Lampiran 7 : Standarisasi Larutan KMnO4 dan Hasil Pengujian Nilai Permanganat *Bulk*

No	Tanggal	N KMnO4
1	2 Mei	0.008955
2	9 Mei	0.009291
3	22 Mei	0.009971
4	7 Agus	0.009288
5	9 Agus	0.00917483
6	15 Agus	0.00923353

No	Tanggal Sampling	EFLUEN SUNGAI PROGO					EFLUEN WADUK SERMO					EFLUEN CLERENG				
		Vol A (ml)	A (ppm)	Vol B (ml)	B (ppm)	Rata-rata	Vol A (ml)	A (ppm)	Vol B (ml)	B (ppm)	Rata-rata	Vol A (ml)	A (ppm)	Vol B (ml)	B (ppm)	Rata-Rata
1	2 Mei	1.7	1.510	1.2	0.095	0.803	2.4	3.491	2.6	4.057	3.774	1.0	-0.471	2.1	2.642	1.086
2	9 Mei	1.3	1.517	1.6	2.458	1.988	3.2	7.156	2.8	5.982	6.569	0.9	0.403	1.6	2.458	1.431
3	16 Mei	2.9	3.339	4.8	11.854	7.597	4,5	10.973	4,8	11.854	11.414	1.4	1.871	1.1	0.990	1.431
4	22 Mei	1.9	5.895	2.3	7.155	6.525	2.5	7.785	2.1	6.525	7.155	0.9	2.744	0.9	2.744	2.744
5	30 Mei	1.2	3.689	1.8	5.580	4.635	2.1	6.525	1.2	3.689	5.107	1.2	3.689	1.2	3.689	3.689
6	7 Agus	1.6	2.446	1.6	2.446	2.446	1.5	2.153	1.0	0.685	1.419	0.9	0.392	0.9	0.392	0.392
7	9 Agus	2	3.191	1.6	2.031	2.611	2.0	3.191	2.3	4.061	3.626	0.9	0.002	0.9	0.002	0.002
8	13 Agus	1.5	1.741	1.6	2.031	1.886	2.2	3.711	2.3	4.061	3.886	1.1	0.582	1.0	0.292	0.437
9	15 Agus	1.6	2.246	1.8	2.83	2.538	1.8	2.830	1.8	2.830	2.83	1.1	0.788	1.2	1.079	0.934

Contoh Perhitungan

$$KMnO4\ \left(\frac{mg}{L}\right) = \frac{[(10+a)b-(10\ x\ c)]1\ x\ 31{,}6\ x\ 1000}{d}$$

$$KMnO4\ \left(\frac{mg}{L}\right) = \frac{[(10+1.7)0.008955-(10\ x\ 0.01)]1\ x\ 31{,}6\ x\ 1000}{100}$$

$$KMnO4\ = 1.508\ mg/L$$

Keterangan :

$a = volume\ titrasi\ KMnO4$
$b = normalitas\ KMnO4\ yang\ sebenarnya$
$c = normalitas\ asam\ oksalat$
$d = volume\ contoh\ uji$