

LAMPIRAN A HASIL ANALISA

A.1. Hasil Analisa

Tabel 4.1. Hasil Analisa Air Sungai Desa Karang Agung

jenis sampel	air sungai		
	1	2	3
pH (-)	12	12	12
Fe ppm	5,715	5,712	5,711
Mn ppm	5,825	5,820	5,823
TSS	380	379	377

Tabel 4.2. Hasil Analisa Fisika Air Setelah Proses Koagulator

V.Fi l	Koagulator		pH	Vol Koagulator	Vol air setelah penyaringan	% penyaringan
	Tawas	Kaporit				
sampel 1 2000 mL	8 gr	16 gr	9	212 ml	1788 ml	11,85%
sampel 2 2000 mL	10 gr	13 gr	9	278 ml	1722 ml	16,14%
sampel 3 2000 mL	12 gr	9 gr	9	285 ml	1715 ml	16,61%

Tabel 4.3. Hasil Analisa Kimia Air Setelah Proses Koagulator

V.Fi l	Fe ppm	Mn ppm	TSS ppm	Bau ppm	Rasa Ppm	Warna Ppm
sampel 1 2000 mL	2,540	2,575	580,000	berbau	berasa	keruh kuning
sampel 2 2000 mL	2,625	2,655	142,666,7	berbau	berasa	keruh kuning
sampel 3 2000 mL	2,750	2,770	880,000	berbau	berasa	keruh kuning

Tabel 4.4. Hasil Analisa Air Setelah Filtrasi

VF	VR	VP	T(min)	Fe	Mn	TSS
1788 ml	1544 ml	244 ml	6 Menit	0,1	0,3	-
1722 ml	1482 ml	240 ml	10 Menit	0,2	0,4	-
1715 ml	1430 ml	285 ml	9 Menit	0,1	0,3	-

Tabel 4.5. Hasil Analisa Air Setelah Filtrasi

VF	Bau Ppm	Rasa Ppm	Warna ppm
1788 ml	Tidak Berbau	Tidak Berasa	Tidak Berwarna
1722 ml	Tidak Berbau	Tidak Berasa	Tidak Berwarna
1715 ml	Tidak Berbau	Tidak Berasa	Tidak Berwarna

Tabel 4.6 Data Hasil Proses Filtrasi

No	Vf	Vr	Vp	t
sampel 1	1788 ml	244 ml	1544 ml	8 menit
sampel 2	1722 ml	285 ml	1482 ml	10 menit
sampel 3	1715 ml	240 ml	1430 ml	10 menit

LAMPIRAN B PERHITUNGAN

A.1. Perhitungan Analisa Koagulator

$$\% \text{ Koagulator} = \frac{v \text{ Koagulator}}{v \text{ Fit}} \times 100\%$$

Sampel 1

Diketahui: V Koagulator = 212 mL

V Fit = 1788 mL

$$\begin{aligned} \% \text{ Koagulator} &= \frac{v \text{ Koagulator}}{v \text{ Fit}} \times 100\% \\ &= \frac{212}{1788} \times 100\% \\ &= 11,85\% \end{aligned}$$

Sampel 2

Diketahui = V Koagulator = 278 mL

V Fit = 1722 mL

$$\begin{aligned} \% \text{ Koagulator} &= \frac{v \text{ Koagulator}}{v \text{ Fit}} \times 100\% \\ &= \frac{278}{1722} \times 100\% \\ &= 16,14\% \end{aligned}$$

Sampel 3

Diketahui = V Koagulator = 285 mL

V Fit = 1715 mL

$$\begin{aligned} \% \text{ Koagulator} &= \frac{v \text{ Koagulator}}{v \text{ Fit}} \times 100\% \\ &= \frac{285}{1715} \times 100\% \\ &= 16,61\% \end{aligned}$$

A.2. Perhitungan Kecepatan Aliran Pada Pompa

$$\frac{V_p}{t} : 1000 \times 60 =$$

$$\frac{V_r}{t} : 1000 \times 60 =$$

$$\frac{V_p}{t} : 1000 \times 60 =$$

Sampel 1

$$\begin{aligned} \text{Diketahui } V_P &= 1544 \text{ ml} \\ &= 8 \text{ menit} \\ &= \frac{1544 \text{ ml}}{8} : 1000 \times 60 \\ &= 11,58 \text{ l/jam} \end{aligned}$$

$$\begin{aligned} \text{Diketahui } V_R &= 244 \text{ ml} \\ t &= 8 \text{ menit} \\ &= \frac{244}{8} : 1000 \times 60 \\ &= 1,83 \text{ l/jam} \end{aligned}$$

$$\begin{aligned} \text{Diketahui } V_F &= 1788 \text{ ml} \\ t &= 8 \text{ menit} \\ &= \frac{1788}{8} : 1000 \times 60 \\ &= 13,41 \text{ l/jam} \end{aligned}$$

Sampel 2

$$\begin{aligned} \text{Diketahui } V_P &= 1482 \text{ ml} \\ t &= 10 \text{ menit} \\ &= \frac{1482}{10} : 1000 \times 60 \\ &= 8,892 \text{ l/jam} \end{aligned}$$

$$\begin{aligned} \text{Diketahui } V_R &= 285 \text{ ml} \\ &= 10 \text{ menit} \\ &= \frac{285}{10} : 1000 \times 60 \\ &= 1,71 \text{ l/jam} \end{aligned}$$

$$\begin{aligned}\text{Diketahui } V_F &= 1722 \text{ ml} \\ &= 10 \text{ menit} \\ &= \frac{1722}{10} : 1000 \times 60 \\ &= 10,332 \text{ l/jam}\end{aligned}$$

Sampel 3

$$\begin{aligned}\text{Diketahui } V_P &= 1430 \text{ ml} \\ t &= 10 \text{ menit} \\ &= \frac{1430}{10} : 1000 \times 60 \\ &= 8,58 \text{ l/jam}\end{aligned}$$

$$\begin{aligned}\text{Diketahui } V_R &= 240 \text{ ml} \\ t &= 10 \text{ menit} \\ &= \frac{240}{10} : 1000 \times 60 \\ &= 1,44 \text{ l/jam}\end{aligned}$$

$$\begin{aligned}\text{Diketahui } V_F &= 1715 \text{ ml} \\ t &= 10 \text{ menit} \\ &= \frac{1715}{10} : 1000 \times 60 \\ &= 10,29 \text{ l/jam}\end{aligned}$$

LAMPIRAN C DOKUMENTASI PENELITIAN

C.1. Poses Filtrasi



Pengambilan sampel Air Sungai



Air sungai



Penimbangan Kaporit



Penimbangan Kaporit



Pebambahan Koagulan



Pemisahan Koagulan



Filter Mangan



Filter Karbon dan Mangan



Filter Karbon



Proses Filtrasi



Pompa yang digunakan saat filtrasi



Air Yang Sudah Di Filtrasi