

**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	2013	23	6.9	7.2	2.0	12.6	198	0.302
Feb		27	7.6	7.1	1.9	10.9	292	0.211
Mar		30	7.3	7.3	1.8	10.0	223	0.260
Apr		33	8.2	7.1	1.3	8.9	341	0.426
May		35	8.4	6.9	1.0	11.2	290	0.132
June		31	8.2	6.9	0.5	7.3	228	1.072
July		24	7.8	7.2	0.9	9.8	166	4.143
Aug		27	8.0	7.2	0.4	22.0	153	0.021
Sep		25	8.2	7.5	0.9	10.4	194	0.565
Oct			7.8	7.5	0.5	9.8	148	0.351
Nov			8	8	2.05	13.9	182	0.351
Dec								
Min		23	6.9	6.9	0.4	7.3	148	0.021
Max		35	8.4	8	2.05	22.0	341	4.143
Average		28	8	7	1	11.5	220	0.712

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		20	8.3	7.1	2.3	18.7	213	0.450
Feb		25	8.0	7.2	2.2	17.3	306	0.422
Mar		26	7.1	7.1	2.2	13.9	333	0.327

Apr	2013	29	7.3	6.9	1.2	8.6	161	0.625	
May		31	8.2	7.1	1.5	11.2	180	0.564	
June		30	8.2	7.0	1.3	11.0	236	1.059	
July		24	8.0	7.0	1.5	11.5	167	3.299	
Aug		24	8.0	7.4	0.5	22.0	146	0.169	
Sep		24	8.4	7.2	0.9	12.2	195	0.355	
Oct			7.8	7.8	0.8	13.9	127	0.523	
Nov			8.2	7.7	0.25	5.5	159	0.523	
Dec									
Min			20	7.1	6.9	0.25	5.5	127	0.169
Max			31	8.4	7.8	2.3	22.0	333	3.299
Average			25.9	8.0	7.2	1.3	13.3	202	0.756

NH ₄ -N, mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml	SI	DI	Class	Nitrite-N, mg/l	T. Alk., mg/l	P. Alk., mg/l
ND	1300	790	6.2	0.65	B	0.020	76	BDL
0.112	2200	1100				0.030	128	BDL
0.168	790	230	--	--	--	BDL	76	BDL
0.168	790	330	6.5	0.52	B	0.013	138	6.0
0.550	1100	450	--	--	--	0.0026	132	4
0.277	3300	1700	--	--	--	0.002	92	BDL
0.336	13000	>160000	--	--	--	0.057	36	BDL
0.550	7000	3300	--	--	--	0.007	64	BDL
0.168	24000	7900	--	--	--	0.005	72	BDL
0.168	2100	1100	6.25	0.58	B	0.007	68	0
0.112	1100	230				0.004	72	0
0.112	790	230	6.20	0.52	0	0.0020	36	0
0.550	24000	7900	6.50	0.65	0	0.0570	138	6
0.261	5153	1713	6.32	0.58	#DIV/0!	0.0148	87	3

NH ₄ -N, mg/l	TC, MPN/ 100 ml	FC, MPN/ 100 ml	SI	DI	Class	Nitrite-N, mg/l	T. Alk., mg/l	P. Alk., mg/l
ND	2800	790	6.1	0.75	B	0.027	100	8
0.112	2200	1100				0.023	132	BDL
0.280	490	170	--	--	--	0.013	140	BDL

0.280	790	220	5.8	0.88	C	0.009	56	BDL
0.385	790	490	--	--	--	0.0003	80	BDL
0.666	1300	450	--	--	--	BDL	98	BDL
0.280	>160000	>160000	--	--	--	0.042	44	BDL
0.440	>160000	160000	--	--	--	0.011	54	BDL
0.392	7900	3300	--	--	--	0.009	66	4
0.168	4900	2300	6.2	0.63	B	0.005	56	0
0.168	1700	490				0.018	60	0
0.112	490	170	5.80	0.63	0	0.0003	44	0
0.666	7900	160000	6.20	0.88	0	0.0420	140	8
0.317	2541	16931	6.03	0.75	#DIV/0!	0.0157	80.5455	3

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	Fluoride, mg/l	Total Kjeldahl N, mg/l	TSS, mg/l
64	40	24	10.8	1.78	ND	0.209	3.10	30
108	72	36	18.7	1.78	0.024	0.250	2.8	90
70	38	32	17.7	5.72	0.110	0.263	2.52	184
124	68	56	16.4	9.7	0.197	0.249	2.5	200
108	76	32	27.2	0.0	0.020	0.237	1.9	90
80	52	28	11.1	5.0	0.230	0.228	2.2	102
52	36	16	6.8	21.3	0.31	0.142	2.2	334
50	40	10	7.7	7.5	0.058	0.197	2.8	128
60	40	20	7.7	2.4	0.051	0.196	3.08	24
48	32	16	10.37	3.980	0.116	0.176	1.68	118
68	44	24	7.54	1.87	0.388	0.158	2.24	24
48	32	10	6.8	0.0	0.020	0.142	1.68	24
124	76	56	27.2	21.3	0.388	0.263	3.10	334
76	49	27	12.9	5.5	0.150	0	2.46	120

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	Fluoride, mg/l	Total Kjeldahl N, mg/l	TSS, mg/l
100	60	40	10.8	1.78	ND	0.219	3.90	48
118	76	42	20.7	1.58	0.021	0.380	2.8	42
120	72	48	14.8	6.23	0.101	0.398	1.40	8

60	36	24	12.4	1.7	0.023	0.375	0.8	368
72	48	24	13.9	3.1	0.090	0.304	1.4	78
88	52	36	12.0	5.3	0.154	0.217	2.5	142
48	32	16	6.8	21.3	0.344	0.137	3.1	86
42	34	8	6.7	8.2	0.083	0.193	2.2	154
60	48	12	7.7	8.5	0.230	0.181	3.08	58
44	28	16	5.6	4.477	0.148	0.150	2.24	196
58	38	20	8.48	5.472	0.1056	0.168	3.92	38
42.0	28	8	5.6	1.6	0.021	0.137	0.84	8
120	76	48	20.7	21.3	0.344	0.398	3.92	368
74	47.6	26.0	10.9	6.2	0.130	0.247	2.48	111

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
107	114	8.7	6.4	2.1	0.091	--	--	--
162	232	31.5	11.1	3.9	0.007	0.7	1.1	5.4
119	262	30.0	11.5	3.3	0.019	--	--	--
182	326	13.0	10.8	3.1	0.023	--	--	--
189	224	28.0	15.8	4.4	0.132	--	--	--
132	204	80.0	9.5	4.2	0.102	--	--	--
94	368	150	4.4	3.0	0.128	--	--	--
90	178	90	5.9	2.2	0.007	--	--	--
114	114	33	4.2	2.6	0.158	--	--	--
87	178	80	6.91	2.63	0.007			
103	98	12	5.59	2.19	0.003			
87	98	8.7	4.18	2.09	0.003	0.7	1.1	5.4
189	368	150.0	15.82	4.36	0.158	0.7	1.1	5.4
125	209	50.6	8	3	0.062	1	1	5

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
124	156	15.1	6.7	2.6	0.034	--	--	--
169	185	15.3	11.6	3.9	0.042	0.7	2.1	8.2
197	158	3.0	8.3	2.4	0.053	--	--	--

92	402	16.0	7.4	2.0	0.007	--	--	--
116	166	20.4	8.5	4.0	0.022	--	--	--
140	230	80.0	9.6	4.2	0.007	--	--	--
98	142	130	4.5	2.9	0.064	--	--	--
82	190	85	5.2	2.6	BDL	--	--	--
118	148	11	4.9	2.8	0.366	--	--	--
72	240	100	3.44	2.82	0.045			
93	108	33	6.48	2.86	0.056			
72	108	3	3.44	2	0.007	0.7	2.1	8.2
197	402	130	11.64	4.18	0.366	0.7	2.1	8.2
118	193	46.2545	6.95727	2.99545	0.070	0.7	2.1	8.2

m Total, micro gm/l	Nickel, micro gm/l	Zinc, micro gm/l	Total, micro gm/l	Mercury, micro gm/l	Cr(VI)
25	--	--	800	BDL	BDL
43	1.6	8.4	610	BDL	BDL
20	--	--	288	BDL	BDL
10	--	--	460	BDL	BDL
6	--	--	1595	BDL	BDL
30	--	--	7389	BDL	BDL
270	--	--	8952	BDL	BDL
25	--	--	6895	BDL	BDL
27	--	--	3456	BDL	BDL
43			6369		10
38			1946		
6	1.6	8.4	288	0.0	
270	1.6	8.4	8952	0	
49	2	8	3524	#DIV/0!	

m Total, micro gm/l	Nickel, micro gm/l	Zinc, micro gm/l	Total, micro gm/l	Mercury, micro gm/l	Cr(VI)
38	--	--	730	BDL	BDL
33	1.8	9.2	460	BDL	BDL
12	--	--	7270	BDL	BDL

27	--	--	570	BDL	BDL
35	--	--	1054	BDL	BDL
27	--	--	10811	BDL	BDL
67	--	--	12593	BDL	BDL
18	--	--	5104	BDL	BDL
32	--	--	5385	BDL	BDL
30			6771		ND
29			2830		
11.704	1.8	9.2	460	0	
67	1.8	9.2	12593	0	
31.6095	1.8	9.2	4870.73	#DIV/0!	