LAMPIRAN

1.1 Lampiran Perhitungan

1.1.1 Analisa Kadar *Total Solid* (TS)

Total Solid (TS) dapat dihitung menggunakan rumus:

$$TS = \frac{(A-B)}{V} \times 1000 = \text{.....(mg/L)}$$

Dimana

A = Berat cawan akhir + residu (mg)

B = Berat cawan (mg)

V = vol ume (L)

Tabel 4. Hasil Analisa *Total Solid* (TS)

Variabel	Volume Sampel (mL)	Berat cawan kosong (gr)	Berat cawan akhir (gr)	Kadar TS (%)
1	5	38,76	39,01	5
2	10	43,88	44,43	5,5
3	15	44,47	45,35	5,86

Perhitungan:

1. Variabel 1, volume sampel 5 mL

$$\%TS = \frac{(39{,}01\ \text{gr} - 38{,}76\ \text{gr})}{5\ \text{mL}} \times 100\% = 5\%$$

2. Variabel 2, volume sampel 10 mL

$$\%TS = \frac{(44{,}43\ \text{gr} - 43{,}88\ \text{gr})}{10\ \text{mL}} \times 100\% = 5{,}5\%$$

3. Variabel 3, volume sampel 15 mL

$$\%TS = \frac{(45{,}35\ \text{gr} - 44{,}47\ \text{gr})}{15\ \text{mL}} \times 100\% = 5{,}86\%$$

1.1.2 Analisa Kadar *Total Suspended Solid (TSS)*

Total Suspended Solid (TSS) dapat dihitung menggunakan rumus:

$$TSS = \frac{(B-A)}{V} \times 1000 \text{ .= .....(mg/L)}$$

Dimana

A = berat kertas saring (mg) atau berat cawan + kertas saring

B = berat sampel pada kertas saring (mg) atau berat cawan sampel + kertas saring residu setelah pemanasan

V = volume sampel (L)

Tabel 5. Hasil Analisa *Total Suspended Solid* (TSS)

Volume Sampel (mL)	PAC (g/L)	Berat cawan + kertas saring (gr)	Berat cawan sampel + kertas saring residu (gr)	Kadar TSS (%)
5	3	38,63	38,81	3,6
5	6	51,14	51,3	3,2
5	9	45,27	45,39	2,4

Perhitungan:

1. Variabel 1, PAC = 3 gr/L

$$\%TSS = \frac{(38{,}81\ \text{gr} - 38{,}63\ \text{gr})}{5\ \text{mL}} \times 100\% = 3{,}6\ \%$$

2. Variabel 2, PAC = 6 gr/L

$$\%TS = \frac{(51{,}3\ \text{gr} - 51{,}14\ \text{gr})}{5\ \text{mL}} \times 100\% = 3{,}2\ \%$$

3. Variabel 3, PAC = 9 gr/L

$$\%TSS = \frac{(45{,}39\ \text{gr} - 45{,}27\ \text{gr})}{5\ \text{mL}} \times 100\% = 2{,}4\%$$

1.1.3 Analisa Kadar *Total Dissolved Solid* (TDS)

Total Dissolved Solid (TDS) dapat dihitung menggunakan rumus:

$$TDS = \frac{(B-A)}{V} \times 1000 .= \text{.....(mg/L)}$$

Dimana

A = berat cawan (mg)

B = berat sampel pada cawan (mg)

V = volume sampel (L)

Tabel 6. Hasil Analisa *Total Suspended Solid* (TSS)

Volume Sampel (mL)	PAC (gr/L)	Berat cawan (gr)	Berat sampel pada cawan (gr)	Kadar TDS (%)
5	3	43,88	44,09	4,2
5	6	44,47	44,66	3,8
5	9	38,76	38,95	3,8

Perhitungan:

1. Variabel 1, PAC = 3 gr/L

$$\%TDS = \frac{(44{,}09\ \text{gr} - 43{,}88\ \text{gr})}{5\ \text{mL}} \times 100\% = 4{,}2\ \%$$

2. Variabel 2, PAC = 6 gr/L

$$\%TDS = \frac{(44{,}66\ \text{gr} - 44{,}47\ \text{gr})}{5\ \text{mL}} \times 100\% = 3{,}8\ \%$$

3. Variabel 3, PAC = 9 gr/L

$$\%TDS = \frac{(38{,}95\ \text{gr} - 38{,}76\ \text{gr})}{5\ \text{mL}} \times 100\% = 3{,}8\%$$

1.1.4 Analisa Kadar Air

Kadar air dapat dihitung menggunakan rumus:

$$Kadar\ Air = \frac{X+Y-Z}{Y} \times 100\ \% = \text{.....(\%)}$$

Dimana

X = berat cawan porselin (mg)

Y = berat sampel (mg)

Z = berat sampel dan cawan porselin setelah dikeringkan (mg)

Tabel 7. Hasil Analisa Kadar Air

Berat Cawan + sampel (gr)	Berat cawan + sampel (gr)	Berat cawan + sampel setelah dikeringkan (gr)	Kadar Air (%)
44,47	105,14	60,04	74,3

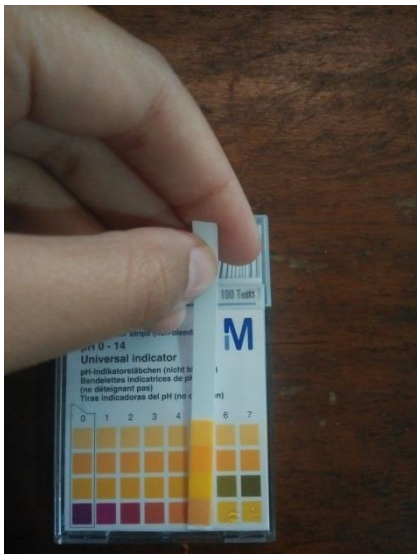
Perhitungan:

Berat sampel = 105,14 gr – 44,47 gr

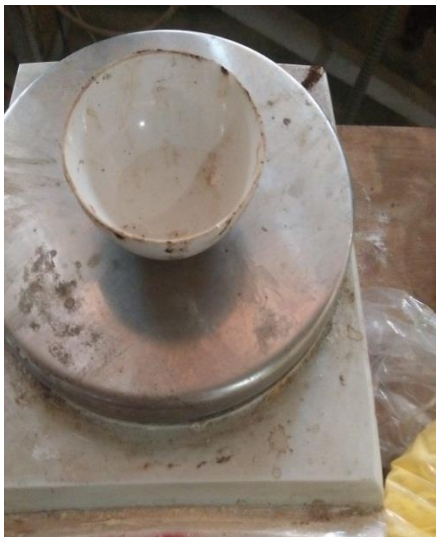
= 60,67 gr

$$\%Kadar\ Air = \frac{(60{,}67\ gr + 44{,}47 - 60{,}04\ \text{gr})}{60{,}67\ gr} \times 100\% = 74{,}3\ \%$$

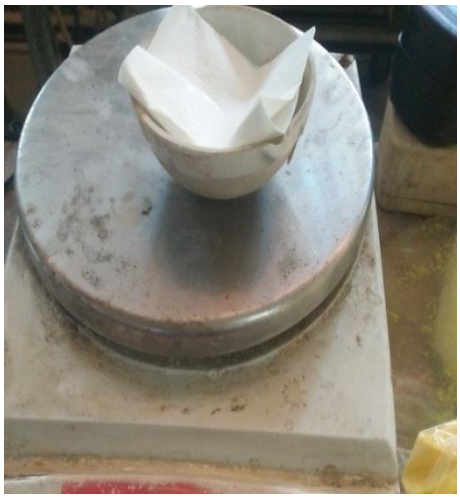
1.2 Lampiran Foto



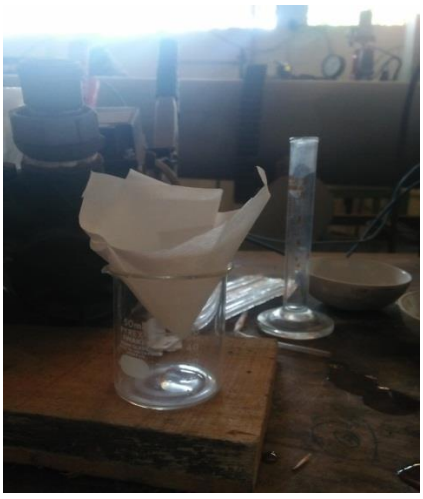
Analisa dengan kertas pH



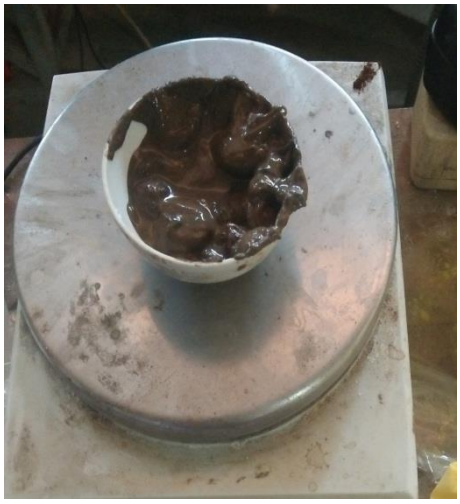
Analisa TS



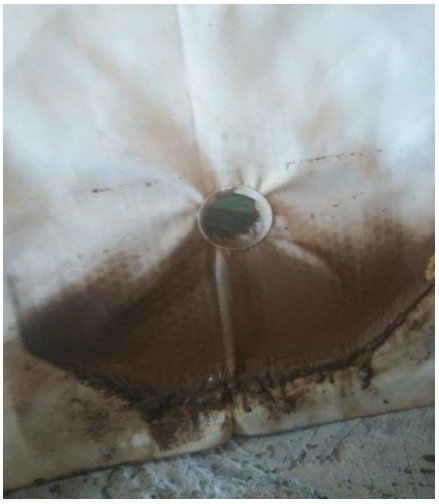
Analisa TSS



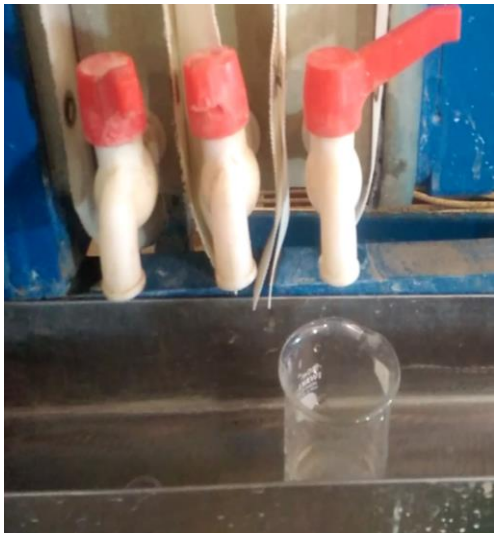
Analisa TDS



Analisa kadar air



Cake yang tertahan pada media penyaring



Filtrat hasil proses filtrasi menggunakan plate and frame filter press

Plate and frame filter press