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# SUMMARY OF SALINITY OF GROUNDWATER IN TASMANIAN ROCKS

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ROCK TYPE	N° OF ANALYSES	SALINITY RANGE TDS- mg/l		0-300 mg/l		301-500 mg/l		501-1000 mg/l		1001-2000 mg/l		>2000 mg/l	
		LOWER	UPPER	N°	%	N°	%	N°	%	N°	%	N°	%
TERTIARY BASALT	146	45	5271	85	58.2	28	19.2	16	11.0	9	6.2	8	5.5
JURASSIC DOLERITE	38	110	8390	3	7.9	4	10.5	12	31.6	12	31.6	7	18.4
TRIASSIC SEDIMENTS	53	123	13224	7	13.2	4	7.6	9	17.0	18	34.0	15	28.3
PERMIAN SEDIMENTS	63	91	4160	16	25.4	17	27.0	16	25.4	11	17.5	3	4.8
DEVONIAN GRANITE	5	140	2250	2	40	-	-	2	40	-	-	1	20
ORD.?- DEV SEDIMENTS (MATHINNA GROUP)	37	65	5830	20	54.1	4	10.8	9	24.3	2	5.4	2	5.4
CAMBRIAN SEDIMENTS AND VOLCANIC ROCKS	26	85	1830	11	42.3	4	15.4	9	34.6	2	7.7	-	-
PRECAMBRIAN DOLOMITE	17	250	626	3	17.7	10	58.8	4	23.5	-	-	-	-
PRECAMBRIAN SLATE AND QUARTZITE	8	81	566	6	75	1	12.5	1	12.5	-	-	-	-

It is of interest to note that in general the salinity decreases with rock age. The main exception is Tertiary basalt, but this usually occurs as dissected plateaux in elevated positions and leaching processes and groundwater movement are relatively rapid. Where the basalt is in low lying areas in low gradient broad valleys such as in the northern Midlands area, the salinity of groundwater can be quite high. Rainfall is probably also a factor in the development of this pattern of salinity with rock age, as the older rocks are located in some of the higher rainfall areas.