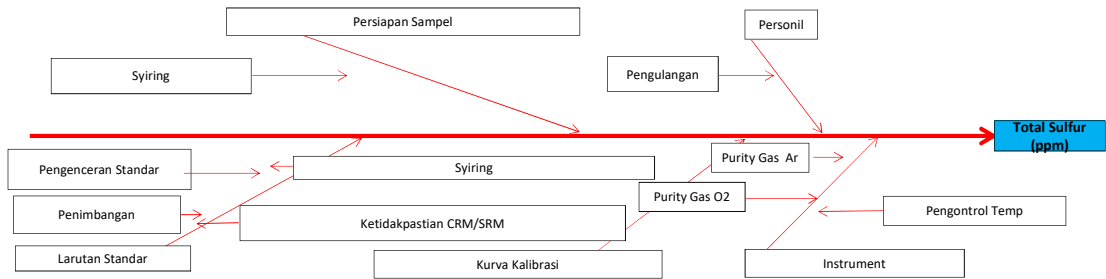


LAPORAN PERHITUNGAN ESTIMASI KETIDAKPASTIAN PENGUKURAN

Parameter : Total Sulfur NSX-2100 Model GI 250  
Lingkup : Natural Gas  
Metode : ASTM D 6667  
PIC : RD  
Checked By : DS

1. FISHBOND DIAGRAM



2. DATA KURVA KALIBRASI

Data			yi-Yi		
No	x, ppm	y, signal	a+b*x	y-(a+b*x)	(xi-xm)^2
1	0.202	8.9	8.52365	0.14164	10.029
2	0.202	10.2	8.52365	2.81015	10.029
3	0.202	10.8	8.52365	5.18177	10.029
4	0.504	17.7	18.3986	0.48805	8.207
5	0.504	16.5	18.3986	3.6047	8.207
6	0.504	18.2	18.3986	0.03944	8.207
7	1.009	33.6	34.9114	1.71966	5.569
8	1.009	30.5	34.9114	19.4601	5.569
9	1.009	34.9	34.9114	0.00013	5.569
10	5.043	169.8	166.817	8.89709	2.803
11	5.043	169.8	166.817	8.89709	2.803
12	5.043	168.0	166.817	1.39901	2.803
13	10.086	330.5	331.716	1.4783	45.121
14	10.086	334.9	331.716	10.1388	45.121
15	10.086	326.8	331.716	24.1656	45.121
			Jumlah:	88.4215	215.184
Rata-rata	3.4				
Hasil Sampel	0.204				

Slope: 32.6985  
Intersep: 1.91855  
Regresi: 0.99981  
Jumlah pengukuran setiap : 3  
Jumlah standar keseluru: 15  
Qxx : 215.184  
Sdxy : 2.608  
u(x,y) 0.05330

3. BUDGET KETIDAKPASTIAN

Gabungan Komponen-komponen ketidakpastian pengukuran

Komponen	Deskripsi	Nilai (x)	Tipe	Distribusi	dakpastian	Pembagi	u(x)	u(x)/x	(u(x)/x)2
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Personil	Pengulangan	0.204	A	Normal	0.026	3.00	0.0087	0.0425	1.80.E-03
Pengenceran Standar	Pengenceran (Pipet) ml	10	B	T Student	0.02	2.00	0.0100	0.0010	1.00.E-06
	Pengenceran (Pipet) ml	5	B	T Student	0.01	2.00	0.0050	0.0010	1.00.E-06
	Pengenceran (Pipet) ml	2	B	T Student	0.02	2.00	0.0100	0.0050	2.50.E-05
	Pengenceran (Labu) ml	100	B	T Student	0.08	2.00	0.0400	0.0004	1.60.E-07
	Pengenceran (Labu) ml	50	B	T Student	0.06	2.00	0.0300	0.0006	3.60.E-07
	Pengenceran (Labu) ml	10	B	T Student	0.04	2.00	0.0200	0.0020	4.00.E-06
Inject Standar	Syring (uL)	10	B	T Student	1.00	2.00	0.5000	0.0500	2.50.E-03
Ketidakpastian Standar	SRM	97%	B	T Student	0.03	1.73	0.0173	0.0179	3.19.E-04
Kurva Kalibrasi	Linearity Kurva	0.9998	A	Normal	0.05	3.87	0.0138	0.0138	1.89.E-04
Purity gas	Gas O2	99,999%	B	T Student	0.001	1.73	0.0006	0.0000	3.33.E-13
	Gas Ar	99,999%	B	T Student	0.001	1.73	0.0006	0.0000	3.33.E-13
Sums									0.004844677
Ketidakpastian baku relatif gabungan, urc									0.06960
Ketidakpastian baku gabungan, uc									0.0142
Faktor cakupan, K									2
Ketidak pastian bentangan, Ue = k*uc,									0.0284
Nilai pokok (y)			0.204 ppm		Pelaporar	0.204	±	0.03	ppm