

**Muniguda (D/s of M/s Vedanta  
Alumina Project)**

Month	Year	Temp., °C	pH	DO, mg/l	BOD, mg/l	COD, mg/l	Cond., µS/cm	Nitrate-N, mg/l
Jan		24	8.2	7.6	0.8	5.9	182.8	0.052
Mar		26	7.8	7.4	1	6.2	206	0.132
Apr		27	7.6	7.6	1	5.7	192	0.13
May		28	8.3	7.5	1.1	9.3	198	0.118
June		28	7.64	7.6	0.6	6.8	233	0.405
July		33	8.3	7.6	2.0	16	212	0.644
Aug		25	8.2	7.2	1.2	20.8	182	3.675
Sep		30	8.0	6.7	2.8	15.2	160	0.193
Oct		23	7.9	6.2	2.6	6.1	184	0.010
Nov		22	8.0	7.2	1.0	6.1	180	0.070
Dec		15	8.2	7.3	1.4	6.8	173	0.634
<b>Min</b>		<b>15</b>	<b>7.6</b>	<b>6.2</b>	<b>0.6</b>	<b>5.7</b>	<b>160</b>	<b>0.010</b>
<b>Max</b>		<b>33</b>	<b>8.27</b>	<b>7.6</b>	<b>2.8</b>	<b>20.8</b>	<b>233</b>	<b>3.675</b>
<b>Average</b>		<b>26</b>	<b>8</b>	<b>7</b>	<b>1</b>	<b>10</b>	<b>191</b>	<b>0.551</b>

**Gunupur (Interstate Boundry)**

Month	Year	Temp., °C	pH	DO, mg/l	BOD, mg/l	COD, mg/l	Cond., µS/cm	Nitrate-N, mg/l
Jan		26	8	7.4	0.8	6.9	238.8	0.095
Mar		25	8.3	7.5	1.2	6.2	326	0.079
Apr		28	7.9	7.4	0.8	6.6	215	0.196
May		29	8.3	7.3	1.4	11.2	239	0.575

June		26	8.07	8.1	0.8	11.9	215	0.018
July		27	7.5	7.2	2.4	18	181	2.936
Aug		26	8.1	7.4	1.0	19.1	191	0.262
Sep		29	7.7	7.4	2.0	19.5	162	0.708
Oct		23	8.1	6.0	2.3	8.2	182	0.469
Nov		22	8.0	7.6	1.0	10.2	192	0.350
Dec		17	8.1	7.2	2.2	11.5	211	0.074
<b>Min</b>		<b>17</b>	<b>7.45</b>	<b>6</b>	<b>0.8</b>	<b>6.2</b>	<b>162</b>	<b>0.018</b>
<b>Max</b>		<b>29</b>	<b>8.32</b>	<b>8.1</b>	<b>2.4</b>	<b>19.5</b>	<b>326</b>	<b>2.936</b>
<b>Average</b>		<b>25.273</b>	<b>8.00364</b>	<b>7.31818</b>	<b>1.44545</b>	<b>11.7545</b>	<b>213.845</b>	<b>0.524</b>

NH <sub>4</sub> -N, mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml				Nitrite-N, mg/l	T. Alk., mg/l	P. Alk., mg/l
0.616	2700	1100	6.2	0.15	B	0.008	90	ND
0.728	1400	630				0.001	100	ND
0.392	790	170	6	0.5	C	ND	80	ND
0.112	840	310				0.005	84	ND
0.224	400	170				0.007	88	ND
0.448	630	230				0.040	86	ND
0.168	7900	2300				0.050	88	ND
0.224	4700	2100				0.007	72	2
0.056	840	310	6.5	0.55	B	0.013	72	ND
0.056	940	330				0.005	72	10
0.056	840	170				0.007	94	8
<b>0.056</b>	<b>400</b>	<b>170</b>	<b>6.0</b>	<b>0.2</b>	<b>0</b>	<b>0.00132</b>	<b>72</b>	<b>2.0</b>
<b>0.728</b>	<b>7900</b>	<b>2300</b>	<b>6.5</b>	<b>0.6</b>	<b>0</b>	<b>0.05049</b>	<b>100</b>	<b>10</b>
<b>0</b>	<b>1998</b>	<b>711</b>	<b>6.2</b>	<b>0.4</b>	<b>#DIV/0!</b>	<b>0</b>	<b>84</b>	<b>6.0</b>

NH <sub>4</sub> -N, mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml				Nitrite-N, mg/l	T. Alk., mg/l	P. Alk., mg/l
0.56	1400	790	6.2	0.75	B	0.011	108	ND
0.478	1300	790				0.005	152	4
0.672	460	110	6	0.4	C	ND	84	ND
0.112	1400	790				0.005	68	ND

0.224	2100	1100				0.004	84	2
0.448	2800	1400				0.062	72	ND
0.112	9400	2600				0.046	56	ND
0.168	7900	4900				0.013	60	ND
0.112	700	490	6.5	0.6	B	0.011	70	2
0.112	1100	790				0.006	82	ND
0.056	1400	790				ND	80	6
<b>0.056</b>	<b>460</b>	<b>110</b>	<b>6.0</b>	<b>0.4</b>	<b>0</b>	<b>0.004</b>	<b>56</b>	<b>2</b>
<b>0.672</b>	<b>9400</b>	<b>4900</b>	<b>6.5</b>	<b>0.8</b>	<b>0</b>	<b>0.06204</b>	<b>152</b>	<b>6</b>
<b>0.27764</b>	<b>2723.64</b>	<b>1322.73</b>	<b>6.2</b>	<b>0.6</b>	<b>#DIV/0!</b>	<b>0.0</b>	<b>83.3</b>	<b>3.5</b>

s CaCO <sub>3</sub> , mg/l	Ca as CaCO <sub>3</sub> , mg/l	Mg as CaCO <sub>3</sub> , mg/l	Chloride , mg/l	Sulphate , mg/l	PO <sub>4</sub> <sup>3-</sup> -P, mg/l	Flouride, mg/l	Total Kjeldahl N, mg/l	TSS, mg/l
88	44	44	18.7	5.5	0.037	0.237	5.3	19
84.0	72	12	8	2.90	0.112	0.19	6.16	10
64	42	22	11	7.9	0.011	0.228	2.5	110
72	56	16	13	9.57	0.008	0.346	12.32	20
78	56	22	15.4	1.94	0.011	0.213	3.36	76
76	48	28	12.8	1.8	0.181	0.236	4.48	82
86	54	32	6.80	4.0	0.096	0.212	3.92	1172
82	50	32	11.6	10.11	0.096	0.27	3.64	46
70	42	28	12.0	1.08	0.042	0.21	0.56	29
86	54	32	16	2.04	0.067	0.223	5.60	35
86	58	28	10.6	0.65	0.042	0.268	0.84	26
<b>64.0</b>	<b>42.0</b>	<b>12.0</b>	<b>6.8</b>	<b>1.1</b>	<b>0.0</b>	<b>0.2</b>	<b>0.6</b>	<b>10.0</b>
<b>88</b>	<b>72</b>	<b>44</b>	<b>18.7</b>	<b>10.1078</b>	<b>0.181</b>	<b>0.346</b>	<b>12.32</b>	<b>1172</b>
<b>78.6</b>	<b>51.8</b>	<b>26.8</b>	<b>12.5</b>	<b>4.7</b>	<b>0.1</b>	<b>0.2</b>	<b>4.8</b>	<b>159.9</b>

s CaCO <sub>3</sub> , mg/l	Ca as CaCO <sub>3</sub> , mg/l	Mg as CaCO <sub>3</sub> , mg/l	Chloride , mg/l	Sulphate , mg/l	PO <sub>4</sub> <sup>3-</sup> -P, mg/l	Flouride, mg/l	Total Kjeldahl N, mg/l	TSS, mg/l
84	56	28	13.7	4.6	0.025	0.252	5.9	18
120.0	96	24	22	3.87	0.085	0.194	3.36	23
72	40	32	10	10.2	0.073	0.232	2.8	59
84	60	24	15	39.79	0.046	0.352	10.36	260

78	56	22	12.5	5.16	0.021	0.289	3.36	260
64	56	8	8.8	9.9	0.103	0.223	3.08	542
58	38	20	10.80	9.2	0.111	0.242	3.92	2328
64	42	22	10.6	20.97	0.097	0.23	0.84	104
58	34	24	9.0	2.04	0.085	0.195	1.12	31
94	60	34	11	3.54	0.046	0.205	1.12	63
76	54	22	19.3	3.44	0.037	0.295	1.12	22
<b>58</b>	<b>34</b>	<b>8</b>	<b>8.8</b>	<b>2.043</b>	<b>0.02114</b>	<b>0.194</b>	<b>0.84</b>	<b>18</b>
<b>120</b>	<b>96</b>	<b>34</b>	<b>22</b>	<b>39.7861</b>	<b>0.111</b>	<b>0.352</b>	<b>10.36</b>	<b>2328</b>
<b>77.5</b>	<b>53.8</b>	<b>23.6</b>	<b>13.0</b>	<b>10.3</b>	<b>0.1</b>	<b>0.2</b>	<b>3.4</b>	<b>337.3</b>

TDS, mg/l	TFS, mg/l	Turbidity, NTU	Na, mg/l	K, mg/l	B, mg/l	Cadmium, micro gm/l	Copper, micro gm/l	Lead, micro gm/l
114	118	20.2	7.9	3	0.174	0.250	1.4	1.8
132	122	2.6	5.7	2.06	0.042	1.7	7.7	3.4
106	192	65.5	7.5	2.92	0.064	0.600	ND	3.8
128	128	2	8.7	3.2	0.06	1.8	7.6	2.1
149	168	18.2	10.7	3.26	0.053	1.5	3.1	4.1
118	124	26.7	8.04	2.4	BDL	2.3	5.2	9.7
113	1020	106.3	4.5	2.44	0.026	1.8	3.0	2.8
104	128	21.5	6.38	1.25	0.026	0.4	5.5	8.4
117	116	3.3	8.7	2.4	0.004	3.8	1.9	5.1
102	118	6.1	11.5	2.5	0.034	3.0	1.4	4.5
113	100	2.8	6.1	1.8	0.011	0.9	5.6	5.6
<b>102.0</b>	<b>116.0</b>	<b>2.0</b>	<b>4.5</b>	<b>1.3</b>	<b>0.0</b>	<b>0.3</b>	<b>1.4</b>	<b>1.8</b>
<b>149</b>	<b>1020</b>	<b>106.3</b>	<b>11.51</b>	<b>3.26</b>	<b>0.17411</b>	<b>3.8125</b>	<b>7.6875</b>	<b>9.6875</b>
<b>118.3</b>	<b>223.4</b>	<b>27.2</b>	<b>8.0</b>	<b>2.5</b>	<b>0.1</b>	<b>1.7</b>	<b>4.1</b>	<b>4.5</b>

TDS, mg/l	TFS, mg/l	Turbidity, NTU	Na, mg/l	K, mg/l	B, mg/l	Cadmium, micro gm/l	Copper, micro gm/l	Lead, micro gm/l
154.2	134	12.9	12.5	3.6	0.185	0.375	6.2	BDL
210	212	6.5	15.16	4.46	0.011	1.0	5.5	3.92
116	150	11.9	6.8	2	0.072	0.400	0.1	2.4
388	388	19.8	11.8	4.1	0.227	2.4	8.3	2.1

140	362	71.5	8.2	3.47	0.072	2.3	4.8	5.9
106	520	126.7	5.58	3.6	0.242	2.2	6.6	5.6
111	1640	268.4	7.5	2.61	0.011	1.9	2.1	3.1
103	184	58.2	5.96	2.84	0.008	0.4	5.0	8.0
115	116	19.5	6.5	2.8	BDL	3.6	5.4	4.6
116	152	3.3	7.3	2.0	0.008	3.0	6.8	3.2
121	124	4	12.4	2.3	0.064	1.1	5.7	3.8
<b>103</b>	<b>116</b>	<b>3.3</b>	<b>5.58</b>	<b>1.99</b>	<b>0.00752</b>	<b>0.375</b>	<b>0.1</b>	<b>2.0625</b>
<b>388</b>	<b>1640</b>	<b>268.4</b>	<b>15.16</b>	<b>4.46</b>	<b>0.242</b>	<b>3.5625</b>	<b>8.25</b>	<b>8</b>
<b>152.7</b>	<b>362.0</b>	<b>54.8</b>	<b>9.1</b>	<b>3.1</b>	<b>0.1</b>	<b>1.7</b>	<b>5.1</b>	<b>4.3</b>



m Total, micro gm/l	Nickel, micro gm/l	Zinc, micro gm/l	Total, micro gm/l	Hg, micro gm/l
5.0	5.0	3.2	3110	
65.0	5.2	1.6	490	BDL
42.0	4.7	ND	10240	BDL
13	0.5	5.3	13757	BDL
10	2.3	10.3	715	BDL
43	1.0	8.8	3283	BDL
2.0	3.8	3.4	18182	BDL
23	3.6	10.3	9504	BDL
40	3.7	4.5	760	BDL
10	0.6	4.1	1709	BDL
10	6.9	5.4	283	BDL
<b>2.0</b>	<b>0.5</b>	<b>1.6</b>	<b>490.0</b>	<b>0.0</b>
<b>65</b>	<b>5.1875</b>	<b>10.3125</b>	<b>18182</b>	<b>0</b>
<b>25.3</b>	<b>3.0</b>	<b>5.9</b>	<b>6671.2</b>	<b>#DIV/0!</b>

m Total, micro gm/l	Nickel, micro gm/l	Zinc, micro gm/l	Total, micro gm/l	Hg, micro gm/l
15.0	5.3	3.5	1620	
50.0	4.1	1.0	340	BDL
38.0	5.3	ND	1460	BDL
10	1.4	4.9	1685	BDL

15	2.6	5.5	13978	BDL
142	4.1	4.9	14611	BDL
6.0	1.3	1.5	19219	BDL
26	2.3	11.9	9754	BDL
30	3.1	5.4	2670	BDL
40	1.9	5.9	811	BDL
18	4.5	9.8	787	BDL
<b>6</b>	<b>1.3125</b>	<b>1</b>	<b>340</b>	<b>0</b>
<b>142</b>	<b>5.3</b>	<b>11.875</b>	<b>19219</b>	<b>0</b>
<b>35.5</b>	<b>3.3</b>	<b>5.4</b>	<b>6085.0</b>	<b>#DIV/0!</b>