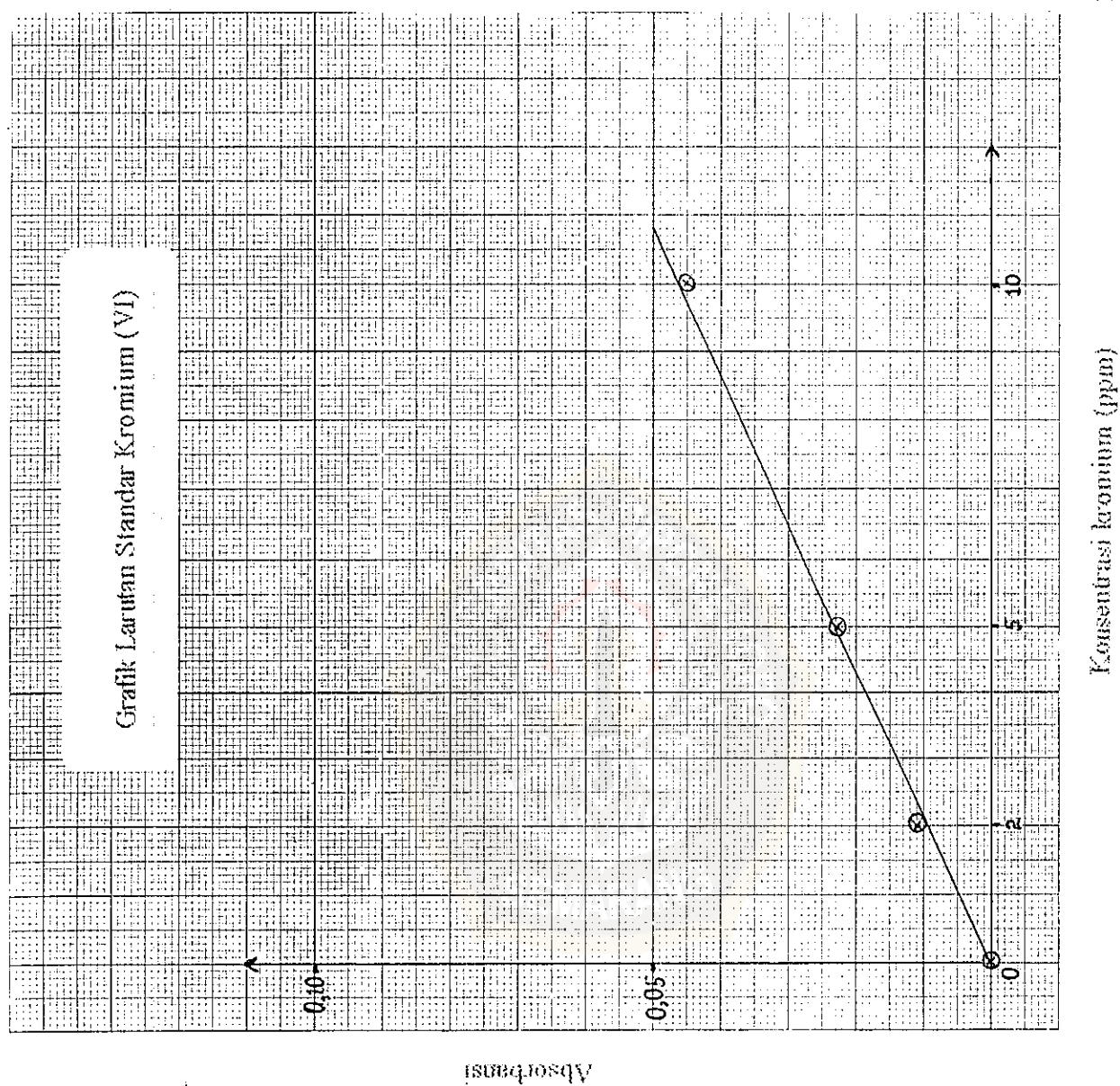
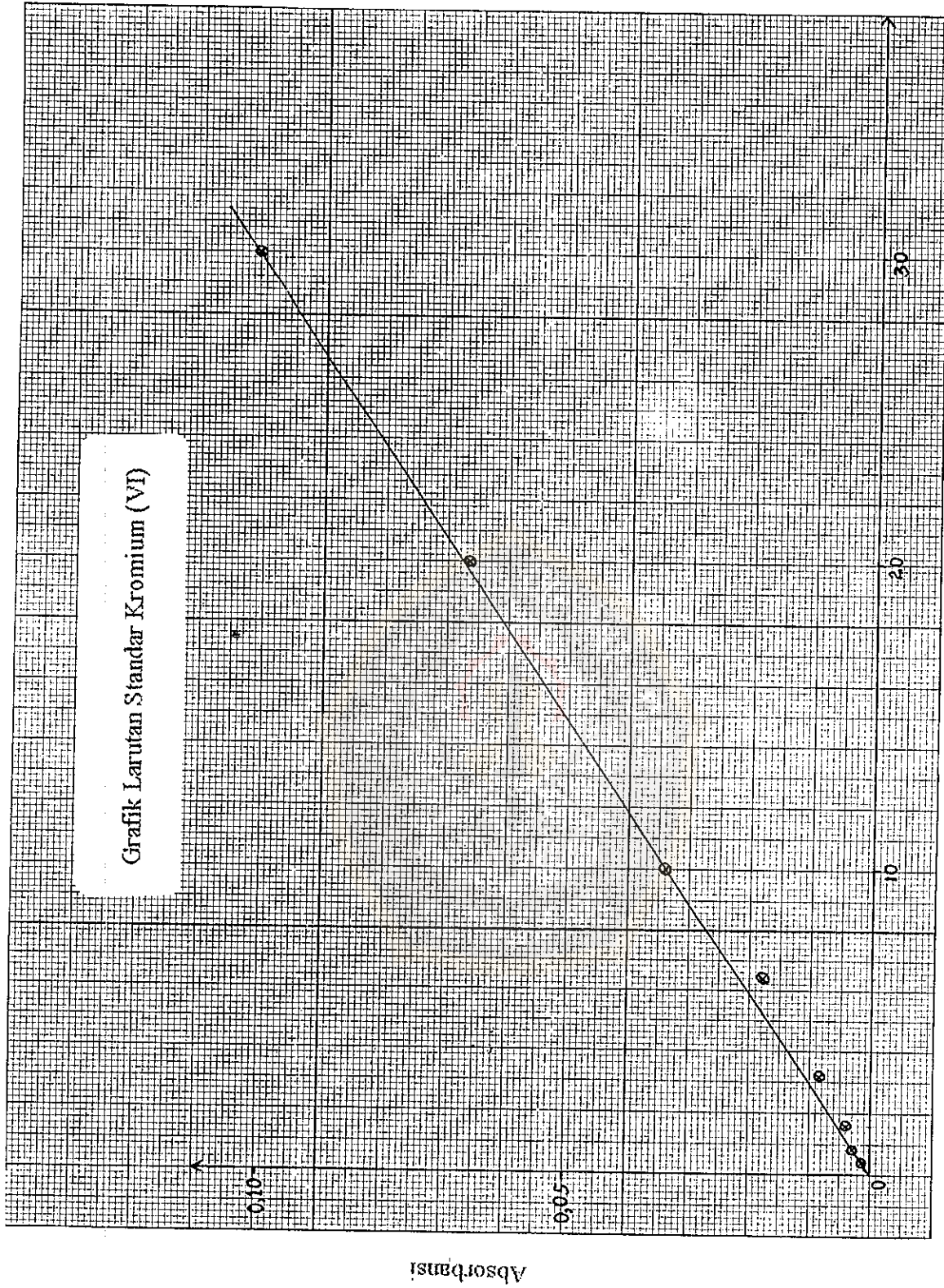


LAMPIRAN A





Konsentrasi kromium (ppm)

LAMPIRAN B

Hasil Pengukuran Absorbansi dan Konsentrasi

Tabel 1. Pengaruh Penambahan Besi (III) terhadap Respon Analitik Kromium

Konsentrasi Fe ³⁺ (ppm)	Absorbansi	Konsentrasi kromium (ppm)
12	0,1253	37,18
24	0,1245	36,94
36	0,1216	36,08
48	0,1164	34,54
60	0,1146	34,01

Tabel 2. Pengaruh Penambahan Fosfat terhadap Respon Analitik Kromium

Konsentrasi fosfat (ppm)	Absorbansi	Konsentrasi kromium (ppm)
12	0,1307	38,78
24	0,1287	38,19
36	0,1247	37,00
48	0,1268	37,63
60	0,1195	35,46

Tabel 3. Pungut Ulang Kromium (40 ppm) yang Diinterferensi Besi (III) (60 ppm)

dengan *Releasing Agent* NH₄Cl

Konsentrasi NH ₄ Cl (%)	Absorbansi	Konsentrasi kromium (ppm)
1,0	0,1448	42,97
2,5	0,1414	41,96
5,0	0,1326	39,35
10,0	0,1212	35,96
15,0	0,1103	32,73

Tabel 4. Pungut Ulang Kromium (40 ppm) yang Diinterferensi Fosfat (60 ppm) dengan *Releasing Agent* Kalsium

Konsentrasi Ca ²⁺ (ppm)	Absorbansi	Konsentrasi kromium (ppm)
1000	0,1834	39,19
2000	0,1674	35,77
4000	0,1574	33,63
6000	0,1470	31,41
8000	0,1511	32,29



LAMPIRAN C

Perhitungan Konsentrasi Kromium dengan adanya Interferen Besi (III)

a) 12 ppm Besi (III)

$$\text{Absorbansi} = 0,1253$$

$$0,1253 = 3,37 (10^{-3}) x$$

$$x = 0,1253 : 3,37 (10^{-3}) = 37,18 \text{ ppm kromium}$$

b) 24 ppm Besi (III)

$$\text{Absorbansi} = 0,1245$$

$$0,1245 = 3,37 (10^{-3}) x$$

$$x = 0,1245 : 3,37 (10^{-3}) = 36,94 \text{ ppm kromium}$$

c) 36 ppm Besi (III)

$$\text{Absorbansi} = 0,1216$$

$$0,1216 = 3,37 (10^{-3}) x$$

$$x = 0,1216 : 3,37 (10^{-3}) = 36,08 \text{ ppm kromium}$$

d) 48 ppm Besi (III)

$$\text{Absorbansi} = 0,1164$$

$$0,1164 = 3,37 (10^{-3}) x$$

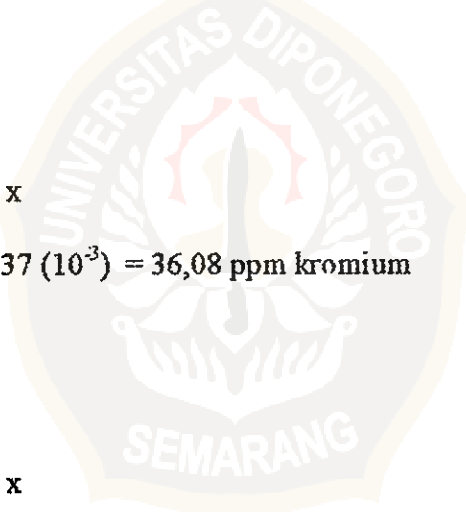
$$x = 0,1164 : 3,37 (10^{-3}) = 34,54 \text{ ppm kromium}$$

e) 60 ppm Besi (III)

$$\text{Absorbansi} = 0,1146$$

$$0,1146 = 3,37 (10^{-3}) x$$

$$x = 0,1146 : 3,37 (10^{-3}) = 34,01 \text{ ppm kromium}$$



LAMPIRAN D

Perhitungan Nilai Recovery Kromium dengan NH_4Cl

a) 1,0 % NH_4Cl

Absorbansi = 0,1448

$$0,1448 = 3,37 (10^{-3}) x$$

$$x = 0,1448 : 3,37 (10^{-3}) = 42,97 \text{ ppm kromium}$$

b) 2,5 % NH_4Cl

Absorbansi = 0,1414

$$0,1414 = 3,37 (10^{-3}) x$$

$$x = 0,1414 : 3,37 (10^{-3}) = 41,96 \text{ ppm kromium}$$

c) 5,0 % NH_4Cl

Absorbansi = 0,1326

$$0,1326 = 3,37 (10^{-3}) x$$

$$x = 0,1326 : 3,37 (10^{-3}) = 39,35 \text{ ppm kromium}$$

d) 10,0 % NH_4Cl

Absorbansi = 0,1212

$$0,1212 = 3,37 (10^{-3}) x$$

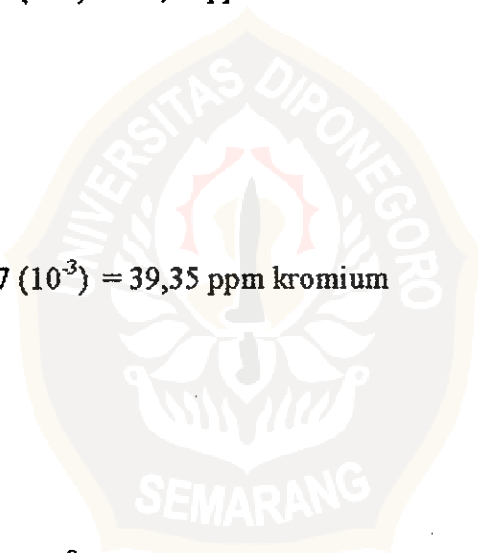
$$x = 0,1212 : 3,37 (10^{-3}) = 35,96 \text{ ppm kromium}$$

e) 15,0 % NH_4Cl

Absorbansi = 0,1103

$$0,1103 = 3,37 (10^{-3}) x$$

$$x = 0,1103 : 3,37 (10^{-3}) = 32,73 \text{ ppm kromium}$$



LAMPIRAN E

Perhitungan Konsentrasi Kromium dengan adanya Interferen Fosfat

a) 12 ppm Fosfat

$$\text{Absorbansi} = 0,1307$$

$$0,1307 = 3,37 (10^{-3}) x$$

$$x = 0,1307 : 3,37 (10^{-3}) = 38,78 \text{ ppm kromium}$$

b) 24 ppm Fosfat

$$\text{Absorbansi} = 0,1287$$

$$0,1287 = 3,37 (10^{-3}) x$$

$$x = 0,1287 : 3,37 (10^{-3}) = 38,19 \text{ ppm kromium}$$

c) 36 ppm Fosfat

$$\text{Absorbansi} = 0,1247$$

$$0,1247 = 3,37 (10^{-3}) x$$

$$x = 0,1247 : 3,37 (10^{-3}) = 37,00 \text{ ppm kromium}$$

d) 48 ppm Fosfat

$$\text{Absorbansi} = 0,1268$$

$$0,1268 = 3,37 (10^{-3}) x$$

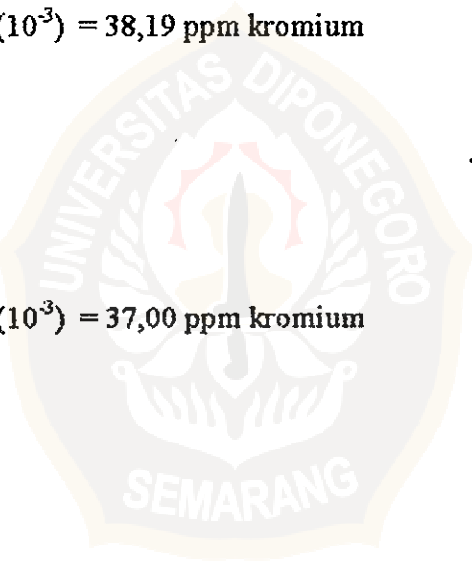
$$x = 0,1268 : 3,37 (10^{-3}) = 37,63 \text{ ppm kromium}$$

e) 60 ppm Fosfat

$$\text{Absorbansi} = 0,1195$$

$$0,1195 = 3,37 (10^{-3}) x$$

$$x = 0,1195 : 3,37 (10^{-3}) = 35,46 \text{ ppm kromium}$$



LAMPIRAN F

Perhitungan Nilai Recovery Kromium dengan Kalsium

a) 1000 ppm Kalsium

$$\text{Absorbansi} = 0,1834$$

$$0,1834 = 4,68 (10^{-3}) x$$

$$x = 0,1834 : 4,68 (10^{-3}) = 39,19 \text{ ppm kromium}$$

b) 2000 ppm Kalsium

$$\text{Absorbansi} = 0,1674$$

$$0,1674 = 4,68 (10^{-3}) x$$

$$x = 0,1674 : 4,68 (10^{-3}) = 35,77 \text{ ppm kromium}$$

c) 4000 ppm Kalsium

$$\text{Absorbansi} = 0,1574$$

$$0,1574 = 4,68 (10^{-3}) x$$

$$x = 0,1574 : 4,68 (10^{-3}) = 33,63 \text{ ppm kromium}$$

d) 6000 ppm Kalsium

$$\text{Absorbansi} = 0,1470$$

$$0,1470 = 4,68 (10^{-3}) x$$

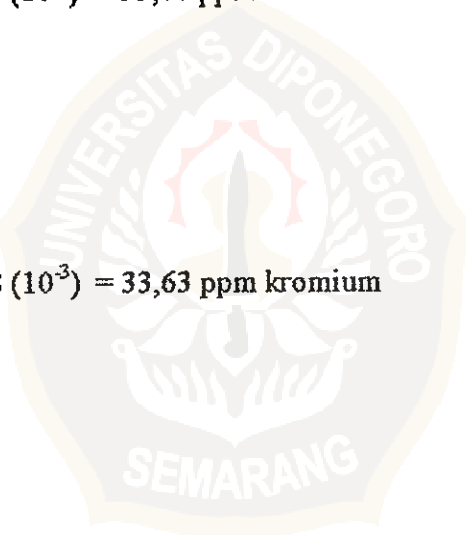
$$x = 0,1470 : 4,68 (10^{-3}) = 31,41 \text{ ppm kromium}$$

e) 8000 ppm Kalsium

$$\text{Absorbansi} = 0,1511$$

$$0,1511 = 4,68 (10^{-3}) x$$

$$x = 0,1511 : 4,68 (10^{-3}) = 32,29 \text{ ppm kromium}$$



LAMPIRAN G

Suhu Nyala dari Beberapa Campuran Gas

Campuran gas	Kecepatan aliran (liter/menit)		S u h u ($^{\circ}$ C)	Sebutan Nyala
	Bahan bakar	Oksidan		
Udara-propana	0,3	8		Lean
	0,3 – 0,45	8	2200	Stoichimetric
	0,45	8		Rich
Udara-asetilen	1,2	8		Lean
	1,2- 1,5	8	2450	Stoichimetric
	1,5 – 1,7	8		Luminous
	1,7 – 2,2	8	2300	Rich
N ₂ O – asetilen	3,5	10		Lean
	3,5 – 4,5	10	3200	Stoichimetric
	4,5	10		Rich
Udara – hidrogen	6	8	2300	Stoichimetric
N ₂ O – hidrogen	10	10	2900	Stoichimetric
N ₂ O – propana	4	10	2900	Stoichimetric

