

**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	2012	20	8.4	7.2	1.5	7.1	211	0.808
Feb		29	8.1	7.2	1.8	10.4	199	0.110
Mar		30	8.2	6.9	2.0	7.8	218	0.318
Apr		32	8.4	7.3	1.4	7.9	183	0.161
May		33	8.4	7.1	1.8	7.2	194	0.086
June		28	8.0	7.2	1.7	6.6	180	0.269
July		37	7.9	6.8	1.4	6.0	182	0.352
Aug		25	8.2	7.1	1.9	26.9	188	0.131
Sep		25	6.9	7.3	2.0	15.5	145	0.121
Oct		23	8.2	7.4	2.1	19.8	182	0.887
Nov		22	8.1	7.5	1.2	8.6	168	0.698
Dec		23	8.0	7.2	1.2	10.3	180	0.297
Min		20	6.9	6.8	1.2	6.0	145	0.086
Max		37	8.42	7.5	2.1	26.9	218	0.887
Average		27	8	7	2	11.2	186	0.353

Gunupur (Interstate Boundary)

Month	Year	Temp., °C	pH	DO, mg/l	BOD, mg/l	COD, mg/l	Cond., µS/cm	Nitrate-N, mg/l
Jan	2012	21	8.3	7.1	2.1	8.9	144	1.004
Feb		28	8.2	6.9	2.1	13.8	293	0.040
Mar		33	8.0	7.1	1.5	7.0	295	0.289

Apr		34	8.4	6.9	1.6	7.9	289	0.105
May		33	8.3	6.8	2.9	19.0	346	0.191
June		28	7.8	7.0	1.6	16.4	193	0.095
July		26	8.4	6.4	1.6	6.0	173	0.382
Aug		23	8.1	6.9	2.1	15.4	146	2.366
Sep		24	8.1	7.1	2.2	18.3	178	2.291
Oct		21	7.4	7.2	0.9	9.9	185	4.192
Nov		22	6.7	7.1	1.2	24.1	150	1.873
Dec		22	7.9	7.3	2.0	16.4	178	0.075
Min		21	6.67	6.4	0.9	6.0	144	0.040
Max		34	8.44	7.3	2.9	24.1	346	4.192
Average		26.3	8.0	7.0	1.8	13.6	214	1.075

NH ₄ -N, mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml				Nitrite-N, mg/l	T. Alk., mg/l	P. Alk., mg/l
0.112	2800	1300	5.8	0.81	C	0.0060	124	10
0.392	2100	940				0.0050	88	ND
0.730	2100	940				ND	84	14
0.112	4700	2700	6.6	0.85	B	0.0130	92	8
0.112	1400	93				0.0120	88	8
0.336	3300	2300				0.0030	80	8
0.112	3300	2300				0.0100	84	BDL
0.112	490	230				0.0110	60	2
0.112	3500	1700				0.0140	70	BDL
0.112	1100	490	6.25	0.58	B	0.0080	78	BDL
0.224	1100	490	--	--	--	0.0200	76	BDL
0.112	1100	330	--	--	--	0.0230	84	BDL
0.112	490	93	5.80	0.58	0	0.0030	60	2
0.730	4700	2700	6.60	0.85	0	0.0230	124	14
0.215	2249	1151	6.22	0.75	#DIV/0!	0.0114	84	8

NH ₄ -N, mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml				Nitrite-N, mg/l	T. Alk., mg/l	P. Alk., mg/l
0.168	4300	2200	5.75	0.63	C	0.0050	72	ND
0.168	2100	1100				0.0090	114	14
0.112	2800	1400				ND	116	ND

0.112	4900	3300	6	0.41	C	0.0060	148	8
0.336	3500	1700				0.0660	156	8
0.280	4900	2300				0.0100	88	BDL
0.112	7000	3300				0.0030	72	2
BDL	9200	1700				0.0520	56	0
0.112	2400	790				0.0430	54	BDL
0.112	790	330	5.75	0.63	C	0.0460	56	BDL
0.336	940	490	--	--	--	0.0500	72	BDL
0.112	940	490	--	--	--	0.0270	88	BDL
0.112	790	330	5.75	0.41	0	0.0030	54	0
0.336	9200	3300	6.00	0.63	0	0.0660	156	14
0.178	3648	1592	5.83	0.56	#DIV/0!	0.0288	91	6.4

Hardness CaCO ₃ , mg/l	Ca as CaCO ₃ , mg/l	Mg as CaCO ₃ , mg/l	Chloride , mg/l	Sulphate , mg/l	PO ₄ ³⁻ -P, mg/l	Flouride, mg/l	Total Kjeldahl N, mg/l	TSS, mg/l
110	88	32	9.6	0.9	0.024	0.256	1.4	31
72	44	28	10.6	1.64	0.046	0.27	9.0	32
66	40	26	35.4	14.36	0.077	0.313	2.24	38
88	56	32	13.4	4.12	0.095	0.277	5.04	25
84	40	44	16.5	5.74	0.084	0.276	1.40	42
80	52	28	10.0	1.49	0.069	0.305	1.68	35
76	56	20	11.1	6.7	0.035	0.305	2.24	78
80	52	28	9.60	13.06	0.013	0.221	5.04	92
68	40	28	13.5	6.30	0.010	0.185	1.12	152
76	46	30	7.8	5.3	0.054	0.142	2.0	86
66	40	26	12.8	2.87	0.008	0.211	2.80	70
70	40	30	12.7	2.3	0.021	0.194	2.8	24
66	40	20	7.8	0.9	0.008	0.142	1.12	24
110	88	44	35.4	14.4	0.095	0.313	8.96	152
78	50	29	13.6	5.4	0.045	0	3.06	59

Hardness CaCO ₃ , mg/l	Ca as CaCO ₃ , mg/l	Mg as CaCO ₃ , mg/l	Chloride , mg/l	Sulphate , mg/l	PO ₄ ³⁻ -P, mg/l	Flouride, mg/l	Total Kjeldahl N, mg/l	TSS, mg/l
62	40	22	8.6	0.9	0.019	0.264	2.0	49
124	80	44	22.5	1.88	0.056	0.29	1.1	54
114	74	40	14.6	4.36	0.066	0.293	1.68	29

120	72	48	17.3	4.41	0.017	0.303	5.04	28
156	108	48	32.3	17.92	0.092	0.363	1.12	162
76	48	28	11.1	10.20	0.061	0.310	1.68	368
64	44	20	10.2	10.3	0.063	0.281	3.36	64
60	40	20	9.70	1.28	BDL	0.216	14.00	422
64	44	20	10.6	12.97	0.319	0.170	3.36	592
48	32	16	10.4	7.8	0.058	0.154	1.7	78
68	52	16	10.8	3.26	0.025	0.176	4.48	68
72	54	18	8.8	3.1	0.019	0.194	3.4	65
48.0	32	16	8.6	0.9	0.017	0.154	1.12	28
156	108	48	32.3	17.9	0.319	0.363	14.00	592
86	57.3	28.3	13.9	6.5	0.072	0.251	3.57	165

TDS, mg/l	TFS, mg/l	Turbidity, NTU	Na, mg/l	K, mg/l	B, mg/l	Cadmiu m, micro gm/l	Copper, micro gm/l	Lead, micro gm/l
137	144	6	6.2	2.41	0.034	1.1	1.9	6.6
106	118	6.2	7.9	2.1	0.049	2.5	3.5	7.3
136	150	8	23.2	2.7	0.019	0.8	4.8	7.6
121	128	6	9.6	3.6	0.019	2.8	3.8	7.8
125	144	11.2	9.9	4.3	0.011	1.1	5.6	3.4
114	134	28.1	6.1	4.53	0.128	--	--	--
113	160	52.7	7.9	2.2	0.026	--	--	--
102	174	65.3	5.31	2.73	0.125	--	--	--
94	204	43.3	6.04	2.4	0.015	--	--	--
105	156	34.9	4.68	2.12	0.028	--	--	--
106	152	26.1	7.9	1.4	0.038	--	--	--
107	110	11.4	8.2	3.9	0.042	--	--	--
94	110	6.0	4.68	1.39	0.011	0.75	1.9375	3.4
137	204	65.3	23.22	4.53	0.128	2.8	5.6	7.8
114	148	24.9	9	3	0.044	2	4	7

TDS, mg/l	TFS, mg/l	Turbidity, NTU	Na, mg/l	K, mg/l	B, mg/l	Cadmiu m, micro gm/l	Copper, micro gm/l	Lead, micro gm/l
88	118	10.2	5.7	3.19	0.004	1.6	4.1	6.1
171	180	13.1	16.9	3.0	0.026	2.8	4.1	9.8
154	160	5	9.0	2.8	0.053	0.3	0.8	2.1

188	194	15	11.6	4.4	0.004	2.9	4.2	8.8
230	362	77.3	20.1	5.3	0.023	1.4	5.8	5.8
125	472	187.1	8.6	5.41	0.057	--	--	--
112	146	16.3	6.7	3.7	0.098	--	--	--
89	482	179.6	5.05	3.50	0.026	--	--	--
100	668	145.6	5.59	3.0	0.026	--	--	--
107	158	10.1	6.33	3.68	0.032	--	--	--
95	148	23.8	6.7	1.6	0.044	--	--	--
109	150	38.5	4.2	2.0	0.088	--	--	--
88	118	5	4.16	1.61	0.004	0.3125	0.8125	2.0625
230	668	187.1	20.1	5.41	0.098	2.9	5.8	9.75
131	270	60.1333	8.85833	3.465	0.040	1.7975	3.8125	6.5075

m Total, micro gm/l	Nickel, micro gm/l	Zinc, micro gm/l	Total, micro gm/l	Hg, micro gm/l	
22	22.6	2.4	1037	BDL	BDL
32	7.9	6.1	946	BDL	BDL
17	7.2	2.9	845	BDL	ND
20	7.9	6.5	533	BDL	BDL
26	2.7	3.8	350	BDL	
28	--	--	2506	--	BDL
50	--	--	2837	--	BDL
22	--	--	5000	--	--
23	--	--	2300	--	--
16	--	--	2400	--	--
32	--	--	2660	--	BDL
35	--	--	552	--	BDL
16	2.7	2.375	350	0.0	
50	22.5625	6.5	5000	0	
27	10	4	1831	#DIV/0!	

m Total, micro gm/l	Nickel, micro gm/l	Zinc, micro gm/l	Total, micro gm/l	Hg, micro gm/l	
33	2.4	3.1	605	BDL	BDL
17	10.3	11.4	1771	BDL	BDL
12	7.9	2.0	504	BDL	ND

23	10.3	9.2	1205	BDL	BDL
34	3.9	6.8	3245	BDL	
15	--	--	2550	--	BDL
20	--	--	868	--	BDL
23	--	--	32000	--	--
28	--	--	12510	--	--
22	--	--	4600	--	--
41	--	--	2040	--	BDL
20	--	--	2460	--	BDL
12	2.4375	2	504	0	
40.5	10.25	11.375	32000	0	
23.9583	6.9425	6.4875	5363.17	#DIV/0!	