CSIR-INSTITUTE OF MINERALS & MATERIALS TECHNOLOGY.



(A Govt. of India Autonomous Body) **Environmental Chemical Laboratory**

Bhubaneswar, Odisha (An NABL Accredited Laboratory)



TEST REPORT

Issued to: NISER, Bbubaneswar

Date:06.07.2020

Test Report No. 2005CH035

Source of Sample: Niser Admin Building

Bottle Seal no if any:01

Type of Sample:

Sample Received on: 19.06.2020

Letter Reference:

| SI No | Characteristics | Test Method (P)of IS:3025 | Requirements as per IS 10500:2012(Latest Version) | | Test Result |
|----------|------------------------------------------------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------|
| 1. | *Color II- | | Acceptable limit | Permissible Limit | |
| | *Color, Hazen units | Part 4 | 5 | 15 | <5 |
| 2. | *Odour | Part 5 | Agreeable | Agreeable | Agreeable |
| 3. | Turbidity, NTU | Part 10 | 1 | 5 | |
| 4. | pH@Temp ° C | Part 11 | 6.5-8.5 | | 0.05 |
| 5. | *Conductivity, µs/cm | Part 14 | | No relaxation | 7.52@25.1 |
| 6. | *Total Suspended Solid, mg/l | | • | | 108 |
| 7. | | Part 17 | • | | 0.02 |
| | Total Dissolved Solids mg/L | Part 16 | 500 | 2000 | 76.0 |
| 8. | Total Hardness (as CaCO ₃),mg/L | Part 21 | 200 | 600 | |
|). | Calcium as Ca, mg/L | Part 40 | 75 | La Displace | 30,0 |
| 0, | Magnesium as Mg, mg/L | Part 46 | | 200 | 10.42 |
| 1. | Alkalinity as CaCO ₃ , mg/L | Charles Landing | 30 | 100 | 0.97 |
| 2. | | Part 23 | 200 | 600 | 24.0 |
| | Chloride as Cl, mg/L | Part 32 | 250 | 1000 | 22.0 |
| 3, | Sulfate as SO ₄ , mg/L | Part 24 | 200 | 400 | 1.20 |
| 4. | Fluoride as F, mg/L | Part 60 | 1.0 | | |
| 5. | *Nitrite as NO2,mg/L | Part 34 | to a second seco | | 0.05 |
| 5. | *Nitrate as NO ₃ , mg/L | Part 34 | 三年 1000年 100 | NI I | 0.017 |
| | *Residual free chlorine, mg/L | Part 26 | 0.02 | | 1.976 |
| | Sodium, mg/l | | | 1.0 | <0.001 |
| | डॉ अरक्षित माजुरि/Dr. Arakshita Majhi ज्यान वैज्ञानिक/Principal Scientlet | Part 45 | | | 5.53 |

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Certificate No. : T-8091

TEST REPORT

| 19. | Potassium,mg/l | Part 45 | | - | 2.08 |
|-----|-----------------------------------|---------|-----------------------|----------------------|-------|
| 20 | Dissolved Oxygen, mg/l | Part 38 | 1 1 1 1 1 1 1 1 1 1 1 | essa et a territoria | 5.43 |
| 21 | Biological Oxygen Demand, mg/l | Part 44 | | | BDL |
| 22 | Chemical Oxygen Demand, mg/l | Part 58 | • 11 24 4 4 4 4 4 4 | | 2.0 |
| 23 | Free CO ₂ , mg/l | Part 61 | | | 10.0 |
| 24 | Iron as Fe, mg/L | Part 53 | 0.3 | No relaxation | 0.426 |
| 25 | Copper as Cu, mg/L | Part 42 | 0.05 | 1.5 | 0.009 |
| 26 | Manganese as Mn, mg/L | Part 59 | 0.1 | 0.3 | 0.056 |
| 27 | Zinc as Zn, mg/L | Part 49 | 5.0 | 15.0 | 0.212 |
| 28 | Lead as Pb, mg/L | Part 47 | 0.01 | No relaxation | 0.048 |
| 29 | Cadmium as Cd, mg/L | Part 41 | 0.003 | No relaxation | 0.009 |
| 30 | Chromium as Cr, mg/L | Part 52 | 0.05 | No relaxation | 0.281 |
| 31 | Nickel as Ni, mg/l | Part 54 | 0.02 | No relaxation | 0.127 |

NOTES:

- 1. The sample is drawn by the customer & result relates to the sample tested.
- This certificate shall not be reproduced wholly or in part without prior written consent of the laboratory.
- 3. This certificate shall not be used in any advertising media or as evidence in the court of Law without prior written consent of laboratory.
- 4. Latest version of test methods used as per latest specification.
- 5. Testing parameters which are not in NABL Scope has marked as "*"
- 6. Testing parameters which are not set limitation has marked as "-"

Authorized Signatory

Dr Arakshita Majhi

हों अर्राक्षत पाड़ी/Dr. Acakshita Majhi प्रधान वैज्ञानिक/Principal Scientlet प्रकृष्टिरण एवं सम्योग्ण विभाग Environmental & Sustainability Doot सीएसआईआर-फिनिज एवं पदार्थ मौद्योगिकी सम्धान

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