

Effects of Lignin-Diverted Reductant with Polyphenol Oxidases on Cellulose Degradation by Wild and Mutant Types of Lytic Polysaccharide Monooxygenase

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Table S1 Summary of pH-temperature optima, parameter estimates and model evaluation of respond surface methods (RSM) calculated by a quadratic regression model by two-factors and three-levels of central composite design (CCD). The quadratic equation of the models is $\text{absorbance} = \text{intercept} + \beta_1 T + \beta_2 T^2 + \beta_3 \text{pH} + \beta_4 \text{pH}^2 + \text{pH} \cdot T$, and the parameters of equation (β -values) are shown above. The model evaluation of R^2 exhibits the correlation between fitting model and results. The p -value is used for representing the lack of fit, where $p < 0.05$ means a significant lack of fit. The *italic* value represents an insignificant ($p > 0.05$) factor within the model.

Name	pH	Temperature (°C)	Parameter Estimates						Evaluation	
			Intercept	T	T ²	pH	pH ²	pH*T	R ²	Lack of Fit
Laccase	5.19	54	0.005907	0.0010681	-0.001164	0.0003911	-0.001272	0.0007818	0.9505	<0.0001
Tyrosinase	7.01	35	0.1014321	0.009775	-0.014264	<i>-0.000575</i>	-0.022564	<i>0.0027875</i>	0.863	0.0325

Table S2 Summary of experimental design matrix featuring coded variables (pH and temperature), independent variables (pH and temperature) and responses (laccase and tyrosinase activities) in relation to RSM.

Run Order	Coded Variables		Independent Variables		Laccase Activity (Δ Abs/min)		Independent Variables		Tyrosinase Activity (Δ Abs)	
	pH	Temperature	pH	Temperature ($^{\circ}$ C)	Experimental	Predicted	pH	Temperature ($^{\circ}$ C)	Experimental	Predicted
1	-1	-1	3.2	30	0.002945	0.002794	5.5	15	0.0495	0.0582
2	-1	-1	3.2	30	0.003115	0.002794	5.5	15	0.0560	0.0582
3	0	-1	4.7	30	0.003466	0.003675	7.0	15	0.0781	0.0774
4	0	-1	4.7	30	0.003463	0.003675	7.0	15	0.0909	0.0774
5	1	-1	6.2	30	0.002003	0.002012	8.5	15	0.0482	0.0515
6	1	-1	6.2	30	0.001969	0.002012	8.5	15	0.0515	0.0515
7	-1	0	3.2	45	0.003664	0.004244	5.5	30	0.0751	0.0795
8	-1	0	3.2	45	0.003705	0.004244	5.5	30	0.0907	0.0795
9	0	0	4.7	45	0.006147	0.005907	7.0	30	0.0964	0.1015
10	0	0	4.7	45	0.005908	0.005907	7.0	30	0.0967	0.1015
11	0	0	4.7	45	0.006314	0.005907	7.0	30	0.1068	0.1015
12	0	0	4.7	45	0.006445	0.005907	7.0	30	0.1077	0.1015
13	1	0	6.2	45	0.004989	0.005026	8.5	30	0.0717	0.0783
14	1	0	6.2	45	0.004994	0.005026	8.5	30	0.0763	0.0783
15	-1	1	3.2	60	0.003740	0.003366	5.5	45	0.0710	0.0722
16	-1	1	3.2	60	0.003638	0.003366	5.5	45	0.0775	0.0722
17	0	1	4.7	60	0.005491	0.005811	7.0	45	0.0879	0.0970
18	0	1	4.7	60	0.005365	0.005811	7.0	45	0.0900	0.0970
19	1	1	6.2	60	0.005619	0.005712	8.5	45	0.0818	0.0766
20	1	1	6.2	60	0.005926	0.005712	8.5	45	0.0833	0.0766

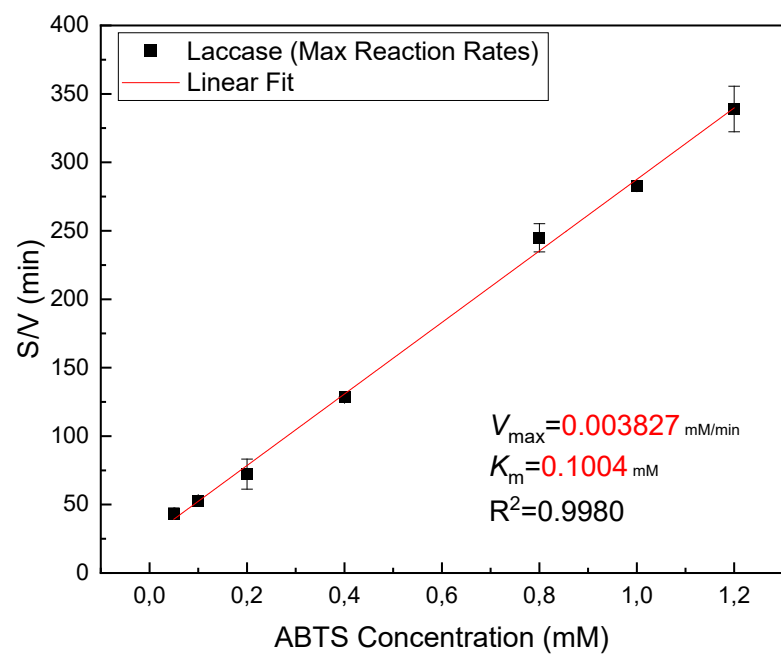
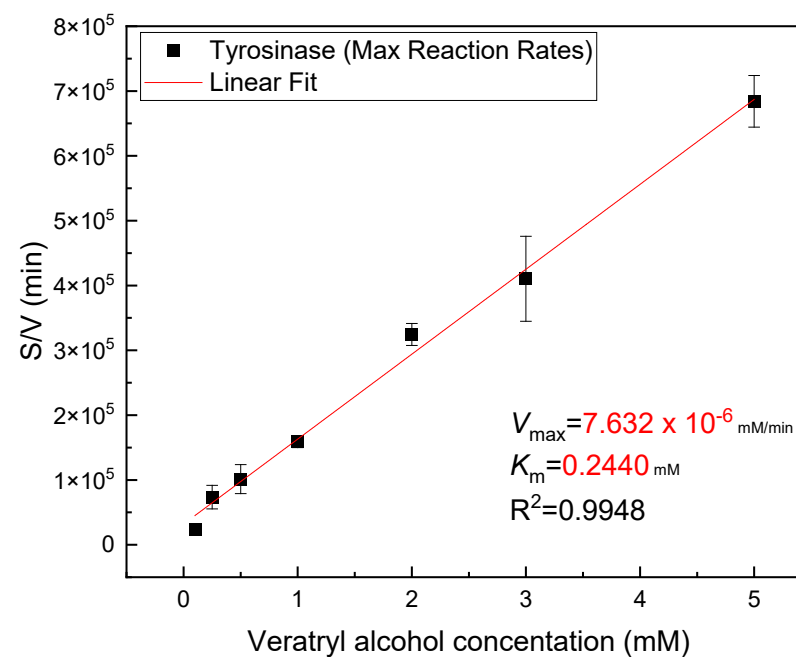
a**b**

Figure S1 Kinetic parameters (K_m and V_{\max}) of (a) laccase and (b) tyrosinase. The linear integrate of Hanes-Woolf plot is used for the calculation of kinetic constants.

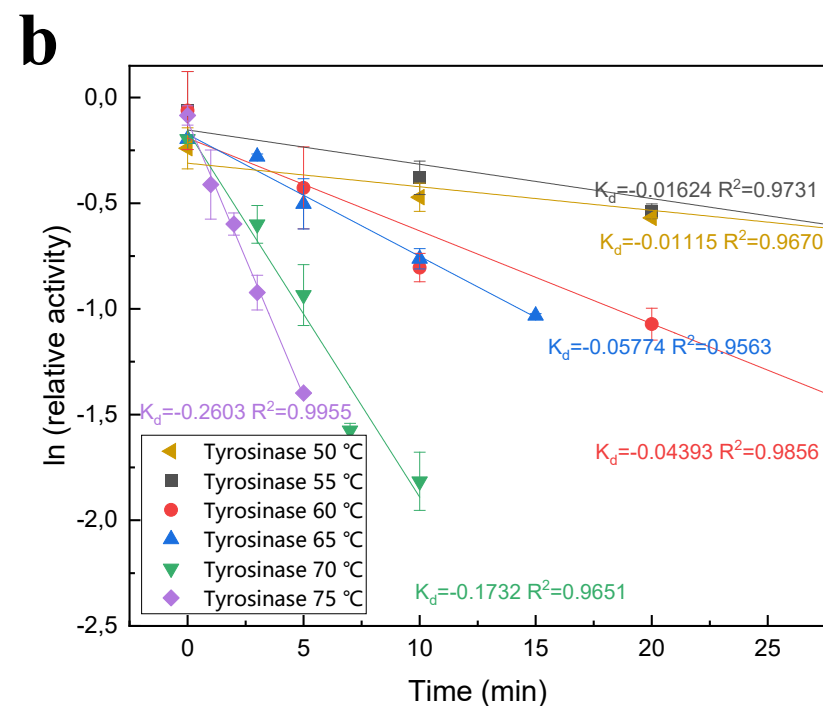
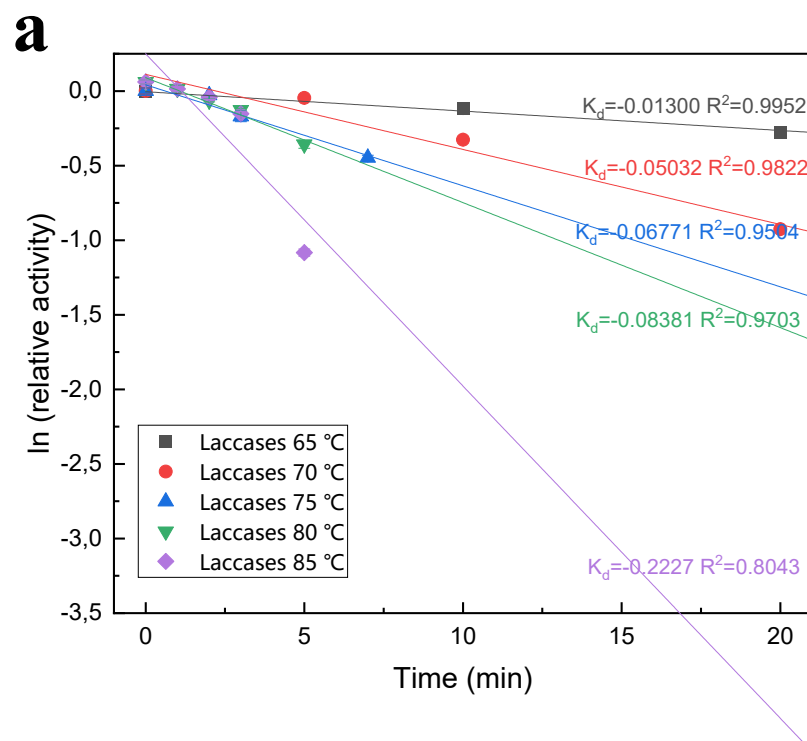


Figure S2 Thermal stabilities of (a) laccase and (b) tyrosinase. The values of K_d and $t_{1/2}$ are calculated by linear fit of plot, which draws using the \ln (relative activity) as the Y-axis and the time as the X-axis (minutes). The selection of enzymatic reaction time is based on the experiment results in different temperatures.

Figure S3. Supplementary figures for LC-MS analysis of products of organosolv lignin after polyphenol oxidases treatment (small lignin-derived phenolic compounds): (a) LK-1 R: reference without polyphenol oxidases, (b) LK-2: the product of organosolv lignin by laccase treatment and (c) LK-3: the product of organosolv lignin by tyrosinase treatment. All the documents for the results of LC-MS analysis are attached.

Openlynx Report -

Sample: 642
File:LK-1 R
Description:Default file

Vial:1:B,3
Date:03-Aug-2023

ID:
Time:12:27:58

Page 1

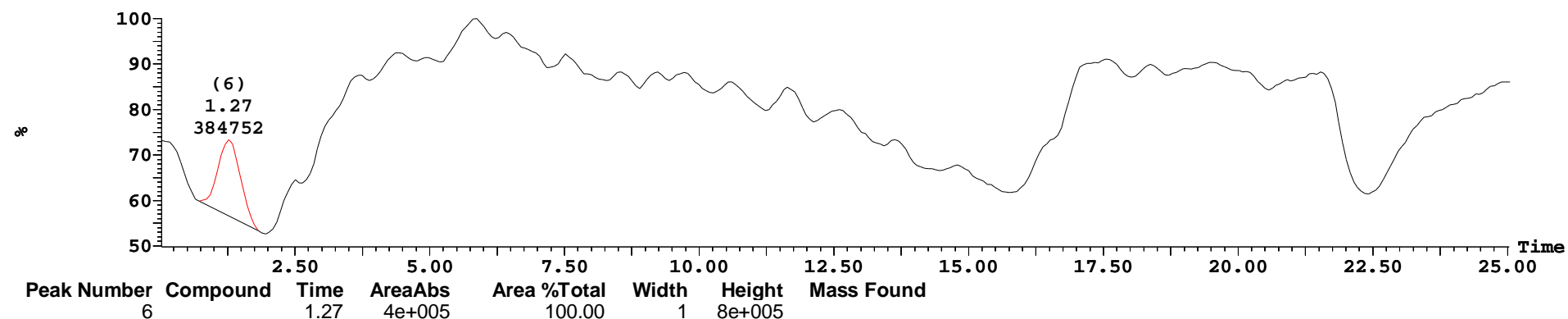
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Sample Report:

Sample 642 Vial 1:B,3 ID File LK-1 R Date 03-Aug-2023 Time 12:27:58 Description Default file

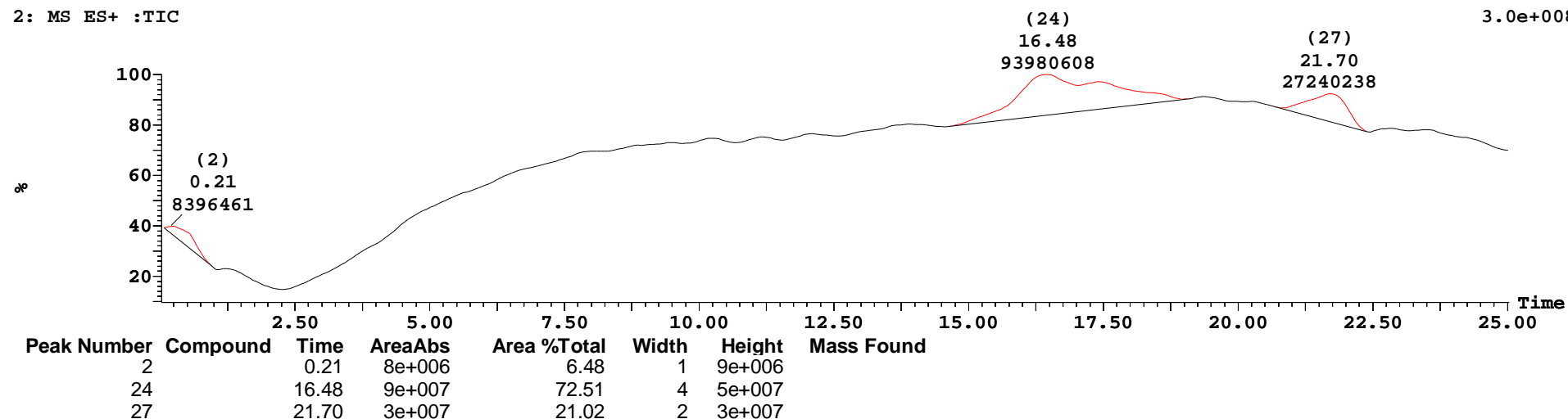
1: MS ES- :TIC

4.7e+006



2: MS ES+ :TIC

3.0e+008



Openlynx Report -

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Description: Default file

Vial: 1:B,3
Date: 03-Aug-2023

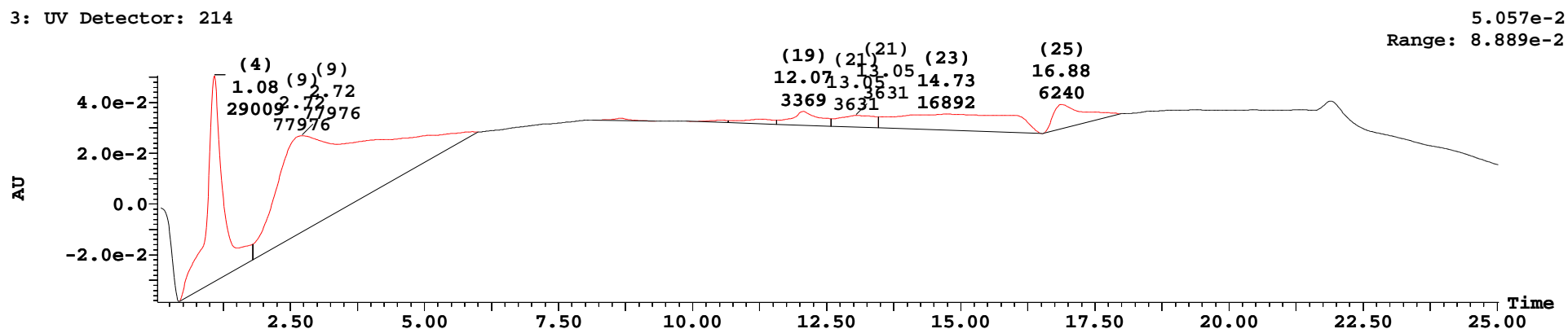
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Time: 12:27:58

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Printed: Thu Aug 03 15:04:15 2023

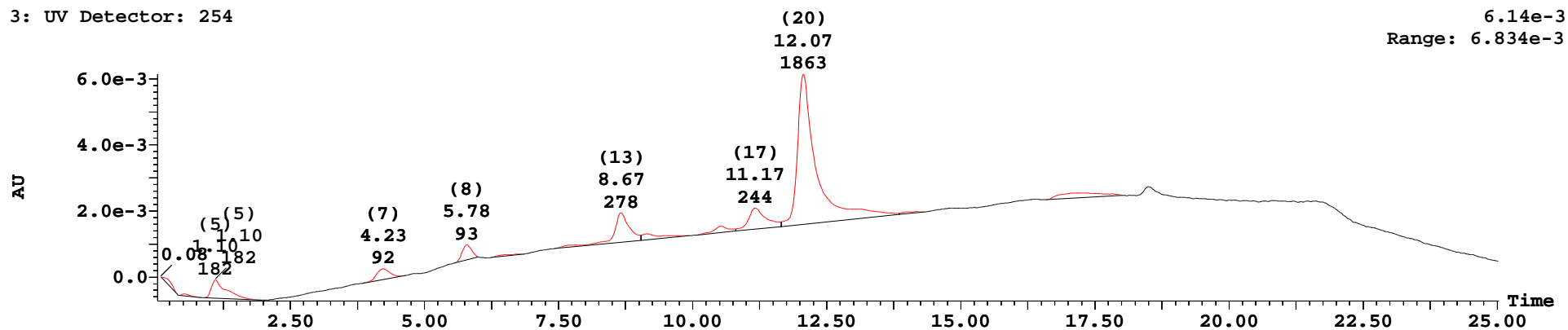
Sample Report (continued):

3: UV Detector: 214



Peak Number	Compound	Time	AreaAbs	Area %Total	Width	Height	Mass Found
4		1.08	3e+004	20.86	1	8e+004	
9		5.90	8e+004	56.06	4	1e+003	
12		8.65	4e+002	0.27	1	1e+003	
15		10.52	3e+002	0.25	1	9e+002	
18		11.27	1e+003	0.91	1	2e+003	
19		12.07	3e+003	2.42	1	5e+003	
21		13.05	4e+003	2.61	1	5e+003	
23		14.73	2e+004	12.14	3	6e+003	
25		16.88	6e+003	4.49	1	1e+004	

3: UV Detector: 254



Openlynx Report -

Sample: 642
File:LK-1 R
Description:Default file

Vial:1:B,3
Date:03-Aug-2023

ID:
Time:12:27:58

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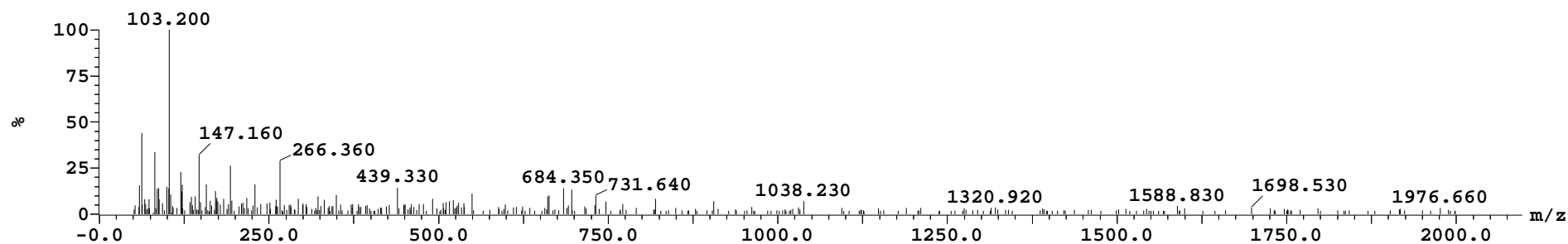
Printed: Thu Aug 03 15:04:15 2023

Sample Report (continued):

Peak Number	Compound	Time	AreaAbs	Area %Total	Width	Height	Mass Found
1		0.08	3e+001	0.94	0		
3		0.53	1e+001	0.35	0	6e+001	
5		1.10	2e+002	5.83	1	6e+002	
7		4.23	9e+001	2.96	1	3e+002	
8		5.78	9e+001	3.00	0	5e+002	
10		6.85	2e+001	0.49	1		
11		7.83	2e+001	0.71	1	5e+001	
13		8.67	3e+002	8.94	1	9e+002	
14		9.15	7e+001	2.26	1	2e+002	
16		10.53	6e+001	1.99	1	2e+002	
17		11.17	2e+002	7.84	1	6e+002	
20		12.07	2e+003	59.82	2	5e+003	
22		14.17	2e+001	0.57	0	4e+001	
26		17.28	1e+002	4.30	1	1e+002	

Peak ID	Compound	Time	Mass Found
1		0.08	

1: (Time: 0.08)

1:MS ES-
3.6e+004

Openlynx Report -

Sample: 642
File:LK-1 R
Description:Default file

Vial:1:B,3
Date:03-Aug-2023

ID:
Time:12:27:58

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Printed: Thu Aug 03 15:04:15 2023

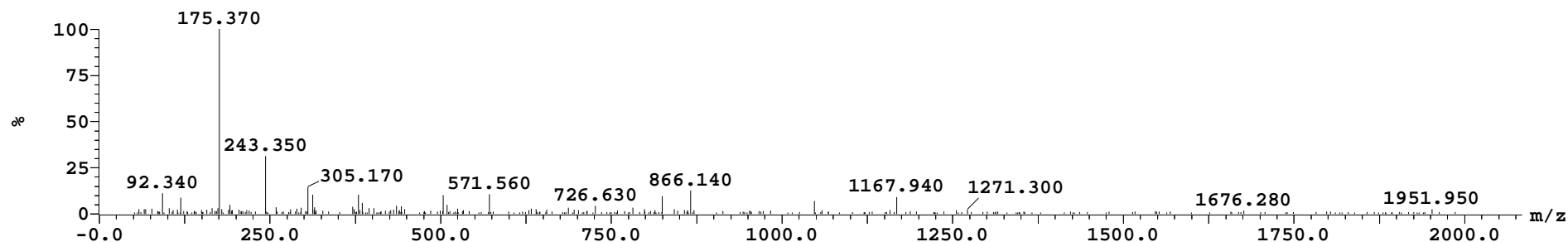
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
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3		0.53	
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3: (Time: 0.53)

1:MS ES-
9.7e+004

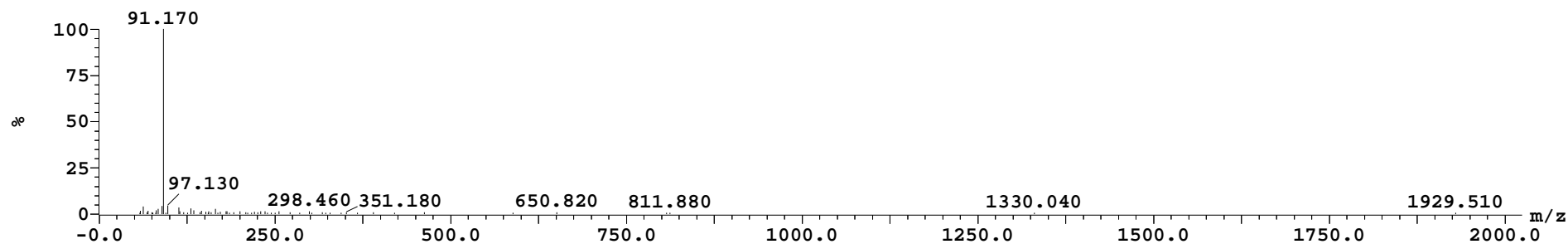


Peak ID	Compound	Time	Mass Found
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4		1.08	
---	--	------	--

4: (Time: 1.08)

1:MS ES-
3.7e+005



Openlynx Report -

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Sample: 642

Vial:1:B,3

ID:

File:LK-1 R

Date:03-Aug-2023

Time:12:27:58

Description:Default file

Printed: Thu Aug 03 15:04:15 2023

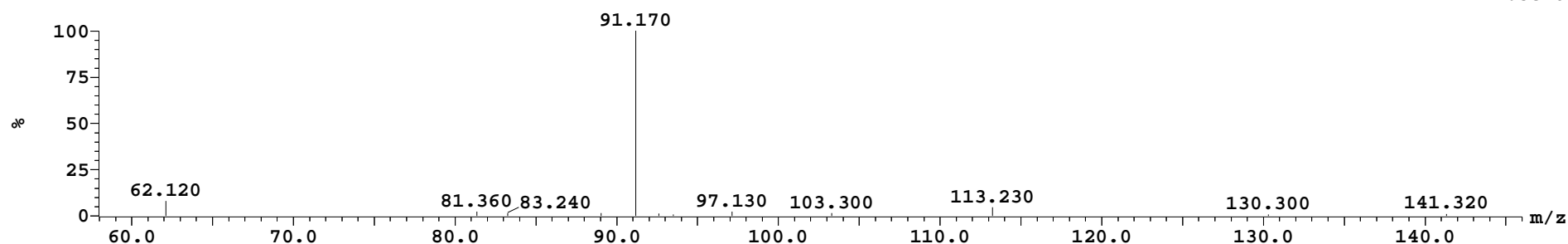
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
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5

1.10

5: (Time: 1.10)

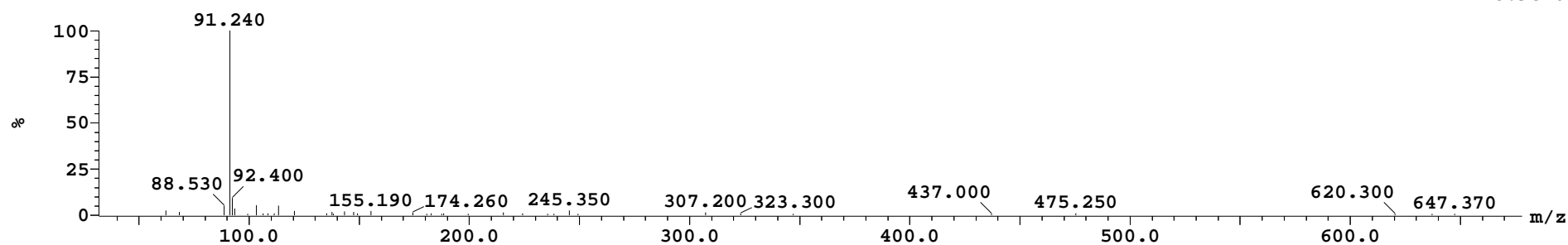
1:MS ES-
2.5e+006

Peak ID	Compound	Time	Mass Found
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6

1.27

6: (Time: 1.27)

1:MS ES-
3.9e+005

Openlynx Report -

Sample: 642
File:LK-1 R
Description:Default file

Vial:1:B,3
Date:03-Aug-2023

ID:
Time:12:27:58

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Printed: Thu Aug 03 15:04:15 2023

Sample Report (continued):

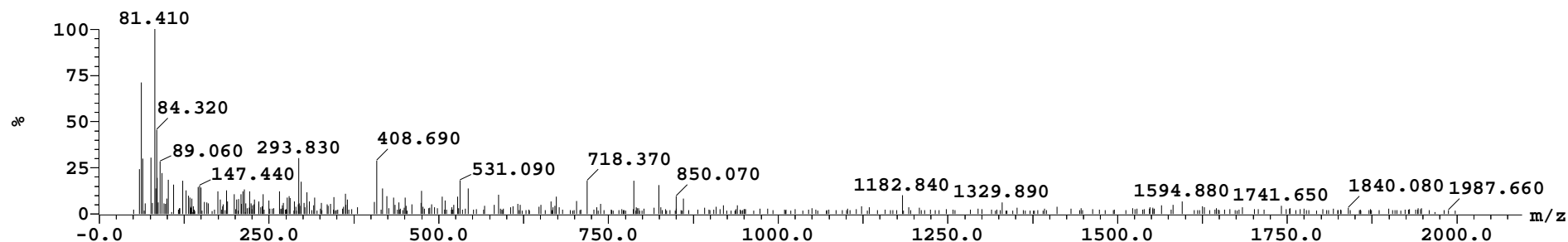
Peak ID	Compound	Time	Mass Found
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7

4.23

7: (Time: 4.23)

1:MS ES-
2.1e+004



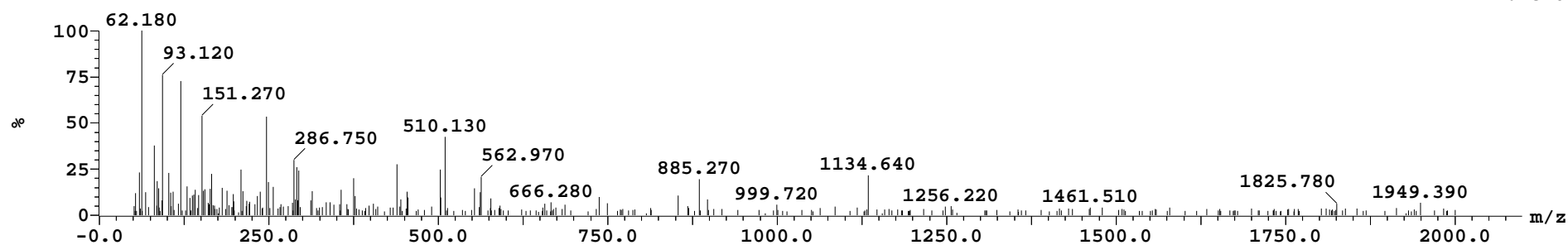
Peak ID	Compound	Time	Mass Found
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8

5.78

8: (Time: 5.78)

1:MS ES-
2.7e+004



Openlynx Report -

Sample: 642
File:LK-1 R
Description:Default file

Vial:1:B,3
Date:03-Aug-2023

ID:
Time:12:27:58

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Printed: Thu Aug 03 15:04:15 2023

Sample Report (continued):

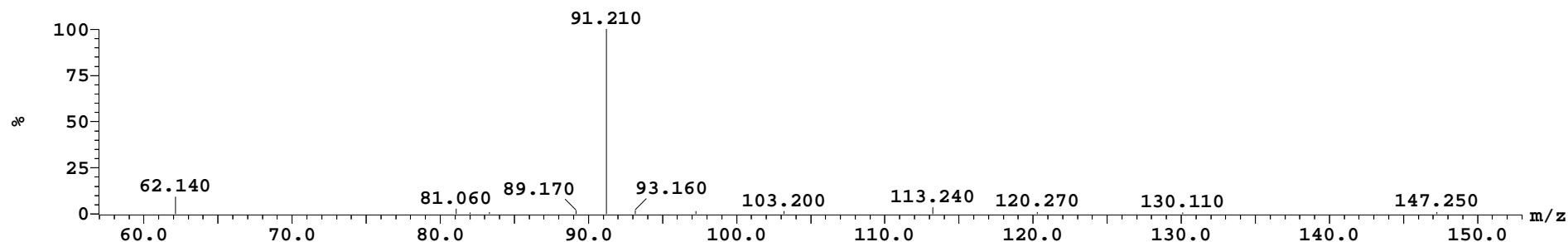
Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

9

5.90

9: (Time: 5.90)

1:MS ES-
3.3e+006



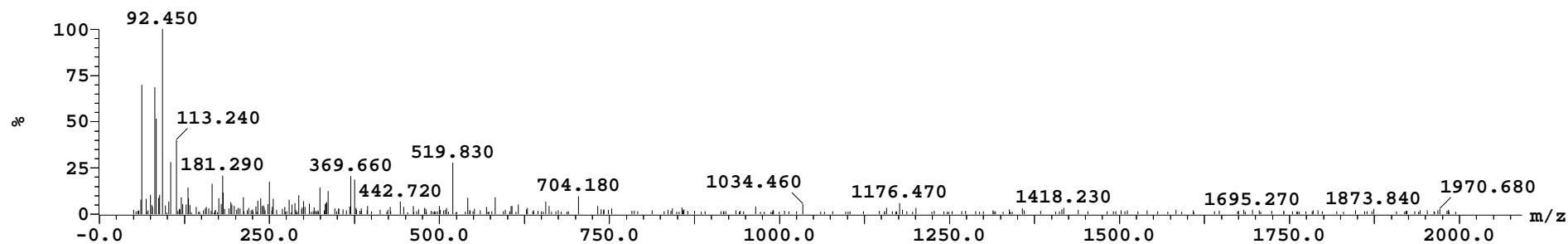
Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

10

6.85

10: (Time: 6.85)

1:MS ES-
4.9e+004



Openlynx Report -

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Sample: 642

Vial:1:B,3

ID:

File:LK-1 R

Date:03-Aug-2023

Time:12:27:58

Description:Default file

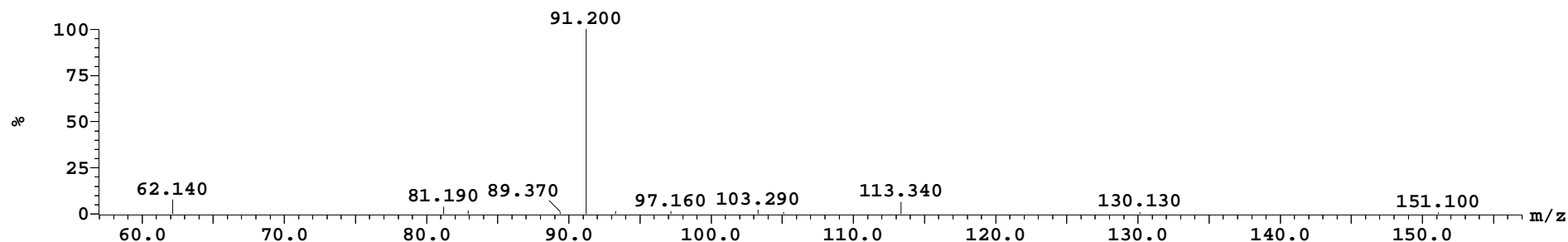
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Sample Report (continued):

Peak ID	Compound	Time	Mass Found
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11		7.83	
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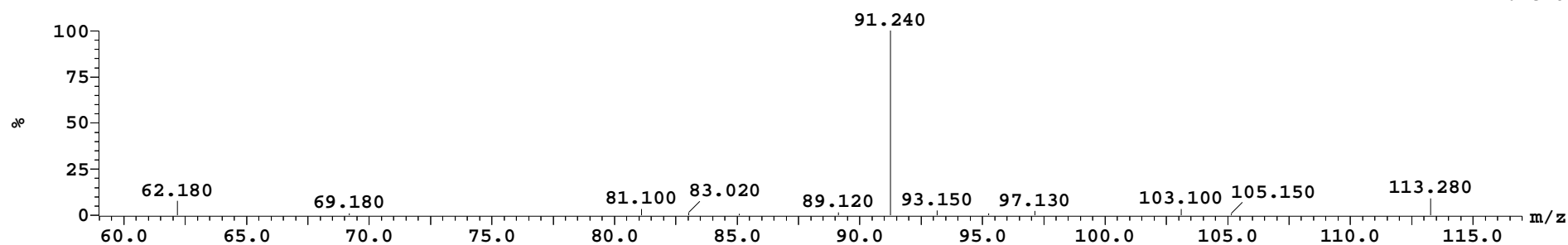
11: (Time: 7.83)

1:MS ES-
2.7e+006

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

12		8.65	
----	--	------	--

12: (Time: 8.65)

1:MS ES-
2.7e+006

Openlynx Report -

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Sample: 642

Vial:1:B,3

ID:

File:LK-1 R

Date:03-Aug-2023

Time:12:27:58

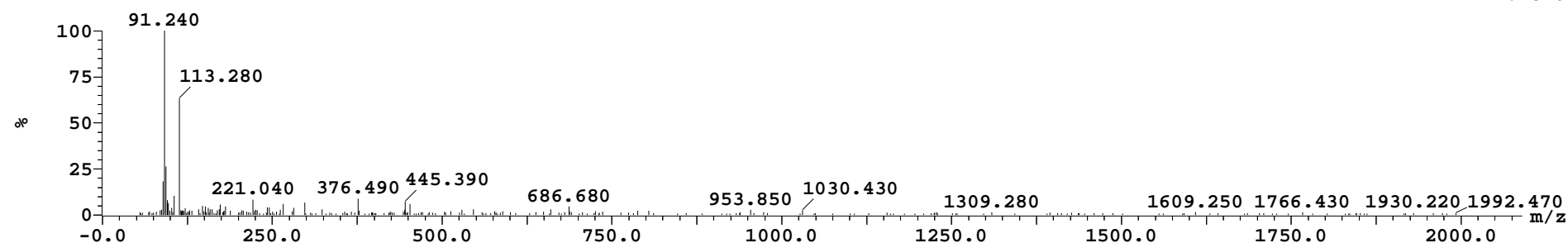
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Sample Report (continued):

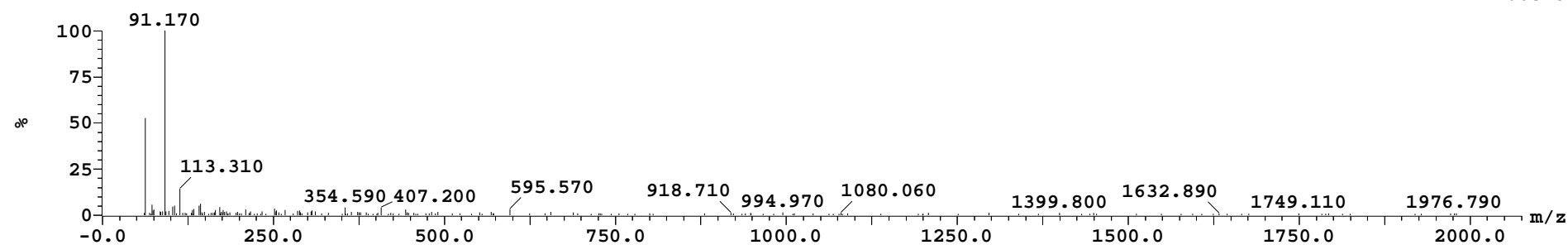
Peak ID	Compound	Time	Mass Found
13		8.67	

13: (Time: 8.67)

1:MS ES-
1.2e+005

Peak ID	Compound	Time	Mass Found
14		9.15	

14: (Time: 9.15)

1:MS ES-
1.6e+005

Openlynx Report -

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Sample: 642

Vial:1:B,3

ID:

File:LK-1 R

Date:03-Aug-2023

Time:12:27:58

Description:Default file

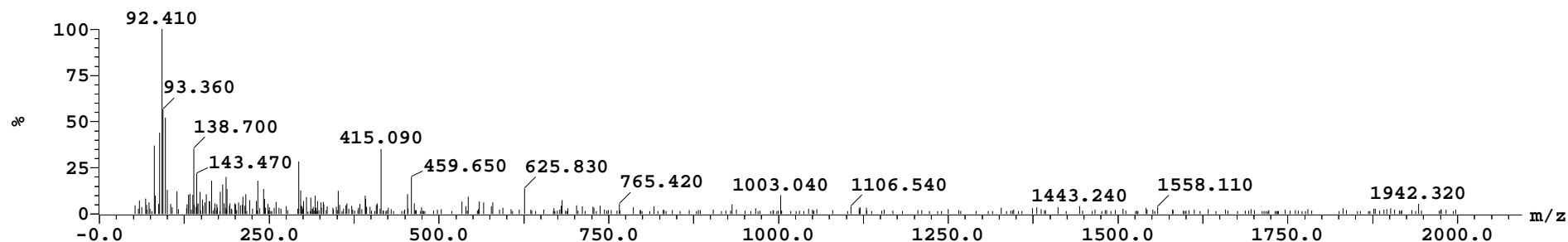
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Sample Report (continued):

Peak ID	Compound	Time	Mass Found
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15		10.52	
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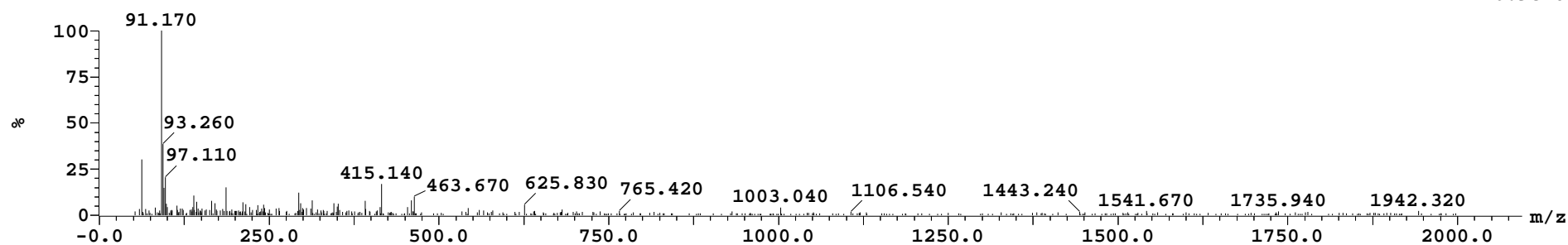
15: (Time: 10.52)

1:MS ES-
4.2e+004

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

16		10.53	
----	--	-------	--

16: (Time: 10.53)

1:MS ES-
6.9e+004

Openlynx Report -

Sample: 642
File:LK-1 R
Description:Default file

Vial:1:B,3
Date:03-Aug-2023

ID:
Time:12:27:58

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Printed: Thu Aug 03 15:04:15 2023

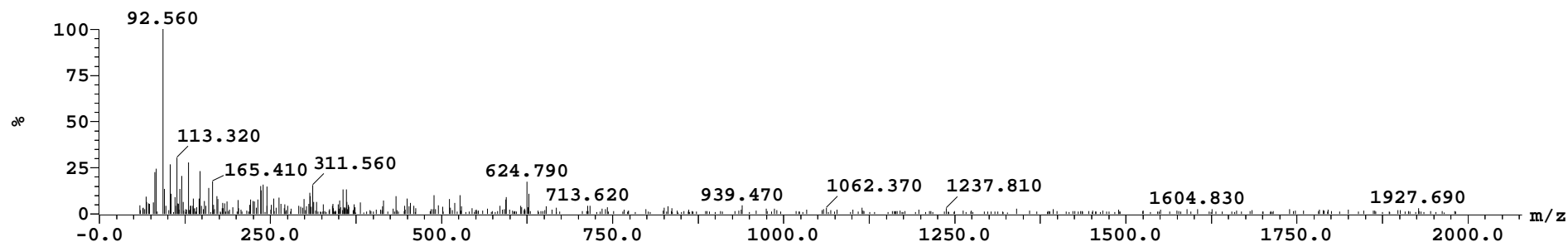
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

17		11.17	
----	--	-------	--

17: (Time: 11.17)

1:MS ES-
4.0e+004

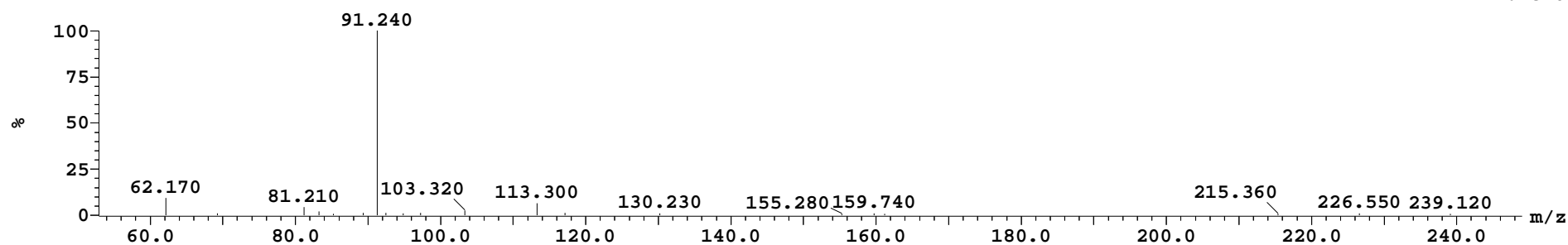


Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

18		11.27	
----	--	-------	--

18: (Time: 11.27)

1:MS ES-
2.1e+006



Openlynx Report -

Sample: 642
File:LK-1 R
Description:Default file

Vial:1:B,3
Date:03-Aug-2023

ID:
Time:12:27:58

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Printed: Thu Aug 03 15:04:15 2023

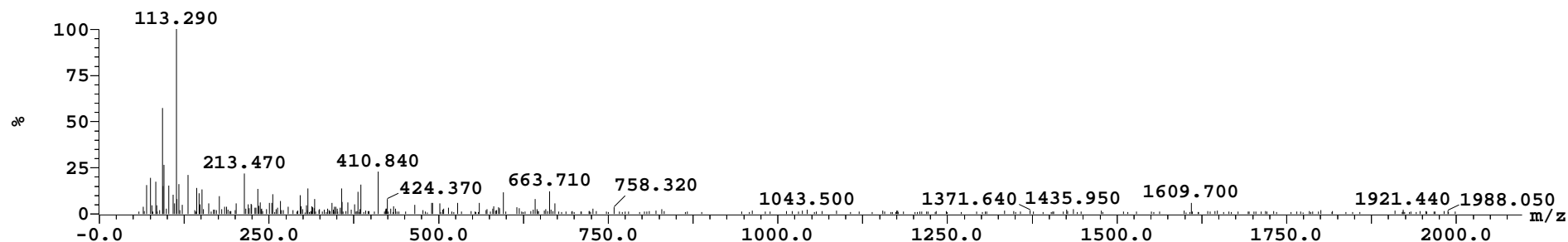
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

19		12.07	
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19:(Time: 12.07)

1:MS ES-
6.5e+004

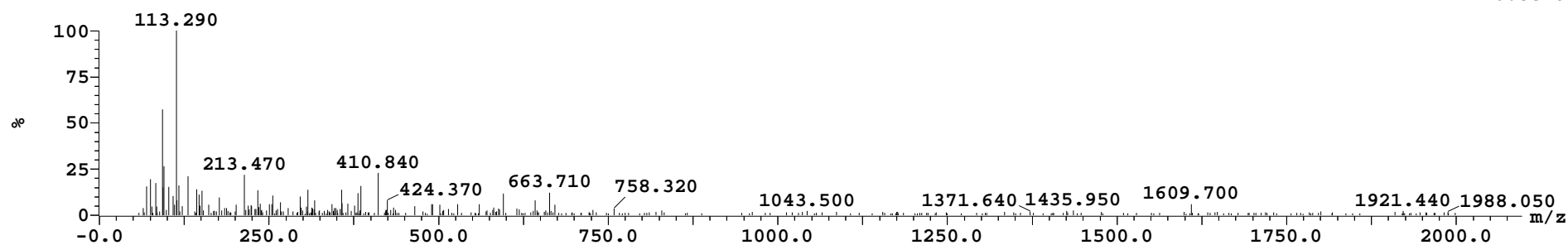


Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

20		12.07	
----	--	-------	--

20:(Time: 12.07)

1:MS ES-
6.5e+004



Openlynx Report -

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Sample: 642

Vial:1:B,3

ID:

File:LK-1 R

Date:03-Aug-2023

Time:12:27:58

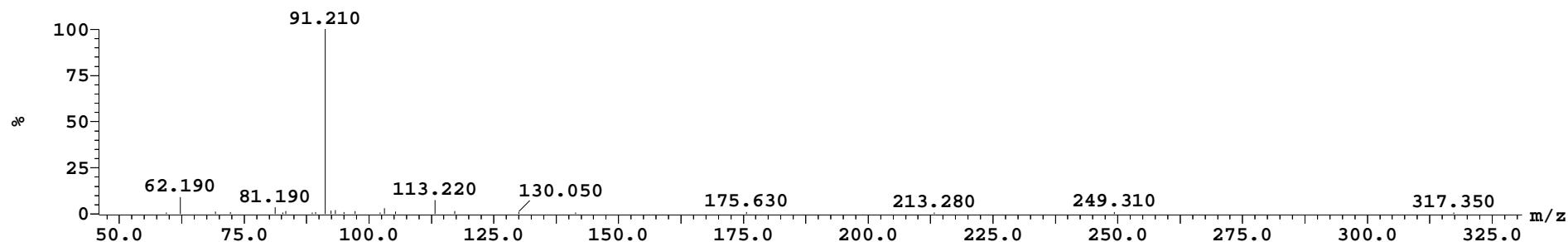
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Sample Report (continued):

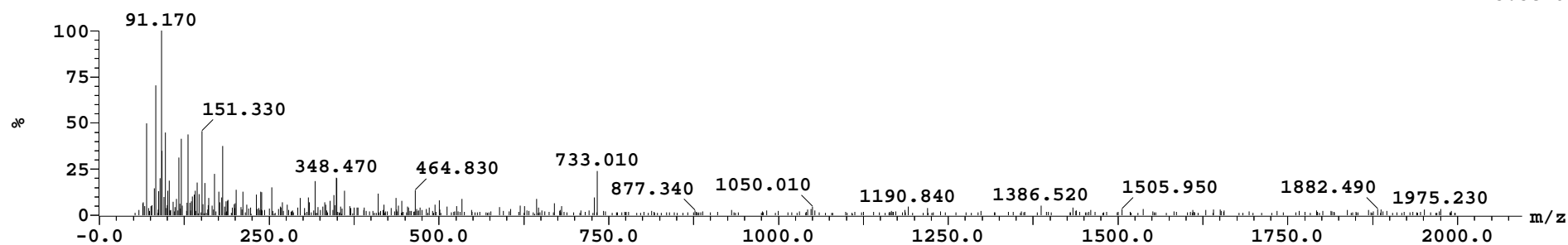
Peak ID	Compound	Time	Mass Found
21		13.05	

21: (Time: 13.05)

1:MS ES-
2.0e+006

Peak ID	Compound	Time	Mass Found
22		14.17	

22: (Time: 14.17)

1:MS ES-
3.3e+004

Openlynx Report -

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Sample: 642

Vial:1:B,3

ID:

File:LK-1 R

Date:03-Aug-2023

Time:12:27:58

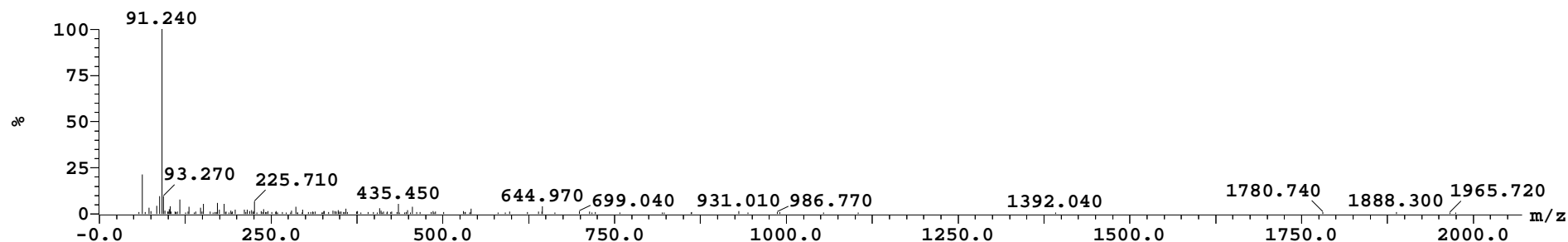
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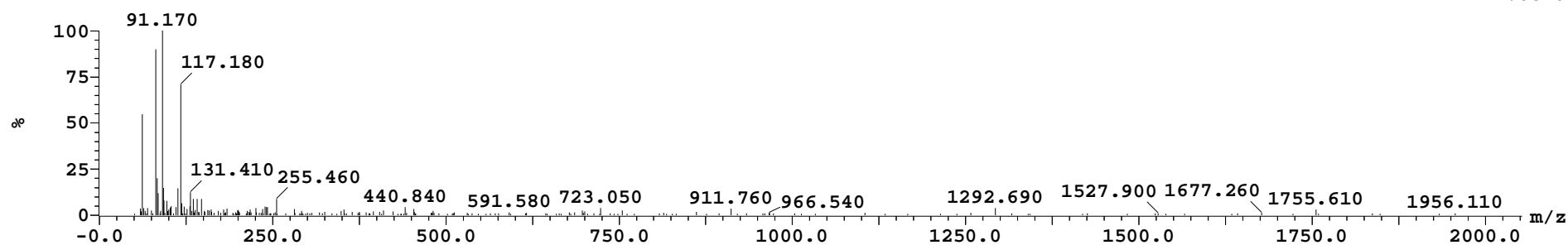
Peak ID	Compound	Time	Mass Found
23		14.73	

23:(Time: 14.73)

1:MS ES-
2.0e+005

Peak ID	Compound	Time	Mass Found
25		16.88	

25:(Time: 16.88)

1:MS ES-
2.0e+005

Openlynx Report -

Sample: 642
File:LK-1 R
Description:Default file

Vial:1:B,3
Date:03-Aug-2023

ID:
Time:12:27:58

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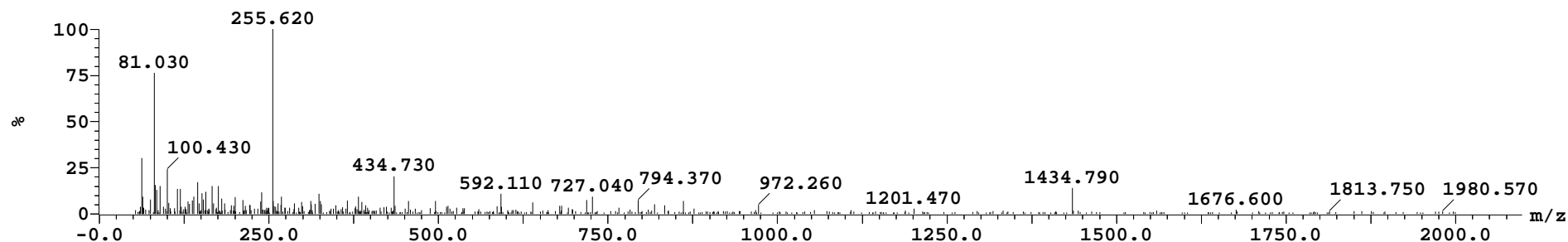
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Sample Report (continued):

Peak ID	Compound	Time	Mass Found
26		17.28	

26: (Time: 17.28)

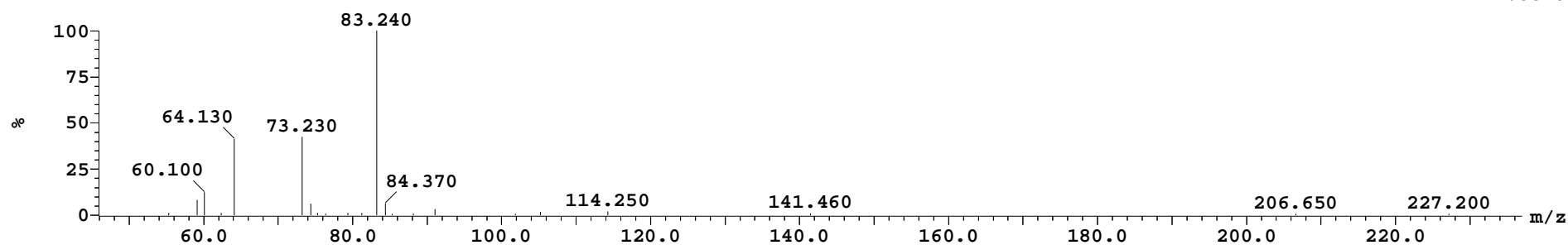
1:MS ES-
6.5e+004



Peak ID	Compound	Time	Mass Found
1		0.08	

1: (Time: 0.08)

2:MS ES+
1.3e+007



Openlynx Report -

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Sample: 642

Vial:1:B,3

ID:

File:LK-1 R

Date:03-Aug-2023

Time:12:27:58

Description:Default file

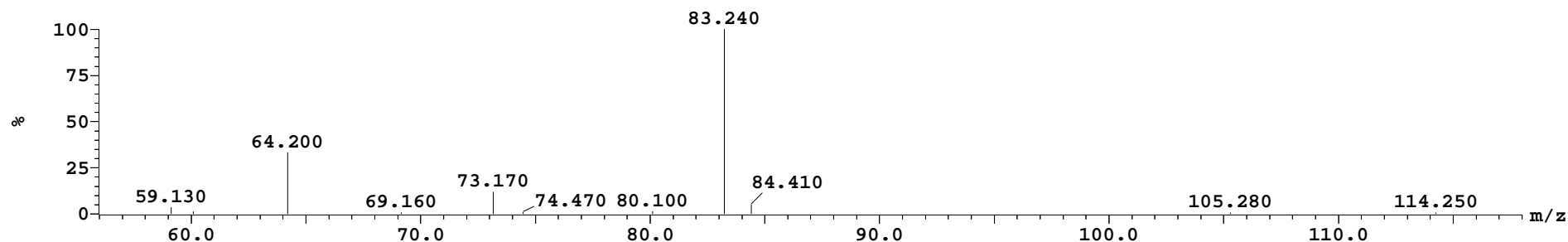
Printed: Thu Aug 03 15:04:15 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

2		0.21	
---	--	------	--

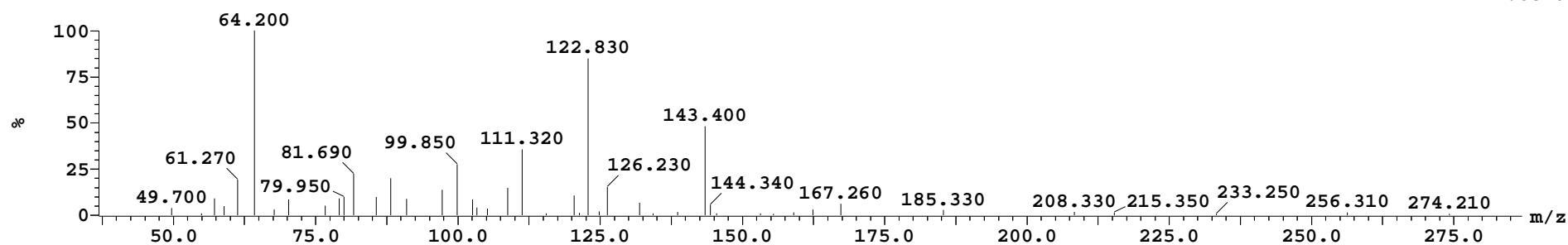
2: (Time: 0.21)

2:MS ES+
1.9e+007

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

3		0.53	
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3: (Time: 0.53)

2:MS ES+
1.8e+007

Openlynx Report -

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Sample: 642

Vial:1:B,3

ID:

File:LK-1 R

Date:03-Aug-2023

Time:12:27:58

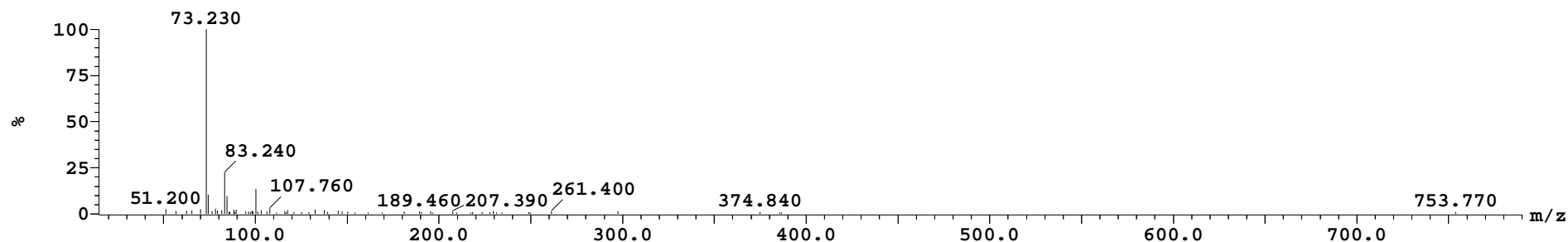
Description:Default file

Printed: Thu Aug 03 15:04:15 2023

Sample Report (continued):

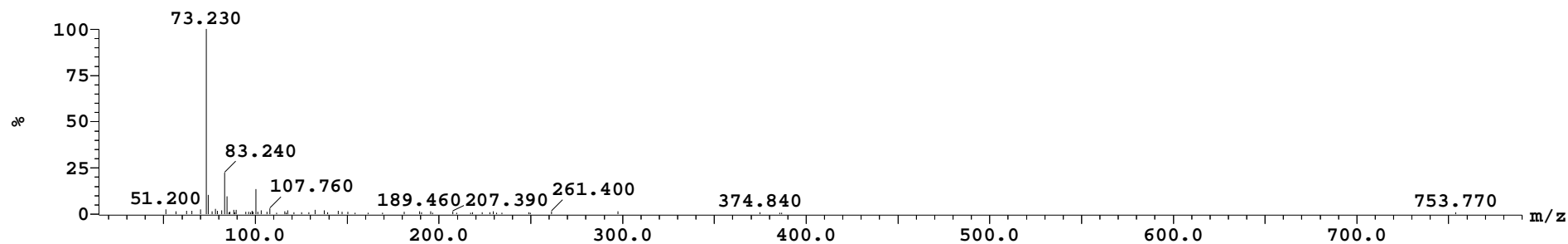
Peak ID	Compound	Time	Mass Found
4		1.08	

4: (Time: 1.08)

2:MS ES+
3.0e+006

Peak ID	Compound	Time	Mass Found
5		1.10	

5: (Time: 1.10)

2:MS ES+
3.0e+006

Openlynx Report -

Sample: 642
File: LK-1 R
Description: Default file

Vial: 1:B,3
Date: 03-Aug-2023

ID:
Time: 12:27:58

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Printed: Thu Aug 03 15:04:15 2023

Sample Report (continued):

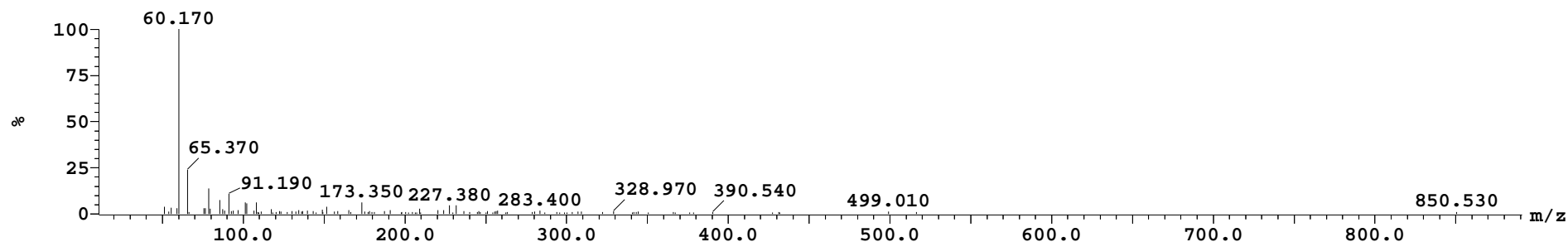
Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

7

4.23

7: (Time: 4.23)

2:MS ES+
1.5e+006



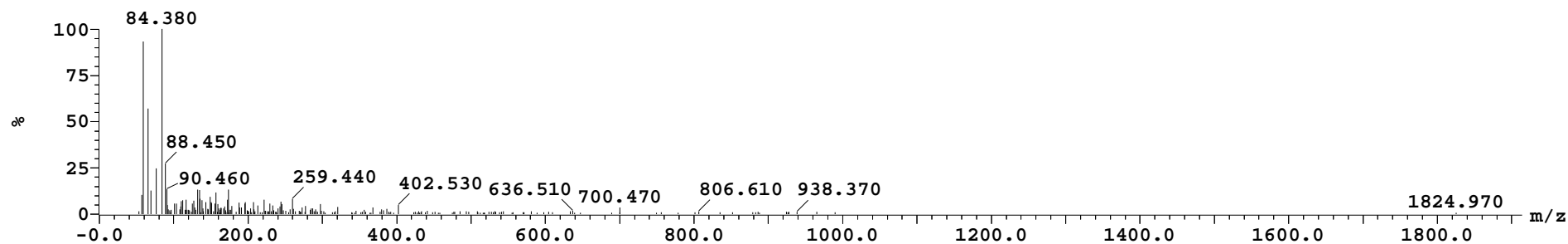
Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

8

5.78

8: (Time: 5.78)

2:MS ES+
5.5e+005



Openlynx Report -

Sample: 642
File: LK-1 R
Description: Default file

Vial: 1:B,3
Date: 03-Aug-2023

ID:
Time: 12:27:58

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Sample Report (continued):

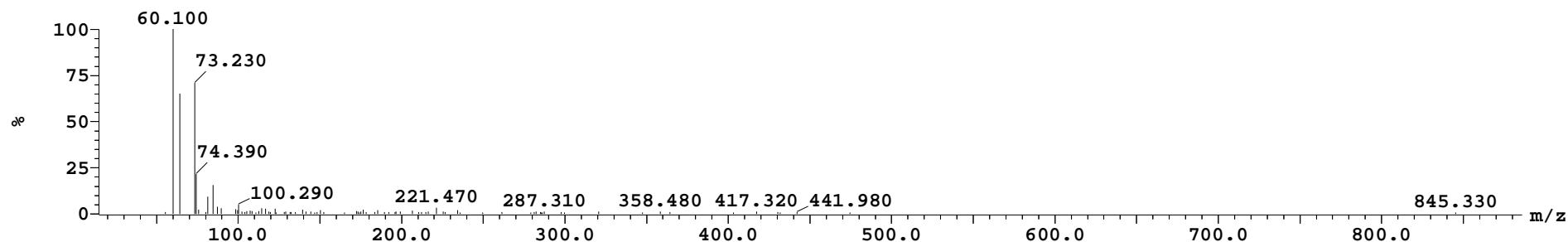
Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

9

5.90

9: (Time: 5.90)

2:MS ES+
2.1e+006



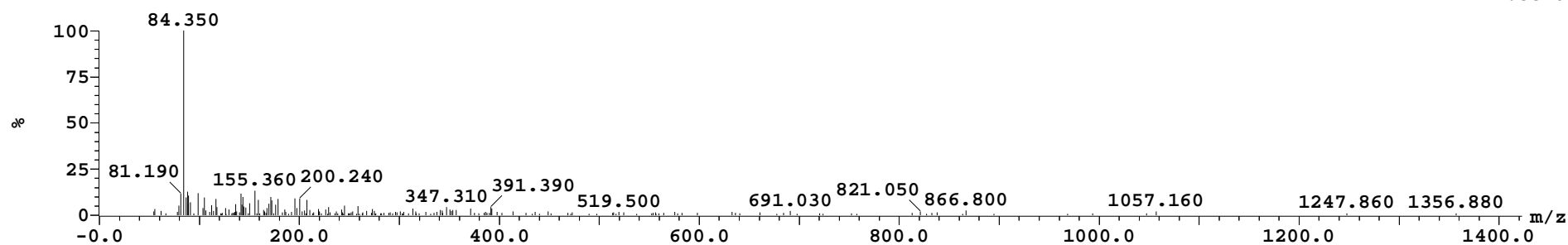
Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

10

6.85

10: (Time: 6.85)

2:MS ES+
7.5e+005



Openlynx Report -

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Sample: 642

Vial:1:B,3

ID:

File:LK-1 R

Date:03-Aug-2023

Time:12:27:58

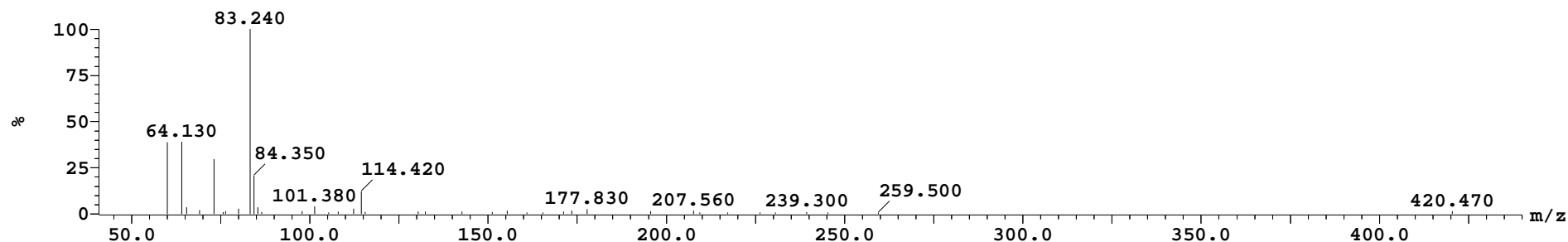
Description:Default file

Printed: Thu Aug 03 15:04:15 2023

Sample Report (continued):

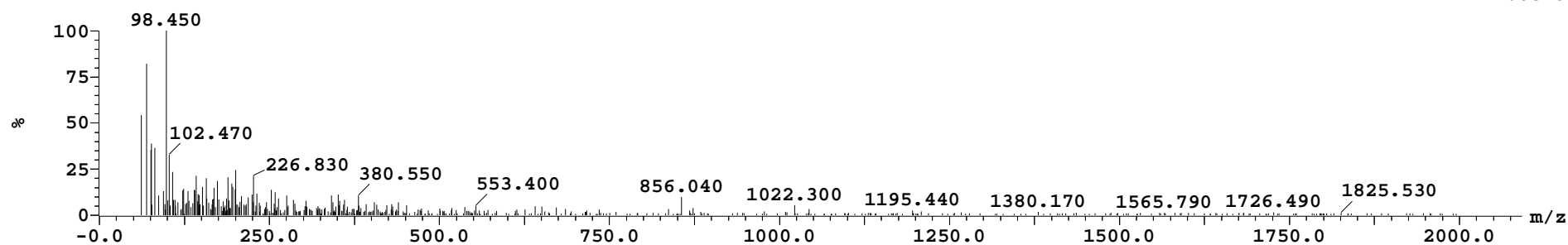
Peak ID	Compound	Time	Mass Found
11		7.83	

11: (Time: 7.83)

2:MS ES+
4.9e+006

Peak ID	Compound	Time	Mass Found
12		8.65	

12: (Time: 8.65)

2:MS ES+
2.0e+005

Openlynx Report -

Sample: 642
File:LK-1 R
Description:Default file

Vial:1:B,3
Date:03-Aug-2023

ID:
Time:12:27:58

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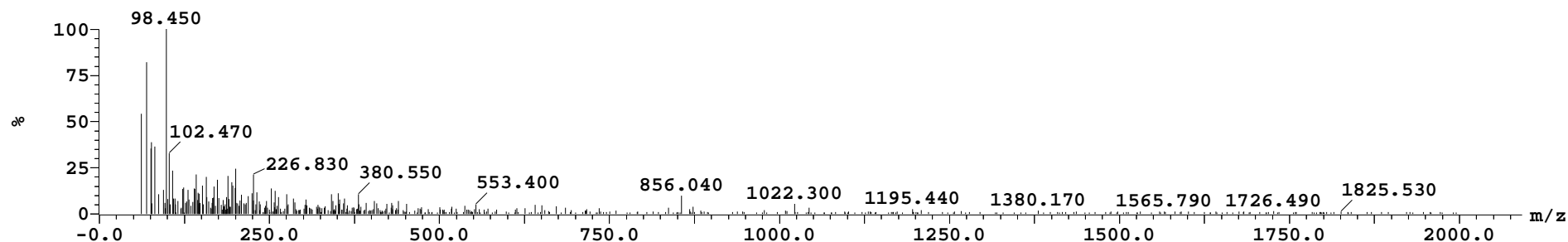
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

13		8.67	
----	--	------	--

13: (Time: 8.67)

2:MS ES+
2.0e+005

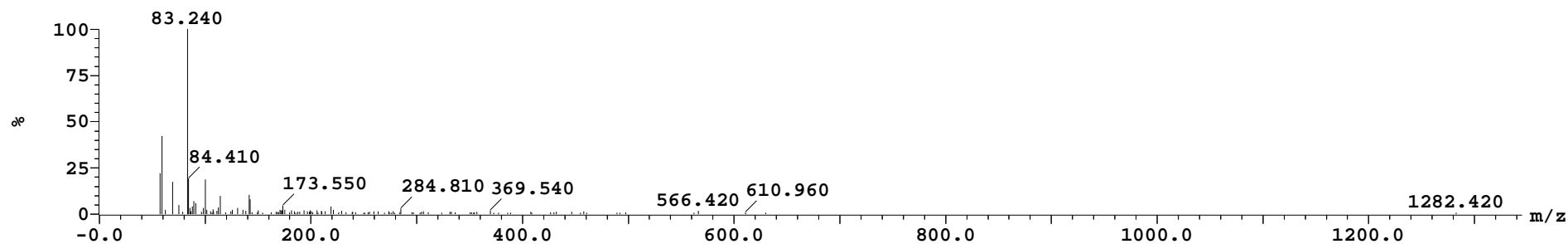


Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

14		9.15	
----	--	------	--

14: (Time: 9.15)

2:MS ES+
1.7e+006



Openlynx Report -

Sample: 642
File: LK-1 R
Description: Default file

Vial: 1:B,3
Date: 03-Aug-2023

ID:
Time: 12:27:58

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Printed: Thu Aug 03 15:04:15 2023

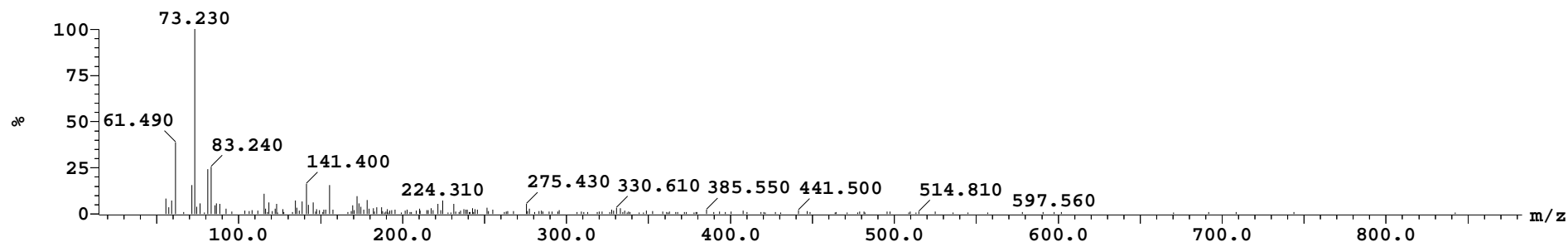
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

15		10.52	
----	--	-------	--

15: (Time: 10.52)

2:MS ES+
9.2e+005

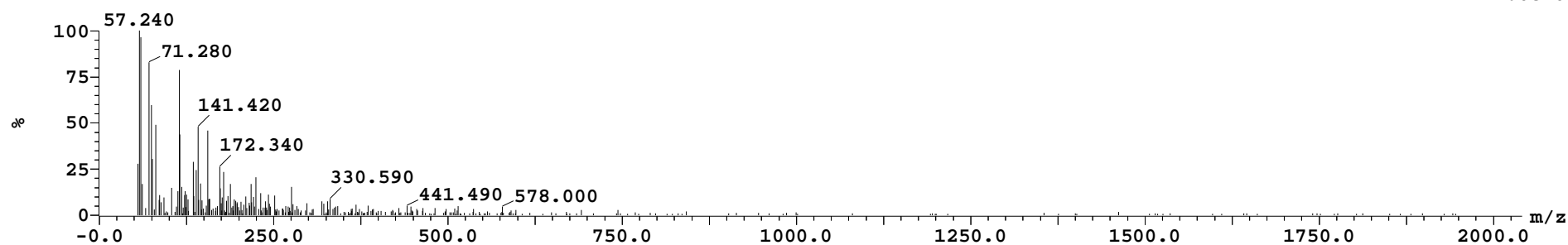


Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

16		10.53	
----	--	-------	--

16: (Time: 10.53)

2:MS ES+
4.0e+005



Openlynx Report -

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Sample: 642

Vial:1:B,3

ID:

File:LK-1 R

Date:03-Aug-2023

Time:12:27:58

Description:Default file

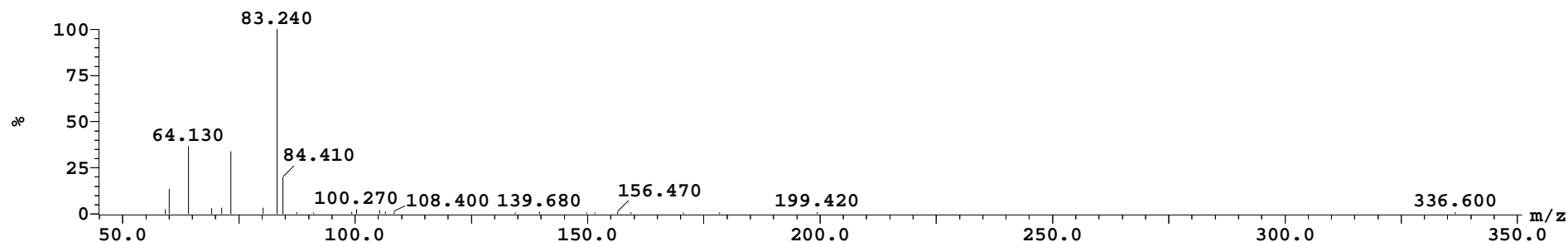
Printed: Thu Aug 03 15:04:15 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

17		11.17	
----	--	-------	--

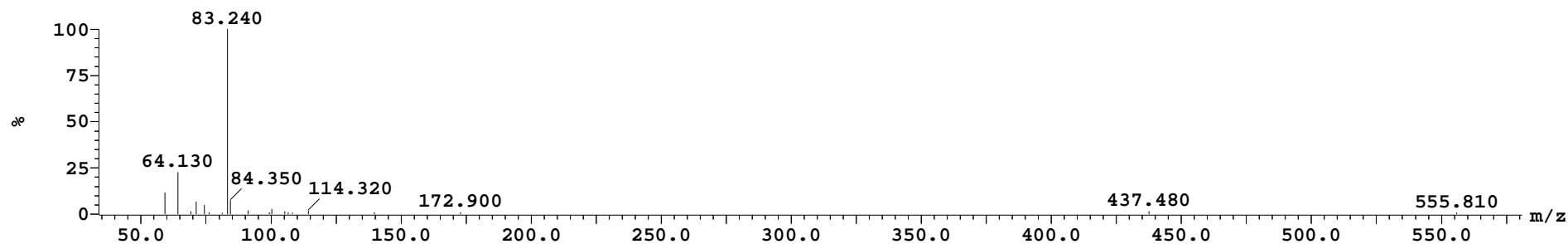
17:(Time: 11.17)

2:MS ES+
1.0e+007

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

18		11.27	
----	--	-------	--

18:(Time: 11.27)

2:MS ES+
1.1e+007

Openlynx Report -

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Sample: 642

Vial:1:B,3

ID:

File:LK-1 R

Date:03-Aug-2023

Time:12:27:58

Description:Default file

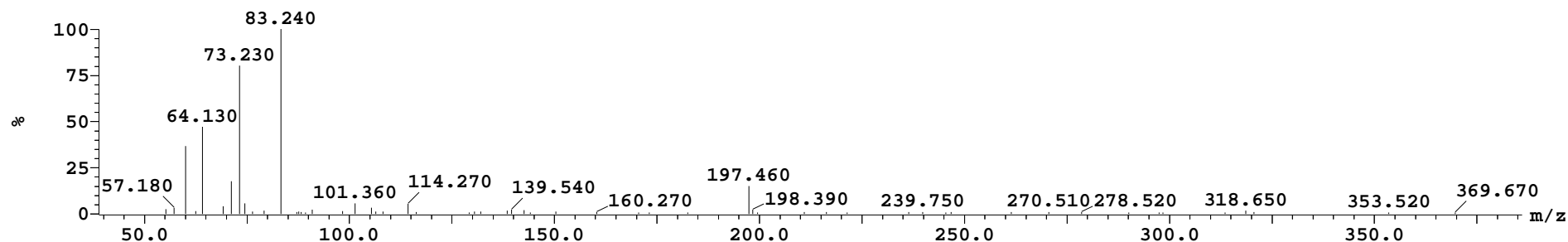
Printed: Thu Aug 03 15:04:15 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

19		12.07	
----	--	-------	--

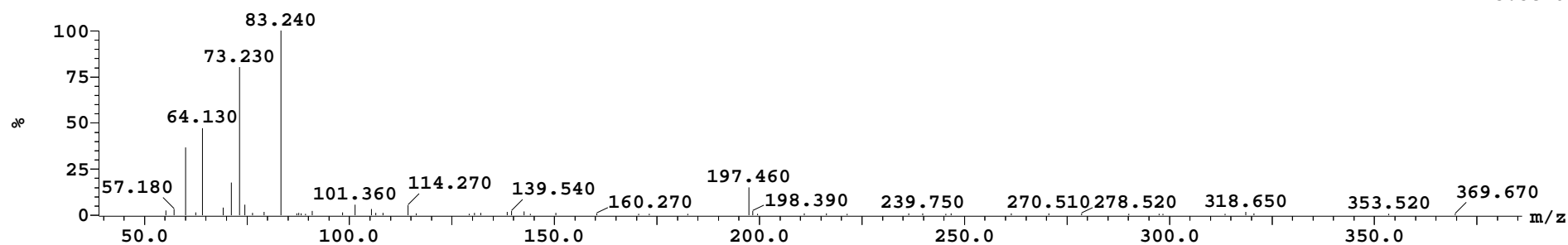
19: (Time: 12.07)

2:MS ES+
5.3e+006

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

20		12.07	
----	--	-------	--

20: (Time: 12.07)

2:MS ES+
5.3e+006

Openlynx Report -

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Sample: 642

Vial:1:B,3

ID:

File:LK-1 R

Date:03-Aug-2023

Time:12:27:58

Description:Default file

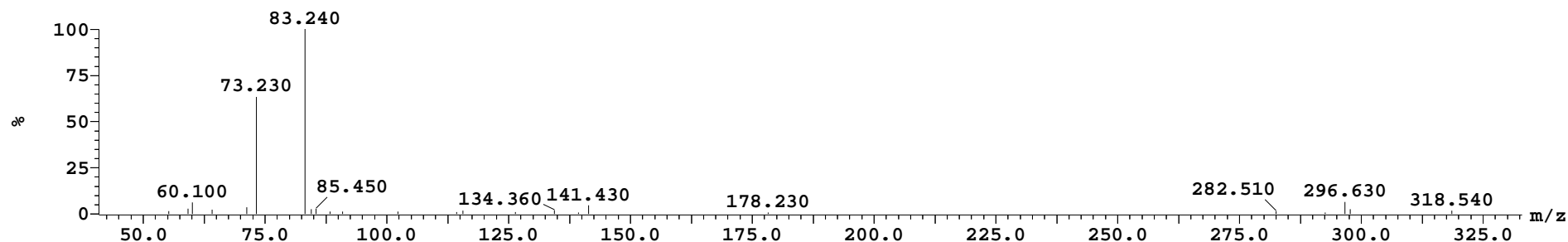
Printed: Thu Aug 03 15:04:15 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

21		13.05	
----	--	-------	--

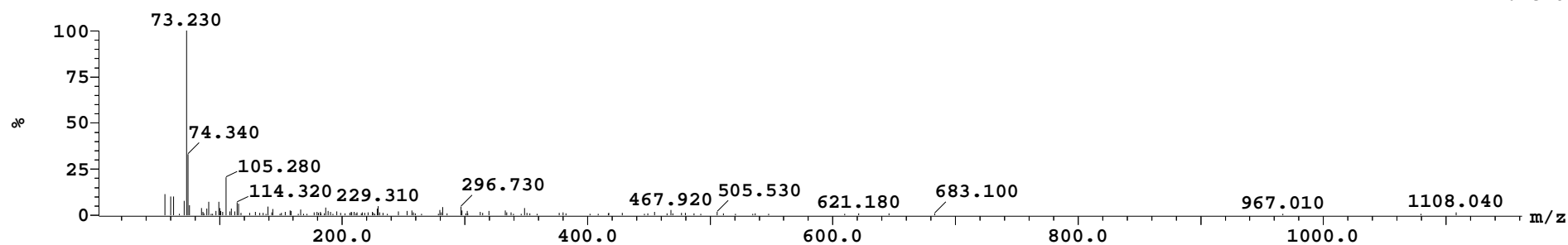
21:(Time: 13.05)

2:MS ES+
8.6e+006

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

22		14.17	
----	--	-------	--

22:(Time: 14.17)

2:MS ES+
2.2e+006

Openlynx Report -

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Sample: 642

Vial:1:B,3

ID:

File:LK-1 R

Date:03-Aug-2023

Time:12:27:58

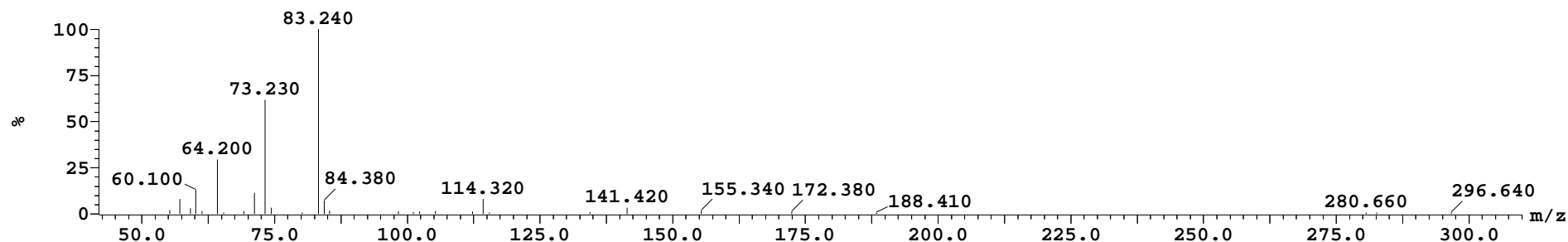
Description:Default file

Printed: Thu Aug 03 15:04:15 2023

Sample Report (continued):

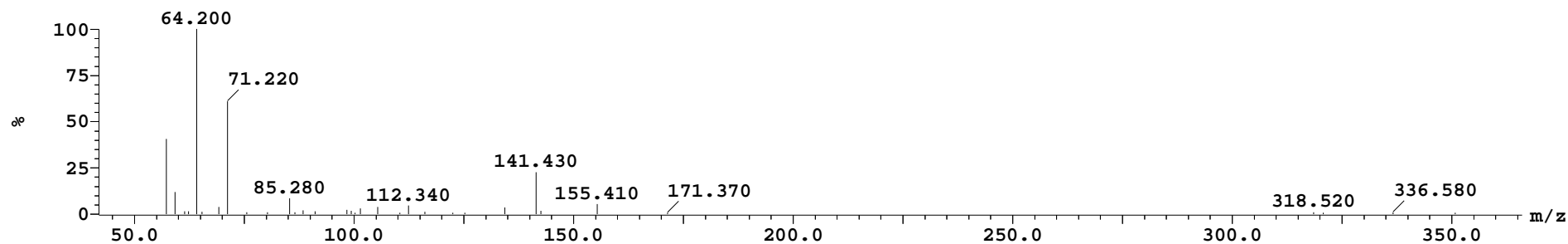
Peak ID	Compound	Time	Mass Found
23		14.73	

23:(Time: 14.73)

2:MS ES+
8.6e+007

Peak ID	Compound	Time	Mass Found
24		16.48	

24:(Time: 16.48)

2:MS ES+
1.7e+007

Openlynx Report -

Sample: 642
File:LK-1 R
Description:Default file

Vial:1:B,3
Date:03-Aug-2023

ID:
Time:12:27:58

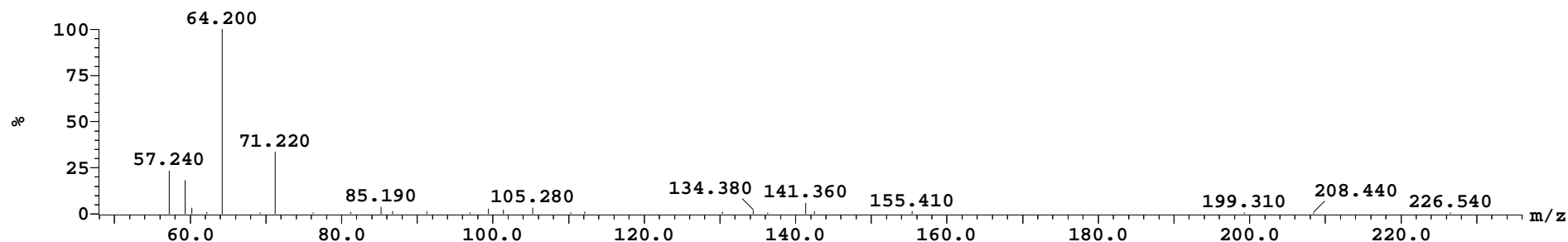
Page 27

Printed: Thu Aug 03 15:04:15 2023

Sample Report (continued):

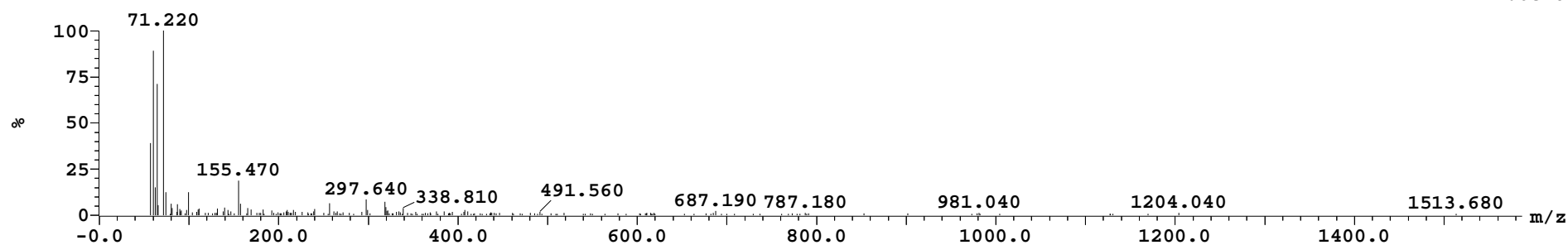
Peak ID Compound Time Mass Found
25
25:(Time: 16.88)

2:MS ES+
1.6e+007



Peak ID Compound Time Mass Found
26
26:(Time: 17.28)

2:MS ES+
2.6e+006



Openlynx Report -

Sample: 642
File:LK-1 R
Description:Default file

Vial:1:B,3
Date:03-Aug-2023

ID:
Time:12:27:58

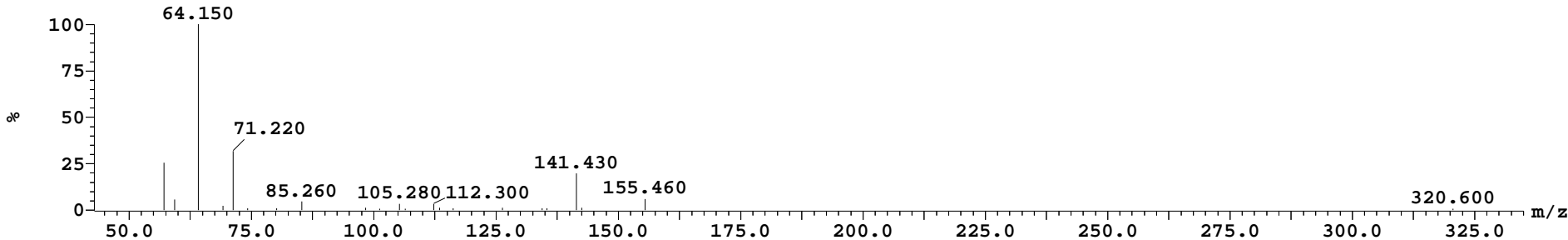
Printed: Thu Aug 03 15:04:15 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
27		21.70	

27:(Time: 21.70)

2:MS ES+
2.9e+007



Openlynx Report -

Sample: 643
File: LK-2
Description: Default file

Vial: 1:B,4
Date: 03-Aug-2023

ID:
Time: 12:54:05

Page 1

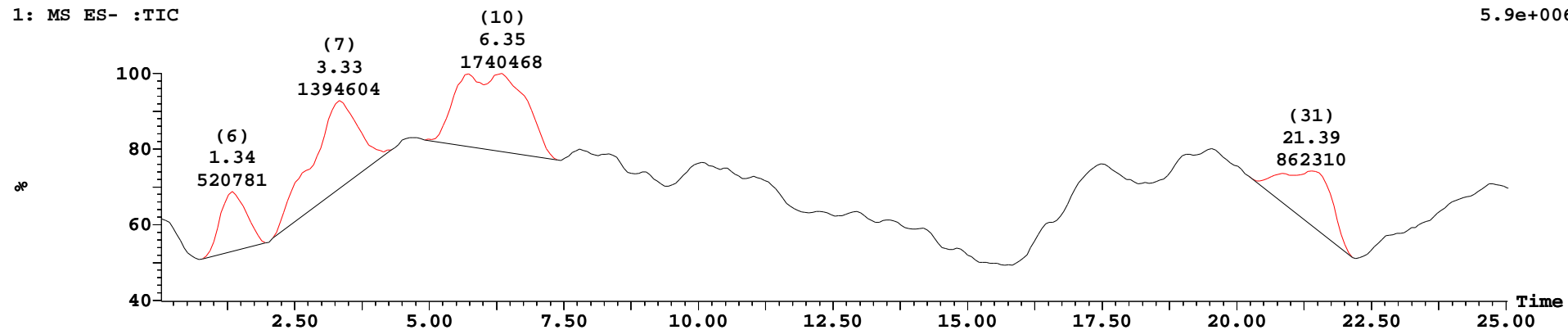
Printed: Thu Aug 03 15:05:03 2023

Sample Report:

Sample 643 Vial 1:B,4 ID File LK-2 Date 03-Aug-2023 Time 12:54:05 Description Default file

1: MS ES- :TIC

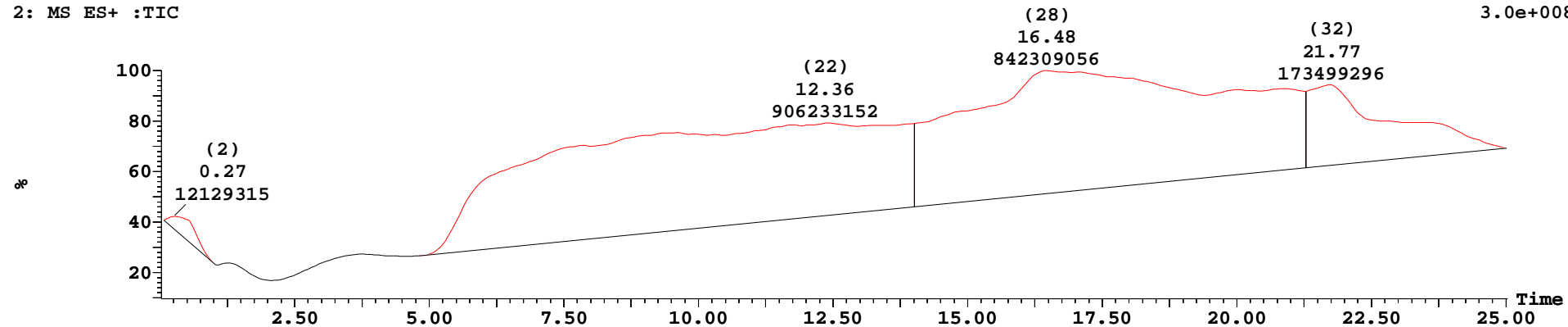
5.9e+006



Peak Number	Compound	Time	AreaAbs	Area %Total	Width	Height	Mass Found
6		1.34	5e+005	11.53	1	9e+005	
7		3.33	1e+006	30.87	2	1e+006	
10		6.35	2e+006	38.52	2	1e+006	
31		21.39	9e+005	19.09	2	8e+005	

2: MS ES+ :TIC

3.0e+008



Peak Number	Compound	Time	AreaAbs	Area %Total	Width	Height	Mass Found
2		0.27	1e+007	0.63	1	2e+007	
22		12.36	9e+008	46.85	9	1e+008	

Openlynx Report -

Sample: 643
File: LK-2
Description: Default file

Vial: 1:B,4
Date: 03-Aug-2023

ID:
Time: 12:54:05

Page 2

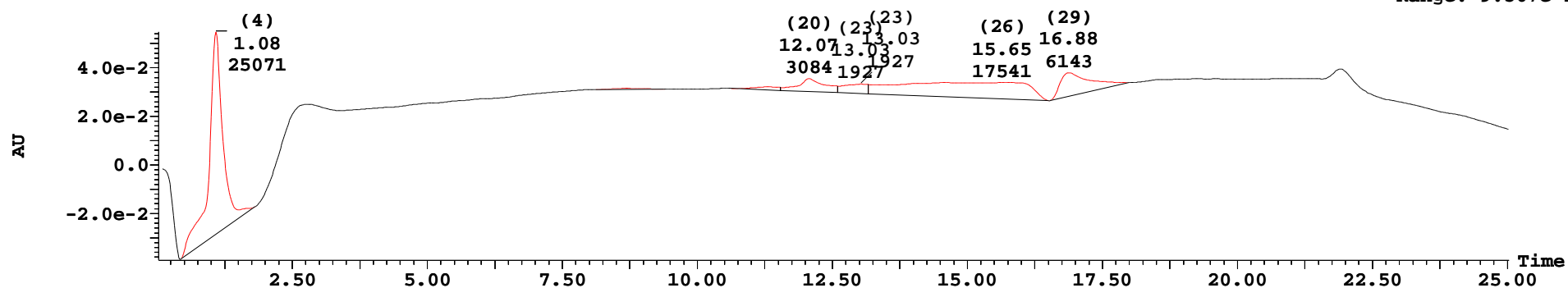
Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

28	16.48	8e+008	43.55	7	1e+008
32	21.77	2e+008	8.97	4	1e+008

3: UV Detector: 214

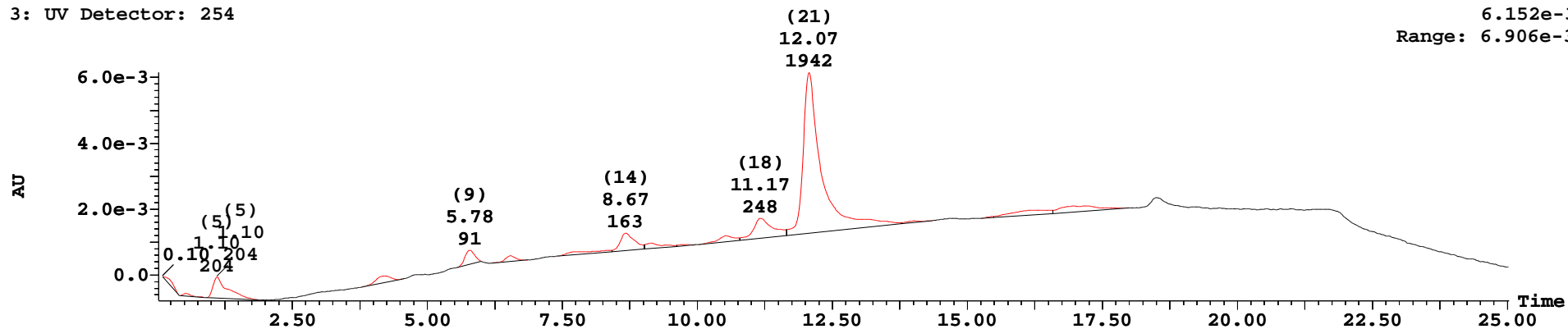
5.478e-2
Range: 9.367e-2



Peak Number	Compound	Time	AreaAbs	Area %Total	Width	Height	Mass Found
4		1.08	3e+004	45.80	1	8e+004	
13		8.67	3e+002	0.59	1	6e+002	
19		11.30	6e+002	1.18	1	1e+003	
20		12.07	3e+003	5.63	1	5e+003	
23		13.03	2e+003	3.52	1	4e+003	
26		15.65	2e+004	32.05	3	7e+003	
29		16.88	6e+003	11.22	1	1e+004	

3: UV Detector: 254

6.152e-3
Range: 6.906e-3



Openlynx Report -

Sample: 643
File:LK-2
Description:Default file

Vial:1:B,4
Date:03-Aug-2023

ID:
Time:12:54:05

Page 3

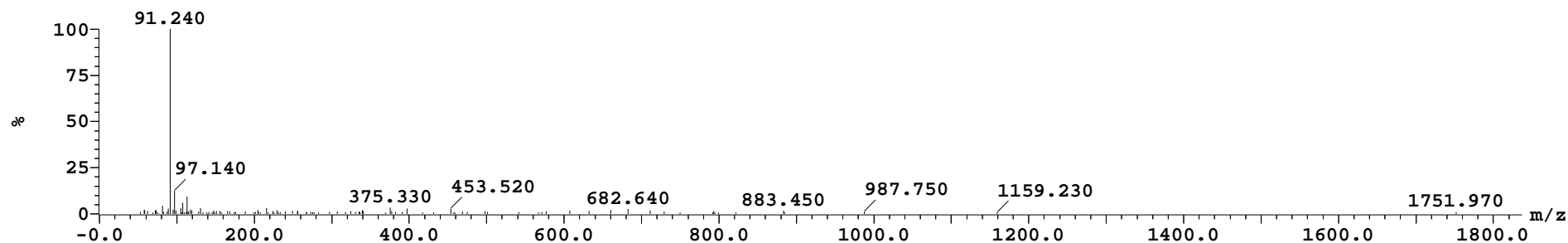
Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

Peak Number	Compound	Time	AreaAbs	Area %Total	Width	Height	Mass Found
1		0.10	3e+001	0.80	0		
3		0.53	1e+001	0.41	0	8e+001	
5		1.10	2e+002	6.29	1	6e+002	
8		4.22	7e+001	2.02	1	2e+002	
9		5.78	9e+001	2.78	0	4e+002	
11		6.53	4e+001	1.17	1	2e+002	
12		8.42	6e+001	1.79	1	4e+001	
14		8.67	2e+002	5.03	1	5e+002	
15		9.13	5e+001	1.67	1	2e+002	
16		9.77	9e+000	0.28	0	4e+001	
17		10.53	6e+001	1.83	1	2e+002	
18		11.17	2e+002	7.64	1	6e+002	
21		12.07	2e+003	59.74	2	5e+003	
24		14.35	1e+001	0.42	1		
25		15.48	5e+000	0.16	0	3e+001	
27		16.37	1e+002	3.58	1	1e+002	
30		17.20	1e+002	4.39	1	2e+002	

Peak ID Compound Time Mass Found
1 0.10
1: (Time: 0.10)

1:MS ES-
3.1e+005



Openlynx Report -

Sample: 643
File:LK-2
Description:Default file

Vial:1:B,4
Date:03-Aug-2023

ID:
Time:12:54:05

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Printed: Thu Aug 03 15:05:03 2023

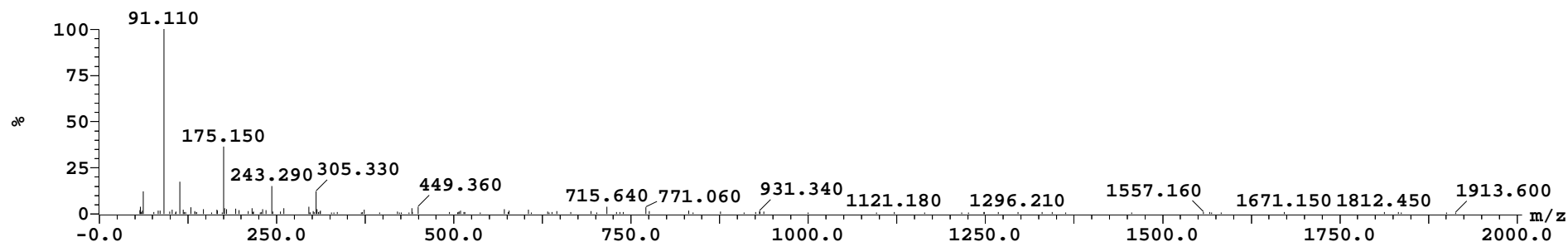
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

3		0.53	
---	--	------	--

3: (Time: 0.53)

1:MS ES-
2.1e+005

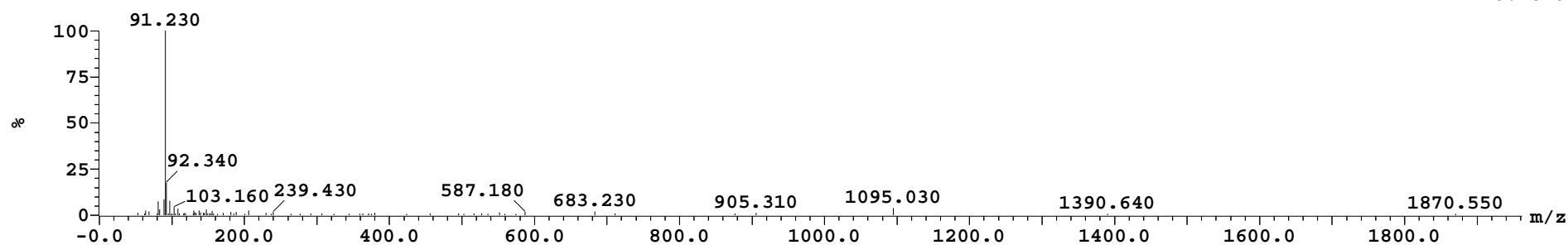


Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

4		1.08	
---	--	------	--

4: (Time: 1.08)

1:MS ES-
3.2e+005



Openlynx Report -

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Sample: 643

Vial:1:B,4

ID:

File:LK-2

Date:03-Aug-2023

Time:12:54:05

Description:Default file

Printed: Thu Aug 03 15:05:03 2023

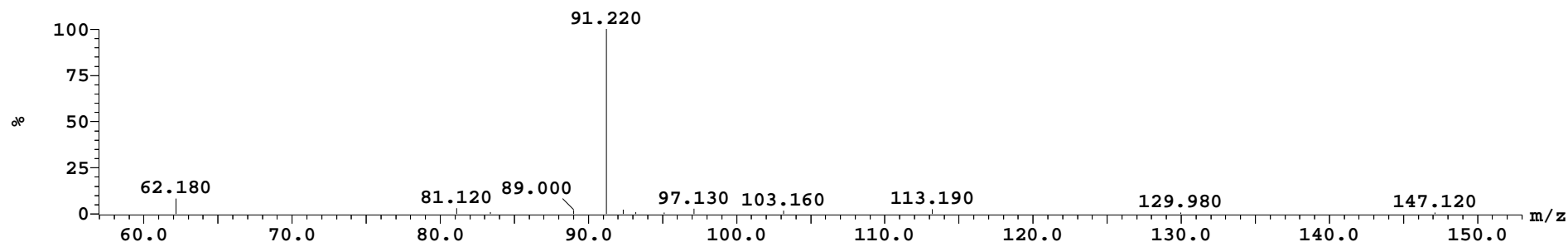
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

5

1.10

5: (Time: 1.10)

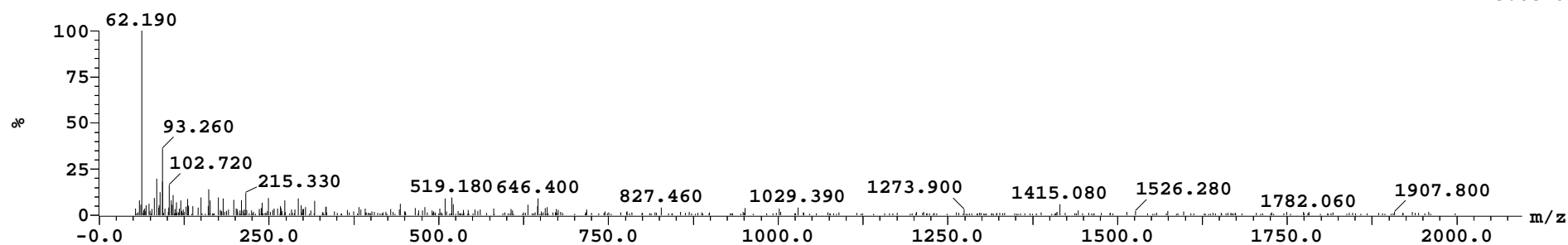
1:MS ES-
2.6e+006

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

6

1.34

6: (Time: 1.34)

1:MS ES-
5.8e+004

Openlynx Report -

Sample: 643

File:LK-2

Description:Default file

Vial:1:B,4

Date:03-Aug-2023

ID:

Time:12:54:05

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Printed: Thu Aug 03 15:05:03 2023

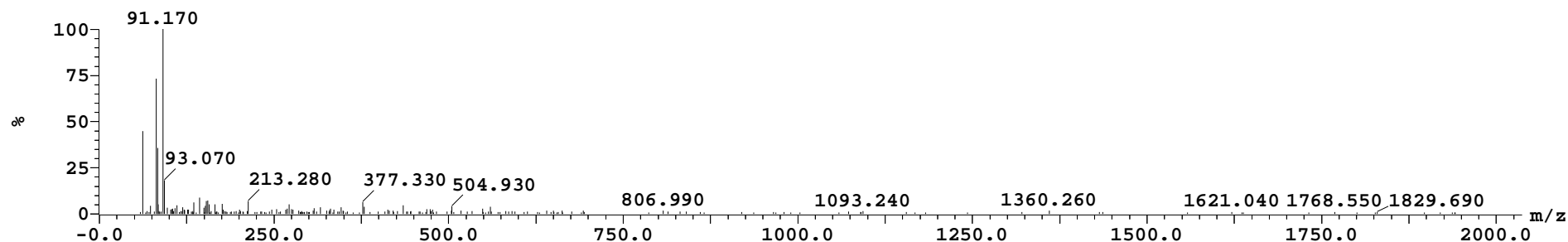
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

7

3.33

7: (Time: 3.33)

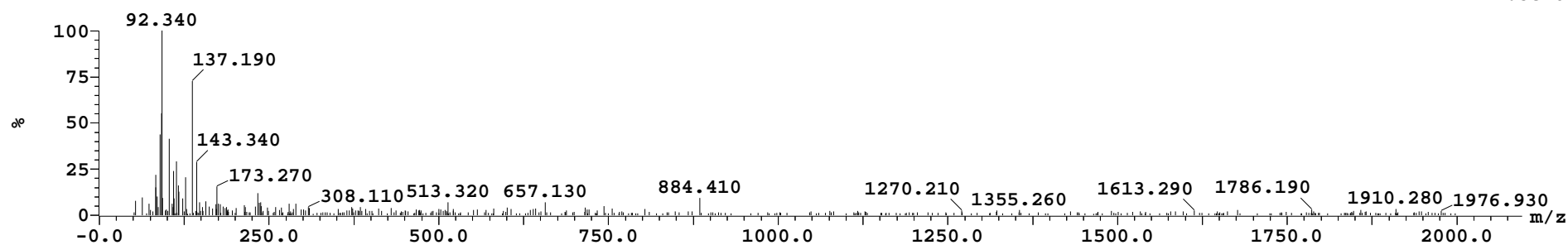
1:MS ES-
1.3e+005

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

8

4.22

8: (Time: 4.22)

1:MS ES-
4.3e+004

Openlynx Report -

Sample: 643
File:LK-2
Description:Default file

Vial:1:B,4
Date:03-Aug-2023

ID:
Time:12:54:05

Page 7

Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

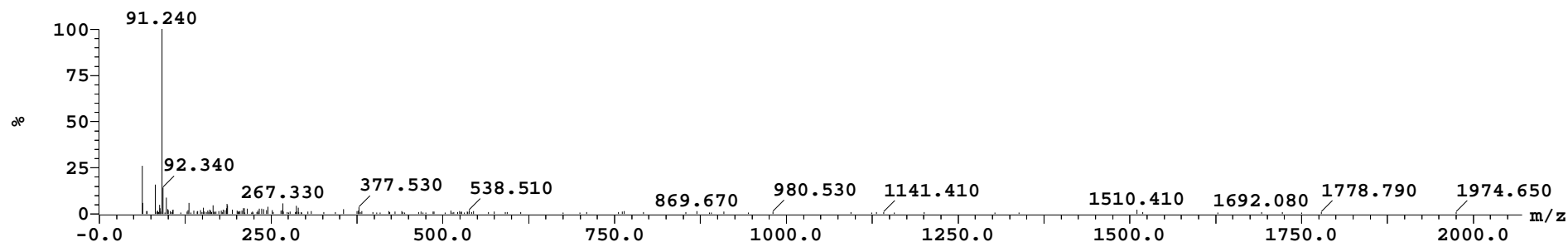
Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

9

5.78

9: (Time: 5.78)

1:MS ES-
2.0e+005



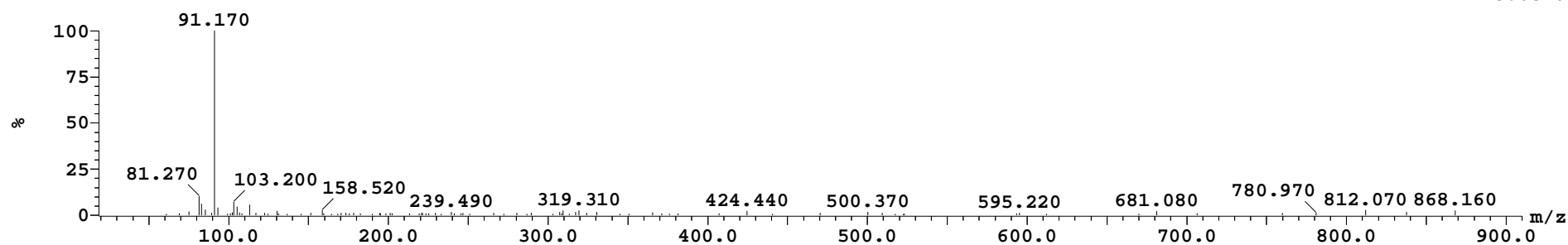
Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

10

6.35

10: (Time: 6.35)

1:MS ES-
3.6e+005



Openlynx Report -

Sample: 643
File:LK-2
Description:Default file

Vial:1:B,4
Date:03-Aug-2023

ID:
Time:12:54:05

Page 8

Printed: Thu Aug 03 15:05:03 2023

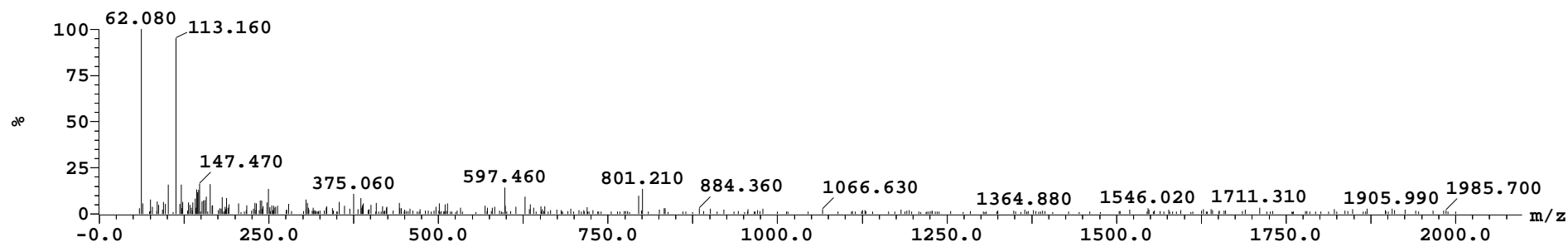
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

11		6.53	
----	--	------	--

11:(Time: 6.53)

1:MS ES-
5.8e+004

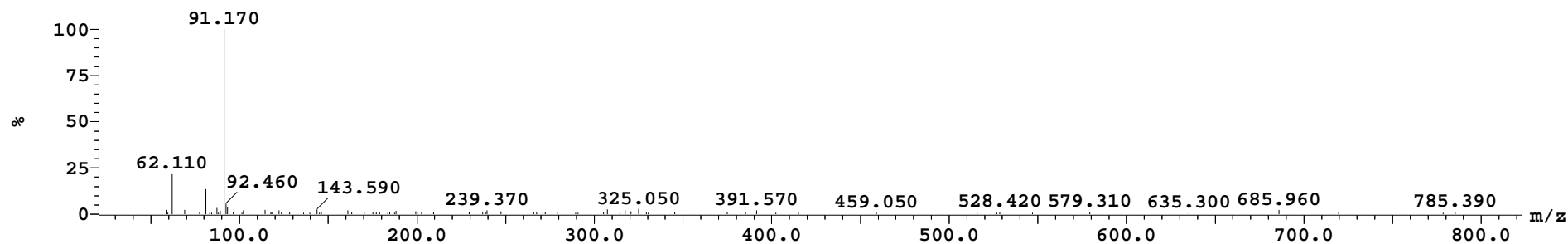


Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

12		8.42	
----	--	------	--

12:(Time: 8.42)

1:MS ES-
3.2e+005



Openlynx Report -

Sample: 643

File:LK-2

Description:Default file

Vial:1:B,4

Date:03-Aug-2023

ID:

Time:12:54:05

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Printed: Thu Aug 03 15:05:03 2023

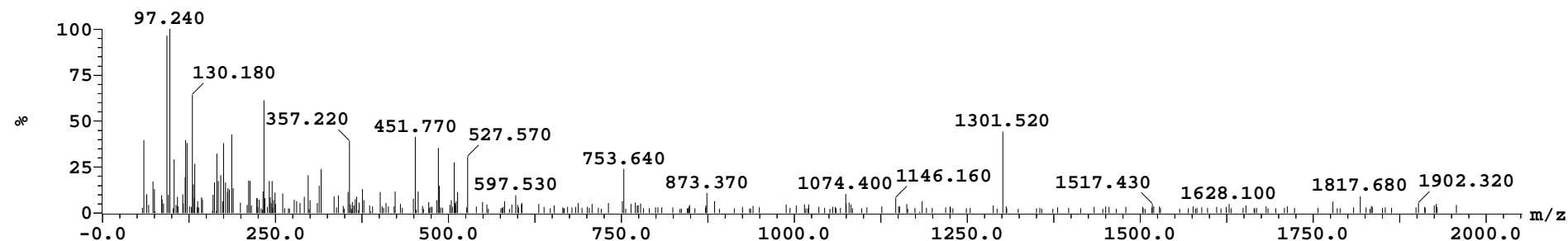
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

13

8.67

13: (Time: 8.67)

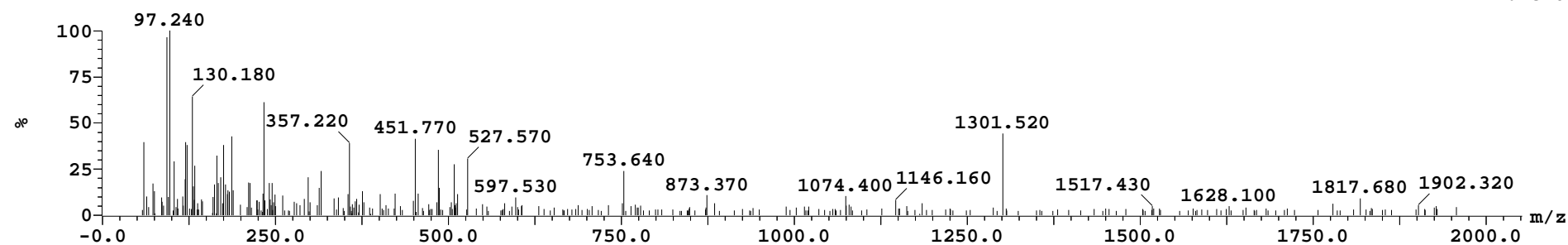
1:MS ES-
2.4e+004

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

14

8.67

14: (Time: 8.67)

1:MS ES-
2.4e+004

Openlynx Report -

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Sample: 643

Vial:1:B,4

ID:

File:LK-2

Date:03-Aug-2023

Time:12:54:05

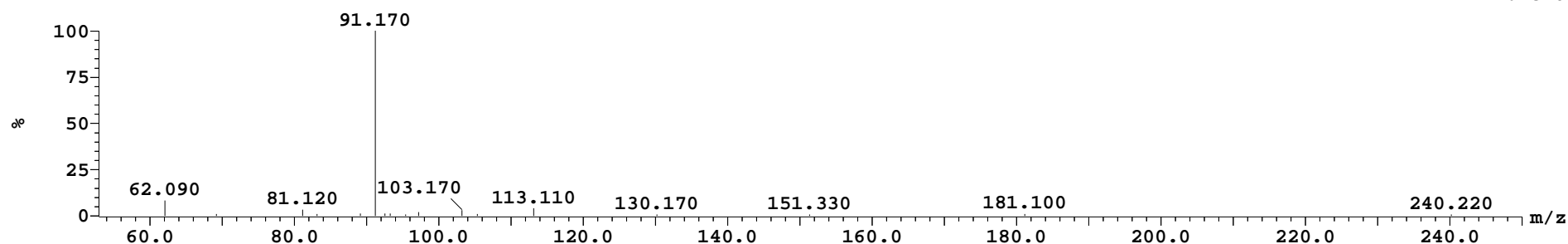
Description:Default file

Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

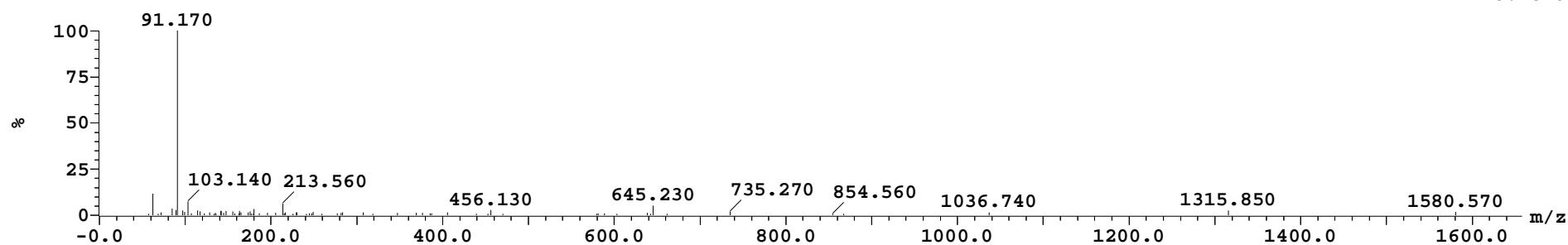
Peak ID	Compound	Time	Mass Found
15		9.13	

15:(Time: 9.13)

1:MS ES-
2.7e+006

Peak ID	Compound	Time	Mass Found
16		9.77	

16:(Time: 9.77)

1:MS ES-
3.7e+005

Openlynx Report -

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Sample: 643

Vial:1:B,4

ID:

File:LK-2

Date:03-Aug-2023

Time:12:54:05

Description:Default file

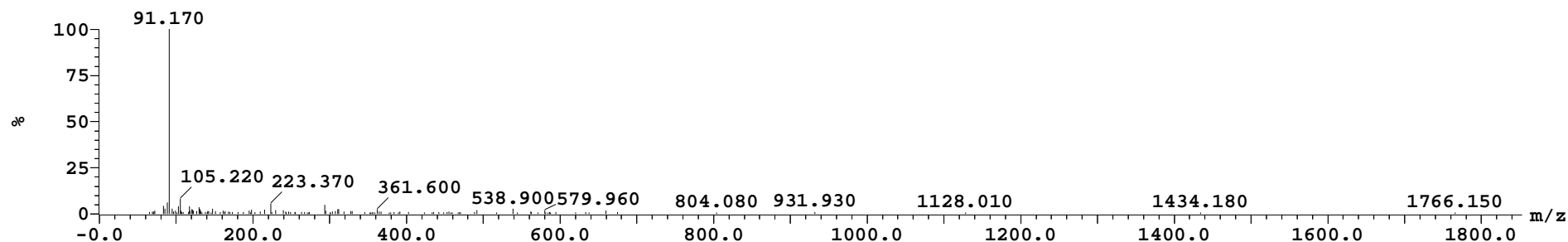
Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

17		10.53	
----	--	-------	--

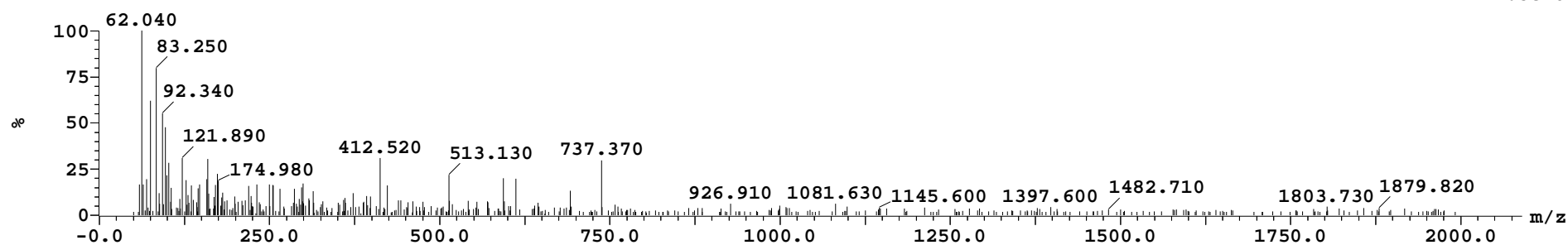
17:(Time: 10.53)

1:MS ES-
2.4e+005

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

18		11.17	
----	--	-------	--

18:(Time: 11.17)

1:MS ES-
2.3e+004

Openlynx Report -

Sample: 643

File:LK-2

Description:Default file

Vial:1:B,4

Date:03-Aug-2023

ID:

Time:12:54:05

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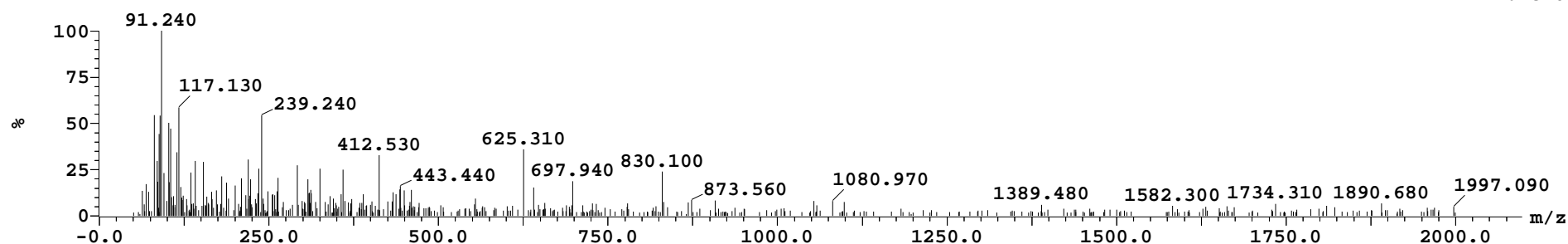
Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

19		11.30	
----	--	-------	--

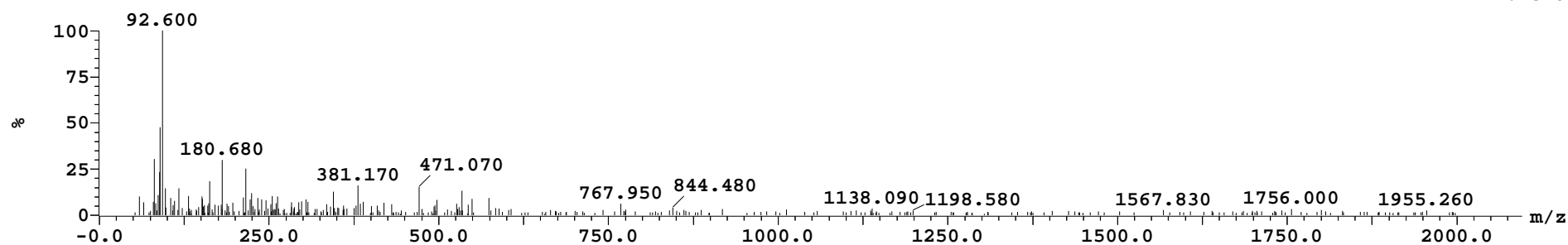
19: (Time: 11.30)

1:MS ES-
2.1e+004

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

20		12.07	
----	--	-------	--

20: (Time: 12.07)

1:MS ES-
4.7e+004

Openlynx Report -

Sample: 643

File:LK-2

Description:Default file

Vial:1:B,4

Date:03-Aug-2023

ID:

Time:12:54:05

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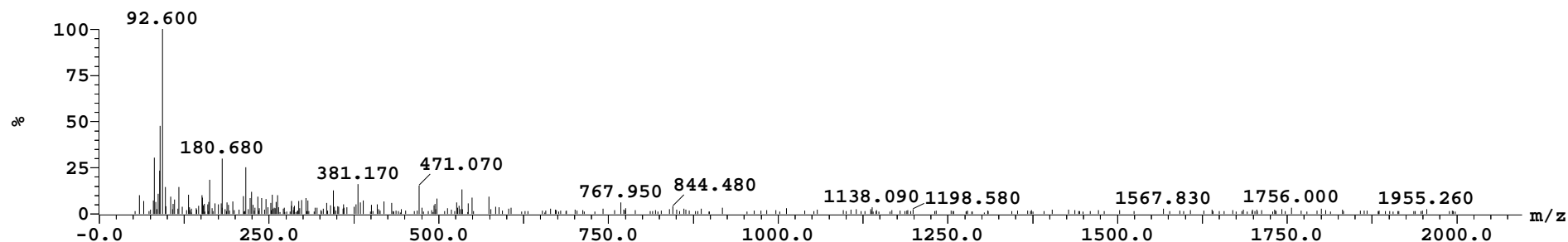
Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

21		12.07	
----	--	-------	--

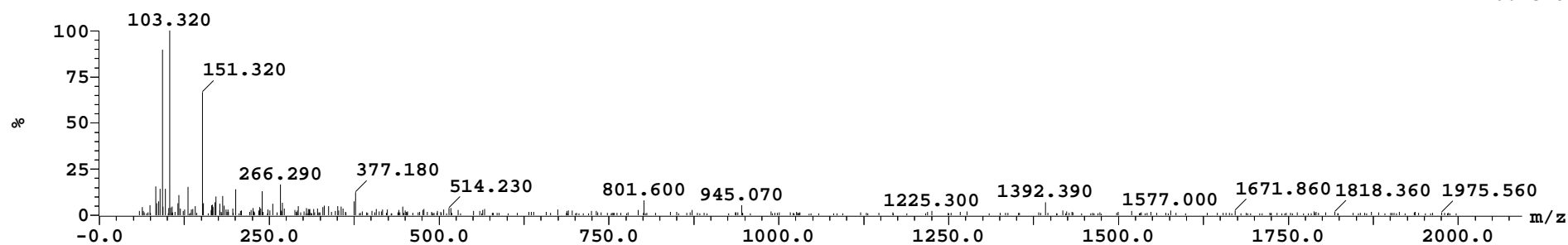
21: (Time: 12.07)

1:MS ES-
4.7e+004

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

23		13.03	
----	--	-------	--

23: (Time: 13.03)

1:MS ES-
6.7e+004

Openlynx Report -

Sample: 643

File:LK-2

Description:Default file

Vial:1:B,4

Date:03-Aug-2023

ID:

Time:12:54:05

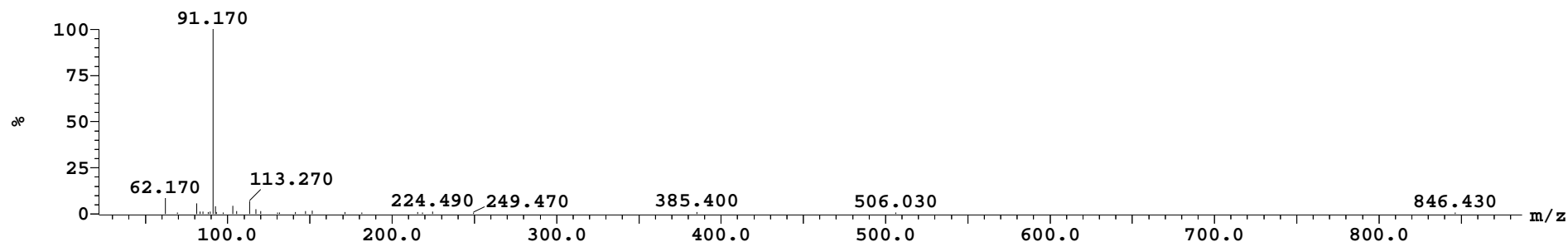
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Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

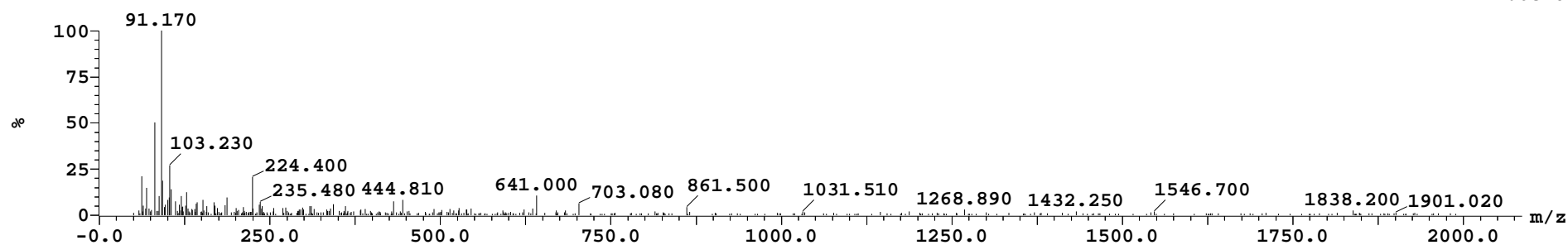
Peak ID	Compound	Time	Mass Found
24		14.35	

24: (Time: 14.35)

1:MS ES-
1.8e+006

Peak ID	Compound	Time	Mass Found
25		15.48	

25: (Time: 15.48)

1:MS ES-
7.6e+004

Openlynx Report -

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Sample: 643

Vial:1:B,4

ID:

File:LK-2

Date:03-Aug-2023

Time:12:54:05

Description:Default file

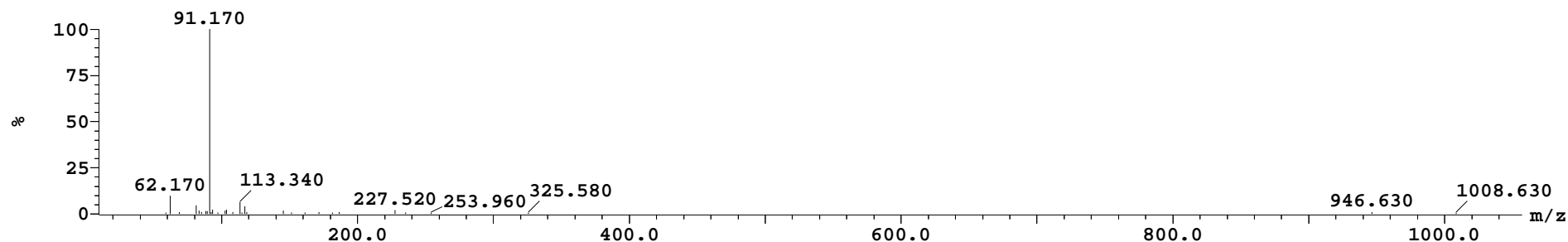
Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

26		15.65	
----	--	-------	--

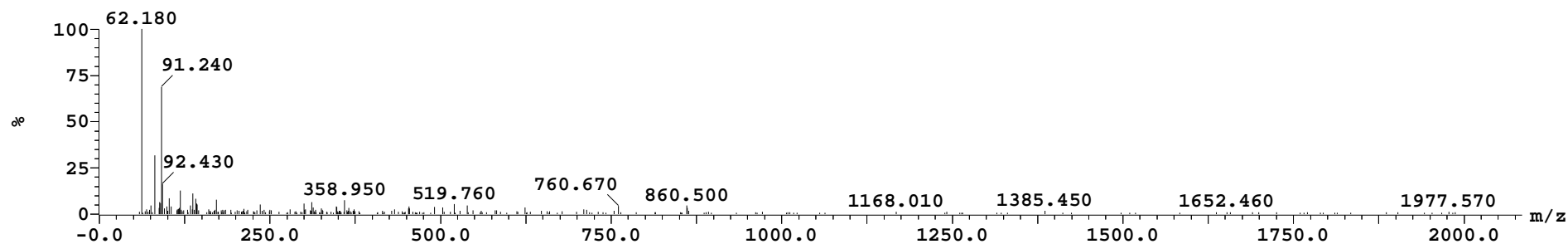
26:(Time: 15.65)

1:MS ES-
1.4e+006

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

27		16.37	
----	--	-------	--

27:(Time: 16.37)

1:MS ES-
1.2e+005

Openlynx Report -

Sample: 643
File:LK-2
Description:Default file

Vial:1:B,4
Date:03-Aug-2023

ID:
Time:12:54:05

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Printed: Thu Aug 03 15:05:03 2023

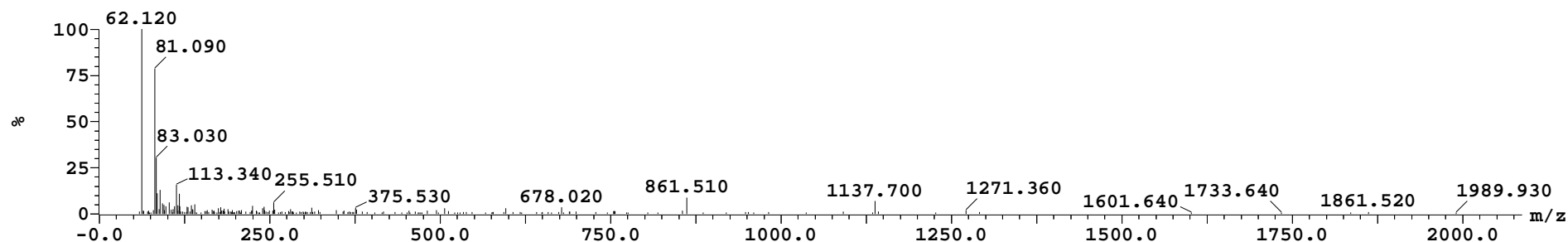
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

29		16.88	
----	--	-------	--

29:(Time: 16.88)

1:MS ES-
2.3e+005

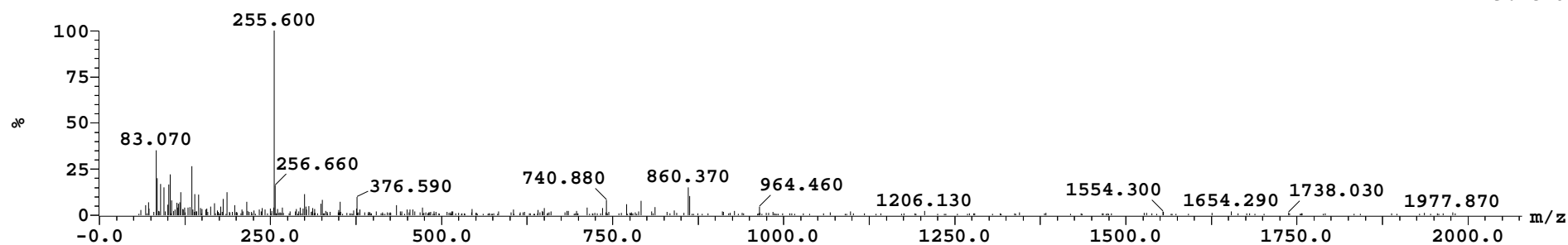


Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

30		17.20	
----	--	-------	--

30:(Time: 17.20)

1:MS ES-
9.4e+004



Openlynx Report -

Sample: 643

File:LK-2

Description:Default file

Vial:1:B,4

Date:03-Aug-2023

ID:

Time:12:54:05

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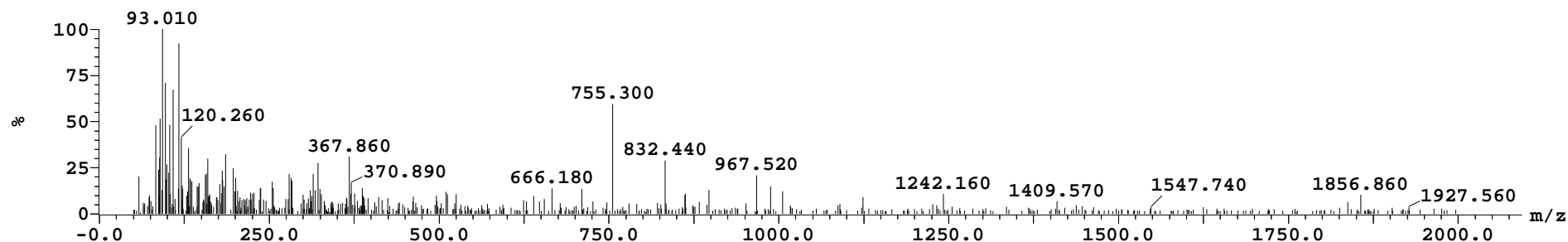
Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

31		21.39	
----	--	-------	--

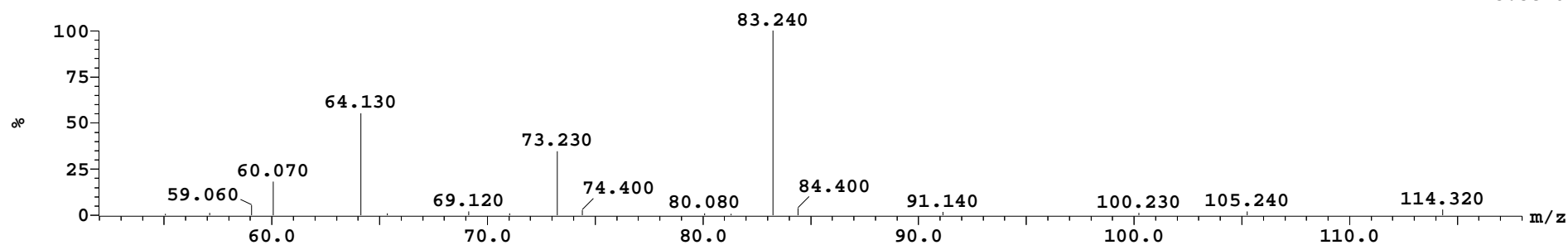
31: (Time: 21.39)

1:MS ES-
2.5e+004

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

1		0.10	
---	--	------	--

1: (Time: 0.10)

2:MS ES+
5.5e+007

Openlynx Report -

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Sample: 643

Vial:1:B,4

ID:

File:LK-2

Date:03-Aug-2023

Time:12:54:05

Description:Default file

Printed: Thu Aug 03 15:05:03 2023

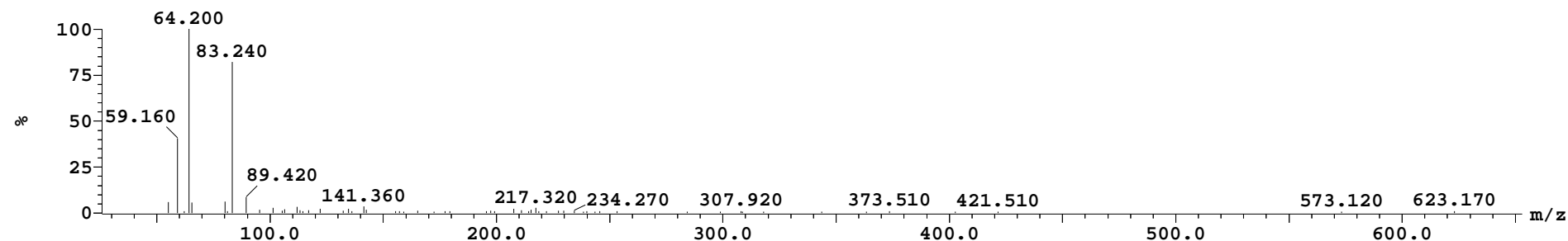
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

2

0.27

2: (Time: 0.27)

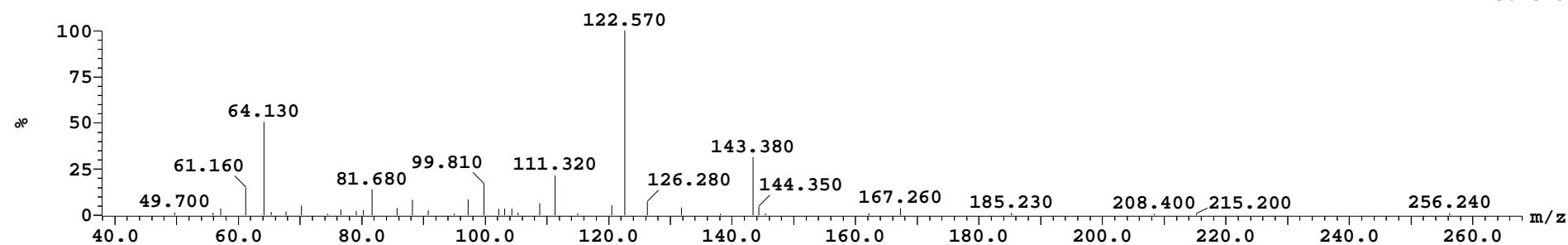
2:MS ES+
2.1e+006

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

3

0.53

3: (Time: 0.53)

2:MS ES+
3.1e+007

Openlynx Report -

Sample: 643

File:LK-2

Description:Default file

Vial:1:B,4

Date:03-Aug-2023

ID:

Time:12:54:05

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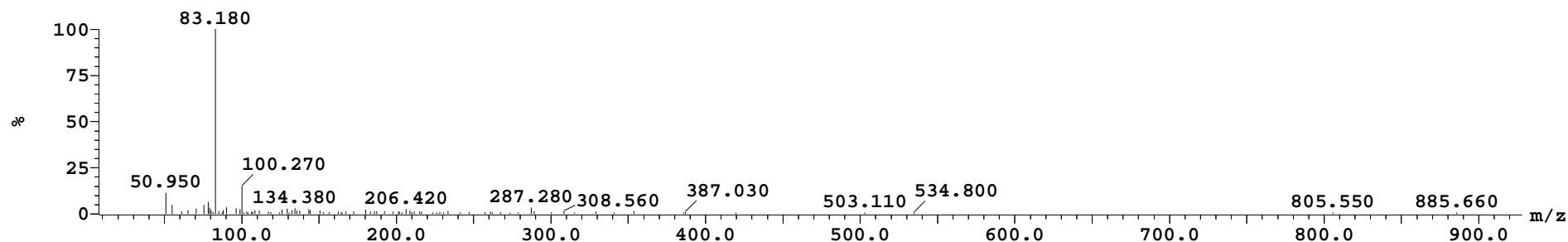
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

4

1.08

4: (Time: 1.08)

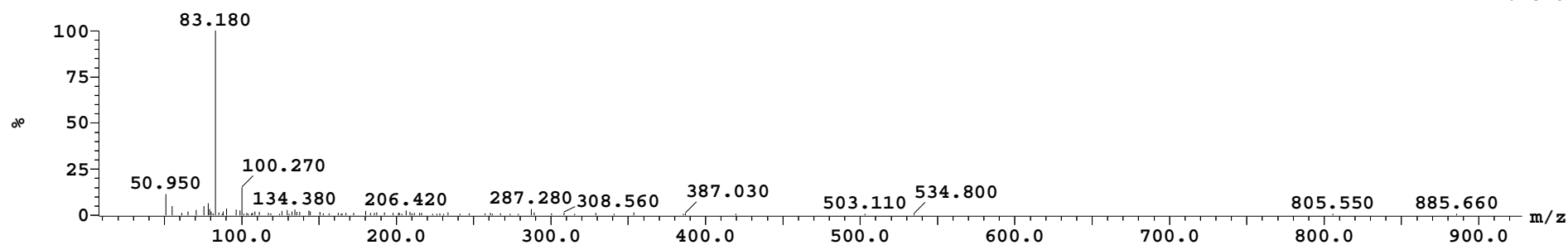
2:MS ES+
1.7e+006

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

5

1.10

5: (Time: 1.10)

2:MS ES+
1.7e+006

Openlynx Report -

Sample: 643
File:LK-2
Description:Default file

Vial:1:B,4
Date:03-Aug-2023

ID:
Time:12:54:05

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Sample Report (continued):

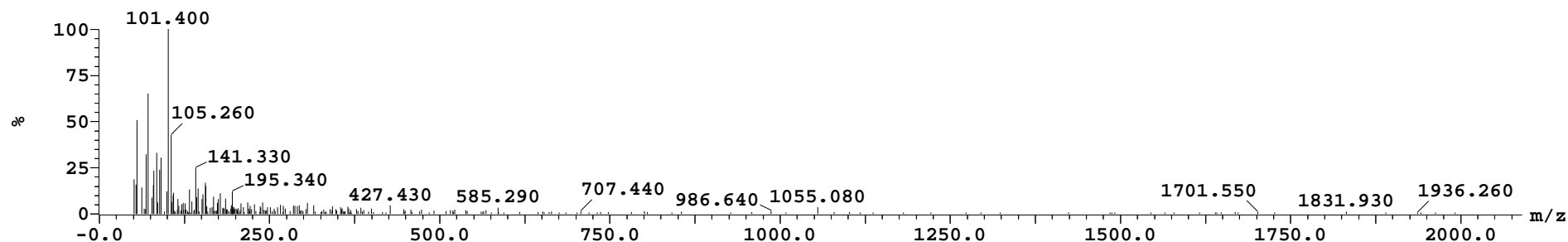
Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

8

4.22

8: (Time: 4.22)

2:MS ES+
4.1e+005



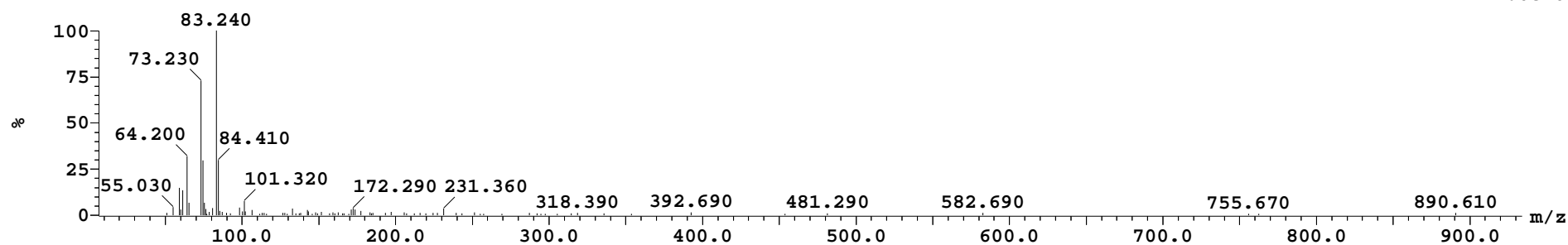
Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

9

5.78

9: (Time: 5.78)

2:MS ES+
2.0e+006



Openlynx Report -

Sample: 643
File:LK-2
Description:Default file

Vial:1:B,4
Date:03-Aug-2023

ID:
Time:12:54:05

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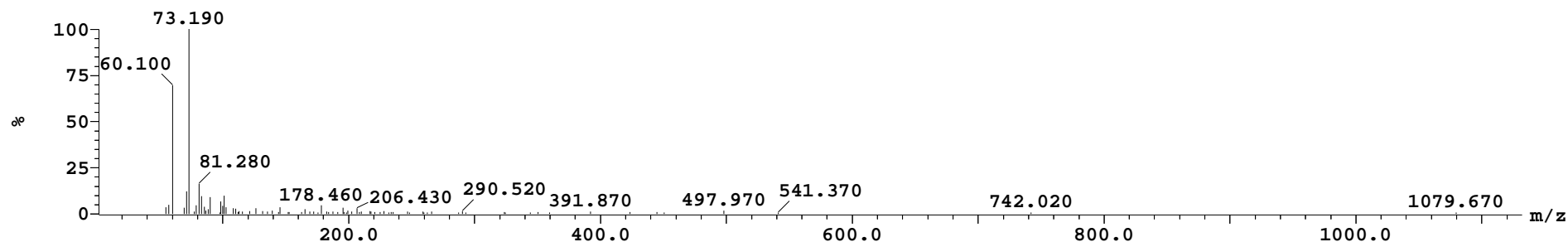
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

11		6.53	
----	--	------	--

11:(Time: 6.53)

2:MS ES+
2.1e+006

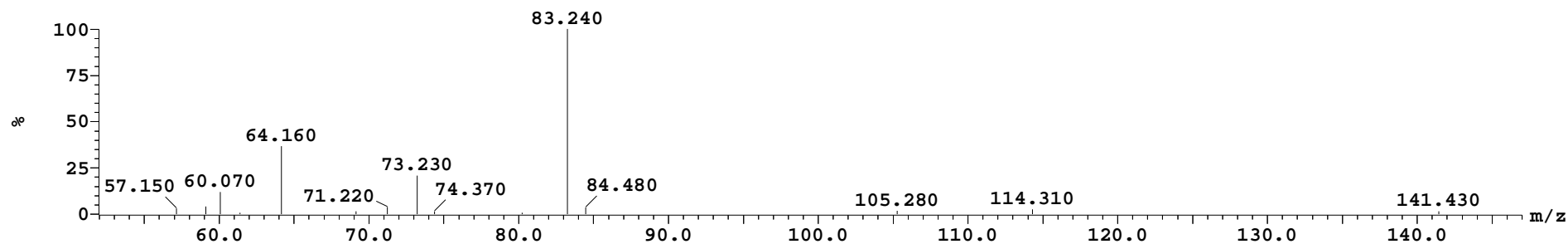


Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

12		8.42	
----	--	------	--

12:(Time: 8.42)

2:MS ES+
1.0e+008



Openlynx Report -

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Sample: 643

Vial:1:B,4

ID:

File:LK-2

Date:03-Aug-2023

Time:12:54:05

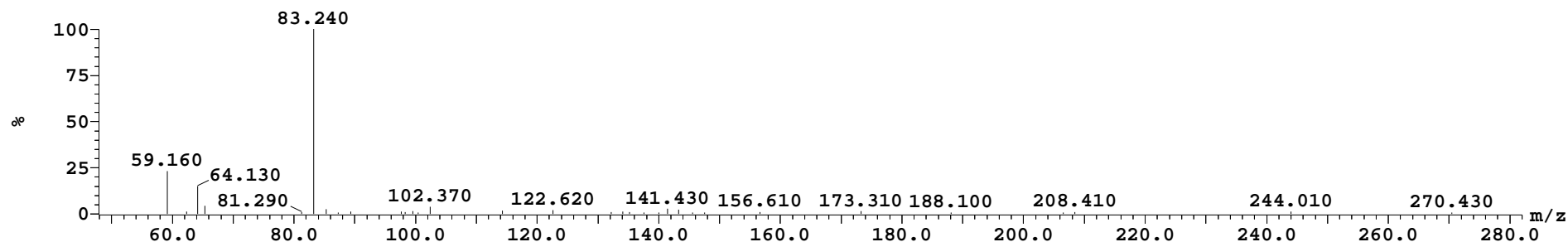
Description:Default file

Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

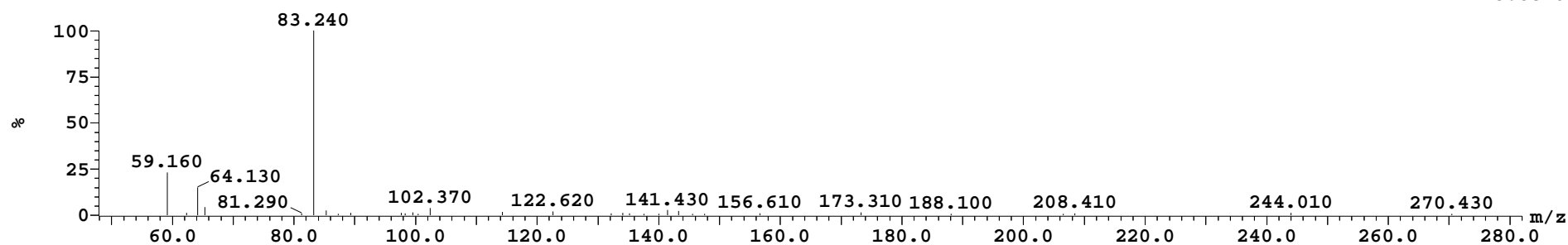
Peak ID	Compound	Time	Mass Found
13		8.67	

13: (Time: 8.67)

2:MS ES+
5.8e+006

Peak ID	Compound	Time	Mass Found
14		8.67	

14: (Time: 8.67)

2:MS ES+
5.8e+006

Openlynx Report -

Sample: 643
File:LK-2
Description:Default file

Vial:1:B,4
Date:03-Aug-2023

ID:
Time:12:54:05

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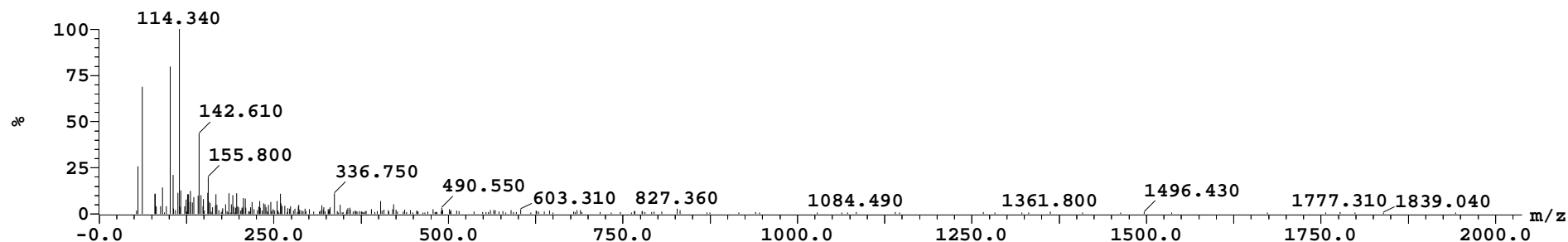
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

15		9.13	
----	--	------	--

15: (Time: 9.13)

2:MS ES+
3.9e+005

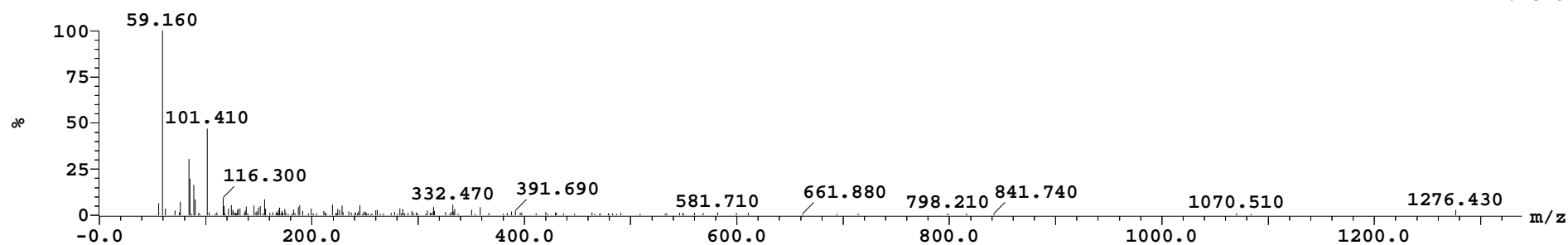


Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

16		9.77	
----	--	------	--

16: (Time: 9.77)

2:MS ES+
1.1e+006



Openlynx Report -

Sample: 643

File:LK-2

Description:Default file

Vial:1:B,4

Date:03-Aug-2023

ID:

Time:12:54:05

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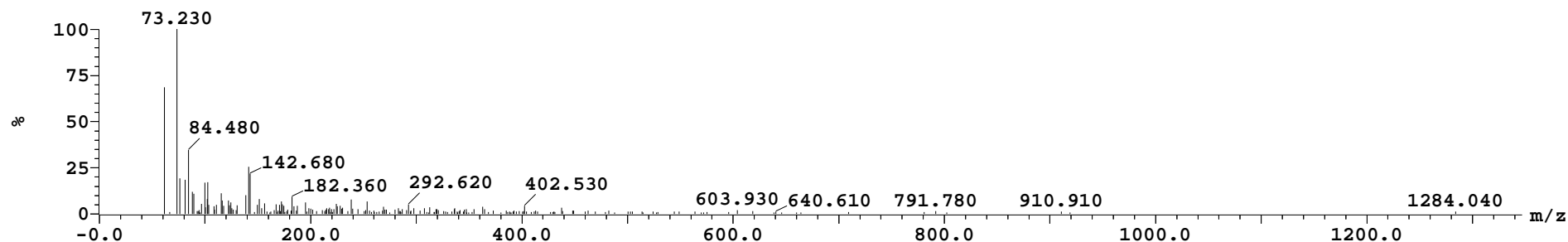
Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

17		10.53	
----	--	-------	--

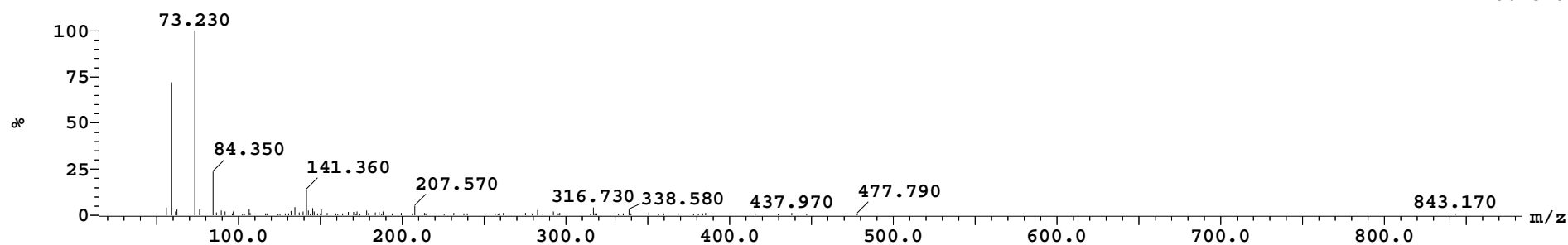
17:(Time: 10.53)

2:MS ES+
9.2e+005

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

18		11.17	
----	--	-------	--

18:(Time: 11.17)

2:MS ES+
3.2e+006

Openlynx Report -

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Sample: 643

Vial:1:B,4

ID:

File:LK-2

Date:03-Aug-2023

Time:12:54:05

Description:Default file

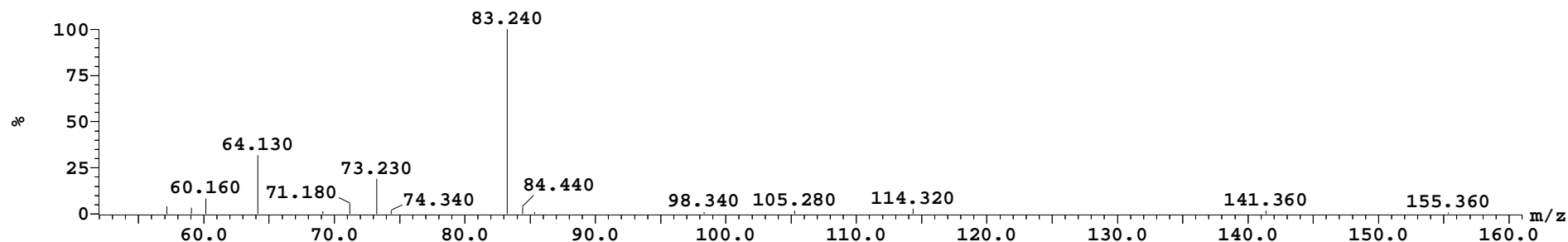
Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

19		11.30	
----	--	-------	--

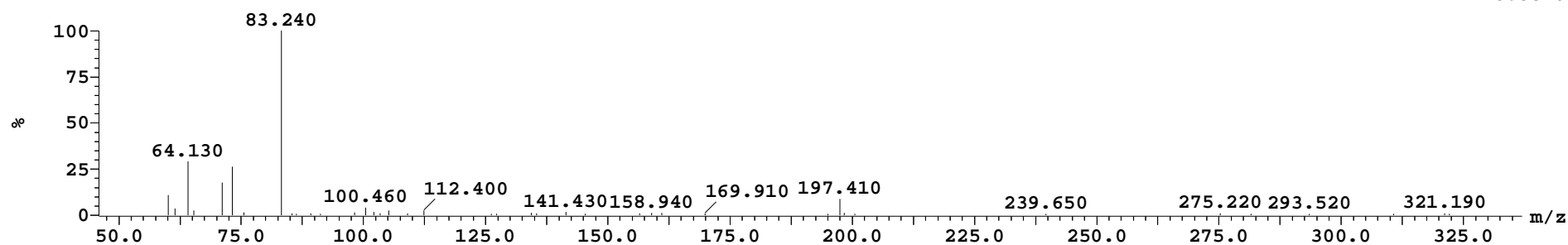
19: (Time: 11.30)

2:MS ES+
1.2e+008

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

20		12.07	
----	--	-------	--

20: (Time: 12.07)

2:MS ES+
8.3e+006

Openlynx Report -

Sample: 643

File:LK-2

Description:Default file

Vial:1:B,4

Date:03-Aug-2023

ID:

Time:12:54:05

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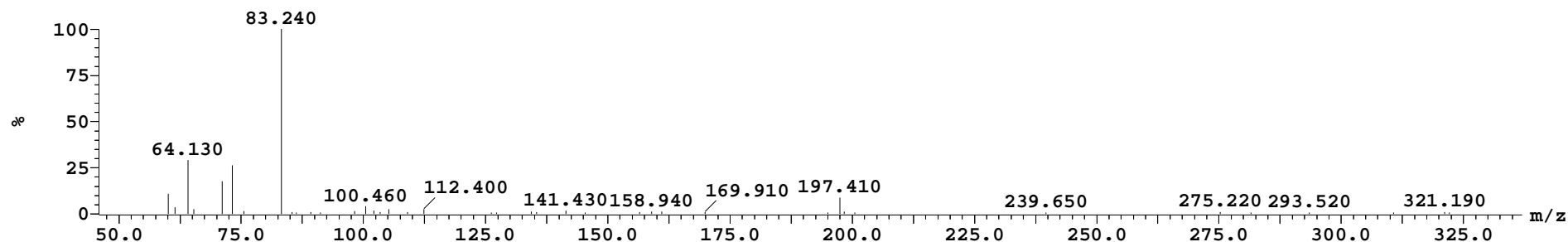
Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

21		12.07	
----	--	-------	--

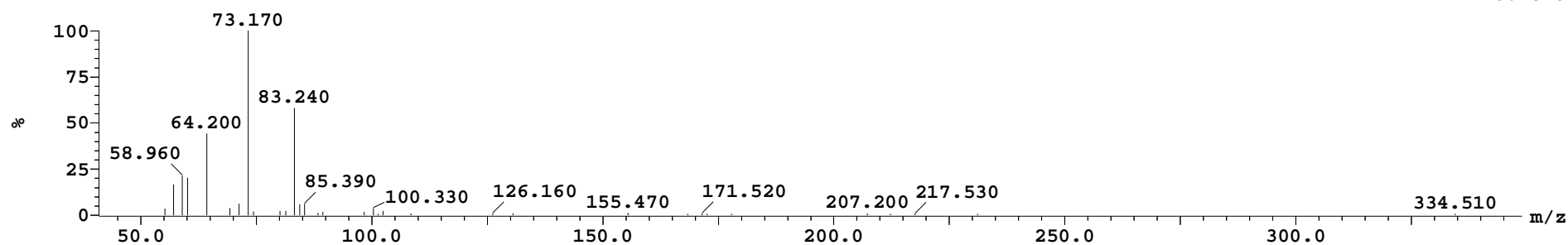
21:(Time: 12.07)

2:MS ES+
8.3e+006

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

22		12.36	
----	--	-------	--

22:(Time: 12.36)

2:MS ES+
6.7e+006

Openlynx Report -

Sample: 643
File:LK-2
Description:Default file

Vial:1:B,4
Date:03-Aug-2023

ID:
Time:12:54:05

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Printed: Thu Aug 03 15:05:03 2023

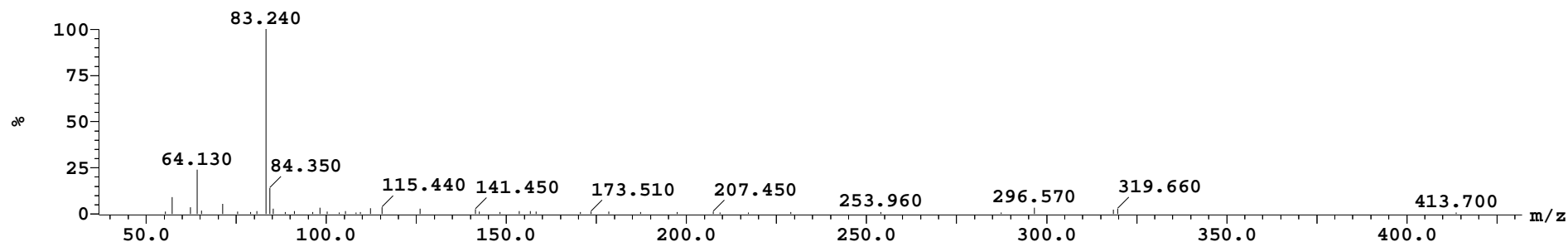
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

23		13.03	
----	--	-------	--

23:(Time: 13.03)

2:MS ES+
6.3e+006

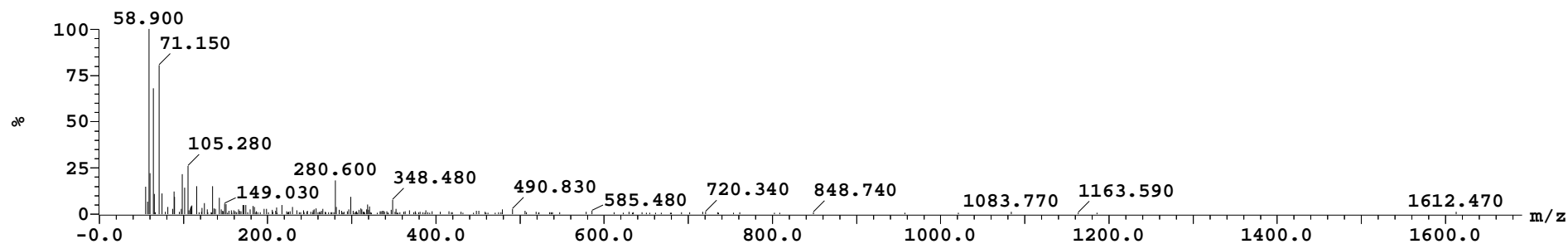


Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

24		14.35	
----	--	-------	--

24:(Time: 14.35)

2:MS ES+
1.1e+006



Openlynx Report -

Sample: 643

File:LK-2

Description:Default file

Vial:1:B,4

Date:03-Aug-2023

ID:

Time:12:54:05

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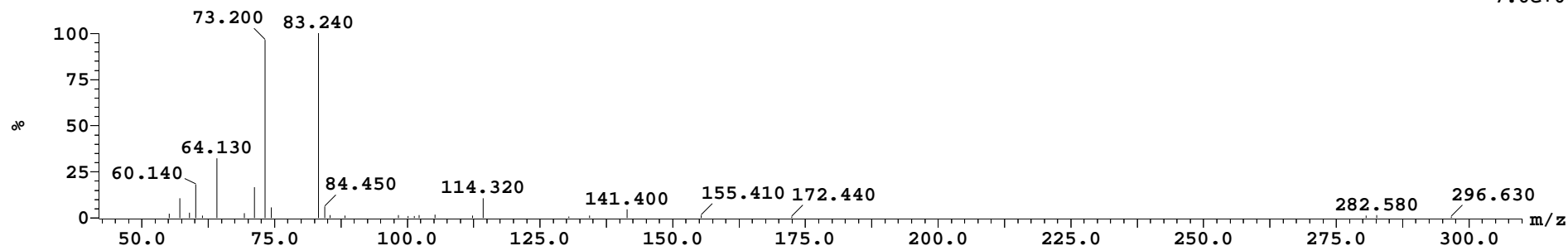
Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

25		15.48	
----	--	-------	--

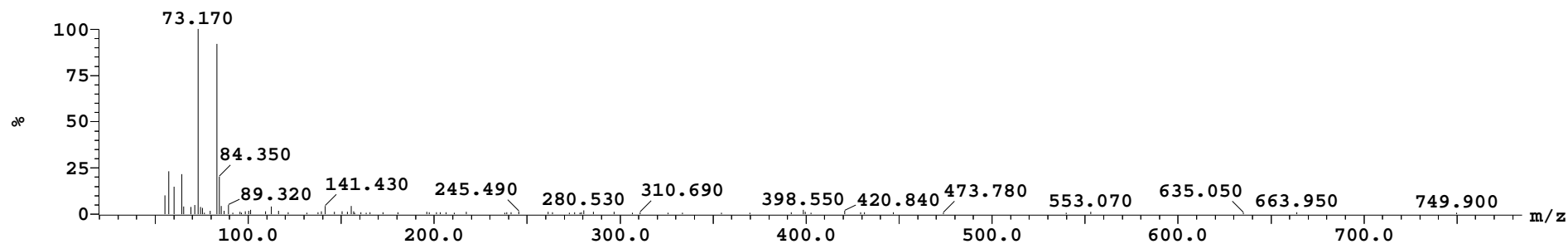
25:(Time: 15.48)

2:MS ES+
7.6e+007

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

26		15.65	
----	--	-------	--

26:(Time: 15.65)

2:MS ES+
4.4e+006

Openlynx Report -

Sample: 643

File:LK-2

Description:Default file

Vial:1:B,4

Date:03-Aug-2023

ID:

Time:12:54:05

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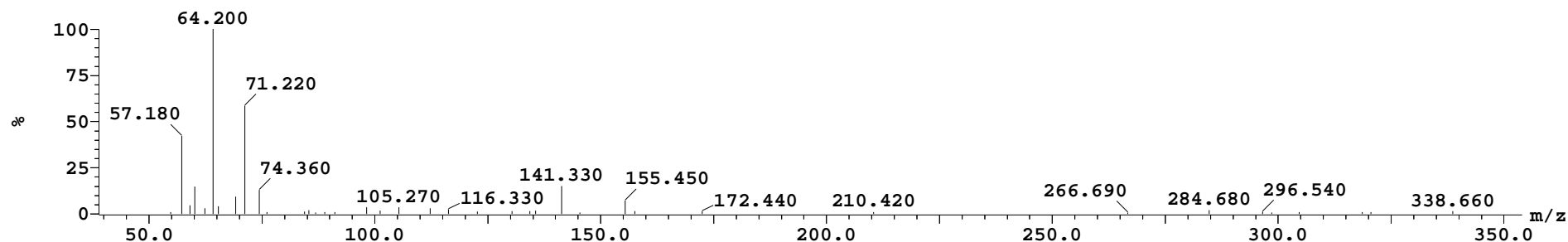
Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

27		16.37	
----	--	-------	--

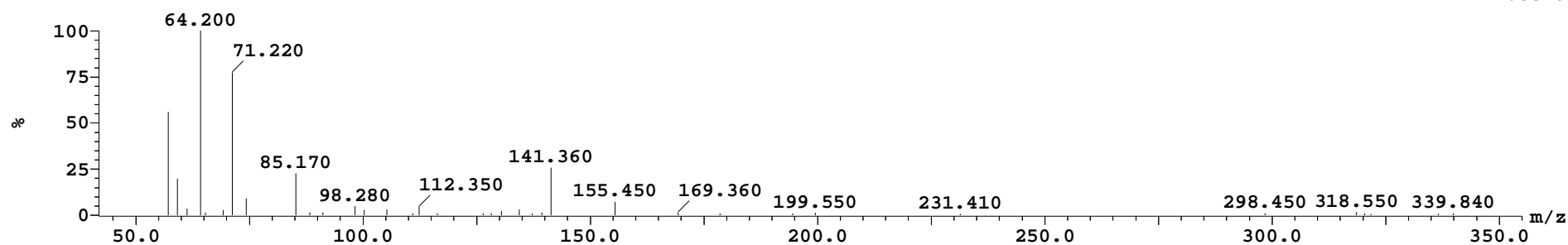
27:(Time: 16.37)

2:MS ES+
1.5e+007

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

28		16.48	
----	--	-------	--

28:(Time: 16.48)

2:MS ES+
1.3e+007

Openlynx Report -

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Sample: 643

Vial:1:B,4

ID:

File:LK-2

Date:03-Aug-2023

Time:12:54:05

Description:Default file

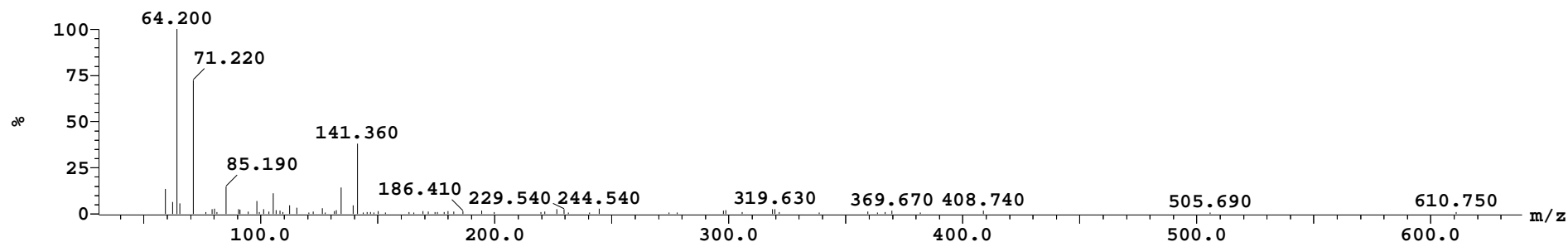
Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

29		16.88	
----	--	-------	--

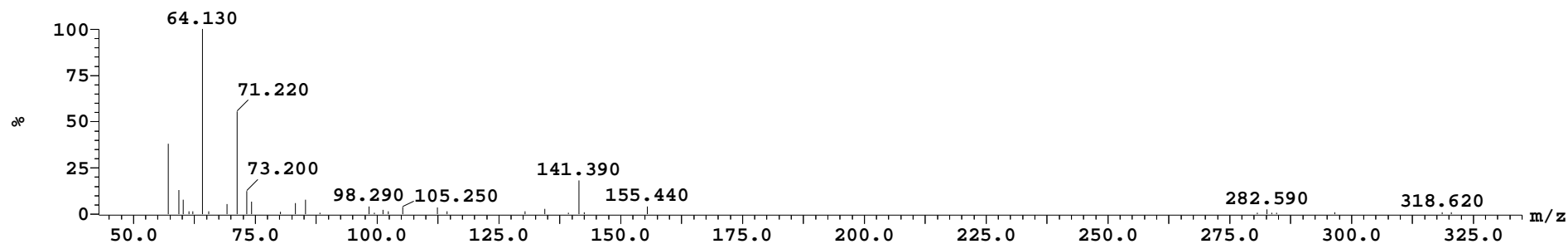
29: (Time: 16.88)

2:MS ES+
5.9e+006

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

30		17.20	
----	--	-------	--

30: (Time: 17.20)

2:MS ES+
8.9e+007

Openlynx Report -

Sample: 643
File:LK-2
Description:Default file

Vial:1:B,4
Date:03-Aug-2023

ID:
Time:12:54:05

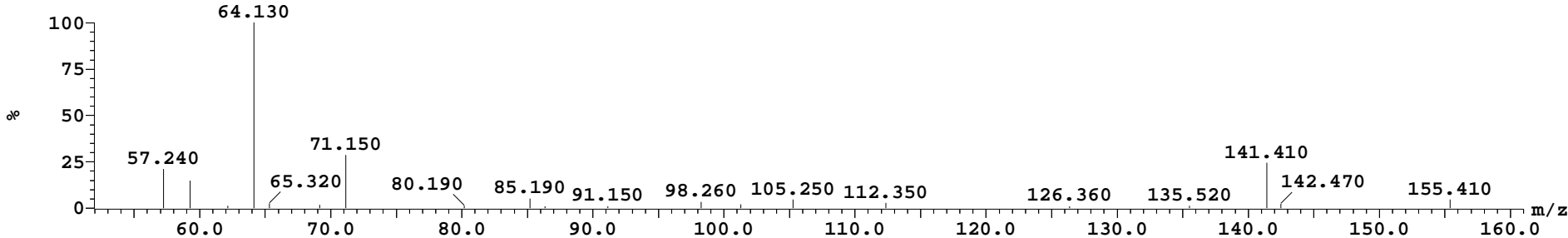
Printed: Thu Aug 03 15:05:03 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
32		21.77	

32:(Time: 21.77)

2:MS ES+
3.8e+007



Openlynx Report -

Sample: 644
File:LK-3
Description:Default file

Vial:1:B,5
Date:03-Aug-2023

ID:
Time:13:20:09

Page 1

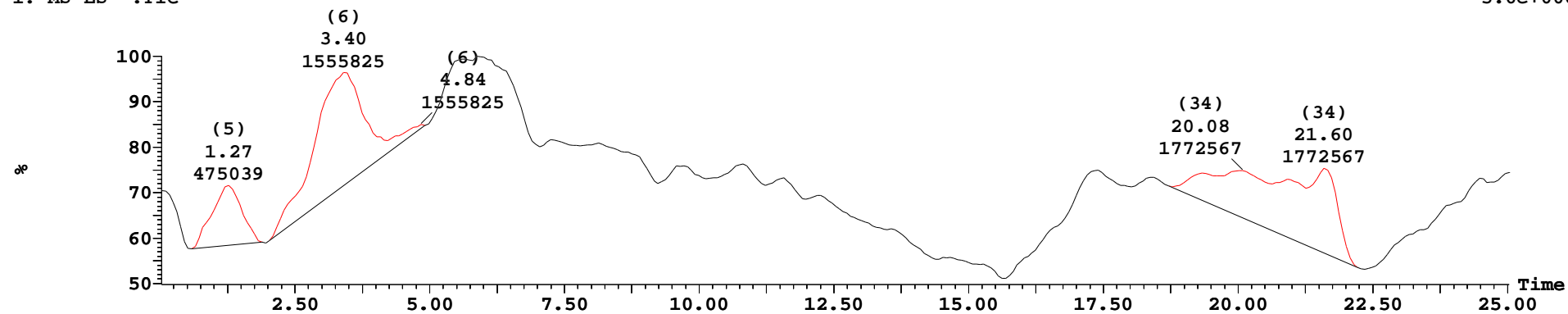
Printed: Thu Aug 03 15:05:46 2023

Sample Report:

Sample 644 Vial 1:B,5 ID File LK-3 Date 03-Aug-2023 Time 13:20:09 Description Default file

1: MS ES- :TIC

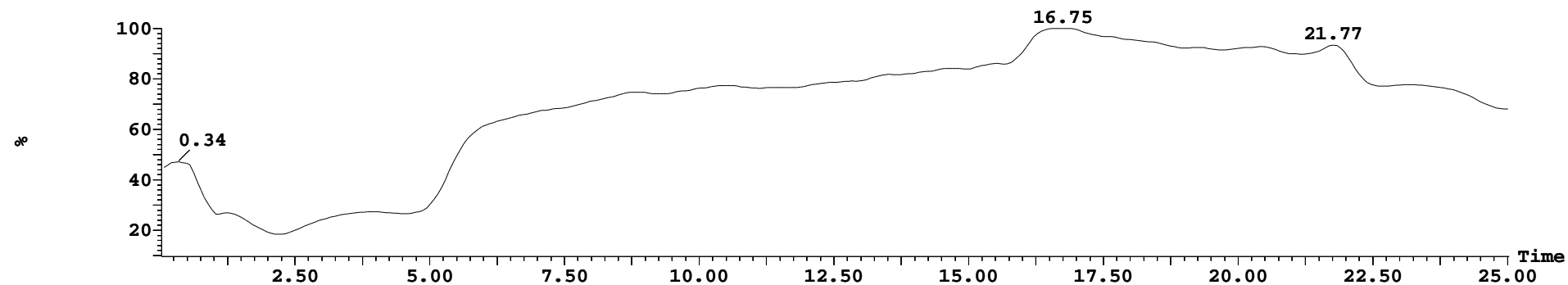
5.6e+006



Peak Number	Compound	Time	AreaAbs	Area %Total	Width	Height	Mass Found
5		1.27	5e+005	12.49	1	7e+005	
6		3.40	2e+006	40.91	3	1e+006	
34		21.60	2e+006	46.60	4	1e+006	

2: MS ES+ :TIC

3.0e+008



Peak Number	Compound	Time	AreaAbs	Area %Total	Width	Height	Mass Found
-------------	----------	------	---------	-------------	-------	--------	------------

Openlynx Report -

Sample: 644
File: LK-3
Description: Default file

Vial: 1:B,5
Date: 03-Aug-2023

ID:
Time: 13:20:09

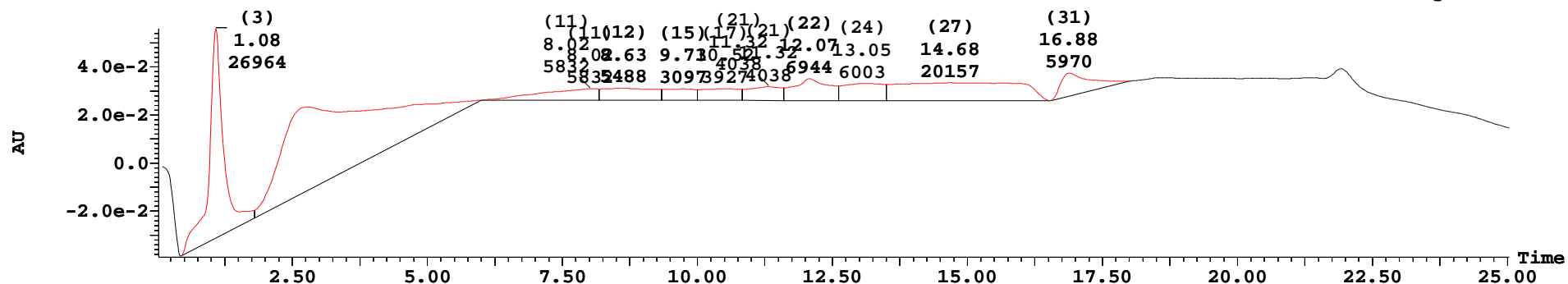
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Sample Report (continued):

3: UV Detector: 214

5.591e-2
Range: 9.466e-2



Peak Number	Compound	Time	AreaAbs	Area %Total	Width	Height	Mass Found
3		1.08	3e+004	16.80	1	9e+004	
10		6.00	7e+004	44.91	4		
11		8.02	6e+003	3.63	2	5e+003	
12		8.63	5e+003	3.42	1	5e+003	
15		9.73	3e+003	1.93	1	5e+003	
17		10.52	4e+003	2.45	1	5e+003	
21		11.32	4e+003	2.52	1	6e+003	
22		12.07	7e+003	4.33	1	9e+003	
24		13.07	6e+003	3.74	1	7e+003	
27		14.68	2e+004	12.56	3	7e+003	
31		16.88	6e+003	3.72	1	1e+004	

Openlynx Report -

Sample: 644
File: LK-3
Description: Default file

Vial: 1:B,5
Date: 03-Aug-2023

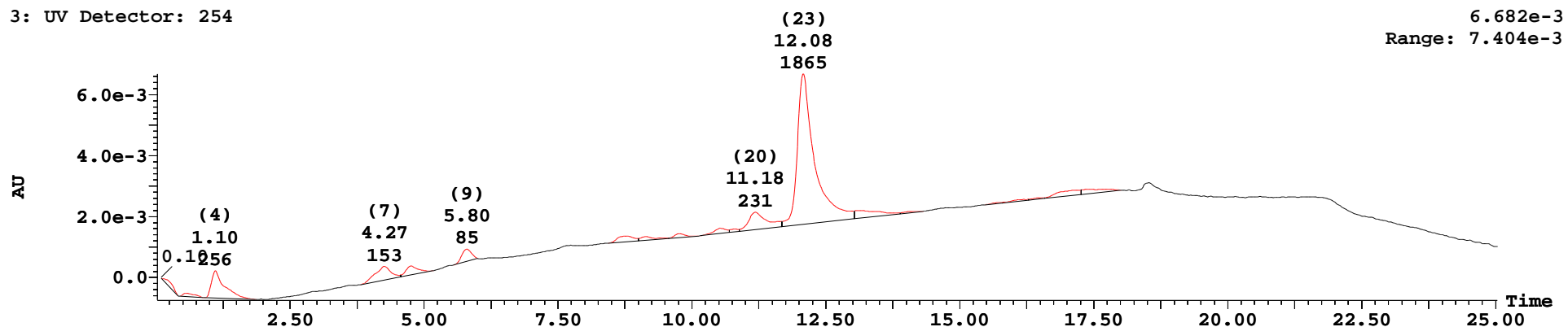
ID:
Time: 13:20:09

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Sample Report (continued):

3: UV Detector: 254



Peak Number	Compound	Time	AreaAbs	Area %Total	Width	Height	Mass Found
1		0.10	3e+001	0.97	0		
2		0.57	3e+001	0.89	0	1e+002	
4		1.10	3e+002	7.90	1	9e+002	
7		4.27	2e+002	4.73	1	4e+002	
8		4.75	8e+001	2.35	1	3e+002	
9		5.80	8e+001	2.62	0	4e+002	
13		8.78	7e+001	2.04	1	2e+002	
14		9.15	3e+001	1.02	1	1e+002	
16		9.77	3e+001	0.87	1	1e+002	
18		10.53	5e+001	1.48	1	2e+002	
19		10.78	2e+001	0.50	0	1e+002	
20		11.18	2e+002	7.13	1	6e+002	
23		12.08	2e+003	57.66	1	5e+003	
25		13.13	1e+002	3.87	1	3e+002	
26		14.30	1e+001	0.34	0		
28		15.80	5e+000	0.15	0	1e+001	
29		16.28	1e+001	0.45	0	2e+001	
30		16.58	9e+000	0.27	0	2e+001	
32		17.27	9e+001	2.66	1	1e+002	
33		17.40	7e+001	2.10	1	1e+002	

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

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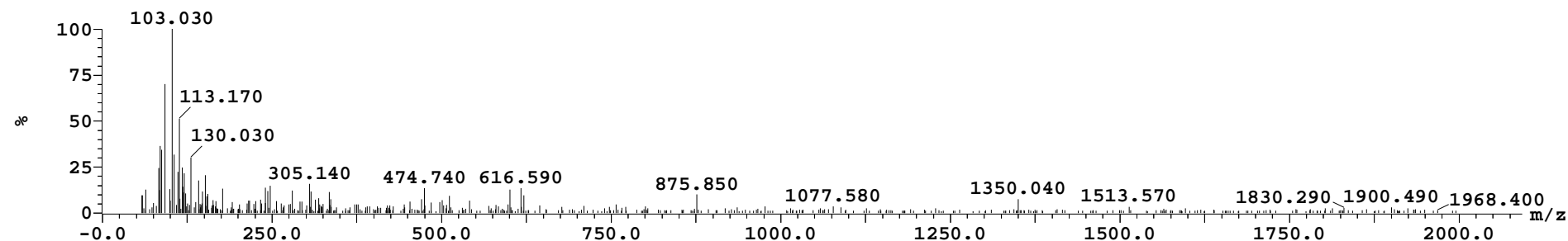
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
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1

0.10

1: (Time: 0.10)

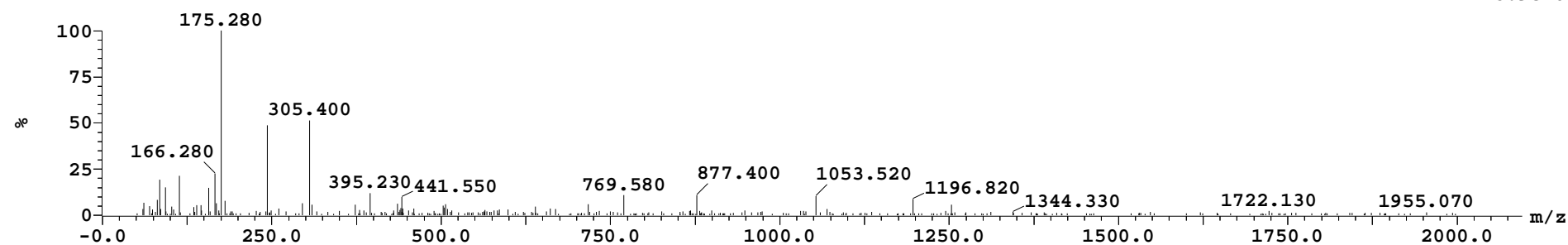
1:MS ES-
3.8e+004

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

2

0.57

2: (Time: 0.57)

1:MS ES-
8.9e+004

Openlynx Report -

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Sample: 644

Vial:1:B,5

ID:

File:LK-3

Date:03-Aug-2023

Time:13:20:09

Description:Default file

Printed: Thu Aug 03 15:05:46 2023

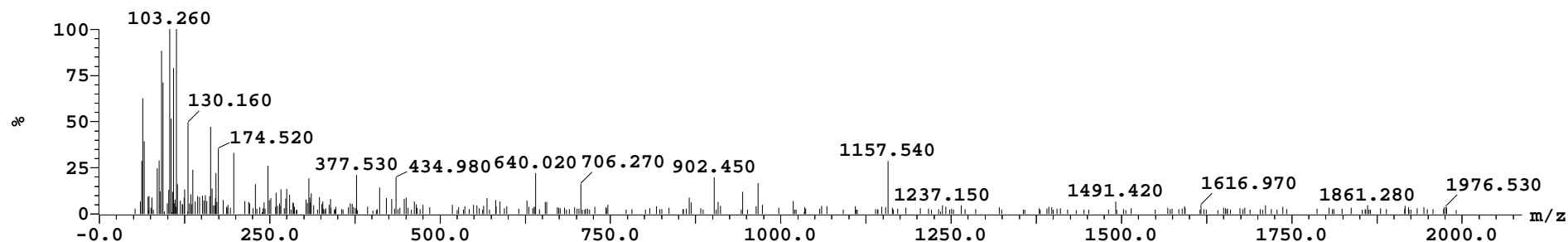
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

3

1.08

3: (Time: 1.08)

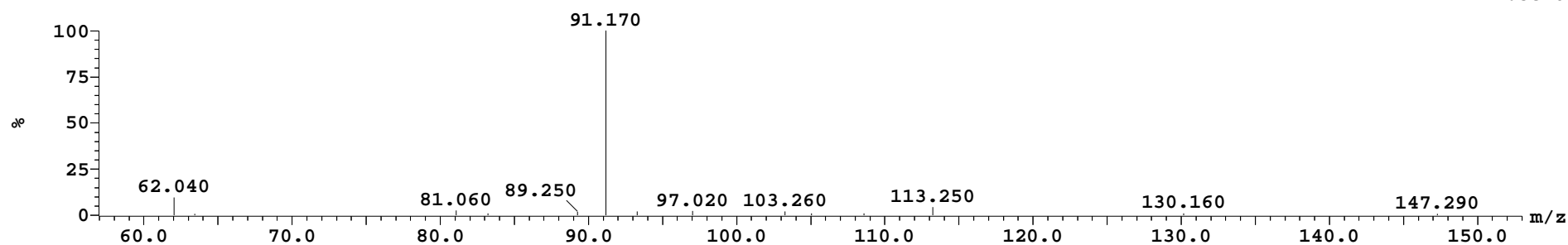
1:MS ES-
2.6e+004

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

4

1.10

4: (Time: 1.10)

1:MS ES-
2.5e+006

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

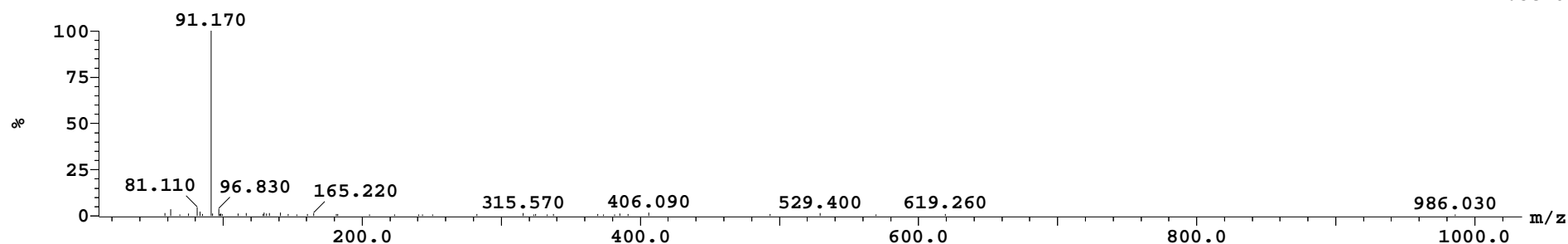
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Sample Report (continued):

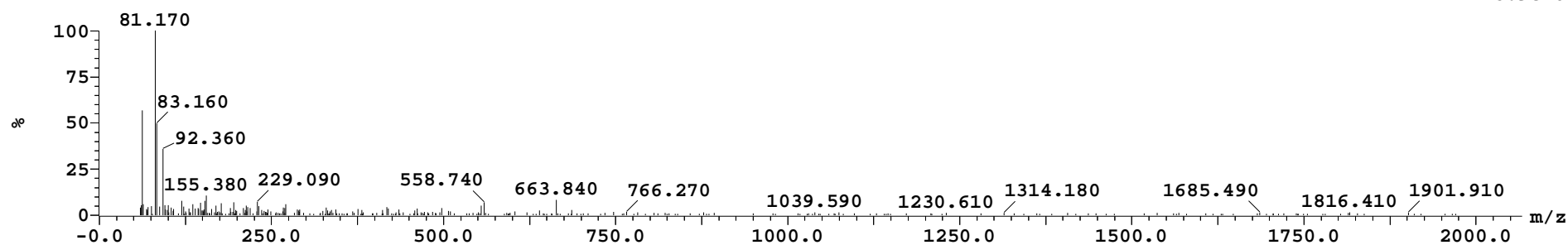
Peak ID	Compound	Time	Mass Found
5		1.27	

5: (Time: 1.27)

1:MS ES-
4.3e+005

Peak ID	Compound	Time	Mass Found
6		3.40	

6: (Time: 3.40)

1:MS ES-
8.9e+004

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

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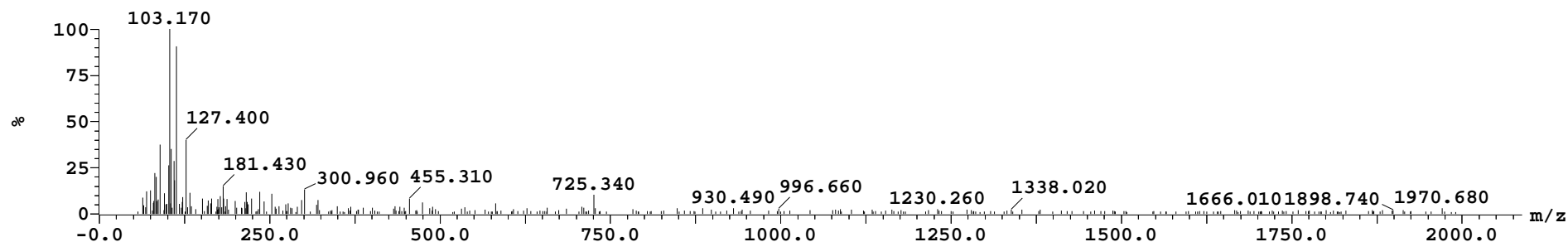
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
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7

4.27

7: (Time: 4.27)

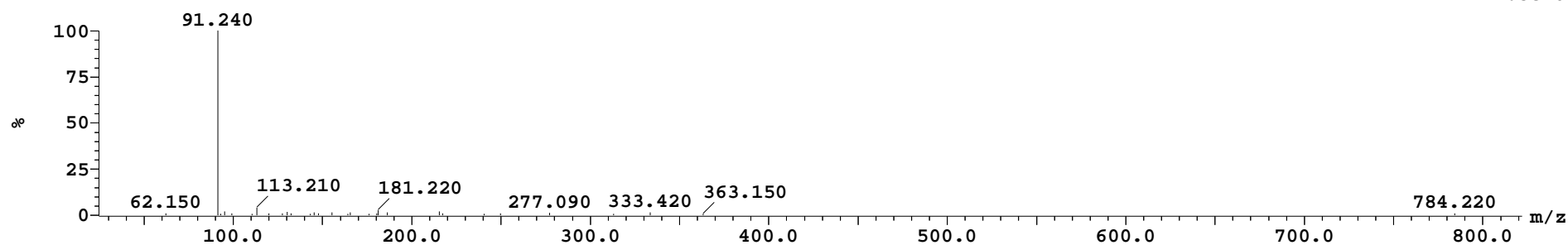
1:MS ES-
5.6e+004

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

8

4.75

8: (Time: 4.75)

1:MS ES-
7.5e+005

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

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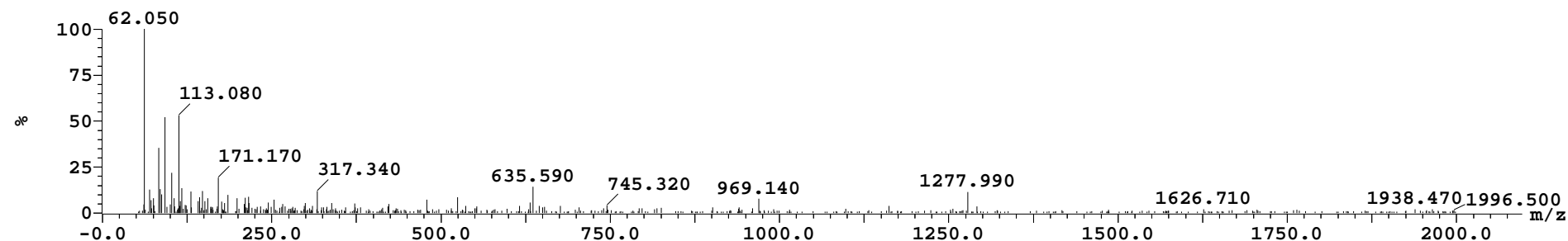
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
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9

5.80

9: (Time: 5.80)

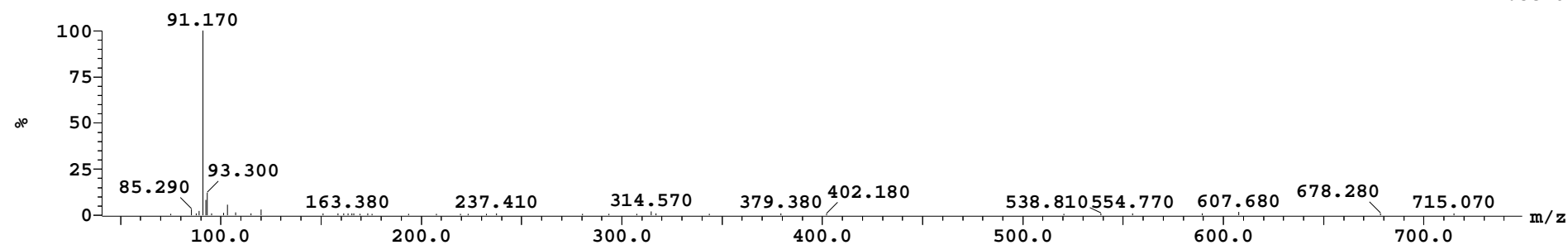
1:MS ES-
6.6e+004

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

10

6.00

10: (Time: 6.00)

1:MS ES-
4.5e+005

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

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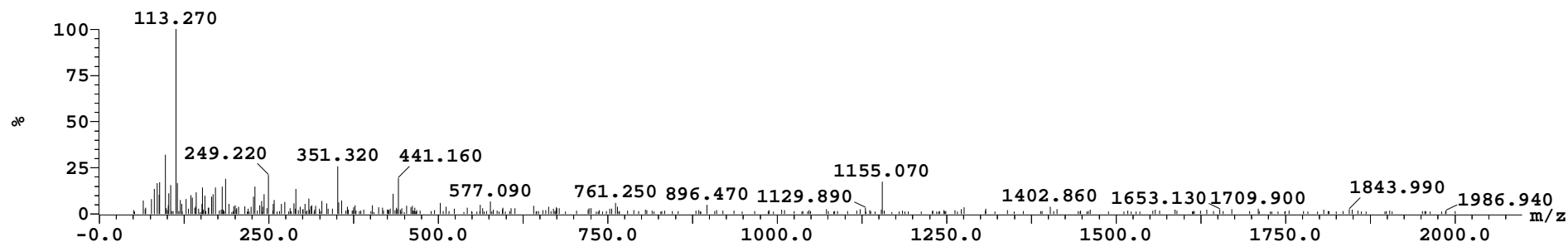
Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
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11		8.02	
----	--	------	--

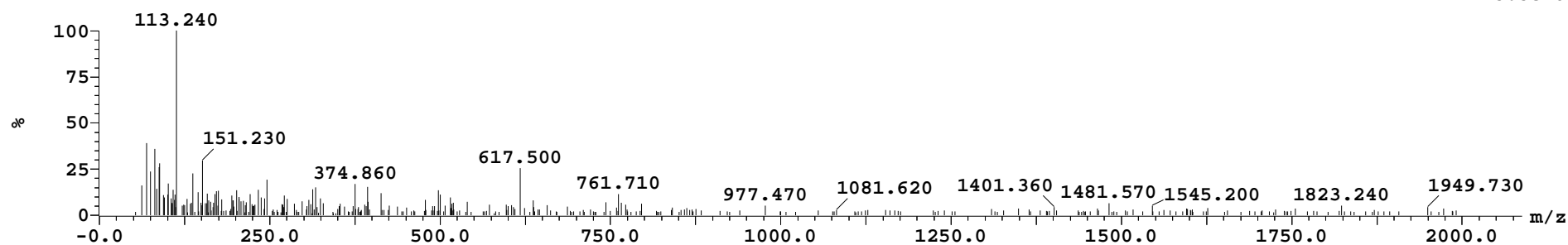
11: (Time: 8.02)

1:MS ES-
4.8e+004

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

12		8.63	
----	--	------	--

12: (Time: 8.63)

1:MS ES-
3.3e+004

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

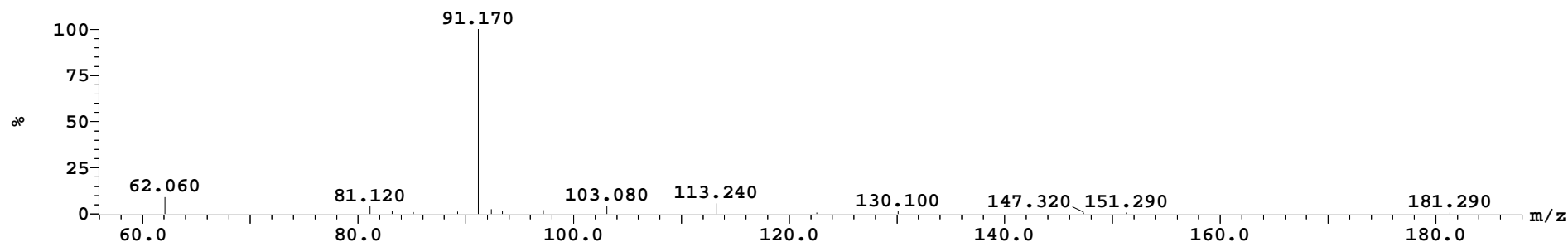
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Sample Report (continued):

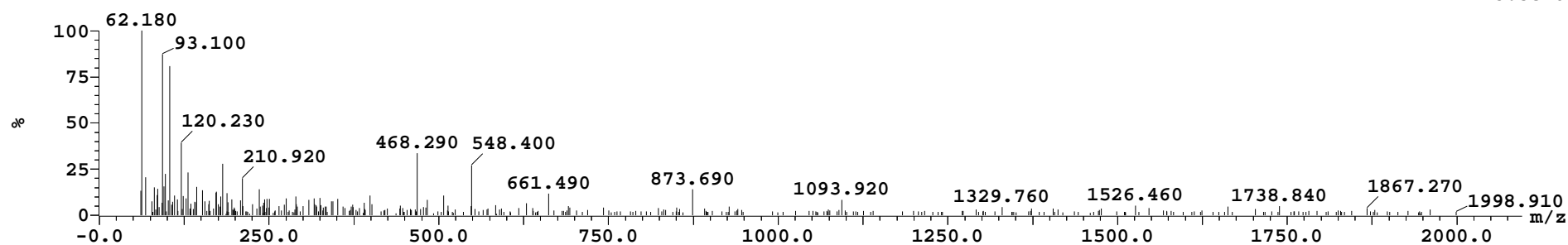
Peak ID	Compound	Time	Mass Found
13		8.78	

13: (Time: 8.78)

1:MS ES-
2.7e+006

Peak ID	Compound	Time	Mass Found
14		9.15	

14: (Time: 9.15)

1:MS ES-
3.5e+004

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

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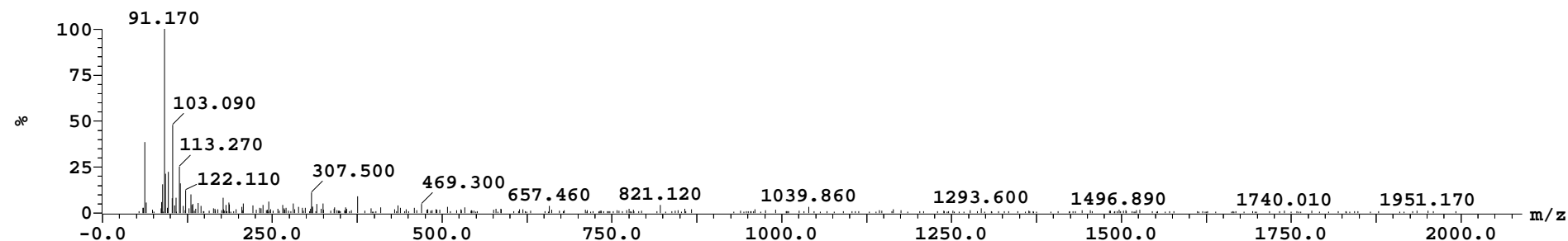
Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
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15		9.73	
----	--	------	--

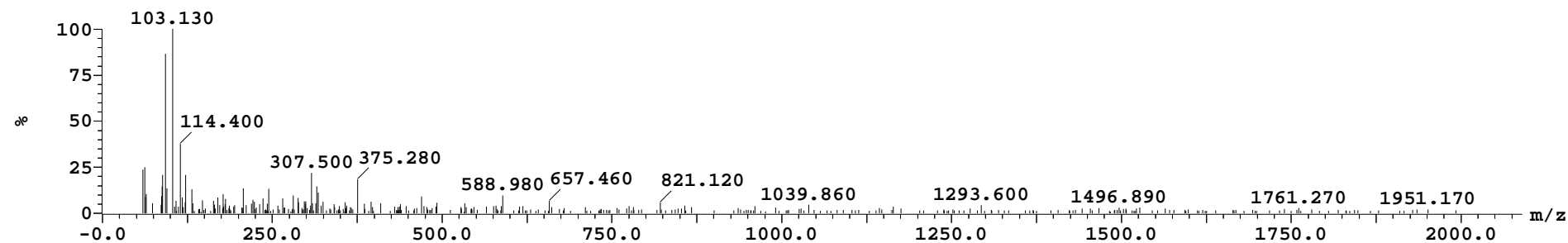
15:(Time: 9.73)

1:MS ES-
9.0e+004

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

16		9.77	
----	--	------	--

16:(Time: 9.77)

1:MS ES-
4.9e+004

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

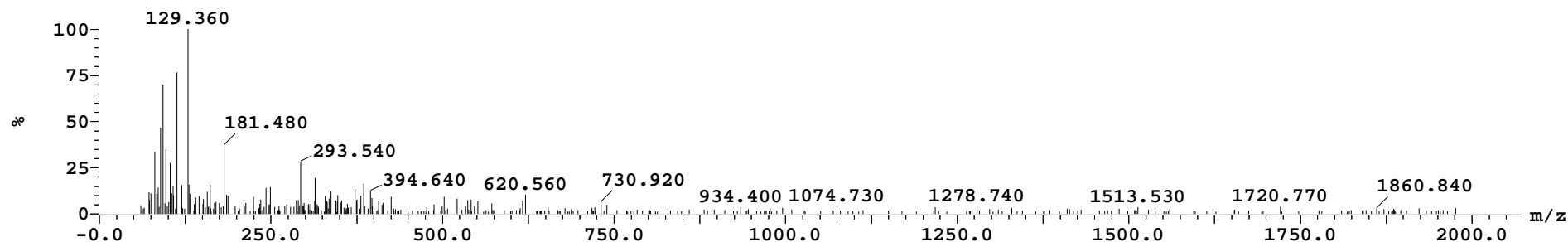
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Sample Report (continued):

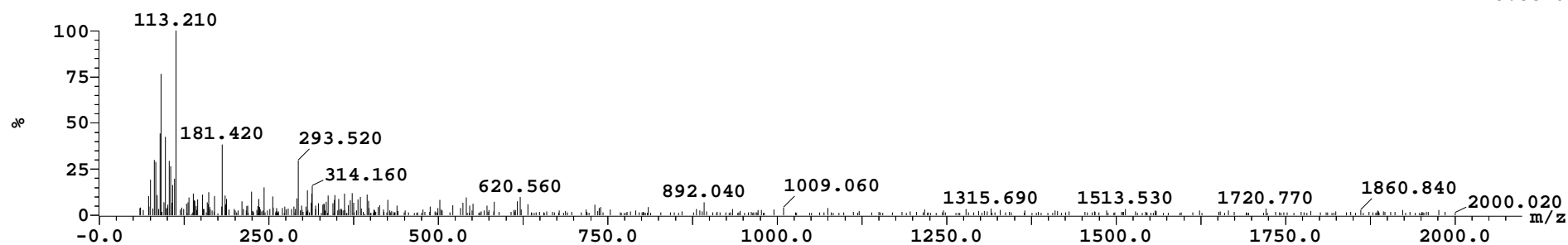
Peak ID	Compound	Time	Mass Found
17		10.52	

17: (Time: 10.52)

1:MS ES-
4.6e+004

Peak ID	Compound	Time	Mass Found
18		10.53	

18: (Time: 10.53)

1:MS ES-
3.5e+004

Openlynx Report -

Page 13

Sample: 644

Vial:1:B,5

ID:

File:LK-3

Date:03-Aug-2023

Time:13:20:09

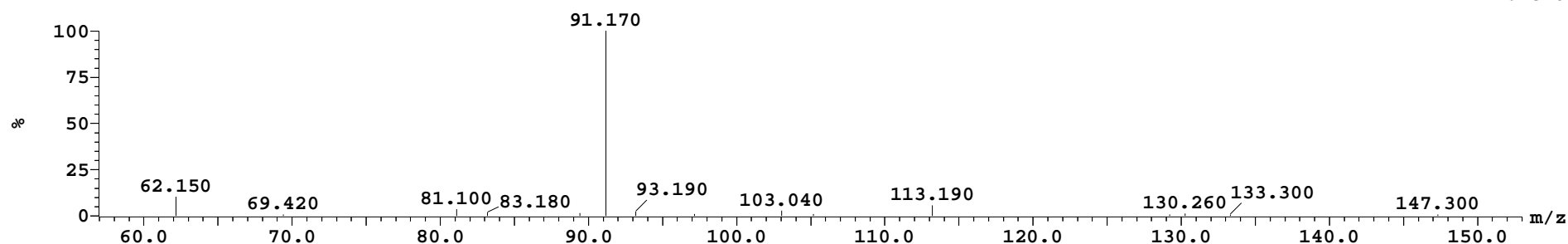
Description:Default file

Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

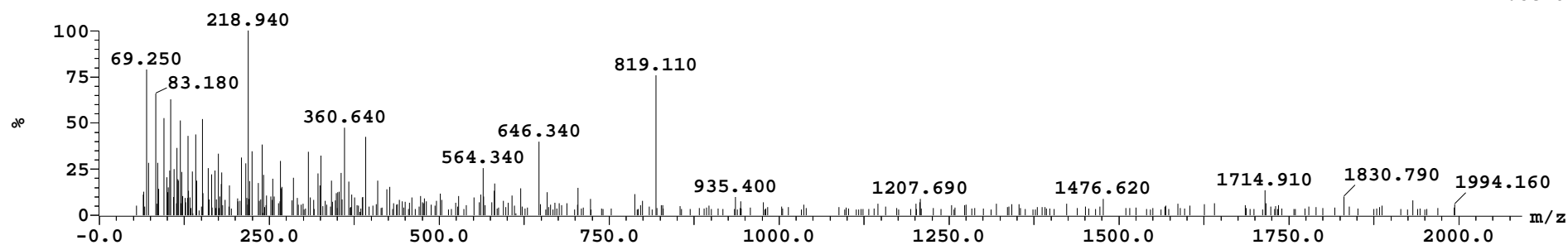
Peak ID	Compound	Time	Mass Found
19		10.78	

19: (Time: 10.78)

1:MS ES-
2.7e+006

Peak ID	Compound	Time	Mass Found
20		11.18	

20: (Time: 11.18)

1:MS ES-
1.8e+004

Openlynx Report -

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Sample: 644

Vial:1:B,5

ID:

File:LK-3

Date:03-Aug-2023

Time:13:20:09

Description:Default file

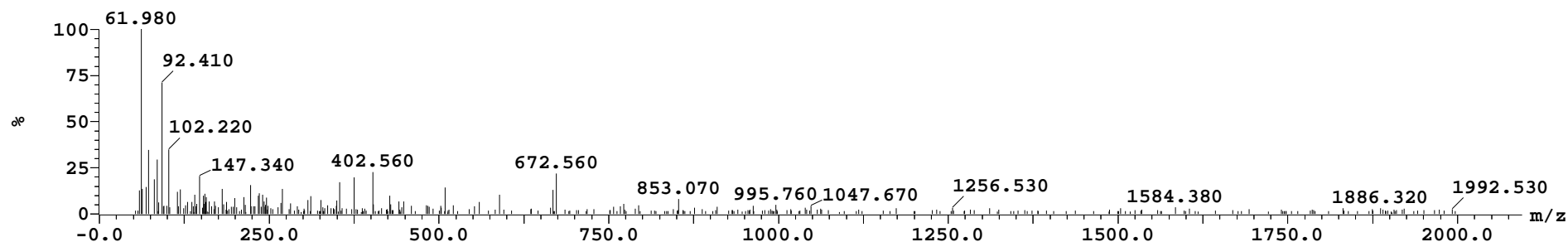
Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
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21		11.32	
----	--	-------	--

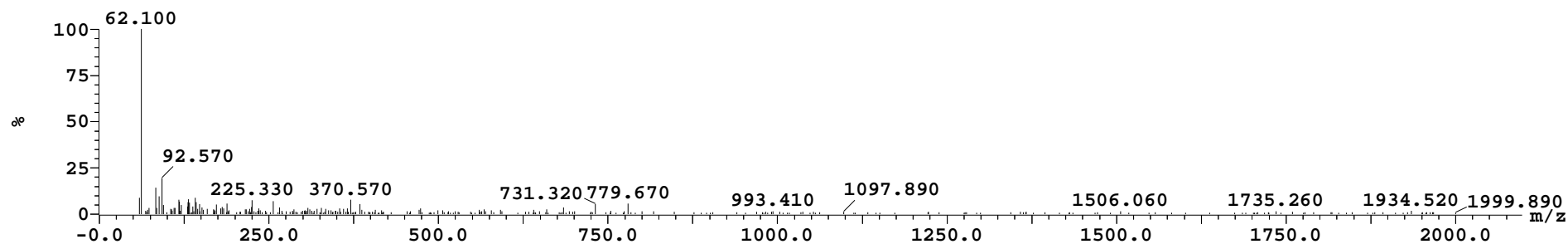
21: (Time: 11.32)

1:MS ES-
4.4e+004

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

22		12.07	
----	--	-------	--

22: (Time: 12.07)

1:MS ES-
1.1e+005

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

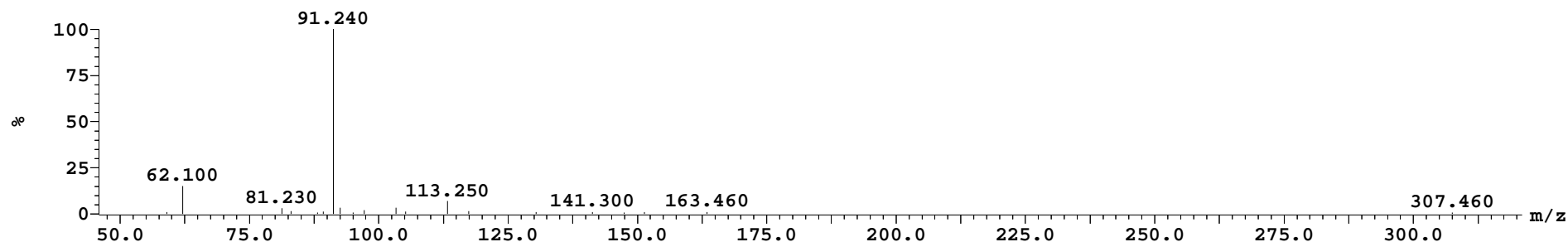
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Sample Report (continued):

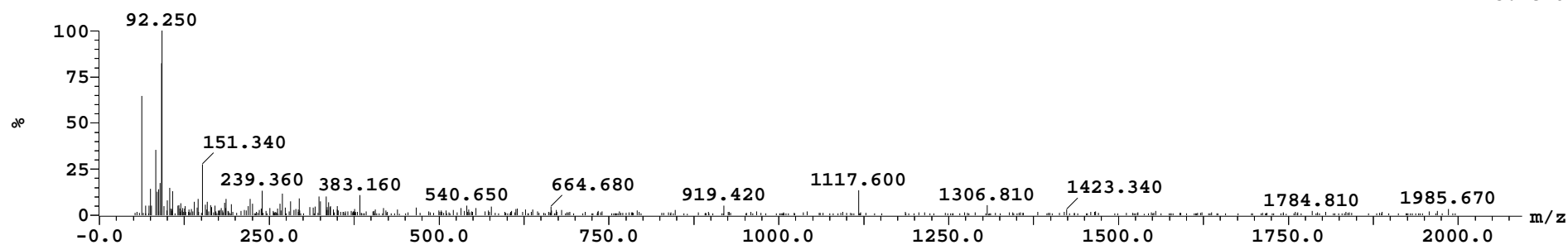
Peak ID	Compound	Time	Mass Found
23		12.08	

23:(Time: 12.08)

1:MS ES-
2.1e+006

Peak ID	Compound	Time	Mass Found
24		13.07	

24:(Time: 13.07)

1:MS ES-
5.2e+004

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

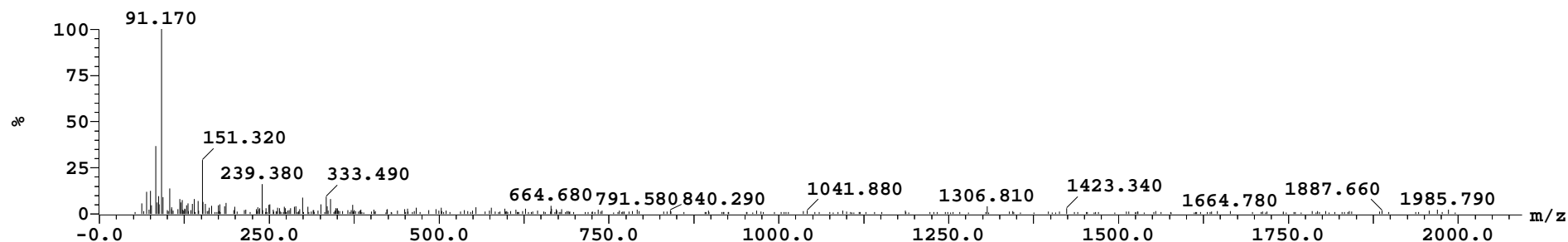
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Sample Report (continued):

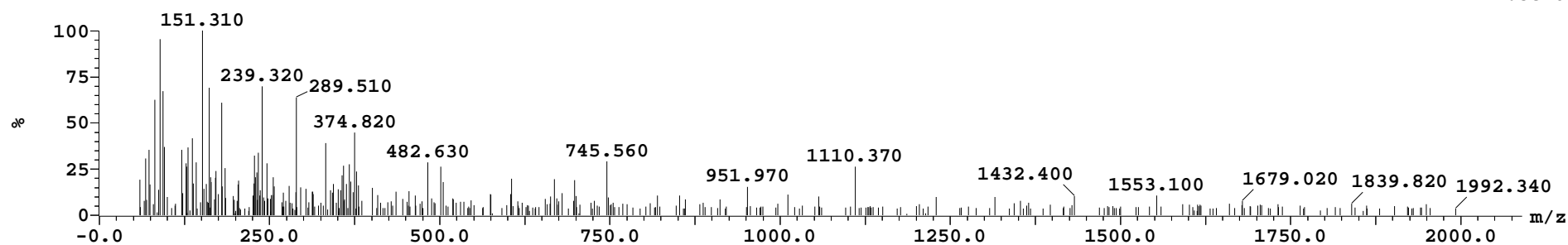
Peak ID	Compound	Time	Mass Found
25		13.13	

25: (Time: 13.13)

1:MS ES-
8.3e+004

Peak ID	Compound	Time	Mass Found
26		14.30	

26: (Time: 14.30)

1:MS ES-
1.5e+004

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

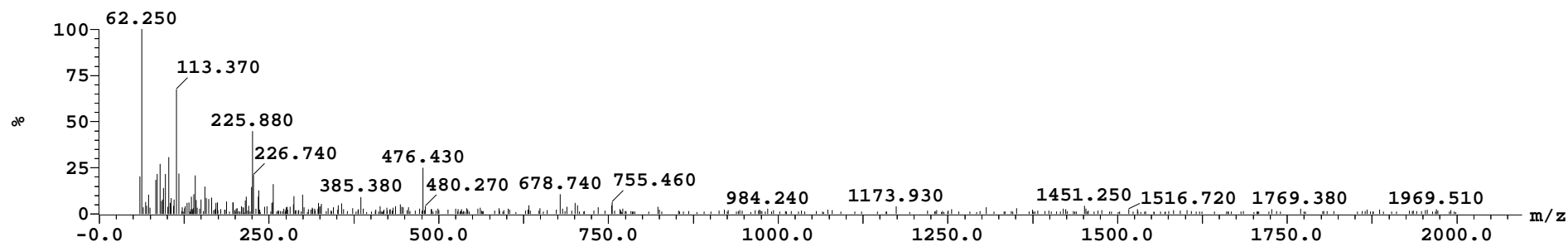
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Sample Report (continued):

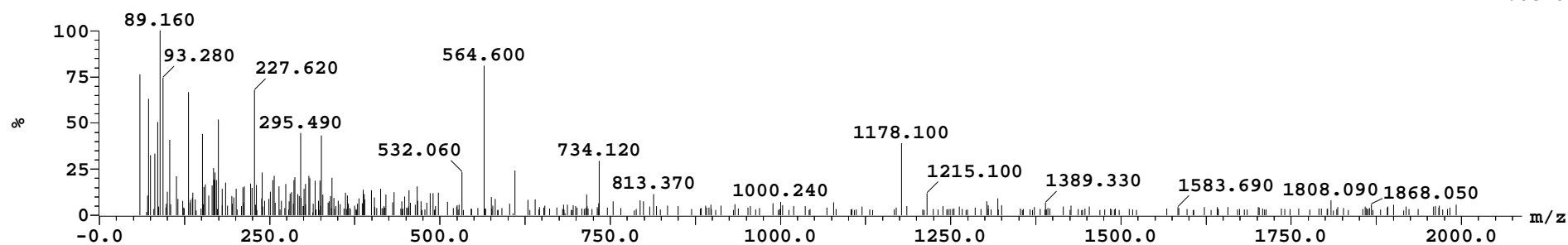
Peak ID	Compound	Time	Mass Found
27		14.68	

27:(Time: 14.68)

1:MS ES-
5.7e+004

Peak ID	Compound	Time	Mass Found
28		15.80	

28:(Time: 15.80)

1:MS ES-
2.0e+004

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

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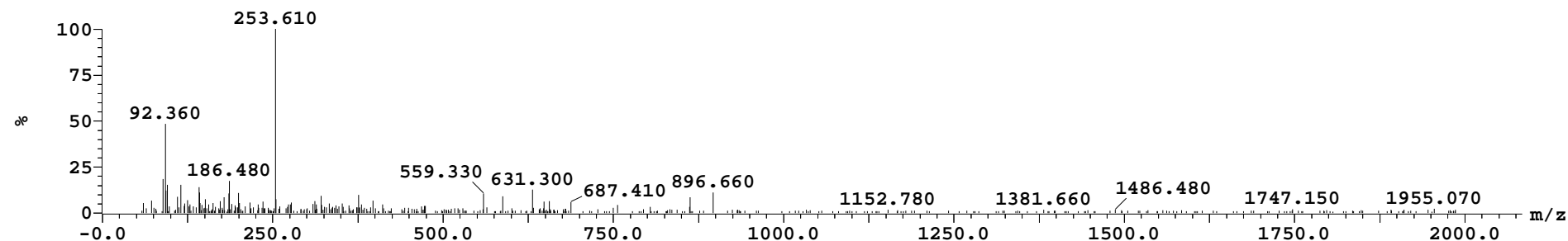
Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
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29		16.28	
----	--	-------	--

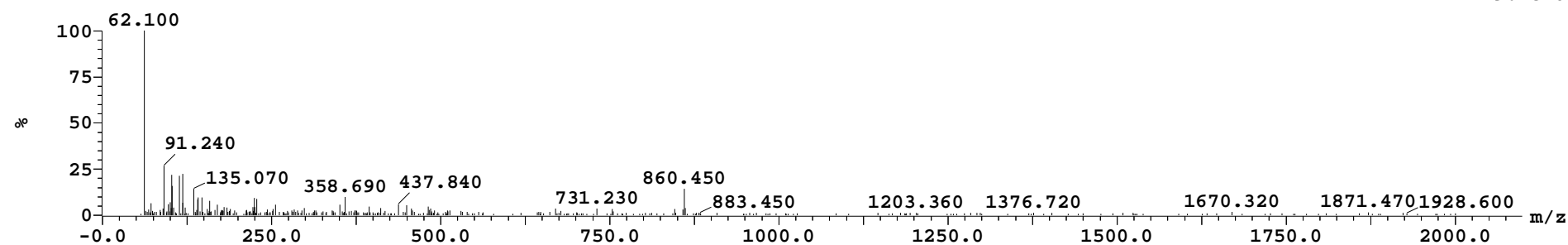
29: (Time: 16.28)

1:MS ES-
7.7e+004

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

30		16.58	
----	--	-------	--

30: (Time: 16.58)

1:MS ES-
9.7e+004

Openlynx Report -

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Sample: 644

Vial:1:B,5

ID:

File:LK-3

Date:03-Aug-2023

Time:13:20:09

Description:Default file

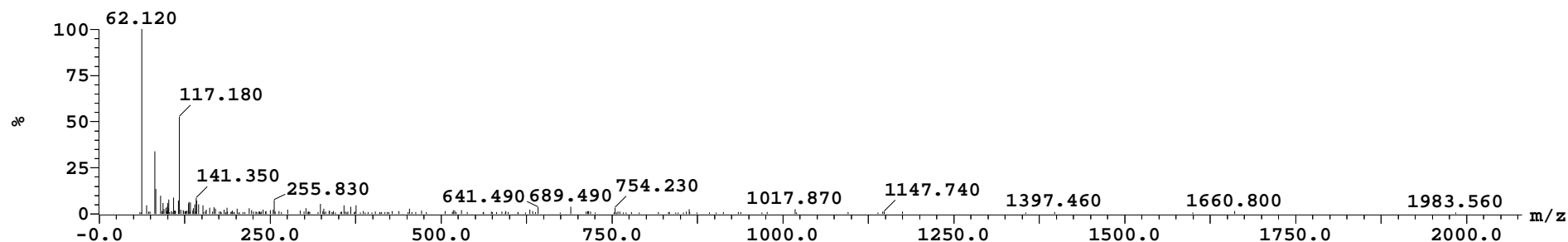
Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

31		16.88	
----	--	-------	--

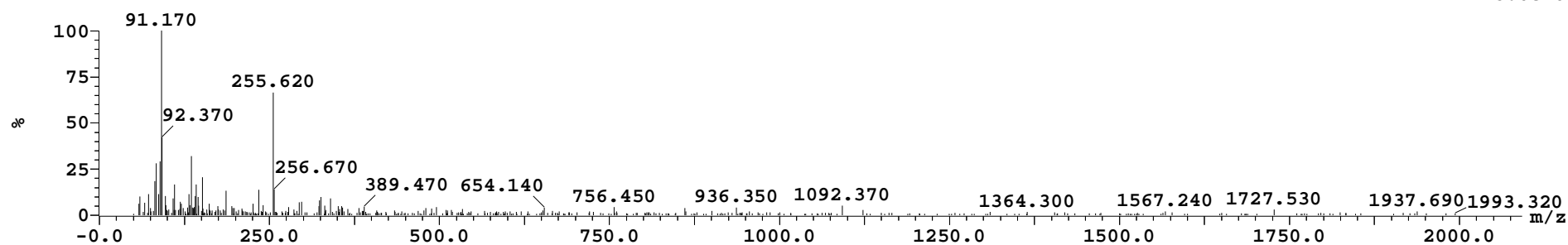
31:(Time: 16.88)

1:MS ES-
2.2e+005

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

32		17.27	
----	--	-------	--

32:(Time: 17.27)

1:MS ES-
8.0e+004

Openlynx Report -

Page 20

Sample: 644

Vial:1:B,5

ID:

File:LK-3

Date:03-Aug-2023

Time:13:20:09

Description:Default file

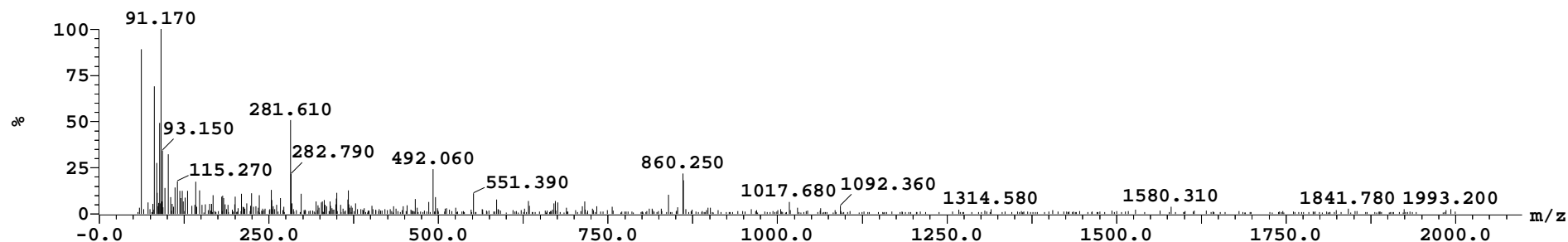
Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

33		17.40	
----	--	-------	--

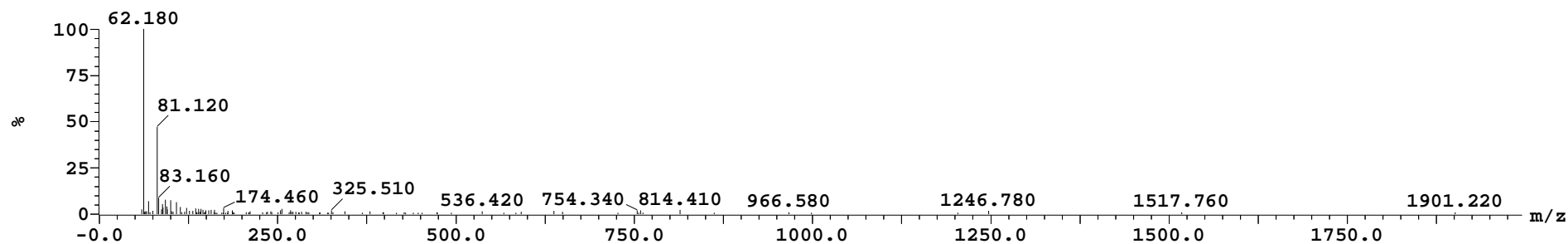
33: (Time: 17.40)

1:MS ES-
5.4e+004

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

34		21.60	
----	--	-------	--

34: (Time: 21.60)

1:MS ES-
3.0e+005

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

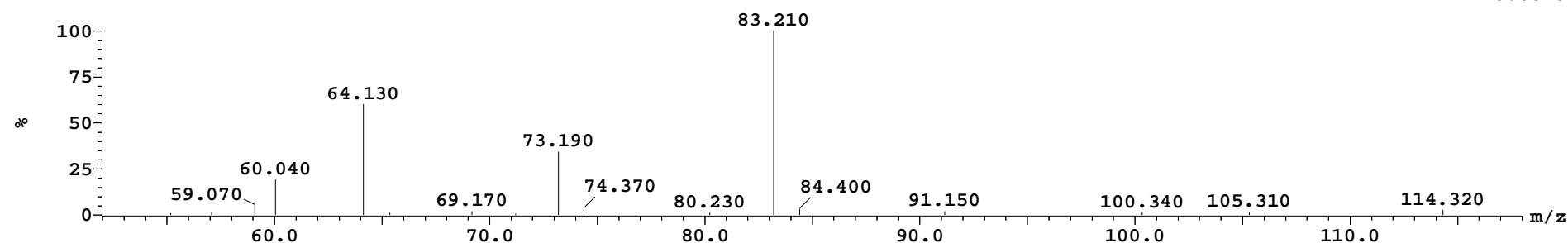
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Sample Report (continued):

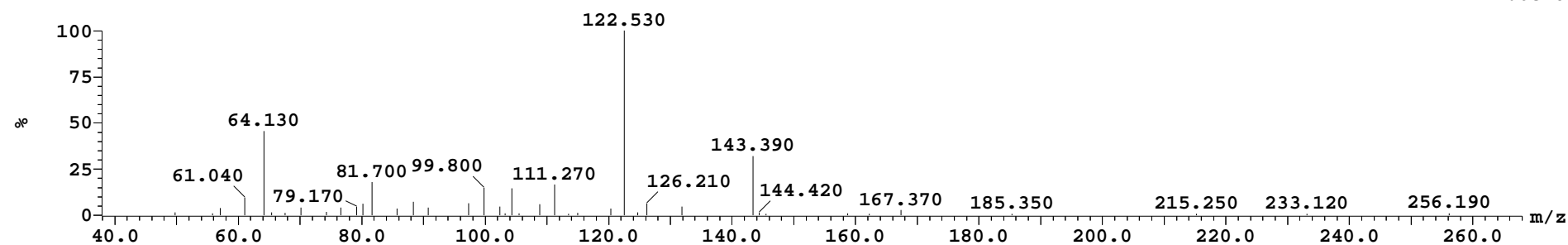
Peak ID	Compound	Time	Mass Found
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1: (Time: 0.10)

2:MS ES+
5.8e+007

Peak ID	Compound	Time	Mass Found
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2: (Time: 0.57)

2:MS ES+
4.6e+007

Openlynx Report -

Sample: 644
File:LK-3
Description:Default file

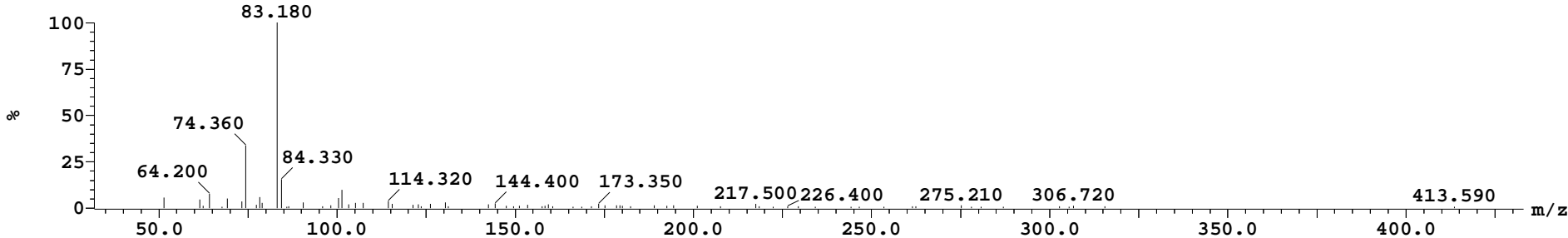
Vial:1:B,5
Date:03-Aug-2023

ID:
Time:13:20:09

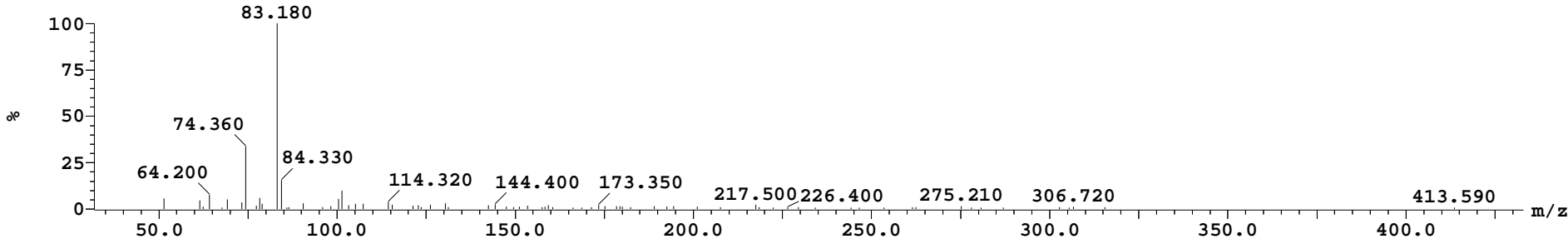
Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
3		1.08	
3: (Time: 1.08)			
			2:MS ES+ 2.5e+006



Peak ID	Compound	Time	Mass Found
4		1.10	
4: (Time: 1.10)			
			2:MS ES+ 2.5e+006



Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

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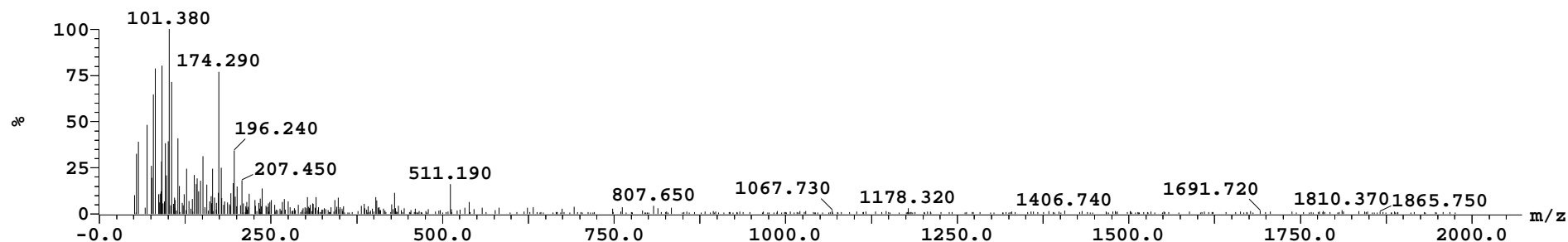
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

7

4.27

7: (Time: 4.27)

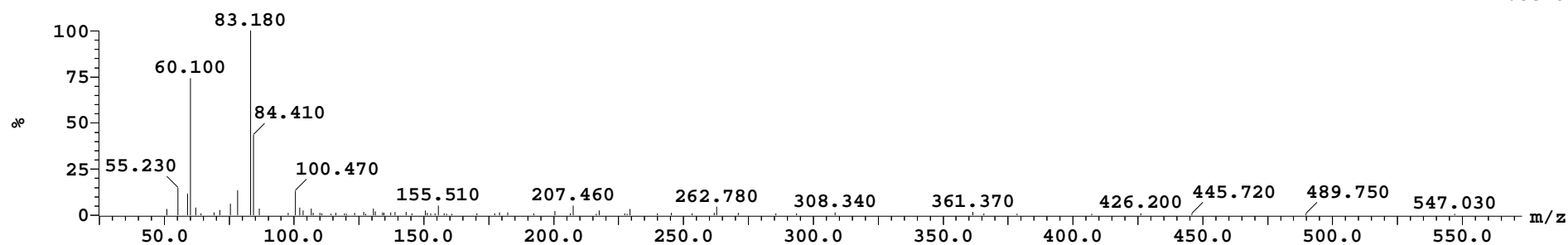
2:MS ES+
1.7e+005

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

8

4.75

8: (Time: 4.75)

2:MS ES+
1.5e+006

Openlynx Report -

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Sample: 644

Vial:1:B,5

ID:

File:LK-3

Date:03-Aug-2023

Time:13:20:09

Description:Default file

Printed: Thu Aug 03 15:05:46 2023

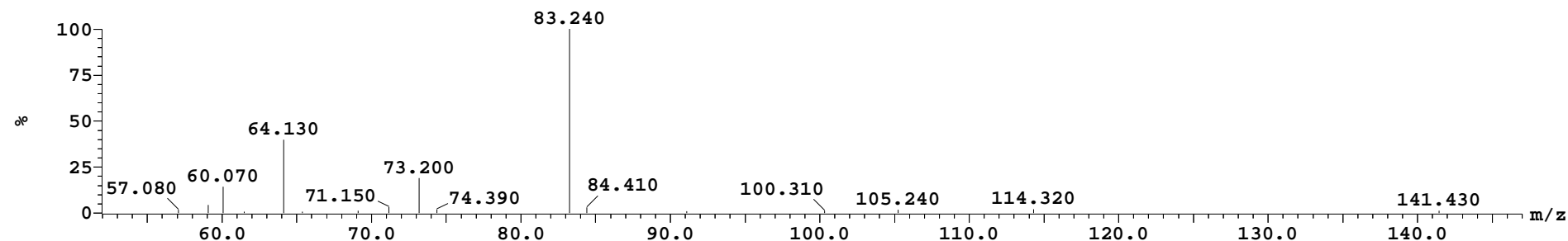
Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

9

5.80

9: (Time: 5.80)

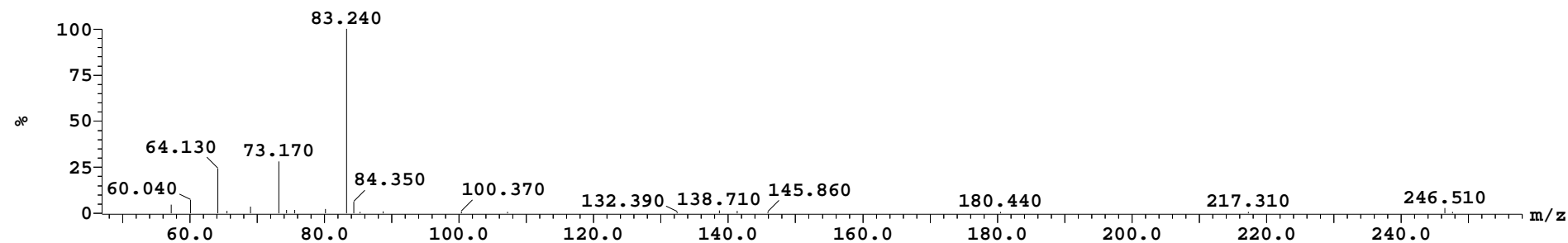
2:MS ES+
8.6e+007

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

10

6.00

10: (Time: 6.00)

2:MS ES+
1.1e+007

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

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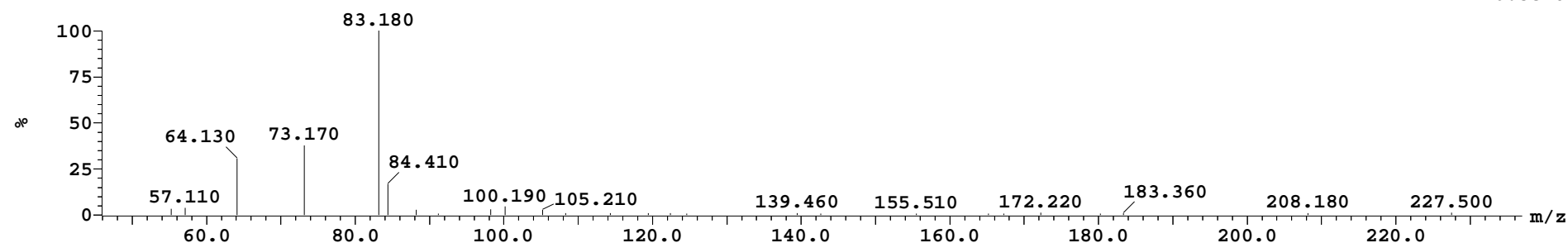
Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

11		8.02	
----	--	------	--

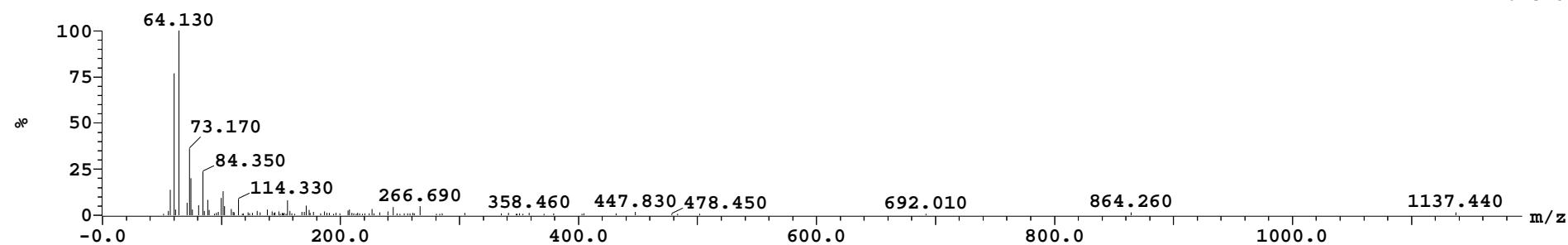
11: (Time: 8.02)

2:MS ES+
6.5e+006

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

12		8.63	
----	--	------	--

12: (Time: 8.63)

2:MS ES+
2.4e+006

Openlynx Report -

Sample: 644

File: LK-3

Description: Default file

Vial: 1:B,5

Date: 03-Aug-2023

ID:

Time: 13:20:09

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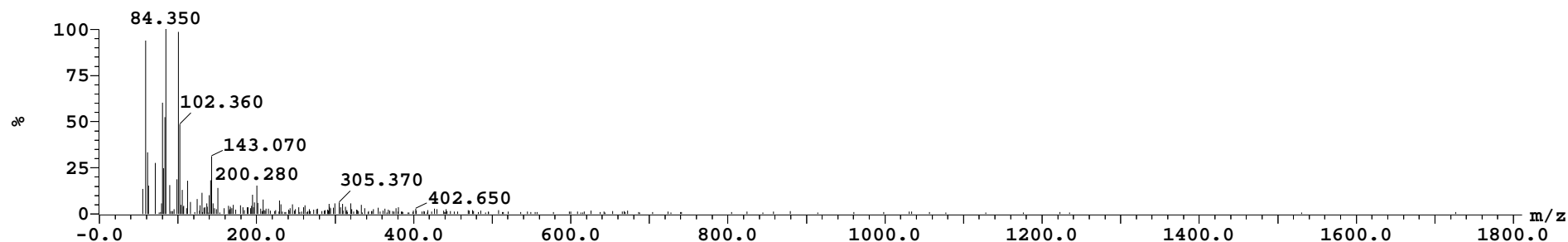
Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

13		8.78	
----	--	------	--

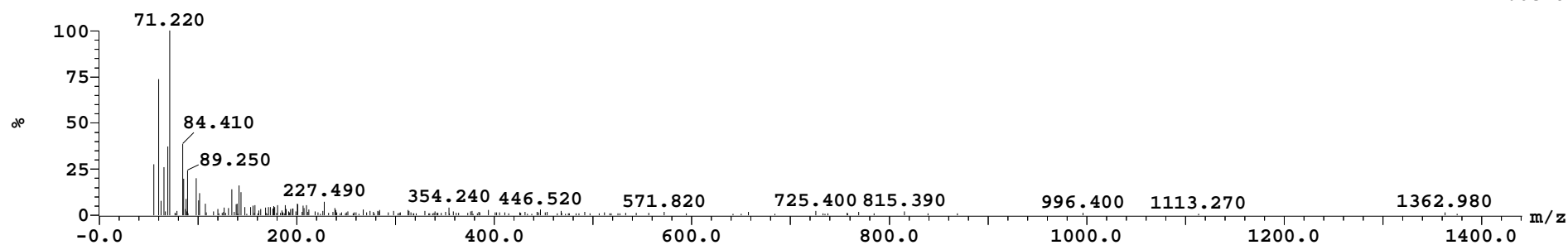
13: (Time: 8.78)

2:MS ES+
4.6e+005

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

14		9.15	
----	--	------	--

14: (Time: 9.15)

2:MS ES+
7.6e+005

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

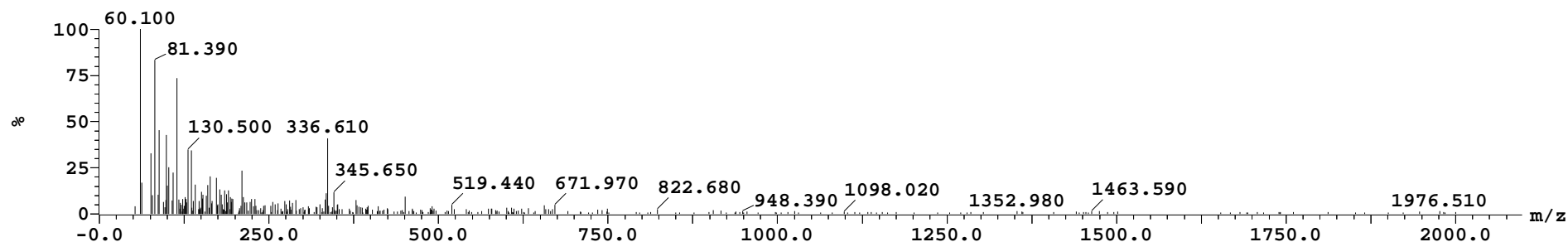
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Sample Report (continued):

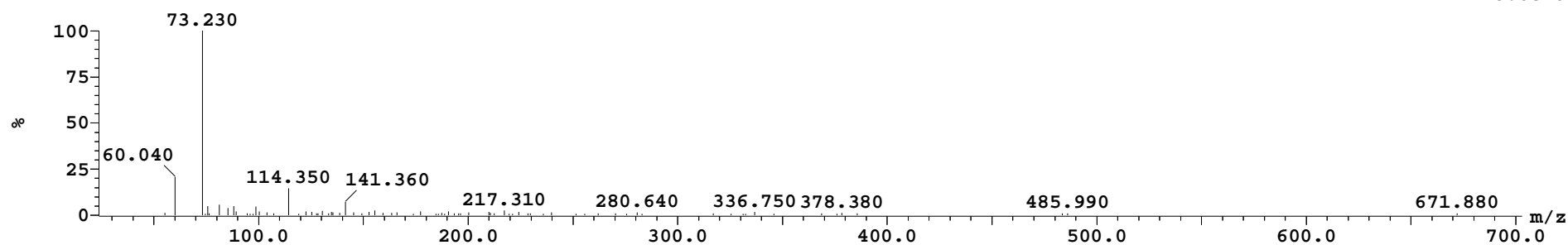
Peak ID	Compound	Time	Mass Found
15		9.73	

15:(Time: 9.73)

2:MS ES+
3.1e+005

Peak ID	Compound	Time	Mass Found
16		9.77	

16:(Time: 9.77)

2:MS ES+
3.0e+006

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

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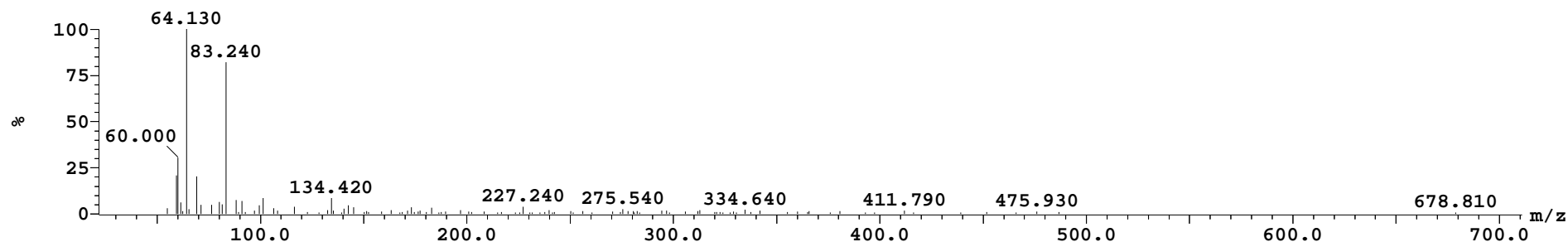
Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

17		10.52	
----	--	-------	--

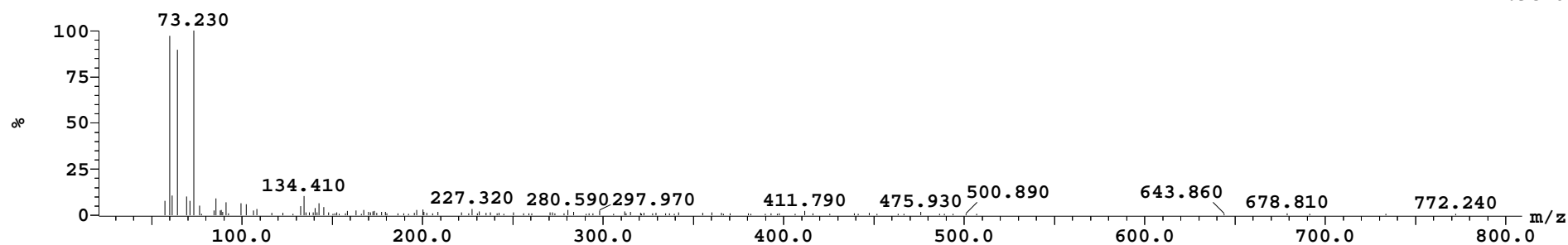
17: (Time: 10.52)

2:MS ES+
1.7e+006

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

18		10.53	
----	--	-------	--

18: (Time: 10.53)

2:MS ES+
1.9e+006

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

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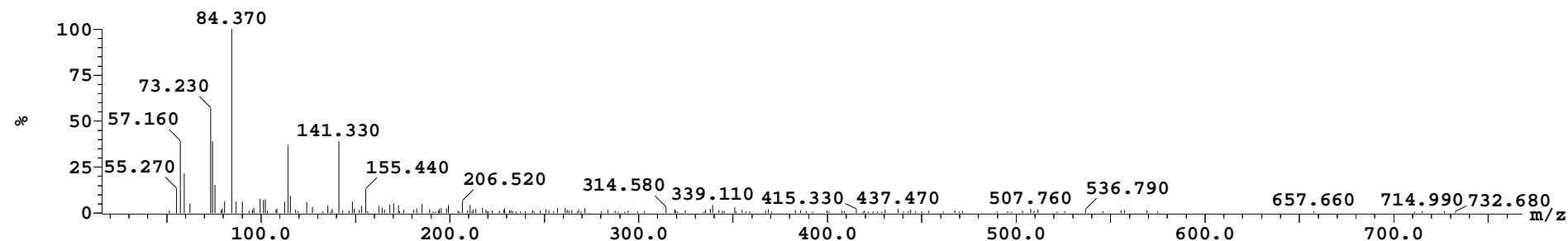
Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

19		10.78	
----	--	-------	--

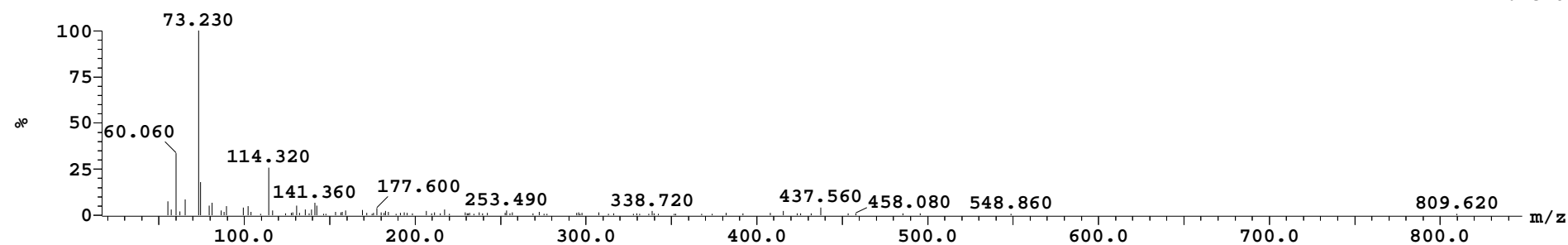
19: (Time: 10.78)

2:MS ES+
1.0e+006

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

20		11.18	
----	--	-------	--

20: (Time: 11.18)

2:MS ES+
2.1e+006

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

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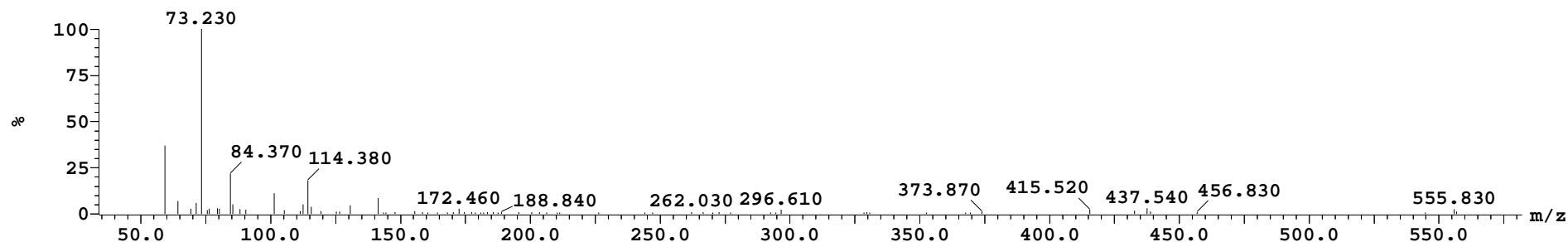
Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

21		11.32	
----	--	-------	--

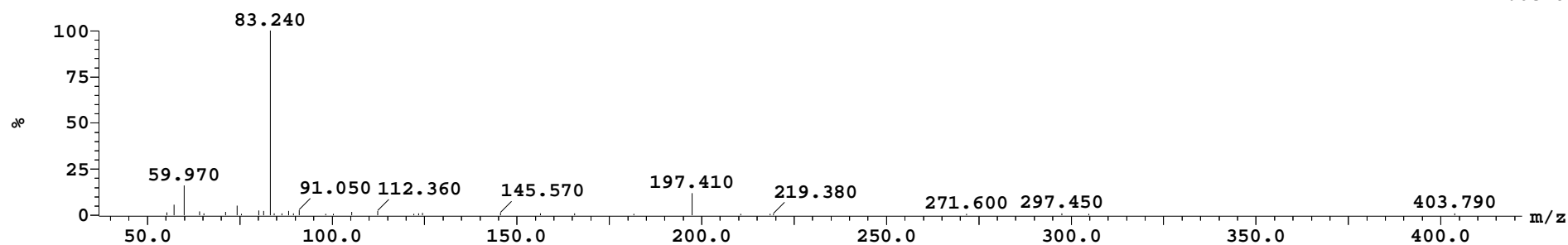
21:(Time: 11.32)

2:MS ES+
3.9e+006

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

22		12.07	
----	--	-------	--

22:(Time: 12.07)

2:MS ES+
7.6e+006

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

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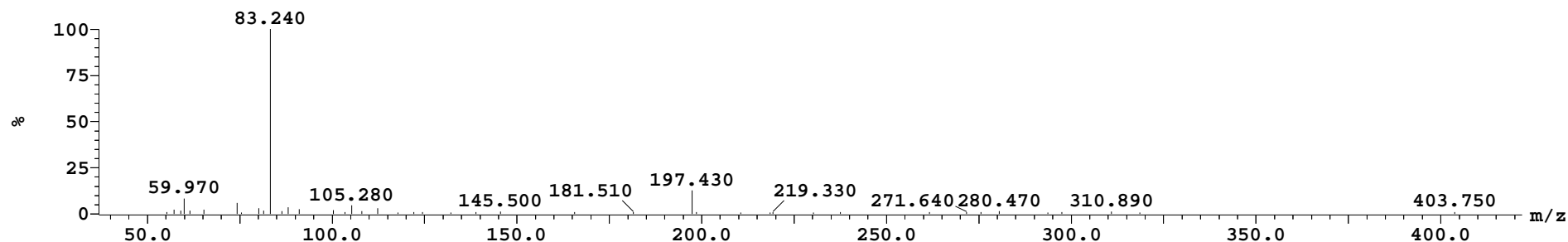
Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

23		12.08	
----	--	-------	--

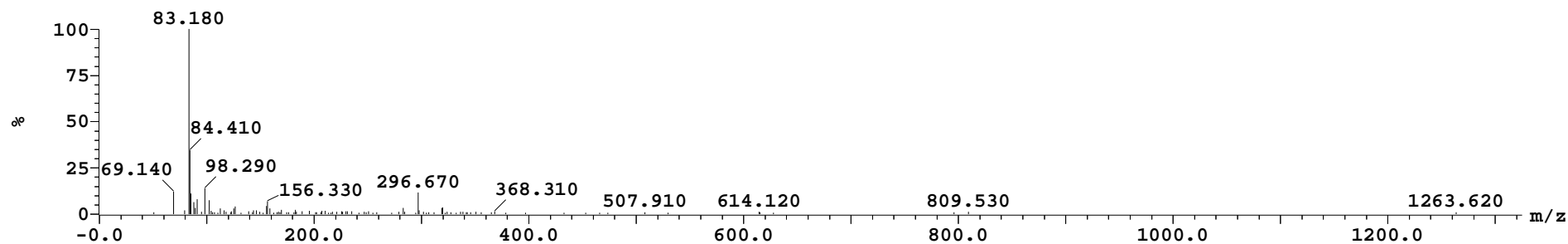
23:(Time: 12.08)

2:MS ES+
5.9e+006

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

24		13.07	
----	--	-------	--

24:(Time: 13.07)

2:MS ES+
2.6e+006

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

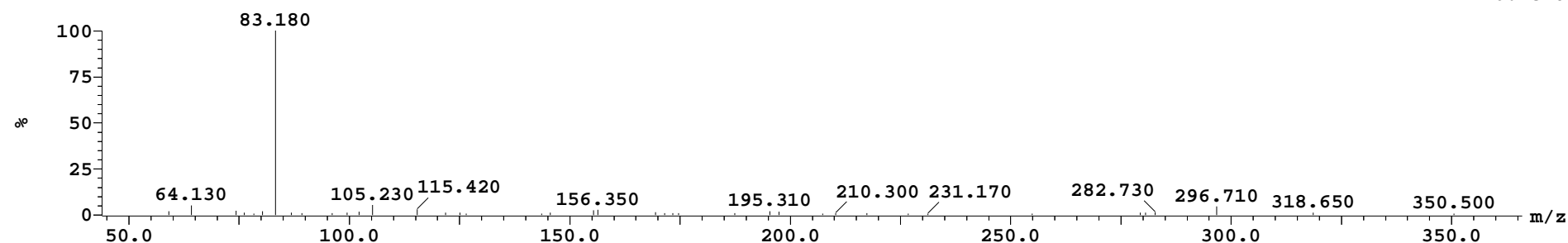
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Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

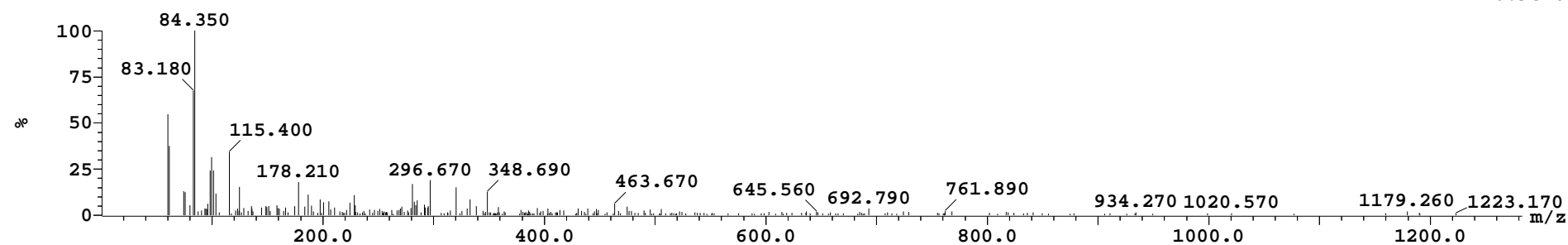
Peak ID	Compound	Time	Mass Found
25		13.13	

25:(Time: 13.13)

2:MS ES+
6.2e+006

Peak ID	Compound	Time	Mass Found
26		14.30	

26:(Time: 14.30)

2:MS ES+
6.9e+005

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

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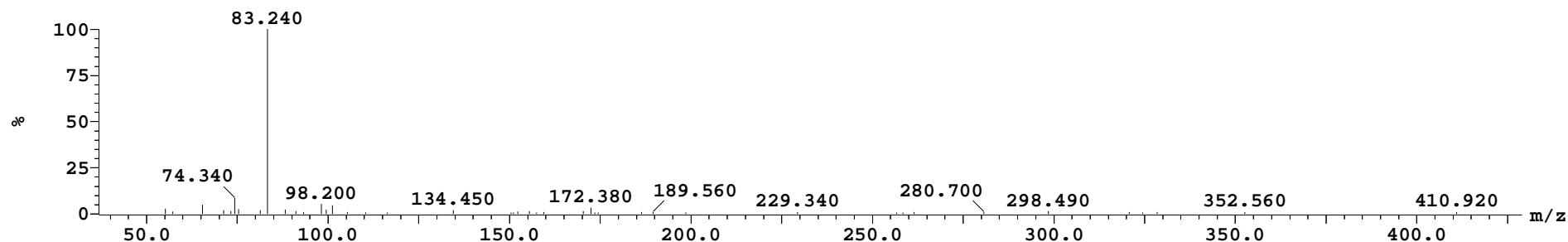
Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

27		14.68	
----	--	-------	--

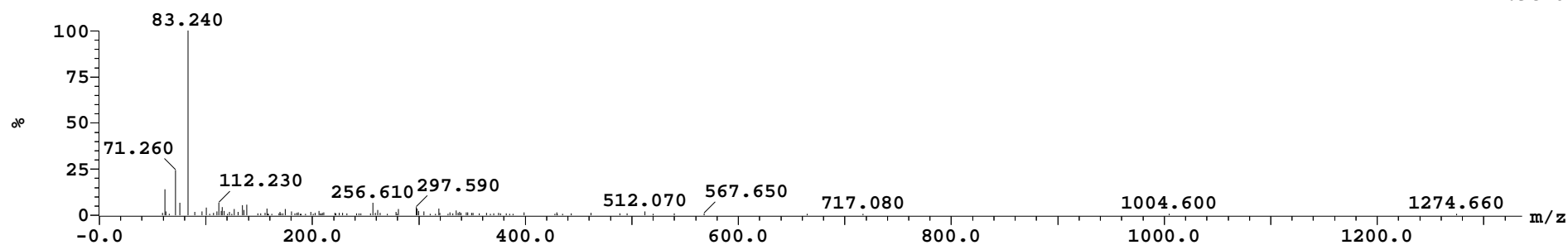
27:(Time: 14.68)

2:MS ES+
7.3e+006

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

28		15.80	
----	--	-------	--

28:(Time: 15.80)

2:MS ES+
2.9e+006

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

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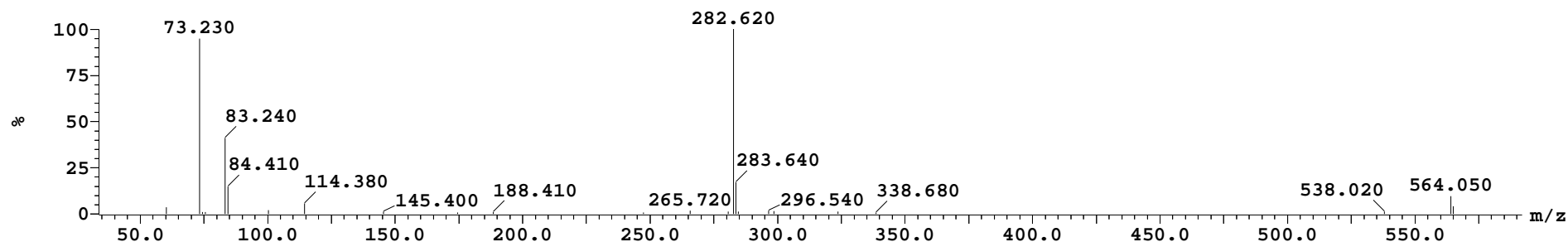
Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

29		16.28	
----	--	-------	--

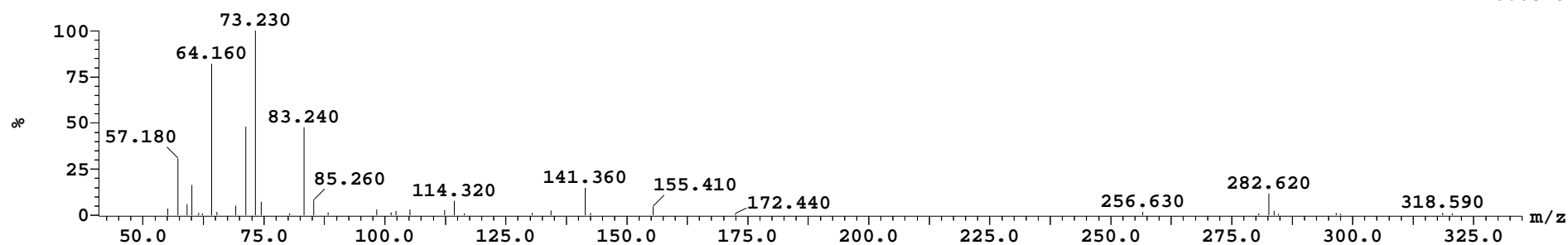
29:(Time: 16.28)

2:MS ES+
2.0e+007

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

30		16.58	
----	--	-------	--

30:(Time: 16.58)

2:MS ES+
6.6e+007

Openlynx Report -

Sample: 644

File:LK-3

Description:Default file

Vial:1:B,5

Date:03-Aug-2023

ID:

Time:13:20:09

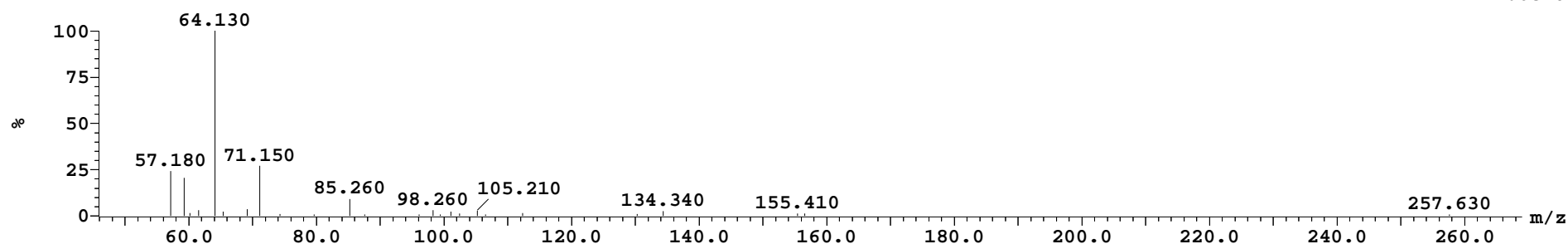
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Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

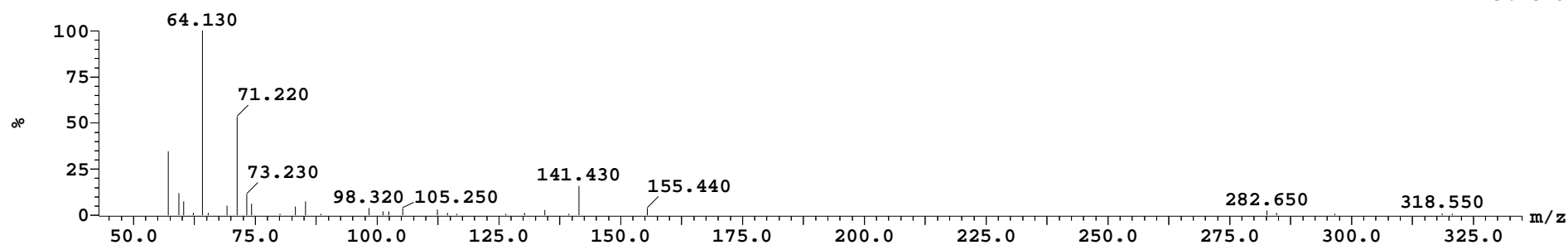
Peak ID	Compound	Time	Mass Found
31		16.88	

31:(Time: 16.88)

2:MS ES+
1.6e+007

Peak ID	Compound	Time	Mass Found
32		17.27	

32:(Time: 17.27)

2:MS ES+
9.4e+007

Openlynx Report -

Sample: 644
File:LK-3
Description:Default file

Vial:1:B,5
Date:03-Aug-2023

ID:
Time:13:20:09

Printed: Thu Aug 03 15:05:46 2023

Sample Report (continued):

Peak ID	Compound	Time	Mass Found
---------	----------	------	------------

33: (Time: 17.40)

2:MS ES+
8.8e+006

