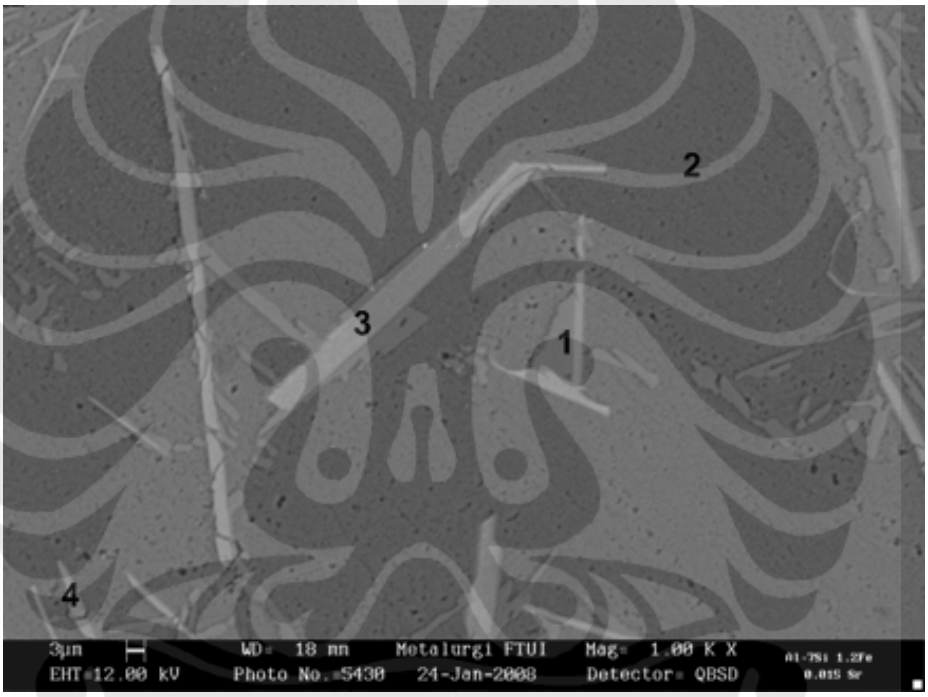
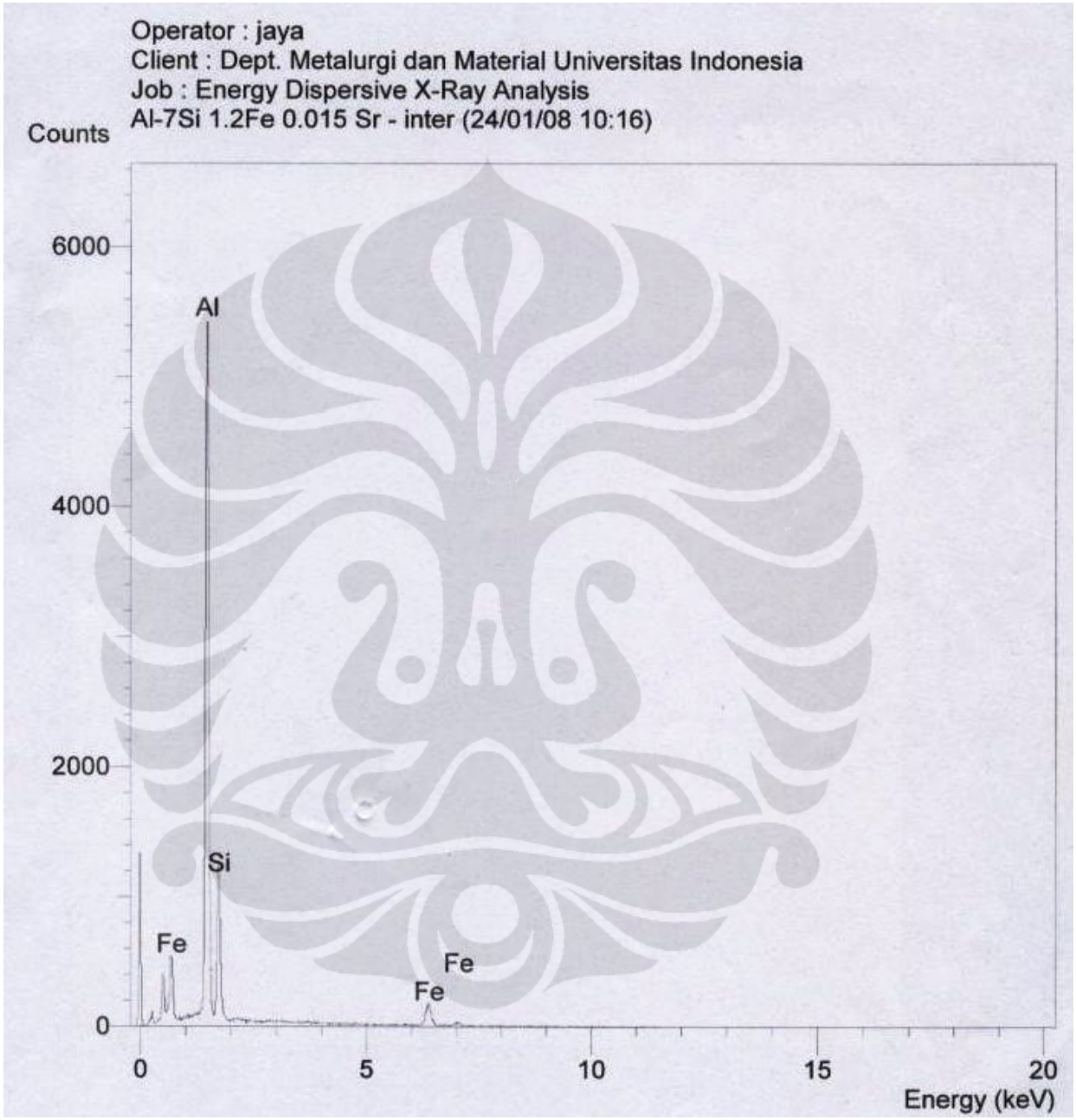
LAMPIRAN

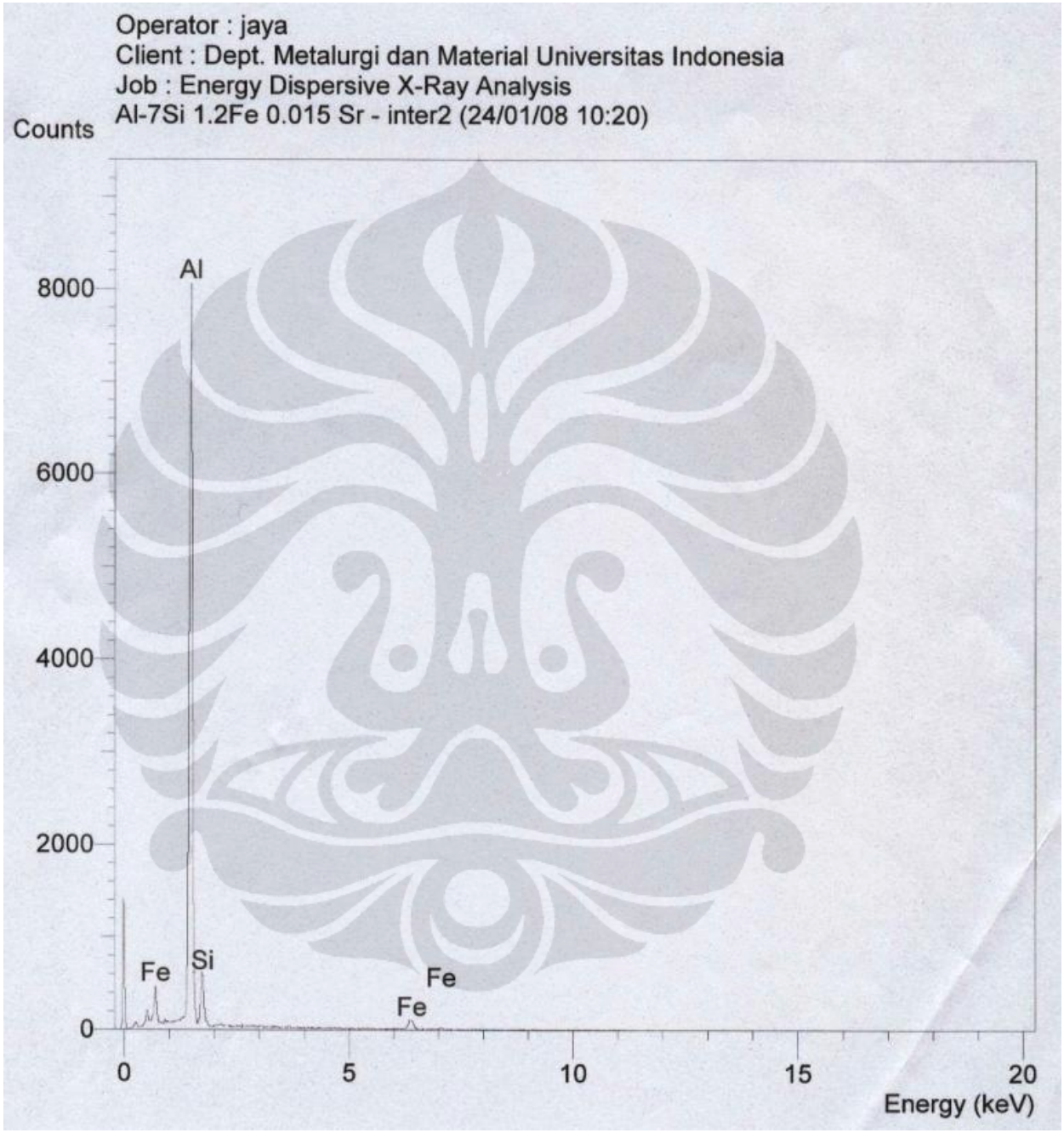
Lampiran 1 Hasil SEM dan EDS

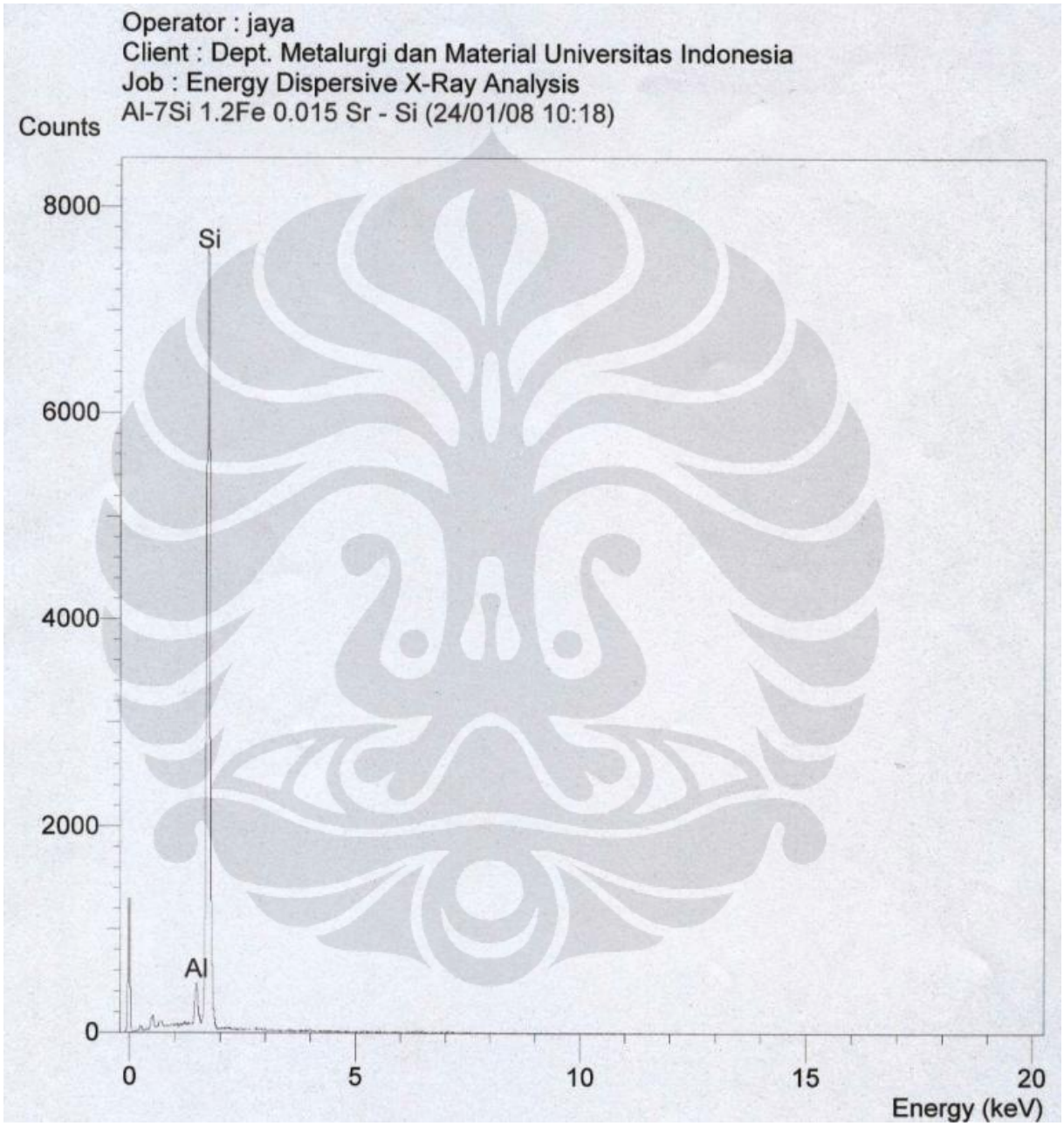
- Al-7%Si + 1.2 wt% Fe + 0.015 wt% Sr (Perbesaran 1000X etsa 0.5% HF temperatur 720 ^{o}C)

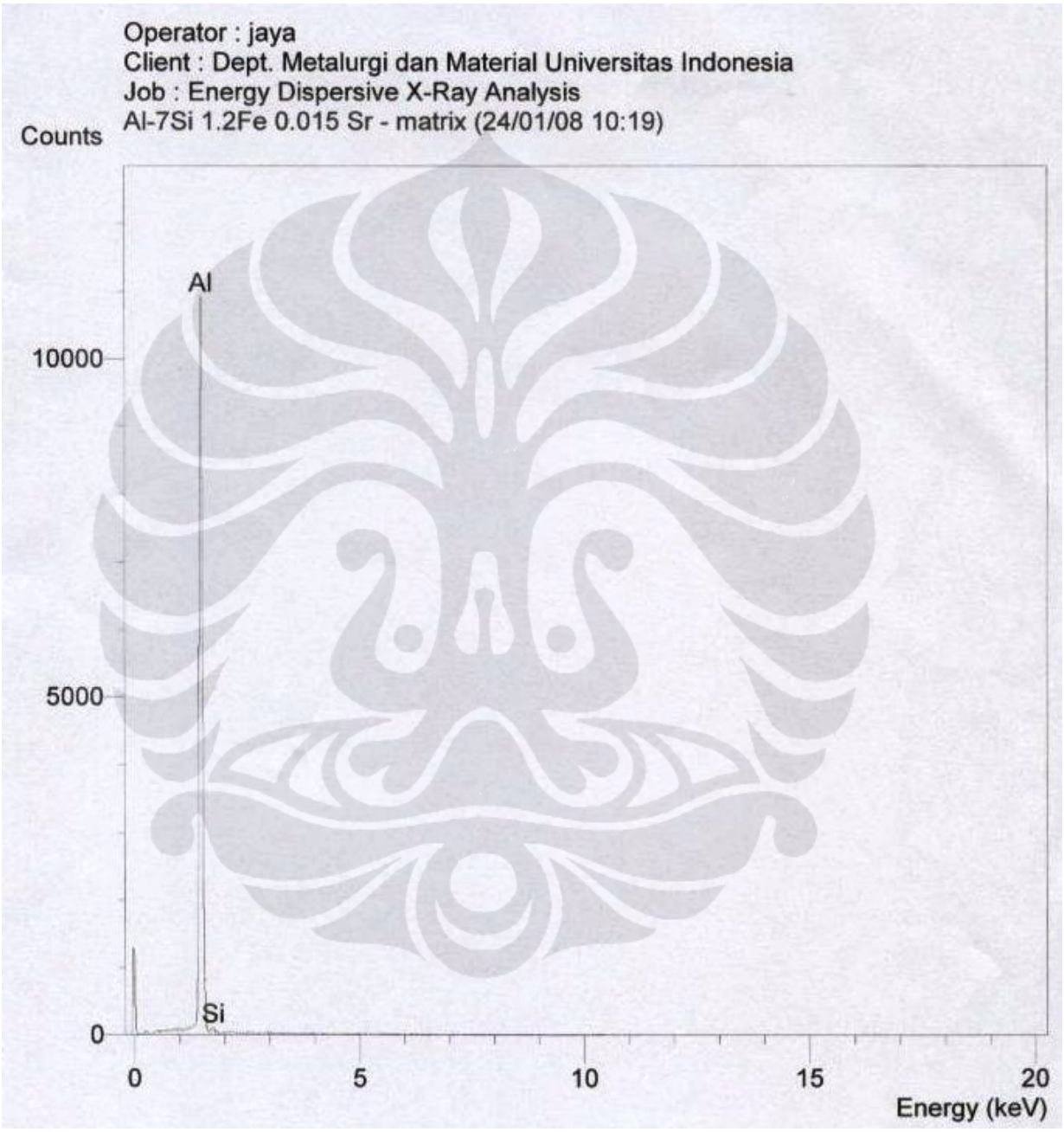


No	Komposisi (wt%)			Warna	Indikasi Fasa yang Terbentuk
	Al	**Si**	**Fe**		
1	6.21	93.79	-	Abu-abu muda	Si eutektik
2	98.73	1.27	-	Abu-abu	Matrik Al
3	60.02	11.93	28.05	Putih	AlFeSi
4	76.22	6.68	17.10	Putih	AlFeSi

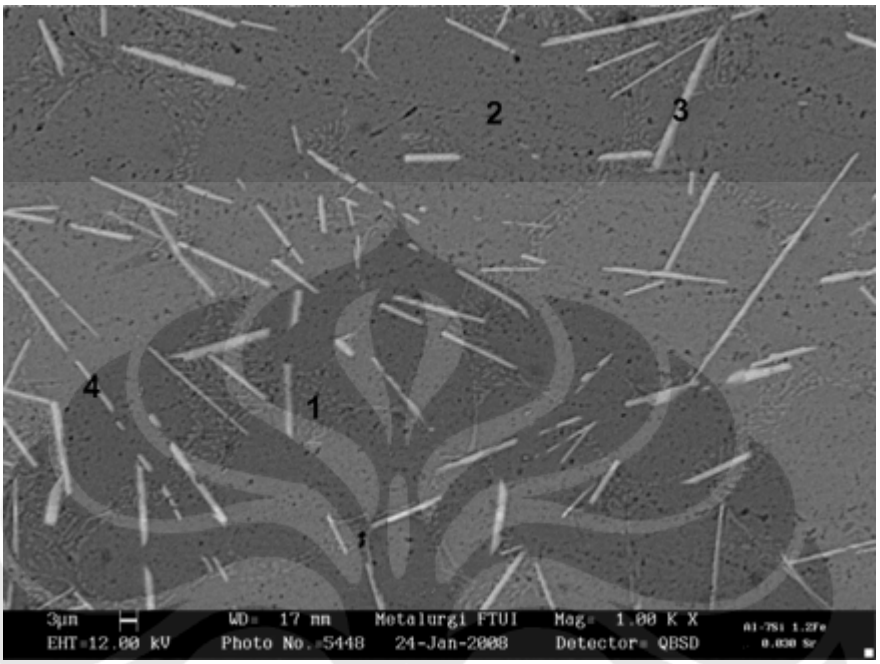




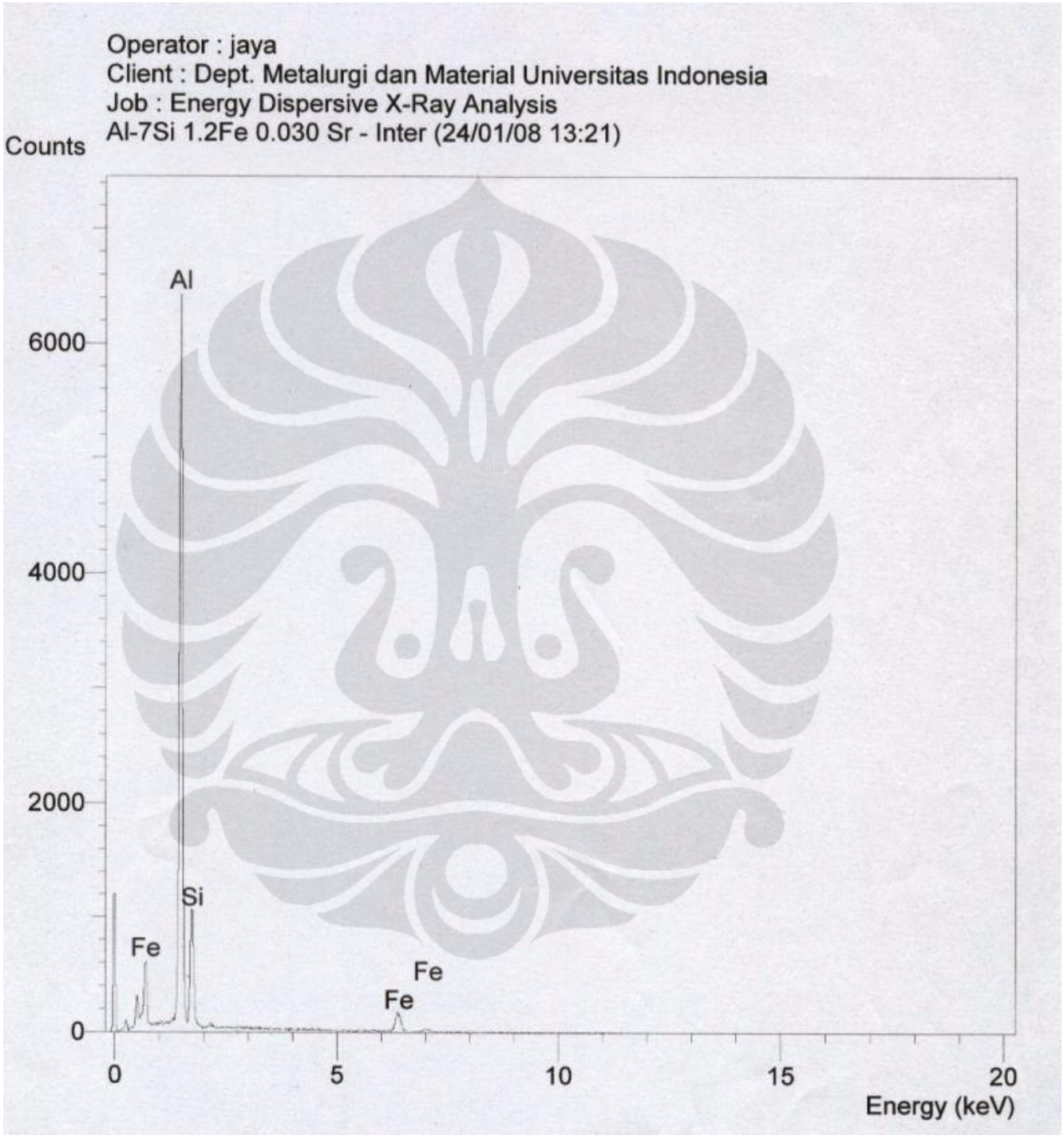


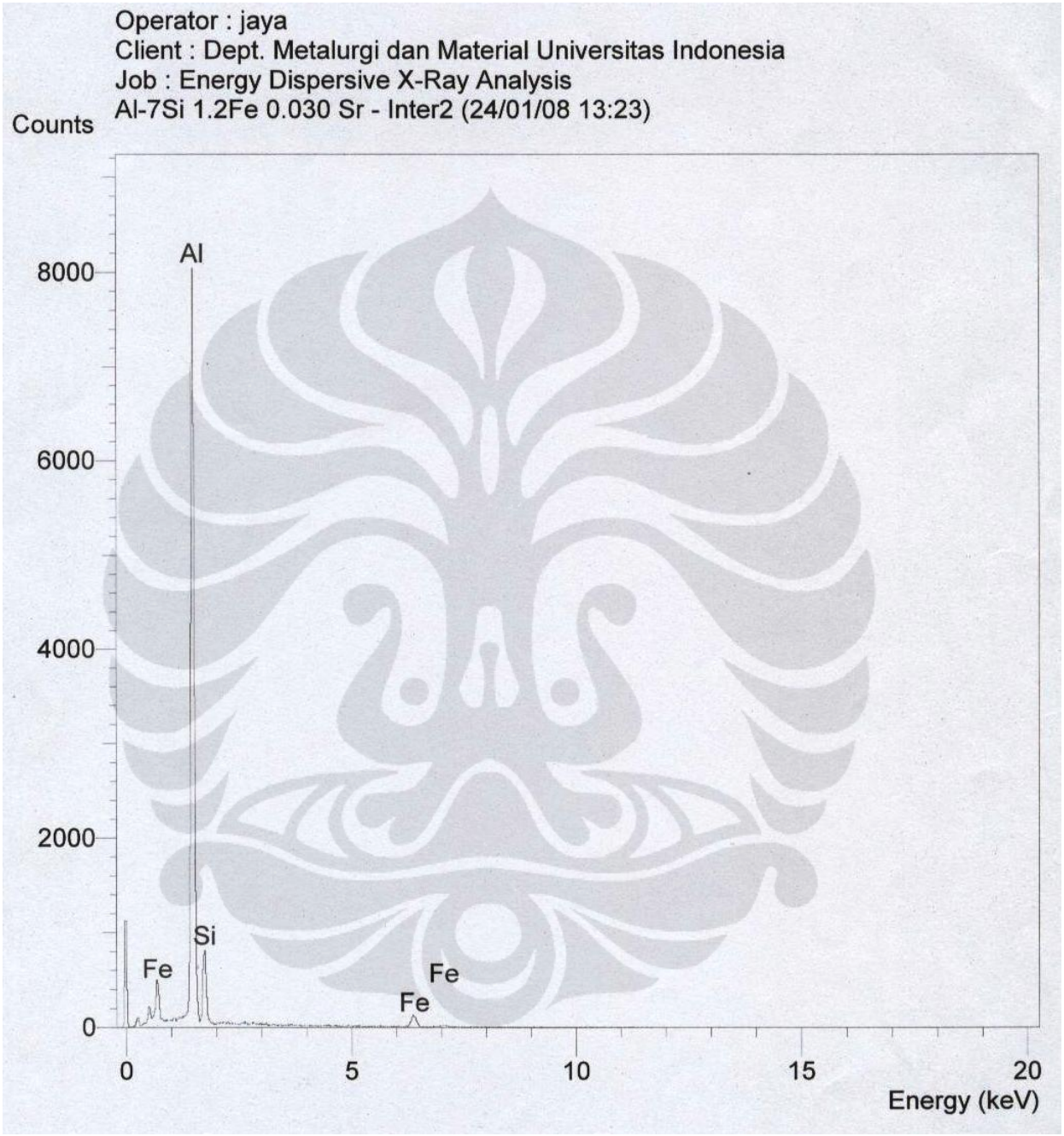


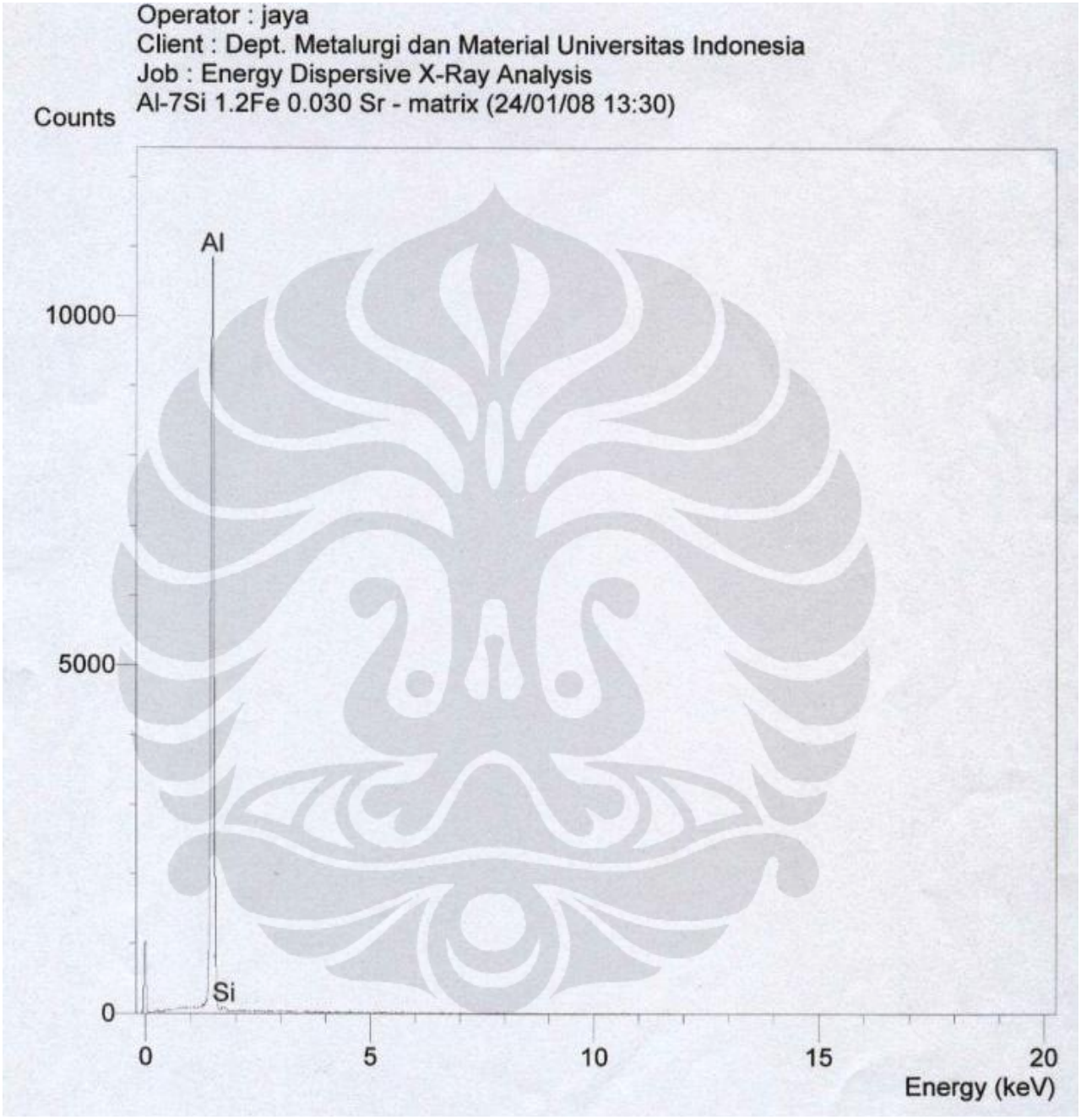
- Al-7%Si + 1.2 wt% Fe + 0.03 wt% Sr (Perbesaran 1000X etsa 0.5% HF temperatur 720 ^{o}C)

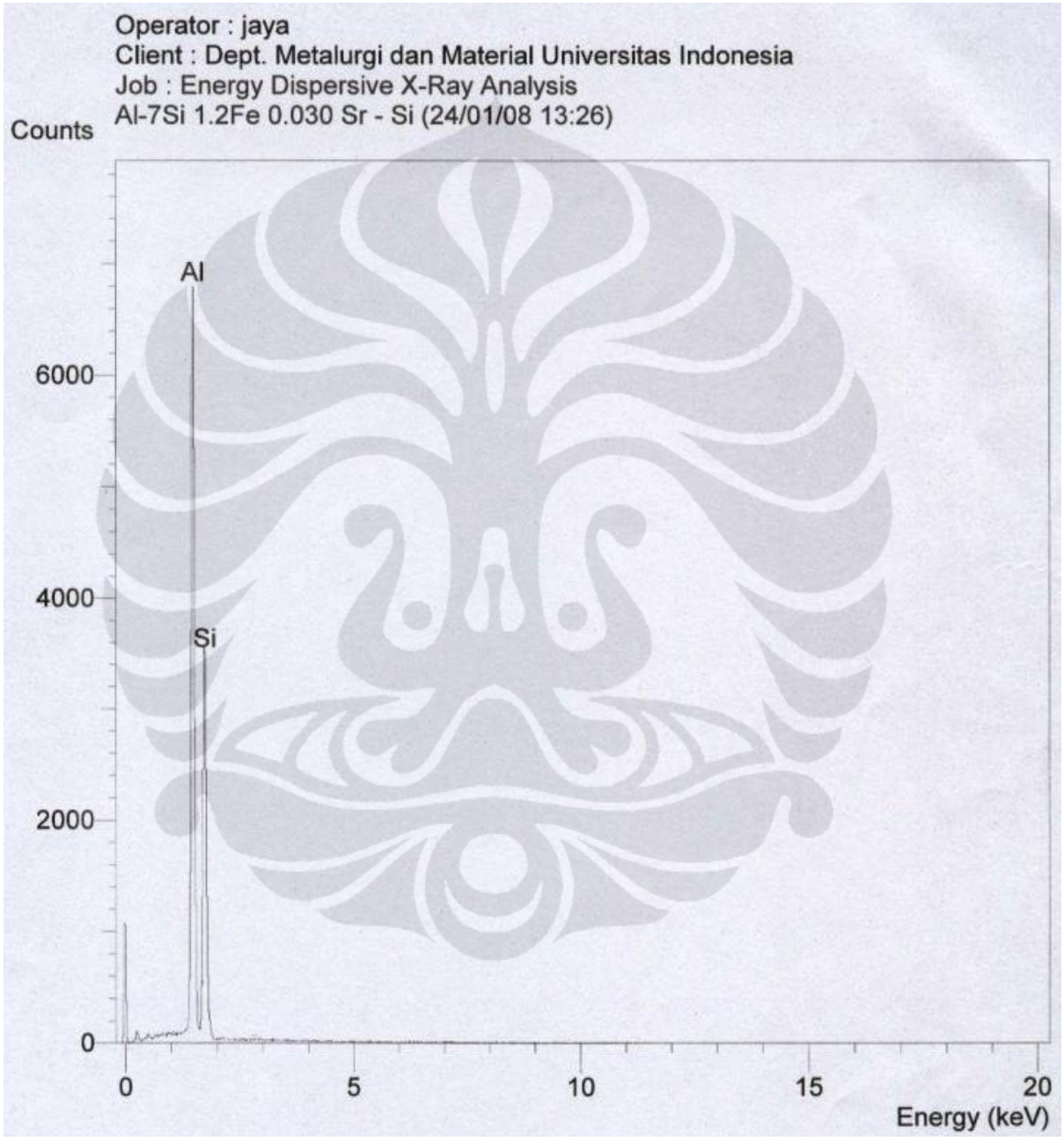


No	Komposisi (wt%)			Warna	Indikasi Fasa yang Terbentuk
	Al	**Si**	**Fe**		
1	63.46	36.54		Abu-abu muda	Si eutektik
2	98.91	1.09	-	Abu-abu	Matrik Al
3	63.91	10.01	26.08	Putih	AlFeSi
4	73.53	7.57	18.90	Putih	AlFeSi

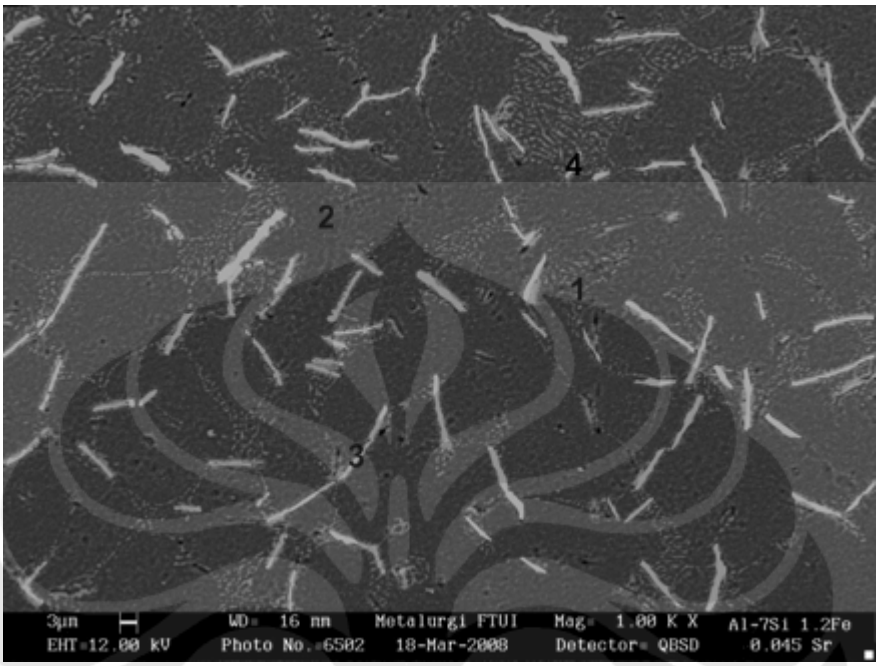




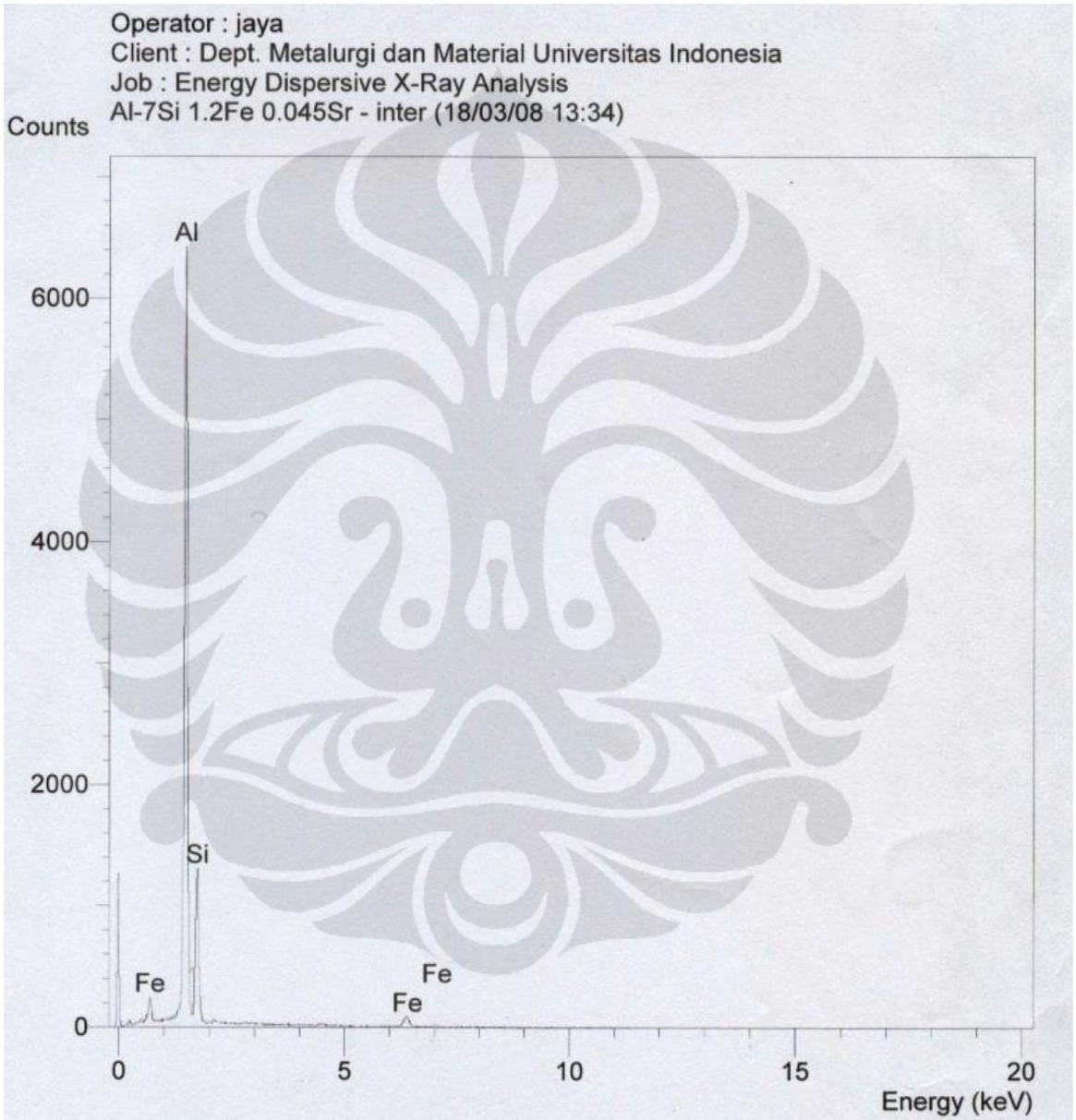


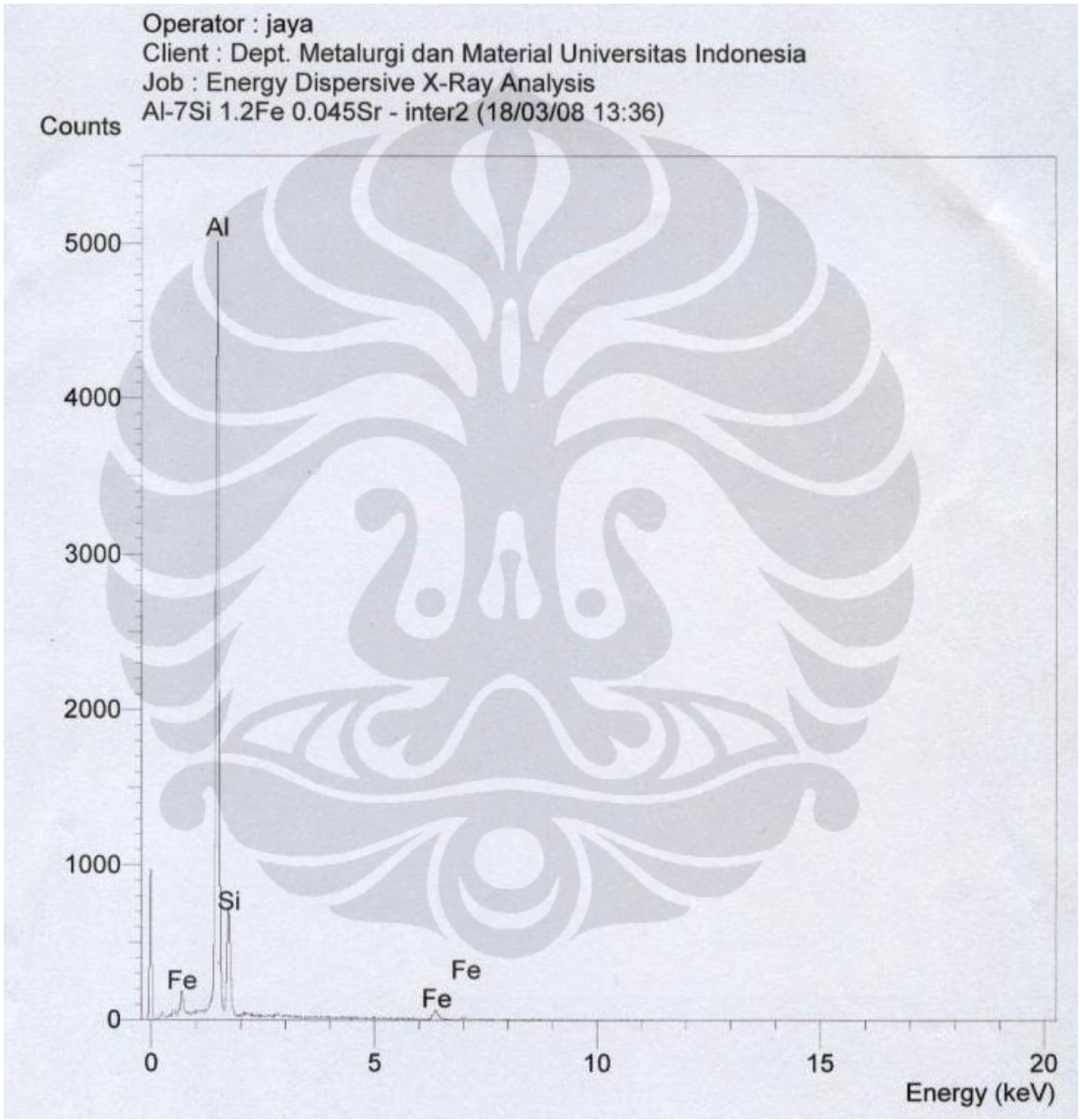


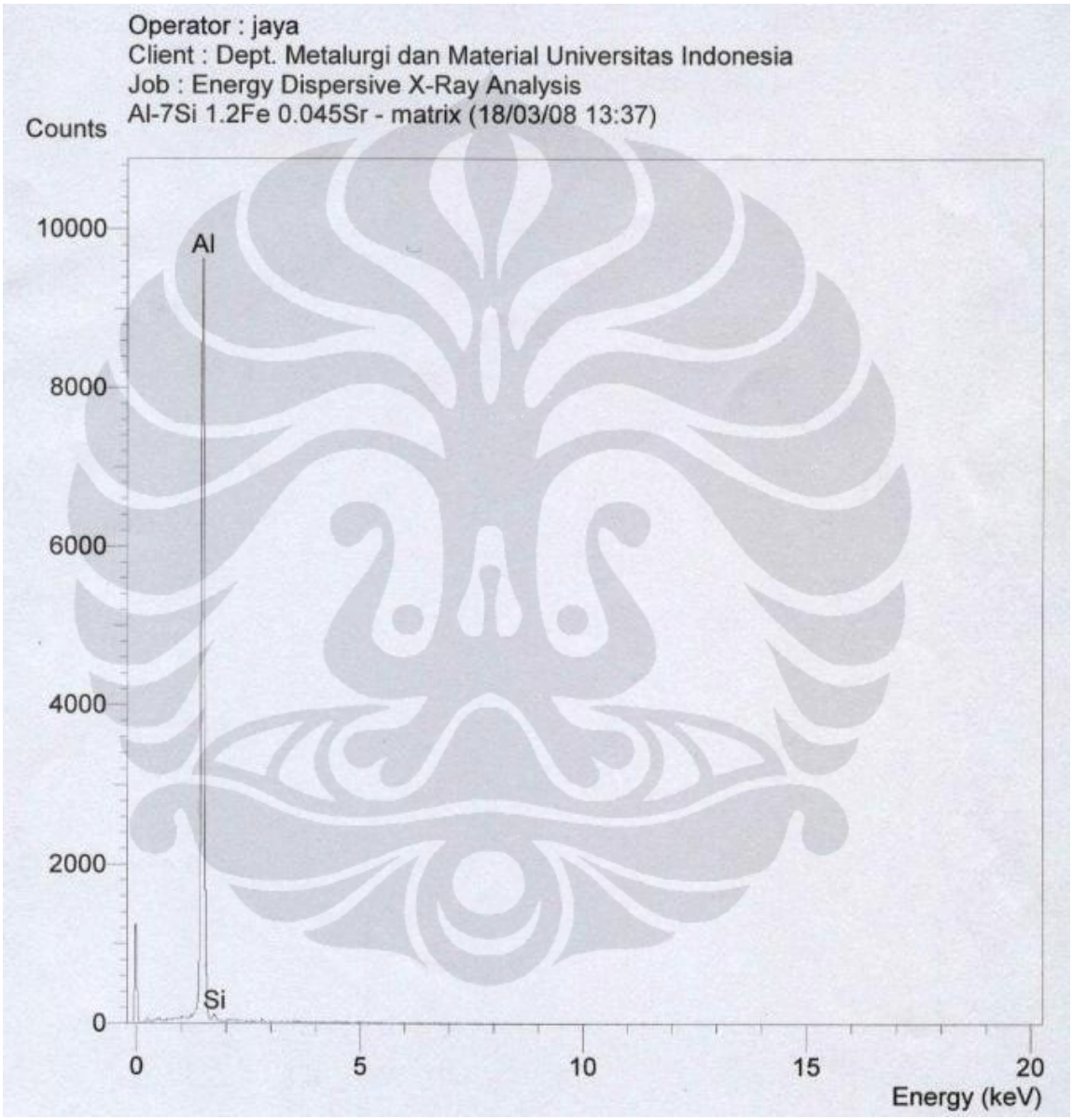
- Al-7%Si + 1.2 wt% Fe + 0.045 wt% Sr (Perbesaran 1000X etsa 0.5% HF temperatur 720 ^{o}C)

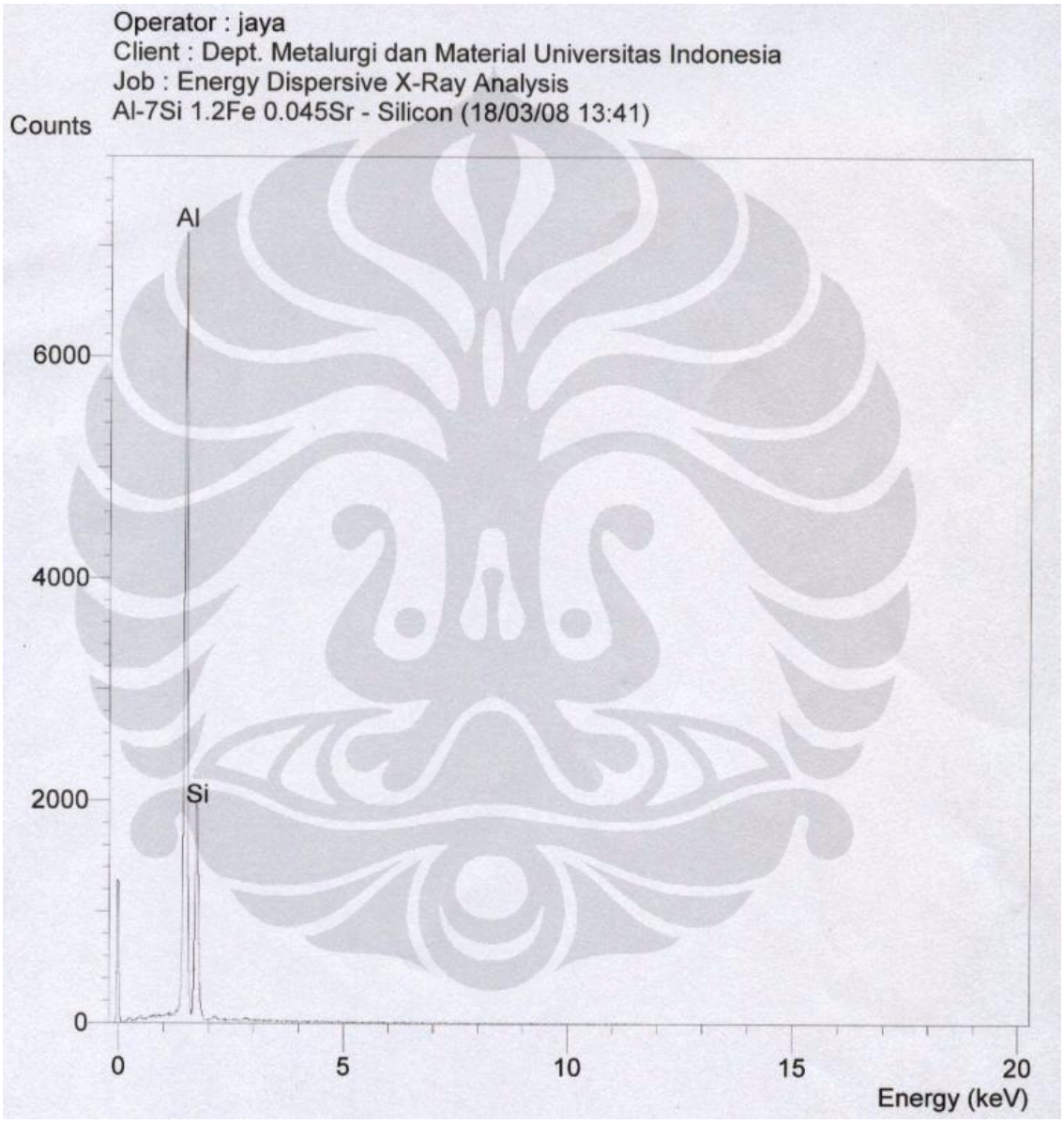


No	Komposisi (wt%)			Warna	Indikasi Fasa yang Terbentuk
	Al	**Si**	**Fe**		
1	75.39	24.61		Abu-abu muda	Si eutektik
2	98.61	1.39		Abu-abu	Matrik Al
3	69.58	14.96	15.45	Putih	AlFeSi
4	73.86	11.82	14.32	Putih	AlFeSi

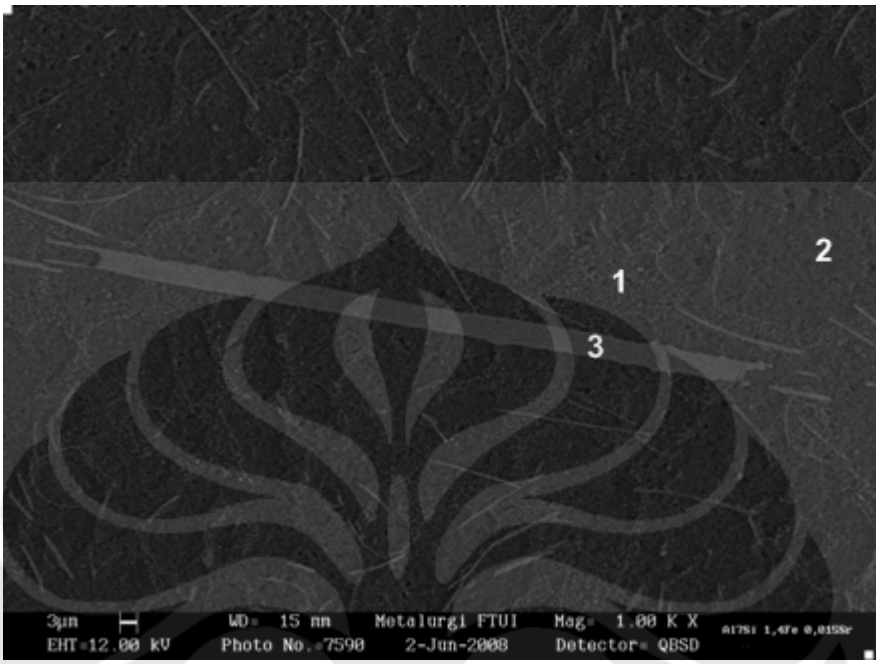




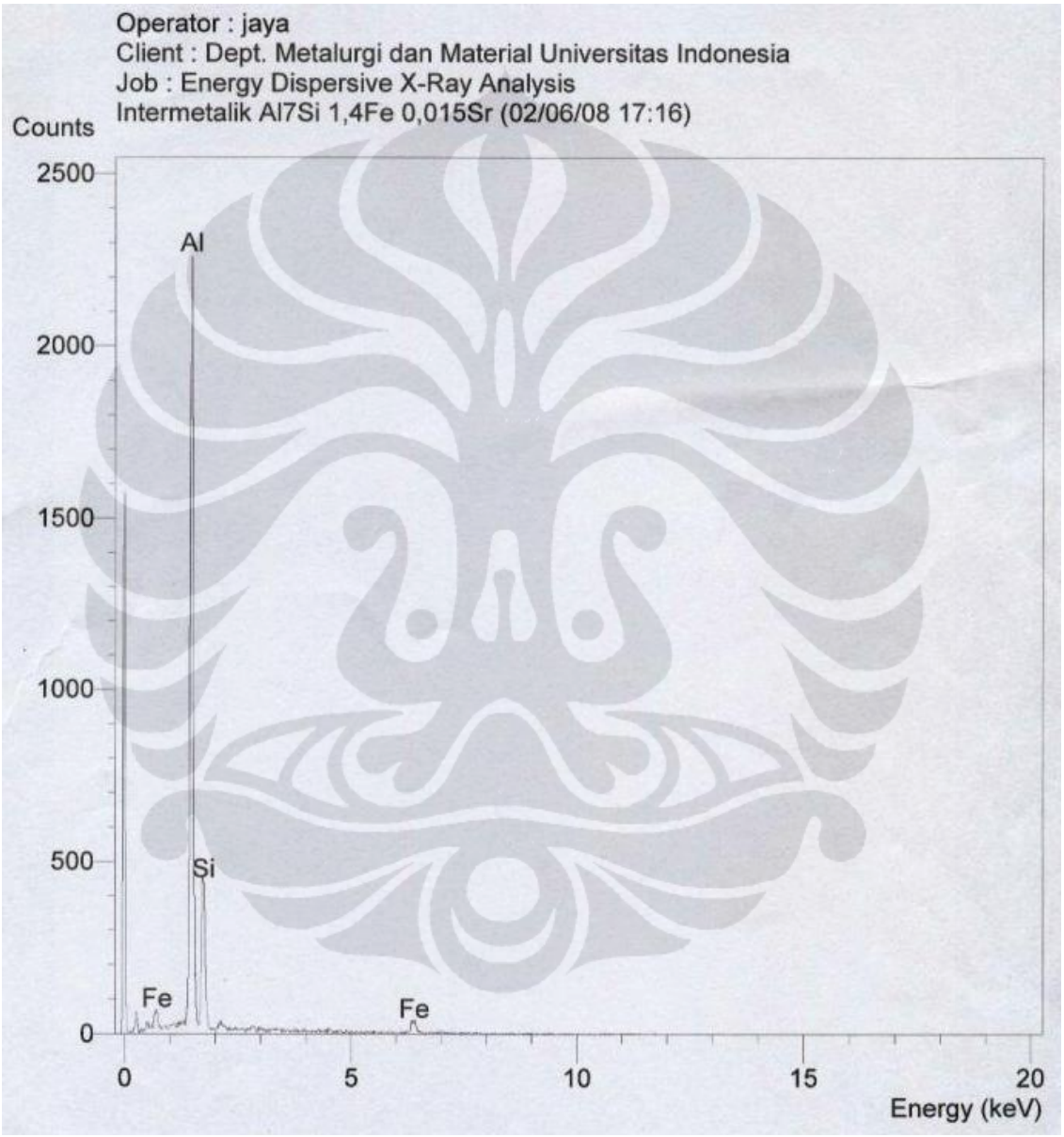


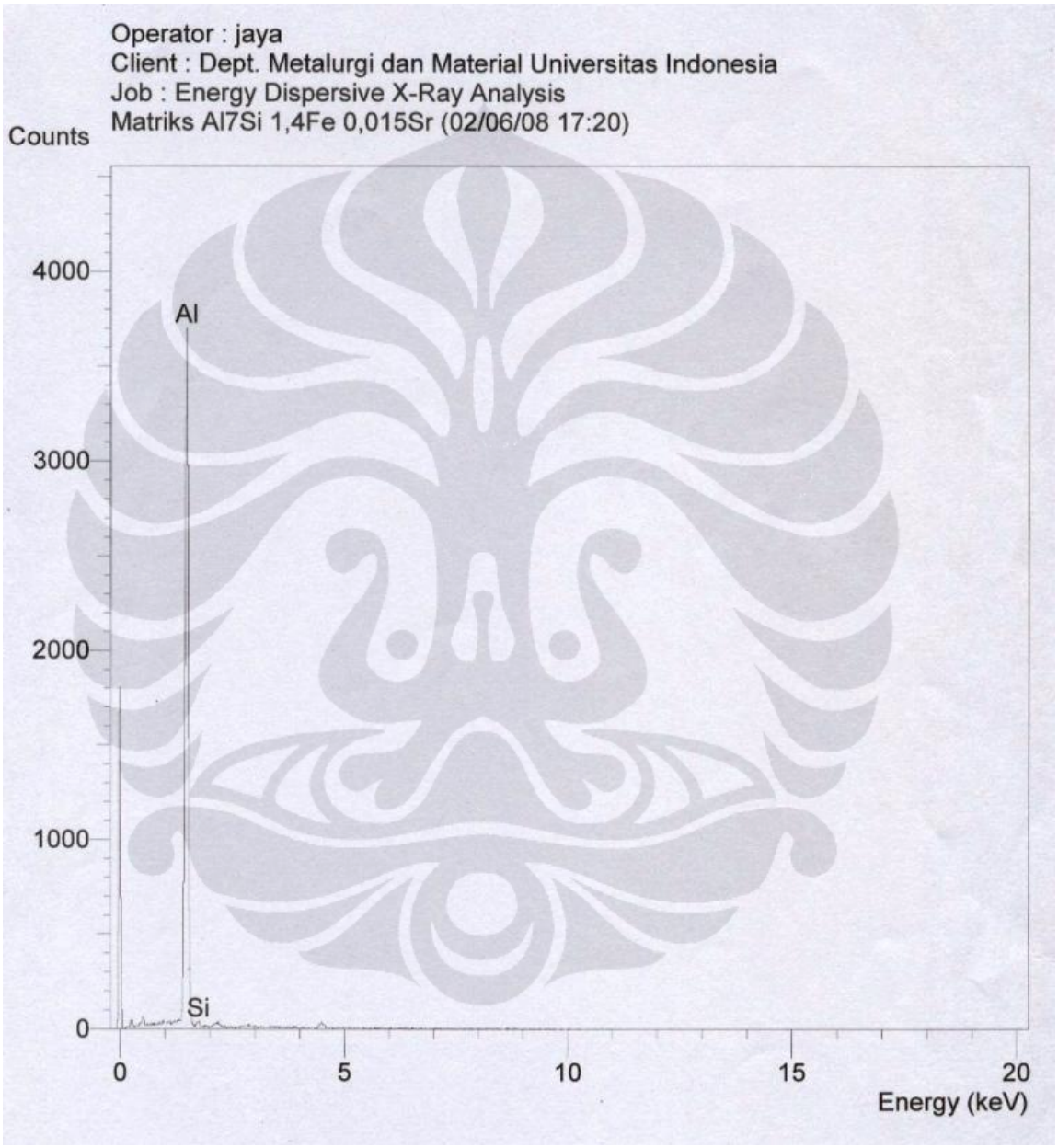


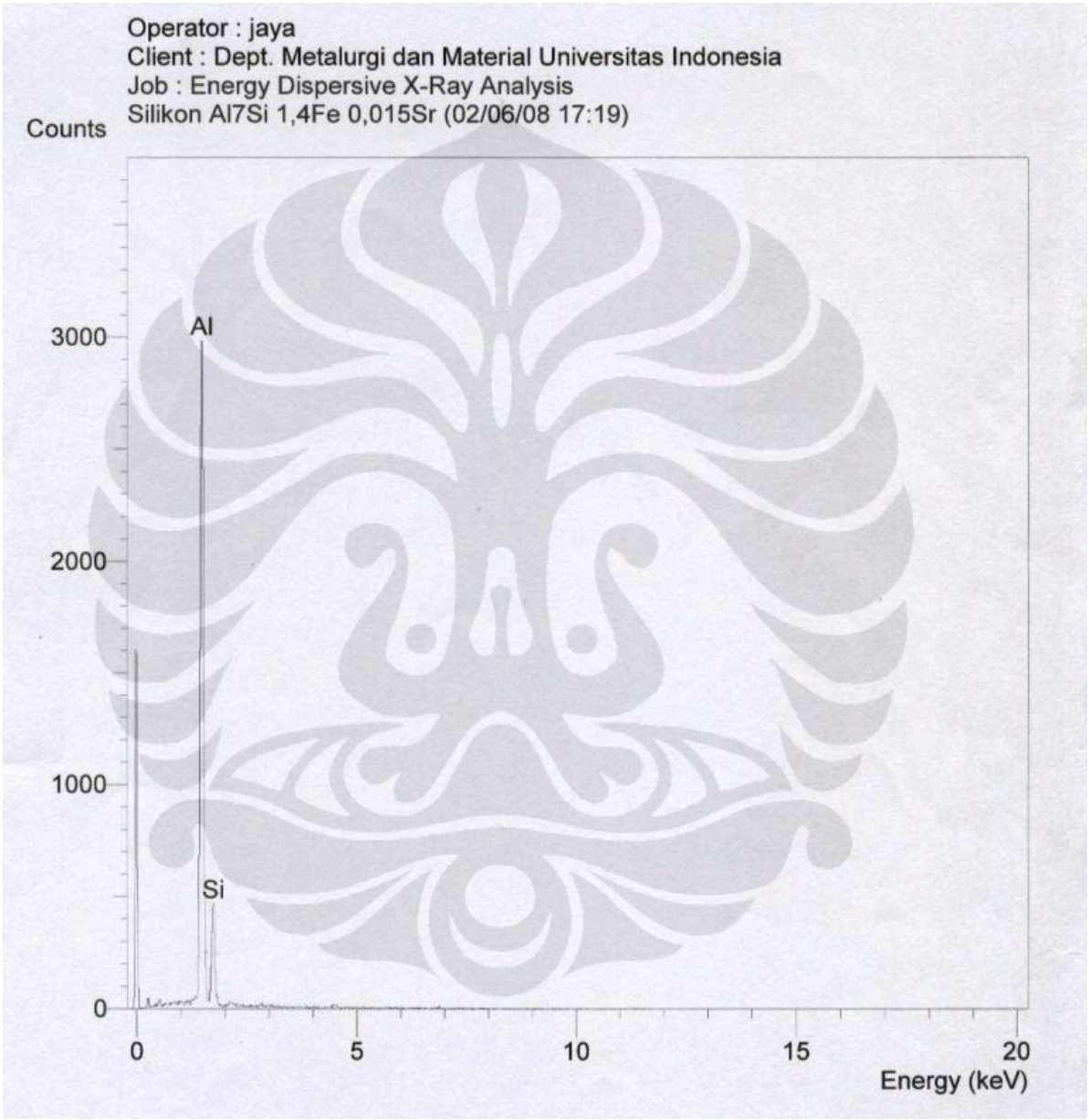
- Al-7%Si + 1.4 wt% Fe + 0.015 wt% Sr (Perbesaran 1000X etsa 0.5% HF temperatur 720 ^{o}C)



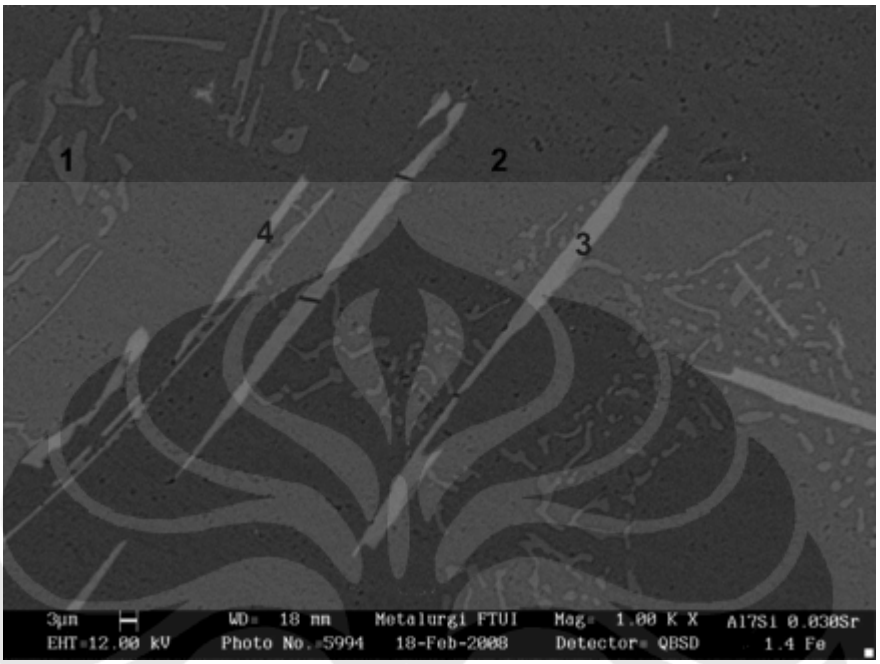
No	Komposisi (wt%)			Warna	Indikasi Fasa yang Terbentuk
	Al	**Si**	**Fe**		
1	83.53	16.47	-	Abu-abu muda	Si eutektik
2	98.83	1.17	-	Abu-abu	Matrik Al
3	67.08	14.64	18.28	Putih	AlFeSi



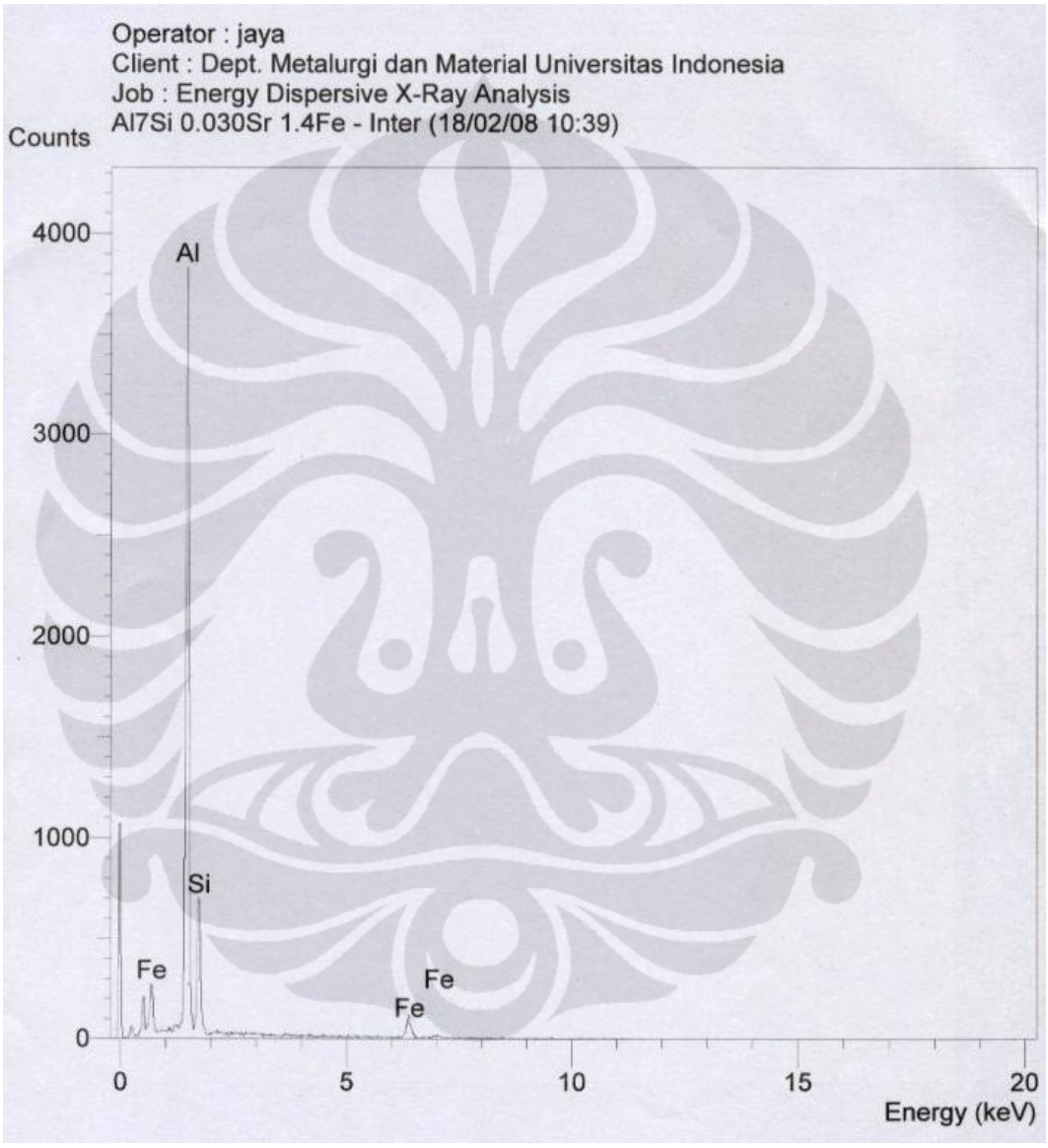


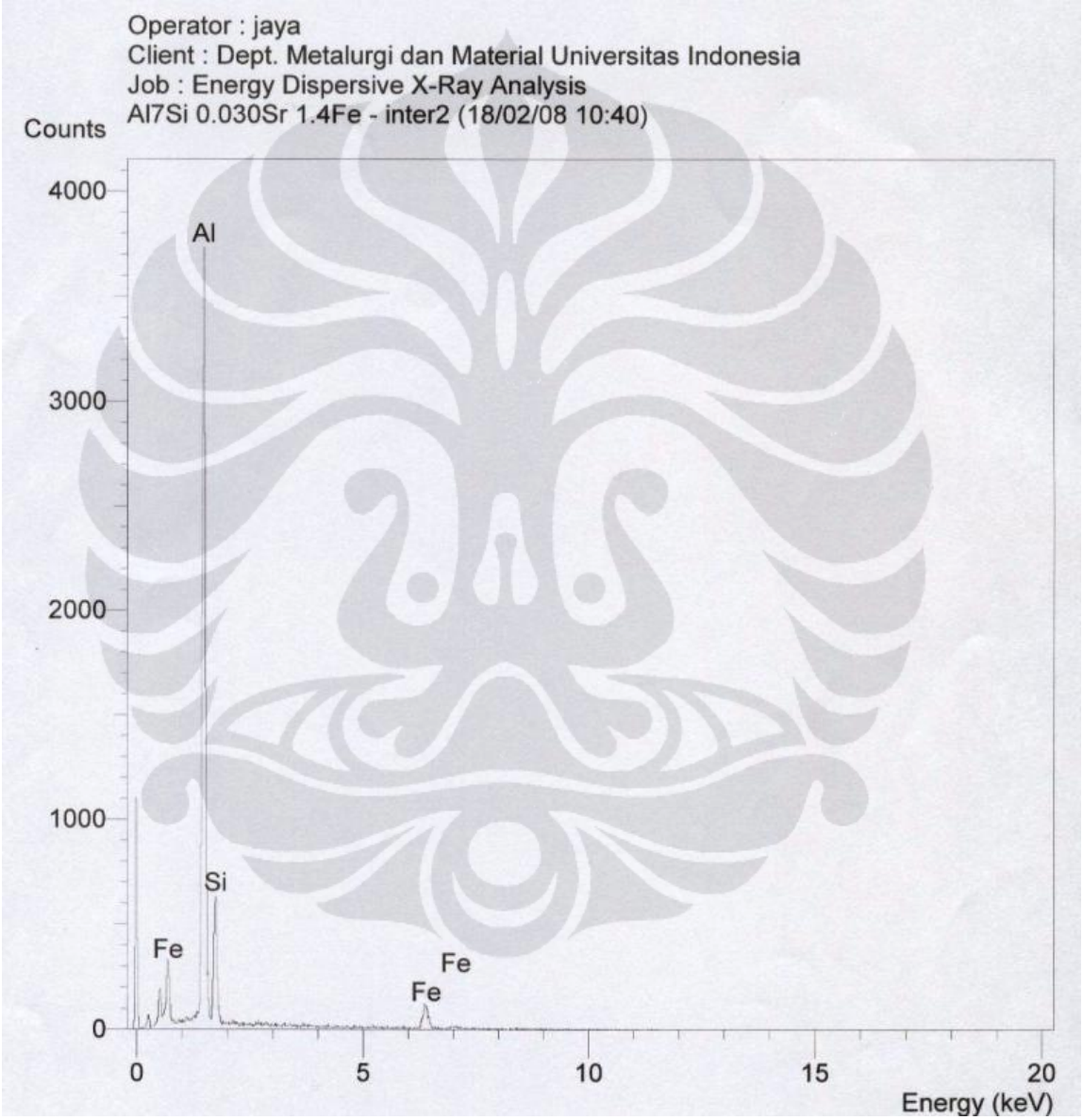


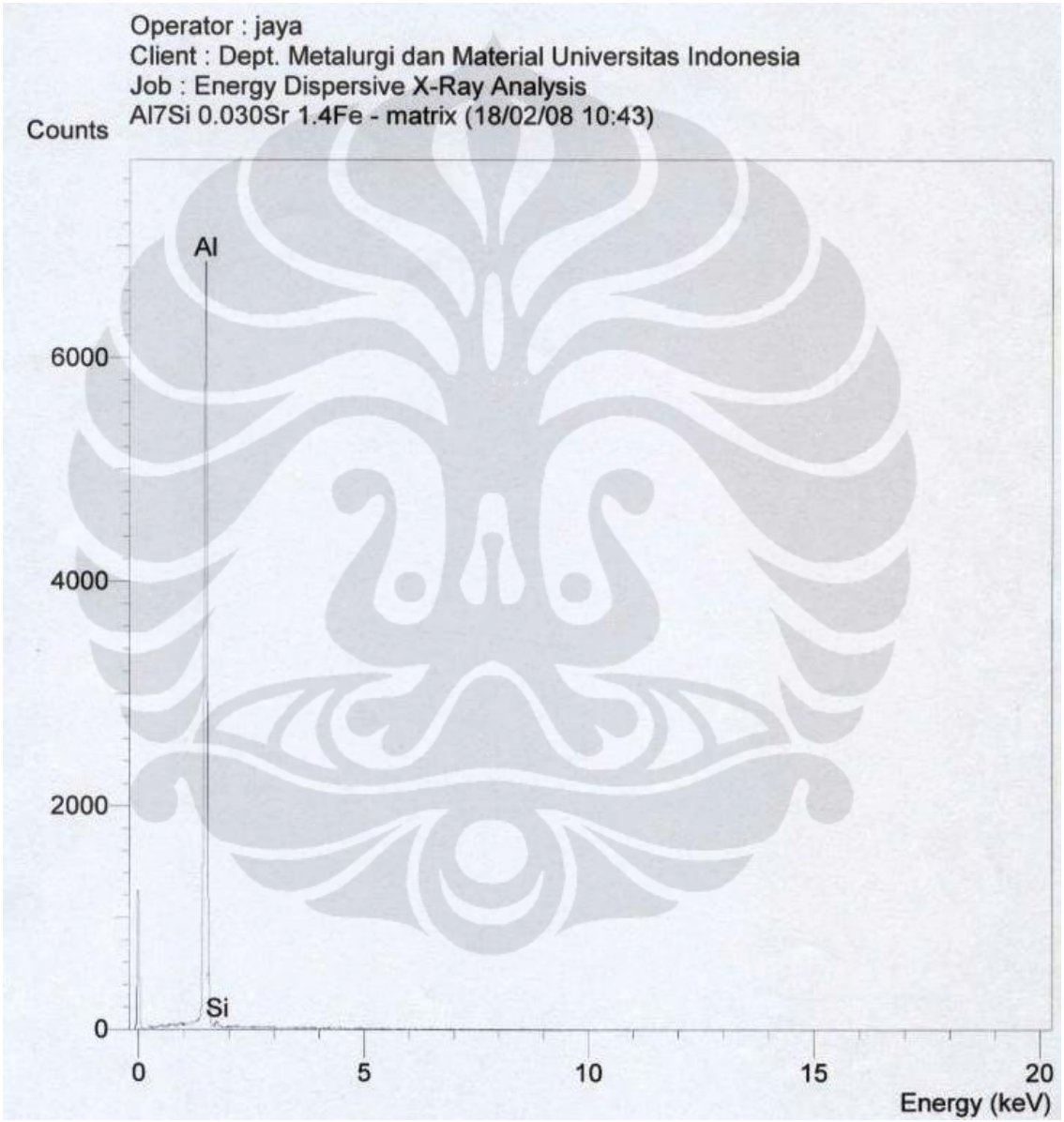
- Al-7%Si + 1.4 wt% Fe + 0.03 wt% Sr (Perbesaran 1000X etsa 0.5% HF temperatur 720 ^{o}C)

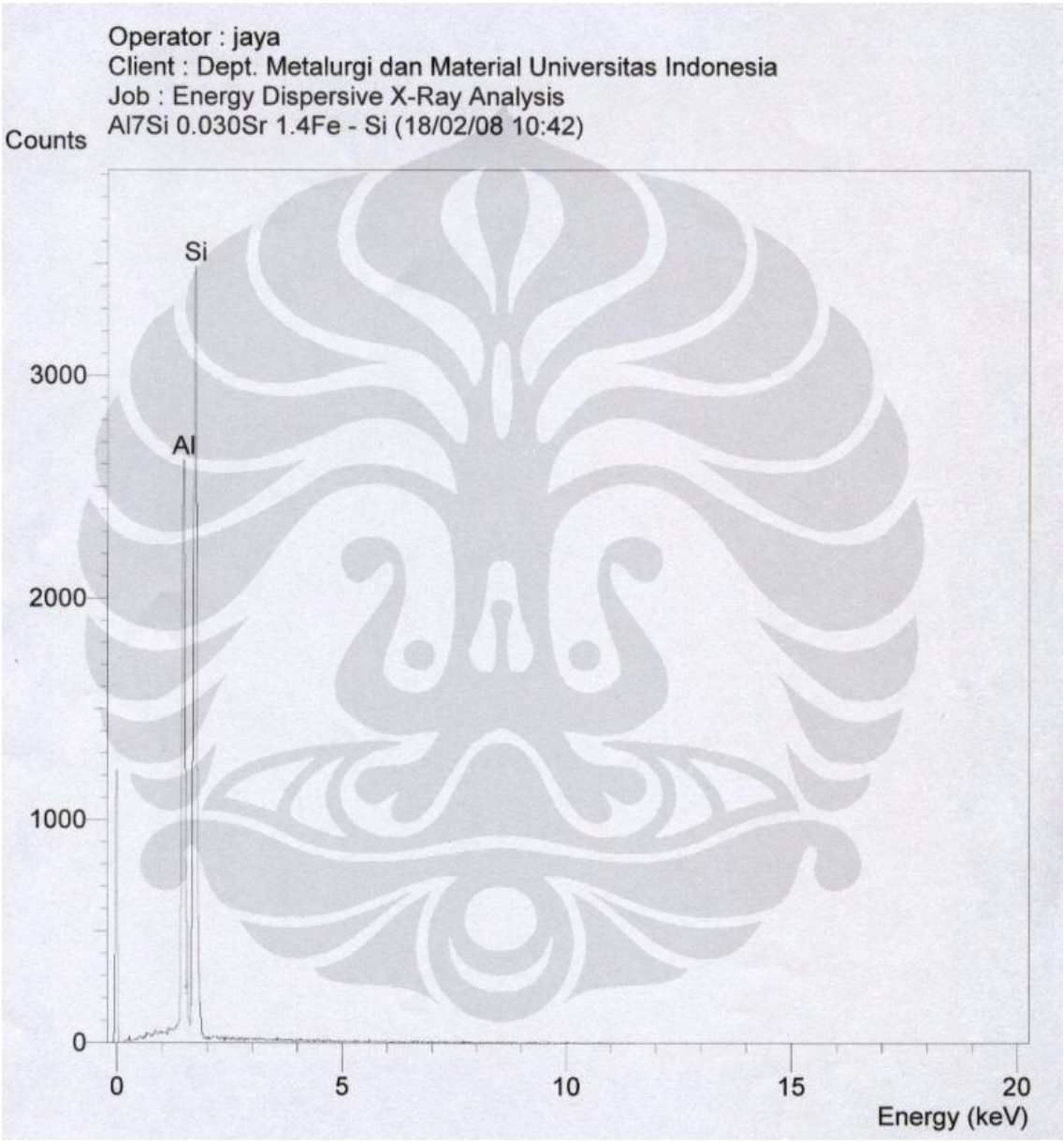


No	Komposisi (wt%)			Warna	Indikasi Fasa yang Terbentuk
	Al	**Si**	**Fe**		
1	44.39	55.61	-	Abu-abu muda	Si eutektik
2	98.93	1.07	-	Abu-abu	Matrik Al
3	63.61	11.43	24.96	Putih	AlFeSi
4	61.60	9.88	28.53	Putih	AlFeSi

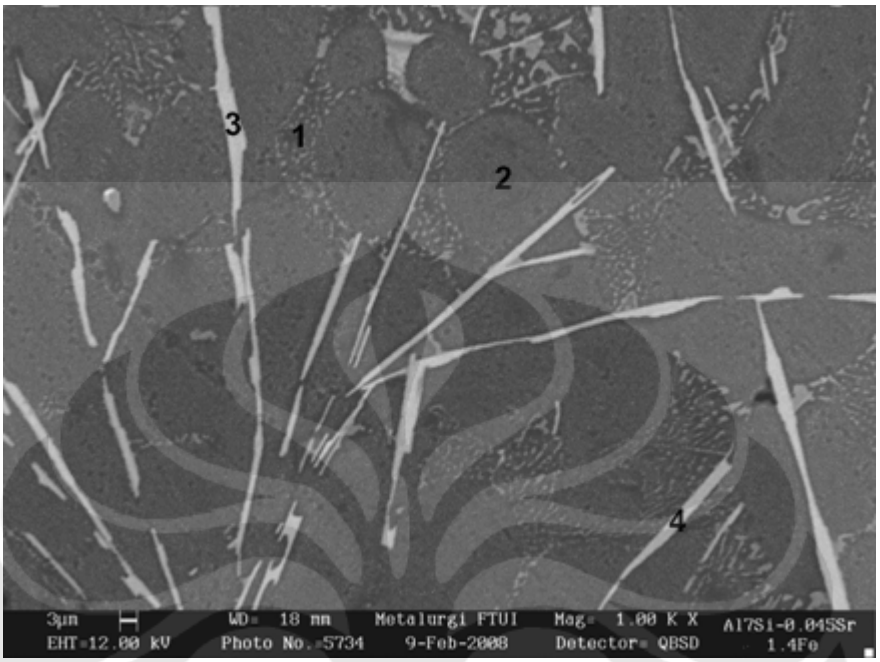




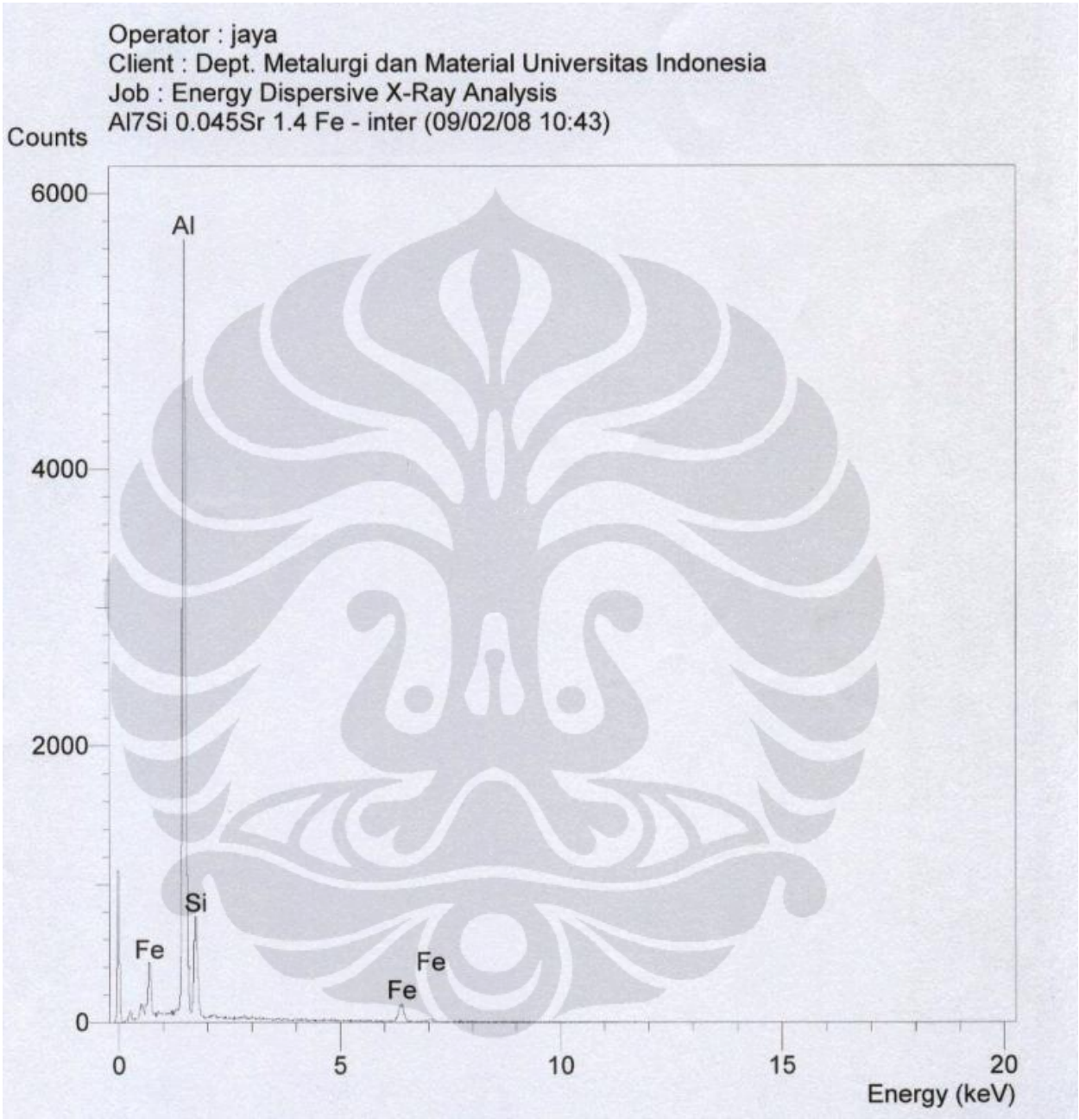


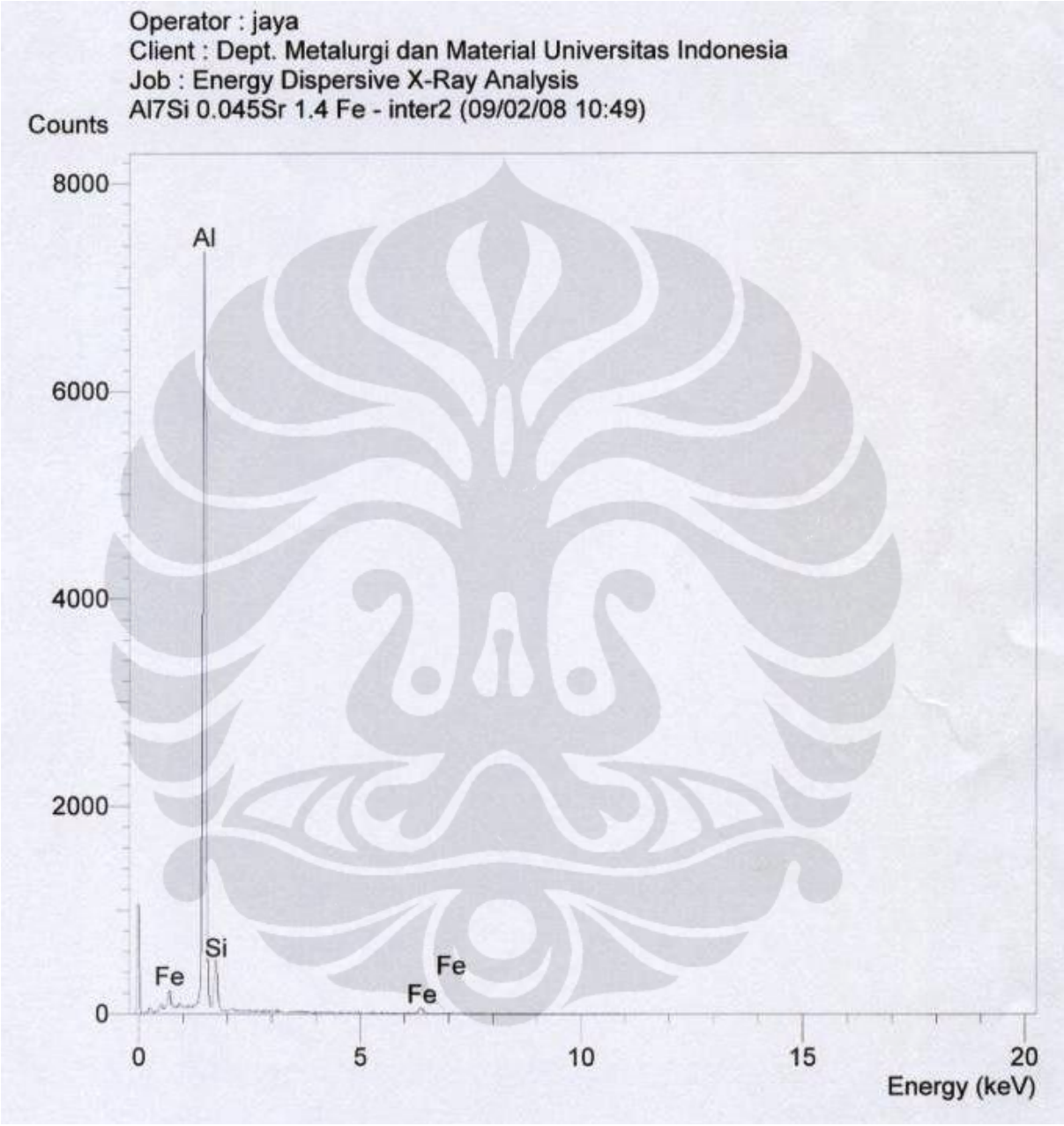


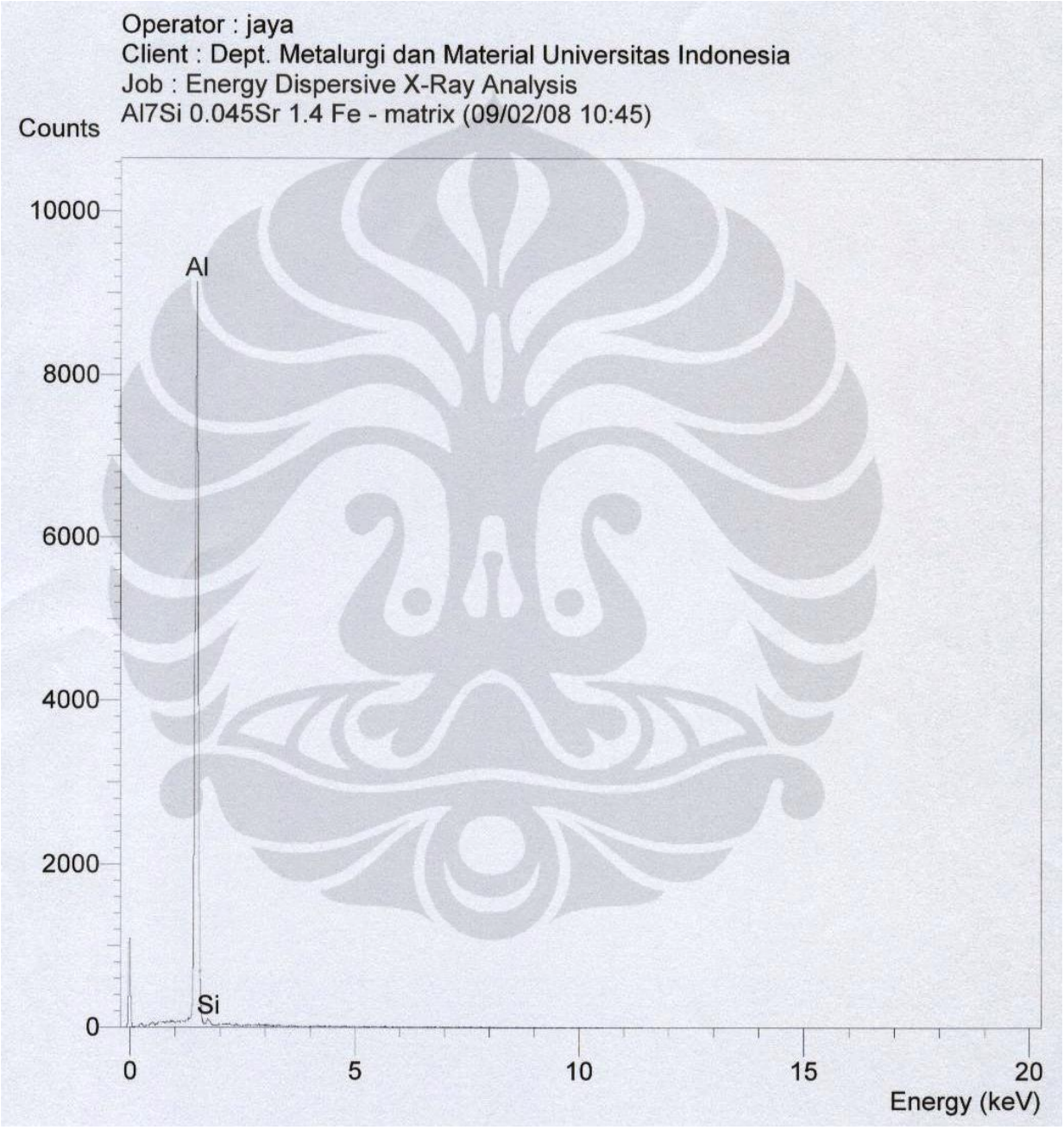
- Al-7%Si + 1.4 wt% Fe + 0.015 wt% Sr (Perbesaran 1000X etsa 0.5% HF temperatur 720 ^{o}C)

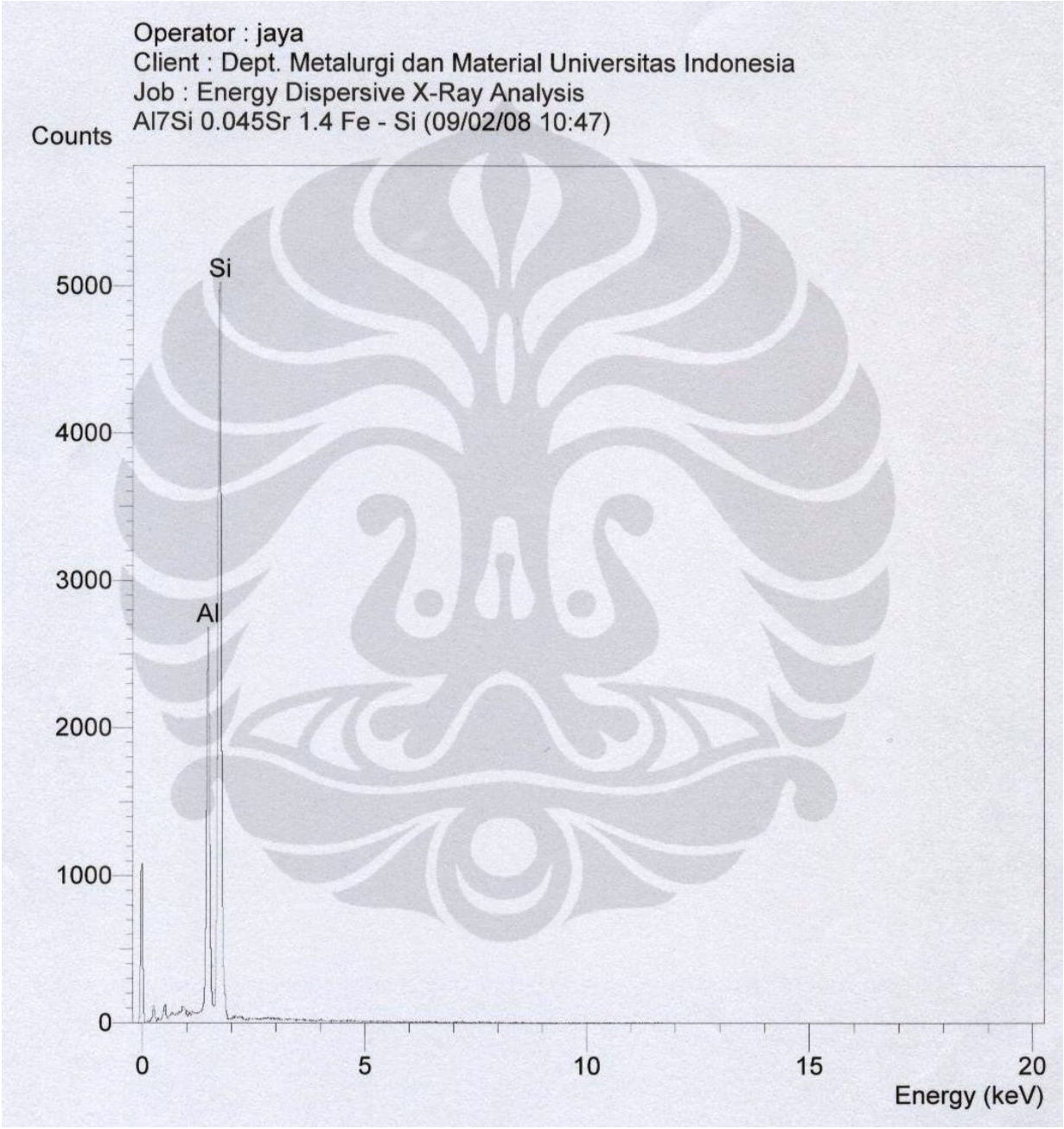


No	Komposisi (wt%)			Warna	Indikasi Fasa yang Terbentuk
	Al	**Si**	**Fe**		
1	36.43	63.57	-	Abu-abu muda	Si eutektik
2	98.70	1.30	-	Abu-abu	Matrik Al
3	66.96	9.13	23.91	Putih	AlFeSi
4	82.09	7.03	10.87	Putih	AlFeSi

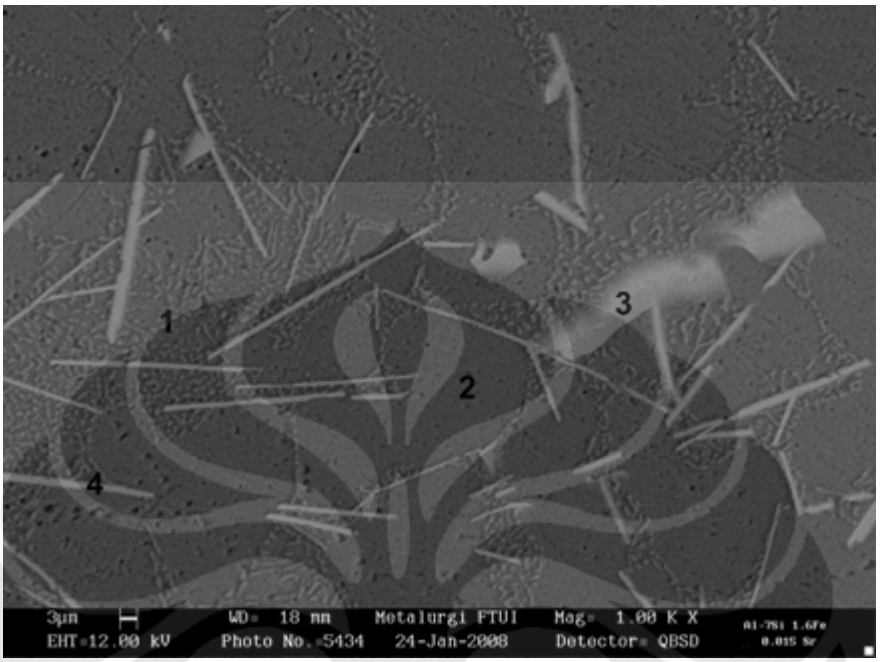




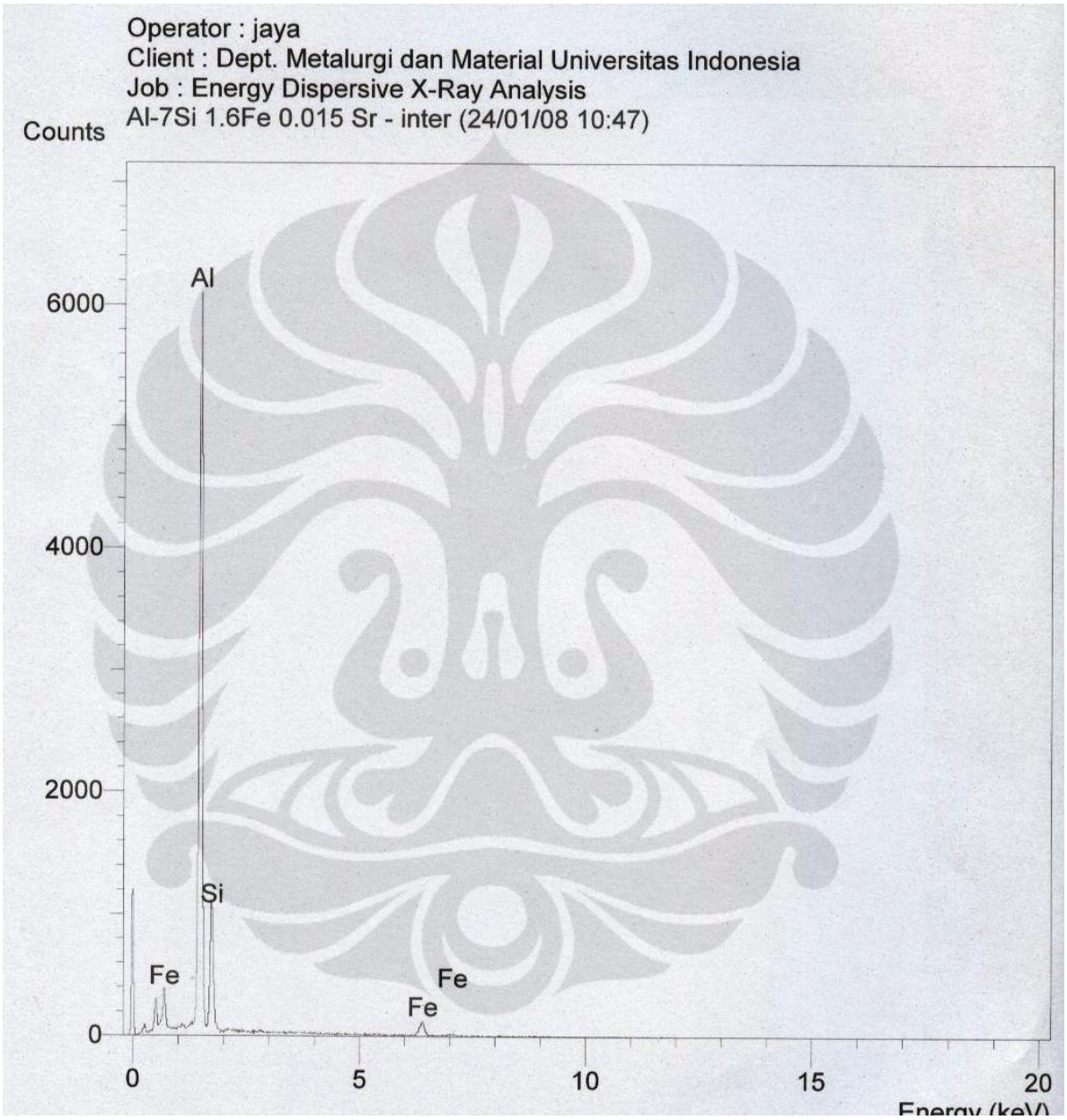


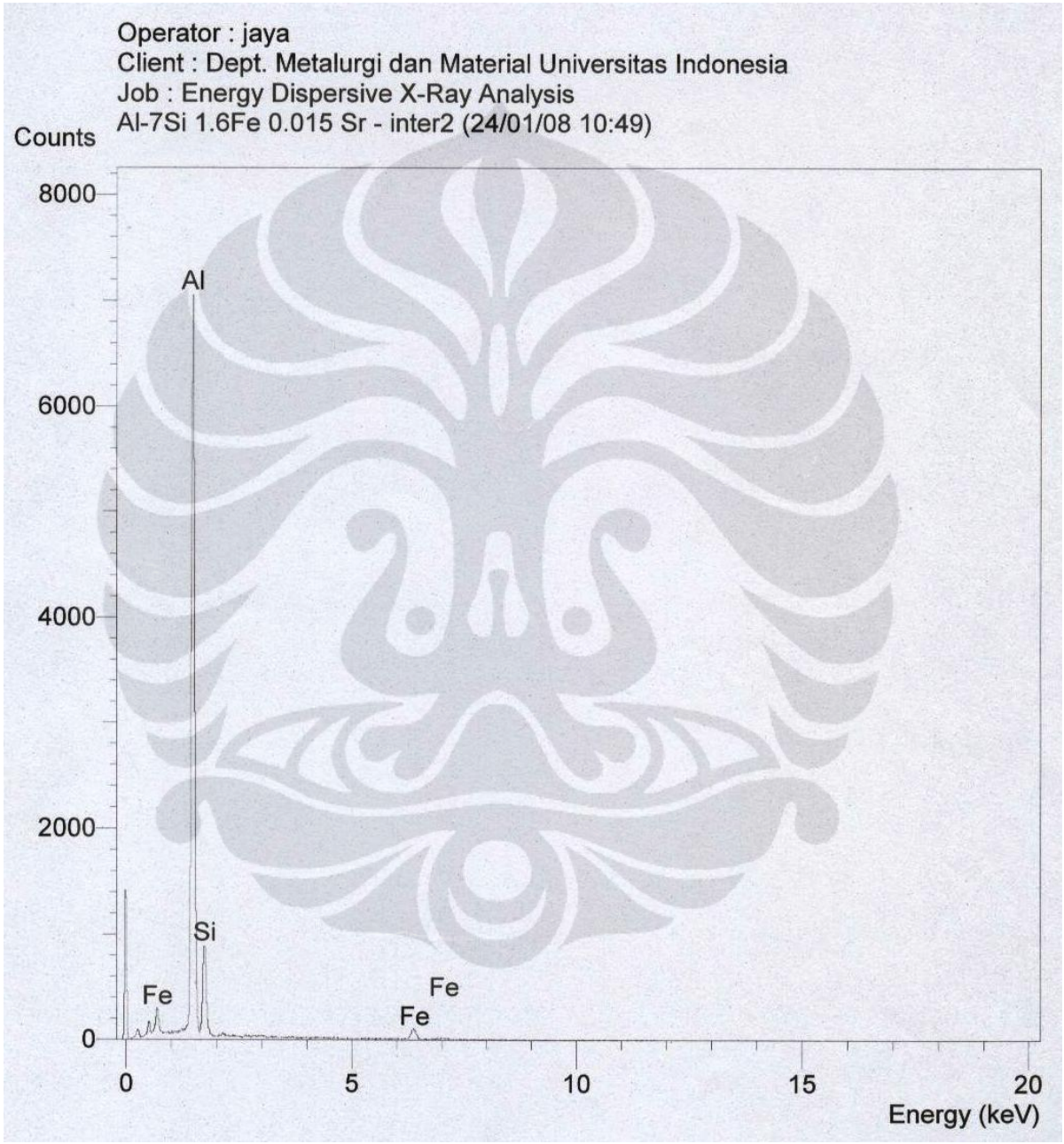


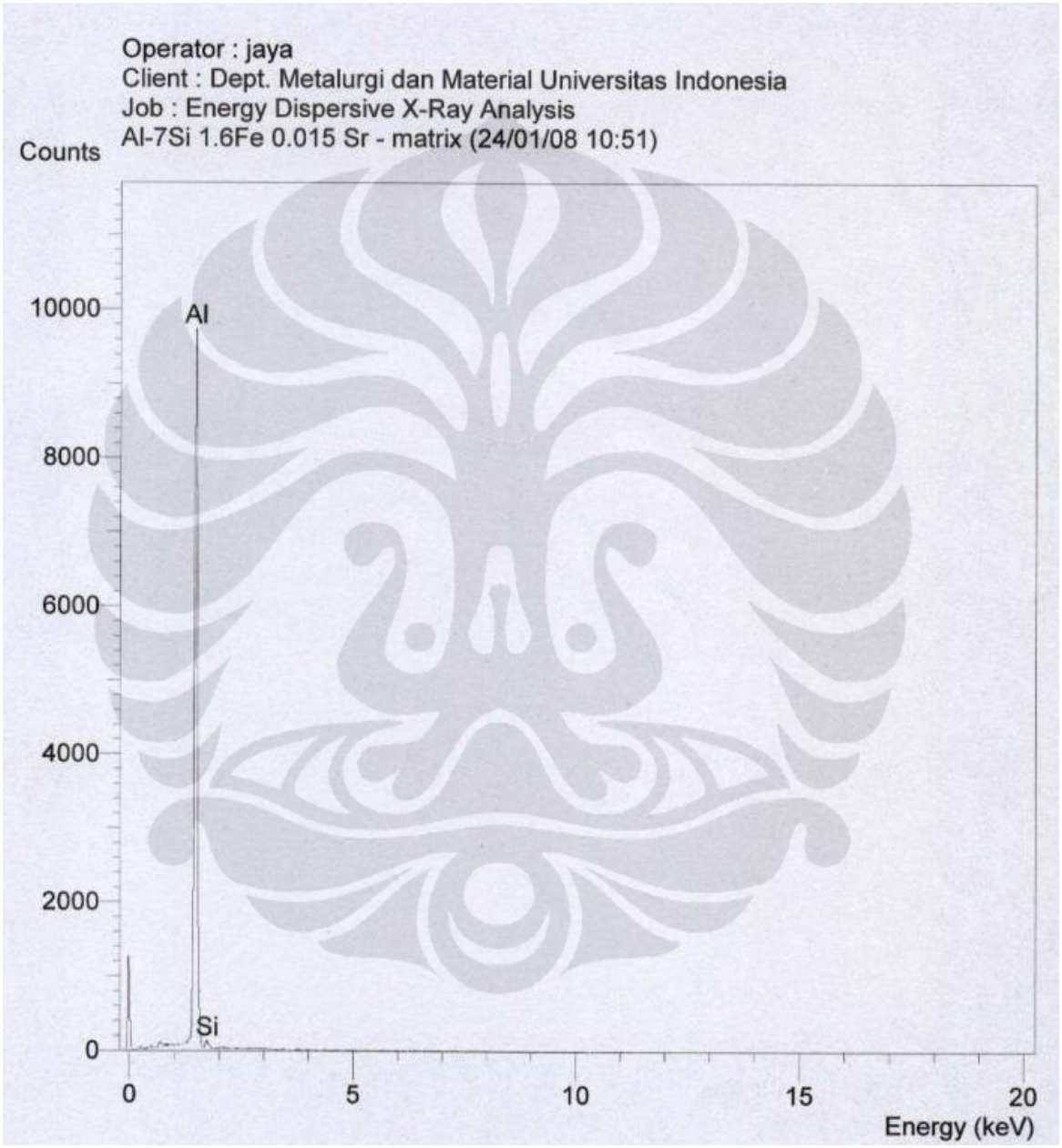
- Al-7%Si + 1.6 wt% Fe + 0.015 wt% Sr (Perbesaran 1000X etsa 0.5% HF temperatur 720 ^{o}C)

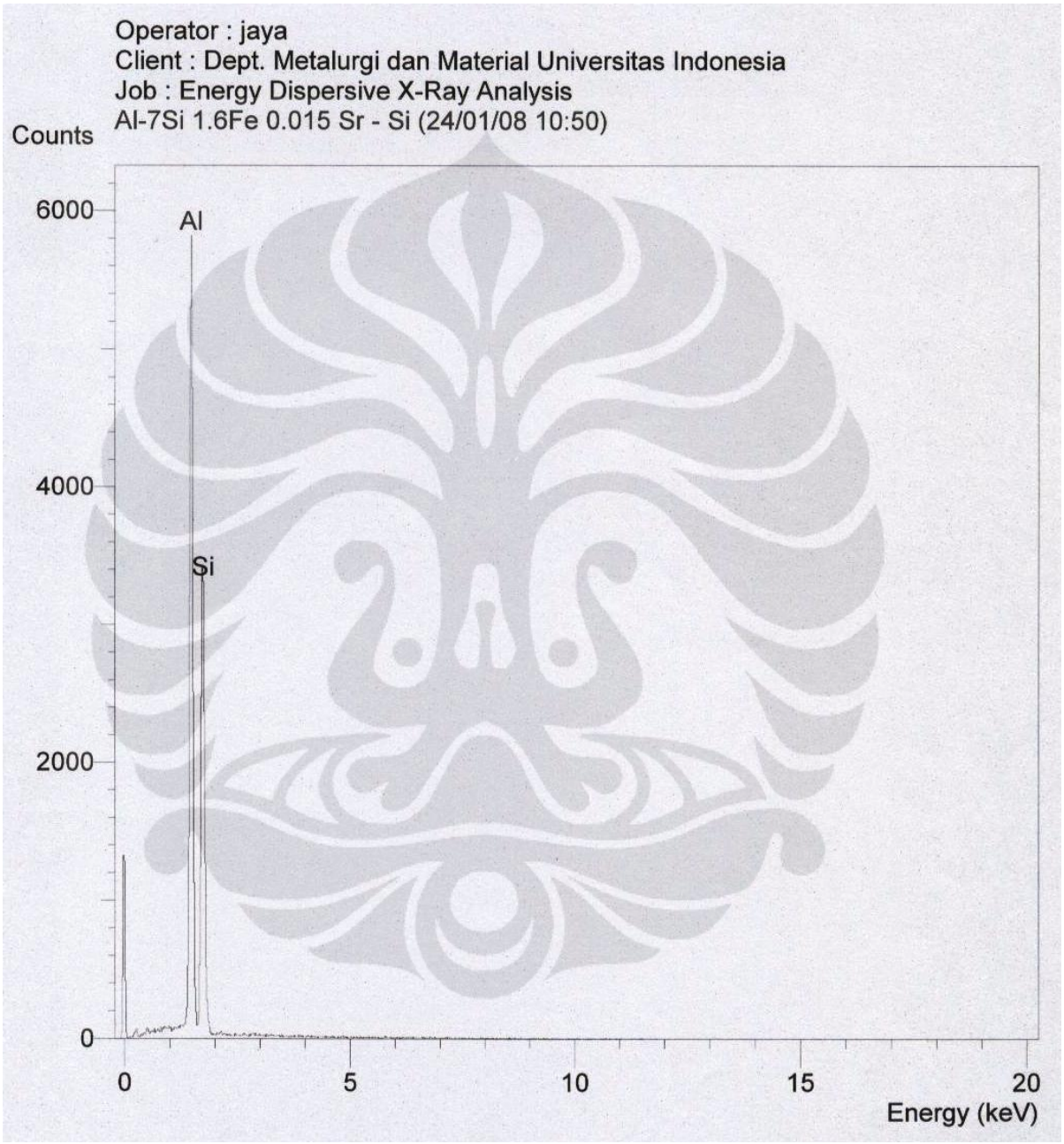


No	Komposisi (wt%)			Warna	Indikasi Fasa yang Terbentuk
	Al	**Si**	**Fe**		
1	61.44	38.56	-	Abu-abu muda	Si eutektik
2	98.34	1.66	-	Abu-abu	Matrik Al
3	67.6	12.6	19.8	Putih	AlFeSi
4	72.54	10.39	17.08	Putih	AlFeSi

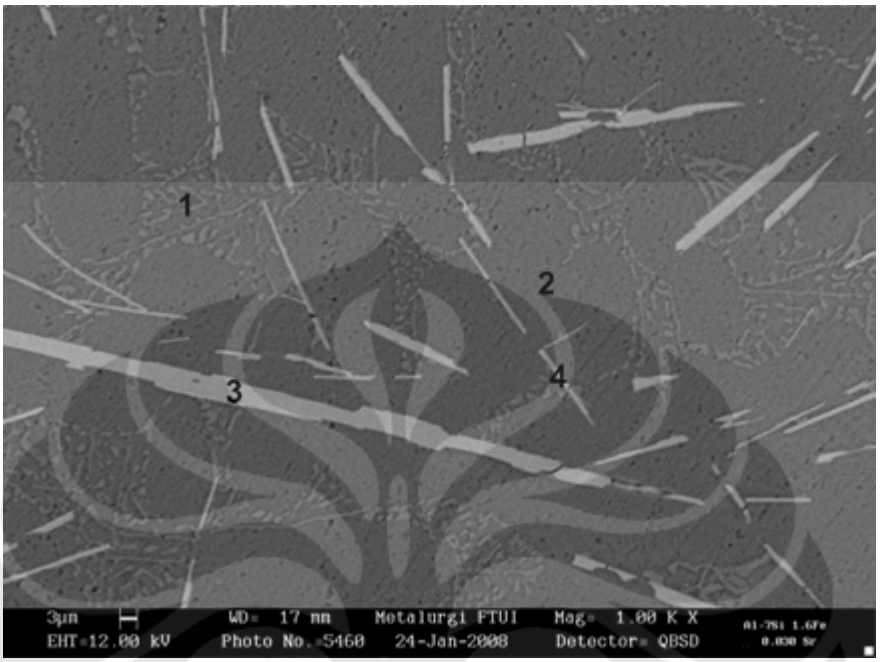




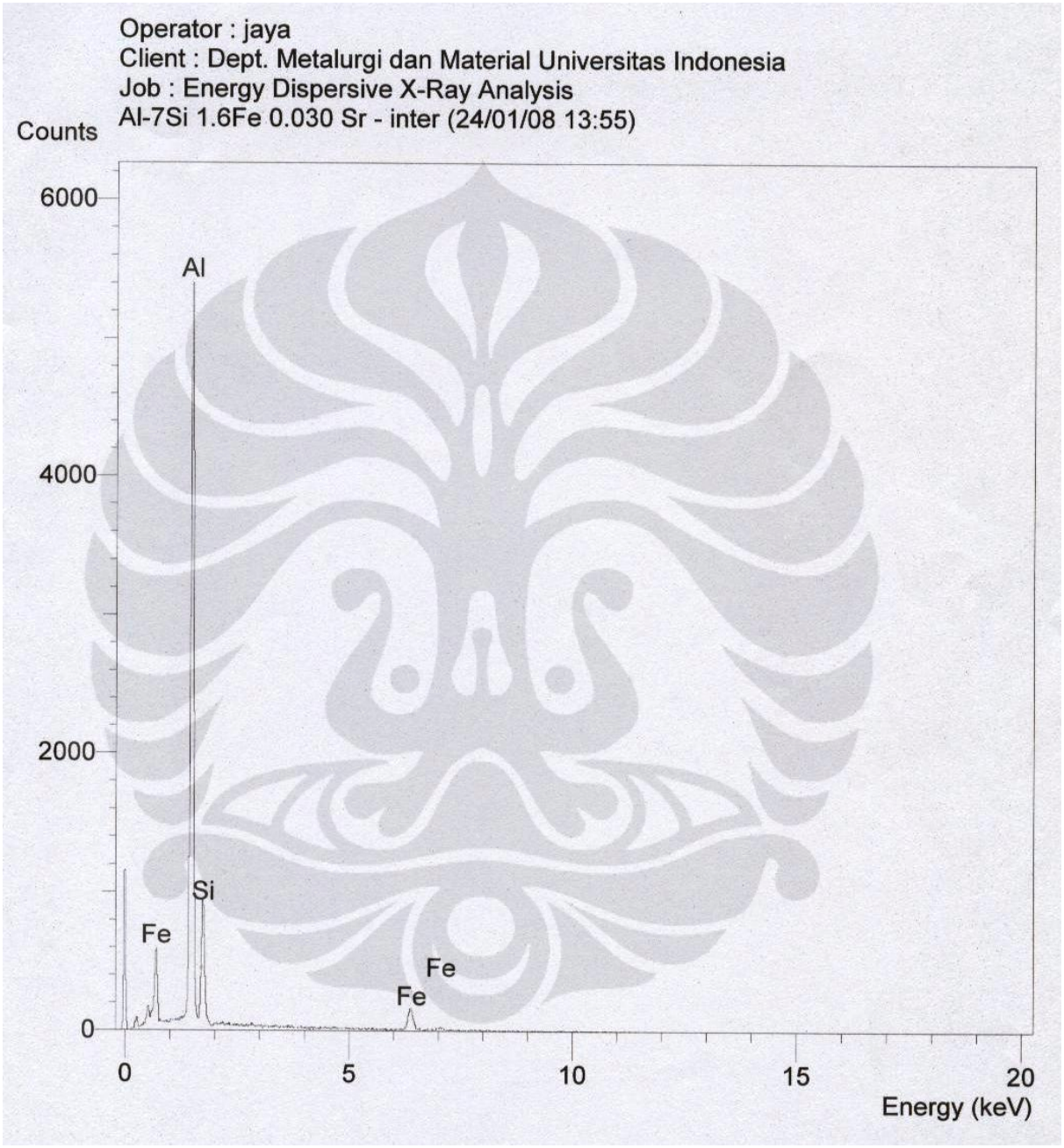


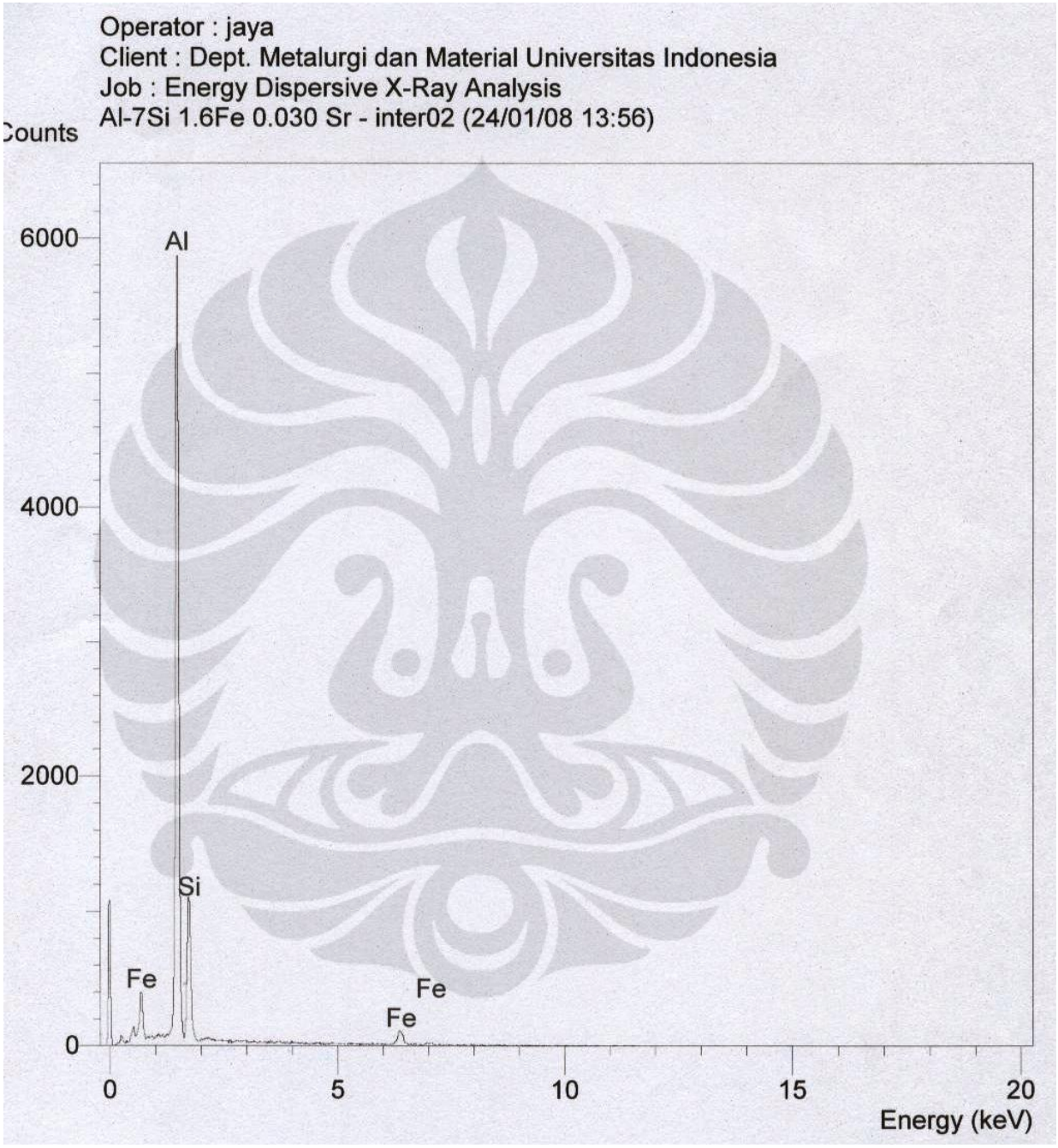


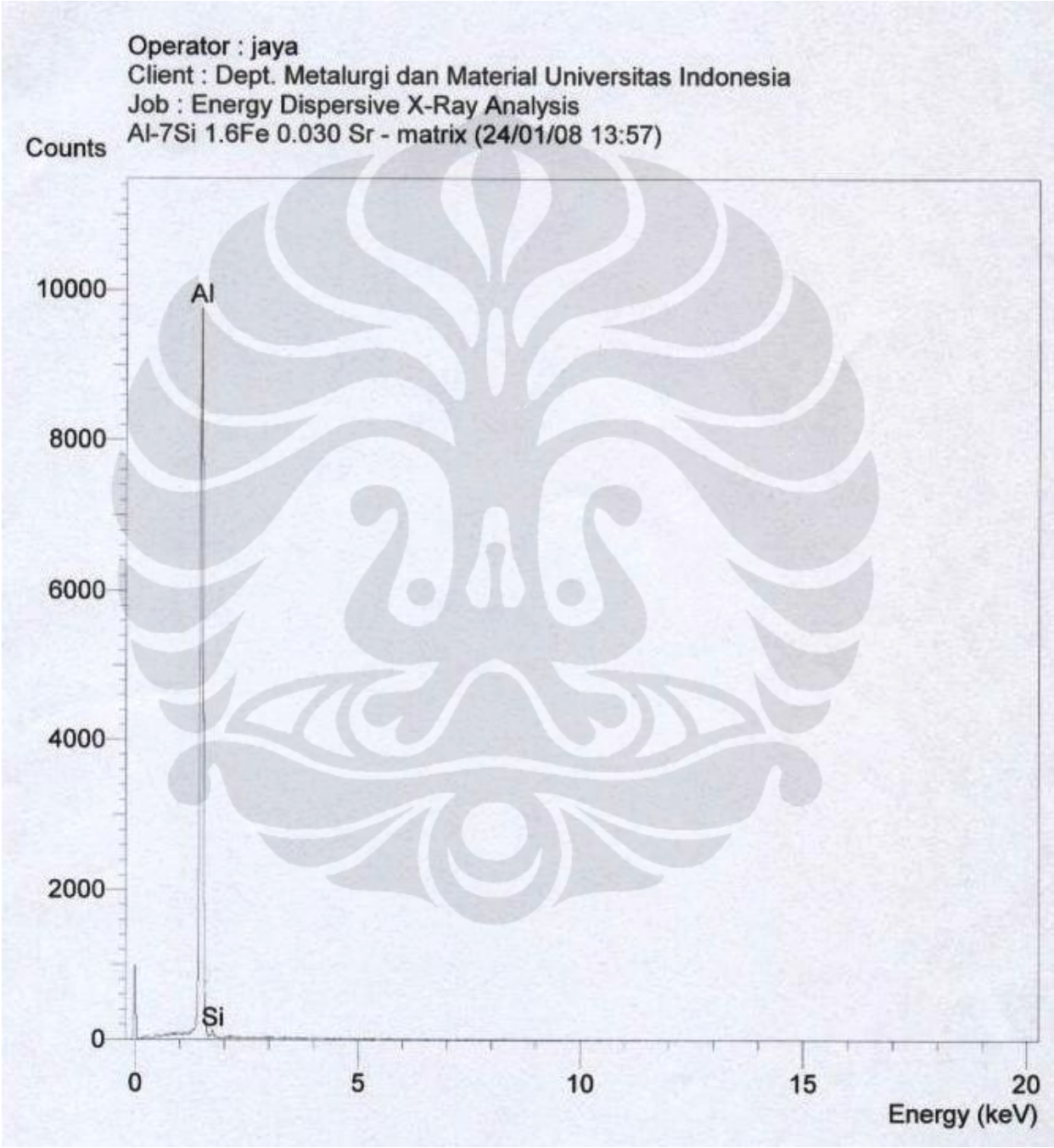
- Al-7%Si + 1.6 wt% Fe + 0.03 wt% Sr (Perbesaran 1000X etsa 0.5% HF temperatur 720 ^{o}C)

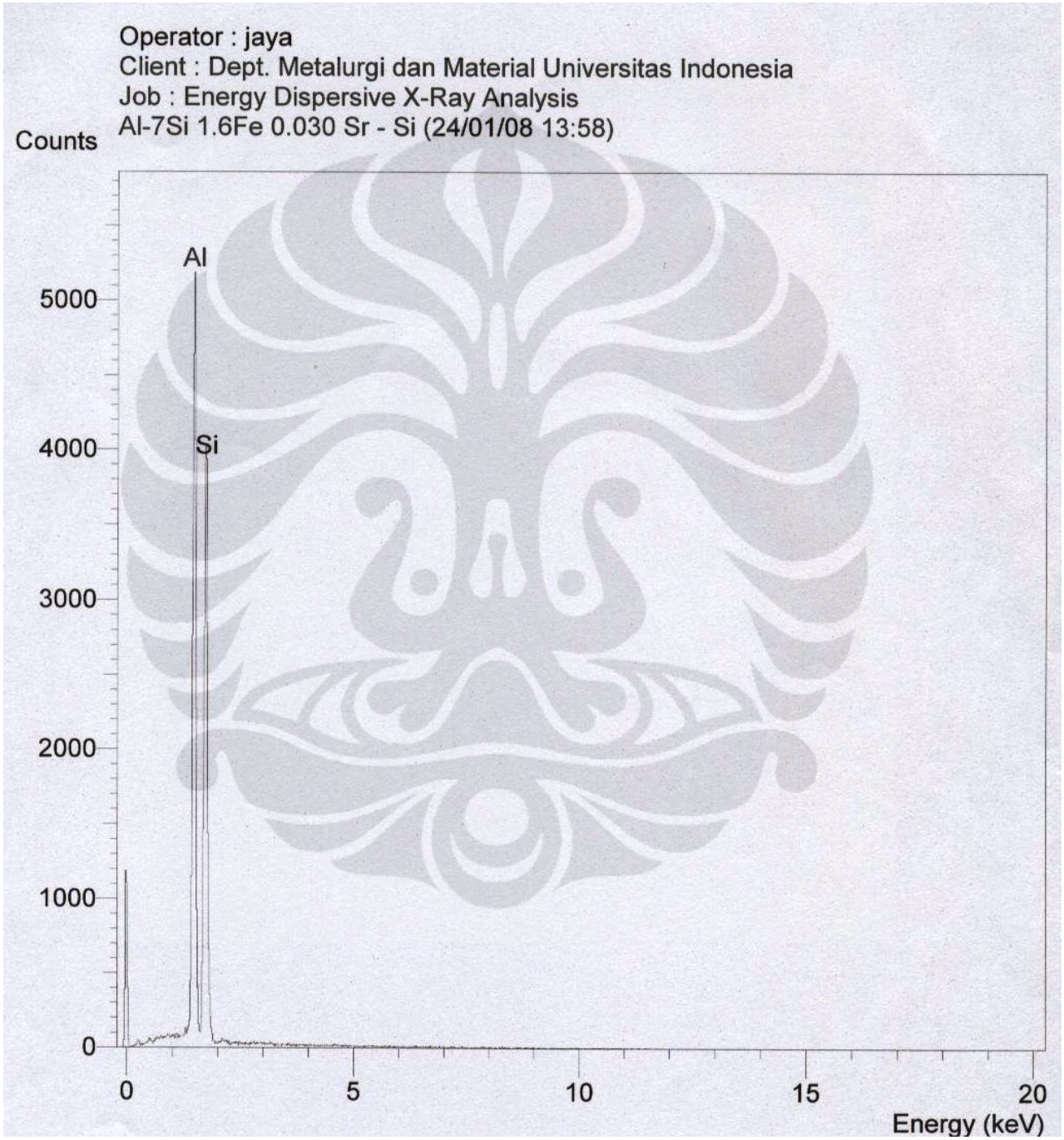


No	Komposisi (wt%)			Warna	Indikasi Fasa yang Terbentuk
	Al	**Si**	**Fe**		
1	55.20	44.80	-	Abu-abu muda	Si eutektik
2	98.76	1.24	-	Abu-abu	Matrik Al
3	67.32	12.7	19.98	Putih	AlFeSi
4	62.43	10.18	27.38	Putih	AlFeSi

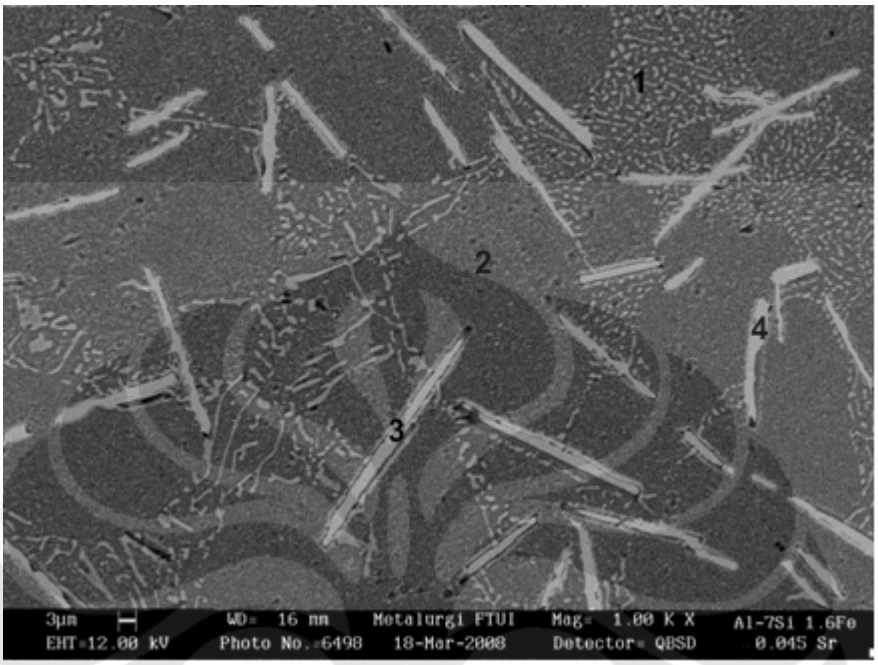




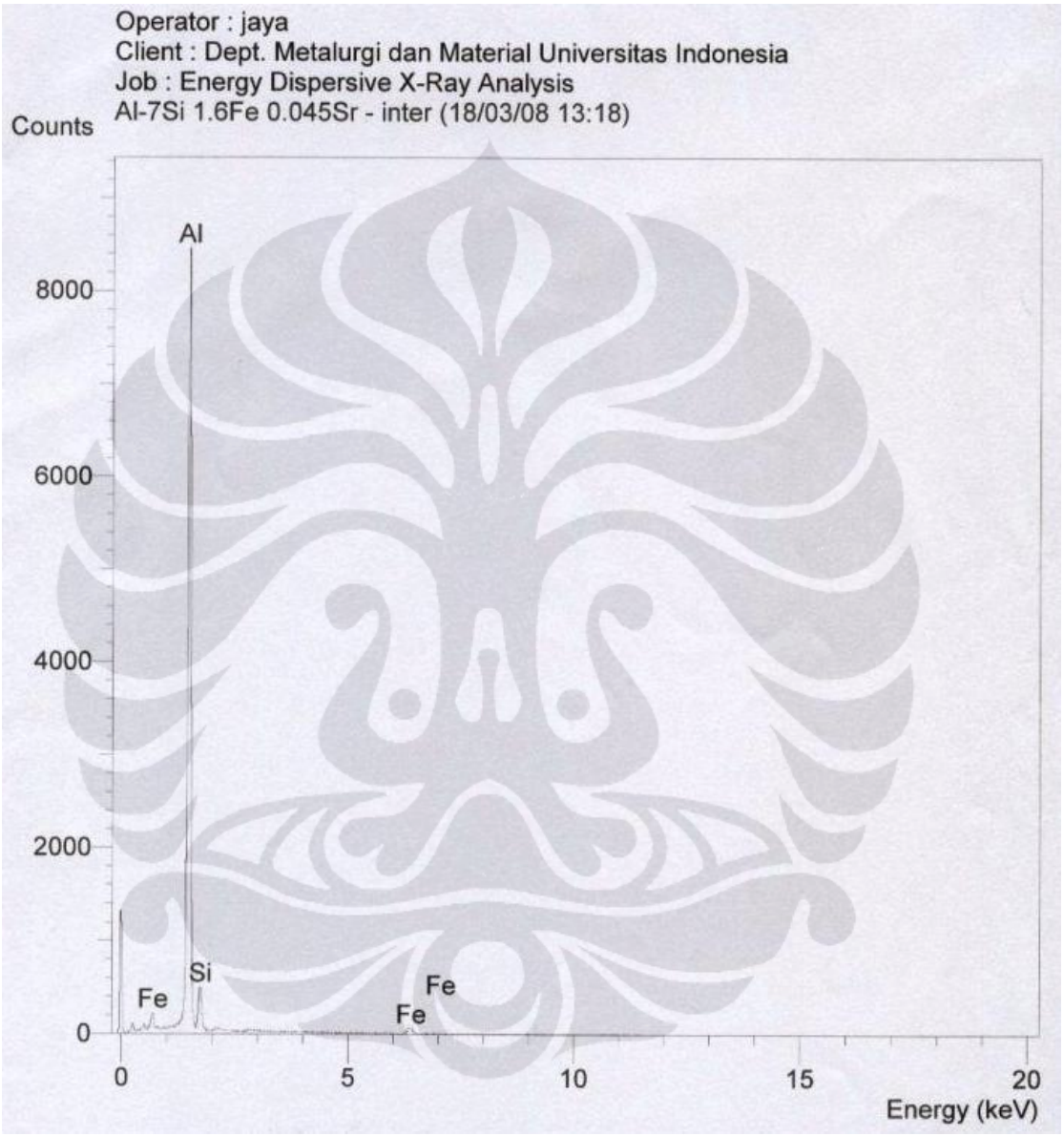


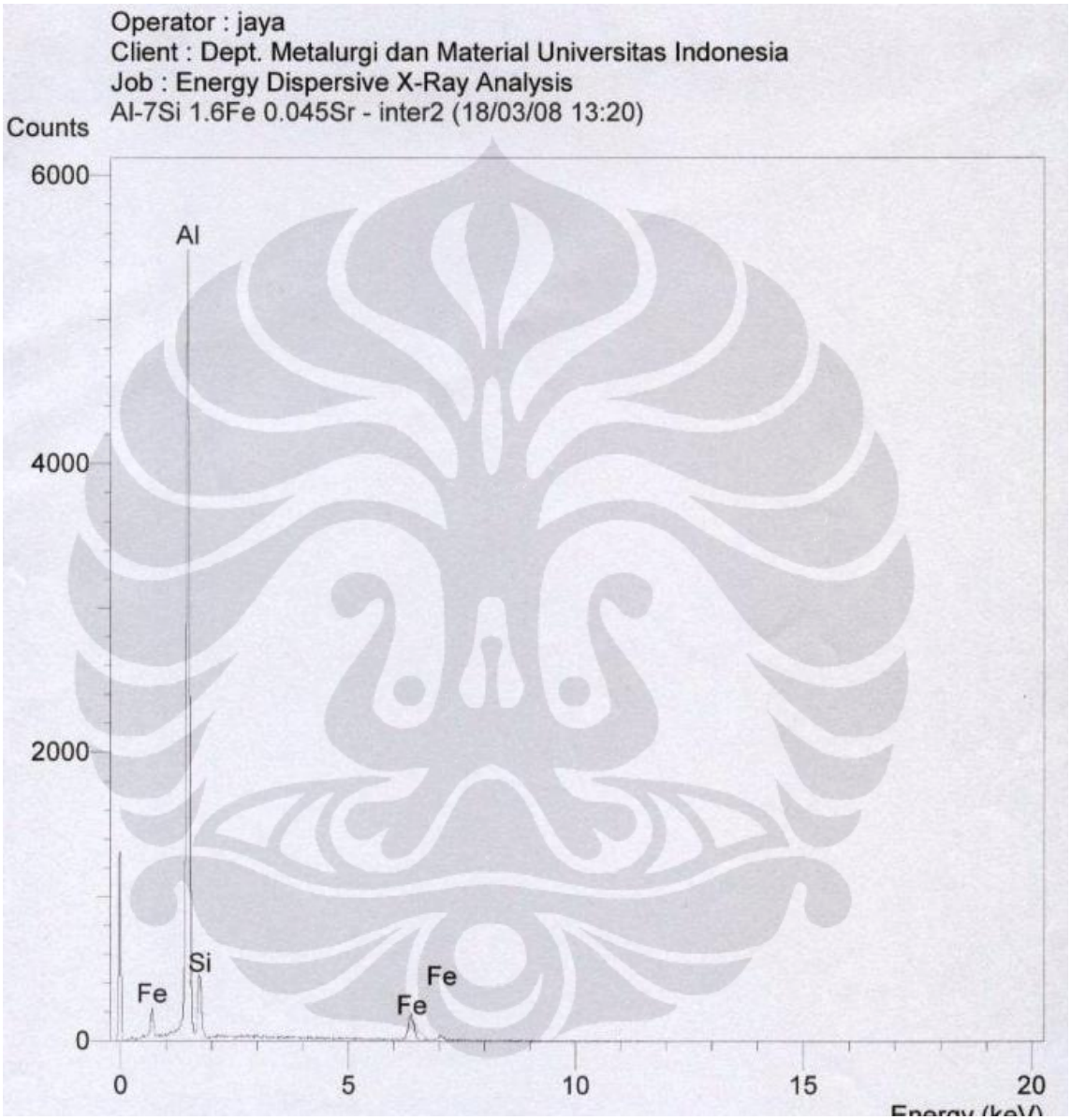


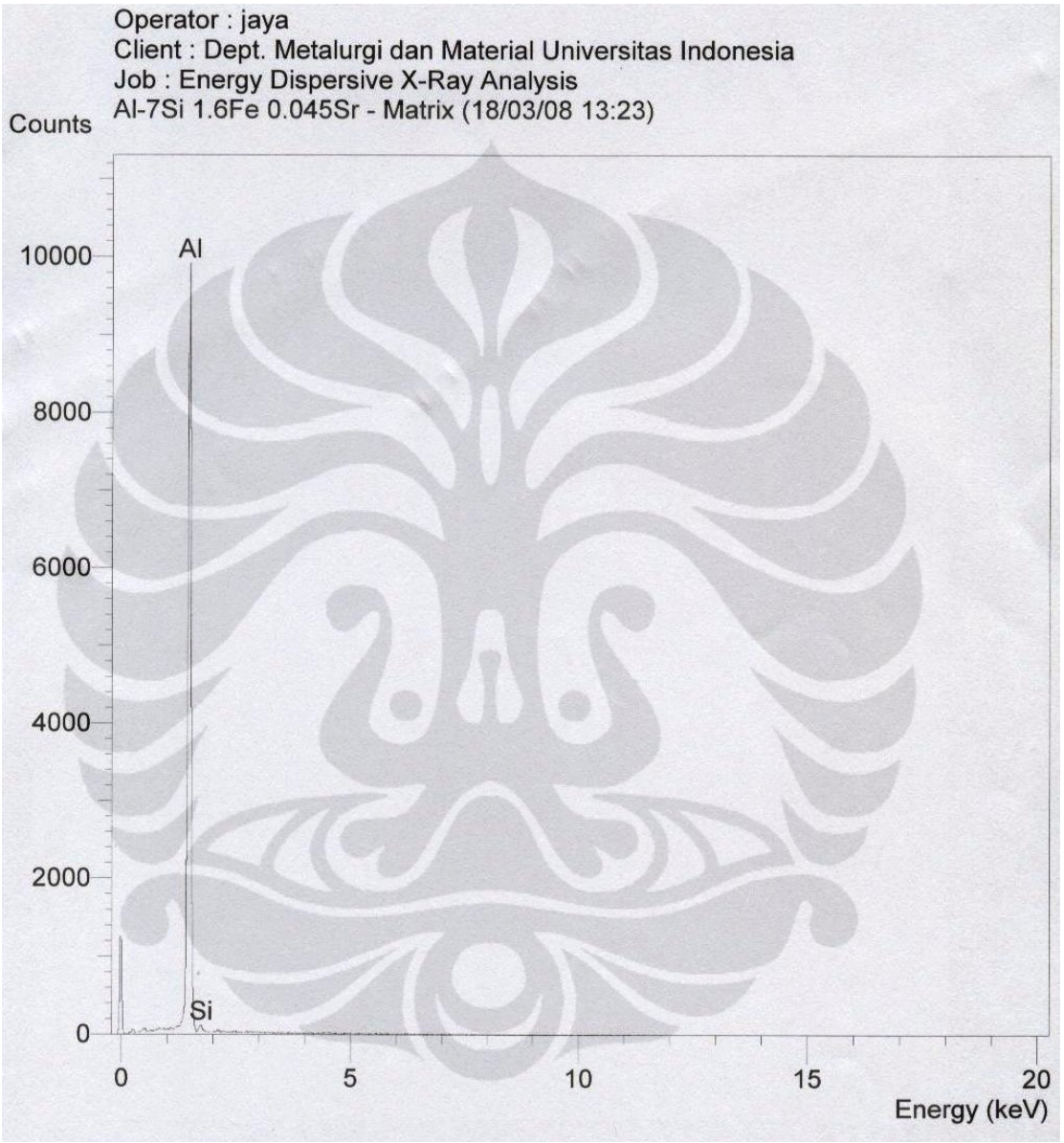
- Al-7%Si + 1.6 wt% Fe + 0.045 wt% Sr (Perbesaran 1000X etsa 0.5% HF temperatur 720 ^{o}C)

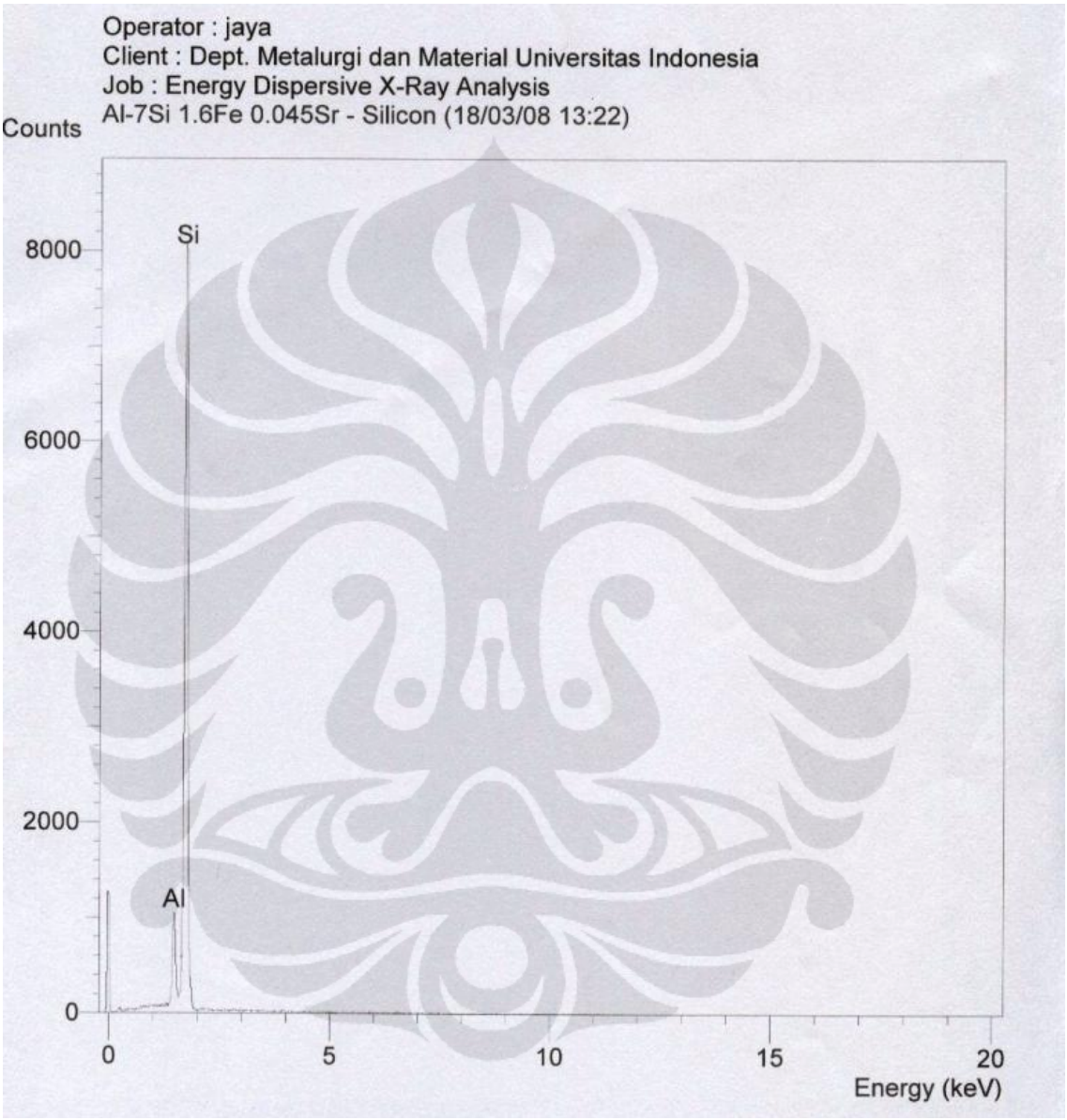


No	Komposisi (wt%)			Warna	Indikasi Fasa yang Terbentuk
	Al	**Si**	**Fe**		
1	13.03	86.97	-	Abu-abu muda	Si eutektik
2	98.58	1.42	-	Abu-abu	Matrik Al
3	8.57	6.29	11.15	Putih	AlFeSi
4	63.77	5.09	31.14	Putih	AlFeSi



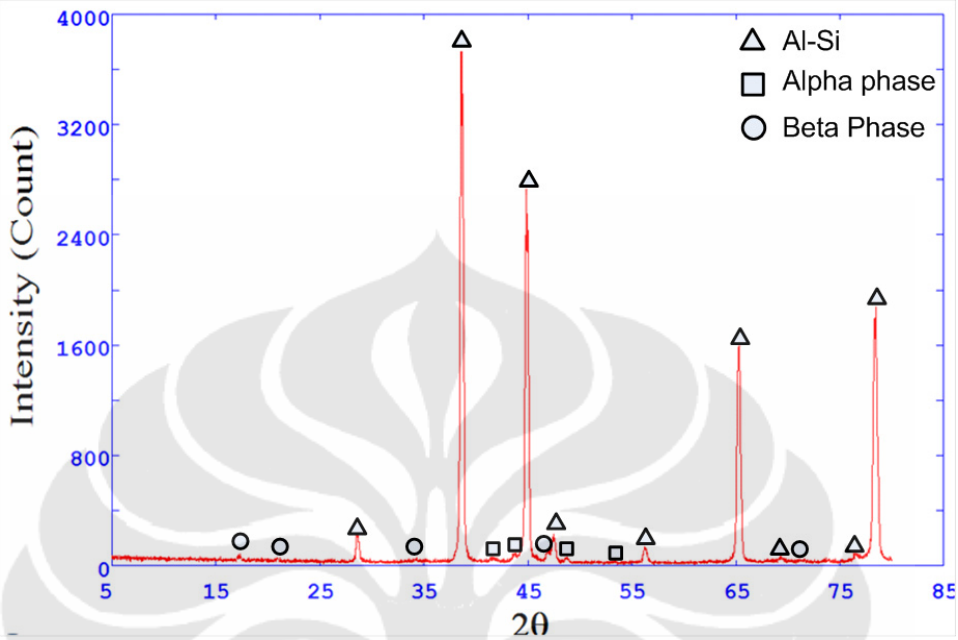






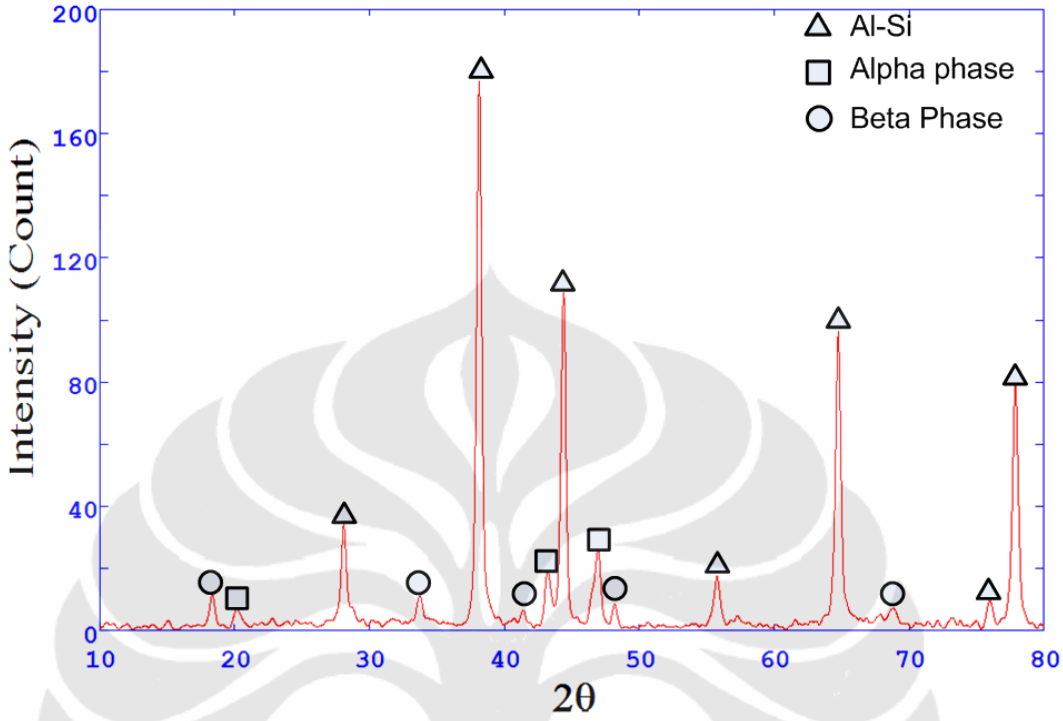
Lampiran 2 **Hasil XRD**

- **Al-7%Si + 1.2 wt% Fe + 0.015 wt% Sr**



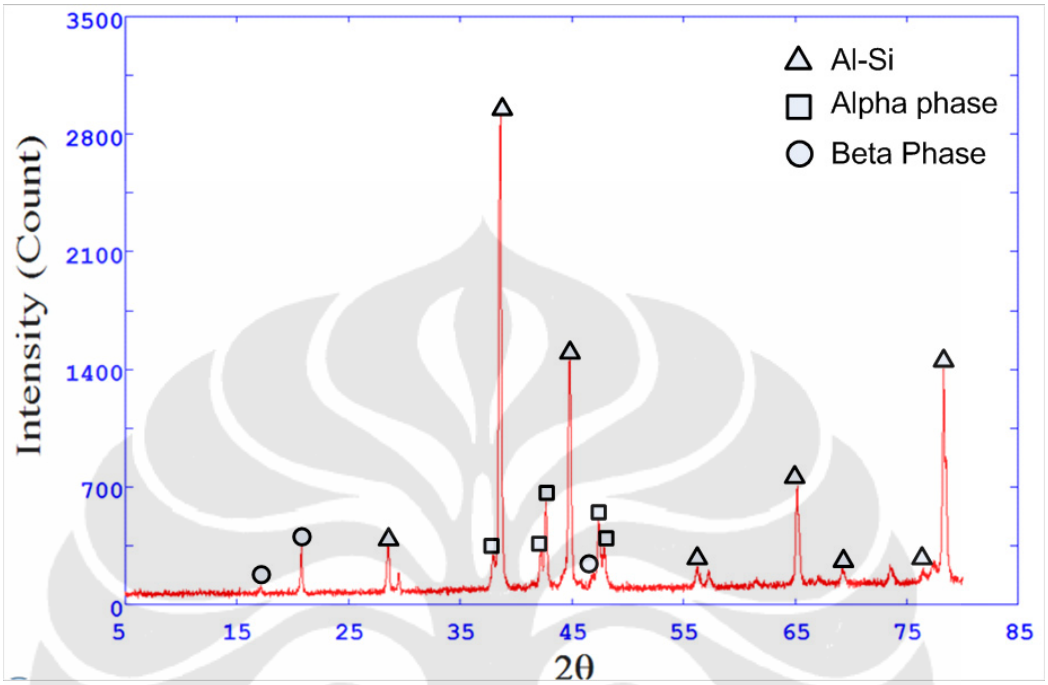
Fasa	alpha	beta	Al-Si
luas peak	219.2	625.7	1909.8
	385.7	563.9	29376
	319.8	388.7	18789
	187	427.9	3311.8
		189.4	2292.7
			12967
			523.7
			724
			11819.6
jumlah	1111.7	2195.6	81713.6
presentase	1.307561	2.582424	96.11002

- **Al-7%Si + 1.2 wt% Fe + 0.03 wt% Sr**



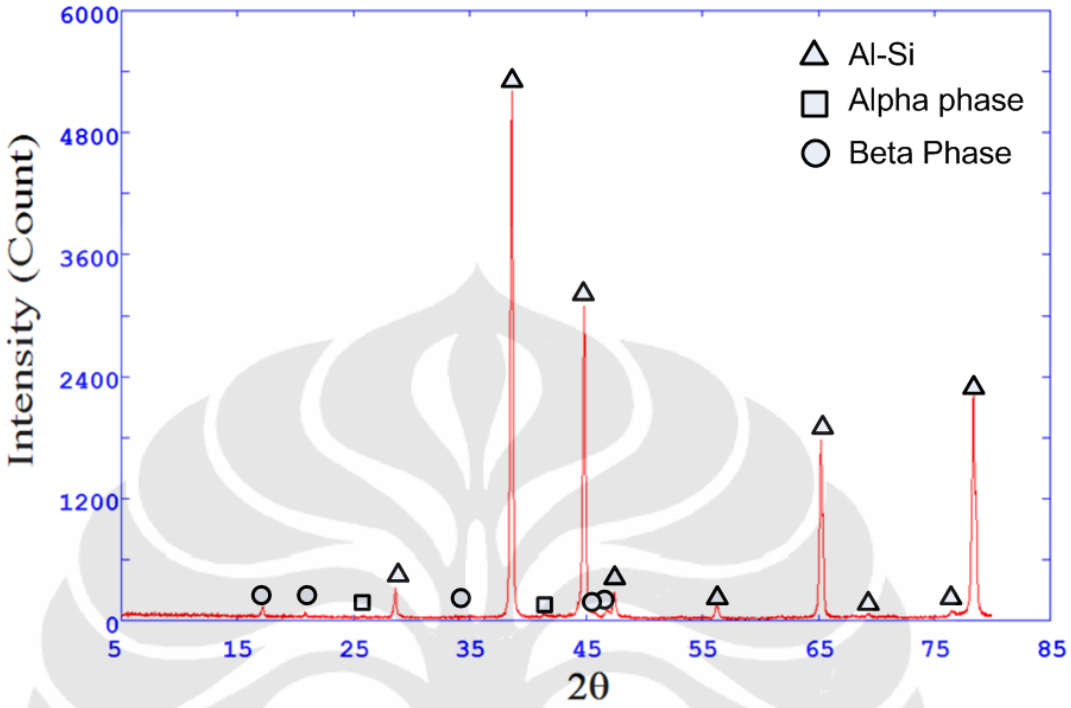
Fasa	alpha	beta	Al-Si
luas peak	193	266.3	715.7
	471.5	268.1	3891.2
	186	136.3	2396
		592.4	433.7
		246.1	2116.5
			267.7
			1814.6
jumlah	850.5	1509.2	11635.4
presentase	6.077127	10.78377	83.1391

- **Al-7%Si + 1.2 wt% Fe + 0.045 wt% Sr**



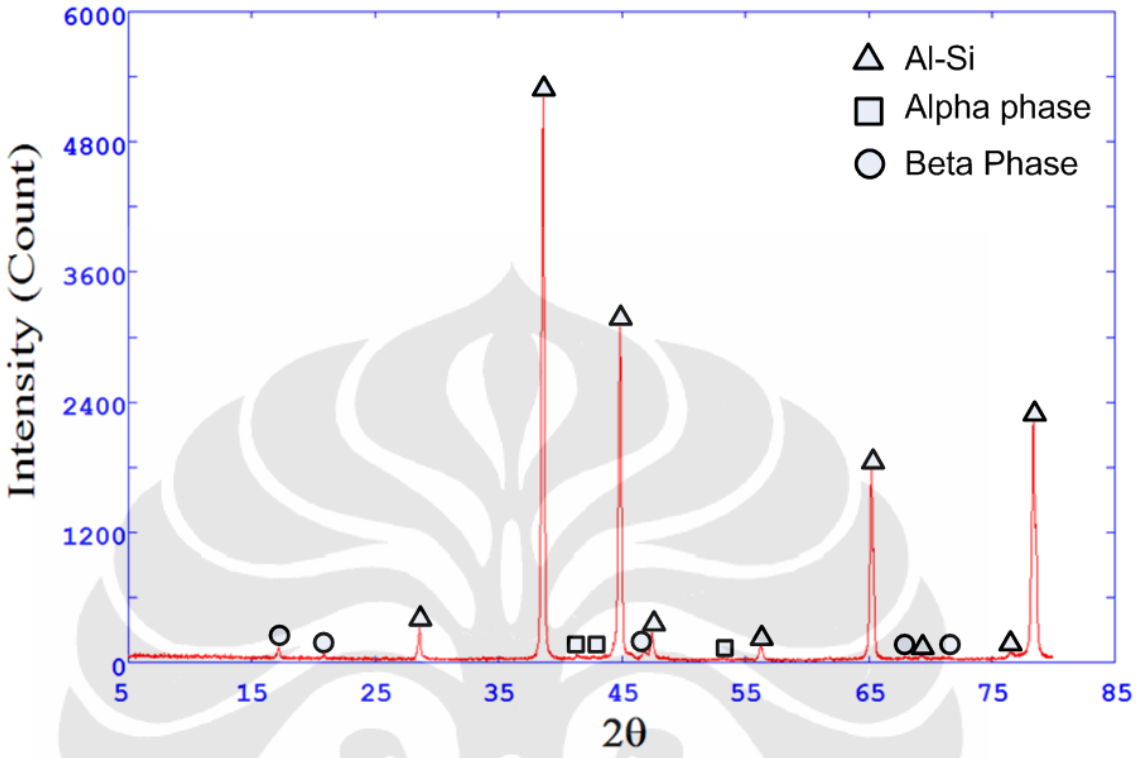
Fasa	alpha	beta	Al-Si
luas peak	3971.4	1484.7	5090.3
	4003.7	4035.7	41939.5
	8134.6	2239.8	22113.2
	7555.6		3198.2
	4498.4		11958.4
			4487.4
			2681.0
			20626.4
jumlah	28163.7	7760.2	112094.4
presentase	19.02717	5.24273	75.7301

- **Al-7%Si + 1.4 wt% Fe + 0.015 wt% Sr**



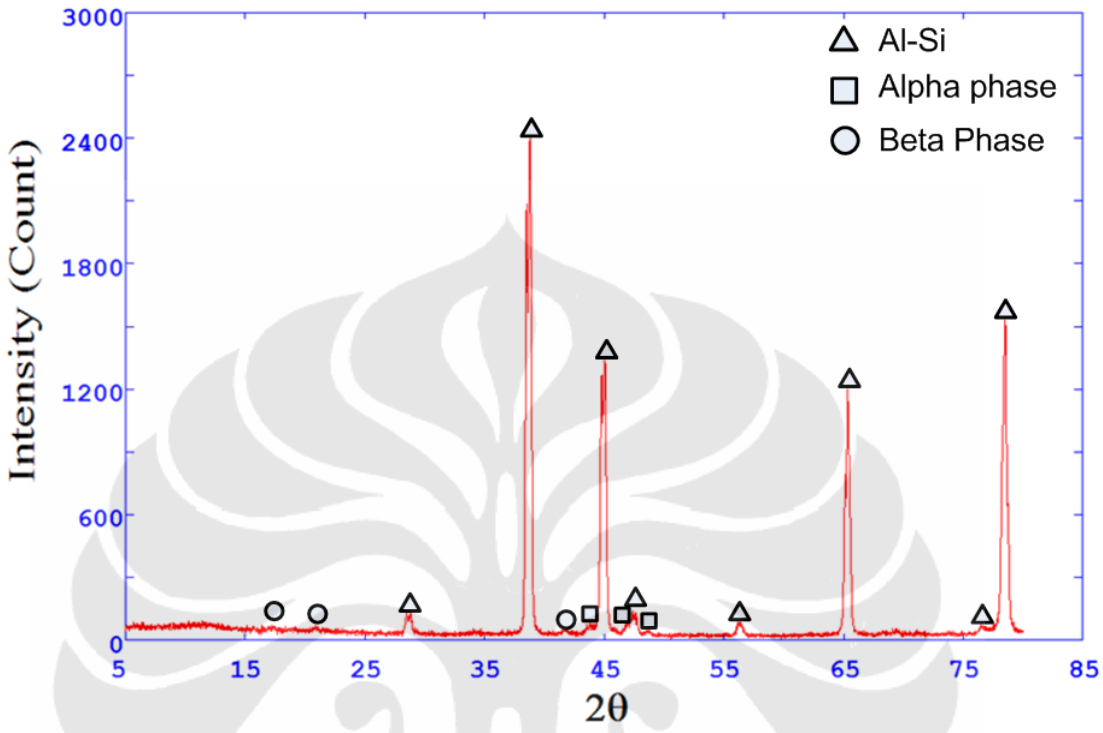
Fasa	alpha	beta	Al-Si
luas peak	228.0	817.3	4001.0
	606.1	373.0	70533.0
	761.9	619.8	30832.2
		1410.1	3405.7
			2084.4
			24967.3
			361.1
			606.5
			24697.5
jumlah	1596.0	3220.2	161488.7
presentase	0.959683	1.936323	97.10399

- **Al-7%Si + 1.6 wt% Fe + 0.015 wt% Sr**



Fasa	alpha	beta	Al-Si
luas peak	319.9	1436.0	3471.1
	223.5	373.9	46917.1
	534.8	1047.9	35443.2
		356.5	3635.4
		244.2	577.4
			16950.1
			419.3
			857.9
			20880.7
jumlah	1078.2	3458.5	129152.2
presentase	0.806499	2.586976	96.60652

- **Al-7%Si + 1.6 wt% Fe + 0.045 wt% Sr**



Fasa	alpha	beta	Al-Si
luas peak	680.3	640.7	1443.7
	1024.5	490.0	29876.5
	390.8	1403.9	15080.4
		517.6	1285.7
			2325.4
			17048.8
			779.3
			33771.6
jumlah	2095.6	3052.2	101611.4
presentase	1.962922	2.858957	95.17812