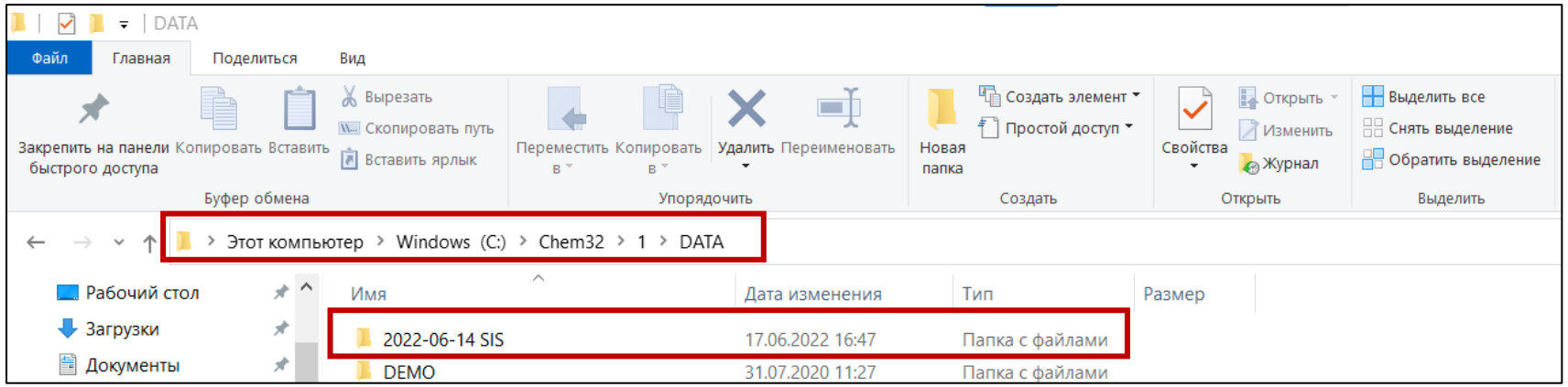
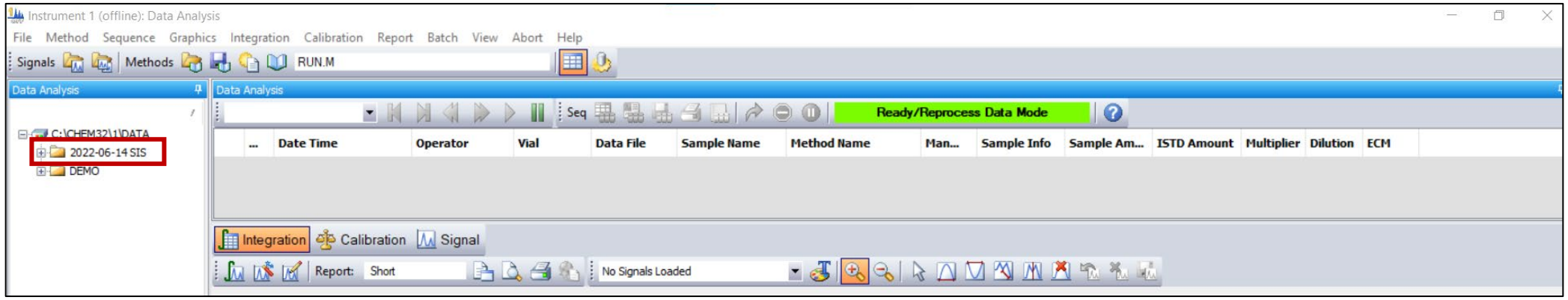
Метод внешнего стандарта

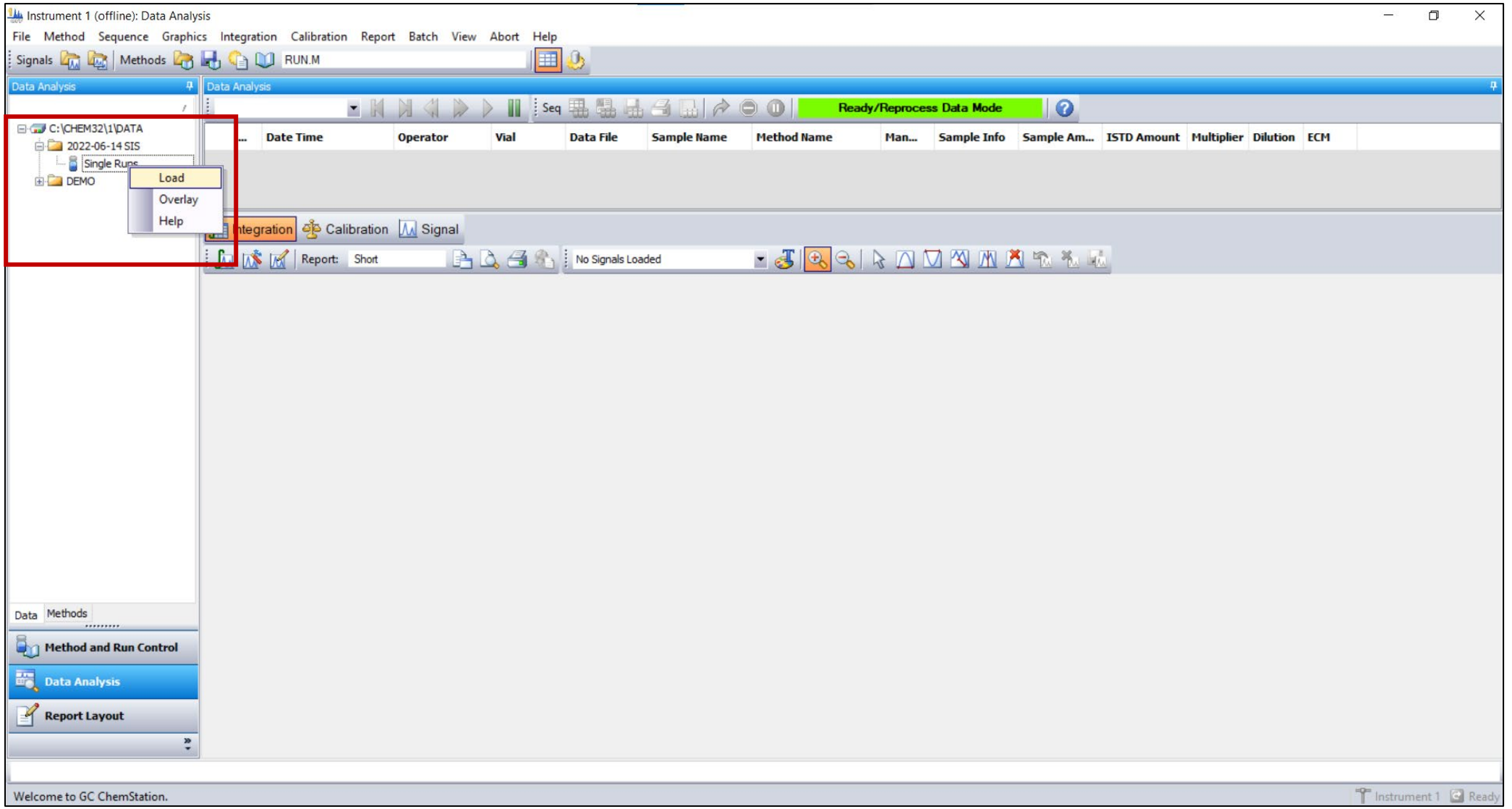
1. Поместить папку с измерениями ChemStation



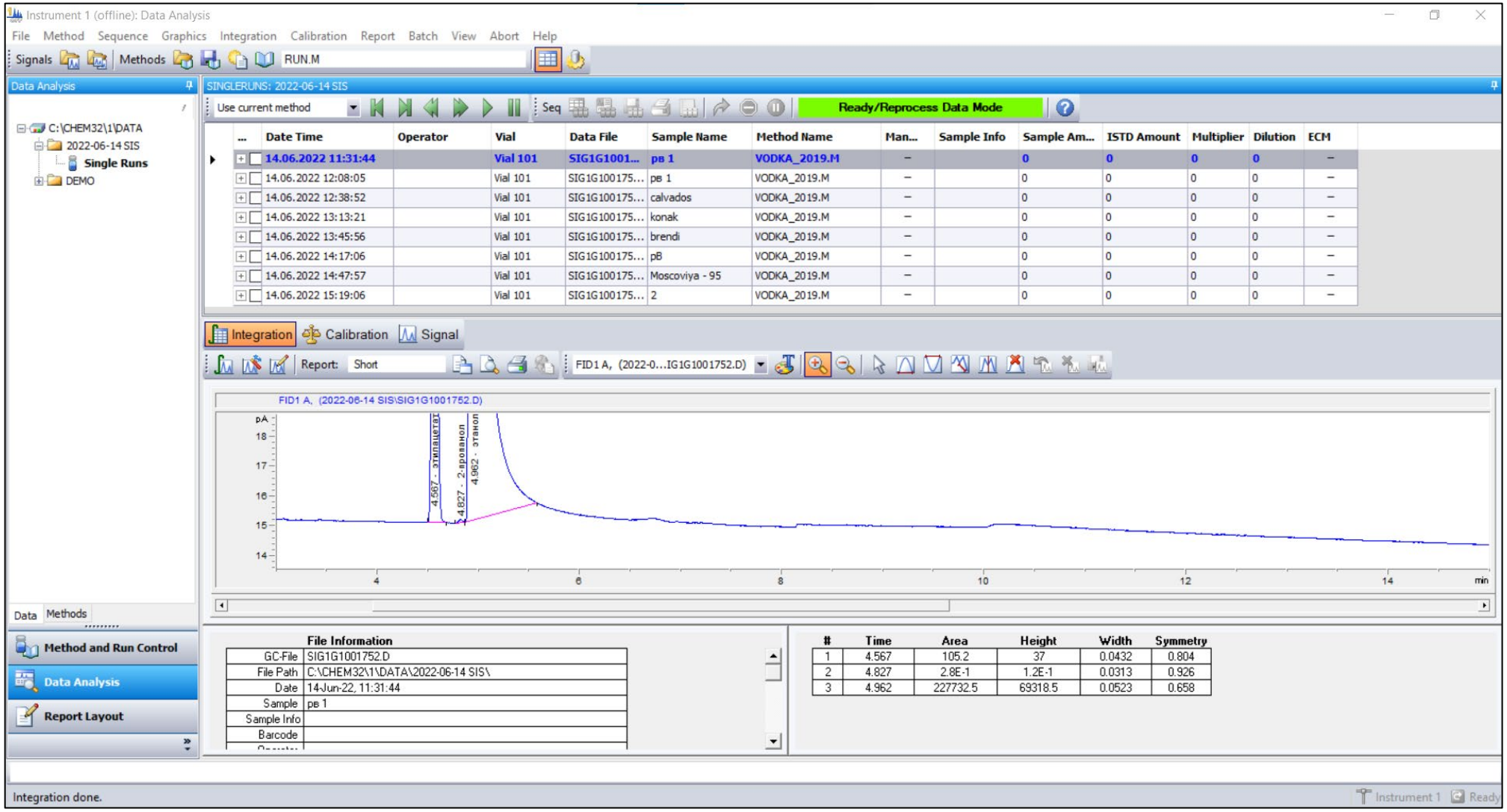
Она появится в ChemStation



3. Загрузить файлы



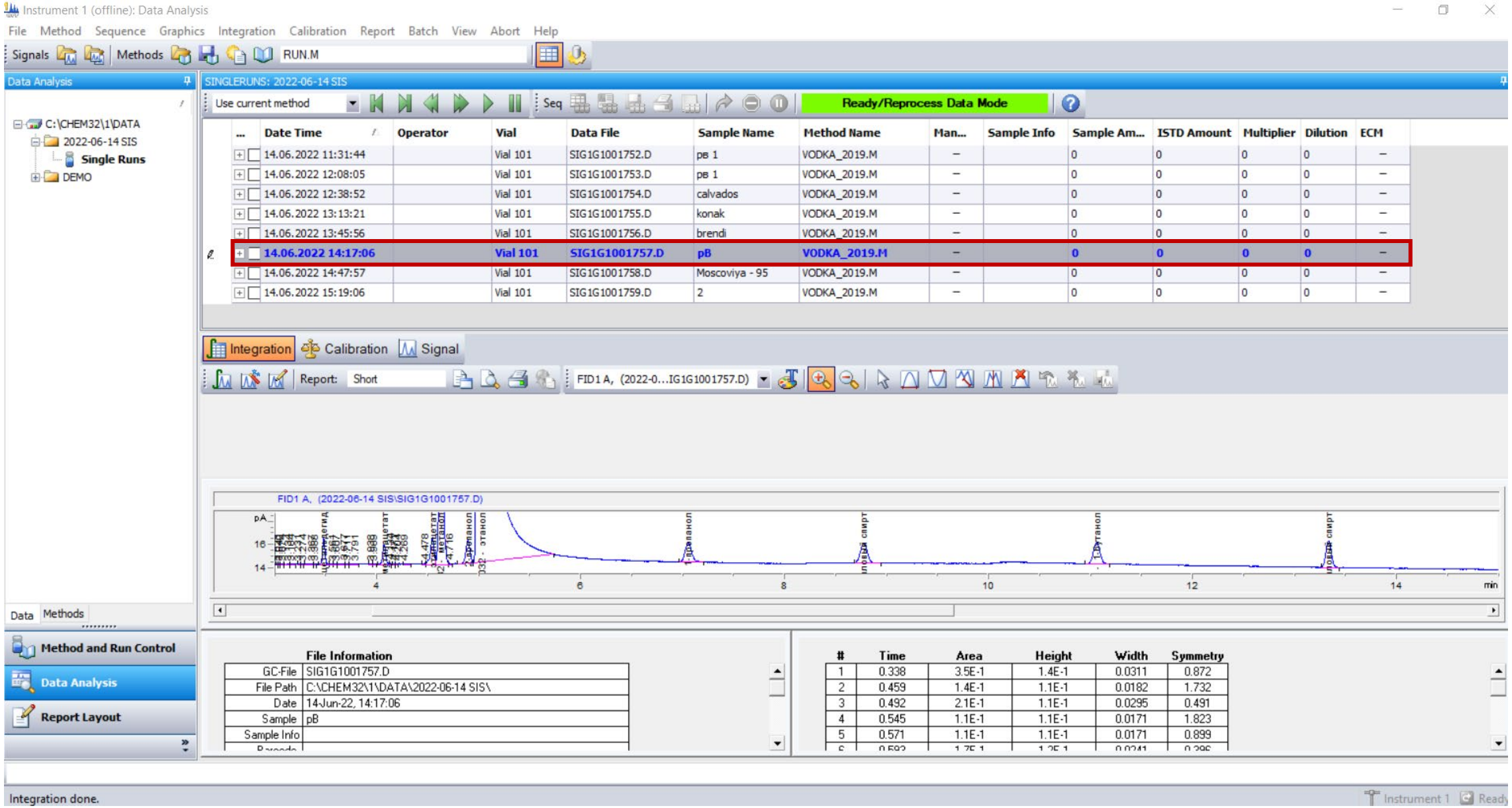
3. Появятся файлы



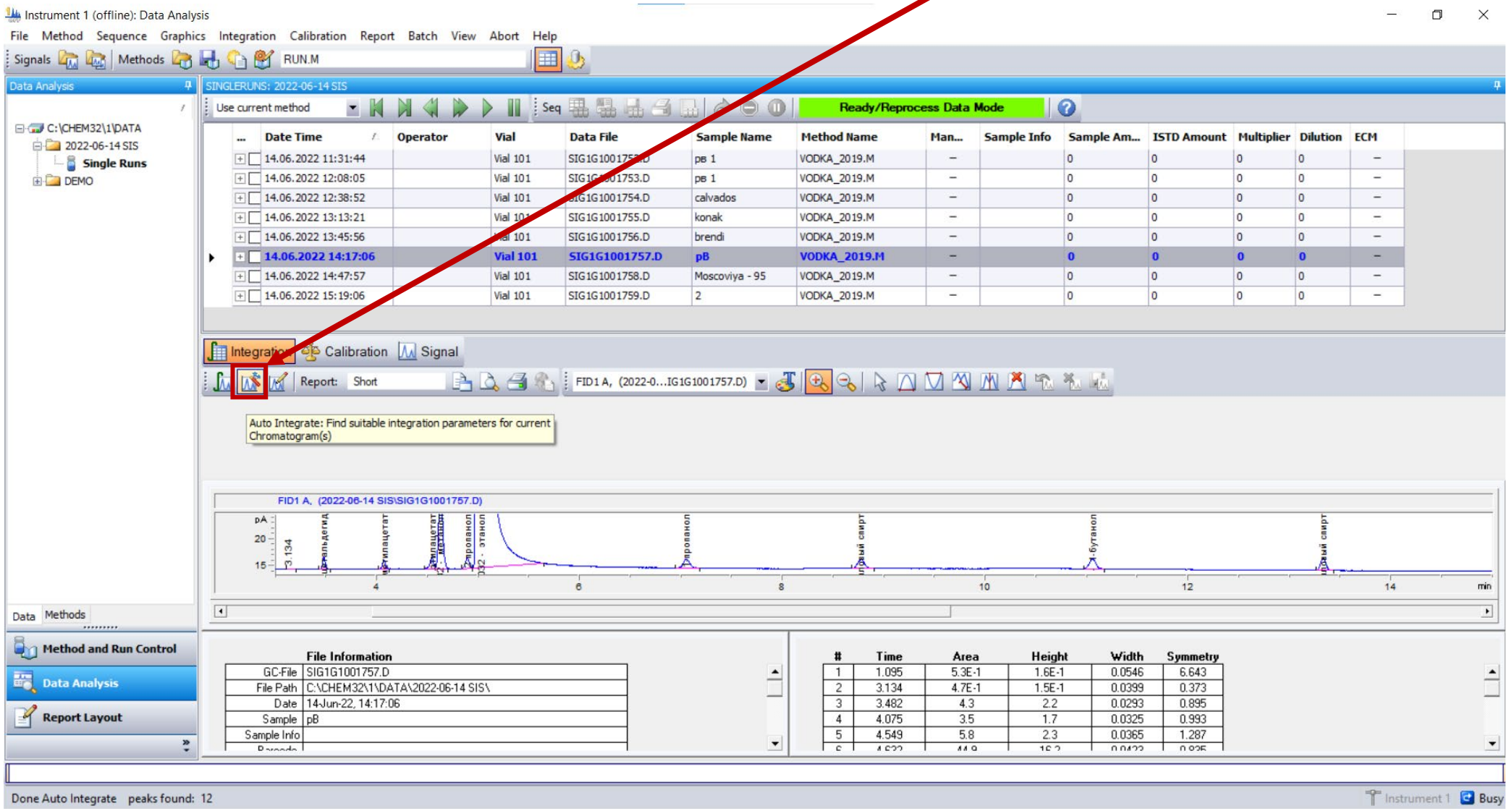
...	Date Time	Operator	Vial	Data File	Sample Name	Method Name	Man...	Sample Info	Sample Am...	ISTD Amount	Multiplier	Dilution	ECM
	14.06.2022 11:31:44		Vial 101	SIG1G1001...	рв 1	VODKA_2019.M	–		0	0	0	0	–
	14.06.2022 12:08:05		Vial 101	SIG1G100175...	рв 1	VODKA_2019.M	–		0	0	0	0	–
	14.06.2022 12:38:52		Vial 101	SIG1G100175...	calvados	VODKA_2019.M	–		0	0	0	0	–
	14.06.2022 13:13:21		Vial 101	SIG1G100175...	konak	VODKA_2019.M	–		0	0	0	0	–
	14.06.2022 13:45:56		Vial 101	SIG1G100175...	brendi	VODKA_2019.M	–		0	0	0	0	–
	14.06.2022 14:17:06		Vial 101	SIG1G100175...	pB	VODKA_2019.M	–		0	0	0	0	–
	14.06.2022 14:47:57		Vial 101	SIG1G100175...	Moscoviya - 95	VODKA_2019.M	–		0	0	0	0	–
	14.06.2022 15:19:06		Vial 101	SIG1G100175...	2	VODKA_2019.M	–		0	0	0	0	–

#	Time	Area	Height	Width	Symmetry
1	4.567	105.2	37	0.0432	0.804
2	4.827	2.8E-1	1.2E-1	0.0313	0.926
3	4.962	227732.5	69318.5	0.0523	0.658

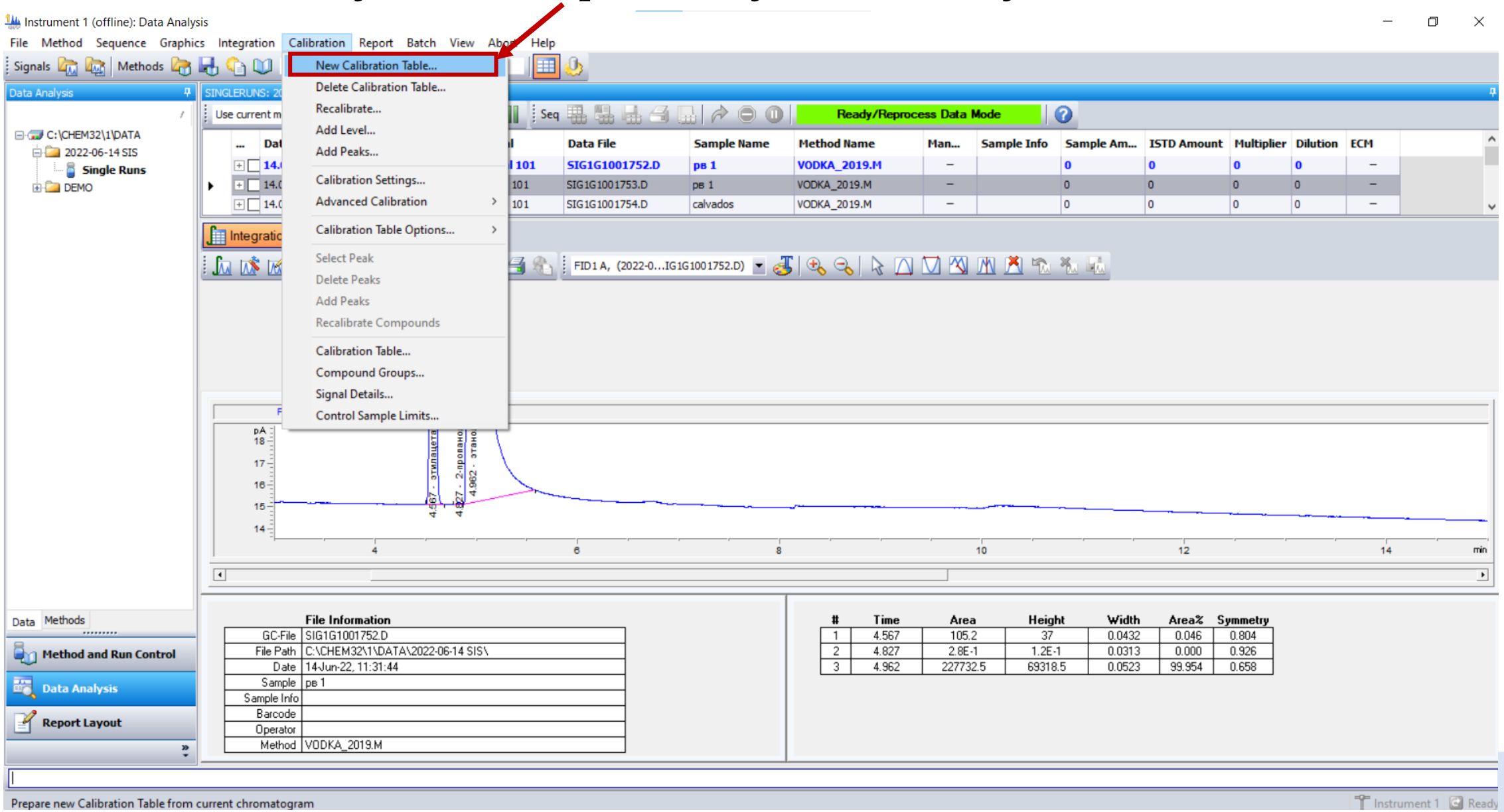
3. Выбрать файл, который будет использоваться в качестве калибровочного



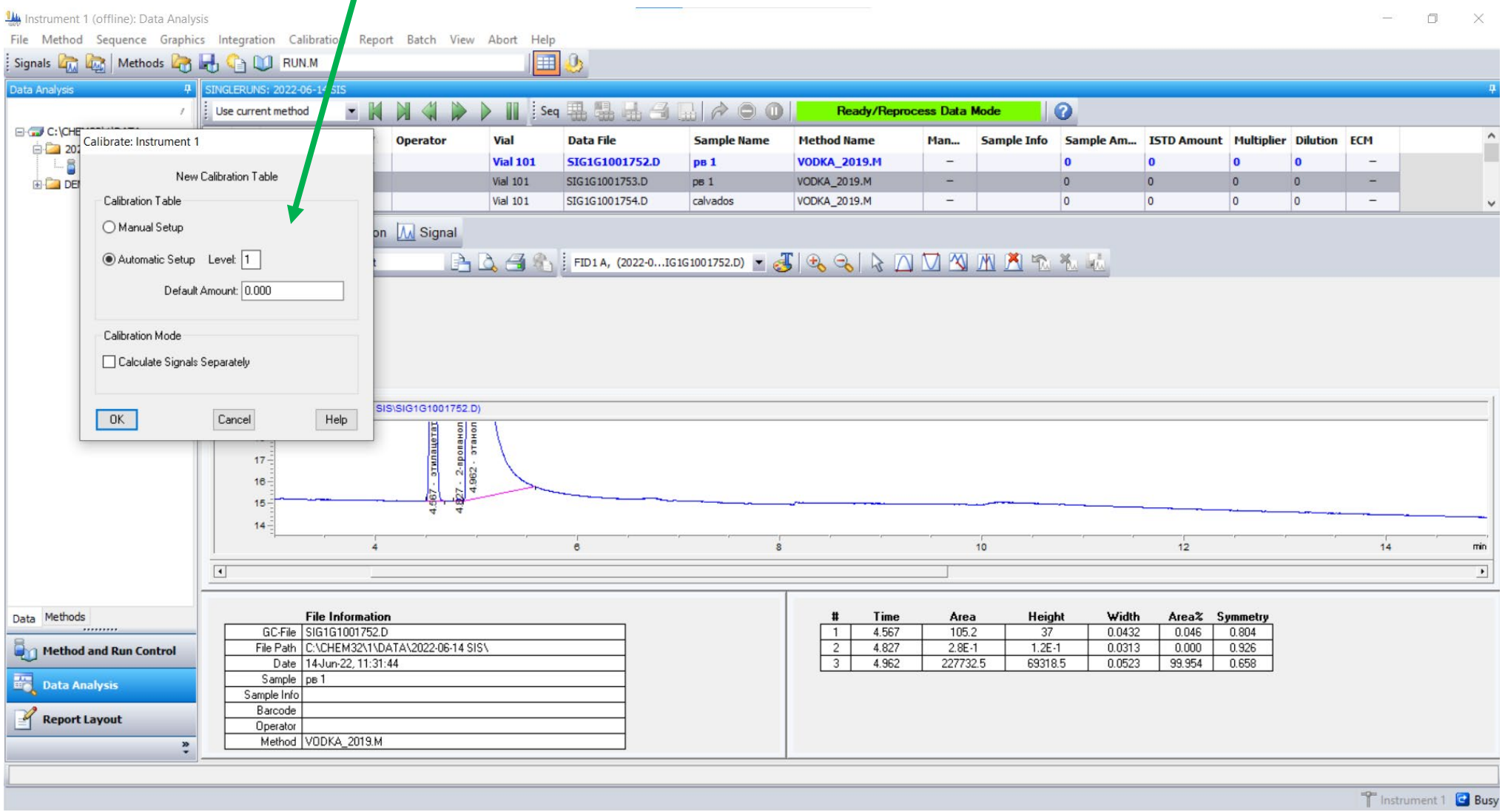
4. Перейти на вкладку Integration и нажать сюда



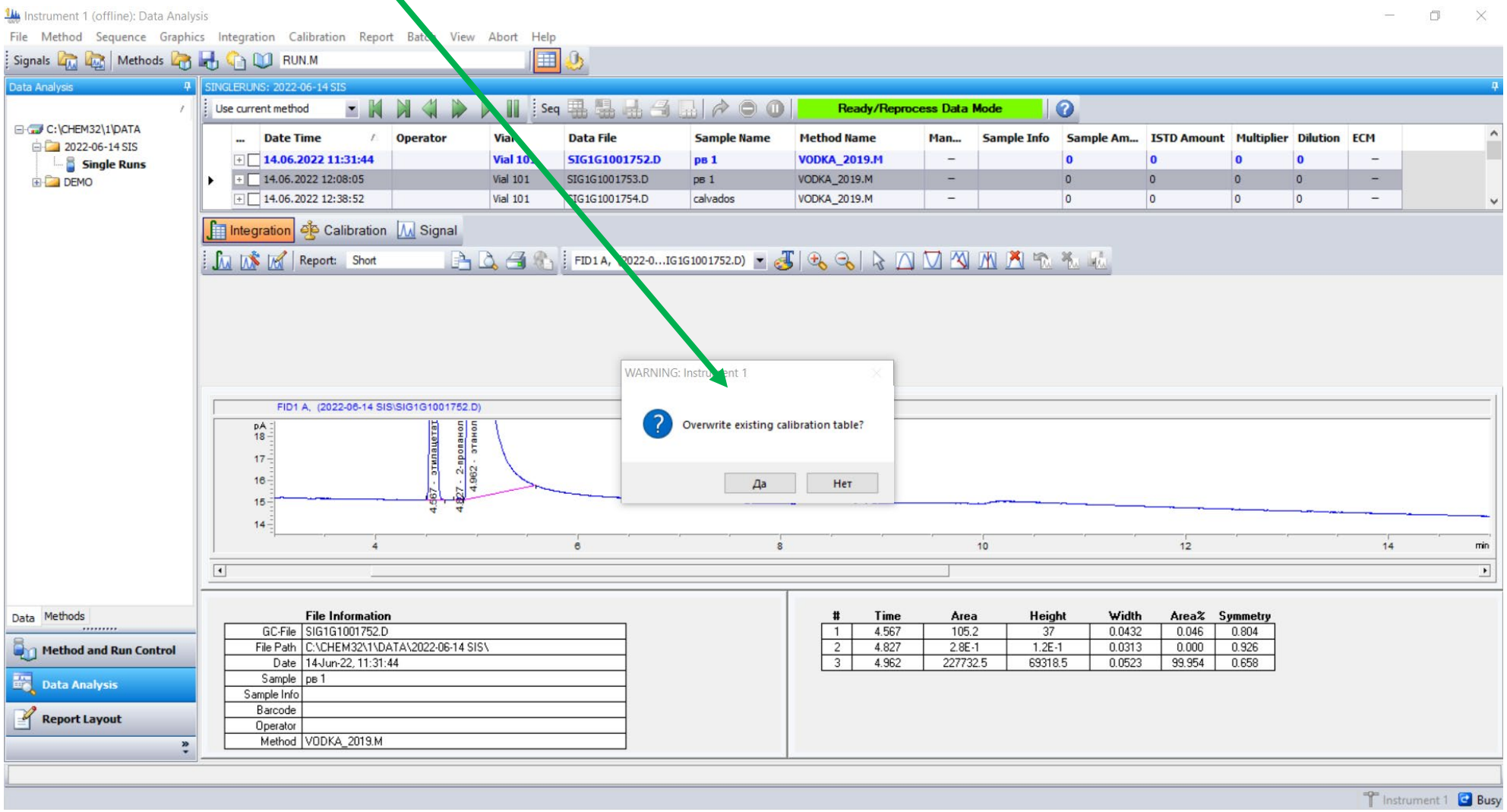
4. Создать новую калибровочную таблицу



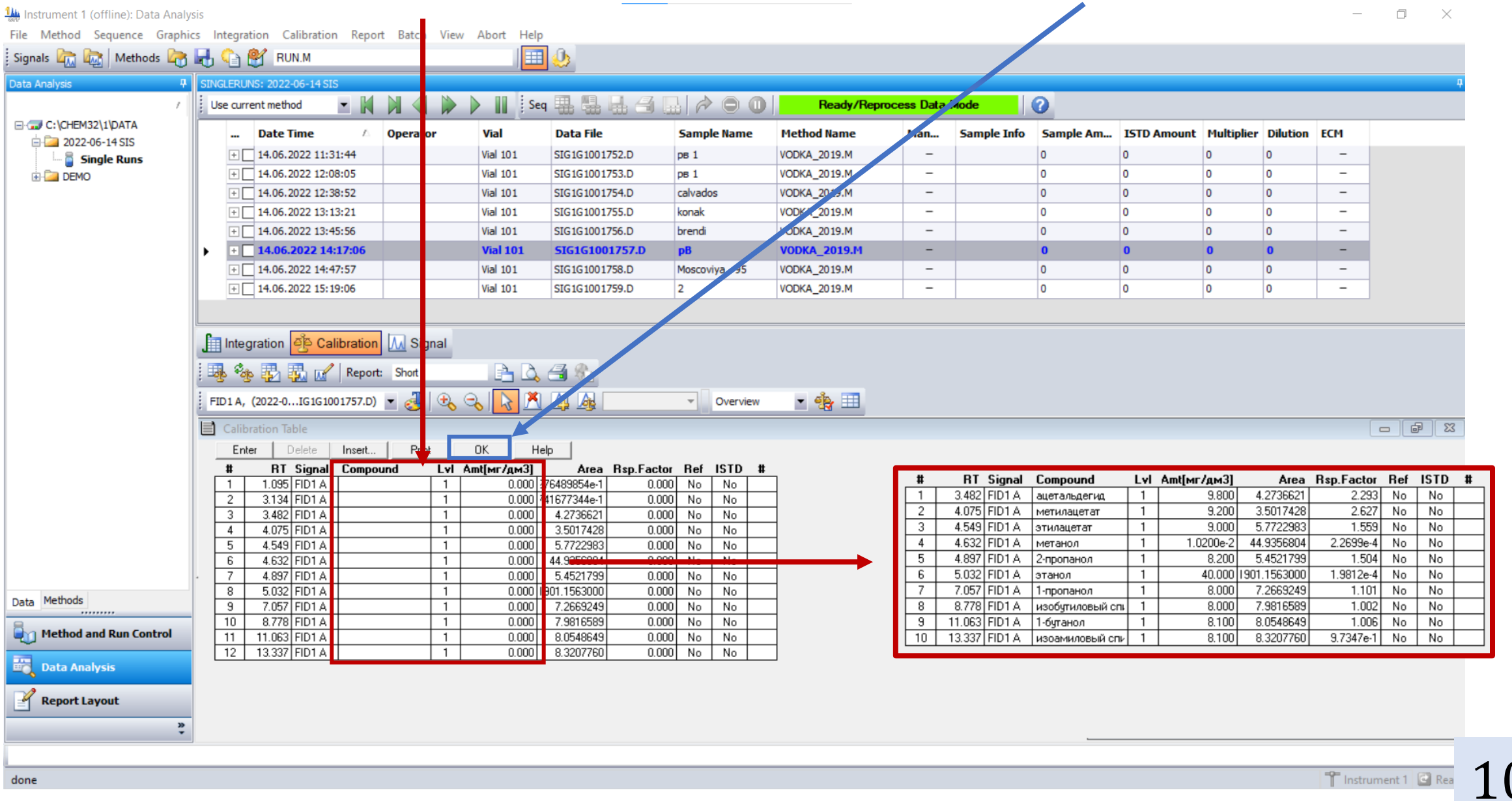
5. Появится окно, нажать «ОК»



6. Появится окно, нажать «ОК»



7. Появится таблица, заполнить ее, нажать «ОК»

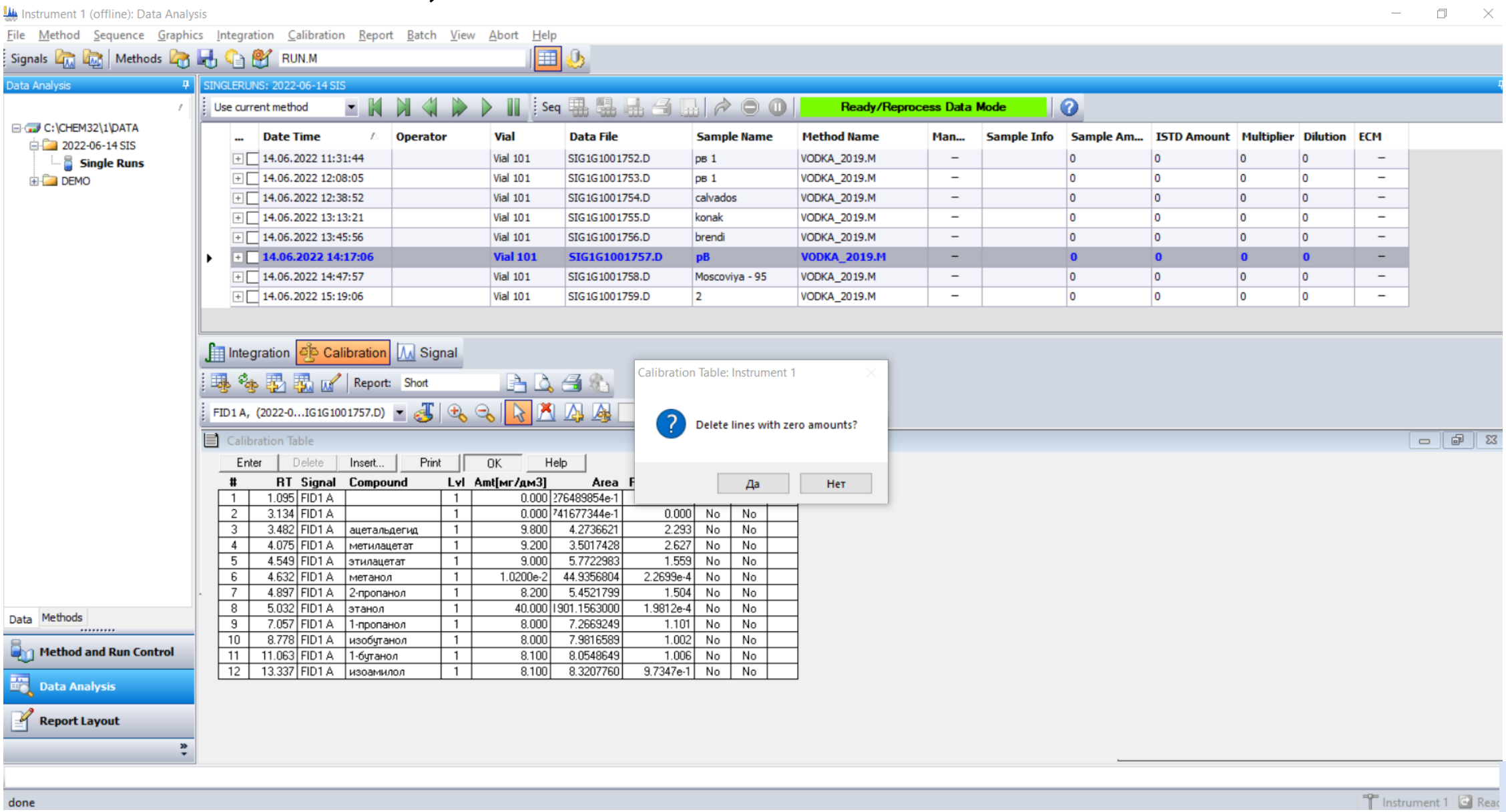


...	Date Time	Operator	Vial	Data File	Sample Name	Method Name	Man...	Sample Info	Sample Am...	ISTD Amount	Multiplier	Dilution	ECM
	14.06.2022 11:31:44		Vial 101	SIG1G1001752.D	рв 1	VODKA_2019.M	–		0	0	0	0	–
	14.06.2022 12:08:05		Vial 101	SIG1G1001753.D	рв 1	VODKA_2019.M	–		0	0	0	0	–
	14.06.2022 12:38:52		Vial 101	SIG1G1001754.D	calvados	VODKA_2019.M	–		0	0	0	0	–
	14.06.2022 13:13:21		Vial 101	SIG1G1001755.D	konak	VODKA_2019.M	–		0	0	0	0	–
	14.06.2022 13:45:56		Vial 101	SIG1G1001756.D	brendi	VODKA_2019.M	–		0	0	0	0	–
	14.06.2022 14:17:06		**Vial 101**	**SIG1G1001757.D**	**pB**	**VODKA_2019.M**	–		**0**	**0**	**0**	**0**	–
	14.06.2022 14:47:57		Vial 101	SIG1G1001758.D	Moscoviya 95	VODKA_2019.M	–		0	0	0	0	–
	14.06.2022 15:19:06		Vial 101	SIG1G1001759.D	2	VODKA_2019.M	–		0	0	0	0	–

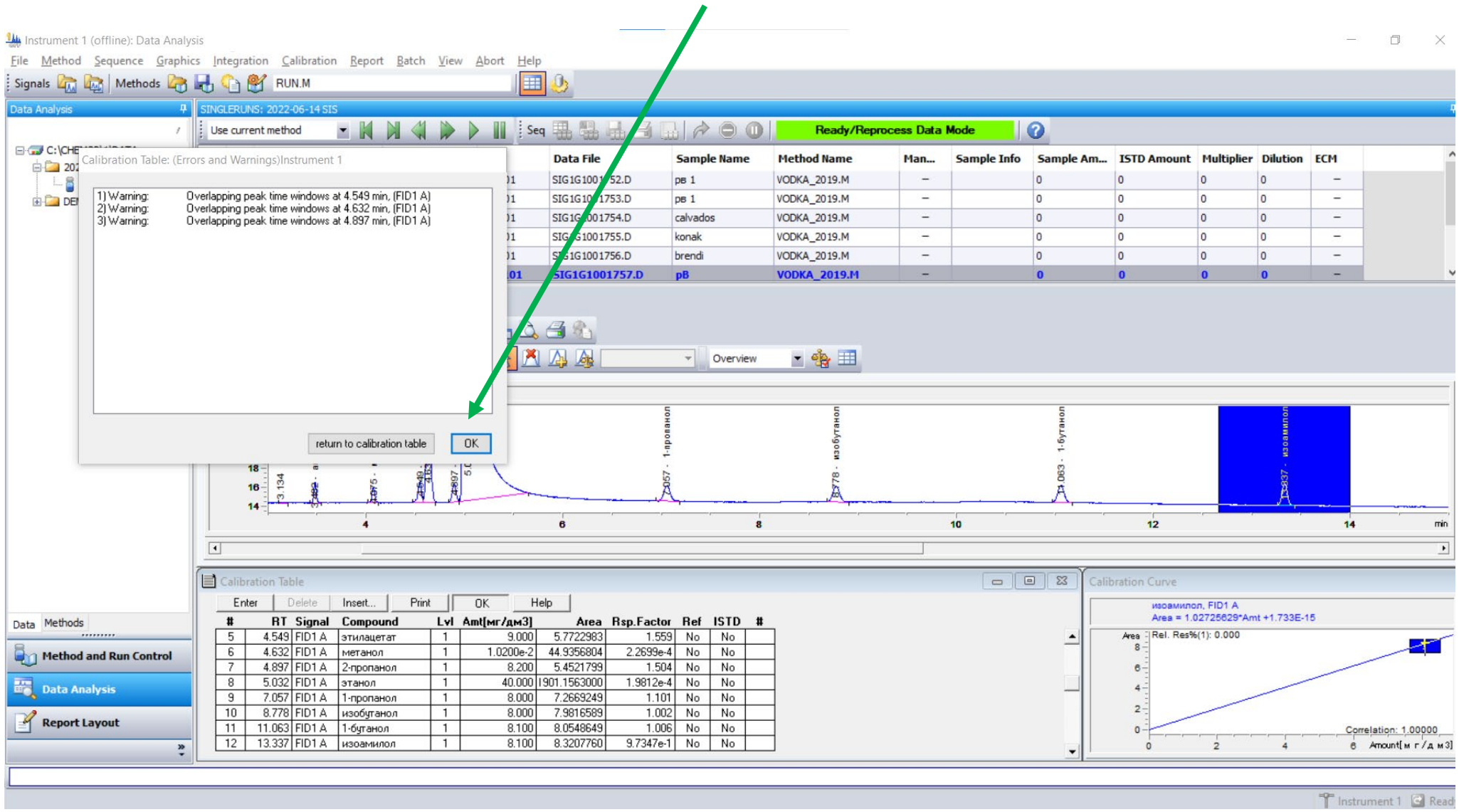
#	RT	Signal	Compound	Lvl	Amt[мг/дм3]	Area	Rsp.Factor	Ref	ISTD	#
1	1.095	FID1 A		1	0.000	76489854e-1	0.000	No	No	
2	3.134	FID1 A		1	0.000	41677344e-1	0.000	No	No	
3	3.482	FID1 A		1	0.000	4.2736621	0.000	No	No	
4	4.075	FID1 A		1	0.000	3.5017428	0.000	No	No	
5	4.549	FID1 A		1	0.000	5.7722983	0.000	No	No	
6	4.632	FID1 A		1	0.000	44.9356804	0.000	No	No	
7	4.897	FID1 A		1	0.000	5.4521799	0.000	No	No	
8	5.032	FID1 A		1	0.000	1901.1563000	0.000	No	No	
9	7.057	FID1 A		1	0.000	7.2669249	0.000	No	No	
10	8.778	FID1 A		1	0.000	7.9816589	0.000	No	No	
11	11.063	FID1 A		1	0.000	8.0548649	0.000	No	No	
12	13.337	FID1 A		1	0.000	8.3207760	0.000	No	No	

#	RT	Signal	Compound	Lvl	Amt[мг/дм3]	Area	Rsp.Factor	Ref	ISTD	#
1	3.482	FID1 A	ацетальдегид	1	9.800	4.2736621	2.293	No	No	
2	4.075	FID1 A	метилацетат	1	9.200	3.5017428	2.627	No	No	
3	4.549	FID1 A	этилацетат	1	9.000	5.7722983	1.559	No	No	
4	4.632	FID1 A	метанол	1	1.0200e-2	44.9356804	2.2699e-4	No	No	
5	4.897	FID1 A	2-пропанол	1	8.200	5.4521799	1.504	No	No	
6	5.032	FID1 A	этанол	1	40.000	1901.1563000	1.9812e-4	No	No	
7	7.057	FID1 A	1-пропанол	1	8.000	7.2669249	1.101	No	No	
8	8.778	FID1 A	изобутиловый спи	1	8.000	7.9816589	1.002	No	No	
9	11.063	FID1 A	1-бутанол	1	8.100	8.0548649	1.006	No	No	
10	13.337	FID1 A	изоамиловый спи	1	8.100	8.3207760	9.7347e-1	No	No	

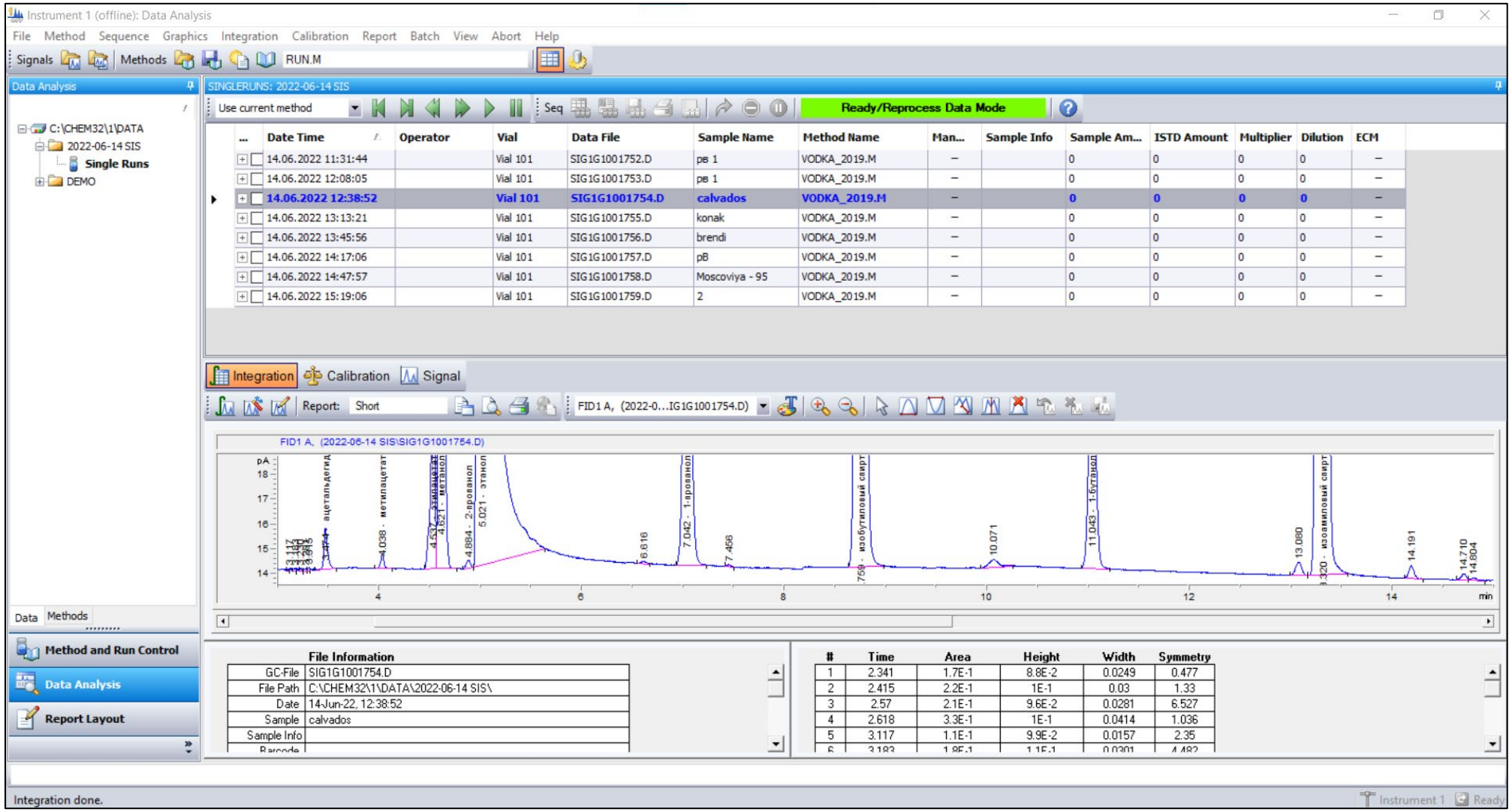
8. Появится окно, нажать «ОК»



9. Появится окно, нажать «ОК»

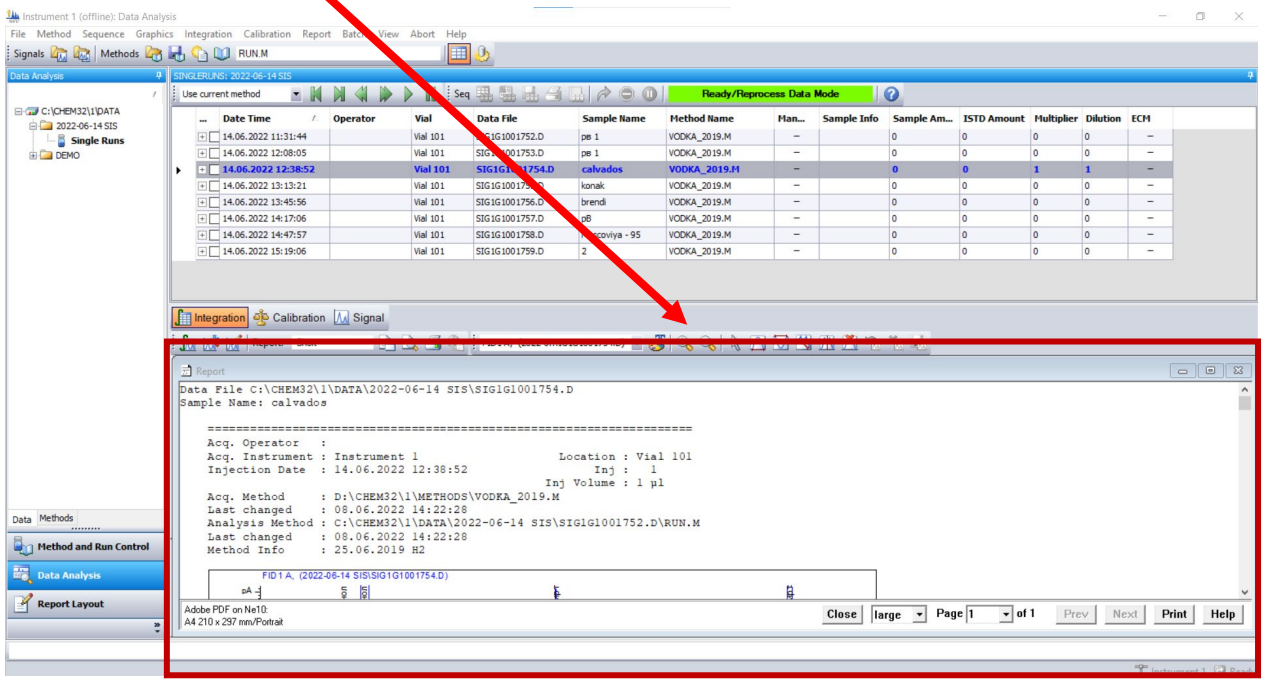


10. Выбрать образец «Кальвадос»

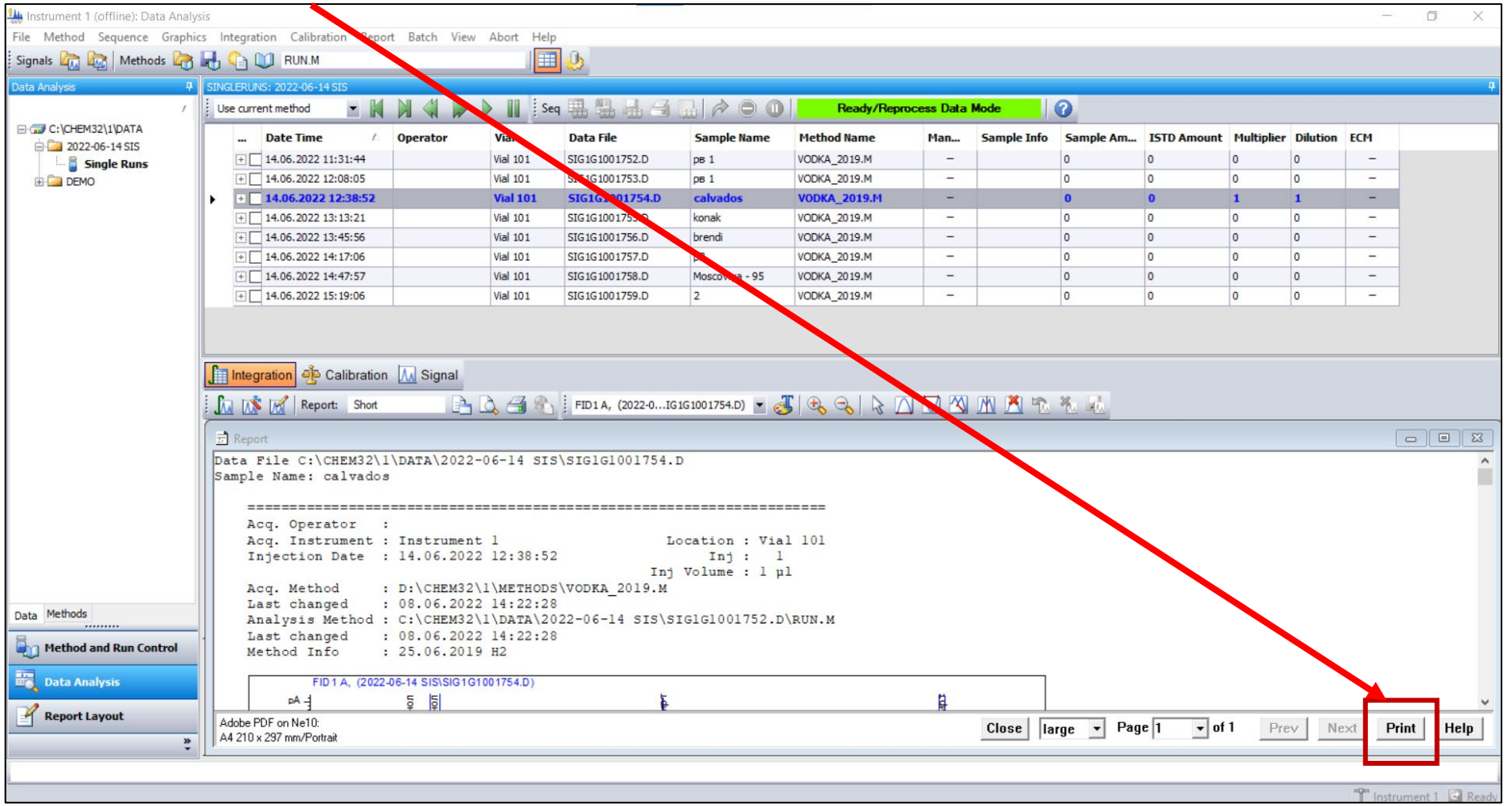


11. Выбрать «Print report»

Отчет появится внизу



12. Нажать «Print» и сохранить как pdf

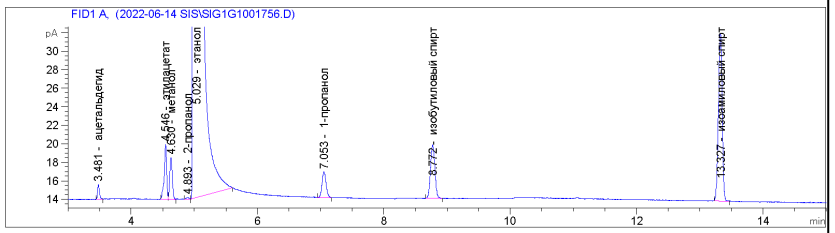


С остальными образцами сделать то же самое

Бренди

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001756.D
Sample Name: brendi

Acq. Operator :
Acq. Instrument : Instrument 1 Location : Vial 101
Injection Date : 14.06.2022 13:45:56 Inj : 1
Inj Volume : 1 µl
Acq. Method : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed : 20.06.2022 14:30:13
Method Info : 25.06.2019 H2



External Standard Report

Sorted By : Signal
Calib. Data Modified : 20.06.2022 14:28:58
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [мг/дм3]	Grp	Name
3.481	BB	3.30317	2.29312	7.57455		ацетальдегид
4.075		-	-	-		метилацетат
4.546	BV	16.05829	1.55917	25.03761		этилацетат
4.630	VV	12.25589	2.26991e-4	2.78198e-3		метанол
4.893	BV	5.12686e-1	1.50399	7.71072e-1		2-пропанол
5.029	VB S	1.96805e5	1.98117e-4	38.99031		этанол
7.053	BB	12.09134	1.10088	13.31109		1-пропанол
8.772	BB	27.49682	1.00230	27.56001		изобутиловый спирт
11.063		-	-	-		1-бутанол
13.327	BB	75.22813	9.73467e-1	73.23210		изоамиловый спирт

Totals : 186.47953

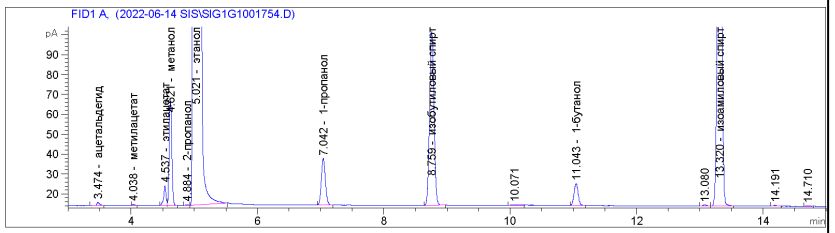
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

Кальвадос

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001754.D
Sample Name: calvados

Acq. Operator :
Acq. Instrument : Instrument 1 Location : Vial 101
Injection Date : 14.06.2022 12:38:52 Inj : 1
Inj Volume : 1 µl
Acq. Method : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed : 20.06.2022 14:30:13
Method Info : 25.06.2019 H2



External Standard Report

Sorted By : Signal
Calib. Data Modified : 20.06.2022 14:28:58
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [мг/дм3]	Grp	Name
3.474	VB	4.07187	2.29312	9.33727		ацетальдегид
4.038	BB	1.18820	2.62726	3.12172		метилацетат
4.537	BV	25.57652	1.55917	39.87817		этилацетат
4.621	VB	151.90663	2.26991e-4	3.44815e-2		метанол
4.884	BV	9.12119e-1	1.50399	1.37181		2-пропанол
5.021	VB S	2.08767e5	1.98117e-4	41.36020		этанол
7.042	BB	106.25713	1.10088	116.97617		1-пропанол
8.759	BB	422.23059	1.00230	423.20084		изобутиловый спирт
11.043	BB	49.33747	1.00560	49.61393		1-бутанол
13.320	VB	1356.46594	9.73467e-1	1320.47470		изоамиловый спирт

Totals : 2005.36929

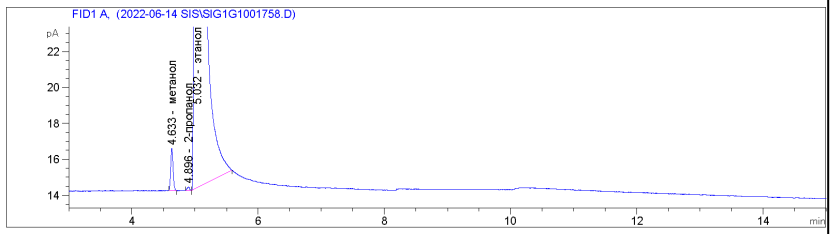
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

Водка

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001758.D
Sample Name: Moscoviya - 95

Acq. Operator :
Acq. Instrument : Instrument 1 Location : Vial 101
Injection Date : 14.06.2022 14:47:57 Inj : 1
Inj Volume : 1 µl
Acq. Method : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed : 20.06.2022 14:30:13
Method Info : 25.06.2019 H2



External Standard Report

Sorted By : Signal
Calib. Data Modified : 20.06.2022 14:28:58
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [мг/дм3]	Grp	Name
3.482		-	-	-		ацетальдегид
4.075		-	-	-		метилацетат
4.549		-	-	-		этилацетат
4.633	BB	6.31566	2.26991e-4	1.43360e-3		метанол
4.896	BV	5.55516e-1	1.50399	8.35488e-1		2-пропанол
5.032	VB S	1.89793e5	1.98117e-4	37.60121		этанол
7.057		-	-	-		1-пропанол
8.778		-	-	-		изобутиловый спирт
11.063		-	-	-		1-бутанол
13.337		-	-	-		изоамиловый спирт

Totals : 38.43813

2 Warnings or Errors :

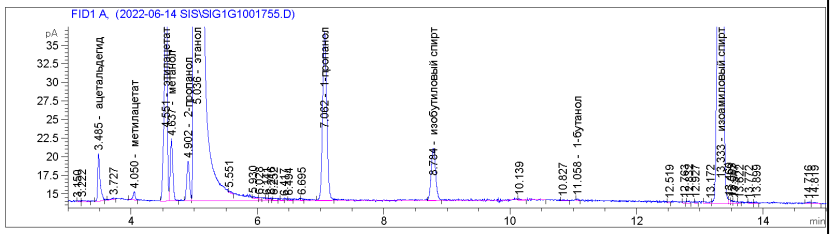
Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

Instrument 1 20.06.2022 14:31:36 Page 1 of 2

Коньяк

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001755.D
Sample Name: konak

Acq. Operator :
Acq. Instrument : Instrument 1 Location : Vial 101
Injection Date : 14.06.2022 13:13:21 Inj : 1
Inj Volume : 1 µl
Acq. Method : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed : 20.06.2022 14:30:13
Method Info : 25.06.2019 H2



External Standard Report

Sorted By : Signal
Calib. Data Modified : 20.06.2022 14:28:58
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [мг/дм3]	Grp	Name
3.485	VV	16.95651	2.29312	38.88323		ацетальдегид
4.050	BV	2.80551	2.62726	7.37081		метилацетат
4.551	BV	128.33510	1.55917	200.09636		этилацетат
4.637	VB	24.14906	2.26991e-4	5.48162e-3		метанол
4.902	BV	16.46674	1.50399	24.76574		2-пропанол
5.036	VB S	2.16074e5	1.98117e-4	42.80782		этанол
7.062	VV T	104.56990	1.10088	115.11874		1-пропанол
8.784	PV T	34.57939	1.00230	34.65885		изобутиловый спирт
11.058	BB	7.03571e-1	1.00560	7.07514e-1		1-бутанол
13.333	VV	854.57062	9.73467e-1	831.89621		изоамиловый спирт

Totals : 1296.31075

1 Warnings or Errors :

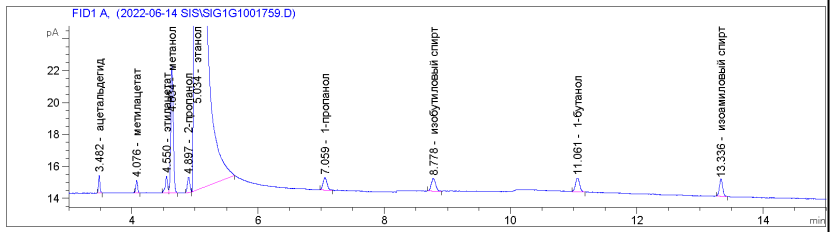
Warning : Calibration warnings (see calibration table listing)

Instrument 1 20.06.2022 14:30:48 Page 1 of 2

РВ-2

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001759.D
Sample Name: 2

```
=====================================================================
Acq. Operator   :
Acq. Instrument : Instrument 1                    Location : Vial 101
Injection Date  : 14.06.2022 15:19:06                Inj :   1
                                                  Inj Volume : 1 µl
Acq. Method     : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed    : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed    : 20.06.2022 14:30:13
Method Info     : 25.06.2019 H2
```



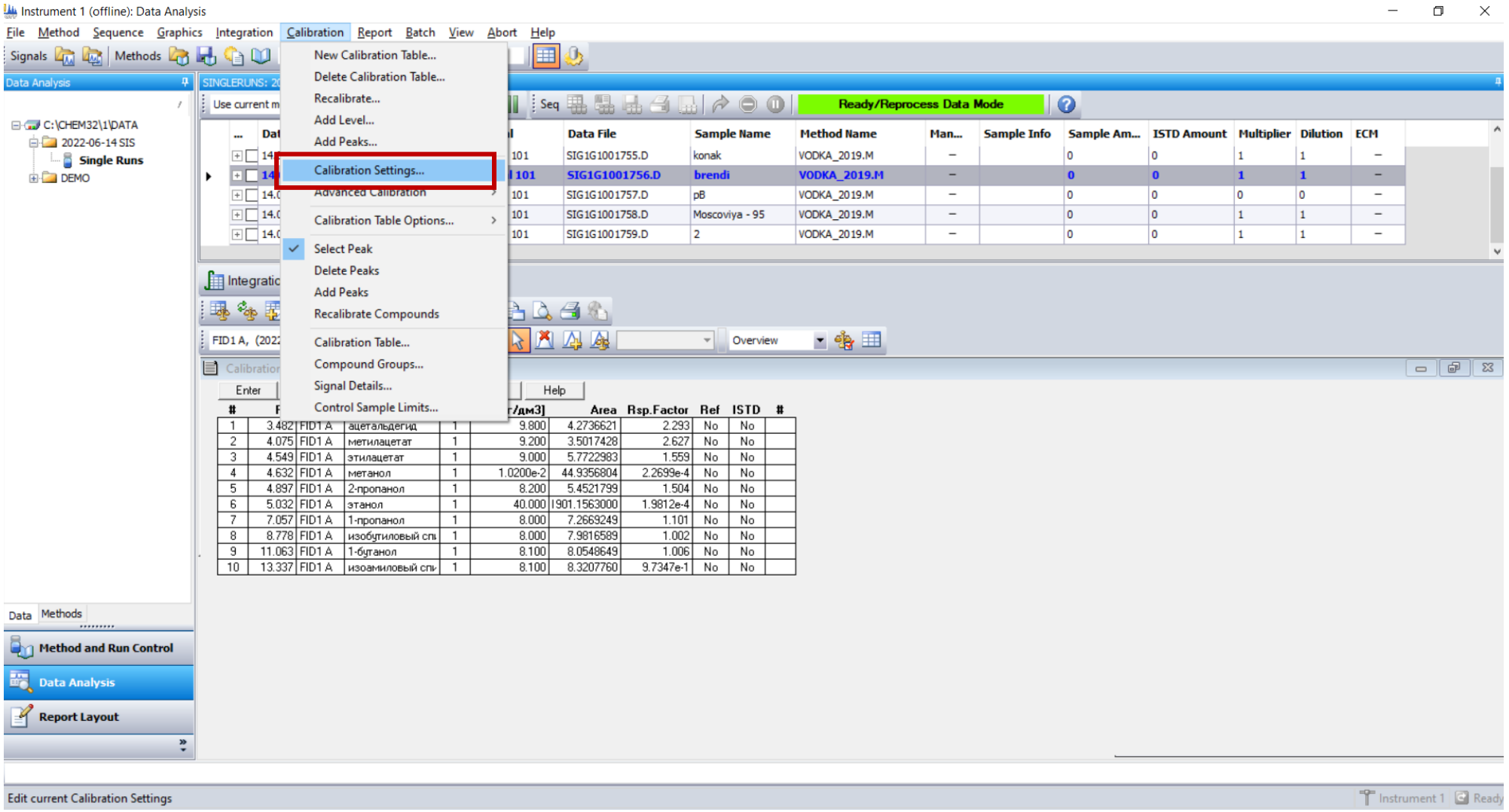

```
=====================================================================
                        External Standard Report
=====================================================================

Sorted By             :      Signal
Calib. Data Modified  :      20.06.2022 14:28:58
Multiplier:                   :      1.0000
Dilution:                     :      1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,
```

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [мг/дм3]	Grp	Name
3.482	BB	1.84653	2.29312	4.23431		ацетальдегид
4.076	BB	1.60546	2.62726	4.21796		метилацетат
4.550	BV	2.68553	1.55917	4.18720		этилацетат
4.634	VB	22.04287	2.26991e-4	5.00354e-3		метанол
4.897	BV	2.66154	1.50399	4.00292		2-пропанол
5.034	VB	S 1.92767e5	1.98117e-4	38.19041		этанол
7.059	BB	3.45941	1.10088	3.80839		1-пропанол
8.778	BB	3.78041	1.00230	3.78909		изобутиловый спирт
11.061	BB	3.85842	1.00560	3.88004		1-бутанол
13.336	BB	4.01742	9.73467e-1	3.91082		изоамиловый спирт
Totals :				70.22614		

```
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
```

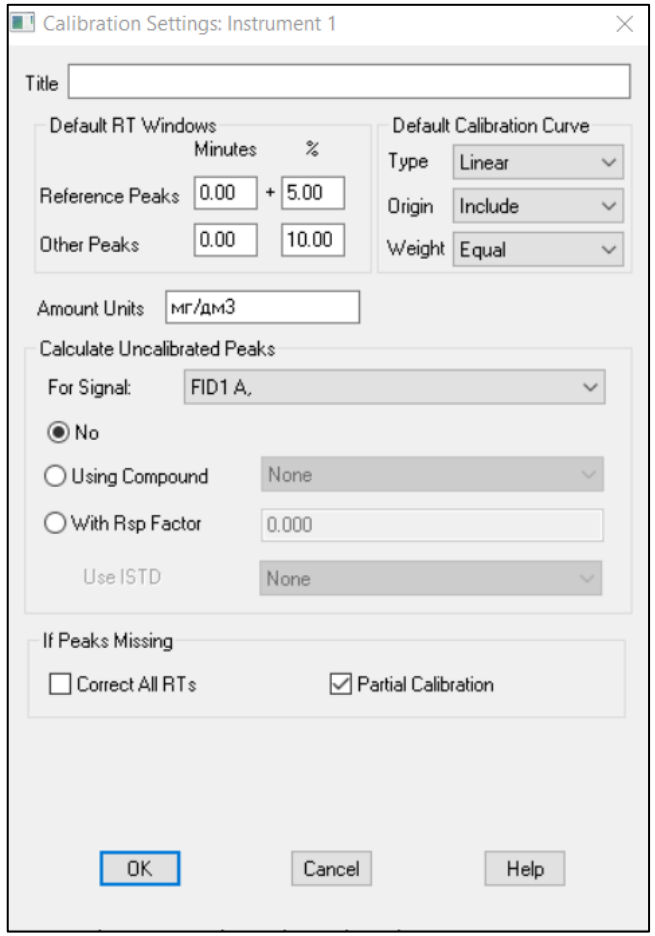
Метод внутреннего стандарта

1. Выбрать «Calibration settings…»

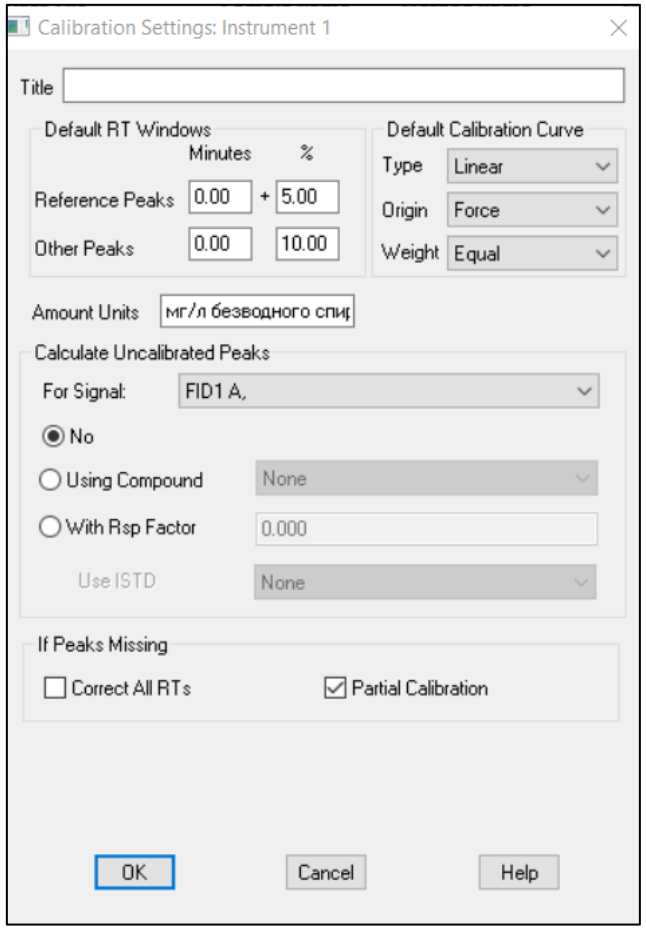


2. Внести изменения в Calibration settings

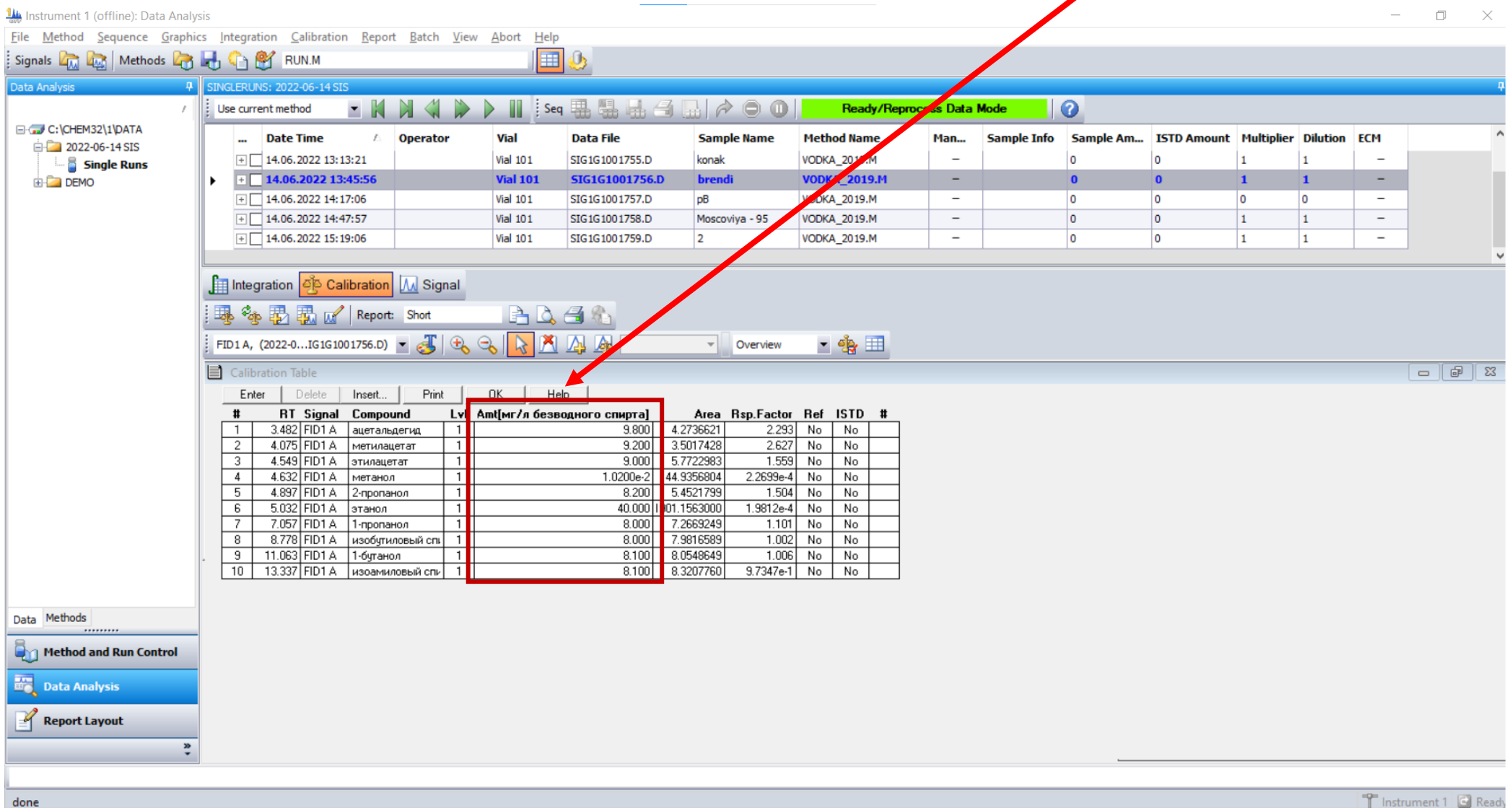
В окне будет это



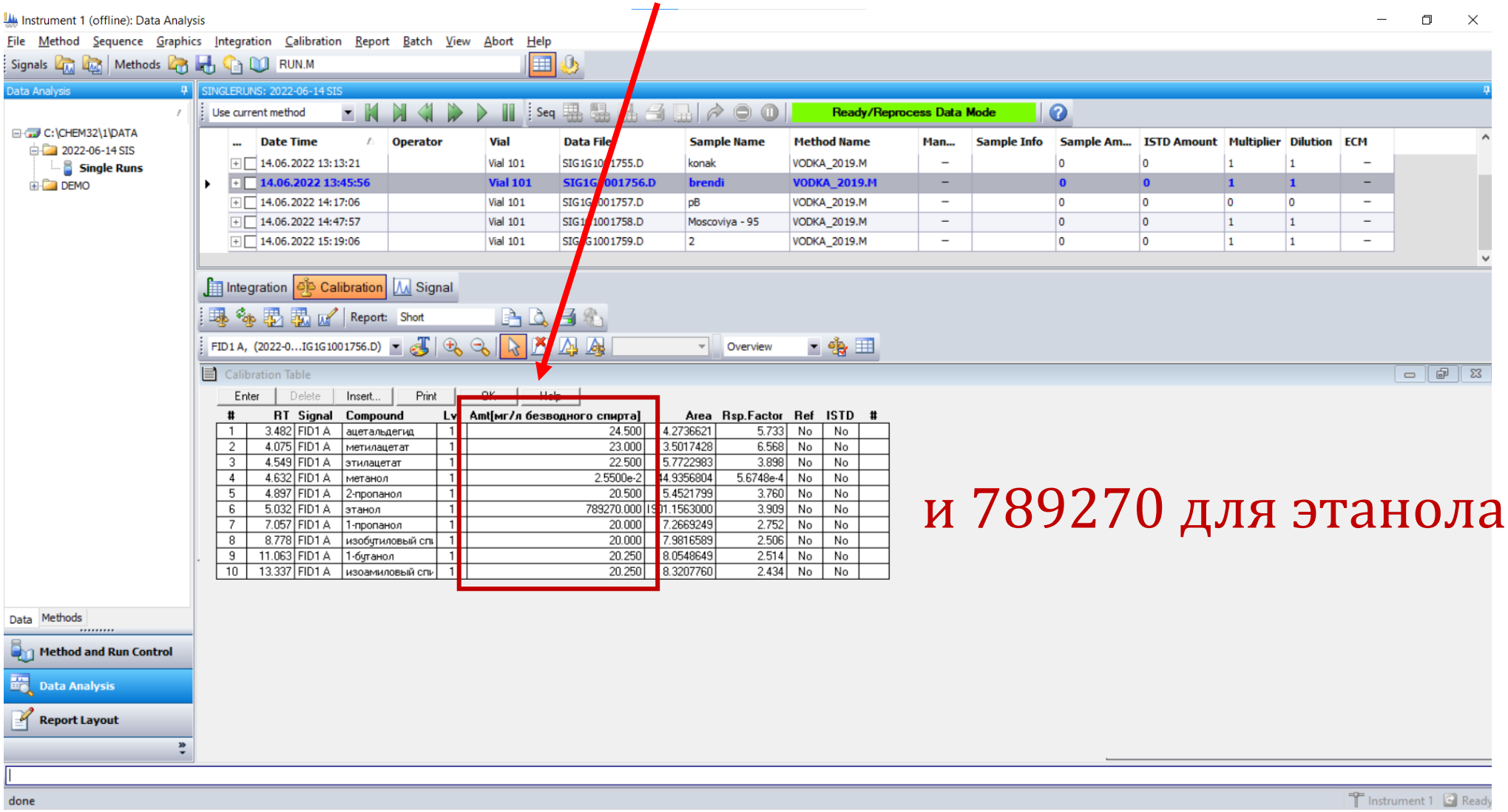
Исправить на



3. Изменить данные концентрации из мг/л в мг/л АА

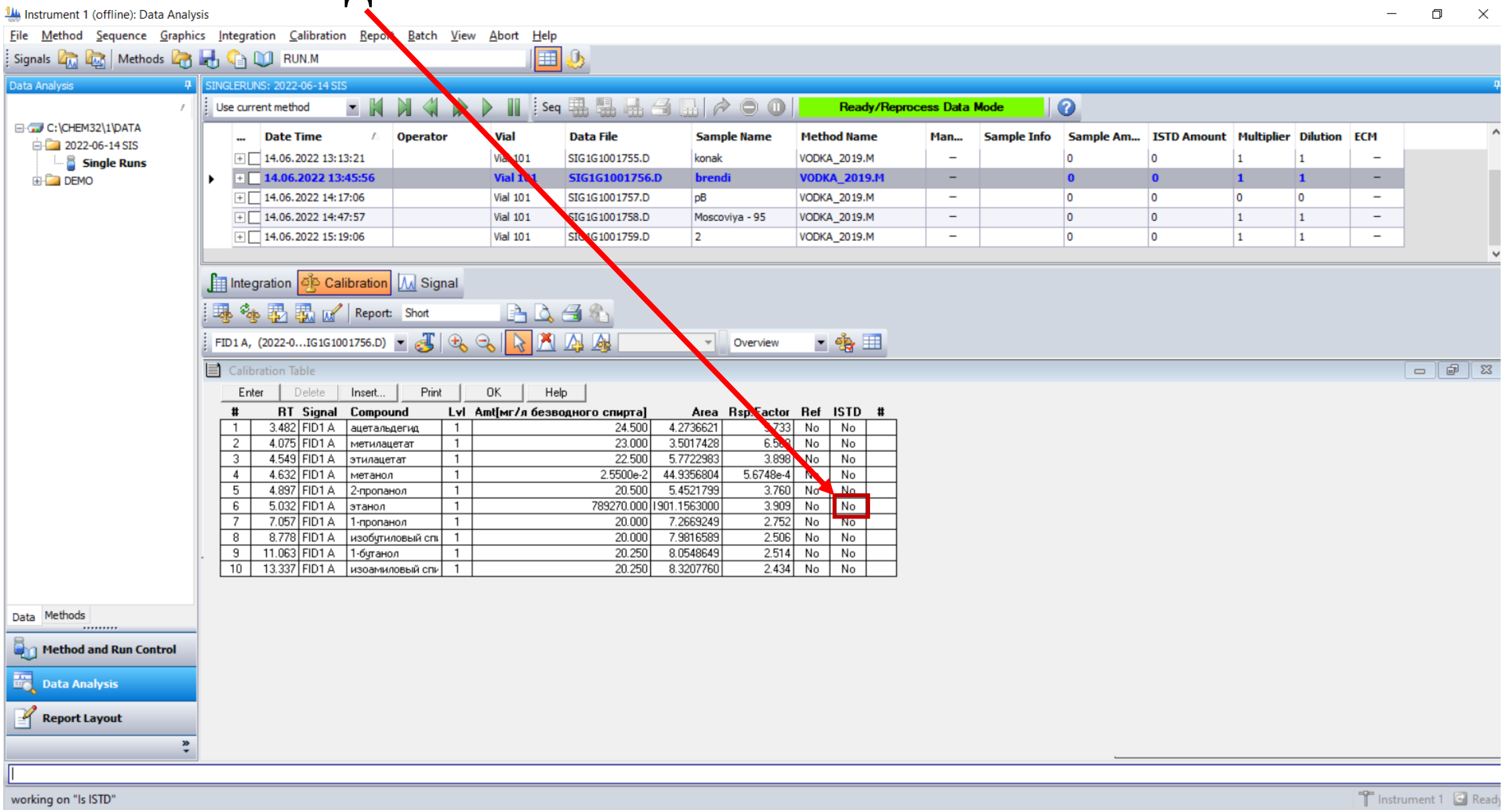


4. В результате должно быть

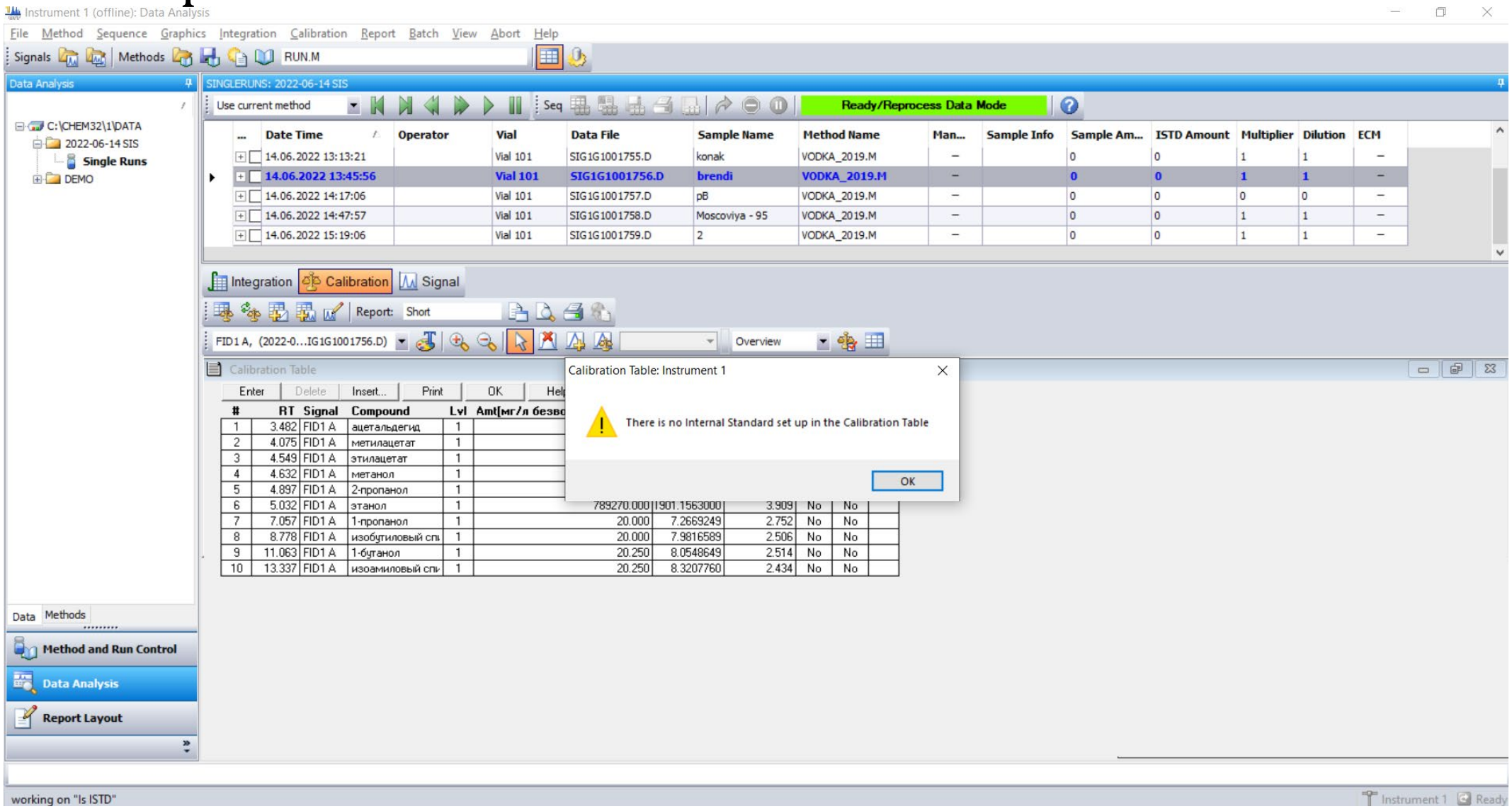


и 789270 для этанола

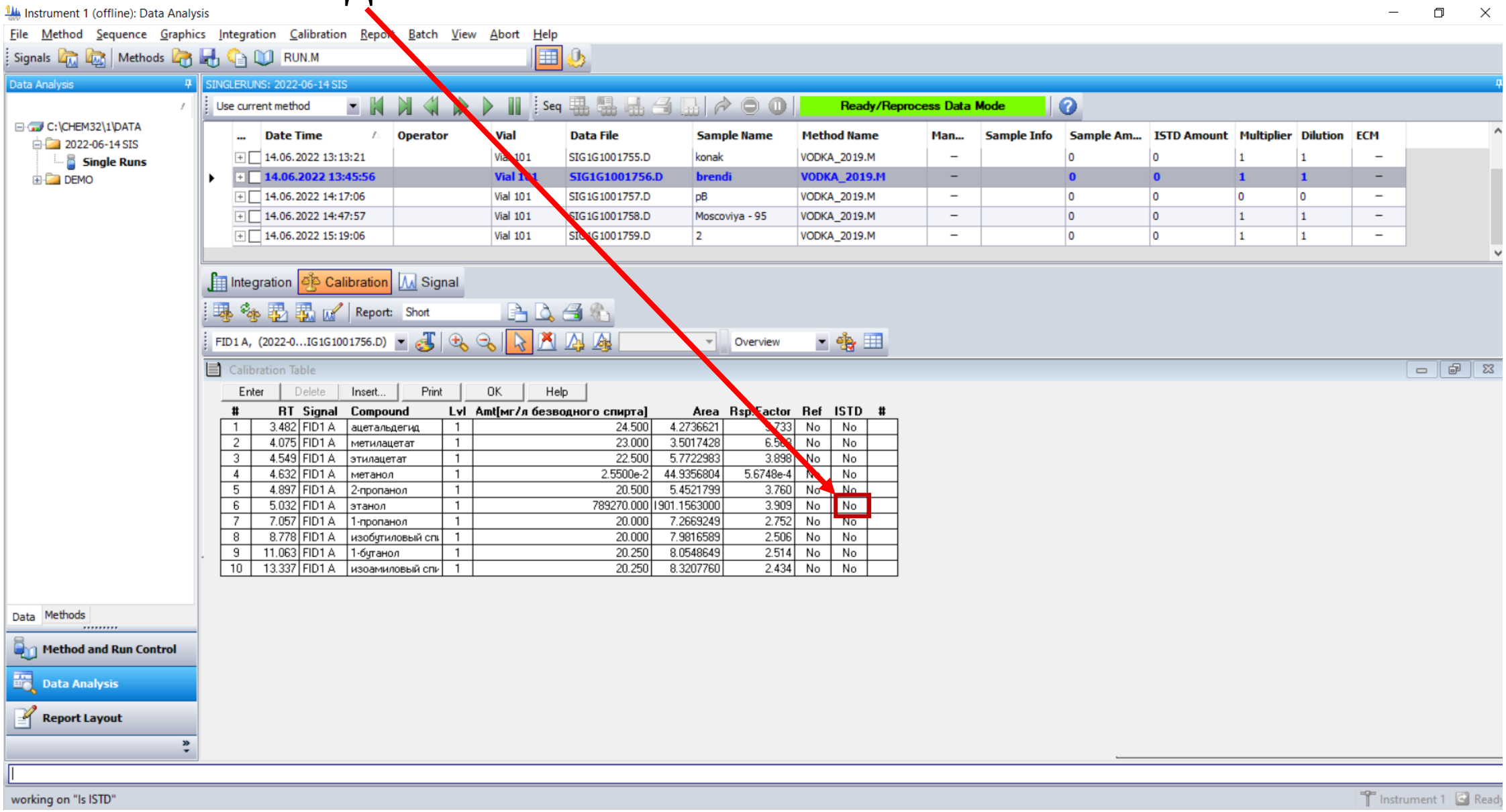
5. Нажать сюда



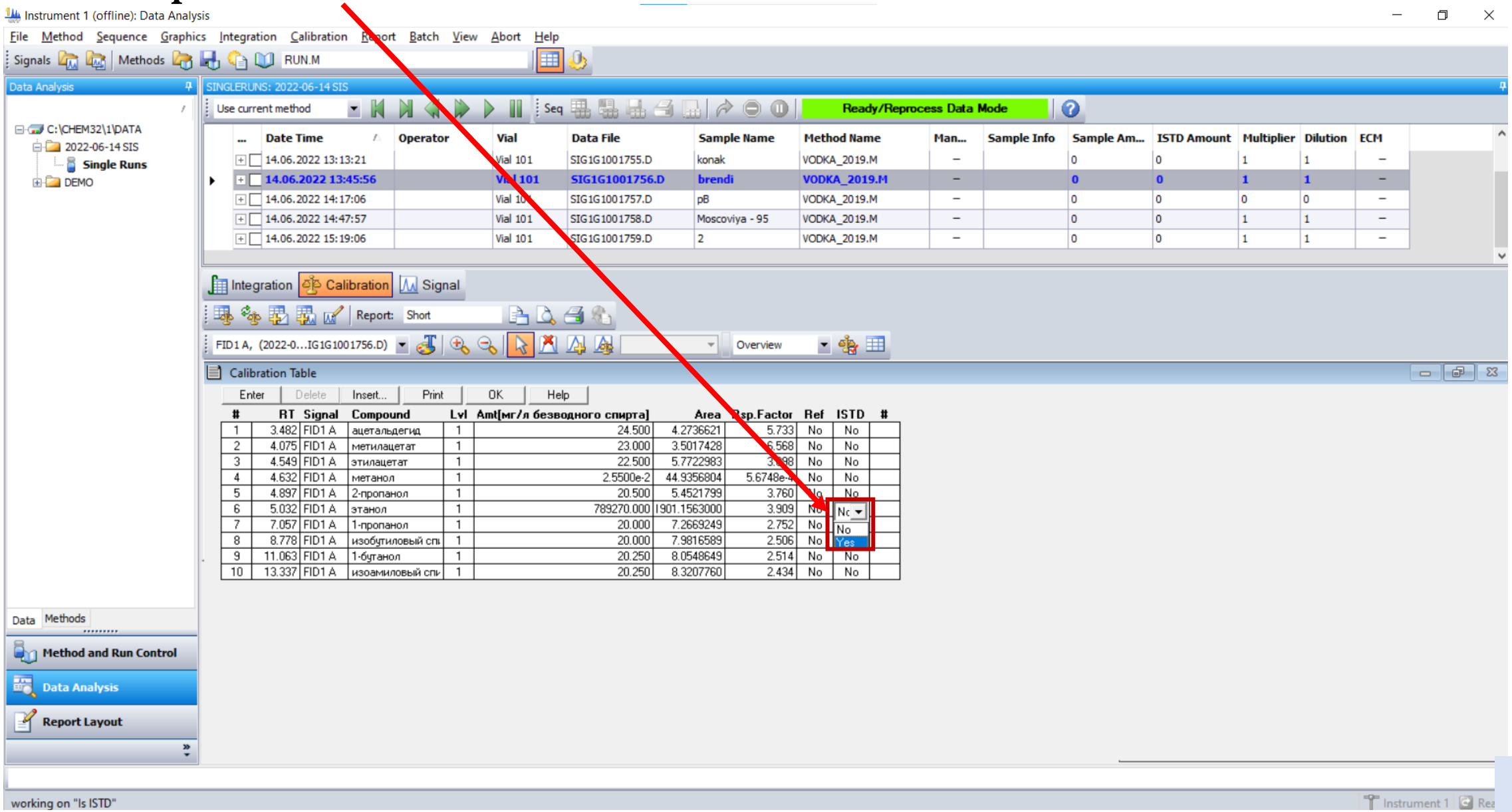
6. Выбрать «ОК»


Instrument 1 (offline): Data Analysis
File Method Sequence Graphics Integration Calibration Report Batch View Abort Help
Signals Methods RUN.M
Data Analysis
C:\CHEM32\1\DATA
2022-06-14 SIS
Single Runs
DEMO
SINGLERUNS: 2022-06-14 SIS
Use current method
Seq
Ready/Reprocess Data Mode
... Date Time Operator Vial Data File Sample Name Method Name Man... Sample Info Sample Am... ISTD Amount Multiplier Dilution ECM
14.06.2022 13:13:21 Vial 101 SIG1G1001755.D konak VODKA_2019.M – 0 0 1 1 –
14.06.2022 13:45:56 Vial 101 SIG1G1001756.D brendi VODKA_2019.M – 0 0 1 1 –
14.06.2022 14:17:06 Vial 101 SIG1G1001757.D pB VODKA_2019.M – 0 0 0 0 –
14.06.2022 14:47:57 Vial 101 SIG1G1001758.D Moscoviya - 95 VODKA_2019.M – 0 0 1 1 –
14.06.2022 15:19:06 Vial 101 SIG1G1001759.D 2 VODKA_2019.M – 0 0 1 1 –
Integration Calibration Signal
Report: Short
FID1 A, (2022-0...IG1G1001756.D)
Overview
Calibration Table
Enter Delete Insert... Print OK
RT Signal Compound Lvl Amt[мг/л безво
1 3.482 FID1 A ацетальдегид 1
2 4.075 FID1 A метилацетат 1
3 4.549 FID1 A этилацетат 1
4 4.632 FID1 A метанол 1
5 4.897 FID1 A 2-пропанол 1
6 5.032 FID1 A этанол 1 789270.000 1901.1563000 3.909 No No
7 7.057 FID1 A 1-пропанол 1 20.000 7.2669249 2.752 No No
8 8.778 FID1 A изобутиловый спи 1 20.000 7.9816589 2.506 No No
9 11.063 FID1 A 1-бутанол 1 20.250 8.0548649 2.514 No No
10 13.337 FID1 A изоамиловый спи 1 20.250 8.3207760 2.434 No No
Calibration Table: Instrument 1
There is no Internal Standard set up in the Calibration Table
OK
Data Methods
Method and Run Control
Data Analysis
Report Layout
working on "Is ISTD"
Instrument 1 Ready

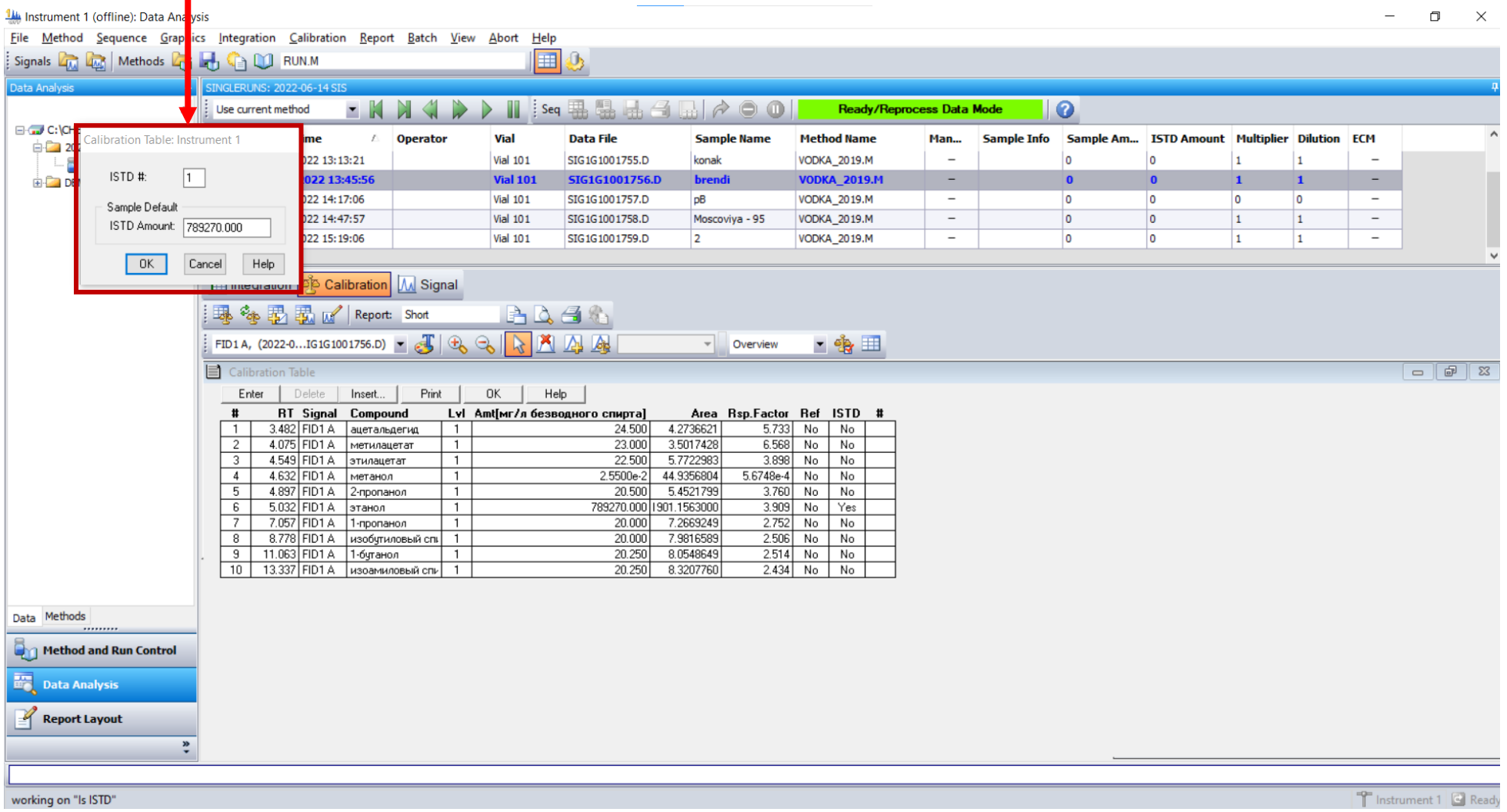
7. Нажать сюда



8. Выбрать «Yes»



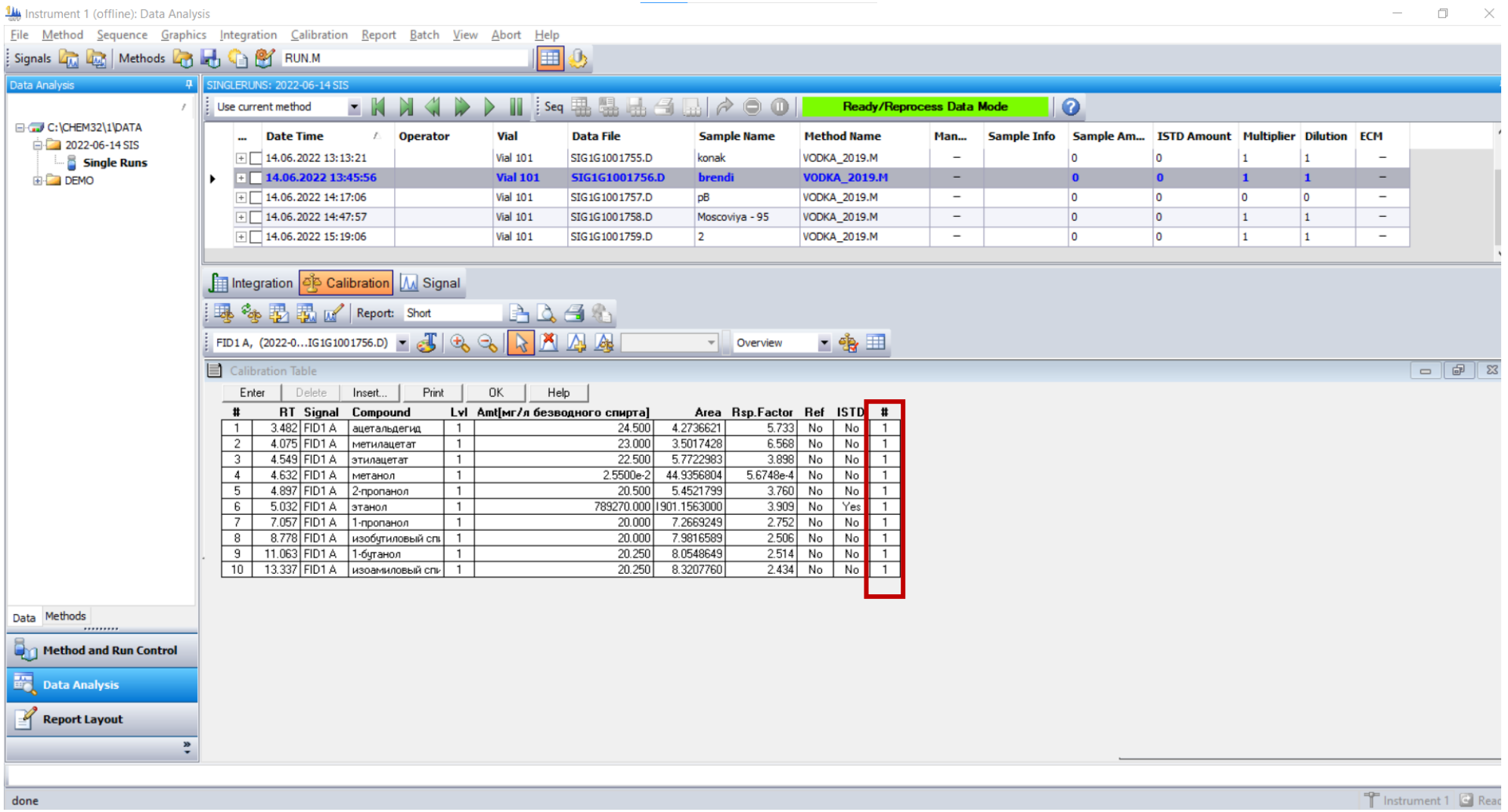
9. Появится окно, нажать «ОК»



Operator	Vial	Data File	Sample Name	Method Name	Man...	Sample Info	Sample Am...	ISTD Amount	Multiplier	Dilution	ECM
	Vial 101	SIG1G1001755.D	konak	VODKA_2019.M	–		0	0	1	1	–
	Vial 101	**SIG1G1001756.D**	**brendi**	**VODKA_2019.M**	–		**0**	**0**	**1**	**1**	–
	Vial 101	SIG1G1001757.D	pB	VODKA_2019.M	–		0	0	0	0	–
	Vial 101	SIG1G1001758.D	Moscoviya - 95	VODKA_2019.M	–		0	0	1	1	–
	Vial 101	SIG1G1001759.D	2	VODKA_2019.M	–		0	0	1	1	–

#	RT	Signal	Compound	Lvl	Amt[мг/л безводного спирта]	Area	Rsp.Factor	Ref	ISTD	#
1	3.482	FID1 A	ацетальдегид	1	24.500	4.2736621	5.733	No	No	
2	4.075	FID1 A	метилацетат	1	23.000	3.5017428	6.568	No	No	
3	4.549	FID1 A	этилацетат	1	22.500	5.7722983	3.898	No	No	
4	4.632	FID1 A	метанол	1	2.5500e-2	44.9356804	5.6748e-4	No	No	
5	4.897	FID1 A	2-пропанол	1	20.500	5.4521799	3.760	No	No	
6	5.032	FID1 A	этанол	1	789270.000	1901.1563000	3.909	No	Yes	
7	7.057	FID1 A	1-пропанол	1	20.000	7.2669249	2.752	No	No	
8	8.778	FID1 A	изобутиловый спи	1	20.000	7.9816589	2.506	No	No	
9	11.063	FID1 A	1-бутанол	1	20.250	8.0548649	2.514	No	No	
10	13.337	FID1 A	изоамиловый спи	1	20.250	8.3207760	2.434	No	No	

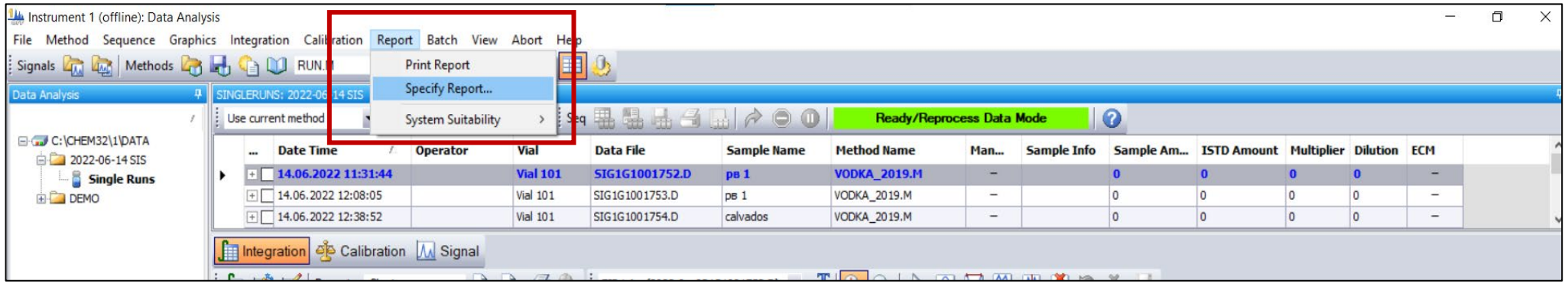
10. Около каждого вещества появится «1»



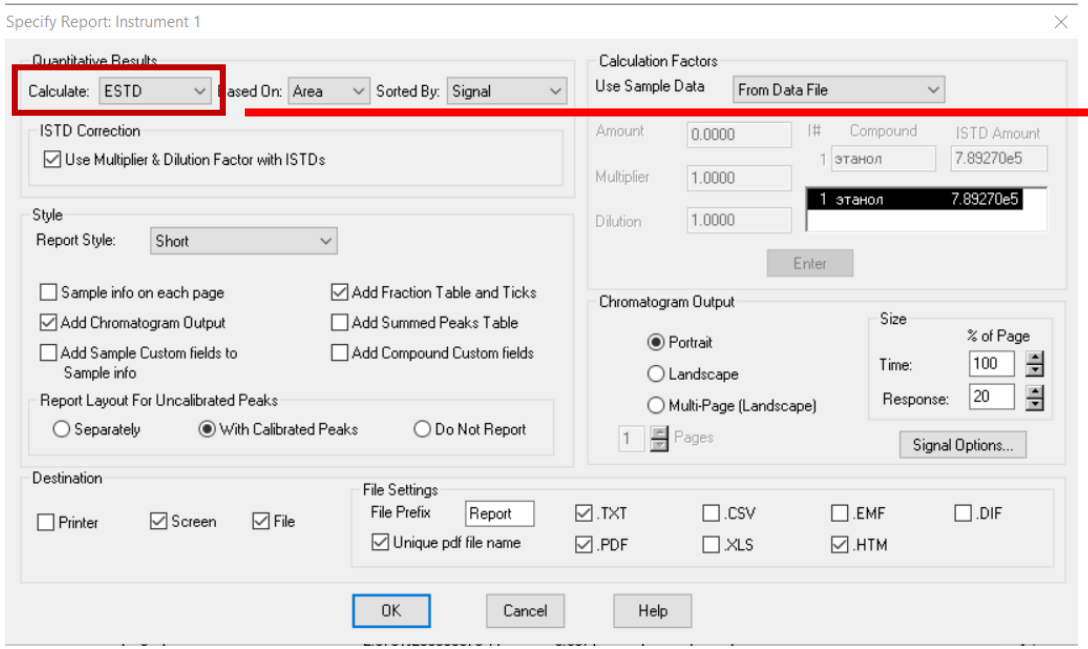
...	Date Time	Operator	Vial	Data File	Sample Name	Method Name	Man...	Sample Info	Sample Am...	ISTD Amount	Multiplier	Dilution	ECM
	14.06.2022 13:13:21		Vial 101	SIG1G1001755.D	konak	VODKA_2019.M	–		0	0	1	1	–
	14.06.2022 13:45:56		Vial 101	SIG1G1001756.D	brendi	VODKA_2019.M	–		0	0	1	1	–
	14.06.2022 14:17:06		Vial 101	SIG1G1001757.D	pB	VODKA_2019.M	–		0	0	0	0	–
	14.06.2022 14:47:57		Vial 101	SIG1G1001758.D	Moscoviya - 95	VODKA_2019.M	–		0	0	1	1	–
	14.06.2022 15:19:06		Vial 101	SIG1G1001759.D	2	VODKA_2019.M	–		0	0	1	1	–

#	RT	Signal	Compound	Lvl	Amt[мг/л безводного спирта]	Area	Rsp.Factor	Ref	ISTD	#
1	3.482	FID1 A	ацетальдегид	1	24.500	4.2736621	5.733	No	No	1
2	4.075	FID1 A	метилацетат	1	23.000	3.5017428	6.568	No	No	1
3	4.549	FID1 A	этилацетат	1	22.500	5.7722983	3.898	No	No	1
4	4.632	FID1 A	метанол	1	2.5500e-2	44.9356804	5.6748e-4	No	No	1
5	4.897	FID1 A	2-пропанол	1	20.500	5.4521799	3.760	No	No	1
6	5.032	FID1 A	этанол	1	789270.000	1901.1563000	3.909	No	Yes	1
7	7.057	FID1 A	1-пропанол	1	20.000	7.2669249	2.752	No	No	1
8	8.778	FID1 A	изобутиловый спи	1	20.000	7.9816589	2.506	No	No	1
9	11.063	FID1 A	1-бутанол	1	20.250	8.0548649	2.514	No	No	1
10	13.337	FID1 A	изоамиловый спи	1	20.250	8.3207760	2.434	No	No	1

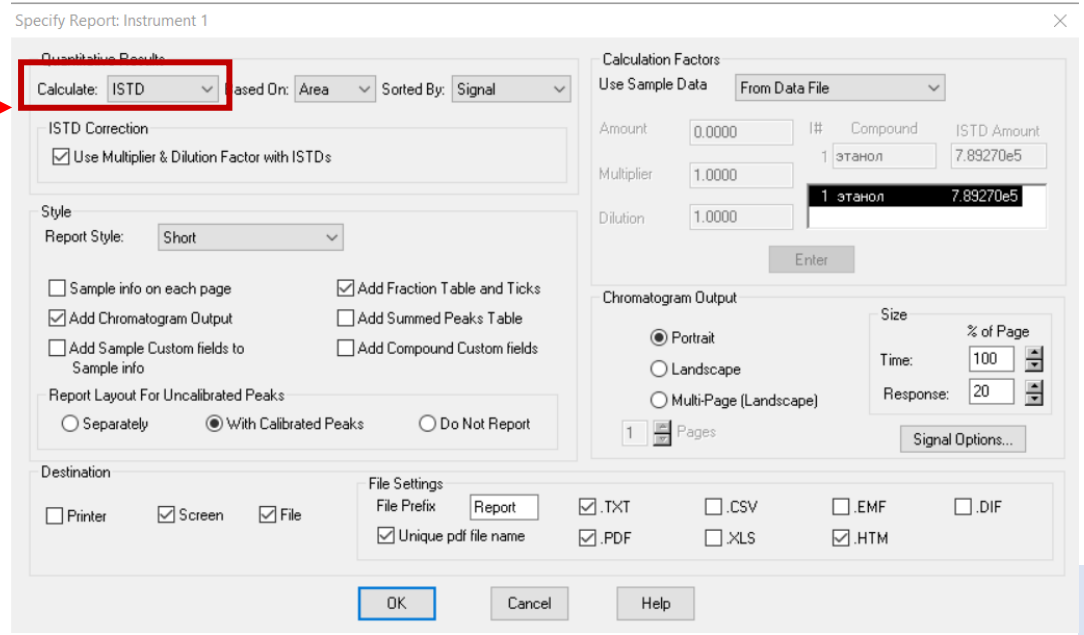
11. Выбрать «Specify report»



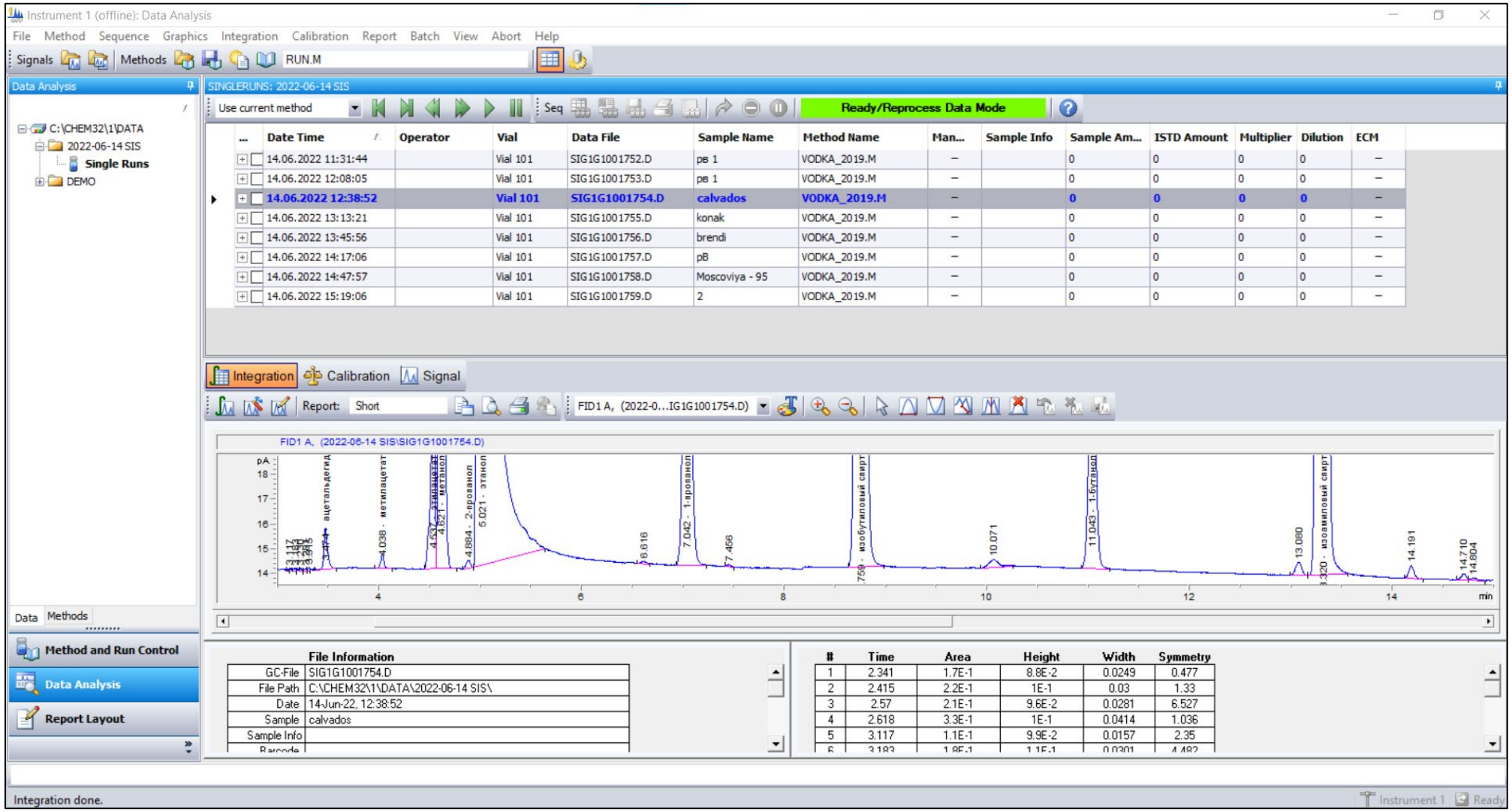
В окне будет это



Исправить на ISTD

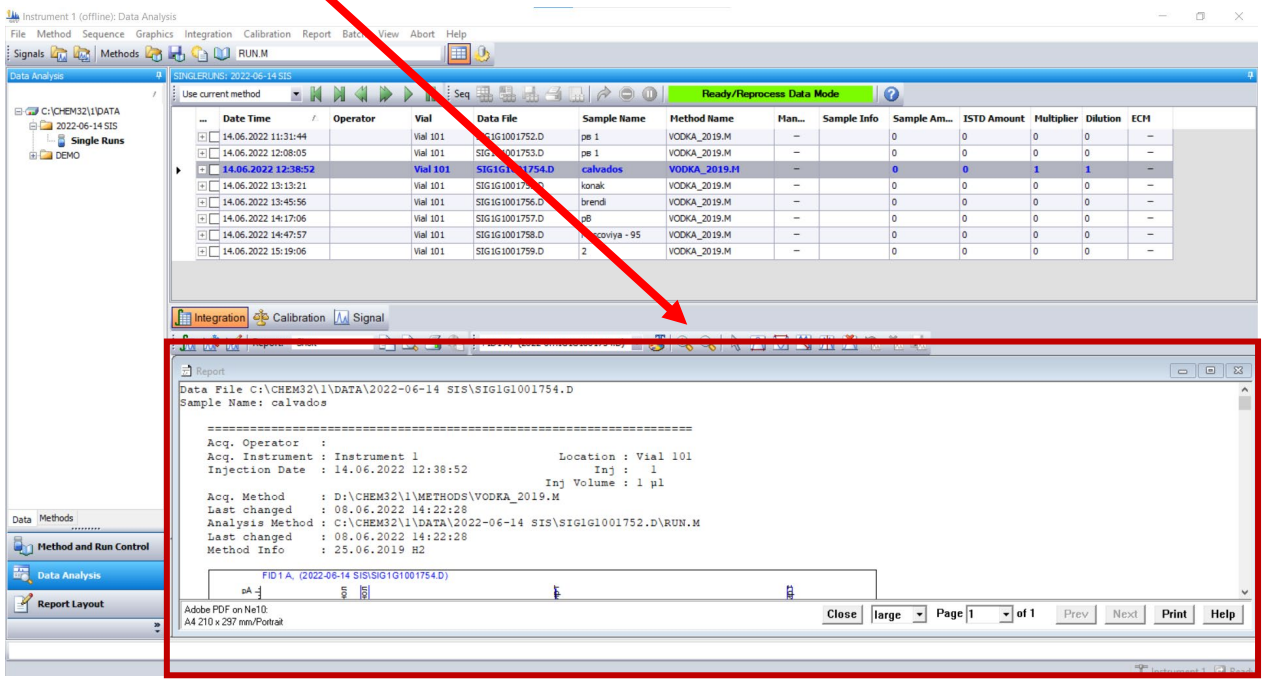


9. Выбрать образец «Кальвадос»

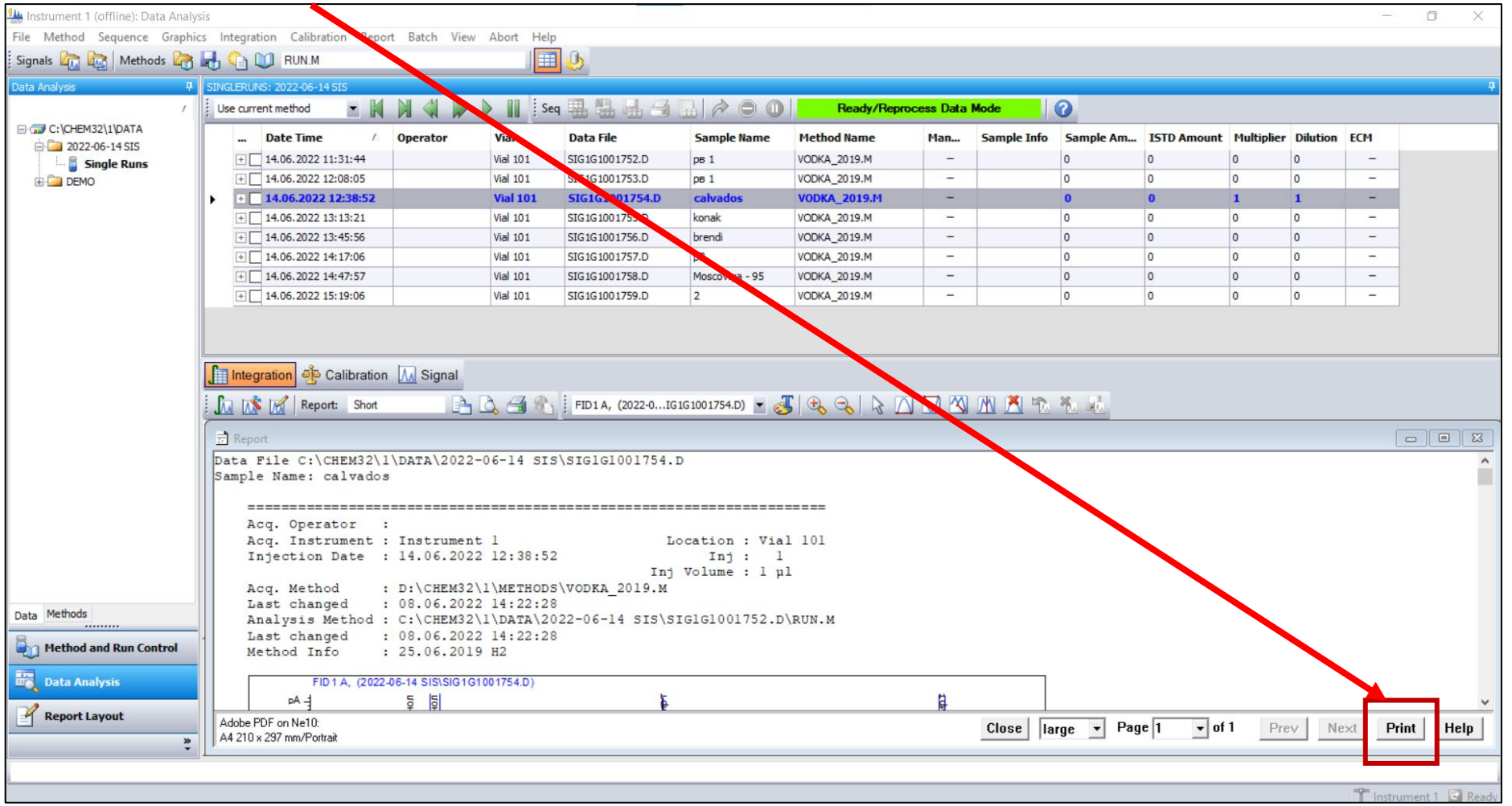


10. Выбрать «Print report»

Отчет появится внизу



10. Нажать «Print» и сохранить как pdf

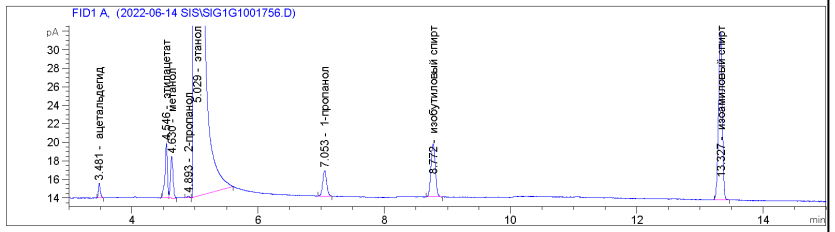


С остальными образцами сделать то же самое

Бренди

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001756.D
Sample Name: brendi

```
Acq. Operator   :
Acq. Instrument : Instrument 1                    Location : Vial 101
Injection Date  : 14.06.2022 13:45:56               Inj :   1
                                                  Inj Volume : 1 µl
Acq. Method     : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed    : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed    : 20.06.2022 14:45:03
                  (modified after loading)
Method Info     : 25.06.2019 H2
```



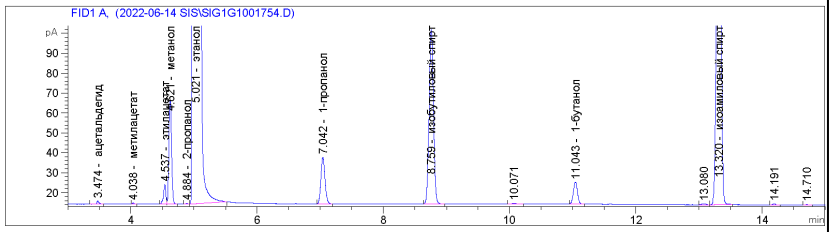

```
Internal Standard Report

Sorted By             :      Signal
Calib. Data Modified  :      20 June 2022 г. 14:45:03
Multiplier:                   :      1.0000
Dilution:                     :      1.0000
Use Multiplier & Dilution Factor with ISTDs
Sample ISTD Information:
ISTD  ISTD Amount   Name
  #   мг/л безво
----|------------|-------------------------
  1   7.89270e5    этанол


Signal 1: FID1 A,

RetTime  Type  ISTD    Area     Amt/Area    Amount   Grp   Name
 [min]         used  [pA*s]       ratio    мг/л безво
-------|------|----|----------|---------|---------|--|-----------------
  3.481 BB        1    3.30317    1.46649   19.42676    ацетальдегид
  4.075           1      -          -         -         метилацетат
  4.546 BV        1   16.05829 9.97119e-1   64.21497    этилацетат
  4.630 VV        1   12.25589 1.45165e-4 7.13505e-3    метанол
  4.893 BV        1 5.12686e-1 9.61827e-1    1.97760    2-пропанол
  5.029 VB S I    1 1.96805e5     1.00000 7.89270e5     этанол
  7.053 BB        1   12.09134 7.04032e-1   34.13948    1-пропанол
  8.772 BB        1   27.49682 6.40988e-1   70.68425    изобутиловый спирт
 11.063           1      -          -         -         1-бутанол
 13.327 BB        1   75.22813 6.22550e-1  187.82128    изоамиловый спирт
```

Instrument 1 20.06.2022 14:46:30 Page 1 of 2

Кальвадос

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001754.D
Sample Name: calvados

```
Acq. Operator   :
Acq. Instrument : Instrument 1                    Location : Vial 101
Injection Date  : 14.06.2022 12:38:52               Inj :   1
                                                  Inj Volume : 1 µl
Acq. Method     : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed    : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed    : 20.06.2022 14:45:03
                  (modified after loading)
Method Info     : 25.06.2019 H2
```



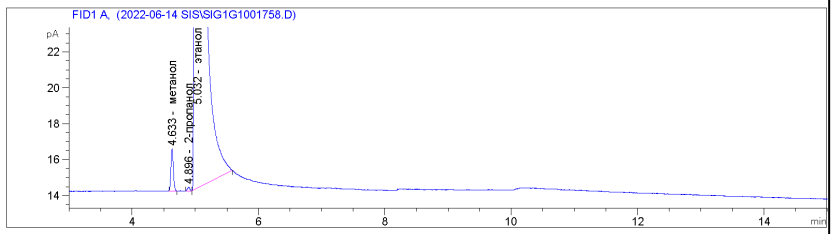

```
Internal Standard Report

Sorted By             :      Signal
Calib. Data Modified  :      20 June 2022 г. 14:45:03
Multiplier:                   :      1.0000
Dilution:                     :      1.0000
Use Multiplier & Dilution Factor with ISTDs
Sample ISTD Information:
ISTD  ISTD Amount   Name
  #   мг/л безво
----|------------|-------------------------
  1   7.89270e5    этанол


Signal 1: FID1 A,

RetTime  Type  ISTD    Area     Amt/Area    Amount   Grp   Name
 [min]         used  [pA*s]       ratio    мг/л безво
-------|------|----|----------|---------|---------|--|-----------------
  3.474 VB        1    4.07187    1.46649   22.57551    ацетальдегид
  4.038 BB        1    1.18820    1.68018    7.54764    метилацетат
  4.537 BV        1   25.57652 9.97119e-1   96.41677    этилацетат
  4.621 VB        1  151.90663 1.45165e-4 8.33687e-2    метанол
  4.884 BV        1 9.12119e-1 9.61827e-1    3.31675    2-пропанол
  5.021 VB S I    1 2.08767e5     1.00000 7.89270e5     этанол
  7.042 BB        1  106.25713 7.04032e-1  282.82301    1-пропанол
  8.759 BB        1  422.23059 6.40988e-1 1023.20787    изобутиловый спирт
 11.043 BB        1   49.33747 6.43102e-1  119.95573    1-бутанол
 13.320 VB        1 1356.46594 6.22550e-1 3192.62153    изоамиловый спирт
```

Instrument 1 20.06.2022 14:45:42 Page 1 of 2

Водка

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001758.D
Sample Name: Moscoviya - 95

```
Acq. Operator   :
Acq. Instrument : Instrument 1                    Location : Vial 101
Injection Date  : 14.06.2022 14:47:57                  Inj :   1
                                                 Inj Volume : 1 µl
Acq. Method     : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed    : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed    : 20.06.2022 14:45:03
                  (modified after loading)
Method Info     : 25.06.2019 H2
```



Internal Standard Report

```
Sorted By             :      Signal
Calib. Data Modified  :      20 June 2022 г. 14:45:03
Multiplier:                   :      1.0000
Dilution:                     :      1.0000
Use Multiplier & Dilution Factor with ISTDs
Sample ISTD Information:
ISTD  ISTD Amount    Name
  #   мг/л безво
----|-------------|-------------------------
  1   7.89270e5     этанол
```

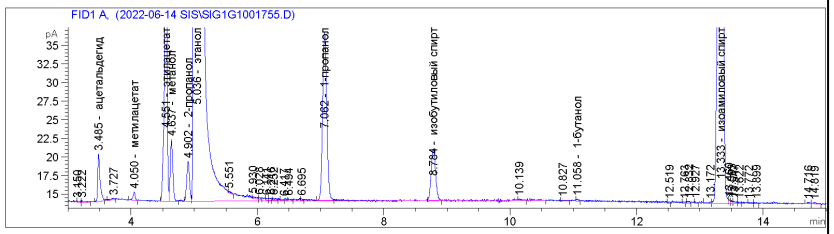
Signal 1: FID1 A,

RetTime [min]	Type	ISTD used	Area [pA*s]	Amt/Area ratio	Amount мг/л безво	Grp	Name
3.482		1	-	-	-		ацетальдегид
4.075		1	-	-	-		метилацетат
4.549		1	-	-	-		этилацетат
4.633	BB	1	6.31566	1.45165e-4	3.81264e-3		метанол
4.896	BV	1	5.55516e-1	9.61827e-1	2.22197		2-пропанол
5.032	VB S I	1	1.89793e5	1.00000	7.89270e5		этанол
7.057		1	-	-	-		1-пропанол
8.778		1	-	-	-		изобутиловый спирт
11.063		1	-	-	-		1-бутанол
13.337		1	-	-	-		изоамиловый спирт

Коньяк

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001755.D
Sample Name: konak

```
Acq. Operator   :
Acq. Instrument : Instrument 1                    Location : Vial 101
Injection Date  : 14.06.2022 13:13:21                  Inj :   1
                                                 Inj Volume : 1 µl
Acq. Method     : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed    : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed    : 20.06.2022 14:45:03
                  (modified after loading)
Method Info     : 25.06.2019 H2
```



Internal Standard Report

```
Sorted By             :      Signal
Calib. Data Modified  :      20 June 2022 г. 14:45:03
Multiplier:                   :      1.0000
Dilution:                     :      1.0000
Use Multiplier & Dilution Factor with ISTDs
Sample ISTD Information:
ISTD  ISTD Amount    Name
  #   мг/л безво
----|-------------|-------------------------
  1   7.89270e5     этанол
```

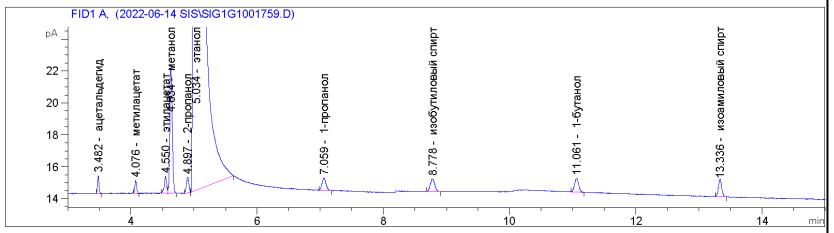
Signal 1: FID1 A,

RetTime [min]	Type	ISTD used	Area [pA*s]	Amt/Area ratio	Amount мг/л безво	Grp	Name
3.485	VV	1	16.95651	1.46649	90.83207		ацетальдегид
4.050	BV	1	2.80551	1.68018	17.21838		метилацетат
4.551	BV	1	128.33510	9.97119e-1	467.42943		этилацетат
4.637	VB	1	24.14906	1.45165e-4	1.28052e-2		метанол
4.902	BV	1	16.46674	9.61827e-1	57.85330		2-пропанол
5.036	VB S I	1	2.16074e5	1.00000	7.89270e5		этанол
7.062	VV T	1	104.56990	7.04032e-1	268.91986		1-пропанол
8.784	PV T	1	34.57939	6.40988e-1	80.96382		изобутиловый спирт
11.058	BB	1	7.03571e-1	6.43102e-1	1.65277		1-бутанол
13.333	VV	1	854.57062	6.22550e-1	1943.32758		изоамиловый спирт

PB-2

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001759.D
Sample Name: 2

```
======================================================================
Acq. Operator   :
Acq. Instrument : Instrument 1                    Location : Vial 101
Injection Date  : 14.06.2022 15:19:06                  Inj :   1
                                                  Inj Volume : 1 µl
Acq. Method     : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed    : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed    : 20.06.2022 14:45:03
                  (modified after loading)
Method Info     : 25.06.2019 H2
```




```
======================================================================
                      Internal Standard Report
======================================================================

Sorted By             :      Signal
Calib. Data Modified  :      20 June 2022 г. 14:45:03
Multiplier:                   :      1.0000
Dilution:                     :      1.0000
Use Multiplier & Dilution Factor with ISTDs
Sample ISTD Information:
ISTD  ISTD Amount   Name
  #   мг/л безво
----|------------|-------------------------
  1   7.89270e5    этанол


Signal 1: FID1 A,

RetTime  Type  ISTD    Area     Amt/Area    Amount   Grp   Name
 [min]         used  [pA*s]      ratio    мг/л безво
-------|------|----|---------|---------|---------|--|------------------
  3.482 BB        1    1.84653    1.46649   11.08736    ацетальдегид
  4.076 BB        1    1.60546    1.68018   11.04455    метилацетат
  4.550 BV        1    2.68553 9.97119e-1   10.96401    этилацетат
  4.634 VB        1   22.04287 1.45165e-4 1.31015e-2    метанол
  4.897 BV        1    2.66154 9.61827e-1   10.48147    2-пропанол
  5.034 VB S I    1 1.92767e5     1.00000 7.89270e5     этанол
  7.059 BB        1    3.45941 7.04032e-1    9.97212    1-пропанол
  8.778 BB        1    3.78041 6.40988e-1    9.92158    изобутиловый спирт
 11.061 BB        1    3.85842 6.43102e-1   10.15972    1-бутанол
 13.336 BB        1    4.01742 6.22550e-1   10.24032    изоамиловый спирт
```

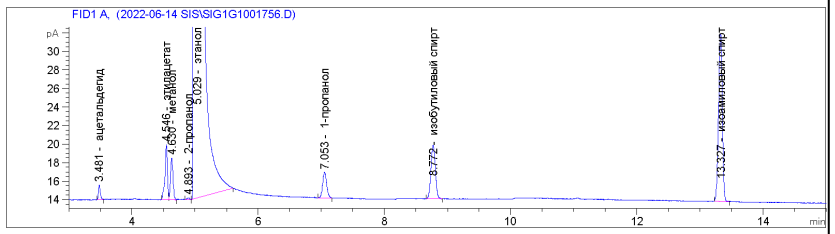
Сравнение полученных результатов

Бренди

Метод внешнего стандарта

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001756.D
Sample Name: brendi

Acq. Operator :
Acq. Instrument : Instrument 1 Location : Vial 101
Injection Date : 14.06.2022 13:45:56 Inj : 1
Inj Volume : 1 µl
Acq. Method : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed : 20.06.2022 14:30:13
Method Info : 25.06.2019 H2



External Standard Report

Sorted By : Signal
Calib. Data Modified : 20.06.2022 14:28:58
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [мг/дм3]	Grp	Name
3.481	BB	3.30317	2.29312	7.57455		ацетальдегид
4.075		-	-	-		метилацетат
4.546	BV	16.05829	1.55917	25.03761		этилацетат
4.630	VV	12.25589	2.26991e-4	2.78198e-3		метанол
4.893	BV	5.12686e-1	1.50399	7.71072e-1		2-пропанол
5.029	VB S	1.96805e5	1.98117e-4	38.99031		этанол
7.053	BB	12.09134	1.10088	13.31109		1-пропанол
8.772	BB	27.49682	1.00230	27.56001		изобутиловый спирт
11.063		-	-	-		1-бутанол
13.327	BB	75.22813	9.73467e-1	73.23210		изоамиловый спирт

Totals : 186.47953

2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

Instrument 1 20.06.2022 14:31:08 Page 1 of 2

Если значение крепости 40 %

7.57455 мг/л / 0,4 = 18.9 мг/л безводного спирта

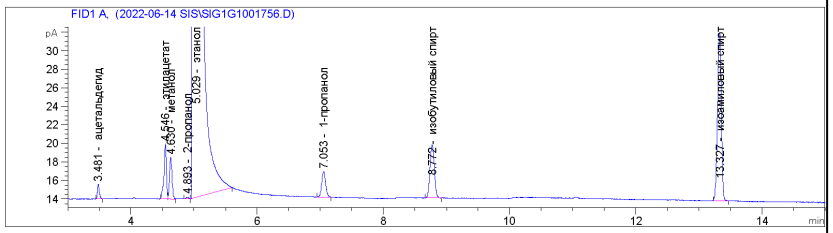
$$\frac{19{,}4-18{,}9}{18{,}9}\cdot 100\ \%=2{,}6\ \%$$

Однако, значение крепости образца в соответствии с результатами измерений не 40 %.

Метод внутреннего стандарта

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001756.D
Sample Name: brendi

Acq. Operator :
Acq. Instrument : Instrument 1 Location : Vial 101
Injection Date : 14.06.2022 13:45:56 Inj : 1
Inj Volume : 1 µl
Acq. Method : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed : 20.06.2022 14:45:03
(modified after loading)
Method Info : 25.06.2019 H2



Internal Standard Report

Sorted By : Signal
Calib. Data Modified : 20 June 2022 г. 14:45:03
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs
Sample ISTD Information:

ISTD #	ISTD Amount мг/л безво	Name
1	7.89270e5	этанол

Signal 1: FID1 A,

RetTime [min]	Type	ISTD used	Area [pA*s]	Amt/Area ratio	Amount мг/л безво	Grp	Name
3.481	BB	1	3.30317	1.46649	19.42676		ацетальдегид
4.075		1	-	-	-		метилацетат
4.546	BV	1	16.05829	9.97119e-1	64.21497		этилацетат
4.630	VV	1	12.25589	1.45165e-4	7.13505e-3		метанол
4.893	BV	1	5.12686e-1	9.61827e-1	1.97760		2-пропанол
5.029	VB S I	1	1.96805e5	1.00000	7.89270e5		этанол
7.053	BB	1	12.09134	7.04032e-1	34.13948		1-пропанол
8.772	BB	1	27.49682	6.40988e-1	70.68425		изобутиловый спирт
11.063		1	-	-	-		1-бутанол
13.327	BB	1	75.22813	6.22550e-1	187.82128		изоамиловый спирт

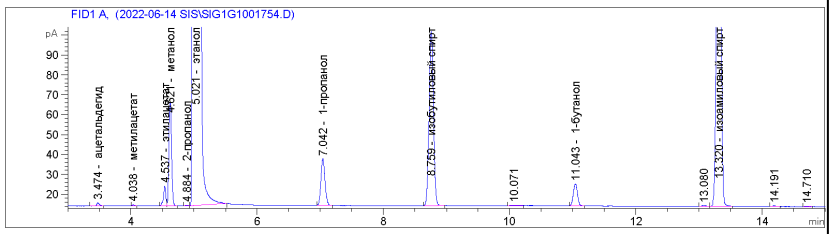
Instrument 1 20.06.2022 14:46:30 Page 1 of 2

Кальвадос

Метод внешнего стандарта

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001754.D
Sample Name: calvados

Acq. Operator :
Acq. Instrument : Instrument 1 Location : Vial 101
Injection Date : 14.06.2022 12:38:52 Inj : 1
Inj Volume : 1 µl
Acq. Method : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed : 20.06.2022 14:30:13
Method Info : 25.06.2019 H2



External Standard Report

Sorted By : Signal
Calib. Data Modified : 20.06.2022 14:28:58
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [мг/дм3]	Grp	Name
3.474	VB	4.07187	2.29312	9.33727		ацетальдегид
4.038	BB	1.18820	2.62726	3.12172		метилацетат
4.537	BV	25.57652	1.55917	39.87817		этилацетат
4.621	VB	151.90663	2.26991e-4	3.44815e-2		метанол
4.884	BV	9.12119e-1	1.50399	1.37181		2-пропанол
5.021	VB S	2.08767e5	1.98117e-4	41.36020		этанол
7.042	BB	106.25713	1.10088	116.97617		1-пропанол
8.759	BB	422.23059	1.00230	423.20084		изобутиловый спирт
11.043	BB	49.33747	1.00560	49.61393		1-бутанол
13.320	VB	1356.46594	9.73467e-1	1320.47470		изоамиловый спирт

Totals : 2005.36929

1 Warnings or Errors :

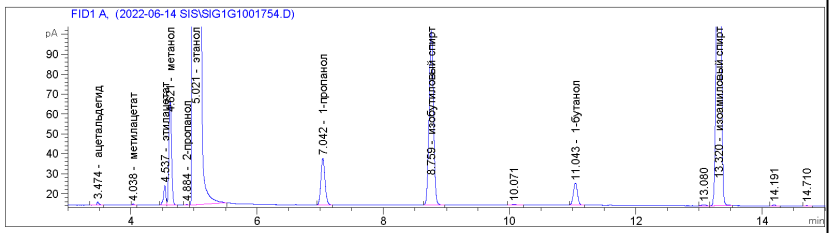
Warning : Calibration warnings (see calibration table listing)

Instrument 1 20.06.2022 14:30:22 Page 1 of 2

Метод внутреннего стандарта

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001754.D
Sample Name: calvados

Acq. Operator :
Acq. Instrument : Instrument 1 Location : Vial 101
Injection Date : 14.06.2022 12:38:52 Inj : 1
Inj Volume : 1 µl
Acq. Method : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed : 20.06.2022 14:45:03
(modified after loading)
Method Info : 25.06.2019 H2



Internal Standard Report

Sorted By : Signal
Calib. Data Modified : 20 June 2022 г. 14:45:03
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs
Sample ISTD Information:

ISTD #	ISTD Amount мг/л безво	Name
1	7.89270e5	этанол

Signal 1: FID1 A,

RetTime [min]	Type	ISTD used	Area [pA*s]	Amt/Area ratio	Amount мг/л безво	Grp	Name
3.474	VB	1	4.07187	1.46649	22.57551		ацетальдегид
4.038	BB	1	1.18820	1.68018	7.54764		метилацетат
4.537	BV	1	25.57652	9.97119e-1	96.41677		этилацетат
4.621	VB	1	151.90663	1.45165e-4	8.33687e-2		метанол
4.884	BV	1	9.12119e-1	9.61827e-1	3.31675		2-пропанол
5.021	VB S I	1	2.08767e5	1.00000	7.89270e5		этанол
7.042	BB	1	106.25713	7.04032e-1	282.82301		1-пропанол
8.759	BB	1	422.23059	6.40988e-1	1023.20787		изобутиловый спирт
11.043	BB	1	49.33747	6.43102e-1	119.95573		1-бутанол
13.320	VB	1	1356.46594	6.22550e-1	3192.62153		изоамиловый спирт

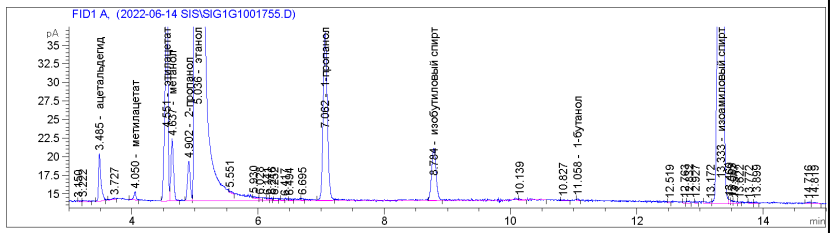
Instrument 1 20.06.2022 14:45:42 Page 1 of 2

Коньяк

Метод внешнего стандарта

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001755.D
Sample Name: konak

Acq. Operator :
Acq. Instrument : Instrument 1 Location : Vial 101
Injection Date : 14.06.2022 13:13:21 Inj : 1
Inj Volume : 1 µl
Acq. Method : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed : 20.06.2022 14:30:13
Method Info : 25.06.2019 H2



External Standard Report

Sorted By : Signal
Calib. Data Modified : 20.06.2022 14:28:58
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [мг/дм3]	Grp	Name
3.485	VV	16.95651	2.29312	38.88323		ацетальдегид
4.050	BV	2.80551	2.62726	7.37081		метилацетат
4.551	BV	128.33510	1.55917	200.09636		этилацетат
4.637	VB	24.14906	2.26991e-4	5.48162e-3		метанол
4.902	BV	16.46674	1.50399	24.76574		2-пропанол
5.036	VB S	2.16074e5	1.98117e-4	42.80782		этанол
7.062	VV T	104.56990	1.10088	115.11874		1-пропанол
8.784	PV T	34.57939	1.00230	34.65885		изобутиловый спирт
11.058	BB	7.03571e-1	1.00560	7.07514e-1		1-бутанол
13.333	VV	854.57062	9.73467e-1	831.89621		изоамиловый спирт

Totals : 1296.31075

1 Warnings or Errors :

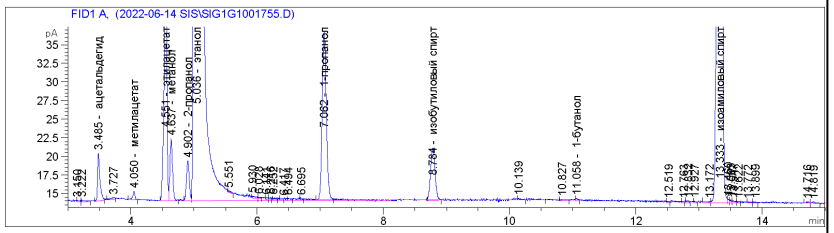
Warning : Calibration warnings (see calibration table listing)

Instrument 1 20.06.2022 14:30:48 Page 1 of 2

Метод внутреннего стандарта

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001755.D
Sample Name: konak

Acq. Operator :
Acq. Instrument : Instrument 1 Location : Vial 101
Injection Date : 14.06.2022 13:13:21 Inj : 1
Inj Volume : 1 µl
Acq. Method : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed : 20.06.2022 14:45:03
(modified after loading)
Method Info : 25.06.2019 H2



Internal Standard Report

Sorted By : Signal
Calib. Data Modified : 20 June 2022 г. 14:45:03
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs
Sample ISTD Information:

ISTD #	ISTD Amount мг/л безво	Name
1	7.89270e5	этанол

Signal 1: FID1 A,

RetTime [min]	Type	ISTD used	Area [pA*s]	Amt/Area ratio	Amount мг/л безво	Grp	Name
3.485	VV	1	16.95651	1.46649	90.83207		ацетальдегид
4.050	BV	1	2.80551	1.68018	17.21838		метилацетат
4.551	BV	1	128.33510	9.97119e-1	467.42943		этилацетат
4.637	VB	1	24.14906	1.45165e-4	1.28052e-2		метанол
4.902	BV	1	16.46674	9.61827e-1	57.85330		2-пропанол
5.036	VB S I	1	2.16074e5	1.00000	7.89270e5		этанол
7.062	VV T	1	104.56990	7.04032e-1	268.91986		1-пропанол
8.784	PV T	1	34.57939	6.40988e-1	80.96382		изобутиловый спирт
11.058	BB	1	7.03571e-1	6.43102e-1	1.65277		1-бутанол
13.333	VV	1	854.57062	6.22550e-1	1943.32758		изоамиловый спирт

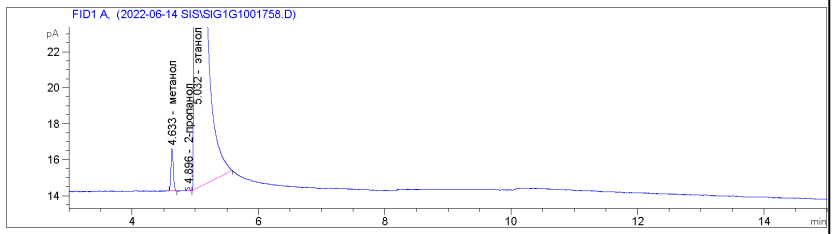
Instrument 1 20.06.2022 14:46:09 Page 1 of 2

Водка

Метод внешнего стандарта

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001758.D
Sample Name: Moscoviya - 95

Acq. Operator :
Acq. Instrument : Instrument 1 Location : Vial 101
Injection Date : 14.06.2022 14:47:57 Inj : 1
Inj Volume : 1 µl
Acq. Method : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed : 20.06.2022 14:30:13
Method Info : 25.06.2019 H2



External Standard Report

Sorted By : Signal
Calib. Data Modified : 20.06.2022 14:28:58
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [мг/дм3]	Grp	Name
3.482		-	-	-		ацетальдегид
4.075		-	-	-		метилацетат
4.549		-	-	-		этилацетат
4.633	BB	6.31566	2.26991e-4	1.43360e-3		метанол
4.896	BV	5.55516e-1	1.50399	8.35488e-1		2-пропанол
5.032	VB S	1.89793e5	1.98117e-4	37.60121		этанол
7.057		-	-	-		1-пропанол
8.778		-	-	-		изобутиловый спирт
11.063		-	-	-		1-бутанол
13.337		-	-	-		изоамиловый спирт

Totals : 38.43813

2 Warnings or Errors :

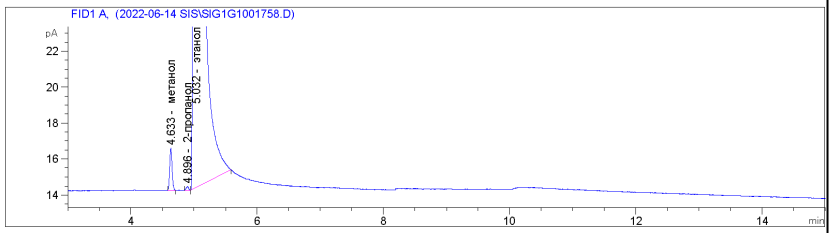
Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

Instrument 1 20.06.2022 14:31:36 Page 1 of 2

Метод внутреннего стандарта

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001758.D
Sample Name: Moscoviya - 95

Acq. Operator :
Acq. Instrument : Instrument 1 Location : Vial 101
Injection Date : 14.06.2022 14:47:57 Inj : 1
Inj Volume : 1 µl
Acq. Method : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed : 20.06.2022 14:45:03
(modified after loading)
Method Info : 25.06.2019 H2



Internal Standard Report

Sorted By : Signal
Calib. Data Modified : 20 June 2022 г. 14:45:03
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs
Sample ISTD Information:

ISTD #	ISTD Amount мг/л безво	Name
1	7.89270e5	этанол

Signal 1: FID1 A,

RetTime [min]	Type	ISTD used	Area [pA*s]	Amt/Area ratio	Amount мг/л безво	Grp	Name
3.482		1	-	-	-		ацетальдегид
4.075		1	-	-	-		метилацетат
4.549		1	-	-	-		этилацетат
4.633	BB	1	6.31566	1.45165e-4	3.81264e-3		метанол
4.896	BV	1	5.55516e-1	9.61827e-1	2.22197		2-пропанол
5.032	VB S I	1	1.89793e5	1.00000	7.89270e5		этанол
7.057		1	-	-	-		1-пропанол
8.778		1	-	-	-		изобутиловый спирт
11.063		1	-	-	-		1-бутанол
13.337		1	-	-	-		изоамиловый спирт

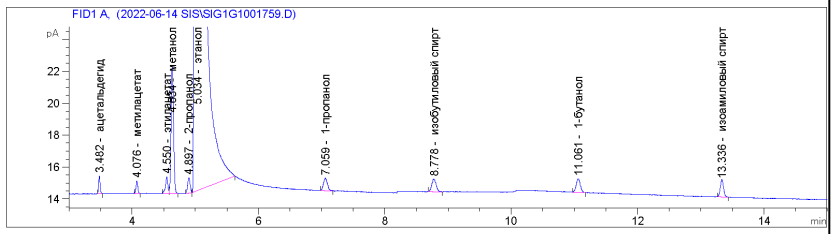
Instrument 1 20.06.2022 14:46:51 Page 1 of 2

PB-2

Метод внешнего стандарта

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001759.D
Sample Name: 2

Acq. Operator :
Acq. Instrument : Instrument 1 Location : Vial 101
Injection Date : 14.06.2022 15:19:06 Inj : 1
Inj Volume : 1 µl
Acq. Method : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed : 20.06.2022 14:30:13
Method Info : 25.06.2019 H2



External Standard Report

Sorted By : Signal
Calib. Data Modified : 20.06.2022 14:28:58
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,

RetTime [min]	Type	Area [pA*s]	Amt/Area	Amount [мг/дм3]	Grp	Name
3.482	BB	1.84653	2.29312	4.23431		ацетальдегид
4.076	BB	1.60546	2.62726	4.21796		метилацетат
4.550	BV	2.68553	1.55917	4.18720		этилацетат
4.634	VB	22.04287	2.26991e-4	5.00354e-3		метанол
4.897	BV	2.66154	1.50399	4.00292		2-пропанол
5.034	VB S	1.92767e5	1.98117e-4	38.19041		этанол
7.059	BB	3.45941	1.10088	3.80839		1-пропанол
8.778	BB	3.78041	1.00230	3.78909		изобутиловый спирт
11.061	BB	3.85842	1.00560	3.88004		1-бутанол
13.336	BB	4.01742	9.73467e-1	3.91082		изоамиловый спирт

Totals : 70.22614

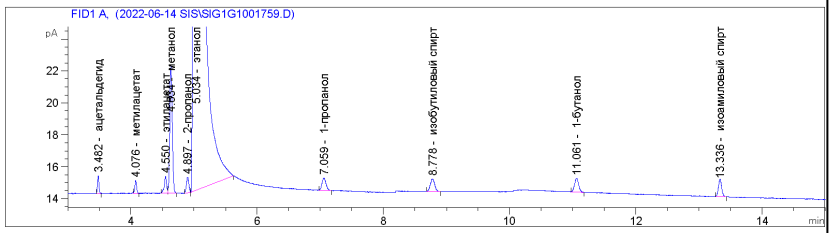
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

Метод внутреннего стандарта

Data File C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001759.D
Sample Name: 2

Acq. Operator :
Acq. Instrument : Instrument 1 Location : Vial 101
Injection Date : 14.06.2022 15:19:06 Inj : 1
Inj Volume : 1 µl
Acq. Method : D:\CHEM32\1\METHODS\VODKA_2019.M
Last changed : 08.06.2022 14:22:28
Analysis Method : C:\CHEM32\1\DATA\2022-06-14 SIS\SIG1G1001752.D\RUN.M
Last changed : 20.06.2022 14:45:03
(modified after loading)
Method Info : 25.06.2019 H2



Internal Standard Report

Sorted By : Signal
Calib. Data Modified : 20 June 2022 г. 14:45:03
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs
Sample ISTD Information:

ISTD #	ISTD Amount мг/л безво	Name
1	7.89270e5	этанол

Signal 1: FID1 A,

RetTime [min]	Type	ISTD used	Area [pA*s]	Amt/Area ratio	Amount мг/л безво	Grp	Name
3.482	BB	1	1.84653	1.46649	11.08736		ацетальдегид
4.076	BB	1	1.60546	1.68018	11.04455		метилацетат
4.550	BV	1	2.68553	9.97119e-1	10.96401		этилацетат
4.634	VB	1	22.04287	1.45165e-4	1.31015e-2		метанол
4.897	BV	1	2.66154	9.61827e-1	10.48147		2-пропанол
5.034	VB S I	1	1.92767e5	1.00000	7.89270e5		этанол
7.059	BB	1	3.45941	7.04032e-1	9.97212		1-пропанол
8.778	BB	1	3.78041	6.40988e-1	9.92158		изобутиловый спирт
11.061	BB	1	3.85842	6.43102e-1	10.15972		1-бутанол
13.336	BB	1	4.01742	6.22550e-1	10.24032		изоамиловый спирт