**WATER QUALITY DATA UNDER NWMP : ANNUAL AVERAGE - 2017**

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| **Sl. No** | **Parameter** | **Method Used** | **Unit** | **River Tlawng, Upstream, Aizawl** | **River Tlawng, Downstream, Aizawl** | **River Tuirial, Upstream, Aizawl** | **River Tuirial, Downstream, Aizawl** | **Ramhlun North Tuikhur, Aizawl** | **Mission Vengthlang Tuikhur, Aizawl** |
| **2050** | **2051** | **2052** | **2053** | **2054** | **2055** |
| 1 | D.O | Iodometric Method | mg/l | 5.76 | 5.66 | 5.79 | 47.55 | 2.83 | 2.83 |
| 2 | pH | Float Method | - | 7.37 | 7.41 | 7.77 | 7.712 | 7.142 | 7.14 |
| 3 | Conductivity | Conductometric Method  | us/cm | 186 | 192 | 236.95 | 203.42 | 278.92 | 279 |
| 4 | BOD  | Dilution Method | mg/l | 1.17 | 1.17 | 1.32 | 1.59 | 1.23 | 1.23 |
| 5 | Nitrogen- Nitrite (N-NO2)  | Calorimetric Method  | mg/l | 0.04 | 0.05 | 0.08 | 0.05 | 0.06 | 0.06 |
| 6 | Faecal Coliform | Multiple Tube Dilution Method | MPN | 2.23 | 1.31 | 3.12 | 4.46 | 0 | 0 |
| 7 | Total Coliform  | Multiple Tube Dilution Method | MPN | 1041 | 1008 | 1208.25 | 1378 | 91.67 | 91.7 |
| 8 | Turbidity  | Turbimetric Method | NTU | 2.38 | 3.02 | 8.8 | 5.93 | 3.09 | 3.1 |
| 9 | Alkalinity  | Visual Titration | mg/l | 44.5 | 45.1 | 49.99 | 45.83 | 79.41 | 79.4 |
| 10 | Chloride  | Argentometric titration | mg/l | 11.3 | 10.5 | 13.58 | 10.69 | 96.59 | 96.6 |
| 11 | Nitrogen Ammonia (N-NH3)  | Calorimetric Method | mg/l | 0.32 | 0.38 | 0.56 | 0.44 | 0.39 | 0.39 |
| 12 | Total hardness  | Complexometric Titration | mg/l | 45.7 | 53.7 | 56.43 | 54.48 | 108.93 | 109 |
| 13 | Calcium  | Complexometric Titration | mg/l | 13.3 | 12.8 | 14.29 | 12.19 | 29.18 | 29.2 |
| 14 | Magnesium  | Calculation Method | mg/l | 4.26 | 5.2 | 4.99 | 10.39 | 8.57 | 8.57 |
| 15 | Sodium  | Flame Photometric method | mg/l | 7.05 | 5.42 | 5.5 | 3.29 | 6.71 | 6.71 |
| 16 | TDS | Gravimetric Method | mg/l | 131 | 120 | 156.67 | 119.17 | 96.67 | 96.7 |
| 17 | TSS  | -----do----- | mg/l | 111 | 59.16 | 54.166 | 54.16 | 35.83 | 10 |
| 18 | Phosphate  | Calorimetric Method | mg/l | 0.14 | 0.24 | 0.183 | 0.155 | 0.18 | 0.16 |

**WATER QUALITY DATA UNDER NWMP : ANNUAL AVERAGE - 2017**

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| **Sl. No** | **Parameter** | **Method Used** | **Unit** | **Tlawng River,****Sairang** | **Serlui Stream,****Reiek Kai, near P.H.E Water Treatment Plant** | **Vaipuanpho****Stream, Reiek Kai** | **Tuikual Stream,****Reiek Kai** | **Sakhisih Stream,****Mission Vengthlang** | **Tuirial River,****Upstream Near Sumsuih Village** |
| **3709** | **3710** | **3711** | **3712** | **3713** | **3714** |
| 1 | D.O | Iodometric Method | mg/l | 5.375 | 5.42 | 5.54 | 4.98 | 4.43 | 5.61 |
| 2 | pH | Float Method | - | 7.691 | 7.40 | 7.49 | 7.36 | 7.13 | 7.15 |
| 3 | Conductivity | Conductometric Method  | us/cm | 223.5 | 211.08 | 188.67 | 232.25 | 306.67 | 184.00 |
| 4 | BOD  | Dilution Method | mg/l | 1.39 | 1.22 | 1.03 | 1.55 | 1.18 | 1.01 |
| 5 | Nitrogen- Nitrite (N-NO2)  | Calorimetric Method  | mg/l | 0.07 | 0.05 | 0.05 | 0.04 | 0.03 | 0.04 |
| 6 | Faecal Coliform | Multiple Tube Dilution Method | MPN | 6.59 | 0.60 | 0 | 0.00 | 0.00 | 0.00 |
| 7 | Total Coliform  | Multiple Tube Dilution Method | MPN | 5287.5 | 238.33 | 224.16 | 0.00 | 200.00 | 0.00 |
| 8 | Turbidity  | Turbimetric Method | NTU | 14.21 | 3.46 | 0.66 | 1.39 | 0.50 | 0.11 |
| 9 | Alkalinity  | Visual Titration | mg/l | 52.81 | 47.68 | 38.15 | 50.22 | 78.27 | 27.15 |
| 10 | Chloride  | Argentometric titration | mg/l | 12.54 | 97.54 | 11.8 | 24.32 | 53.83 | 11.03 |
| 11 | Nitrogen Ammonia (N-NH3)  | Calorimetric Method | mg/l | 0.53 | 0.43 | 0.28 | 0.59 | 0.55 | 0.28 |
| 12 | Total hardness  | Complexometric Titration | mg/l | 60.93 | 57.31 | 51.93 | 61.00 | 100.82 | 35.48 |
| 13 | Calcium  | Complexometric Titration | mg/l | 16.05 | 13.76 | 11.83 | 15.72 | 29.00 | 8.45 |
| 14 | Magnesium  | Calculation Method | mg/l | 4.94 | 5.45 | 4.77 | 5.56 | 6.94 | 3.44 |
| 15 | Sodium  | Flame Photometric method | mg/l | 3.25 | 4.87 | 4.33 | 5.46 | 5.08 | 3.71 |
| 16 | TDS | Gravimetric Method | mg/l | 110.83 | 132.5 | 102.5 | 177.50 | 78.33 | 57.50 |
| 17 | TSS  | -----do----- | mg/l | 52.5 | 36.66 | 24.16 | 44.17 | 10.08 | 16.67 |
| 18 | Phosphate  | Calorimetric Method | mg/l | 0.26 | 0.17 | 0.08 | 0.10 | 0.10 | 0.11 |

**WATER QUALITY DATA UNDER NWMP : ANNUAL AVERAGE - 2017**

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| **Sl. No** | **Parameter** | **Method Used** | **Unit** | **Tuirial River,****Airfield, before****Dumping Ground** | **Damdiai Stream,****Airfield, near Dumping Ground** | **Tuirial River,****Airfield, after Dumping Ground** | **Chite Stream,****Armed Veng, near Mini Sports Complex** | **Tuirini River, Seling** | **Tuivawl River,****Near Tuivawl Bridge, Keifang** |
| **3715** | **3716** | **3717** | **3718** | **3719** | **3720** |
| 1 | D.O | Iodometric Method | mg/l | 10.15 | 10.70 | 11.33 | 12.02 | 7.58 | 8.18 |
| 2 | pH | Float Method | - | 7.45 | 7.46 | 7.47 | 7.43 | 7.40 | 7.43 |
| 3 | Conductivity | Conductometric Method  | us/cm | 226.40 | 231.41 | 236.32 | 236.25 | 240.35 | 235.53 |
| 4 | BOD  | Dilution Method | mg/l | 1.29 | 1.31 | 1.32 | 1.32 | 1.29 | 1.30 |
| 5 | Nitrogen- Nitrite (N-NO2)  | Calorimetric Method  | mg/l | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 |
| 6 | Faecal Coliform | Multiple Tube Dilution Method | MPN | 2.29 | 2.30 | 2.42 | 2.33 | 2.07 | 2.33 |
| 7 | Total Coliform  | Multiple Tube Dilution Method | MPN | 1293.06 | 1324.54 | 1364.13 | 1383.61 | 1384.31 | 1545.89 |
| 8 | Turbidity  | Turbimetric Method | NTU | 5.50 | 5.89 | 6.25 | 5.93 | 5.93 | 6.28 |
| 9 | Alkalinity  | Visual Titration | mg/l | 55.60 | 56.98 | 58.46 | 59.52 | 61.23 | 58.96 |
| 10 | Chloride  | Argentometric titration | mg/l | 37.43 | 40.71 | 44.48 | 48.34 | 53.05 | 47.60 |
| 11 | Nitrogen Ammonia (N-NH3)  | Calorimetric Method | mg/l | 6.34 | 7.09 | 7.93 | 8.85 | 9.90 | 11.09 |
| 12 | Total hardness  | Complexometric Titration | mg/l | 67.10 | 69.78 | 71.78 | 73.70 | 76.11 | 72.00 |
| 13 | Calcium  | Complexometric Titration | mg/l | 21.82 | 22.89 | 24.16 | 25.40 | 27.05 | 26.78 |
| 14 | Magnesium  | Calculation Method | mg/l | 11.82 | 12.77 | 13.72 | 14.81 | 15.36 | 16.21 |
| 15 | Sodium  | Flame Photometric method | mg/l | 10.70 | 11.16 | 11.87 | 12.67 | 13.84 | 14.74 |
| 16 | TDS | Gravimetric Method | mg/l | 109.84 | 107.19 | 105.59 | 99.20 | 96.71 | 96.71 |
| 17 | TSS  | -----do----- | mg/l | 60.98 | 54.73 | 49.70 | 44.03 | 41.20 | 45.10 |
| 18 | Phosphate  | Calorimetric Method | mg/l | 6.13 | 6.88 | 7.72 | 8.65 | 9.70 | 10.90 |

**WATER QUALITY DATA UNDER NWMP : ANNUAL AVERAGE - 2017**

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| **Sl. No** | **Parameter** | **Method Used** | **Unit** | **Lawibual Stream,****Lawibual village** | **Lawibuai Fishpond** | **Tamdil Lake,****Saitual** | **Challui, Lengpui** | **Lungli Tuikhur,****Republic Veng** | **Ramhlun ‘S’ Tuikhur, Near Community Hall** |
| **3721** | **3722** | **3723** | **3724** | **3725** | **3726** |
| 1 | D.O | Iodometric Method | mg/l | 8.85 | 9.28 | 9.76 | 9.76 | 4.82 | 5.08 |
| 2 | pH | Float Method | - | 7.47 | 7.44 | 7.45 | 7.45 | 7.28 | 7.26 |
| 3 | Conductivity | Conductometric Method  | us/cm | 230.10 | 230.93 | 233.41 | 233.41 | 174.75 | 180.08 |
| 4 | BOD  | Dilution Method | mg/l | 1.30 | 1.29 | 1.30 | 1.30 | 1.18 | 1.27 |
| 5 | Nitrogen- Nitrite (N-NO2)  | Calorimetric Method  | mg/l | 0.06 | 0.06 | 0.06 | 0.06 | 0.03 | 0.05 |
| 6 | Faecal Coliform | Multiple Tube Dilution Method | MPN | 2.62 | 2.12 | 2.31 | 2.31 | 0.76 | 0.00 |
| 7 | Total Coliform  | Multiple Tube Dilution Method | MPN | 1727.67 | 1282.69 | 1413.24 | 1413.24 | 200.00 | 38.33 |
| 8 | Turbidity  | Turbimetric Method | NTU | 6.68 | 5.74 | 6.02 | 6.02 | 0.05 | 0.07 |
| 9 | Alkalinity  | Visual Titration | mg/l | 56.41 | 56.86 | 58.00 | 58.00 | 40.09 | 31.62 |
| 10 | Chloride  | Argentometric titration | mg/l | 41.48 | 45.10 | 44.77 | 44.77 | 45.95 | 42.23 |
| 11 | Nitrogen Ammonia (N-NH3)  | Calorimetric Method | mg/l | 12.42 | 13.91 | 9.69 | 9.69 | 0.26 | 0.37 |
| 12 | Total hardness  | Complexometric Titration | mg/l | 67.39 | 68.19 | 70.76 | 70.76 | 67.15 | 70.55 |
| 13 | Calcium  | Complexometric Titration | mg/l | 26.48 | 27.78 | 25.30 | 25.30 | 14.92 | 15.52 |
| 14 | Magnesium  | Calculation Method | mg/l | 17.16 | 18.69 | 15.07 | 15.07 | 7.21 | 7.50 |
| 15 | Sodium  | Flame Photometric method | mg/l | 15.74 | 17.30 | 13.50 | 13.50 | 7.58 | 11.33 |
| 16 | TDS | Gravimetric Method | mg/l | 96.72 | 94.96 | 100.86 | 100.86 | 117.50 | 120.83 |
| 17 | TSS  | -----do----- | mg/l | 49.49 | 49.11 | 49.29 | 49.29 | 9.17 | 10.00 |
| 18 | Phosphate  | Calorimetric Method | mg/l | 12.24 | 13.74 | 9.50 | 9.50 | 0.13 | 0.11 |

**WATER QUALITY DATA UNDER NWMP : ANNUAL AVERAGE - 2017**

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| **Sl. No** | **Parameter** | **Method Used** | **Unit** | **Tuithiang Veng****Tuikhur** | **Khurpui Tuikhur,****S.Hlimen** | **Bawngkawn Hand Pump near HB Petrol Pump** | **Selesih****Hand Pump** | **Tuikual****Hand Pump** | **Chaltlang hand pump near Remi Tyre Works** |
| **3727** | **3728** | **3729** | **3730** | **3731** | **3732** |
| 1 | D.O | Iodometric Method | mg/l | 3.17 | 5.66 | 2.64 | 3.90 | 2.52 | 1.64 |
| 2 | pH | Float Method | - | 7.26 | 7.07 | 7.26 | 7.20 | 7.15 | 7.07 |
| 3 | Conductivity | Conductometric Method  | us/cm | 193.42 | 306.83 | 221.00 | 257.67 | 242.42 | 272.08 |
| 4 | BOD  | Dilution Method | mg/l | 0.96 | 1.35 | 0.98 | 1.03 | 1.03 | 2.57 |
| 5 | Nitrogen- Nitrite (N-NO2)  | Calorimetric Method  | mg/l | 0.05 | 0.04 | 0.06 | 0.07 | 0.05 | 0.04 |
| 6 | Faecal Coliform | Multiple Tube Dilution Method | MPN | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | Total Coliform  | Multiple Tube Dilution Method | MPN | 200.00 | 200.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8 | Turbidity  | Turbimetric Method | NTU | 0.67 | 0.35 | 0.54 | 4.13 | 0.64 | 1.89 |
| 9 | Alkalinity  | Visual Titration | mg/l | 25.64 | 23.77 | 103.78 | 93.03 | 78.05 | 79.31 |
| 10 | Chloride  | Argentometric titration | mg/l | 45.47 | 28.37 | 32.89 | 64.50 | 73.57 | 86.64 |
| 11 | Nitrogen Ammonia (N-NH3)  | Calorimetric Method | mg/l | 0.32 | 0.26 | 3.24 | 0.31 | 0.40 | 0.31 |
| 12 | Total hardness  | Complexometric Titration | mg/l | 55.87 | 52.93 | 118.05 | 129.90 | 140.50 | 126.08 |
| 13 | Calcium  | Complexometric Titration | mg/l | 11.62 | 13.24 | 43.20 | 37.39 | 40.17 | 31.57 |
| 14 | Magnesium  | Calculation Method | mg/l | 6.35 | 4.84 | 10.76 | 9.16 | 9.14 | 8.75 |
| 15 | Sodium  | Flame Photometric method | mg/l | 8.88 | 4.67 | 5.98 | 4.04 | 6.93 | 5.54 |
| 16 | TDS | Gravimetric Method | mg/l | 114.17 | 53.33 | 91.67 | 60.83 | 45.83 | 145.00 |
| 17 | TSS  | -----do----- | mg/l | 10.83 | 6.67 | 14.17 | 10.83 | 11.67 | 9.17 |
| 18 | Phosphate  | Calorimetric Method | mg/l | 0.13 | 0.10 | 0.10 | 0.11 | 0.16 | 0.12 |

**WATER QUALITY DATA UNDER NWMP : ANNUAL AVERAGE - 2017**

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| **Sl. No** | **Parameter** | **Method Used** | **Unit** | **S.Hlimen****Hand Pump** | **Tlawng River, Upstream,****Zobawk, Lunglei** | **Mat River** | **Tlawng River,****Pialthleng, Zotlang, Lunglei** | **Vaitui Tuikhur,****Theiriat,****Lunglei** | **Sap Tuikhur,****Serkawn** |
| **3733** | **3734** | **3735** | **3736** | **3737** | **3738** |
| 1 | D.O | Iodometric Method | mg/l | 2.30 | 5.65 | 7.64 | 7.15 | 7.07 | 6.90 |
| 2 | pH | Float Method | - | 7.18 | 7.30 | 7.27 | 7.32 | 7.21 | 7.24 |
| 3 | Conductivity | Conductometric Method  | us/cm | 310.00 | 254.00 | 175.58 | 172.08 | 188.58 | 193.67 |
| 4 | BOD  | Dilution Method | mg/l | 0.90 | 1.42 | 1.73 | 1.49 | 1.38 | 1.49 |
| 5 | Nitrogen- Nitrite (N-NO2)  | Calorimetric Method  | mg/l | 0.04 | 0.07 | 0.05 | 0.09 | 0.04 | 0.05 |
| 6 | Faecal Coliform | Multiple Tube Dilution Method | MPN | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | Total Coliform  | Multiple Tube Dilution Method | MPN | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8 | Turbidity  | Turbimetric Method | NTU | 1.73 | 0.33 | 0.62 | 0.05 | 0.17 | 0.10 |
| 9 | Alkalinity  | Visual Titration | mg/l | 84.18 | 58.75 | 32.37 | 37.24 | 38.88 | 29.73 |
| 10 | Chloride  | Argentometric titration | mg/l | 28.14 | 17.41 | 8.99 | 11.91 | 42.31 | 13.17 |
| 11 | Nitrogen Ammonia (N-NH3)  | Calorimetric Method | mg/l | 0.27 | 0.29 | 0.36 | 0.38 | 0.33 | 0.35 |
| 12 | Total hardness  | Complexometric Titration | mg/l | 92.22 | 72.55 | 44.10 | 41.94 | 66.32 | 42.70 |
| 13 | Calcium  | Complexometric Titration | mg/l | 27.22 | 19.24 | 10.30 | 13.12 | 15.39 | 10.32 |
| 14 | Magnesium  | Calculation Method | mg/l | 7.44 | 5.81 | 4.35 | 4.48 | 6.78 | 4.01 |
| 15 | Sodium  | Flame Photometric method | mg/l | 6.13 | 3.83 | 3.87 | 4.28 | 5.67 | 5.04 |
| 16 | TDS | Gravimetric Method | mg/l | 38.33 | 90.83 | 57.50 | 62.50 | 65.83 | 36.67 |
| 17 | TSS  | -----do----- | mg/l | 10.83 | 13.33 | 11.67 | 12.50 | 18.33 | 8.33 |
| 18 | Phosphate  | Calorimetric Method | mg/l | 0.12 | 0.11 | 0.11 | 0.13 | 0.11 | 0.10 |

**WATER QUALITY DATA UNDER NWMP : ANNUAL AVERAGE - 2017**

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| **Sl. No** | **Parameter** | **Method Used** | **Unit** | **Zobawk Veng****Hand Pump,****Lunglei** | **Saikah Stream,****Lawngtlai** | **Khurpui Tuikhur,****Lawngtlai** | **Chanmari****Hand Pump,****Lawngtlai** | **P.H.E Reservior,****Helipad,****New Saiha** | **Chhimtuipui River, Kawlchaw** |
| **3739** | **3740** | **3741** | **3742** | **3743** | **3744** |
| 1 | D.O | Iodometric Method | mg/l | 2.55 | 7.07 | 6.08 | 3.69 | 6.88 | 7.21 |
| 2 | pH | Float Method | - | 7.33 | 7.38 | 7.26 | 7.24 | 7.38 | 7.33 |
| 3 | Conductivity | Conductometric Method  | us/cm | 197.67 | 162.22 | 224.83 | 206.08 | 207.67 | 179.54 |
| 4 | BOD  | Dilution Method | mg/l | 1.48 | 1.42 | 1.38 | 1.43 | 1.28 | 1.39 |
| 5 | Nitrogen- Nitrite (N-NO2)  | Calorimetric Method  | mg/l | 0.07 | 0.10 | 0.05 | 0.06 | 0.04 | 0.11 |
| 6 | Faecal Coliform | Multiple Tube Dilution Method | MPN | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | Total Coliform  | Multiple Tube Dilution Method | MPN | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8 | Turbidity  | Turbimetric Method | NTU | 13.81 | 0.20 | 0.44 | 9.08 | 0.12 | 3.23 |
| 9 | Alkalinity  | Visual Titration | mg/l | 115.77 | 43.41 | 39.11 | 56.71 | 19.38 | 46.03 |
| 10 | Chloride  | Argentometric titration | mg/l | 18.43 | 12.61 | 39.23 | 23.01 | 9.42 | 12.93 |
| 11 | Nitrogen Ammonia (N-NH3)  | Calorimetric Method | mg/l | 0.52 | 0.28 | 0.25 | 0.41 | 0.36 | 0.30 |
| 12 | Total hardness  | Complexometric Titration | mg/l | 129.17 | 54.07 | 72.75 | 63.68 | 35.75 | 66.58 |
| 13 | Calcium  | Complexometric Titration | mg/l | 37.37 | 12.10 | 13.40 | 15.97 | 8.86 | 28.36 |
| 14 | Magnesium  | Calculation Method | mg/l | 8.64 | 9.88 | 7.90 | 6.04 | 3.32 | 5.78 |
| 15 | Sodium  | Flame Photometric method | mg/l | 6.13 | 3.83 | 3.88 | 3.79 | 4.67 | 3.92 |
| 16 | TDS | Gravimetric Method | mg/l | 35.00 | 50.83 | 65.83 | 50.83 | 19.96 | 51.67 |
| 17 | TSS  | -----do----- | mg/l | 10.83 | 18.33 | 10.00 | 13.33 | 6.67 | 16.67 |
| 18 | Phosphate  | Calorimetric Method | mg/l | 0.19 | 0.17 | 0.10 | 0.17 | 0.11 | 0.11 |

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| **Sl. No** | **Parameter** | **Method Used** | **Unit** | **Chhochhopa Tuikhur, Saiha** | **Tuikum River,****Serchhip** | **Sesah Stream,****Serchhip** | **Project veng****Hand Pump,****Serchhip** | **Lahmun River, Phaizau, Mamit** | **Teirei River,****Near Bawngva Village, Mamit** |
| **3745** | **3746** | **3747** | **3748** | **3749** | **3750** |
| 1 | D.O | Iodometric Method | m | 6.82 | 7.22 | 7.58 | 7.87 | 6.49 | 6.35 |
| 2 | pH | Float Method | m/s | 7.34 | 7.23 | 7.56 | 7.33 | 7.39 | 7.33 |
| 3 | Conductivity | Conductometric Method  | 0C | 182.50 | 156.58 | 176.42 | 191.50 | 168.92 | 214.25 |
| 4 | BOD  | Dilution Method | mg/l | 1.50 | 1.37 | 2.17 | 1.53 | 1.18 | 1.24 |
| 5 | Nitrogen- Nitrite (N-NO2)  | Calorimetric Method  | **-** | 0.04 | 0.07 | 0.06 | 0.05 | 0.04 | 0.04 |
| 6 | Faecal Coliform | Multiple Tube Dilution Method | µs/cm | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | Total Coliform  | Multiple Tube Dilution Method | mg/l | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8 | Turbidity  | Turbimetric Method | mg/l | 0.09 | 0.06 | 0.08 | 0.07 | 0.07 | 1.35 |
| 9 | Alkalinity  | Visual Titration | mg/l | 37.39 | 31.73 | 46.62 | 40.09 | 62.24 | 54.92 |
| 10 | Chloride  | Argentometric titration | NTU | 24.89 | 9.42 | 10.60 | 19.86 | 14.33 | 12.28 |
| 11 | Nitrogen Ammonia (N-NH3)  | Calorimetric Method | mg/l | 0.22 | 0.29 | 0.42 | 0.31 | 4.51 | 0.37 |
| 12 | Total hardness  | Complexometric Titration | mg/l | 53.29 | 40.37 | 51.70 | 48.72 | 72.05 | 60.70 |
| 13 | Calcium  | Complexometric Titration | mg/l | 16.01 | 10.35 | 14.73 | 9.56 | 17.24 | 14.92 |
| 14 | Magnesium  | Calculation Method | mg/l | 4.61 | 3.95 | 5.65 | 5.12 | 13.62 | 5.55 |
| 15 | Sodium  | Flame Photometric method | mg/l | 3.92 | 5.04 | 5.79 | 3.29 | 3.21 | 5.88 |
| 16 | TDS | Gravimetric Method | mg/l | 23.33 | 70.83 | 41.67 | 34.17 | 65.00 | 66.67 |
| 17 | TSS  | -----do----- | mg/l | 6.67 | 24.17 | 15.00 | 6.67 | 13.33 | 43.33 |
| 18 | Phosphate  | Calorimetric Method | mg/l | 0.10 | 0.11 | 0.12 | 0.10 | 0.14 | 0.14 |

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| **Sl. No** | **Parameter** | **Method Used** | **Unit** | **Tut River, Near Dapchhuah Village** | **Tuichhuahen Stream, Kolasib** | **Hmar veng Tuikhur, Kolasib** | **Tlawng River, Downstream,****Bairabi** | **Pond, Near Thermal Power Plant, Bairabi** | **Tiau River,****Champhai** |
| **3751** | **3752** | **3753** | **3754** | **3755** | **3756** |
| 1 | D.O | Iodometric Method | mg/l | 6.28 | 6.20 | 7.12 | 6.16 | 6.07 | 6.41 |
| 2 | pH | Float Method | - | 7.23 | 7.32 | 7.16 | 7.67 | 7.48 | 7.79 |
| 3 | Conductivity | Conductometric Method  | us/cm | 134.50 | 218.00 | 260.67 | 169.42 | 204.00 | 185.00 |
| 4 | BOD  | Dilution Method | mg/l | 1.21 | 1.10 | 1.51 | 1.32 | 1.79 | 2.30 |
| 5 | Nitrogen- Nitrite (N-NO2)  | Calorimetric Method  | mg/l | 0.03 | 0.08 | 0.04 | 0.06 | 0.08 | 0.04 |
| 6 | Faecal Coliform | Multiple Tube Dilution Method | MPN | 0.00 | 0.00 | 0.00 | 0.83 | 0.00 | 0.00 |
| 7 | Total Coliform  | Multiple Tube Dilution Method | MPN | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8 | Turbidity  | Turbimetric Method | NTU | 1.75 | 0.19 | 0.09 | 2.52 | 2.31 | 0.16 |
| 9 | Alkalinity  | Visual Titration | mg/l | 47.28 | 44.01 | 24.94 | 50.31 | 49.38 | 58.15 |
| 10 | Chloride  | Argentometric titration | mg/l | 10.39 | 10.52 | 11.93 | 12.41 | 12.92 | 19.18 |
| 11 | Nitrogen Ammonia (N-NH3)  | Calorimetric Method | mg/l | 0.28 | 0.37 | 10.41 | 0.46 | 0.56 | 0.31 |
| 12 | Total hardness  | Complexometric Titration | mg/l | 55.20 | 47.10 | 40.93 | 58.43 | 64.17 | 80.77 |
| 13 | Calcium  | Complexometric Titration | mg/l | 13.81 | 11.47 | 8.95 | 13.98 | 15.63 | 17.11 |
| 14 | Magnesium  | Calculation Method | mg/l | 4.51 | 5.40 | 4.44 | 7.13 | 6.16 | 8.82 |
| 15 | Sodium  | Flame Photometric method | mg/l | 5.58 | 5.17 | 2.96 | 15.92 | 8.58 | 4.03 |
| 16 | TDS | Gravimetric Method | mg/l | 69.17 | 82.50 | 37.50 | 85.83 | 71.67 | 118.33 |
| 17 | TSS  | -----do----- | mg/l | 43.33 | 20.00 | 5.83 | 28.33 | 10.00 | 21.67 |
| 18 | Phosphate  | Calorimetric Method | mg/l | 0.09 | 0.17 | 0.11 | 7.81 | 16.73 | 0.11 |

**WATER QUALITY DATA UNDER NWMP : ANNUAL AVERAGE - 2017**

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| --- | --- | --- | --- | --- | --- |
| **Sl. No** | **Parameter** | **Method Used** | **Unit** | **Tuipui River,****Champhai** | **Bethel Veng** **Hand-pump, Champhai** |
| **3757** | **3758** |
| 1 | D.O | Iodometric Method | mg/l | 6.63 | 3.79 |
| 2 | pH | Float Method | - | 7.79 | 592.49 |
| 3 | Conductivity | Conductometric Method  | us/cm | 180.25 | 237.92 |
| 4 | BOD  | Dilution Method | mg/l | 1.76 | 1.64 |
| 5 | Nitrogen- Nitrite (N-NO2)  | Calorimetric Method  | mg/l | 0.04 | 0.08 |
| 6 | Faecal Coliform | Multiple Tube Dilution Method | MPN | 0.00 | 0.00 |
| 7 | Total Coliform  | Multiple Tube Dilution Method | MPN | 0.00 | 0.00 |
| 8 | Turbidity  | Turbimetric Method | NTU | 0.07 | 17.73 |
| 9 | Alkalinity  | Visual Titration | mg/l | 39.15 | 115.29 |
| 10 | Chloride  | Argentometric titration | mg/l | 11.09 | 28.87 |
| 11 | Nitrogen Ammonia (N-NH3)  | Calorimetric Method | mg/l | 0.26 | 0.60 |
| 12 | Total hardness  | Complexometric Titration | mg/l | 46.27 | 122.72 |
| 13 | Calcium  | Complexometric Titration | mg/l | 11.23 | 37.07 |
| 14 | Magnesium  | Calculation Method | mg/l | 5.12 | 9.35 |
| 15 | Sodium  | Flame Photometric method | mg/l | 6.75 | 6.17 |
| 16 | TDS | Gravimetric Method | mg/l | 71.67 | 53.33 |
| 17 | TSS  | -----do----- | mg/l | 20.83 | 10.83 |
| 18 | Phosphate  | Calorimetric Method | mg/l | 0.10 | 0.23 |