

Depth (m)	Al (mg/l)	As (mg/l)	Ca (mg/l)	Cd (mg/l)	Cr (mg/l)	Cu (mg/l)	Fe (mg/l)	Mg (mg/l)	Mn (mg/l)	P (mg/l)	Pb (mg/l)	S (mg/l)	Sr (mg/l)	Zn (mg/l)	Na (mg/l)	K (mg/l)
0	0.208	0	0.791	0	0	0.01	0	1.750	0	0	0	0.116	0	0	12.863	1.994
2	0.209	0	0.667	0	0	0	0	1.740	0	0	0	0.103	0	0	13.243	2.326
5	0.216	0	1.060	0	0	0	0	1.778	0	0	0	0.107	0	0	11.731	2.653
10	0.205	0	1.047	0	0	0	0	1.858	0	0	0	0.126	0	0	14.525	2.122
15	0.202	0	0.736	0	0	0	0	1.770	0	0	0	0.095	0	0	12.650	2.347
20	0.200	0	0.533	0	0	0	0	1.803	0	0	0	0.107	0	0	11.392	2.186
25	0.209	0	0.897	0	0	0	0	1.831	0	0	0	0.100	0	0	12.259	2.325
30	0.226	0	0.786	0	0	0	0	1.760	0	0	0	0.075	0	0	13.217	2.350
35	0.205	0	0.832	0	0	0	0	1.840	0	0	0	0.092	0	0	13.142	2.476
40	0.229	0	0.822	0	0	0	0	1.807	0	0	0	0.081	0	0	12.583	2.192
45	0.239	0	0.958	0	0	0	0	1.817	0	0	0	0.092	0	0	13.65	2.383
50	0.236	0	1.187	0	0	0	0	1.869	0	0	0	0	0	0	12.507	2.835
55	0.231	0	0.702	0	0	0	0	1.837	0	0	0	0.073	0	0	14.134	2.323
60	0.220	0	0.733	0	0	0	0	1.834	0	0	0	0.080	0	0	13.811	2.393
62.5	0.230	0	0.476	0	0	0	0	1.646	0	0	0	0.070	0	0	13.738	2.675
63	0.206	0	0.37	0	0	0	0	1.720	0	0	0	0.093	0	0	13.903	2.195
<b>Mean</b>	0.217	0	0.787	0	0	0	0	1.791	0	0	0	0.088	0	0	13.084	2.361
<b>Std dev</b>	0.013	0	0.217	0	0	0	0	0.058	0	0	0	0.028	0	0	0.8706	0.217

The sampling was done on 12/04/02 around noon. The weather was warm, partially cloudy and with a light, cold wind. The sechi disc was of 10.6 meters.

Table 7: Summary of the results obtained for Okataina Lake

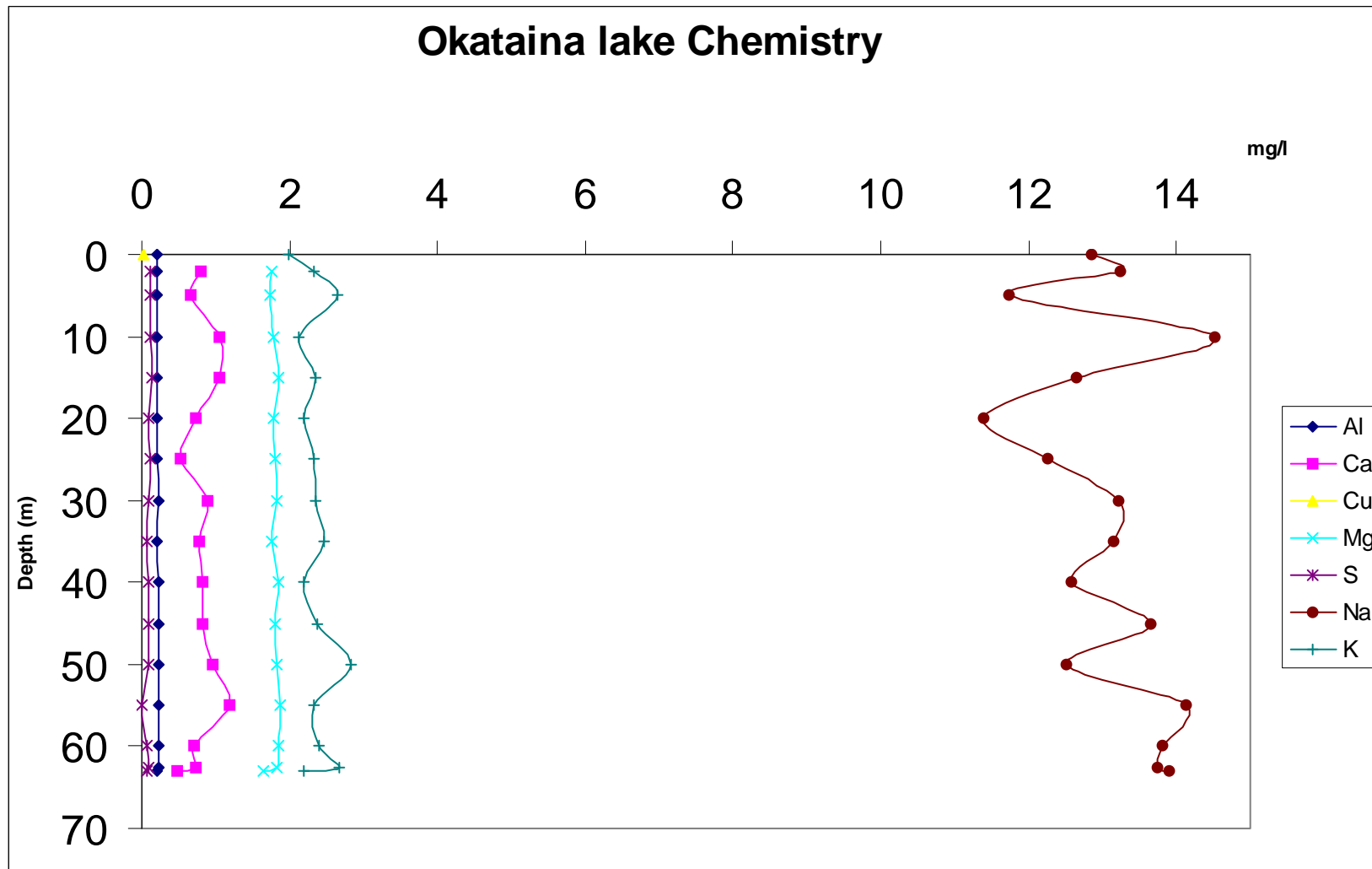


Figure 14

### 3.9 Metal Correlation

Correlations between the metals analyzed can rise from similar ionic size and/or cation charge, as for example  $Zn^{2+}$  can be replaced by  $Cu^{2+}$ ,  $Fe^{2+}$ ,  $Mg^{2+}$ , and  $Li^+$ ;  $Ca^{2+}$  and  $Na^+$  they substitute one-other. Good correlations wherever present, have been generally seen between Pb, Cu, and Cr.<sup>10, 11</sup>

Table 21 shows the correlation factors of those elements.

Table 21

	Al	As	Ca	Cd	Cr	Cu	Fe	Mg	Mn	P	Pb	S	Sr	Zn	Na
Al	1														
As	0														
Ca	0.278	N/a													
Cd	0	N/a	0												
Cr	0	N/a	0	N/a											
Cu	0	N/a	0	N/a	0										
Fe	0	N/a	0	N/a	0	0									
Mg	0.065	N/a	<b>0.67</b>	N/a	0	0	0								
Mn	0	N/a	0	N/a	0	0	0	0							
P	0	N/a	0	N/a	0	0	0	0	0						
Pb	0	N/a	0	N/a	0	0	0	0	0	0					
S	0	N/a	0	N/a	0	0	0	0	0	0	0				
Sr	0	N/a	0	N/a	0	0	0	0	0	0	0	0			
Zn	0	N/a	0	N/a	0	0	0	0	0	0	0	0	0		
Na	0.233	N/a	0	N/a	0	0	0	0	0	0	0	0.01	0	0	
K	0.493	N/a	0.32	N/a	0	0	0	0.002	0	0	0	0	0	0	0

From the values obtained a slight correlation was shown between calcium and magnesium that can be seen also in figure 28.

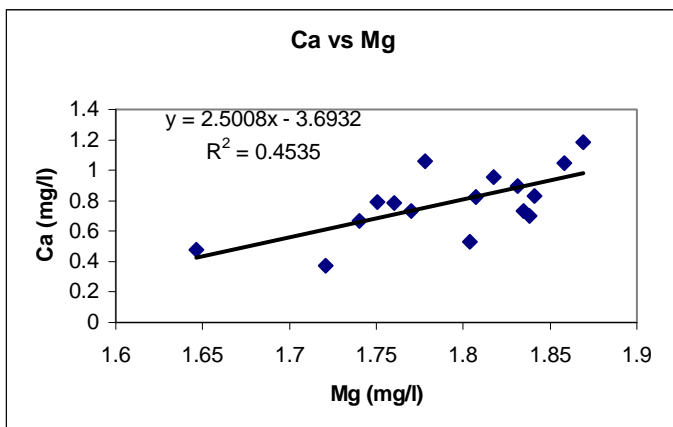


Figure 28