

III. Repeatability:

No scientific method would be fit for use if the results obtained through its use were not repeatable. For the validation of this method, the calibration curve will have to be generated multiple times and yield reproducible results within stated acceptance criteria. Analysis must demonstrate that several extractions from the same source of plant material yield similar results. This will give confidence in our capacity to extract THC from plant material in a consistent manor. It will also be beneficial to run the same sample multiple times on the same instrument to ensure that variance in the instrument does not drastically impact the reliability of the method.

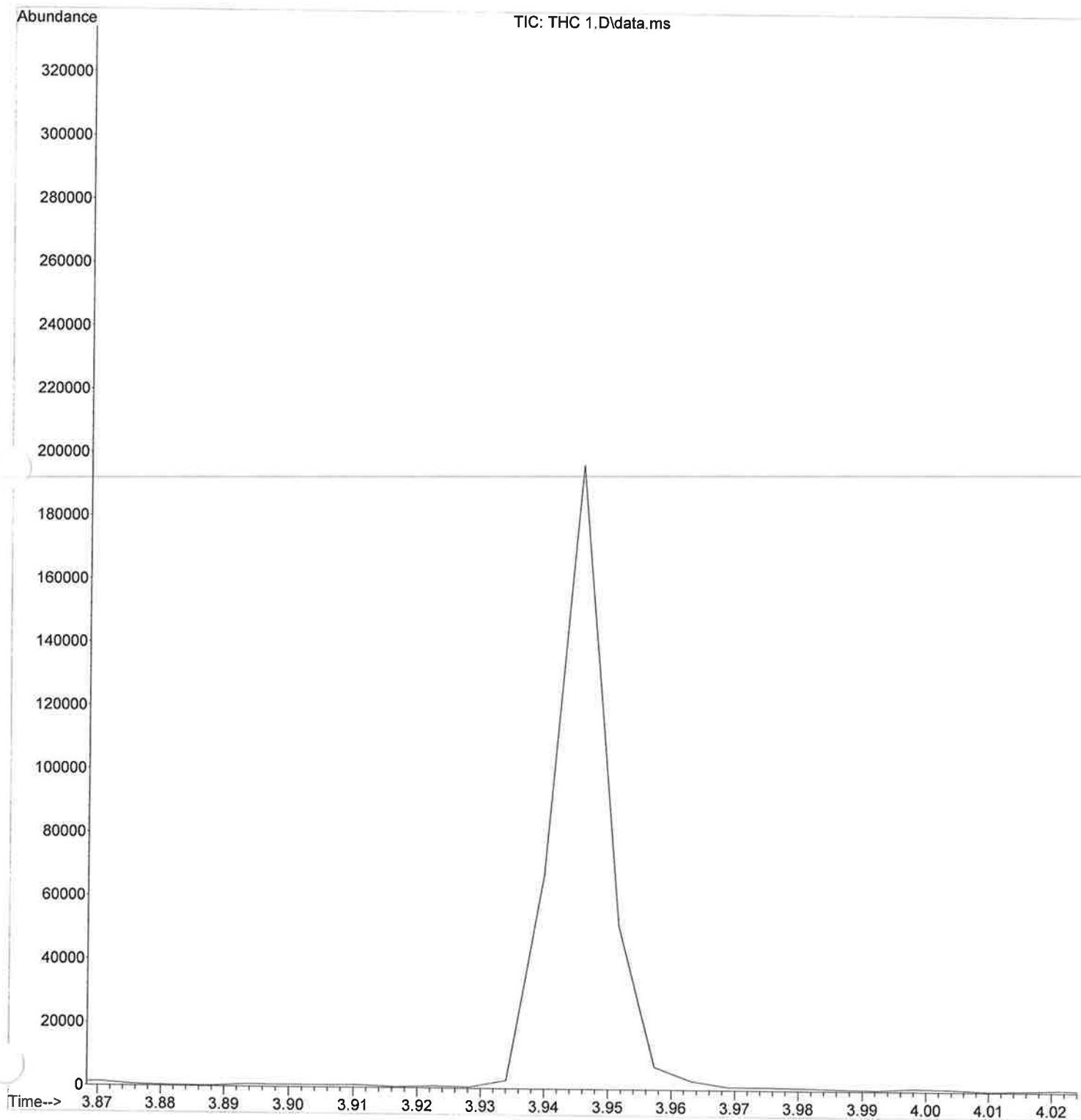
On 1/14/2019 a series of four THC standards (50.0, 100.0, 150.0, and 200.0 $\mu\text{g/mL}$) were prepared in methanol with a 1.00174 mg/mL concentration of tribenzylamine. Six separate aliquots of these standards were run using an existing GC/MS method (ASMSDRUGS100) on 1/15/2019. After the second sample in the second series, the filament on the instrument went out and the remaining samples were collected using a different filament. The change in filaments led to drastically different instrument response and made comparing the runs less insightful. The same prepared aliquots were run again on 1/16/2019. The results between runs were very similar and indicated that the GC/MS autosample method was consistent and reproducible.

On 2/7/2019 a new calibration curve was generated from a THC series prepared on 1/30/2019. An industrial hemp sample (C1818268) was prepared by extracting 49.61 mg of plant material into 2.0 mL of 1.00174 mg/mL tribenzylamine in methanol. The prepared hemp sample was run twenty-five times. The retention time, peak height, peak area, and quantitated concentration were all compared to evaluate the GC/MS method (THC-MS) for repeatable results. The data collected from these runs was consistent and give confidence that the instrument performs reliably from run to run.

On 2/8/2019 a new series of calibration standards (50, 100, 150, and 200 $\mu\text{g/mL}$) was prepared. A calibration curve was generated and the standards were run five more times each on a GC/MS (Gumbo). These standards were run six more times on 2/11/2019 and then six more times on 2/12/2019 on the GC/MS (Heisenberg). The results were all calibrated and checked to insure the calibration standards were reproducible and produced similar curves. This experiment helped demonstrate linearity and repeatability. An excel spread sheet was prepared to illustrate the results. The data collected on 2/11/2019 had significantly more variance than the data collected on the other days. The autosampler's syringe was replaced after collection of the 2/11/2019 data and the results appeared to be much more consistent on 2/12/2019.

After these initial studies were completed the calibration curves were generated several more times for different experiments. The curves were reproducible using different THC standards and even when tweaking the internal standard and THC concentrations slightly. Not only were the calibration curves successfully repeated multiple times, but know spiked samples, hemp samples, and marijuana samples were also extracted and quantitated multiple times.

File :C:\msdchem\1\DATA\2019\BTT\1-14-19\THC 1.D
Operator : BTT
Acquired : 14 Jan 2019 15:16 using AcqMethod ASMSDRUGS100.M
Instrument : Gumbo
Sample Name: THC 100
Misc Info : Methanol
Vial Number: 55



Data Path : C:\msdchem\1\DATA\2019\BTT\1-14-19\

Data File : THC 1.D

Acq On : 14 Jan 2019 15:16

Operator : BTT

Sample : THC 100

Misc : Methanol

ALS Vial : 55 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

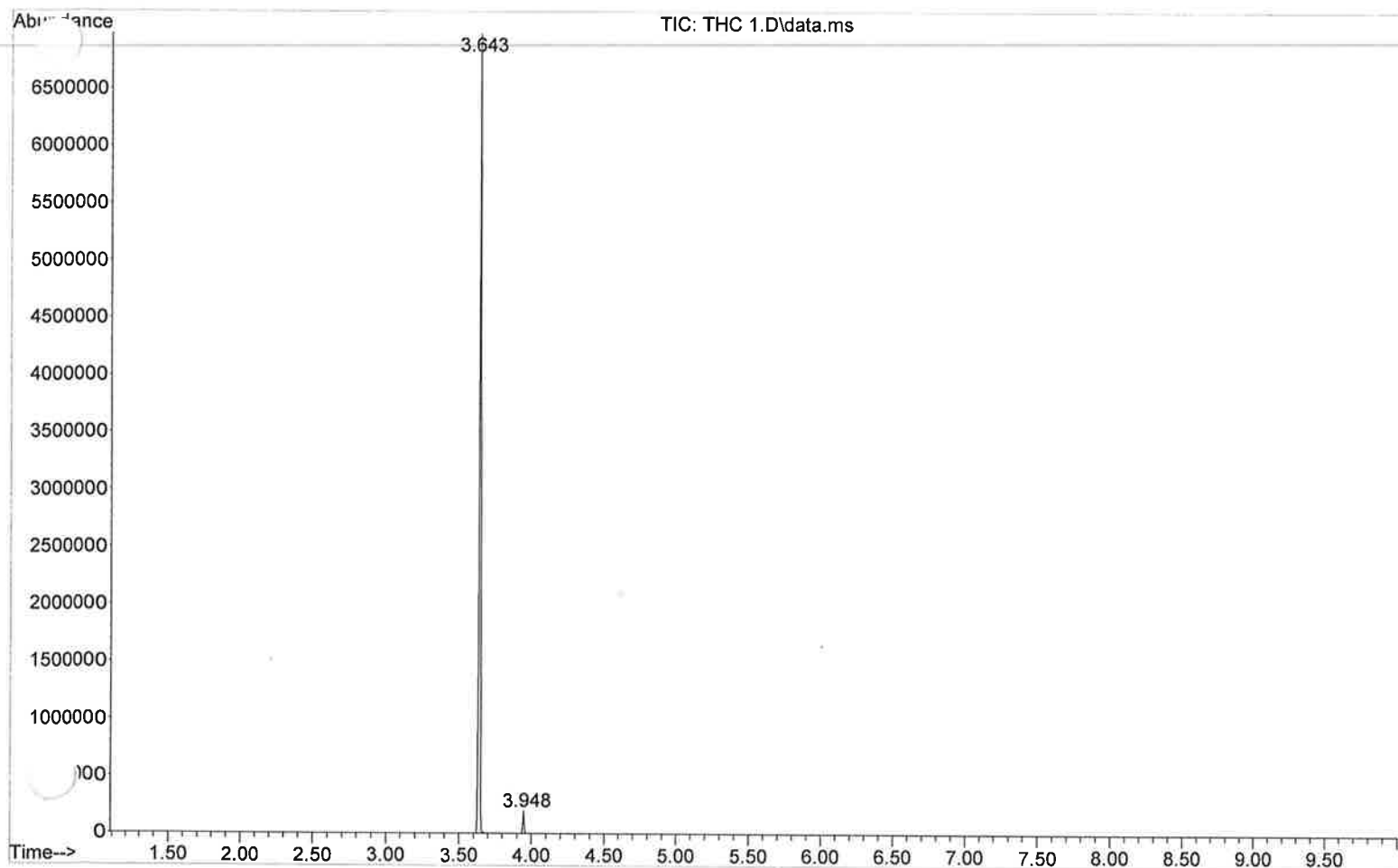
Title :

Signal : TIC: THC 1.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.643	433	440	455	BV	6077256	47034334	100.00%	97.648%
2	3.948	489	492	500	BV	173728	1132966	2.41%	2.352%

Sum of corrected areas: 48167299

MSDRUGS100.M Mon Jan 14 16:05:21 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-14-19\

Data File : THC 2.D

Acq On : 14 Jan 2019 15:44

Operator : BTT

Sample : THC 200

Misc : Methanol

ALS Vial : 57 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

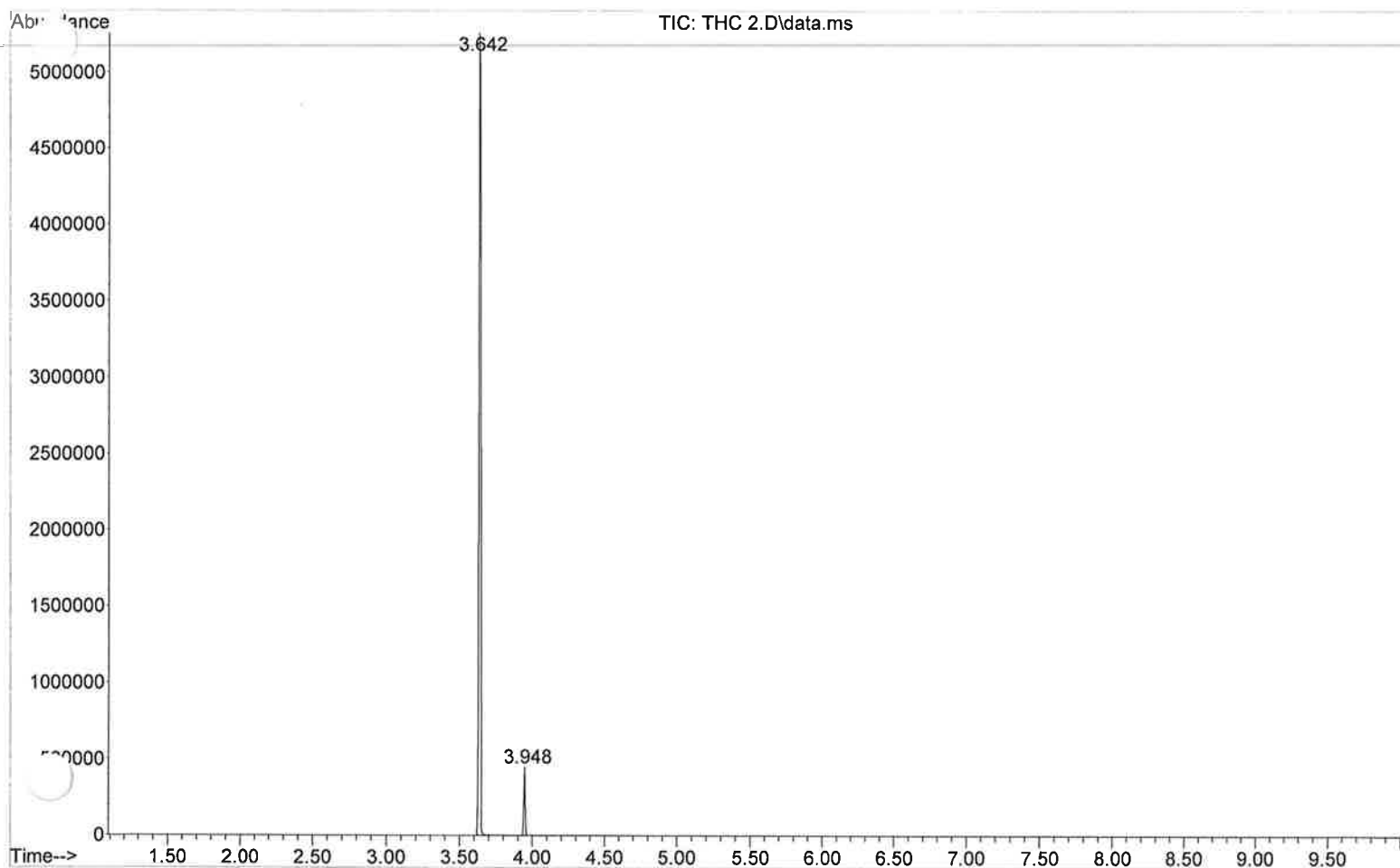
Title :

Signal : TIC: THC 2.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	3.642	435	440	459	BV	5343050	44940348	100.00%	94.127%
2	3.948	488	492	500	PV	401458	2803817	6.24%	5.873%

Sum of corrected areas: 47744165

MSDRUGS100.M Mon Jan 14 16:05:31 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-14-19\

Data File : THC 3.D

Acq On : 14 Jan 2019 16:13

Operator : BTT

Sample : THC 300

Misc : Methanol

ALS Vial : 59 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

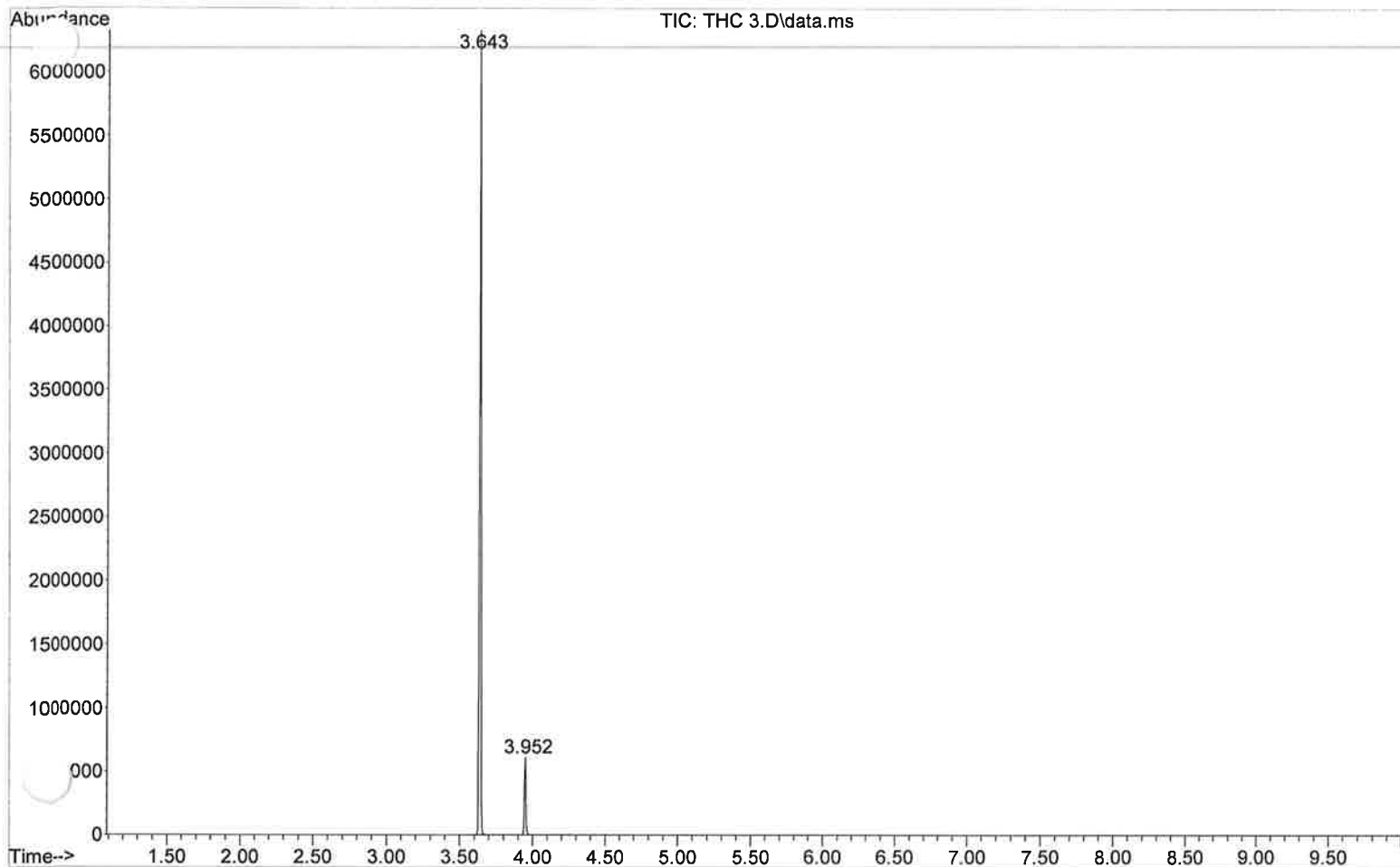
Title :

Signal : TIC: THC 3.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	3.643	434	440	457	BV	5440762	41104926	100.00%	90.153%	
2	3.952	490	493	502	PV	596403	4489666	10.92%	9.847%	

Sum of corrected areas: 45594592

MSDRUGS100.M Tue Jan 15 09:18:37 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-14-19\

Data File : THC 4.D

Acq On : 14 Jan 2019 16:42

Operator : BTT

Sample : THC 400

Misc : Methanol

ALS Vial : 61 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

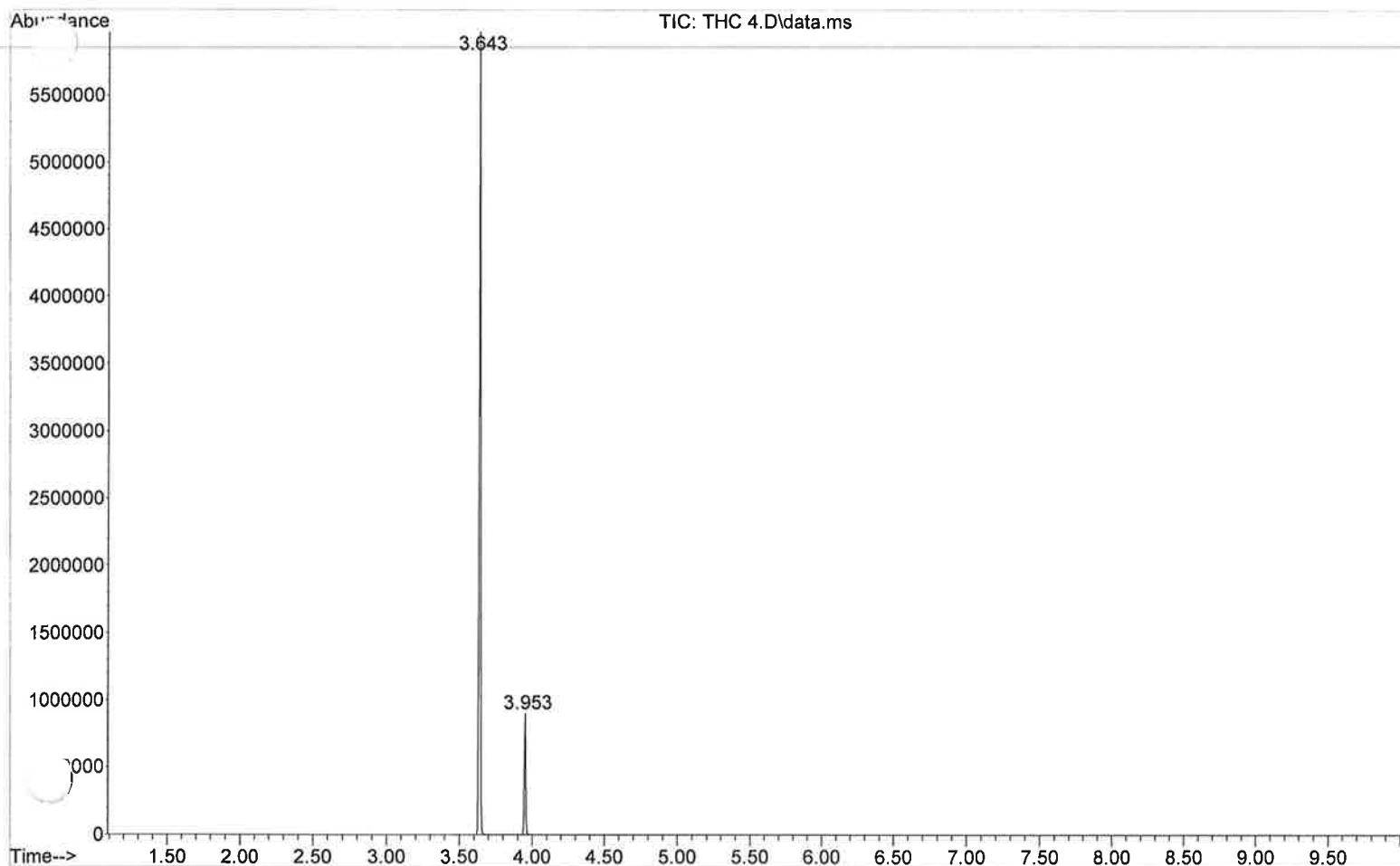
Title :

Signal : TIC: THC 4.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	3.643	435	440	460	BV	5156199	39072645	100.00%	86.514%	86.514%
2	3.953	490	493	507	VB	844511	6090767	15.59%	13.486%	13.486%

Sum of corrected areas: 45163413

MSDRUGS100.M Tue Jan 15 09:18:53 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\

Data File : THC 1a.D

Acq On : 15 Jan 2019 10:45

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 52 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

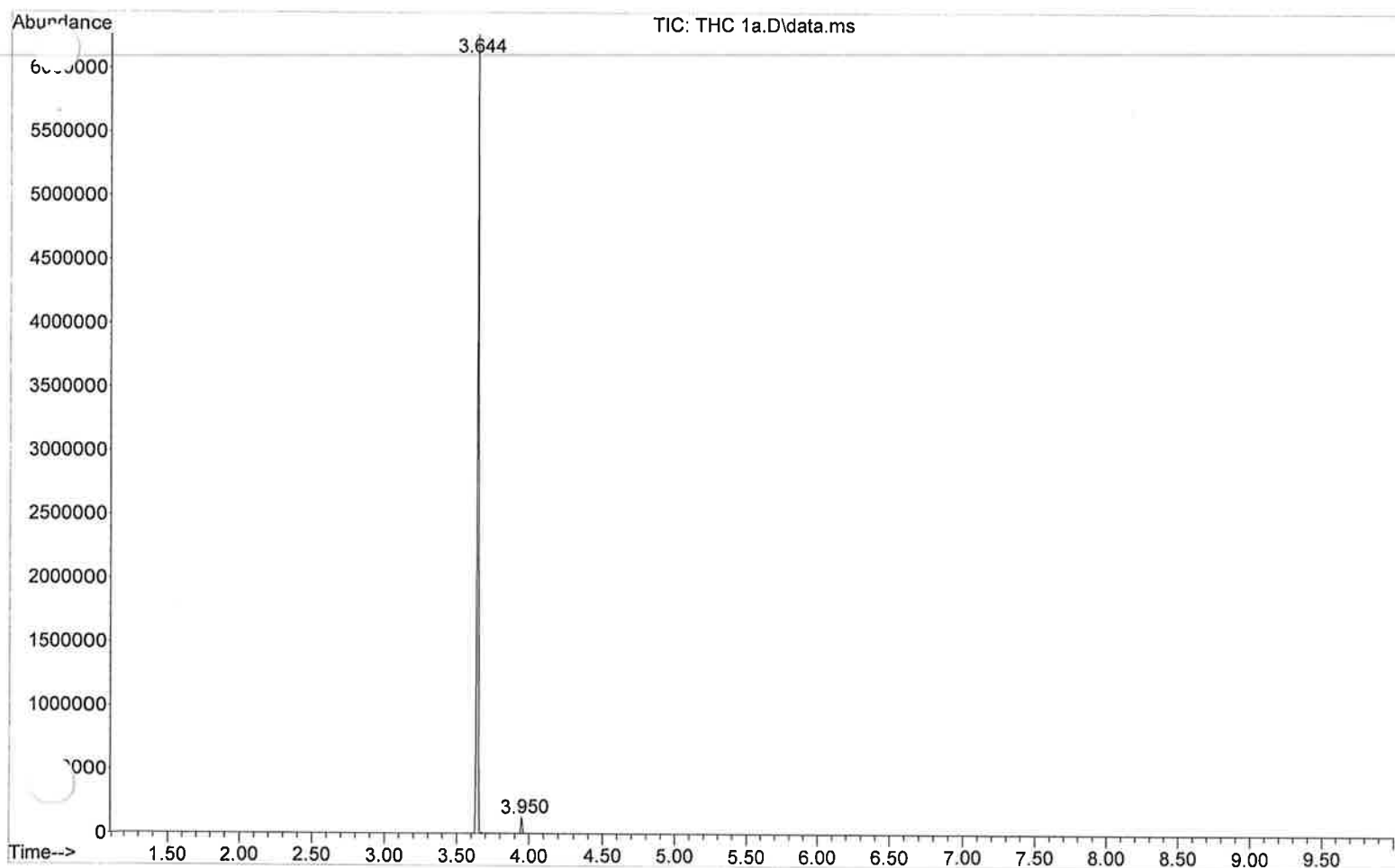
Title :

Signal : TIC: THC 1a.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	3.644	431	440	460	VV	5253167	38619707	100.00%	97.687%	
2	3.950	488	493	499	PV	123757	914558	2.37%	2.313%	

Sum of corrected areas: 39534265

MSDRUGS100.M Tue Jan 15 12:30:56 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\
 Data File : THC 2a.D
 Acq On : 15 Jan 2019 11:13
 Operator : BTT
 Sample : Standard
 Misc : Methanol
 ALS Vial : 53 Sample Multiplier: 1

Integration Parameters: autoint1.e
 Integrator: ChemStation

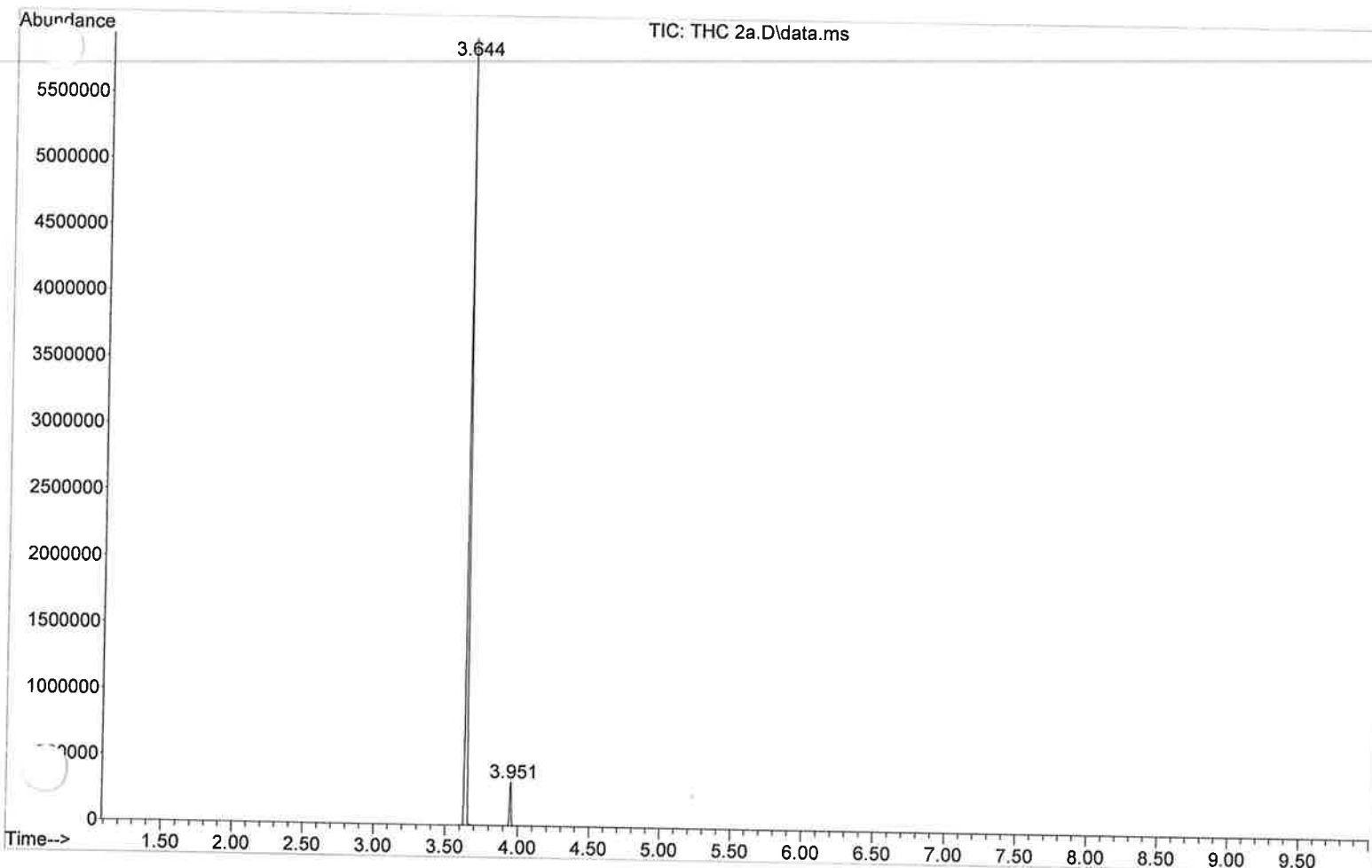
Method : C:\msdchem\1\METHODS\MSDRUGS100.M
 Title :

Signal : TIC: THC 2a.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	3.644	435	440	462	BB	5080285	38896410	100.00%	93.765%
2	3.951	487	493	507	BV	336597	2586358	6.65%	6.235%

Sum of corrected areas: 41482768

MSDRUGS100.M Tue Jan 15 12:31:08 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\

Data File : THC 3a.D

Acq On : 15 Jan 2019 11:42

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 54 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

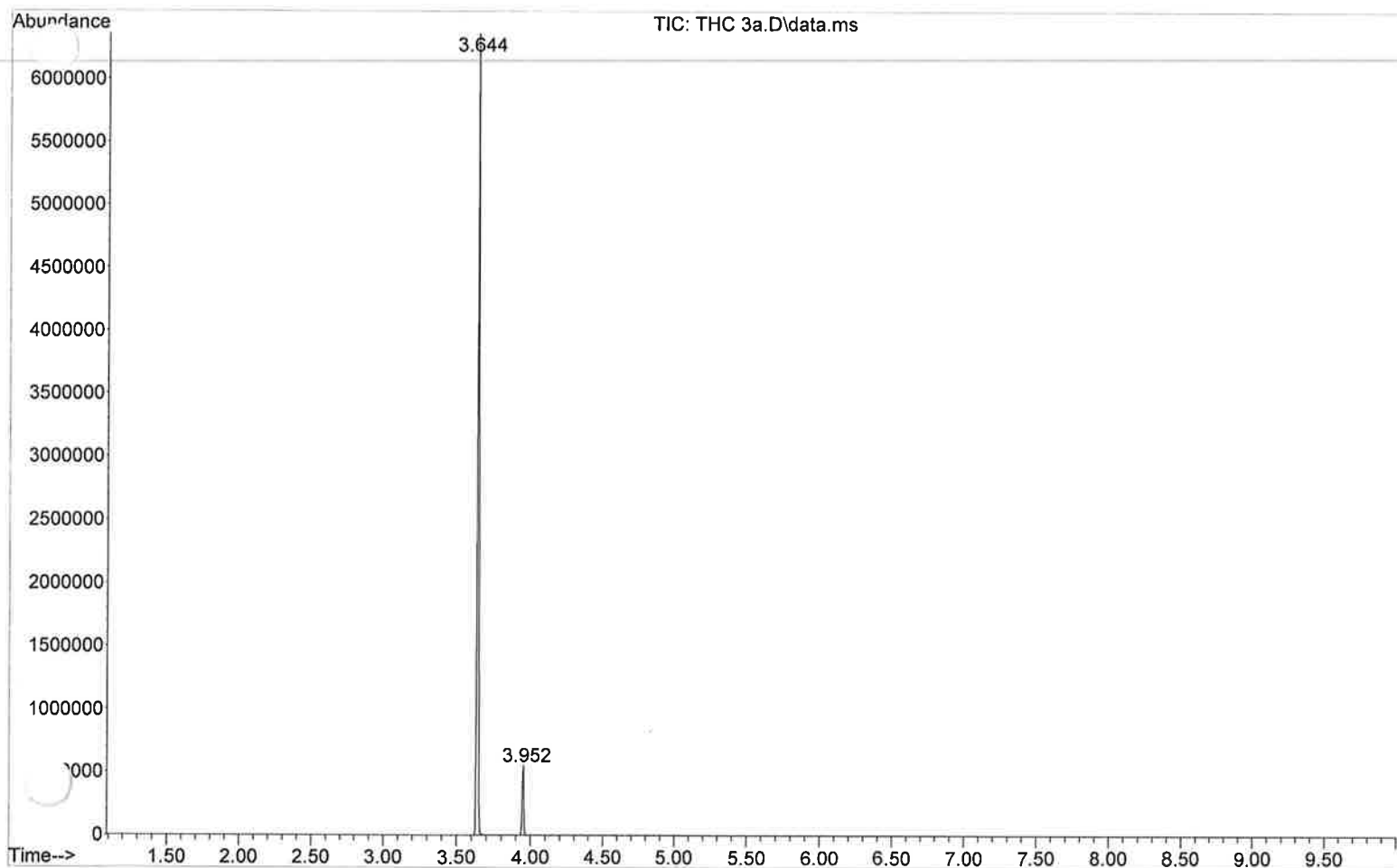
Title :

Signal : TIC: THC 3a.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.
1	3.644	435	440	455	BV	5376208	39679382	100.00%	90.212%
2	3.952	489	493	503	VV	551574	4305450	10.85%	9.788%

Sum of corrected areas: 43984832

MSDRUGS100.M Tue Jan 15 12:31:18 2019



Data Path : C:\msdchem\1\DATA\2019\BTT1-15-19\
 Data File : THC 4a.D
 Acq On : 15 Jan 2019 12:10
 Operator : BTT
 Sample : Standard
 Misc : Methanol
 ALS Vial : 55 Sample Multiplier: 1

Integration Parameters: autoint1.e
 Integrator: ChemStation

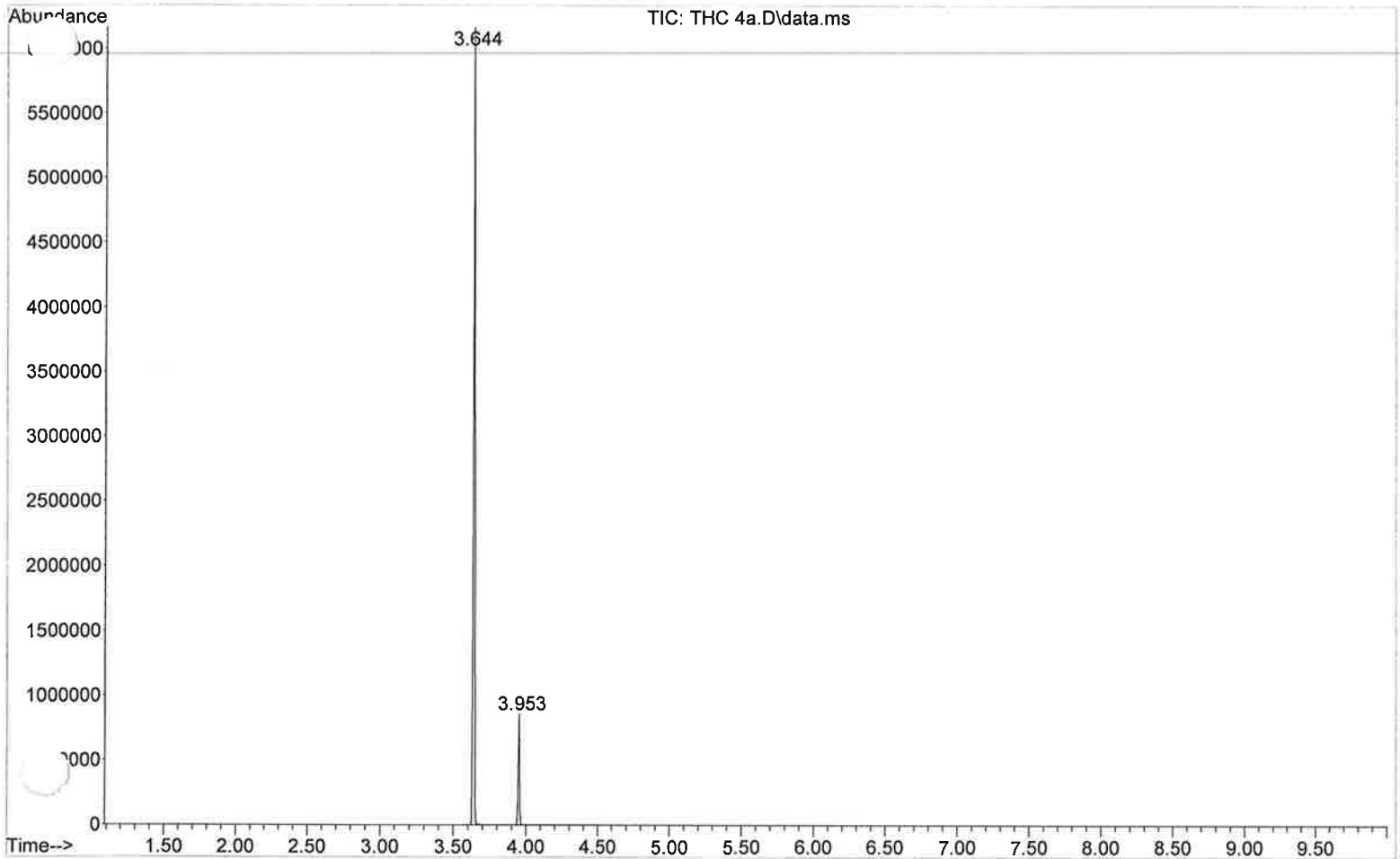
Method : C:\msdchem\1\METHODS\MSDRUGS100.M
 Title :

Signal : TIC: THC 4a.D\data.ms

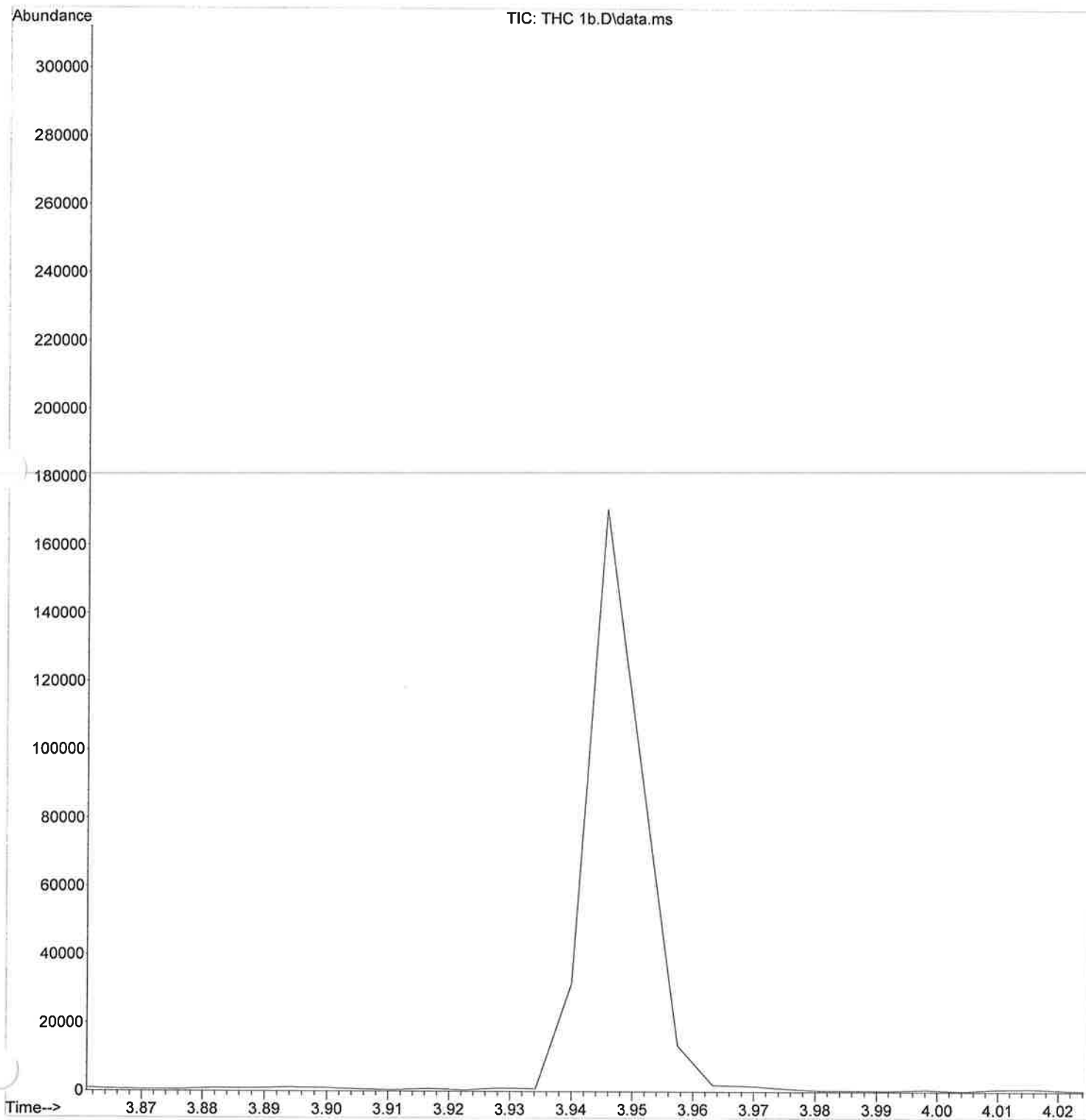
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.
1	3.644	408	440	451	BV	5173623	37727338	100.00%	86.596%
2	3.953	488	493	505	VV	804157	5839735	15.48%	13.404%

Sum of corrected areas: 43567073

MSDRUGS100.M Tue Jan 15 12:31:36 2019



File :C:\msdchem\1\DATA\2019\BTT\1-15-19\THC 1b.D
Operator : BTT
Acquired : 15 Jan 2019 12:39 using AcqMethod ASMSDRUGS100.M
Instrument : Gumbo
Sample Name: Standard
Misc Info : Methanol
Vial Number: 57



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\

Data File : THC 1b.D

Acq On : 15 Jan 2019 12:39

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 57 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

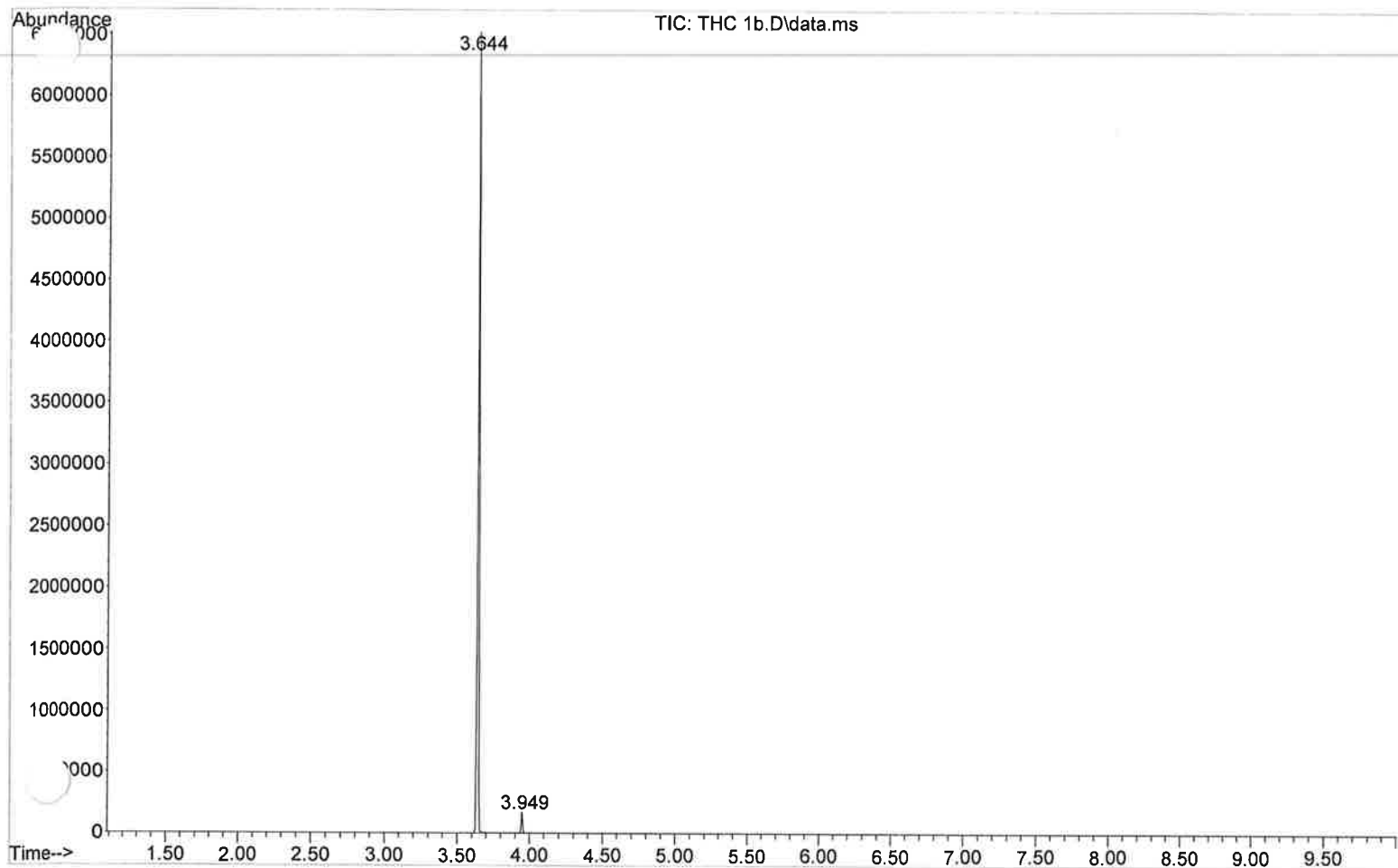
Title :

Signal : TIC: THC 1b.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	3.644	426	440	453	PV	5419027	39980694	100.00%	100.00%	97.300%
2	3.949	480	493	502	VV	155933	1109384	2.77%	2.77%	2.700%

Sum of corrected areas: 41090078

MSDRUGS100.M Tue Jan 15 13:26:14 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\

Data File : THC 2b.D

Acq On : 15 Jan 2019 13:08

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 58 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

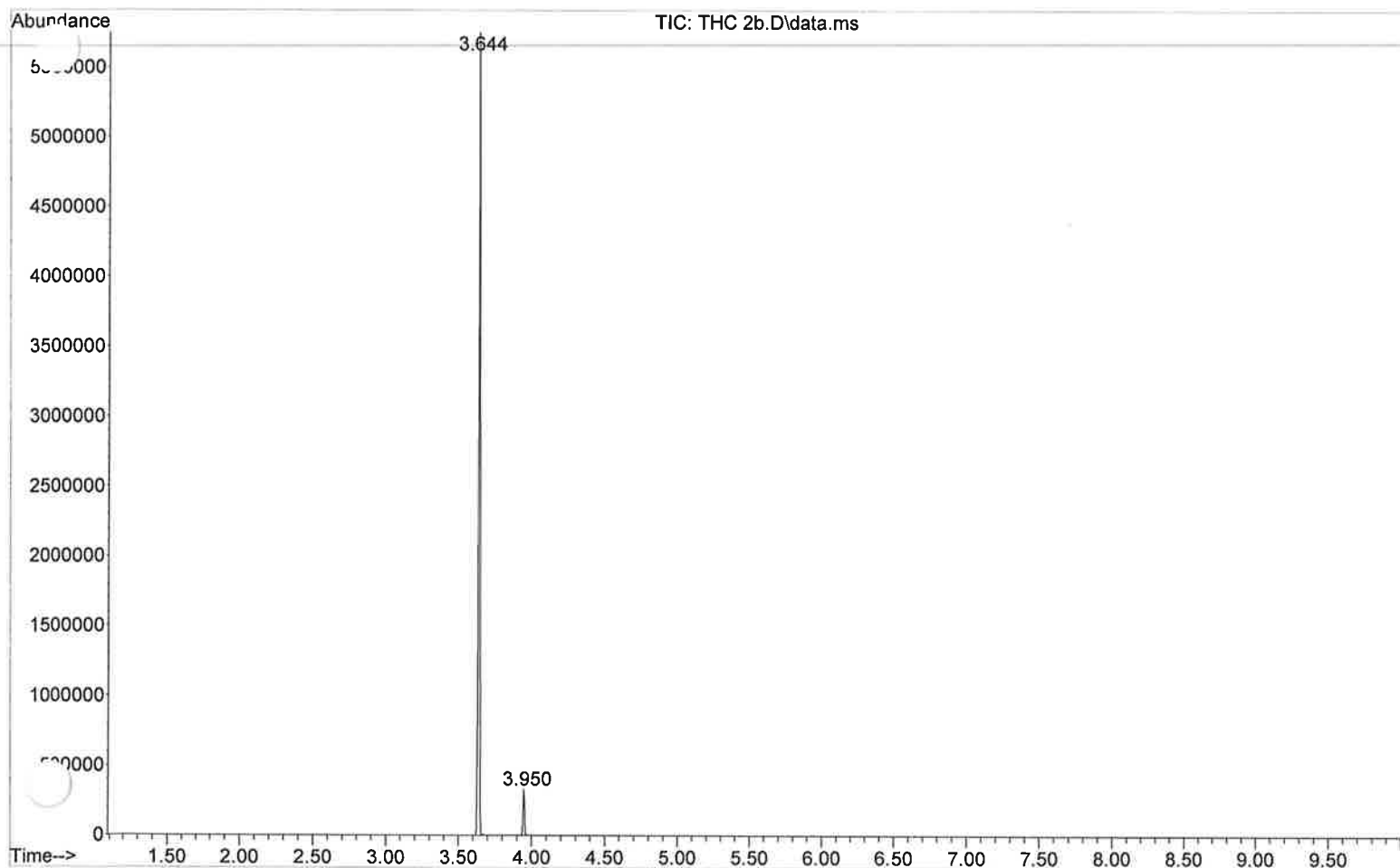
Title :

Signal : TIC: THC 2b.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	3.644	430	440	455	PV	4847230	35531633	100.00%	93.858%
2	3.950	477	493	499	PV	310712	2325166	6.54%	6.142%

Sum of corrected areas: 37856799

MSDRUGS100.M Tue Jan 15 13:26:25 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\

Data File : THC 3b.D

Acq On : 15 Jan 2019 14:23

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 59 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

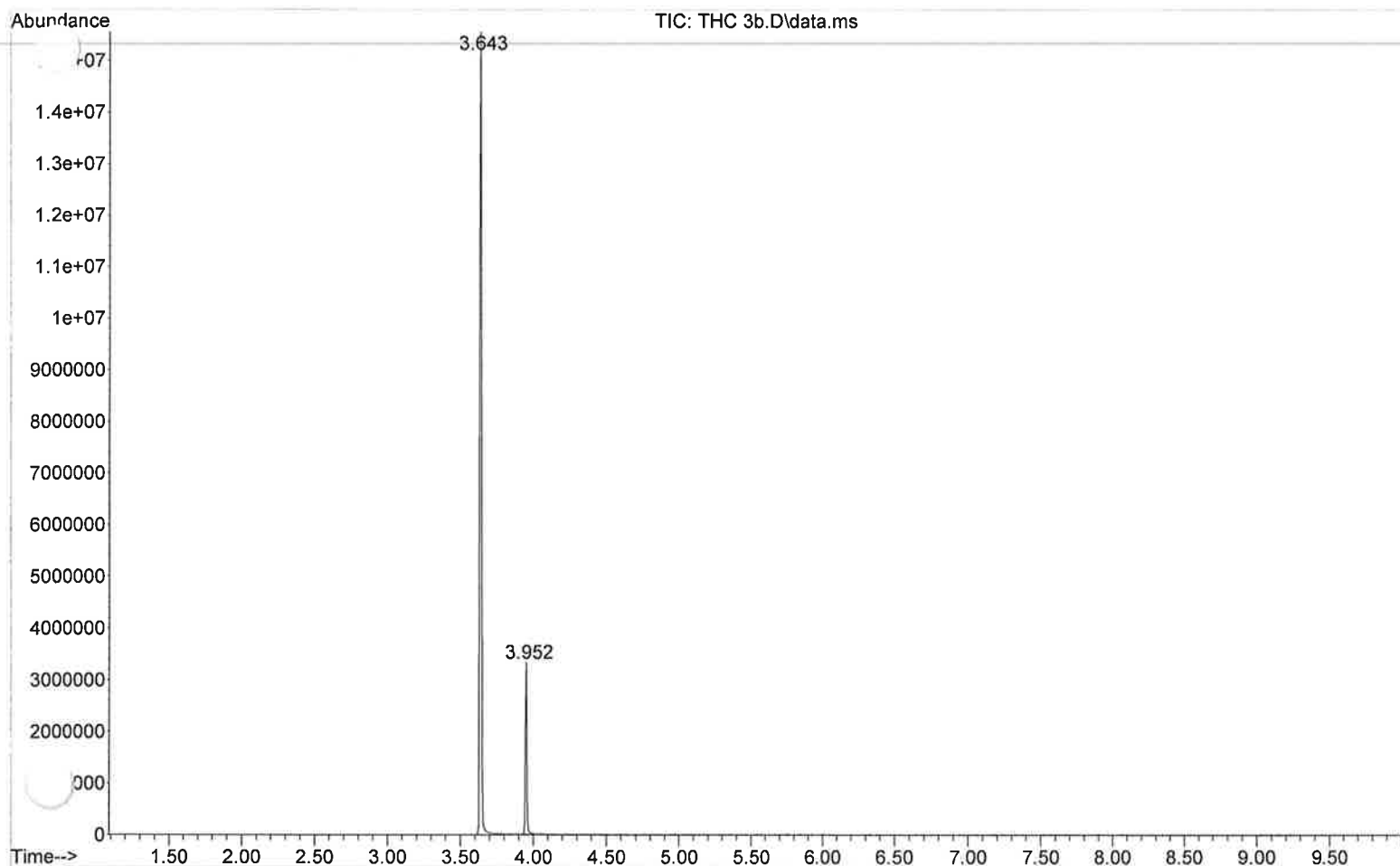
Title :

Signal : TIC: THC 3b.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.643	434	440	465	PV	14739612	131560995	100.00%	84.143%
2	3.952	489	493	515	VV	3183875	24793141	18.85%	15.857%

Sum of corrected areas: 156354136

MSDRUGS100.M Tue Jan 15 15:07:29 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\
Data File : THC 4b.D
Acq On : 15 Jan 2019 14:51
Operator : BTT
Sample : Standard
Misc : Methanol
ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e
Integrator: ChemStation

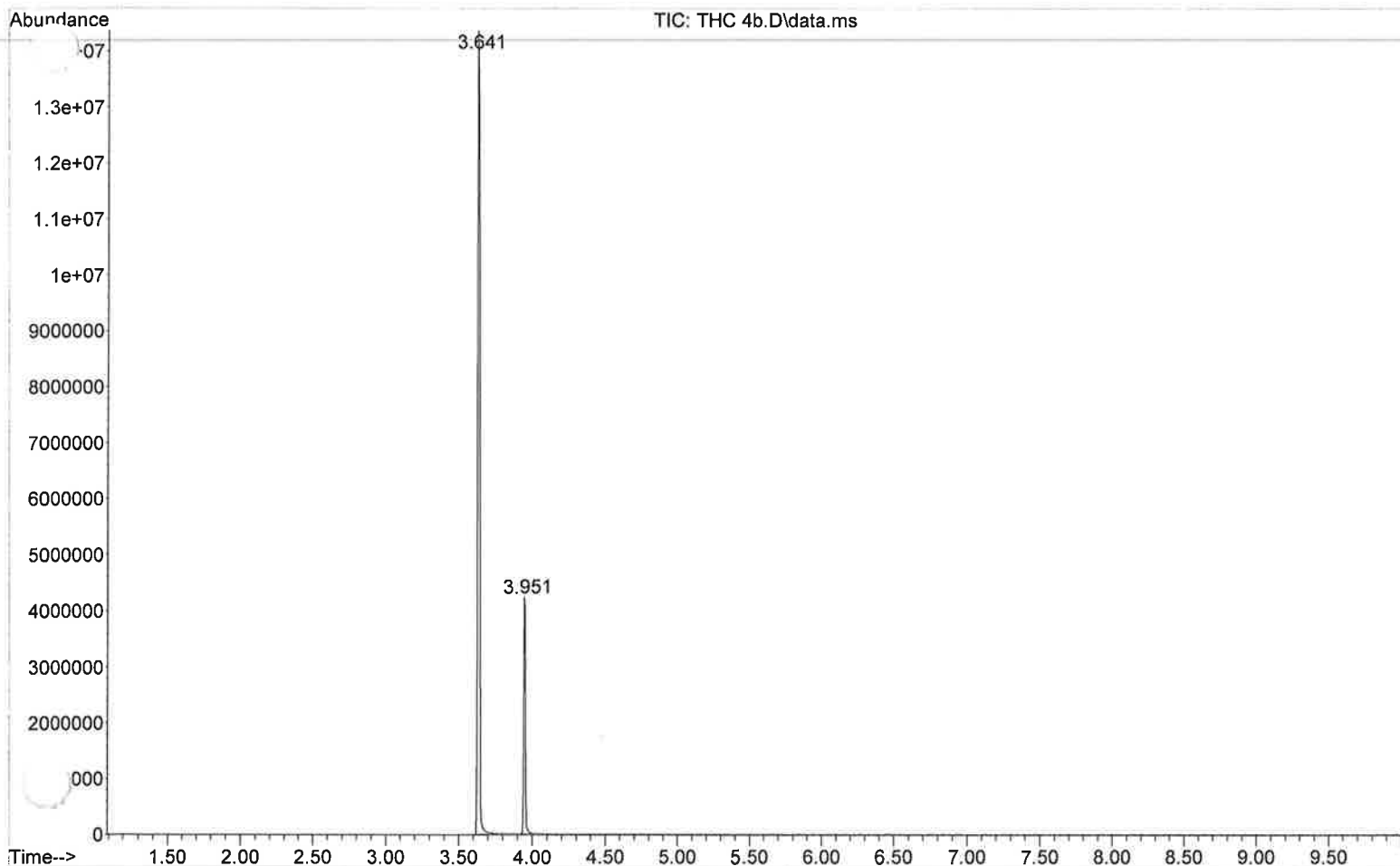
Method : C:\msdchem\1\METHODS\MSDRUGS100.M
Title :

Signal : TIC: THC 4b.D\data.ms

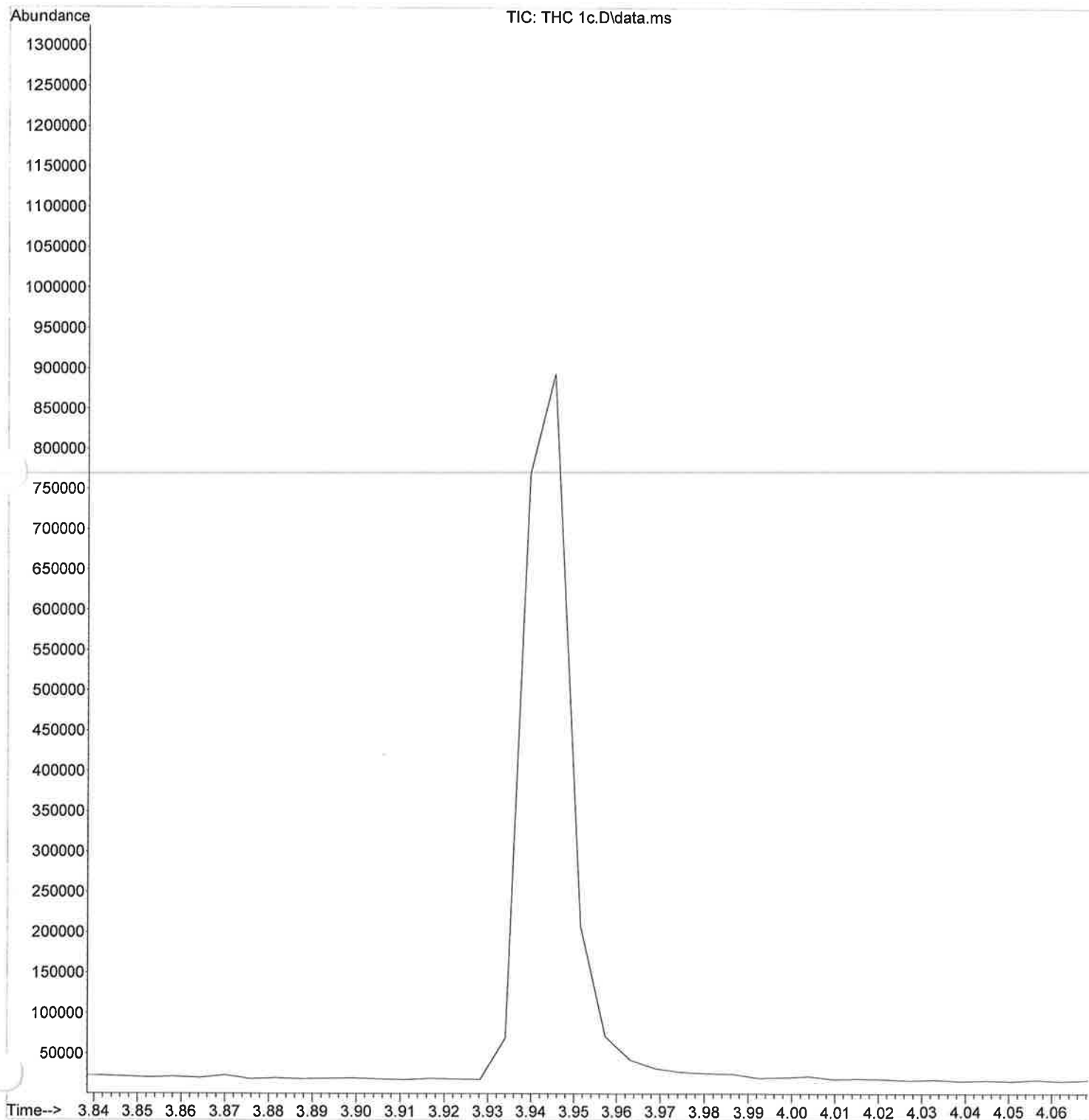
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	3.641	433	440	465	BV	14398758	140281900	100.00%	79.807%
2	3.951	488	493	506	PV	4309170	35494258	25.30%	20.193%

Sum of corrected areas: 175776158

MSDRUGS100.M Tue Jan 15 15:07:54 2019



File :C:\msdchem\1\DATA\2019\BTT\1-15-19\THC 1c.D
Operator : BTT
Acquired : 15 Jan 2019 15:20 using AcqMethod ASMSDRUGS100.M
Instrument : Gumbo
Sample Name: Standard
Misc Info : Methanol
Vial Number: 62



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\

Data File : THC 1c.D

Acq On : 15 Jan 2019 15:20

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 62 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

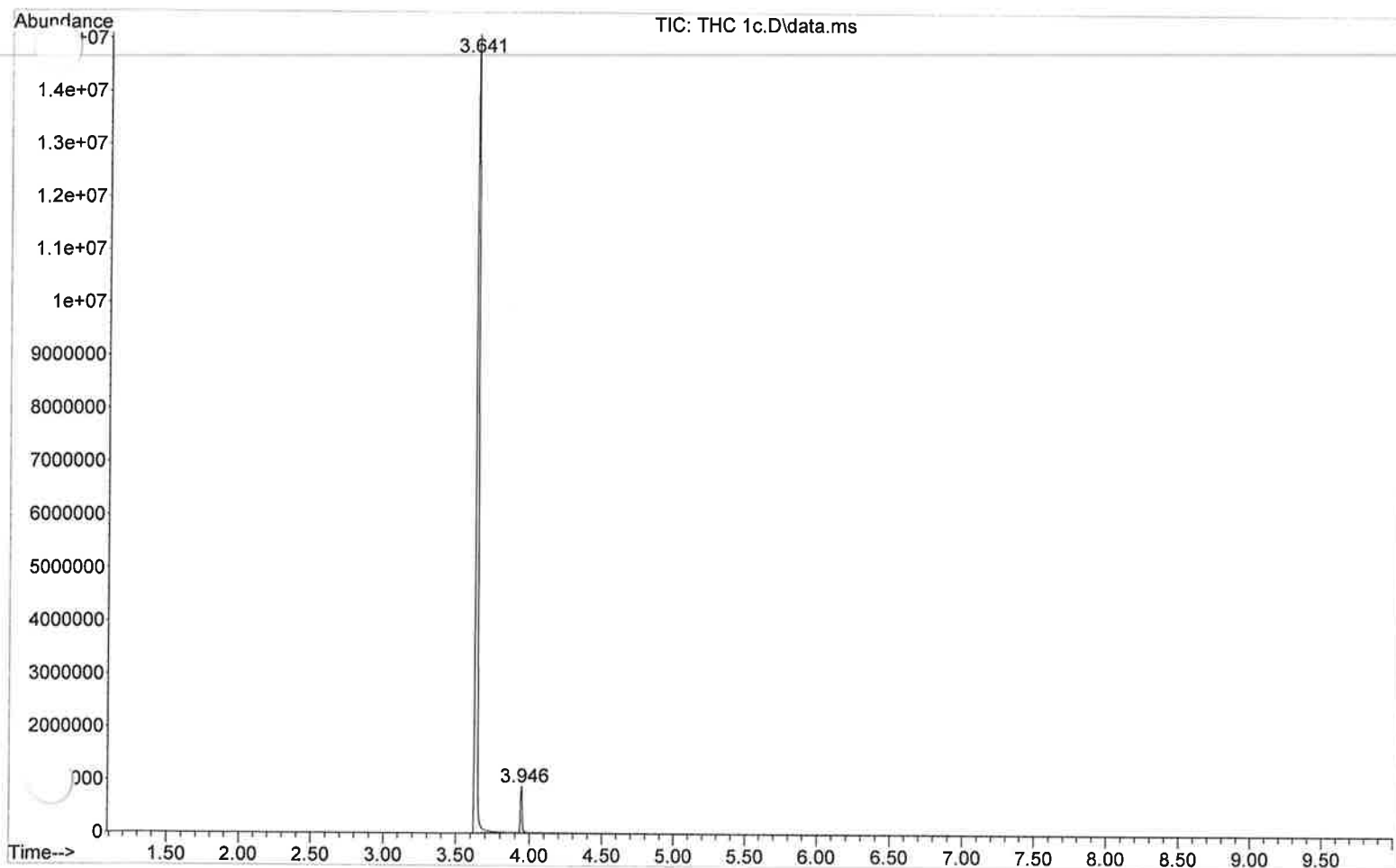
Title :

Signal : TIC: THC 1c.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	3.641	418	440	472	BV	15522869	156755966	100.00%	95.791%	
2	3.946	488	492	501	BV	850034	6887211	4.39%	4.209%	

Sum of corrected areas: 163643177

MSDRUGS100.M Wed Jan 16 08:39:28 2019



TBI Area Percent Report

Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\
Data File : THC 2c.D
Acq On : 15 Jan 2019 15:49
Operator : BTT
Sample : Standard
Misc : Methanol
ALS Vial : 63 Sample Multiplier: 1

Integration Parameters: autoint1.e
Integrator: ChemStation

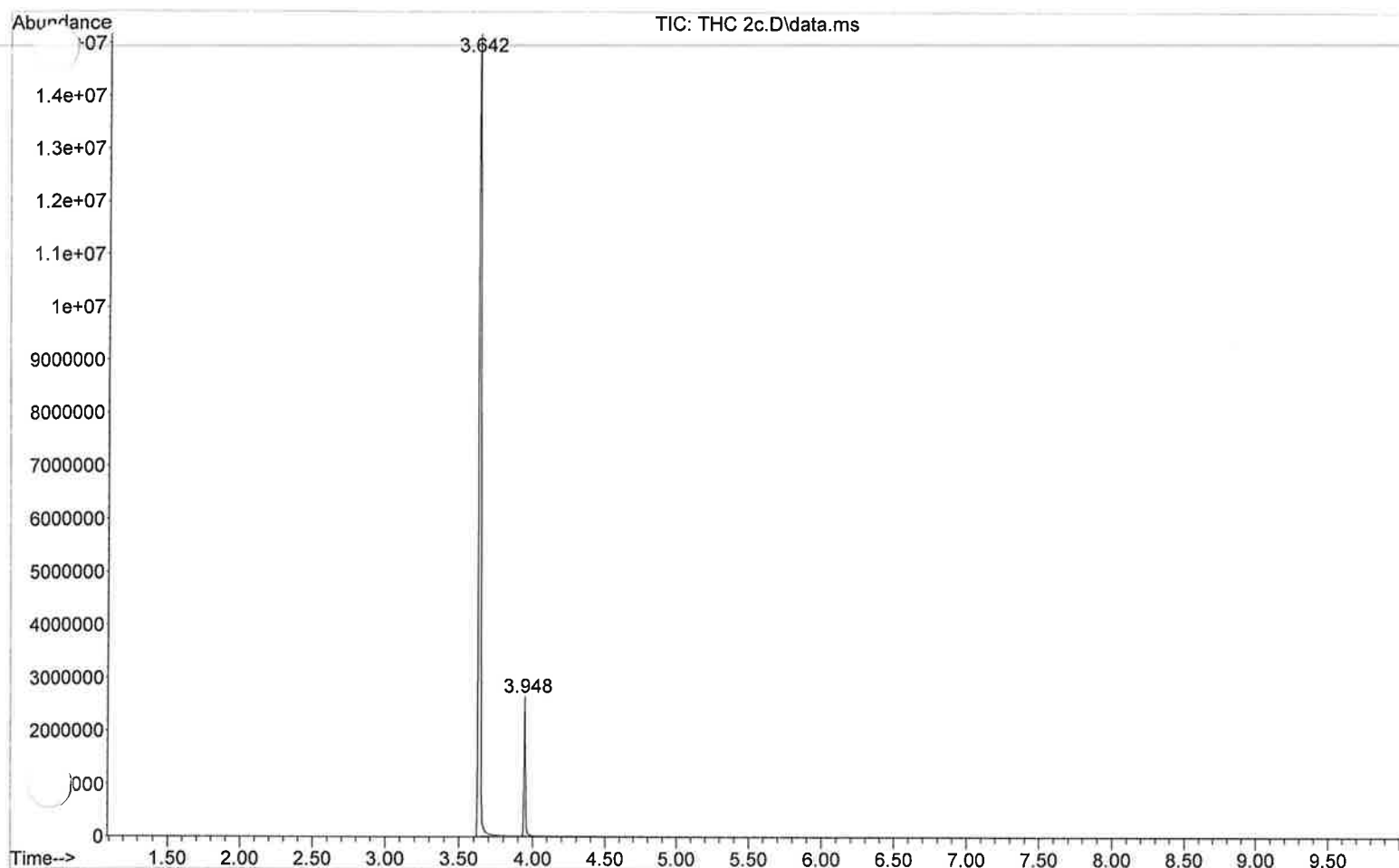
Method : C:\msdchem\1\METHODS\MSDRUGS100.M
Title :

Signal : TIC: THC 2c.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	3.642	430	440	463	BV	15409254	150261166	100.00%	89.667%
2	3.948	487	492	508	BV	2358595	17316102	11.52%	10.333%

Sum of corrected areas: 167577268

MSDRUGS100.M Wed Jan 16 08:39:39 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\

Data File : THC 3c.D

Acq On : 15 Jan 2019 16:18

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 64 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

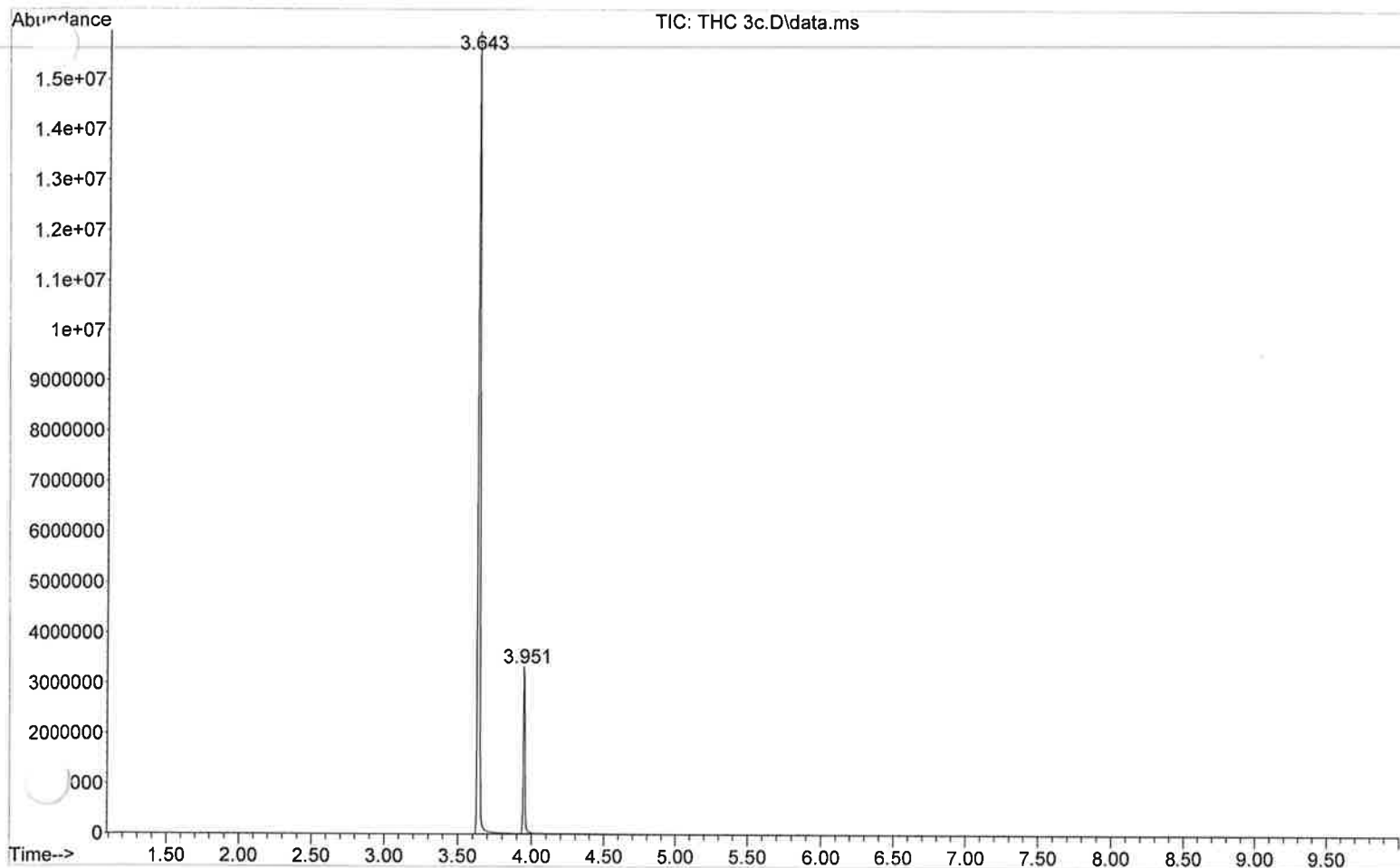
Title :

Signal : TIC: THC 3c.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % area	% of max.	% of total
1	3.643	419	440	477	BV	15133508	141642390	100.00%	84.002%	
2	3.951	484	493	512	VV	3332675	26976340	19.05%	15.998%	

Sum of corrected areas: 168618729

MSDRUGS100.M Wed Jan 16 08:39:48 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\
Data File : THC 4c.D
Acq On : 15 Jan 2019 16:47
Operator : BTT
Sample : Standard
Misc : Methanol
ALS Vial : 65 Sample Multiplier: 1

Integration Parameters: autoint1.e
Integrator: ChemStation

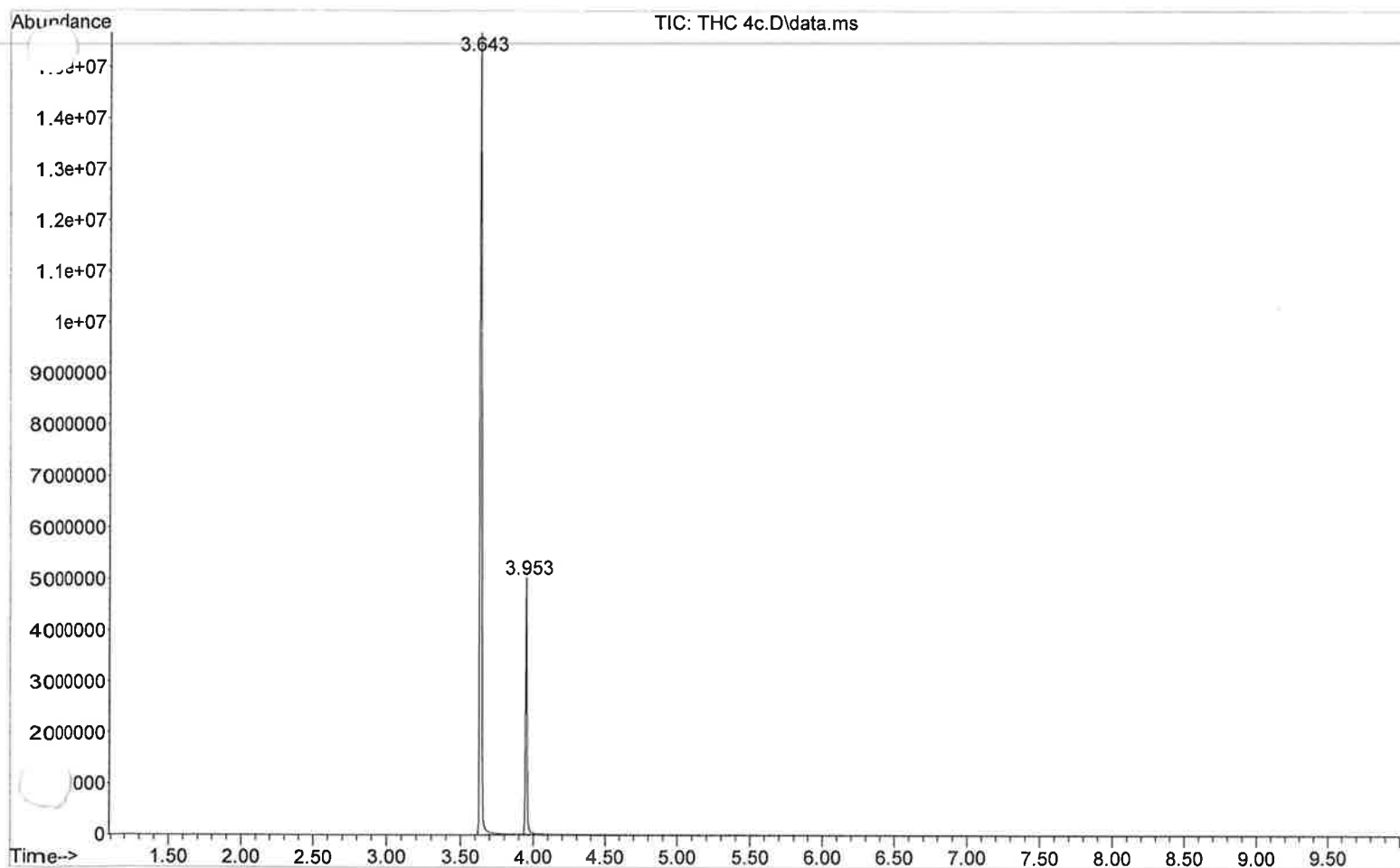
Method : C:\msdchem\1\METHODS\MSDRUGS100.M
Title :

Signal : TIC: THC 4c.D\data.ms

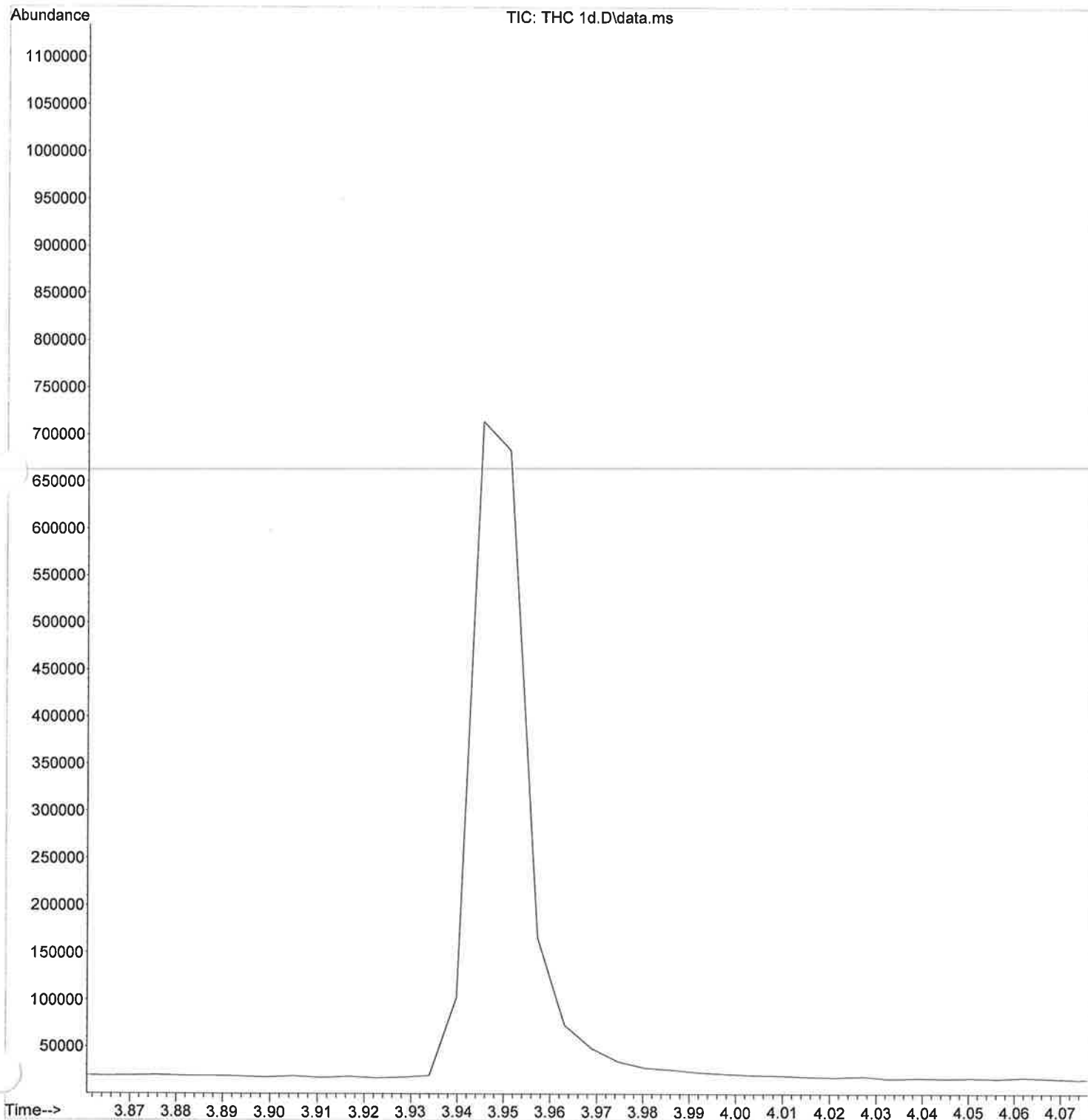
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.
1	3.643	434	440	478	BV	14854962	136512637	100.00%	79.359%
2	3.953	484	493	510	VV	4598175	35505796	26.01%	20.641%

Sum of corrected areas: 172018433

MSDRUGS100.M Wed Jan 16 08:39:58 2019



File :C:\msdchem\1\DATA\2019\BTT\1-15-19\THC 1d.D
Operator : BTT
Acquired : 15 Jan 2019 17:15 using AcqMethod ASMSDRUGS100.M
Instrument : Gumbo
Sample Name: Standard
Misc Info : Methanol
Vial Number: 67



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\

Data File : THC 1d.D

Acq On : 15 Jan 2019 17:15

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 67 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

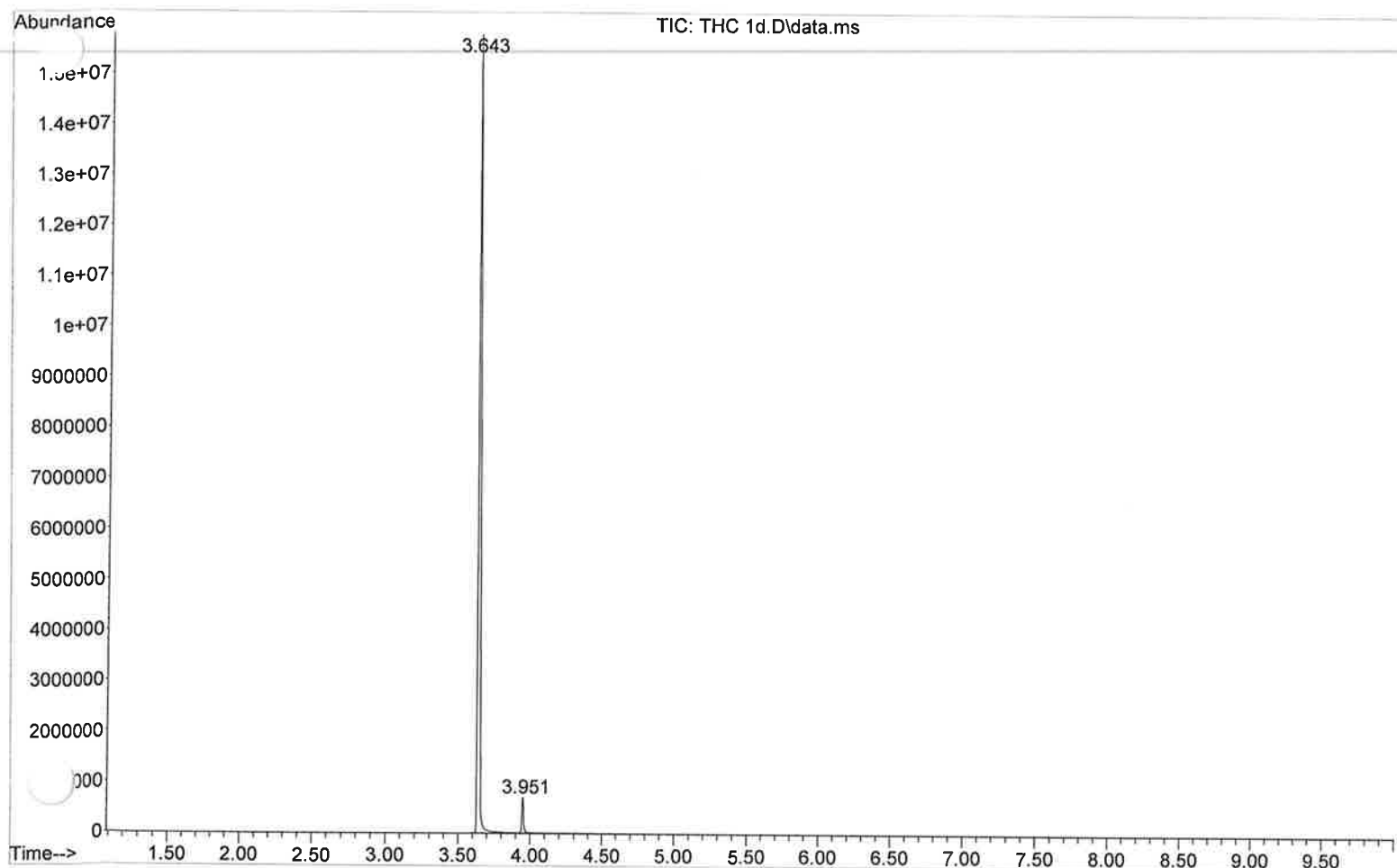
Title :

Signal : TIC: THC 1d.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	3.643	410	440	488	PV	14694683	151244253	100.00%	95.975%	
2	3.951	488	493	514	VV	716526	6342709	4.19%	4.025%	

Sum of corrected areas: 157586963

MSDRUGS100.M Wed Jan 16 08:40:10 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\

Data File : THC 2d.D

Acq On : 15 Jan 2019 17:44

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 68 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

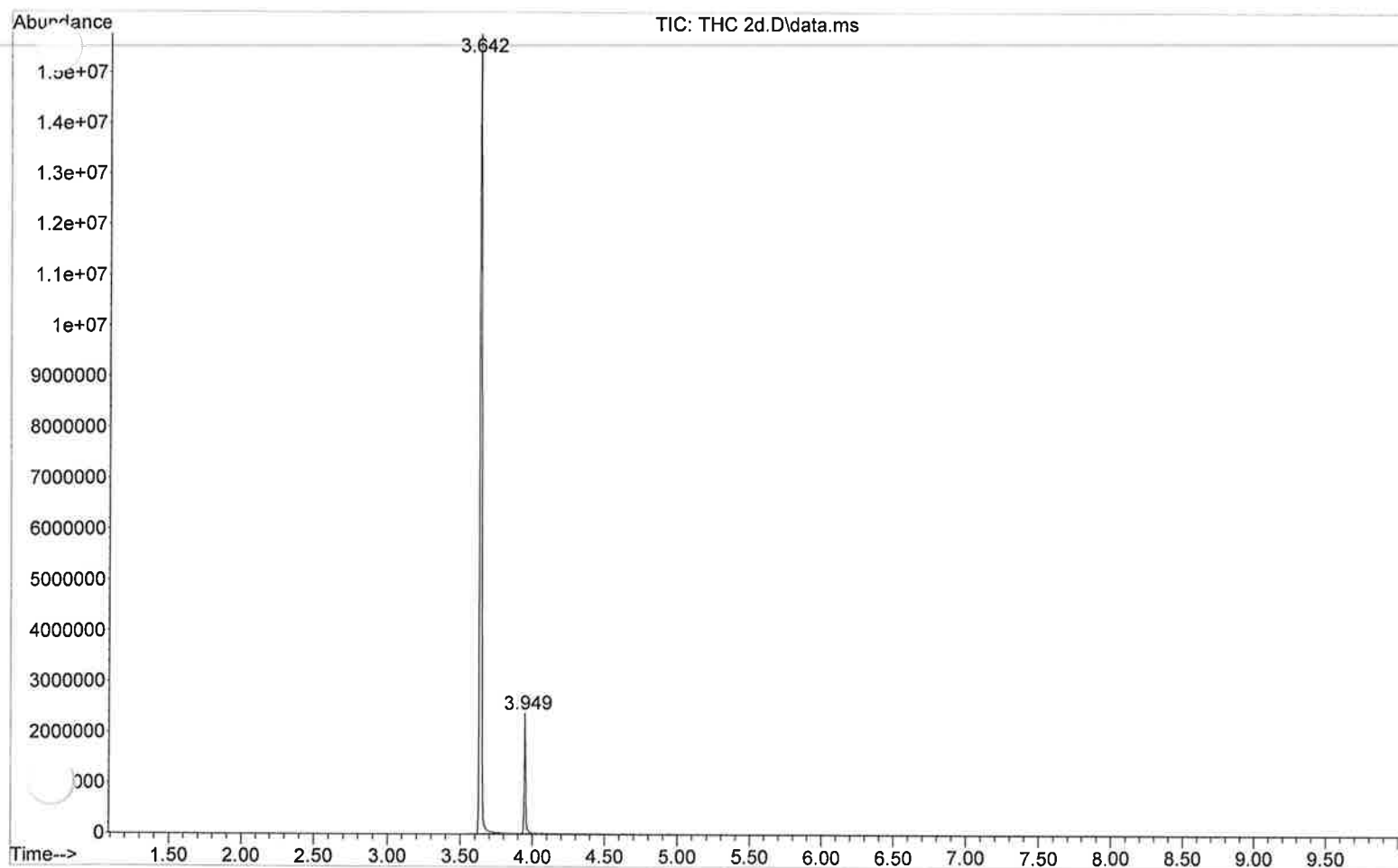
Title :

Signal : TIC: THC 2d.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.
1	3.642	415	440	472	BV	15271798	144626264	100.00%	90.005%
2	3.949	488	493	513	BV	2165602	16061541	11.11%	9.995%

Sum of corrected areas: 160687805

MSDRUGS100.M Wed Jan 16 08:40:23 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\

Data File : THC 3d.D

Acq On : 15 Jan 2019 18:13

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 69 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

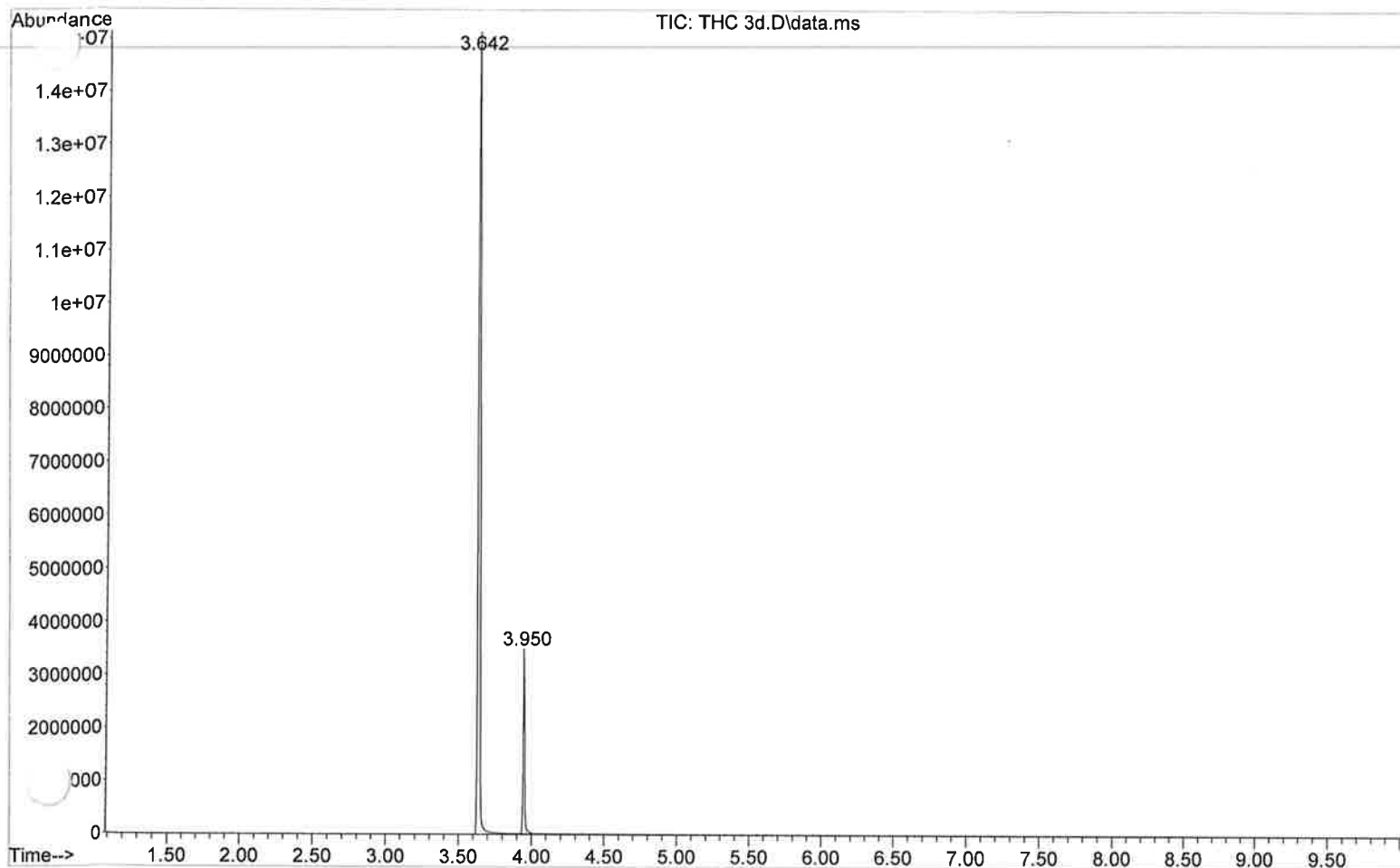
Title :

Signal : TIC: THC 3d.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.642	432	440	484	PV	14978510	146743129	100.00%	85.009%
2	3.950	488	493	512	VV	3289924	25877451	17.63%	14.991%

Sum of corrected areas: 172620580

MSDRUGS100.M Wed Jan 16 08:40:32 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\

Data File : THC 4d.D

Acq On : 15 Jan 2019 18:42

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 70 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

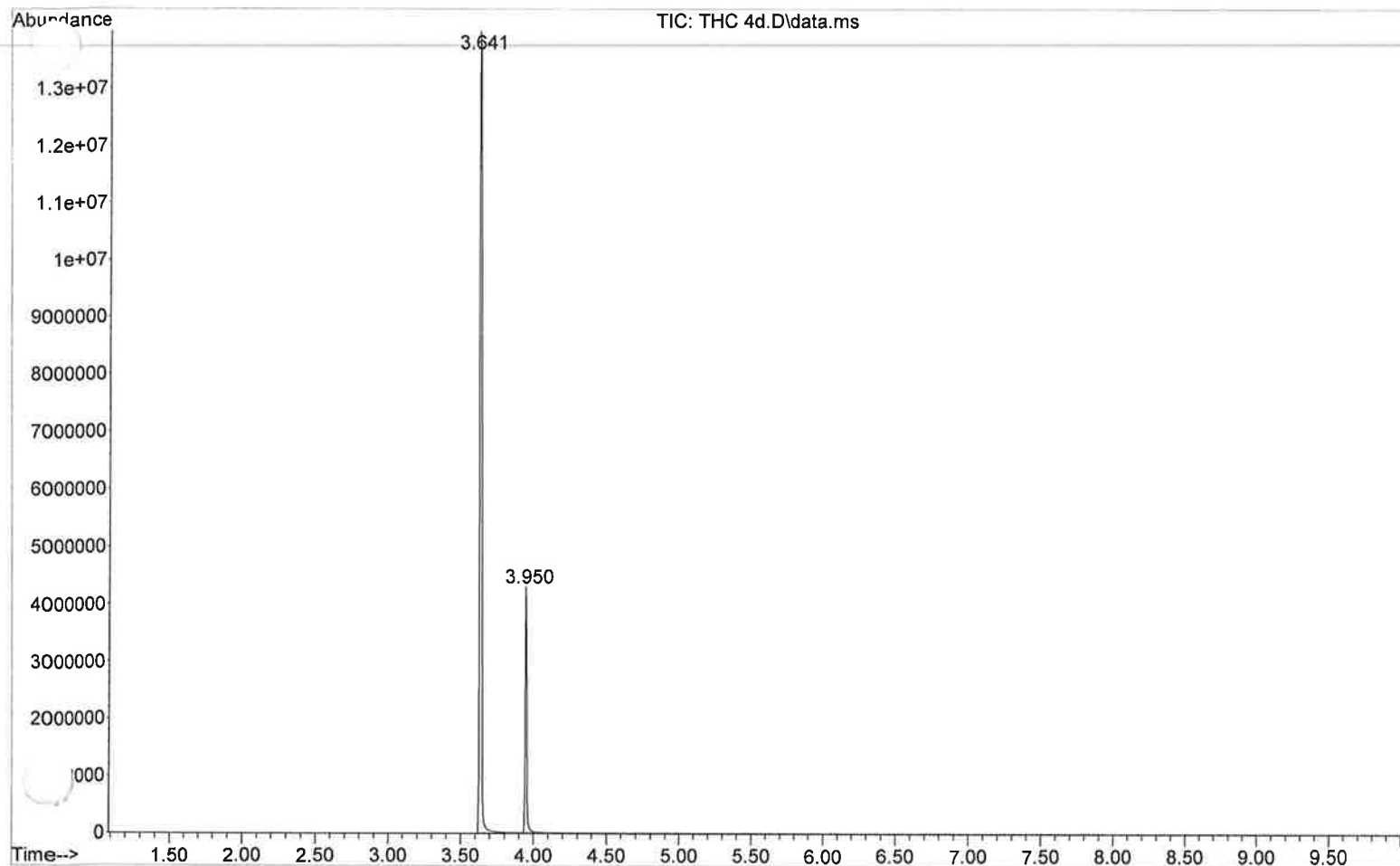
Title :

Signal : TIC: THC 4d.D\data.ms

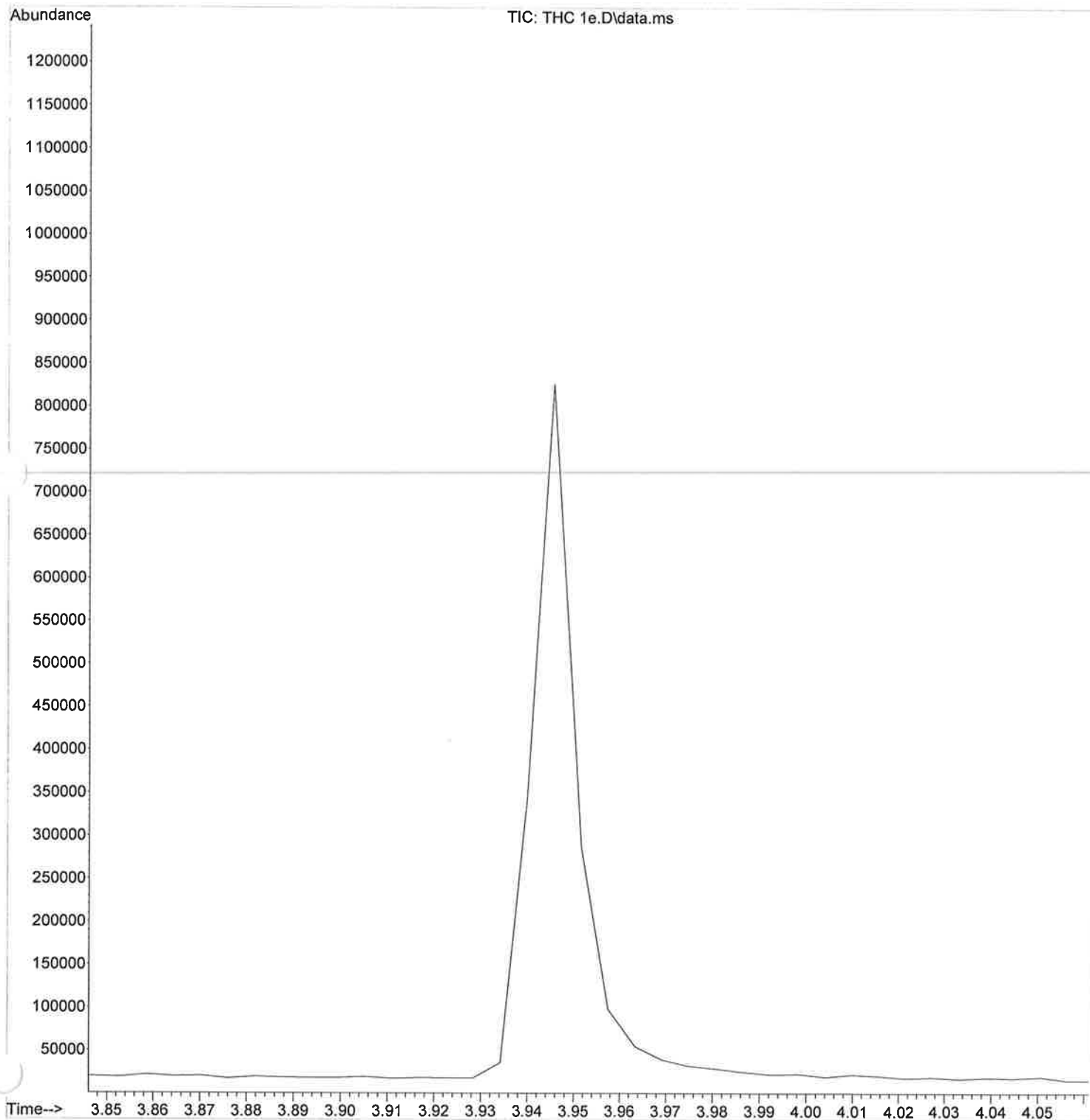
peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	3.641	424	440	469	BV	14476202	141888130	100.00%	80.913%	
2	3.950	488	493	512	VV	4165643	33469669	23.59%	19.087%	

Sum of corrected areas: 175357799

MSDRUGS100.M Wed Jan 16 08:40:43 2019



File : C:\msdchem\1\DATA\2019\BTT\1-15-19\THC 1e.D
Operator : BTT
Acquired : 15 Jan 2019 19:11 using AcqMethod ASMSDRUGS100.M
Instrument : Gumbo
Sample Name: Standard
Misc Info : Methanol
Vial Number: 72



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\

Data File : THC 1e.D

Acq On : 15 Jan 2019 19:11

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 72 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

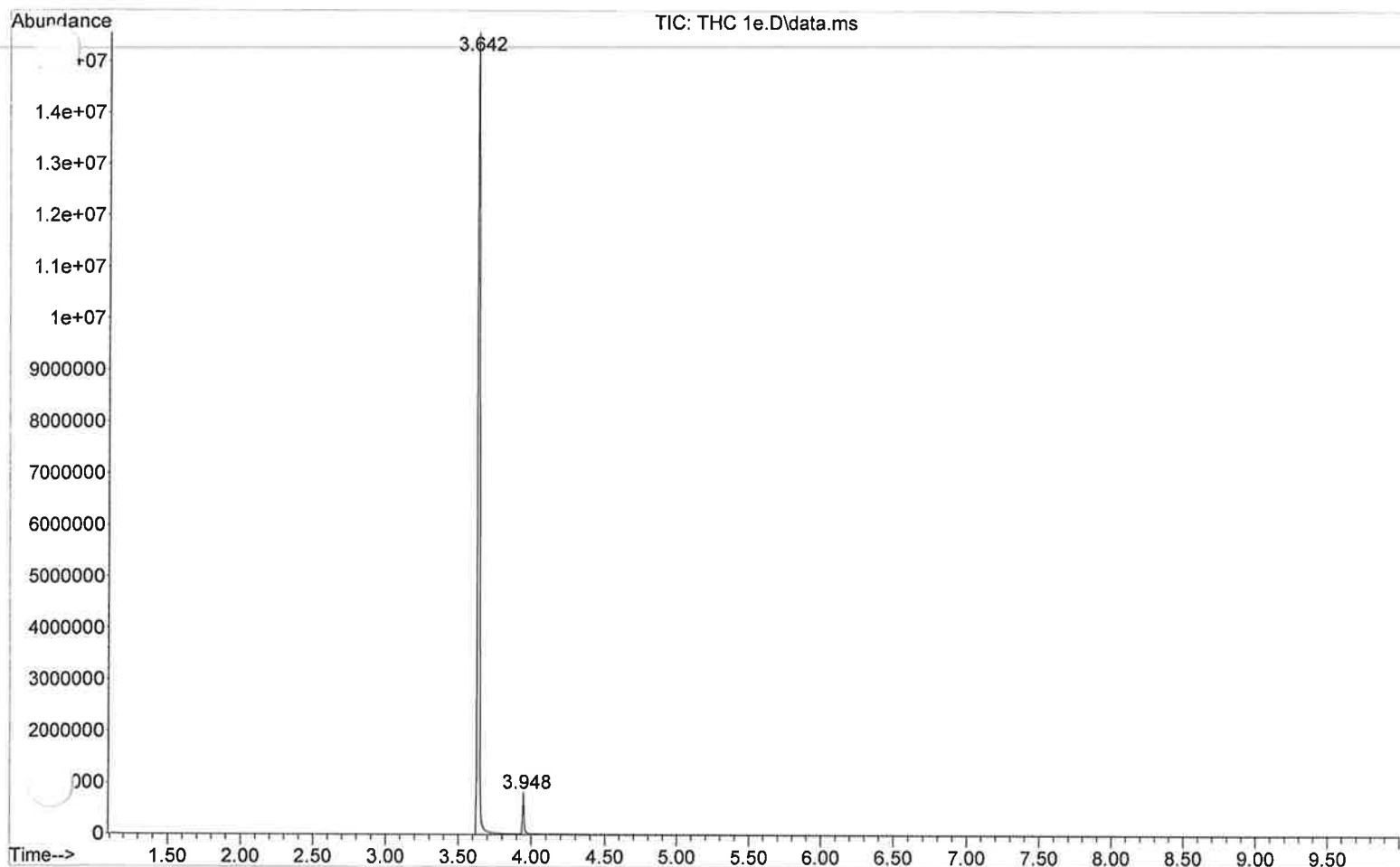
Title :

Signal : TIC: THC 1e.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	3.642	416	440	487	BV	15564042	153934022	100.00%	96.171%	
2	3.948	487	492	516	VV	731265	6128209	3.98%	3.829%	

Sum of corrected areas: 160062231

MSDRUGS100.M Wed Jan 16 08:40:53 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\

Data File : THC 2e.D

Acq On : 15 Jan 2019 19:39

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 73 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

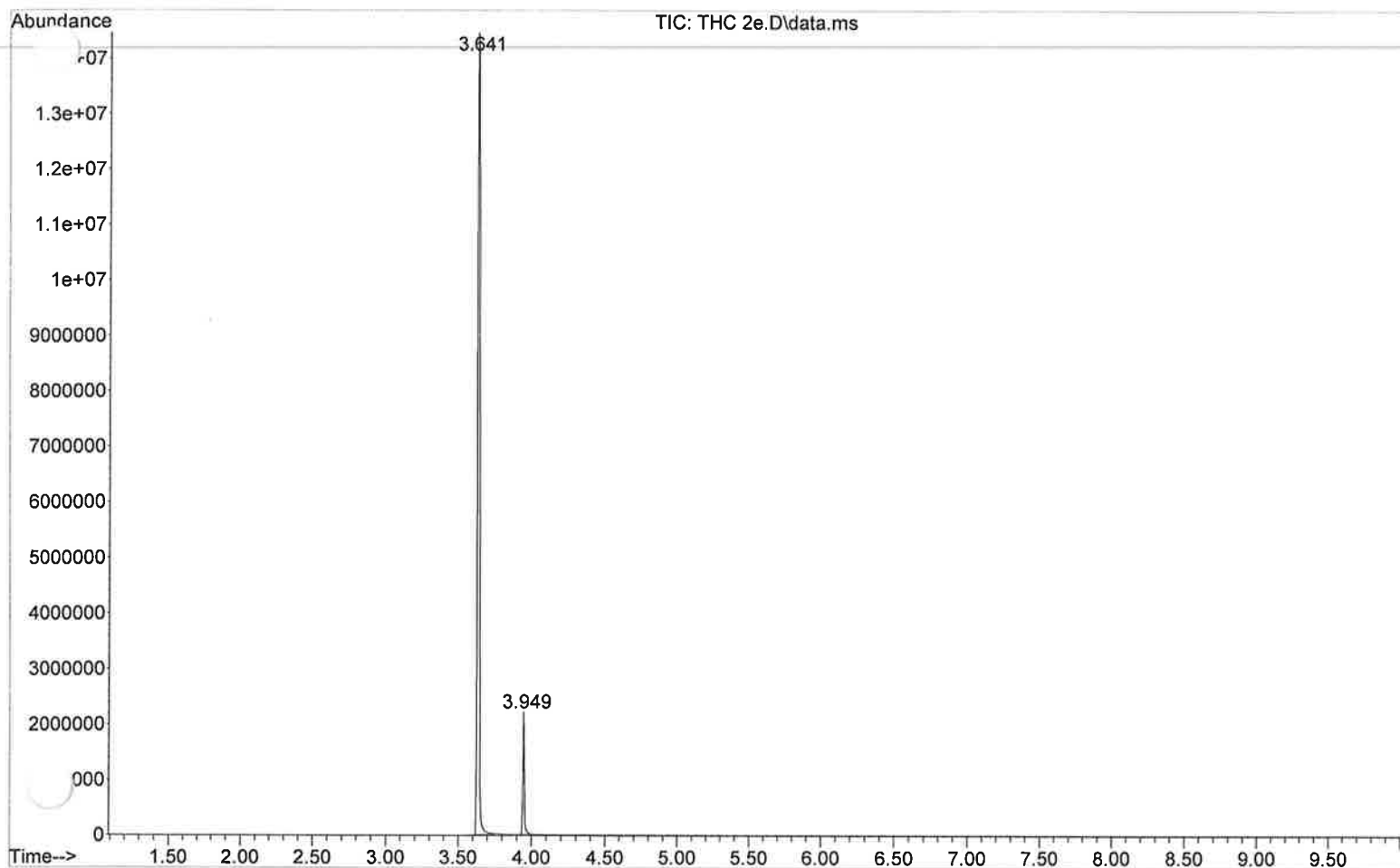
Title :

Signal : TIC: THC 2e.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	3.641	426	440	462	PV	15032517	147959569	100.00%	90.585%
2	3.949	488	493	523	PB	1992625	15378101	10.39%	9.415%

Sum of corrected areas: 163337671

MSDRUGS100.M Wed Jan 16 08:41:09 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\

Data File : THC 3e.D

Acq On : 15 Jan 2019 20:08

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 74 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

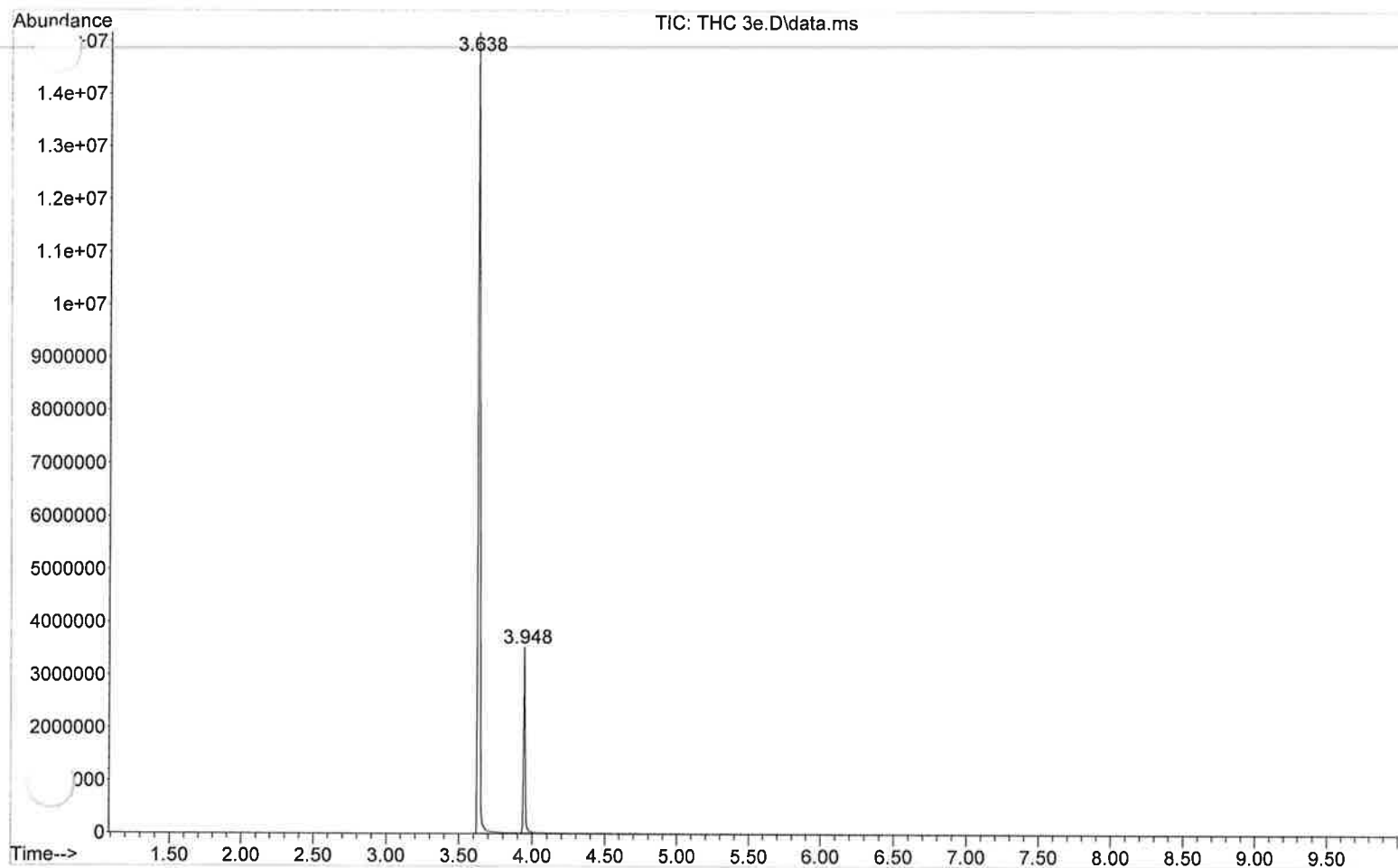
Title :

Signal : TIC: THC 3e.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	3.638	419	439	483	BV	14414583	138875193	100.00%	84.940%
2	3.948	488	492	508	VV	3175859	24623133	17.73%	15.060%

Sum of corrected areas: 163498326

MSDRUGS100.M Wed Jan 16 08:41:20 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-15-19\

Data File : THC 4e.D

Acq On : 15 Jan 2019 20:37

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 75 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

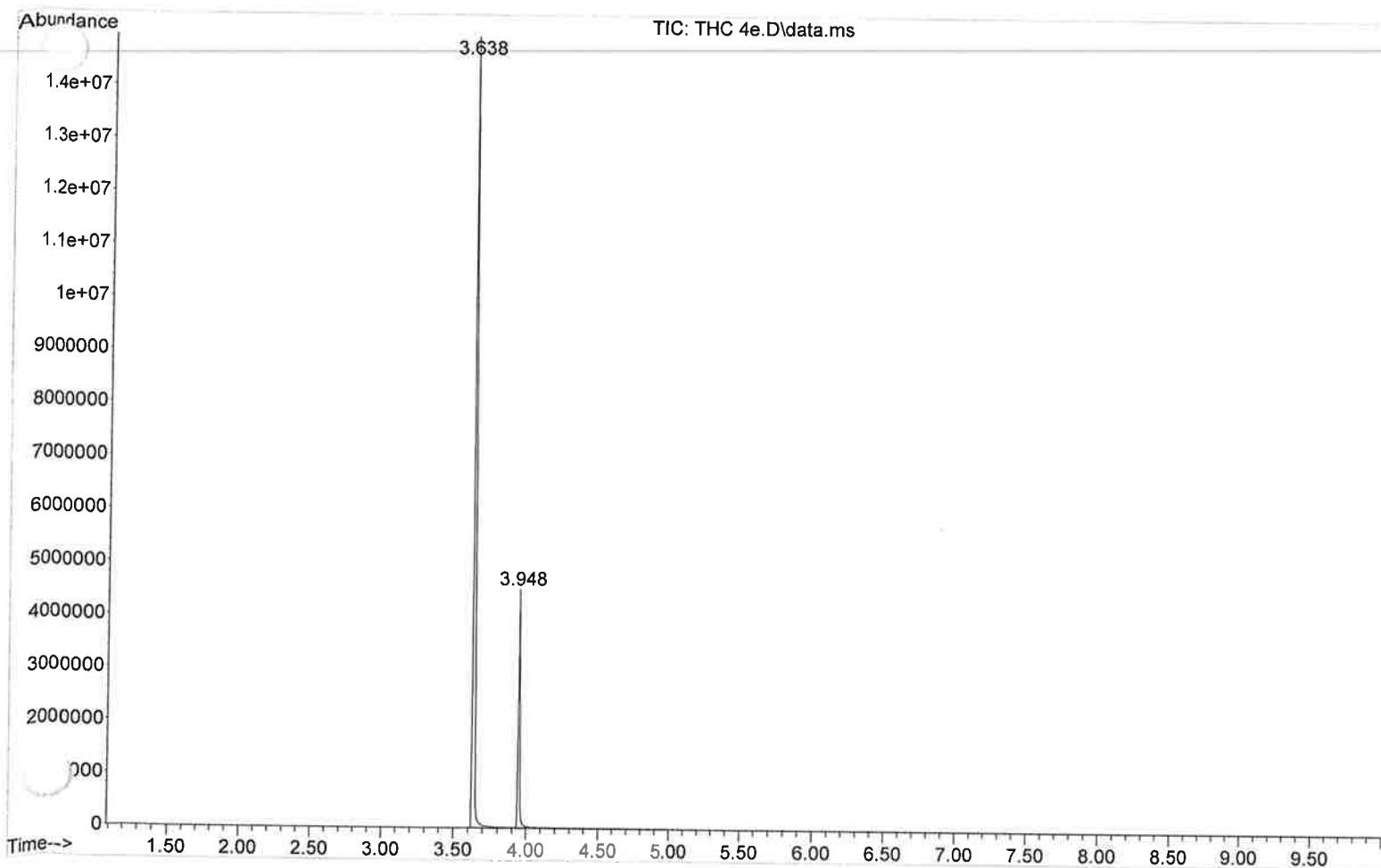
Title :

Signal : TIC: THC 4e.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	3.638	418	439	476	BV	14184176	129384510	100.00%	79.850%	
2	3.948	488	492	511	PV	4091782	32650667	25.24%	20.150%	

Sum of corrected areas: 162035177

MSDRUGS100.M Wed Jan 16 08:41:28 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\

Data File : THC 1a.D

Acq On : 16 Jan 2019 13:31

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 52 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

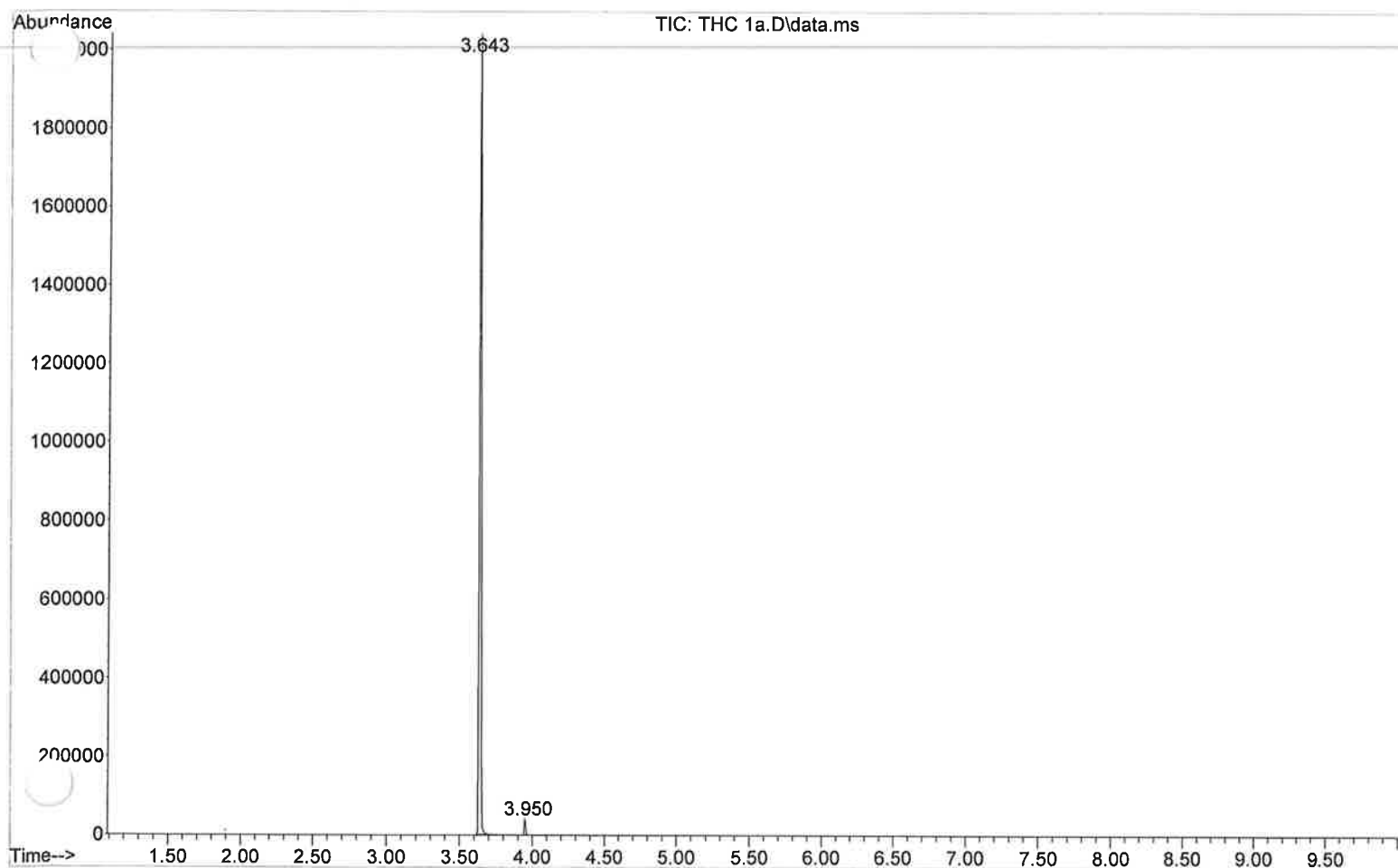
Title :

Signal : TIC: THC 1a.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.643	436	440	455	BB	1963282	16725328	100.00%	98.428%
2	3.950	490	493	498	BB	38563	267073	1.60%	1.572%

Sum of corrected areas: 16992402

MSDRUGS100.M Thu Jan 17 11:22:40 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\

Data File : THC 2a.D

Acq On : 16 Jan 2019 13:59

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 53 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

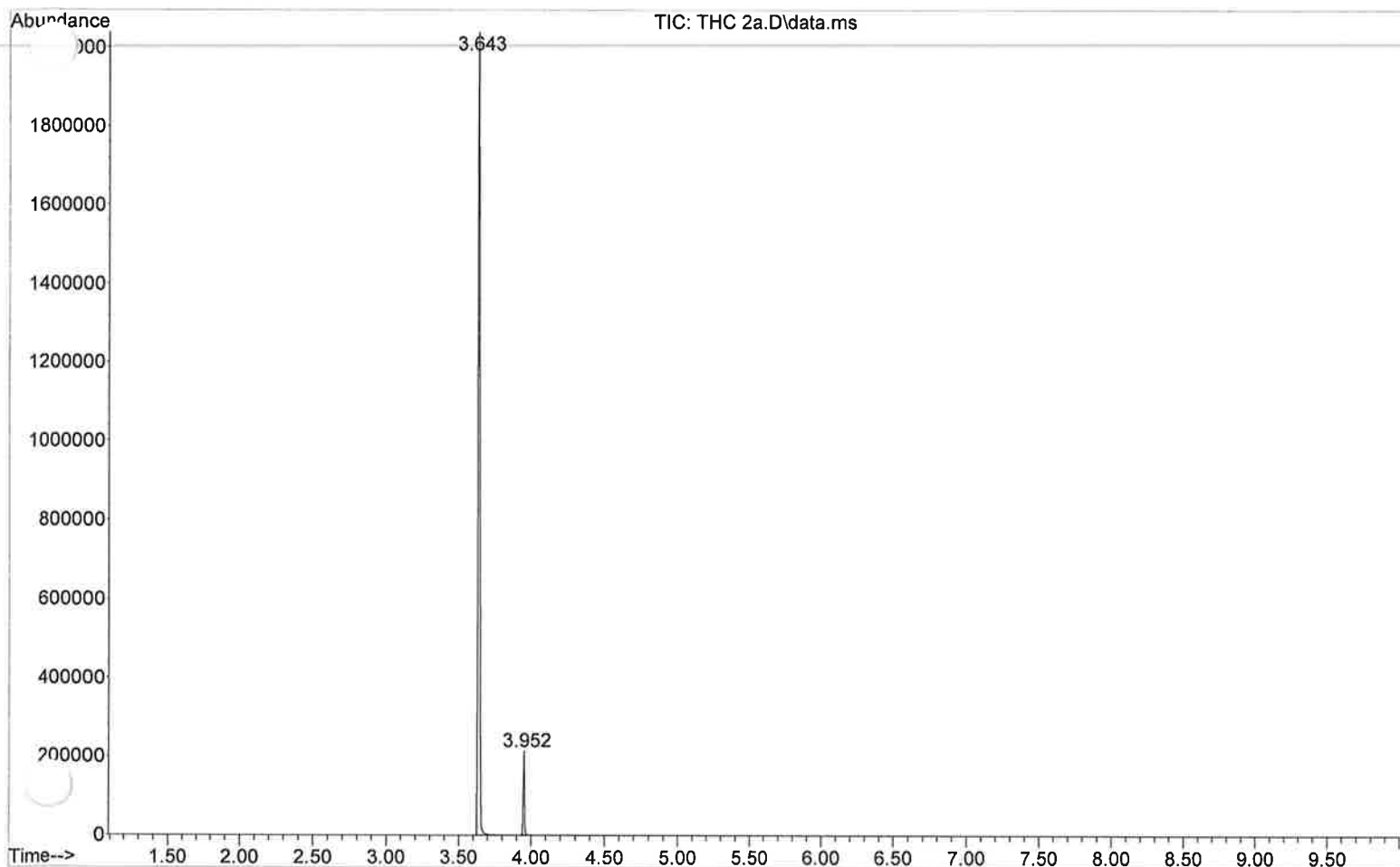
Title :

Signal : TIC: THC 2a.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	3.643	436	440	456	BB	1969016	16683857	100.00%	92.486%
2	3.952	490	493	500	BB	199573	1355397	8.12%	7.514%

Sum of corrected areas: 18039254

MSDRUGS100.M Thu Jan 17 11:22:58 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\

Data File : THC 3a.D

Acq On : 16 Jan 2019 14:28

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 54 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

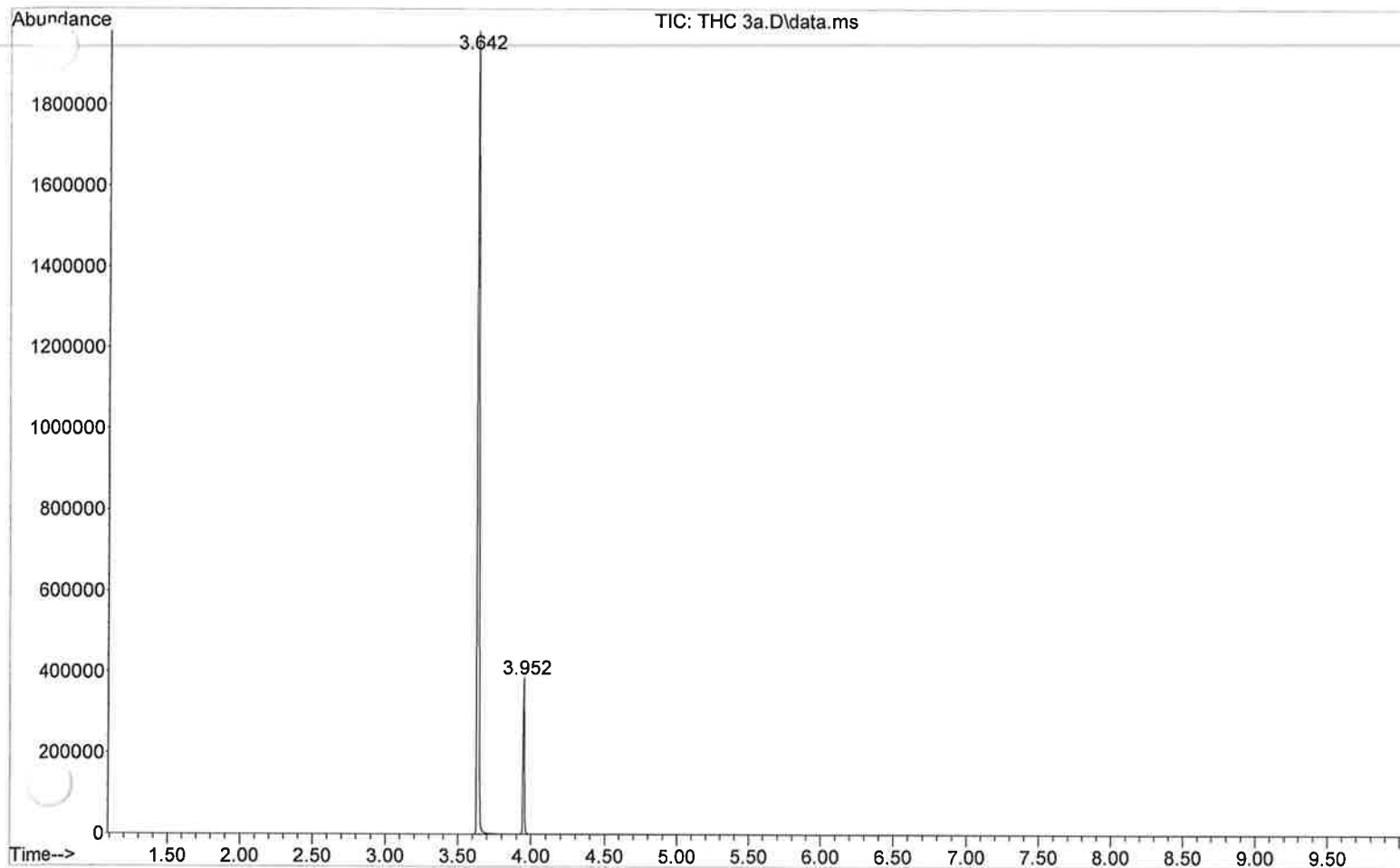
Title :

Signal : TIC: THC 3a.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.642	435	440	457	BB	1953074	17159746	100.00%	86.758%
2	3.952	489	493	504	BB	371522	2619096	15.26%	13.242%

Sum of corrected areas: 19778842

MSDRUGS100.M Thu Jan 17 11:23:06 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\

Data File : THC 4a.D

Acq On : 16 Jan 2019 14:57

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 55 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

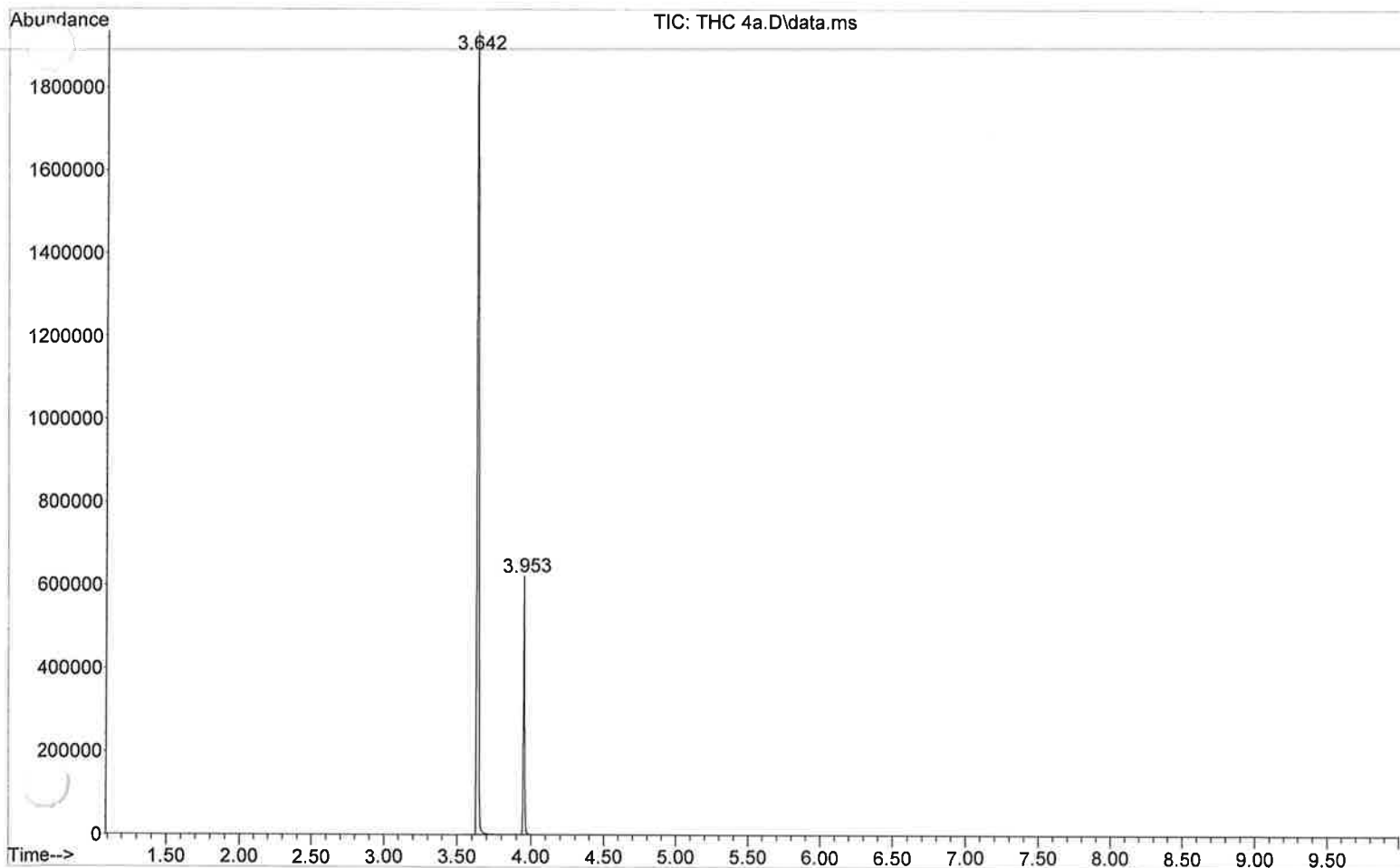
Title :

Signal : TIC: THC 4a.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	3.642	435	440	457	BB	1930503	16098799	100.00%	81.480%	
2	3.953	489	493	503	BB	555981	3659246	22.73%	18.520%	

Sum of corrected areas: 19758045

MSDRUGS100.M Thu Jan 17 11:23:16 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\

Data File : THC 1b.D

Acq On : 16 Jan 2019 15:26

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 57 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

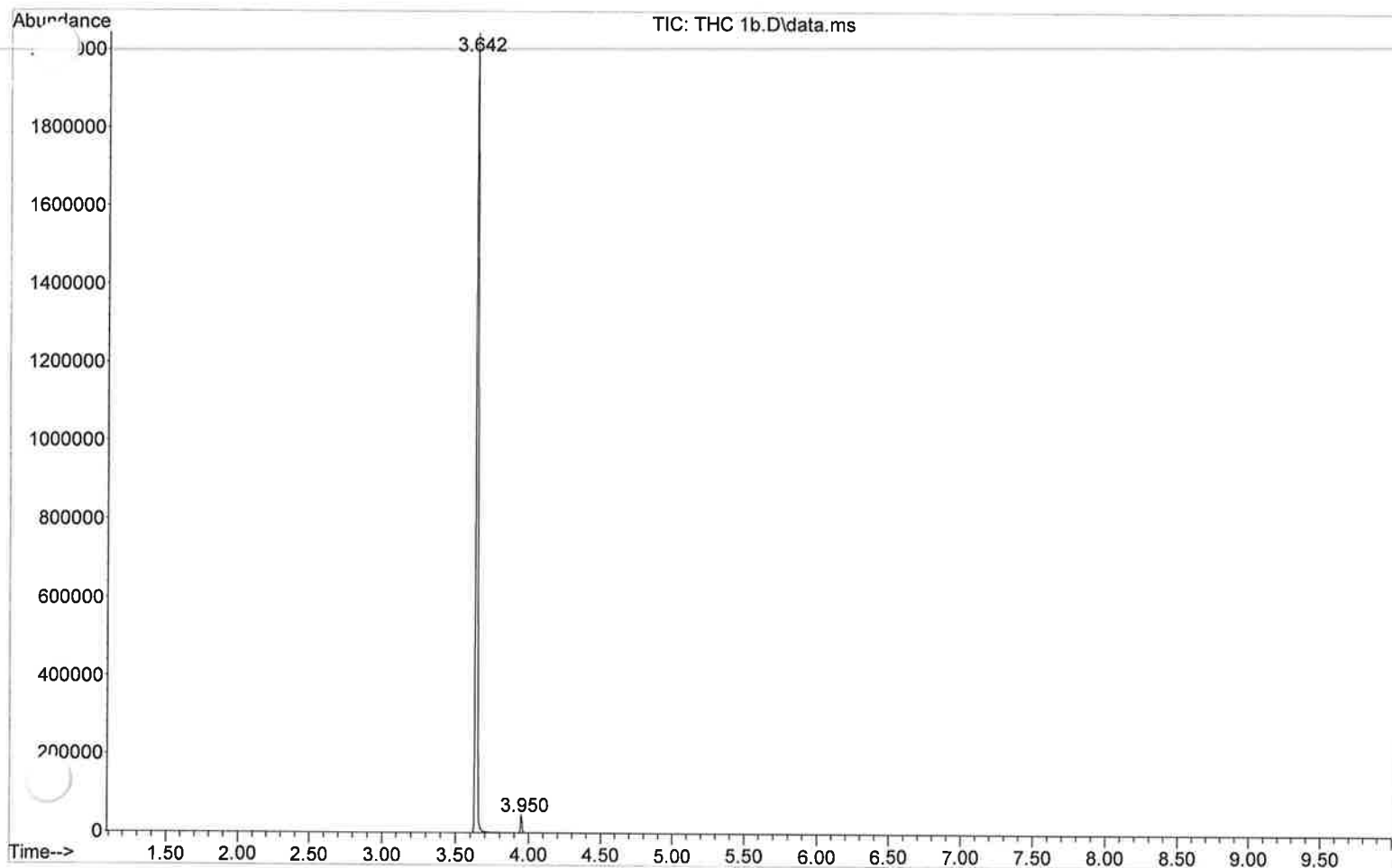
Title :

Signal : TIC: THC 1b.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	3.642	435	440	457	BB	2000133	17925746	100.00%	98.303%	
2	3.950	489	493	498	BB	43394	309519	1.73%	1.697%	

Sum of corrected areas: 18235265

MSDRUGS100.M Thu Jan 17 11:23:30 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\
Data File : THC 2b.D
Acq On : 16 Jan 2019 15:55
Operator : BTT
Sample : Standard
Misc : Methanol
ALS Vial : 58 Sample Multiplier: 1

Integration Parameters: autoint1.e
Integrator: ChemStation

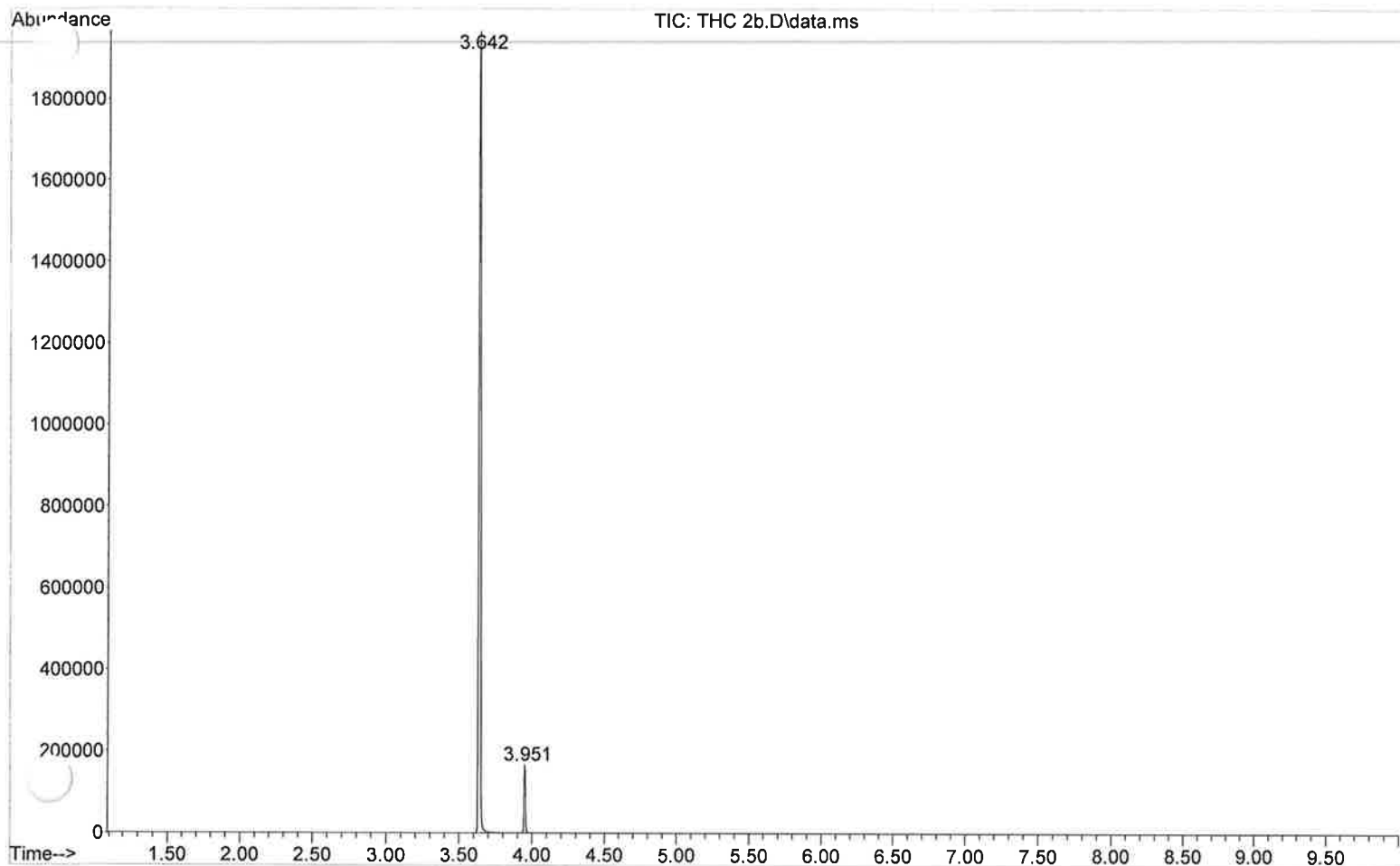
Method : C:\msdchem\1\METHODS\MSDRUGS100.M
Title :

Signal : TIC: THC 2b.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.642	435	440	457	BB	1983603	17267089	100.00%	93.318%
2	3.951	489	493	502	BB	168248	1236321	7.16%	6.682%

Sum of corrected areas: 18503410

MSDRUGS100.M Thu Jan 17 11:23:40 2019



Data Path : C:\msdchem\1\DATA\2019\BTT1-16-19\

Data File : THC 3b.D

Acq On : 16 Jan 2019 16:23

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 59 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

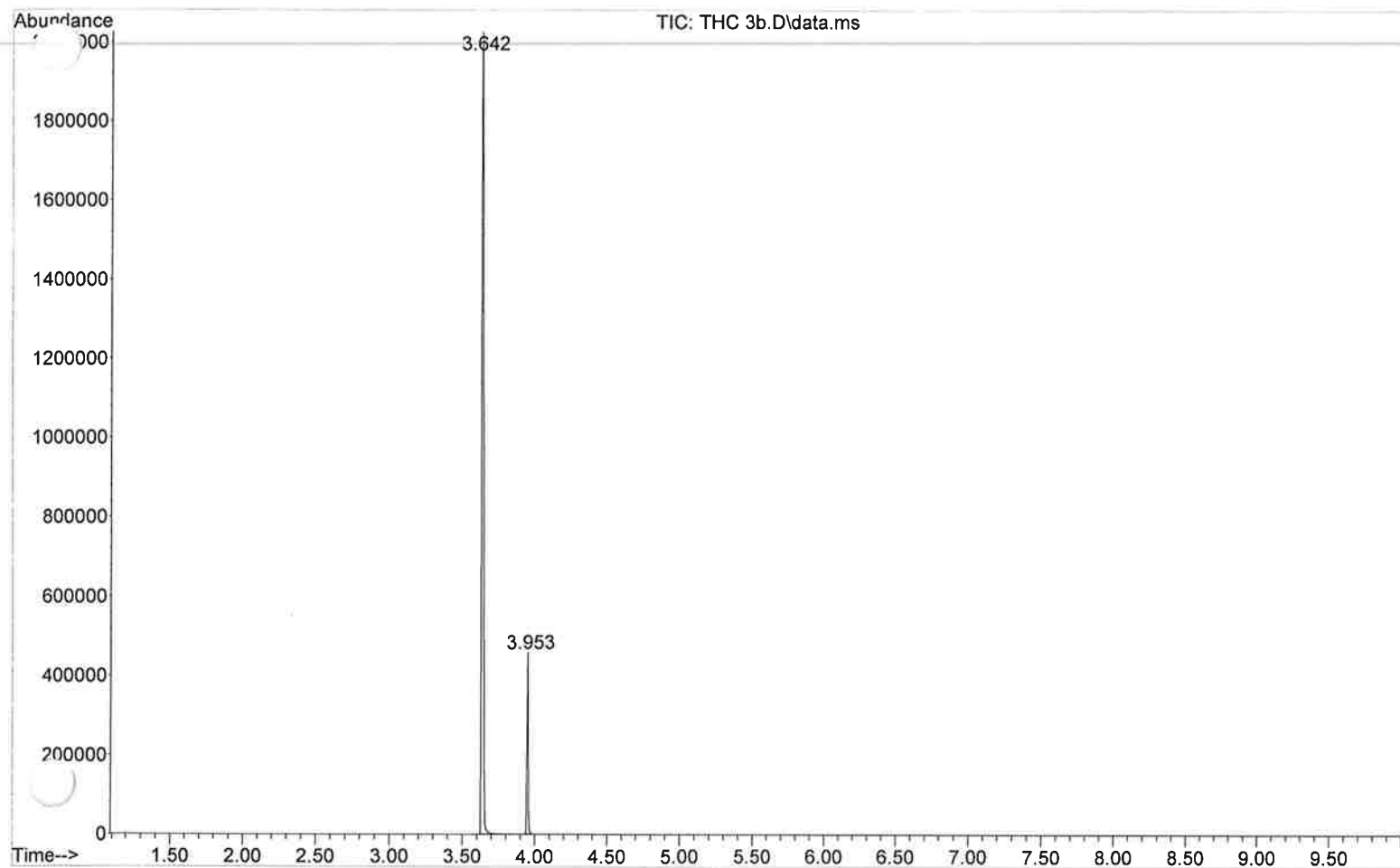
Title :

Signal : TIC: THC 3b.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.642	436	440	455	BB	1992544	17145173	100.00%	86.251%
2	3.953	490	493	502	BB	416466	2732953	15.94%	13.749%

Sum of corrected areas: 19878126

MSDRUGS100.M Thu Jan 17 11:23:50 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\
Data File : THC 4b.D
Acq On : 16 Jan 2019 16:52
Operator : BTT
Sample : Standard
Misc : Methanol
ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e
Integrator: ChemStation

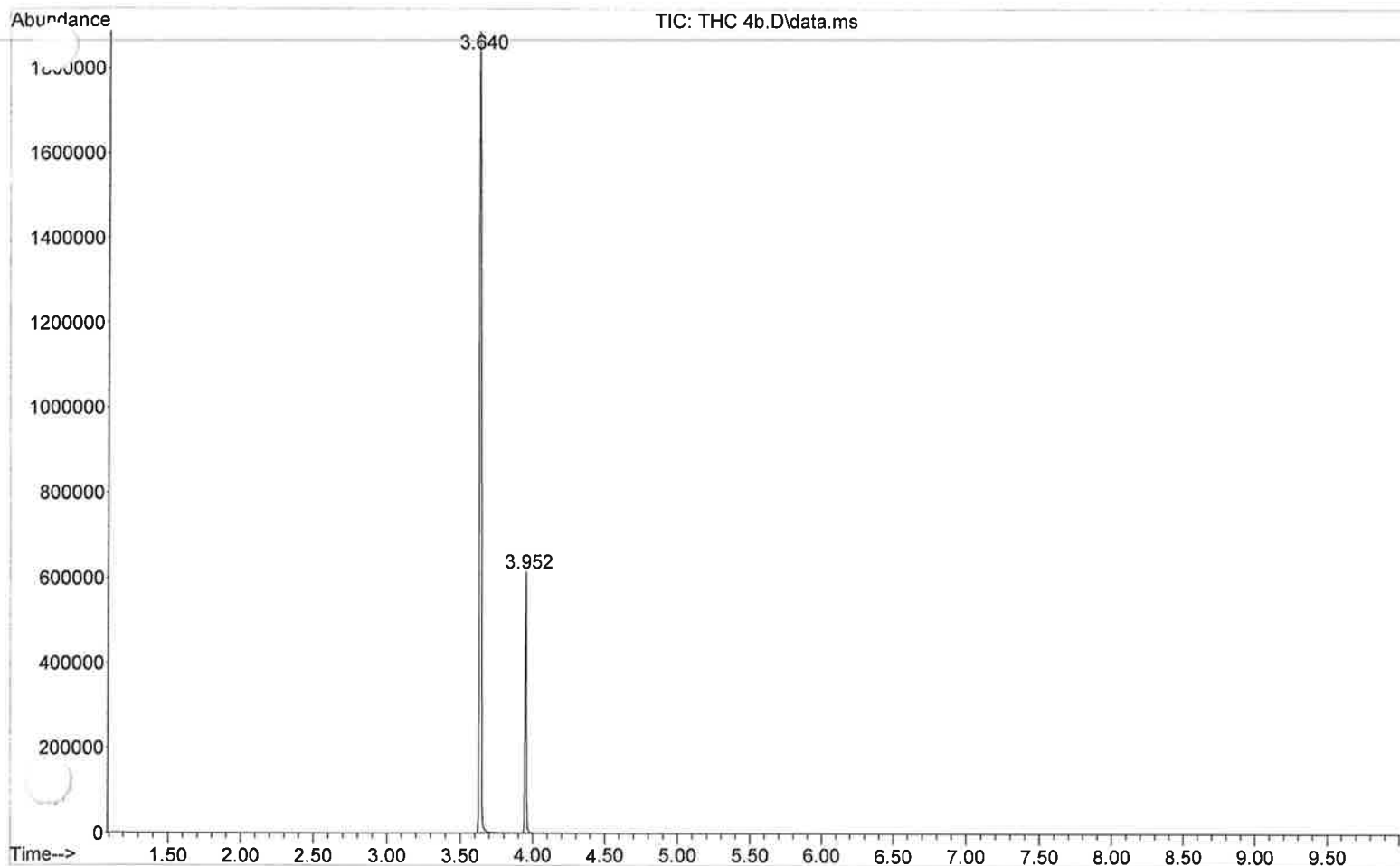
Method : C:\msdchem\1\METHODS\MSDRUGS100.M
Title :

Signal : TIC: THC 4b.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	3.640	435	440	454	BB	1824195	17486095	100.00%	81.194%
2	3.952	489	493	503	BB	579648	4050072	23.16%	18.806%

Sum of corrected areas: 21536167

MSDRUGS100.M Thu Jan 17 11:24:01 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\

Data File : THC 1c.D

Acq On : 16 Jan 2019 17:21

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 62 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

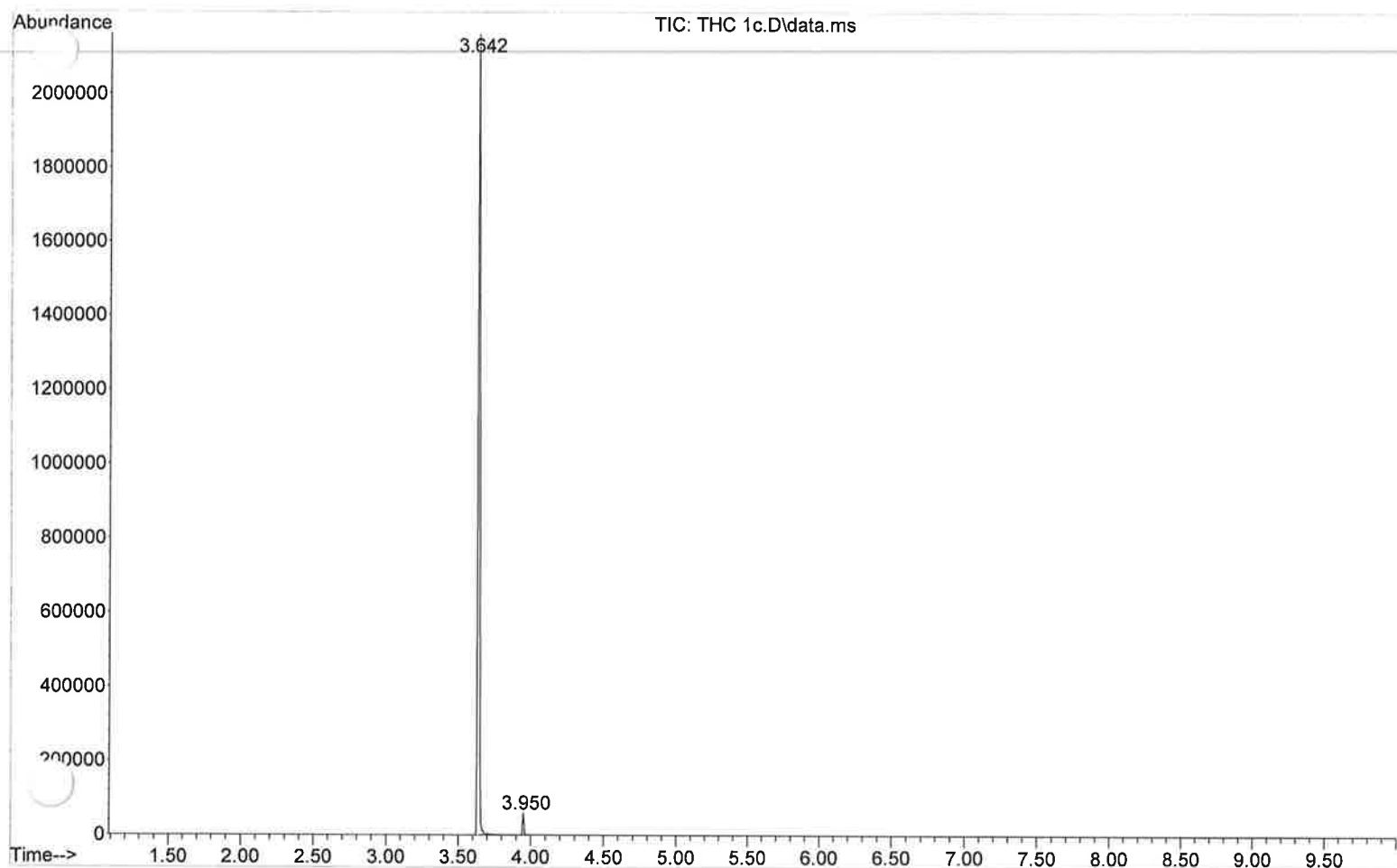
Title :

Signal : TIC: THC 1c.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	3.642	435	440	457	BB	2082389	18546515	100.00%	98.006%	
2	3.950	489	493	499	BB	54361	377403	2.03%	1.994%	

Sum of corrected areas: 18923918

MSDRUGS100.M Thu Jan 17 11:24:22 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\

Data File : THC 2c.D

Acq On : 16 Jan 2019 17:50

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 63 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

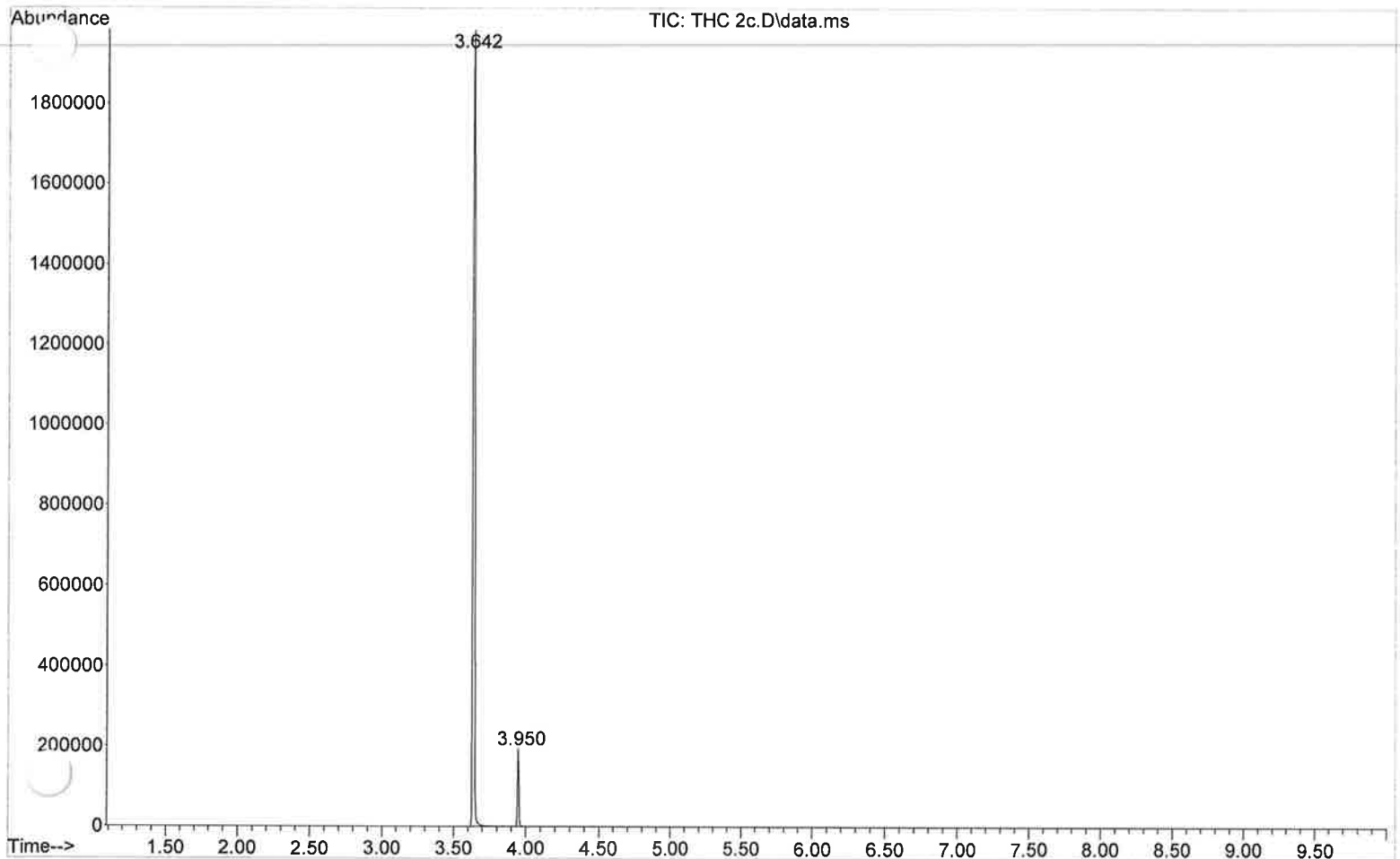
Title :

Signal : TIC: THC 2c.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	3.642	435	440	455	BB	2006957	18190341	100.00%	93.376%	
2	3.950	489	493	501	BB	182428	1290411	7.09%	6.624%	

Sum of corrected areas: 19480752

MSDRUGS100.M Thu Jan 17 11:24:31 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\

Data File : THC 3c.D

Acq On : 16 Jan 2019 18:19

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 64 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

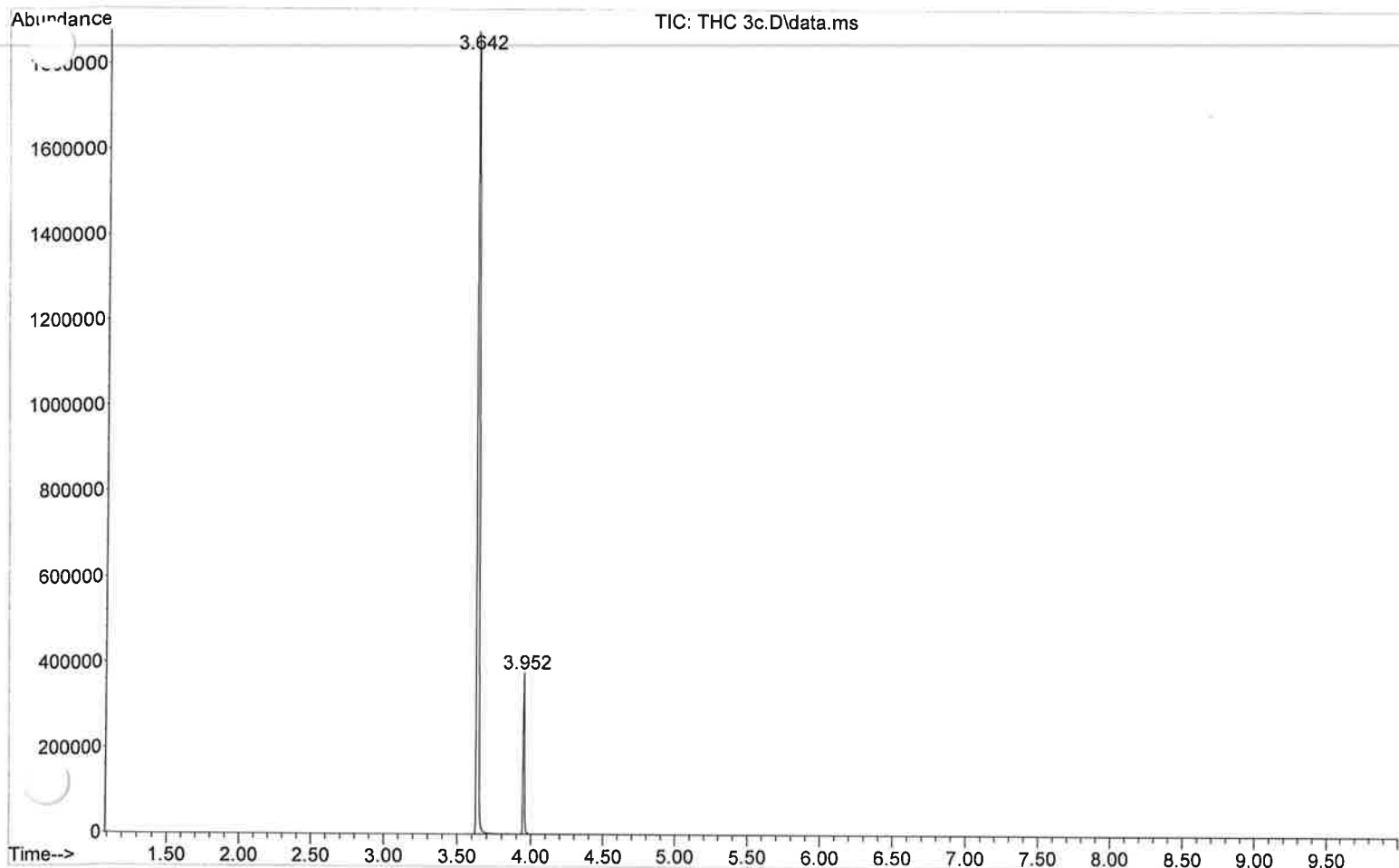
Title :

Signal : TIC: THC 3c.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	3.642	435	440	456	BB	1939014	17669593	100.00%	87.301%
2	3.952	489	493	502	BB	363186	2570343	14.55%	12.699%

Sum of corrected areas: 20239937

MSDRUGS100.M Thu Jan 17 11:24:43 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\

Data File : THC 4c.D

Acq On : 16 Jan 2019 18:47

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 65 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

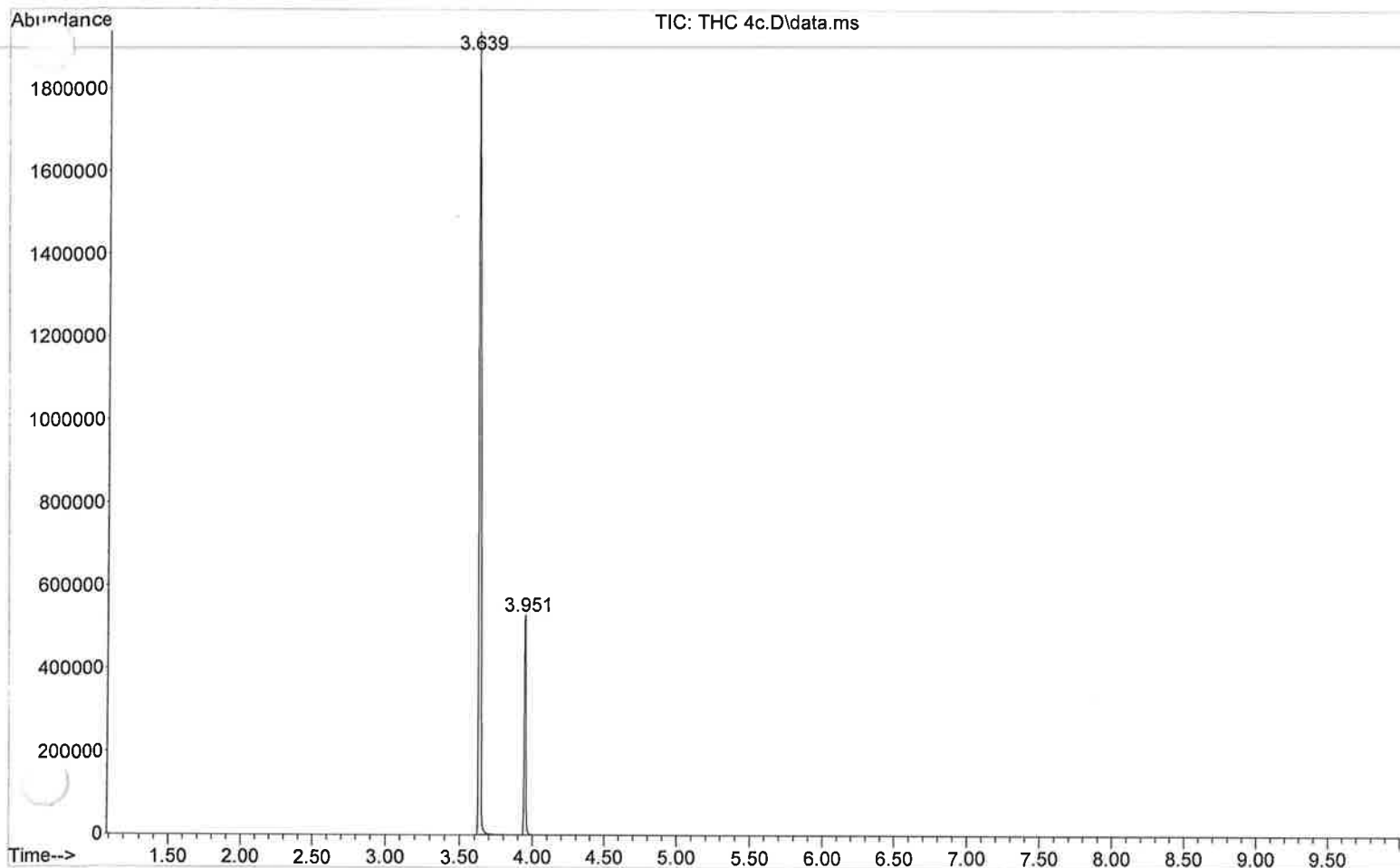
Title :

Signal : TIC: THC 4c.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.639	435	439	454	BB	1838026	16920122	100.00%	80.076%
2	3.951	488	493	502	BB	546489	4210024	24.88%	19.924%

Sum of corrected areas: 21130146

MSDRUGS100.M Thu Jan 17 11:24:53 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\

Data File : THC 1d.D

Acq On : 16 Jan 2019 19:16

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 67 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

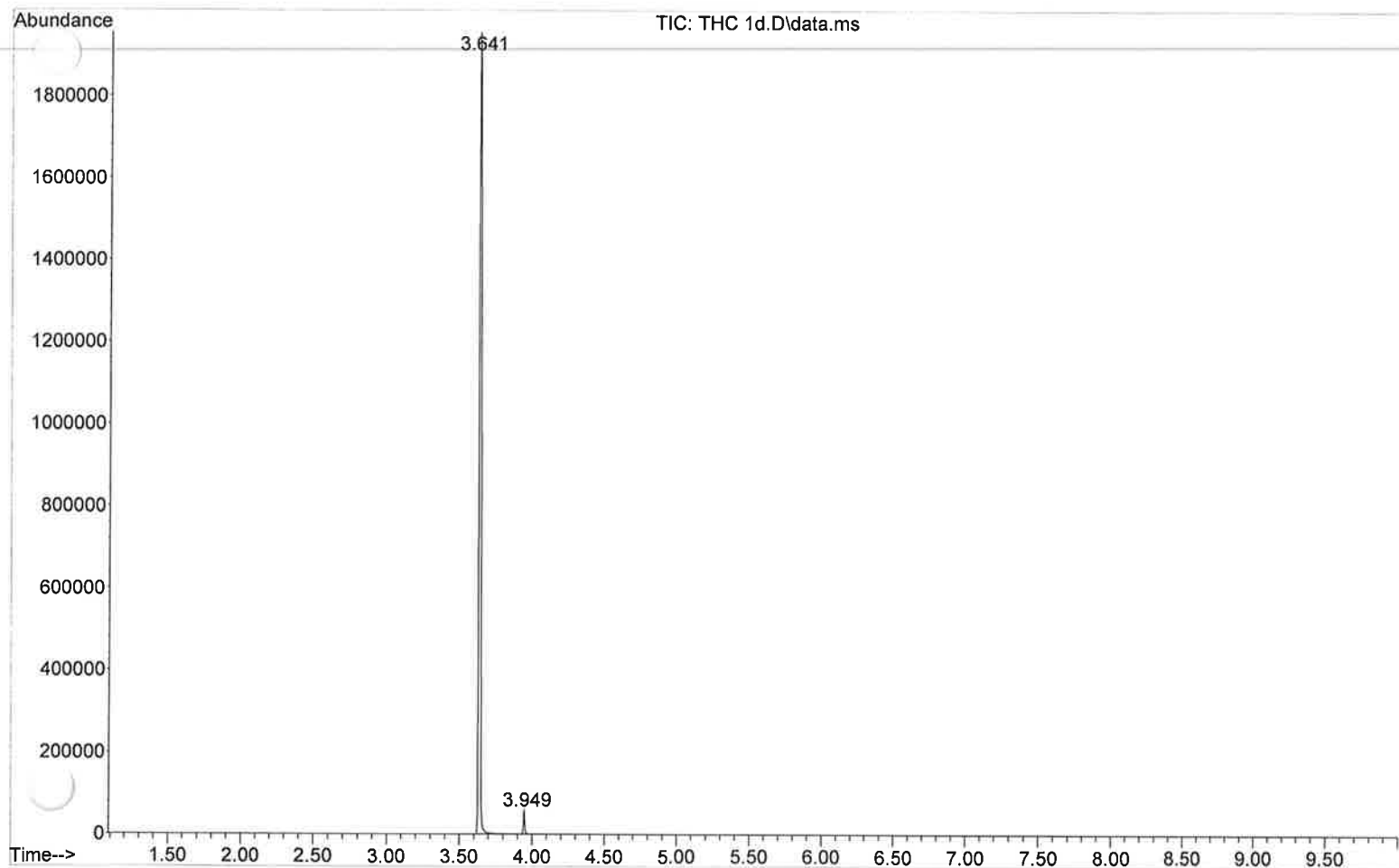
Title :

Signal : TIC: THC 1d.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	3.641	435	440	457	BB	2010382	19003620	100.00%	98.210%	
2	3.949	489	493	498	BB	52587	346316	1.82%	1.790%	

Sum of corrected areas: 19349936

MSDRUGS100.M Thu Jan 17 11:25:04 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\

Data File : THC 2d.D

Acq On : 16 Jan 2019 19:45

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 68 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

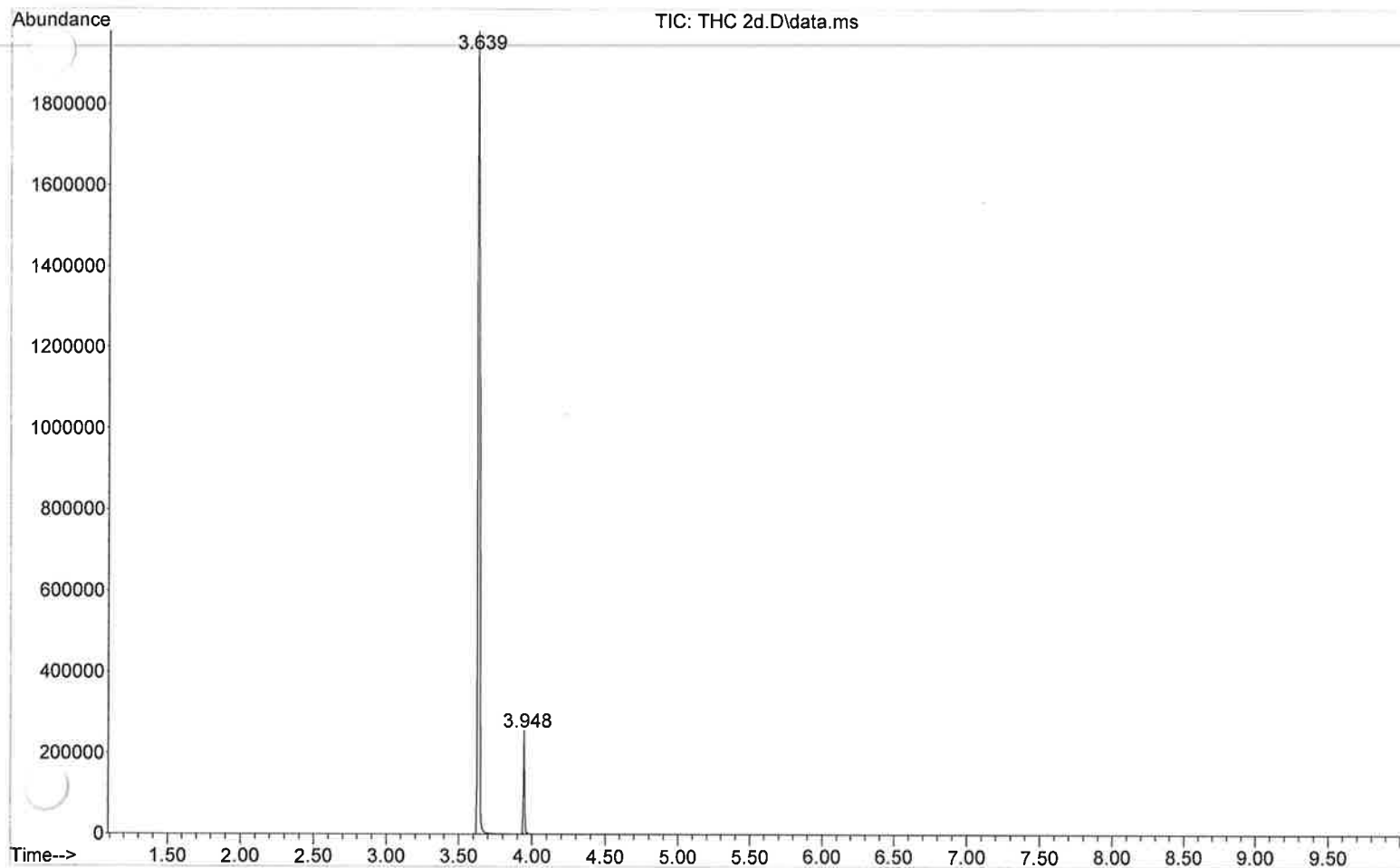
Title :

Signal : TIC: THC 2d.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	3.639	434	439	457	BB	1907689	18115765	100.00%	92.895%	
2	3.948	489	492	502	BB	223360	1385530	7.65%	7.105%	

Sum of corrected areas: 19501294

MSDRUGS100.M Thu Jan 17 11:25:15 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\

Data File : THC 3d.D

Acq On : 16 Jan 2019 20:14

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 69 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

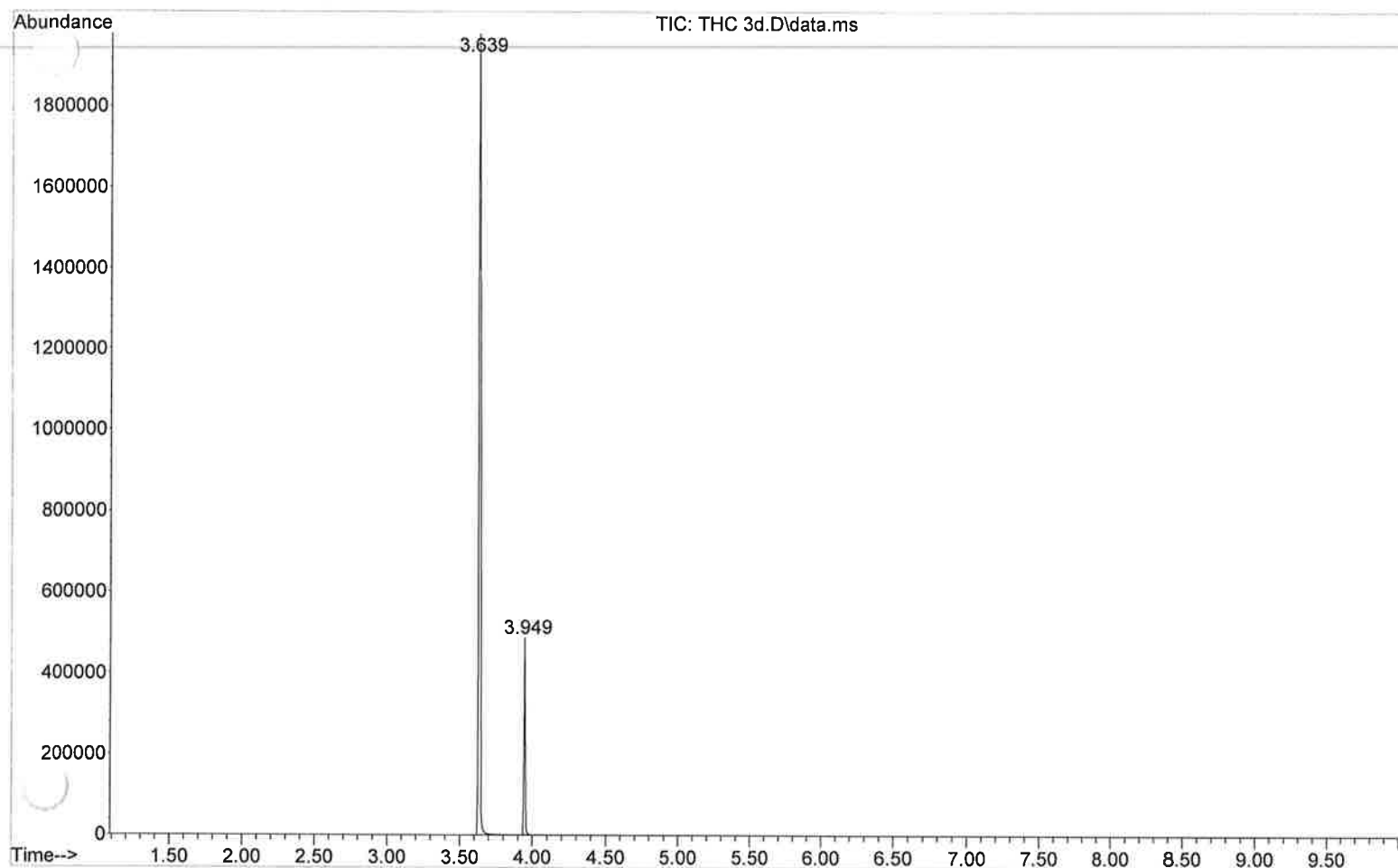
Title :

Signal : TIC: THC 3d.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.639	435	439	458	BB	1912020	17932897	100.00%	86.531%
2	3.949	489	492	502	BB	431929	2791386	15.57%	13.469%

Sum of corrected areas: 20724284

MSDRUGS100.M Thu Jan 17 11:25:23 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\

Data File : THC 4d.D

Acq On : 16 Jan 2019 20:43

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 70 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

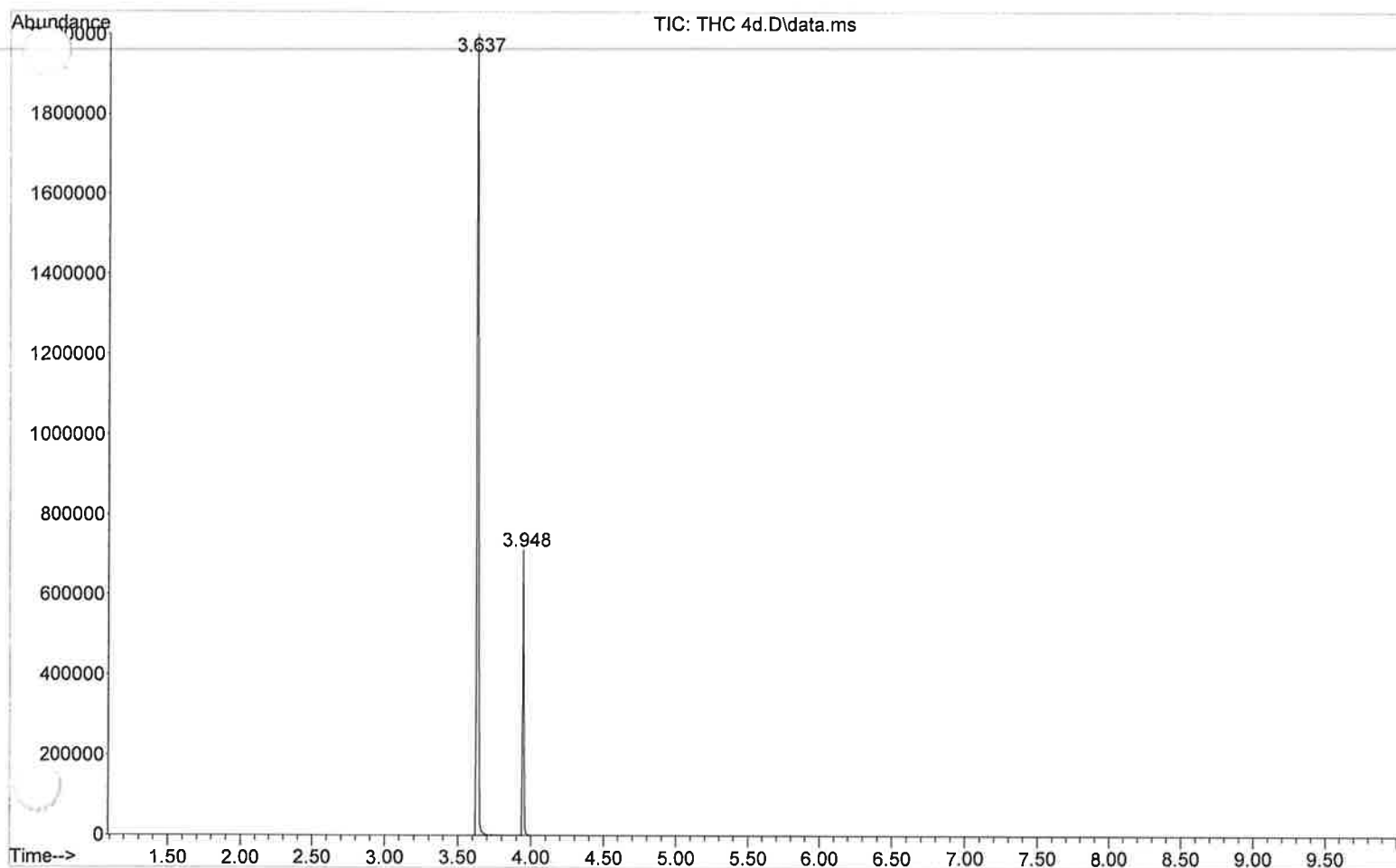
Title :

Signal : TIC: THC 4d.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	3.637	434	439	453	BB	1985032	16366381	100.00%	79.775%	
2	3.948	488	492	502	BB	630376	4149199	25.35%	20.225%	

Sum of corrected areas: 20515580

MSDRUGS100.M Thu Jan 17 11:25:31 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\

Data File : THC 1e.D

Acq On : 16 Jan 2019 21:11

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 72 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

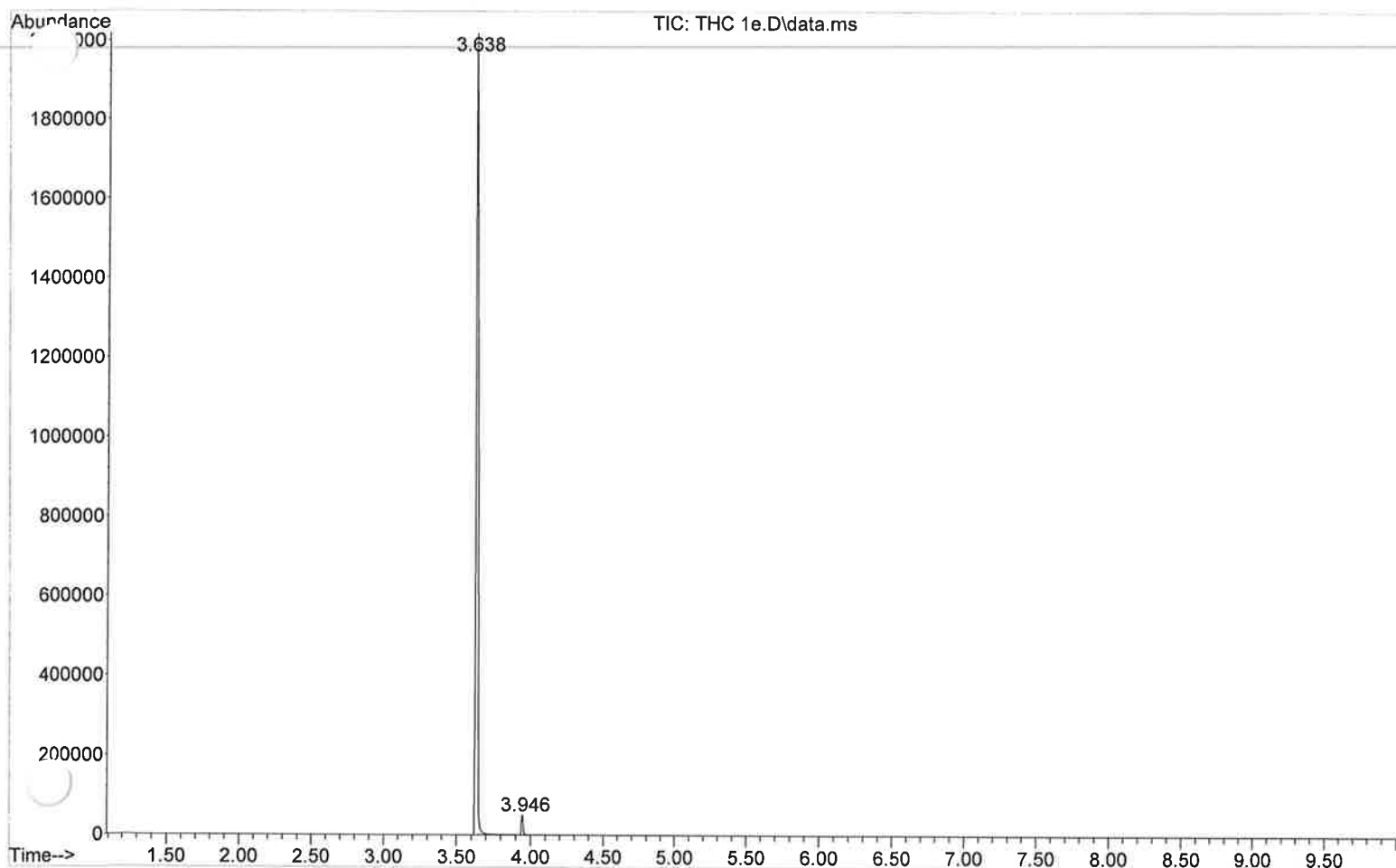
Title :

Signal : TIC: THC 1e.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	3.638	434	439	460	BB	1973081	19263014	100.00%	98.088%
2	3.946	488	492	498	BB	48831	375567	1.95%	1.912%

Sum of corrected areas: 19638581

MSDRUGS100.M Thu Jan 17 11:25:48 2019



Data Path : C:\msdchem\1\DATA\2019\BTT1-16-19\

Data File : THC 2e.D

Acq On : 16 Jan 2019 21:40

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 73 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

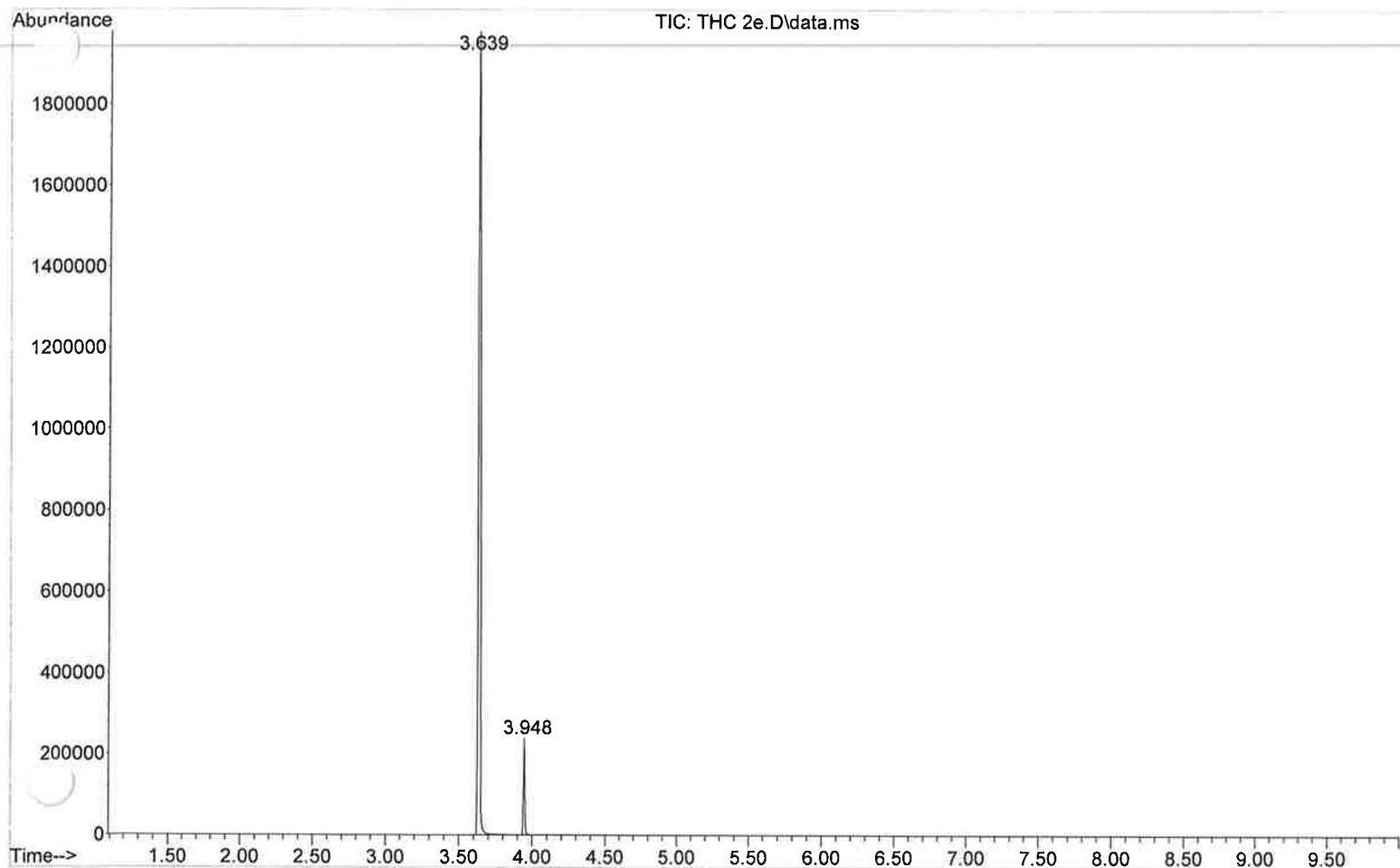
Title :

Signal : TIC: THC 2e.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	3.639	435	439	459	BB	1919121	18758340	100.00%	92.965%
2	3.948	488	492	501	BB	212413	1419585	7.57%	7.035%

Sum of corrected areas: 20177925

MSDRUGS100.M Thu Jan 17 11:25:57 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\

Data File : THC 3e.D

Acq On : 16 Jan 2019 22:09

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 74 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

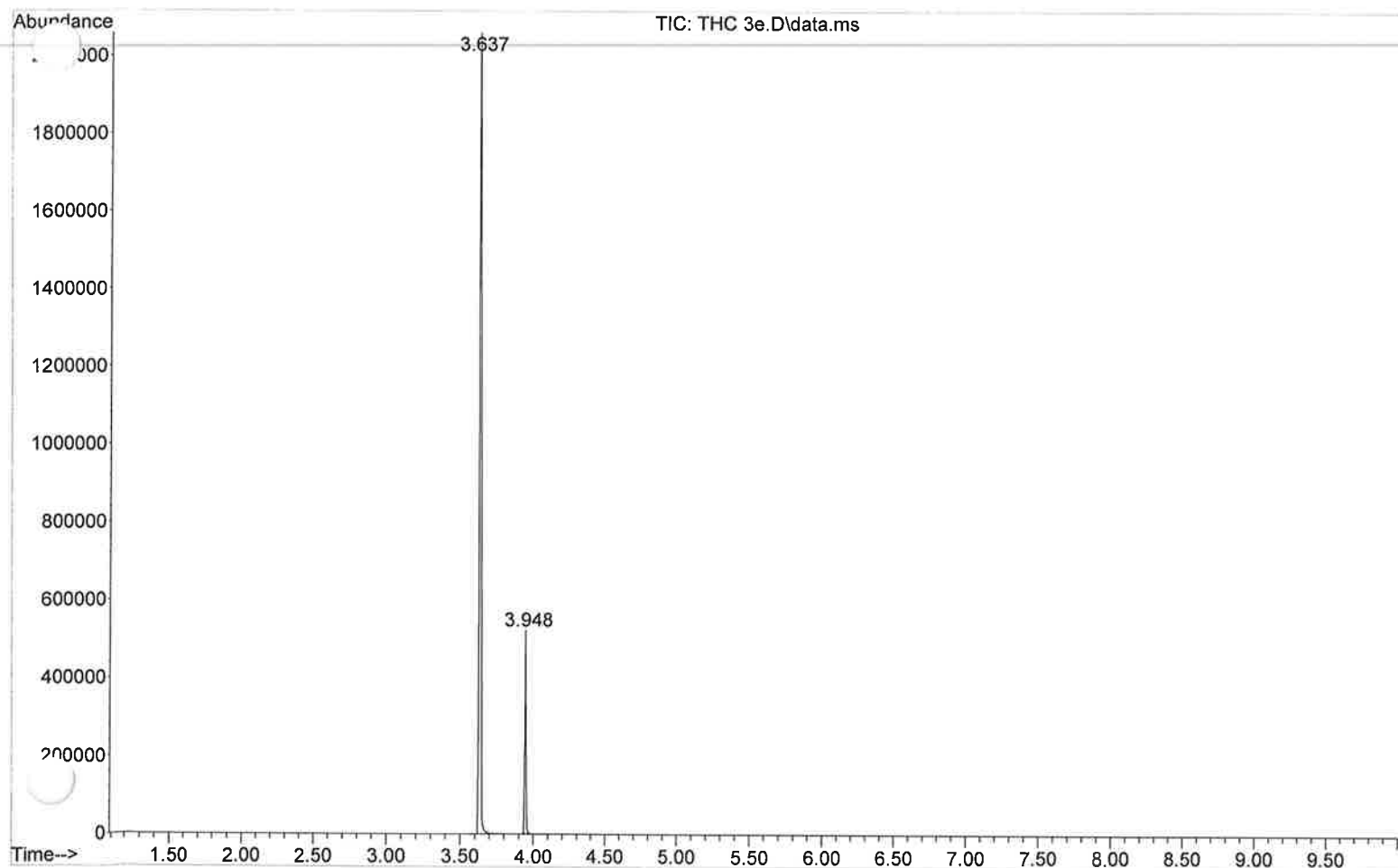
Title :

Signal : TIC: THC 3e.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.
1	3.637	434	439	456	BB	2011417	17296324	100.00%	85.686%
2	3.948	489	492	502	BB	458877	2889310	16.70%	14.314%

Sum of corrected areas: 20185634

MSDRUGS100.M Thu Jan 17 11:26:06 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\1-16-19\

Data File : THC 4e.D

Acq On : 16 Jan 2019 22:38

Operator : BTT

Sample : Standard

Misc : Methanol

ALS Vial : 75 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\MSDRUGS100.M

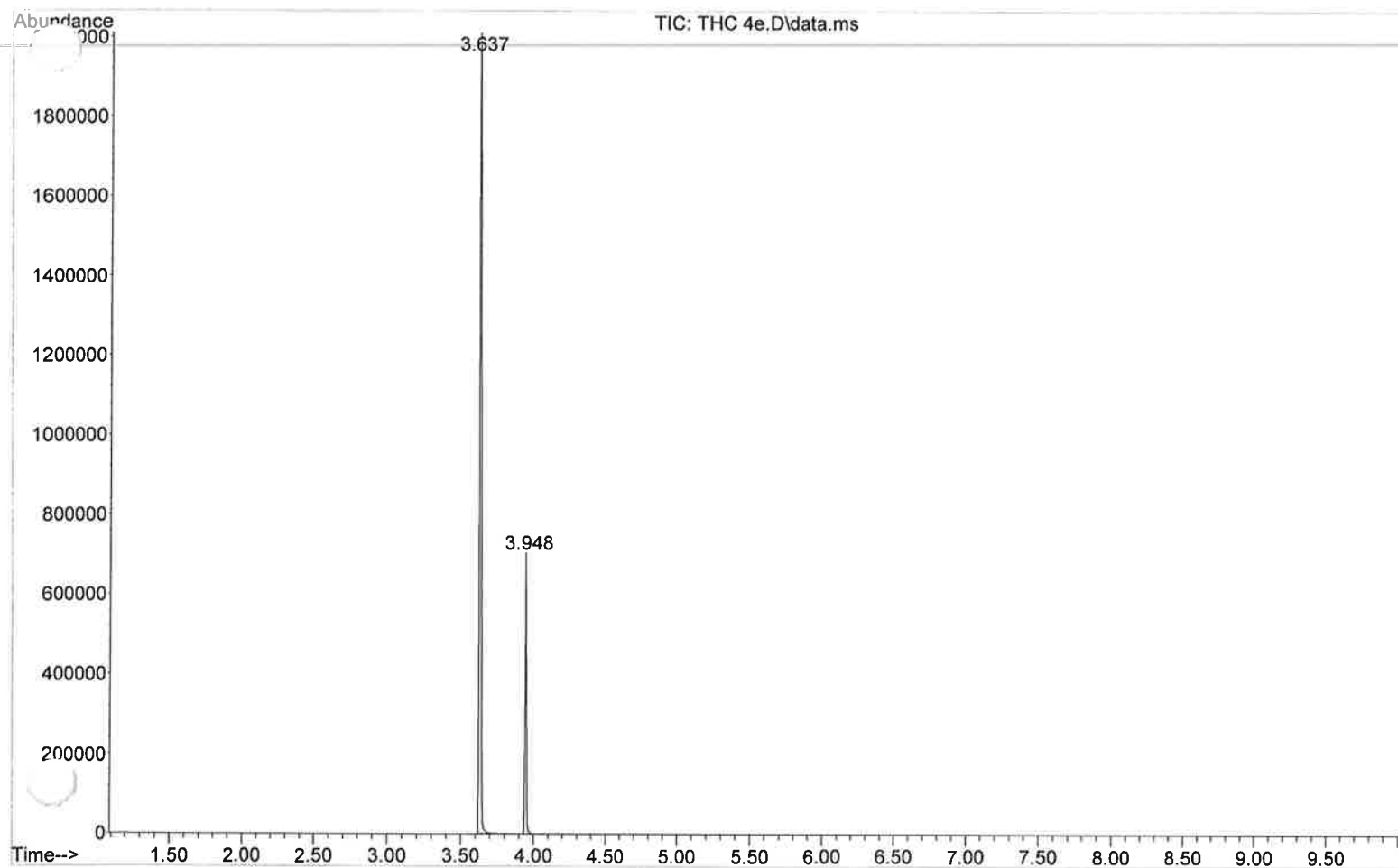
Title :

Signal : TIC: THC 4e.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.637	435	439	455	BB	2018420	16413367	100.00%	79.984%
2	3.948	488	492	503	BB	623333	4107498	25.03%	20.016%

Sum of corrected areas: 20520864

MSDRUGS100.M Thu Jan 17 11:26:17 2019



Hemp sample C1818268 was run 25 times on 2-7-19 as a part of a repeatability study.

Run #	Internal Standard			CBD			THC		
	Ret.	Peak		Ret.	Peak		Ret.	Peak	
	Time	Height	Peak Area	Time	Height	Peak Area	Time	Height	Peak Area
1	1.977	1537977	40304966	2.676	13511751	82679430	3.272	178273	3929326
2	1.966	1354172	28175401	2.652	1298085	62141619	3.265	111190	2430863
3	1.964	1587781	52517348	2.666	1376590	97751849	3.26	209908	4968990
4	1.956	1525051	47414608	2.655	1364324	91934323	3.253	188748	4410278
5	1.967	1328430	30679030	2.633	1210756	47893991	3.259	68165	1500547
6	1.975	1574979	42148041	2.677	1384484	87465425	3.27	197431	4366261
7	1.976	1583123	42620287	2.677	1384841	88663410	3.271	200262	4443800
8	1.968	1513651	36840283	2.663	1372517	79732400	3.264	161362	3612636
9	1.969	1522411	38488348	2.667	1376858	82667442	3.266	168339	3798878
10	1.972	1547424	39941692	2.671	1393015	85482051	3.268	185063	4092071
11	1.973	1575652	39791062	2.672	1397139	85345142	3.268	183100	4122390
12	1.978	1633875	44929641	2.681	1414381	92855334	3.273	213992	4743578
13	1.972	1579118	39419422	2.67	1401107	85323285	3.268	185846	4156912
14	1.971	1534802	38730379	2.668	1392768	83862429	3.268	176428	4004063
15	1.977	1649160	44473662	2.681	1424915	92175750	3.273	211865	4740280
16	1.973	1582034	40000420	2.673	1409712	86413196	3.27	191546	4225986
17	1.975	1603336	42889144	2.675	1414621	90092147	3.271	201739	4508186
18	1.967	1478532	34276252	2.661	1400201	76439453	3.264	149824	3368440
19	1.972	1565393	42534899	2.671	1419106	88619554	3.268	184400	4263940
20	1.973	1613686	41796083	2.672	1421842	89120420	3.269	201454	4455622
21	1.977	1665793	44659430	2.68	1448912	92836972	3.272	210357	4777937
22	1.977	1679282	45080448	2.68	1462784	93021970	3.272	211645	4830128
23	1.969	1541893	36866015	2.666	1420947	81191534	3.267	171488	3811289
24	1.981	1673213	48685647	2.681	1439508	95870521	3.275	219738	5057976
25	1.972	1603053	39103835	2.669	1432034	85362060	3.268	184554	4133789
Av.	1.9719	1562153	40894654	2.6695	1878928	84997668	3.2678	182669	4110167
St. Dev.	0.0054	84116.4	5294854	0.0109	2424024	10553315	0.005	33590.7	781064.9

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-1.D
Acq On : 7 Feb 2019 9:16
Operator : BTT
Sample : Plant material
Misc : Methanol
ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e
Integrator: ChemStation

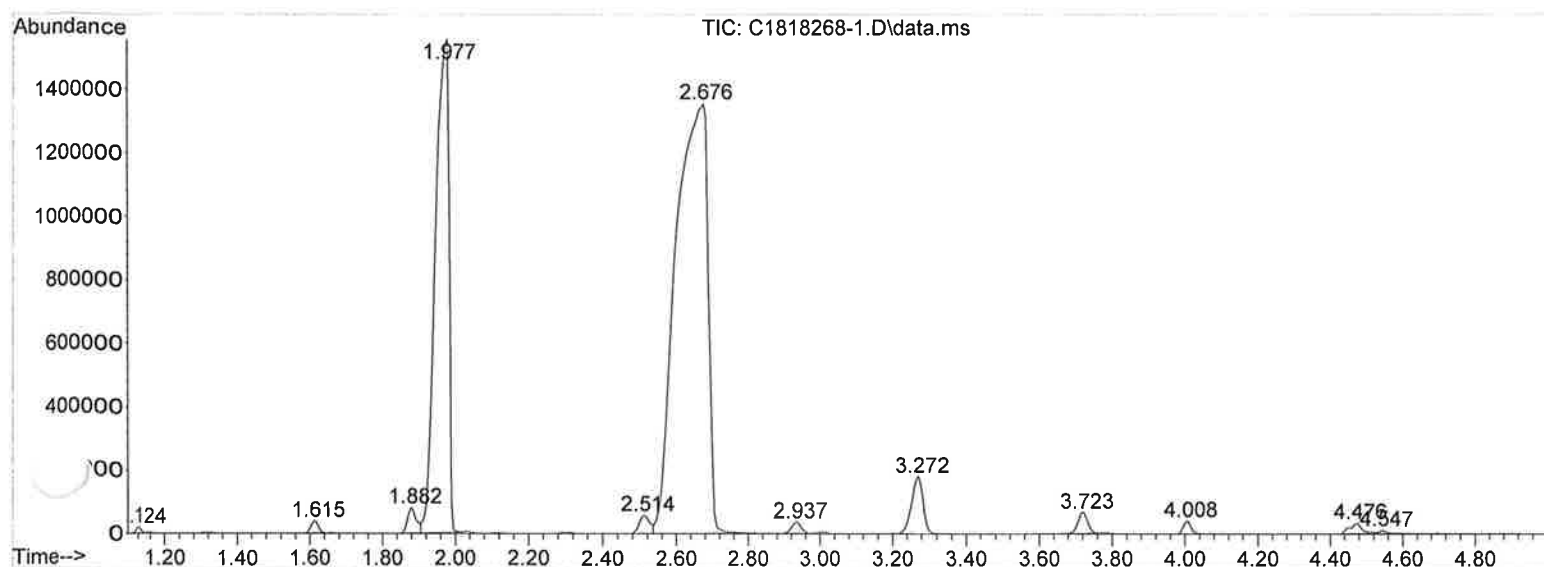
Method : C:\msdchem\1\METHODS\THC Quant.M
Title : BT THC Quant

Signal : TIC: C1818268-1.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.124	3	7	11	BV	16840	180278	0.22%	0.135%
2	1.615	84	92	97	BV	38069	517340	0.63%	0.388%
3	1.882	128	138	142	BV	77936	1264431	1.53%	0.949%
4	1.977	142	154	161	VV	1537977	40304966	48.75%	30.249%
5	2.514	235	246	250	BV	55880	1070516	1.29%	0.803%
6	2.676	250	274	300	VV 4	1351751	82679430	100.00%	62.051%
7	2.937	310	319	326	BV 2	35275	632952	0.77%	0.475%
8	3.272	353	376	396	BV 2	178273	3929326	4.75%	2.949%
9	3.723	423	454	462	BV	65558	1126181	1.36%	0.845%
10	4.008	484	503	512	BV	39154	571877	0.69%	0.429%
11	4.476	562	583	592	BV 4	33382	796113	0.96%	0.597%
12	4.547	592	595	609	VB	9604	170538	0.21%	0.128%

Sum of corrected areas: 133243949

THC Quant.M Thu Feb 07 15:18:32 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-2.D
Acq On : 7 Feb 2019 9:31
Operator : BTT
Sample : Plant material
Misc : Methanol
ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e
Integrator: ChemStation

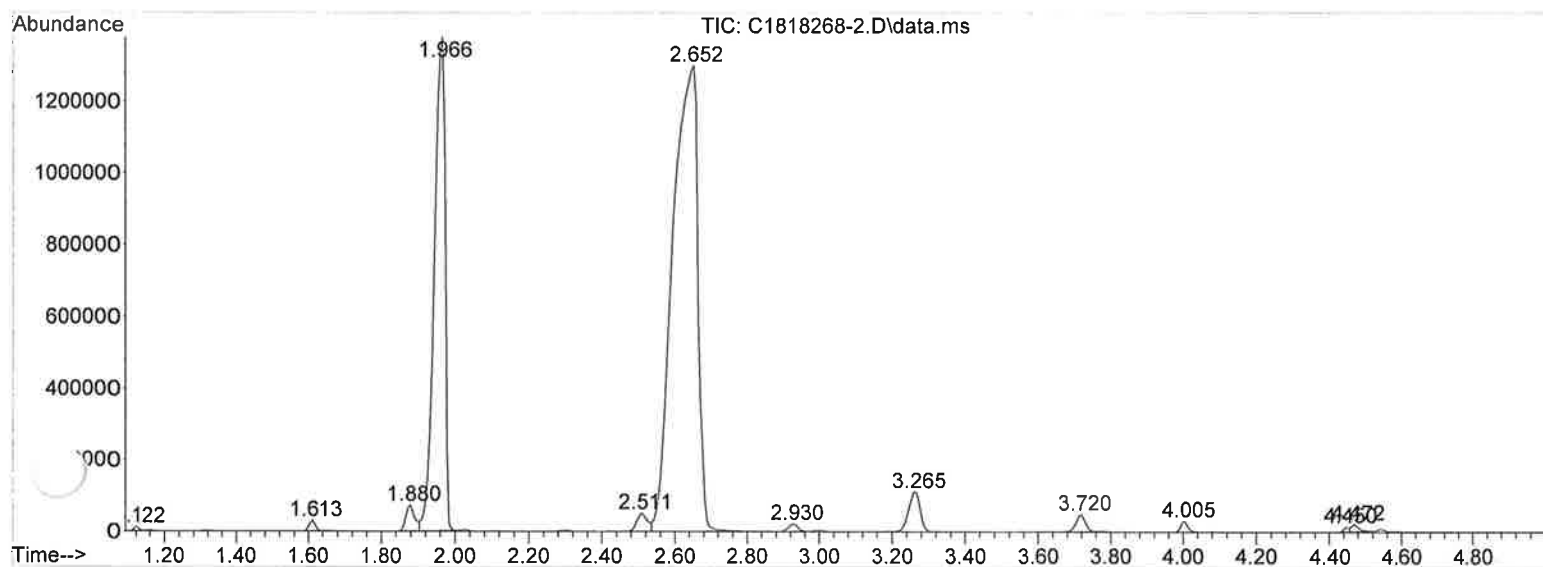
Method : C:\msdchem\1\METHODS\THC Quant.M
Title : BT THC Quant

Signal : TIC: C1818268-2.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.122	3	7	11	BV	10612	101271	0.16%	0.104%
2	1.613	84	91	96	BV	27239	332922	0.54%	0.342%
3	1.880	123	137	141	BV	70438	1122746	1.81%	1.155%
4	1.966	141	152	160	VV	1354172	28175401	45.34%	28.973%
5	2.511	235	246	250	BV	48739	960445	1.55%	0.988%
6	2.652	250	270	301	VV	1298085	62141619	100.00%	63.900%
7	2.930	309	318	325	BV 3	20304	364940	0.59%	0.375%
8	3.265	353	375	393	BV	111190	2430863	3.91%	2.500%
9	3.720	421	453	462	BV	46713	797225	1.28%	0.820%
10	4.005	495	502	510	BV	29520	385892	0.62%	0.397%
11	4.450	572	579	580	BV	13362	124560	0.20%	0.128%
12	4.472	580	582	592	VV 2	19652	309904	0.50%	0.319%

Sum of corrected areas: 97247787

THC Quant.M Thu Feb 07 15:19:02 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-3.D

Acq On : 7 Feb 2019 9:47

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

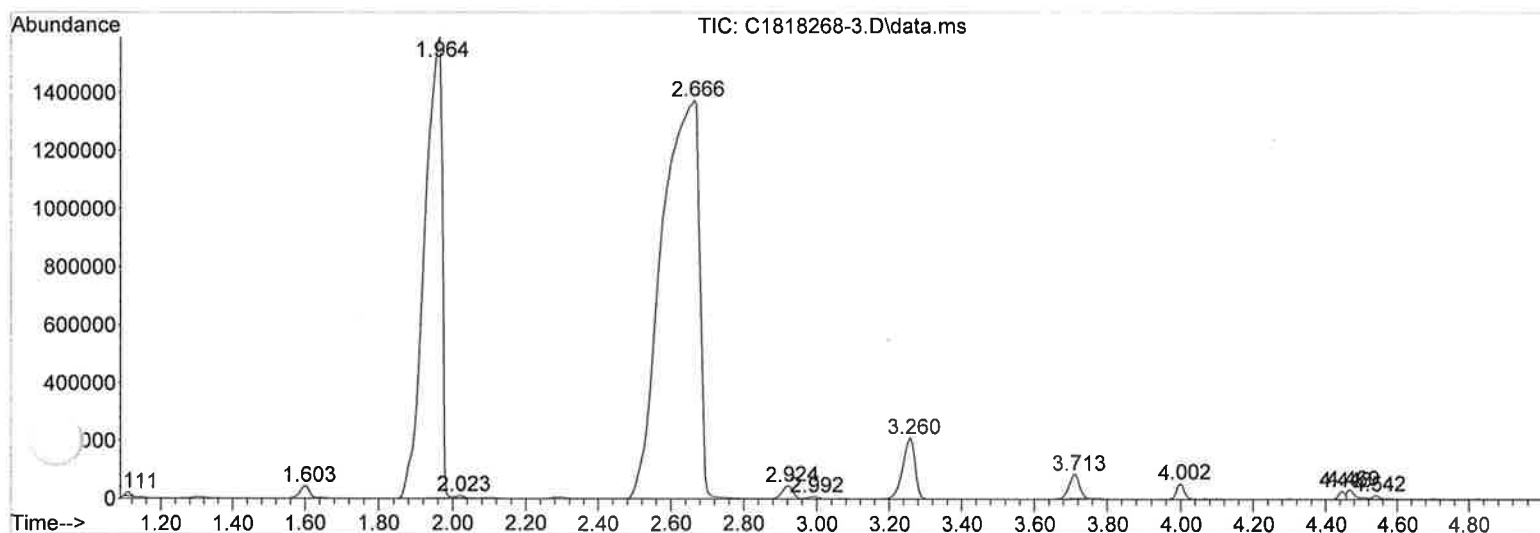
Title : BT THC Quant

Signal : TIC: C1818268-3.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.111	3	5	9	BV	12764	118749	0.12%	0.074%
2	1.603	68	90	108	BV	43877	830884	0.85%	0.517%
3	1.964	131	152	159	BV	1587781	52517348	53.73%	32.650%
4	2.023	159	162	168	VV	8634	130232	0.13%	0.081%
5	2.666	239	272	302	BV 4	1376590	97751849	100.00%	60.773%
6	2.924	302	316	323	VV 2	44797	968355	0.99%	0.602%
7	2.992	323	328	338	VV 3	7800	172419	0.18%	0.107%
8	3.260	351	374	391	VV	209908	4968990	5.08%	3.089%
9	3.713	431	452	460	BV	83539	1617245	1.65%	1.005%
10	4.002	493	502	510	PV	52835	774906	0.79%	0.482%
11	4.448	573	578	580	PV	26595	286889	0.29%	0.178%
12	4.469	580	582	591	VV 4	32017	537952	0.55%	0.334%
13	4.542	591	594	604	VV 2	11766	171467	0.18%	0.107%

Sum of corrected areas: 160847286

THC Quant.M Thu Feb 07 15:19:28 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-4.D

Acq On : 7 Feb 2019 10:02

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

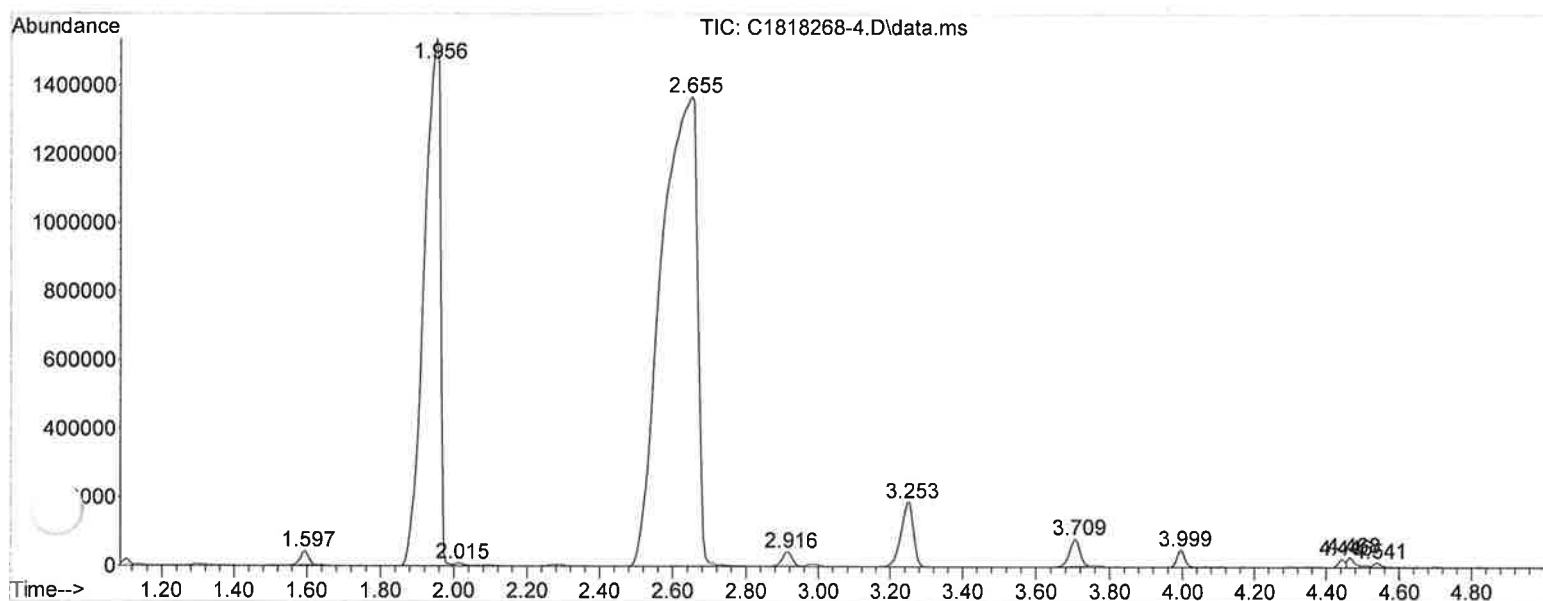
Title : BT THC Quant

Signal : TIC: C1818268-4.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.
1	1.597	62	88	94	BV	40398	599547	0.65%	0.404%
2	1.956	128	150	157	BV	1525051	47414608	51.57%	31.931%
3	2.015	157	160	166	VV 3	8220	148538	0.16%	0.100%
4	2.655	221	270	298	PV 3	1364324	91934323	100.00%	61.913%
5	2.916	305	315	322	BV 2	40779	767142	0.83%	0.517%
6	3.253	356	373	392	BB	188748	4410278	4.80%	2.970%
7	3.709	437	451	459	PV	77949	1535886	1.67%	1.034%
8	3.999	492	501	510	PV	48540	726691	0.79%	0.489%
9	4.468	570	578	579	PV	22830	257941	0.28%	0.174%
10	4.468	579	582	591	VV 4	28377	481873	0.52%	0.325%
11	4.541	591	594	611	VV	13028	212684	0.23%	0.143%

Sum of corrected areas: 148489511

THC Quant.M Thu Feb 07 15:19:38 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-5.D
Acq On : 7 Feb 2019 10:18
Operator : BTT
Sample : Plant material
Misc : Methanol
ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e
Integrator: ChemStation

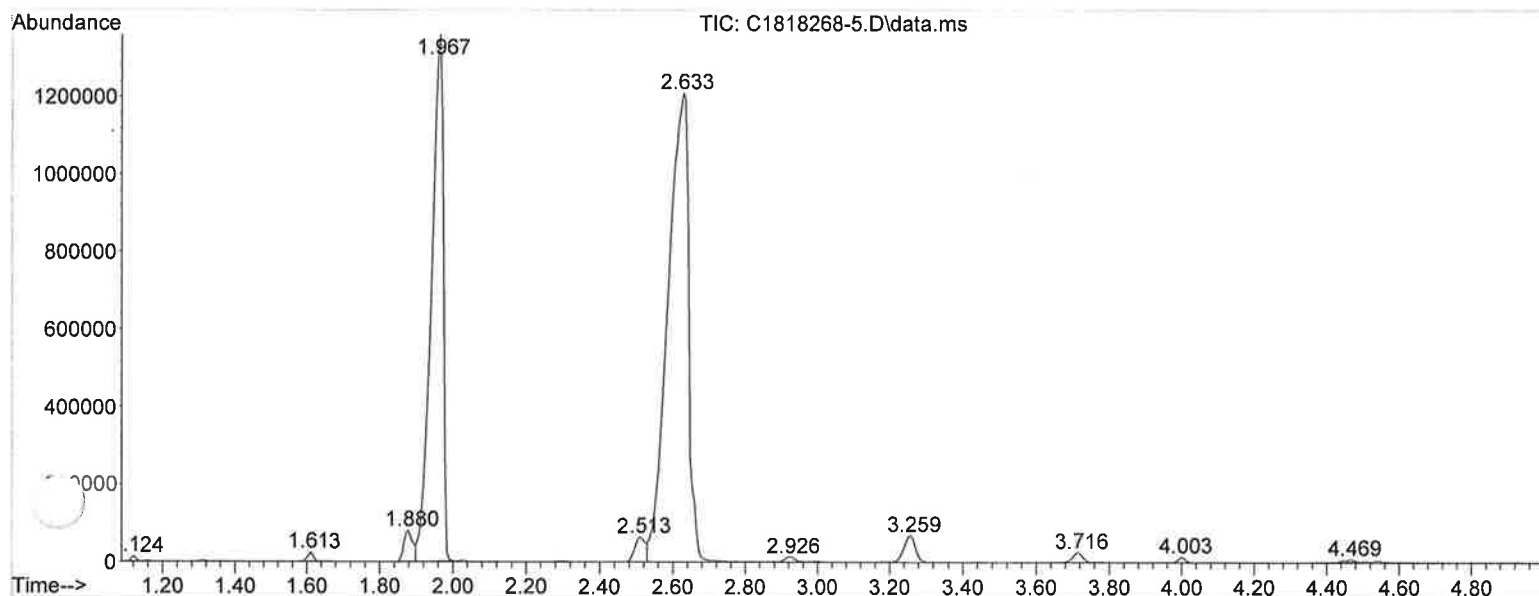
Method : C:\msdchem\1\METHODS\THC Quant.M
Title : BT THC Quant

Signal : TIC: C1818268-5.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.124	3	7	11	BV	11337	96257	0.20%	0.115%
2	1.613	82	91	96	BV	21141	247798	0.52%	0.295%
3	1.880	125	137	140	BV	78722	1247977	2.61%	1.487%
4	1.967	140	152	160	VV	1328430	30679030	64.06%	36.558%
5	2.513	233	246	249	BV	63505	1178430	2.46%	1.404%
6	2.633	249	266	300	VV	1210756	47893991	100.00%	57.072%
7	2.926	300	317	324	VV 4	13175	252042	0.53%	0.300%
8	3.259	353	374	393	BV 3	68165	1500547	3.13%	1.788%
9	3.716	440	453	477	VB 2	25834	535861	1.12%	0.639%
10	4.003	480	502	511	BV	13515	184767	0.39%	0.220%
11	4.469	557	582	587	BV 6	6035	101292	0.21%	0.121%

Sum of corrected areas: 83917993

THC Quant.M Thu Feb 07 15:19:55 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-6.D
Acq On : 7 Feb 2019 10:33
Operator : BTT
Sample : Plant material
Misc : Methanol
ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e
Integrator: ChemStation

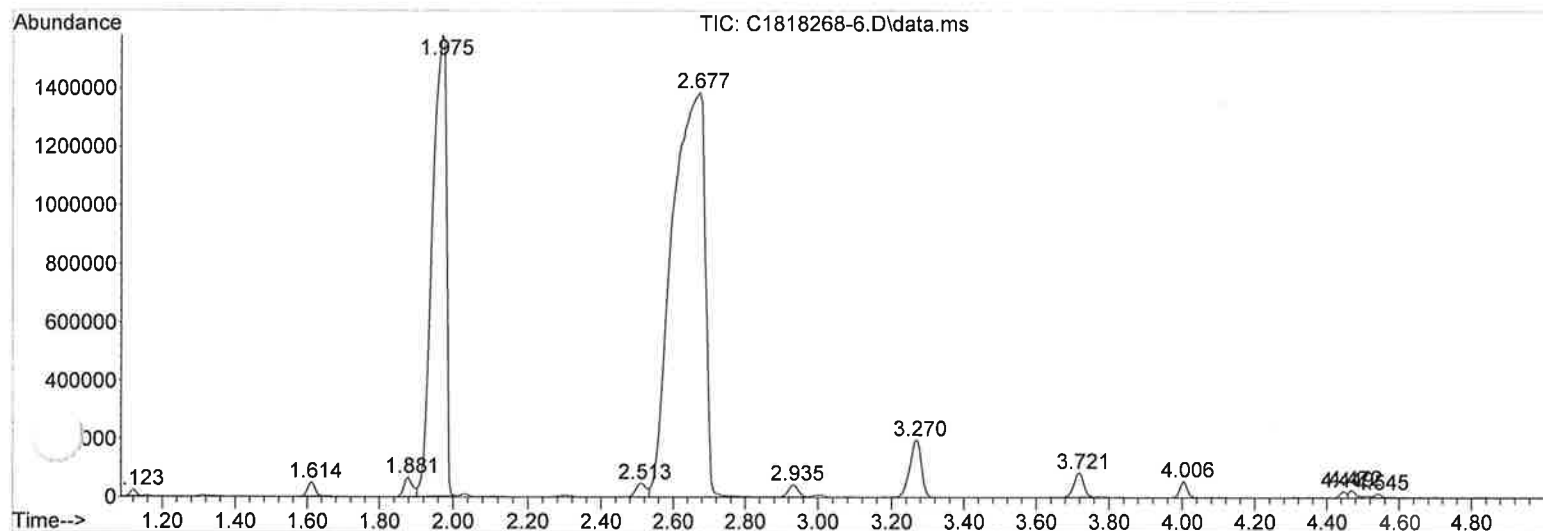
Method : C:\msdchem\1\METHODS\THC Quant.M
Title : BT THC Quant

Signal : TIC: C1818268-6.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.123	3	7	11	BV	20697	231620	0.26%	0.165%
2	1.614	83	92	97	BV	47257	679602	0.78%	0.483%
3	1.881	128	137	141	BV	63669	1002645	1.15%	0.713%
4	1.975	141	154	160	VV	1574979	42148041	48.19%	29.981%
5	2.513	238	246	249	PV	46599	889293	1.02%	0.633%
6	2.677	249	274	303	VV 2	1384484	87465425	100.00%	62.216%
7	2.935	309	318	325	PV 2	41667	769796	0.88%	0.548%
8	3.270	365	376	393	VV	197431	4366261	4.99%	3.106%
9	3.721	431	453	461	BV	82308	1528628	1.75%	1.087%
10	4.006	480	502	511	BV	53527	746005	0.85%	0.531%
11	4.449	573	578	580	PV 2	20675	228655	0.26%	0.163%
12	4.472	580	582	588	VV 3	24469	354563	0.41%	0.252%
13	4.545	592	595	604	VV	12200	173671	0.20%	0.124%

Sum of corrected areas: 140584203

THC Quant.M Thu Feb 07 15:20:05 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-7.D
Acq On : 7 Feb 2019 10:49
Operator : BTT
Sample : Plant material
Misc : Methanol
ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e
Integrator: ChemStation

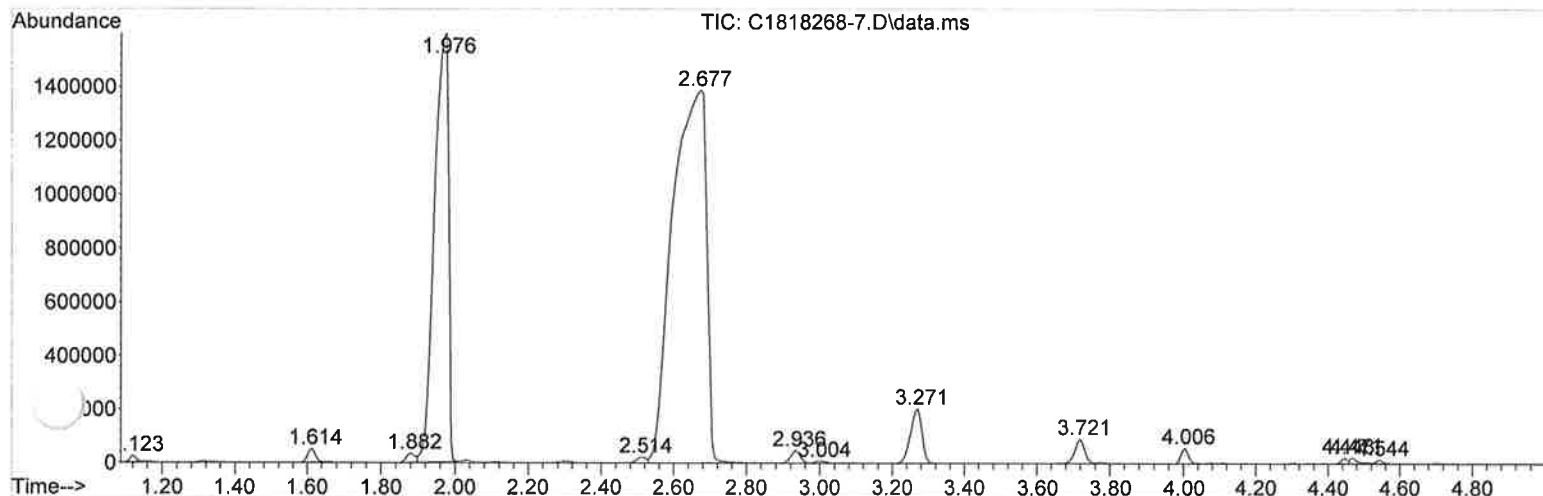
Method : C:\msdchem\1\METHODS\THC Quant.M
Title : BT THC Quant

Signal : TIC: C1818268-7.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.123	3	7	11	BV	21492	241891	0.27%	0.171%
2	1.614	84	92	97	BV	48953	715139	0.81%	0.505%
3	1.882	130	138	140	BV	32719	498623	0.56%	0.352%
4	1.976	140	154	160	VV	1583123	42620287	48.07%	30.076%
5	2.514	235	246	249	BV 2	20872	369279	0.42%	0.261%
6	2.677	249	274	297	VV 3	1384841	88663410	100.00%	62.567%
7	2.936	310	319	325	BV	44944	808244	0.91%	0.570%
8	3.004	325	330	338	VV 2	7388	146921	0.17%	0.104%
9	3.271	365	376	398	VB	200262	4443800	5.01%	3.136%
10	3.721	428	453	461	BV	87852	1697467	1.91%	1.198%
11	4.006	494	502	511	PV 2	54690	758132	0.86%	0.535%
12	4.448	566	578	580	PV	19781	223718	0.25%	0.158%
13	4.471	580	582	591	VV 5	20700	340997	0.38%	0.241%
14	4.544	591	595	606	VV	12955	182342	0.21%	0.129%

Sum of corrected areas: 141710251

THC Quant.M Thu Feb 07 15:20:16 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-8.D

Acq On : 7 Feb 2019 11:04

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

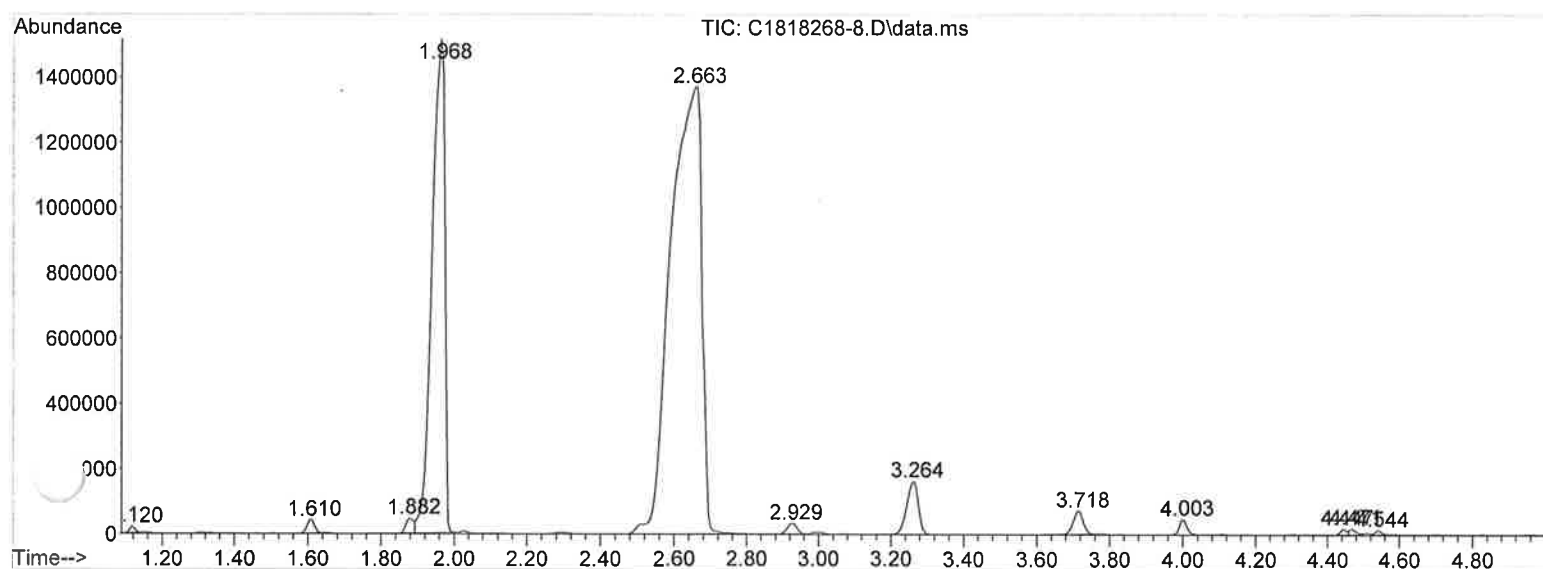
Title : BT THC Quant

Signal : TIC: C1818268-8.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.120	3	7	11	BV	17809	188723	0.24%	0.151%
2	1.610	83	91	96	BV	41222	569377	0.71%	0.457%
3	1.882	109	137	139	BV	44439	539259	0.68%	0.433%
4	1.968	139	152	160	VV	1513651	36840283	46.20%	29.555%
5	2.663	235	272	299	BV 2	1372517	79732400	100.00%	63.964%
6	2.929	310	317	324	BV 2	32582	607717	0.76%	0.488%
7	3.264	353	375	384	BV	161362	3612636	4.53%	2.898%
8	3.718	428	453	461	BV	70895	1291132	1.62%	1.036%
9	4.003	493	502	510	VV	46505	651592	0.82%	0.523%
10	4.447	572	578	580	BV	17362	189155	0.24%	0.152%
11	4.471	580	582	587	VV 3	17988	250284	0.31%	0.201%
12	4.544	591	595	612	VB	12299	178994	0.22%	0.144%

Sum of corrected areas: 124651552

THC Quant.M Thu Feb 07 15:20:25 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-9.D

Acq On : 7 Feb 2019 11:20

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

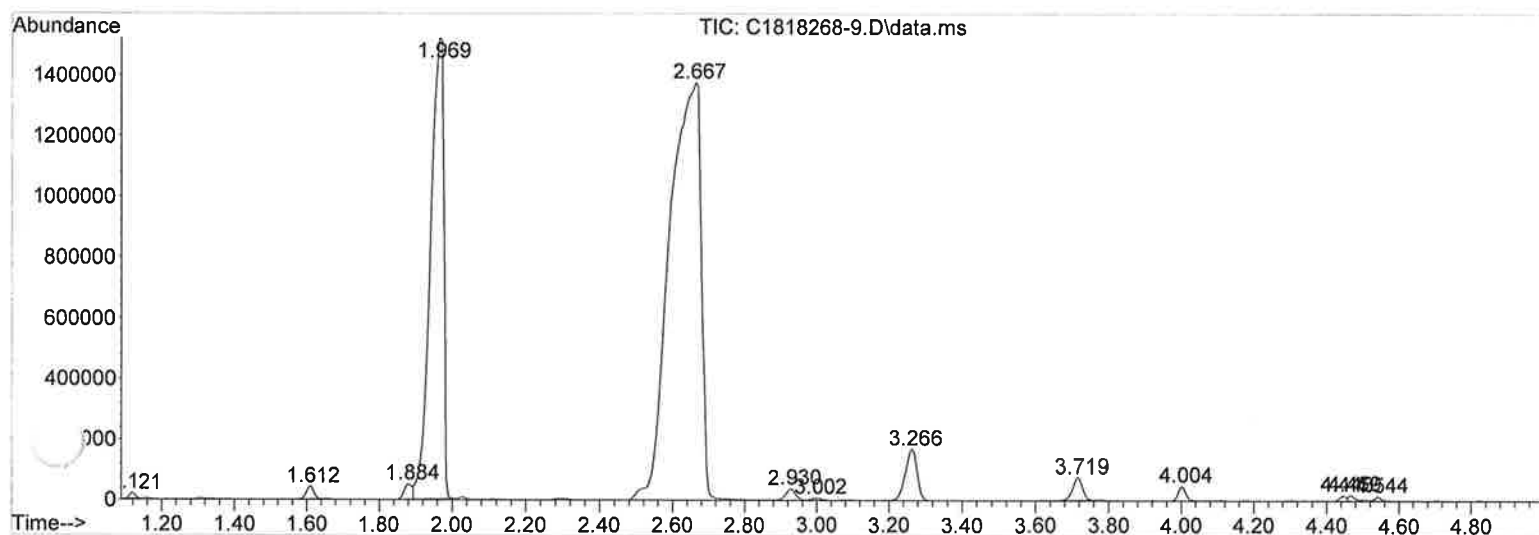
Title : BT THC Quant

Signal : TIC: C1818268-9.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. %	% of max.	% of total
1	1.121	3	7	11	BV	18228	198121	0.24%	0.152%	
2	1.612	83	91	97	BV	41321	587192	0.71%	0.452%	
3	1.884	131	138	140	BV	50471	698252	0.84%	0.537%	
4	1.969	140	153	160	VV	1522411	38488348	46.56%	29.614%	
5	2.667	224	272	297	BV 2	1376858	82667442	100.00%	63.606%	
6	2.930	304	318	325	VV 2	37580	734676	0.89%	0.565%	
7	3.002	325	330	336	VV 4	7254	157211	0.19%	0.121%	
8	3.266	355	375	395	VV 2	168339	3798878	4.60%	2.923%	
9	3.719	426	453	461	BV	75224	1357634	1.64%	1.045%	
10	4.004	477	502	511	BV	46444	675374	0.82%	0.520%	
11	4.448	572	578	580	PV	16824	187108	0.23%	0.144%	
12	4.469	580	582	587	VV 4	17764	244474	0.30%	0.188%	
13	4.544	591	595	604	VB 2	12931	174004	0.21%	0.134%	

Sum of corrected areas: 129968712

THC Quant.M Thu Feb 07 15:20:35 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-10.D

Acq On : 7 Feb 2019 11:36

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

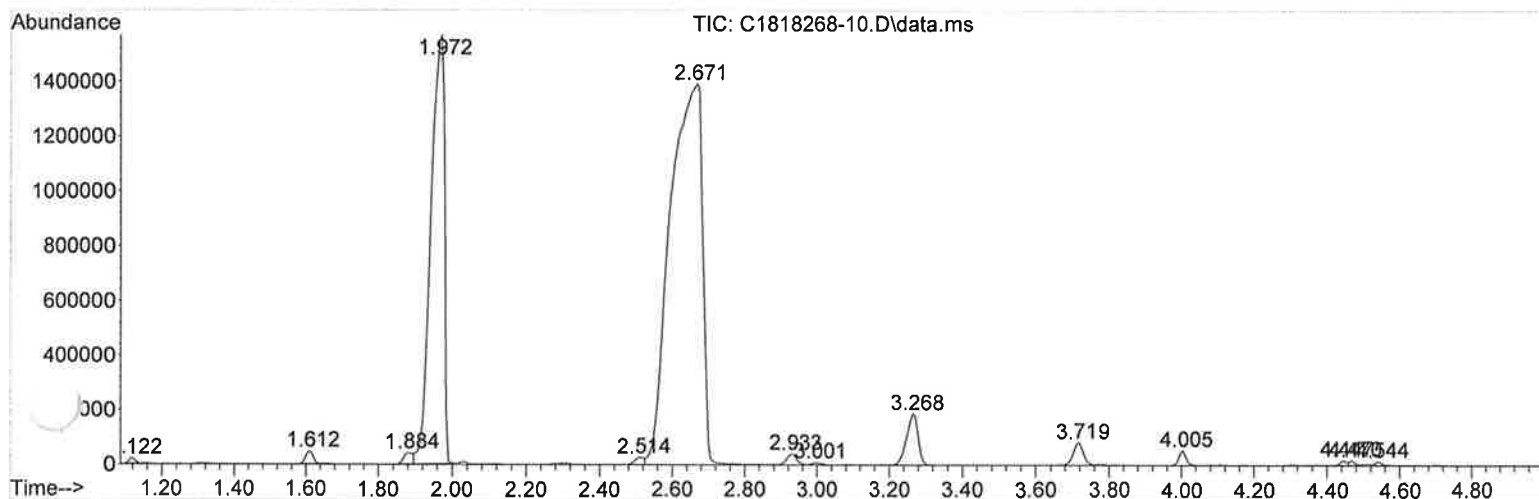
Title : BT THC Quant

Signal : TIC: C1818268-10.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.122	3	7	11	BV	20102	220758	0.26%	0.163%
2	1.612	83	91	97	BV	45295	651733	0.76%	0.482%
3	1.884	127	138	140	BV 2	40801	604967	0.71%	0.447%
4	1.972	140	153	160	VV	1547424	39941692	46.73%	29.532%
5	2.514	236	246	248	BV 2	25803	410285	0.48%	0.303%
6	2.671	248	273	308	VV 2	1393015	85482051	100.00%	63.204%
7	2.933	308	318	325	VV 3	39163	761208	0.89%	0.563%
8	3.001	325	330	338	VV 4	7569	155725	0.18%	0.115%
9	3.268	354	376	393	BV	185063	4092071	4.79%	3.026%
10	3.719	428	453	461	BV	82802	1620690	1.90%	1.198%
11	4.005	480	502	511	PV	51880	745030	0.87%	0.551%
12	4.447	572	578	580	BV 2	16894	187945	0.22%	0.139%
13	4.470	580	582	587	VV 4	15619	204090	0.24%	0.151%
14	4.544	591	595	604	VV	12789	169493	0.20%	0.125%

Sum of corrected areas: 135247739

THC Quant.M Thu Feb 07 15:20:45 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-11.D

Acq On : 7 Feb 2019 11:51

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

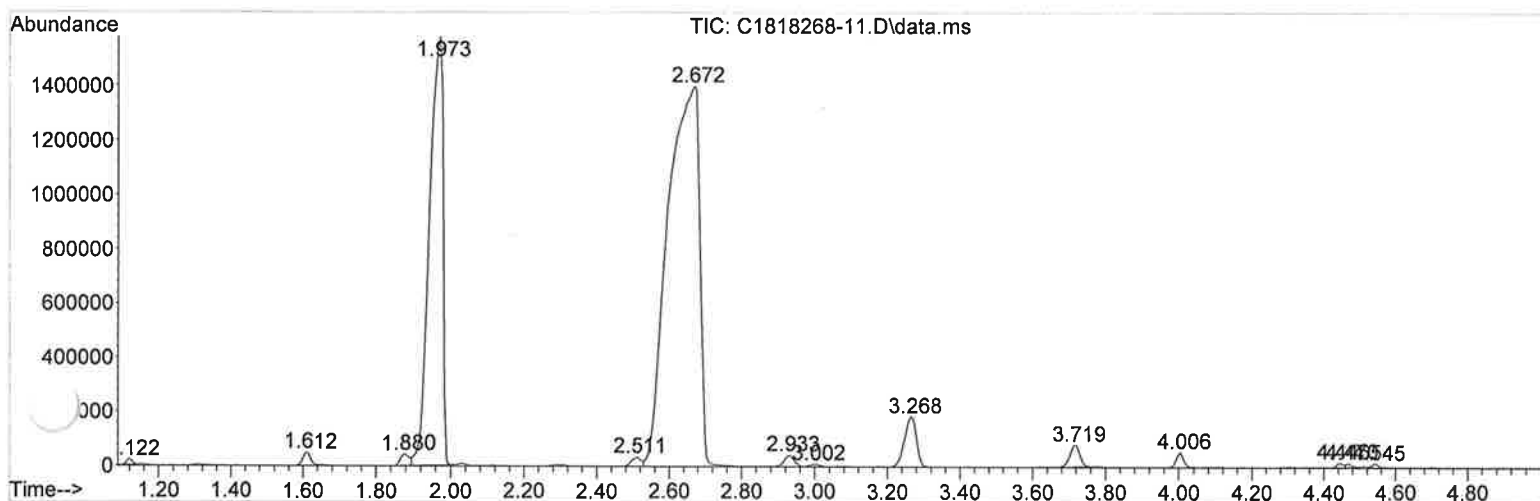
Title : BT THC Quant

Signal : TIC: C1818268-11.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.122	3	7	11	BV	19899	216305	0.25%	0.160%
2	1.612	83	91	113	BB	47010	755387	0.89%	0.559%
3	1.880	130	137	140	BV	41918	640705	0.75%	0.474%
4	1.973	140	153	160	VV	1575652	39791062	46.62%	29.442%
5	2.511	230	246	249	PV	32290	587590	0.69%	0.435%
6	2.672	249	273	302	VV 2	1397139	85345142	100.00%	63.148%
7	2.933	309	318	325	VV	41374	780034	0.91%	0.577%
8	3.002	325	330	338	VV 5	8077	156237	0.18%	0.116%
9	3.268	364	376	386	BV	183100	4122390	4.83%	3.050%
10	3.719	427	453	461	BV	79262	1458561	1.71%	1.079%
11	4.006	477	502	511	BV	52920	737339	0.86%	0.546%
12	4.446	573	578	580	VV	16121	193142	0.23%	0.143%
13	4.470	580	582	587	VV 3	14595	188104	0.22%	0.139%
14	4.545	591	595	604	VB	13389	178536	0.21%	0.132%

Sum of corrected areas: 135150531

THC Quant.M Thu Feb 07 15:20:55 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-12.D

Acq On : 7 Feb 2019 12:07

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

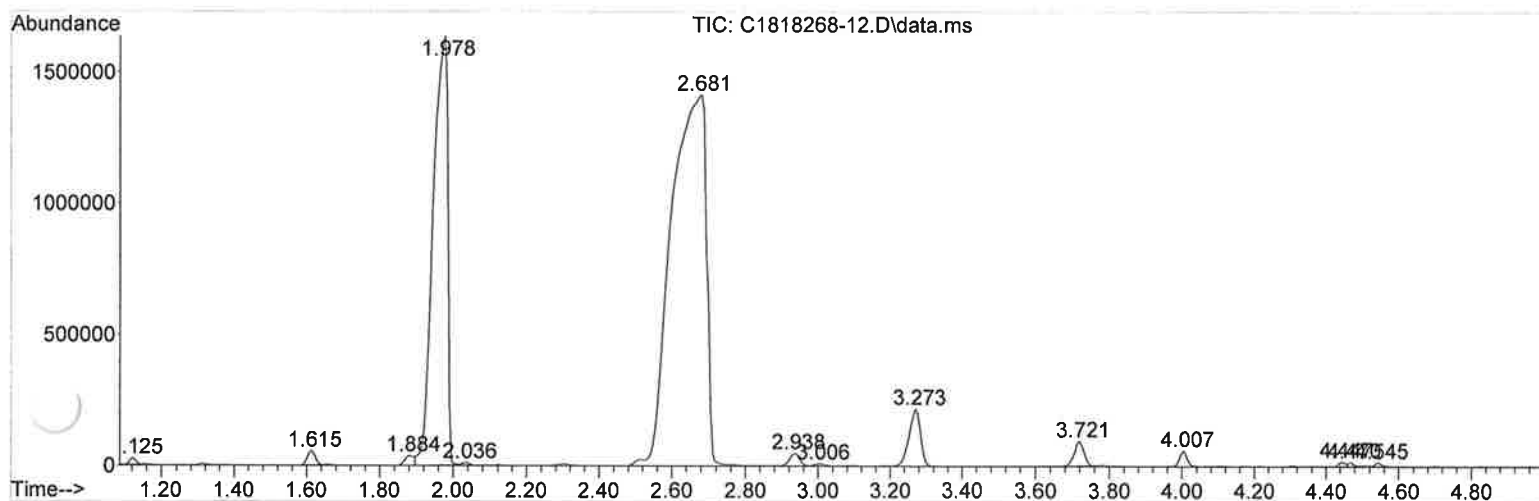
Title : BT THC Quant

Signal : TIC: C1818268-12.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.125	3	7	12	BV	23053	259745	0.28%	0.175%
2	1.615	84	92	98	BV	52557	783781	0.84%	0.528%
3	1.884	129	138	140	BV	36924	568343	0.61%	0.383%
4	1.978	140	154	161	VV	1633875	44929641	48.39%	30.272%
5	2.036	161	164	170	VV	10411	146991	0.16%	0.099%
6	2.681	222	275	301	PV 2	1414381	92855334	100.00%	62.562%
7	2.938	301	319	326	VV 2	47335	926758	1.00%	0.624%
8	3.006	326	331	338	VV 2	8290	159304	0.17%	0.107%
9	3.273	355	377	393	BV	213992	4743578	5.11%	3.196%
10	3.721	425	453	461	BV	91121	1646395	1.77%	1.109%
11	4.007	493	502	511	VV	57665	813022	0.88%	0.548%
12	4.447	572	578	580	VV 2	17631	199861	0.22%	0.135%
13	4.470	580	582	587	VV 2	14988	199355	0.21%	0.134%
14	4.545	592	595	612	VB	13635	188953	0.20%	0.127%

Sum of corrected areas: 148421061

THC Quant.M Thu Feb 07 15:21:05 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-13.D

Acq On : 7 Feb 2019 12:22

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

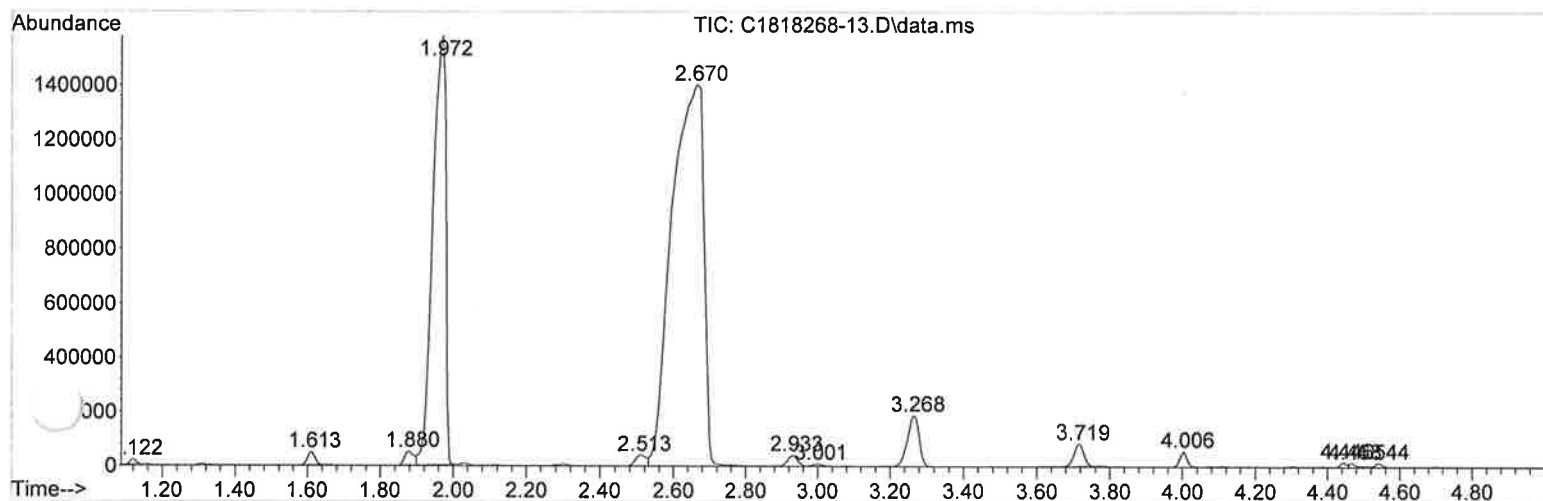
Title : BT THC Quant

Signal : TIC: C1818268-13.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.122	3	7	11	BV	19869	222084	0.26%	0.164%
2	1.613	83	91	97	BV	46584	664739	0.78%	0.492%
3	1.880	128	137	140	BV	50158	828326	0.97%	0.613%
4	1.972	140	153	160	VV	1579118	39419422	46.20%	29.170%
5	2.513	221	246	249	PV 2	39465	793072	0.93%	0.587%
6	2.670	249	273	311	VV 4	1401107	85323285	100.00%	63.138%
7	2.933	311	318	325	VV 2	40085	777870	0.91%	0.576%
8	3.001	325	330	338	VV 4	7924	174080	0.20%	0.129%
9	3.268	354	376	389	VV	185846	4156912	4.87%	3.076%
10	3.719	424	453	461	BV	82465	1470423	1.72%	1.088%
11	4.006	494	502	511	PV	54475	740319	0.87%	0.548%
12	4.446	573	578	580	VV 2	16671	190806	0.22%	0.141%
13	4.468	580	582	587	VV 3	13772	187550	0.22%	0.139%
14	4.544	591	595	606	VV	13388	189494	0.22%	0.140%

Sum of corrected areas: 135138381

THC Quant.M Thu Feb 07 15:21:15 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-14.D

Acq On : 7 Feb 2019 12:38

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

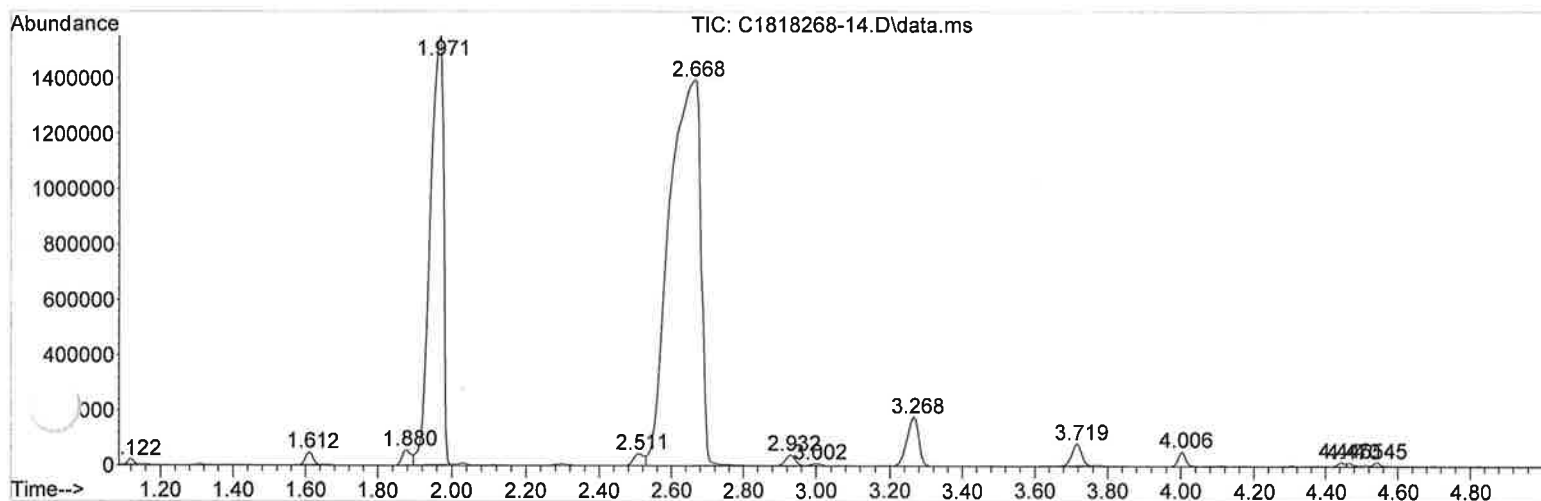
Title : BT THC Quant

Signal : TIC: C1818268-14.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.122	3	7	11	BV	19678	215523	0.26%	0.162%
2	1.612	79	91	97	PV	44877	641781	0.77%	0.484%
3	1.880	131	137	140	PV	55045	851435	1.02%	0.642%
4	1.971	140	153	160	VV	1534802	38730379	46.18%	29.193%
5	2.511	235	246	249	BV 2	42626	809198	0.96%	0.610%
6	2.668	249	273	293	VV 3	1392768	83862429	100.00%	63.210%
7	2.932	308	318	325	BV 2	38916	718430	0.86%	0.542%
8	3.002	325	330	336	VV 3	7497	144130	0.17%	0.109%
9	3.268	354	376	390	BV	176428	4004063	4.77%	3.018%
10	3.719	427	453	461	PV	79984	1441259	1.72%	1.086%
11	4.006	492	502	511	BV	51044	714779	0.85%	0.539%
12	4.446	573	578	580	PV 4	14146	169814	0.20%	0.128%
13	4.470	580	582	587	VV 3	11936	167176	0.20%	0.126%
14	4.545	591	595	609	VB	13432	201338	0.24%	0.152%

Sum of corrected areas: 132671733

THC Quant.M Thu Feb 07 15:21:28 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-15.D

Acq On : 7 Feb 2019 12:53

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

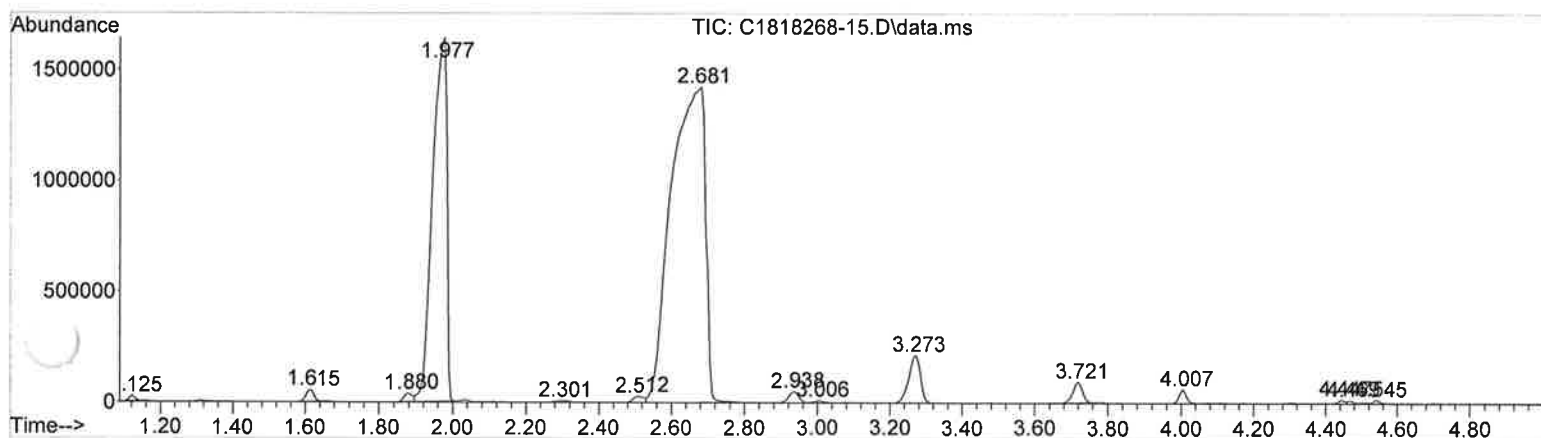
Title : BT THC Quant

Signal : TIC: C1818268-15.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % area	% of max.	% of total
1	1.125	3	7	12	BV	22563	249868	0.27%	0.169%	
2	1.615	82	92	97	BV	51911	763179	0.83%	0.516%	
3	1.880	124	137	140	PV	37016	543563	0.59%	0.368%	
4	1.977	140	154	160	VV 2	1649160	44473662	48.25%	30.096%	
5	2.301	193	210	222	BV 5	6878	176936	0.19%	0.120%	
6	2.512	237	246	249	BV 2	27590	521672	0.57%	0.353%	
7	2.681	249	275	299	VV 2	1424915	92175750	100.00%	62.376%	
8	2.938	308	319	325	BV 2	48350	905333	0.98%	0.613%	
9	3.006	325	331	340	VV 3	8150	162652	0.18%	0.110%	
10	3.273	354	376	387	PV	211865	4740280	5.14%	3.208%	
11	3.721	431	453	461	PV	91263	1681480	1.82%	1.138%	
12	4.007	480	502	511	BV	60334	817241	0.89%	0.553%	
13	4.447	572	578	580	PV 4	15453	182935	0.20%	0.124%	
14	4.469	580	582	587	VV 3	12215	158278	0.17%	0.107%	
15	4.545	587	595	602	VV 2	13332	222206	0.24%	0.150%	

Sum of corrected areas: 147775034

THC Quant.M Thu Feb 07 15:21:37 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-16.D

Acq On : 7 Feb 2019 13:09

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

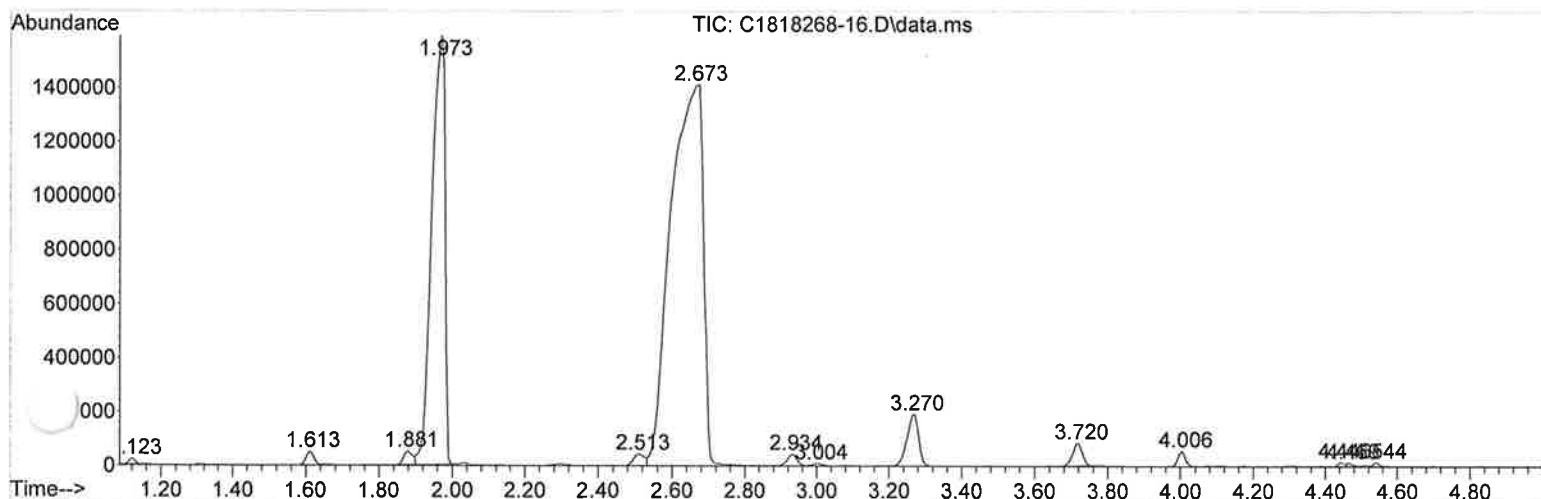
Title : BT THC Quant

Signal : TIC: C1818268-16.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.123	3	7	11	BV	20315	231421	0.27%	0.169%
2	1.613	83	91	97	BV	49306	737111	0.85%	0.538%
3	1.881	106	137	140	PV	49693	714176	0.83%	0.522%
4	1.973	140	153	160	VV 2	1582034	40000420	46.29%	29.210%
5	2.513	234	246	249	BV	43438	857010	0.99%	0.626%
6	2.673	249	273	308	VV 3	1409712	86413196	100.00%	63.103%
7	2.934	308	318	325	VV 2	42239	809229	0.94%	0.591%
8	3.004	325	330	339	VV 3	7913	160897	0.19%	0.117%
9	3.270	354	376	393	BB	191546	4225986	4.89%	3.086%
10	3.720	430	453	461	BV	82318	1501176	1.74%	1.096%
11	4.006	482	502	511	BV	54380	761987	0.88%	0.556%
12	4.446	572	578	580	VV 2	14624	172712	0.20%	0.126%
13	4.469	580	582	587	VV 3	11973	162385	0.19%	0.119%
14	4.544	592	595	607	VV	14171	192480	0.22%	0.141%

Sum of corrected areas: 136940185

THC Quant.M Thu Feb 07 15:21:47 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-17.D

Acq On : 7 Feb 2019 13:24

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

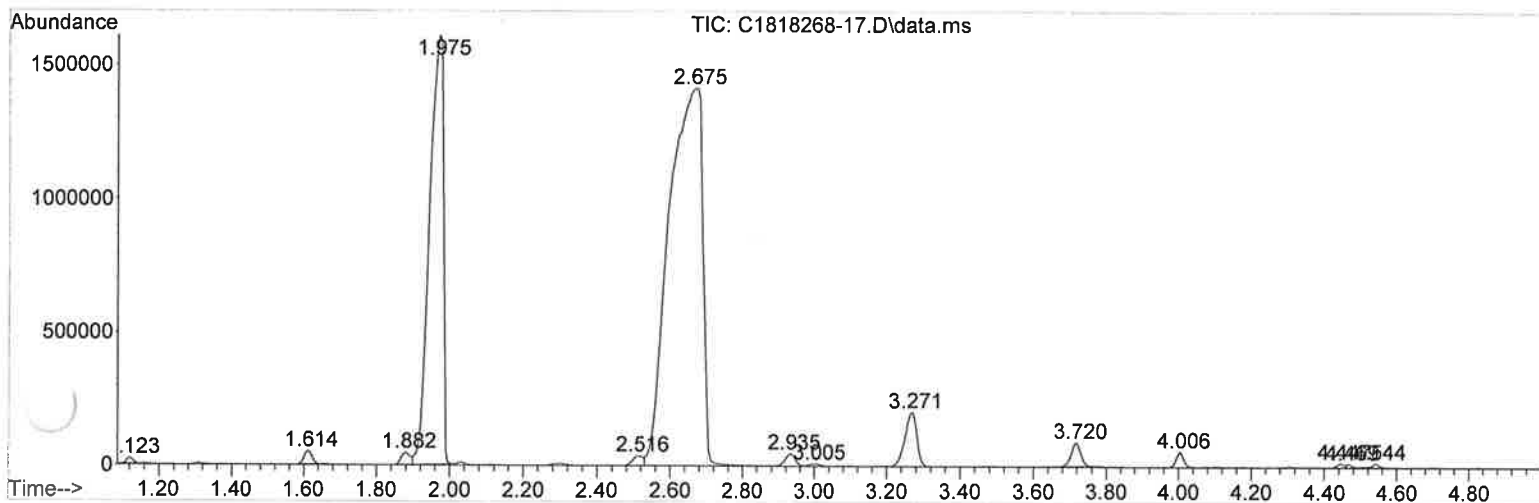
Title : BT THC Quant

Signal : TIC: C1818268-17.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.123	3	7	11	BV	20675	240579	0.27%	0.167%
2	1.614	83	92	97	BV	49254	735574	0.82%	0.511%
3	1.882	124	137	140	BV	44306	691823	0.77%	0.481%
4	1.975	140	153	161	VV	1603336	42889144	47.61%	29.821%
5	2.516	236	246	249	PV 3	35776	659267	0.73%	0.458%
6	2.675	249	274	307	VV 2	1414621	90092147	100.00%	62.641%
7	2.935	310	318	325	VV 2	44630	877323	0.97%	0.610%
8	3.005	325	330	338	VV 3	7992	165604	0.18%	0.115%
9	3.271	353	376	393	BB	201739	4508186	5.00%	3.135%
10	3.720	432	453	461	BV	87805	1599073	1.77%	1.112%
11	4.006	491	502	511	VV 2	55103	781852	0.87%	0.544%
12	4.447	573	578	580	PV 2	15210	186290	0.21%	0.130%
13	4.469	580	582	586	VV 3	12352	148421	0.16%	0.103%
14	4.544	586	595	608	VB 2	13711	246565	0.27%	0.171%

Sum of corrected areas: 143821848

THC Quant.M Thu Feb 07 15:21:58 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-18.D
Acq On : 7 Feb 2019 13:40
Operator : BTT
Sample : Plant material
Misc : Methanol
ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e
Integrator: ChemStation

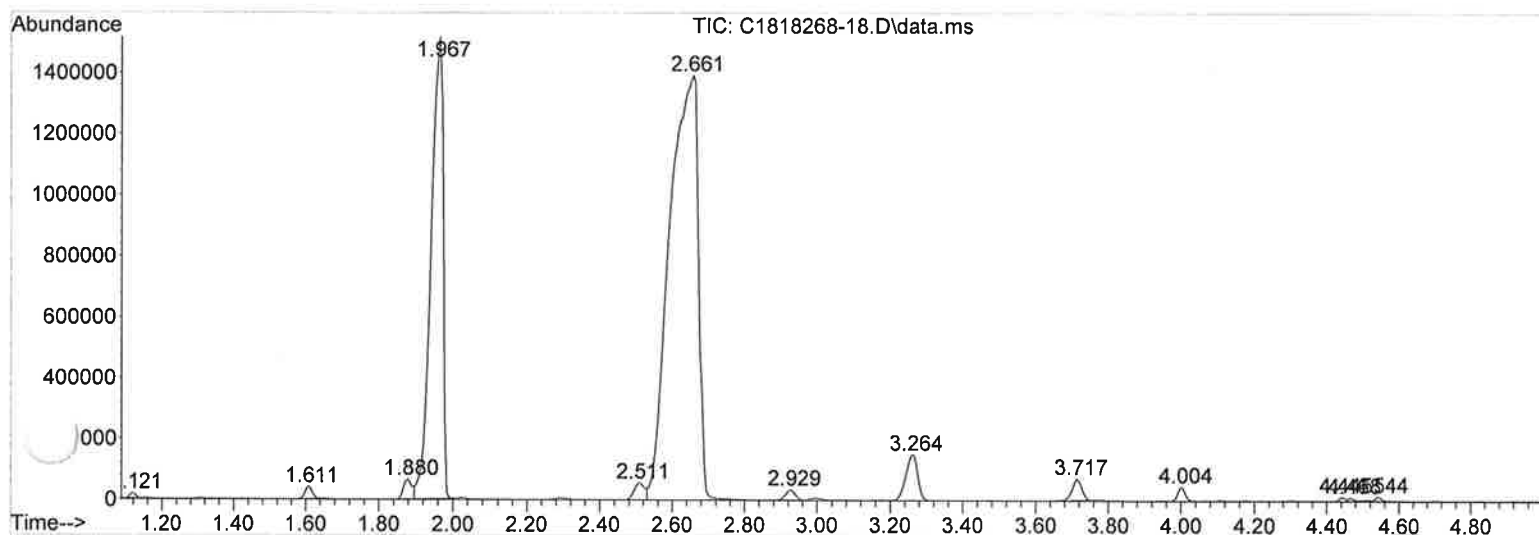
Method : C:\msdchem\1\METHODS\THC Quant.M
Title : BT THC Quant

Signal : TIC: C1818268-18.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.121	3	7	11	BV	16451	171983	0.22%	0.144%
2	1.611	83	91	96	BV	39703	540869	0.71%	0.452%
3	1.880	128	137	140	BV	63145	956605	1.25%	0.799%
4	1.967	140	152	160	VV	1478532	34276252	44.84%	28.619%
5	2.511	238	246	249	VV	54092	1018423	1.33%	0.850%
6	2.661	249	271	307	VV 2	1400201	76439453	100.00%	63.822%
7	2.929	307	317	324	PV 2	31877	591833	0.77%	0.494%
8	3.264	363	375	392	VV	149824	3368440	4.41%	2.812%
9	3.717	438	453	461	BV	68743	1249659	1.63%	1.043%
10	4.004	480	502	510	BV	44449	632983	0.83%	0.529%
11	4.445	572	578	580	PV 3	12793	150220	0.20%	0.125%
12	4.468	580	582	587	VV 3	10392	137699	0.18%	0.115%
13	4.544	587	595	610	VV	13411	235031	0.31%	0.196%

Sum of corrected areas: 119769451

THC Quant.M Thu Feb 07 15:22:07 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-19.D

Acq On : 7 Feb 2019 13:55

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

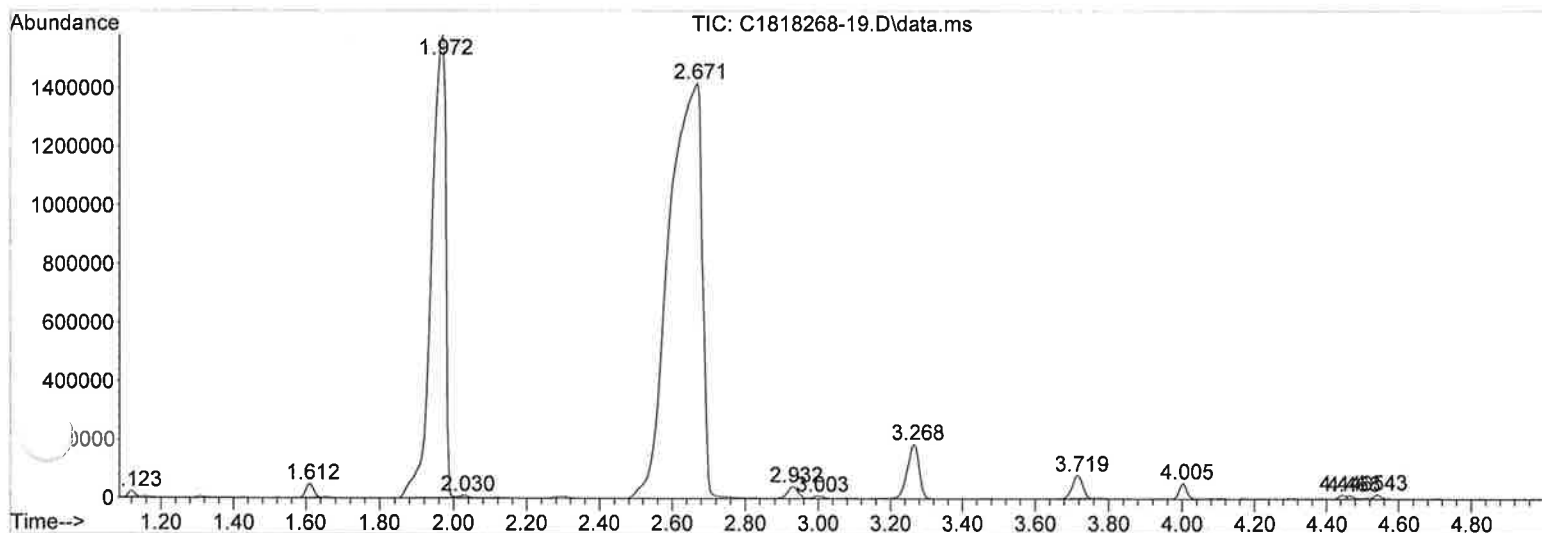
Title : BT THC Quant

Signal : TIC: C1818268-19.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.123	3	7	11	BV	19478	223939	0.25%	0.160%
2	1.612	82	91	97	BV	45722	674199	0.76%	0.481%
3	1.972	119	153	160	BV	1565393	42534899	48.00%	30.331%
4	2.030	160	163	169	VB 2	7711	121372	0.14%	0.087%
5	2.671	235	273	309	BV 2	1419106	88619554	100.00%	63.192%
6	2.932	309	318	325	VV 2	40725	834746	0.94%	0.595%
7	3.003	325	330	337	VV 2	8504	177173	0.20%	0.126%
8	3.268	353	376	394	VV 2	184400	4263940	4.81%	3.041%
9	3.719	437	453	461	BV	77693	1515193	1.71%	1.080%
10	4.005	483	502	511	BV	51719	771346	0.87%	0.550%
11	4.446	573	578	580	VV 3	13105	157244	0.18%	0.112%
12	4.468	580	582	587	VV 4	11293	148071	0.17%	0.106%
13	4.543	591	595	607	VV	14231	195789	0.22%	0.140%

Sum of corrected areas: 140237464

THC Quant.M Thu Feb 07 15:22:16 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-20.D

Acq On : 7 Feb 2019 14:11

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

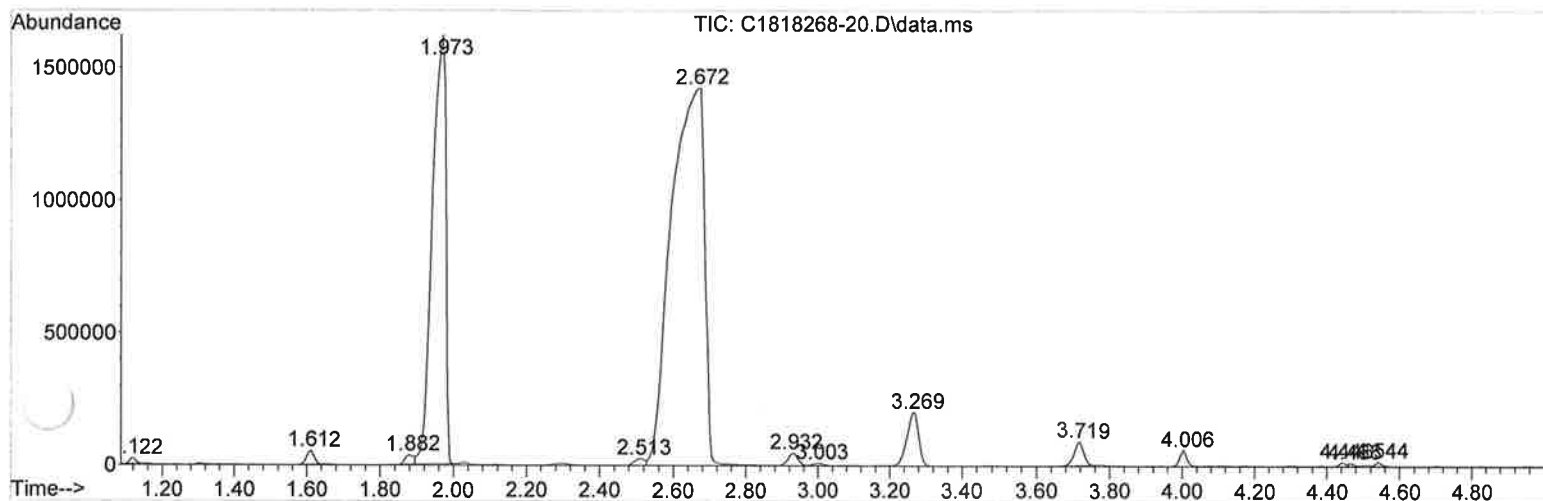
Title : BT THC Quant

Signal : TIC: C1818268-20.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.122	3	7	11	BV	21855	248088	0.28%	0.176%
2	1.612	84	91	97	BV	49930	732103	0.82%	0.518%
3	1.882	123	137	140	BV	35503	493787	0.55%	0.350%
4	1.973	140	153	160	VV	1613686	41796083	46.90%	29.587%
5	2.513	228	246	248	BV 2	24536	441749	0.50%	0.313%
6	2.672	248	273	308	VV 3	1421842	89120420	100.00%	63.087%
7	2.932	308	318	325	VV	46247	872973	0.98%	0.618%
8	3.004	325	330	337	VV 3	8297	172076	0.19%	0.122%
9	3.269	356	376	388	BV	201454	4455622	5.00%	3.154%
10	3.719	442	453	461	PV	88056	1618644	1.82%	1.146%
11	4.006	495	502	511	VV	58225	795554	0.89%	0.563%
12	4.446	572	578	580	PV 2	13326	162036	0.18%	0.115%
13	4.468	580	582	587	VV 2	11463	156024	0.18%	0.110%
14	4.544	591	595	610	VV	14317	201237	0.23%	0.142%

Sum of corrected areas: 141266397

THC Quant.M Thu Feb 07 15:22:25 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-21.D

Acq On : 7 Feb 2019 14:27

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

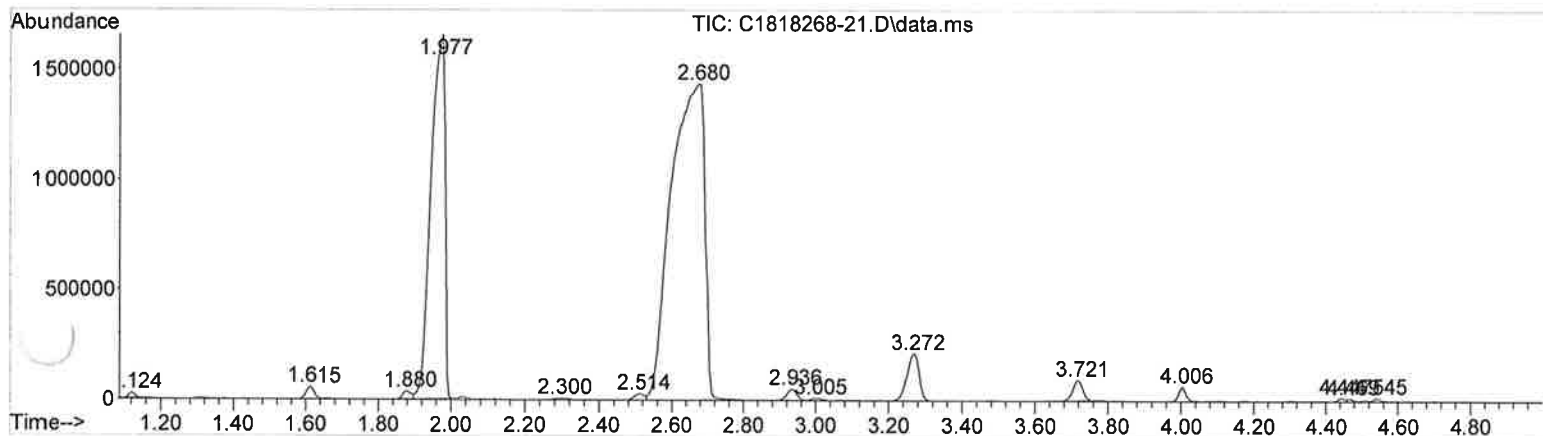
Title : BT THC Quant

Signal : TIC: C1818268-21.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.124	3	7	12	BV	22375	261335	0.28%	0.176%
2	1.615	84	92	112	BB	54120	898301	0.97%	0.604%
3	1.880	120	137	140	BV	34321	488326	0.53%	0.328%
4	1.977	140	154	161	VV	1665793	44659430	48.11%	30.019%
5	2.300	192	209	220	BV 3	6839	190895	0.21%	0.128%
6	2.514	230	246	249	BV	27753	492142	0.53%	0.331%
7	2.680	249	275	301	VV 4	1448912	92836972	100.00%	62.404%
8	2.936	309	319	326	BV 2	49555	928322	1.00%	0.624%
9	3.005	326	330	337	VV 2	8808	168732	0.18%	0.113%
10	3.272	363	376	394	BV 2	210357	4777937	5.15%	3.212%
11	3.721	430	453	461	PV 2	90316	1679328	1.81%	1.129%
12	4.006	480	502	511	BV	61425	849590	0.92%	0.571%
13	4.447	573	578	580	VV	14467	179539	0.19%	0.121%
14	4.469	580	582	587	VV 3	11678	157121	0.17%	0.106%
15	4.545	591	595	606	VB	13548	200801	0.22%	0.135%

Sum of corrected areas: 148768771

THC Quant.M Thu Feb 07 15:22:35 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-22.D

Acq On : 7 Feb 2019 14:42

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

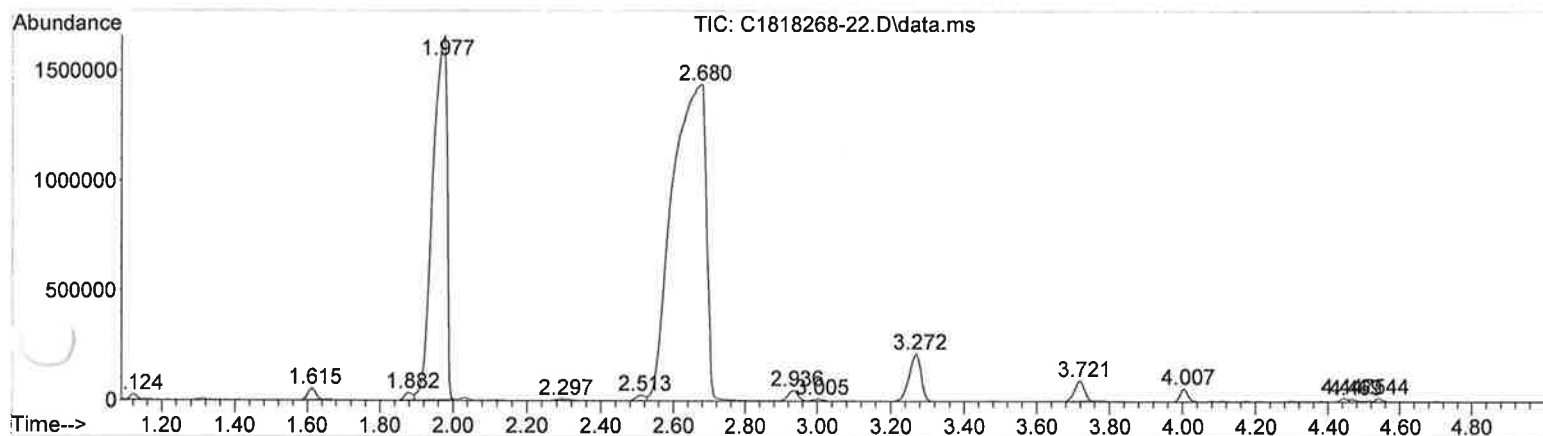
Title : BT THC Quant

Signal : TIC: C1818268-22.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.124	3	7	12	BV	22535	267319	0.29%	0.179%
2	1.615	84	92	98	BV	51050	781785	0.84%	0.524%
3	1.882	127	137	140	BV	32660	460289	0.49%	0.308%
4	1.977	140	154	161	VV	1679282	45080448	48.46%	30.210%
5	2.297	189	209	226	BV 3	6805	194441	0.21%	0.130%
6	2.513	229	246	248	PV	24708	431868	0.46%	0.289%
7	2.680	248	275	310	VV 3	1462784	93021970	100.00%	62.336%
8	2.936	310	319	325	VV 2	48387	971481	1.04%	0.651%
9	3.005	325	330	338	VV 3	9316	194531	0.21%	0.130%
10	3.272	355	376	387	VV	211645	4830128	5.19%	3.237%
11	3.721	429	453	461	BV	89181	1651045	1.77%	1.106%
12	4.007	495	503	511	BV	56502	812143	0.87%	0.544%
13	4.447	572	578	580	PV 2	14675	175013	0.19%	0.117%
14	4.469	580	582	587	VV 3	10919	154409	0.17%	0.103%
15	4.544	591	595	607	VV	14344	199108	0.21%	0.133%

Sum of corrected areas: 149225978

THC Quant.M Thu Feb 07 15:22:44 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-23.D

Acq On : 7 Feb 2019 14:58

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

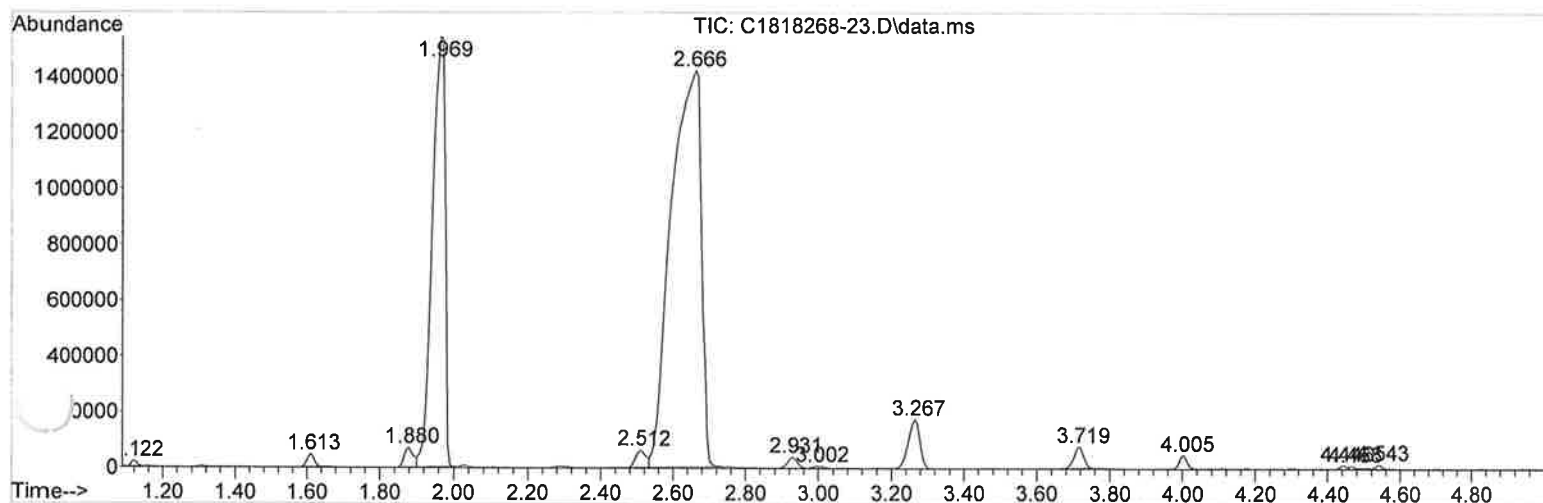
Title : BT THC Quant

Signal : TIC: C1818268-23.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.122	3	7	11	BV	18752	198112	0.24%	0.154%
2	1.613	84	91	97	BV	43647	619359	0.76%	0.482%
3	1.880	128	137	141	BV	68441	1112557	1.37%	0.866%
4	1.969	141	153	160	VV	1541893	36866015	45.41%	28.706%
5	2.512	223	246	249	PV	60240	1140354	1.40%	0.888%
6	2.666	249	272	286	VV	1420947	81191534	100.00%	63.221%
7	2.931	308	318	325	BV 2	38624	722807	0.89%	0.563%
8	3.002	325	330	337	VV 4	7302	151605	0.19%	0.118%
9	3.267	364	375	386	VV 2	171488	3811289	4.69%	2.968%
10	3.719	428	453	460	BV	75866	1380725	1.70%	1.075%
11	4.005	477	502	510	BV	47870	700986	0.86%	0.546%
12	4.446	573	578	580	PV 4	12042	149352	0.18%	0.116%
13	4.468	580	582	587	VV 3	9776	133369	0.16%	0.104%
14	4.543	587	595	605	VV 2	14125	246600	0.30%	0.192%

Sum of corrected areas: 128424663

THC Quant.M Thu Feb 07 15:22:56 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\

Data File : C1818268-24.D

Acq On : 7 Feb 2019 15:13

Operator : BTT

Sample : Plant material

Misc : Methanol

ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e

Integrator: ChemStation

Method : C:\msdchem\1\METHODS\THC Quant.M

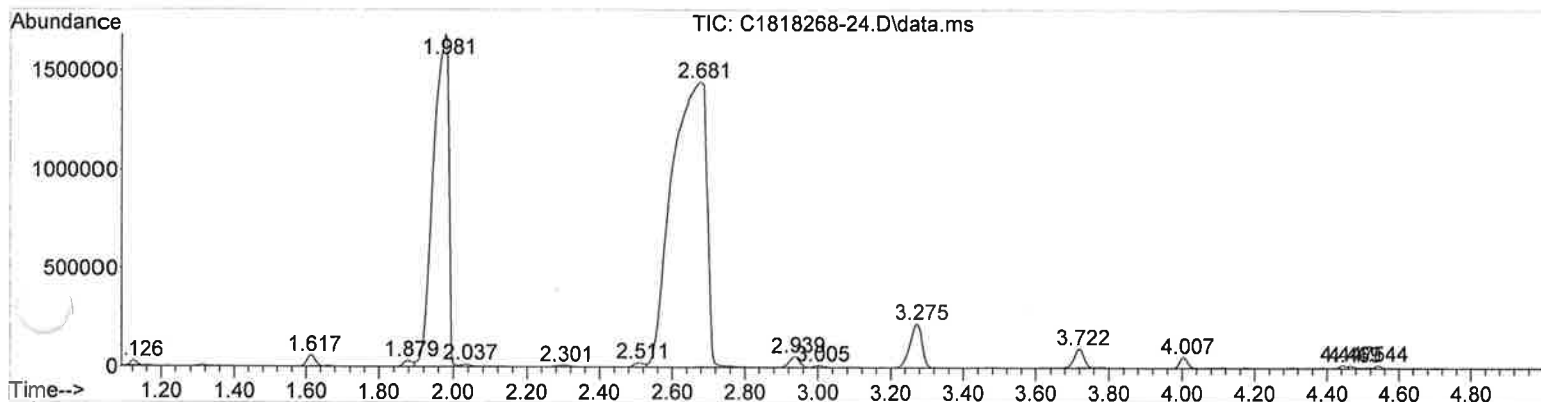
Title : BT THC Quant

Signal : TIC: C1818268-24.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.126	3	8	12	BV	25290	294127	0.31%	0.188%
2	1.617	83	92	98	BV	55773	855095	0.89%	0.547%
3	1.879	123	137	140	BV	29484	446436	0.47%	0.286%
4	1.981	140	155	161	VV	1673213	48685647	50.78%	31.171%
5	2.037	161	164	170	VV 3	11285	170195	0.18%	0.109%
6	2.301	191	210	228	BV 3	7699	210337	0.22%	0.135%
7	2.511	228	246	249	PV 2	20496	364304	0.38%	0.233%
8	2.681	249	275	294	VV 3	1439508	95870521	100.00%	61.382%
9	2.939	310	319	326	BV 2	53353	1013892	1.06%	0.649%
10	3.005	326	330	339	VV 2	8691	166181	0.17%	0.106%
11	3.275	364	377	391	VV	219738	5057976	5.28%	3.238%
12	3.722	425	454	461	BV	93434	1666004	1.74%	1.067%
13	4.007	480	502	511	BV 2	53876	822513	0.86%	0.527%
14	4.447	572	578	580	VV 4	14106	175872	0.18%	0.113%
15	4.469	580	582	587	VV 3	11390	162975	0.17%	0.104%
16	4.544	587	595	607	VV 2	13065	225123	0.23%	0.144%

Sum of corrected areas: 156187200

THC Quant.M Thu Feb 07 15:23:06 2019



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-25.D
Acq On : 7 Feb 2019 15:29
Operator : BTT
Sample : Plant material
Misc : Methanol
ALS Vial : 60 Sample Multiplier: 1

Integration Parameters: autoint1.e
Integrator: ChemStation

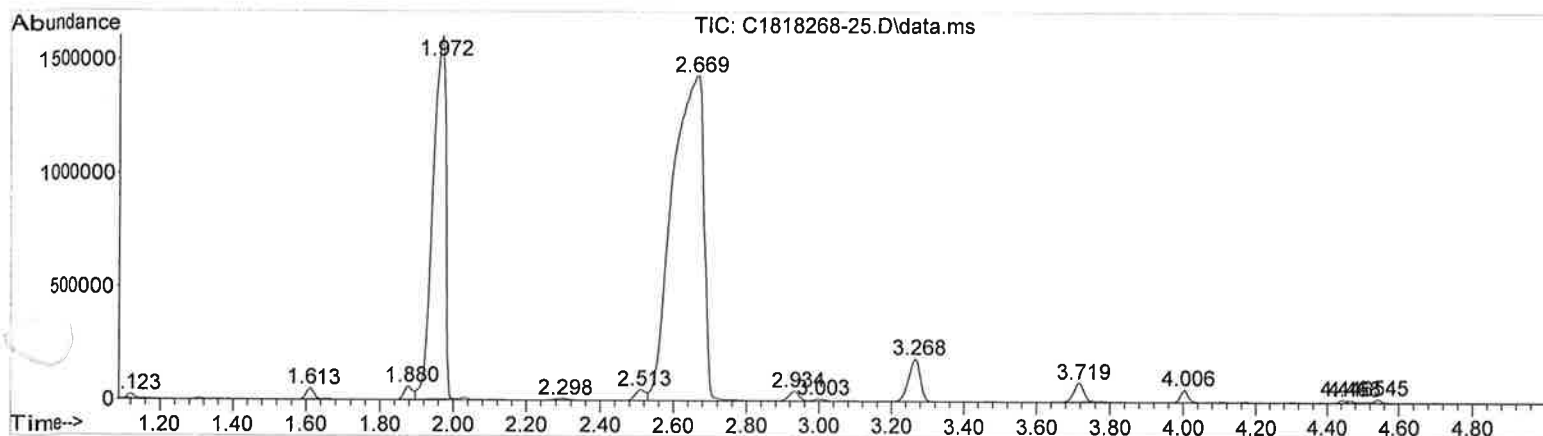
Method : C:\msdchem\1\METHODS\THC Quant.M
Title : BT THC Quant

Signal : TIC: C1818268-25.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max	% of total
1	1.123	3	7	22	BV	20713	279671	0.33%	0.207%
2	1.613	83	91	97	BV	46226	665349	0.78%	0.492%
3	1.880	123	137	140	BV	57633	859376	1.01%	0.636%
4	1.972	140	153	160	VV	1603053	39103835	45.81%	28.920%
5	2.298	198	209	220	BV 3	6832	180007	0.21%	0.133%
6	2.513	220	246	249	PV	46966	910682	1.07%	0.674%
7	2.669	249	273	307	VV	1432034	85362060	100.00%	63.132%
8	2.934	307	318	325	VV 3	41700	808706	0.95%	0.598%
9	3.003	325	330	340	VV 3	8425	166280	0.19%	0.123%
10	3.268	354	376	387	BV 2	184554	4133789	4.84%	3.057%
11	3.719	433	453	461	BV	82017	1490833	1.75%	1.103%
12	4.006	492	502	511	VV	53567	768768	0.90%	0.569%
13	4.446	572	578	580	PV 2	11821	150914	0.18%	0.112%
14	4.468	580	582	587	VV 3	9982	133102	0.16%	0.098%
15	4.545	592	595	605	VV	14721	198170	0.23%	0.147%

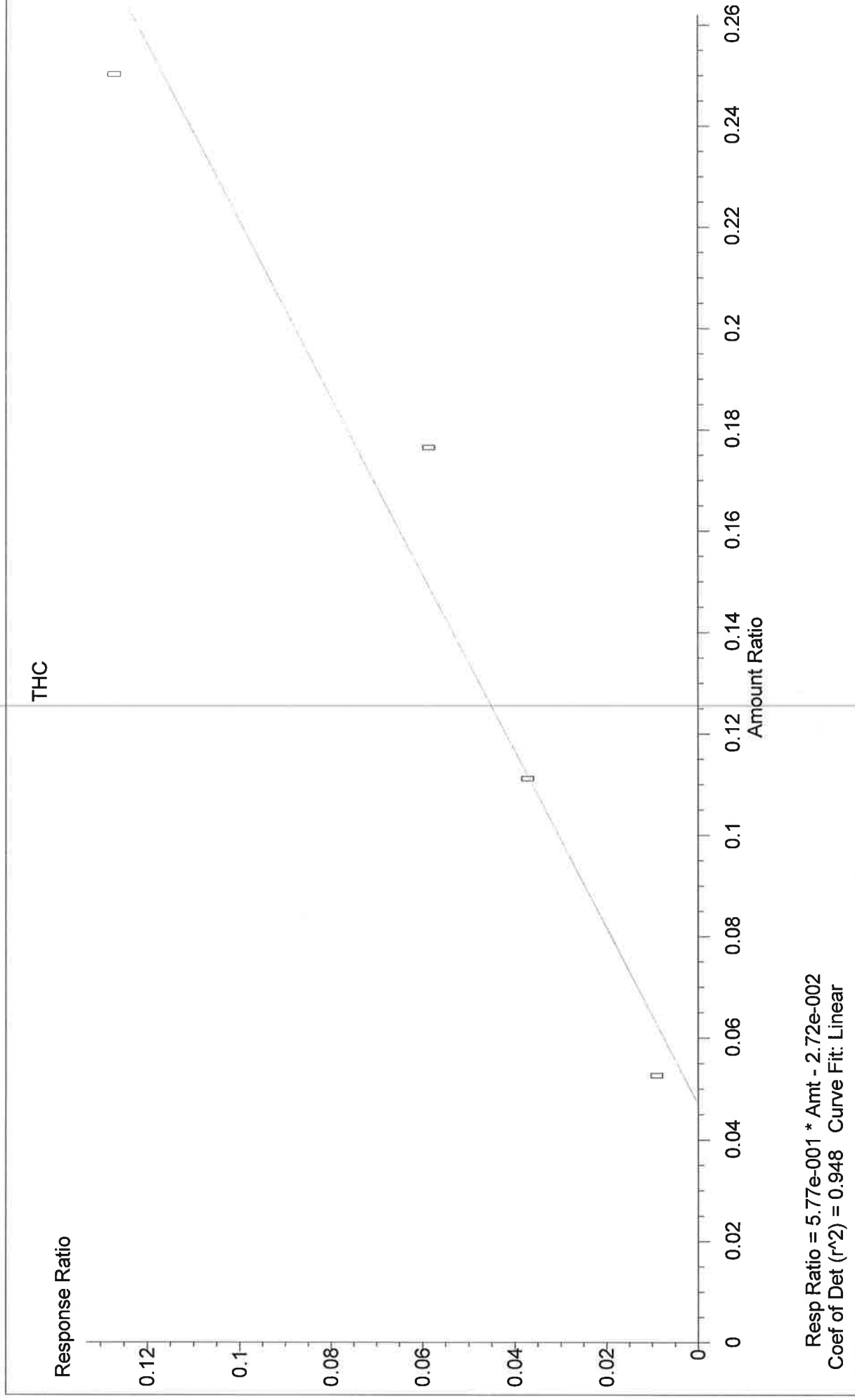
Sum of corrected areas: 135211543

THC Quant.M Thu Feb 07 15:34:46 2019



Calibration data of THC

LvLID	Amount (ratio)	Response (ratio)	bias (%)	Data File
1	0.0526	0.009025	181.62	C:\msdchem\1\DATA\2019\BTT\2-7-19\THC 1.D
2	0.1111	0.037236	0.73	C:\msdchem\1\DATA\2019\BTT\2-7-19\THC 2.D
3	0.1765	0.058572	-21.59	C:\msdchem\1\DATA\2019\BTT\2-7-19\THC 3.D
4	0.2500	0.127194	8.57	C:\msdchem\1\DATA\2019\BTT\2-7-19\THC 4.D



Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-1.D
Acq On : 7 Feb 2019 9:16
Operator : BTT
Sample : Plant material
Solvent : Methanol
Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:17:15 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.976	TIC	40317790	1.00	mg/mL	-0.02
Target Compounds						
2) THC	3.272	TIC	3863315	0.20	mg/mL	100
3) CBD	2.669	TIC	83667804	2.49	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:17:15 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-2.D
Acq On : 7 Feb 2019 9:31
Operator : BTT
Sample : Plant material
Methanol : Methanol
Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:18:08 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.966	TIC	28180338	1.00	mg/mL	-0.03
Target Compounds						
2) THC	3.265	TIC	2426434	0.18	mg/mL	100
3) CBD	2.651	TIC	62112421	2.64	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:18:08 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-3.D
Acq On : 7 Feb 2019 9:47
Operator : BTT
Sample : Plant material
Methanol : Methanol
Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:18:32 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.965	TIC	52286556	1.00	mg/mL	-0.03
Target Compounds						
2) THC	3.260	TIC	4910024	0.20	mg/mL	100
3) CBD	2.658	TIC	97604316	2.24	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:18:32 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-4.D
Acq On : 7 Feb 2019 10:02
Operator : BTT
Sample : Plant material
Solvent : Methanol
Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:18:49 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.955	TIC	47175982	1.00	mg/mL	-0.04
Target Compounds						
2) THC	3.253	TIC	4400647	0.20	mg/mL	100
3) CBD	2.646	TIC	91975748	2.34	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:18:49 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-5.D
Acq On : 7 Feb 2019 10:18
Operator : BTT
Sample : Plant material
Solvent : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:19:06 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.966	TIC	30780559	1.00	mg/mL	-0.03
Target Compounds						
2) THC	3.259	TIC	1516702	0.12	mg/mL	100
3) CBD	2.631	TIC	47770336	1.87	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:19:06 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-6.D
Acq On : 7 Feb 2019 10:33
Operator : BTT
Sample : Plant material
Methanol : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:19:20 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.975	TIC	42155714	1.00	mg/mL	-0.02
Target Compounds						
2) THC	3.270	TIC	4334647	0.21	mg/mL	100
3) CBD	2.669	TIC	88208790	2.51	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:19:20 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-7.D
Acq On : 7 Feb 2019 10:49
Operator : BTT
Sample : Plant material
Methanol : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:19:35 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.975	TIC	42624419	1.00	mg/mL	-0.02
Target Compounds						
2) THC	3.272	TIC	4423328	0.21	mg/mL	100
3) CBD	2.670	TIC	89060292	2.50	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:19:36 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-8.D
Acq On : 7 Feb 2019 11:04
Operator : BTT
Sample : Plant material
Solvent : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:20:00 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.968	TIC	36869356	1.00	mg/mL	-0.03
Target Compounds						
2) THC	3.264	TIC	3586018	0.20	mg/mL	100
3) CBD	2.661	TIC	79730481	2.59	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:20:00 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-9.D
Acq On : 7 Feb 2019 11:20
Operator : BTT
Sample : Plant material
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:20:22 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.970	TIC	38479116	1.00	mg/mL	-0.03
Target Compounds						
2) THC	3.266	TIC	3766005	0.20	mg/mL	100
3) CBD	2.665	TIC	82544504	2.57	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:20:22 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-10.D
Acq On : 7 Feb 2019 11:36
Operator : BTT
Sample : Plant material
Solvent : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:20:38 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.971	TIC	39959148	1.00	mg/mL	-0.03
Target Compounds						
2) THC	3.268	TIC	4046203	0.21	mg/mL	100
3) CBD	2.664	TIC	85786982	2.57	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:20:39 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-11.D
Acq On : 7 Feb 2019 11:51
Operator : BTT
Sample : Plant material
Solvent : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:20:59 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.972	TIC	39796027	1.00	mg/mL	-0.03
Target Compounds						
2) THC	3.268	TIC	4123034	0.21	mg/mL	100
3) CBD	2.664	TIC	85790050	2.58	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:20:59 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-12.D
Acq On : 7 Feb 2019 12:07
Operator : BTT
Sample : Plant material
Solvent : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:21:12 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.978	TIC	45330428	1.00	mg/mL	-0.02
Target Compounds						
2) THC	3.273	TIC	4718108	0.21	mg/mL	100
3) CBD	2.674	TIC	92782101	2.45	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:21:12 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-13.D
Acq On : 7 Feb 2019 12:22
Operator : BTT
Sample : Plant material
Solvent : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:21:27 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.972	TIC	39436440	1.00	mg/mL	-0.03
Target Compounds						
2) THC	3.268	TIC	4090578	0.21	mg/mL	100
3) CBD	2.664	TIC	85901032	2.61	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:21:27 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-14.D
Acq On : 7 Feb 2019 12:38
Operator : BTT
Sample : Plant material
Solvent : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:21:47 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.970	TIC	38726896	1.00	mg/mL	-0.03
Target Compounds						
2) THC	3.268	TIC	3957372	0.21	mg/mL	100
3) CBD	2.661	TIC	84726750	2.62	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:21:47 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-15.D
Acq On : 7 Feb 2019 12:53
Operator : BTT
Sample : Plant material
Solvent : Methanol
Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:22:01 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.976	TIC	44485684	1.00	mg/mL	-0.02
Target Compounds						
2) THC	3.273	TIC	4710935	0.22	mg/mL	100
3) CBD	2.673	TIC	92686624	2.50	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:22:02 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-16.D
Acq On : 7 Feb 2019 13:09
Operator : BTT
Sample : Plant material
Meth : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:22:14 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.974	TIC	40042932	1.00	mg/mL	-0.02
Target Compounds						
2) THC	3.270	TIC	4190983	0.22	mg/mL	100
3) CBD	2.665	TIC	87101886	2.60	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:22:14 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-17.D
Acq On : 7 Feb 2019 13:24
Operator : BTT
Sample : Plant material
Solvent : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:22:27 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.975	TIC	42897386	1.00	mg/mL	-0.02
Target Compounds						
2) THC	3.271	TIC	4471317	0.22	mg/mL	100
3) CBD	2.668	TIC	90586167	2.53	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:22:27 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-18.D
Acq On : 7 Feb 2019 13:40
Operator : BTT
Sample : Plant material
Solvent : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:22:44 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.966	TIC	34268333	1.00	mg/mL	-0.03
Target Compounds						Qvalue
2) THC	3.264	TIC	3375148	0.21	mg/mL	100
3) CBD	2.659	TIC	76311161	2.67	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:22:44 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-19.D
Acq On : 7 Feb 2019 13:55
Operator : BTT
Sample : Plant material
Solvent : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:22:57 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.971	TIC	42383817	1.00	mg/mL	-0.03
Target Compounds						
2) THC	3.268	TIC	4226581	0.21	mg/mL	100
3) CBD	2.663	TIC	88407734	2.50	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:22:57 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-20.D
Acq On : 7 Feb 2019 14:11
Operator : BTT
Sample : Plant material
Solvent : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:23:11 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.972	TIC	41811276	1.00	mg/mL	-0.03
Target Compounds						
2) THC	3.269	TIC	4430971	0.22	mg/mL	100
3) CBD	2.665	TIC	89431409	2.56	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:23:11 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-21.D
Acq On : 7 Feb 2019 14:27
Operator : BTT
Sample : Plant material
Solvent : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:23:26 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.976	TIC	44696140	1.00	mg/mL	-0.02
Target Compounds						
2) THC	3.272	TIC	4774897	0.22	mg/mL	100
3) CBD	2.671	TIC	93359640	2.50	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:23:26 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-22.D
Acq On : 7 Feb 2019 14:42
Operator : BTT
Sample : Plant material
I : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:23:42 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.976	TIC	45079421	1.00	mg/mL	-0.02
Target Compounds						
2) THC	3.272	TIC	4781193	0.22	mg/mL	100
3) CBD	2.670	TIC	93231910	2.48	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:23:42 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-23.D
Acq On : 7 Feb 2019 14:58
Operator : BTT
Sample : Plant material
 : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:23:57 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.970	TIC	36873707	1.00	mg/mL	-0.03
Target Compounds						
2) THC	3.267	TIC	3823863	0.21	mg/mL	100
3) CBD	2.664	TIC	81602050	2.65	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:23:57 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-24.D
Acq On : 7 Feb 2019 15:13
Operator : BTT
Sample : Plant material
Solvent : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:24:11 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.979	TIC	48498184	1.00	mg/mL	-0.02
Target Compounds						
2) THC	3.275	TIC	5039414	0.21	mg/mL	100
3) CBD	2.675	TIC	96382075	2.38	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:24:12 2019

Data Path : C:\msdchem\1\DATA\2019\BTT\2-7-19\
Data File : C1818268-25.D
Acq On : 7 Feb 2019 15:29
Operator : BTT
Sample : Plant material
 : Methanol
ALS Vial : 60 Sample Multiplier: 1

Quant Time: Feb 08 09:24:26 2019
Quant Method : C:\msdchem\1\METHODS\THC Quant.M
Quant Title : BT THC Quant
QLast Update : Mon Feb 04 13:06:48 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Tribenzylamine	1.971	TIC	39125470	1.00	mg/mL	-0.03
Target Compounds						Qvalue
2) THC	3.268	TIC	4132694	0.22	mg/mL	100
3) CBD	2.668	TIC	85208142	2.61	mg/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

THC Quant.M Fri Feb 08 09:24:26 2019

Data Collected on Gumbo 2/8/2019

	Measured Concentrations				Percent Difference			
	50 ug/mL	100 ug/mL	150 ug/mL	200 ug/mL	50 ug/mL	100 ug/mL	150 ug/mL	200 ug/mL
A	54.52	90.8	143.08	205.17	9.04	9.20	4.61	2.58
B	53.74	95.78	143.13	211.13	7.48	4.22	4.58	5.57
C	53.69	94.63	139.29	200.35	7.38	5.37	7.14	0.17
D	52.53	93.88	141.99	200.92	5.06	6.12	5.34	0.46
E	53.48	91.8	141.28	211.63	6.96	8.20	5.81	5.82
Calibrators	55.03	94.32	146.28	204.38	10.06	5.68	2.48	2.19

Average 53.83166667 93.535 142.5083333 205.5966667
 Standard Deviation 0.866750637 1.868943552 2.326967268 4.859628244
 3 x Standard Deviation 2.600251911 5.606830656 6.980901804 14.57888473

Data Collected on Heisenburg 2/11/19

A (Calibrators)	Measured Concentrations				Percent Difference			
	50 ug/mL	100 ug/mL	150 ug/mL	200 ug/mL	50 ug/mL	100 ug/mL	150 ug/mL	200 ug/mL
	51.95	95.46	153.22	199.36	3.90	4.54	2.15	0.32
B	34.49	84.79	128.15	205.62	31.02	15.21	14.57	2.81
C	44.38	90.29	135.97	192.95	11.24	9.71	9.35	3.53
D	36.24	85.4	147.02	207.95	27.52	14.60	1.99	3.97
E	37.26	94.26	131.35	215.14	25.48	5.74	12.43	7.57
F	36.66	95.41	134.07	211.58	26.68	4.59	10.62	5.79

Average 40.16333333 90.935 138.2966667 205.4333333
 Standard Deviation 6.708021069 4.906529323 9.729250057 8.137423835
 3 x Standard Deviation 20.12406321 14.71958797 29.18775017 24.4122715

Data Collected on Heisenburg 2/12/19

A (Calibrators)	Measured Concentrations				Percent Difference			
	50 ug/mL	100 ug/mL	150 ug/mL	200 ug/mL	50 ug/mL	100 ug/mL	150 ug/mL	200 ug/mL
	55.92	95.42	142.91	206.25	11.84	4.58	4.73	3.13
B	39.73	87.9	141.41	200.71	20.54	12.10	5.73	0.36
C	46.76	93.59	139.35	208.51	6.48	6.41	7.10	4.26
D	50.72	93.75	142.09	206.84	1.44	6.25	5.27	3.42
E	49.26	86.96	146.03	201.51	1.48	13.04	2.65	0.75
F	51.99	95.05	139.62	202.01	3.98	4.95	6.92	1.01

Average 49.06333333 92.11166667 141.9016667 204.305
 Standard Deviation 5.491428472 3.707459597 2.451696691 3.283118944
 3 x Standard Deviation 16.47428542 11.12237879 7.355090074 9.849356832