



GOLDEN JUBILEE YEAR

सीएसआइआर - खनिज एवं पदार्थ प्रौद्योगिकी संस्थान

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद)

भुवनेश्वर-751 013, ओड़िशा, भारत

CSIR - INSTITUTE OF MINERALS & MATERIALS TECHNOLOGY

(Council of Scientific & Industrial Research)

Bhubaneswar - 751013, Odisha, INDIA

To

RDPD/TSP-003/07/17

Dt 03/07/17

Bharti Waters Pvt. Ltd
ARADHANA BHAWAN
AZADPUR COMMERCIAL COMPLEX
NEW DELHI-110033

Sub: Iron removal unit

Dear Sir,

Please find enclosed the test reports (No.TSP-003/06/17/684) Dated 30/06/17 of the sample(s) given by you/your organization. Kindly acknowledge the receipt of the report.

Thanking you

Yours sincerely,

(D. Sahoo)

RDPD



INSTITUTE OF MINERALS AND MATERIAL TECHNOLOGY

BHUBANESWAR -751 013

TEST REPORT

Date: 30.06.2017

Name & Address of the Party :- BHARTI WATERS Pvt. Ltd
ARADHANA BHAWAN
AZADPUR COMMERCIAL COMPLEX
NEW DELHI 110033

Sample Ref No. :- **TSP 003/ 06/17/684**

Sample Details :- Evaluation of BHARTI-SENCO IRON REMOVAL UNIT

Date of Receiving :- 05.06.2017 (money received 30.06.2017)

Date(s) of Conducting Test :- All working days during 05.06.2017 to 30.06.2017

Date of Completion of Test :- 30.06.2017

Standard / Method Adopted :- BIS methods

DR. P.CHATTOPADHYAY
SCIENTIST
CSIR-IMMT (GOVT. OF INDIA)
BHUBANESWAR

TEST REPORT

ON ONLINE IRON REMOVAL UNIT SUBMITTED BY M/s BHARTI WATERS Pvt Ltd, ARADHANA BHAWAN , AZADPUR COMMERCIAL COMPLEX , NEW DELHI – 110033 , FOR PERFORMANCE TESTING OF THE UNIT AS WELL AS IRON REMOVAL PROFICIENCY AGAINST IRON CONTAMINATION OF 20 PPM, 15 PPM, 10 PPM, 05 PPM and 01 PPM IN THE POTABLE WATER MEANT FOR HUMAN CONSUMPTION .

THE UNIT WAS TESTED IN THE ABOVE LIGHT AND THE RESULT IS DERIVED AS THUS:-

EVALUATION OF BHARTI-SENCO IRON REMOVAL UNIT (The Unit Received on 05.06.2017)

Each day all parameters were run in triplicate. Test water sample was prepared using standard iron solution

Date	Iron (Total), mg/L 1.0, 5.0, 10.0, 15.0, 20.0	
	Before	After
9.6.17	1. 0.96	1. 0.04
	2. 4.91	2. 0.14
	3. 9.91	3. 0.21
	4. 14.96	4. 0.17
	5. 19.91	5. 0.19
14.6.17	1. 0.95	1. 0.03
	2. 4.97	2. 0.13
	3. 9.98	3. 0.19
	4. 14.97	4. 0.18
	5. 19.92	5. 0.21
19.6.17	1. 0.95	1. 0.07
	2. 4.94	2. 0.17
	3. 10.01	3. 0.19
	4. 14.96	4. 0.21
	5. 19.92	5. 0.24
23.6.17	1. 0.95	1. 0.07
	2. 4.96	2. 0.16
	3. 10.03	3. 0.18
	4. 14.94	4. 0.20
	5. 19.96	5. 0.23
28.6.17	1. 0.96	1. 0.06
	2. 4.94	2. 0.14
	3. 9.97	3. 0.19
	4. 14.94	4. 0.22
	5. 19.95	5. 0.26

Pankaj Chatterjee

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PERFORMANCE OF THE UNIT:-

WHILE OPERATING THE UNIT FOR SEVERAL DAYS, THE HANDLING MECHANISM WORKED VERY FINE AND APPEARED TO BE STURDY. THE ON SITE WARRANTY CLAIM OF 04 YEARS INCLUDING THE MEDIA, APPEARS GOOD VALUE FOR MONEY.

ADOPTABILITY: THE UNIT IS SUCH THAT IT CAN BE HOOKED TO BOTH SMALL AND MEDIUM DE-IRONISATION REQUIREMENTS IE; BETWEEN 1000 LPH TO 20000LPH & EVEN FOR DOMESTIC APPLICATION TOO.

THE TESTING WAS CARRIED OUT ON THE BASIS OF 24Hrs, 48 Hrs & 72 Hrs BACK WASH INTERVALS.

Observations:

- **Fe (total) and pH pass test within the permissible limit as per BIS 10500-2012 set for drinking water by Bureau of Indian Standard**
- All materials were received in good condition and packing of the materials have been found to be safe enough to carry to the field
- The systems are efficient in iron removal from source. Very easy operation and practically maintenance free.
- **The system as submitted to us is approved for drinking water application**

Standard methods were followed for all the parameters as shown in the Table using "Titrisol Grade" standard chemicals from Merck, Germany.

Turbidity: ECTN100IR PORTABLE TURBIDITY METER (EUTECH INSTRUMENTS) WAS USED FOR CROSS CHECK.

Quality: Very good

CONCLUSION: IRON REMOVAL PLANT PASSES THE QUALITY AS CLAIMED BY THE PARTY

Signature

Dr.ParthaChattopadhyay

Senior Principal Scientist and Professor of Chemical Sciences (AcSIR)

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