

Air quality monitoring

ATTRIBUTES FOR AIR QUALITY MONITORING

PARAMETER

A parameter is contextually declared with the parameter attribute by its specification in a PROCEDURE or ENTRY statement. The parameter should be explicitly declared with appropriate attributes. The PARAMETER attribute can also be specified in the declaration

UNITS

- Not vary with respect to place.
- Not vary with respect to time.
- Be of Convenient size.
- Easy to make a copy.
- Be properly defined.
- Reproduce easily.
- Be easy to measure things. etc.

CATIONS

Characteristics of cations : (i) Cations are positively charged. (ii) Cations are formed when an atom loses electrons from its valence shell to attain octet. (iii) Cations are smaller in size than parent atom. (iv) The charge acquired by a cation is equal to the number of electrons lost by the valence shell

SYMBOLS

A chemical symbol is a one- or two-letter designation of an element. Some examples of chemical symbols are O for oxygen, Zn for zinc, and Fe for iron. The first letter of a symbol is always capitalized. If the symbol contains two letters, the second letter is lower case.

Parameter	Unit	N01	N02	N04		
COD	ppm	18	21			
hardness CaC03	ppm	397.5	353.5	3		
Si02	ppm	2.88	3.84	4		
Organic nitrogen	ppm	3.27	0.54	1		
Total nitrogen	ppm	4.96	1.17	1		
Fe	ppm	0.062	0.017	0		
804	ppm	248.2	176.2	1		
NH3	ppm	0.4	2.01	0		
Cl	ppm	251	340.8	37		
Nitrate	ppm	6	2.98	3		
Organic Phosphate	ppm	0.031	0.021	0		
Total Phosphorus	ppm	0.058	0.025	1		
TSS	ppm	1426	88	2		
Turbidity	NTU	18.52	43	45		
pH	ppm	8.5	8.2	26		
EC	μS em	1426	1620	1		
Temperature	OC	14	13	11		
BOD5	ppm	3.2	3.5	08		
DO	ppm	8	9.8	34		
Springs name	7.3	1182	3200	3117	84	2.14
tfaatook -2	7.4	1064	2900	2790	74	1.9
laan-3	7.2	944	2561	2390	72	1.9
Al- rohbaan -4	7.2	986	2390	2203	73	1.9
Al-hiaiatheea -5	7.8	1001	2320	2237	54	1.4
M-rehameah -6	7.6	1276	2690	2412	41	1.03
Al-iseaah-7	7.6	1245	2864	2710	48	1.2
Al-assaweed -8	7.4	1387	2813	2931	56	1.4
Al-ruhhba -9	7.3	1681	2890	2701	44	1.1
Rweez -10	7.4	1512	2864	2682	46	1.2
Average	7.4	1228	2759	2597	59	

	To convert ppm 'as the ion' to ppm 'as CaCO ₃ ' mult			
0	Cations	symbol	values	T
16.5	Aluminum	Al ³⁺	5.55	pH
.13	Ammonium	NH ₄ ⁺	2.78	EC
1.26	Barium	Ba ²⁺	0.73	SS
.12	Cadmium	Cd ²⁺	1.78	MA I
.03	Calcium	Ca ²⁺	2.5	Cl
12.8	Chromium	Cr ³⁺	2.89	NH ₃ -N
.34	Copper	Cu ²⁺	1.57	N ₀₃ -N
7.01	Ferric (Iron)	Fe ³⁺	2.69	DO
.14	Ferrous (Iron)	Fe ²⁺	1.79	Pv
.14	Hydrogen	H ⁺	50	BODs
.67	Lead	Pb ²⁺	0.48	T
66	Magnesium	Mg ²⁺	4.1	pH
6	Nickel	Ni ²⁺	3.16	EC
8.1	Potassium	K ⁺	1.28	SS
730	Silver	Ag ⁺	0.93	MA I
10	Sodium	Na ⁺	2.18	Cl
4.4	Zinc	Zn ²⁺	1.53	NH ₃ -N
8.6	Copper	Cu ²⁺	11.26	N ₀₃ -N
457 19.8	173 14.2	188 9.4	952 26.	660 13.7
348 15.1	91 7.4	276 13.8	868 24.	548 11.4
382 16.6	76 6.3	252 12.6	588 16.	560 11.7
203 8.8	57 4.7	301 15	462 13	785 16.3
278 12.1	46 3.8	326 16.3	462 13	830 17.3
263 11.4	196 16.2	188 9.4	380 10.	1188 24.7
335 14.6	213 17.5	152 7.4	546 15.	1226 25.5
266	251 20.6	143 7.1	714 20.	970 20.2
271 11.9	342 28.2	112 5.6	350	1765 36.8
266	319 26.2	131 6.6	392	1539 32.1
307	176	207	571	1007

	-0.734	0.539	-0.238	0.075	0.018	0.0
	-0.088	0.061	-0.246	0.472	0.032	-0.
	-0.821	0.312	-0.067	0.079	-0.203	-0.
	0.644	0.575	-0.264	-0.003	0.149	0.2
	-0.463	-0.380	0.357	0.083	0.682	0.0
	-0.183	0.372	0.646	-0.349	-0.028	0.3
	0.097	0.565	0.641	-0.037	0.007	-0.
	0.029	-0.378	-0.163	-0.775	-0.096	0.0
	0.659	-0.623	0.113	0.067	-0.017	-0.
	0.524	0.675	0.061	-0.120	0.096	-0.
	0.467	-0.176	0.539	0.421	-0.295	0.2
	-0.734	0.539	-0.238	0.075	0.018	0.0
	-0.088	0.061	-0.246	0.472	0.032	-0.
	-0.821	0.312	-0.067	0.079	-0.203	-0.
	0.644	0.575	-0.264	-0.003	0.149	0.2
	-0.463	-0.380	0.357	0.083	0.682	0.0
	-0.183	0.372	0.646	-0.349	-0.028	0.3
	0.097	0.565	0.641	-0.037	0.007	-0.
	0.029	-0.378	-0.163	-0.775	-0.096	0.0
116 1.9	25	0.641	-0.037	0.007	-0.	
45 1.5	26	-0.163	-0.775	-0.096	0.0	
116 1.9	26	0.113	0.067	-0.017	-0.	
116 1.9	25.5	0.061	-0.120	0.096	-0.	
140 2.3	26	0.539	0.421	-0.295	0.2	
110 1.8	26.5	-0.238	0.075	0.018	0.0	
122 1.99	27	-0.246	0.472	0.032	-0.	
116 1.9	26	-0.067	0.079	-0.203	-0.	
109 1.8	26	-0.264	-0.003	0.149	0.2	
116	25.6	0.357	0.083	0.682	0.0	
109	25	0.646	-0.349	-0.028	0.3	

84	0.182	0.023	-0.037	0.170	-0.191	-0.238	0.075	0.018
041	-0.035	0.113	0.006	0.013	0.038	-0.246	0.472	0.032
028	0.206	-0.160	0.304	-0.065	0.103	-0.067	0.079	-0.203
51	0.066	0.110	0.052	0.158	0.162	-0.264	-0.003	0.149
85	0.179	-0.025	0.016	-0.015	0.026	0.357	0.083	0.682
23	-0.274	-0.029	0.124	0.032	-0.032	0.646	-0.349	-0.028
450	0.095	0.213	0.032	0.035	0.015	0.641	-0.037	0.007
26	0.307	0.114	-0.015	0.003	0.014	-0.163	-0.775	-0.096
161	0.023	-0.174	0.220	0.208	-0.048	0.113	0.067	-0.017
091	0.131	-0.349	-0.184	-0.030	0.009	0.061	-0.120	0.096
98	0.316	0.041	-0.060	-0.041	-0.026	0.539	0.421	-0.295
84	0.182	0.023	-0.037	0.170	-0.191	-0.238	0.075	0.018
041	-0.035	0.113	0.006	0.013	0.038	-0.246	0.472	0.032
028	0.206	-0.160	0.304	-0.065	0.103	-0.067	0.079	-0.203
51	0.066	0.110	0.052	0.158	0.162	-0.264	-0.003	0.149
85	0.179	-0.025	0.016	-0.015	0.026	0.357	0.083	0.682
23	-0.274	-0.029	0.124	0.032	-0.032	0.646	-0.349	-0.028
450	0.095	0.213	0.032	0.035	0.015	0.641	-0.037	0.007
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85	0.179	-0.025	0.016	-0.015	0.026	0.357	0.083	0.682
23	-0.274	-0.029	0.124	0.032	-0.032	0.646	-0.349	-0.028

0.084	7.28
-0.041	5.55
-0.028	2.78
0.251	0.73
0.085	1.78
0.323	2.5
-0.450	2.89
0.026	1.57
-0.161	2.69
-0.091	1.79
0.298	50
0.084	0.48
-0.041	4.1
-0.028	3.16
0.251	1.28
0.085	0.93
0.323	2.18
-0.450	1.53
0.026	11.26
-0.450	952 26.9
0.026	868 24.5
-0.161	588 16.5
-0.091	462 13
0.298	462 13
0.084	380 10.7
-0.041	546 15.4
-0.028	714 20.1
0.251	350
0.085	392
0.323	571