

Lampiran 6. Perhitungan Konsentrasi TSS

Konsentrasi TSS Senin, 16 Juli 2018

Perhitungan

Sampel 1:

$$\text{Mg TSS per Liter} = \frac{(A - B) \times 1000}{\text{Volume Contoh Uji ,mL}}$$

$$\frac{(1,2626 - 1,2740) \times 1000}{100 \text{ mL}}$$

$$= 0,114 \text{ g/l} = 114 \text{ mg/l}$$

Sampel 2:

$$\text{Mg TSS per Liter} = \frac{(A - B) \times 1000}{\text{Volume Contoh Uji ,mL}}$$

$$\frac{(1,268 - 1,2789) \times 1000}{100 \text{ mL}}$$

$$= 0,109 \text{ g/l} = 109 \text{ mg/l}$$

$$\text{Rata-rata TSS} = (\text{sampel 1+sampel 2})/2$$

$$= (114 \text{ mg/l} + 109 \text{ mg/l})/2$$

$$= 112 \text{ mg/l}$$

$$\text{RPD} = \frac{(X_1 - X_2)}{(X_1 + X_2)/2} \times 100$$

$$\frac{(114 - 109) \times 1000}{112}$$

$$= 4,48\%$$

$$\% \text{Removal} = \frac{\text{Influent} - \text{Effluent}}{\text{Influent}} \times 100$$

$$\frac{112 - 99}{112} \times 100 = 11,21$$

Perhitungan TSS secara lengkap dapat dilihat pada tabel dibawah ini.

Senin, 16 Juli 2018

No	Reaktor	Sampel		Berat Kertas Kosong (gram)	Berat Kertas Total (gram)	Jumlah TSS (Mg/l)	Rata-rata TSS	RPD	%Removal	
1	R. Andesit 1 (Running 4 Jam)	Influent	Sampel 1	1.2626	1.2740	114	112	4.48%	11.21%	
			Sampel 2	1.268	1.2789	109				
		Effluent	Sampel 1	1.2503	1.2604	101	99	4.04%		
			Sampel 2	1.2559	1.2656	97				
2	R. Andesit 2 (Running 4 Jam)	Influent	Sampel 1	1.2626	1.2740	114	112	4.48%	12.11%	
			Sampel 2	1.268	1.2789	109				
		Effluent	Sampel 1	1.2525	1.2625	100	98	4.08%		
			Sampel 2	1.2572	1.2668	96				

Selasa, 17 Juli 2018

No	Reaktor	Sampel		Berat Kertas Kosong (gram)	Berat Kertas Total (gram)	Jumlah TSS (Mg/l)	Rata-rata TSS	RPD	%Removal	
1	R. Andesit 1 (Running 4 Jam)	Influent	Sampel 1	1.255	1.2648	98	101	4.98%	14.43%	
			Sampel 2	1.2587	1.2690	103				
		Effluent	Sampel 1	1.2528	1.2615	87	86	2.33%		
			Sampel 2	1.2556	1.2641	85				
2	R. Andesit 2 (Running 4 Jam)	Influent	Sampel 1	1.255	1.2648	98	101	4.98%	11.44%	
			Sampel 2	1.2587	1.2690	103				
		Effluent	Sampel 1	1.2481	1.2569	88	89	2.25%		
			Sampel 2	1.2502	1.2592	90				

Rabu, 18 Juli 2018

No	Reaktor	Sampel		Berat Kertas Kosong (gram)	Berat Kertas Total (gram)	Jumlah TSS (Mg/l)	Rata-rata TSS	RPD	%Removal	
1	R. Andesit 1 (Running 4 Jam)	Influent	Sampel 1	1.2223	1.2454	231	233	1.29%	12.90%	
			Sampel 2	1.2236	1.2470	234				
		Effluent	Sampel 1	1.2674	1.2872	198	202	4.44%		
			Sampel 2	1.256	1.2767	207				
2	R. Andesit 2 (Running 4 Jam)	Influent	Sampel 1	1.2223	1.2454	231	233	1.29%	10.11%	
			Sampel 2	1.2236	1.2470	234				
		Effluent	Sampel 1	1.2551	1.2757	206	209	2.87%		
			Sampel 2	1.2577	1.2789	212				

Kamis, 19 Juli 2018

No	Reaktor	Sampel		Berat Kertas Kosong (gram)	Berat Kertas Total (gram)	Jumlah TSS (Mg/l)	Rata-rata TSS	RPD	%Removal	
1	R. Andesit 1 (Running 4 Jam)	Influent	Sampel 1	1.0843	1.1034	191	188	3.19%	21.28%	
			Sampel 2	1.0918	1.1103	185				
		Effluent	Sampel 1	1.0749	1.0896	147	148	1.35%		
			Sampel 2	1.0786	1.0935	149				
2	R. Andesit 2 (Running 4 Jam)	Influent	Sampel 1	1.0843	1.1034	191	188	3.19%	18.88%	
			Sampel 2	1.0918	1.1103	185				
		Effluent	Sampel 1	1.0775	1.0930	155	153	3.28%		
			Sampel 2	1.0899	1.1049	150				

Jumat, 20 Juli 2018

No	Reaktor	Sampel		Berat Kertas Kosong (gram)	Berat Kertas Total (gram)	Jumlah TSS (Mg/l)	Rata-rata TSS	RPD	%Removal	
1	R. Andesit 1 (Running 4 Jam)	Influent	Sampel 1	1.0834	1.1022	188	187	1.61%	28.15%	
			Sampel 2	1.0722	1.0907	185				
		Effluent	Sampel 1	1.0873	1.1007	134	134	0.00%		
			Sampel 2	1.0808	1.0942	134				
2	R. Andesit 2 (Running 4 Jam)	Influent	Sampel 1	1.0834	1.1022	188	187	1.61%	31.90%	
			Sampel 2	1.0722	1.0907	185				
		Effluent	Sampel 1	1.0749	1.0874	125	127	3.15%		
			Sampel 2	1.0847	1.0976	129				

Senin, 23 Juli 2018

No	Reaktor	Sampel		Berat Kertas Kosong (gram)	Berat Kertas Total (gram)	Jumlah TSS (Mg/l)	Rata-rata TSS	RPD	%Removal	
1	R. Andesit 1 (Running 4 Jam)	Influent	Sampel 1	1.22	1.2395	195	197	2.03%	35.53%	
			Sampel 2	1.2305	1.2504	199				
		Effluent	Sampel 1	1.2162	1.2288	126	127	1.57%		
			Sampel 2	1.2305	1.2433	128				
2	R. Andesit 2 (Running 4 Jam)	Influent	Sampel 1	1.22	1.2395	195	197	2.03%	40.61%	
			Sampel 2	1.2305	1.2504	199				
		Effluent	Sampel 1	1.2317	1.2435	118	117	1.71%		
			Sampel 2	1.2109	1.2225	116				

Selasa, 24 Juli 2018

No	Reaktor	Sampel		Berat Kertas Kosong (gram)	Berat Kertas Total (gram)	Jumlah TSS (Mg/l)	Rata-rata TSS	RPD	%Removal	
1	R. Andesit 1 (Running 4 Jam)	Influent	Sampel 1	1.0723	1.0894	171	169	1.77%	39.82%	
			Sampel 2	1.0657	1.0825	168				
		Effluent	Sampel 1	1.0838	1.0939	101	102	1.96%		
			Sampel 2	1.0814	1.0917	103				
2	R. Andesit 2 (Running 4 Jam)	Influent	Sampel 1	1.0723	1.0894	171	169	1.77%	43.95%	
			Sampel 2	1.0657	1.0825	168				
		Effluent	Sampel 1	1.0638	1.0734	96	95	2.11%		
			Sampel 2	1.0586	1.0680	94				

Rabu, 25 Juli 2018

No	Reaktor	Sampel		Berat Kertas Kosong (gram)	Berat Kertas Total (gram)	Jumlah TSS (Mg/l)	Rata-rata TSS	RPD	%Removal	
1	R. Andesit 1 (Running 4 Jam)	Influent	Sampel 1	1.0743	1.0945	202	207	4.36%	36.56%	
			Sampel 2	1.0633	1.0844	211				
		Effluent	Sampel 1	1.0684	1.0812	128	131	4.58%		
			Sampel 2	1.0575	1.0709	134				
2	R. Andesit 2 (Running 4 Jam)	Influent	Sampel 1	1.0743	1.0945	202	207	4.36%	41.65%	
			Sampel 2	1.0633	1.0844	211				
		Effluent	Sampel 1	1.0622	1.0740	118	121	4.15%		
			Sampel 2	1.0662	1.0785	123				

Kamis, 26 Juli 2018

No	Reaktor	Sampel		Berat Kertas Kosong (gram)	Berat Kertas Total (gram)	Jumlah TSS (Mg/l)	Rata-rata TSS	RPD	%Removal	
1	R. Andesit 1 (Running 4 Jam)	Influent	Sampel 1	1.0661	1.0859	198	201	2.49%	39.90%	
			Sampel 2	1.0531	1.0734	203				
		Effluent	Sampel 1	1.0648	1.0767	119	121	2.49%		
			Sampel 2	1.0688	1.0810	122				
2	R. Andesit 2 (Running 4 Jam)	Influent	Sampel 1	1.0661	1.0859	198	201	2.49%	43.89%	
			Sampel 2	1.0531	1.0734	203				
		Effluent	Sampel 1	1.0662	1.0775	113	113	0.89%		
			Sampel 2	1.0828	1.0940	112				

Jumat, 27 Juli 2018

No	Reaktor	Sampel		Berat Kertas Kosong (gram)	Berat Kertas Total (gram)	Jumlah TSS (Mg/l)	Rata-rata TSS	RPD	%Removal	
1	R. Andesit 1 (Running 4 Jam)	Influent	Sampel 1	1.0693	1.0894	201	204	2.46%	40.79%	
			Sampel 2	1.0651	1.0857	206				
		Effluent	Sampel 1	1.0766	1.0889	123	121	4.15%		
			Sampel 2	1.0662	1.0780	118				
2	R. Andesit 2 (Running 4 Jam)	Influent	Sampel 1	1.0693	1.0894	201	204	2.46%	44.47%	
			Sampel 2	1.0651	1.0857	206				
		Effluent	Sampel 1	1.0617	1.0728	111	113	3.54%		
			Sampel 2	1.0723	1.0838	115				

PENGECEKAN TIAP KOMPARTEMEN

No	Reaktor	Sampel		Berat Kertas Kosong (gram)	Berat Kertas Total (gram)	Jumlah TSS (Mg/l)	Rata-rata TSS	RPD	%Removal	
1	Kompartemen 1	Influent	Sampel 1	1.0693	1.0894	201	204	2.46%	4.18%	
			Sampel 2	1.0651	1.0857	206				
		Effluent	Sampel 1	1.0617	1.0813	196	195	1.03%		
			Sampel 2	1.0589	1.0783	194				
2	Kompartemen 2	Influent	Sampel 1	1.0617	1.0813	196	195	1.03%	15.90%	
			Sampel 2	1.0589	1.0783	194				
		Effluent	Sampel 1	1.0608	1.0769	161	164	3.66%		
			Sampel 2	1.0647	1.0814	167				
3	Kompartemen 3	Influent	Sampel 1	1.0608	1.0769	161	164	3.66%	26.52%	
			Sampel 2	1.0647	1.0814	167				
		Effluent	Sampel 1	1.0766	1.0889	123	121	4.15%		
			Sampel 2	1.0662	1.0780	118				