SURAT KETERANGAN

Saya yang bertanda tangan dibawah ini:

Nama : Nur Prabawa

Jabatan : Laboran

Unit : Lab. Konversi Energi

Departemen : Teknik Mesin dan Industri

Dengan ini menerangkan bahwa analisa Gas Chromatograph untuk mengetahui komposisi CO, CO_2, H_2, dan CH_4 dari beberapa sampel syngas memang benar telah dilakukan di Laboratorium Konversi Energi, Departemen Teknik Mesin dan Industri, Fakultas Teknik, Universitas Gadjah Mada.

Demikian surat keterangan ini dibuat untuk dapat digunakan sebagaimana mestinya.

Yogyakarta, 03 Februari 2022

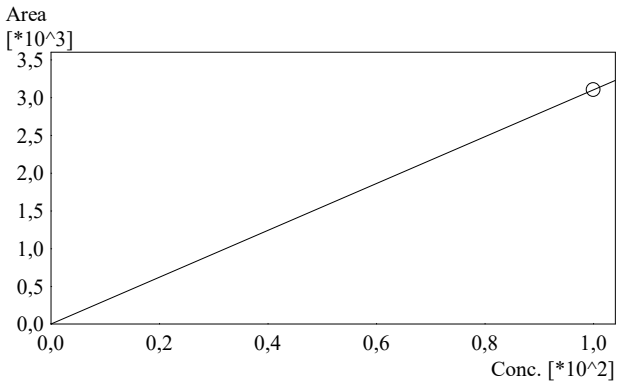
Yang menerangkan

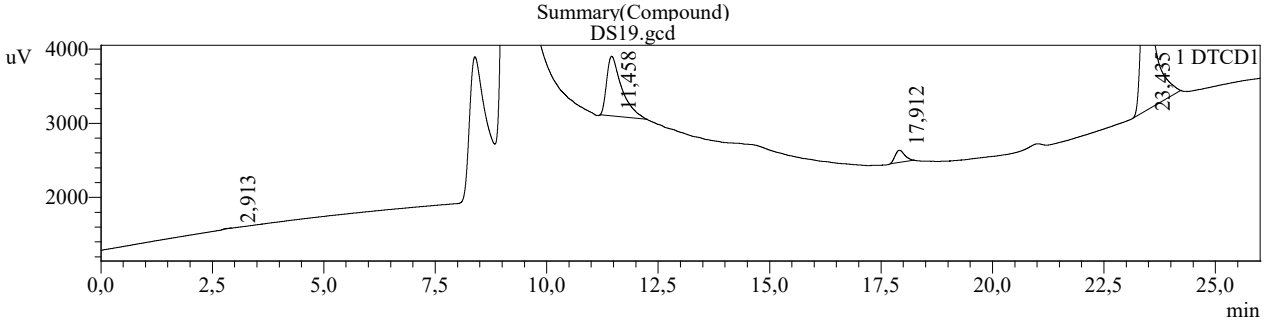
(Nur Prabawa)

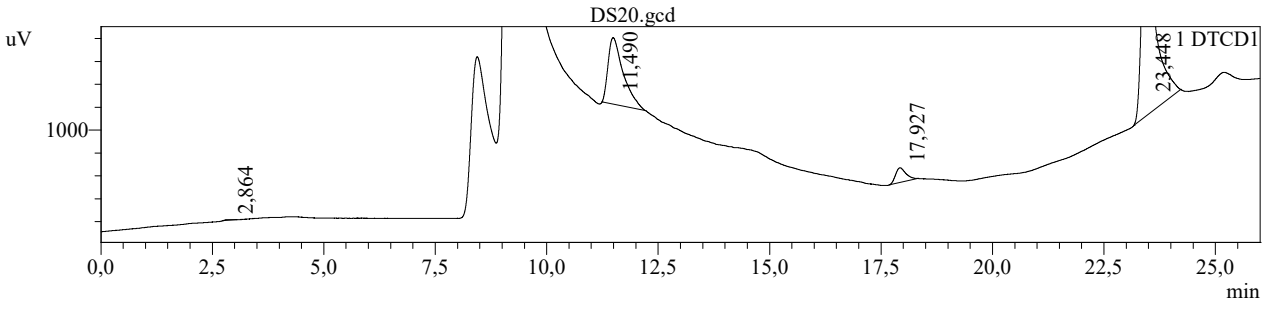
Calibration Curve

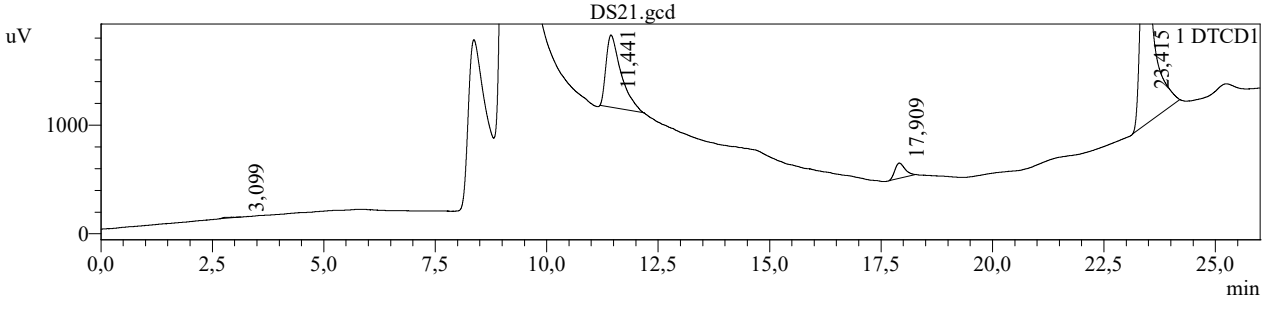
ID# : 1
Name : Hydrogen
Quantitative Method : External Standard
Function : f(x)=31,0659*x+0
Rr1=1,000000 Rr2=1,000000 RSS=0,000000e+00
MeanRF: 3,106589e+001 RFSD: 0,000000e+00 RFRSD: 0,000000
FitType : Linear
ZeroThrough : Not Through
Weighted Regression : None
Detector Name : DTCD1

#	Conc.(Ratio)	MeanArea	Area
1	99,98	3106	3106







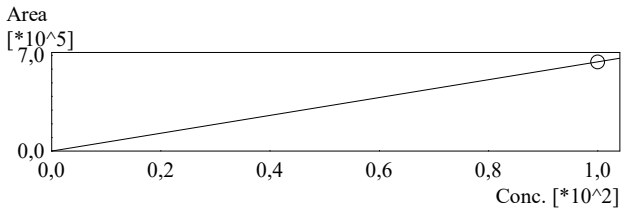


<< DTCD1 >>
ID#1 Compound Name: Hydrogen

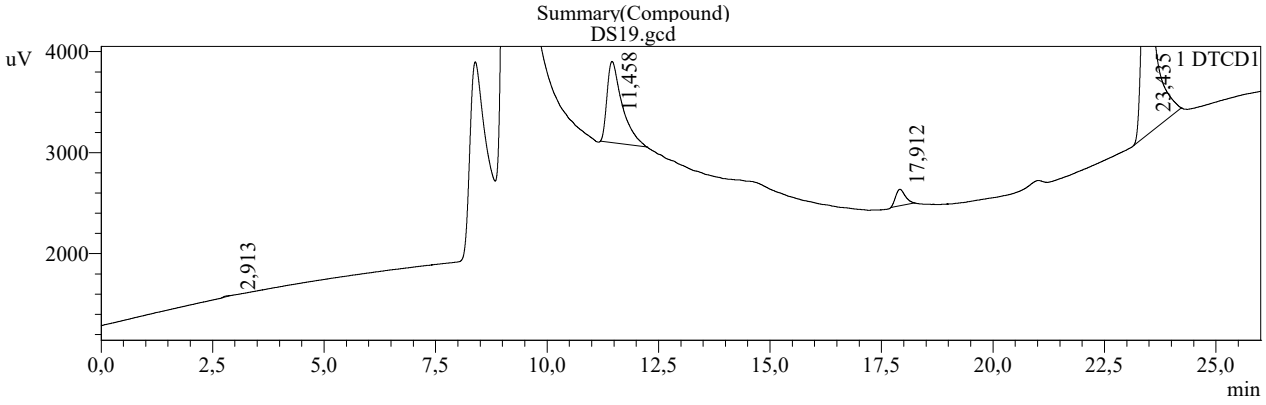
Title	Sample Name	Sample ID	Ret. Time	Area	Height	Conc.
DS19.gcd	STANDARD (	DS19	2,913	53	0	1,715
DS20.gcd	Nashrul	DS20	2,864	74	7	2,386
DS21.gcd	Nashrul	DS21	0,000	0	0	0,000
Average			2,888	64	4	2,050
%RSD			1,193	23,151	126,998	23,151
Maximum			2,913	74	7	2,386
Minimum			2,864	53	0	1,715
Standard Deviation			0,034	15	5	0,475

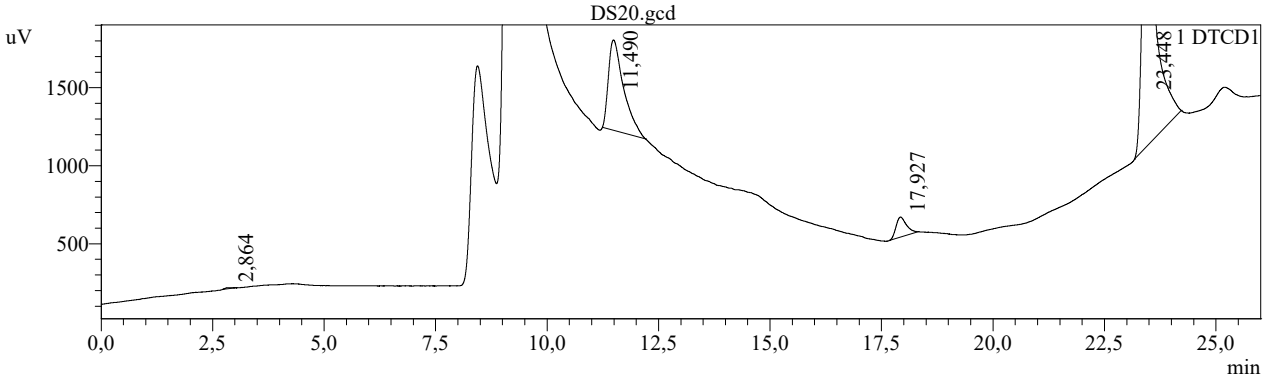
Calibration Curve

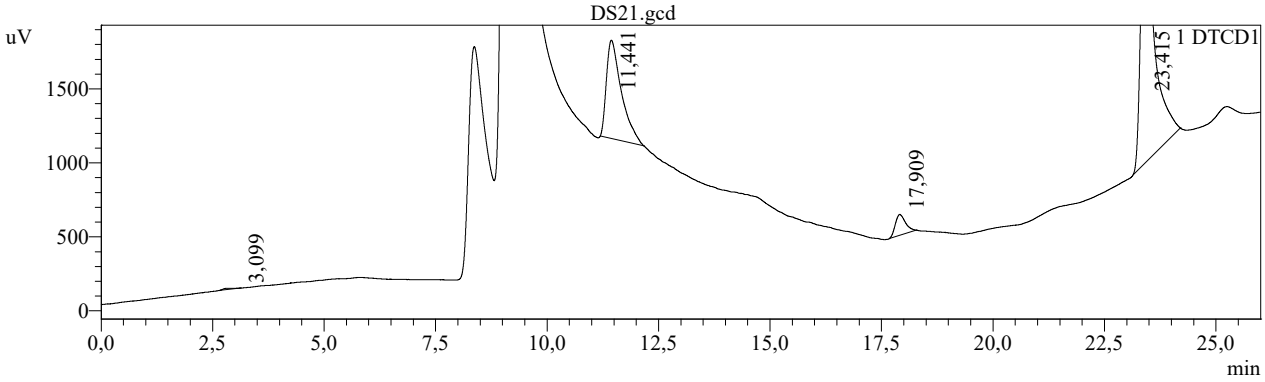
ID# : 1
Name : Carbon Monoxide
Quantitative Method : External Standard
Function : f(x)=6519,68*x+0
Rr1=1,000000 Rr2=1,000000 RSS=0,000000e+00
MeanRF: 6,519680e+003 RFSD: 0,000000e+00 RFRSD: 0,000000
FitType : Linear
ZeroThrough : Not Through
Weighted Regression : None
Detector Name : DTCD1



#	Conc.(Ratio)	MeanArea	Area
1	99,98	651838	651838







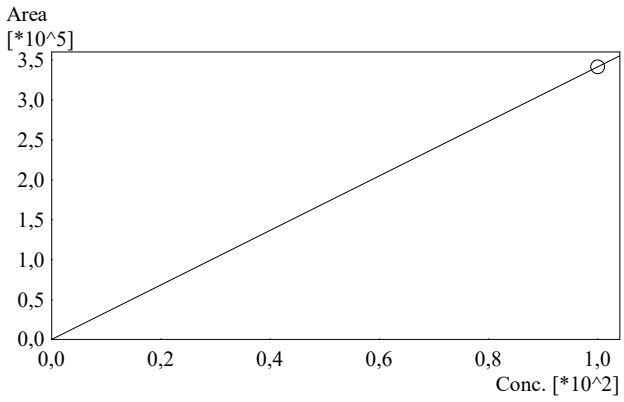
<< DTCD1 >>
ID#1 Compound Name: Carbon Monoxide

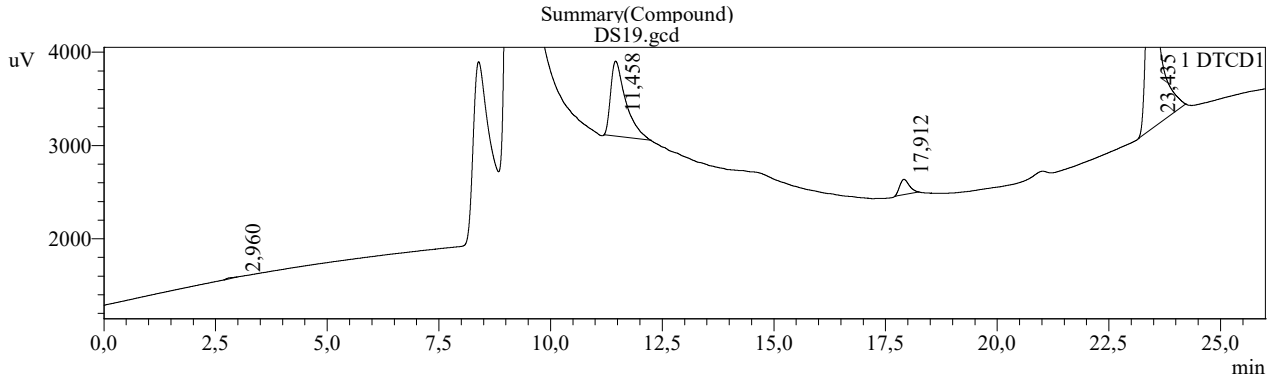
Title	Sample Name	Sample ID	Ret. Time	Area	Height	Conc.
DS19.gcd	STANDARD (	DS19	11,458	18907	804	2,900
DS20.gcd	Nashrul	DS20	11,490	13777	580	2,113
DS21.gcd	Nashrul	DS21	11,441	15597	664	2,392
Average			11,463	16094	683	2,468
%RSD			0,214	16,161	16,537	16,161
Maximum			11,490	18907	804	2,900
Minimum			11,441	13777	580	2,113
Standard Deviation			0,025	2601	113	0,399

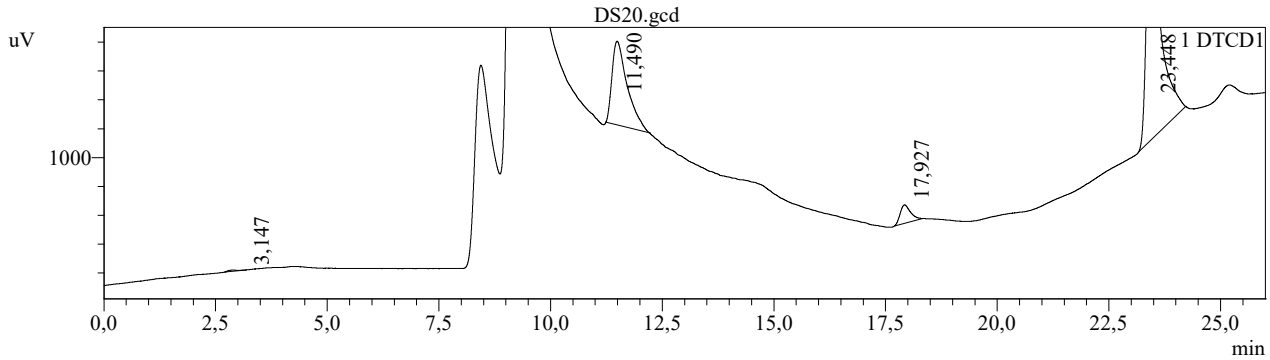
Calibration Curve

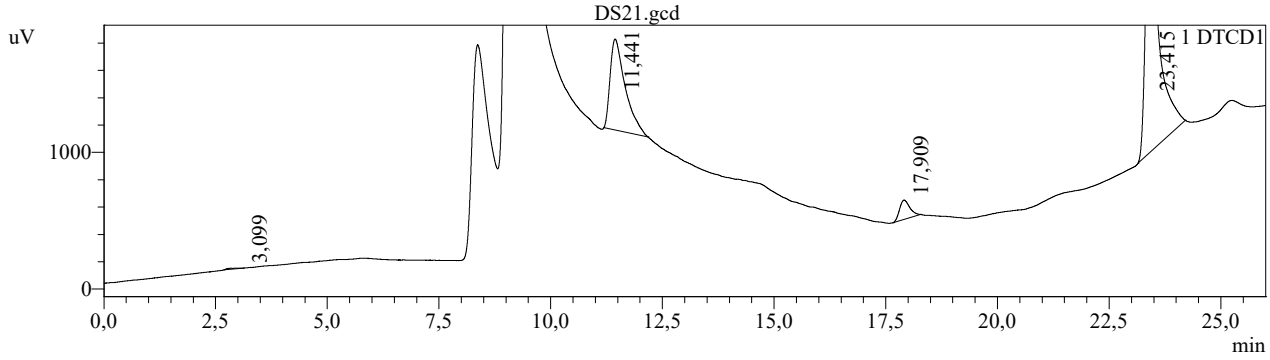
ID# : 1
Name : Methane
Quantitative Method : External Standard
Function : f(x)=3415,94*x+0
Rr1=1,000000 Rr2=1,000000 RSS=0,000000e+00
MeanRF: 3,415936e+003 RFSD: 0,000000e+00 RFRSD: 0,000000
FitType : Linear
ZeroThrough : Not Through
Weighted Regression : None
Detector Name : DTCD1

#	Conc.(Ratio)	MeanArea	Area
1	99,98	341525	341525









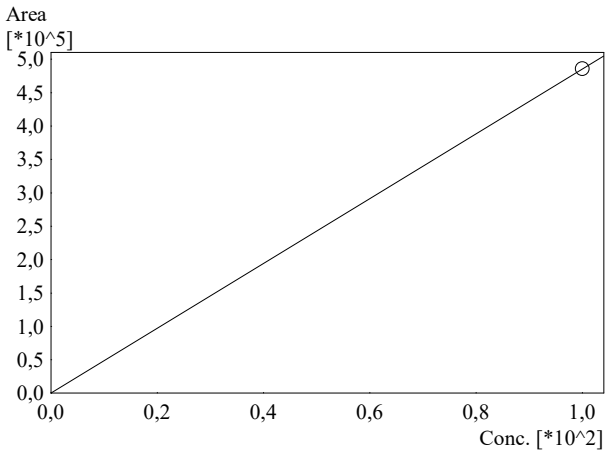
<< DTCD1 >>
ID#1 Compound Name: Methane

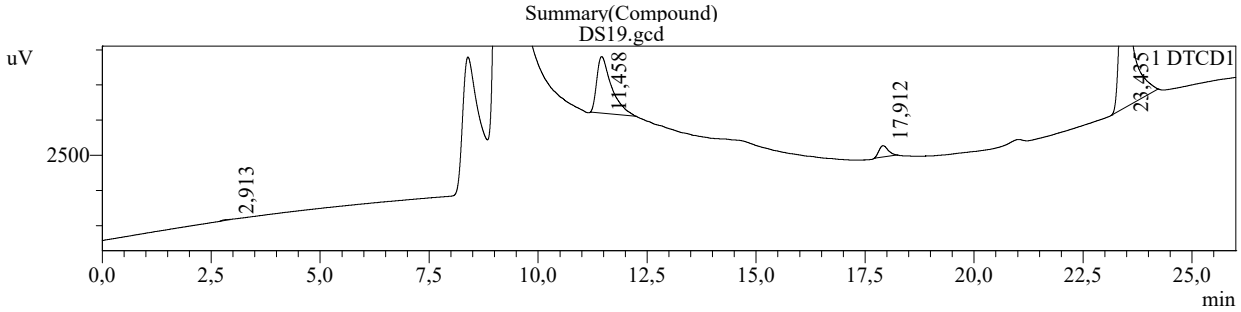
Title	Sample Name	Sample ID	Ret. Time	Area	Height	Conc.
DS19.gcd	STANDARD (	DS19	17,912	2424	163	0,710
DS20.gcd	Nashrul	DS20	17,927	2040	127	0,597
DS21.gcd	Nashrul	DS21	17,909	2261	142	0,662
Average			17,916	2242	144	0,656
%RSD			0,054	8,609	12,551	8,609
Maximum			17,927	2424	163	0,710
Minimum			17,909	2040	127	0,597
Standard Deviation			0,010	193	18	0,056

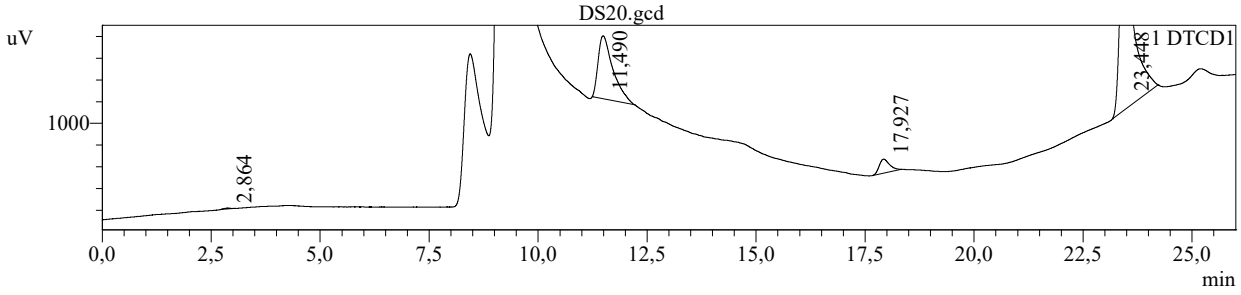
Calibration Curve

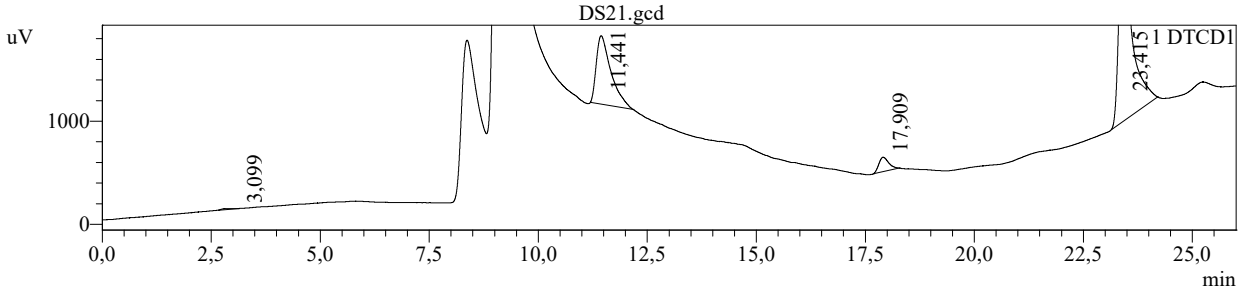
ID# : 1
Name : Carbon Dioksida
Quantitative Method : External Standard
Function : f(x)=4857,11*x+0
Rr1=1,000000 Rr2=1,000000 RSS=3,388132e-021
MeanRF: 4,857113e+003 RFSD: 0,000000e+00 RFRSD: 0,000000
FitType : Linear
ZeroThrough : Not Through
Weighted Regression : None
Detector Name : DTCD1

#	Conc.(Ratio)	MeanArea	Area
1	99,98	485614	485614









<< DTCD1 >>
ID#1 Compound Name: Carbon Dioksida

Title	Sample Name	Sample ID	Ret. Time	Area	Height	Conc.
DS19.gcd	STANDARD (	DS19	23,435	46083	2418	9,488
DS20.gcd	Nashrul	DS20	23,448	38475	1943	7,921
DS21.gcd	Nashrul	DS21	23,415	40268	2097	8,291
Average			23,433	41609	2153	8,567
%RSD			0,071	9,559	11,249	9,559
Maximum			23,448	46083	2418	9,488
Minimum			23,415	38475	1943	7,921
Standard Deviation			0,017	3977	242	0,819