development Project, Guwahati**  
Date of Sampling : **27.11.2018**  
Date of Sample Received : **30.11.2018**  
Sampling by : **B K Payne**  
Sample Description : **Soil Sample**  
Sample Quantity : **1.0 Kg**  
Sample Location : **Lachit Ghat**  
Station Details : **Ghats/Commercial Zone- Station-1**  
: **Sensitive Zone- Station-2**  
: **Approaching Roads- Station-3**  
Date of Analysis : **30.11.2018 to 10.12.2018**  
Reference No. : **CEMC-1012018S1**

## ANALYSIS RESULT

Sl. No	Parameter		Unit	Result		
				Station-1	Station-2	Station-3
1	Bulk Density		g/cc	1.22	1.23	1.2
2	Colour		--	Grayish Brown	Grayish Brown	Grayish Brown
3	Texture	Sand	%	14.8	16.2	13.7
4		Clay	%	67.2	69.1	72.4
5		Silt	%	18.0	14.7	13.9
6	Soil type		%	Acidic	Acidic	Acidic
7	pH Value (1:5 V/V)		%	5.98	5.78	5.64
8	Electrical Conductivity		µS/cm	92.2	94.6	88.2
9	Nitrogen (as N)		%	0.017	0.019	0.016
10	Phosphorus (as P)		%	0.008	0.01	0.007
11	Potassium (as K)		%	0.012	0.016	0.022
12	Arsenic (as As)		%	<0.00001	<0.00001	<0.00001
13	Cadmium (as Cd)		%	<0.001	<0.001	<0.001
14	Mercury (as Hg)		%	<0.00001	<0.00001	<0.00001
15	Lead (as Pb)		%	0.003	0.005	0.006
16	Nickel (as Ni)		%	<0.001	<0.001	<0.001
17	PCB		%	<0.0001	<0.0001	<0.0001
18	POP		%	<0.0001	<0.0001	<0.0001
19	Hydrocarbon (as HC)		%	<0.00001	<0.00001	<0.00001

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Seal of Laboratory

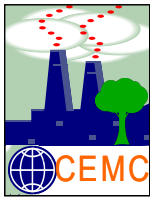
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Report no. - CEMC/AIWTDP/191218/S2

Issued Date-19.12.2018

## SOIL TEST REPORT

Client Name and Address : M/s. Assam Inland Water Transport Development Project,  
Guwahati  
Date of Sampling : 08.12.2018  
Date of Sample Received : 11.12.2018  
Sampling by : B K Payne  
Sample Description : Soil Sample  
Sample Quantity : 1.0 Kg  
Sample Location : North Guwahati  
Station Details : Ghats/Commercial Zone- Station-1  
: Sensitive Zone- Station-2  
: Approaching Roads- Station-3  
Date of Analysis : 11.12.2018 to 19.12.2018  
Reference No. : CEMC-19122018S2

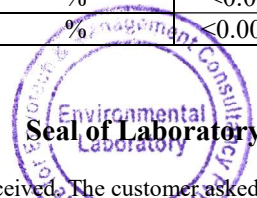
## ANALYSIS RESULT

Sl. No	Parameter		Unit	Result		
				Station-1	Station-2	Station-3
1	Bulk Density		g/cc	1.24	1.21	1.19
2	Colour		--	Grayish Brown	Grayish Brown	Grayish Brown
3	Texture	Sand	%	18.5	16.7	15.6
4		Clay	%	66.2	68.9	69.2
5		Silt	%	15.3	14.4	15.2
6	Soil type		%	acidic	acidic	acidic
7	pH Value (1:5 V/V)		%	6.02	5.73	5.98
8	Electrical Conductivity		µS/cm	98.4	101.6	103.9
9	Nitrogen (as N)		%	0.021	0.023	0.025
10	Phosphorus (as P)		%	0.012	0.011	0.012
11	Potassium (as K)		%	0.024	0.02	0.04
12	Arsenic (as As)		%	<0.00001	<0.00001	<0.00001
13	Cadmium (as Cd)		%	<0.001	<0.001	<0.001
14	Mercury (as Hg)		%	<0.00001	<0.00001	<0.00001
15	Lead (as Pb)		%	0.003	0.002	0.004
16	Nickel (as Ni)		%	<0.001	<0.001	<0.001
17	PCB		%	<0.0001	<0.0001	<0.0001
18	POP		%	<0.0001	<0.0001	<0.0001
19	Hydrocarbon (as HC)		%	<0.00001	<0.00001	<0.00001

  
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Notes:

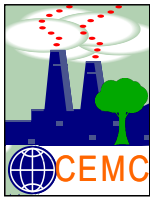
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Report no. - CEMC/AIWTDP/180918/S3

Issued Date-18.09.2018

## SOIL TEST REPORT

Client Name and Address : M/s. Assam Inland Water Transport Development Project,  
Guwahati  
Date of Sampling : 28.08.2018  
Date of Sample Received : 06.09.2018  
Sampling by : B K Payne  
Sample Description : Soil Sample  
Sample Quantity : 1.0 Kg  
Sample Location : Neamati Ghat  
Station Details : Ghats/Commercial Zone- Station-1  
: Sensitive Zone- Station-2  
: Approaching Roads- Station-3  
Date of Analysis : 06.09.2018 to 18.09.2018  
Reference No. : CEMC-18092018S3

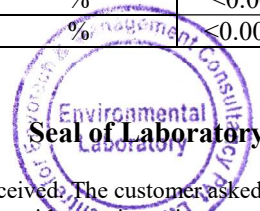
## ANALYSIS RESULT

Sl. No	Parameter		Unit	Result		
				Station-1	Station-2	Station-3
1	Bulk Density		g/cc	1.21	1.18	1.14
2	Colour		--	Grayish Brown	Grayish Brown	Grayish Brown
3	Texture	Sand	%	17.6	18.6	17.9
4		Clay	%	67.5	69.5	67.3
5		Silt	%	14.9	11.9	14.8
6	Soil type		%	Acidic	Acidic	Acidic
7	pH Value (1:5 V/V)		%	5.98	5.85	6.02
8	Electrical Conductivity		µS/cm	99.6	100.2	99.3
9	Nitrogen (as N)		%	0.022	0.025	0.019
10	Phosphorus (as P)		%	0.018	0.012	0.013
11	Potassium (as K)		%	0.028	0.021	0.038
12	Arsenic (as As)		%	<0.00001	<0.00001	<0.00001
13	Cadmium (as Cd)		%	<0.001	<0.001	<0.001
14	Mercury (as Hg)		%	<0.00001	<0.00001	<0.00001
15	Lead (as Pb)		%	0.0031	0.0029	0.0038
16	Nickel (as Ni)		%	<0.001	<0.001	<0.001
17	PCB		%	<0.0001	<0.0001	<0.0001
18	POP		%	<0.0001	<0.0001	<0.0001
19	Hydrocarbon (as HC)		%	<0.00001	<0.00001	<0.00001

  
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Notes:

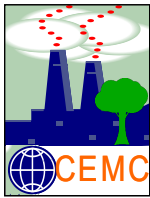
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Report no. - CEMC/AIWTDP/180918/S4

Issued Date-18.09.2018

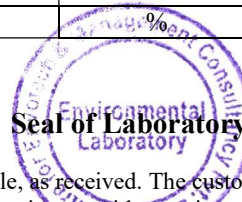
## SOIL TEST REPORT

Client Name and Address : M/s. Assam Inland Water Transport Development Project, Guwahati  
 Date of Sampling : 30.08.2018  
 Date of Sample Received : 06.09.2018  
 Sampling by : B K Payne  
 Sample Description : Soil Sample  
 Sample Quantity : 1.0 Kg  
 Sample Location : Kamalabari Ghat  
 Station Details : Ghats/Commercial Zone- Station-1  
 : Sensitive Zone- Station-2  
 : Approaching Roads- Station-3  
 Date of Analysis : 06.09.2018 to 18.09.2018  
 Reference No. : CEMC-18092018S4

## ANALYSIS RESULT

Sl. No	Parameter		Unit	Result		
				Station-1	Station-2	Station-3
1	Bulk Density		g/cc	1.18	1.08	1.14
2	Colour		--	Grayish Brown	Grayish Brown	Grayish Brown
3	Texture	Sand	%	19.3	17.4	18.2
4		Clay	%	69.2	67.5	68.3
5		Silt	%	11.5	15.1	13.5
6	Soil type		%	Acidic	Acidic	Acidic
7	pH Value (1:5 V/V)		%	6.11	5.96	5.79
8	Electrical Conductivity		µS/cm	102.6	103.9	101.8
9	Nitrogen (as N)		%	0.011	0.028	0.021
10	Phosphorus (as P)		%	0.008	0.012	0.009
11	Potassium (as K)		%	0.021	0.021	0.021
12	Arsenic (as As)		%	<0.00001	<0.00001	<0.00001
13	Cadmium (as Cd)		%	<0.001	<0.001	<0.001
14	Mercury (as Hg)		%	<0.00001	<0.00001	<0.00001
15	Lead (as Pb)		%	0.0018	0.0021	0.0031
16	Nickel (as Ni)		%	<0.001	<0.001	<0.001
17	PCB		%	<0.0001	<0.0001	<0.0001
18	POP		%	<0.0001	<0.0001	<0.0001
19	Hydrocarbon (as HC)		%	<0.00001	<0.00001	<0.00001

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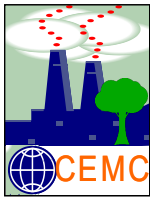
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Report no. - CEMC/AIWTDP/180918/S5

Issued Date-18.09.2018

## SOIL TEST REPORT

Client Name and Address : M/s. Assam Inland Water Transport Development Project,  
Guwahati  
Date of Sampling : 02.09.2018  
Date of Sample Received : 06.09.2018  
Sampling by : B K Payne  
Sample Description : Soil Sample  
Sample Quantity : 1.0 Kg  
Sample Location : Aphlamukh Ghat  
Station Details : Ghats/Commercial Zone- Station-1  
: Sensitive Zone- Station-2  
: Approaching Roads- Station-3  
Date of Analysis : 06.09.2018 to 18.09.2018  
Reference No. : CEMC-18092018S5

## ANALYSIS RESULT

Sl. No	Parameter		Unit	Result		
				Station-1	Station-2	Station-3
1	Bulk Density		g/cc	1.15	1.13	1.08
2	Colour		--	Grayish Brown	Grayish Brown	Grayish Brown
3	Texture	Sand	%	16.9	14.8	16.6
4		Clay	%	68.3	67.4	70.3
5		Silt	%	14.8	17.8	13.1
6	Soil type		%	Acidic	Acidic	Acidic
7	pH Value (1:5 V/V)		%	6.11	5.89	5.74
8	Electrical Conductivity		µS/cm	101.5	103.9	105.6
9	Nitrogen (as N)		%	0.029	0.027	0.031
10	Phosphorus (as P)		%	0.011	0.009	0.010
11	Potassium (as K)		%	0.025	0.024	0.019
12	Arsenic (as As)		%	<0.00001	<0.00001	<0.00001
13	Cadmium (as Cd)		%	<0.001	<0.001	<0.001
14	Mercury (as Hg)		%	<0.00001	<0.00001	<0.00001
15	Lead (as Pb)		%	0.0031	0.0028	0.0024
16	Nickel (as Ni)		%	<0.001	<0.001	<0.001
17	PCB		%	<0.0001	<0.0001	<0.0001
18	POP		%	<0.0001	<0.0001	<0.0001
19	Hydrocarbon (as HC)		%	<0.00001	<0.00001	<0.00001

  
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