

PARAMETER: Total Alkalinity

Supervisor: Mr. Md. A. Rafique

Requisition Number	No. of Samples	Al. of Alkal.	Due Date	Al. of Analysis
RDKL/FN/2324/SR00057	6	7.2.24	14.2.24	7.2.24
" /SR00058	7	"	"	"

Sl. No.	Requisition No.	Sample Code	Sample Vol. (ml)	T.R (ml)	F.R (ml)	Diff. (ml)	T. Alkalinity (mg/L)
1.	Std.	Na ₂ CO ₃	10	0.3	24.2	24.2	0.0207(N)
2.	Blank	DW	50	24.2	24.3	0.1	-

Calculation: T. Alkalinity mg CaCO₃/L = $\frac{\text{H}_2\text{SO}_4 \text{ Consumed} \times N \times 50,000}{\text{Vol. of Sample (ml)}}$

N = Normality of H₂SO₄

Standardization of H₂SO₄ = 24.2 ml of H₂SO₄ consumed to titrate 10ml (0.05 N) Na₂CO₃

∴ Normality of H₂SO₄ (N) = $\frac{10 \times 0.05}{24.2} = 0.0207(N)$

Sl. No.	Requisition No.	Sample Code	Sample Vol. (ml)	T.R (ml)	F.R (ml)	Diff. (ml)	T. Alkalinity (mg/L)
1.	SR00057	2324/RDKL/FN/FN/L00099	50	0	4.8	4.8	39
2.		L000100	50	4.8	8.9	4.1	85
3.		L00101	50	8.9	13.1	4.2	87
4.		L00102	50	13.1	18.5	5.4	112
5.	(Repeat)	L00102	50	25.9	31.4	5.5	114
6.		L00103	50	18.5	22.3	3.8	79
7.		L00104	50	22.3	25.8	3.5	72
8.	SR00058	2324/RDKL/FN/FN/L00105	50	0.6	4.8	4.2	87
9.	(Repeat)	L00105	50	4.8	9	4.2	87
10.		L00106	50	9	11.9	2.9	60
11.	(Repeat)	L00106	50	40	42.9	2.9	60
12.		L00107	50	11.9	15.7	3.8	79
13.	(Repeat)	L00107	50	35.7	39.5	3.8	79

G. M. S.

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Sl. No.	Requisition Number	Sample code	Sample Vol. (ml)	F.R (ml)	F.R (ml)	Diff. (ml)	T. Alkalinity (mg/L)
14	SR00058	2324/RDKL/FH/1EH/L00108	50	15.7	19.4	3.7	76.59
		(Repeat) L00108	50	26.5	30.2	3.7	76.59
		L00109	50	19.7	22.8	3.1	64
		L00110	50	23.5	26.1	2.6	54
		(Repeat) L00110	50	26.1	28.8	2.7	56
		L00111	50	28.8	31.3	2.5	52
		(Repeat) L00111	50	31.3	33.8	2.5	52
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