



# Mahabal Enviro Engineers Pvt. Ltd.

Plot 13/14, Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist. Nagpur – 441111

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## Water Sample Analysis Report

<b>Report No.</b>	ME-NS0428-121126-SA-INDIABUL-NASHIK		<b>Date:</b> 26.11.2012
<b>Name and Address of Customer</b>	<b>INDIABULLS REALTECH LTD. (SEZ Co-Developer)</b> Indiabulls Industrial Infrastructure Ltd. (Multiproduct SEZ), Village – Musalgaon & Gulvanch, Tal- Sinnar, Nashik.		<b>Order Reference</b>
			Your Work Order No. 3320001083 Date: 18.11.2011
<b>Sample Description /Type</b>	Ground Water	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	Musalgaon	<b>Sample Quantity/Packing</b>	5 L X 1 No. Plastic Can 1 L X 1 No. Glass Bottle 250 mL X 1 No. Sterile Glass Bottle
<b>Date of Sampling</b>	20.11.2012	<b>Date of Receipt of Sample</b>	21.11.2012
<b>Sampling Procedure</b>	IS 1622: 1981, Reaffirmed 2003; IS 3025 (Part 1): 1987, Reaffirmed 2003 & APHA 21 <sup>st</sup> Ed. 2005, 1060-B		
<b>Date of Start of Analysis</b>	21.11.2012	<b>Date of Completion of Analysis</b>	24.11.2012

Sr. No.	Parameter	Result	Unit	Desirable Limit as per IS 10500: 1991	Method Reference
<b>Physico-Chemical Analysis</b>					
1.	Colour	1	Hazen Units	Max. 5	APHA 21 <sup>st</sup> Ed. 2005, 2120-B, 2-2
2.	Odour	Unobjectionable	-	Unobjectionable	IS 3025 (Part 5): 1983, Reaffirmed 2006
3.	Taste	Disagreeable	-	Agreeable	IS 3025 (Part 8): 1984, Reaffirmed 2006
4.	Turbidity	0.3	N.T.U.	Max. 5	APHA 21 <sup>st</sup> Ed. 2005, 2130-B, 2-9
5.	pH	7.77	-	6.5-8.5	APHA 21 <sup>st</sup> Ed. 2005, 4500-H <sup>+</sup> -B, 4-90
6.	Suspended Solids	BDL (DL:5)	mg/L	-	IS 3025 (Part 17): 1984, Reaffirmed 2006, Amds.1
7.	Total Dissolved Solids	1236	mg/L	Max. 500	IS 3025 (Part 16): 1984, Reaffirmed 2006, Ed. 2.1 (1999-12)
8.	Dissolved Oxygen	5.4	mg/L	-	IS 3025 (Part 38): 1989, Reaffirmed 2009
9.	Alkalinity (as CaCO <sub>3</sub> )	386	mg/L	Max. 200	IS 3025 (Part 23): 1986, Reaffirmed 2003, Amds.1
10.	Total Hardness (as CaCO <sub>3</sub> )	842	mg/L	Max. 300	APHA 21 <sup>st</sup> Ed. 2005, 2340-C, 2-37
11.	Calcium (as Ca)	155	mg/L	Max. 75	APHA 21 <sup>st</sup> Ed. 2005, 3500-Ca-B, 3-65
12.	Magnesium (as Mg)	111	mg/L	Max. 30	APHA 21 <sup>st</sup> Ed. 2005, 3500-Mg-B, 3-84

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Sr. No.	Parameter	Result	Unit	Desirable Limit as per IS 10500: 1991	Method Reference
13.	Aluminium (as Al)	BDL (DL:0.025)	mg/L	Max. 0.03	APHA 21 <sup>st</sup> Ed. 2005, 3500-AI-B, 3-58
14.	Arsenic (as As)	BDL (DL:0.01)	mg/L	Max. 0.01	IS 3025 (Part 2): 2004
15.	Cadmium (as Cd)	BDL (DL:0.005)	mg/L	Max. 0.01	IS 3025 (Part 2): 2004
16.	Chromium (as Cr <sup>+6</sup> )	BDL (DL:0.02)	mg/L	Max. 0.05	APHA 21 <sup>st</sup> Ed. 2005, 3500-Cr-B, 3-67
17.	Copper (as Cu)	BDL (DL:0.02)	mg/L	Max. 0.05	IS 3025 (Part 2): 2004
18.	Iron (as Fe)	BDL (DL:0.06)	mg/L	Max. 0.3	IS 3025 (Part 2): 2004
19.	Lead (as Pb)	BDL (DL:0.008)	mg/L	Max. 0.05	IS 3025 (Part 2): 2004
20.	Manganese (as Mn)	BDL (DL:0.02)	mg/L	Max. 0.1	IS 3025 (Part 2): 2004
21.	Mercury (as Hg)	BDL (DL:0.0008)	mg/L	Max. 0.001	IS 3025 (Part 2): 2004
22.	Selenium (as Se)	BDL (DL:0.005)	mg/L	Max. 0.01	IS 3025 (Part 2): 2004
23.	Zinc (as Zn)	BDL (DL:0.05)	mg/L	Max. 5	IS 3025 (Part 2): 2004
24.	Boron (as B)	5.26	mg/L	Max. 1	APHA 21 <sup>st</sup> Ed. 2005, 4500-B-B, 4-23
25.	Residual free chlorine	BDL (DL:0.01)	mg/L	Min.0.2	IS 3025 (Part 26): 1986, Reaffirmed 2003, Ed. 2.1 (2004-02)
26.	Chloride (as Cl)	208	mg/L	Max. 250	APHA 21 <sup>st</sup> Ed. 2005, 4500-CI-B, 4-70
27.	Sulphate (as SO <sub>4</sub> )	397	mg/L	Max. 200	IS 3025 (Part 24):1986, Reaffirmed 2009
28.	Fluoride (as F)	0.64	mg/L	Max. 1	APHA 21 <sup>st</sup> Ed. 2005, 4500-F-D, 4-85
29.	Nitrate (as NO <sub>3</sub> )	128	mg/L	Max. 45	APHA 21 <sup>st</sup> Ed. 2005, 4500-NO <sub>3</sub> -B, 4-120
30.	Cyanide (as CN)	BDL (DL:0.001)	mg/L	Max. 0.05	APHA 21 <sup>st</sup> Ed. 2005, 4500-CN-C & E, 4-39 & 4-41
31.	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	BDL (DL:0.001)	mg/L	Max. 0.001	APHA 21 <sup>st</sup> Ed. 2005, 5530-B & C, 5-44 & 5-45
32.	Mineral Oil	BDL (DL:005)	mg/L	Max. 0.01	IS: 3025 (Part 39): 1991, Reaffirmed 2003, Amds.1



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Sr. No.	Parameter	Result	Unit	Desirable Limit as per IS 10500: 1991	Method Reference
<b>Microbiological Analysis</b>					
33.	Total Coliforms	220	/100ml	Absent	APHA, 22 <sup>nd</sup> Ed., 2012, 9221-D, 9-73
34.	E-Coli	Absent	/100ml	Absent	APHA, 22 <sup>nd</sup> Ed., 2012, 9221-G, 9-76
<b>Remark:</b> BDL- Below Detection Limit, DL- Detection Limit.					

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FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

**TECHNICAL MANAGER**

## Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.



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## Water Sample Analysis Report

<b>Report No.</b>	ME-NS0429-121126-SA-INDIABUL-NASHIK		<b>Date:</b> 26.11.2012
<b>Name and Address of Customer</b>	<b>INDIABULLS REALTECH LTD.</b> (SEZ Co-Developer) Indiabulls Industrial Infrastructure Ltd. (Multiproduct SEZ), Village – Musalgaon & Gulvanch, Tal- Sinnar, Nashik.		<b>Order Reference</b>
			Your Work Order No. 3320001083 Date: 18.11.2011
<b>Sample Description /Type</b>	Ground Water	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	Kedarpur	<b>Sample Quantity/Packing</b>	5 L X 1 No. Plastic Can 1 L X 1 No. Glass Bottle 250 mL X 1 No. Sterile Glass Bottle
<b>Date of Sampling</b>	20.11.2012	<b>Date of Receipt of Sample</b>	21.11.2012
<b>Sampling Procedure</b>	IS 1622: 1981, Reaffirmed 2003; IS 3025 (Part 1): 1987, Reaffirmed 2003 & APHA 21 <sup>st</sup> Ed. 2005, 1060-B		
<b>Date of Start of Analysis</b>	21.11.2012	<b>Date of Completion of Analysis</b>	24.11.2012

Sr. No.	Parameter	Result	Unit	Desirable Limit as per IS 10500: 1991	Method Reference
<b>Physico-Chemical Analysis</b>					
1.	Colour	3	Hazen Units	Max. 5	APHA 21 <sup>st</sup> Ed. 2005, 2120-B, 2-2
2.	Odour	Unobjectionable	-	Unobjectionable	IS 3025 (Part 5): 1983, Reaffirmed 2006
3.	Taste	Disagreeable	-	Agreeable	IS 3025 (Part 8): 1984, Reaffirmed 2006
4.	Turbidity	2.2	N.T.U.	Max. 5	APHA 21 <sup>st</sup> Ed. 2005, 2130-B, 2-9
5.	pH	7.92	-	6.5-8.5	APHA 21 <sup>st</sup> Ed. 2005, 4500-H <sup>+</sup> -B, 4-90
6.	Suspended Solids	10	mg/L	-	IS 3025 (Part 17): 1984, Reaffirmed 2006, Amds.1
7.	Total Dissolved Solids	840	mg/L	Max. 500	IS 3025 (Part 16): 1984, Reaffirmed 2006, Ed. 2.1 (1999-12)
8.	Dissolved Oxygen	5.2	mg/L	-	IS 3025 (Part 38): 1989, Reaffirmed 2009
9.	Alkalinity (as CaCO <sub>3</sub> )	341	mg/L	Max. 200	IS 3025 (Part 23): 1986, Reaffirmed 2003, Amds.1
10.	Total Hardness (as CaCO <sub>3</sub> )	356	mg/L	Max. 300	APHA 21 <sup>st</sup> Ed. 2005, 2340-C, 2-37
11.	Calcium (as Ca)	61.5	mg/L	Max. 75	APHA 21 <sup>st</sup> Ed. 2005, 3500-Ca-B, 3-65

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Sr. No.	Parameter	Result	Unit	Desirable Limit as per IS 10500: 1991	Method Reference
12.	Magnesium (as Mg)	49.2	mg/L	Max. 30	APHA 21 <sup>st</sup> Ed. 2005, 3500-Mg-B, 3-84
13.	Aluminium (as Al)	BDL (DL:0.025)	mg/L	Max. 0.03	APHA 21 <sup>st</sup> Ed. 2005, 3500-Al-B, 3-58
14.	Arsenic (as As)	BDL (DL:0.01)	mg/L	Max. 0.01	IS 3025 (Part 2): 2004
15.	Cadmium (as Cd)	BDL (DL:0.005)	mg/L	Max. 0.01	IS 3025 (Part 2): 2004
16.	Chromium (as Cr <sup>+6</sup> )	BDL (DL:0.02)	mg/L	Max. 0.05	APHA 21 <sup>st</sup> Ed. 2005, 3500-Cr-B, 3-67
17.	Copper (as Cu)	BDL (DL:0.02)	mg/L	Max. 0.05	IS 3025 (Part 2): 2004
18.	Iron (as Fe)	BDL (DL:0.06)	mg/L	Max. 0.3	IS 3025 (Part 2): 2004
19.	Lead (as Pb)	BDL (DL:0.008)	mg/L	Max. 0.05	IS 3025 (Part 2): 2004
20.	Manganese (as Mn)	BDL (DL:0.02)	mg/L	Max. 0.1	IS 3025 (Part 2): 2004
21.	Mercury (as Hg)	BDL (DL:0.0008)	mg/L	Max. 0.001	IS 3025 (Part 2): 2004
22.	Selenium (as Se)	BDL (DL:0.005)	mg/L	Max. 0.01	IS 3025 (Part 2): 2004
23.	Zinc (as Zn)	BDL (DL:0.05)	mg/L	Max. 5	IS 3025 (Part 2): 2004
24.	Boron (as B)	0.63	mg/L	Max. 1	APHA 21 <sup>st</sup> Ed. 2005, 4500-B-B, 4-23
25.	Residual free chlorine	BDL(DL:0.1)	mg/L	Min.0.2	IS 3025 (Part 26): 1986, Reaffirmed 2003, Ed. 2.1 (2004-02)
26.	Chloride (as Cl)	188	mg/L	Max. 250	APHA 21 <sup>st</sup> Ed. 2005, 4500-Cl-B, 4-70
27.	Sulphate (as SO <sub>4</sub> )	155	mg/L	Max. 200	IS 3025 (Part 24):1986, Reaffirmed 2009
28.	Fluoride (as F)	0.8	mg/L	Max. 1	APHA 21 <sup>st</sup> Ed. 2005, 4500-F-D, 4-85
29.	Nitrate (as NO <sub>3</sub> )	68.9	mg/L	Max. 45	APHA 21 <sup>st</sup> Ed. 2005, 4500-NO <sub>3</sub> -B, 4-120
30.	Cyanide (as CN)	BDL (DL:0.001)	mg/L	Max. 0.05	APHA 21 <sup>st</sup> Ed. 2005, 4500-CN-C & E, 4-39 & 4-41
31.	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	BDL (DL:0.001)	mg/L	Max. 0.001	APHA 21 <sup>st</sup> Ed. 2005, 5530-B & C, 5-44 & 5-45
32.	Mineral Oil	BDL (DL:005)	mg/L	Max. 0.01	IS: 3025 (Part 39): 1991, Reaffirmed 2003, Amds.1



Microbiological Analysis					
33.	Total Coliforms	920	/100ml	Absent	APHA, 22 <sup>nd</sup> Ed., 2012, 9221-D, 9-73
34.	E.coli	Present	/100ml	Absent	APHA, 22 <sup>nd</sup> Ed., 2012, 9221-G, 9-76
<b>Remark:</b> BDL- Below Detection Limit, DL- Detection Limit.					

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**TECHNICAL MANAGER**

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## Water Sample Analysis Report

<b>Report No.</b>	ME-NS0431-121126-SA-INDIABUL-NASHIK		<b>Date:</b> 26.11.2012
<b>Name and Address of Customer</b>	<b>Indiabulls Realtech Ltd.</b> (SEZ Co-Developer) Indiabulls Industrial Infrastructure Ltd.(Multiproduct SEZ), Village – Musalgaon & Gulwanch, Tal- Sinnar, Nashik.		<b>Order Reference</b>
			Your Work Order No. 3320001083 Date: 18.11.2011
<b>Sample Description /Type</b>	Ground Water	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	Gulwanch	<b>Sample Quantity/Packing</b>	5 L X 1 No. Plastic Can 1 L X 1 No. Glass Bottle
<b>Date of Sampling</b>	20.11.2012	<b>Date of Receipt of Sample</b>	21.11.2012
<b>Sampling Procedure</b>	IS 3025(Part 1):1987, Reaffirmed 2003 & APHA 21 <sup>st</sup> Ed. 2005, 1060-B		
<b>Date of Start of Analysis</b>	21.11.2012	<b>Date of Completion of Analysis</b>	24.11.2012

Sr. No.	Parameter	Result	Unit	Desirable Limit as per IS 10500: 1991	Method Reference
<b>Physico-Chemical Analysis</b>					
1.	Colour	2	Hazen Units	Max. 5	APHA 21 <sup>st</sup> Ed. 2005, 2120-B, 2-2
2.	Odour	Unobjectionable	-	Unobjectionable	IS 3025 (Part 5): 1983, Reaffirmed 2006
3.	Taste	Agreeable	-	Agreeable	IS 3025 (Part 8): 1984, Reaffirmed 2006
4.	Turbidity	1.1	N.T.U.	Max. 5	APHA 21 <sup>st</sup> Ed. 2005, 2130-B, 2-9
5.	pH	8.01	-	6.5-8.5	APHA 21 <sup>st</sup> Ed. 2005, 4500-H <sup>+</sup> -B, 4-90
6.	Suspended Solids	BDL (DL:5)	mg/L	-	IS 3025 (Part 17): 1984, Reaffirmed 2006, Amds.1
7.	Total Dissolved Solids	1120	mg/L	Max. 500	IS 3025 (Part 16): 1984, Reaffirmed 2006, Ed. 2.1 (1999-12)
8.	Dissolved Oxygen	5.8	mg/L	-	IS 3025 (Part 38): 1989, Reaffirmed 2009
9.	Alkalinity (as CaCO <sub>3</sub> )	305	mg/L	Max. 200	IS 3025 (Part 23): 1986, Reaffirmed 2003, Amds.1
10.	Total Hardness (as CaCO <sub>3</sub> )	604	mg/L	Max. 300	APHA 21 <sup>st</sup> Ed. 2005, 2340-C, 2-37
11.	Calcium (as Ca)	95.2	mg/L	Max. 75	APHA 21 <sup>st</sup> Ed. 2005, 3500-Ca-B, 3-65
12.	Magnesium (as Mg)	89	mg/L	Max. 30	APHA 21 <sup>st</sup> Ed. 2005, 3500-Mg-B, 3-84
13.	Aluminium (as Al)	BDL (DL:0.025)	mg/L	Max. 0.03	APHA 21 <sup>st</sup> Ed. 2005, 3500-Al-B, 3-58
14.	Arsenic (as As)	BDL (DL:0.01)	mg/L	Max. 0.01	IS 3025 (Part 2): 2004

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Sr. No.	Parameter	Result	Unit	Desirable Limit as per IS 10500: 1991	Method Reference
15.	Cadmium (as Cd)	BDL (DL:0.005)	mg/L	Max. 0.01	IS 3025 (Part 2): 2004
16.	Chromium (as Cr <sup>+6</sup> )	BDL (DL:0.02)	mg/L	Max. 0.05	APHA 21 <sup>st</sup> Ed. 2005, 3500-Cr-B, 3-67
17.	Copper (as Cu)	BDL (DL:0.02)	mg/L	Max. 0.05	IS 3025 (Part 2): 2004
18.	Iron (as Fe)	BDL (DL:0.06)	mg/L	Max. 0.3	IS 3025 (Part 2): 2004
19.	Lead (as Pb)	BDL (DL:0.008)	mg/L	Max. 0.05	IS 3025 (Part 2): 2004
20.	Manganese (as Mn)	BDL (DL:0.02)	mg/L	Max. 0.1	IS 3025 (Part 2): 2004
21.	Mercury (as Hg)	BDL (DL:0.0008)	mg/L	Max. 0.001	IS 3025 (Part 2): 2004
22.	Selenium (as Se)	BDL (DL:0.005)	mg/L	Max. 0.01	IS 3025 (Part 2): 2004
23.	Zinc (as Zn)	BDL (DL:0.05)	mg/L	Max. 5	IS 3025 (Part 2): 2004
24.	Boron (as B)	0.45	mg/L	Max. 1	APHA 21 <sup>st</sup> Ed. 2005, 4500-B-B, 4-23
25.	Residual free chlorine	BDL (DL:0.01)	mg/L	Min.0.2	IS 3025 (Part 26): 1986, Reaffirmed 2003, Ed. 2.1 (2004-02)
26.	Chloride (as Cl)	242	mg/L	Max. 250	APHA 21 <sup>st</sup> Ed. 2005, 4500-Cl-B, 4-70
27.	Sulphate (as SO <sub>4</sub> )	217	mg/L	Max. 200	IS 3025 (Part 24): 1986, Reaffirmed 2009
28.	Fluoride (as F)	0.9	mg/L	Max. 1	APHA 21 <sup>st</sup> Ed. 2005, 4500-F-D, 4-85
29.	Nitrate (as NO <sub>3</sub> )	210	mg/L	Max. 45	APHA 21 <sup>st</sup> Ed. 2005, 4500-NO <sub>3</sub> -B, 4-120
30.	Cyanide (as CN)	BDL (DL:0.001)	mg/L	Max. 0.05	APHA 21 <sup>st</sup> Ed. 2005, 4500-CN-C & E, 4-39 & 4-41
31.	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	BDL (DL:0.001)	mg/L	Max. 0.001	APHA 21 <sup>st</sup> Ed. 2005, 5530-B & C, 5-44 & 5-45
32.	Mineral Oil	BDL (DL:0.05)	mg/L	Max. 0.01	IS: 3025 (Part 39): 1991, Reaffirmed 2003, Amds.1
<b>Remark:</b> BDL- Below Detection Limit, DL- Detection Limit.					

-END-

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



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## Water Sample Analysis Report

<b>Report No.</b>	ME-NS0430-121126-SA-INDIABUL-NASHIK		<b>Date:</b> 26.11.2012
<b>Name and Address of Customer</b>	<b>INDIABULLS REALTECH LTD. (SEZ Co-Developer)</b> Indiabulls Industrial Infrastructure Ltd.(Multiproduct SEZ), Village – Musalgaon & Gulvanch, Tal- Sinnar, Nashik.		<b>Order Reference</b>
			Your Work Order No. 3320001083 Date: 18.11.2011
<b>Sample Description /Type</b>	Water	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	IRL Canteen Water	<b>Sample Quantity/Packing</b>	5 L X 1 No. Plastic Can 1 L X 1 No. Glass Bottle 250 mL X 1 No. Sterile Glass Bottle
<b>Date of Sampling</b>	20.11.2012	<b>Date of Receipt of Sample</b>	21.11.2012
<b>Sampling Procedure</b>	IS 1622:1981, Reaffirmed 2009; IS 3025(Part 1) 1987, Reaffirmed 2003 & APHA 21 <sup>st</sup> Ed. 2005, 1060 B, 1-29		
<b>Date of Start of Analysis</b>	21.11.2012	<b>Date of Completion of Analysis</b>	24.11.2012

Sr. No.	Parameter	Result	Unit	Desirable Limit as per IS 10500: 1991	Method Reference
<b>Physico-Chemical Analysis</b>					
1.	Colour	1	Hazen Unit	Max. 5	APHA 21 <sup>st</sup> Ed. 2005, 2120-B, 2-2
2.	Odour	Unobjectionable	-	Unobjectionable	IS 3025 (Part 5): 1983, Reaffirmed 2006
3.	Turbidity	0.4	N.T.U.	Max. 5	APHA 21 <sup>st</sup> Ed. 2005, 2130-B, 2-9
4.	pH	8.26	-	6.5-8.5	APHA 21 <sup>st</sup> Ed. 2005, 4500-H <sup>+</sup> -B, 4-90
5.	Suspended Solids	BDL (DL: 5)	mg/L	-	IS 3025 (Part 17): 1984, Reaffirmed 2006, Amds.1
6.	Biochemical Oxygen Demand (3 days, 27°C)	3.0	mg/L	-	IS 3025 (Part 44): 1993, Reaffirmed 2006, Amds.1
7.	Chemical Oxygen Demand	10	mg/L	-	APHA 21 <sup>st</sup> Ed. 2005, 5220-B, 5-15
8.	Oil & Grease	BDL (DL: 0.5)	mg/L	-	APHA 21 <sup>st</sup> Ed. 2005, 5220-B, 5-37
9.	Total Dissolved Solids	26	mg/L	Max. 500	IS 3025 (Part 16): 1984, Reaffirmed 2006, Ed. 2.1 (1999-12)
10.	Dissolved Oxygen	6.8	mg/L	-	IS 3025 (Part 38): 1989, Reaffirmed 2009

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Sr. No.	Parameter	Result	Unit	Desirable Limit as per IS 10500: 1991	Method Reference
11.	Phenolphthalein Alkalinity (as CaCO <sub>3</sub> )	BDL (DL:0.5)	mg/L	-	IS 3025 (Part 23): 1986, Reaffirmed 2003, Amds.1
12.	Methyl Orange Alkalinity (as CaCO <sub>3</sub> )	7.6	mg/L	-	IS 3025 (Part 23): 1986, Reaffirmed 2003, Amds.1
13.	Total Hardness (as CaCO <sub>3</sub> )	15	mg/L	Max. 300	APHA 21 <sup>st</sup> Ed. 2005, 2340-C, 2-37
14.	Calcium (as Ca)	2.38	mg/L	Max. 75	APHA 21 <sup>st</sup> Ed. 2005, 3500-Ca-B, 3-65
15.	Magnesium (as Mg)	2.31	mg/L	Max. 30	APHA 21 <sup>st</sup> Ed. 2005, 3500-Mg-B, 3-84
16.	Arsenic (as As)	0.02	mg/L	Max. 0.01	IS 3025 (Part 2): 2004
17.	Cadmium (as Cd)	0.01	mg/L	Max. 0.01	IS 3025 (Part 2): 2004
18.	Chromium (as Cr <sup>+6</sup> )	BDL (DL:0.02)	mg/L	Max. 0.05	APHA 21 <sup>st</sup> Ed. 2005, 3500-Cr-B, 3-67
19.	Copper (as Cu)	BDL (DL:0.02)	mg/L	Max. 0.05	IS 3025 (Part 2): 2004
20.	Iron (as Fe-Dissolved)	0.21	mg/L	-	APHA 21 <sup>st</sup> Ed. 2005, 3111 B, 3-17
21.	Iron (as Fe-Suspended)	BDL (DL:0.008)	mg/L	-	APHA 21 <sup>st</sup> Ed. 2005, 3111 B, 3-17
22.	Lead (as Pb)	BDL (DL:0.008)	mg/L	Max. 0.05	IS 3025 (Part 2): 2004
23.	Manganese (as Mn)	BDL (DL:0.02)	mg/L	Max. 0.1	IS 3025 (Part 2): 2004
24.	Mercury (as Hg)	BDL (DL:0.0008)	mg/L	Max. 0.001	IS 3025 (Part 2): 2004
25.	Selenium (as Se)	BDL (DL:0.005)	mg/L	Max. 0.01	IS 3025 (Part 2): 2004
26.	Zinc (as Zn)	0.05	mg/L	Max. 5	IS 3025 (Part 2): 2004
27.	Nickel (as Ni)	BDL (DL:0.01)	mg/L	-	IS 3025 (Part 2): 2004
28.	Barium (as Ba)	BDL (DL:0.1)	mg/L	-	IS 3025 (Part 2): 2004
29.	Sodium(as Na)	6.1	mg/L	-	IS 3025 (Part 45): 1993, Reaffirmed 2009, Amds.1
30.	Potassium (as K)	0.2	mg/L	-	IS 3025 (Part 45):1993, Reaffirmed 2009



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Sr. No.	Parameter	Result	Unit	Desirable Limit as per IS 10500: 1991	Method Reference
31.	Chloride (as Cl)	2.94	mg/L	Max. 250	APHA 21 <sup>st</sup> Ed. 2005, 4500-Cl-B, 4-70
32.	Sulphate (as SO <sub>4</sub> )	BDL (DL: 1)	mg/L	Max. 200	IS 3025 (Part 24):1986, Reaffirmed 2009
33.	Fluoride (as F)	BDL (DL:0.05)	mg/L	Max. 1	APHA 21 <sup>st</sup> Ed. 2005, 4500-F <sup>-</sup> -D, 4-85
34.	Phosphate (as PO <sub>4</sub> )	BDL (DL:0.03)	mg/L	-	APHA 21 <sup>st</sup> Ed. 2005, 4500-P-E, 4-153
35.	Nitrate (as NO <sub>3</sub> )	3.10	mg/L	Max. 45	APHA 21 <sup>st</sup> Ed. 2005, 4500-NO <sub>3</sub> -E, 4-123
36.	Dissolved Silica (as SiO <sub>2</sub> )	0.51	mg/L	-	APHA 21 <sup>st</sup> Ed. 2005, 4500-SiO <sub>2</sub> -D, 4-167
37.	Hydrogen Sulphide (as H <sub>2</sub> S)	BDL (DL:0.08)	mg/L	-	APHA 21 <sup>st</sup> Ed. 2005, 4500-S <sup>2</sup> -C, 4-173
38.	Carbon Dioxide	1.67	mg/L	-	APHA 21 <sup>st</sup> Ed. 2005, 4500-CO <sub>2</sub> -C, 4-33
39.	Permanganate Value at 25°C	BDL (DL:0.1)	mg/L	-	IS 3025:1964, 51 Pg-96
<b>Microbiological Analysis</b>					
40.	Total Coliforms	20	/100ml	Absent	APHA, 22 <sup>nd</sup> Ed., 2012, 9221-D, 9-73
41.	E. coli	Absent	/100ml	Absent	APHA, 22 <sup>nd</sup> Ed., 2012, 9221-G, 9-76
<b>Remarks:</b> BDL: Below Detection Limit, DL: Detection Limit.					

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
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