

# TDS estimates – using average results from waste brines (with some removal of outliers)

## For Blandford area site

### TDS and Electrical Conductivity

#### TDS - Electrical Conductivity (water conductivity)

The table stated below can be used to calculate the TDS (total dissolved solids) as well as the cation and anion composition from a water analysis. Please also use the following [website](#) for more information.

value & unit	weight	charge	in mmol/l	in mg/l	in meq
25266 mg/l Cl <sup>-</sup>	35.5	-1	712	2.53e+4	-712
0.2 mg/l NO <sub>2</sub> <sup>-</sup>	46.0	-1	0.00435	0.200	-0.00435
2069 mg/l NO <sub>3</sub> <sup>-</sup>	62.0	-1	33.4	2.07e+3	-33.4
0 mg/l F <sup>-</sup>	19.0	-1	0.00	0.00	0.00
4381 mg/l HCO <sub>3</sub> <sup>-</sup>	61.0	-1	71.8	4.38e+3	-71.8
mg/l CO <sub>3</sub> <sup>2-</sup>	60.0	-2	0.00	0.00	0.00
2847 mg/l SO <sub>4</sub> <sup>2-</sup>	96.1	-2	29.6	2.85e+3	-59.3
0.93 mg/l H <sub>2</sub> PO <sub>4</sub> <sup>-</sup>	97.0	-1	0.00959	0.930	-0.00959
19680 mg/l Na <sup>+</sup>	23.0	1	856	1.97e+4	856
4.98 mg/l K <sup>+</sup>	39.1	1	0.127	4.98	0.127
0 mg/l NH <sub>4</sub> <sup>+</sup>	18.0	1	0.00	0.00	0.00
1.3 mg/l Mg <sup>2+</sup>	24.3	2	0.0535	1.30	0.107
15.5 mg/l Ca <sup>2+</sup>	40.1	2	0.387	15.5	0.773
0 mg/l Fe <sup>2+</sup>	55.8	2	0.00	0.00	0.00
0 mg/l Mn <sup>2+</sup>	54.9	2	0.00	0.00	0.00
0 mg/l Al <sup>3+</sup>	27.0	3	0.00	0.00	0.00
TDS in ppm				54266	
				anion sum	-876.17
				cation sum	856.66
Difference between sum of anions and cations: 19.5 = 1.13 % total amount of ions					
For more than 10% you should check your analysis!					

Calculate Clear mg/l to ppm to tds to mmol/l to meq to EC to μS (microSiemens)

## For another site in our region

### TDS and Electrical Conductivity

#### TDS - Electrical Conductivity (water conductivity)

The table stated below can be used to calculate the TDS (total dissolved solids) as well as the cation and anion composition from a water analysis. Please also use the following [website](#) for more information.

value & unit	weight	charge	in mmol/l	in mg/l	in meq
20653 mg/l <input type="text"/> Cl <sup>-</sup>	35.5	-1	582	2.07e+4	-582
0.12 mg/l <input type="text"/> NO <sub>2</sub> <sup>-</sup>	46.0	-1	0.00261	0.120	-0.00261
1751 mg/l <input type="text"/> NO <sub>3</sub> <sup>-</sup>	62.0	-1	28.2	1.75e+3	-28.2
0 mg/l <input type="text"/> F <sup>-</sup>	19.0	-1	0.00	0.00	0.00
14114 mg/l <input type="text"/> HCO <sub>3</sub> <sup>-</sup>	61.0	-1	231	1.41e+4	-231
<input type="text"/> mg/l <input type="text"/> CO <sub>3</sub> <sup>2-</sup>	60.0	-2	0.00	0.00	0.00
7088 mg/l <input type="text"/> SO <sub>4</sub> <sup>2-</sup>	96.1	-2	73.8	7.09e+3	-148
0 mg/l <input type="text"/> H <sub>2</sub> PO <sub>4</sub> <sup>-</sup>	97.0	-1	0.00	0.00	0.00
19556 mg/l <input type="text"/> Na <sup>+</sup>	23.0	1	850	1.96e+4	850
4.2 mg/l <input type="text"/> K <sup>+</sup>	39.1	1	0.107	4.20	0.107
0 mg/l <input type="text"/> NH <sub>4</sub> <sup>+</sup>	18.0	1	0.00	0.00	0.00
5.6 mg/l <input type="text"/> Mg <sup>2+</sup>	24.3	2	0.230	5.60	0.461
84 mg/l <input type="text"/> Ca <sup>2+</sup>	40.1	2	2.09	84.0	4.19
0 mg/l <input type="text"/> Fe <sup>2+</sup>	55.8	2	0.00	0.00	0.00
0.0 mg/l <input type="text"/> Mn <sup>2+</sup>	54.9	2	0.00	0.00	0.00
0.0 mg/l <input type="text"/> Al <sup>3+</sup>	27.0	3	0.00	0.00	0.00
			TDS in ppm <input type="text"/> 63256	anion sum <input type="text"/> -988.91	
				cation sum <input type="text"/> 855.02	
Difference between sum of anions and cations: <input type="text"/> 134 = <input type="text"/> 7.27 % total amount of ions					
For more than 10% you should check your analysis!					
<input type="button" value="Calculate"/> <input type="button" value="Clear"/> mg/l to ppm to tds to mmol/l to meq to EC to $\mu$ S (microSiemens)					