

## LAMPIRAN

### Lampiran Perhitungan Kadar DO :

Pengukuran 1

$$\begin{aligned} 1. \text{ Oksigen terlarut (mg/l)} &= \frac{0,81 \times 0,025 \times 8000 \times 1,007}{50} \\ &= \frac{163,134}{50} \\ &= 3,26 \text{ mg/l} \end{aligned}$$

Pengukuran 2

$$\begin{aligned} 2. \text{ Oksigen terlarut (mg/l)} &= \frac{0,81 \times 0,025 \times 8000 \times 1,007}{50} \\ &= \frac{163,134}{50} \\ &= 3,26 \text{ mg/l} \end{aligned}$$

### Lampiran Perhitungan %RPD :

$$\begin{aligned} \%RPD &= \frac{3,26 - 3,26}{3,26} \times 100 \% \\ &= 0 \% \end{aligned}$$

### Hasil Akhir :

$$\begin{aligned} \text{Oksigen terlarut (mg/l)} &= \frac{\text{hasil pengukuran simplo} + \text{hasil pengukuran duplo}}{2} \\ &= \frac{3,26 + 3,26}{2} \\ &= 3,26 \text{ mg/l} \end{aligned}$$

### Lampiran Perhitungan Kadar BOD<sub>0</sub> hari :

Pengukuran 1

$$\begin{aligned} 1. \text{ BOD}_0 \text{ hari (mg/l)} &= \frac{0,81 \times 0,025 \times 8000 \times 1,007}{50} \\ &= \frac{163,134}{50} \\ &= 3,26 \text{ mg/l} \end{aligned}$$

Pengukuran 2

$$\begin{aligned} 2. \text{ BOD}_0 \text{ hari (mg/l)} &= \frac{0,81 \times 0,025 \times 8000 \times 1,007}{50} \\ &= \frac{163,134}{50} \\ &= 3,26 \text{ mg/l} \end{aligned}$$

### Lampiran Perhitungan %RPD :

$$\begin{aligned} \%RPD &= \frac{3,26 - 3,26}{3,26} \times 100 \% \\ &= 0 \% \end{aligned}$$

**Hasil :**

$$\begin{aligned} \text{BOD}_0 \text{ hari} &= \frac{\text{hasil pengukuran simplo} + \text{hasil pengukuran duplo}}{2} \\ &= \frac{3,26 + 3,26}{2} \\ &= 3,26 \text{ mg/l} \end{aligned}$$

### Lampiran Perhitungan Kadar BOD<sub>5</sub> hari :

Pengukuran 1

$$\begin{aligned} 1. \text{ BOD}_5 \text{ (mg/l)} &= \frac{0,04 \times 0,025 \times 8000 \times 1,007}{50} \\ &= \frac{8,056}{50} \\ &= 0,16 \text{ mg/l} \end{aligned}$$

Pengukuran 2

$$\begin{aligned} 2. \text{ BOD}_5 \text{ (mg/l)} &= \frac{0,04 \times 0,025 \times 8000 \times 1,007}{50} \\ &= \frac{8,056}{50} \\ &= 0,16 \text{ mg/l} \end{aligned}$$

### Lampiran Perhitungan %RPD :

$$\begin{aligned} \%RPD &= \frac{0,16 - 0,16}{0,16} \times 100 \% \\ &= 0\% \end{aligned}$$

**Hasil :**

$$\begin{aligned} \text{BOD}_5 \text{ hari} &= \frac{\text{hasil pengukuran simplo} + \text{hasil pengukuran duplo}}{2} \\ &= \frac{0,16 + 0,16}{2} \\ &= 0,16 \text{ mg/l} \end{aligned}$$

### Kadar BOD<sub>5</sub> Sesungguhnya :

$$\begin{aligned} \text{Kadar BOD} &= \text{BOD}_0 \text{ hari} - \text{BOD}_5 \text{ hari} \\ &= 3,26 \text{ mg/l} - 0,16 \text{ mg/l} \\ &= 3,10 \text{ mg/l} \end{aligned}$$

**Dokumentasi Penelitian:**



**Gambar 1.** Sampel analisis.



**Gambar 2.** Botol winkler 300 ml untuk uji DO dan BOD.



**Gambar 3.** Larutan  $\text{MnSO}_4$  dan larutan Alkali iodide azida.



**Gambar 4.** Sampel sebelum ditambahkan larutan  $\text{MnSO}_4$  dan larutan Alkali iodide azida.



**Gambar 5.** Sampel setelah ditambahkan larutan  $\text{MnSO}_4$  dan larutan Alkali iodide azida.



**Gambar 6.** Sampel setelah penambahan Asam Sulfat.



**Gambar 7.** Proses titrasi sampel.