Analytical Resources, LLC
Analytical Chemists and Consultants

30 August 2023

Ali Judkins
Anchor QEA, LLC
1201 3rd Ave, Suite 2600
Seattle, WA 98101

RE: AOC5 MR Phase 1

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)	Associated SDG ID(s)
23H0579	N/A

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclosed Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kelly Bottem For Susan Dunnihoo, Director, Client Services

Cert# 100006-012

Z3F0M3

Sample ID	Date Collected	ARI Login WO ID	Location (16oz, 4oz, AG 8oz if needed)	PCBs	Other Benthic Risk Drivers (PAHs, SVOCs, HCB)	All Metals/ Mercury	TOC/Percent Solids	Dioxins/ Furans
LDW23-SC1156A	12/14/22 1044	22L0384-10	C3-4, C3-5	x	x	x	TOC only	-
LDW23-SC1226A	1/3/2023 1235	23A0042-02	B6-4, B2-4, B1-1	x	x	x	TOC only	x
LDW23-SS1269	1/4/2023 0855	23A0086-01	B2-4, B2-4	x	x	x	TOC only	-
LDW23-SS1275	1/4/2023 0910	23A0086-02	B2-4, B2-4	x	x	x	TOC only	-
LDW23-SS1274	1/4/2023 1320	23A0086-03	B2-4, B2-4	x	-	Hg only	TOC only	-
LDW23-SS1230	1/4/2023 1430	23A0086-05	B2-4, B2-4	x	PAHs only	-	TOC only	-
LDW23-SC1221A	1/4/2023 1338	23A0086-06	B2-4, B2-4	x	x	x	TOC only	-
LDW23-SC1184B	1/4/2023 1458	23A0086-08	B2-4, B2-4	x	-	x	TOC only	-
LDW23-SC1205B	1/5/2023 1120	23A0101-01	C7-5, C7-5	x	-	x	TOC only	-
LDW23-SS1195	1/6/2023 0901	23A0135-02	C2-3, C2-3	x	-	x	TOC only	-
LDW23-SS1243	1/6/2023 1024	23A0135-04	C2-3, C2-3	x	-	-	TOC only	-
LDW23-SS1063	1/10/2023 1308	23A0181-01	F1-5, F1-4	x	PAHs only	-	TOC only	-
LDW23-SC1038A	1/13/2023 0946	23A0294-01	E4-5, E4-5	x	x	x	TOC only	-
LDW23-SC1023A	1/13/2023 1035	23A0294-03	E4-5, E4-5, E4-5	x	x	x	TOC only	x
LDW23-SC1022B	1/13/2023 1120	23A0294-05	E4-5, E4-5	x	-	x	TOC only	-
LDW23-SC1017A	1/13/2023 1247	23A0294-06	E4-5, E4-5	x	x	x	TOC only	-
LDW23-SC1016B	1/16/2023 1111	23A0314-01	F6-2, F6-2	x	-	x	TOC only	-
LDW23-SC1011B	1/16/2023 1146	23A0314-02	F6-2, F6-2	x	-	x	TOC only	-
LDW23-SC1006B	1/16/2023 1229	23A0314-03	F6-2, F6-2	x	-	x	TOC only	-
LDW23-SC1012A	1/16/2023 1313	23A0314-04	F6-2, F6-2	x	x	x	TOC only	-
LDW23-SC1170B	1/17/2023 1033	23A0329-01	F4-5, F4-5	x	-	x	TOC only	-
LDW23-SC1169A	1/17/2023 1108	23A0329-02	F4-5, F4-5	x	x	x	TOC only	-
LDW23-SC1169B	1/17/2023 1108	23A0329-03	F4-5, F4-5	x	x	x	TOC only	-
LDW23-SC1162A	1/17/2023 1437	23A0329-05	F4-5, F4-5, F4-5	x	x	x	TOC only	x
LDW23-SS1056	3/2/2023 1050	23C0071-07	L2-3, F-05 05	x	-	x	TOC only	-
LDW23-SS1113	3/3/2023 1058	23C0105-01	H9-5, H9-5	x	HCB only	-	TOC only	-
LDW23-SS1119	3/3/2023 1107	23C0105-02	H9-5, H9-5	-	cPAHs only	-	TOC only	-
LDW23-SS1042	4/10/2023 1650	23D0255-01	H6-1, H6-1	x	-	x	TOC only	-
LDW23-SS1067	4/11/2023 1438	23D0255-02	H6-1, H6-1, H6-1	x	-	-	TOC only	x
LDW23-SS1050	4/11/2023 1543	23D0255-03	H6-1, H6-1	x	-	x	TOC only	-

1 of 2 22L0384 23F0143

CHAIN-OF-CUSTODY/TEST REQUEST FORM

TIER 2

No 3350

Project/Client Name: AOC 5 MR Phase 1
Project Number: 210075.01.02
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: ARI
Attn: Sue Dunninoo
Shipper: Courier
Form filled out by: AV/CC

Shipping Date: 12/14/22
Airbill Number: —
Turnaround requested: STd

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Archive							Comments / Instructions (Jar tag number(s))
12/14/22	0804	LDW23-SC1177A	~~4~~ 3	sediment	X							HOLD ALL
	0804	LDW23-SC1177B	~~4~~ 3		X							
	0804	LDW23-SC1177D	~~4~~ 3		X							
	0903	LDW23-SC1150A	3		X							
	0903	LDW23-SC1150B	3		X							
	0903	LDW23-SC1150D	3		X							
	0945	LDW23-SC1137A	3		X							
	0945	LDW23-SC1137B	3		X							
	0945	LDW23-SC1137D	3		X							
	1044	LDW23-SC1156A	3		X							
	1044	LDW23-SC1156B	3		X							
	1331	LDW23-SC1191A	4		X							
		Total Number of Containers	37	Purchase Order / Statement of Work # APJ-110222-AOC5-ARL								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Amara Vandervort	YARD	YARD	
Signature:			
Company: Windward	YA YA SAFETY	YA YA SAFETY	ARI
Date/Time: 12/14/22 1625	12/14/22 4:25	12/14/22	12/14/22 1647

* Distribution: White copies accompany shipment; yellow retained by consignor.

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

Wind Ward environmental LLC
200 1st Ave W, Suite 500
Seattle, WA 98119
206.378.1364

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

TIER 2

№ 3355

Project/Client Name: AOC5 MR Phase 1
Project Number: ~~21005~~ 210075.01.02
Contact Name: Amara Vanderhoof
Sampled By: Windward

Ship to: ARL
Attn: Sue Dunnihoo
Shipper: Courier
Form filled out by: AV/CS

Shipping Date: 12/14/2022
Airbill Number: —
Turnaround requested: std

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required)	Comments / Instructions [Jar tag number(s)]
					Archive	
12/14/22	1331	LDW23-SC1191C	4	sediment	X	
	1409	LDW23-SC1183A	3		X	
	1409	LDW23-SC1183B	3		X	
	1409	LDW23-SC1183C	3		X	
	1409	LDW23-SC1183E	3		X	
		Total Number of Containers	16	Purchase Order / Statement of Work # APJ-110222-AOC5-ARL		

AV 12/14/22

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: A Vanderhoof	YARED	YARED	
Signature:			
Company: Windward	YA YA SAFETY	YA YA SAFETY	ARL
Date/Time: 12/14/22 1625	12/14/22 4:25	12/14/22 4:25	12/14/22 1647

* Distribution: White copies accompany shipment; yellow retained by consignor.

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

Windward environmental LLC
200 1st Ave W, Suite 500
Seattle, WA 98119
206.378.1364

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23F0143

CHAIN-OF-CUSTODY/TEST REQUEST FORM

Tier 2

№ 4054

Project/Client Name: AOC 5 NR Phase 1
Project Number: 216075.01.02
Contact Name: Angra Vandewort
Sampled By: Windward

Ship to: ARL
Attn: Sue Dunnihoo
Shipper: courier
Form filled out by: AVdeW

Shipping Date: 1/3/23
Airbill Number:
Turnaround requested: Std

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Archive							Comments / Instructions [Jar tag number(s)]
1/3/23	1026	LDW23-IT1275	~~4~~ 4	sediment	X							
	1235	LDW23-SC1226A	4		X							
	1235	LDW23-SC1226C	4		X							
		Total Number of Containers	12		Purchase Order / Statement of Work # APJ-110222-AOC5-ARL							

1/3/23

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Angra Vandewort	YARED	YARED	Phillip
Signature:			
Company: Windward	YA YA SAFETY	YA YA SAFETY	AR
Date/Time: 1/3/22 1625	1/3/22 4:30	1/3/22 4:57	1/03/23 16:57

* Distribution: White copies accompany shipment; yellow retained by consignor.

To be completed by Laboratory upon sample receipt:

Date of receipt:: ~~1/04/23~~ 1/3 1/03/23	Laboratory W.O. #: 23A0042
Condition upon receipt: good	Time of receipt: 16:57
Cooler temperature: 5.6°C	Received by: Phillip Bates

Wind Ward environmental LLC

200 1st Ave W, Suite 500
Seattle, WA 98119

206.378.1364

1 of 1 AV +2 2746880 23F0143

Tier 2 SS

CHAIN-OF-CUSTODY/TEST REQUEST FORM

No 3434

Project/Client Name: LDW AOC5 MR Phase 1
Project Number: 210075-01.02
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: ARI
Attn: Sue Dinihoo
Shipper: courier
Form filled out by: S Replinger

Shipping Date: 1/4 2023
Airbill Number: —
Turnaround requested: Std.

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required)							Comments / Instructions [Jar tag number(s)]
					Archive							
1.4.2023	0855	LDW23-SS1269	4	sediment	X							
	0910	LDW23-SS1275	4		X							
	1320	LDW23-SS1274	4		X							
	1333	LDW23-SS1273	4		X							
	1430	LDW23-SS1230	4		X							
		Total Number of Containers	20	Purchase Order / Statement of Work #	APS-110222-AOC5-ARL							

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Amara VandeVort	YARED	YARED	RW
Signature:			
Company: Windward	YA YA SAFETY	YA YA SAFETY	ARI
Date/Time: 1/4/23 1618	1/4/23 4:18	1/4/23 4:	1/4/23 1651

* Distribution: White copies accompany shipment; yellow retained by consignor.

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

Wind/Ward environmental LLC
200 1st Ave W, Suite 500
Seattle, WA 98119
206.378.1364

2340086 23F0143

CHAIN-OF-CUSTODY/TEST REQUEST FORM

TIER 2
M2 4013

Project/Client Name: [illegible]
Project Number: 210075.01.02
Contact Name: [illegible]
Sampled By: Windward

Ship to: ARL
Attn: [illegible]
Shipper: Courier
Form filled out by: AV/KC

Shipping Date: 1/4/23
Airbill Number: —
Turnaround requested: std

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required): [illegible]							Comments / Instructions [Jar tag number(s)]
1/4/23	[illegible]	[illegible]	[illegible]	sediment	X							
	[illegible]	[illegible] AV/B	[illegible]		X							
	1638	[illegible]	[illegible]		X							
	1919	[illegible] /B AV			X							

AV 1/4/23

Total Number of Containers: 12

Purchase Order / Statement of Work # [illegible] ARL

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Angela Vandegrift	[illegible]	Print name: [illegible]	
Signature: A. Vandegrift	Company: [illegible]	Signature: [illegible]	Company:
Company: Windward		Company: [illegible]	
Date/Time: 1/4/23 1648	Date/Time: [illegible]	Date/Time: [illegible]	Date/Time:

* Distribution: White copies accompany shipment; yellow retained by consignor.

Windward environmental LLC
200 West Mercer Street
Suite 401
Seattle, WA 98119
Tel: (206) 378-1364
Fax: (206) 217-9343

To be completed by Laboratory upon sample receipt:

Date of receipt:	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

23Aoia1

1 of 1

23F0143

CHAIN-OF-CUSTODY/TEST REQUEST FORM

TIER 2

№ 3994

Project/Client Name: AOC5 MR Phase1
Project Number: 210075.01.02
Contact Name: Amara VandeVoort
Sampled By: Windward

Ship to: ARL
Attn: Sue Dunning
Shipper: Courier
Form filled out by: AV/CC

Shipping Date: 11/5/23
Airbill Number: —
Turnaround requested: Std

11/5/23

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required)							Comments / Instructions [Jar tag number(s)]
					Archive							
~~11/4/23~~	1120	LDW23-SC1205B	3	sediment	X							
	1446	LDW23-SC1109A	3		X							
	1446	LDW23-SC1109C	3		X							
		Total Number of Containers	9									

AV 11/5/23

Purchase Order / Statement of Work # APJ-110222-AOC5-ARL

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Amara Vandevoort	YARED	YARED	
Signature: Amara Vandevoort			
Company: Windward	YA YA SAFETY	YA YA SAFETY	ARI
Date/Time: 11/5/23 1605	11/5/23 4:05	11/5/23 4:	11/5/23 1636

* Distribution: White copies accompany shipment; yellow retained by consignor.

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

Wind Ward environmental LLC
200 1st Ave W, Suite 500
Seattle, WA 98119
206.378.1364

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

Tier 2

No 3440

Project/Client Name: AOCS MR Phase 1
Project Number: 210075.01.02
Contact Name: Amara Vandenaat
Sampled By: Windward

Ship to: ARL
Attn: Sue Dominico
Shipper: Courier
Form filled out by: K. McPeek

Shipping Date: 11/6/23
Airbill Number:
Turnaround requested: std

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Archive							Comments / Instructions [Jar tag number(s)]
11/6/23	0845	LOW23-SS1196	4	sediment	X							
"	0901	-SS1195	4	"	X							
"	0919	-SS1187	4	"	X							
"	1024	~~1008~~ -SS1243	4	"	X							
		Total Number of Containers	16	Purchase Order / Statement of Work # APS-110222-AOCS-ARL								

Kinnetic 11/6/23

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Amara Vandenaat	YARED	YARED	
Signature: Amara Vandenaat			
Company: Windward	YA YA SAFETY	YA YA SAFETY	ARI LLC
Date/Time: 11/6/23 1703	11/6/23 4:55	11/6/23 17:26	Date/Time: calendar 1726

* Distribution: White copies accompany shipment; yellow retained by consignor.

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

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200 1st Ave W, Suite 500
Seattle, WA 98119
206.378.1364

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CHAIN-OF-CUSTODY/TEST REQUEST FORM

Tier 2

№ 3456

Project/Client Name: AOCS MR Phase 1
Project Number: 210075.01.02
Contact Name: Amara Vandervoet
Sampled By: Windward

Ship to: ARL
Attn: Sue Dunnihoo
Shipper: Courier
Form filled out by: K. McPeek

Shipping Date: 1/10/23
Airbill Number: —
Turnaround requested: STD

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required): Archive							Comments / Instructions [Jar tag number(s)]
1/10/23	1308	LDW23-SS1063	8oz 4	Sediment	X							
		Total Number of Containers		Purchase Order / Statement of Work # APT-110222-AOCS-ARL								

Keep on ice

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Amara Vandervoet	YARED	YARED	Jacob Waite
Signature:			
Company: Windward	YA YA SAFETY	YA YA SAFETY	AR, LLC
Date/Time: 1/10/23 16:45	Date/Time: 01/10/23 4:45	Date/Time: 01/10/23 1710	Date/Time: 01/10/23 1710

* Distribution: White copies accompany shipment; yellow retained by consignor.

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

Wind Ward environmental LLC

200 West Mercer Street
Suite 401

200 1st Ave W, Suite 500
Seattle, WA 98119

206.378.1364

1 of 1 23A0294 23F0143

CHAIN-OF-CUSTODY/TEST REQUEST FORM

TIER 2

№ 3964

Project/Client Name: AOC5 MR Phase 1
Project Number: 210075.01.02
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: ARL
Attn: Sue Dunnihoo
Shipper: Courier
Form filled out by: AVICC

Shipping Date: ~~1/23~~ N 1/13/23
Airbill Number: —
Turnaround requested: std

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Archive							Comments / Instructions [Jar tag number(s)]
1/13/23	0946	LDW23-SC1038A	~~4~~ 3	sediment	X							
	0946	LDW23-SC1038C	~~4~~ 3		X							
	1035	LDW23-SC1023A	" ~~3~~ 4		X							
	1035	LDW23-SC1023C	" ~~3~~ 4		X							
	1120	LDW23-SC1022B	3		X							
	1247	LDW23-SC1017A	3		X							
	1247	LDW23-SC1017C	3		X							
		Total Number of Containers	23	Purchase Order / Statement of Work #								

1/13/23

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Amara Vandervort	Phillip	Print name:	
Signature:	Company: AR	Signature:	Company:
Company: Windward		Company:	
Date/Time: 1/13/23 1638	Date/Time: 1/13/23 16:38	Date/Time:	Date/Time:

* Distribution: White copies accompany shipment; yellow retained by consignor.

Wind Ward environmental LLC
200 1st Ave W, Suite 500
Seattle, WA 98119
206.378.1364

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

1 of 1

2340314 23F0143

CHAIN-OF-CUSTODY/TEST REQUEST FORM

TIER 2

№ 3967

Project/Client Name: AOCS MR Phase I
Project Number: 210075 01 02
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: ARL
Attn: Sue Dunnihoo
Shipper: Courier
Form filled out by: AV/CC

Shipping Date: 1/16/23
Airbill Number: —
Turnaround requested: Std

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required): Archive							Comments / Instructions (Jar tag number(s))
1/16/23	1111	LDW23-SC1016B	3	sediment	X							
	1146	LDW23-SC1011B	3		X							
	~~1229~~	~~LDW23-SC1006 SC1012B~~ CC	~~3~~		~~X~~	CC						
	1229	LDW23-SC1006B	3		X							
	1313	LDW23-SC1012A	3		X							
	1313	LDW23-SC1012C	3		X							
		AV 1/16/23										
		Total Number of Containers	5	Purchase Order / Statement of Work # APJ-110222-AOCS-ARL								

1) Released by:	1) Rec'd by: Phillip B	2) Released by:	2) Rec'd by:
Print name: Amara Vandervort		Print name:	
Signature: Amara Vandervort	Company: AR	Signature:	Company:
Company: Windward		Company:	
Date/Time: 1/16/23 1635	Date/Time: 1/16/23 16:35	Date/Time:	Date/Time:

* Distribution: White copies accompany shipment; yellow retained by consignor.

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

Windward environmental LLC
200 1st Ave W, Suite 500
Seattle, WA 98119
206.378.1364

23F0143

Tier 2

1 of 1

CHAIN-OF-CUSTODY/TEST REQUEST FORM

№ 3978

Project/Client Name: AOC5 MR Phase 1
Project Number: 210075.01.02
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: ARL
Attn: Sue Quinnhod
Shipper: Courier
Form filled out by: AV

Shipping Date: 11/7/23
Airbill Number: —
Turnaround requested: Std.

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Archive							Comments / Instructions [Jar tag number(s)]
11/7/23	1033	LOW23-SC1170B	4 3 AV	Sediment	X							
↓	1108	LOW23-SC1169A	3	↓	X							
↓	1108	↓ -SC1169B	3	↓	X							
11/7/23	1108	LOW23-SC1169D	3	Sediment	X							
↓	1437	LOW23-SC1162A	4	↓	X							
11/7/23	1437	LOW23-SC1162C	4	Sediment	X							
		Total Number of Containers	20	Purchase Order / Statement of Work #	APJ-110222-AOC5-ARL							

11/7/23

AV

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Amara Vandervort	Phillip	Print name:	
Signature: Amara Vandervort		Signature:	
Company: Windward	Company: AR	Company:	Company:
Date/Time: 11/7/23 1646	Date/Time: 11/7/23 16:46	Date/Time:	Date/Time:

* Distribution: White copies accompany shipment; yellow retained by consignor.

Wind Ward environmental LLC
200 1st Ave W, Suite 500
Seattle, WA 98119
206.378.1364

To be completed by Laboratory upon sample receipt:

Date of receipt:: 11/7/23	Laboratory W.O. #: 23A0329
Condition upon receipt: good	Time of receipt: 16:46
Cooler temperature: 5.2°C	Received by: Phillip Bates

23F0143

1 of 1

CHAIN-OF-CUSTODY/TEST REQUEST FORM

№ 4055

Project/Client Name: AOCS NR Phase 1
Project Number: 210075.01.02
Contact Name: Amara Vanderhoof
Sampled By: Windward

Ship to: ARL
Attn: Sue Dunihoo
Shipper: Courier
Form filled out by: TDo/AV

Shipping Date: 3/2/23
Airbill Number:
Turnaround requested: Std

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) PCBs	SMS SVOCs	SMS Metals	TOCI TotalSolids	DIF	Archive		Comments / Instructions [Jar tag number(s)]
03.02.23	0933	LDW23-SS1000	4	Sediment	X	X	X	X	NA	X		
	0956	LDW23-SS1037	4	Sediment	X	X	X	X	X	X		
	1010	LDW23-SS1036	4	Sediment	X	X	X	X	NA	X		
	1022	LDW23-SS1044	4	Sediment	X	X	X	X	NA	X		
	1032	LDW23-SS1045	4	Sediment	X	X	X	X	NA	X		
	1041	LDW23-SS1051	4	Sediment	X	X	X	X	NA	X		
	1050	LDW23-SS1056	4	Sediment	X	X	X	X	NA	X		
	1156	LDW23-SC1054	3		X	—	—	X	—	X		
	1227	LDW23-SC1048	3		X	—	—	X	—	X		
	1409	LDW23-SC1036	3	Sediment	X	—	—	X	—	X		
		Total Number of Containers	37	Purchase Order / Statement of Work # APJ-110222-AOCS-ARL								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Amara Vanderhoof	Phillip	Print name:	
Signature:		Signature:	
Company: Windward	Company: ARL	Company:	Company:
Date/Time: 3/2/2023 16:34	Date/Time: 3/2/23 16:34	Date/Time:	Date/Time:

* Distribution: White copies accompany shipment; yellow retained by consignor.

Wind Ward environmental LLC
200 1st Ave W, Suite 500
Seattle, WA 98119
206.378.1364

To be completed by Laboratory upon sample receipt:

Date of receipt:: 3/2/23	Laboratory W.O. #: 23C0071
Condition upon receipt: good	Time of receipt: 16:34
Cooler temperature: 4.6, 2.3	Received by: Phillip Bat+OS

23F0143

232d105

Tier 2

_ of 1

CHAIN-OF-CUSTODY/TEST REQUEST FORM

№ 4057

Project/Client Name: AOCS MR Phase 1
Project Number: 210075-01.02
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: ARL
Attn: Sue Dunihoo
Shipper: Courier
Form filled out by: TDO

Shipping Date: 3/3/23
Airbill Number: —
Turnaround requested: Std

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required): Archive							Comments / Instructions [Jar tag number(s)]
03.03.23	1058	LDW23-SS1113	4	Sediment	X							
03.03.23	1107	LDW23-SS1119	4	Sediment	X							
		Total Number of Containers	8	Purchase Order / Statement of Work # APJ-110222-AOCS-ARL								

AV 3/3/23

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Amara Vandervort	Phillip [illegible]	Print name:	
Signature: [signature]		Signature:	
Company: Windward	Company: AR	Company:	Company:
Date/Time: 3/3/23 1635	Date/Time: 3/3/23 16:35	Date/Time:	Date/Time:

* Distribution: White copies accompany shipment; yellow retained by consignor.

To be completed by Laboratory upon sample receipt:

Date of receipt::	Laboratory W.O. #:
Condition upon receipt:	Time of receipt:
Cooler temperature:	Received by:

Windward environmental LLC
200 1st Ave W, Suite 500
Seattle, WA 98119

206.378.1364

23E0143

Tier 2

p1 of 1

CHAIN-OF-CUSTODY/TEST REQUEST FORM

№ 3985

Project/Client Name: AOC5 MR Phase 1
Project Number: 210075.0102
Contact Name: Amara Vandervort
Sampled By: Windward

Ship to: ARL
Attn: Sue Quinnhod
Shipper: hand del'd.
Form filled out by: TTO

Shipping Date: 4.11.2023
Airbill Number: —
Turnaround requested: Std

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) Archive							Comments / Instructions [Jar tag number(s)]
04.10.23	1650	LDW23-SS1042	4	sediment	X							
04.11.23	1438	LDW23-SS1067	4	↓	X							
04.11.23	1543	LDW23-SS1050	4	↓	X							
		Total Number of Containers	12		Purchase Order / Statement of Work # APJ-110222-AOC5-ARL							

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Suzanne Replinger	Print name:	Print name:	
Signature:	Company: ARI LLC	Signature:	Company:
Company: Windward Env.		Company:	
Date/Time: 4.11.2023 1750	Date/Time: 04/12/23 0717	Date/Time:	Date/Time:

* Distribution: White copies accompany shipment; yellow retained by consignor.

Wind Ward environmental LLC
200 1st Ave W, Suite 500
Seattle, WA 98119
206.378.1364

To be completed by Laboratory upon sample receipt:

Date of receipt:: 4/12/23	Laboratory W.O. #: 230255
Condition upon receipt: good	Time of receipt: 7:17
Cooler temperature: 2.9°C	Received by: Jacob Walter

Analytical Resources, LLC
Analytical Chemists and Consultants

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02 Task 7.2	**Reported:**
Seattle, WA 98101	Project Manager: Ali Judkins	08/30/2023 13:39

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Matrix	Date Sampled	Date Received
23H0579-01	LDW23-SC1156A	Solid	12/14/22 10:44	06/06/23 15:53
23H0579-02	LDW23-SC1226A	Solid	01/03/23 12:35	06/06/23 15:53
23H0579-03	LDW23-SS1269	Solid	01/04/23 08:55	06/06/23 15:53
23H0579-04	LDW23-SS1275	Solid	01/04/23 09:10	06/06/23 15:53
23H0579-05	LDW23-SC1221A	Solid	01/04/23 13:38	06/06/23 15:53
23H0579-06	LDW23-SC1038A	Solid	01/13/23 09:46	06/06/23 15:53
23H0579-07	LDW23-SC1023A	Solid	01/13/23 10:35	06/06/23 15:53
23H0579-08	LDW23-SC1017A	Solid	01/13/23 12:47	06/06/23 15:53
23H0579-09	LDW23-SC1012A	Solid	01/16/23 13:13	06/06/23 15:53
23H0579-10	LDW23-SC1169A	Solid	01/17/23 11:08	06/06/23 15:53
23H0579-11	LDW23-SC1169B	Solid	01/17/23 11:08	06/06/23 15:53
23H0579-12	LDW23-SC1162A	Solid	01/17/23 14:37	06/06/23 15:53

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02 Task 7.2	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	30-Aug-2023 13:39

Case Narrative

Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Work Order: 23H0579

Sample receipt

Samples as listed on the preceding page were pulled from frozen archive on 23-Aug-2023 and logged under ARI work order 23H0579. For details regarding sample receipt, please refer to the Cooler Receipt Form.

Semivolatiles - EPA Method SW8270E-SIM

The sample(s) were extracted and analyzed within the recommended holding times for samples stored frozen.

Initial and continuing calibrations were within method requirements with the exception of all associated "Q" flagged analytes which are out of control high in the ICV. Samples that contain analyte have been flagged with a "Q" qualifer.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits with the exception of surrogates flagged on the associated forms.

The method blank(s) were clean at the reporting limits.

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries were within control limits and relative percent differences (RPDs) were flagged on the associated forms.

The matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent differences (RPD) were within advisory control limits with the exception of analytes flagged on the associated forms.

The reference material (SRM) percent recoveries were within control limits.

QUALIFIERS AND NOTES

Qualifier	Definition
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20% RSD, <20% drift or minimum RRF)
*	Flagged value is not within established control limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1156A

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23H0579-01 A	SDG:	23H0579
Sampled:	12/14/22 10:44	Prepared:	08/25/23 12:39	File ID:	NT1708292312.D
% Solids:	55.55	Preparation:	EPA 3546 (Microwave)	Analyzed:	08/29/23 18:27
Batch:	BLH0669	Sequence:	SLH0447	Initial/Final:	18.03 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GH00045
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	748.83	586	78.3	27 - 120	
p-Terphenyl-d14	499.22	391	78.3	37 - 120	Q

INTERNAL STANDARDS	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	357888	9.413	296489	9.413	
Naphthalene-d8	1238156	11.878	1098892	11.878	
Acenaphthene-d10	442643	15.487	443071	15.487	
Phenanthrene-d10	572113	18.519	627744	18.506	
Chrysene-d12	579135	23.506	404122	23.506	
Perylene-d12	1103482	26.248	417323	26.223	*

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292312.D

Date : 29-AUG-2023 18:27

Client ID:

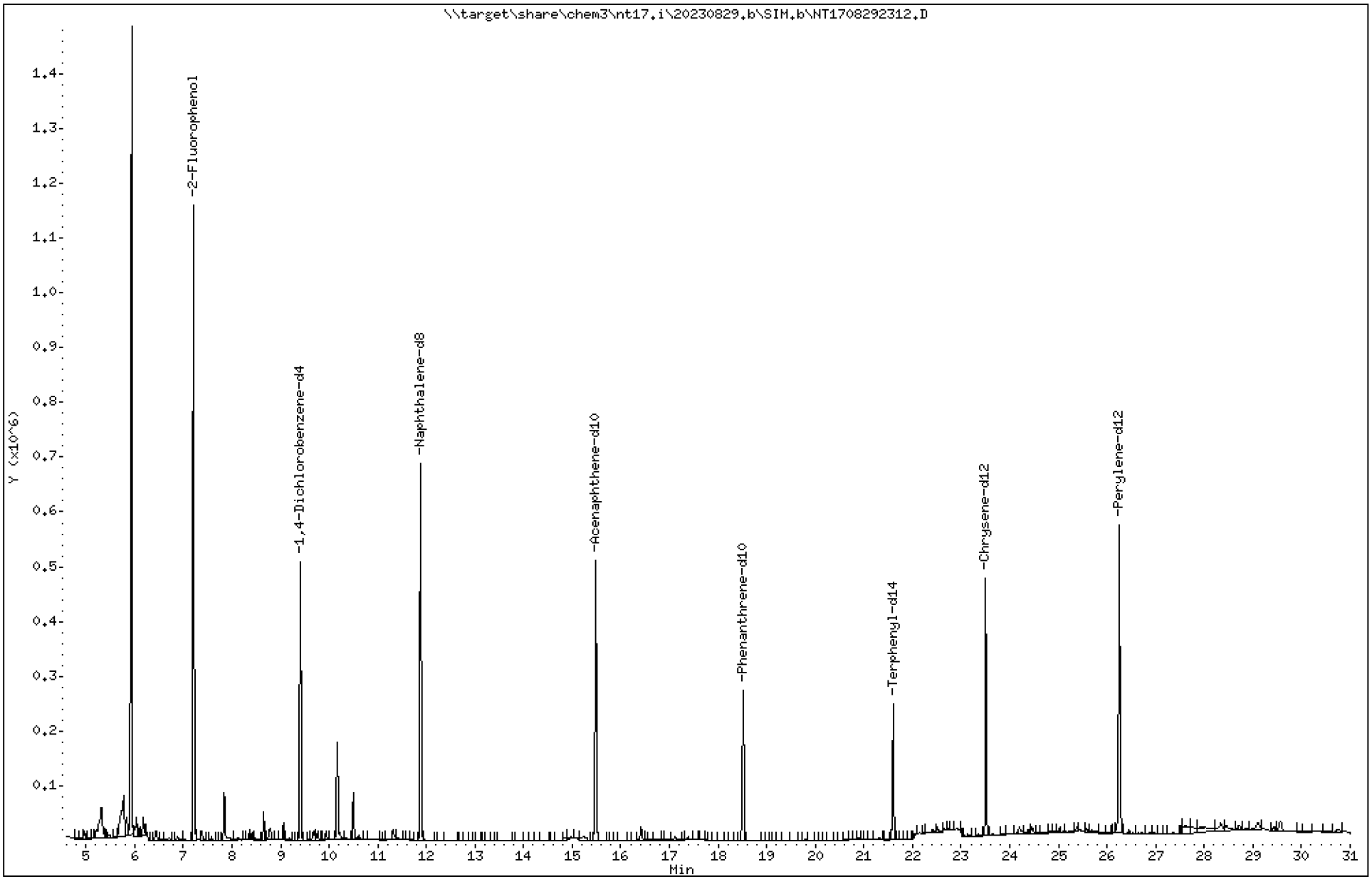
Sample Info: 23H0579-01

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 29-AUG-2023 18:27

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-01

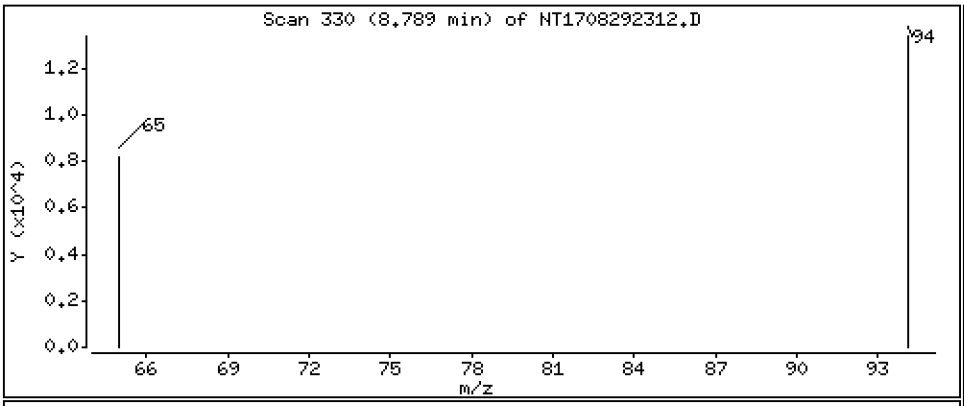
Operator: JGR

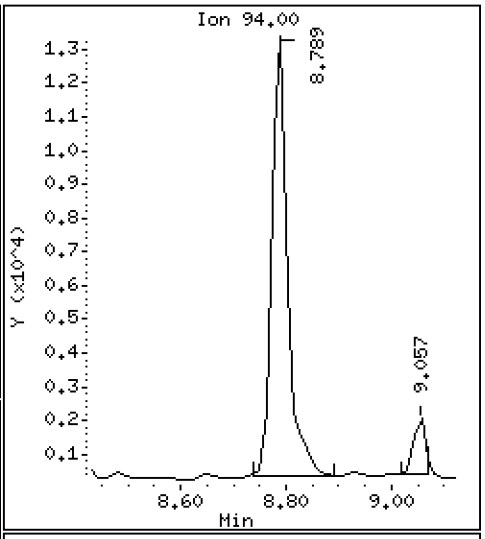
Column phase: ZB-5msi

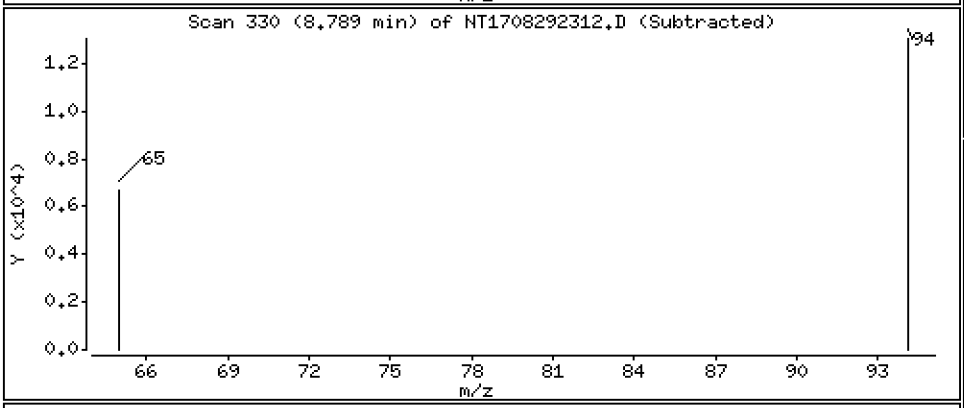
Column diameter: 0.25

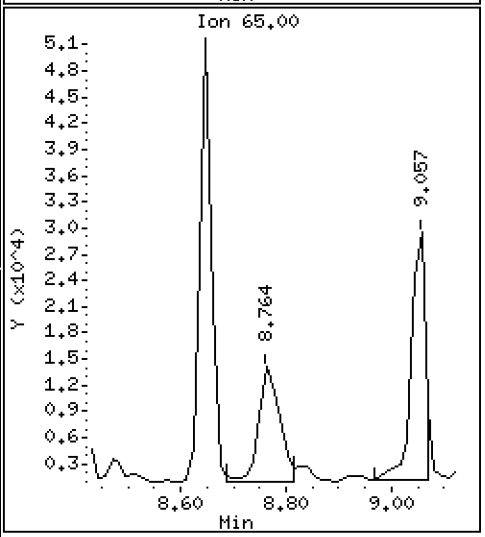
3 Phenol

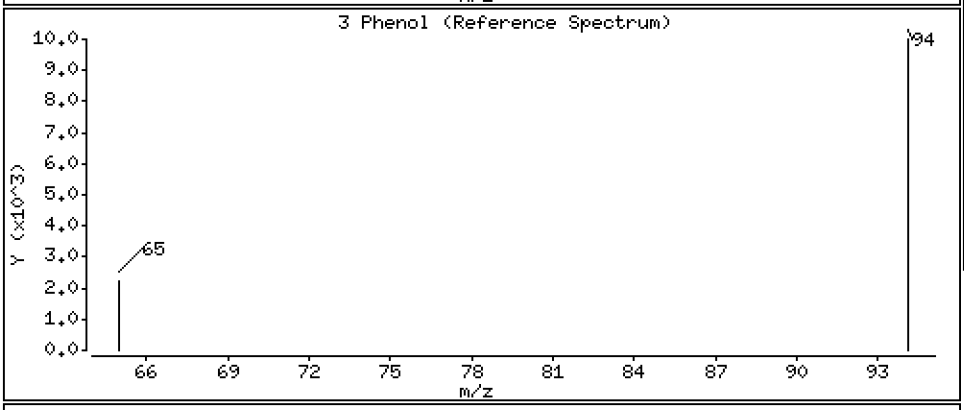
Concentration: 0.1190 ug/mL

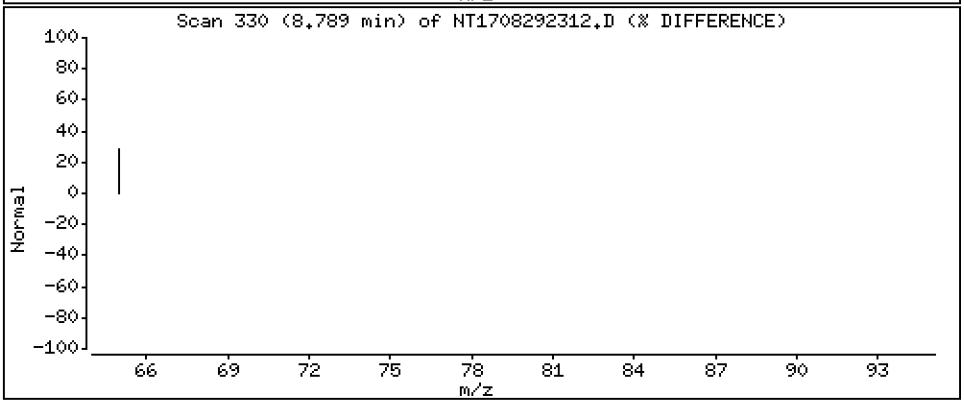












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Date : 29-AUG-2023 18:27

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-01

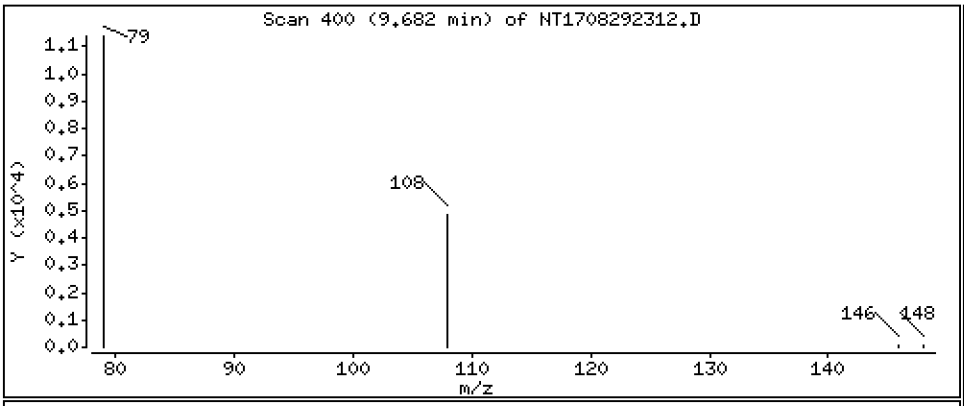
Operator: JGR

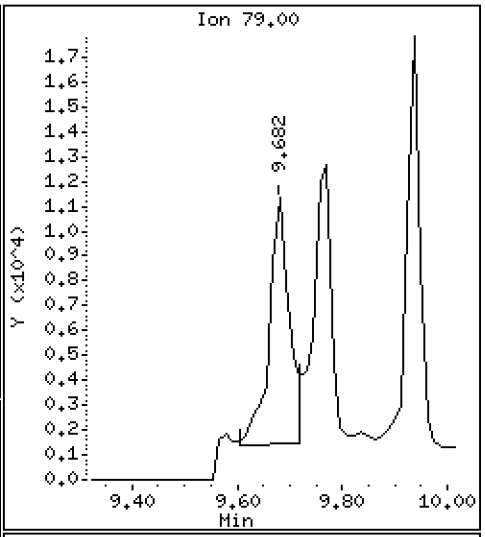
Column phase: ZB-5msi

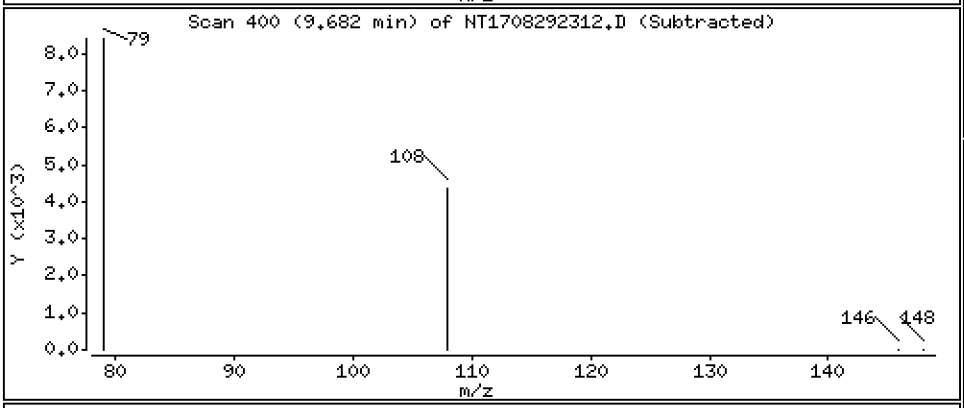
Column diameter: 0.25

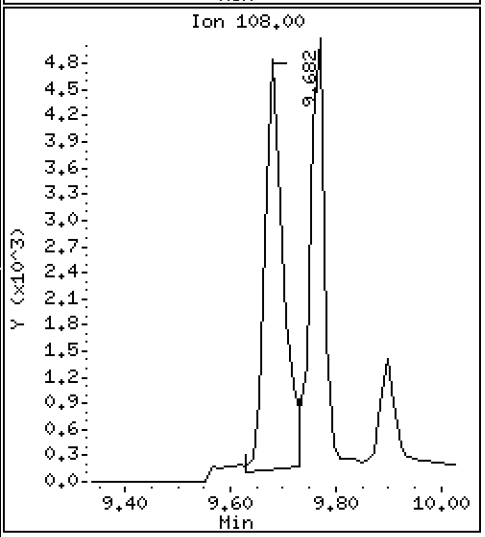
11 Benzyl alcohol

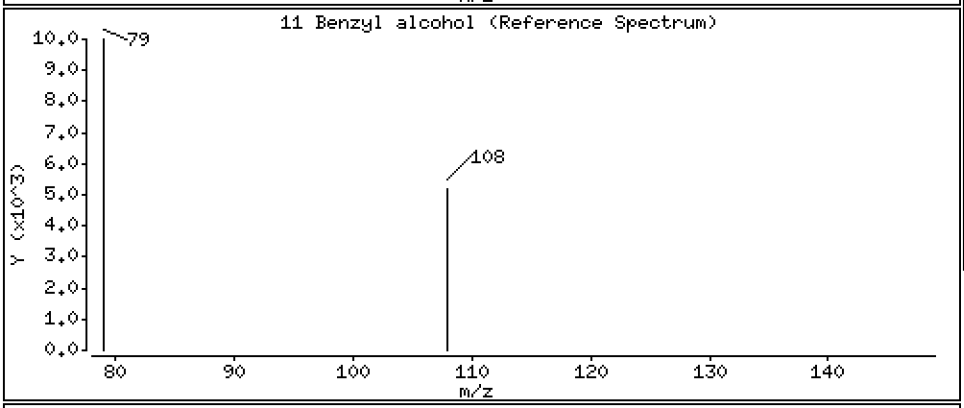
Concentration: 0.1733 ug/mL

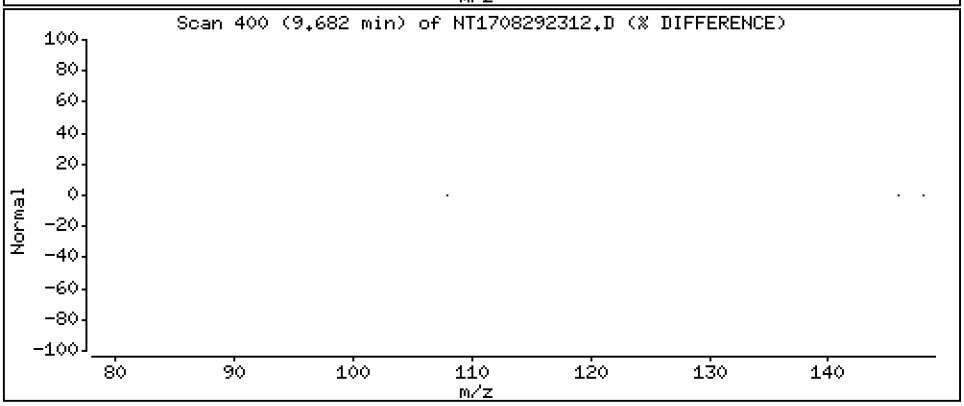












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Date : 29-AUG-2023 18:27

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-01

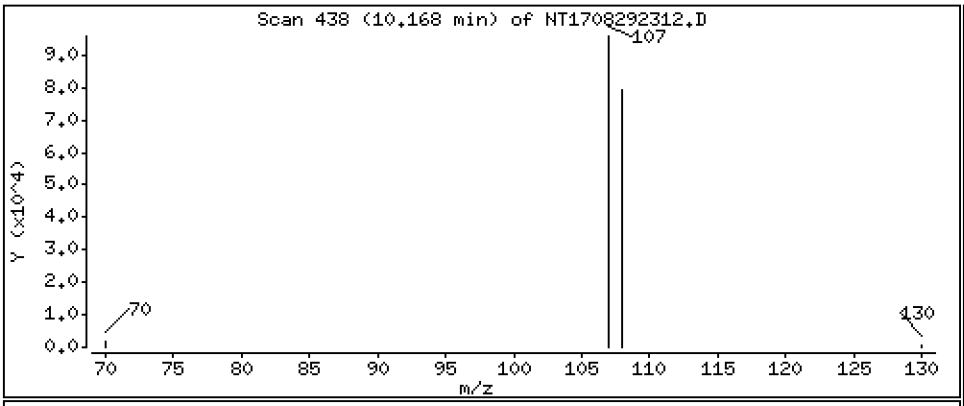
Operator: JGR

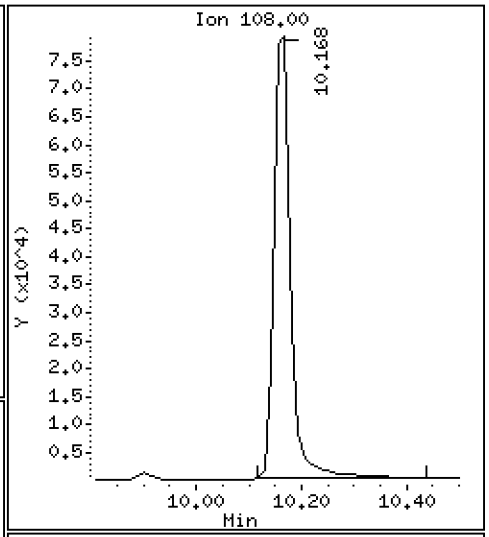
Column phase: ZB-5msi

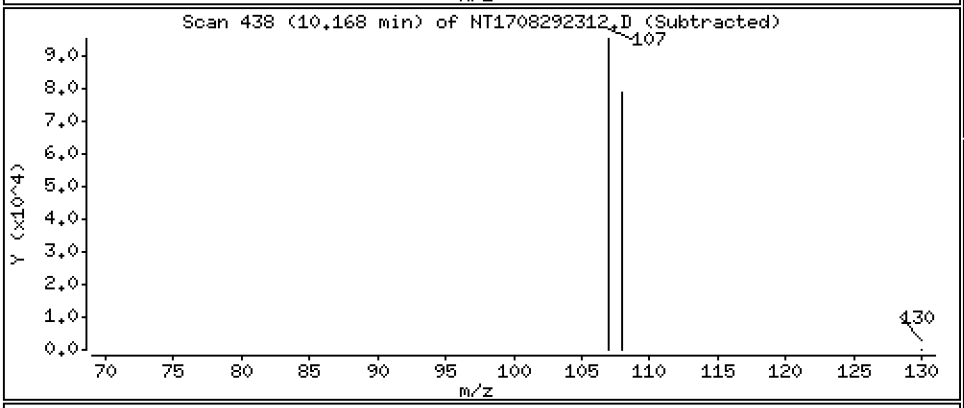
Column diameter: 0.25

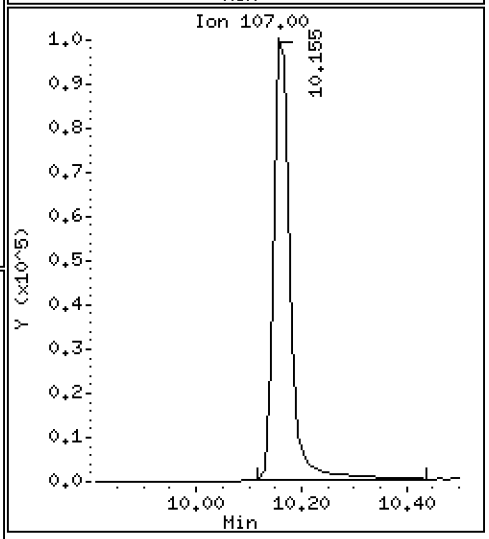
15 4-Methylphenol

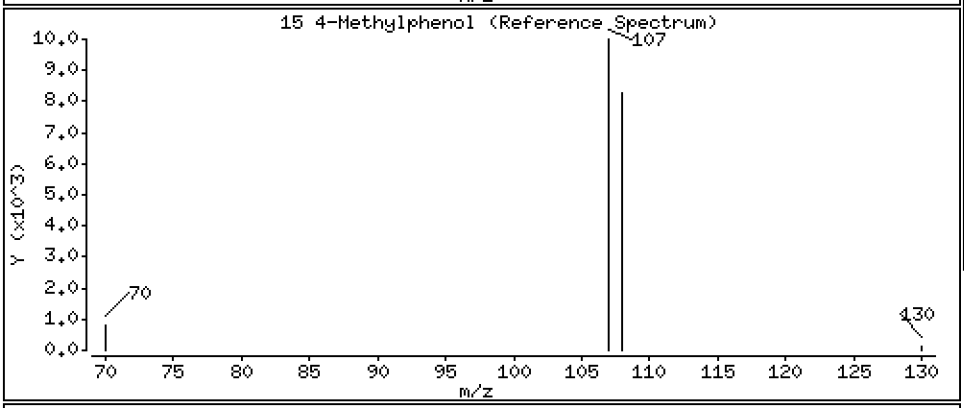
Concentration: 1.226 ug/mL

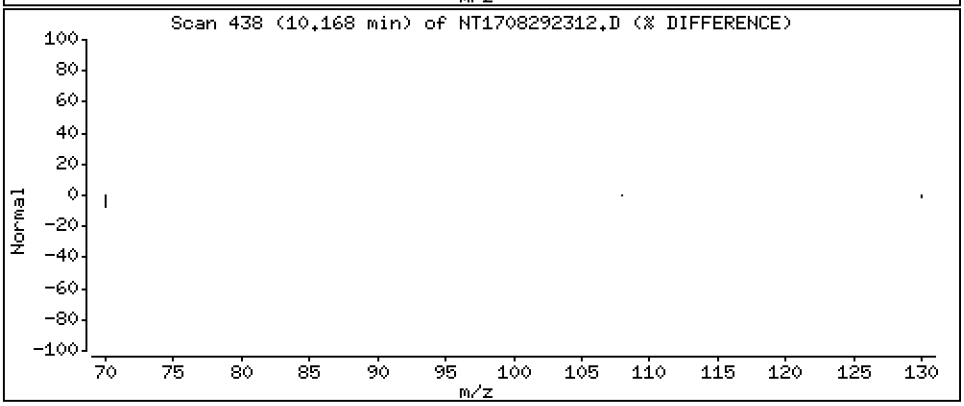












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Date : 29-AUG-2023 18:27

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-01

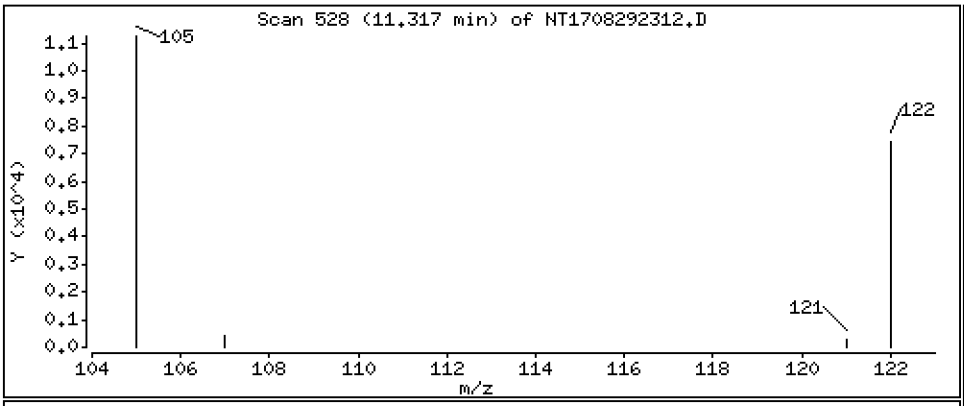
Operator: JGR

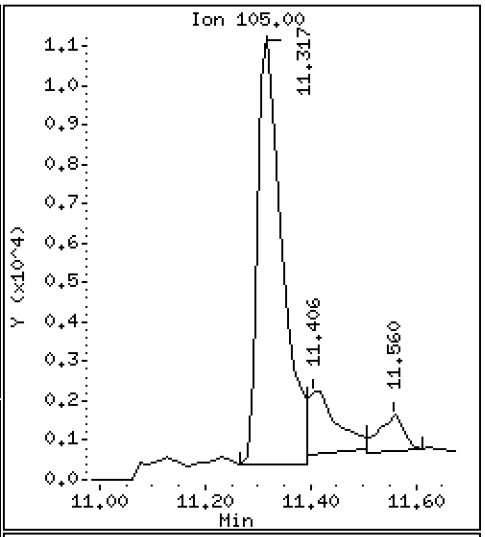
Column phase: ZB-5msi

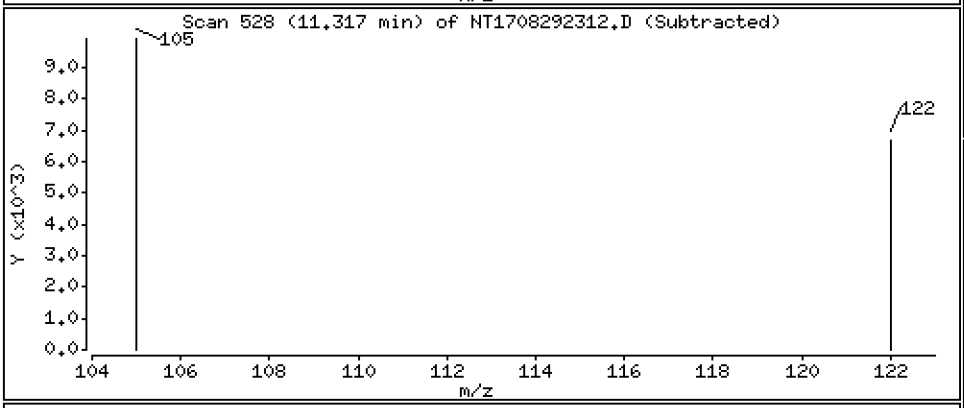
Column diameter: 0.25

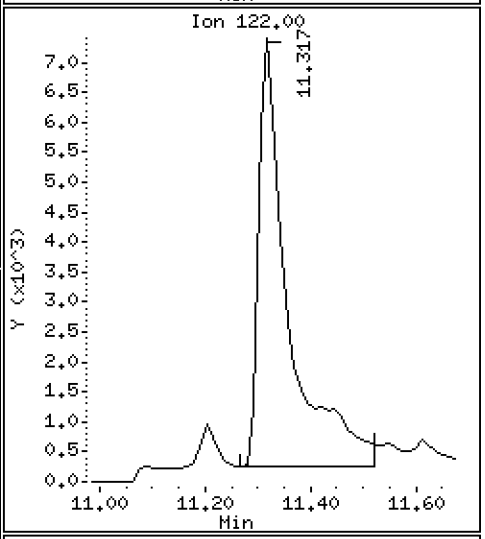
24 Benzoic acid

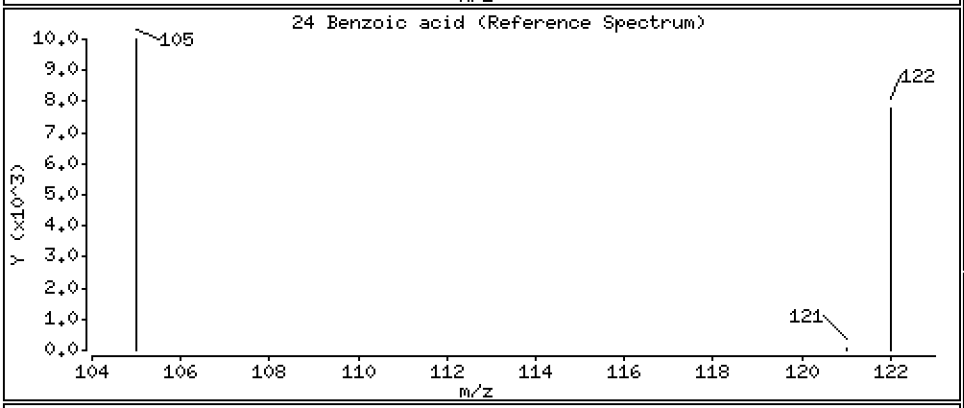
Concentration: 0.4406 ug/mL

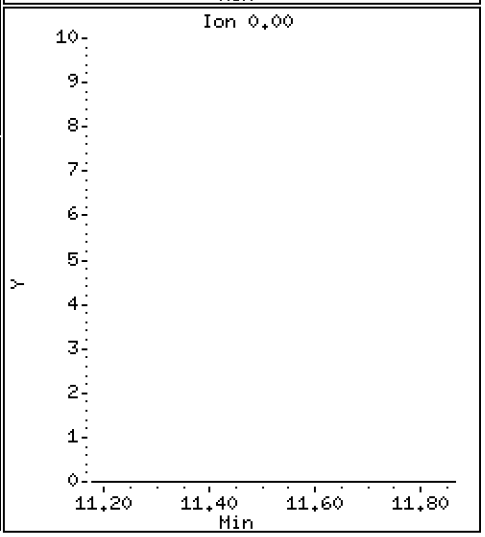


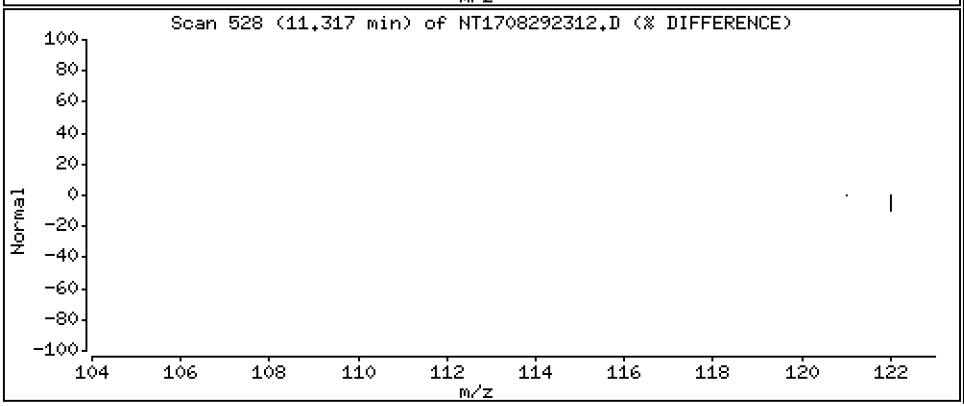












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Date : 29-AUG-2023 18:27

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-01

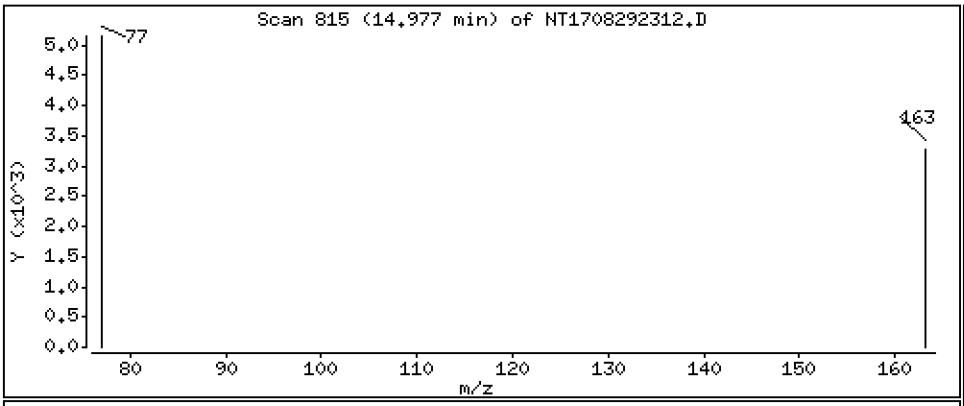
Operator: JGR

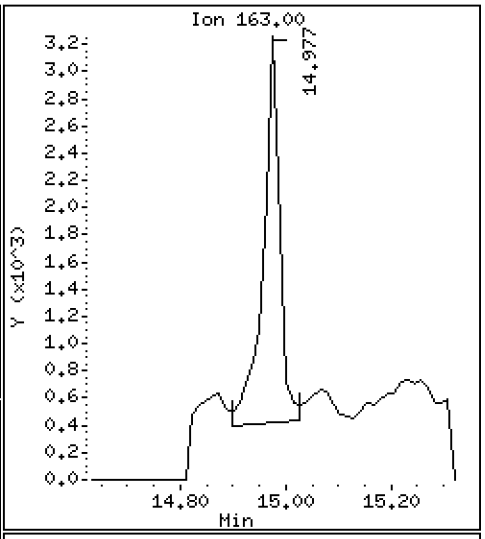
Column phase: ZB-5msi

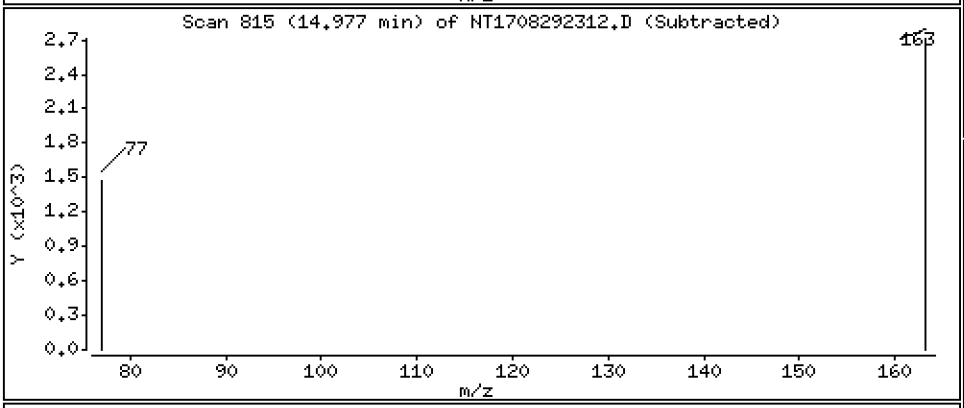
Column diameter: 0.25

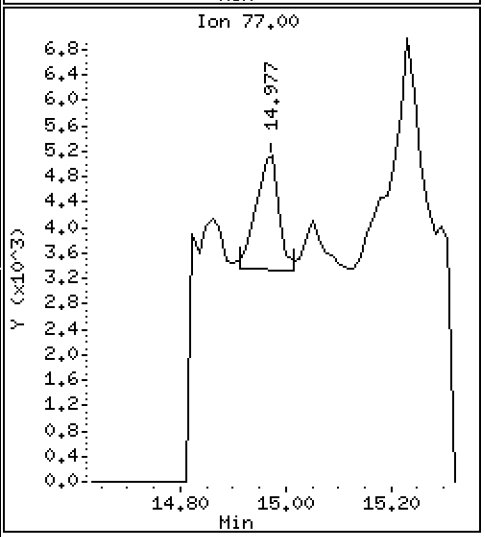
39 Dimethylphthalate

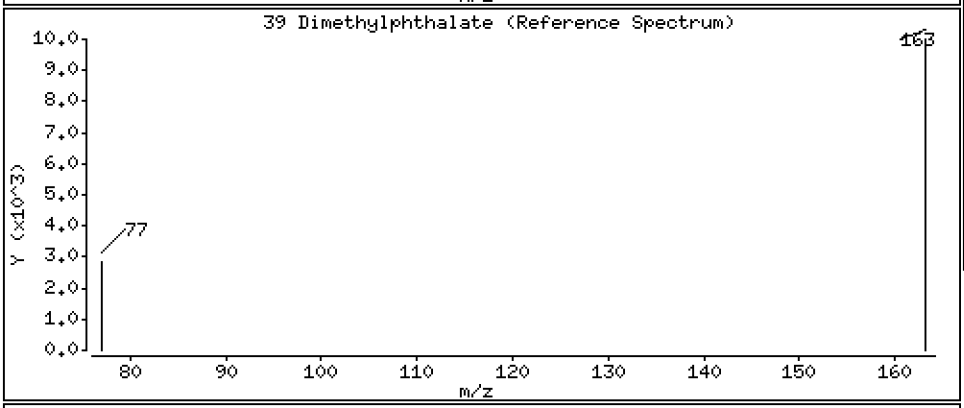
Concentration: 0.04327 ug/mL

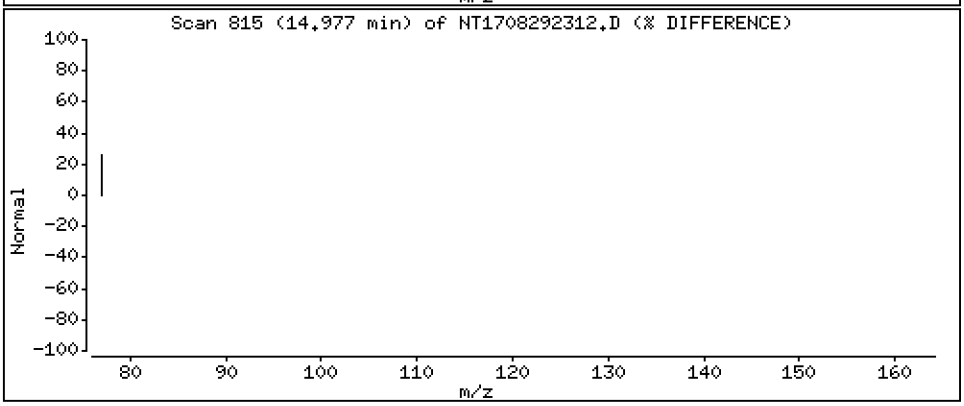












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Date : 29-AUG-2023 18:27

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-01

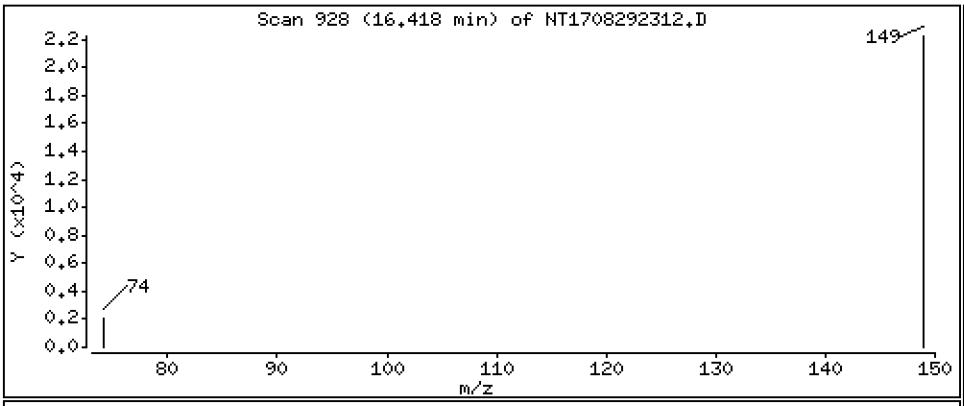
Operator: JGR

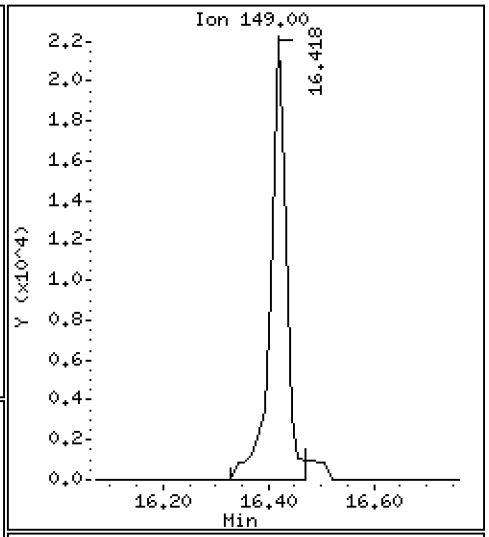
Column phase: ZB-5msi

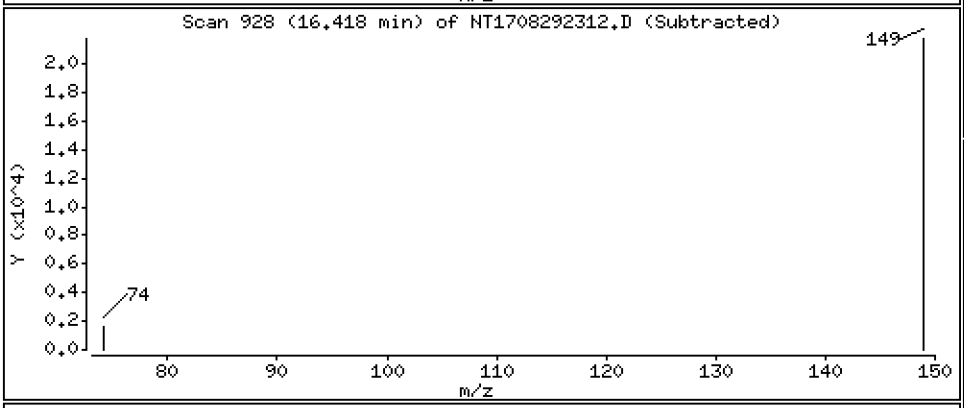
Column diameter: 0.25

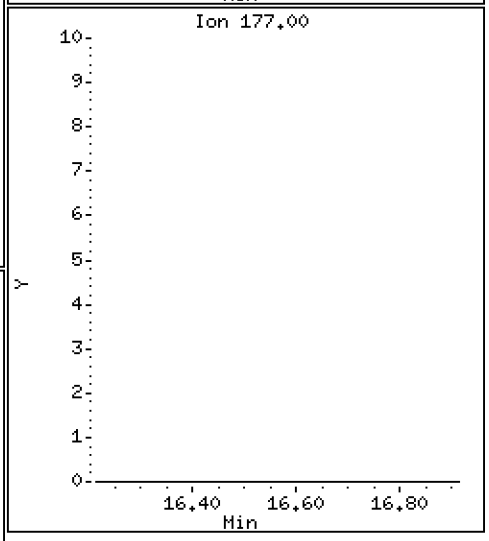
50 Diethylphthalate

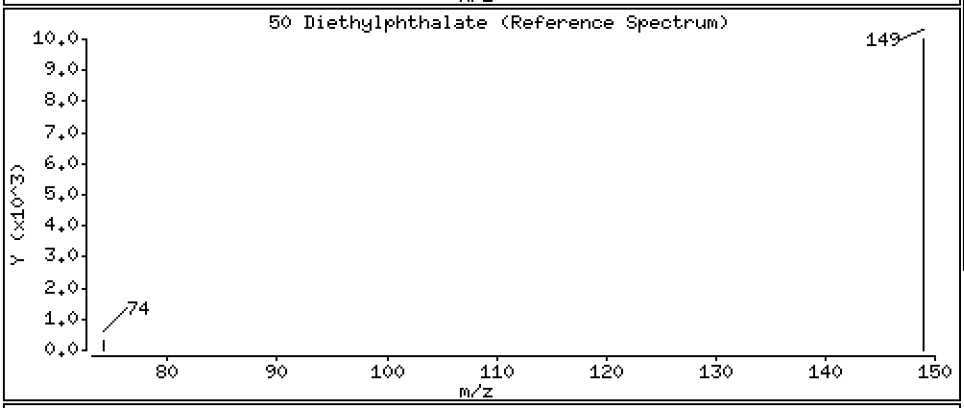
Concentration: 0.3103 ug/mL

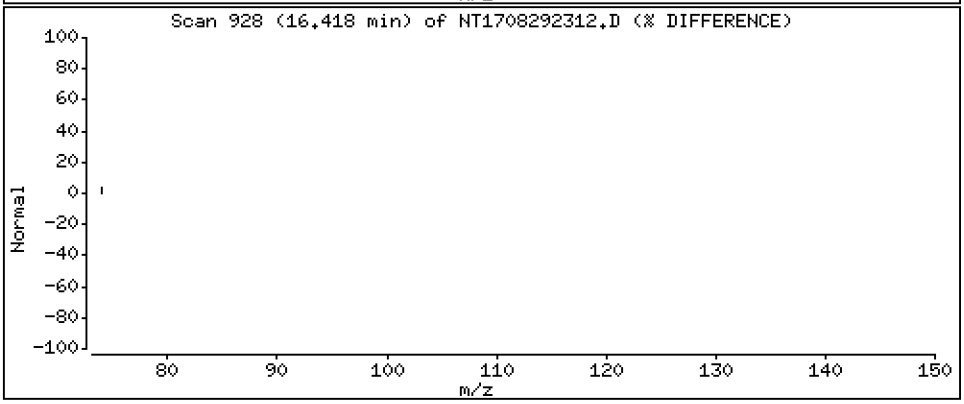












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Date : 29-AUG-2023 18:27

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-01

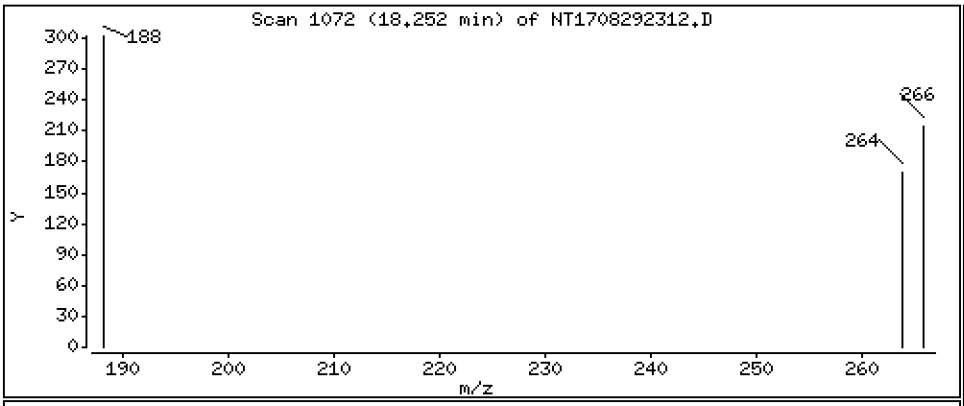
Operator: JGR

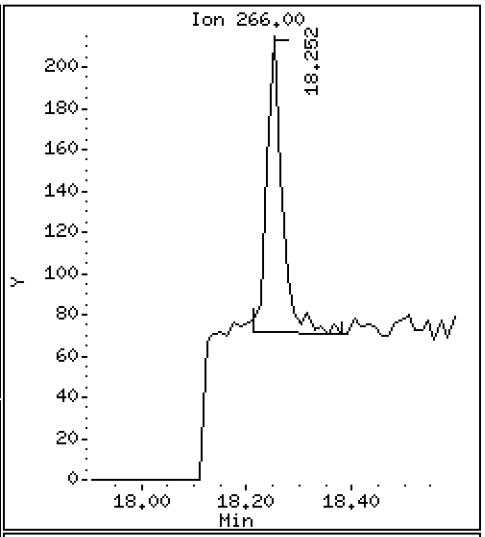
Column phase: ZB-5msi

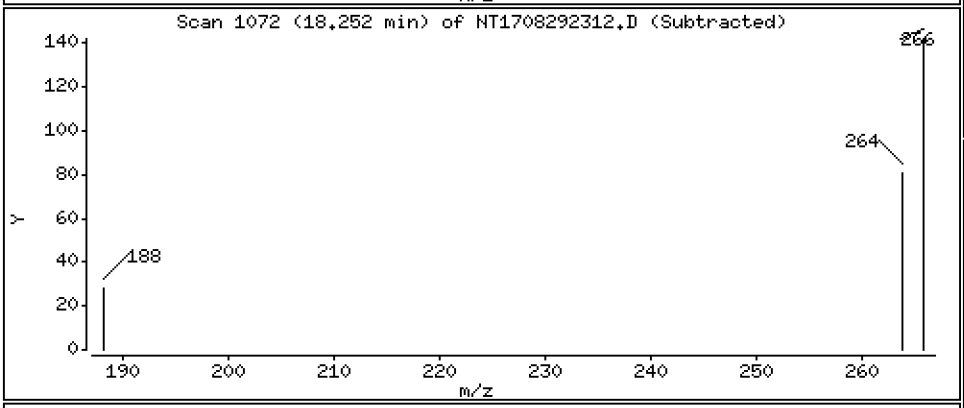
Column diameter: 0.25

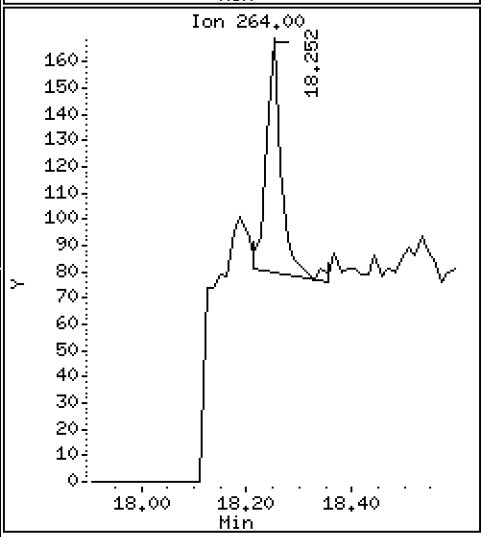
58 Pentachlorophenol

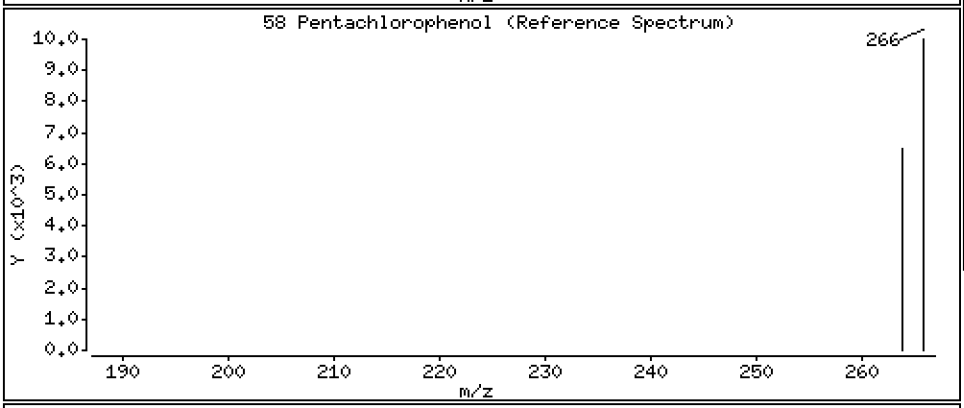
Concentration: 0.01580 ug/mL

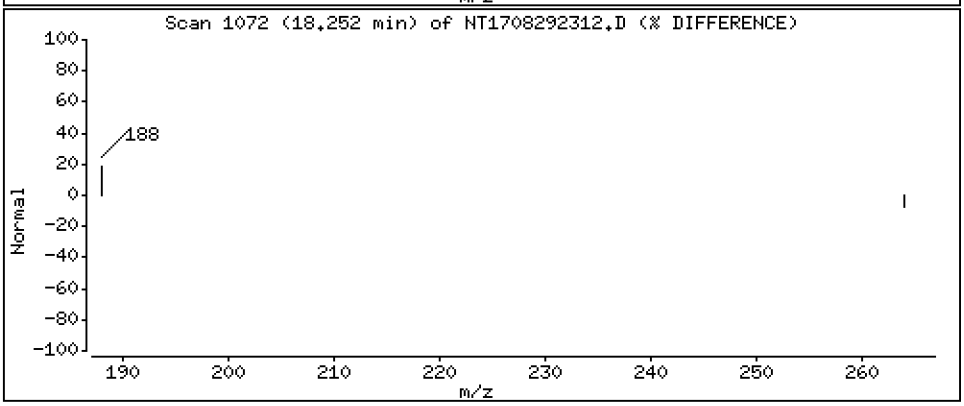












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292312.D

Date : 29-AUG-2023 18:27

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-01

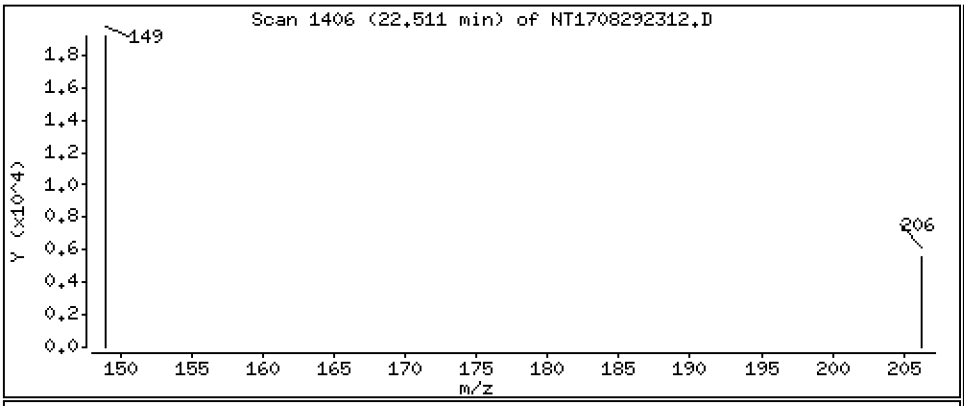
Operator: JGR

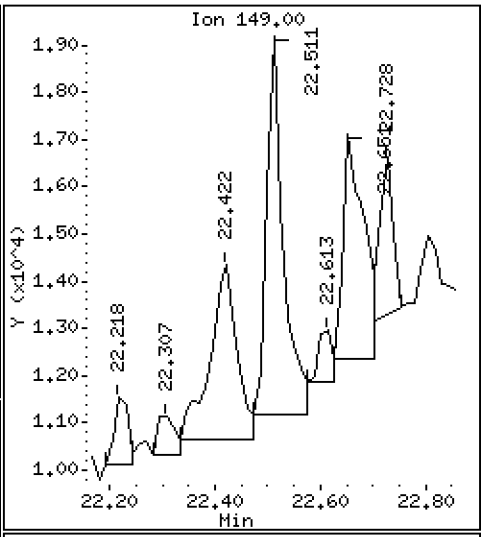
Column phase: ZB-5msi

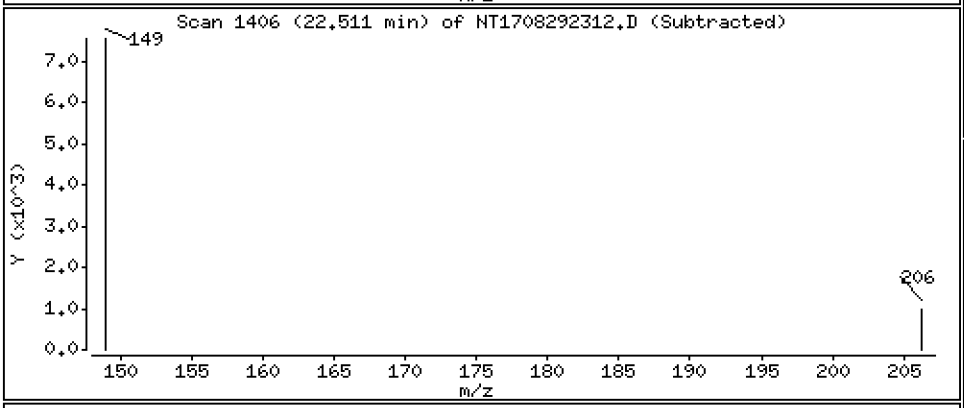
Column diameter: 0.25

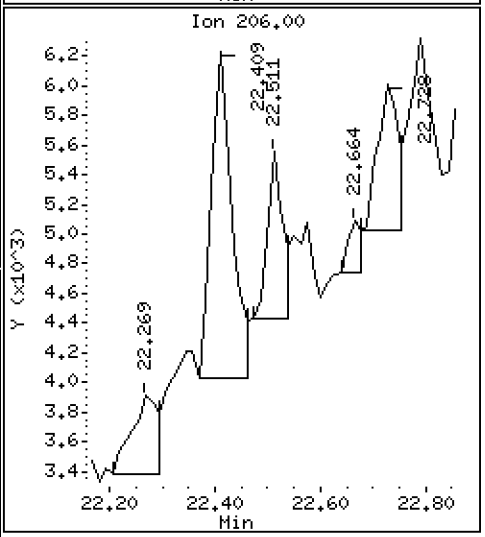
67 Butylbenzylphthalate

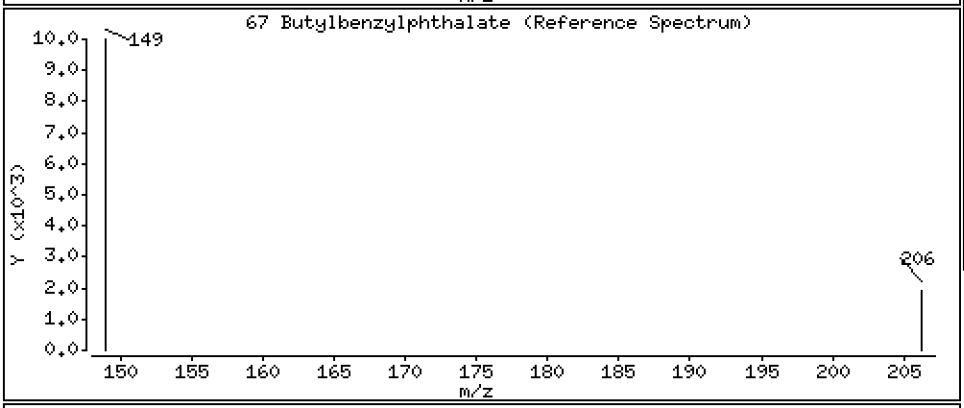
Concentration: 0.1145 ug/mL

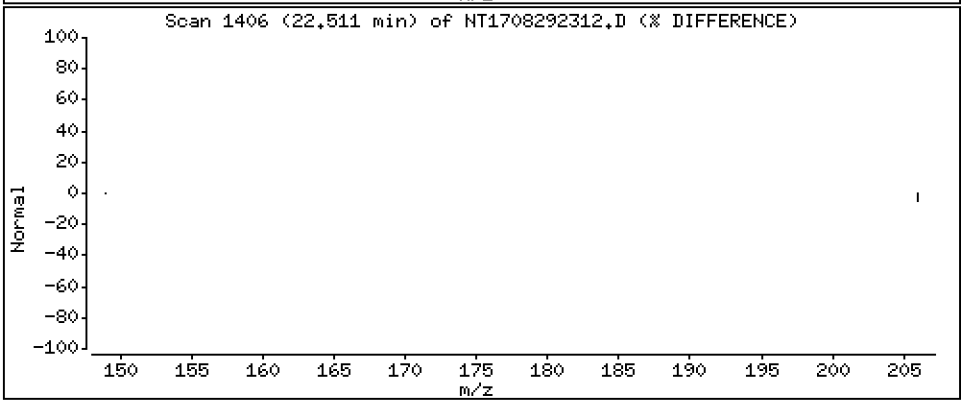












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292312.D

Date : 29-AUG-2023 18:27

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-01

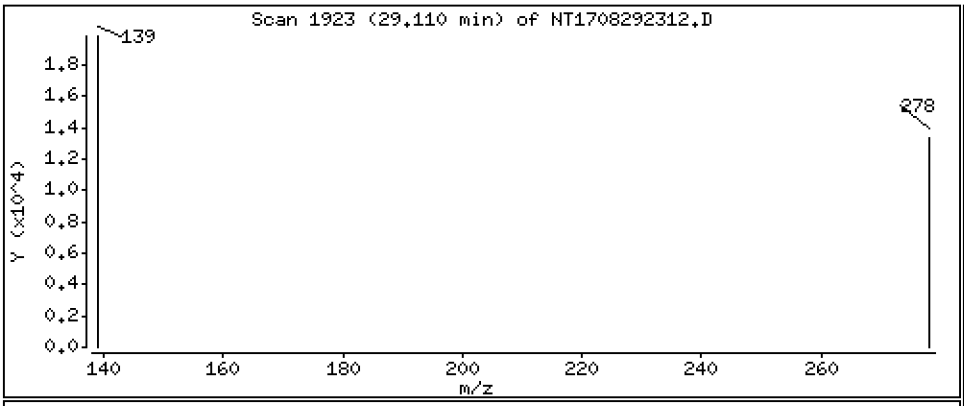
Operator: JGR

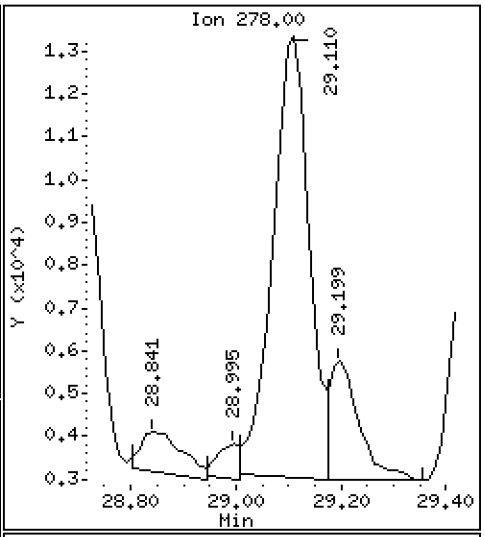
Column phase: ZB-5msi

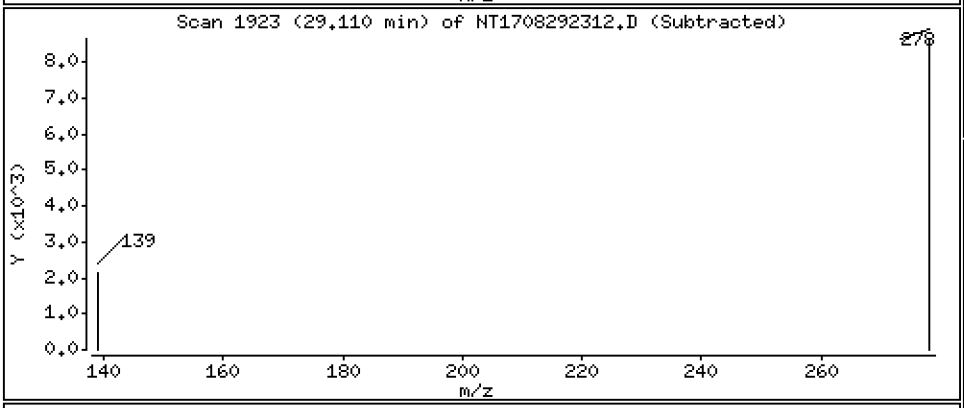
Column diameter: 0.25

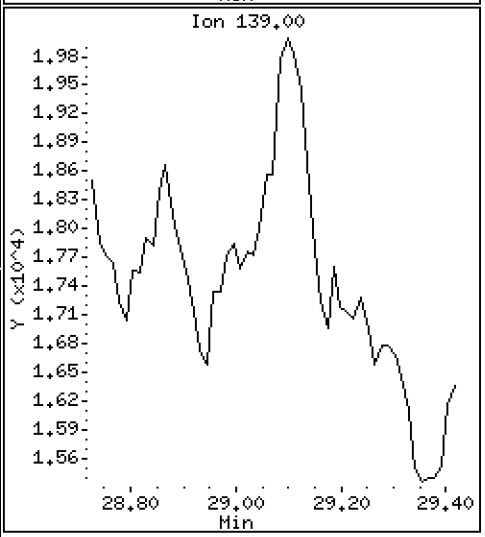
79 Dibenzo(a,h)anthracene

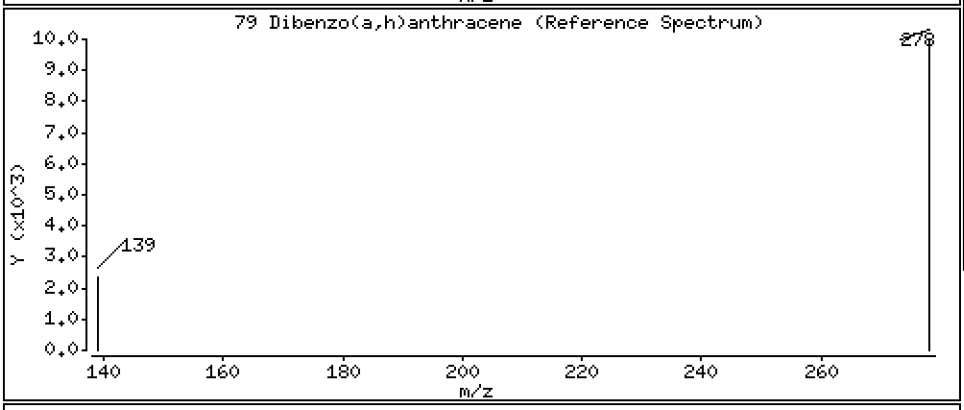
Concentration: 0.1540 ug/mL

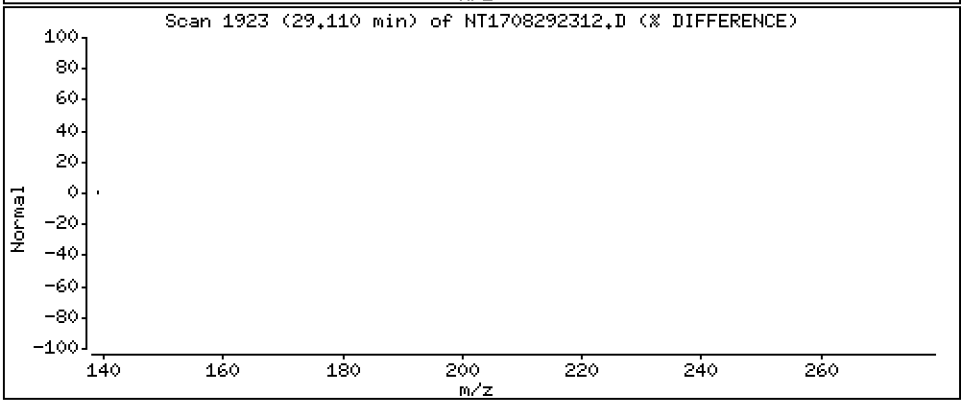












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292312.D
Lab Smp Id: 23H0579-01
Inj Date : 29-AUG-2023 18:27
Operator : JGR Inst ID: nt17.i
Smp Info : 23H0579-01
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 09:25 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.209	7.196	(0.766)	872398	5.87066	5.871(R)
	3 Phenol	94	8.789	8.776	(0.934)	26948	0.11896	0.1190
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	357888	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	9.681	9.669	(1.028)	27169	0.17328	0.1733(M)
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	15 4-Methylphenol	108	10.167	10.154	(1.080)	176067	1.22641	1.226
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	24 Benzoic acid	105	11.317	11.329	(0.953)	35808	0.44060	0.4406
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.878	11.878	(1.000)	1238156	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.977	14.977	(0.967)	6225	0.04327	0.04327(M)
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	442643	4.00000	
	50 Diethylphthalate	149	16.417	16.417	(1.060)	46418	0.31030	0.3103
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	289	0.01580	0.01580(M)
*	59 Phenanthrene-d10	188	18.519	18.506	(1.000)	572113	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	313640	3.91355	3.914(R)
	67 Butylbenzylphthalate	149	22.511	22.511	(0.958)	17591	0.11447	0.1145
*	69 Chrysene-d12	240	23.506	23.506	(1.000)	579135	4.00000	
*	77 Perylene-d12	264	26.248	26.223	(1.000)	1103482	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.109	29.071	(1.109)	50204	0.15403	0.1540
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Report Date: 30-Aug-2023 09:25

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292312.D
Lab Smp Id: 23H0579-01
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 29-AUG-2023
Calibration Time: 12:37
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	296489	148245	592978	357888	20.71
27 Naphthalene-d8	1098892	549446	2197784	1238156	12.67
42 Acenaphthene-d10	443071	221536	886142	442643	-0.10
59 Phenanthrene-d10	627744	313872	1255488	572113	-8.86
69 Chrysene-d12	404122	202061	808244	579135	43.31
77 Perylene-d12	417323	208662	834646	1103482	164.42 <-

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	-0.00
27 Naphthalene-d8	11.88	11.38	12.38	11.88	-0.00
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	-0.00
59 Phenanthrene-d10	18.51	18.01	19.01	18.52	0.07
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.22	25.72	26.72	26.25	0.10

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292312.D

Lab ID: 23H0579-01
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   29-AUG-2023 18:27

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1708292304.D

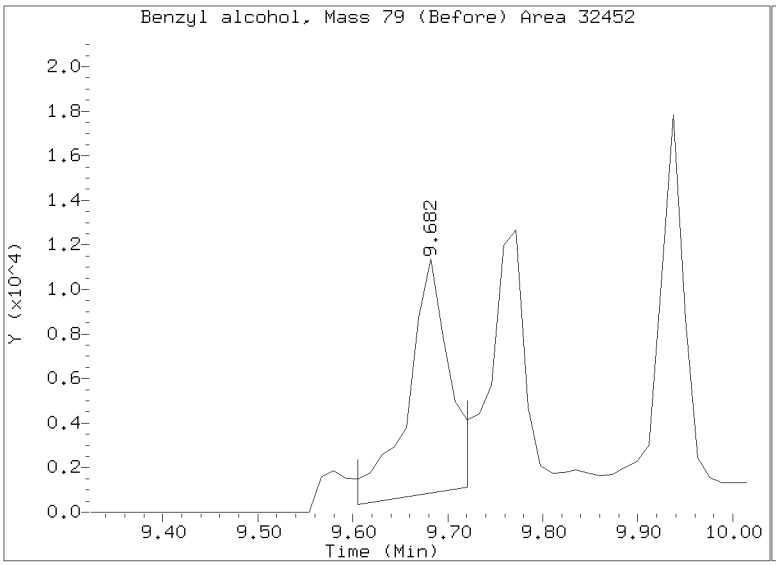
On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

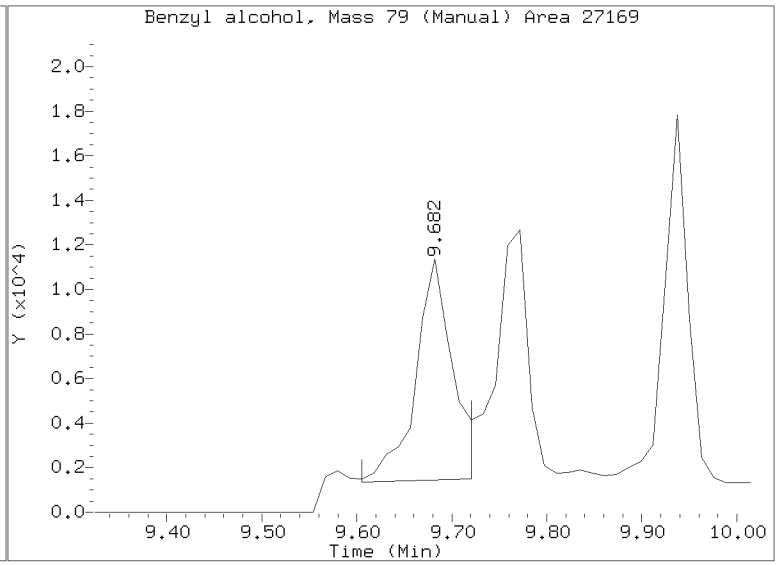
Exception: 1,2,4-Trichlorobenzene 0.0010

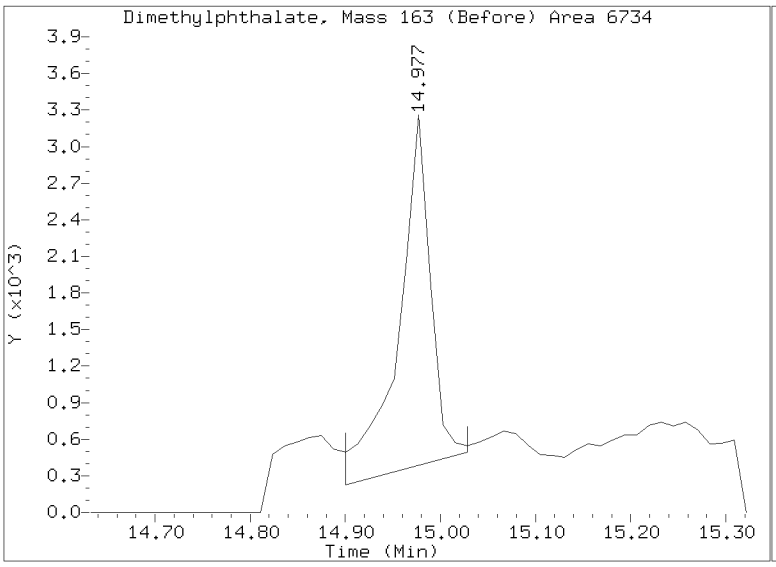
* Only compounds listed in the work order have been verified by the analyst *

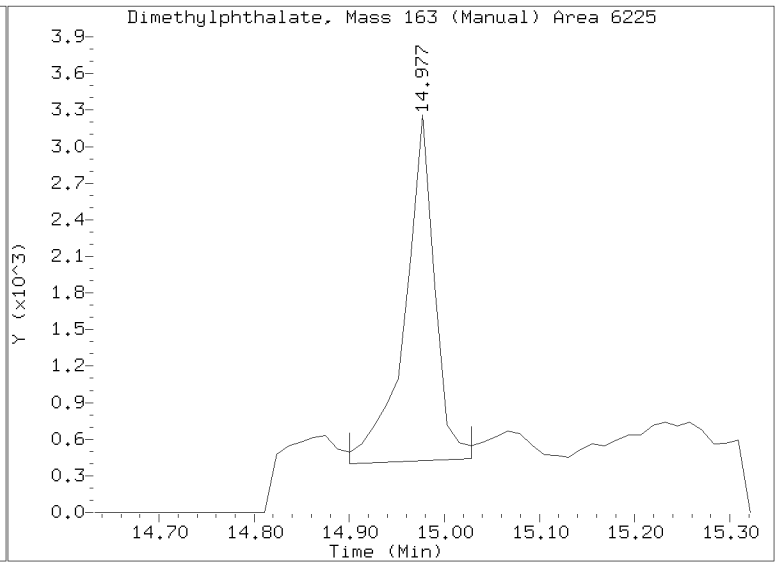
Quant Ion Manual Peak Adjustment Report

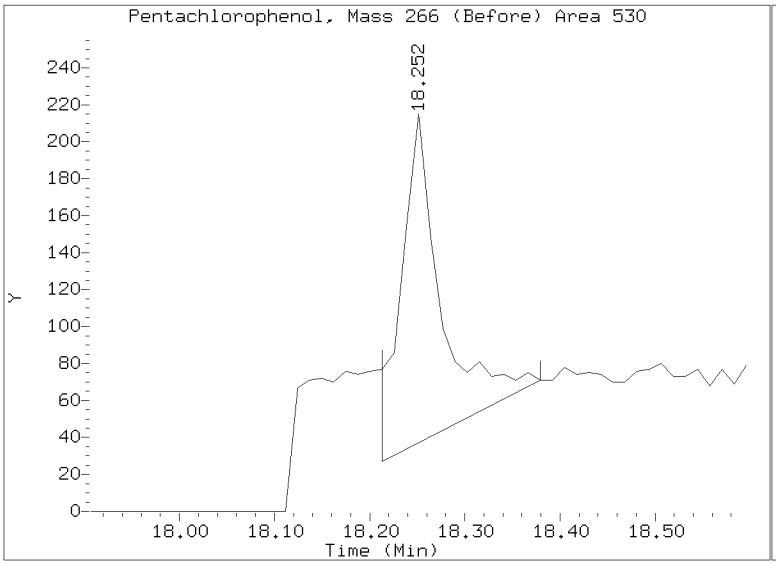
Datafile: //target/share/chem3/nt17.i/20230829.b/SIM.b/NT1708292312.D
Injection Date: 29-AUG-2023 18:27
Lab ID:23H0579-01 Client ID:
Report Date: 08/30/2023 09:25

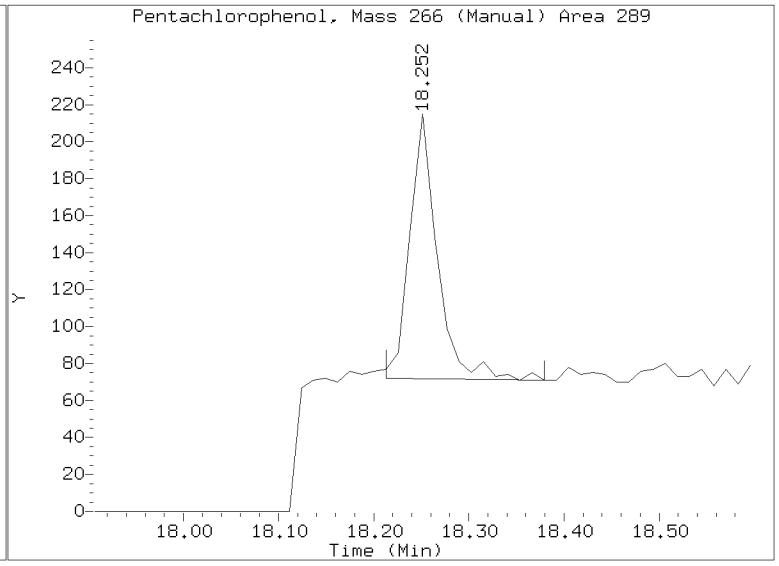












Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1226A

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23H0579-02 A	SDG:	23H0579
Sampled:	01/03/23 12:35	Prepared:	08/25/23 12:39	File ID:	NT1708292313.D
% Solids:	54.42	Preparation:	EPA 3546 (Microwave)	Analyzed:	08/29/23 19:04
Batch:	BLH0669	Sequence:	SLH0447	Initial/Final:	18.39 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GH00045
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	749.41	556	74.2	27 - 120	
p-Terphenyl-d14	499.61	524	105	37 - 120	Q

INTERNAL STANDARDS	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	390871	9.413	296489	9.413	
Naphthalene-d8	1415559	11.878	1098892	11.878	
Acenaphthene-d10	548181	15.487	443071	15.487	
Phenanthrene-d10	761131	18.519	627744	18.506	
Chrysene-d12	505742	23.506	404122	23.506	
Perylene-d12	734507	26.236	417323	26.223	

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292313.D

Date : 29-AUG-2023 19:04

Client ID:

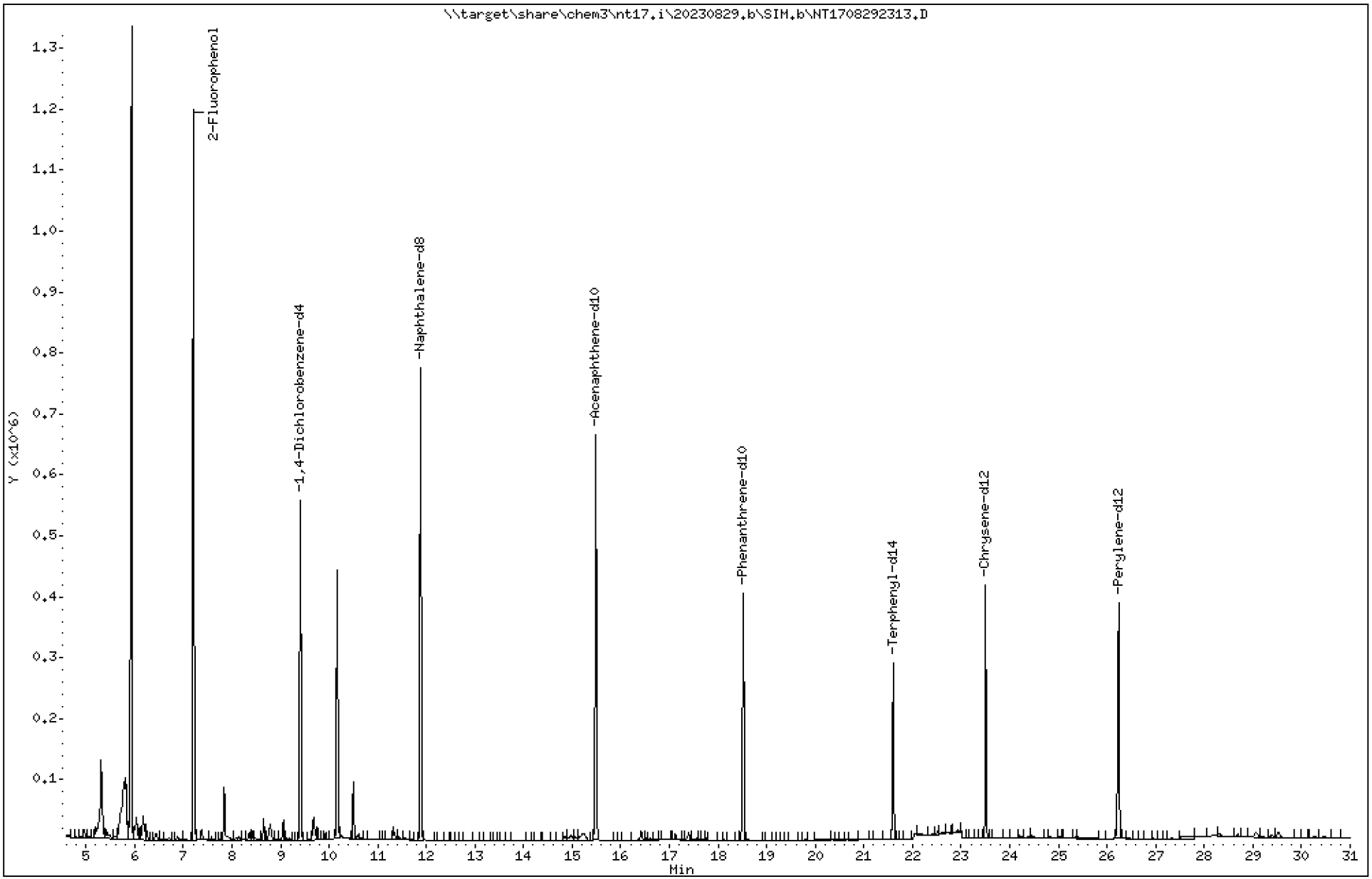
Sample Info: 23H0579-02

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 29-AUG-2023 19:04

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-02

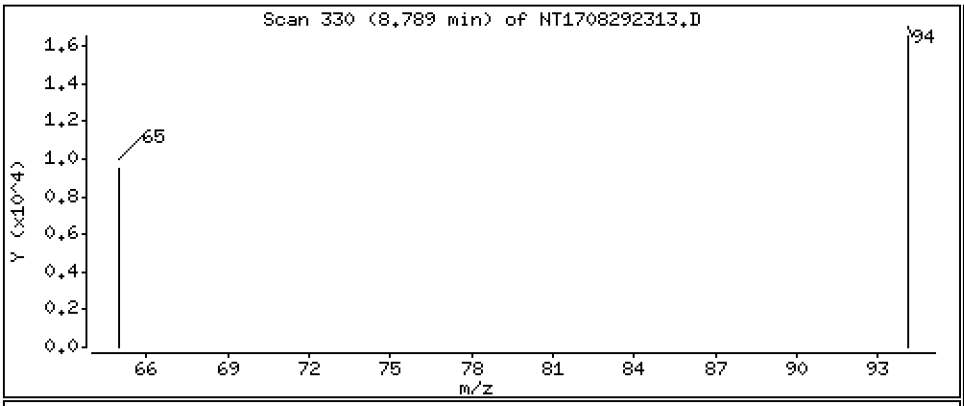
Operator: JGR

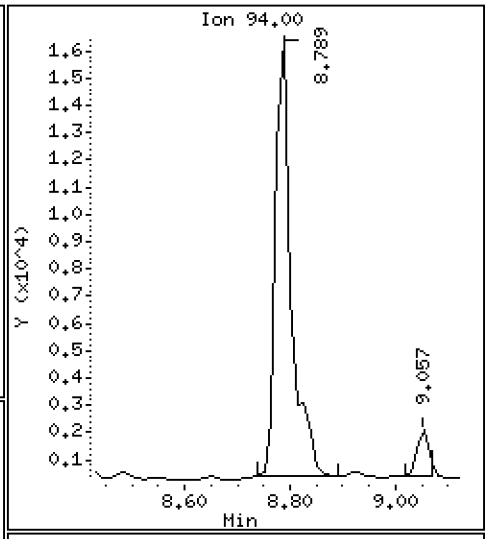
Column phase: ZB-5msi

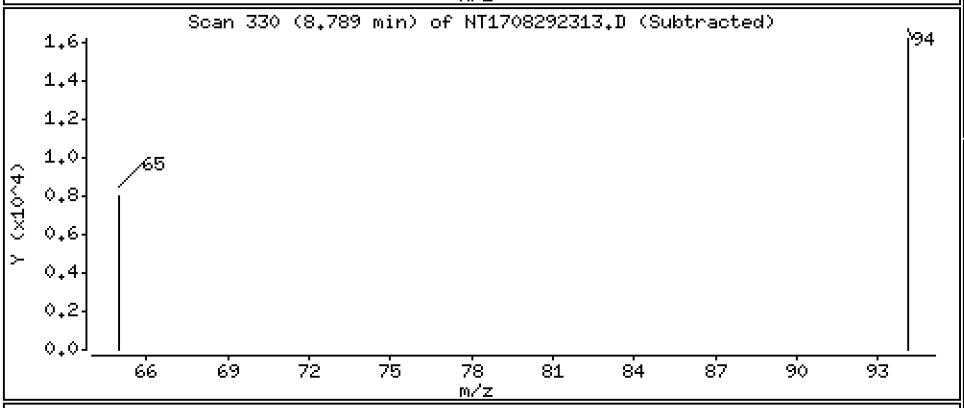
Column diameter: 0.25

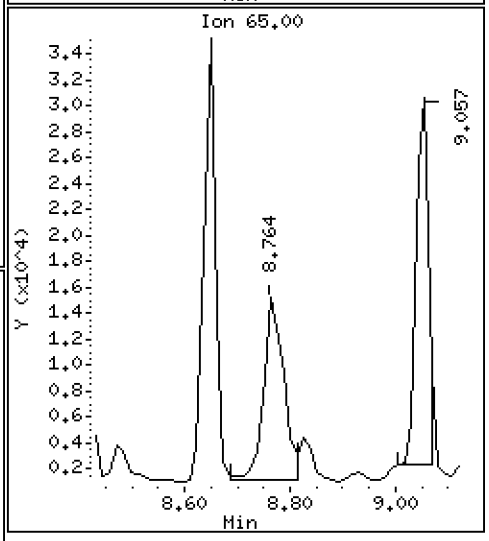
3 Phenol

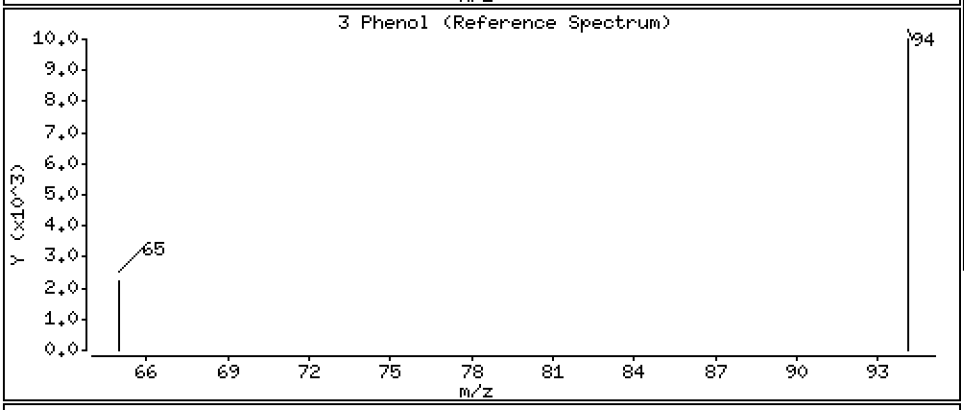
Concentration: 0.1384 ug/mL

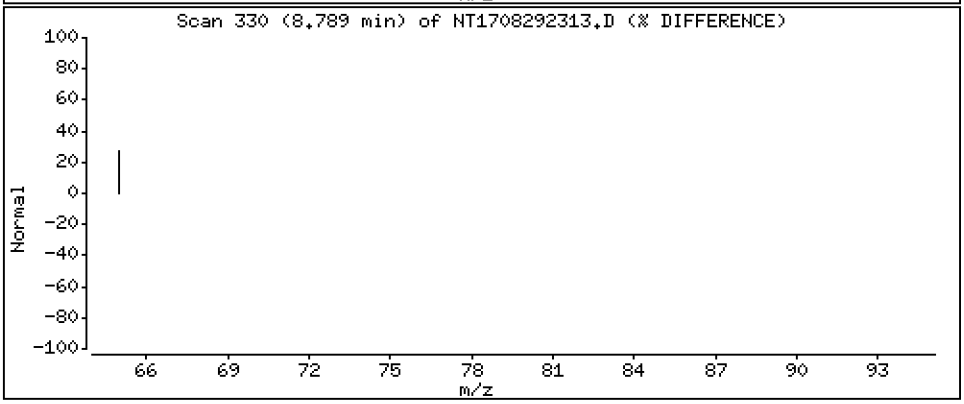












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Date : 29-AUG-2023 19:04

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-02

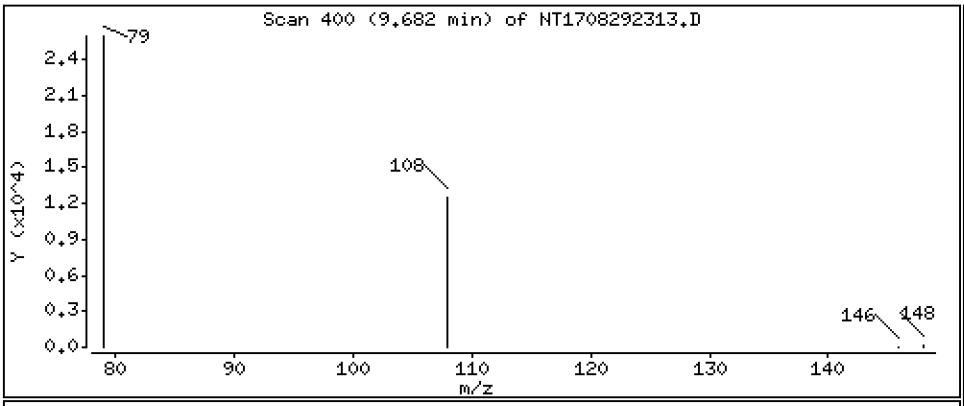
Operator: JGR

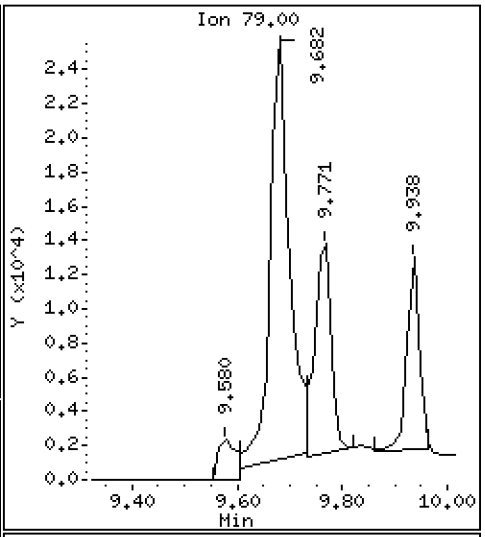
Column phase: ZB-5msi

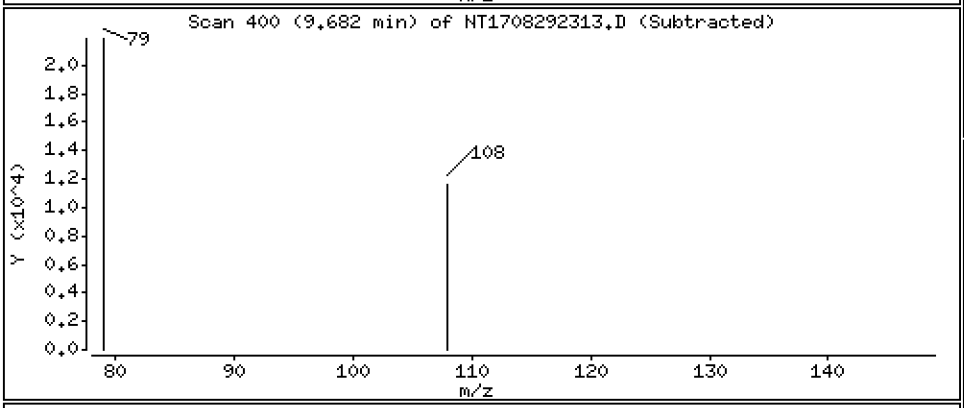
Column diameter: 0.25

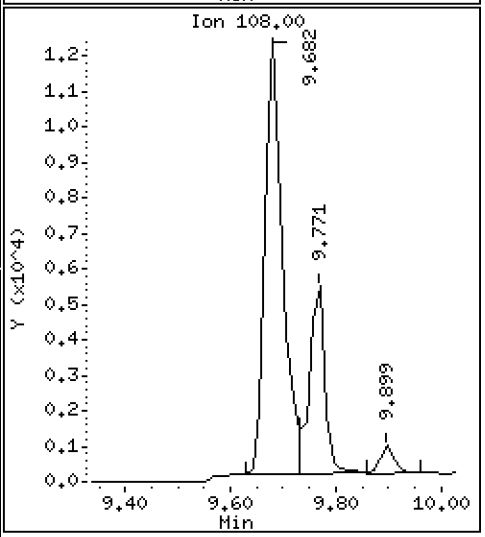
11 Benzyl alcohol

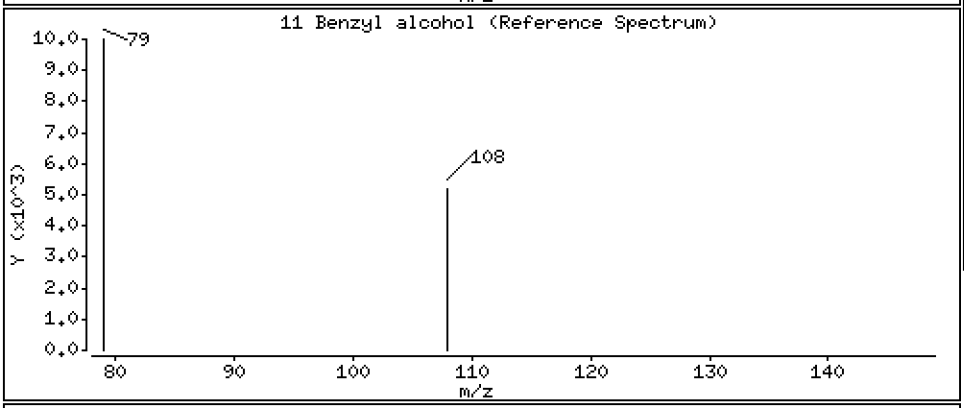
Concentration: 0.3816 ug/mL

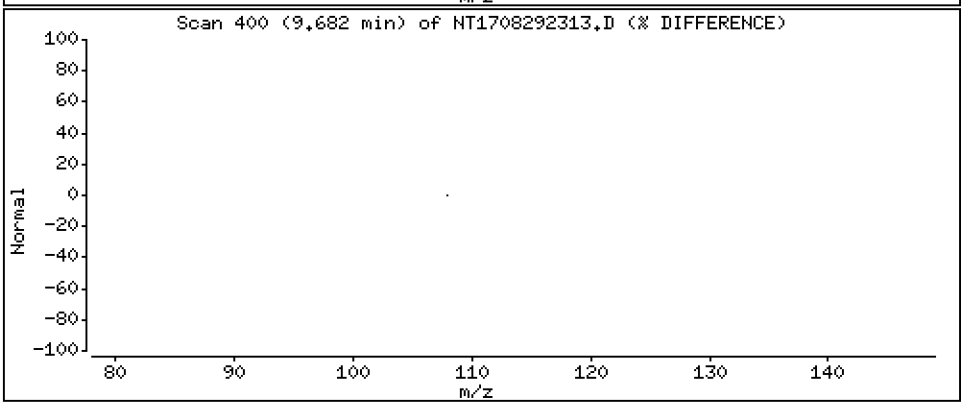












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Date : 29-AUG-2023 19:04

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-02

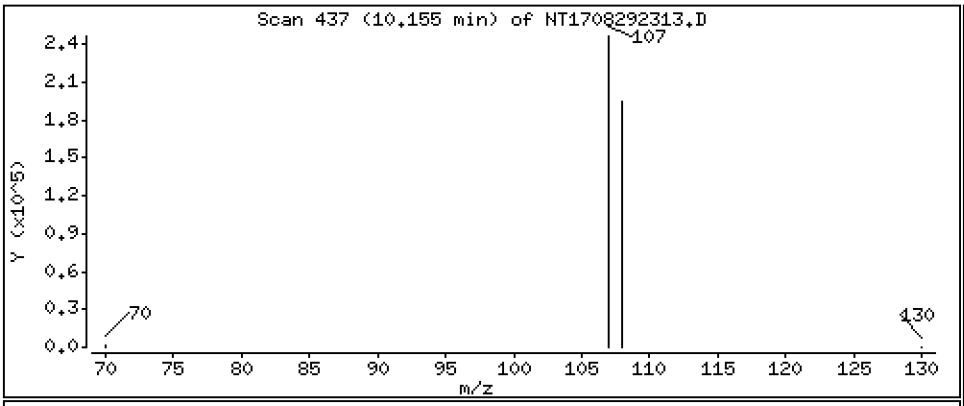
Operator: JGR

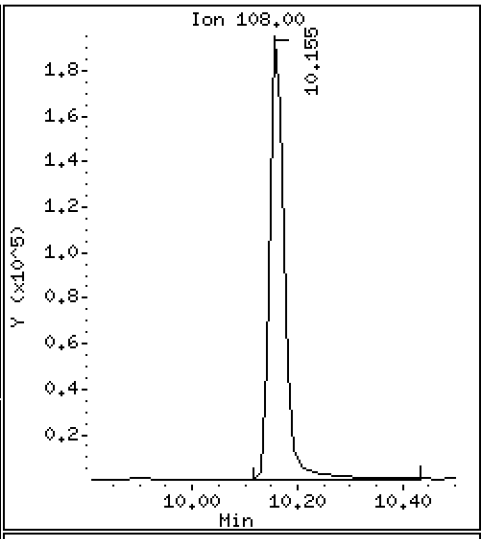
Column phase: ZB-5msi

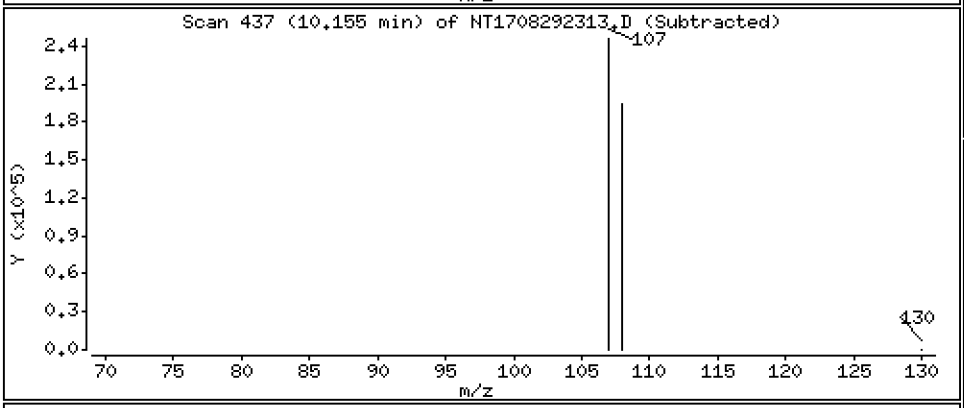
Column diameter: 0.25

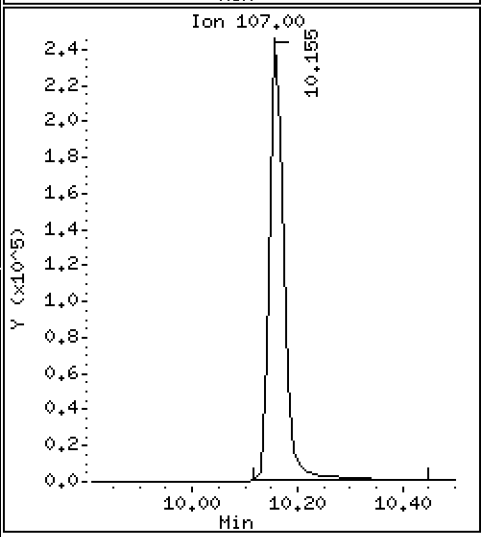
15 4-Methylphenol

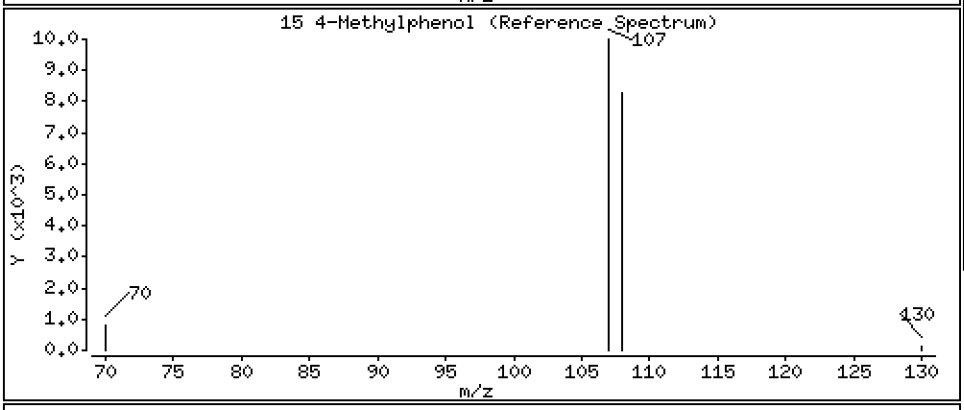
Concentration: 2.444 ug/mL

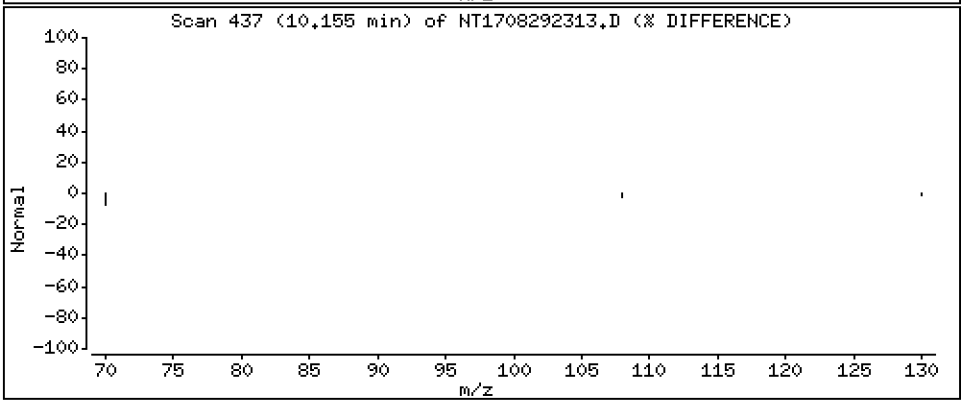












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Date : 29-AUG-2023 19:04

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-02

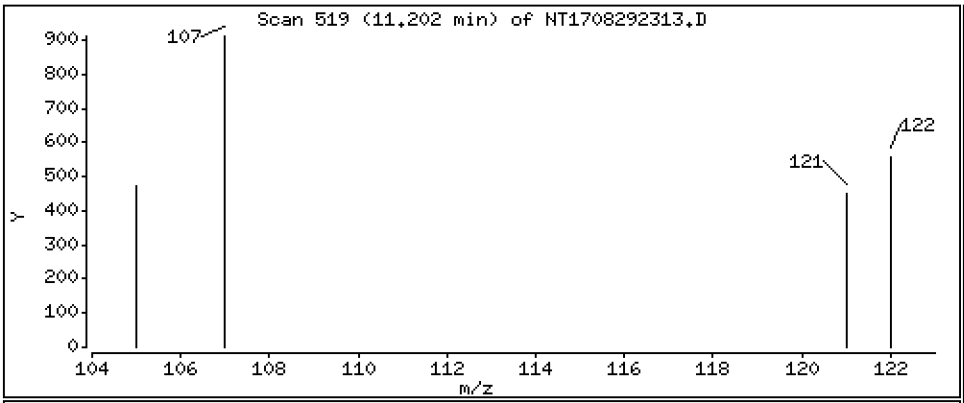
Operator: JGR

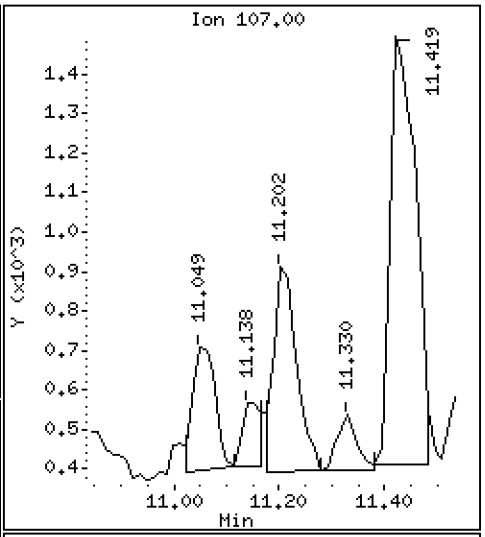
Column phase: ZB-5msi

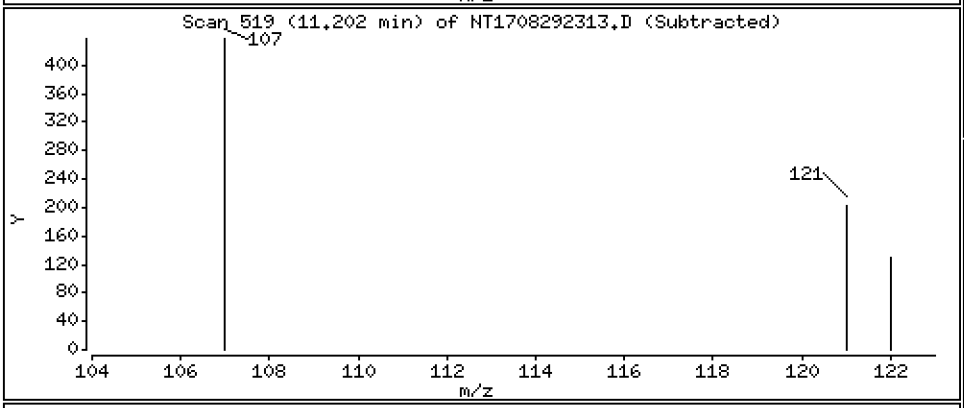
Column diameter: 0.25

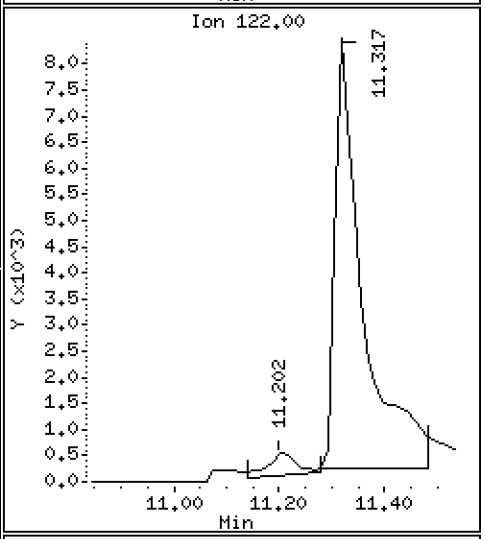
22 2,4-Dimethylphenol

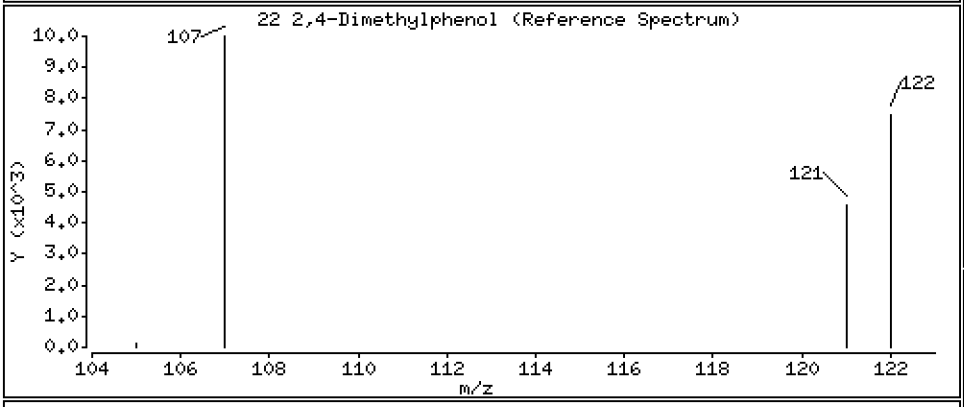
Concentration: 0.01143 ug/mL

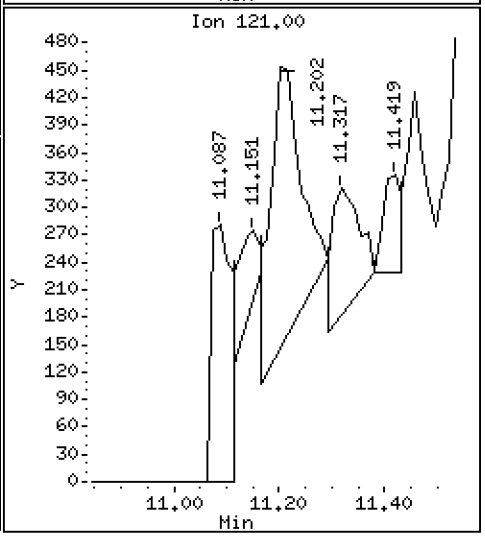


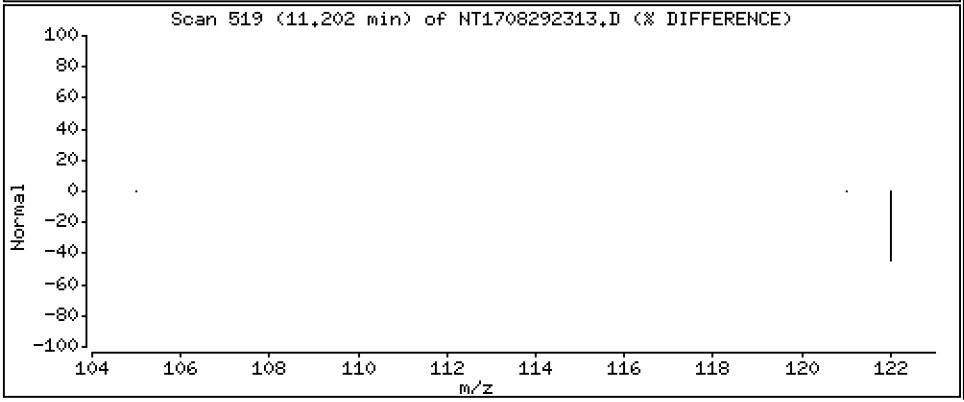












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292313.D

Date : 29-AUG-2023 19:04

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-02

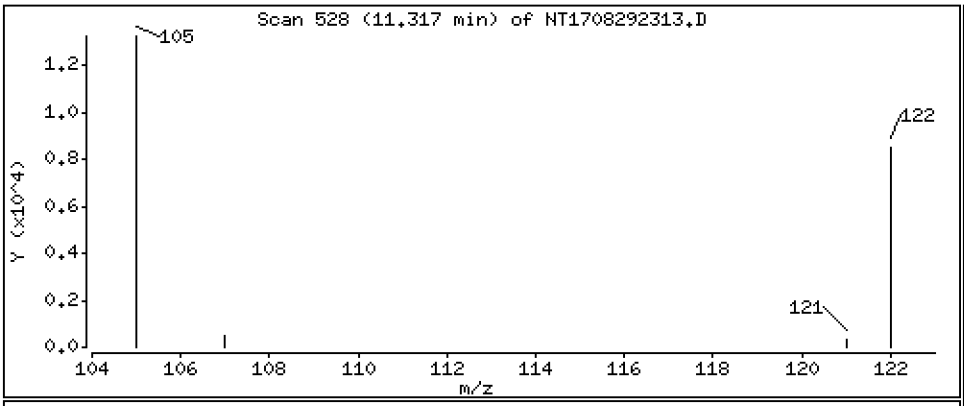
Operator: JGR

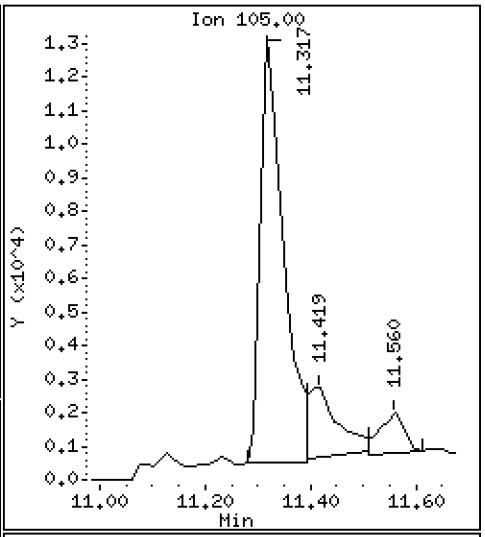
Column phase: ZB-5msi

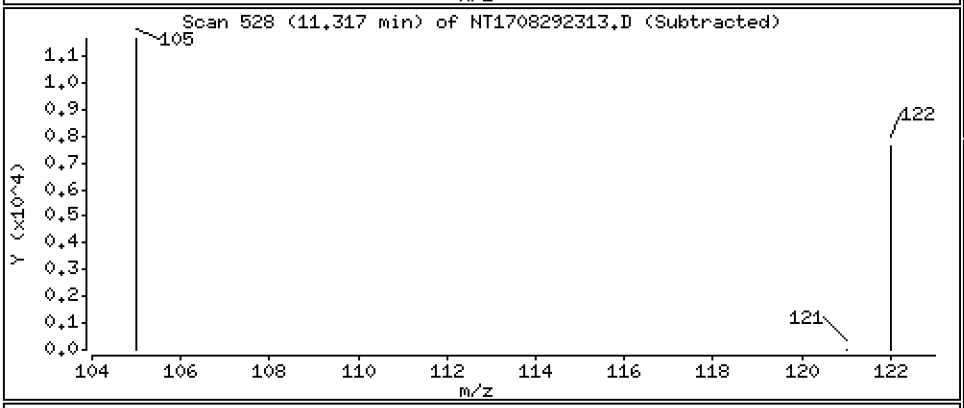
Column diameter: 0.25

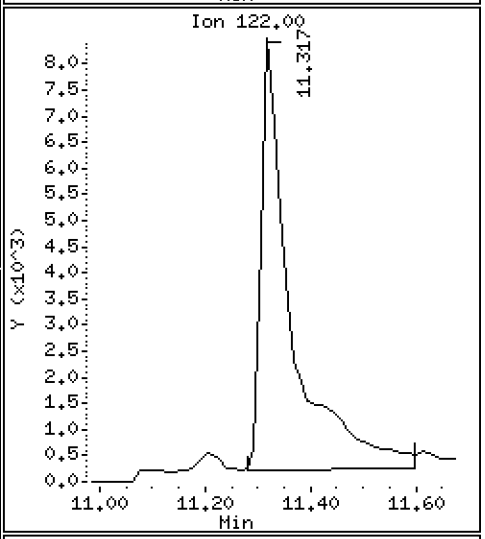
24 Benzoic acid

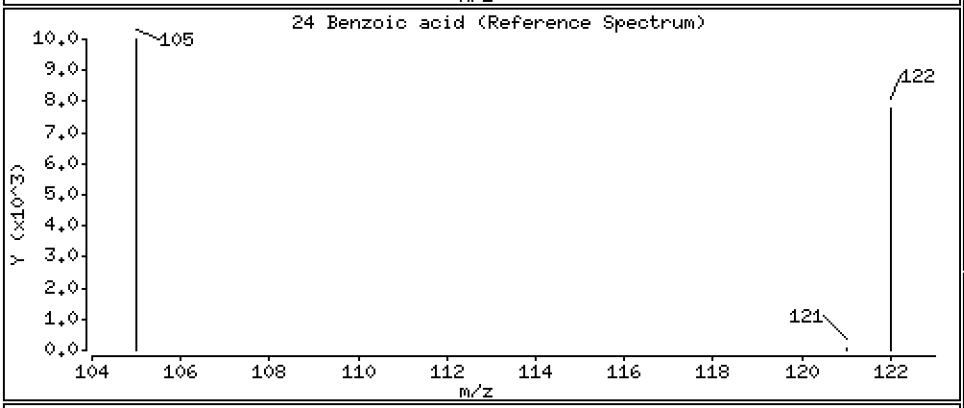
Concentration: 0.4265 ug/mL

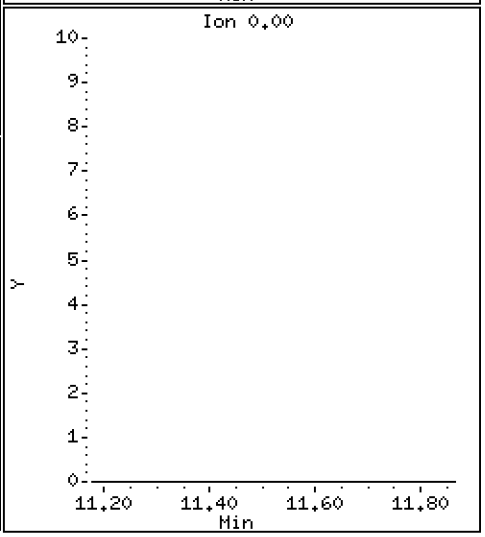


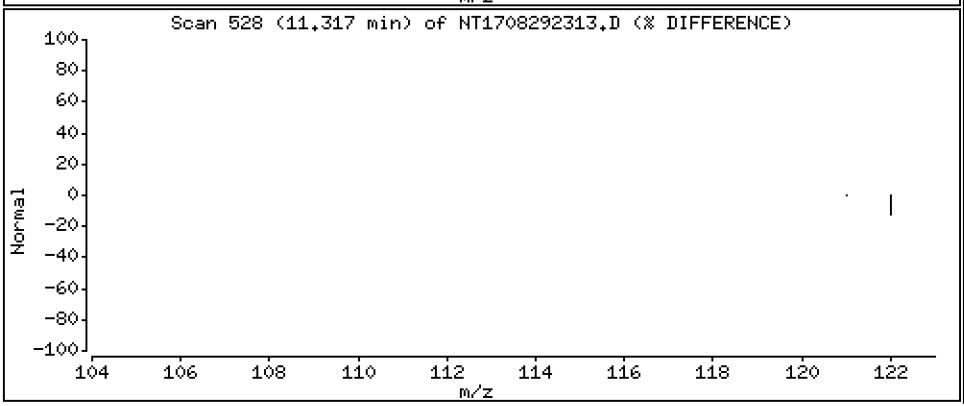












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Date : 29-AUG-2023 19:04

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-02

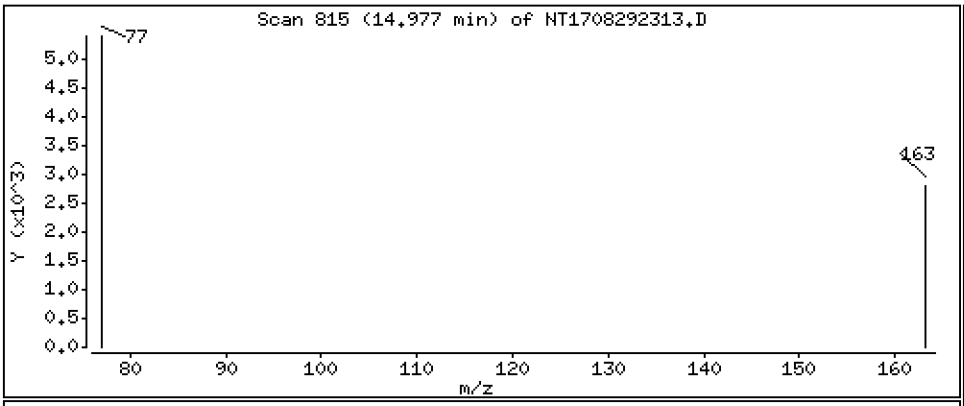
Operator: JGR

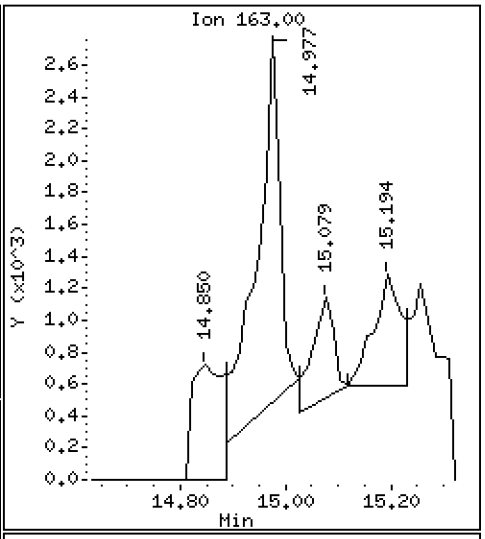
Column phase: ZB-5msi

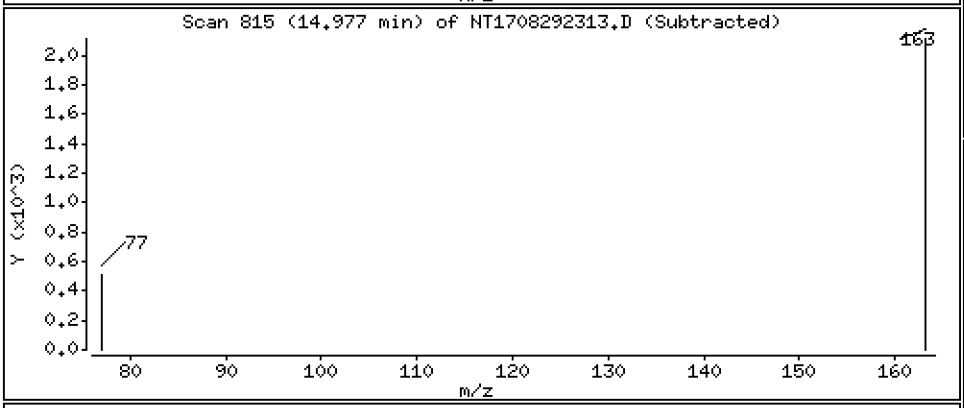
Column diameter: 0.25

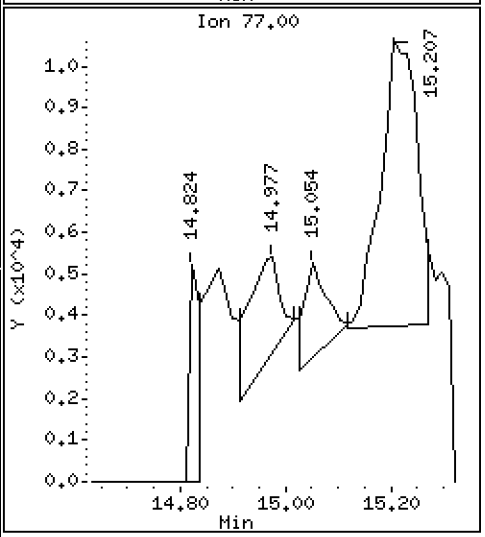
39 Dimethylphthalate

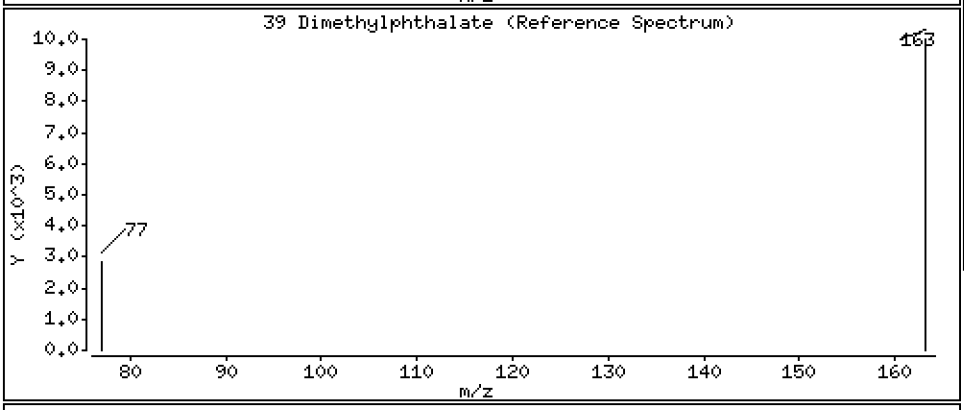
Concentration: 0.03994 ug/mL

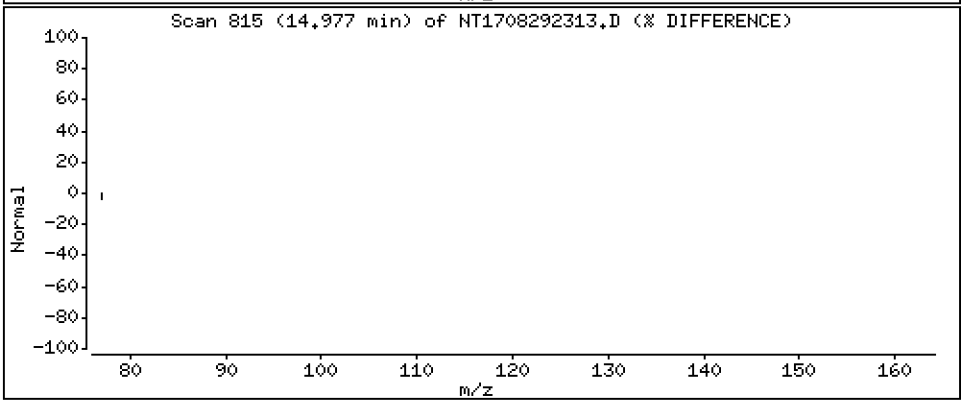












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Date : 29-AUG-2023 19:04

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-02

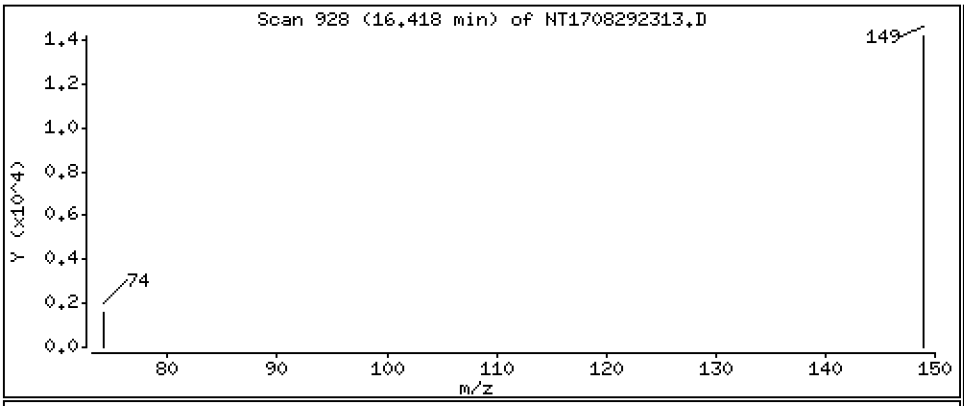
Operator: JGR

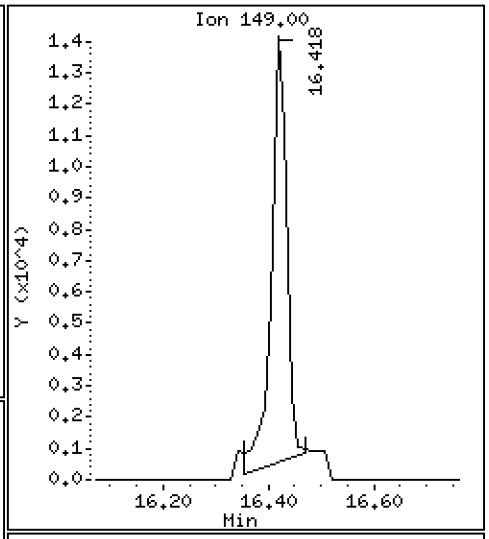
Column phase: ZB-5msi

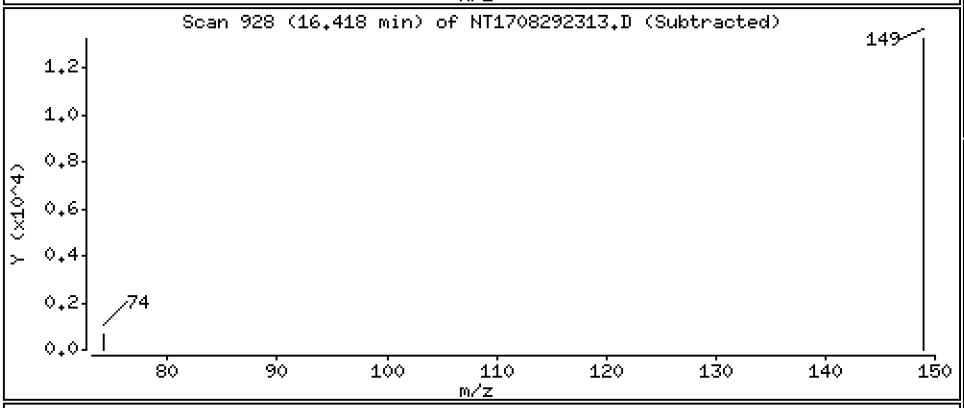
Column diameter: 0.25

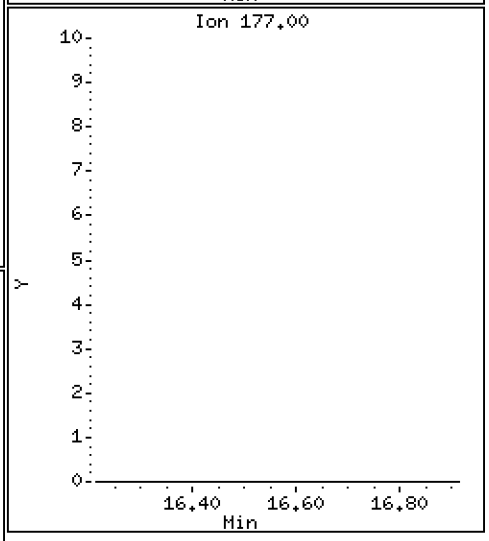
50 Diethylphthalate

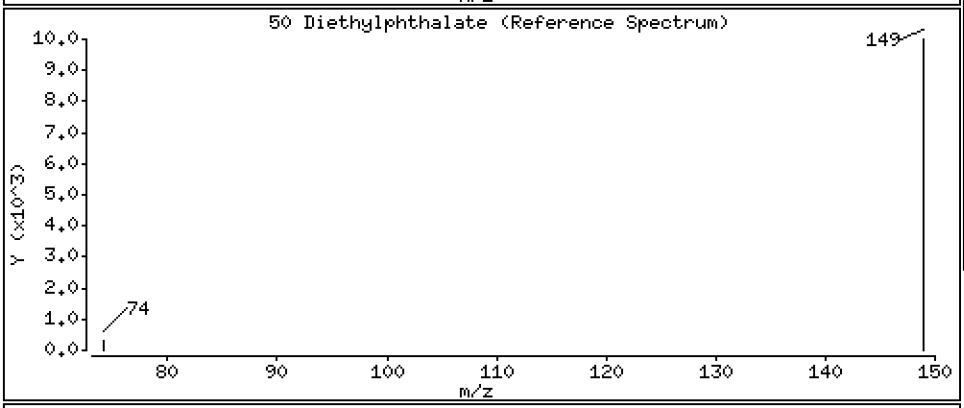
Concentration: 0.1493 ug/mL

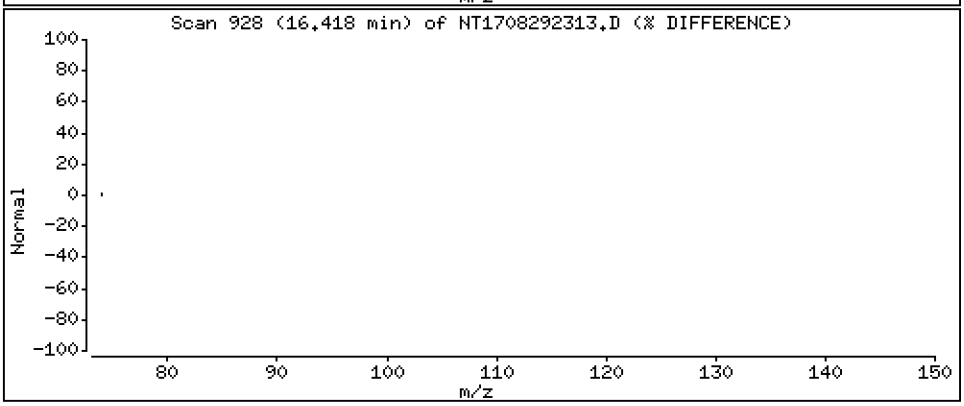












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Date : 29-AUG-2023 19:04

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-02

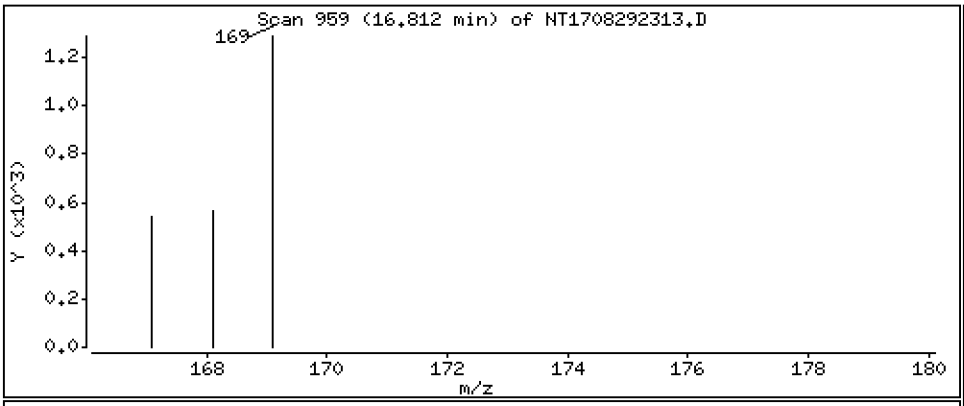
Operator: JGR

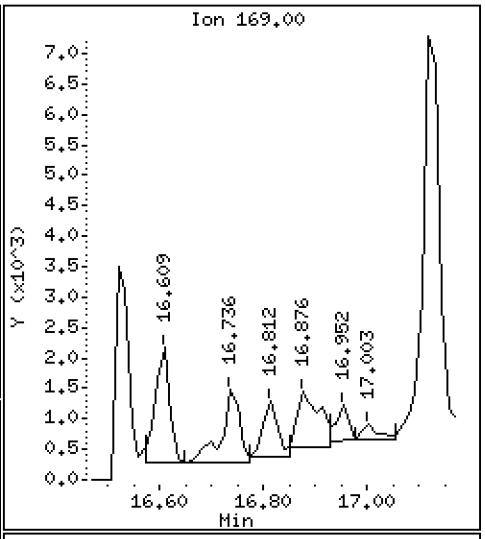
Column phase: ZB-5msi

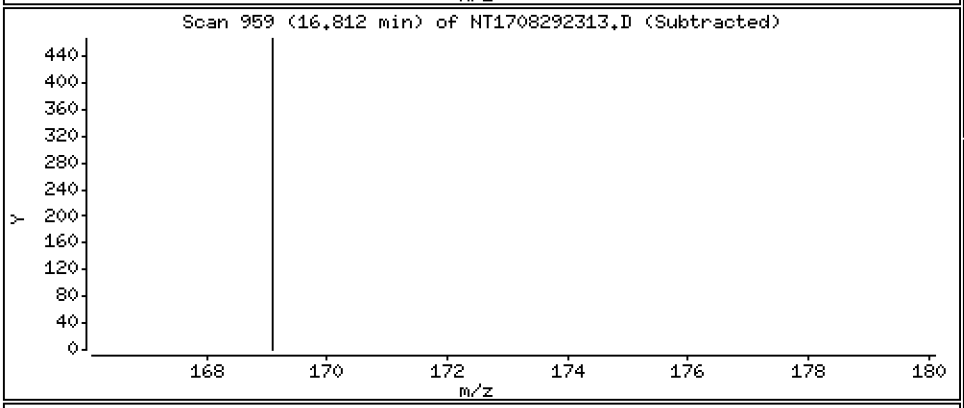
Column diameter: 0.25

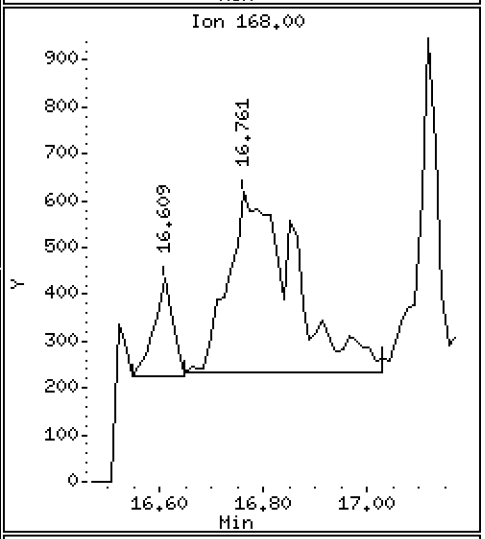
54 N-Nitrosodiphenylamine

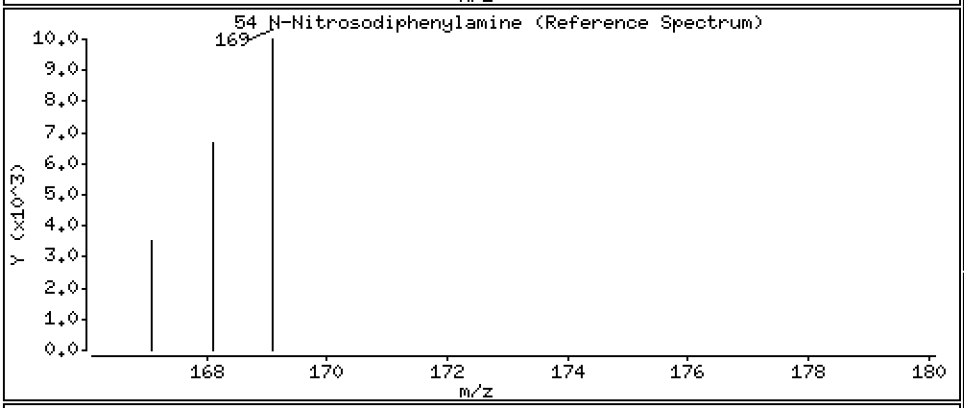
Concentration: 0.01679 ug/mL

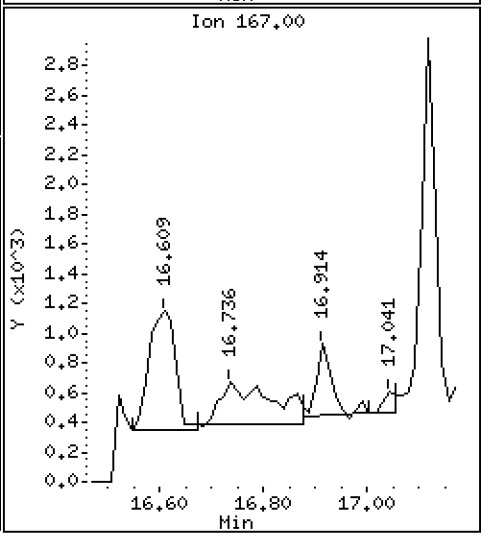


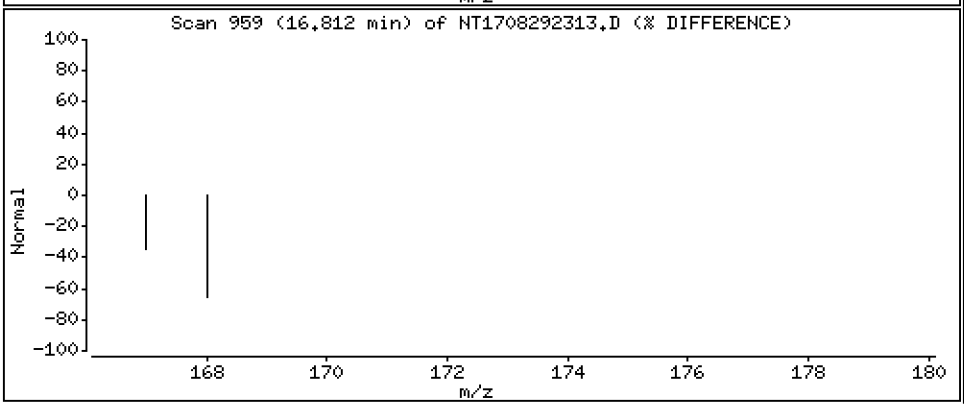












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292313.D

Date : 29-AUG-2023 19:04

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-02

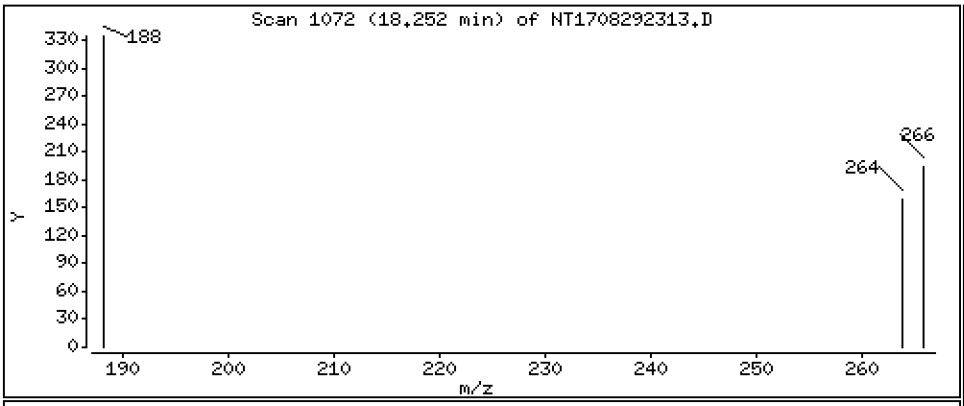
Operator: JGR

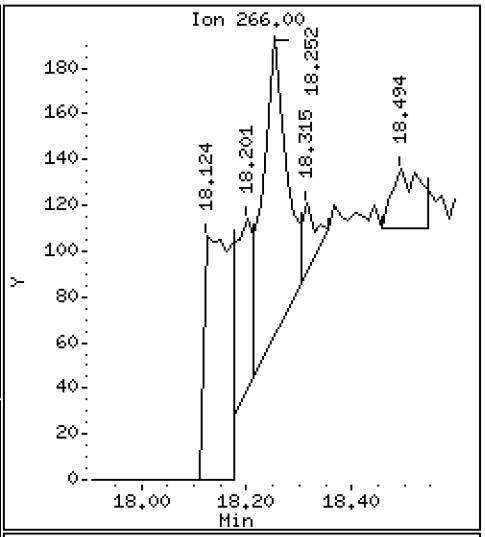
Column phase: ZB-5msi

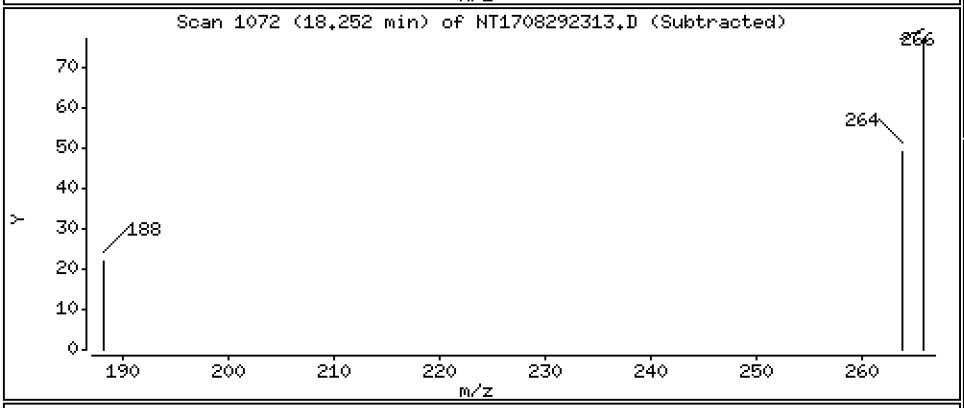
Column diameter: 0.25

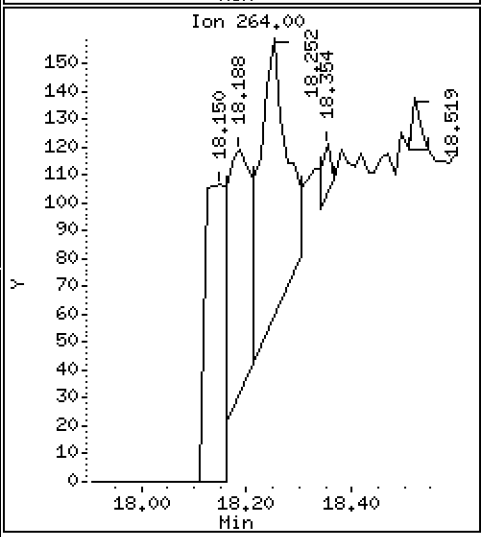
58 Pentachlorophenol

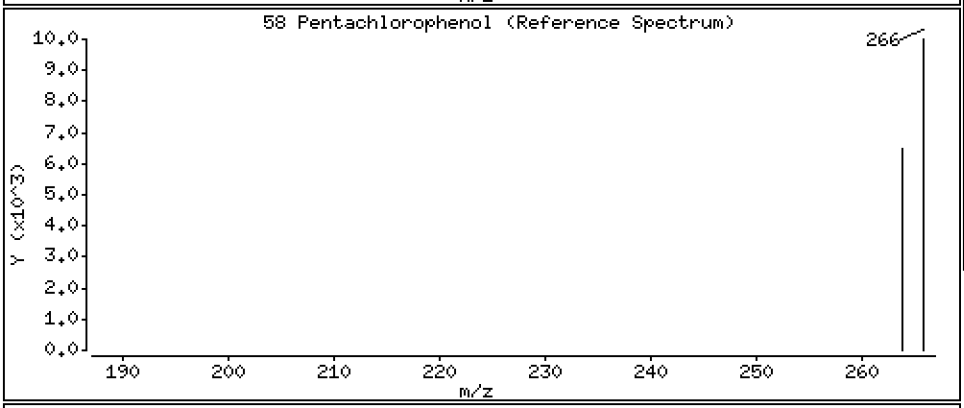
Concentration: 0.01788 ug/mL

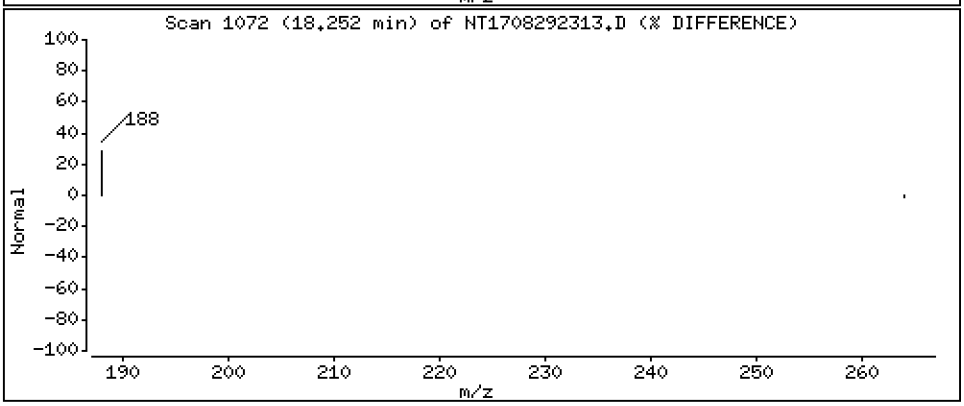












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Date : 29-AUG-2023 19:04

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-02

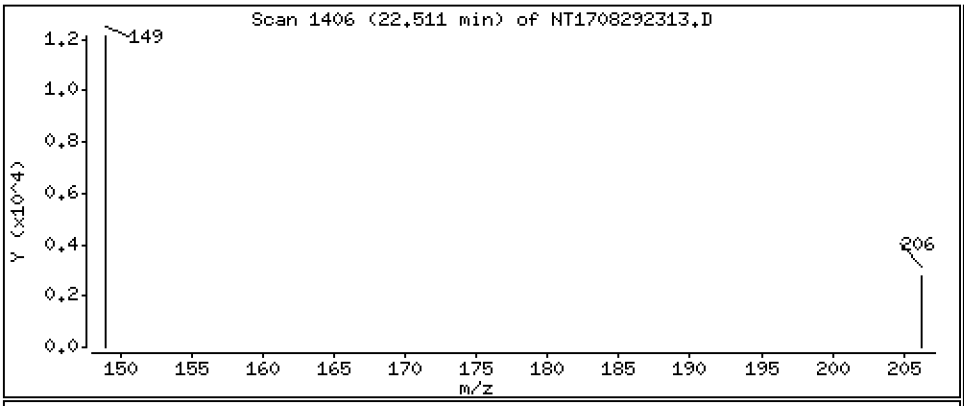
Operator: JGR

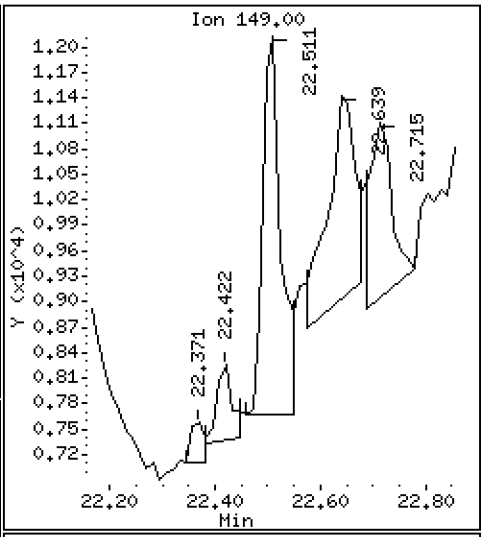
Column phase: ZB-5msi

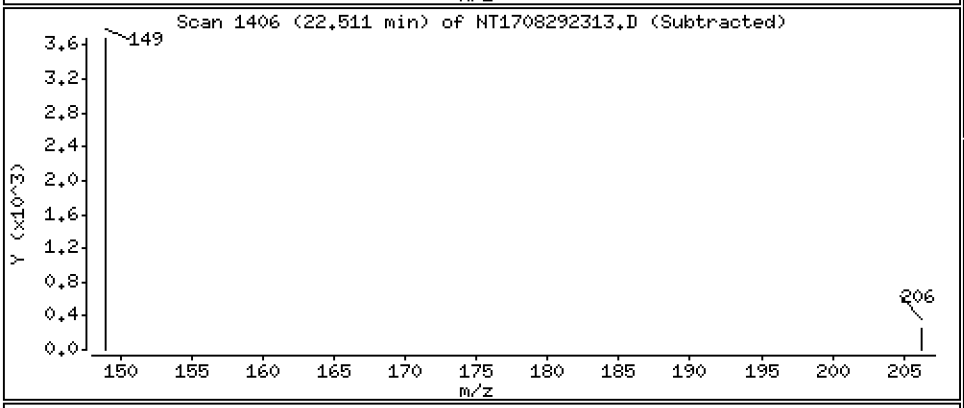
Column diameter: 0.25

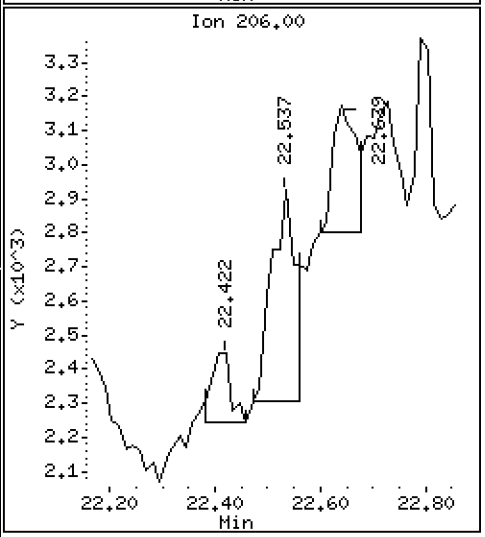
67 Butylbenzylphthalate

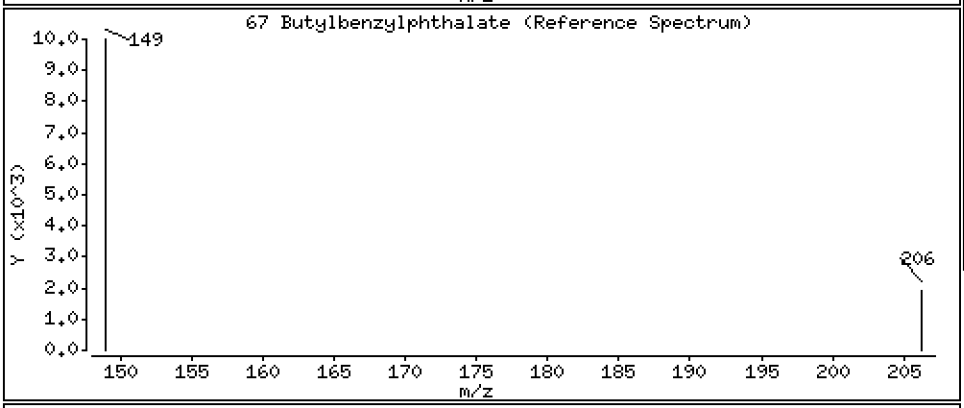
Concentration: 0.08067 ug/mL

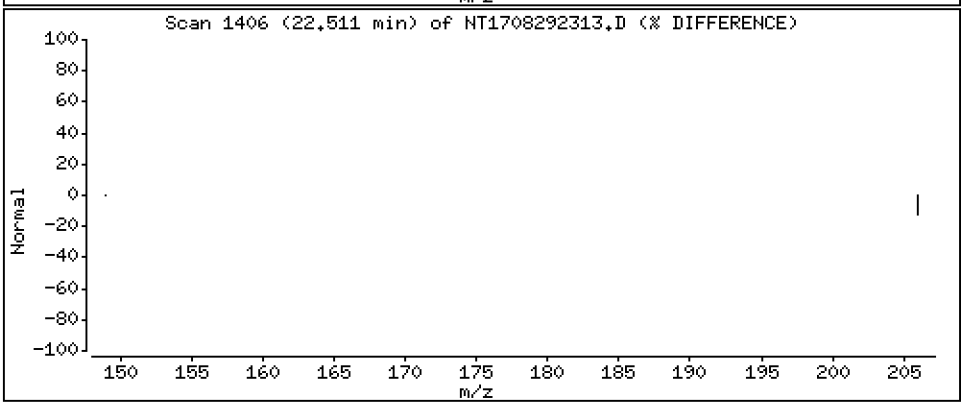












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292313.D

Date : 29-AUG-2023 19:04

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-02

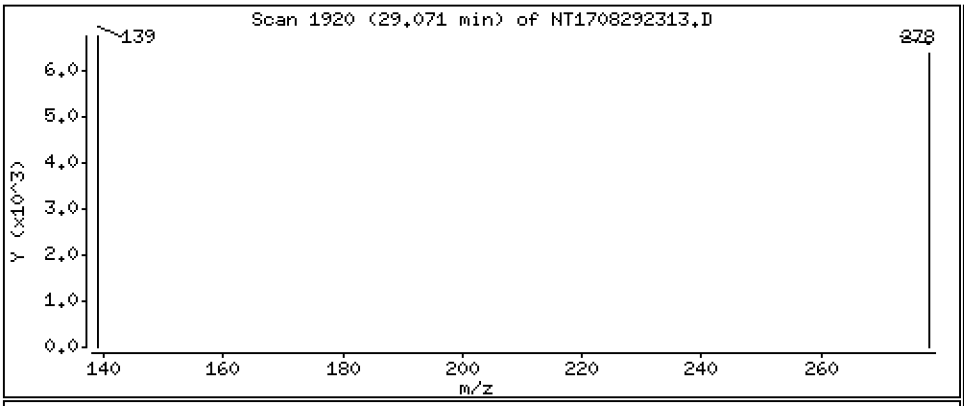
Operator: JGR

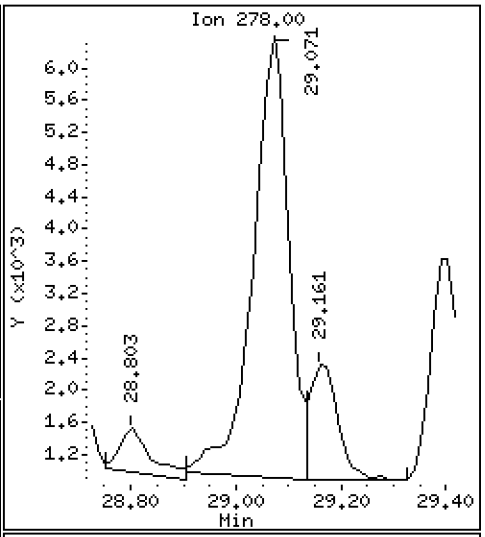
Column phase: ZB-5msi

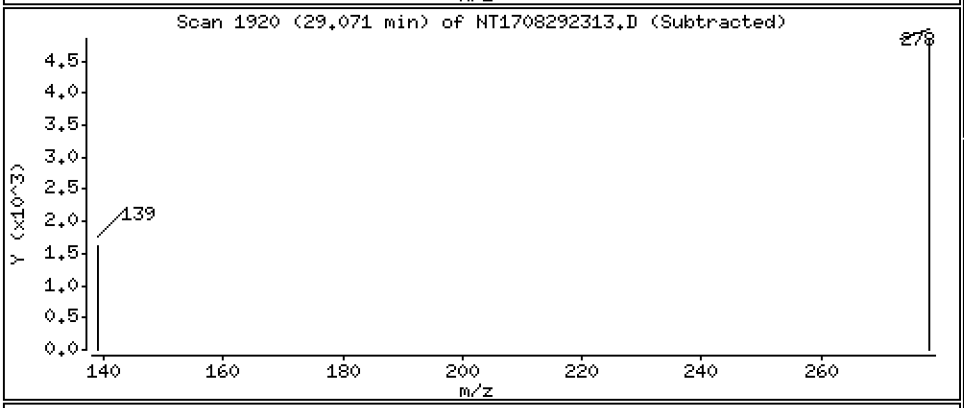
Column diameter: 0.25

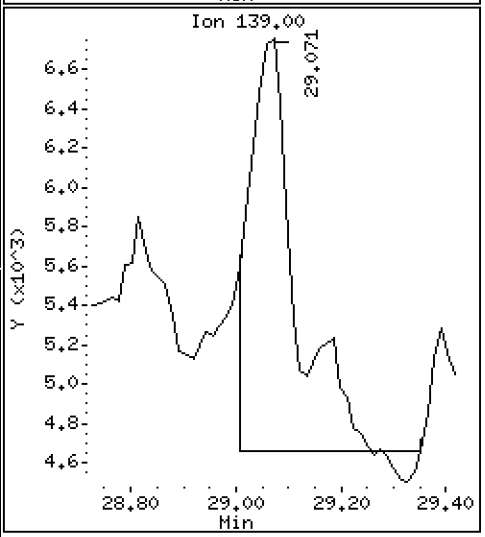
79 Dibenzo(a,h)anthracene

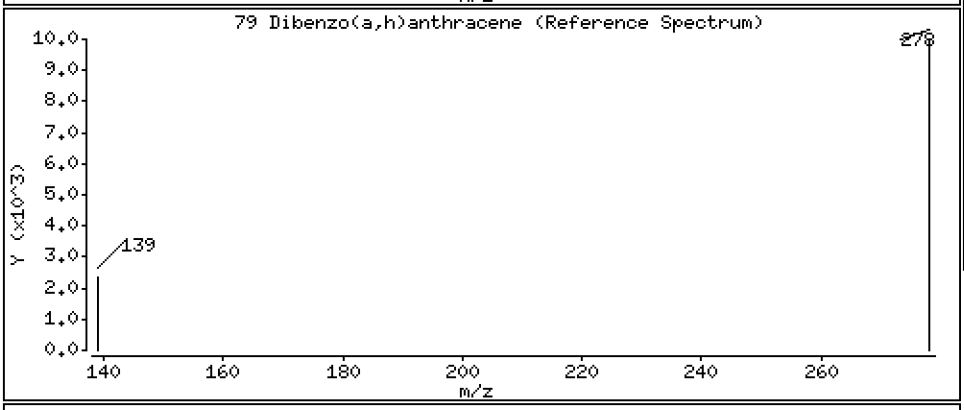
Concentration: 0.1214 ug/mL

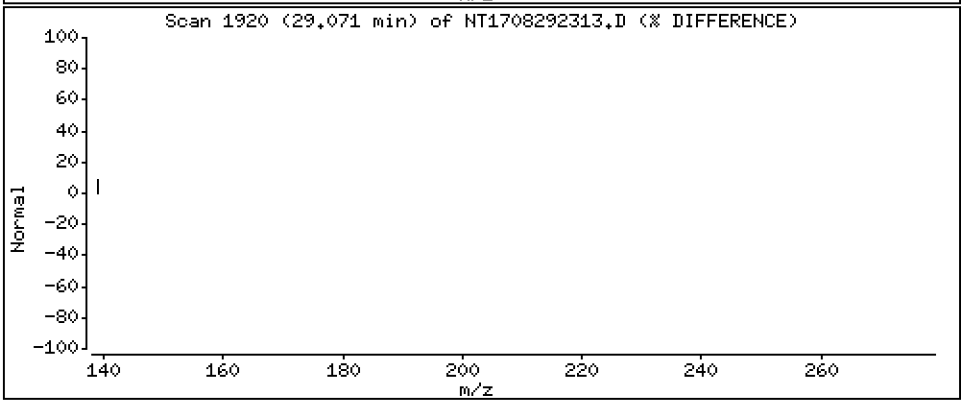












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292313.D
Lab Smp Id: 23H0579-02
Inj Date : 29-AUG-2023 19:04
Operator : JGR Inst ID: nt17.i
Smp Info : 23H0579-02
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 09:25 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.209	7.196	(0.766)	902734	5.56219	5.562(R)
	3 Phenol	94	8.789	8.776	(0.934)	34246	0.13842	0.1384
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	390871	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	9.681	9.669	(1.028)	65346	0.38160	0.3816
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	15 4-Methylphenol	108	10.154	10.154	(1.079)	383249	2.44429	2.444
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	11.202	11.189	(0.943)	1624	0.01143	0.01143
	24 Benzoic acid	105	11.317	11.329	(0.953)	39627	0.42651	0.4265
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.878	11.878	(1.000)	1415559	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.977	14.977	(0.967)	7116	0.03994	0.03994
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	548181	4.00000	
	50 Diethylphthalate	149	16.417	16.417	(1.060)	27660	0.14931	0.1493
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	1837	0.01679	0.01679
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	435	0.01788	0.01788
*	59 Phenanthrene-d10	188	18.519	18.506	(1.000)	761131	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	366818	5.24133	5.241(R)
	67 Butylbenzylphthalate	149	22.511	22.511	(0.958)	10826	0.08067	0.08067
*	69 Chrysene-d12	240	23.506	23.506	(1.000)	505742	4.00000	
*	77 Perylene-d12	264	26.236	26.223	(1.000)	734507	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.071	29.071	(1.108)	26336	0.12139	0.1214
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 30-Aug-2023 09:25

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292313.D
Lab Smp Id: 23H0579-02
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 29-AUG-2023
Calibration Time: 12:37
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	296489	148245	592978	390871	31.83
27 Naphthalene-d8	1098892	549446	2197784	1415559	28.82
42 Acenaphthene-d10	443071	221536	886142	548181	23.72
59 Phenanthrene-d10	627744	313872	1255488	761131	21.25
69 Chrysene-d12	404122	202061	808244	505742	25.15
77 Perylene-d12	417323	208662	834646	734507	76.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	-0.00
27 Naphthalene-d8	11.88	11.38	12.38	11.88	-0.00
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	-0.00
59 Phenanthrene-d10	18.51	18.01	19.01	18.52	0.07
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.22	25.72	26.72	26.24	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292313.D

Lab ID: 23H0579-02
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   29-AUG-2023 19:04

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1708292304.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1269

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23H0579-03 A	SDG:	23H0579
Sampled:	01/04/23 08:55	Prepared:	08/25/23 12:39	File ID:	NT1708292314.D
% Solids:	59.84	Preparation:	EPA 3546 (Microwave)	Analyzed:	08/29/23 19:42
Batch:	BLH0669	Sequence:	SLH0447	Initial/Final:	16.71 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GH00045
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	750.06	564	75.1	27 - 120	
p-Terphenyl-d14	500.04	518	103	37 - 120	Q

INTERNAL STANDARDS	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	427545	9.413	296489	9.413	
Naphthalene-d8	1547544	11.878	1098892	11.878	
Acenaphthene-d10	577551	15.487	443071	15.487	
Phenanthrene-d10	789736	18.519	627744	18.506	
Chrysene-d12	520922	23.506	404122	23.506	
Perylene-d12	779150	26.236	417323	26.223	

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292314.D

Date : 29-AUG-2023 19:42

Client ID:

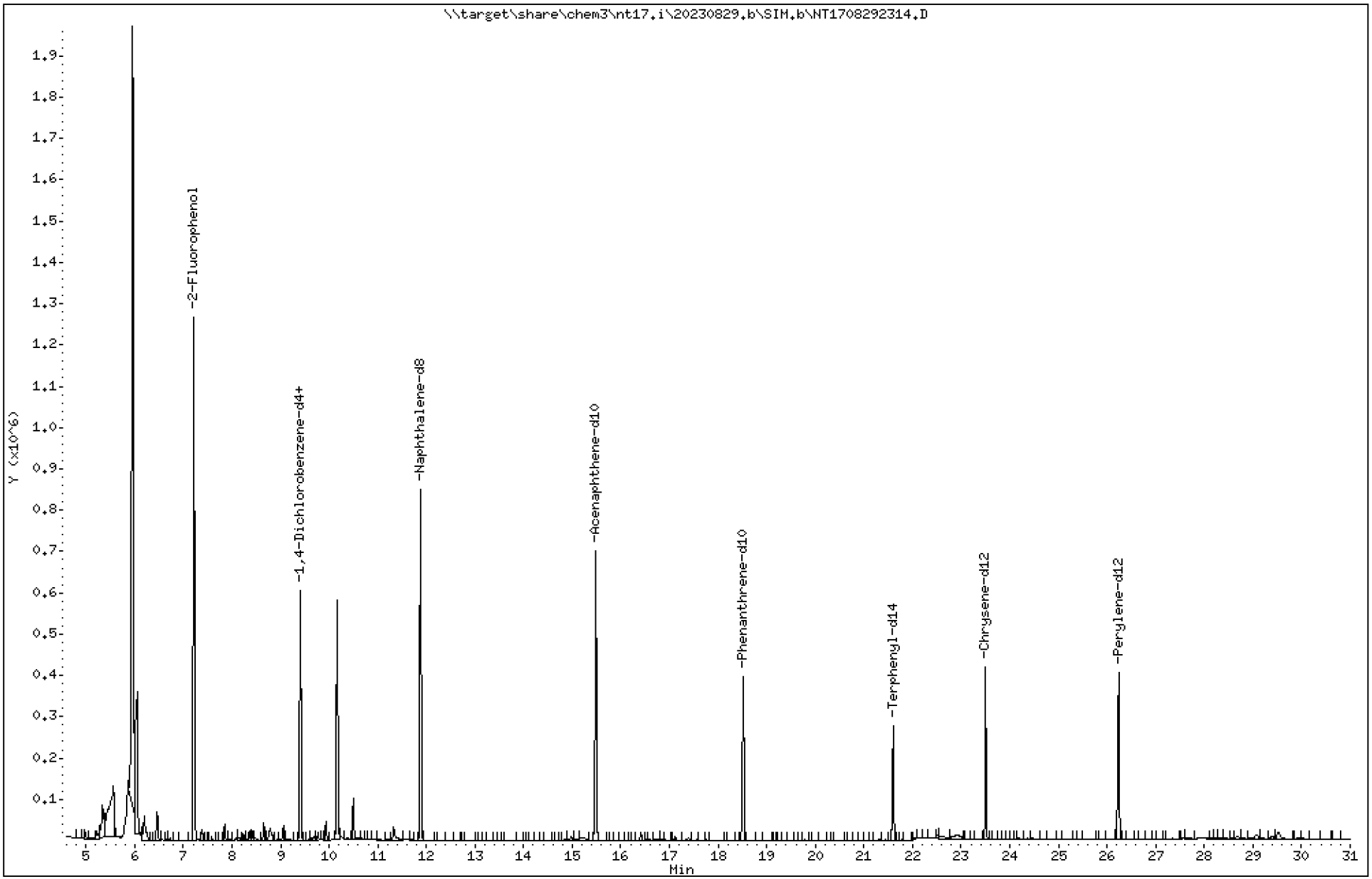
Sample Info: 23H0579-03

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

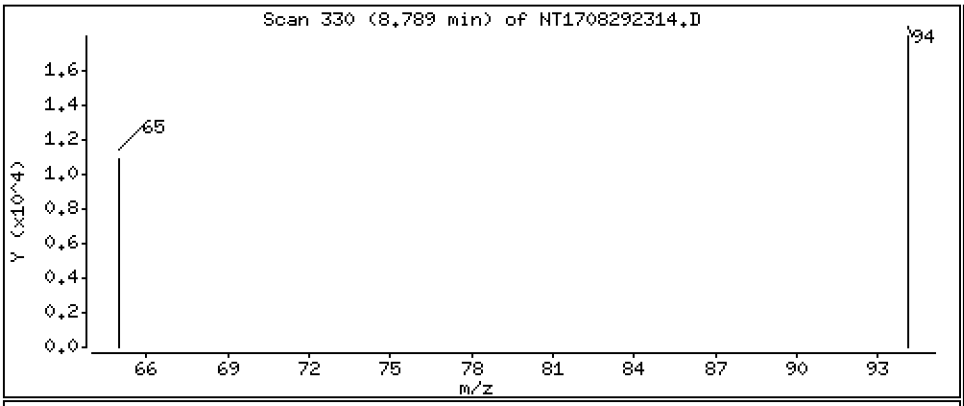
Operator: JGR

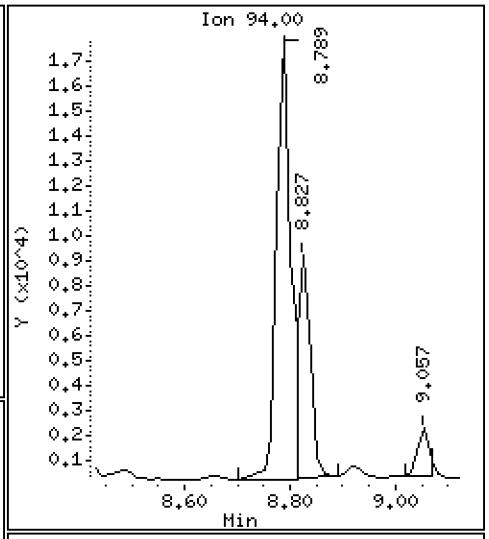
Column phase: ZB-5msi

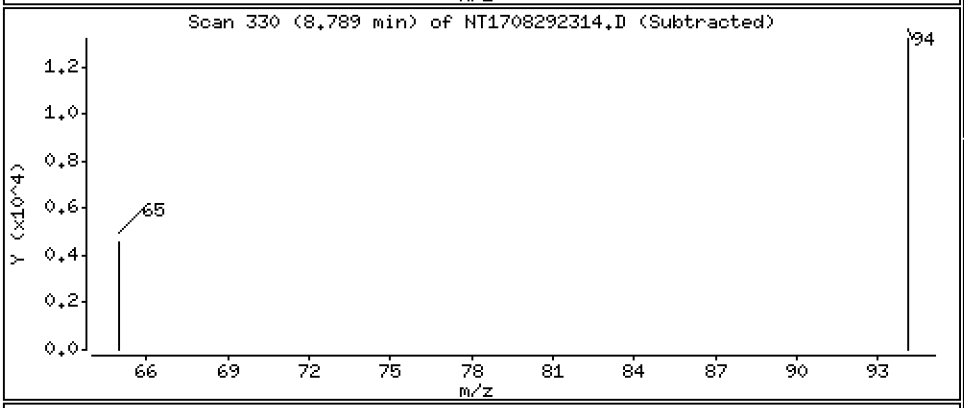
Column diameter: 0.25

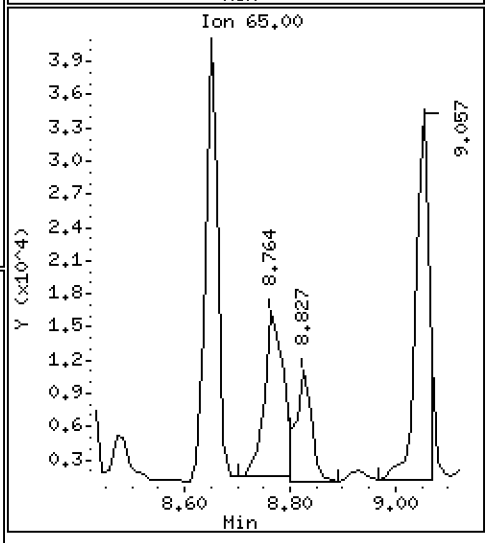
3 Phenol

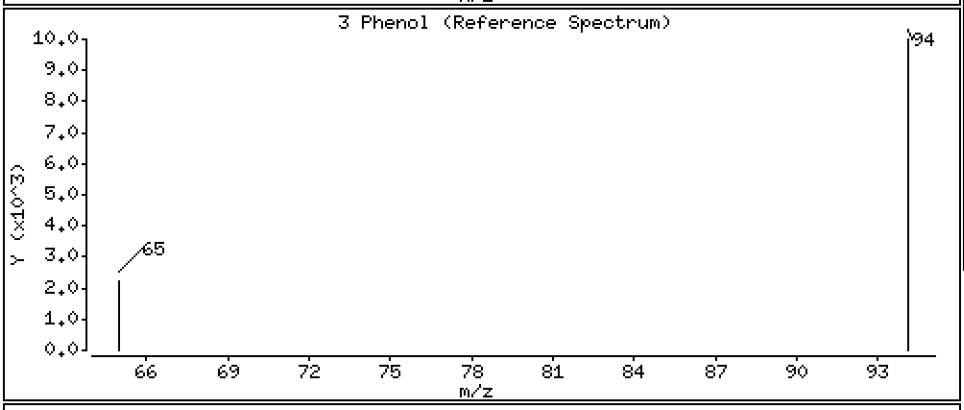
Concentration: 0.1284 ug/mL

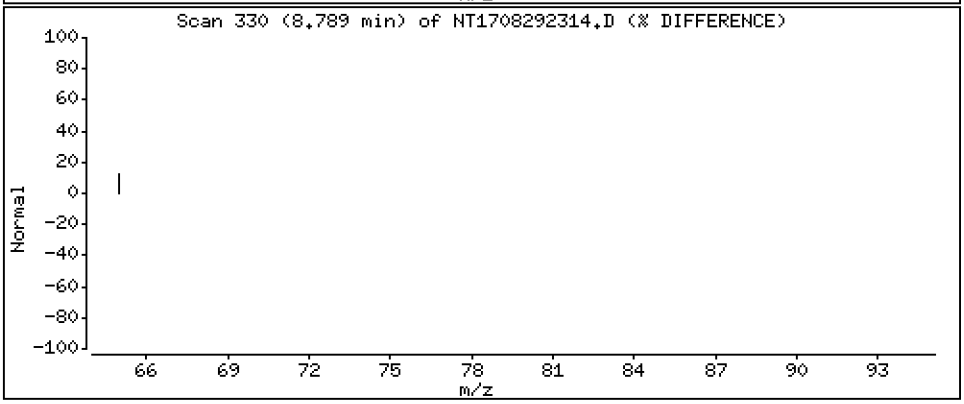












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Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

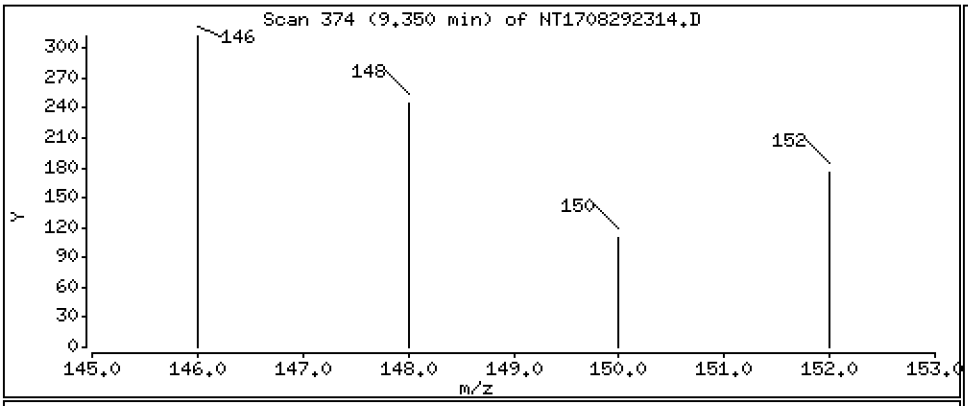
Operator: JGR

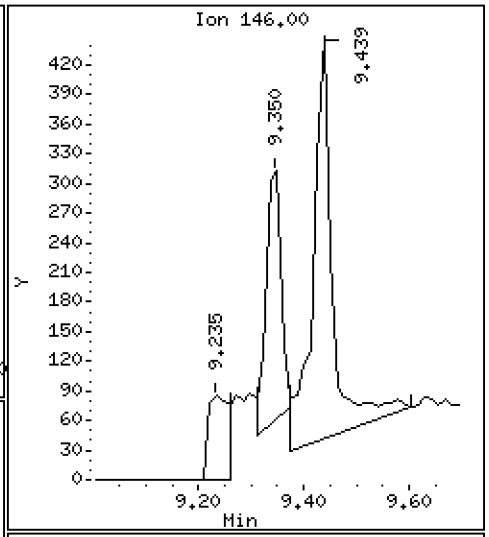
Column phase: ZB-5msi

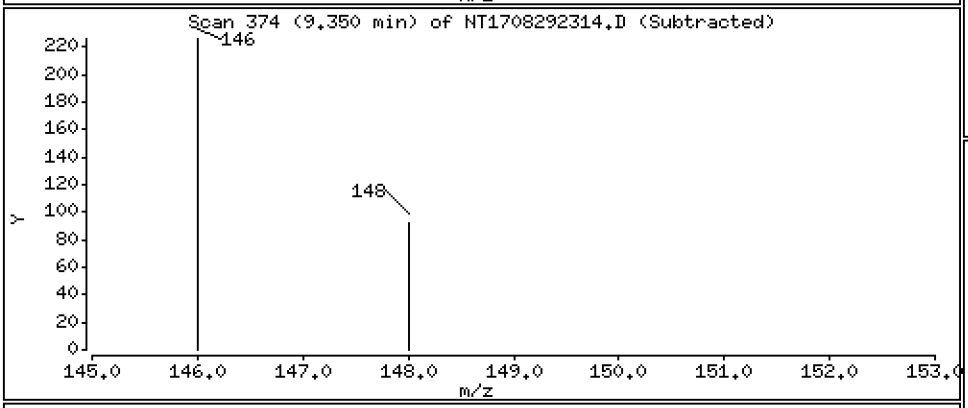
Column diameter: 0.25

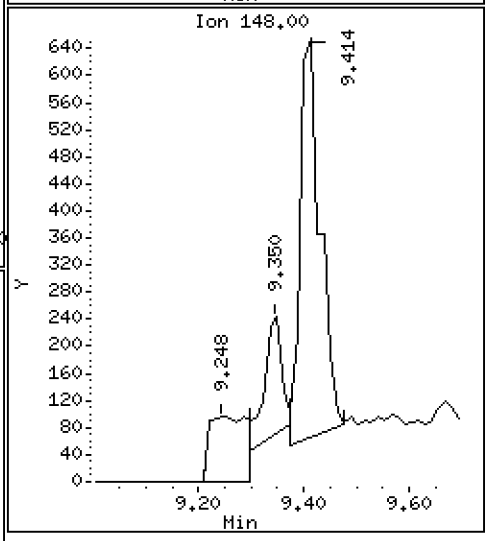
7 1,3-Dichlorobenzene

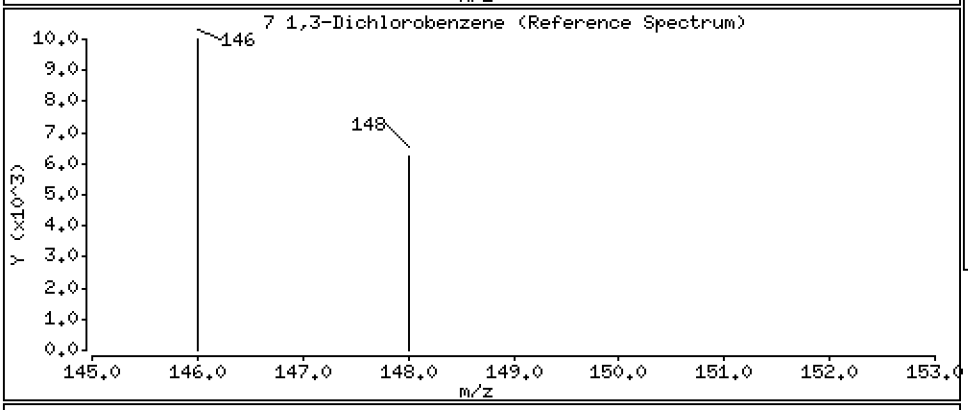
Concentration: 0.002895 ug/mL

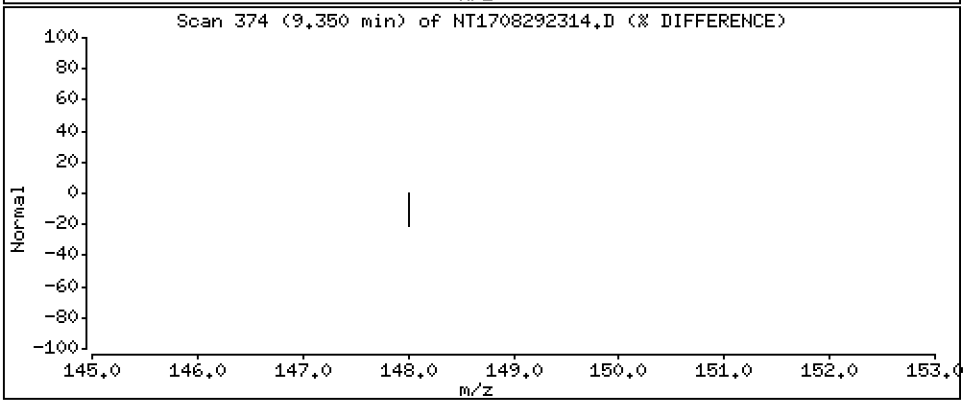












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Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

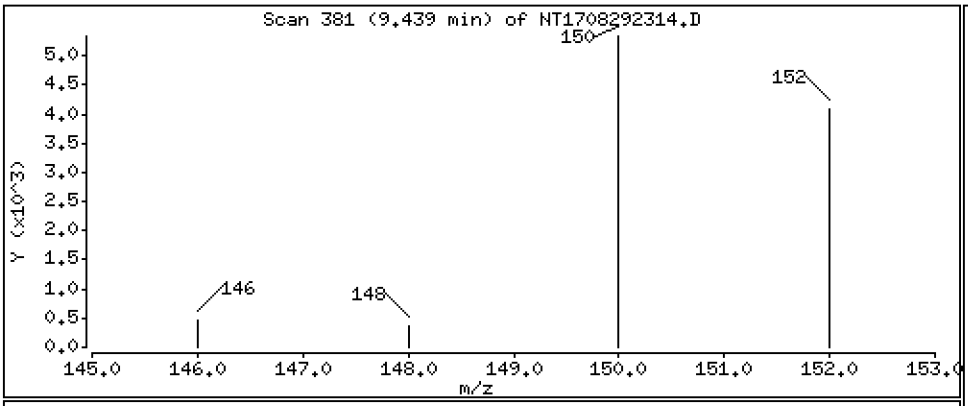
Operator: JGR

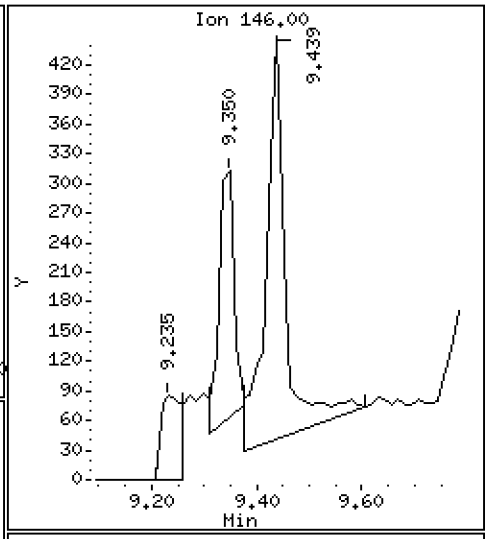
Column phase: ZB-5msi

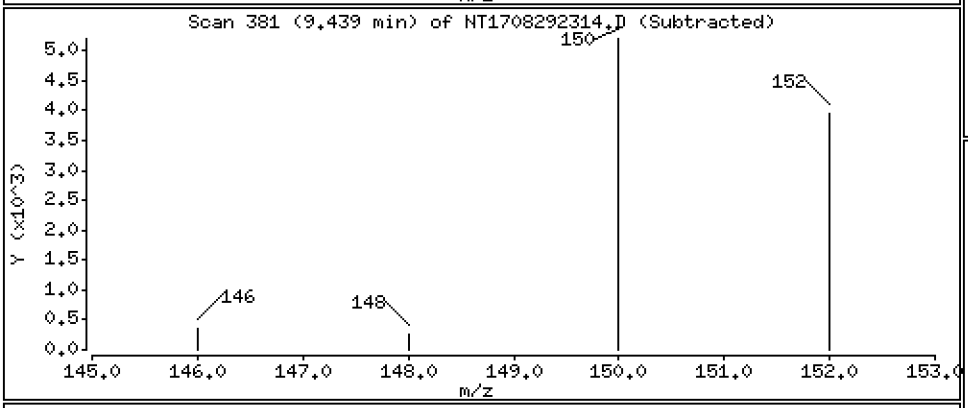
Column diameter: 0.25

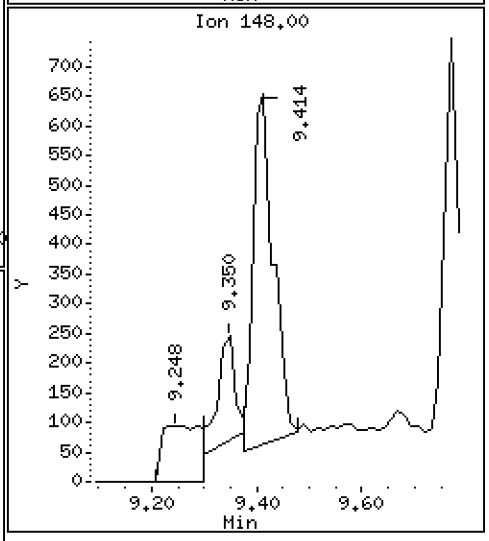
9 1,4-Dichlorobenzene

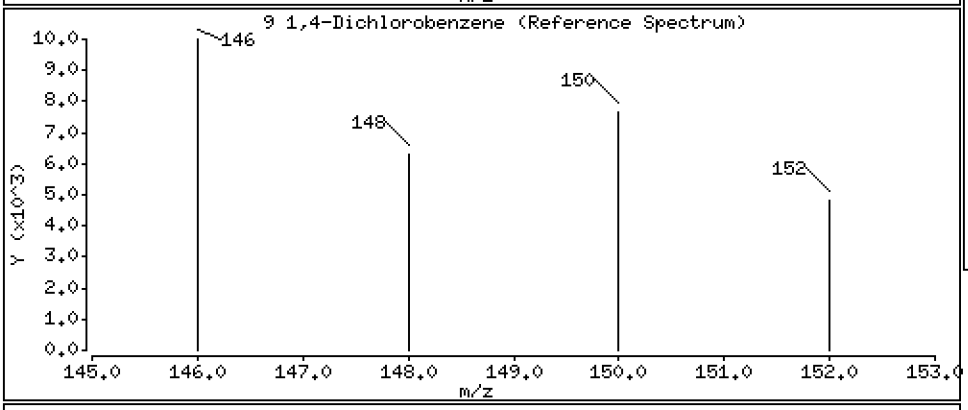
Concentration: 0.005967 ug/mL

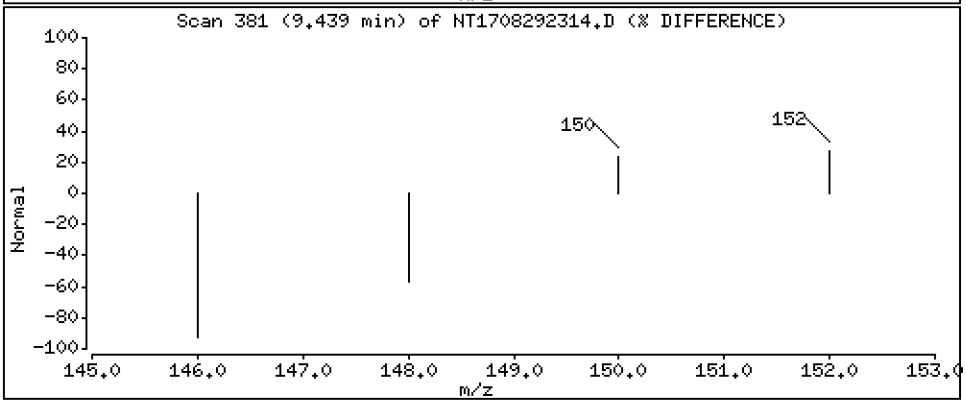












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Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

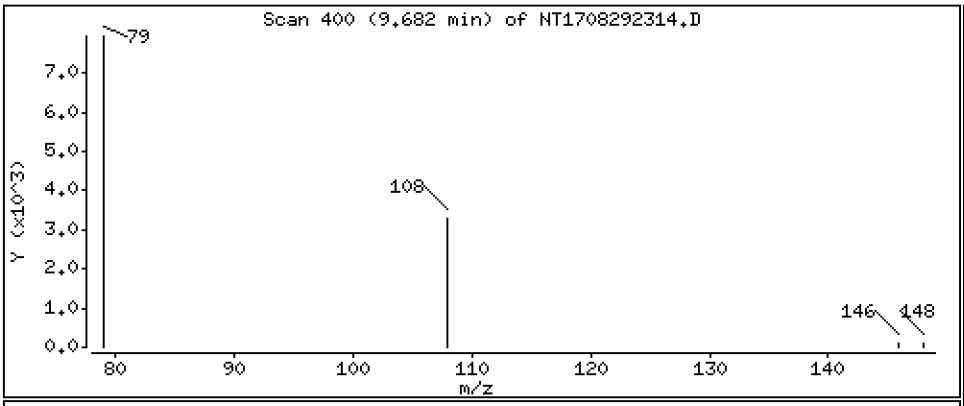
Operator: JGR

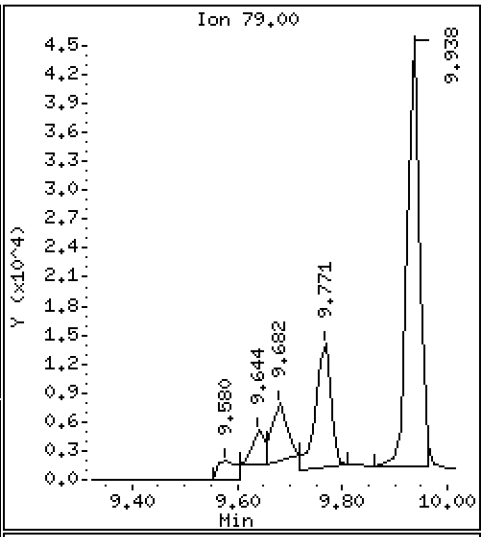
Column phase: ZB-5msi

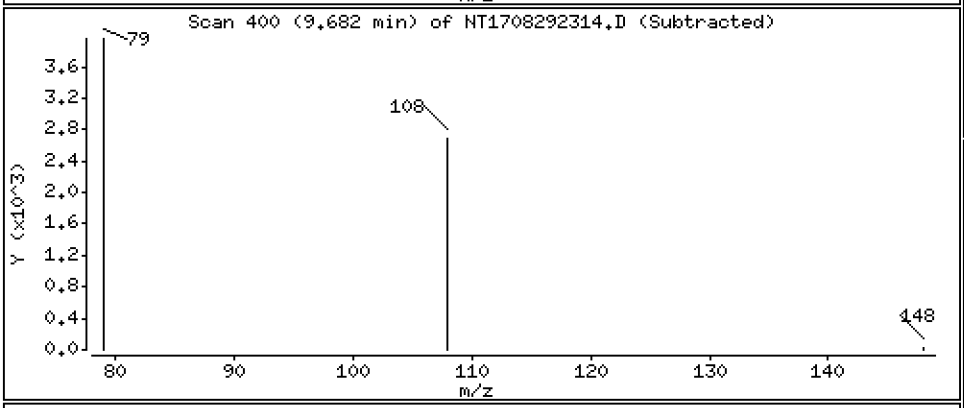
Column diameter: 0.25

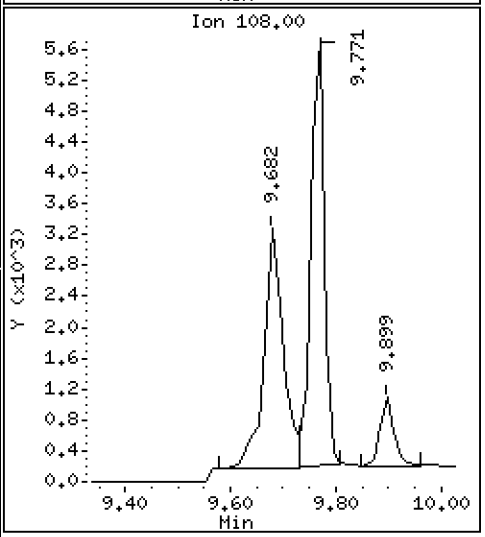
11 Benzyl alcohol

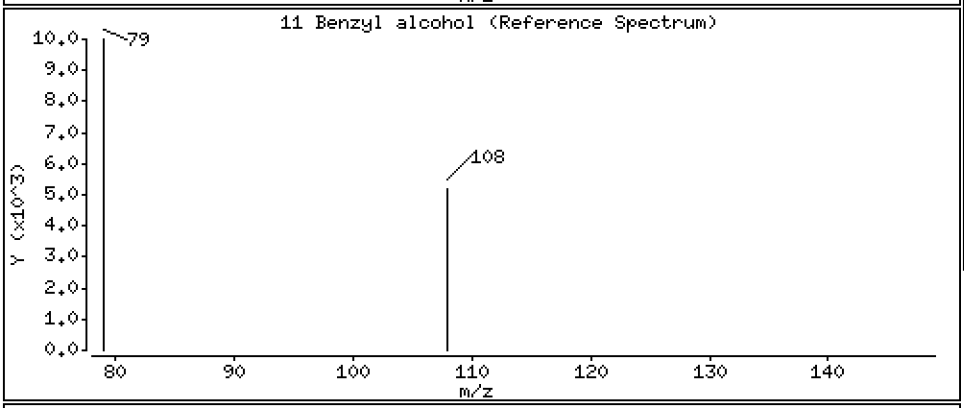
Concentration: 0.06710 ug/mL

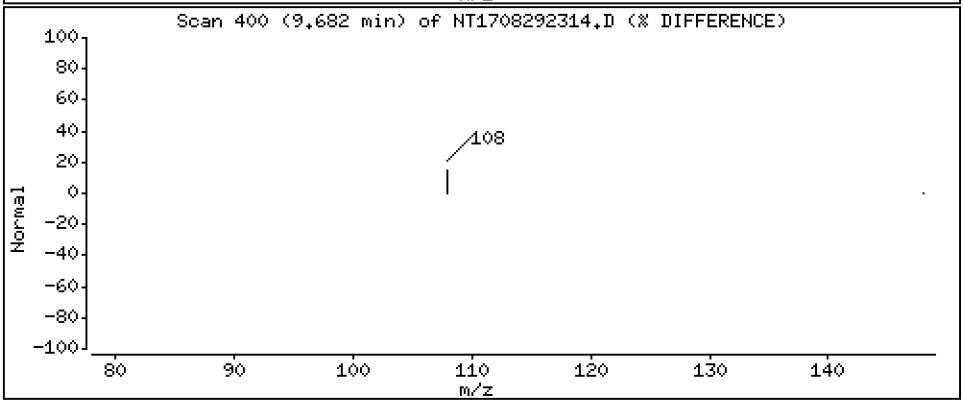












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Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

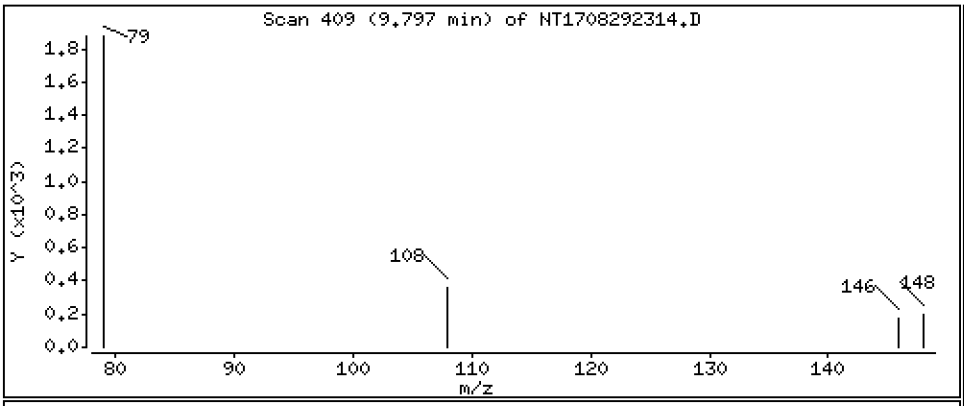
Operator: JGR

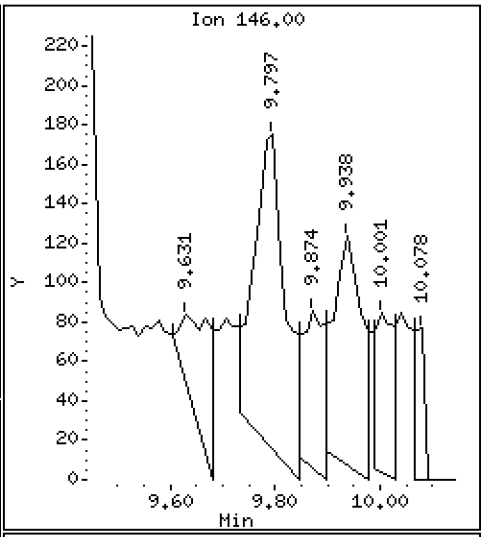
Column phase: ZB-5msi

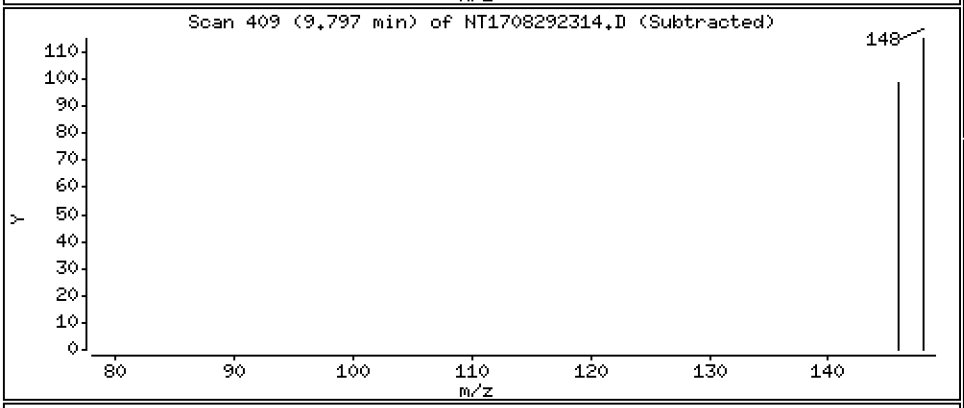
Column diameter: 0.25

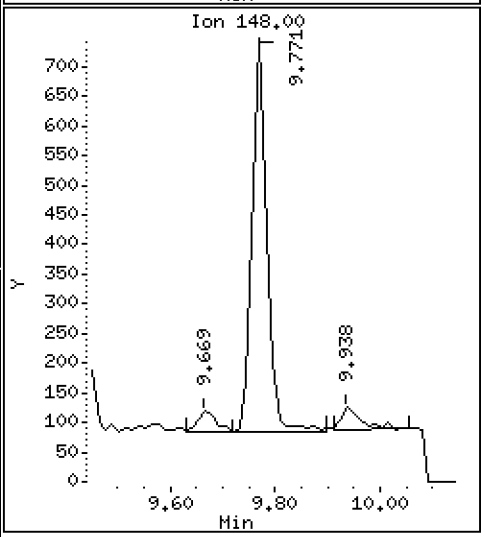
12 1,2-Dichlorobenzene

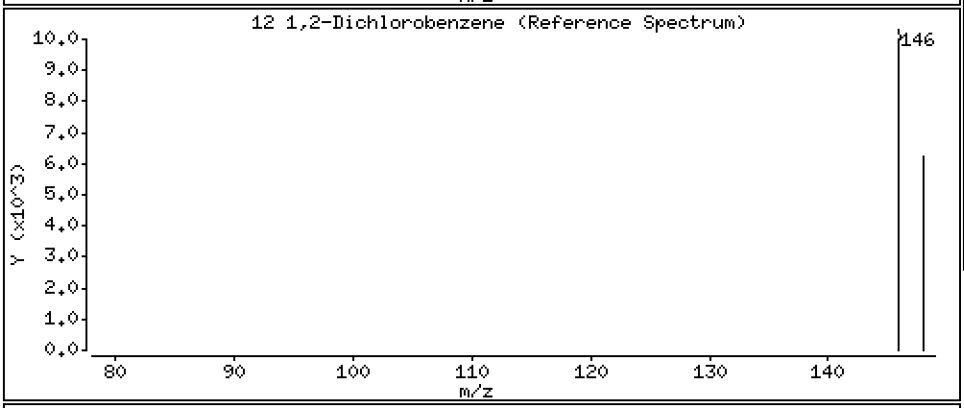
Concentration: 0.004103 ug/mL

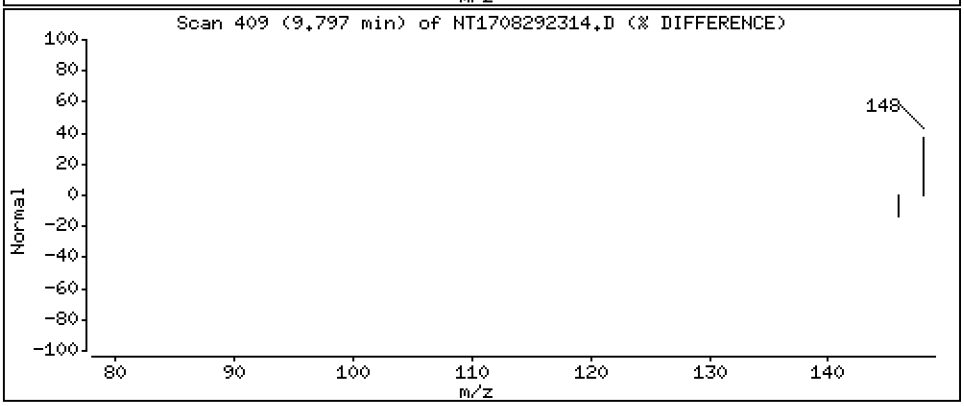












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Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

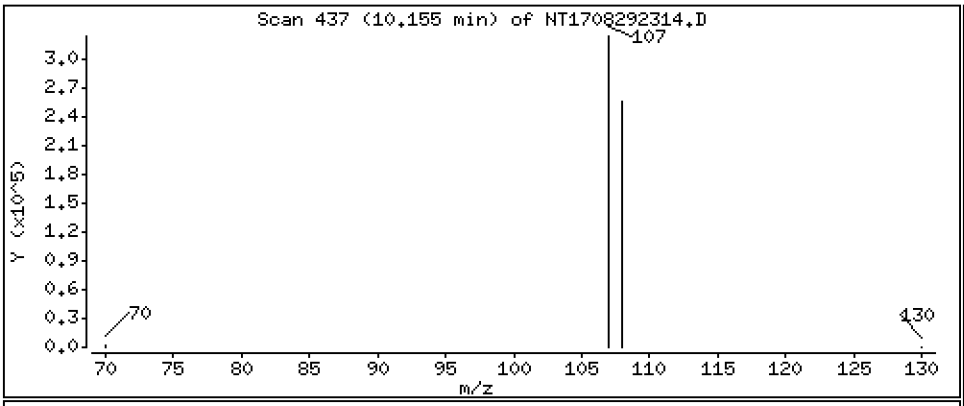
Operator: JGR

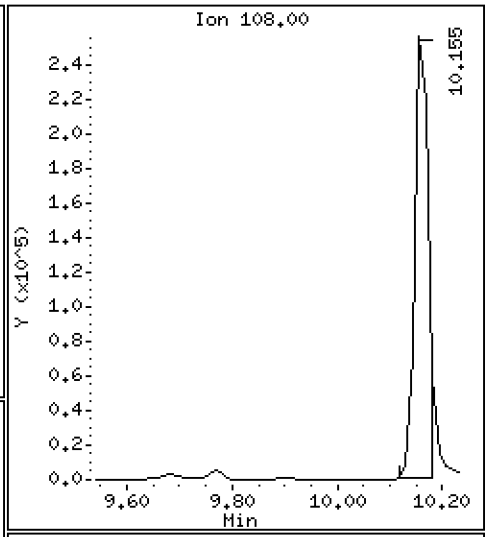
Column phase: ZB-5msi

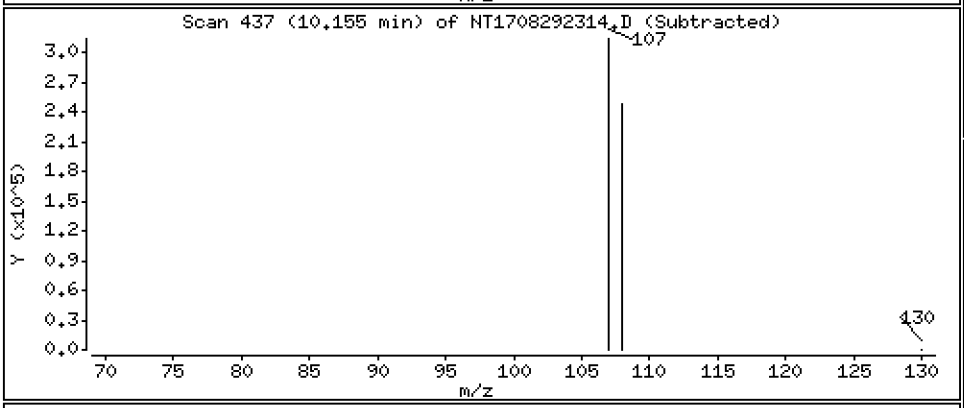
Column diameter: 0.25

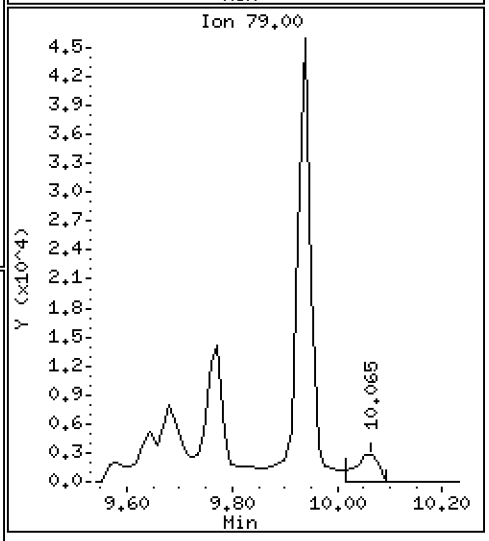
13 2-Methylphenol

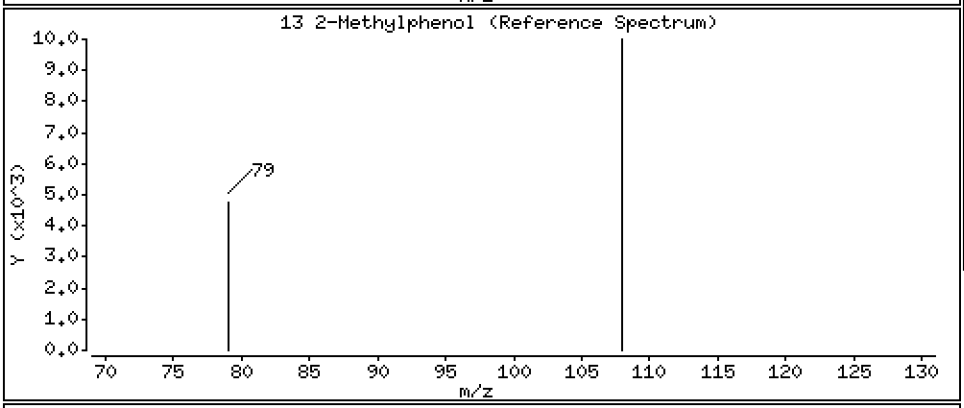
Concentration: 2.848 ug/mL

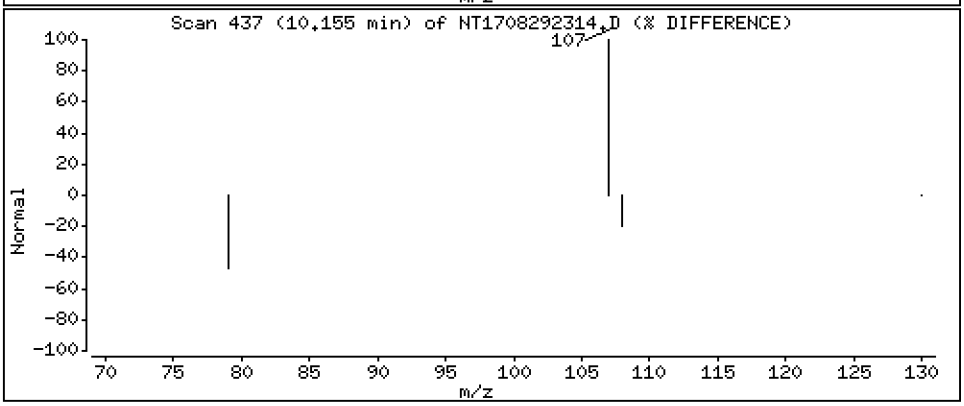












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Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

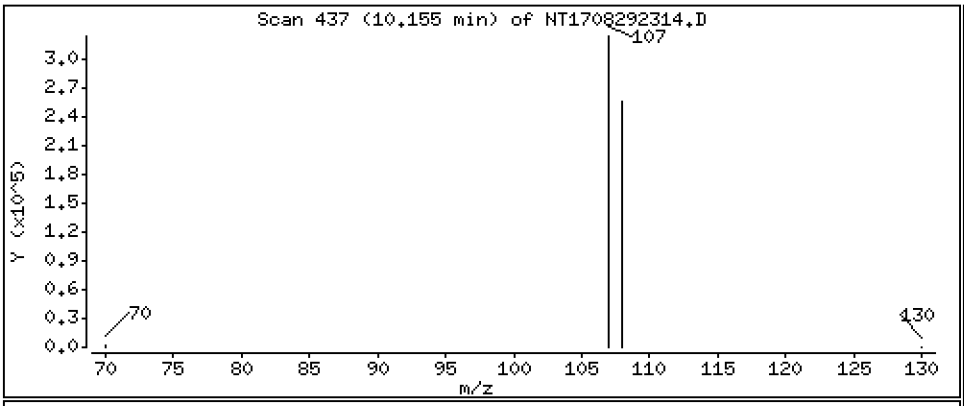
Operator: JGR

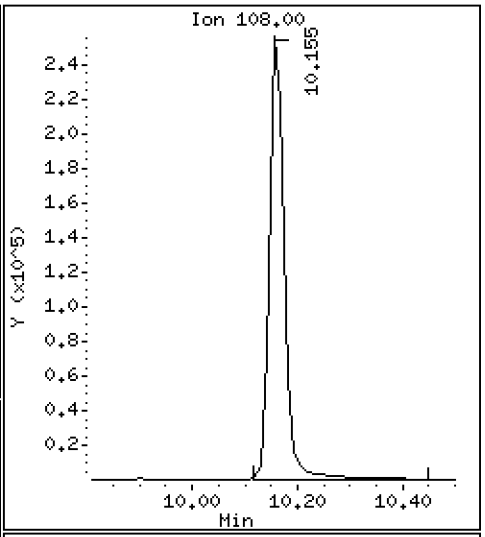
Column phase: ZB-5msi

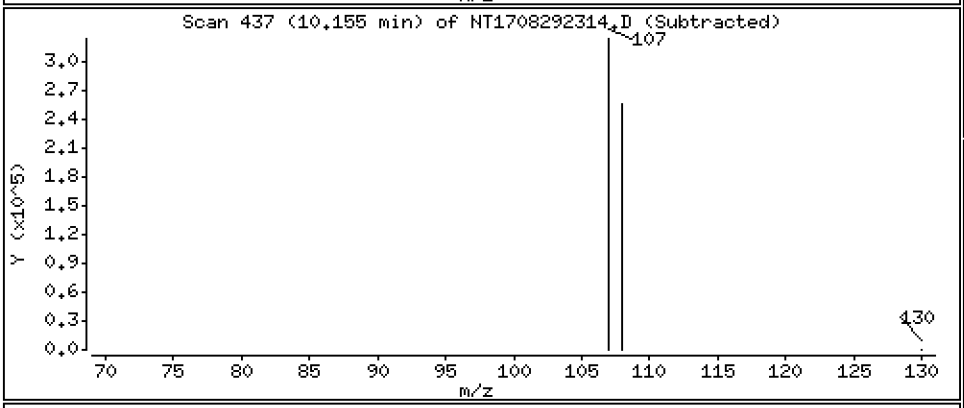
Column diameter: 0.25

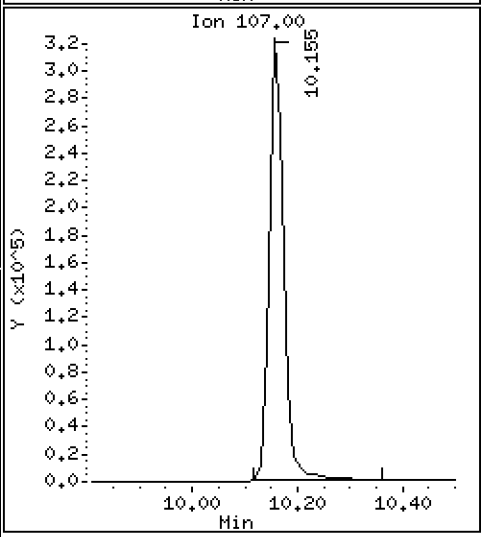
15 4-Methylphenol

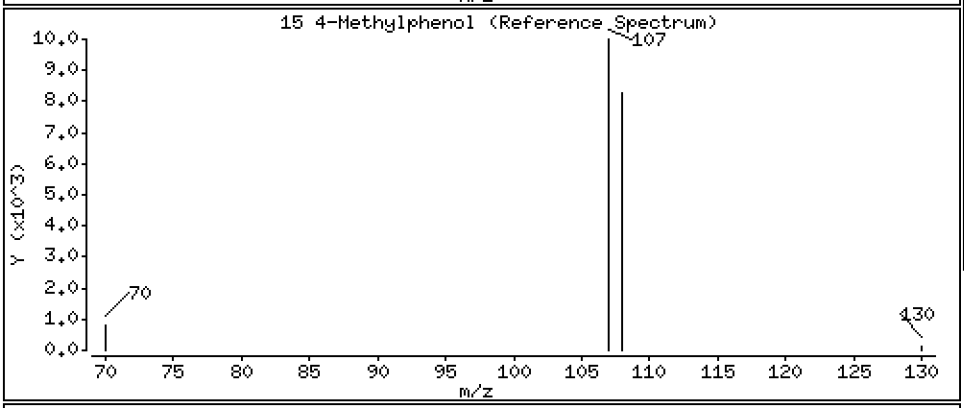
Concentration: 2.929 ug/mL

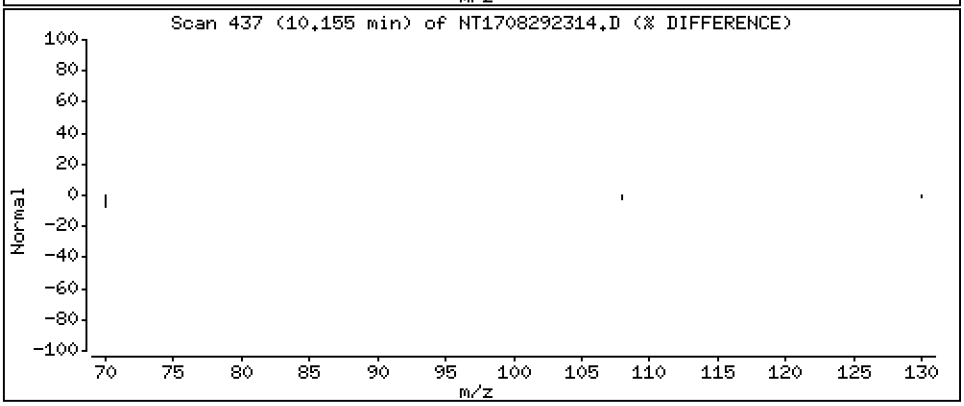












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Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

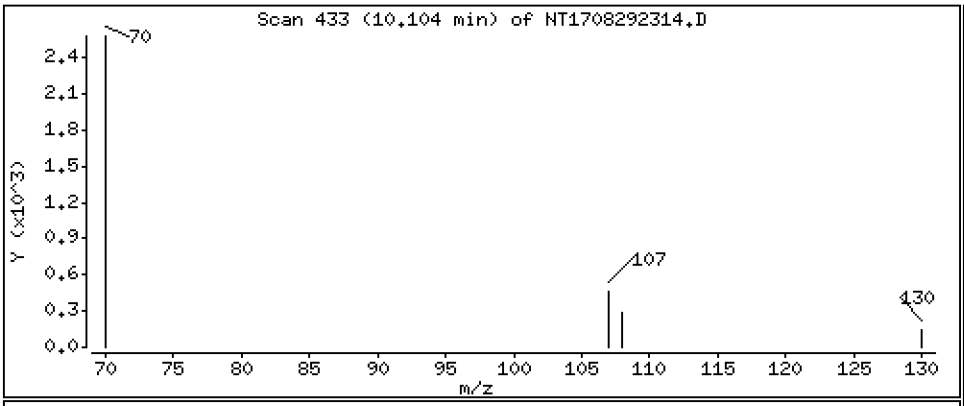
Operator: JGR

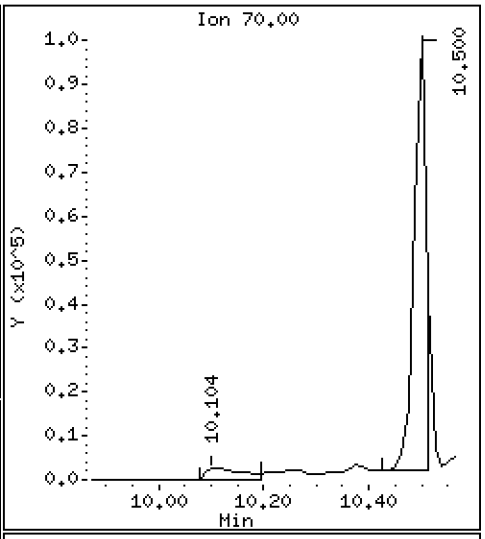
Column phase: ZB-5msi

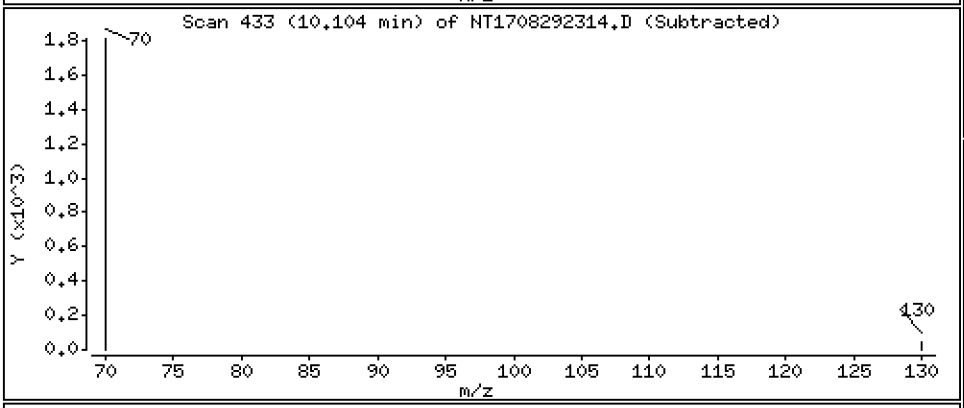
Column diameter: 0.25

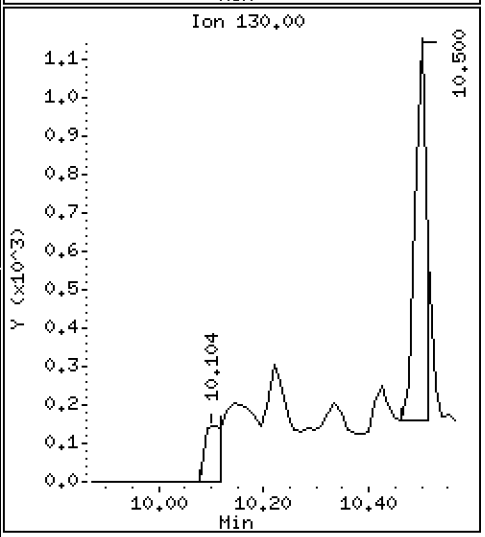
16 N-Nitroso-di-n-propylamine

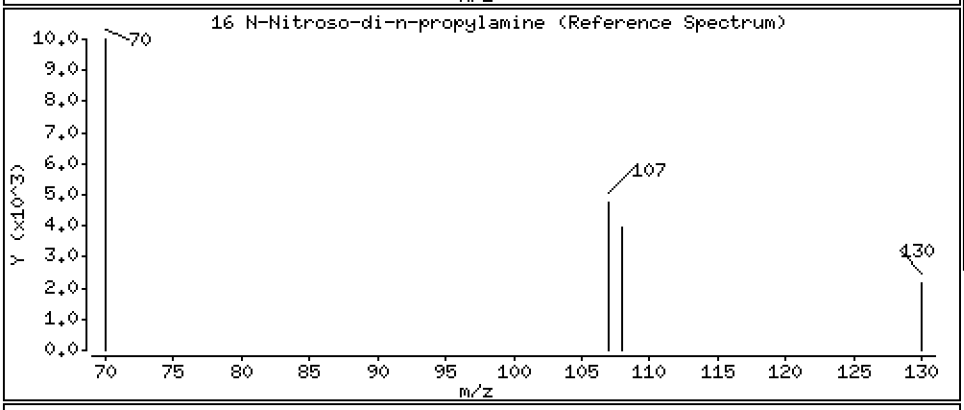
Concentration: 0.07687 ug/mL

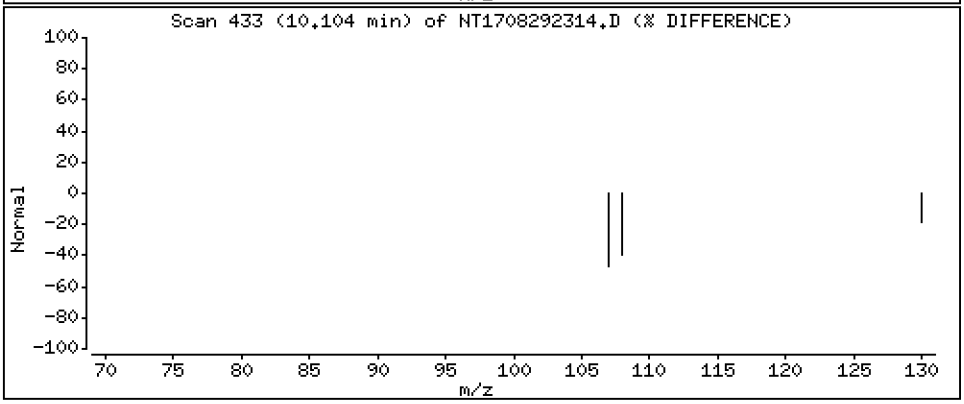












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Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

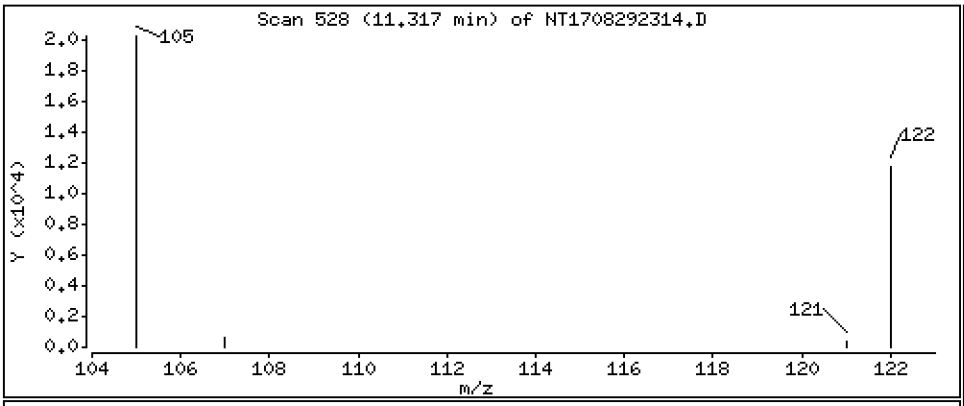
Operator: JGR

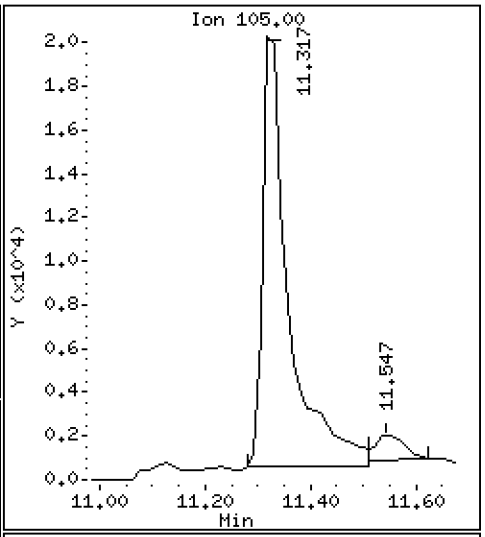
Column phase: ZB-5msi

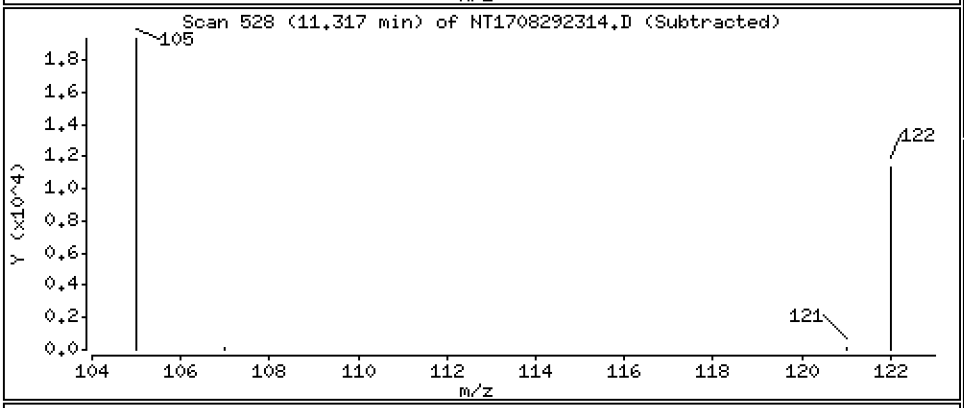
Column diameter: 0.25

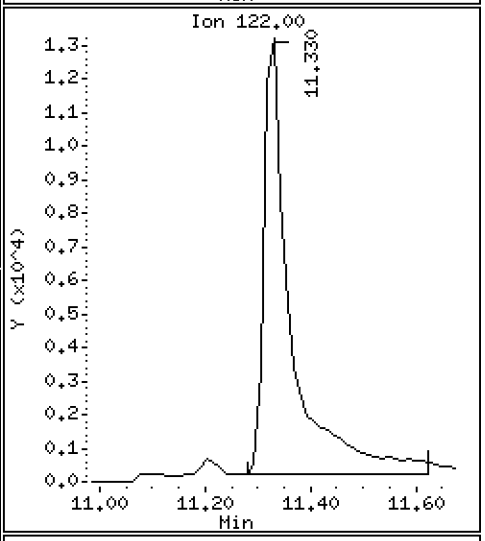
24 Benzoic acid

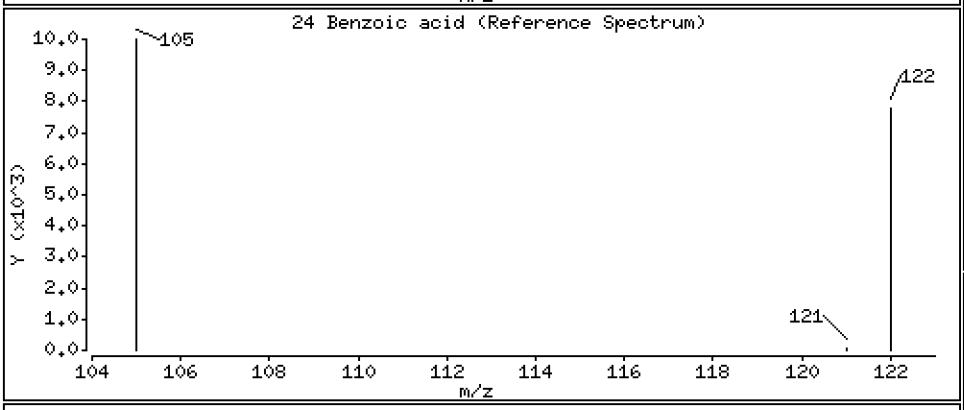
Concentration: 0.6722 ug/mL

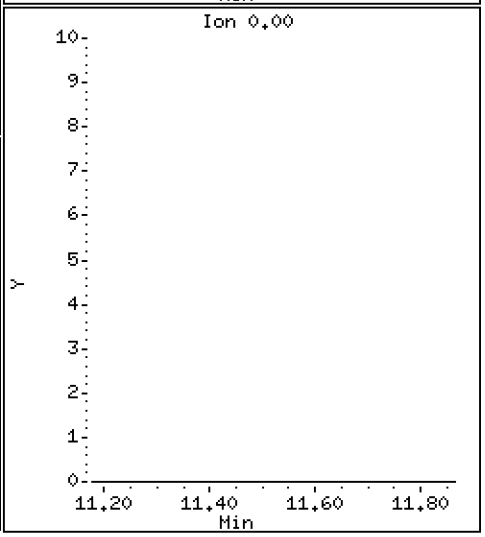


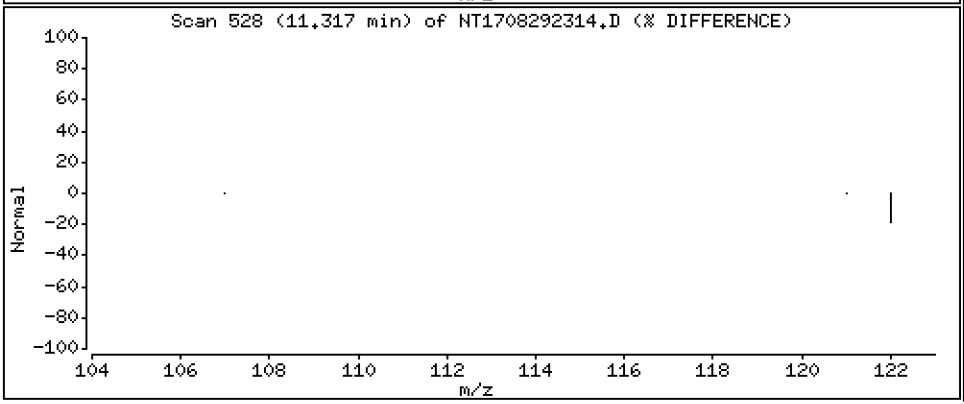












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Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

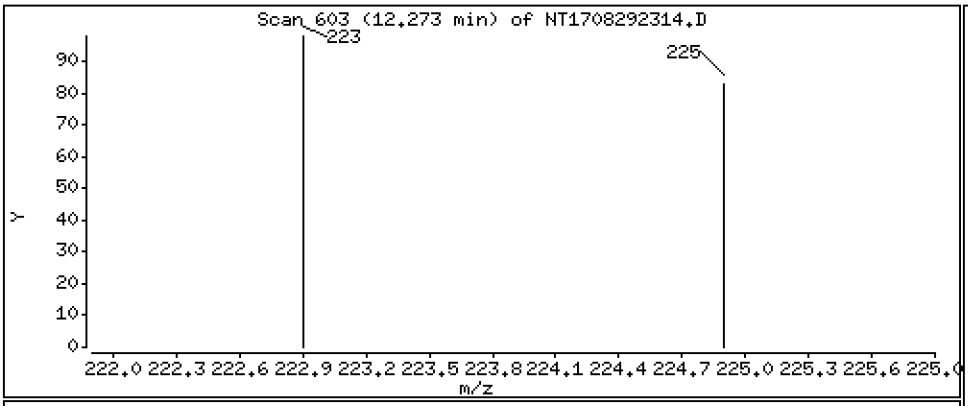
Operator: JGR

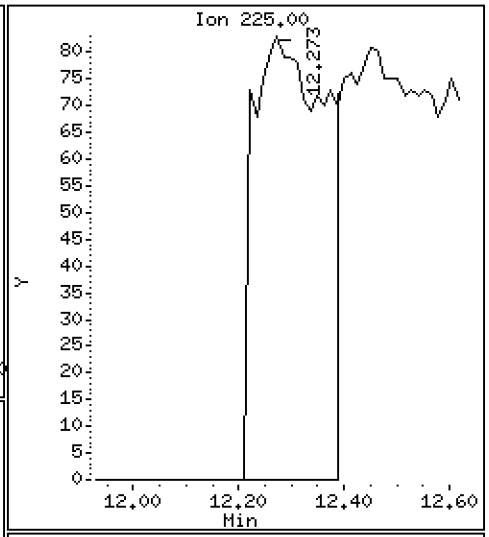
Column phase: ZB-5msi

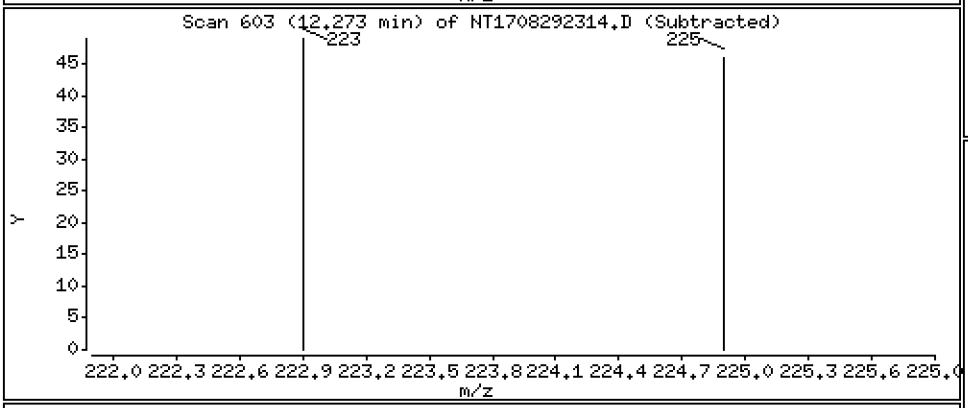
Column diameter: 0.25

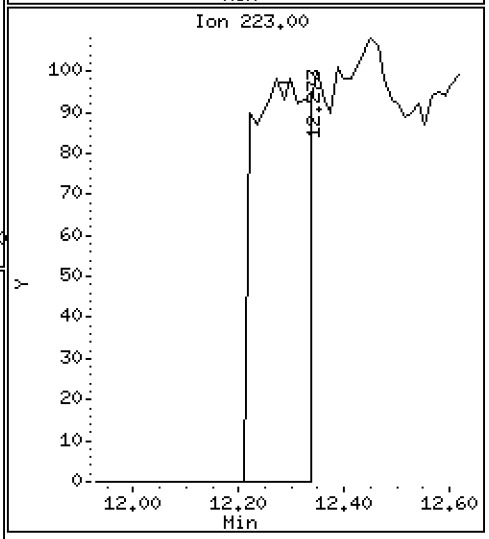
30 Hexachlorobutadiene

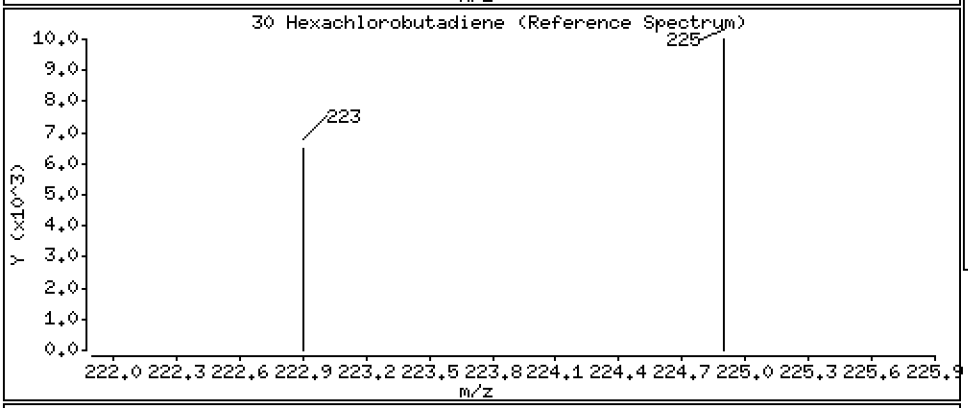
Concentration: 0.01600 ug/mL

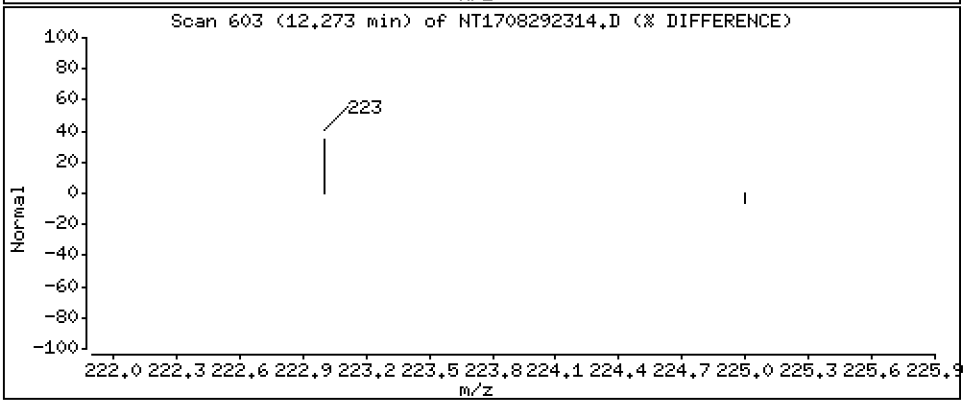












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Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

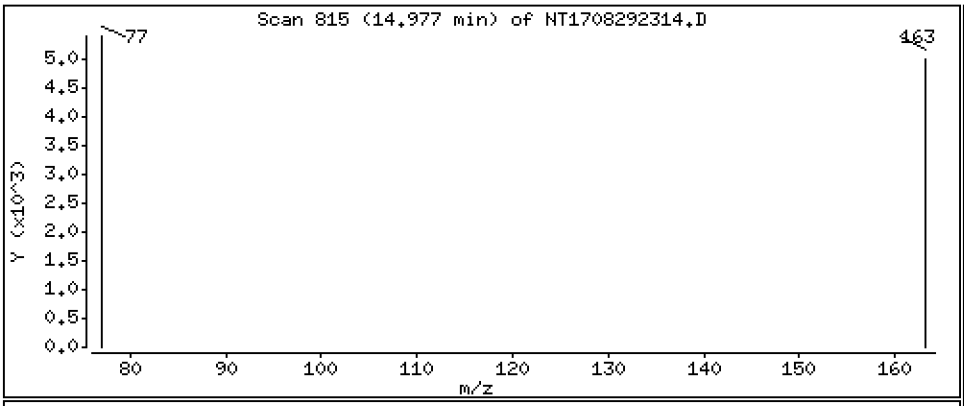
Operator: JGR

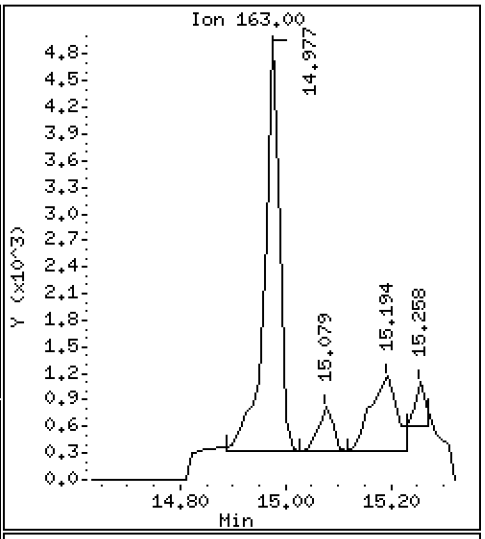
Column phase: ZB-5msi

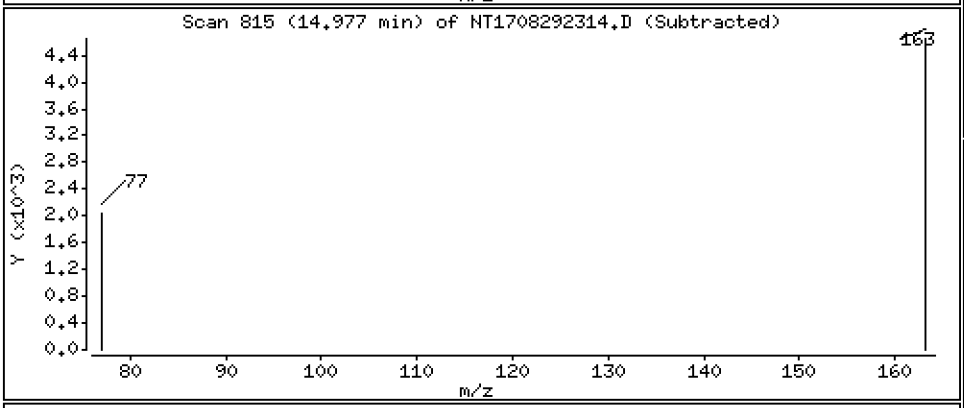
Column diameter: 0.25

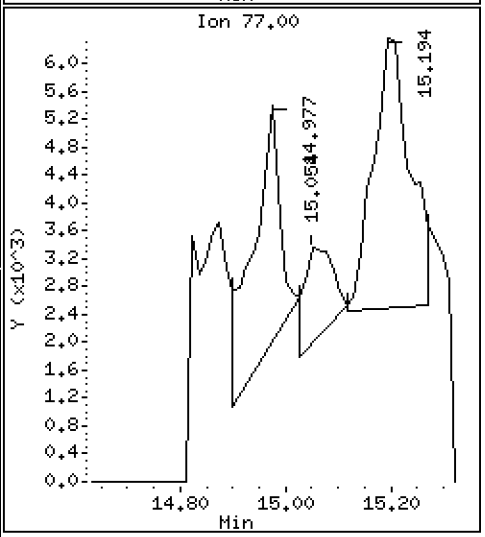
39 Dimethylphthalate

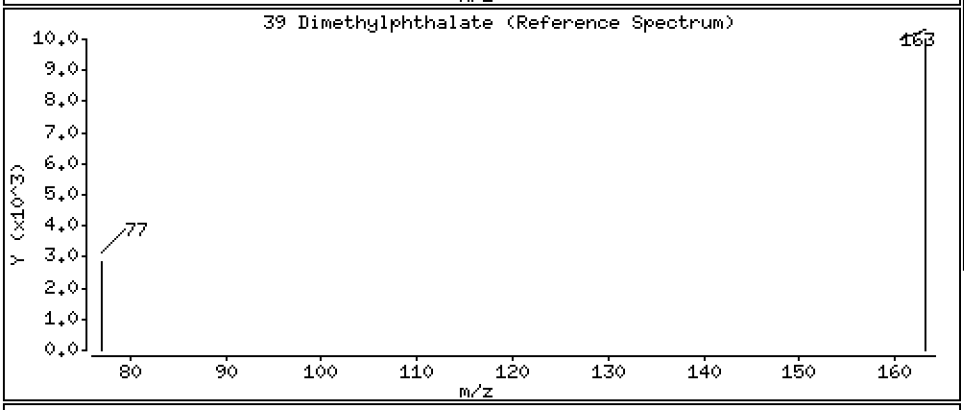
Concentration: 0.04937 ug/mL

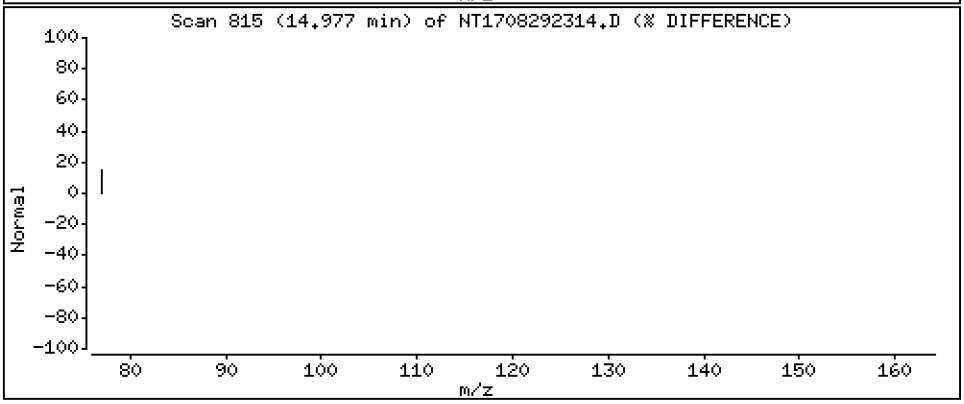












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Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

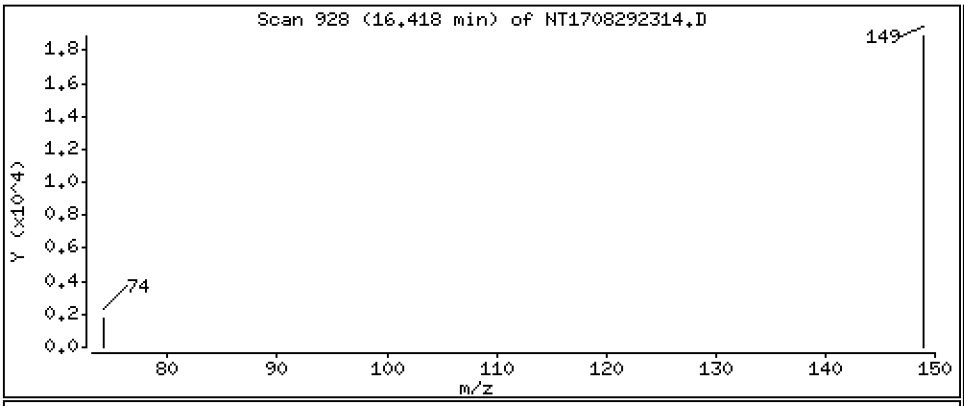
Operator: JGR

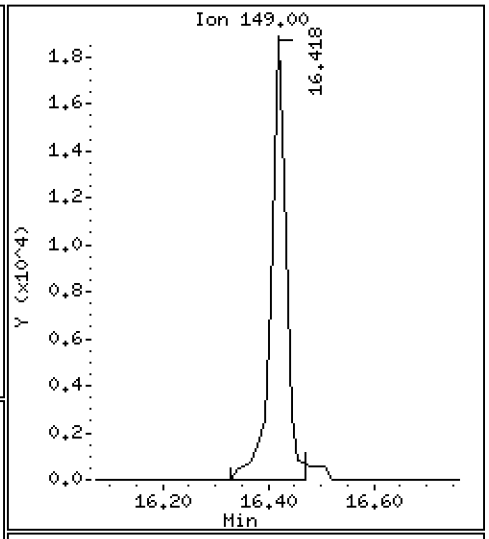
Column phase: ZB-5msi

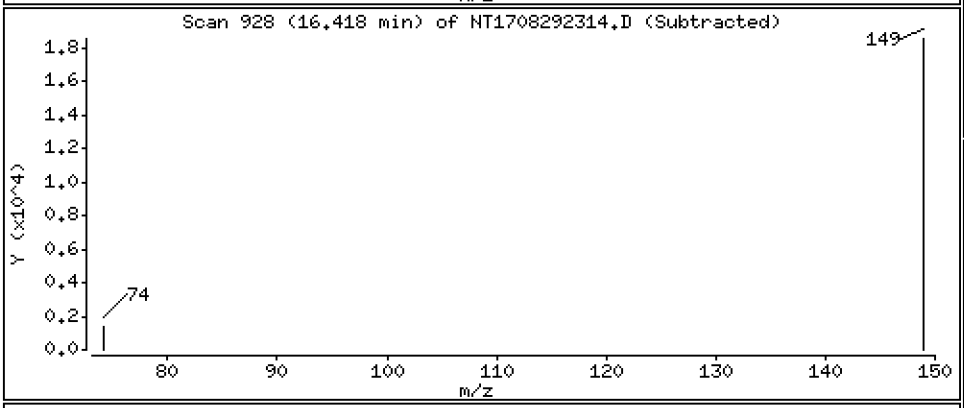
Column diameter: 0.25

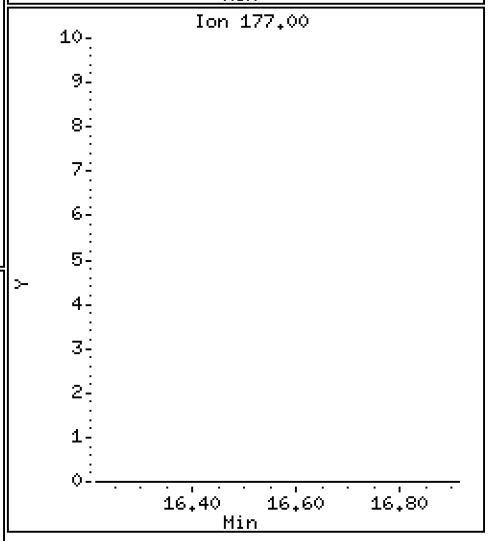
50 Diethylphthalate

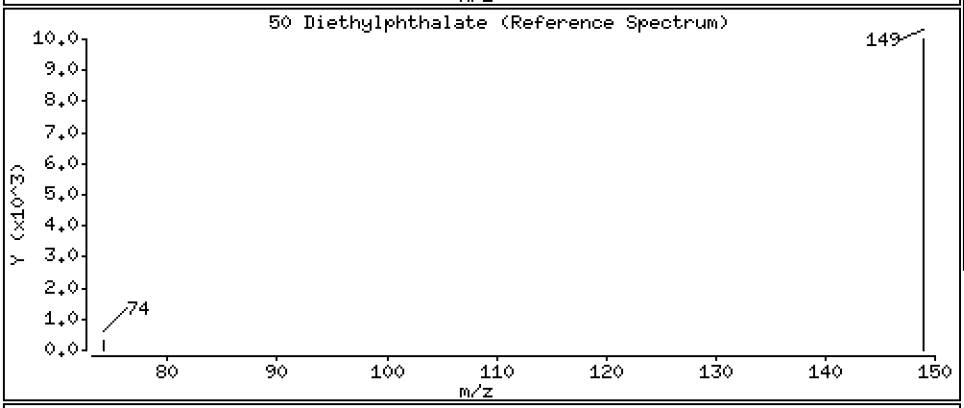
Concentration: 0.1930 ug/mL

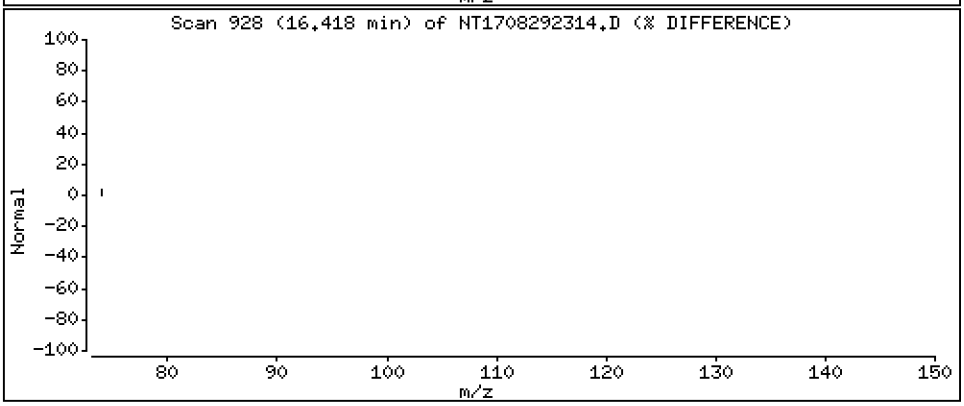












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292314.D

Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

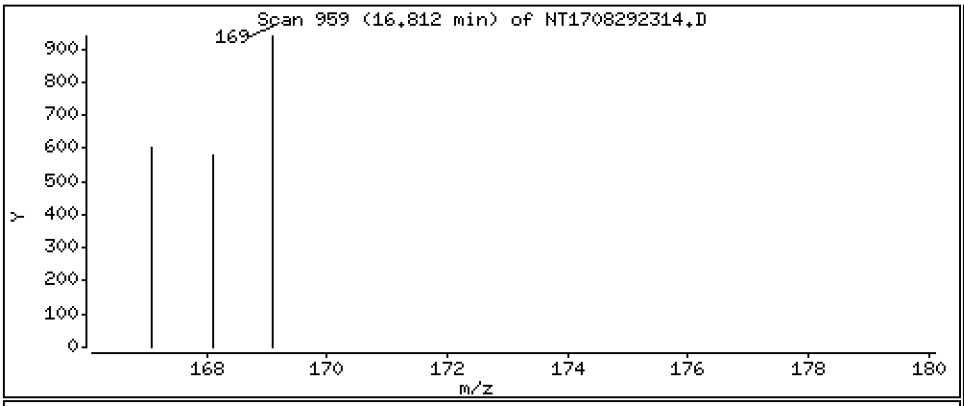
Operator: JGR

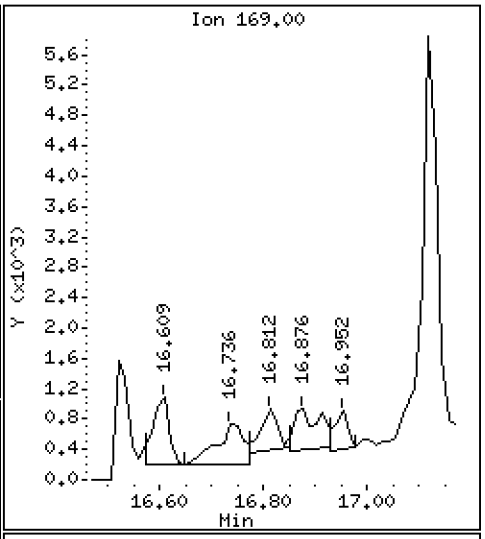
Column phase: ZB-5msi

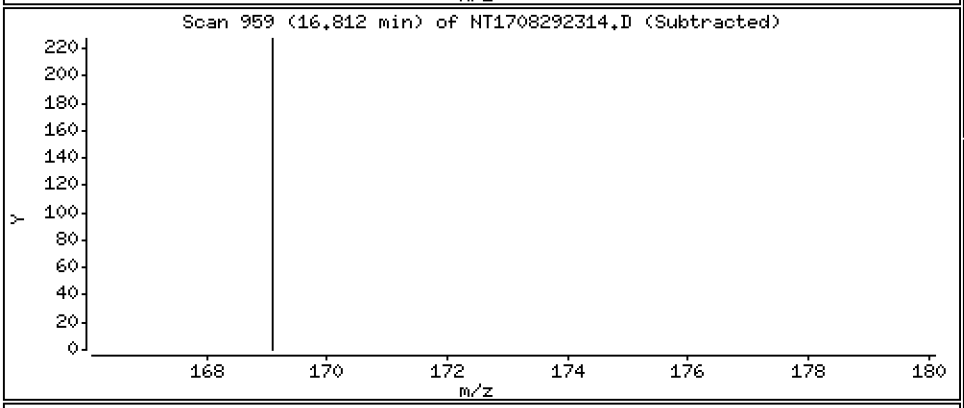
Column diameter: 0.25

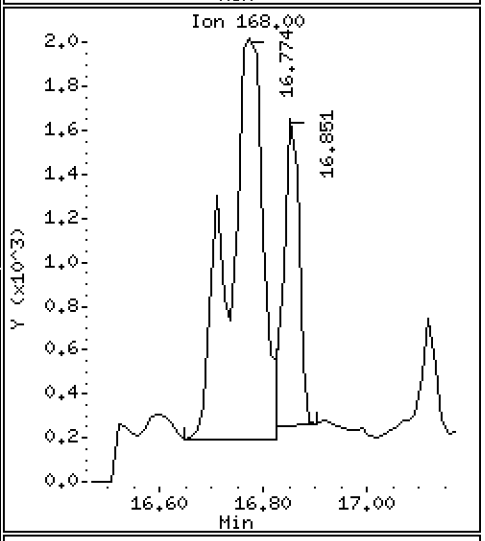
54 N-Nitrosodiphenylamine

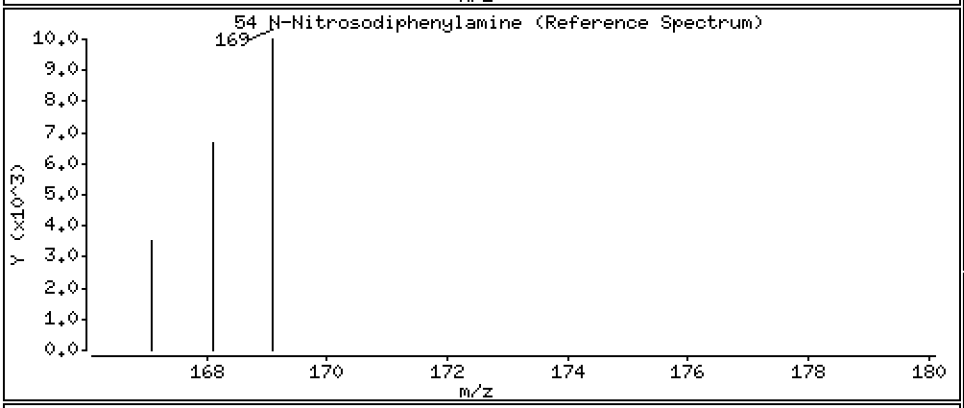
Concentration: 0.01159 ug/mL

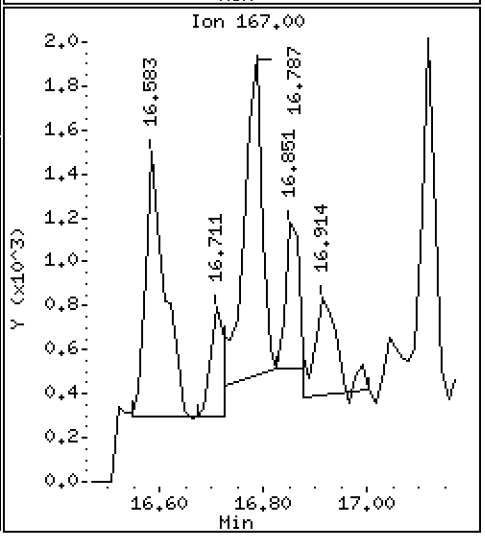


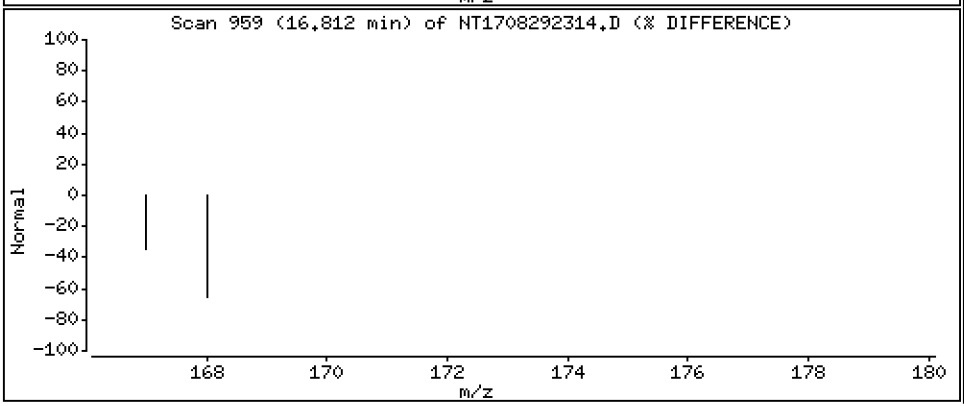












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292314.D

Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

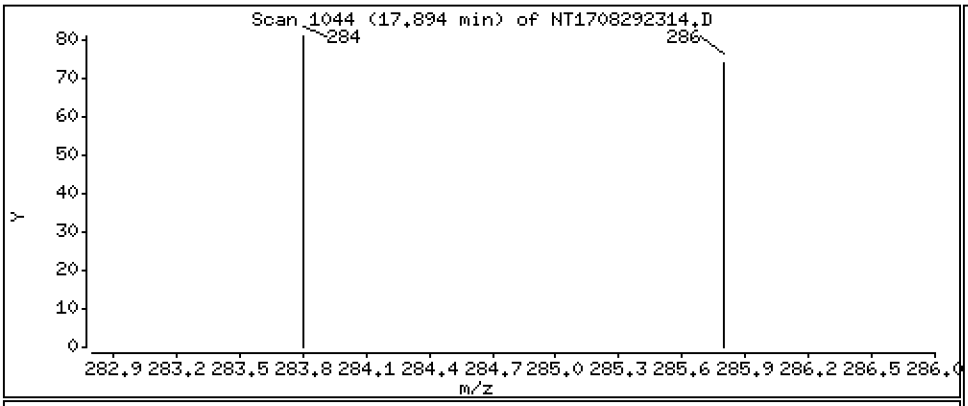
Operator: JGR

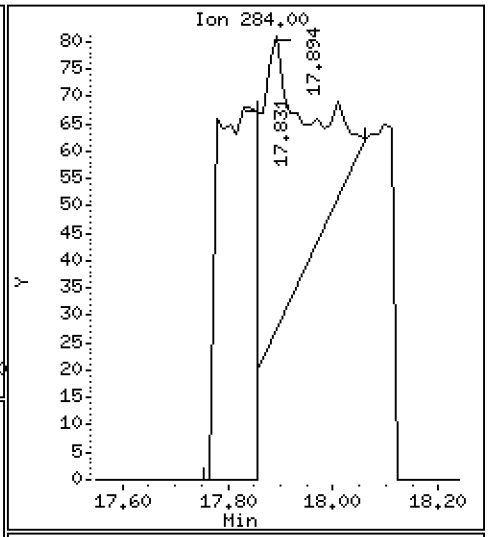
Column phase: ZB-5msi

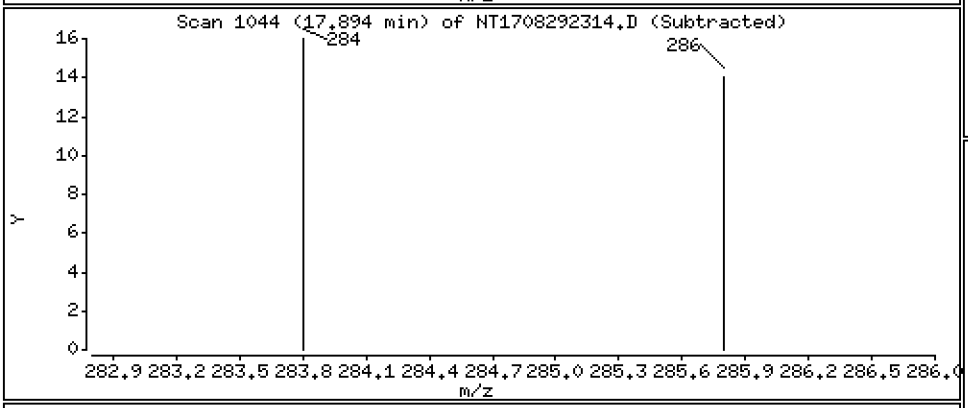
Column diameter: 0.25

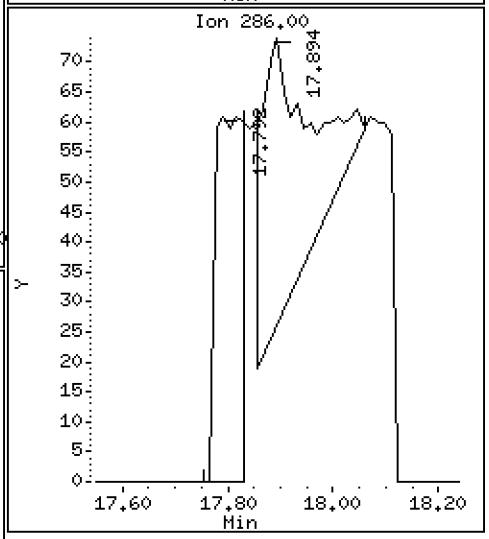
57 Hexachlorobenzene

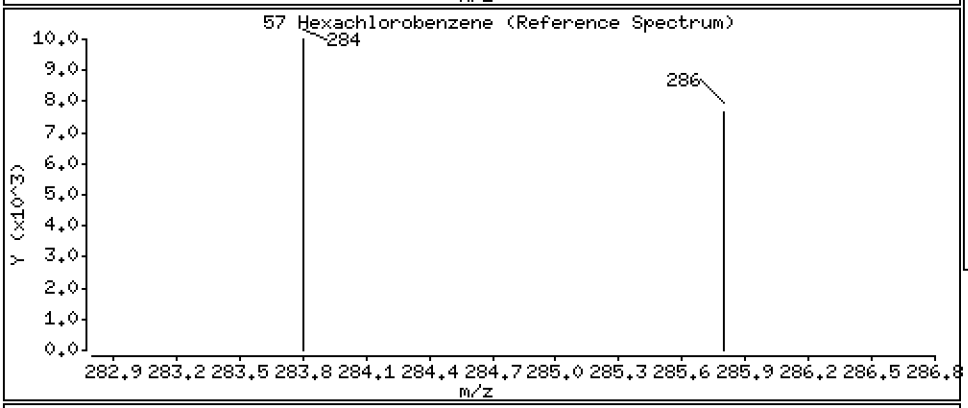
Concentration: 0.009194 ug/mL

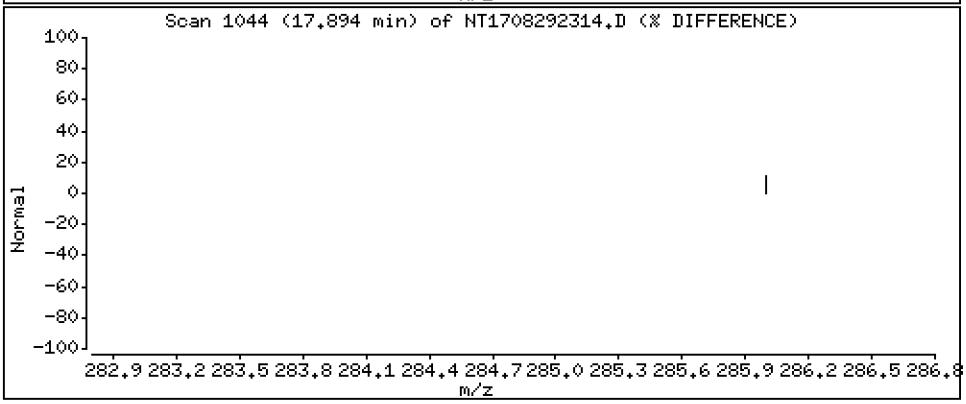












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292314.D

Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

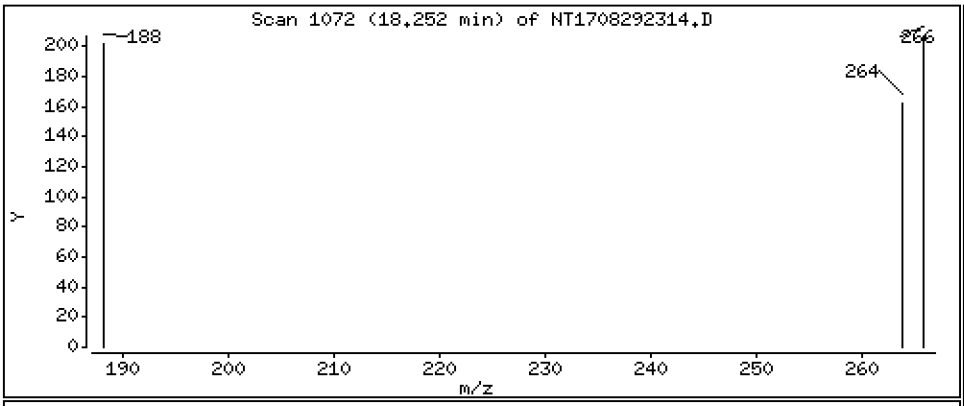
Operator: JGR

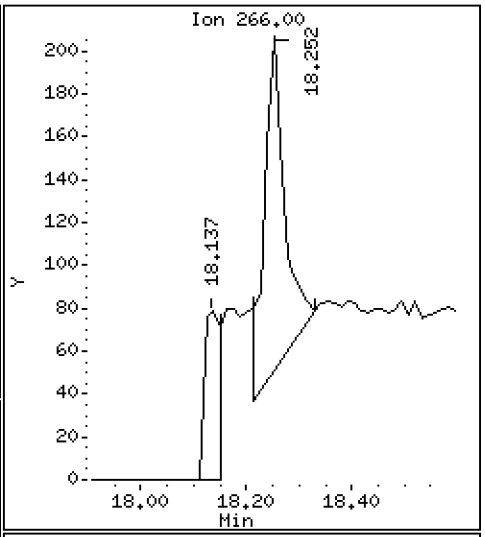
Column phase: ZB-5msi

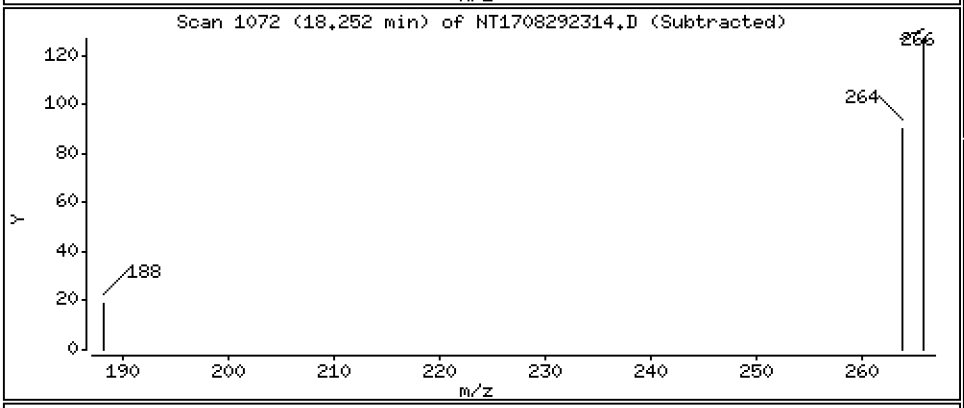
Column diameter: 0.25

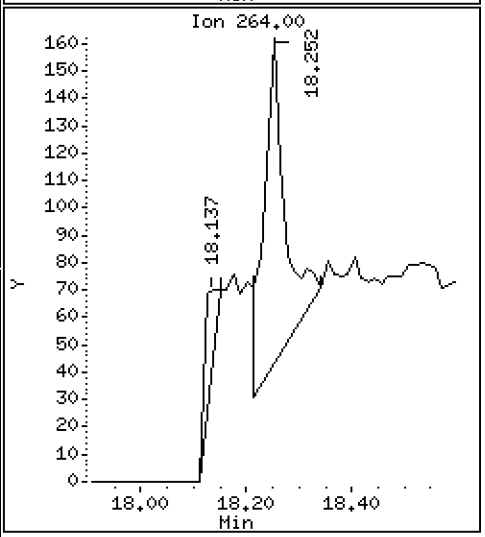
58 Pentachlorophenol

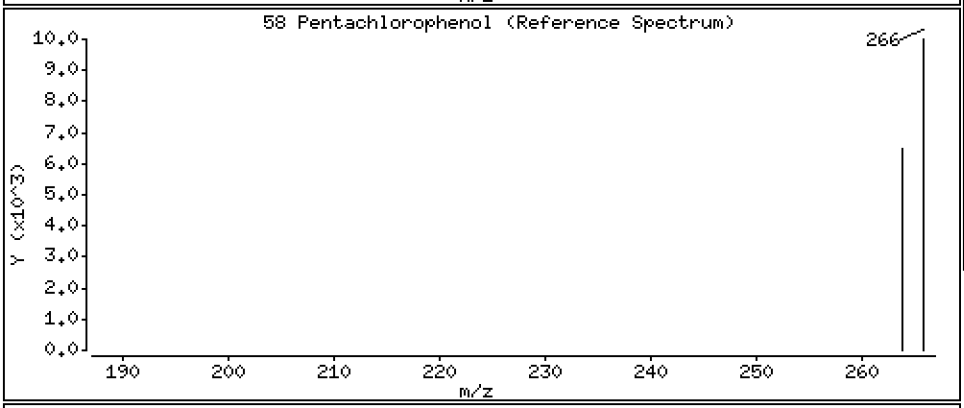
Concentration: 0.01684 ug/mL

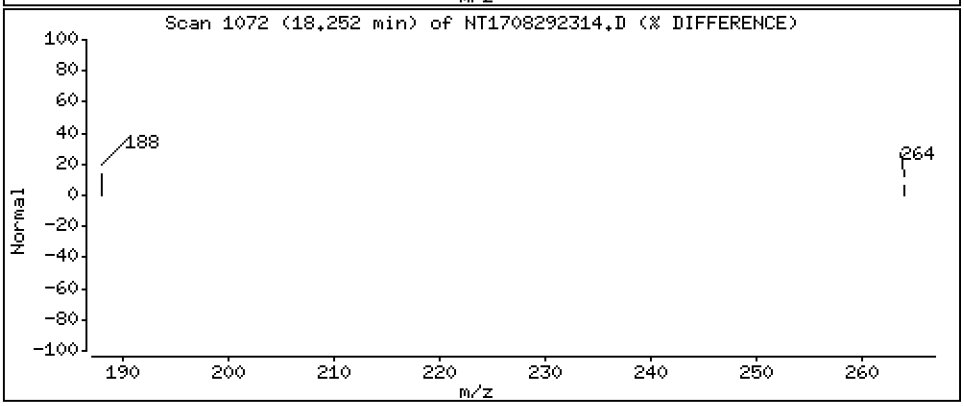












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Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

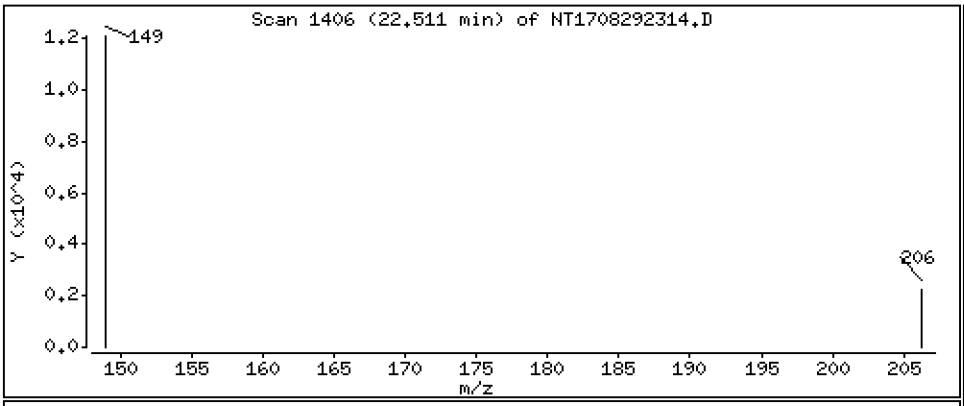
Operator: JGR

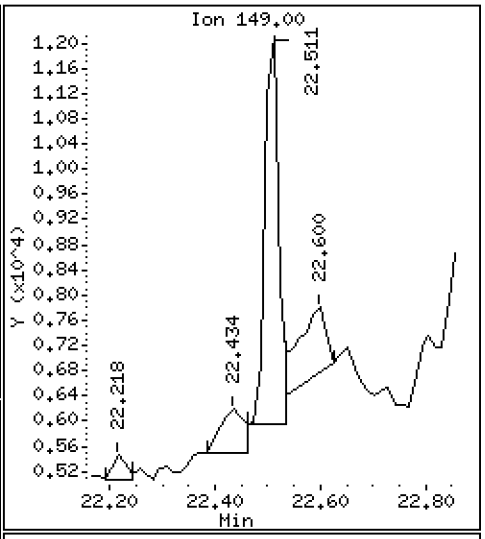
Column phase: ZB-5msi

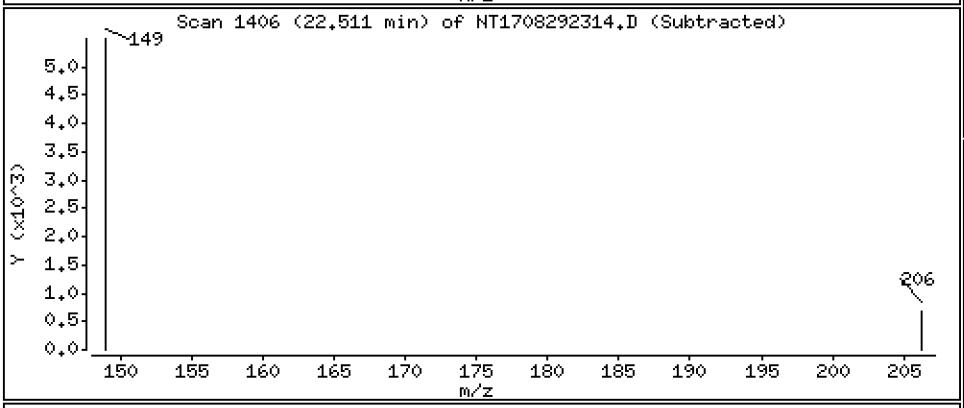
Column diameter: 0.25

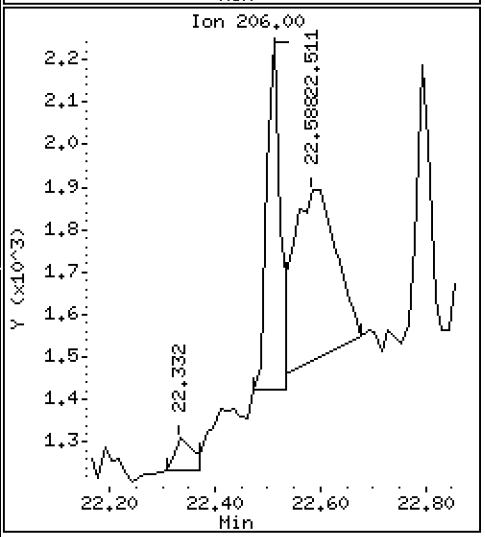
67 Butylbenzylphthalate

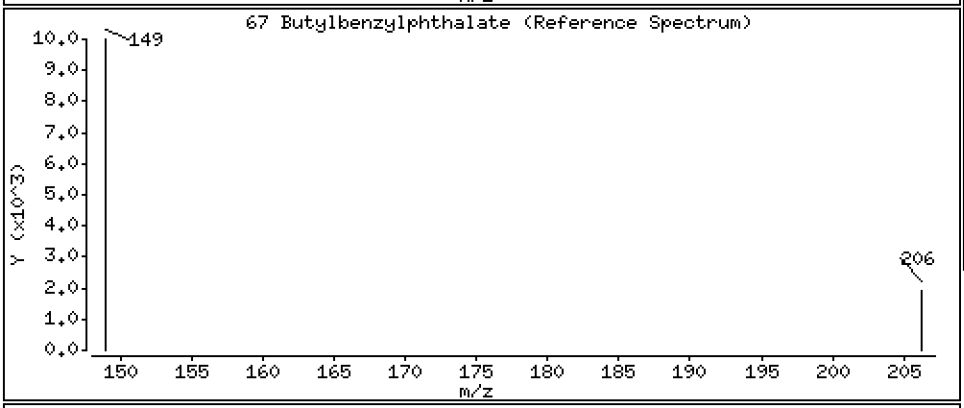
Concentration: 0.08697 ug/mL

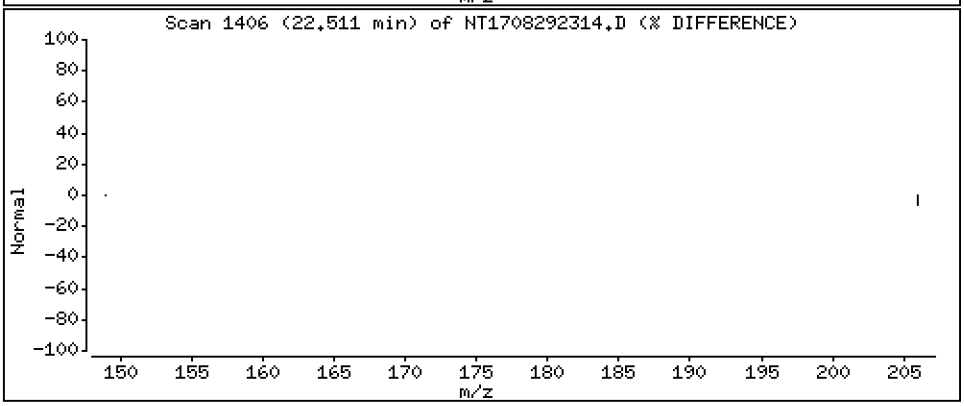












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Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

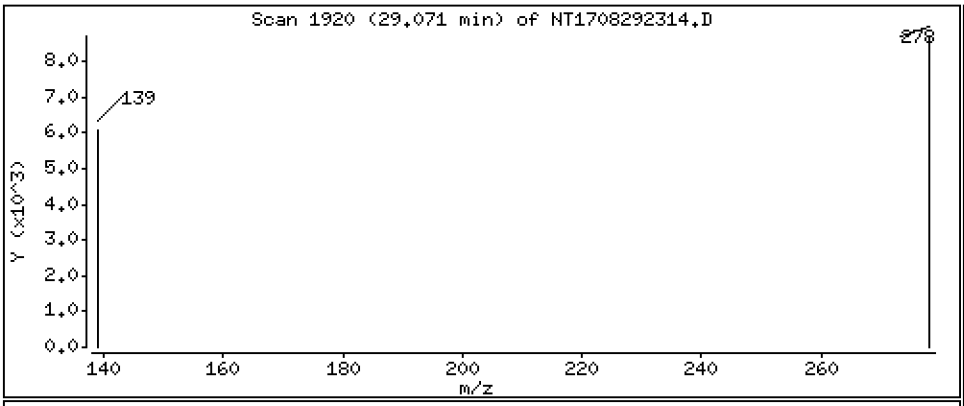
Operator: JGR

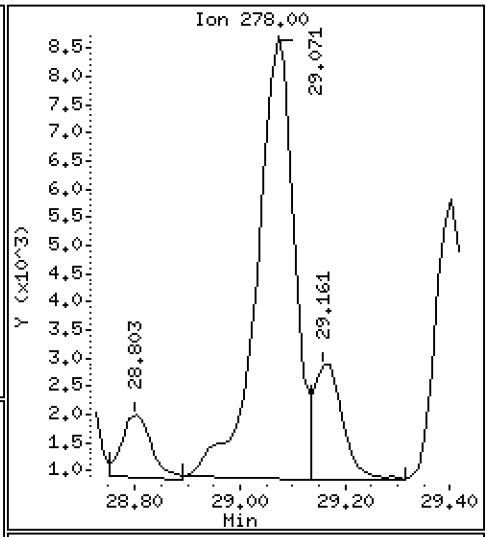
Column phase: ZB-5msi

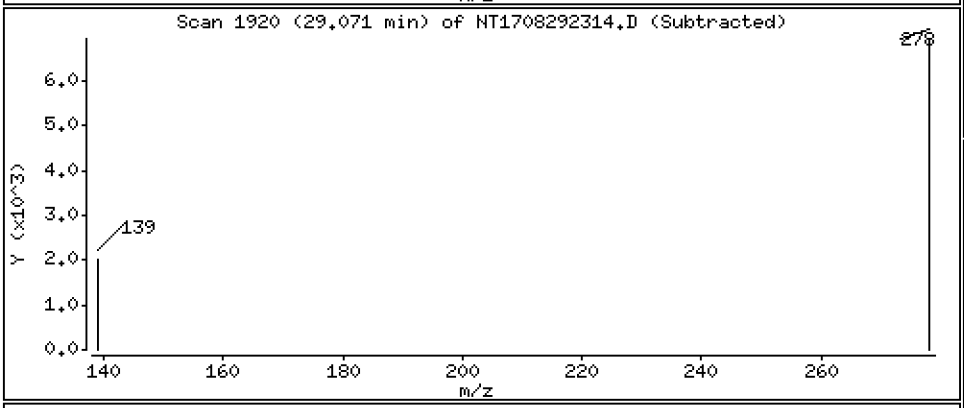
Column diameter: 0.25

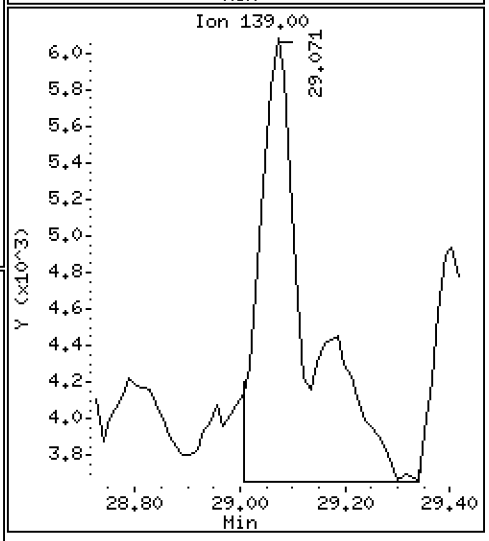
79 Dibenzo(a,h)anthracene

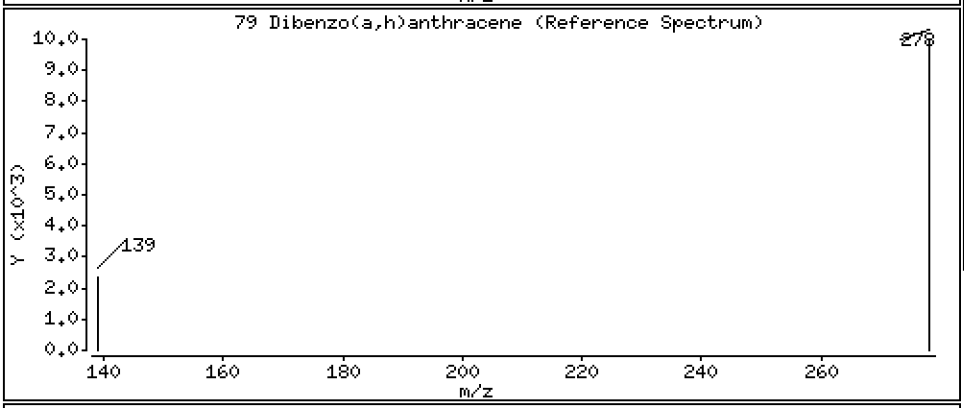
Concentration: 0.1704 ug/mL

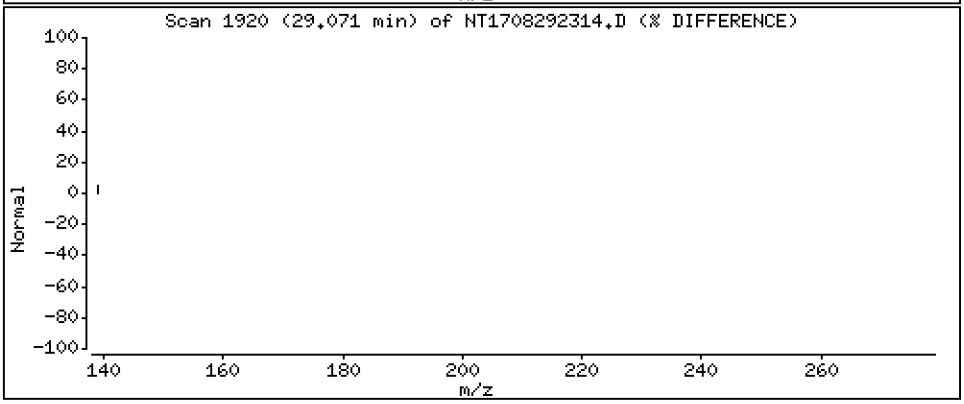












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Date : 29-AUG-2023 19:42

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-03

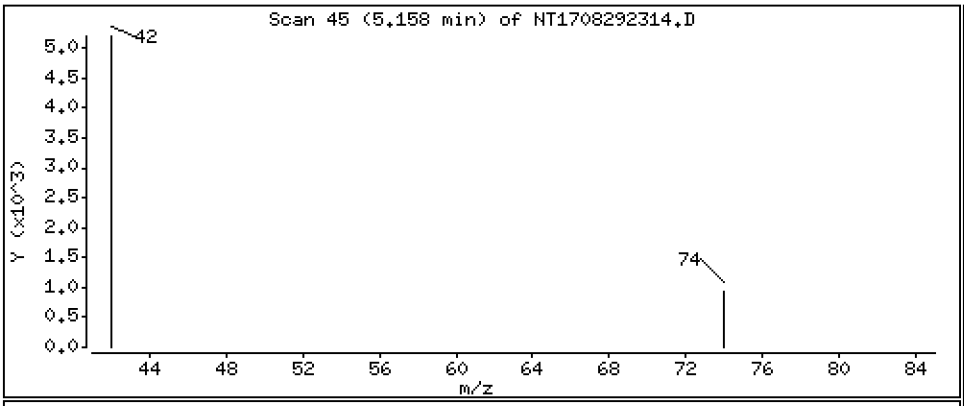
Operator: JGR

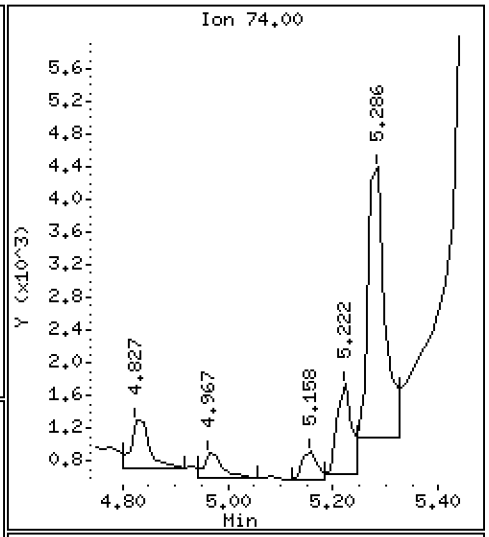
Column phase: ZB-5msi

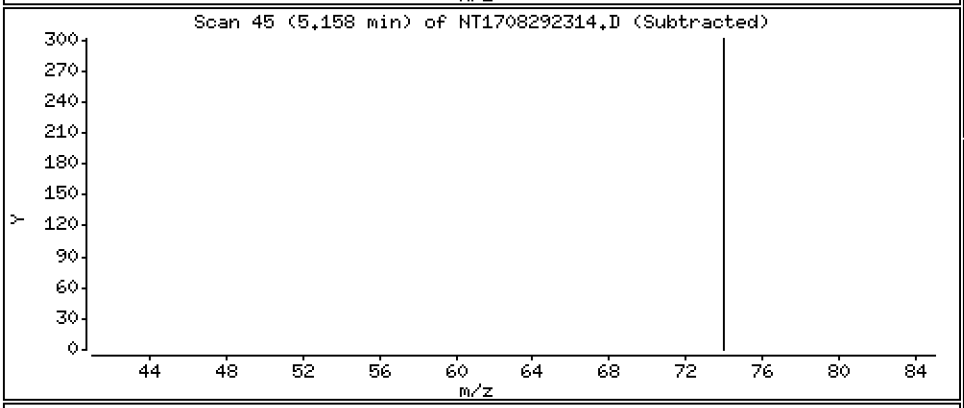
Column diameter: 0.25

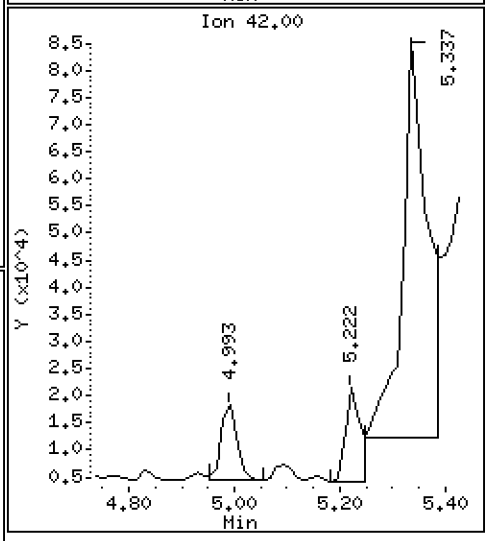
90 N-Nitrosodimethylamine

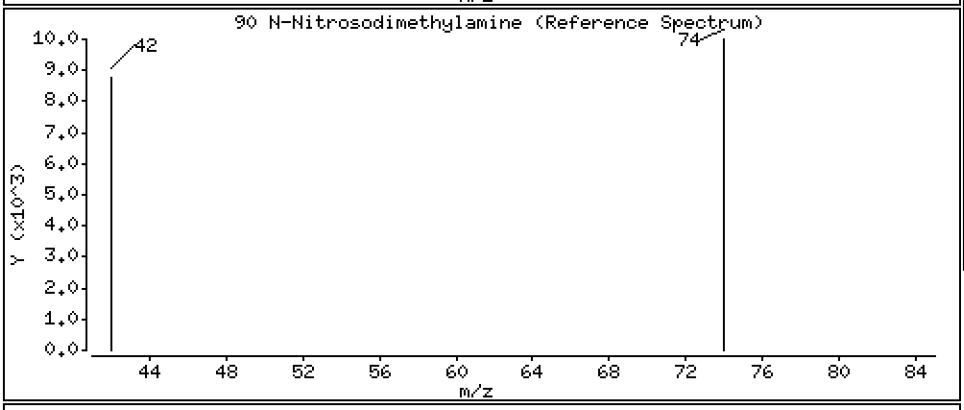
Concentration: 0.003698 ug/mL

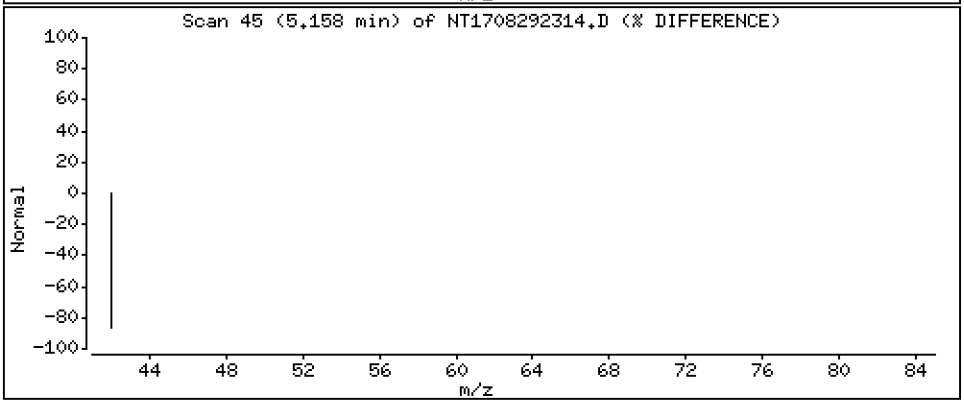












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292314.D
Lab Smp Id: 23H0579-03
Inj Date : 29-AUG-2023 19:42
Operator : JGR Inst ID: nt17.i
Smp Info : 23H0579-03
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 09:25 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.221	7.196	(0.767)	1000349	5.63494	5.635(R)
	3 Phenol	94	8.789	8.776	(0.934)	34755	0.12843	0.1284
	7 1,3-Dichlorobenzene	146	9.349	9.349	(0.993)	530	0.00290	0.002895
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	427545	4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	1057	0.00597	0.005967
	11 Benzyl alcohol	79	9.681	9.669	(1.028)	12568	0.06710	0.06710
	12 1,2-Dichlorobenzene	146	9.797	9.797	(1.041)	705	0.00410	0.004103
	13 2-Methylphenol	108	10.154	9.886	(1.079)	467341	2.84805	2.848
	15 4-Methylphenol	108	10.154	10.154	(1.079)	502415	2.92945	2.929
	16 N-Nitroso-di-n-propylamine	70	10.103	10.218	(1.073)	13482	0.07687	0.07687
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	24 Benzoic acid	105	11.317	11.329	(0.953)	68347	0.67216	0.6722
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.878	11.878	(1.000)	1547544	4.00000	
	30 Hexachlorobutadiene	225	12.273	12.273	(1.033)	795	0.01600	0.01600
	39 Dimethylphthalate	163	14.977	14.977	(0.967)	9268	0.04937	0.04937
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	577551	4.00000	
	50 Diethylphthalate	149	16.417	16.417	(1.060)	37678	0.19304	0.1930
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	1316	0.01159	0.01159
	57 Hexachlorobenzene	284	17.894	17.894	(0.966)	342	0.00919	0.009194
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	425	0.01684	0.01684
*	59 Phenanthrene-d10	188	18.519	18.506	(1.000)	789736	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	373027	5.17473	5.175(R)
	67 Butylbenzylphthalate	149	22.511	22.511	(0.958)	12022	0.08697	0.08697
*	69 Chrysene-d12	240	23.506	23.506	(1.000)	520922	4.00000	
*	77 Perylene-d12	264	26.236	26.223	(1.000)	779150	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.071	29.071	(1.108)	39212	0.17039	0.1704
	90 N-Nitrosodimethylamine	74	5.158	5.094	(0.548)	668	0.00370	0.003698

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 30-Aug-2023 09:26

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292314.D
Lab Smp Id: 23H0579-03
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 29-AUG-2023
Calibration Time: 12:37
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	296489	148245	592978	427545	44.20
27 Naphthalene-d8	1098892	549446	2197784	1547544	40.83
42 Acenaphthene-d10	443071	221536	886142	577551	30.35
59 Phenanthrene-d10	627744	313872	1255488	789736	25.81
69 Chrysene-d12	404122	202061	808244	520922	28.90
77 Perylene-d12	417323	208662	834646	779150	86.70

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	-0.00
27 Naphthalene-d8	11.88	11.38	12.38	11.88	-0.00
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	-0.00
59 Phenanthrene-d10	18.51	18.01	19.01	18.52	0.07
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.22	25.72	26.72	26.24	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292314.D

Lab ID: 23H0579-03
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   29-AUG-2023 19:42

RT	CO-ELUTION COMPOUNDS
10.155	4-Methylphenol and 2-Methylphenol

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.079	1.050	0.0285	2-Methylphenol
1.073	1.085	-0.0122	N-Nitroso-di-n-propylamine
0.548	0.541	0.0068	N-Nitrosodimethylamine

RRT check based on Ccal File: SIM.b/NT1708292304.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1275

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23H0579-04 A	SDG:	23H0579
Sampled:	01/04/23 09:10	Prepared:	08/25/23 12:39	File ID:	NT1708292315.D
% Solids:	57.45	Preparation:	EPA 3546 (Microwave)	Analyzed:	08/29/23 20:19
Batch:	BLH0669	Sequence:	SLH0447	Initial/Final:	17.45 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GH00045
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	748.13	543	72.6	27 - 120	
p-Terphenyl-d14	498.75	488	97.8	37 - 120	Q

INTERNAL STANDARDS	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	387366	9.413	296489	9.413	
Naphthalene-d8	1403162	11.878	1098892	11.878	
Acenaphthene-d10	525861	15.487	443071	15.487	
Phenanthrene-d10	730142	18.519	627744	18.506	
Chrysene-d12	508226	23.506	404122	23.506	
Perylene-d12	676972	26.236	417323	26.223	

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292315.D

Date : 29-AUG-2023 20:19

Client ID:

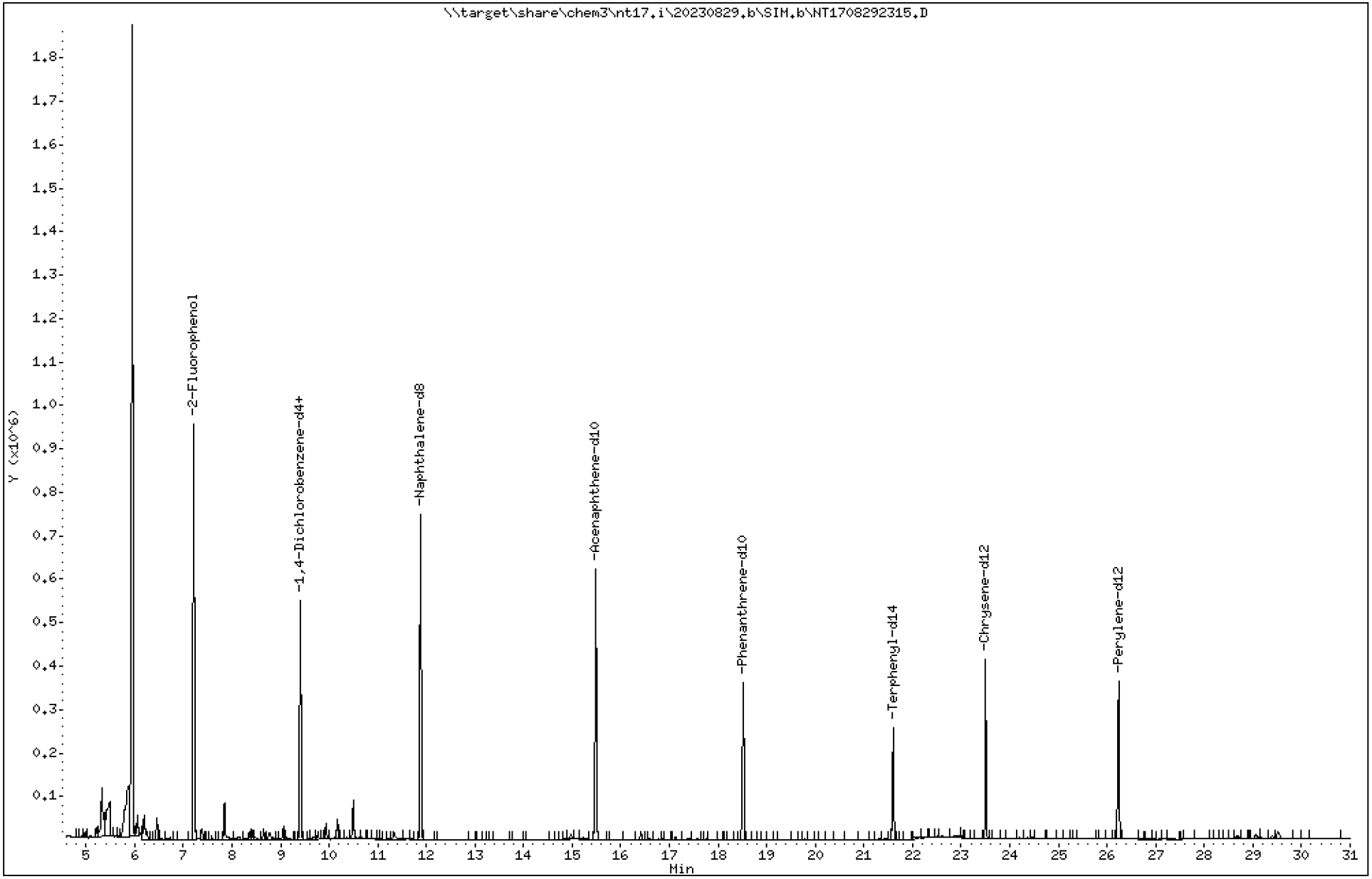
Sample Info: 23H0579-04

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

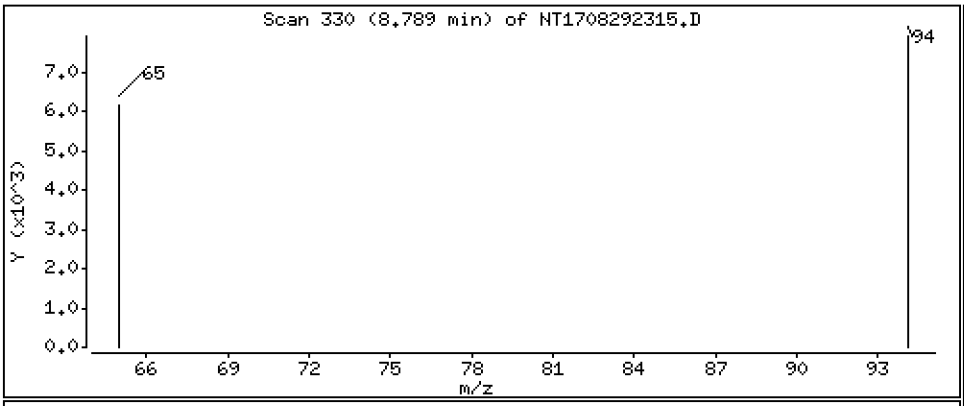
Operator: JGR

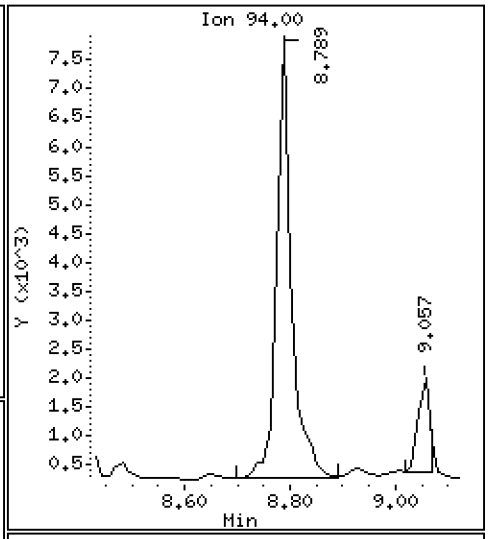
Column phase: ZB-5msi

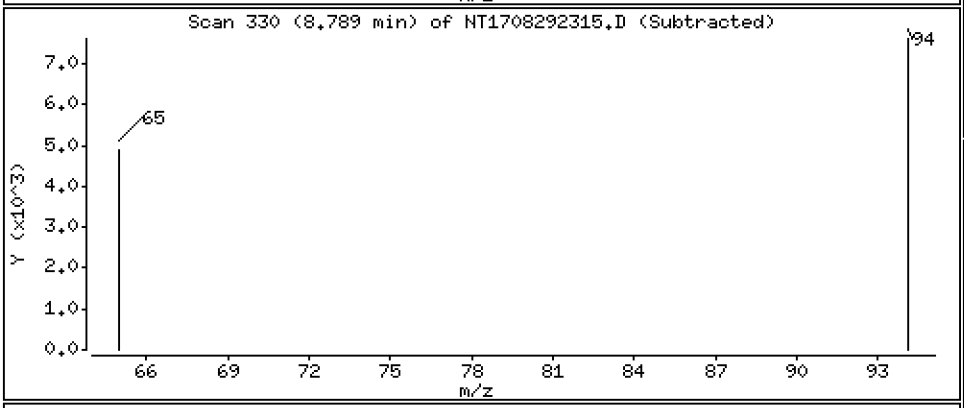
Column diameter: 0.25

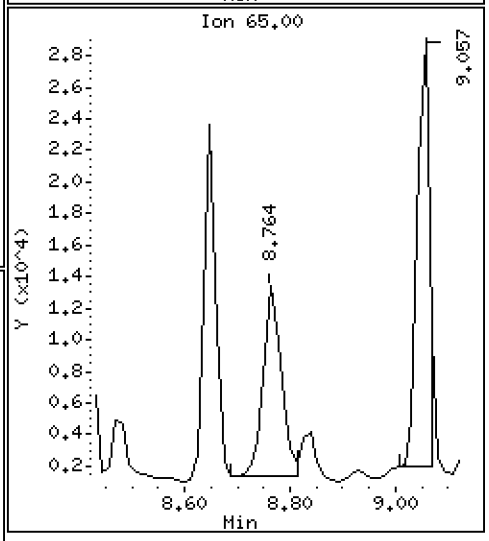
3 Phenol

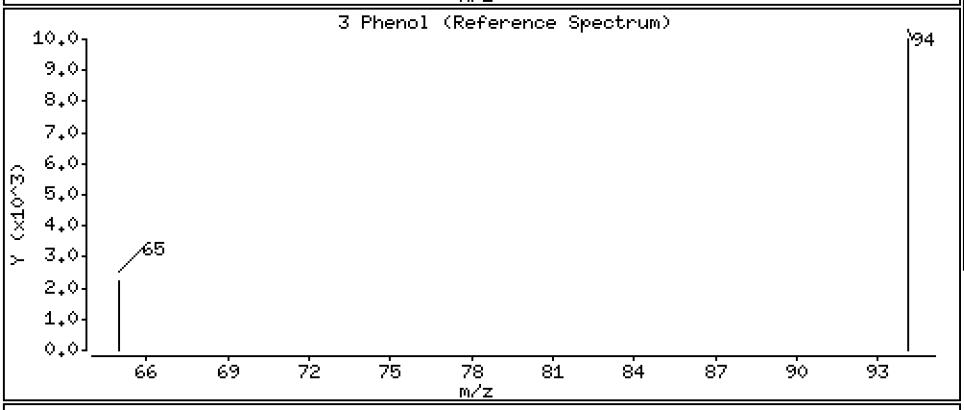
Concentration: 0.06437 ug/mL

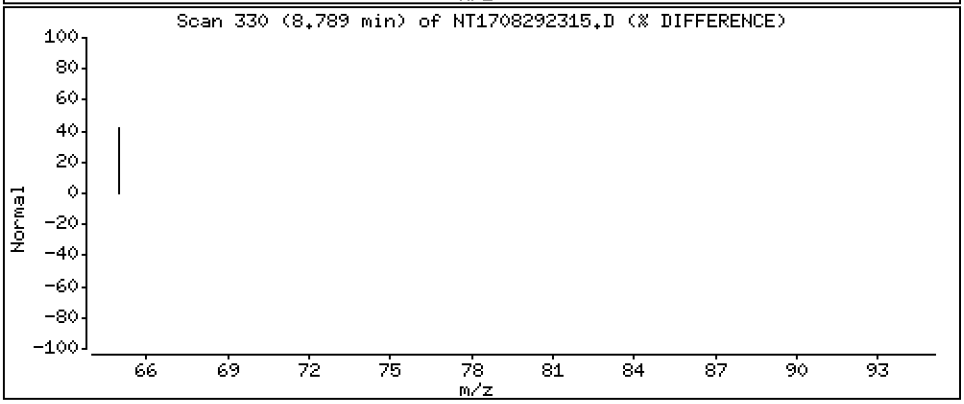












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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

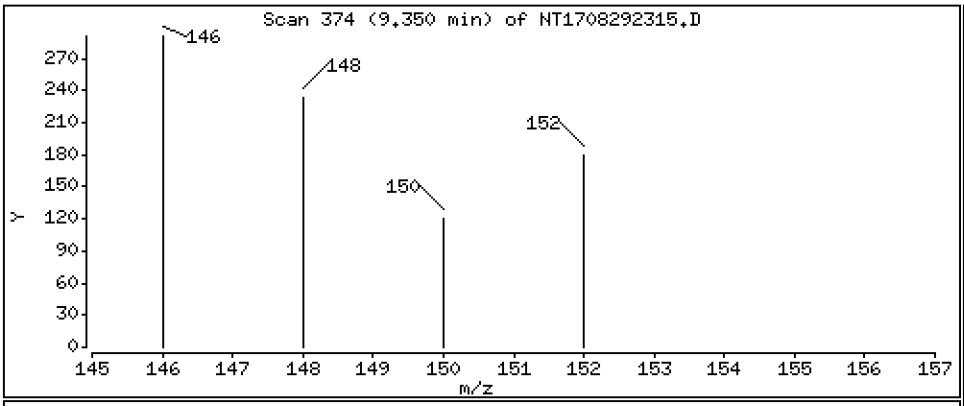
Operator: JGR

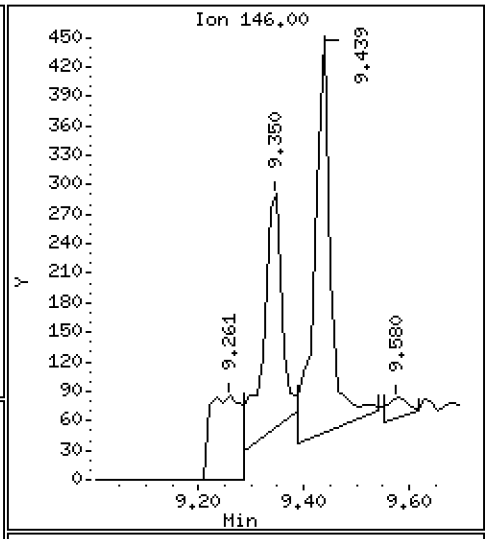
Column phase: ZB-5msi

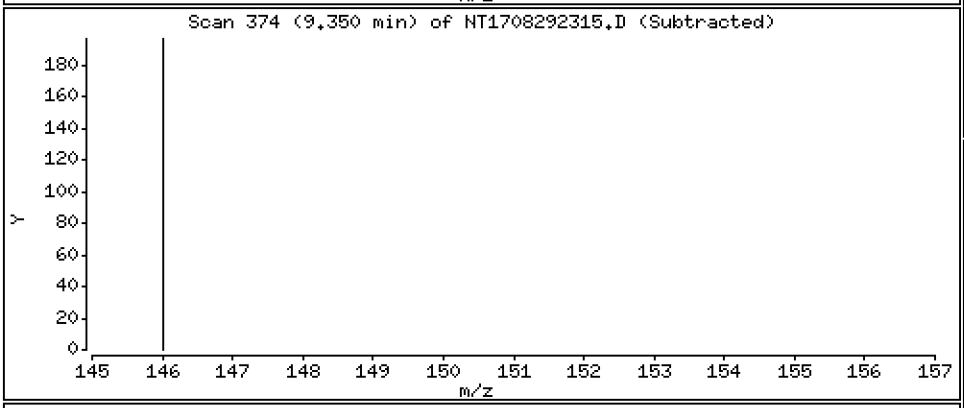
Column diameter: 0.25

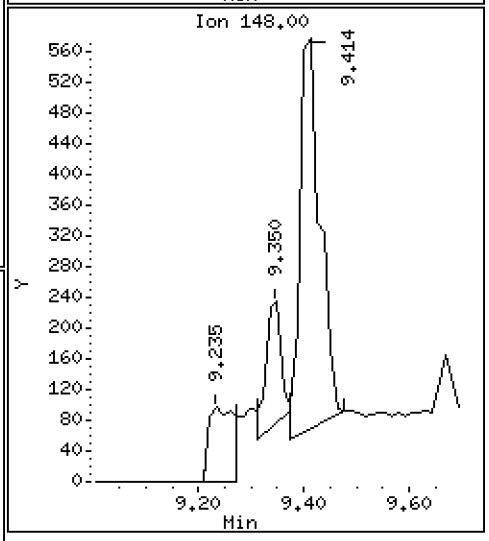
7 1,3-Dichlorobenzene

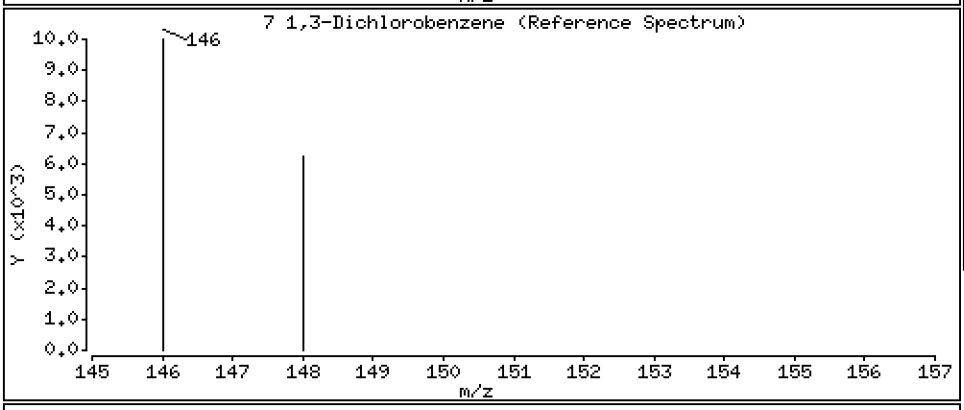
Concentration: 0.003630 ug/mL

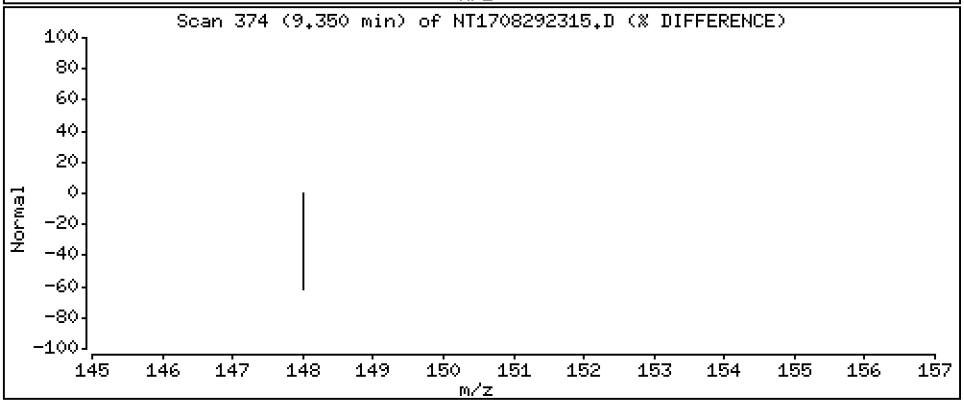












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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

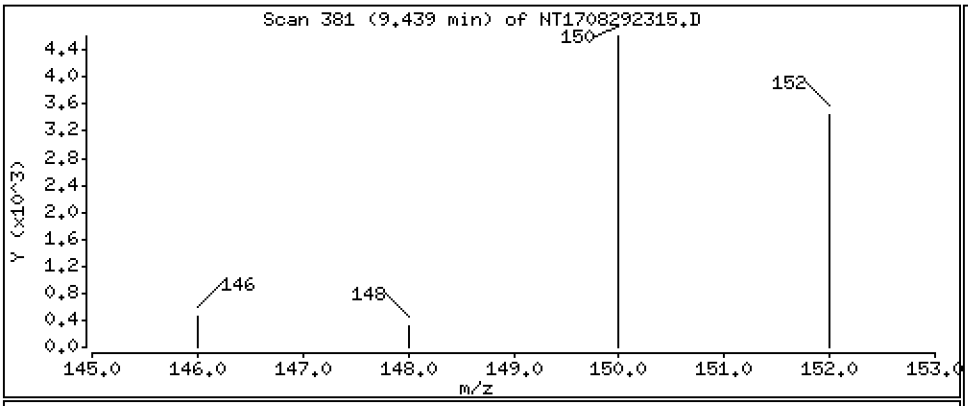
Operator: JGR

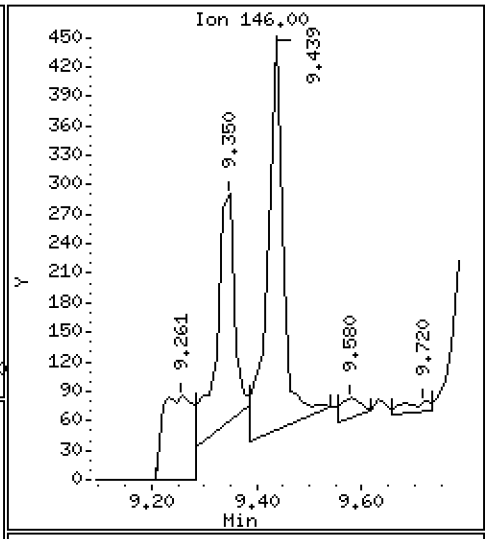
Column phase: ZB-5msi

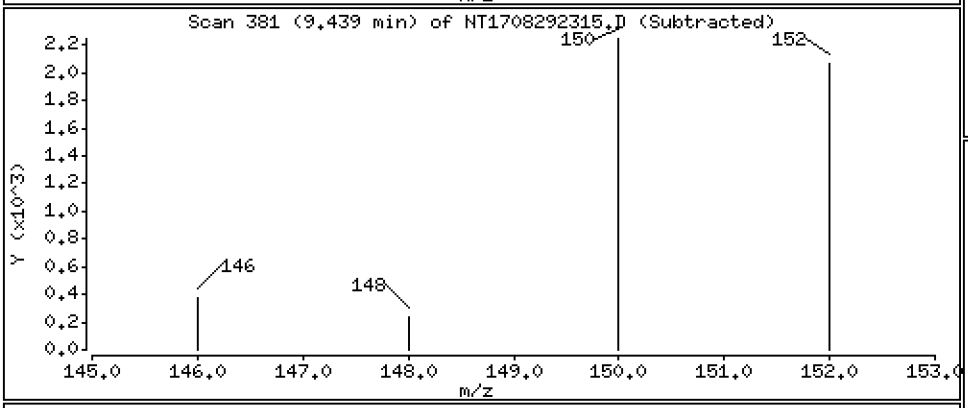
Column diameter: 0.25

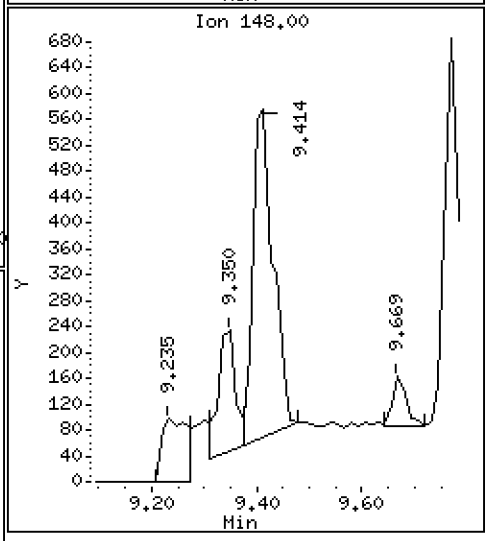
9 1,4-Dichlorobenzene

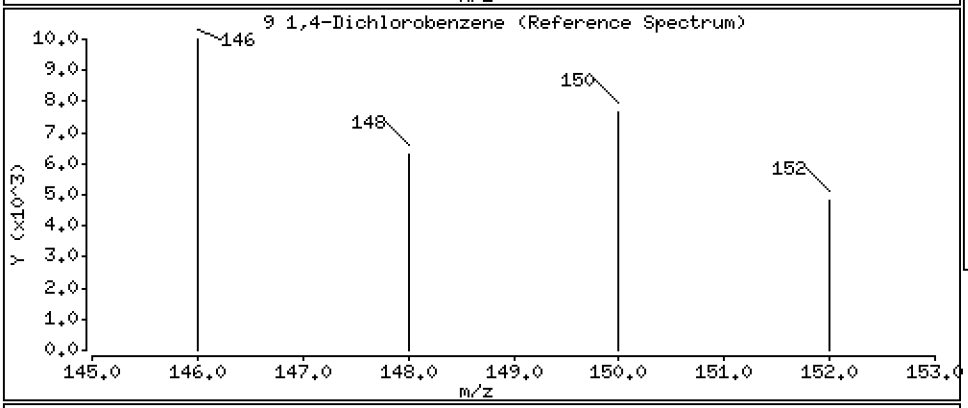
Concentration: 0.005159 ug/mL

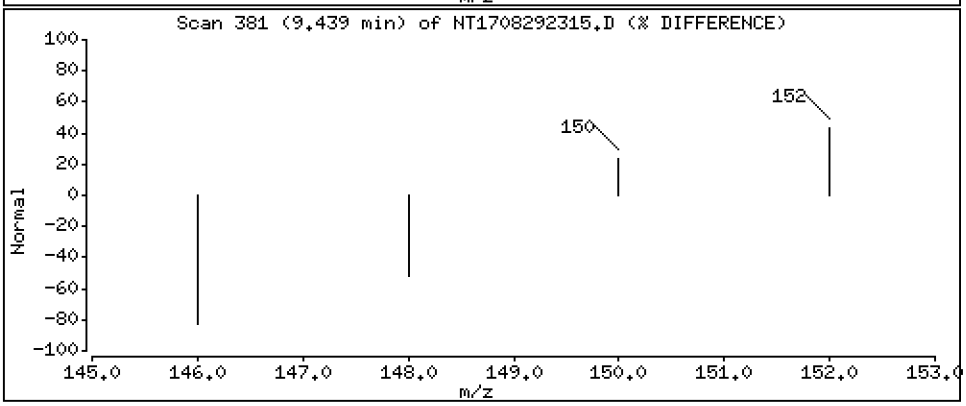












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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

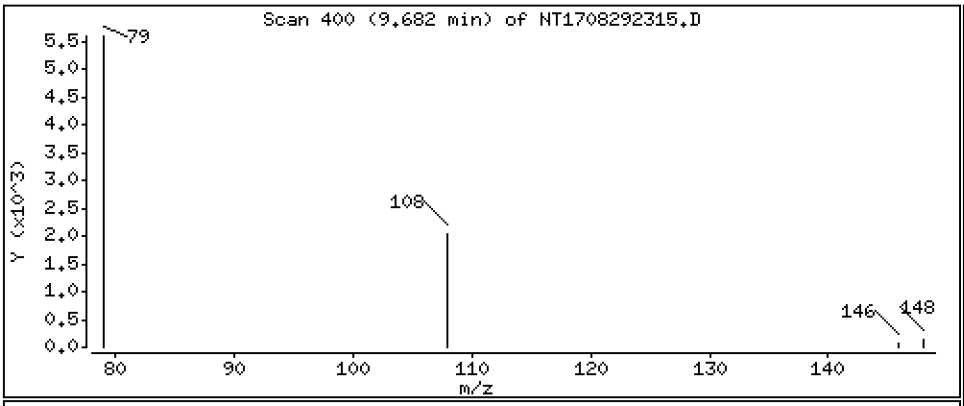
Operator: JGR

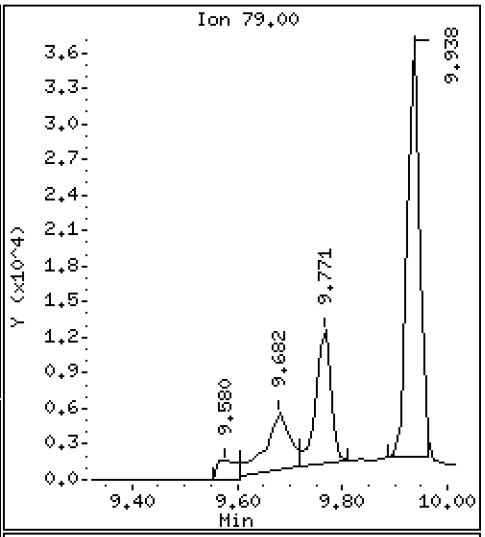
Column phase: ZB-5msi

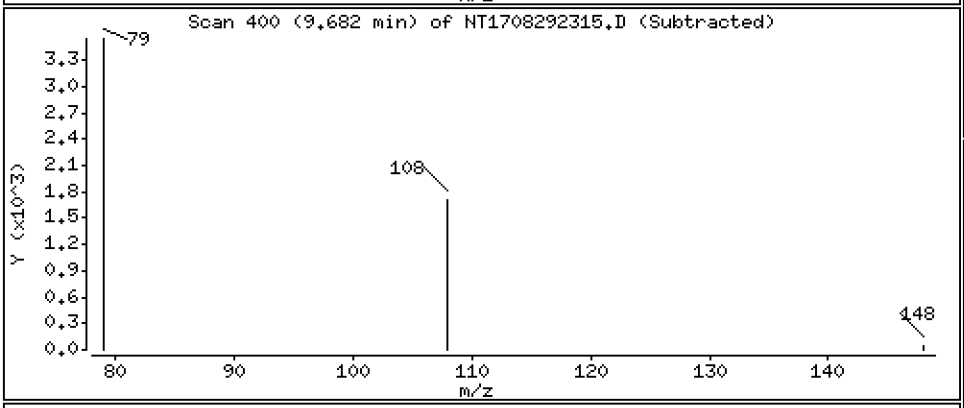
Column diameter: 0.25

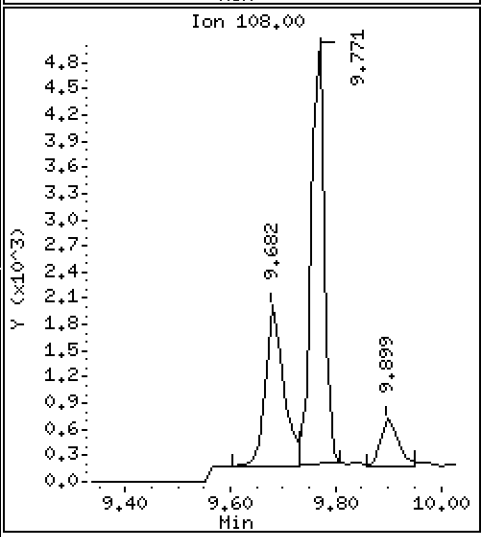
11 Benzyl alcohol

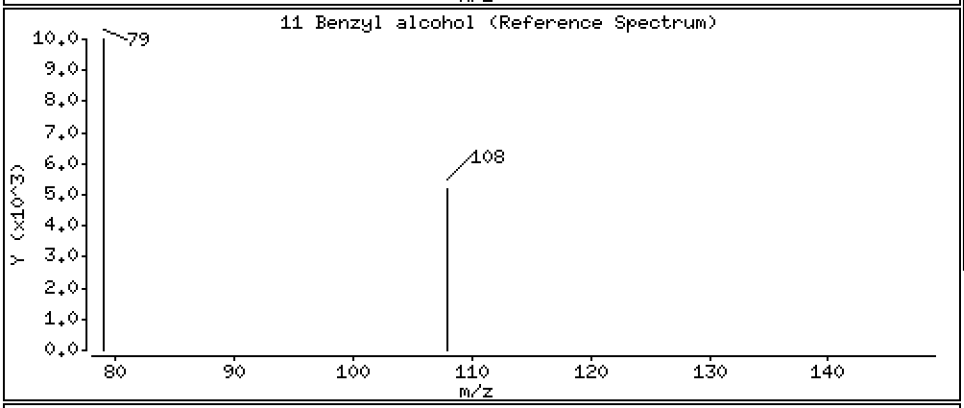
Concentration: 0.09950 ug/mL

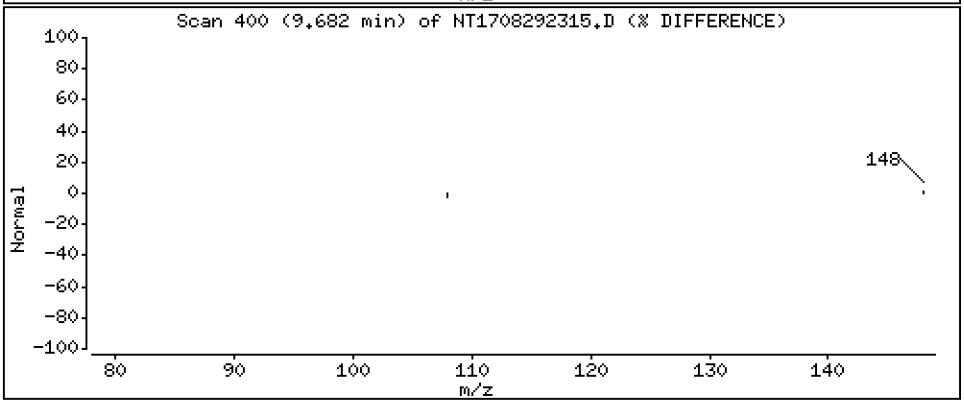












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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

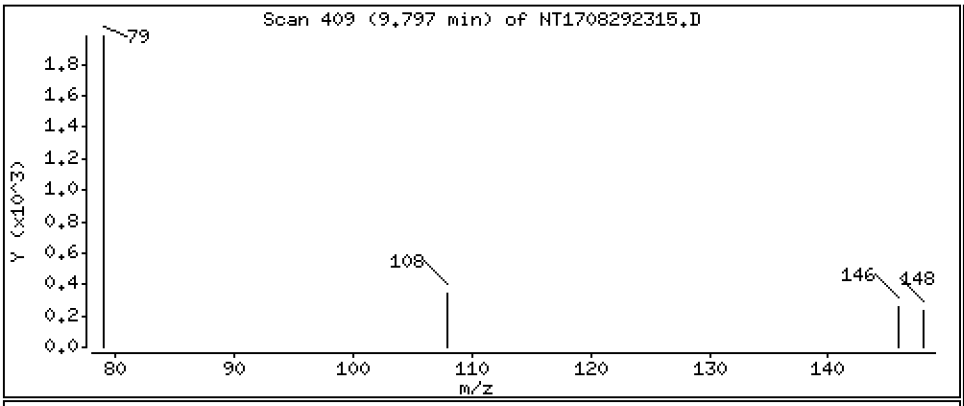
Operator: JGR

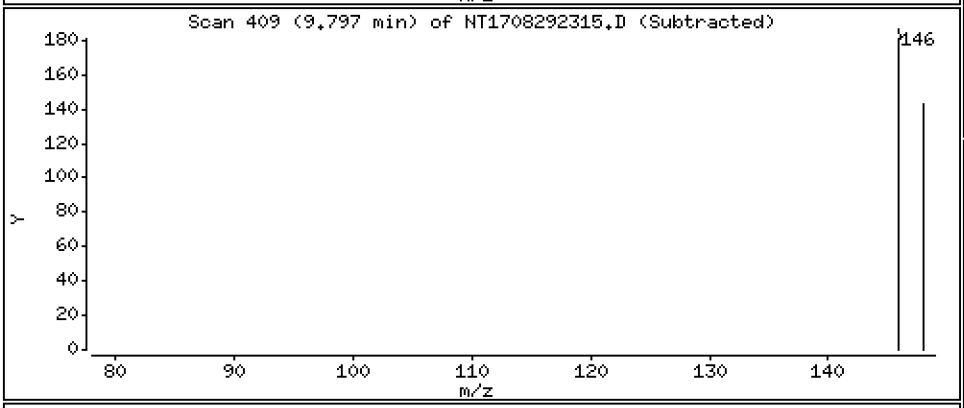
Column phase: ZB-5msi

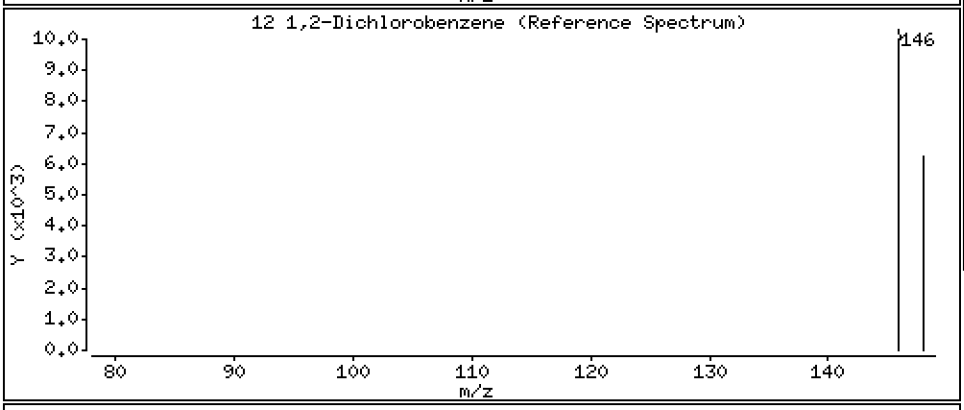
Column diameter: 0.25

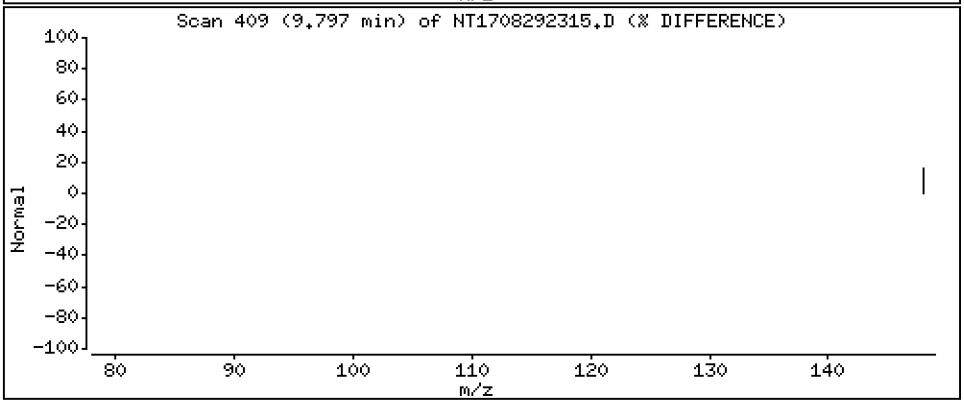
12 1,2-Dichlorobenzene

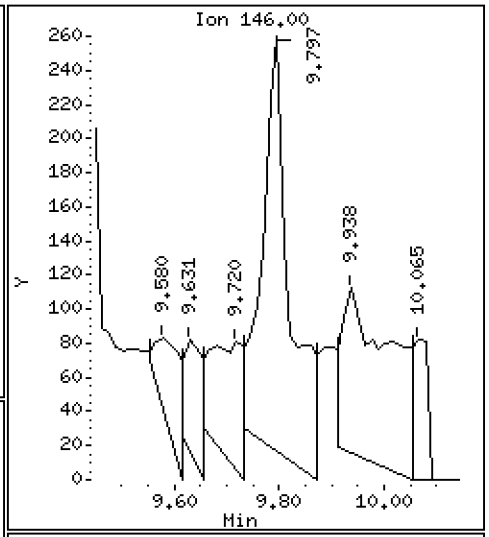
Concentration: 0.006063 ug/mL

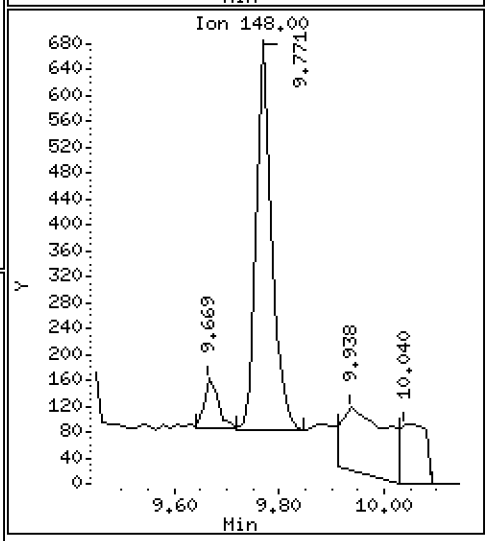












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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

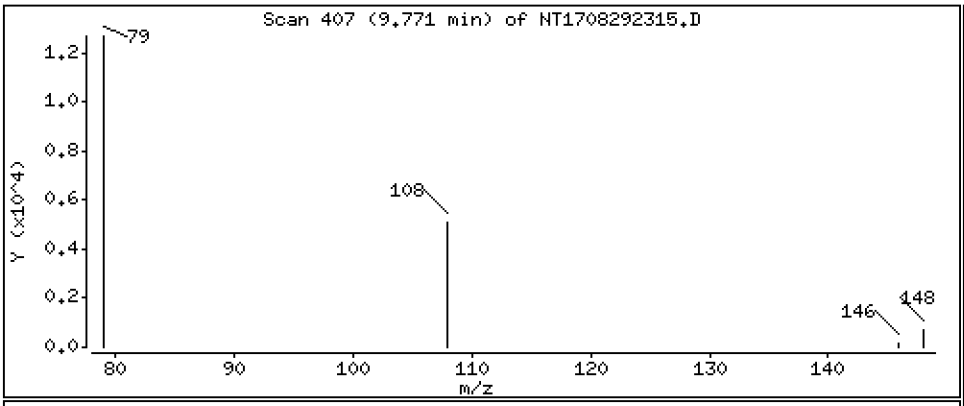
Operator: JGR

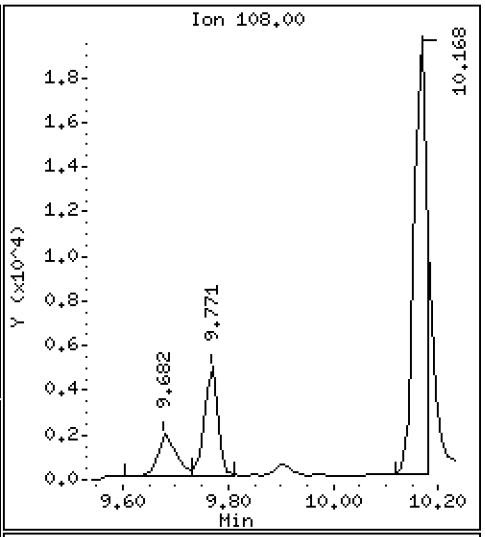
Column phase: ZB-5msi

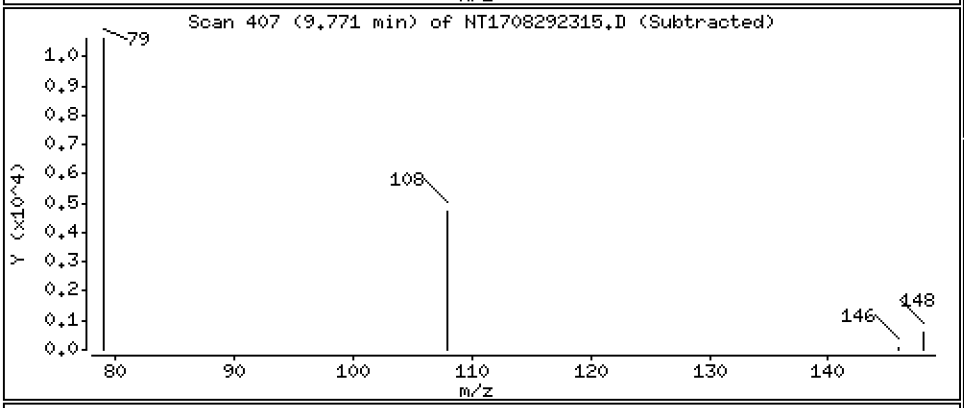
Column diameter: 0.25

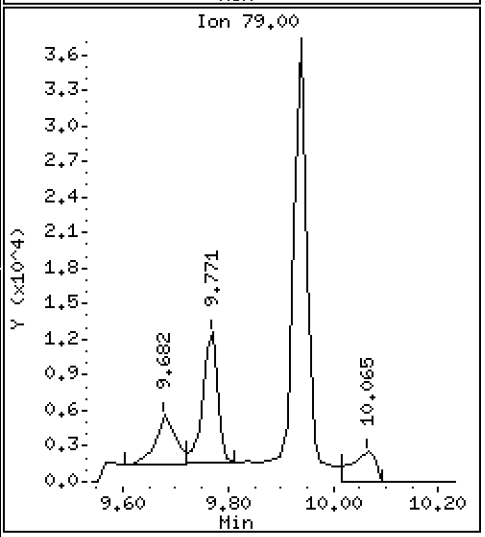
13 2-Methylphenol

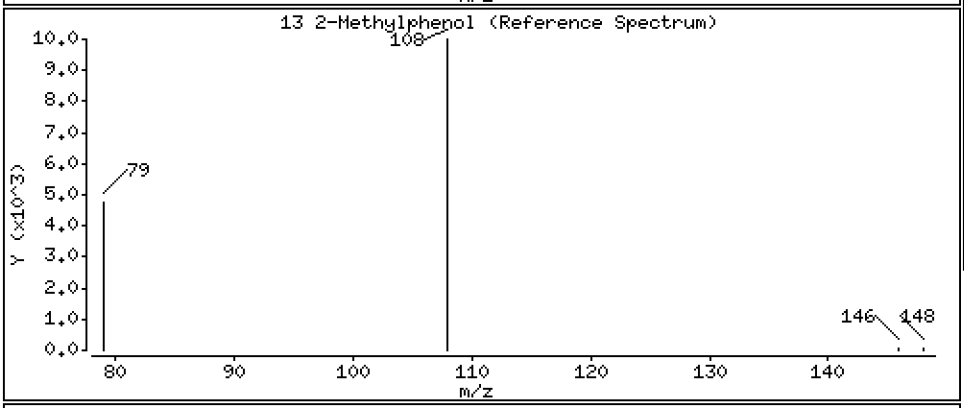
Concentration: 0.05845 ug/mL

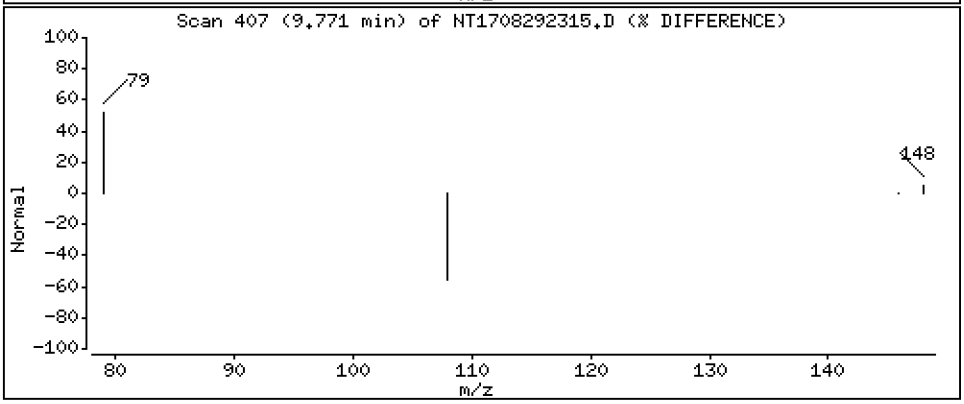












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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

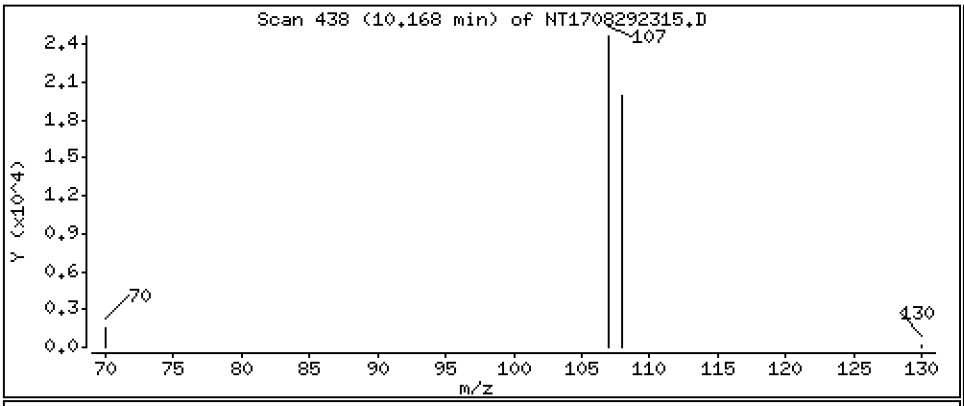
Operator: JGR

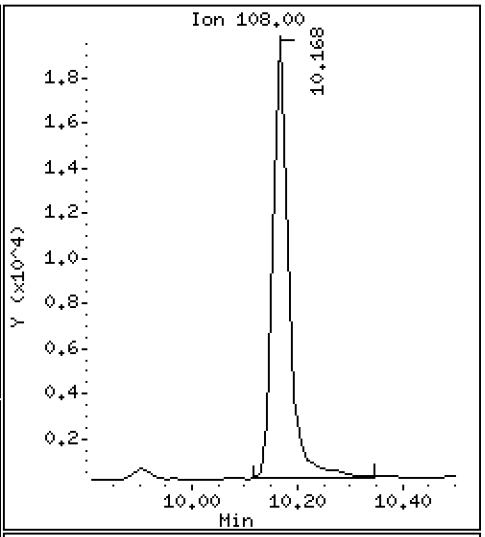
Column phase: ZB-5msi

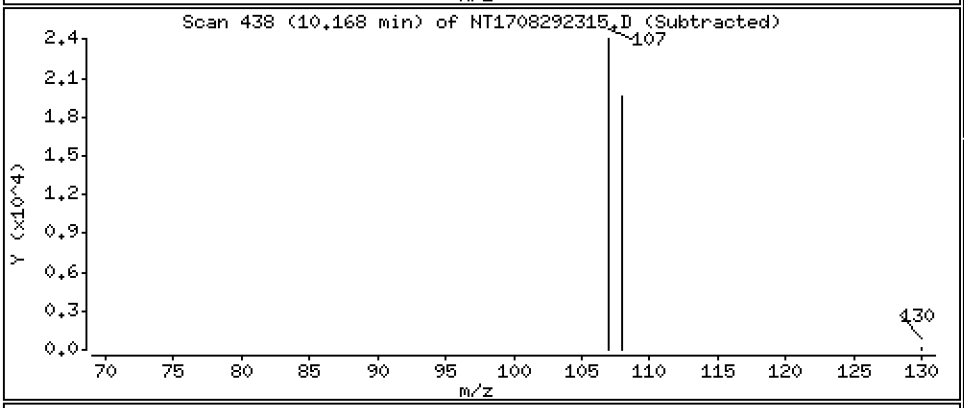
Column diameter: 0.25

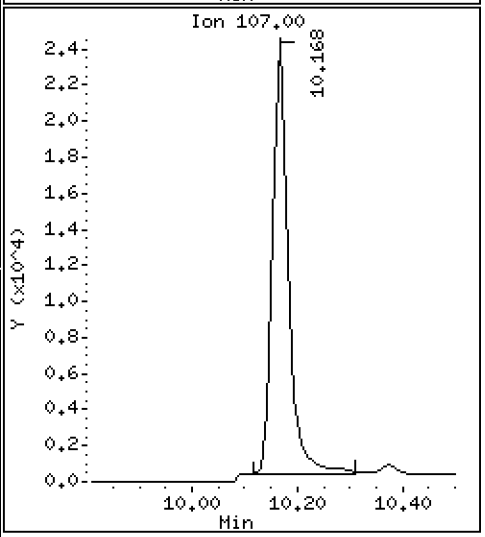
15 4-Methylphenol

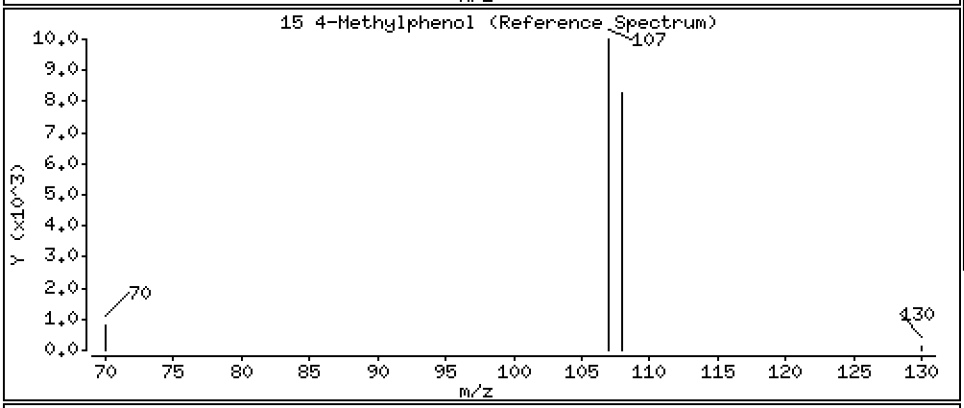
Concentration: 0.2653 ug/mL

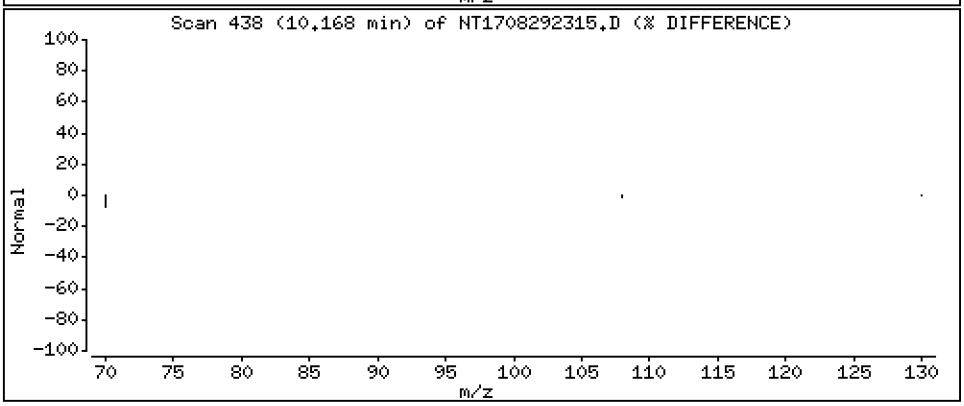












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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

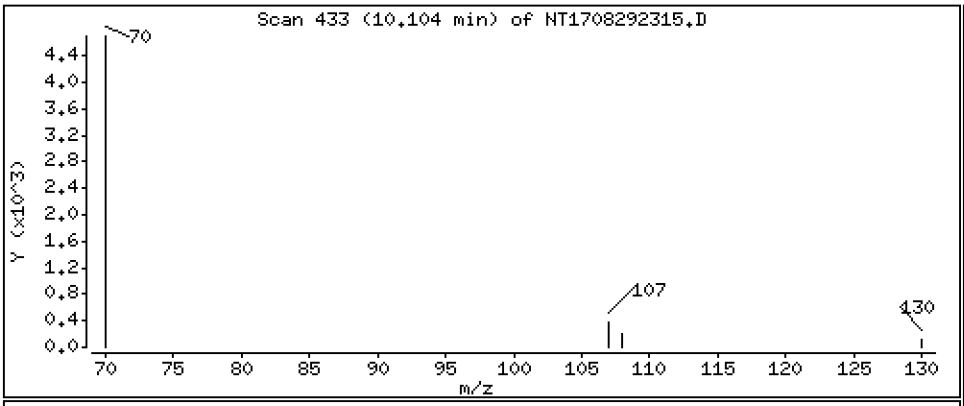
Operator: JGR

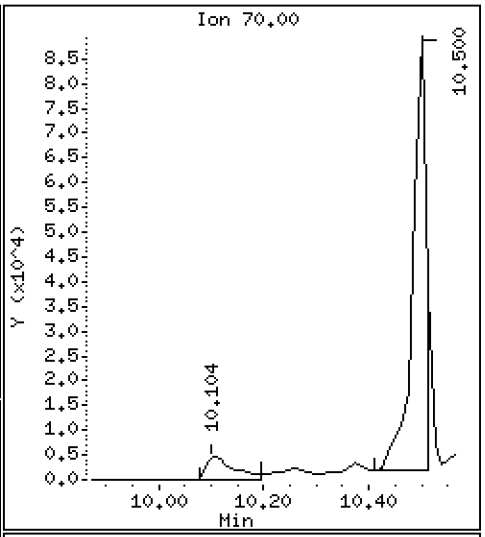
Column phase: ZB-5msi

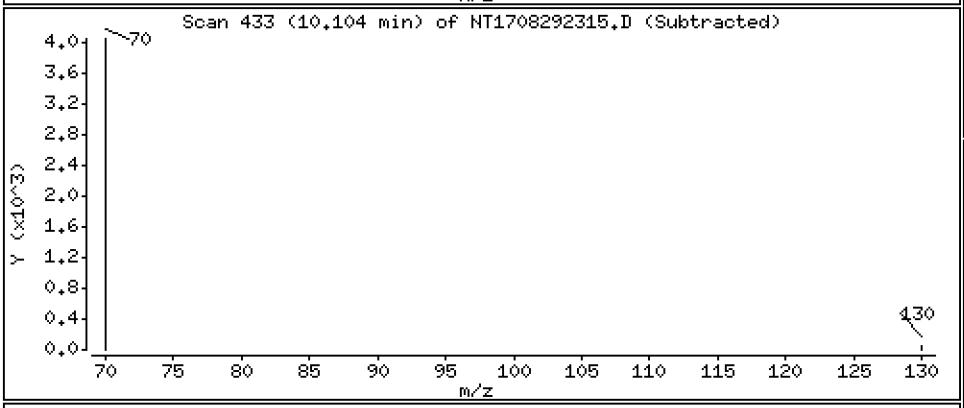
Column diameter: 0.25

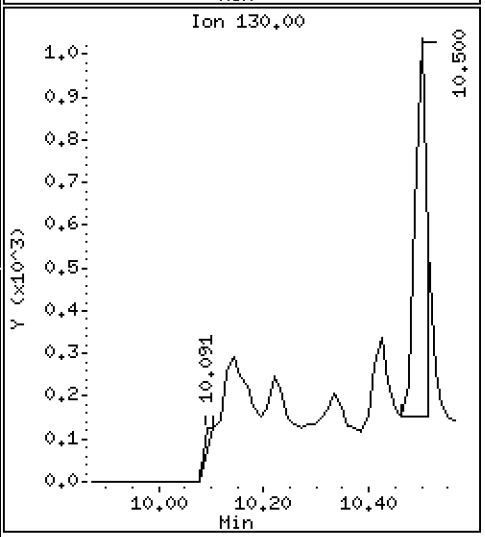
16 N-Nitroso-di-n-propylamine

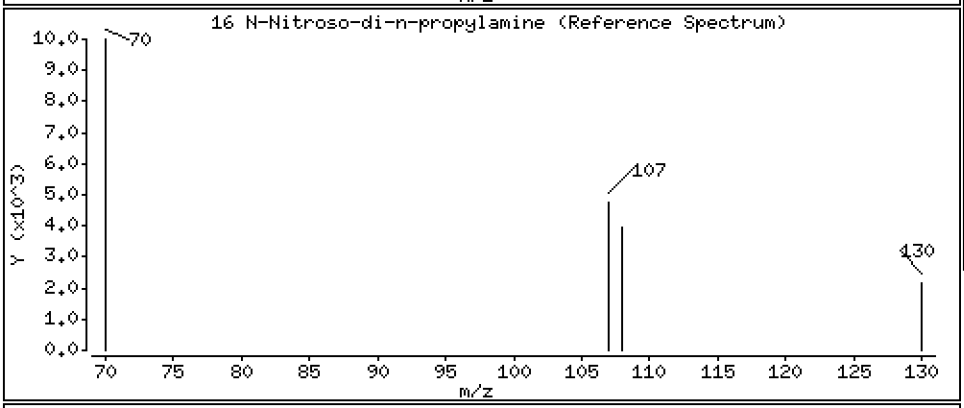
Concentration: 0.1112 ug/mL

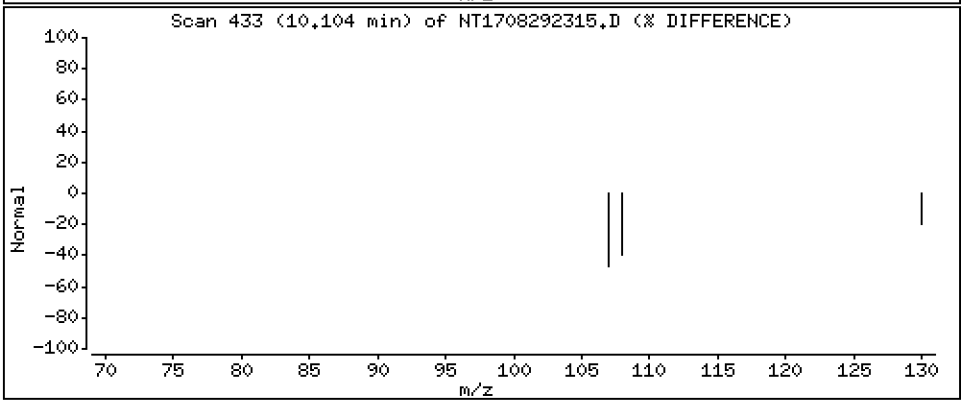












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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

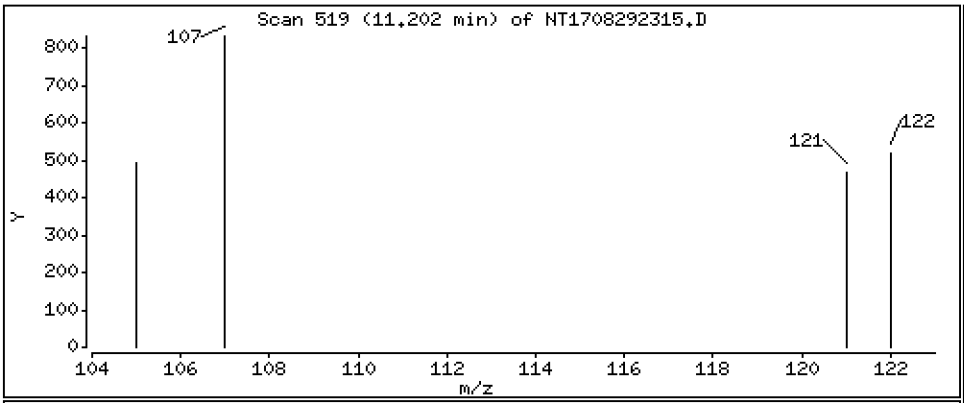
Operator: JGR

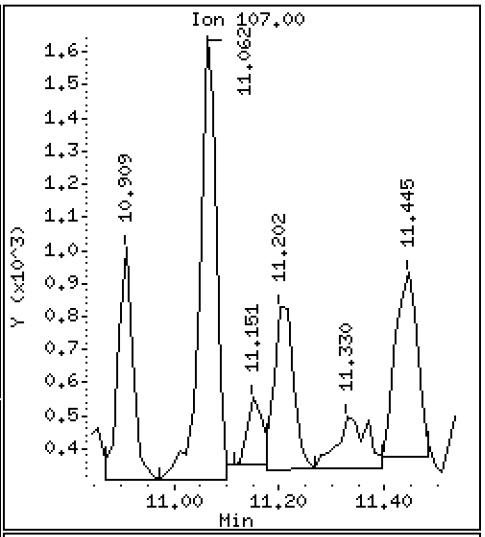
Column phase: ZB-5msi

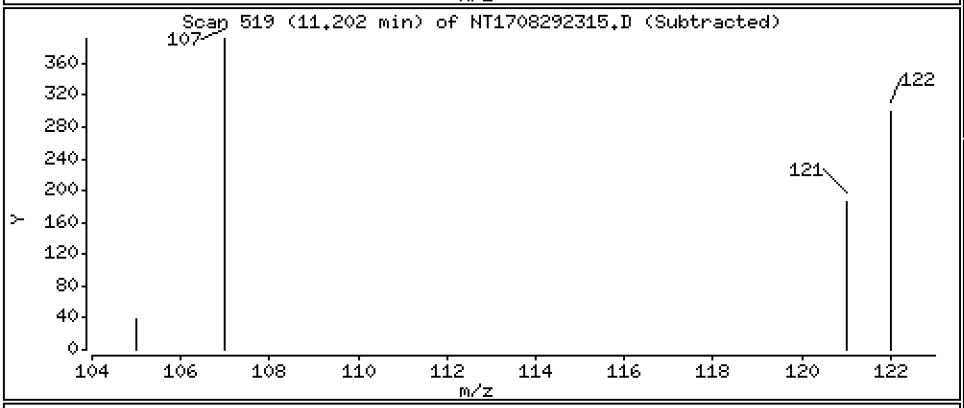
Column diameter: 0.25

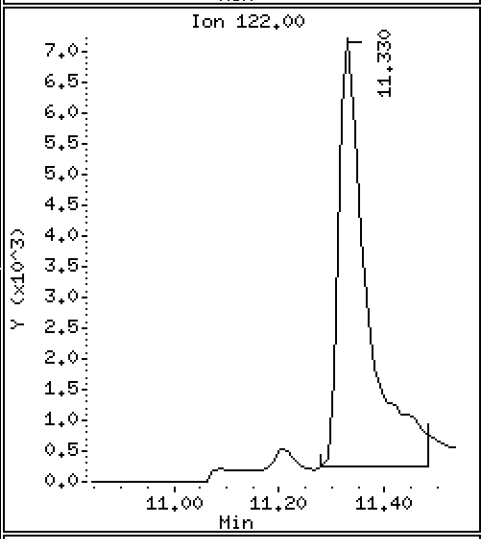
22 2,4-Dimethylphenol

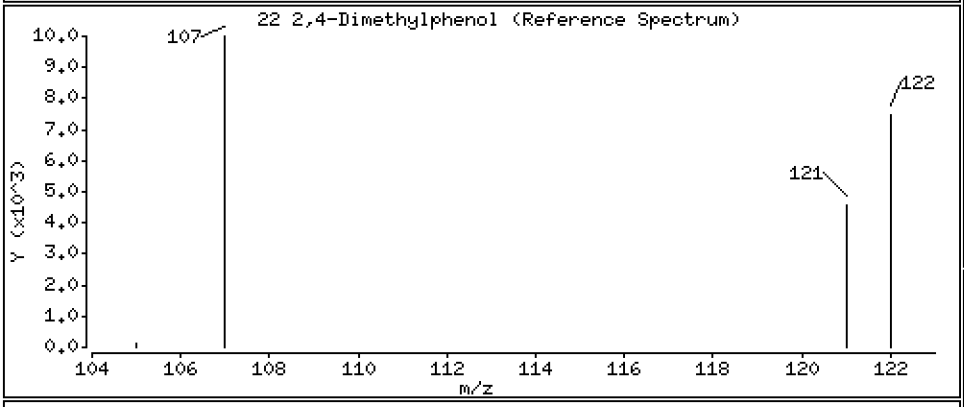
Concentration: 0.009319 ug/mL

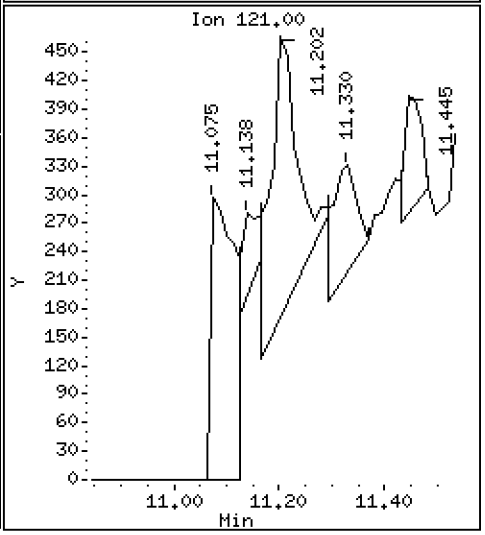


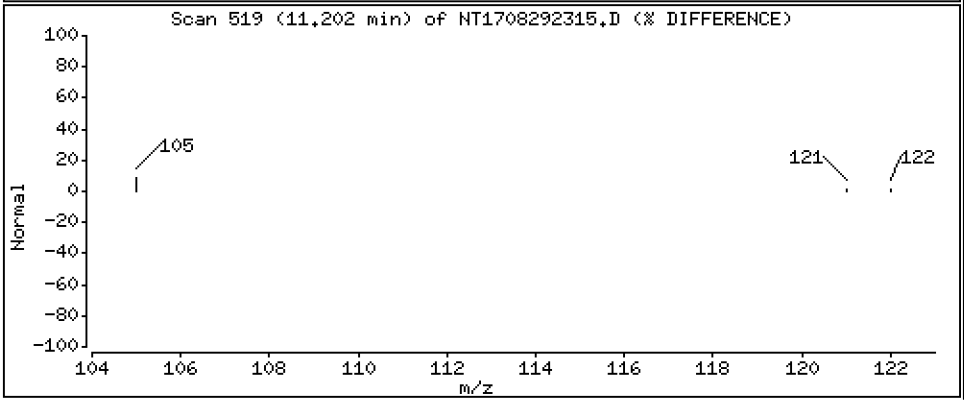












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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

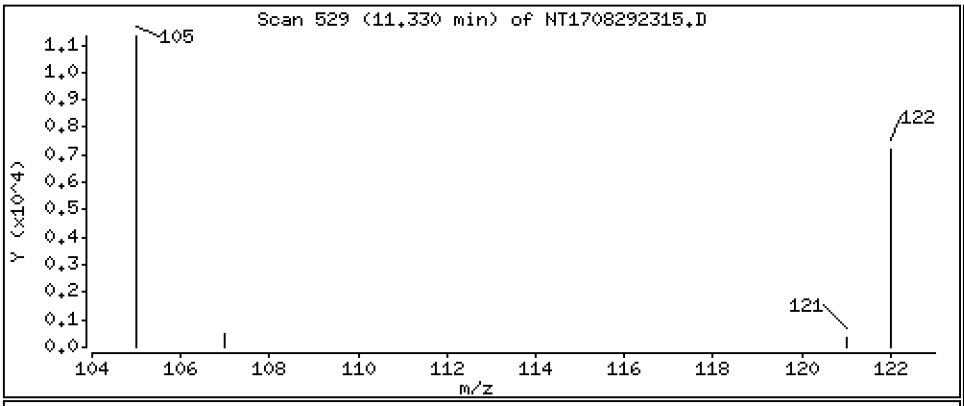
Operator: JGR

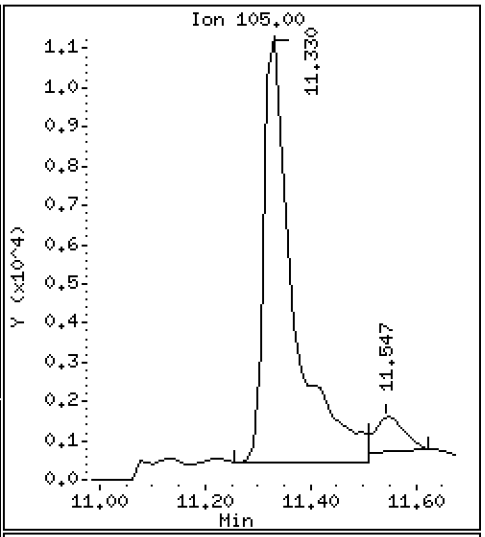
Column phase: ZB-5msi

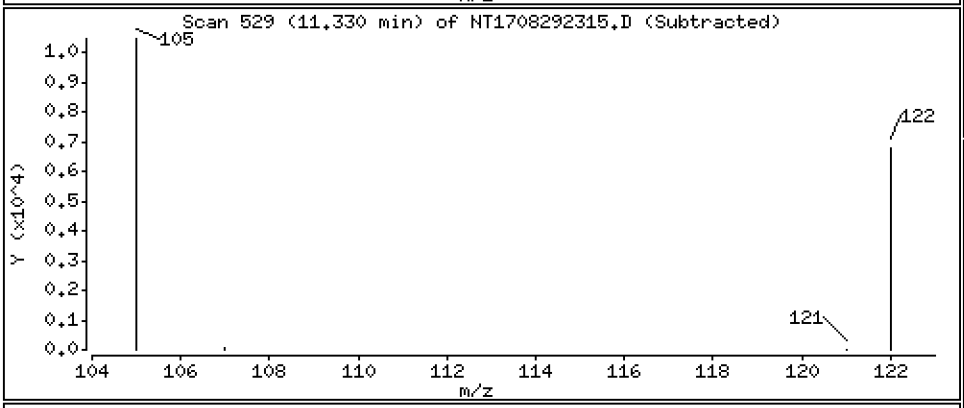
Column diameter: 0.25

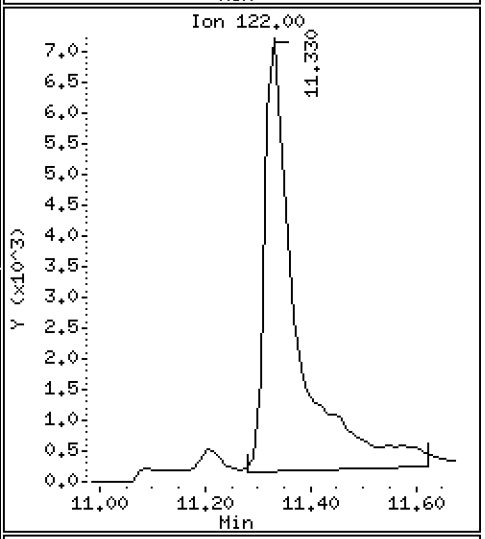
24 Benzoic acid

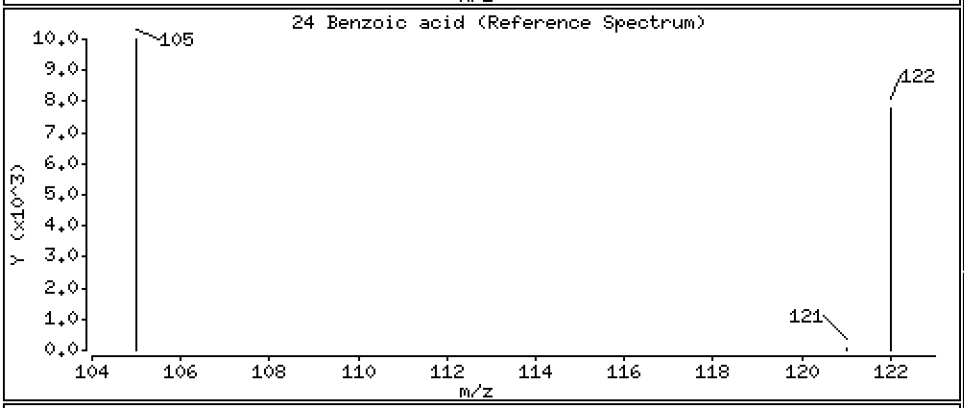
Concentration: 0.4717 ug/mL

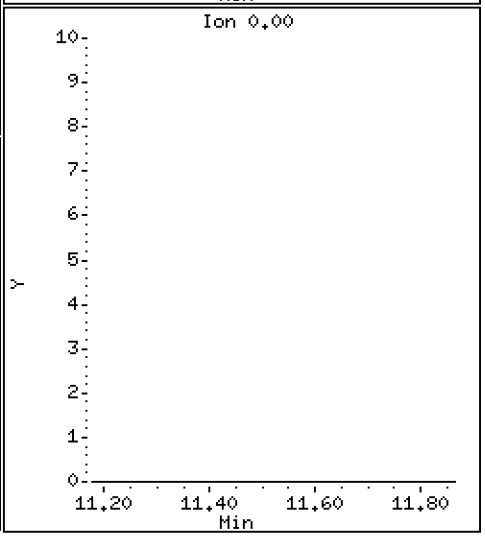


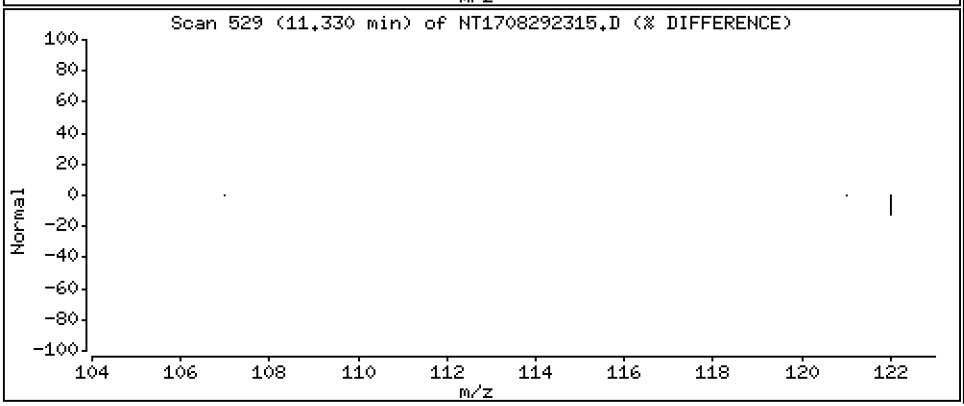












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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

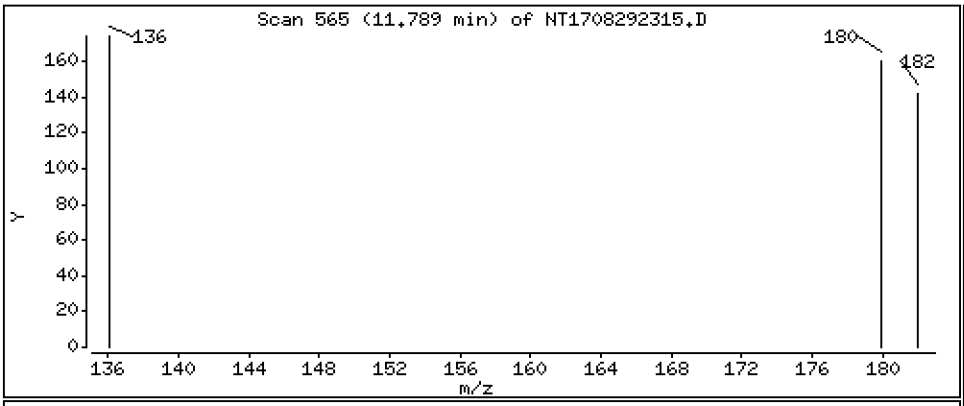
Operator: JGR

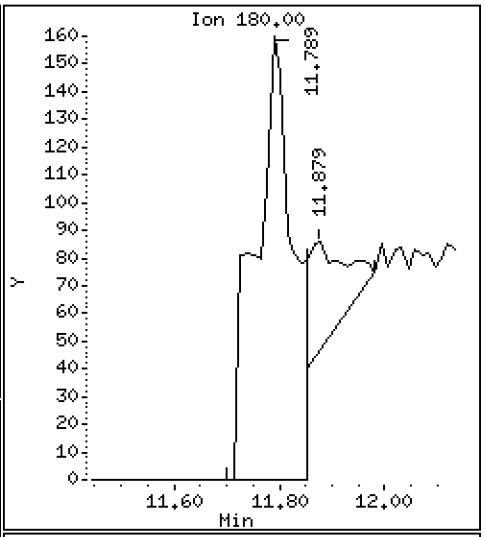
Column phase: ZB-5msi

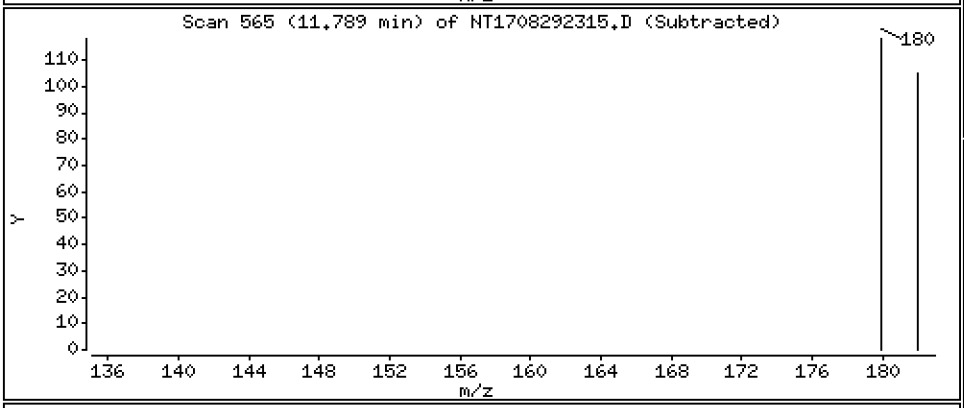
Column diameter: 0.25

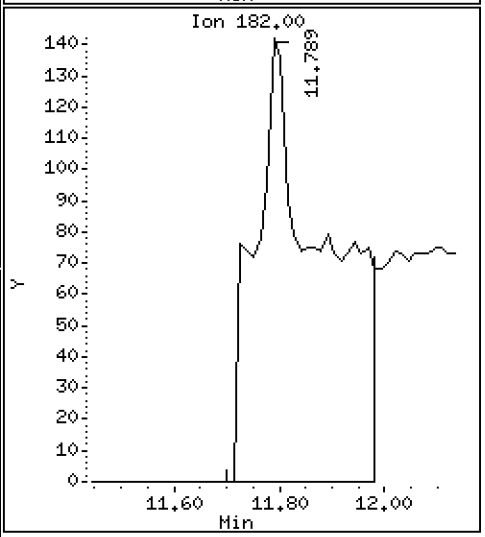
26 1,2,4-Trichlorobenzene

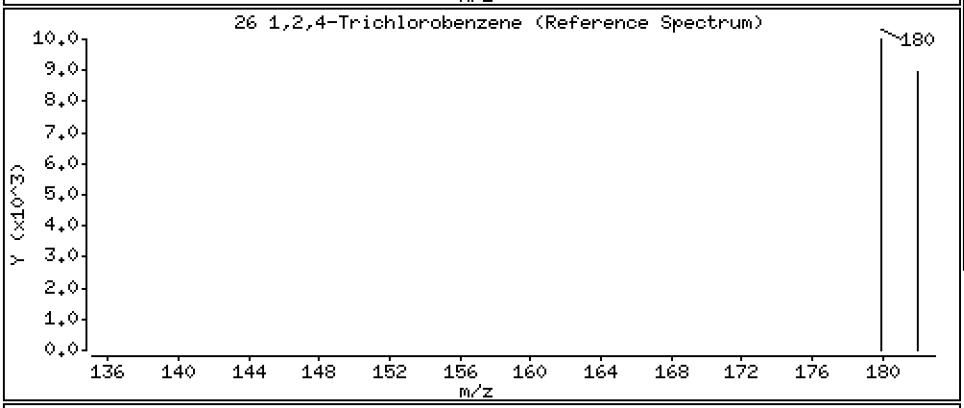
Concentration: 0.008452 ug/mL

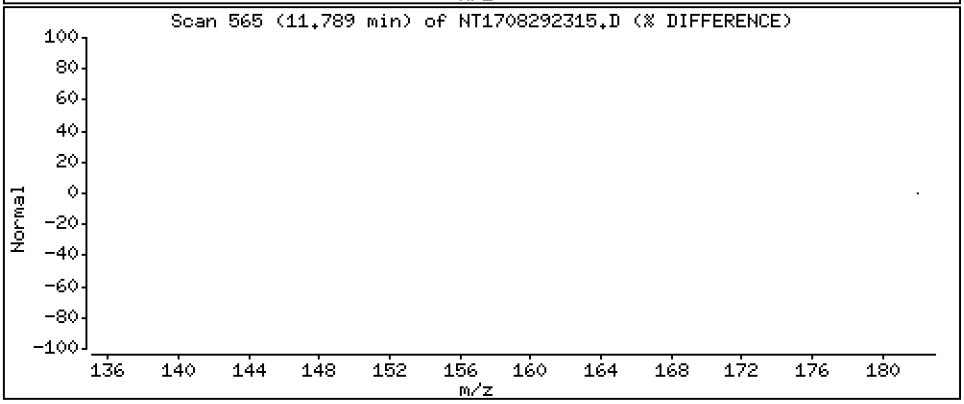












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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

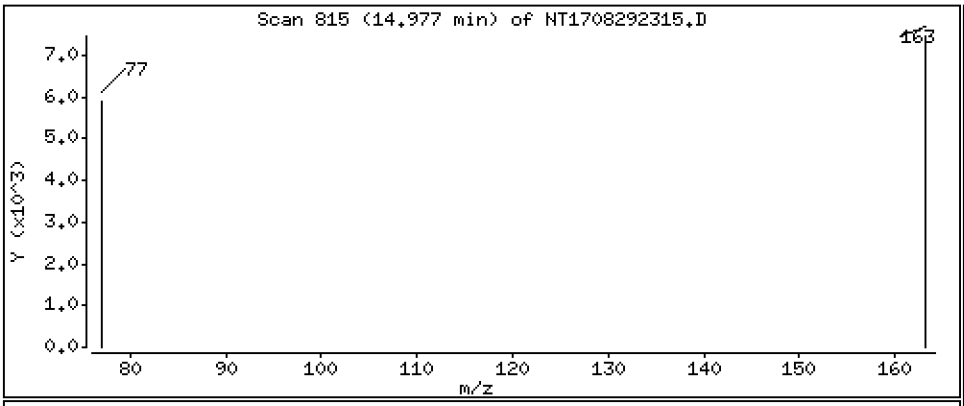
Operator: JGR

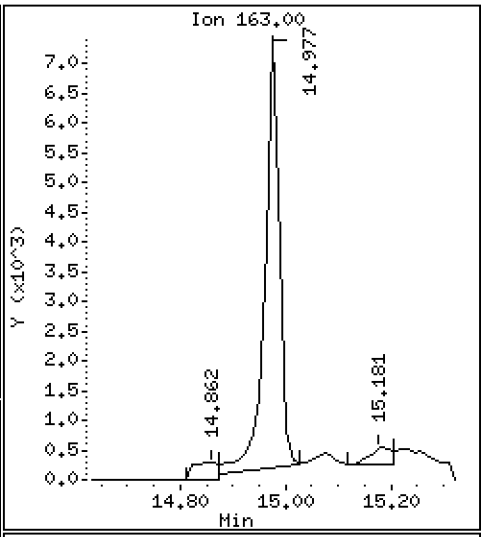
Column phase: ZB-5msi

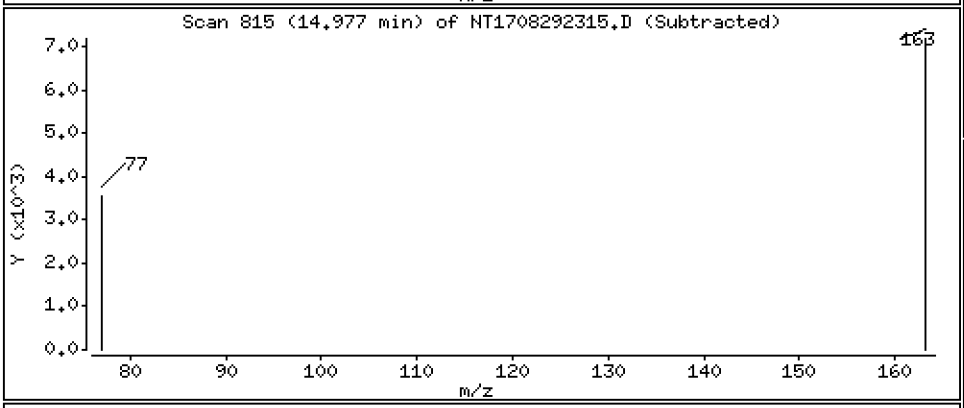
Column diameter: 0.25

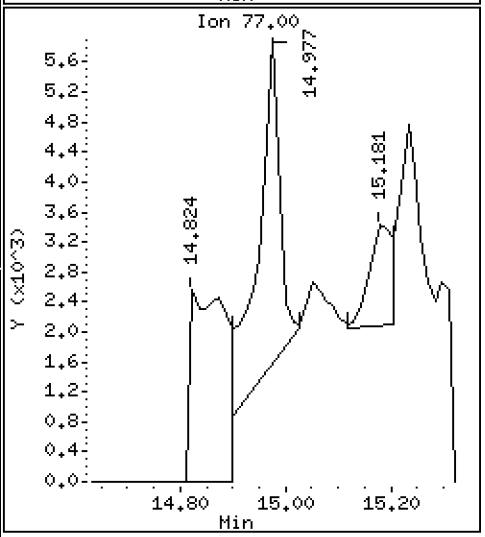
39 Dimethylphthalate

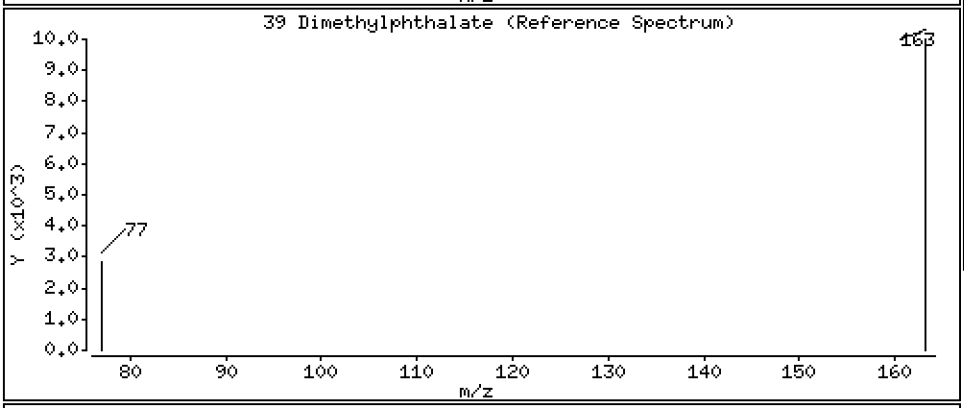
Concentration: 0.08196 ug/mL

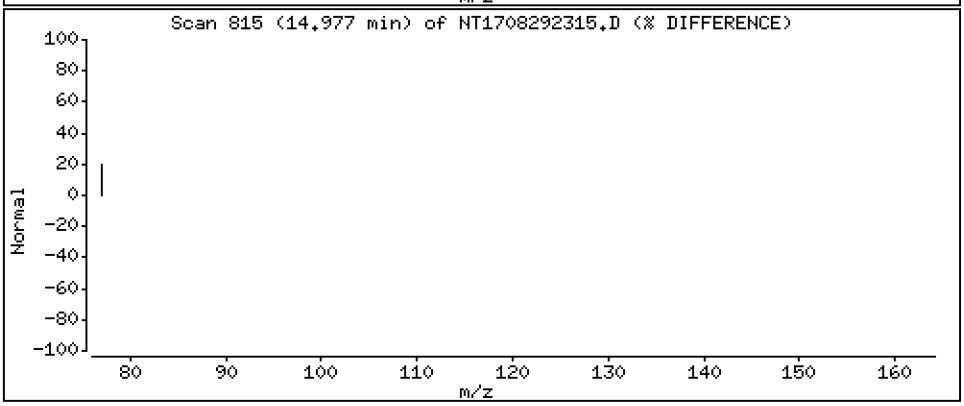












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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

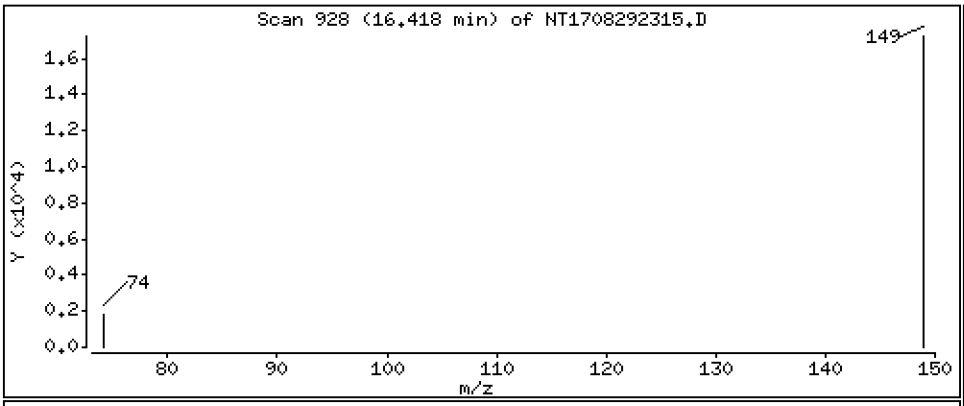
Operator: JGR

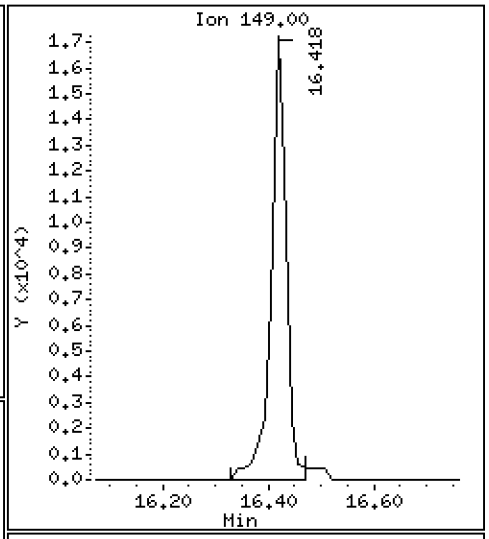
Column phase: ZB-5msi

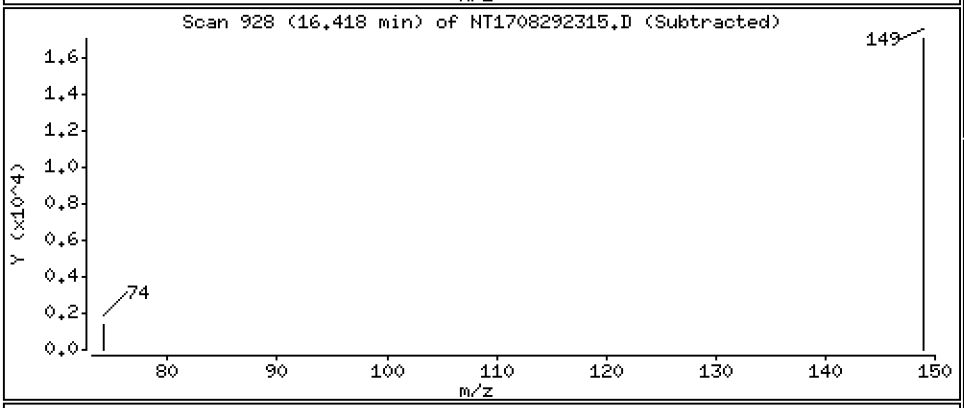
Column diameter: 0.25

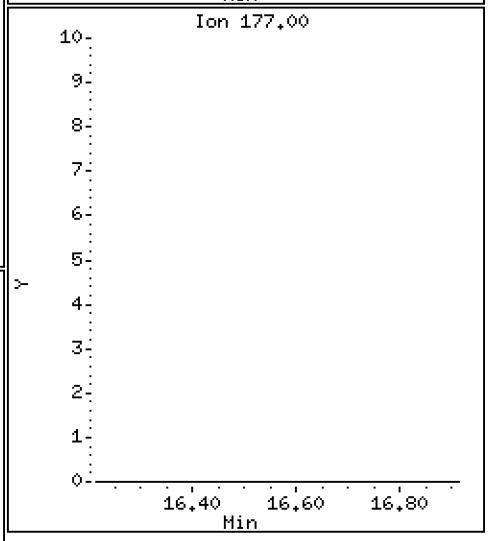
50 Diethylphthalate

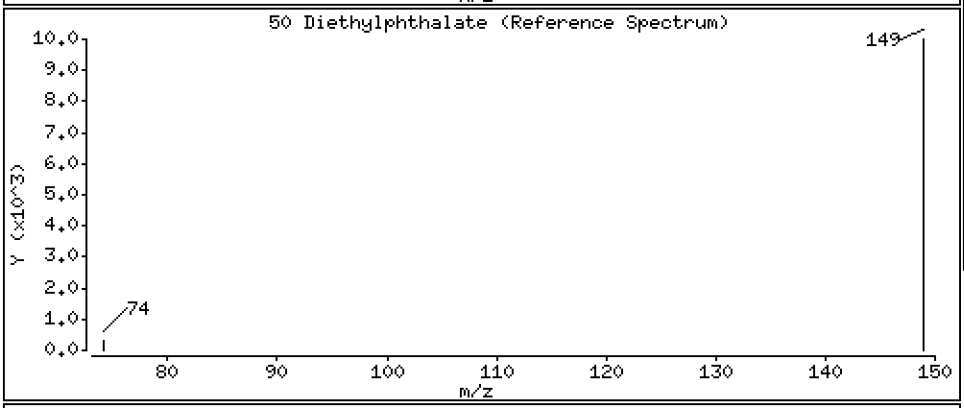
Concentration: 0.1934 ug/mL

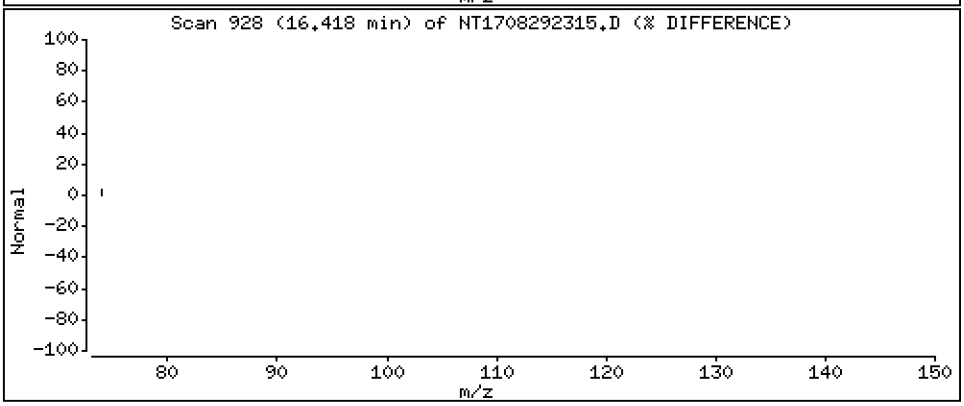












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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

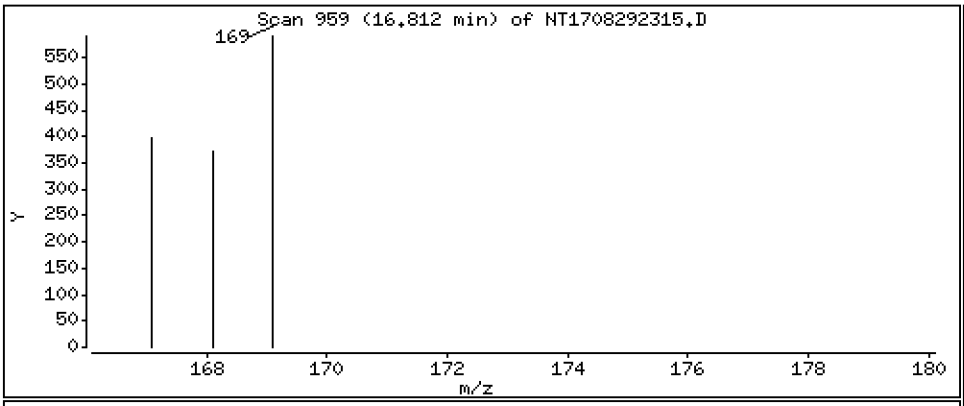
Operator: JGR

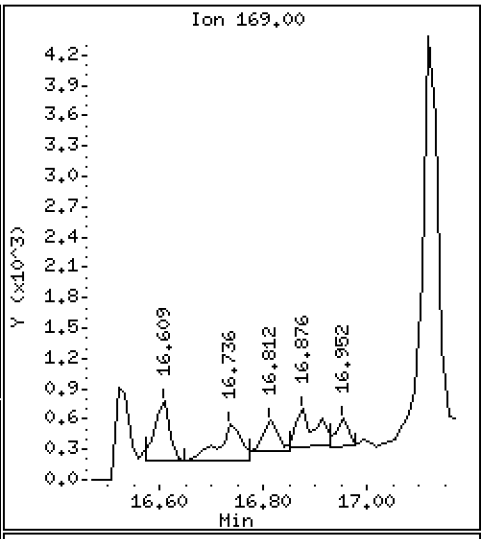
Column phase: ZB-5msi

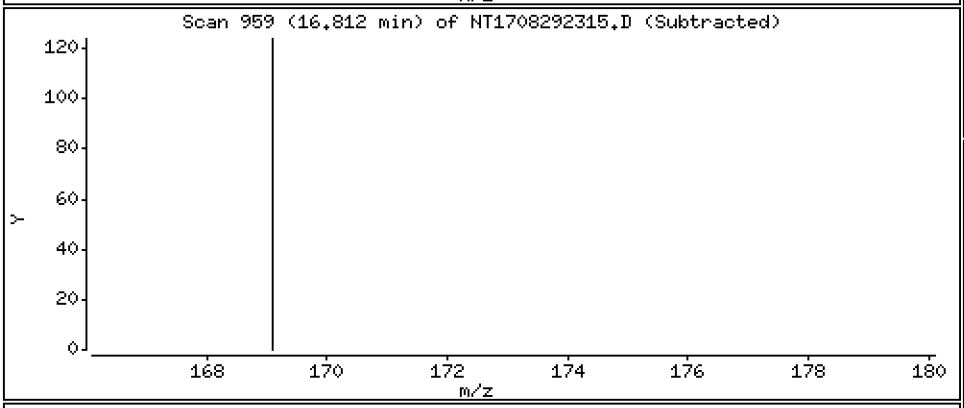
Column diameter: 0.25

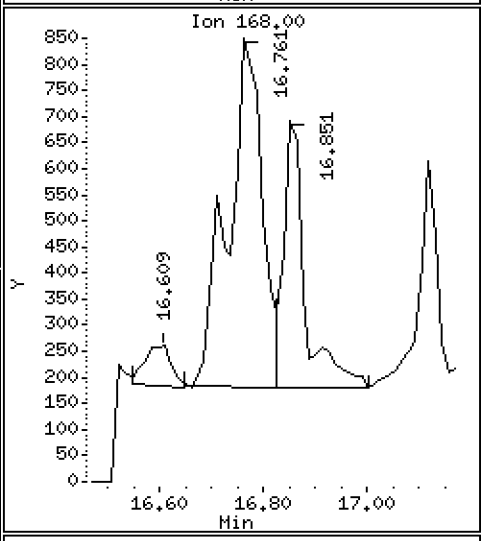
54 N-Nitrosodiphenylamine

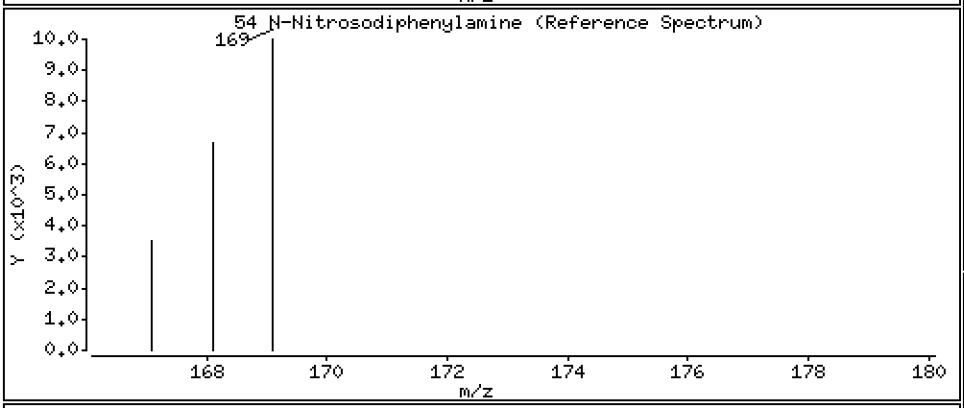
Concentration: 0.006173 ug/mL

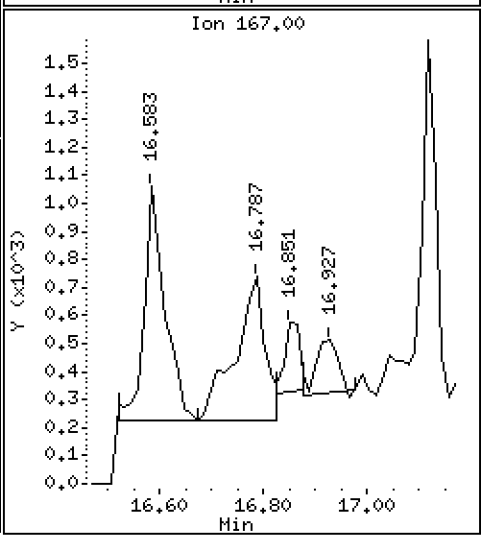


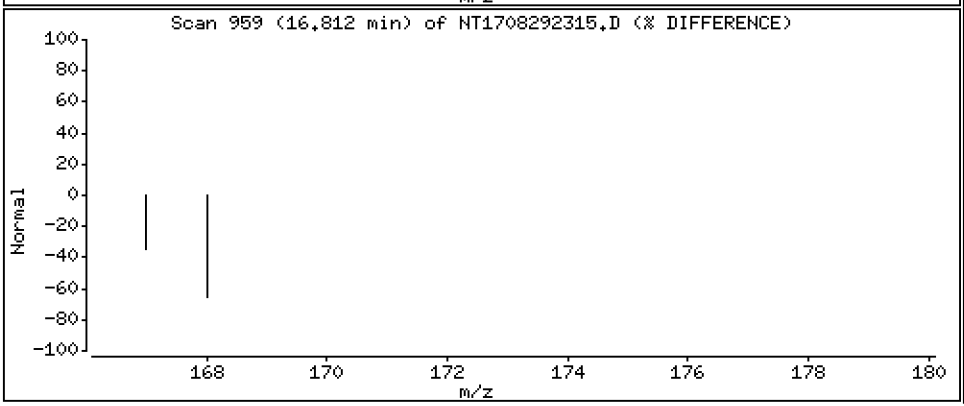












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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

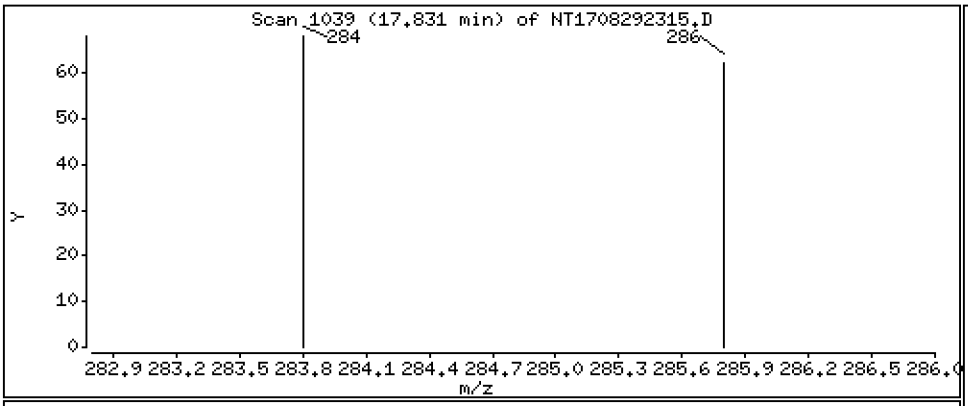
Operator: JGR

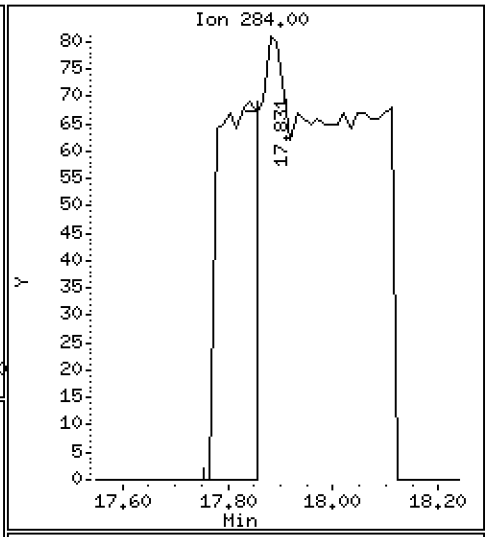
Column phase: ZB-5msi

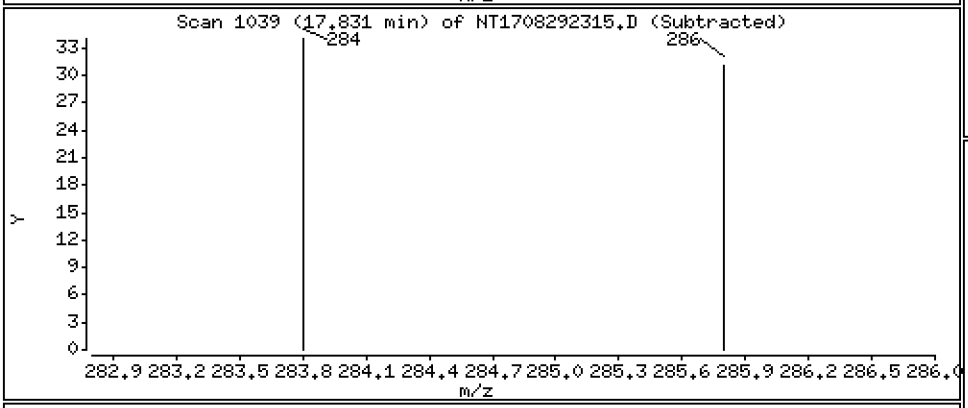
Column diameter: 0.25

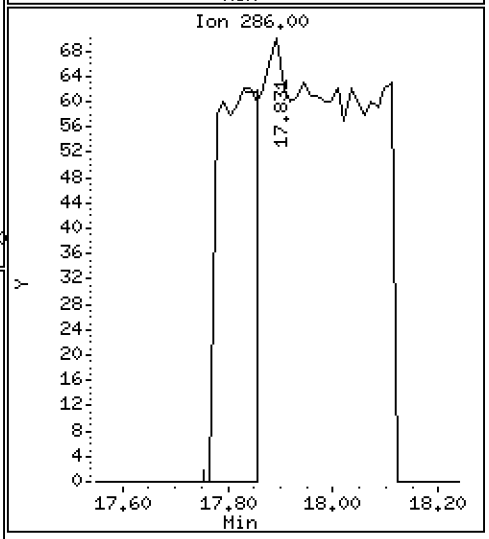
57 Hexachlorobenzene

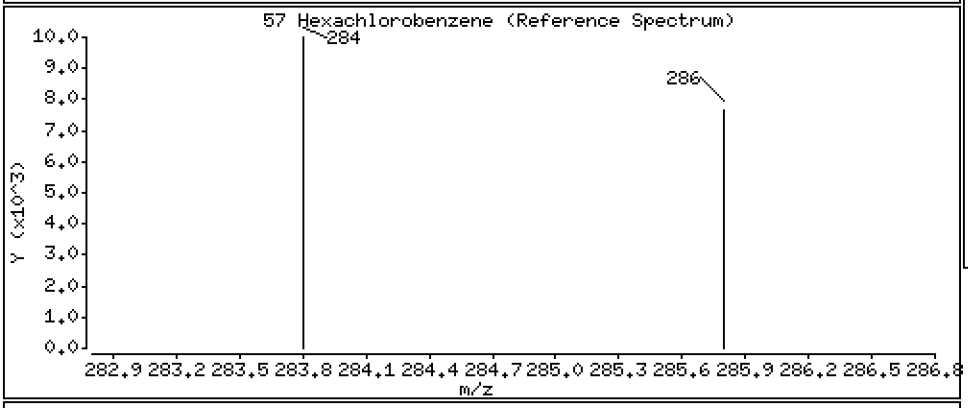
Concentration: 0.01032 ug/mL

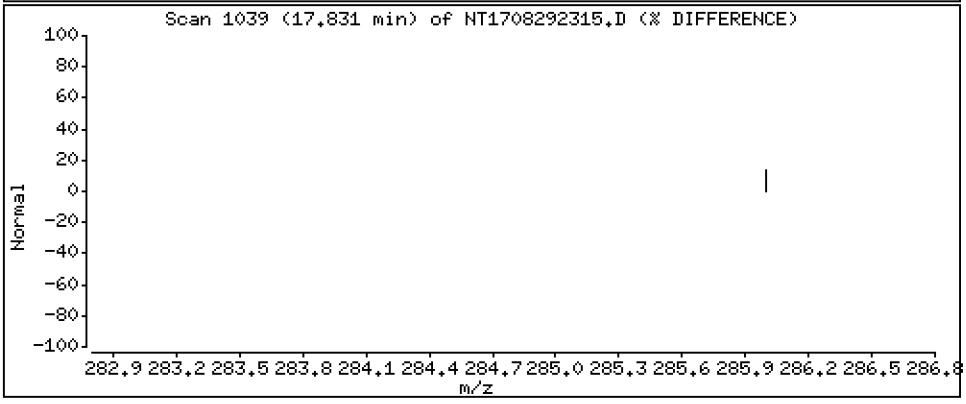












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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

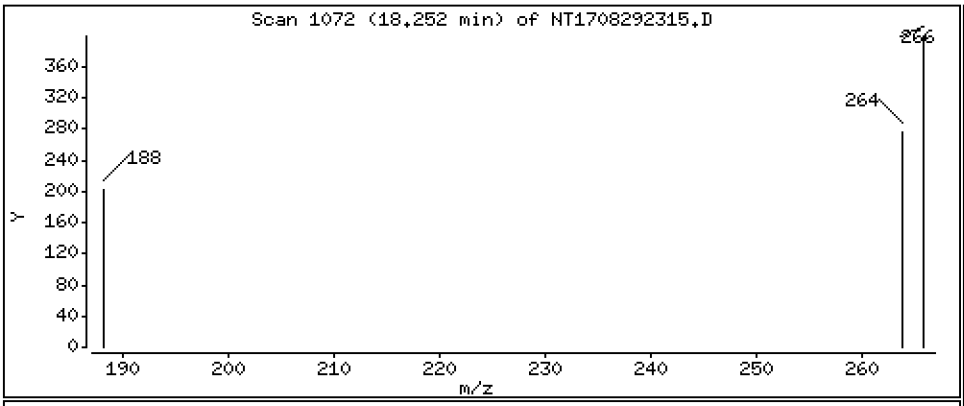
Operator: JGR

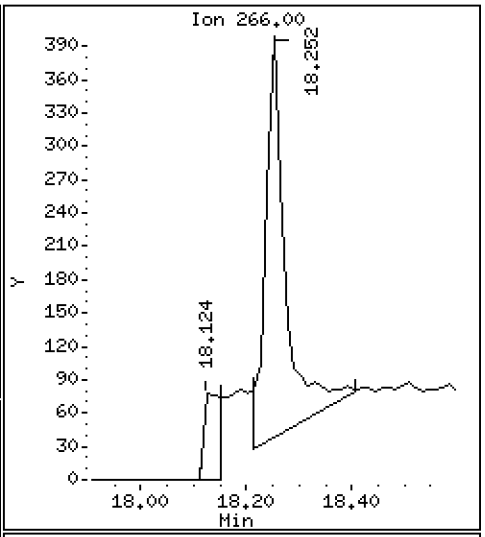
Column phase: ZB-5msi

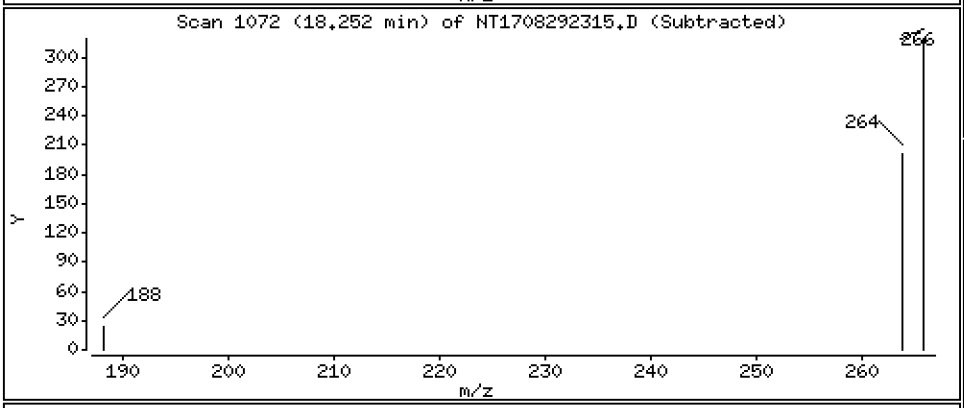
Column diameter: 0.25

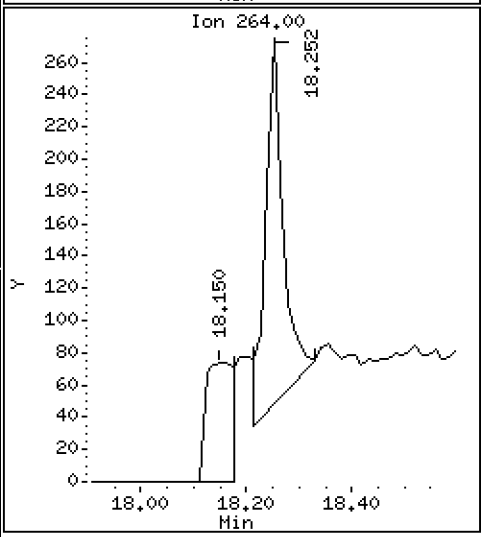
58 Pentachlorophenol

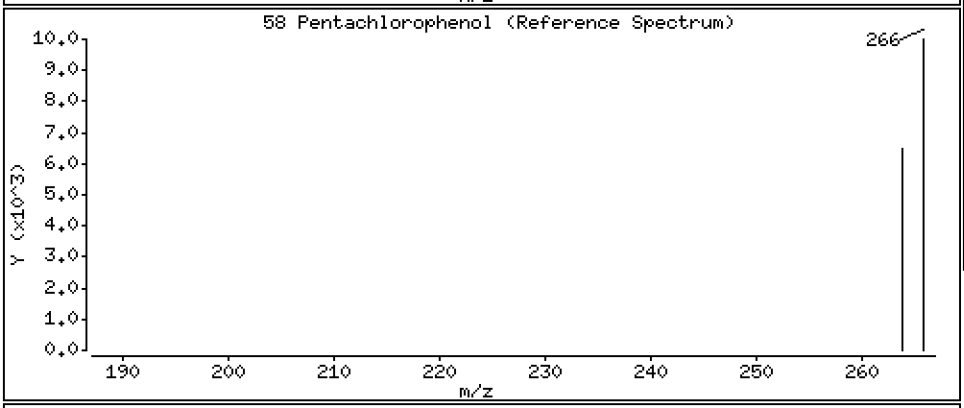
Concentration: 0.04126 ug/mL

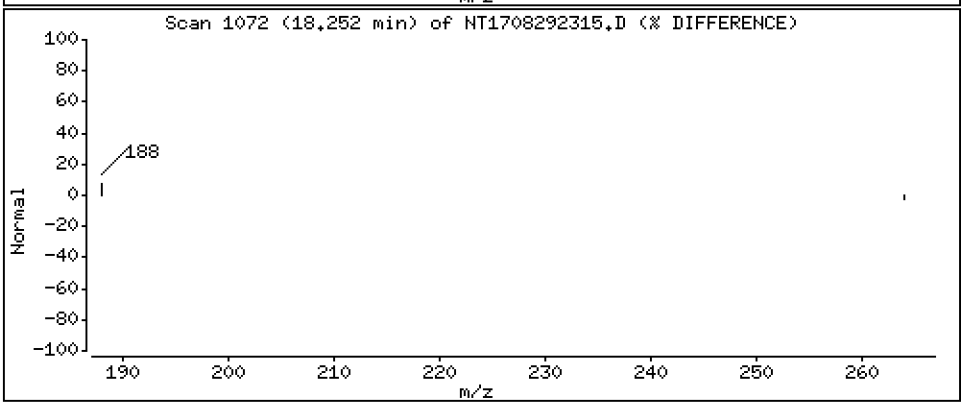












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292315.D

Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

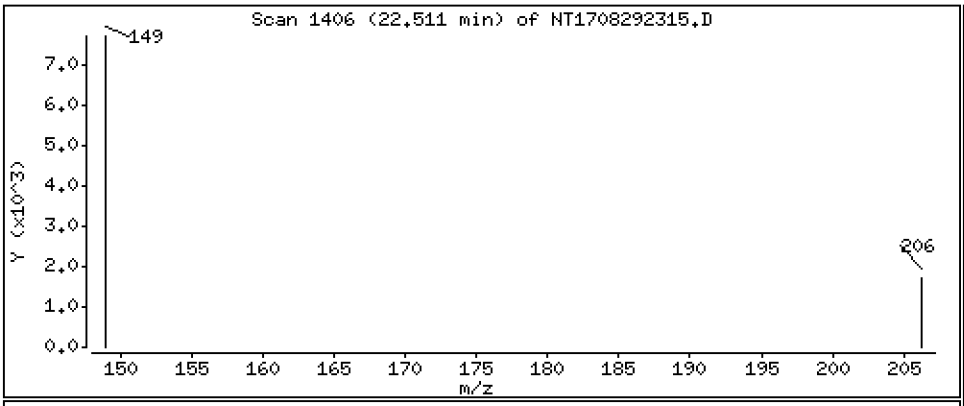
Operator: JGR

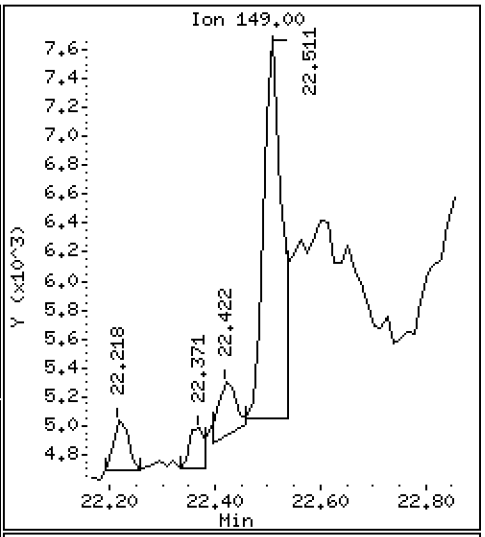
Column phase: ZB-5msi

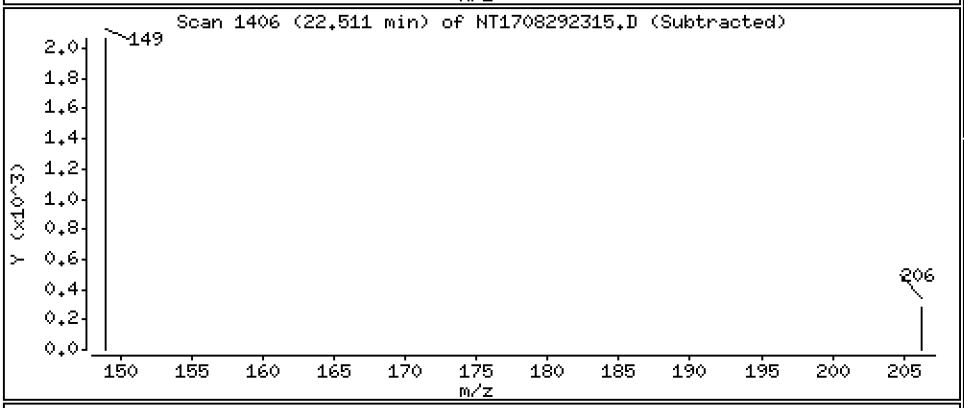
Column diameter: 0.25

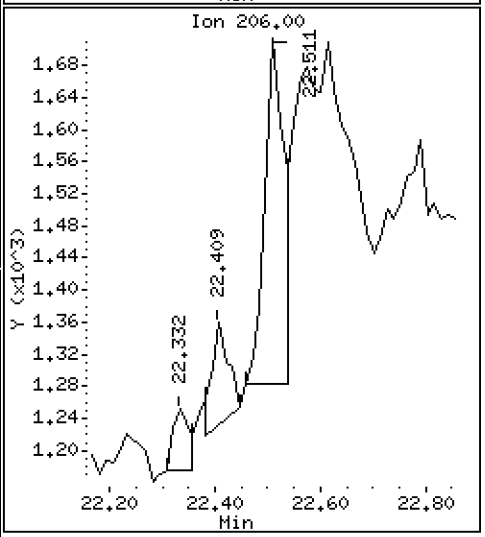
67 Butylbenzylphthalate

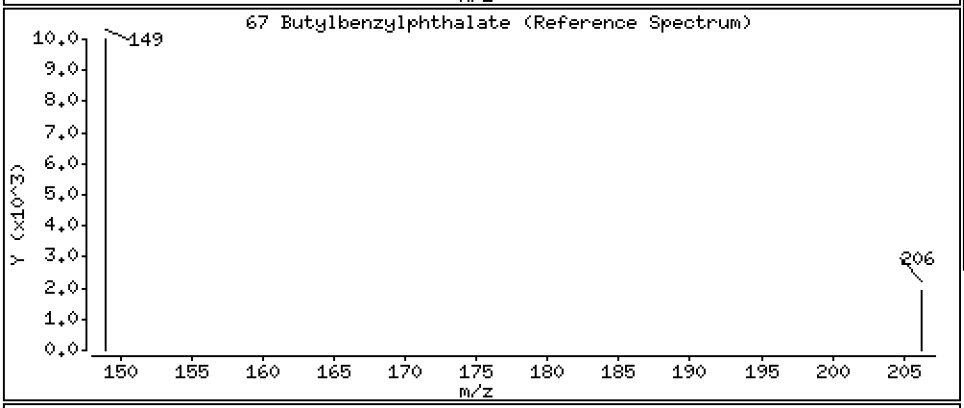
Concentration: 0.04598 ug/mL

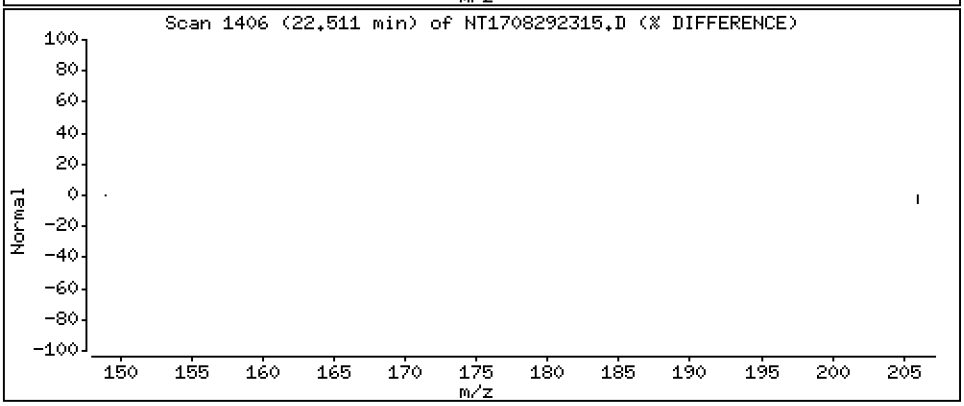












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Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

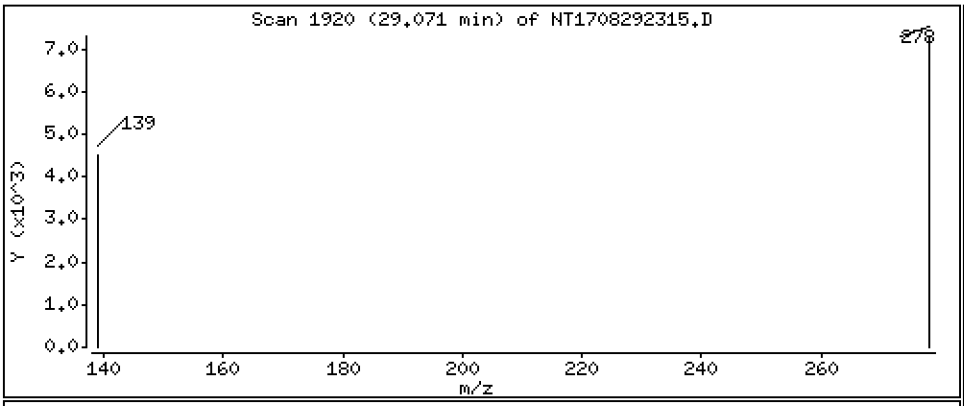
Operator: JGR

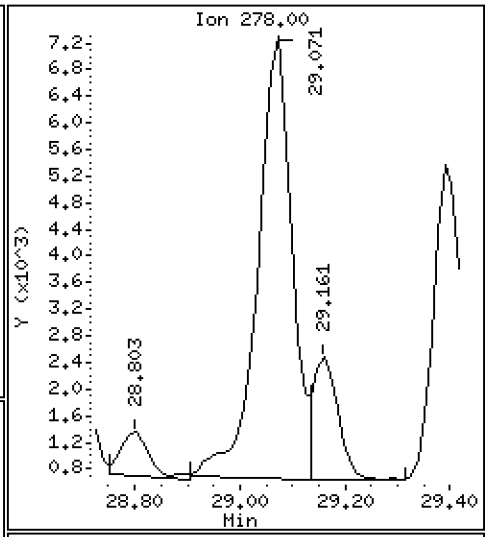
Column phase: ZB-5msi

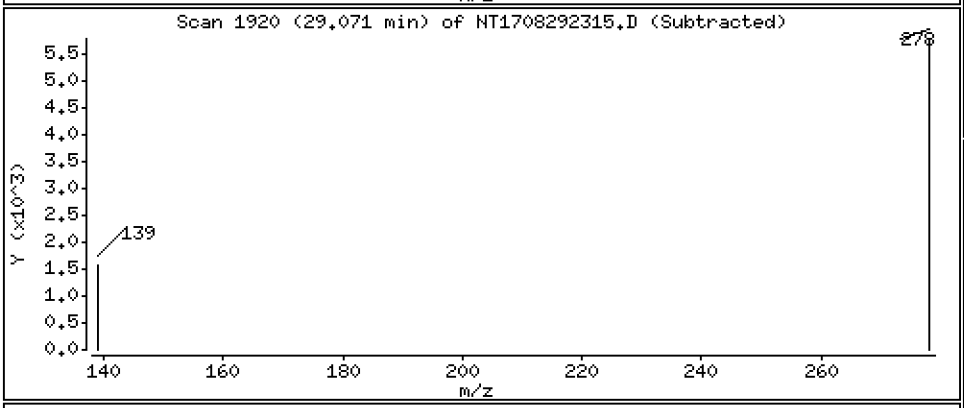
Column diameter: 0.25

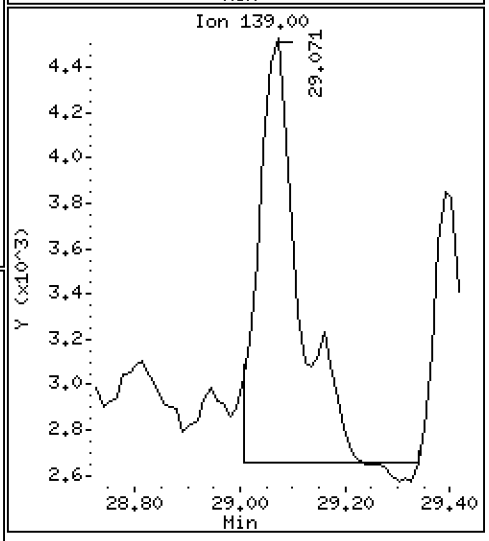
79 Dibenzo(a,h)anthracene

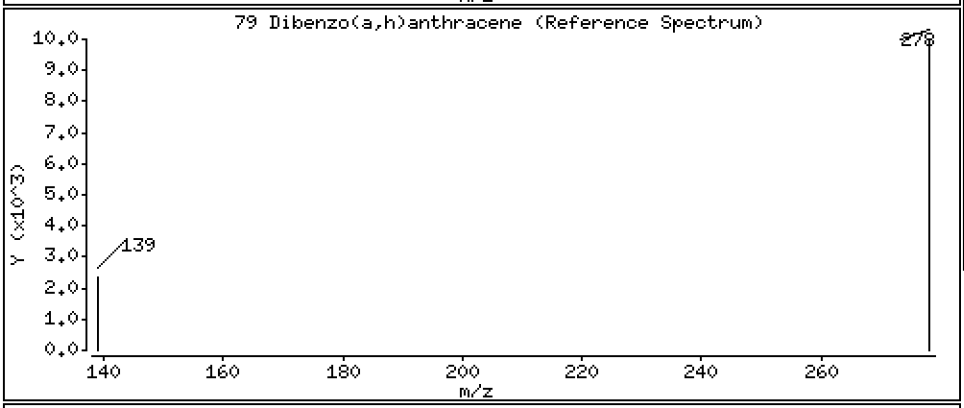
Concentration: 0.1499 ug/mL

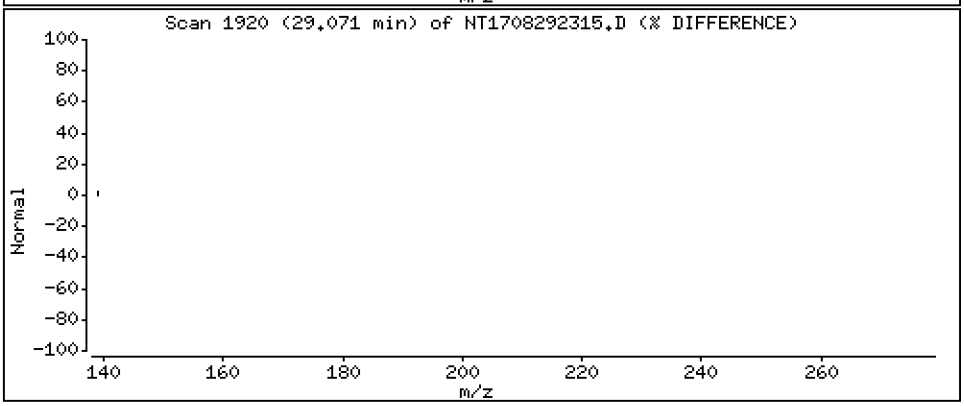












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292315.D

Date : 29-AUG-2023 20:19

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-04

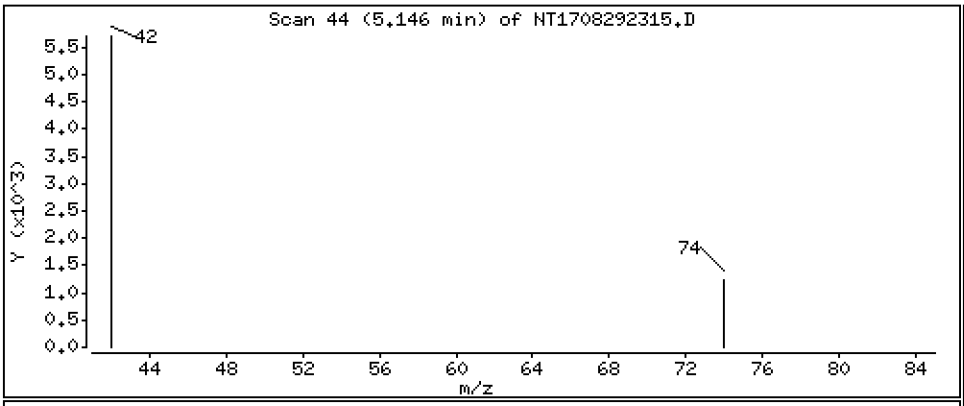
Operator: JGR

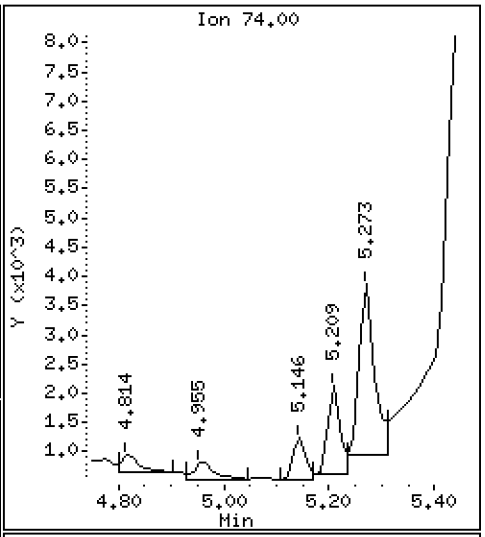
Column phase: ZB-5msi

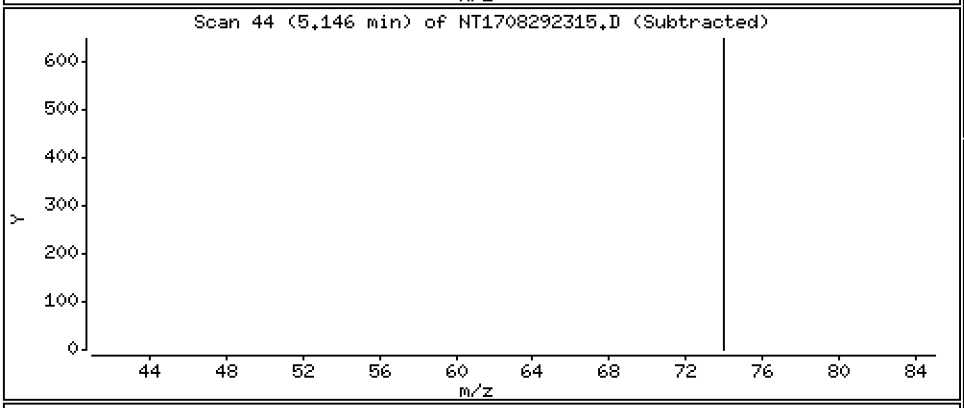
Column diameter: 0.25

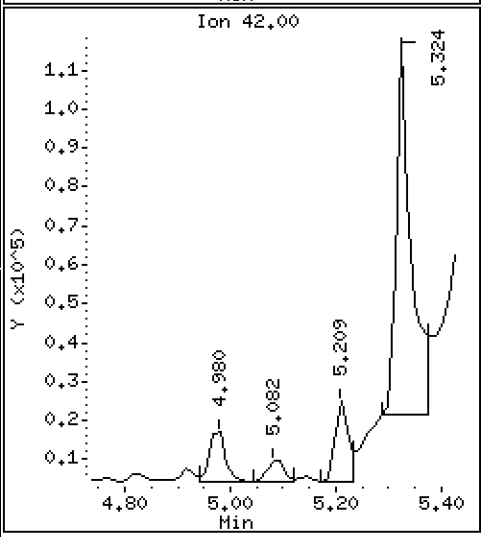
90 N-Nitrosodimethylamine

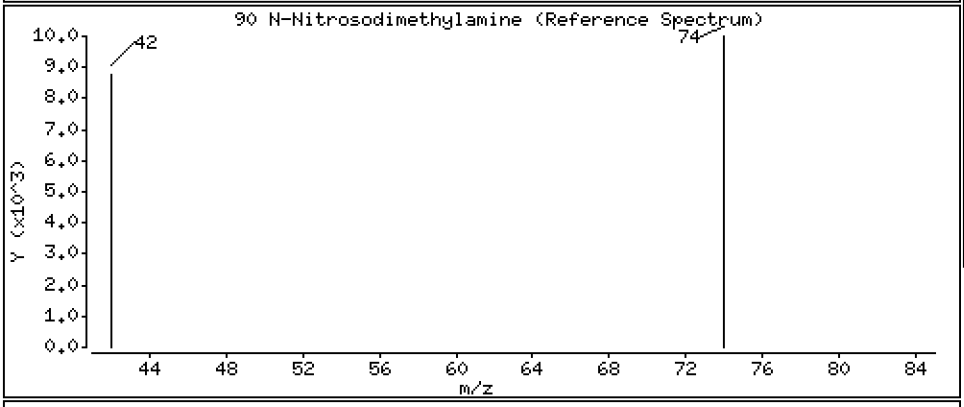
Concentration: 0.007851 ug/mL

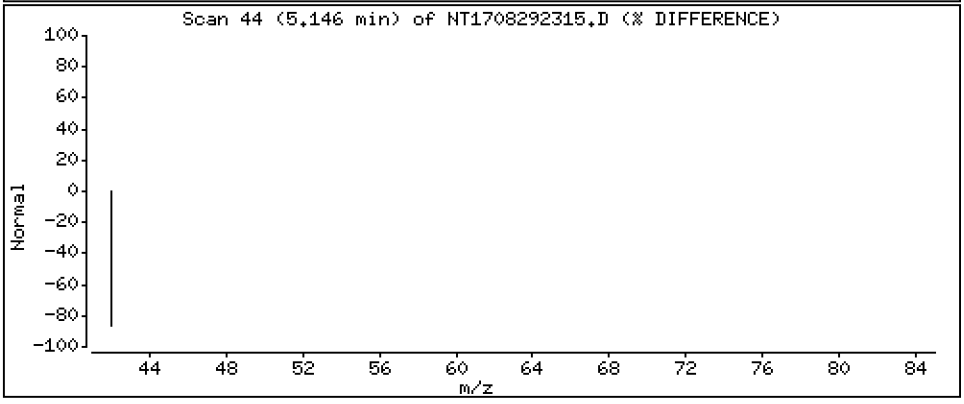












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292315.D
Lab Smp Id: 23H0579-04
Inj Date : 29-AUG-2023 20:19
Operator : JGR Inst ID: nt17.i
Smp Info : 23H0579-04
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 09:25 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.222	7.196	(0.767)	876191	5.44749	5.447(R)
	3 Phenol	94	8.789	8.776	(0.934)	15782	0.06437	0.06437
	7 1,3-Dichlorobenzene	146	9.349	9.349	(0.993)	602	0.00363	0.003630
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	387366	4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	828	0.00516	0.005159
	11 Benzyl alcohol	79	9.682	9.669	(1.028)	16886	0.09950	0.09950
	12 1,2-Dichlorobenzene	146	9.797	9.797	(1.041)	944	0.00606	0.006063
	13 2-Methylphenol	108	9.771	9.886	(1.038)	8690	0.05845	0.05845
	15 4-Methylphenol	108	10.167	10.154	(1.080)	41223	0.26529	0.2653
	16 N-Nitroso-di-n-propylamine	70	10.103	10.218	(1.073)	17663	0.11116	0.1112
	22 2,4-Dimethylphenol	107	11.202	11.189	(0.943)	1312	0.00932	0.009319
	24 Benzoic acid	105	11.329	11.329	(0.954)	43449	0.47168	0.4717
	26 1,2,4-Trichlorobenzene	180	11.789	11.789	(0.992)	813	0.00845	0.008452
*	27 Naphthalene-d8	136	11.878	11.878	(1.000)	1403162	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.977	14.977	(0.967)	14009	0.08196	0.08196
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	525861	4.00000	
	50 Diethylphthalate	149	16.417	16.417	(1.060)	34363	0.19336	0.1934
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	648	0.00617	0.006173
	57 Hexachlorobenzene	284	17.830	17.894	(0.963)	355	0.01032	0.01032
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	963	0.04126	0.04126
*	59 Phenanthrene-d10	188	18.519	18.506	(1.000)	730142	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	343790	4.88828	4.888(R)
	67 Butylbenzylphthalate	149	22.511	22.511	(0.958)	6201	0.04598	0.04598
*	69 Chrysene-d12	240	23.506	23.506	(1.000)	508226	4.00000	
*	77 Perylene-d12	264	26.236	26.223	(1.000)	676972	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.071	29.071	(1.108)	29983	0.14995	0.1499
	90 N-Nitrosodimethylamine	74	5.145	5.094	(0.547)	1285	0.00785	0.007851

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 30-Aug-2023 09:26

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292315.D
Lab Smp Id: 23H0579-04
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 29-AUG-2023
Calibration Time: 12:37
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	296489	148245	592978	387366	30.65
27 Naphthalene-d8	1098892	549446	2197784	1403162	27.69
42 Acenaphthene-d10	443071	221536	886142	525861	18.69
59 Phenanthrene-d10	627744	313872	1255488	730142	16.31
69 Chrysene-d12	404122	202061	808244	508226	25.76
77 Perylene-d12	417323	208662	834646	676972	62.22

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	-0.00
27 Naphthalene-d8	11.88	11.38	12.38	11.88	-0.00
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	-0.00
59 Phenanthrene-d10	18.51	18.01	19.01	18.52	0.07
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.22	25.72	26.72	26.24	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292315.D

Lab ID: 23H0579-04
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   29-AUG-2023 20:19

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.038	1.050	-0.0122	2-Methylphenol
1.073	1.085	-0.0122	N-Nitroso-di-n-propylamine
0.547	0.541	0.0054	N-Nitrosodimethylamine

RRT check based on Ccal File: SIM.b/NT1708292304.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1221A

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23H0579-05 A	SDG:	23H0579
Sampled:	01/04/23 13:38	Prepared:	08/25/23 12:39	File ID:	NT1708292316.D
% Solids:	53.15	Preparation:	EPA 3546 (Microwave)	Analyzed:	08/29/23 20:56
Batch:	BLH0669	Sequence:	SLH0447	Initial/Final:	18.87 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GH00045
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
105-67-9	2,4-Dimethylphenol	1	19.9	U	2.2	19.9

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	747.80	523	69.9	27 - 120	
p-Terphenyl-d14	498.53	436	87.5	37 - 120	Q

INTERNAL STANDARDS	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	388539	9.413	296489	9.413	
Naphthalene-d8	1410367	11.878	1098892	11.878	
Acenaphthene-d10	521028	15.487	443071	15.487	
Phenanthrene-d10	707968	18.519	627744	18.506	
Chrysene-d12	495588	23.506	404122	23.506	
Perylene-d12	727498	26.236	417323	26.223	

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292316.D

Date : 29-AUG-2023 20:56

Client ID:

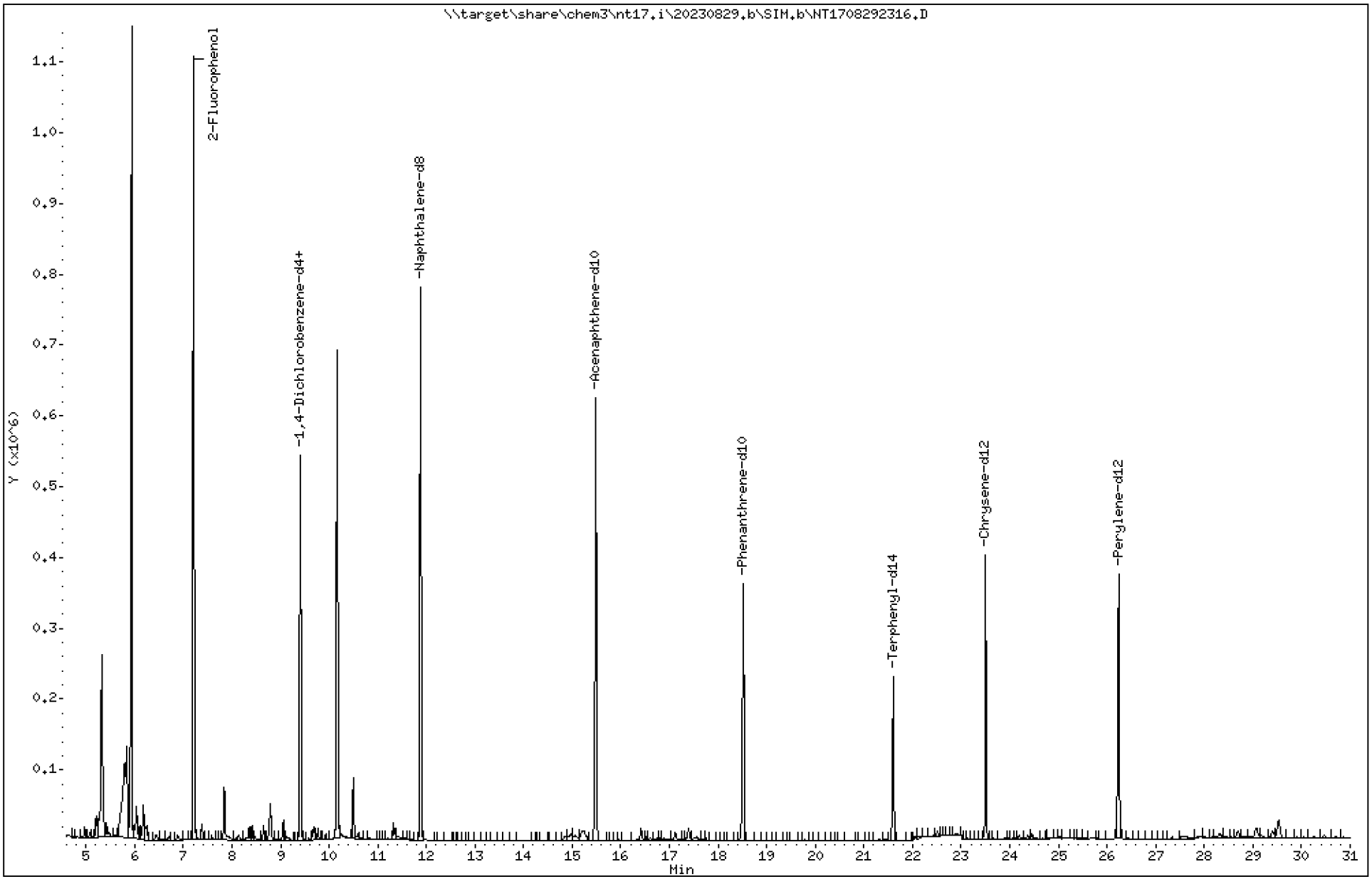
Sample Info: 23H0579-05

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

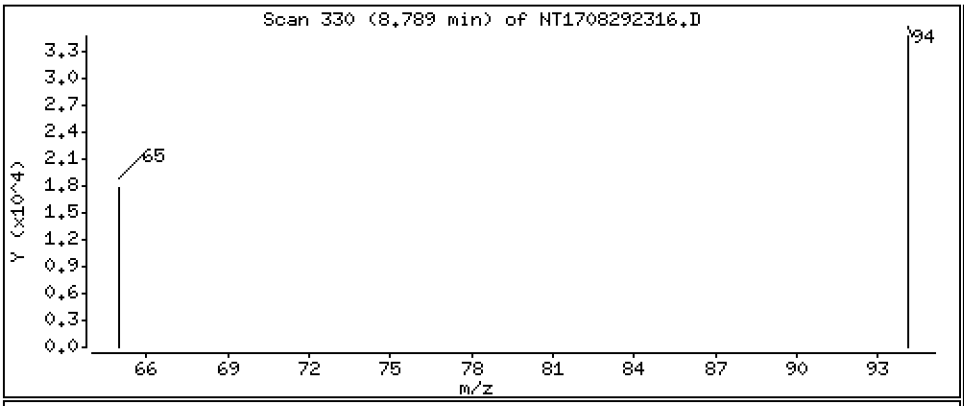
Operator: JGR

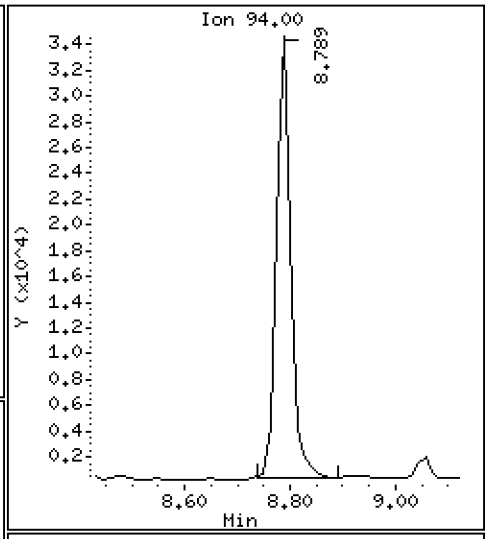
Column phase: ZB-5msi

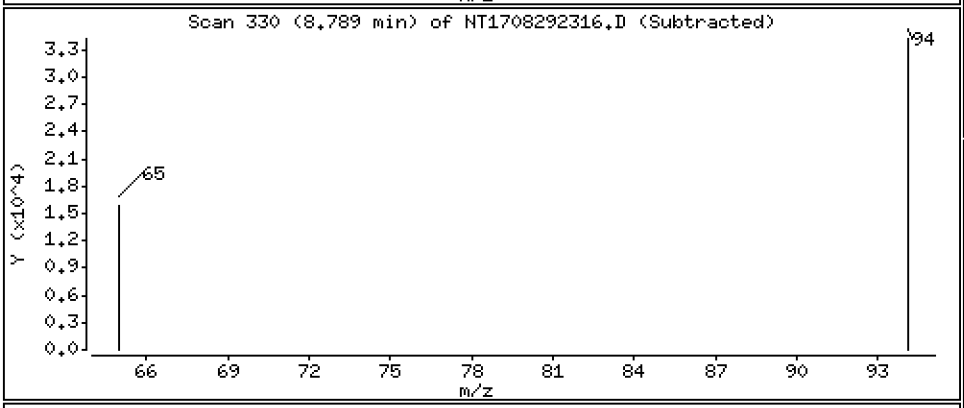
Column diameter: 0.25

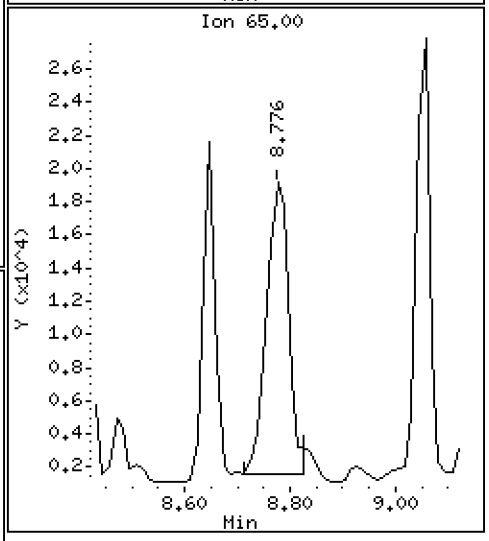
3 Phenol

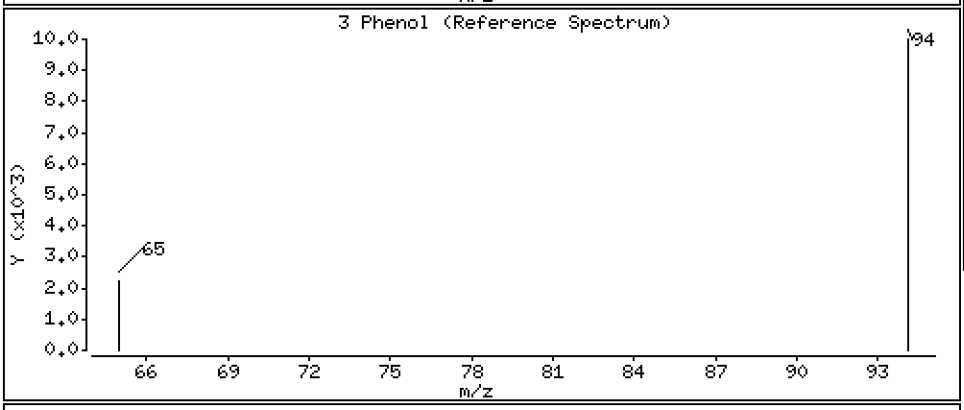
Concentration: 0.2593 ug/mL

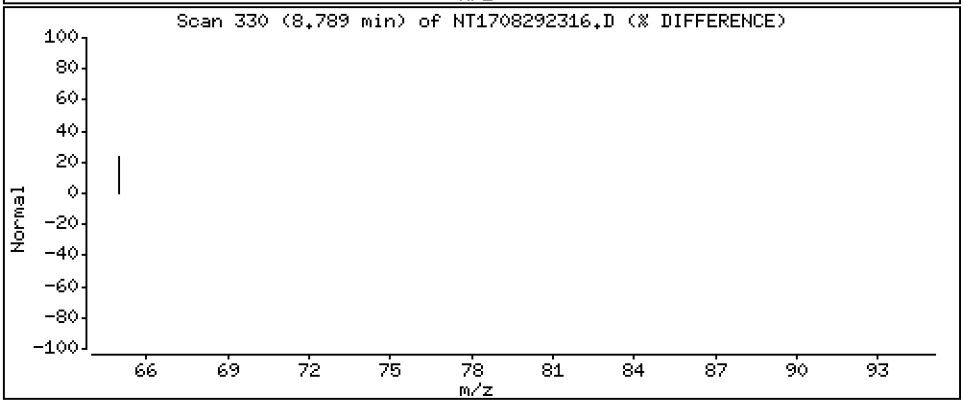












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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

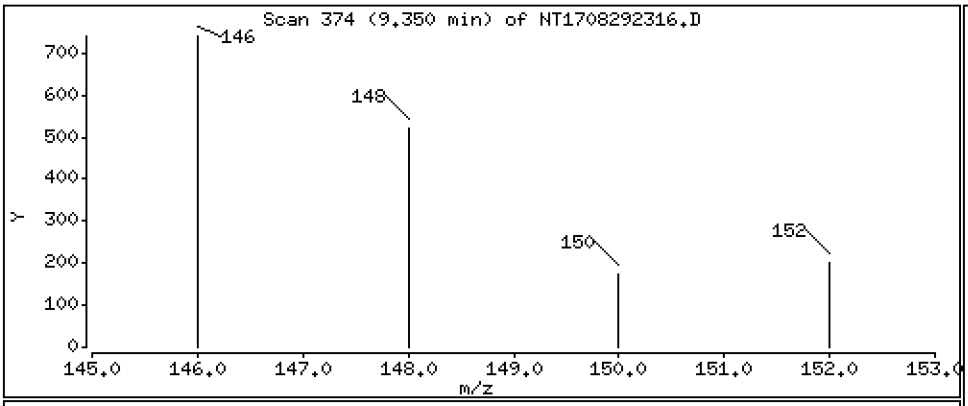
Operator: JGR

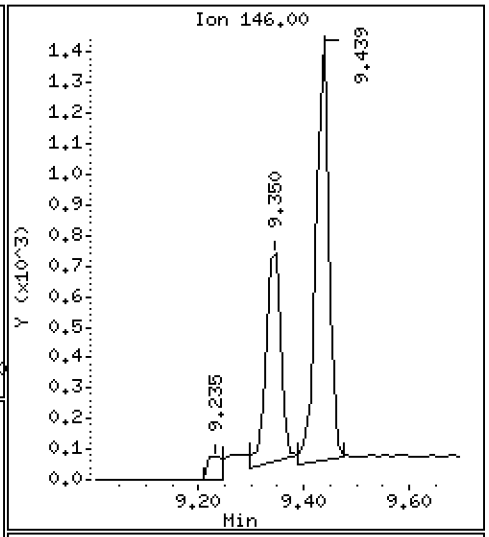
Column phase: ZB-5msi

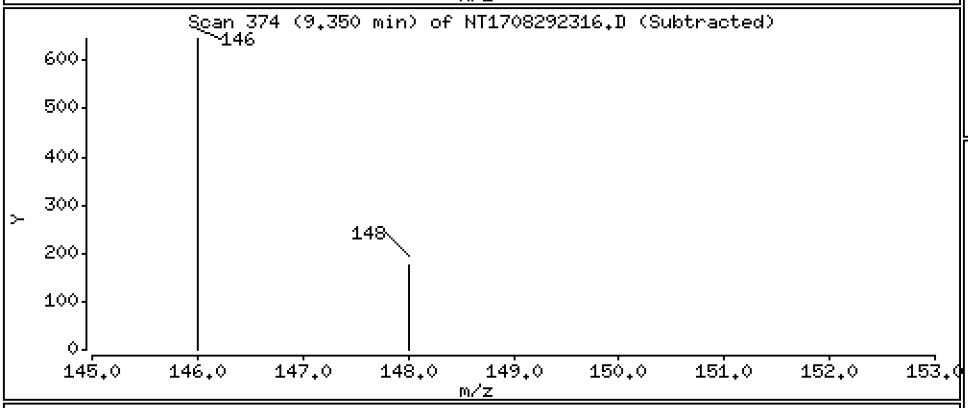
Column diameter: 0.25

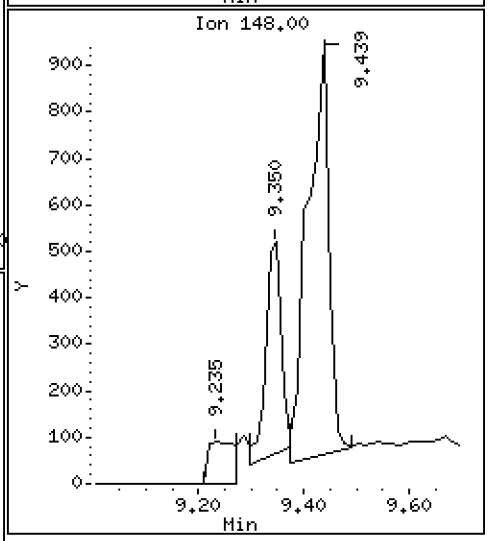
7 1,3-Dichlorobenzene

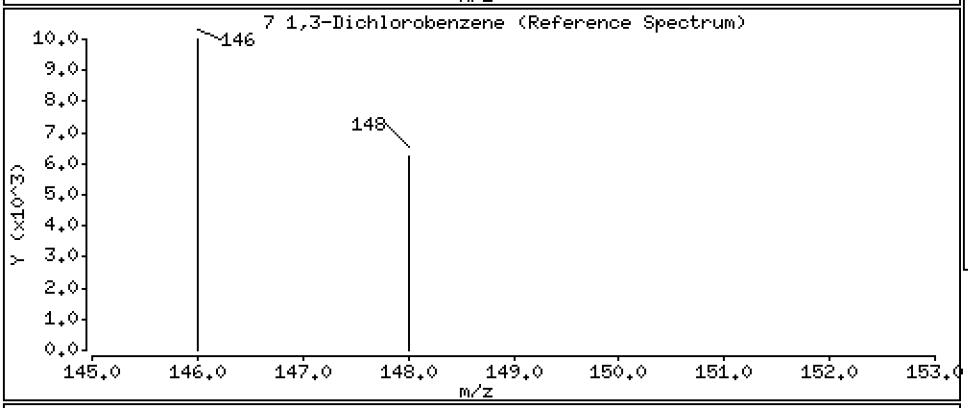
Concentration: 0.008296 ug/mL

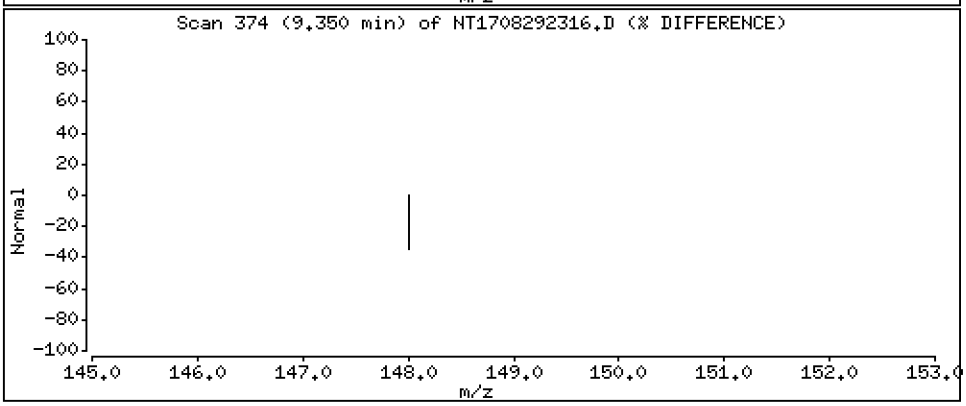












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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

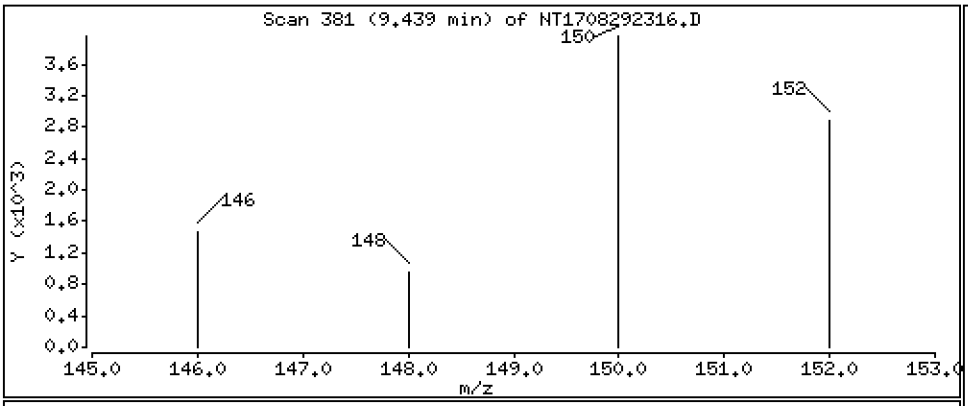
Operator: JGR

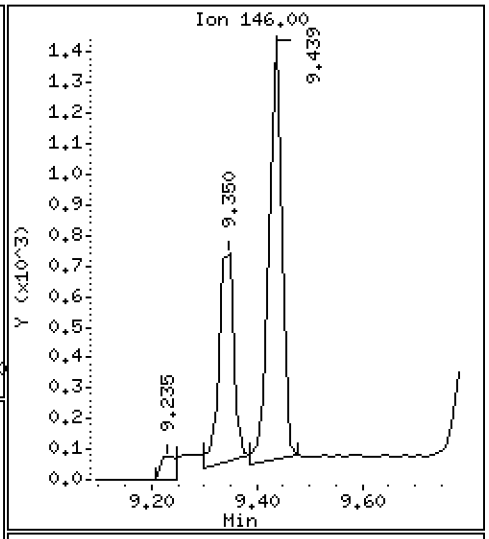
Column phase: ZB-5msi

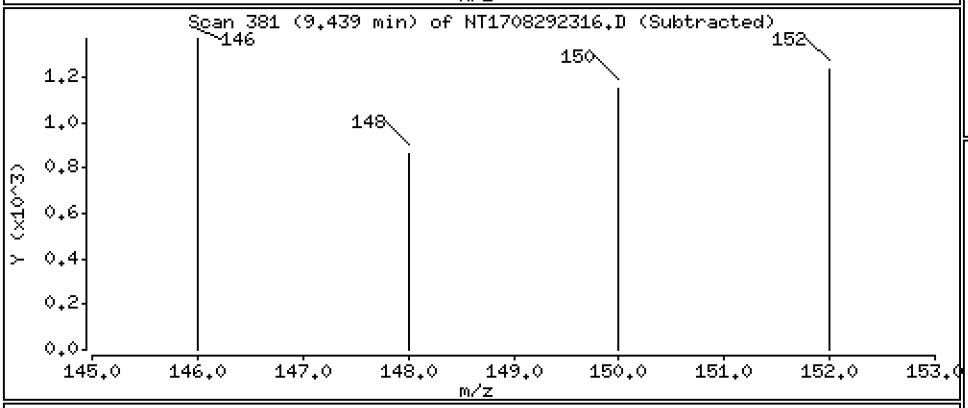
Column diameter: 0.25

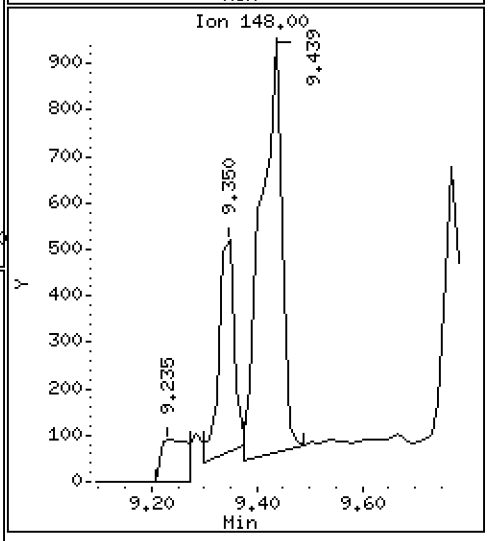
9 1,4-Dichlorobenzene

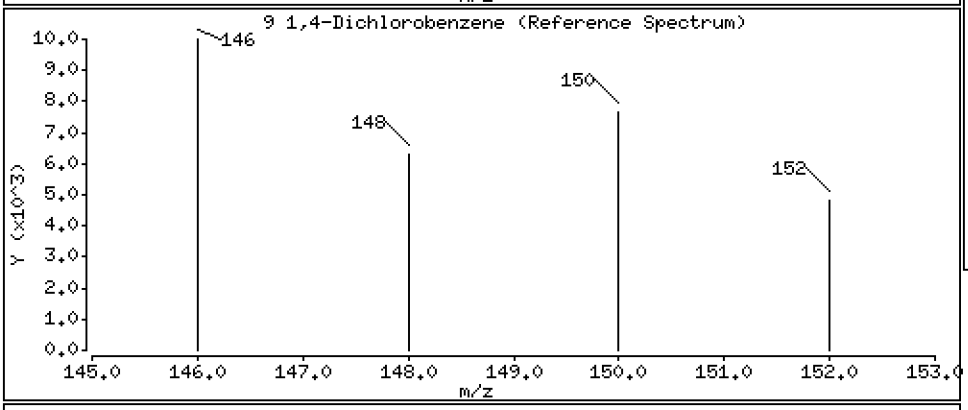
Concentration: 0.01477 ug/mL

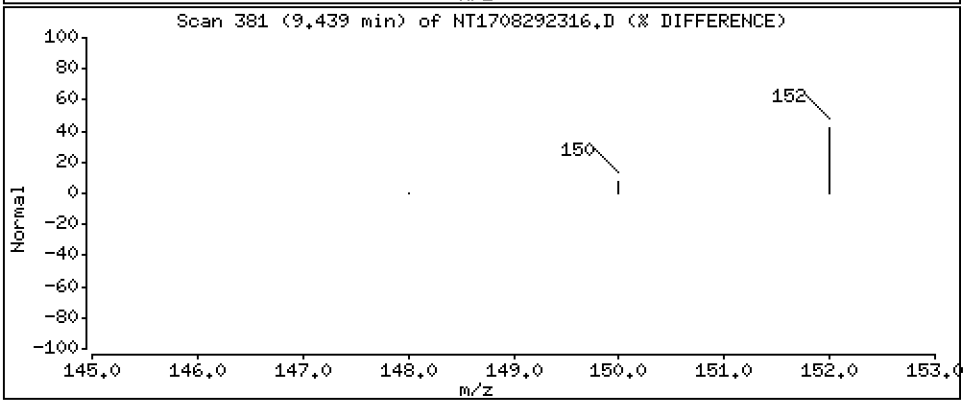












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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

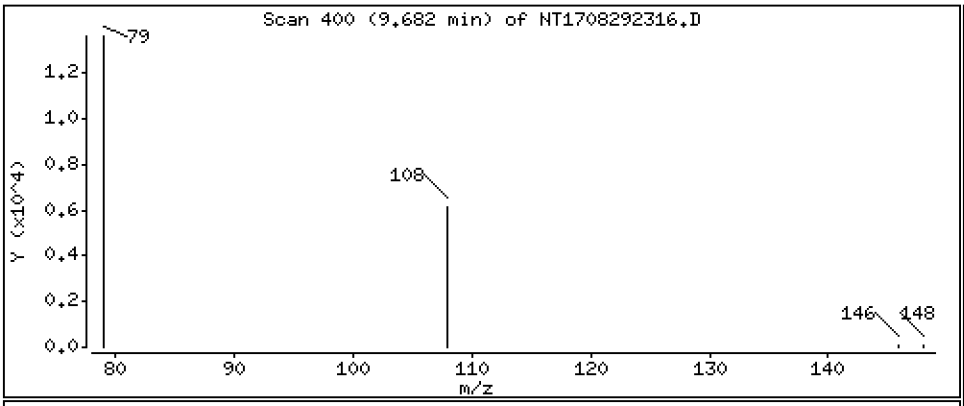
Operator: JGR

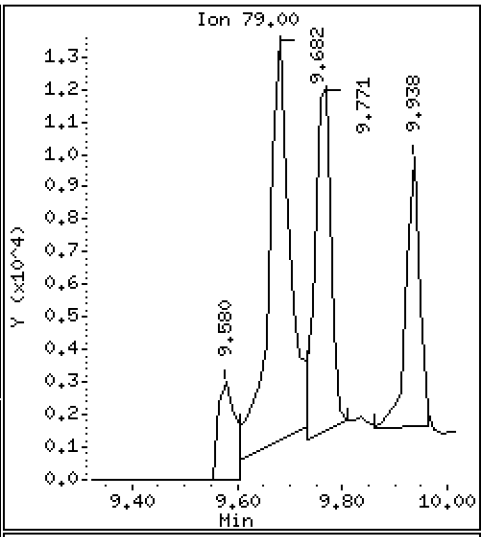
Column phase: ZB-5msi

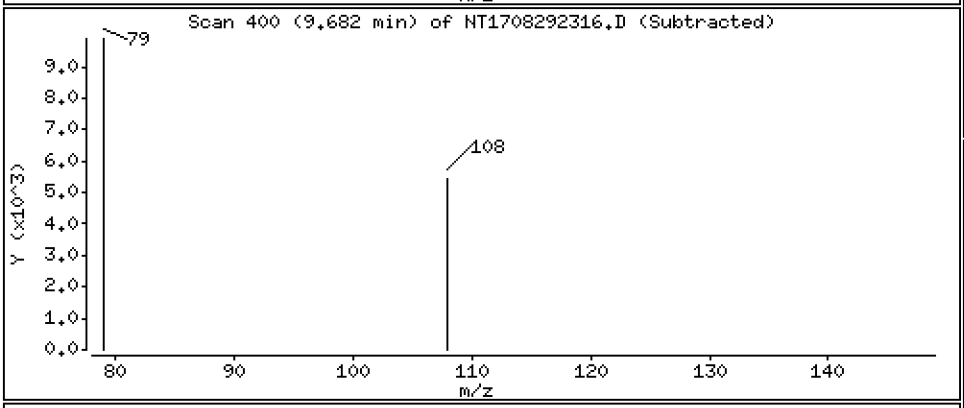
Column diameter: 0.25

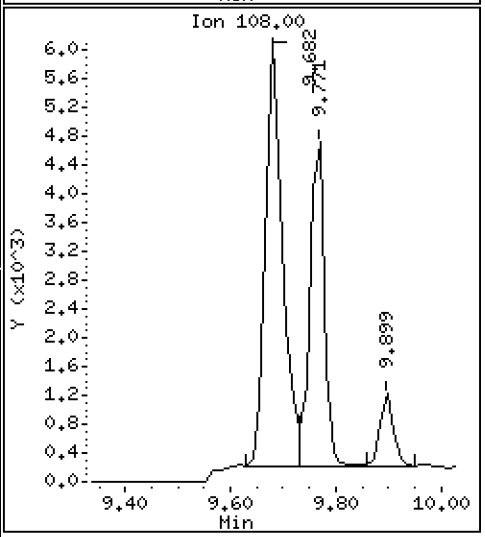
11 Benzyl alcohol

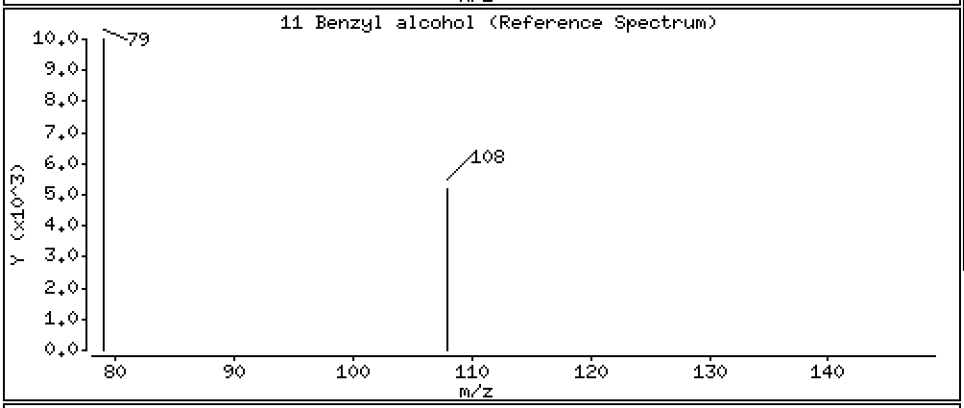
Concentration: 0.2074 ug/mL

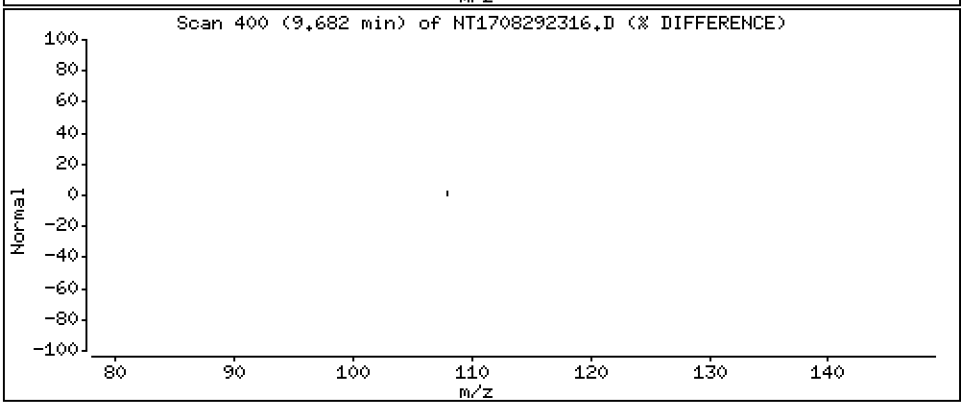












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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

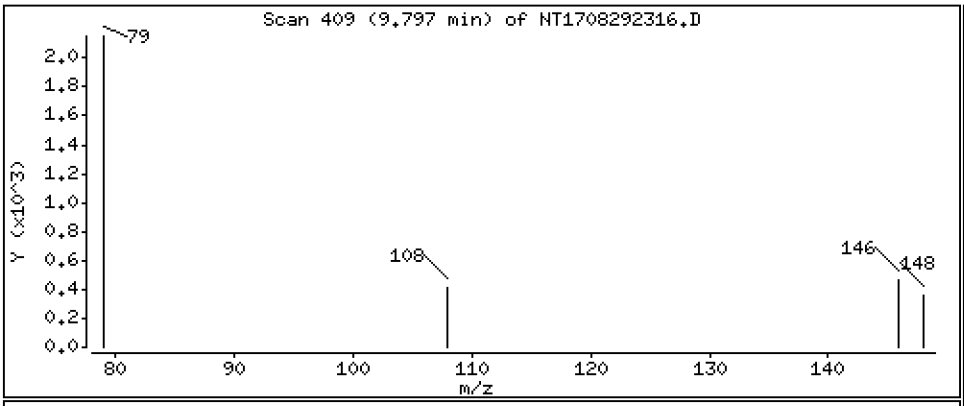
Operator: JGR

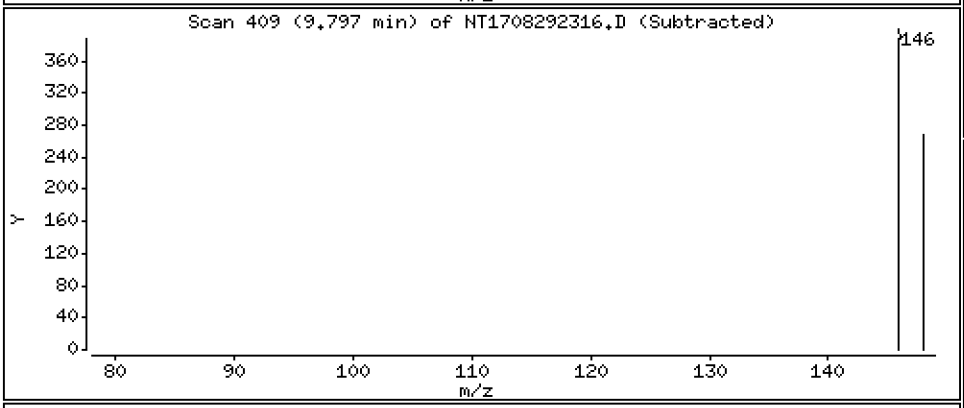
Column phase: ZB-5msi

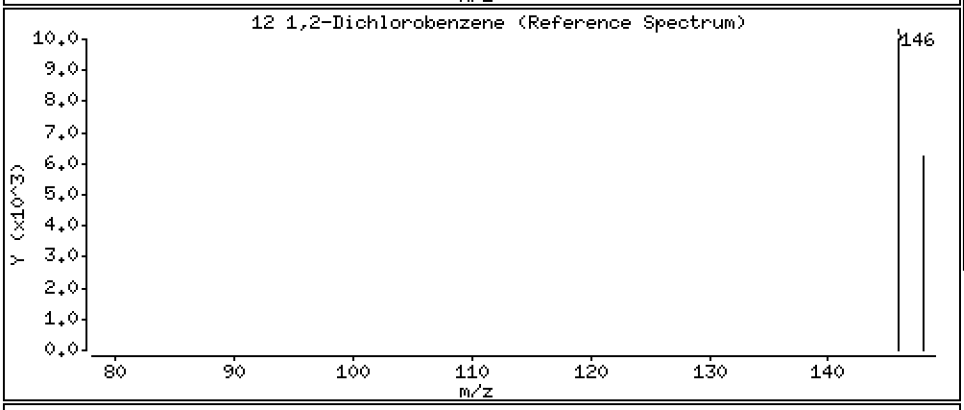
Column diameter: 0.25

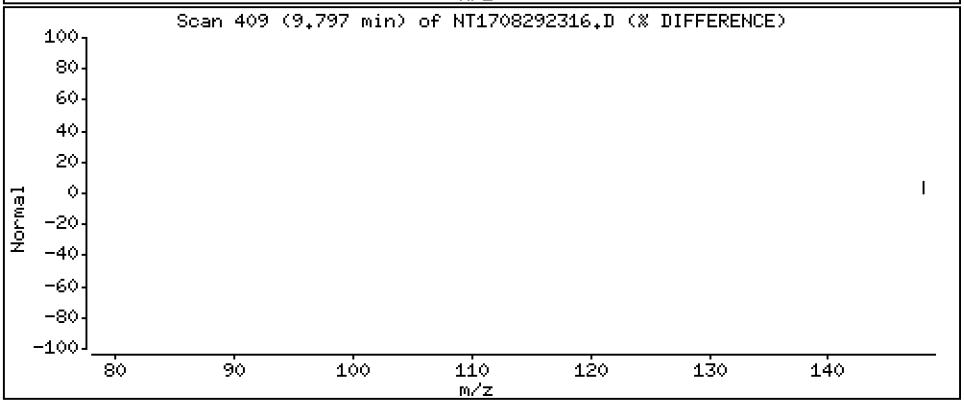
12 1,2-Dichlorobenzene

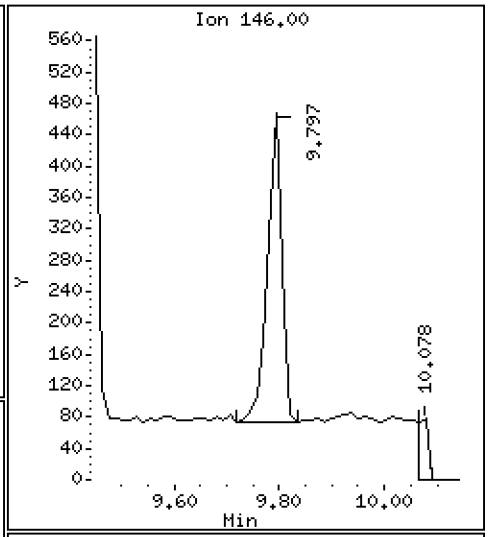
Concentration: 0.004828 ug/mL

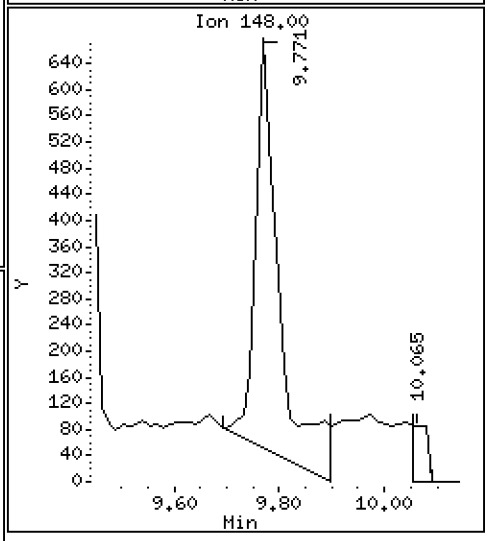












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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

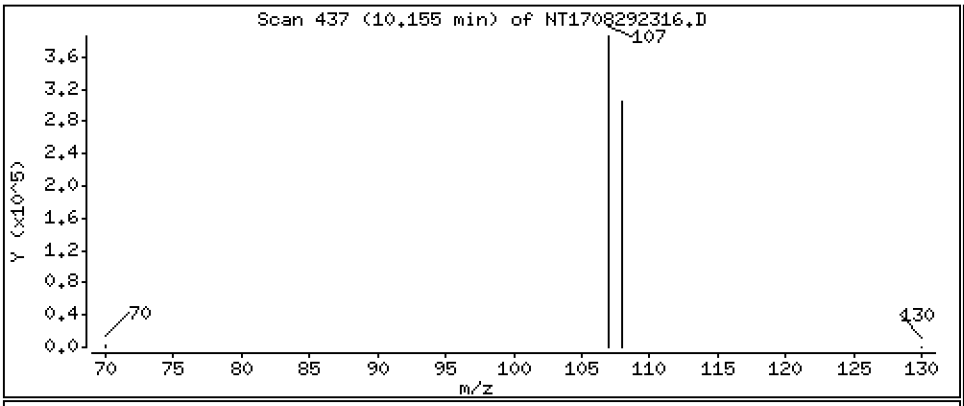
Operator: JGR

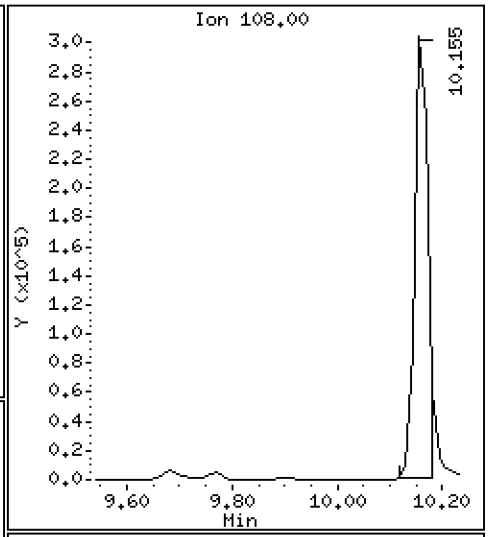
Column phase: ZB-5msi

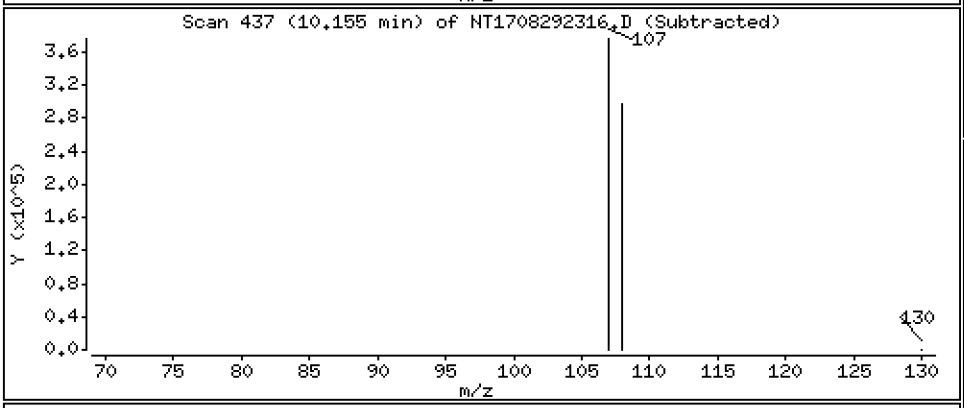
Column diameter: 0.25

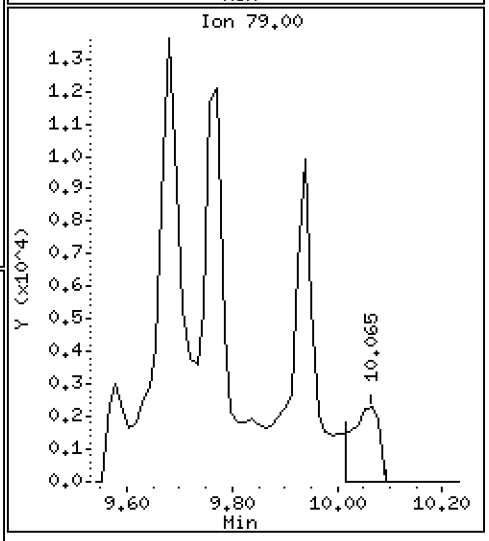
13 2-Methylphenol

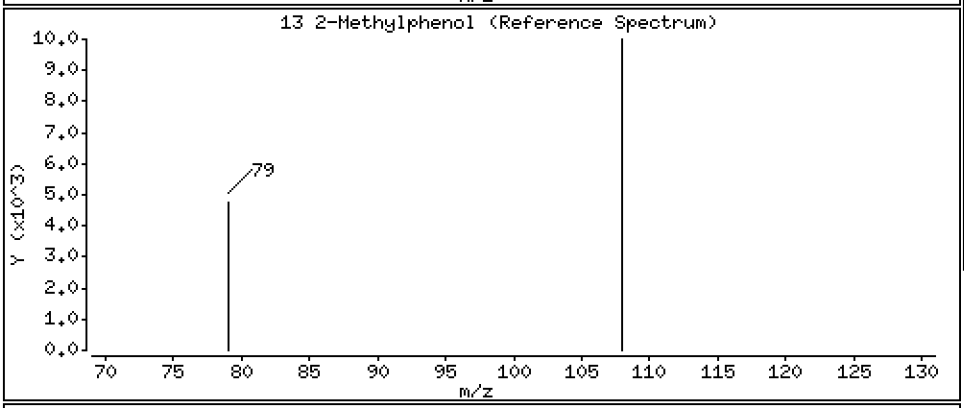
Concentration: 3.624 ug/mL

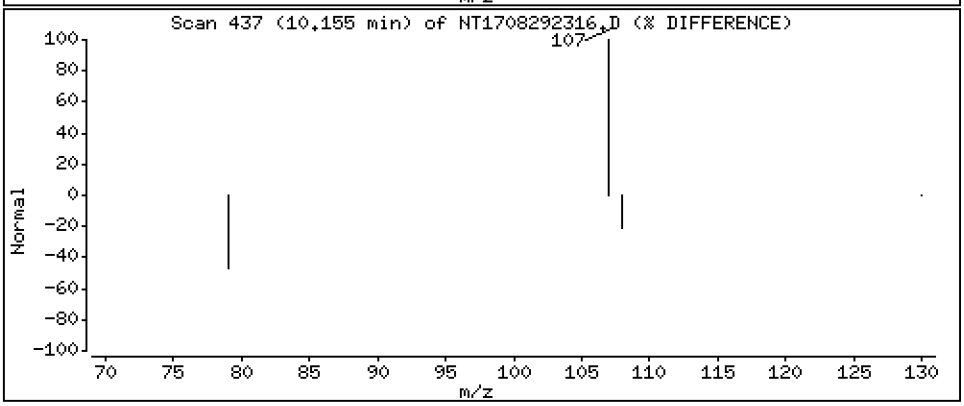












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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

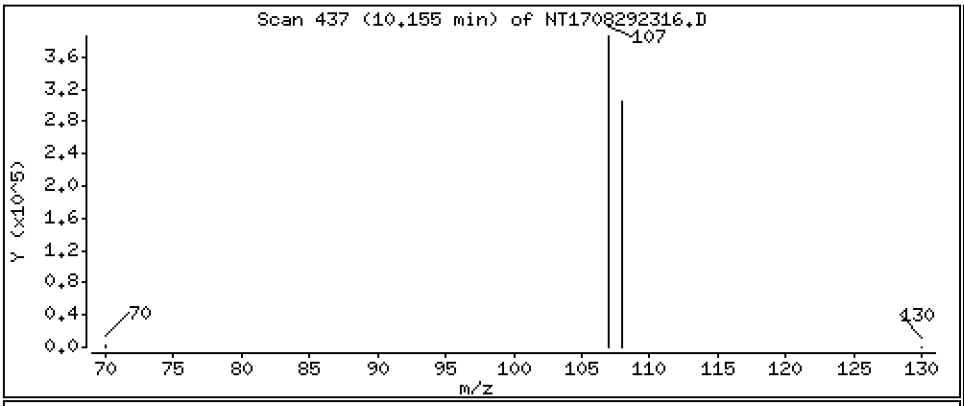
Operator: JGR

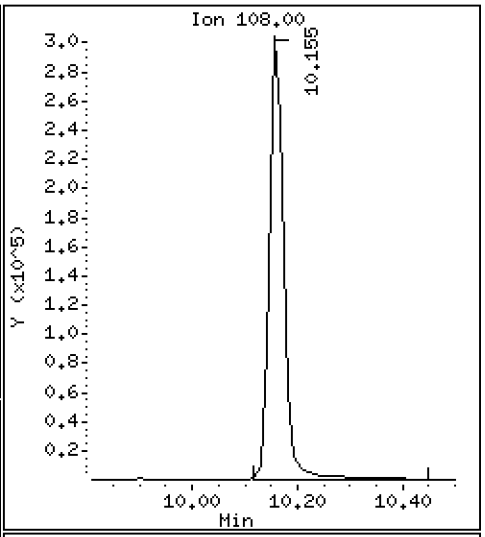
Column phase: ZB-5msi

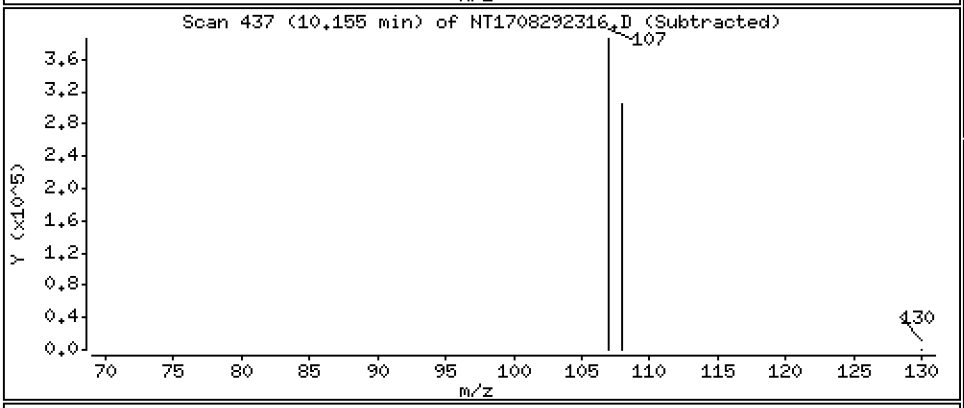
Column diameter: 0.25

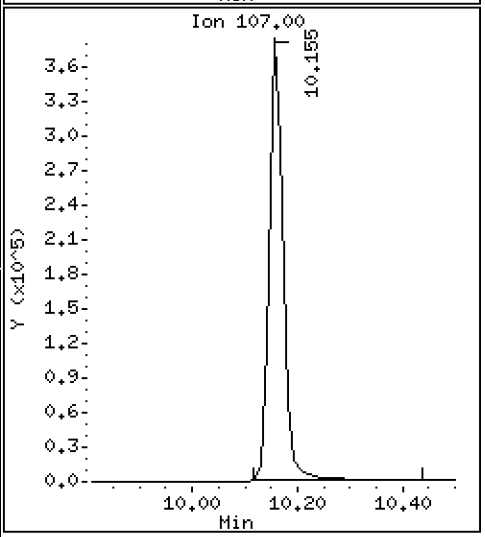
15 4-Methylphenol

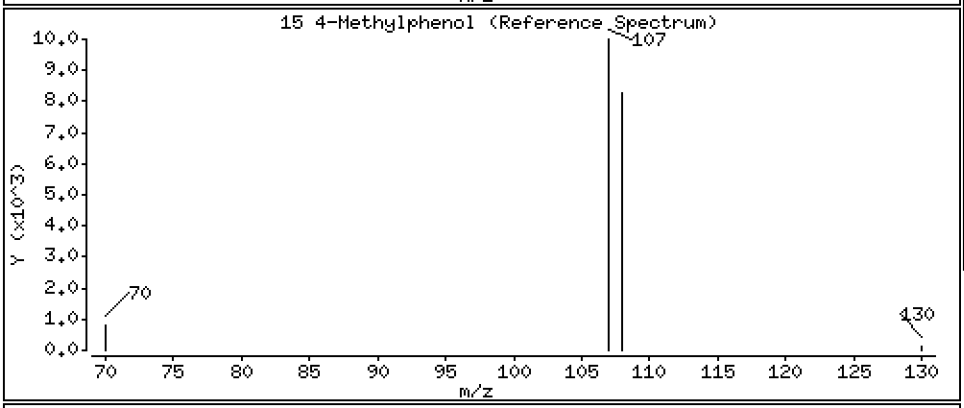
Concentration: 3.690 ug/mL

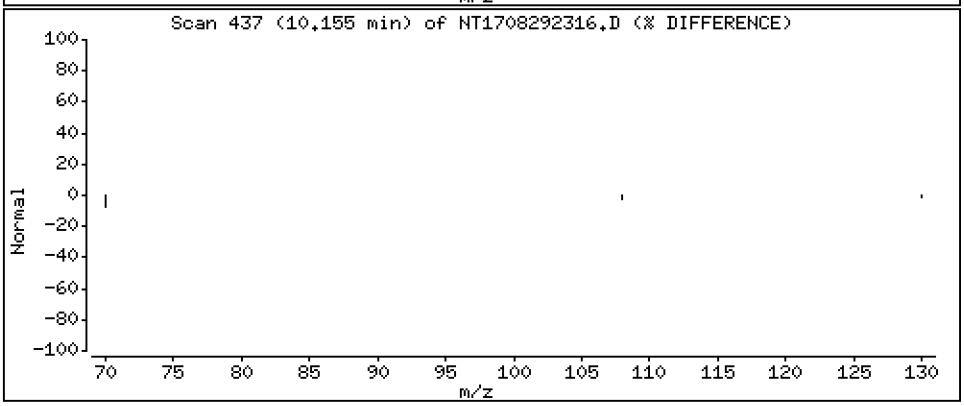












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Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

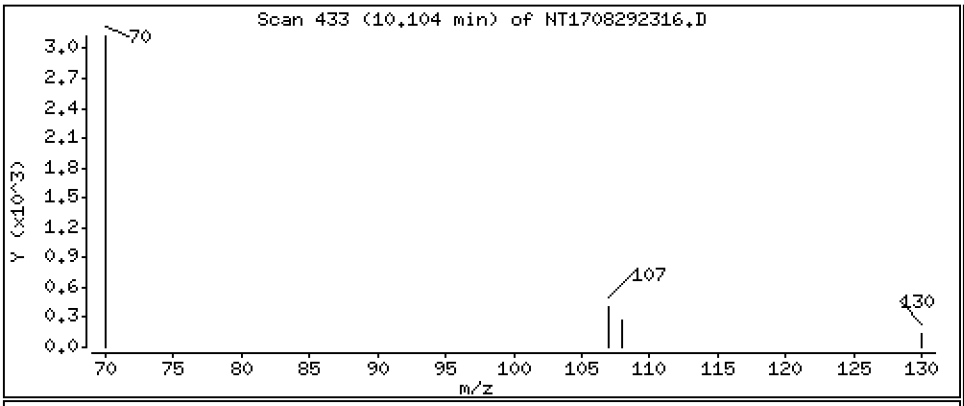
Operator: JGR

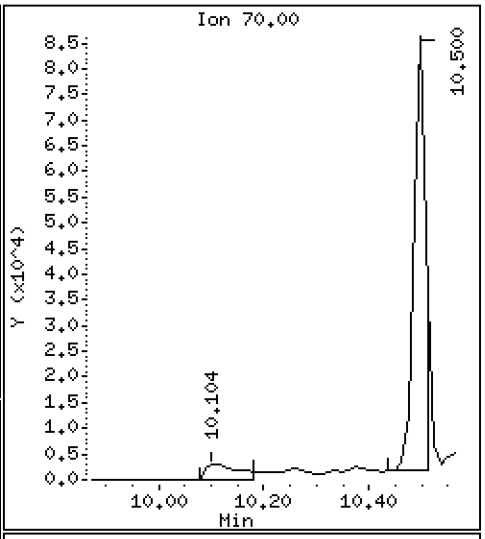
Column phase: ZB-5msi

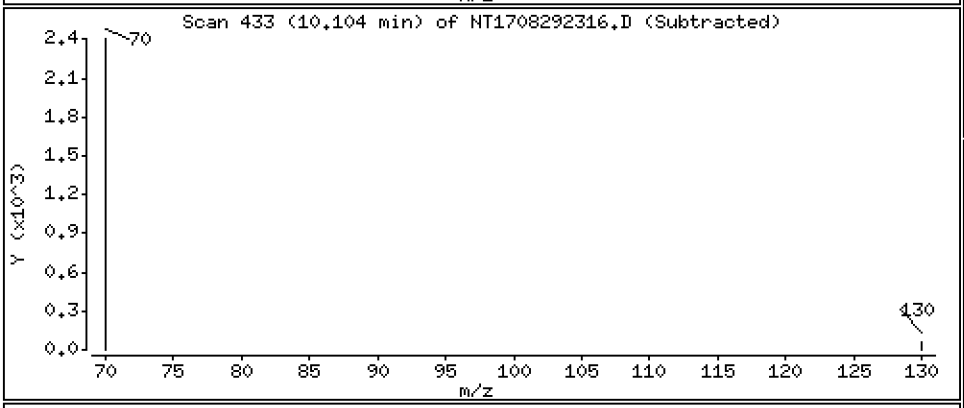
Column diameter: 0.25

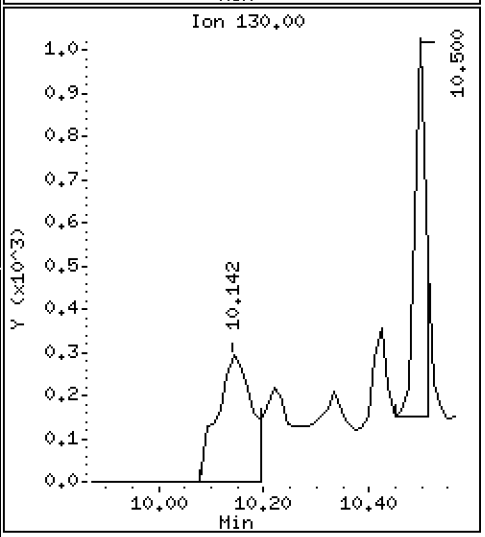
16 N-Nitroso-di-n-propylamine

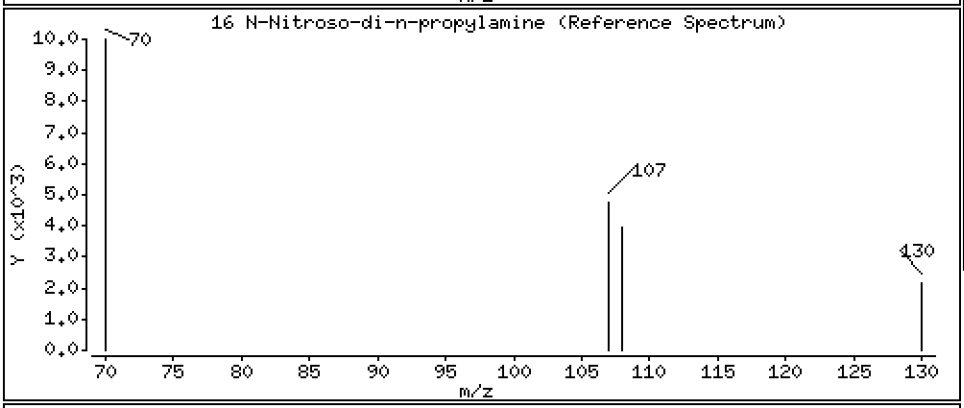
Concentration: 0.08505 ug/mL

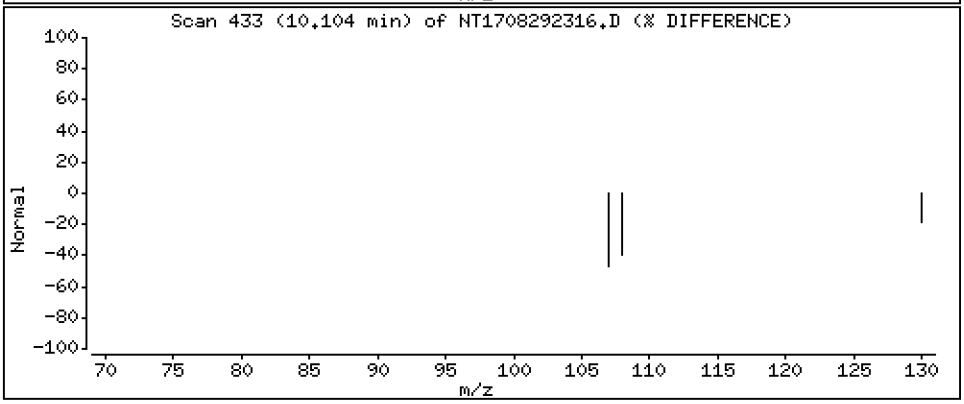












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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

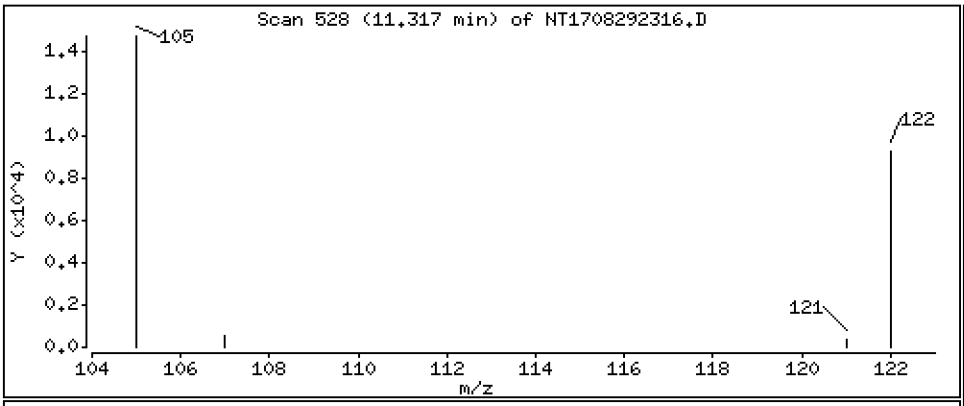
Operator: JGR

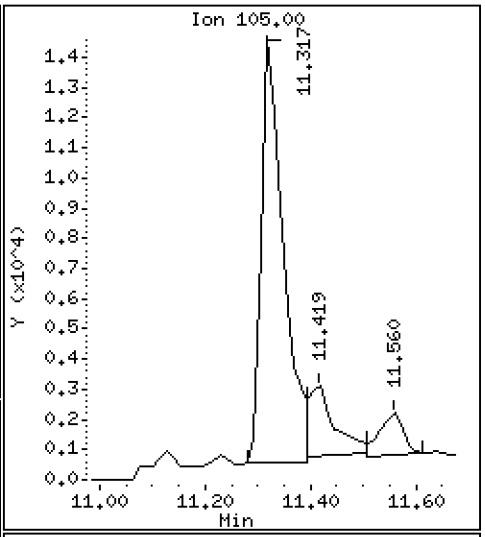
Column phase: ZB-5msi

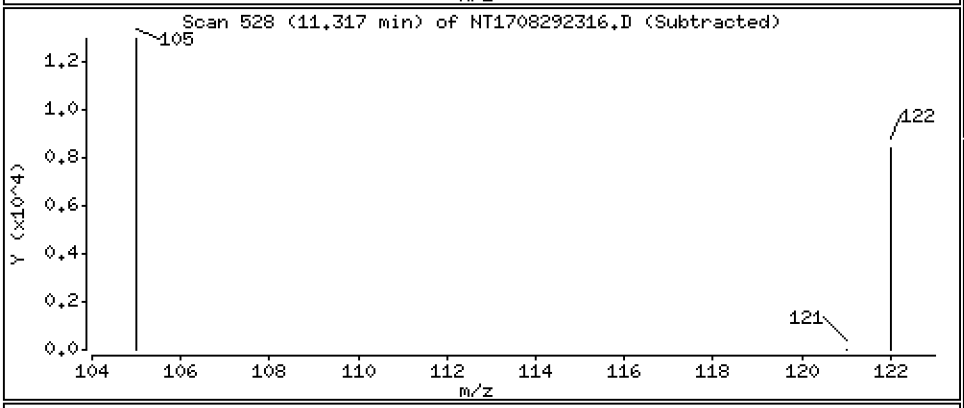
Column diameter: 0.25

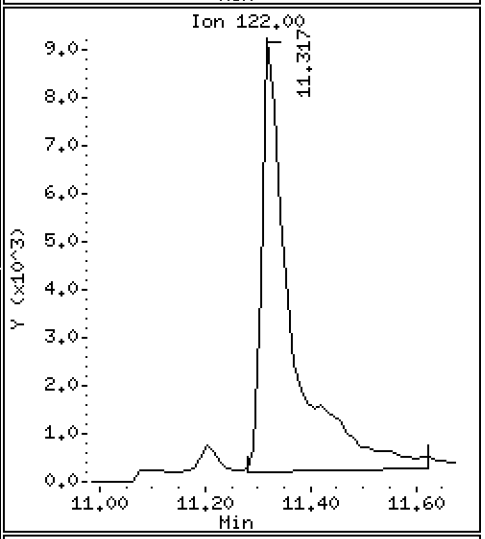
24 Benzoic acid

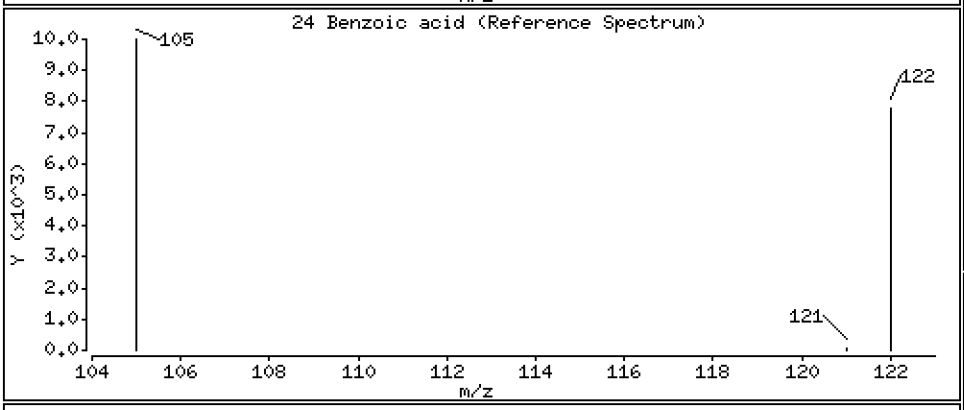
Concentration: 0.4542 ug/mL

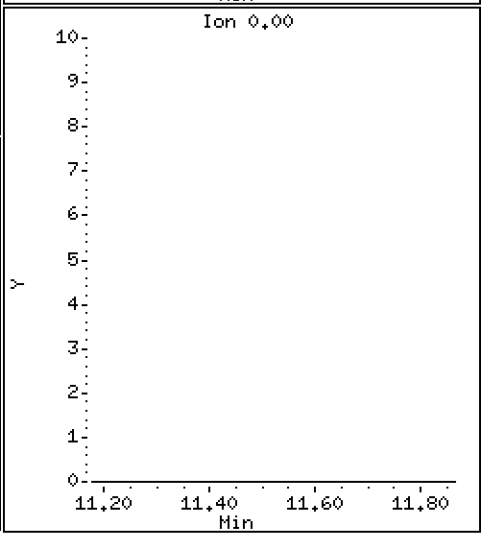


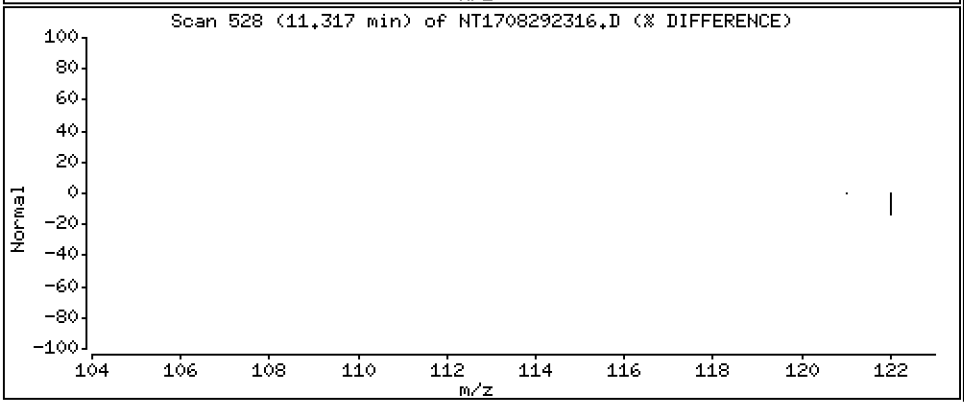












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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

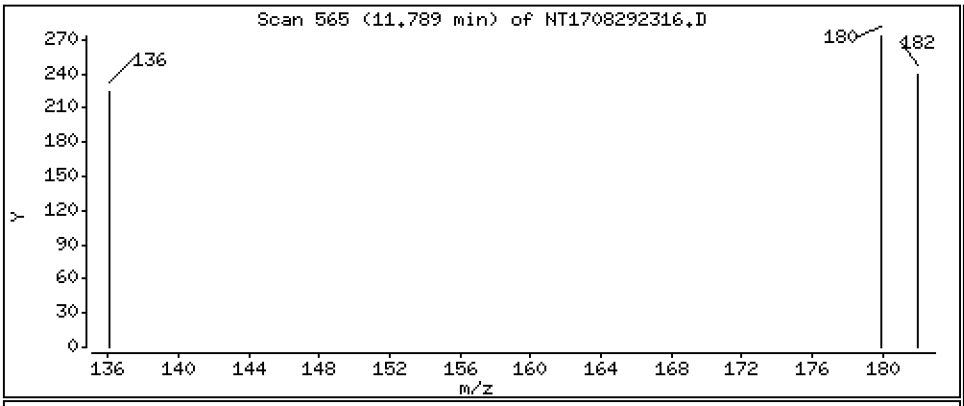
Operator: JGR

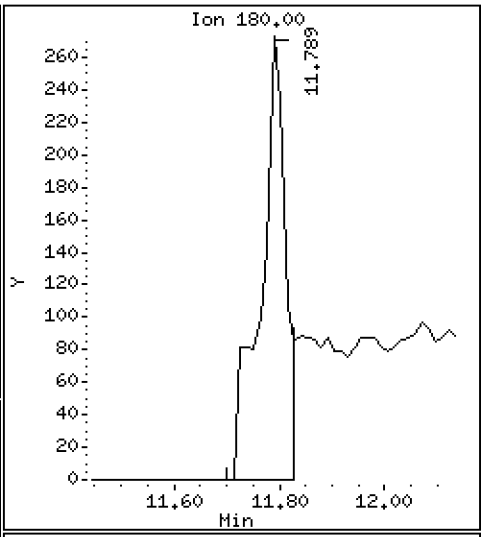
Column phase: ZB-5msi

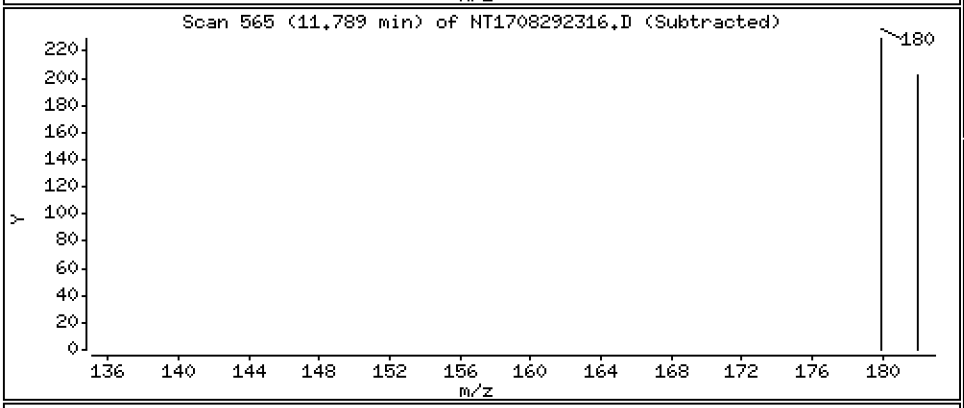
Column diameter: 0.25

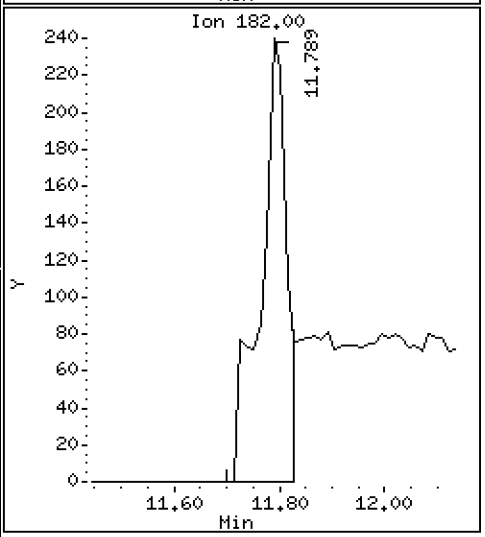
26 1,2,4-Trichlorobenzene

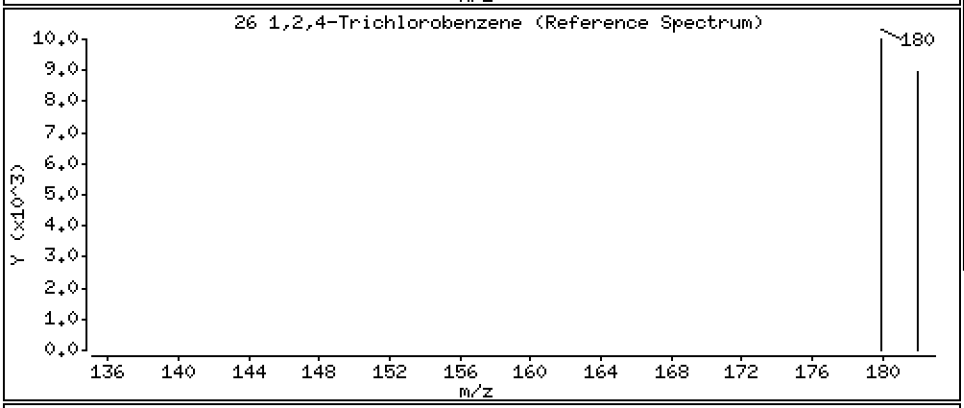
Concentration: 0.009360 ug/mL

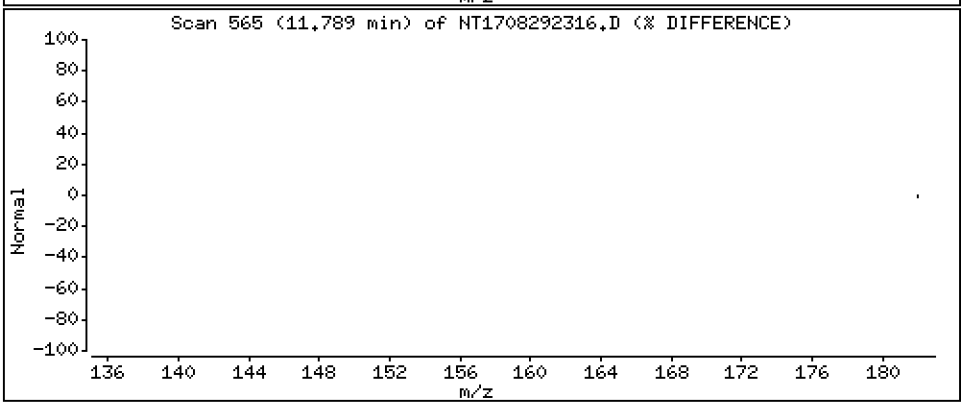












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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

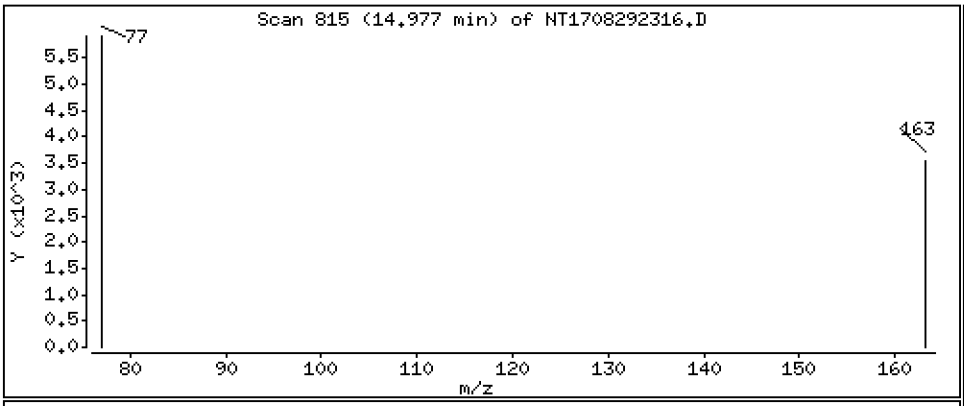
Operator: JGR

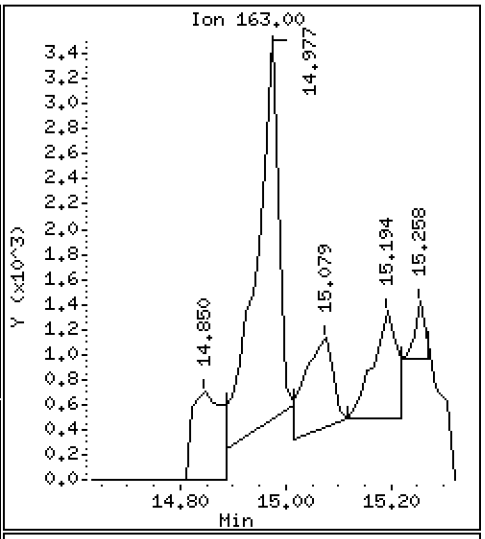
Column phase: ZB-5msi

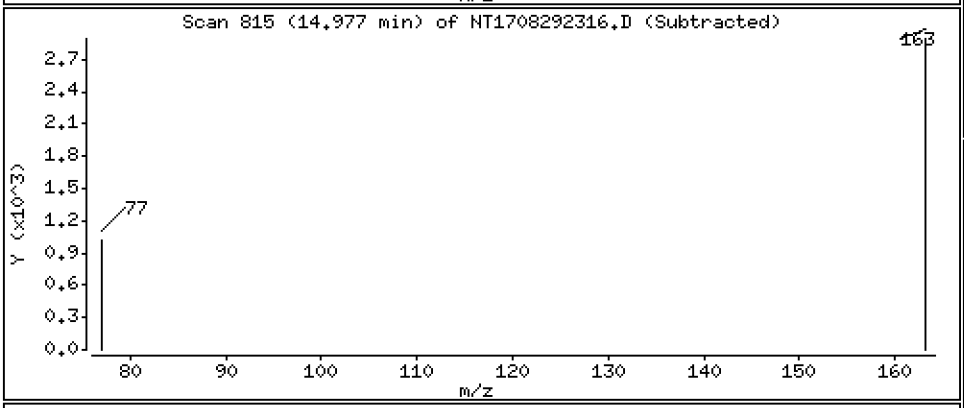
Column diameter: 0.25

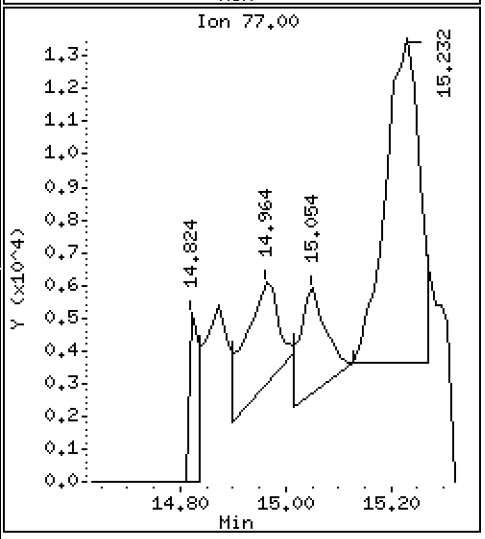
39 Dimethylphthalate

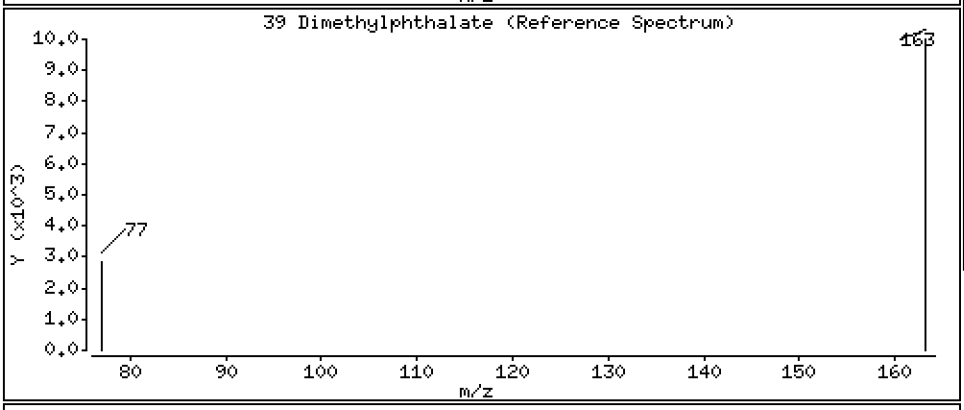
Concentration: 0.05309 ug/mL

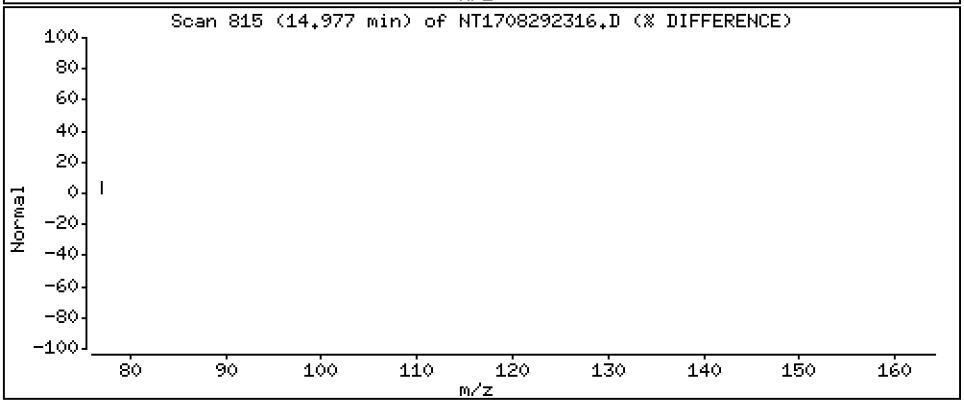












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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

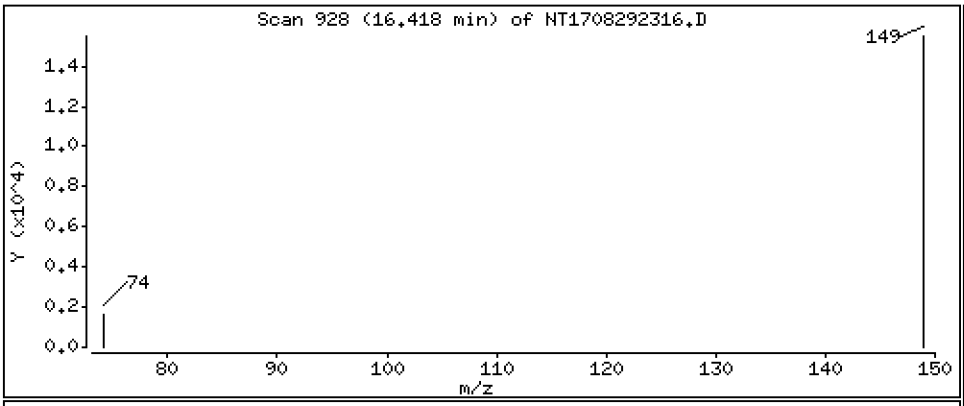
Operator: JGR

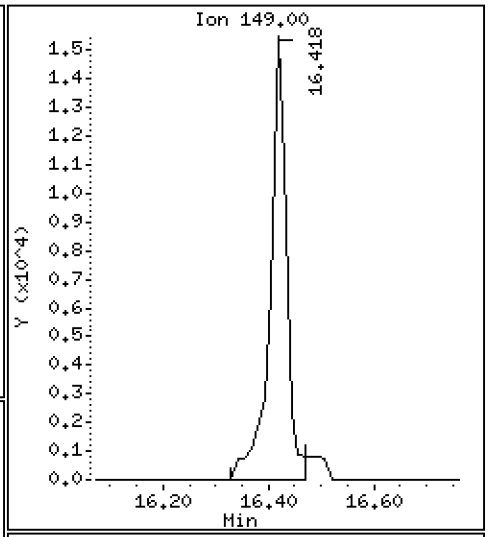
Column phase: ZB-5msi

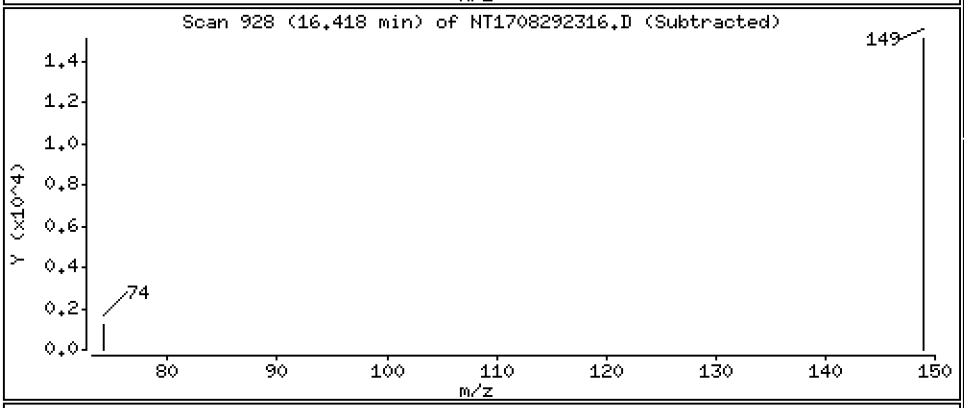
Column diameter: 0.25

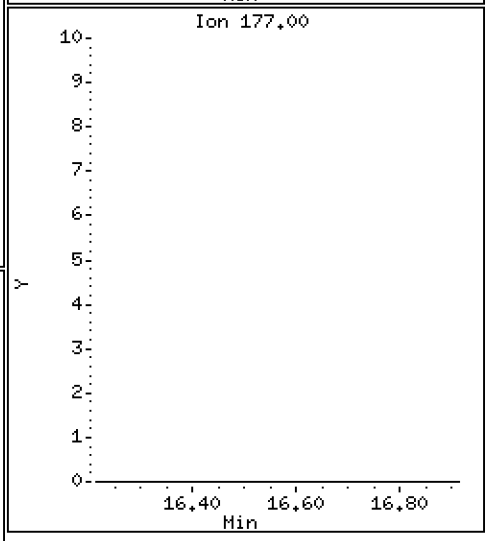
50 Diethylphthalate

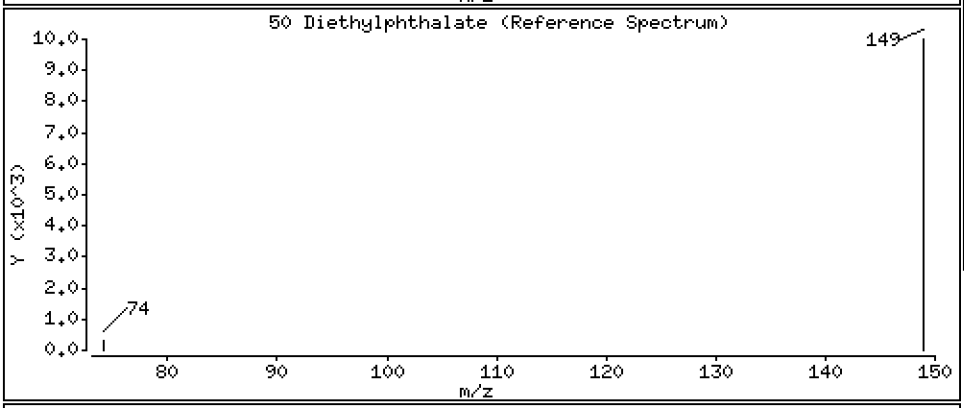
Concentration: 0.1927 ug/mL

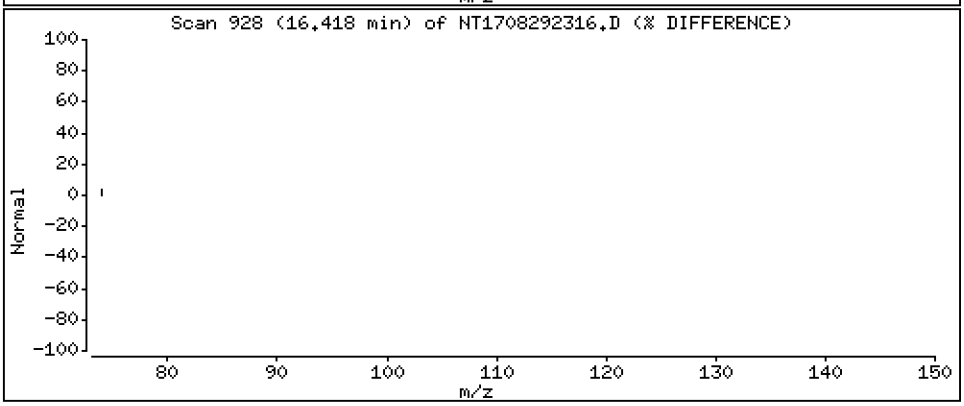












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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

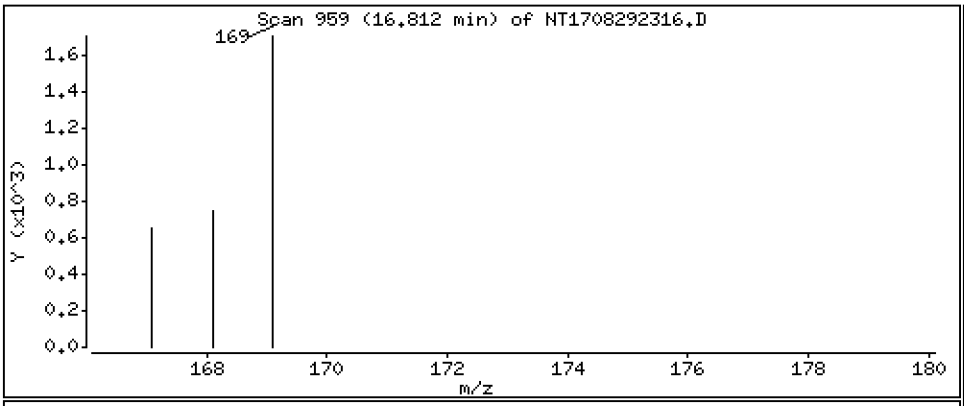
Operator: JGR

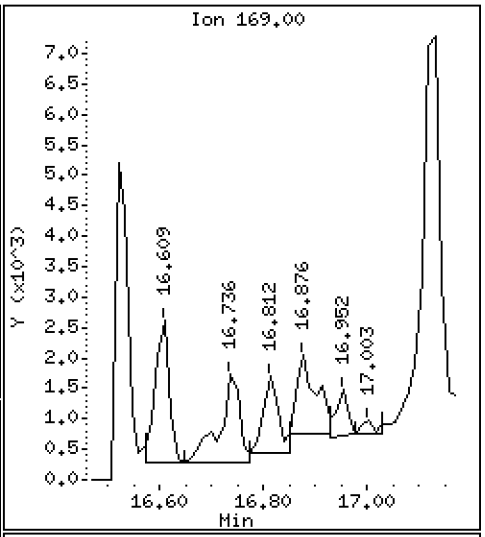
Column phase: ZB-5msi

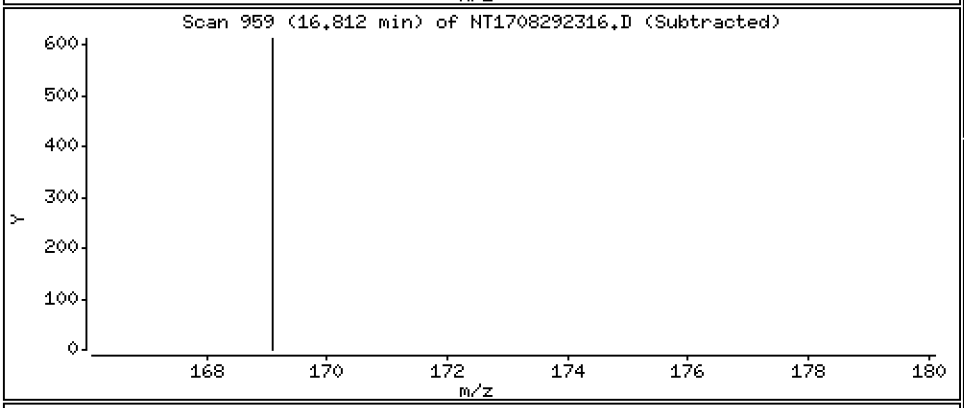
Column diameter: 0.25

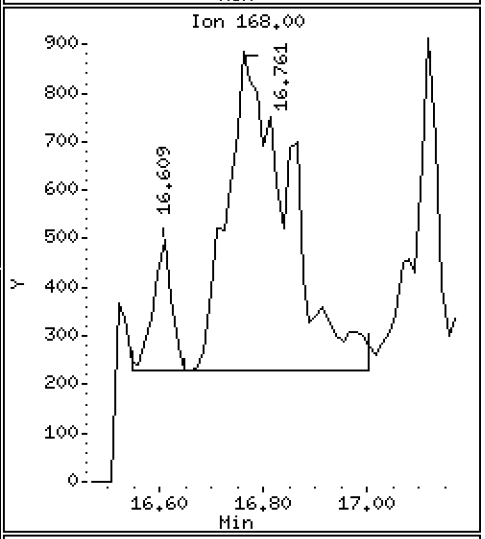
54 N-Nitrosodiphenylamine

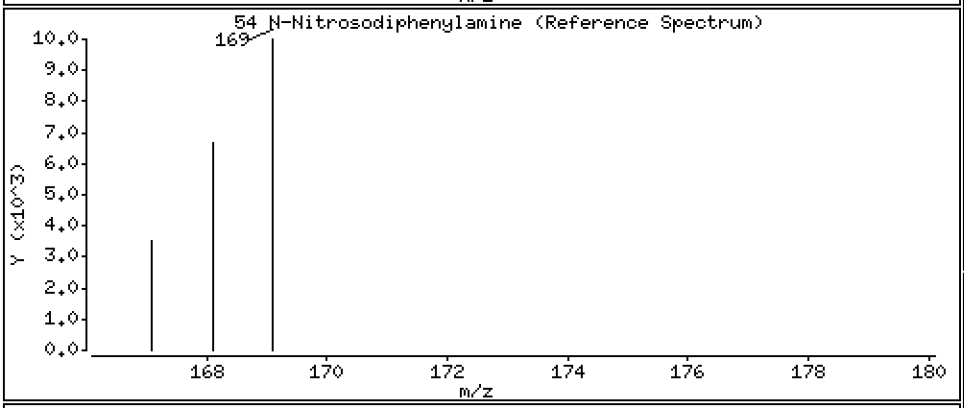
Concentration: 0.02507 ug/mL

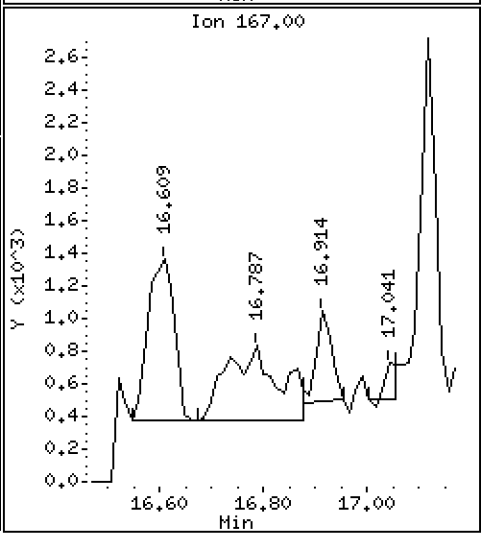


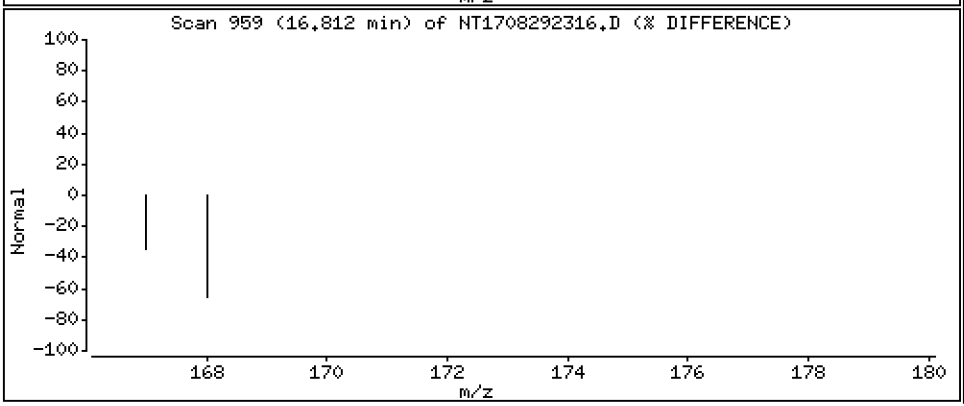












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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

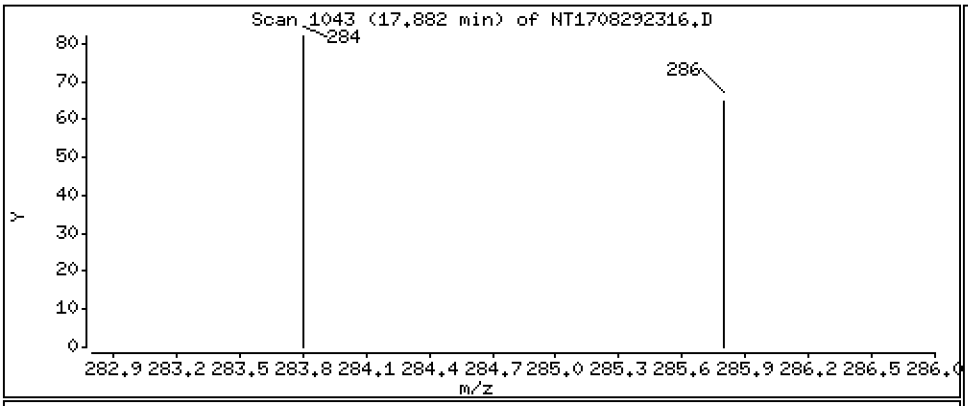
Operator: JGR

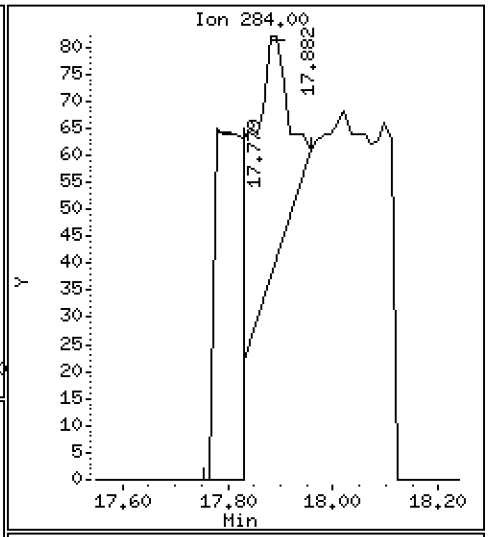
Column phase: ZB-5msi

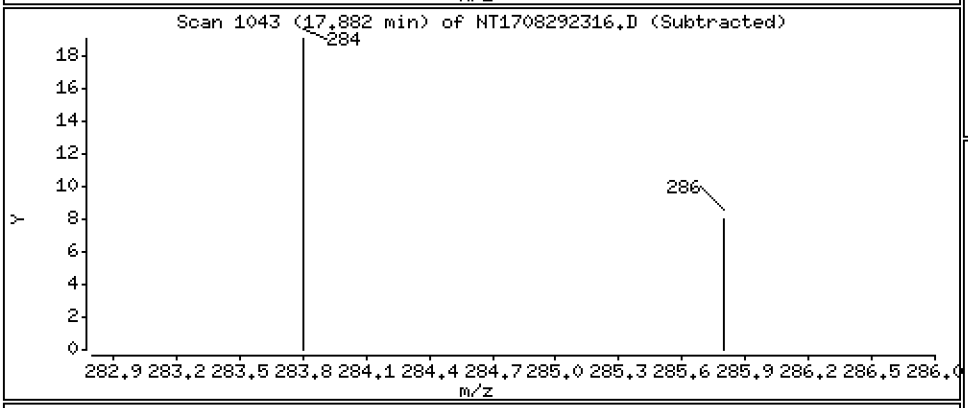
Column diameter: 0.25

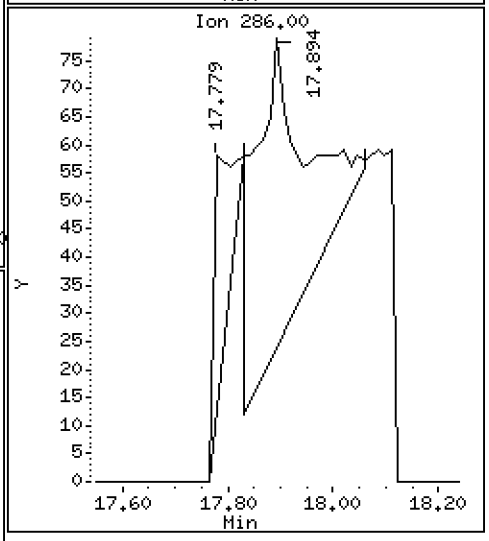
57 Hexachlorobenzene

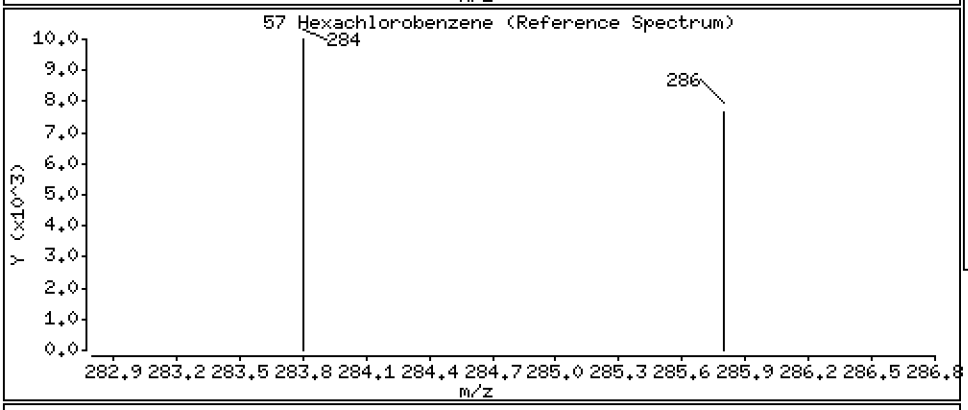
Concentration: 0.006717 ug/mL

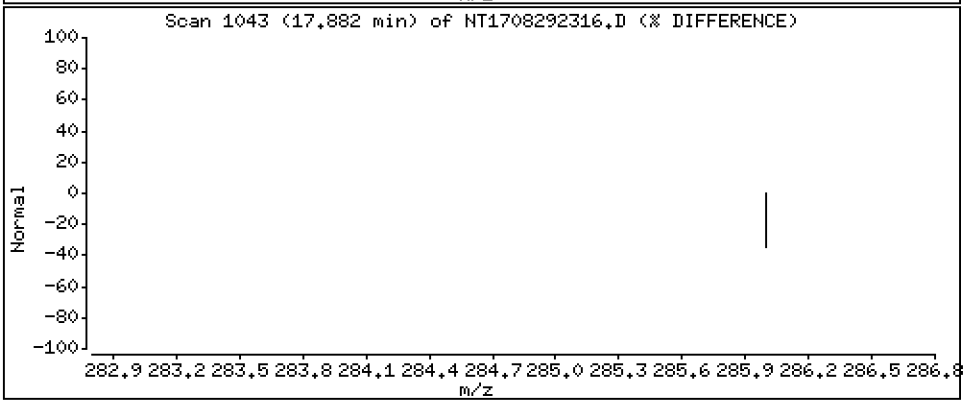












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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

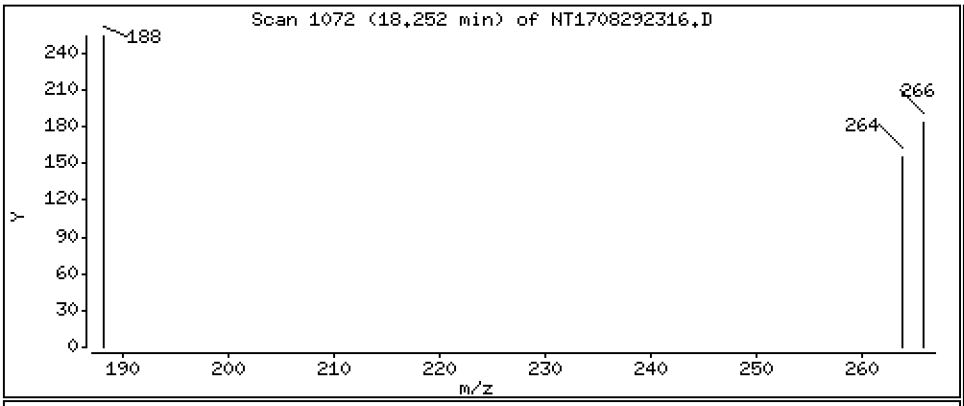
Operator: JGR

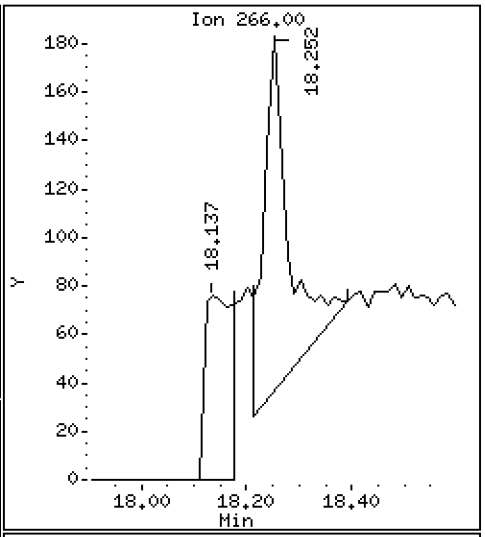
Column phase: ZB-5msi

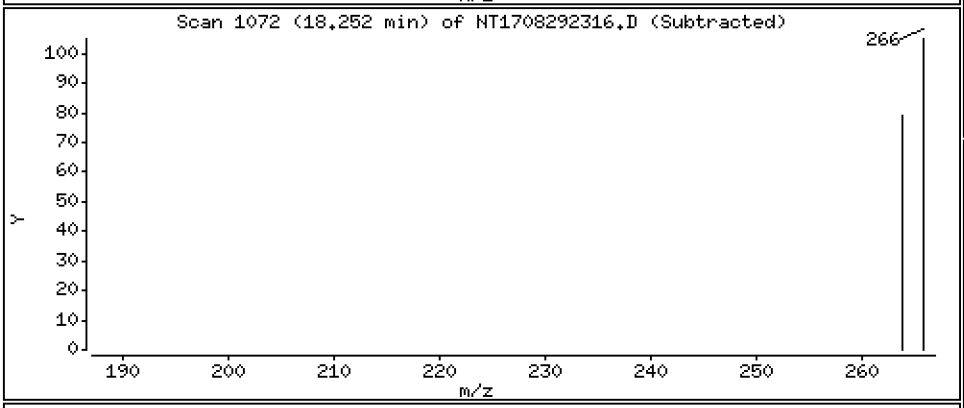
Column diameter: 0.25

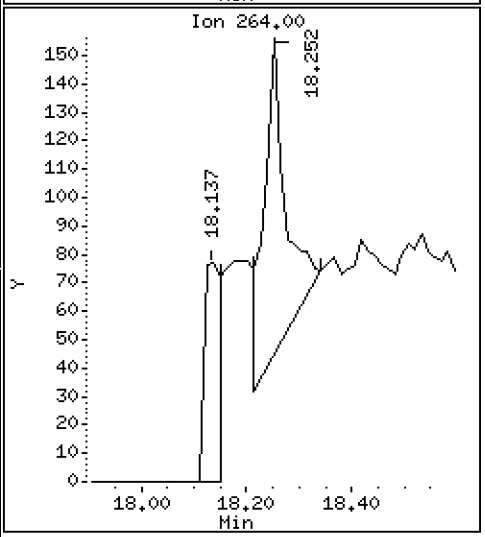
58 Pentachlorophenol

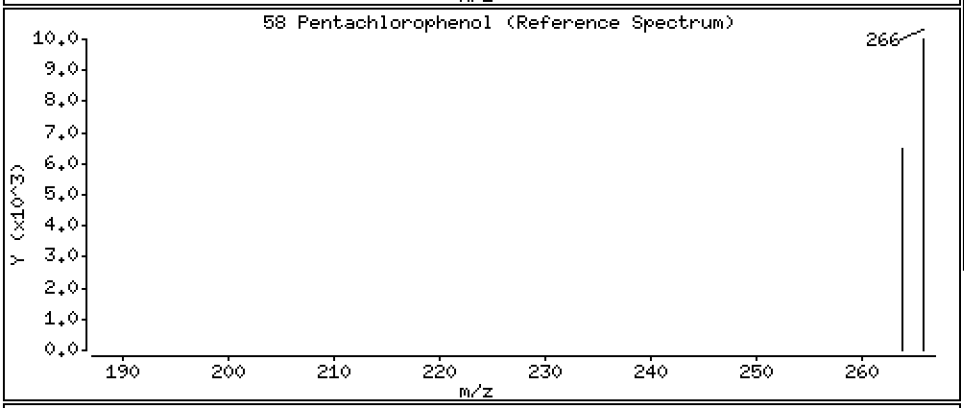
Concentration: 0.02174 ug/mL

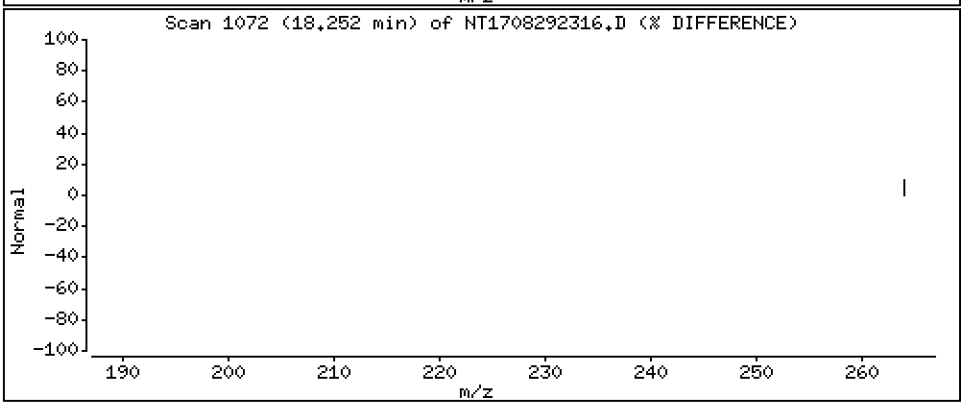












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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

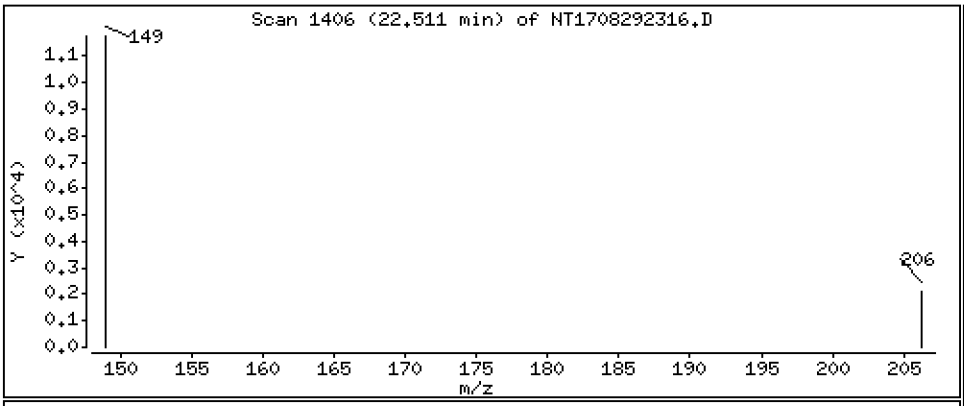
Operator: JGR

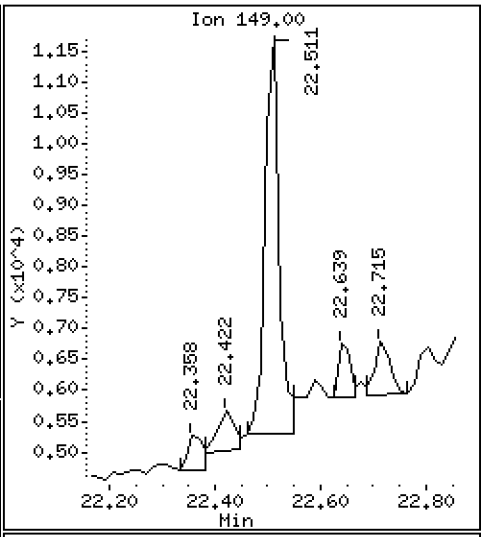
Column phase: ZB-5msi

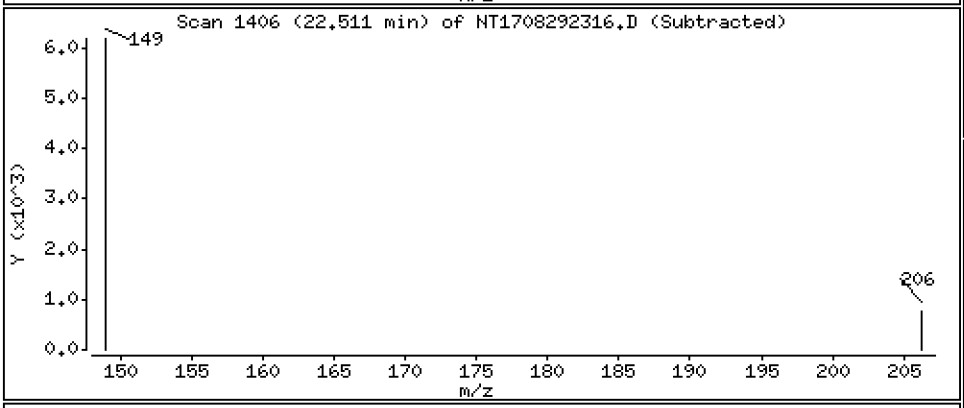
Column diameter: 0.25

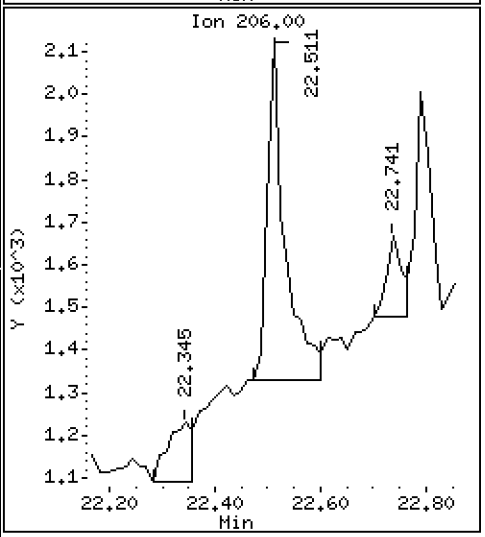
67 Butylbenzylphthalate

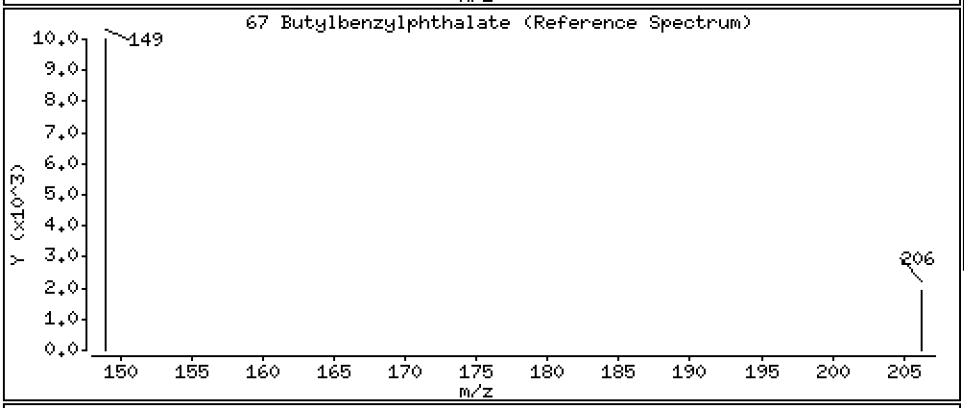
Concentration: 0.09382 ug/mL

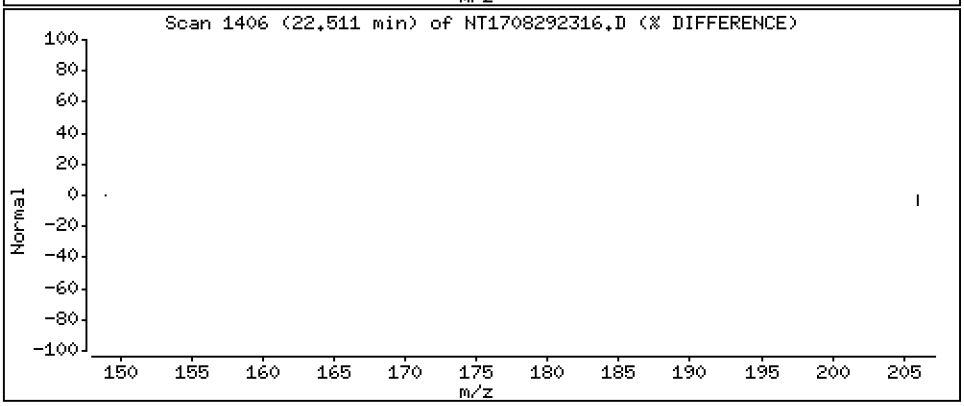












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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

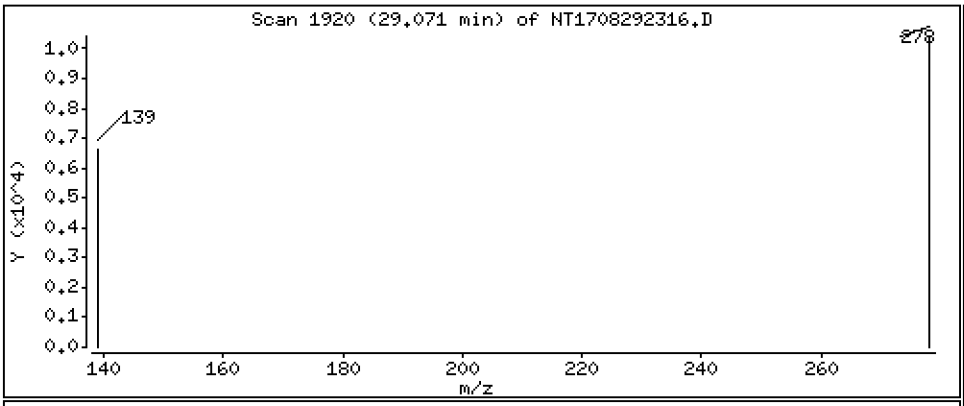
Operator: JGR

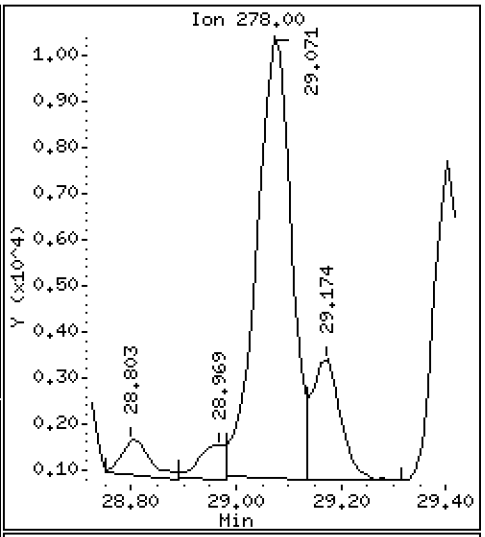
Column phase: ZB-5msi

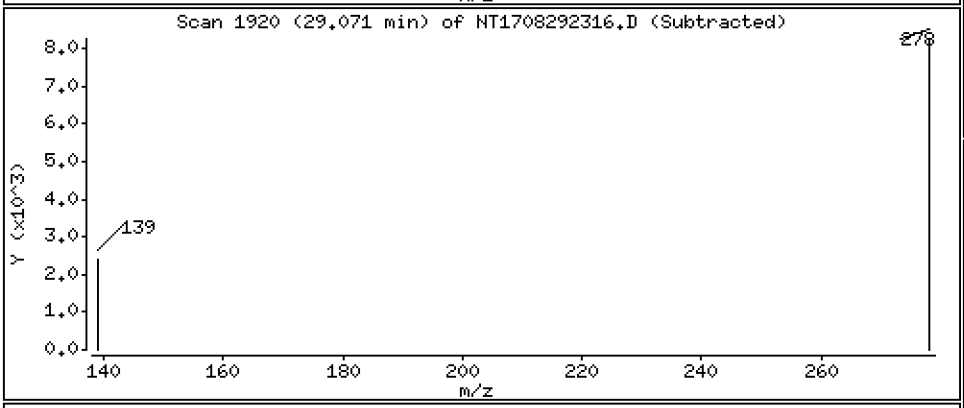
Column diameter: 0.25

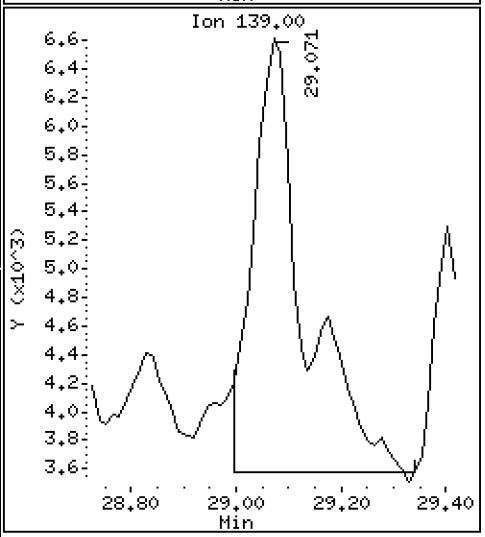
79 Dibenzo(a,h)anthracene

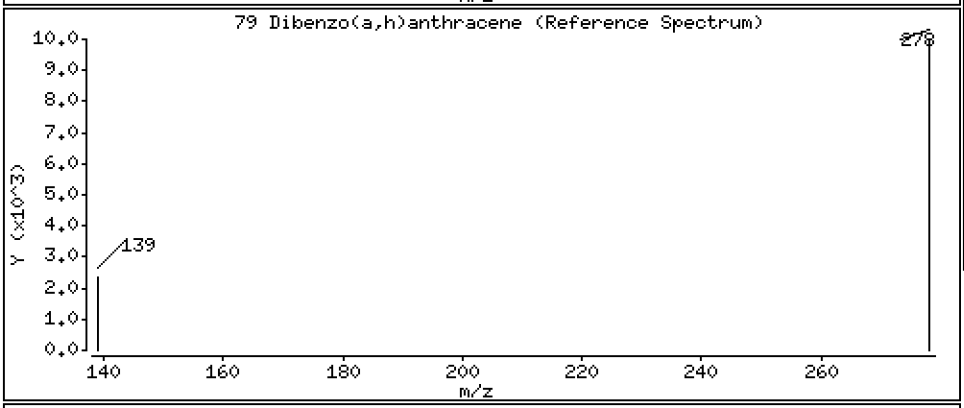
Concentration: 0.2059 ug/mL

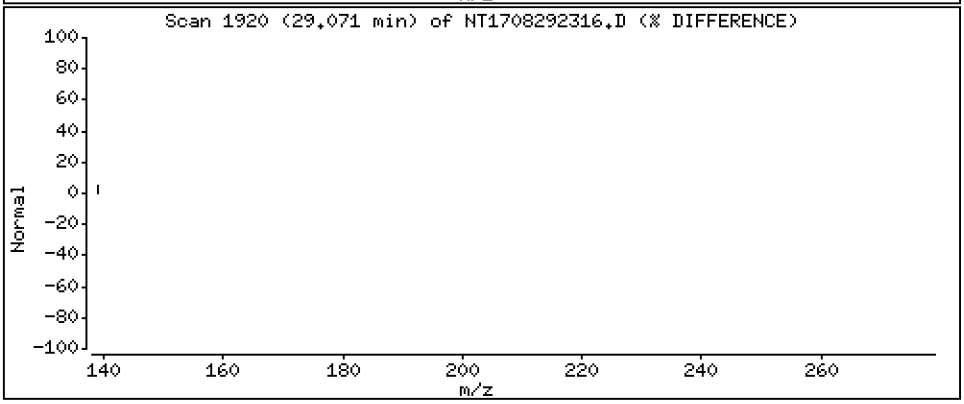












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Date : 29-AUG-2023 20:56

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-05

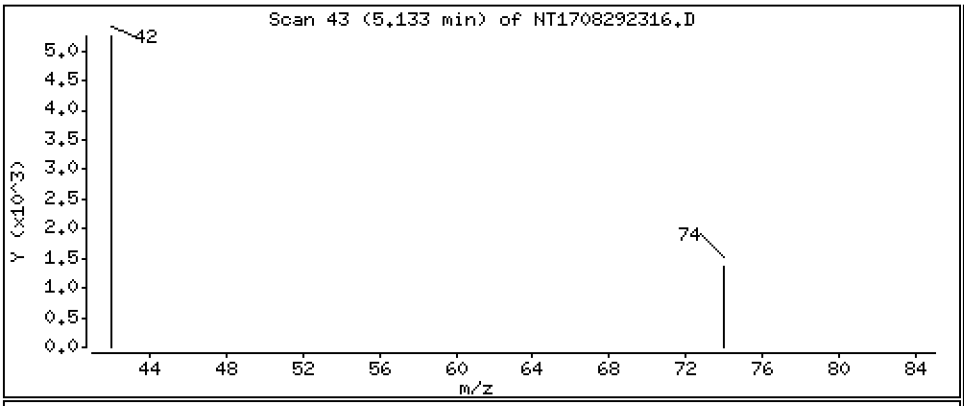
Operator: JGR

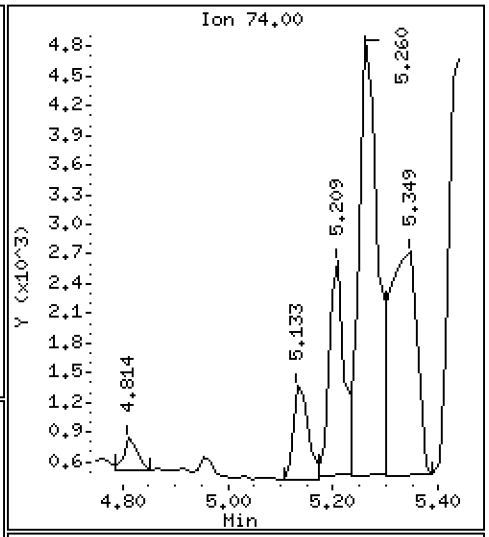
Column phase: ZB-5msi

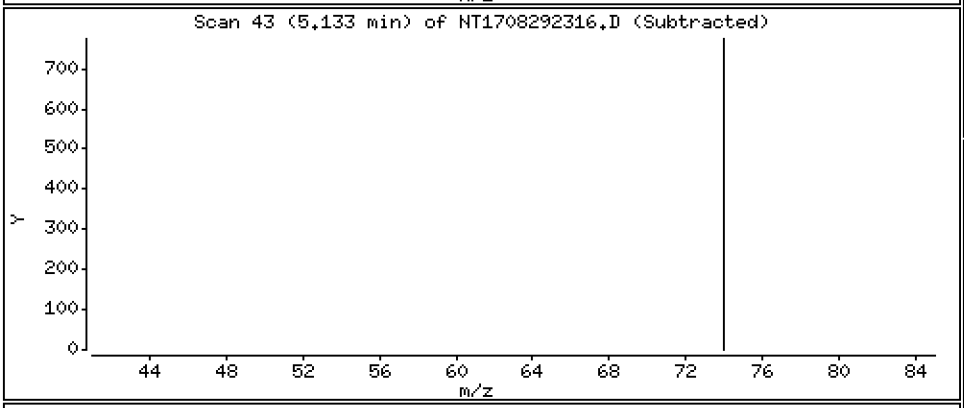
Column diameter: 0.25

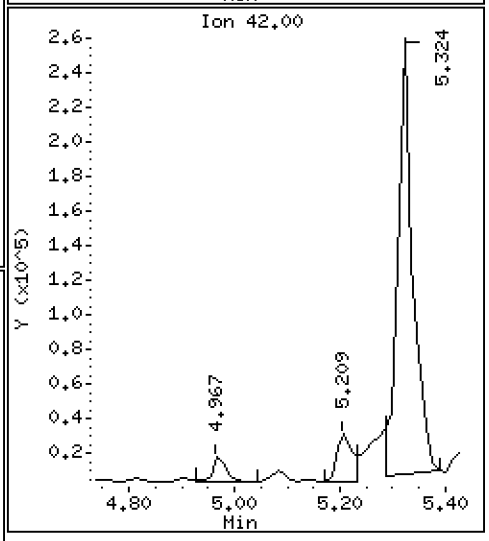
90 N-Nitrosodimethylamine

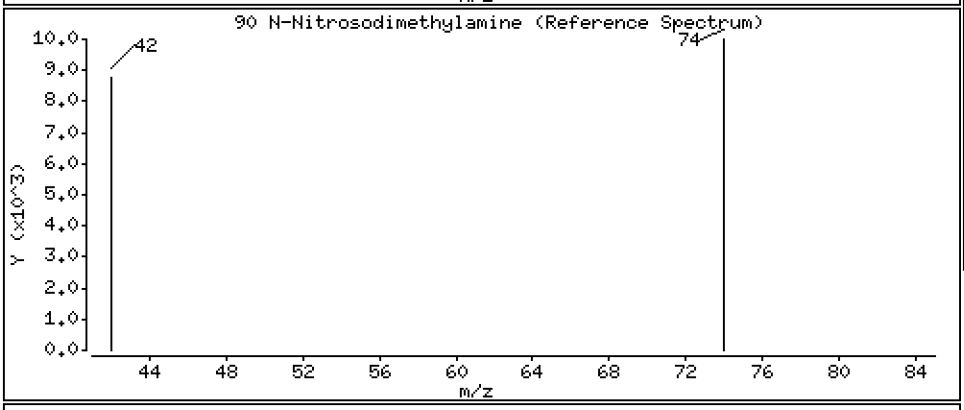
Concentration: 0.01137 ug/mL

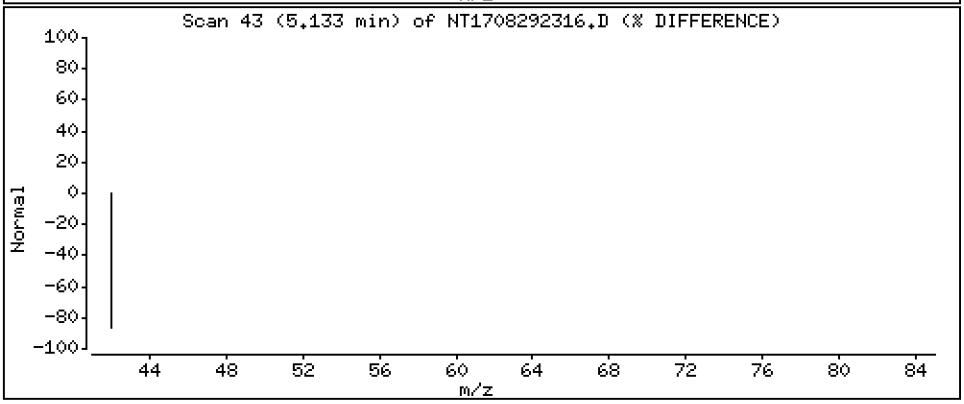












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292316.D
Lab Smp Id: 23H0579-05
Inj Date : 29-AUG-2023 20:56
Operator : JGR Inst ID: nt17.i
Smp Info : 23H0579-05
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 09:25 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.209	7.196	(0.766)	846042	5.24417	5.244(R)
	3 Phenol	94	8.789	8.776	(0.934)	63770	0.25930	0.2593
	7 1,3-Dichlorobenzene	146	9.349	9.349	(0.993)	1380	0.00830	0.008296
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	388539	4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	2378	0.01477	0.01477
	11 Benzyl alcohol	79	9.681	9.669	(1.028)	35298	0.20737	0.2074
	12 1,2-Dichlorobenzene	146	9.796	9.797	(1.041)	754	0.00483	0.004828
	13 2-Methylphenol	108	10.154	9.886	(1.079)	540472	3.62438	3.624
	15 4-Methylphenol	108	10.154	10.154	(1.079)	575191	3.69048	3.690
	16 N-Nitroso-di-n-propylamine	70	10.103	10.218	(1.073)	13555	0.08505	0.08505
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	24 Benzoic acid	105	11.317	11.329	(0.953)	42050	0.45420	0.4542
	26 1,2,4-Trichlorobenzene	180	11.789	11.789	(0.992)	905	0.00936	0.009360
*	27 Naphthalene-d8	136	11.878	11.878	(1.000)	1410367	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.977	14.977	(0.967)	8991	0.05309	0.05309
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	521028	4.00000	
	50 Diethylphthalate	149	16.417	16.417	(1.060)	33926	0.19267	0.1927
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	2552	0.02507	0.02507
	57 Hexachlorobenzene	284	17.881	17.894	(0.966)	224	0.00672	0.006717
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	492	0.02174	0.02174
*	59 Phenanthrene-d10	188	18.519	18.506	(1.000)	707968	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	300089	4.37572	4.376(R)
	67 Butylbenzylphthalate	149	22.510	22.511	(0.958)	12338	0.09382	0.09382
*	69 Chrysene-d12	240	23.506	23.506	(1.000)	495588	4.00000	
*	77 Perylene-d12	264	26.236	26.223	(1.000)	727498	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.071	29.071	(1.108)	44244	0.20590	0.2059
	90 N-Nitrosodimethylamine	74	5.132	5.094	(0.545)	1866	0.01137	0.01137

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 30-Aug-2023 09:26

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292316.D
Lab Smp Id: 23H0579-05
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 29-AUG-2023
Calibration Time: 12:37
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	296489	148245	592978	388539	31.05
27 Naphthalene-d8	1098892	549446	2197784	1410367	28.34
42 Acenaphthene-d10	443071	221536	886142	521028	17.59
59 Phenanthrene-d10	627744	313872	1255488	707968	12.78
69 Chrysene-d12	404122	202061	808244	495588	22.63
77 Perylene-d12	417323	208662	834646	727498	74.32

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	-0.00
27 Naphthalene-d8	11.88	11.38	12.38	11.88	-0.00
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	-0.00
59 Phenanthrene-d10	18.51	18.01	19.01	18.52	0.07
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.22	25.72	26.72	26.24	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292316.D

Lab ID: 23H0579-05
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   29-AUG-2023 20:56

RT	CO-ELUTION COMPOUNDS
10.155	4-Methylphenol and 2-Methylphenol

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.079	1.050	0.0285	2-Methylphenol
1.073	1.085	-0.0122	N-Nitroso-di-n-propylamine

RRT check based on Ccal File: SIM.b/NT1708292304.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1038A

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23H0579-06 A	SDG:	23H0579
Sampled:	01/13/23 09:46	Prepared:	08/25/23 12:39	File ID:	NT1708292317.D
% Solids:	94.31	Preparation:	EPA 3546 (Microwave)	Analyzed:	08/29/23 21:33
Batch:	BLH0669	Sequence:	SLH0447	Initial/Final:	10.6 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GH00045
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	750.24	596	79.4	27 - 120	
p-Terphenyl-d14	500.16	467	93.3	37 - 120	Q

INTERNAL STANDARDS	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	368553	9.413	296489	9.413	
Naphthalene-d8	1344656	11.878	1098892	11.878	
Acenaphthene-d10	479393	15.487	443071	15.487	
Phenanthrene-d10	685047	18.519	627744	18.506	
Chrysene-d12	440712	23.506	404122	23.506	
Perylene-d12	675829	26.236	417323	26.223	

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292317.D

Date : 29-AUG-2023 21:33

Client ID:

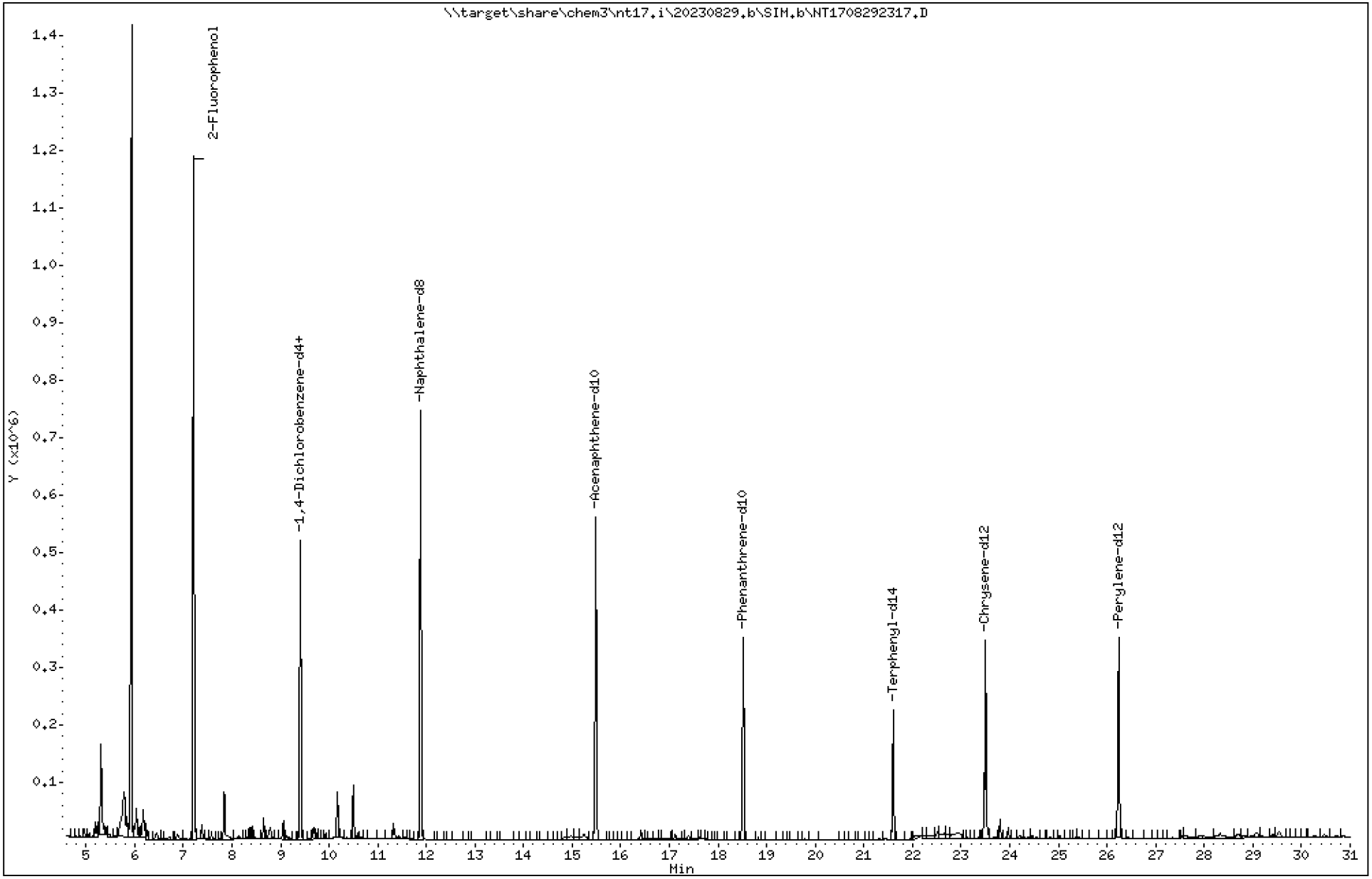
Sample Info: 23H0579-06

Instrument: nt17.i

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

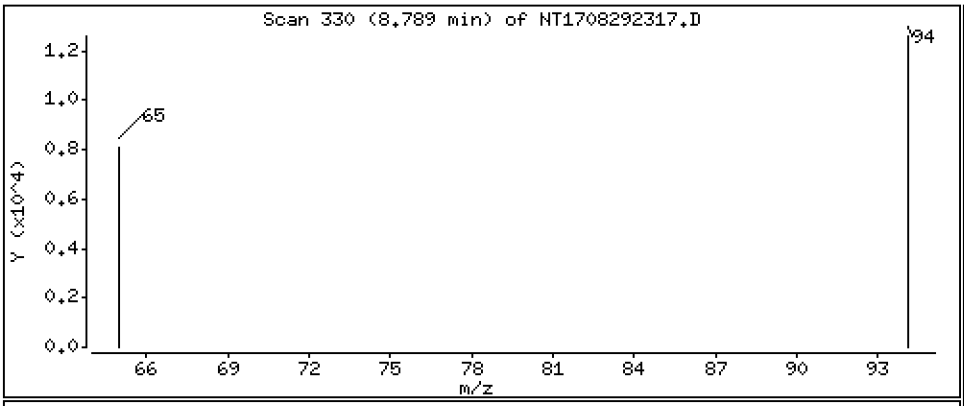
Operator: JGR

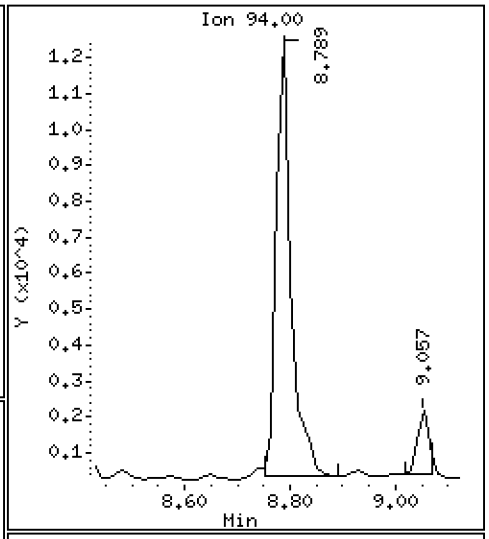
Column phase: ZB-5msi

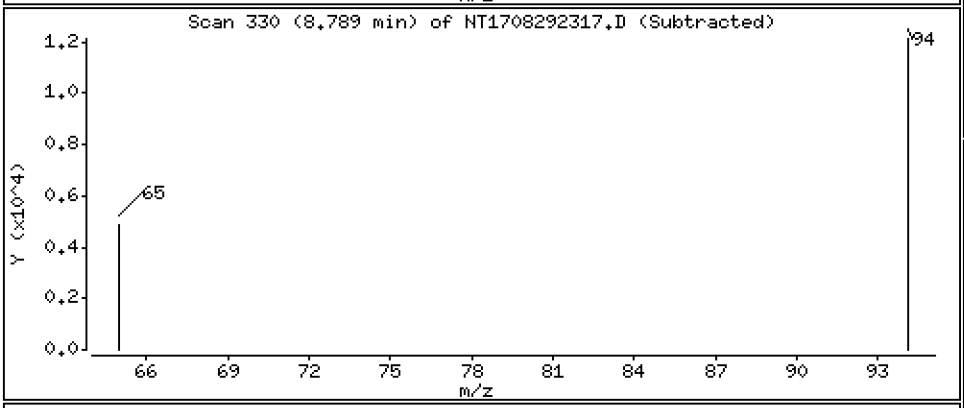
Column diameter: 0.25

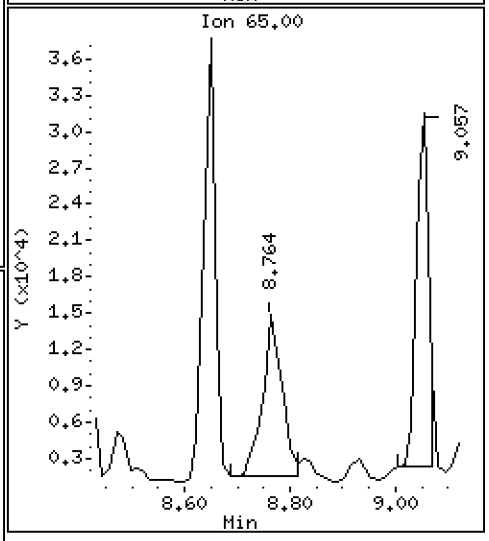
3 Phenol

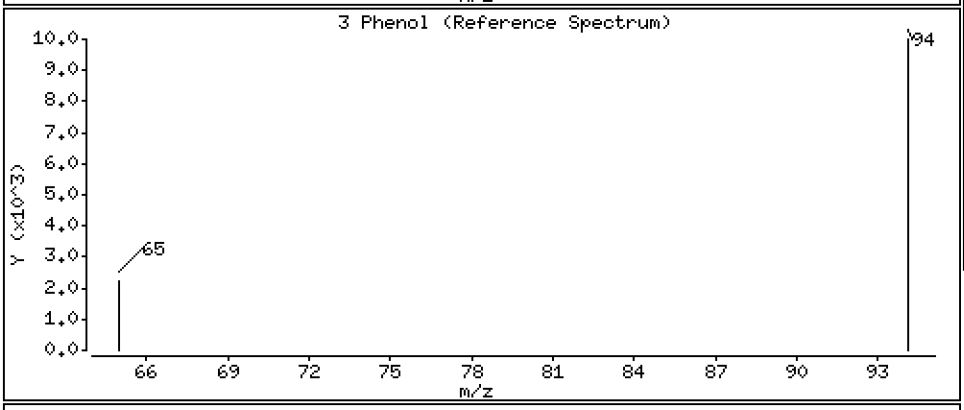
Concentration: 0.1031 ug/mL

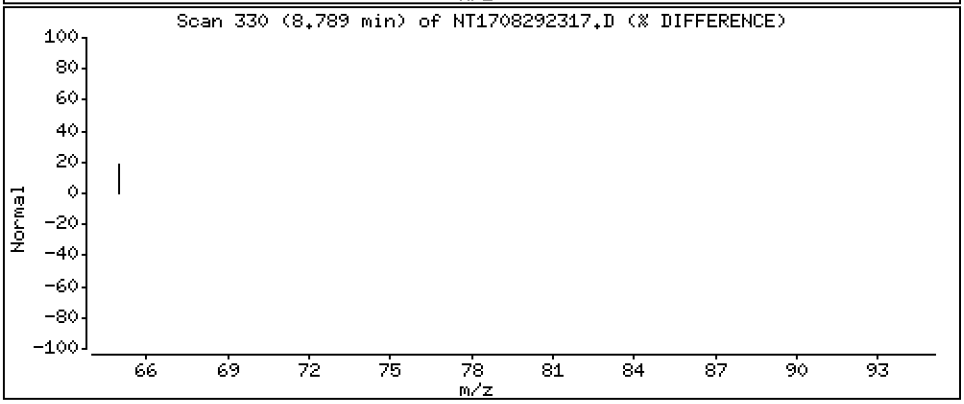












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

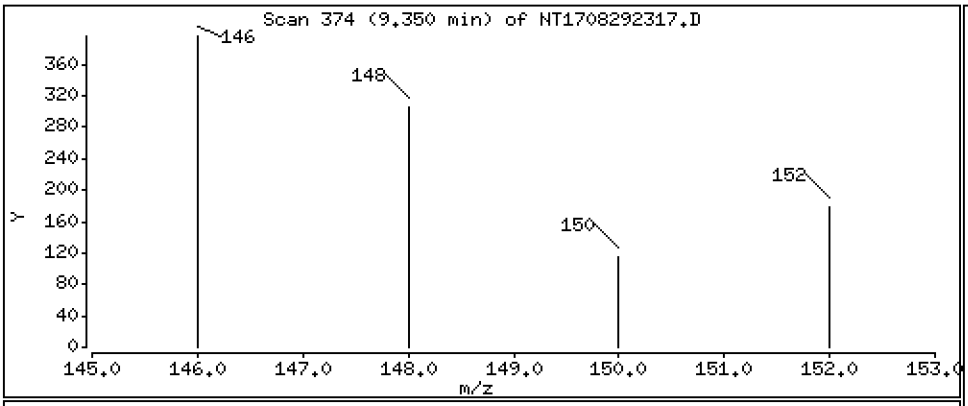
Operator: JGR

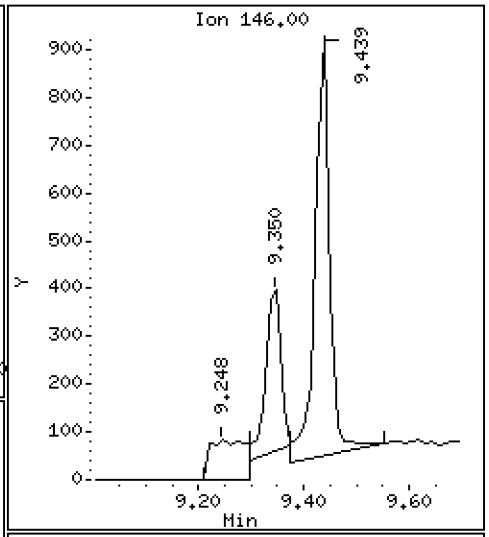
Column phase: ZB-5msi

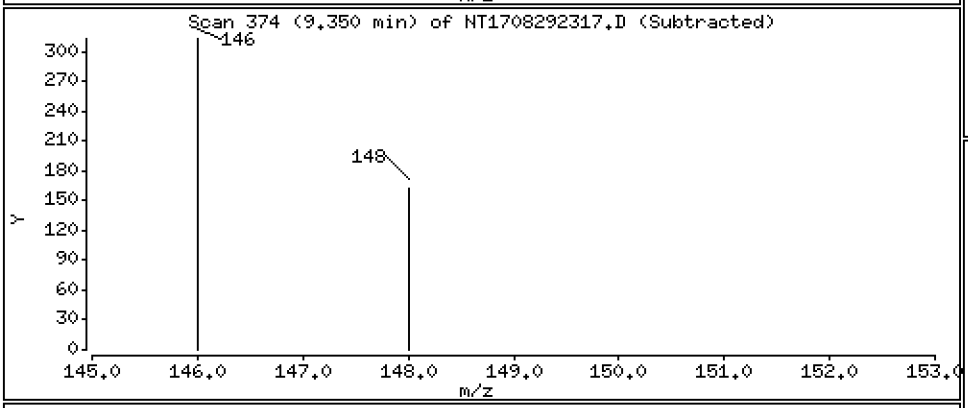
Column diameter: 0.25

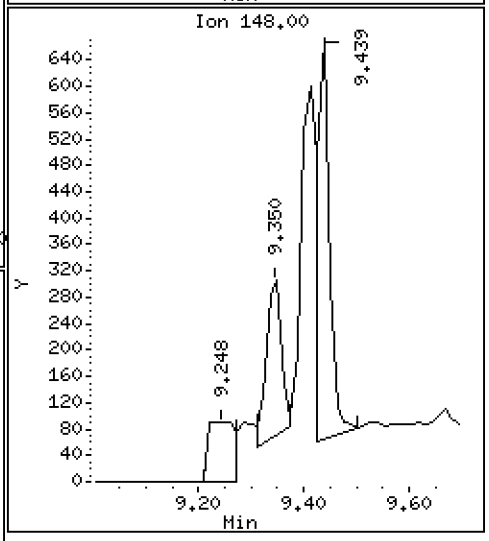
7 1,3-Dichlorobenzene

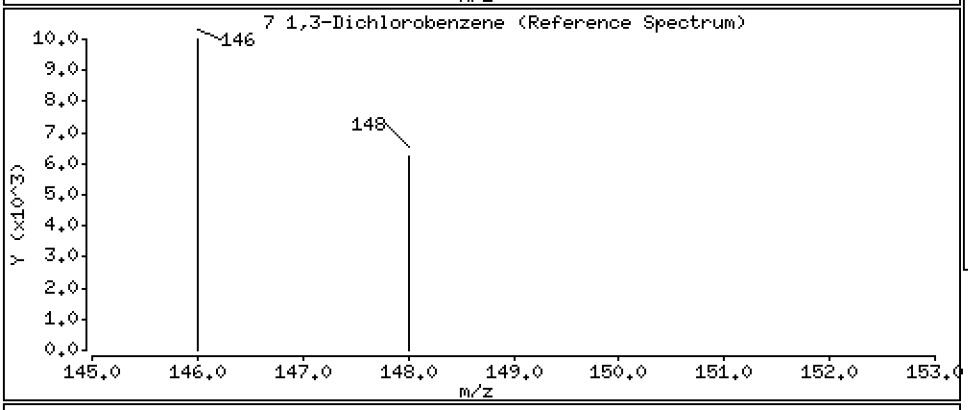
Concentration: 0.004417 ug/mL

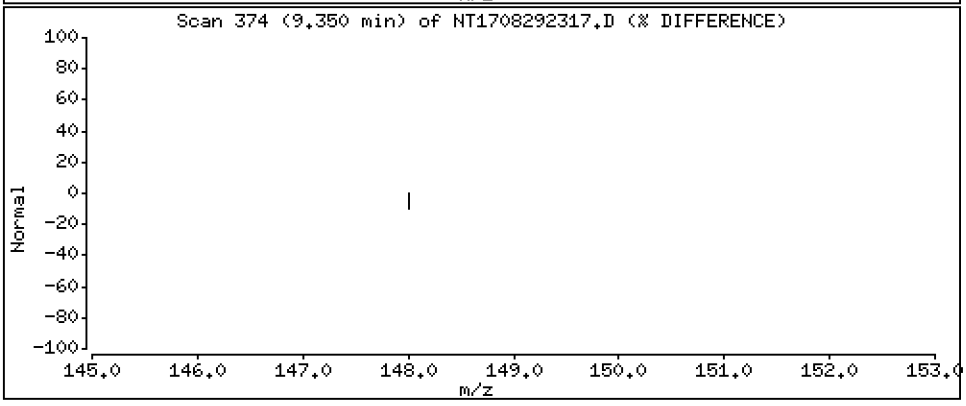












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

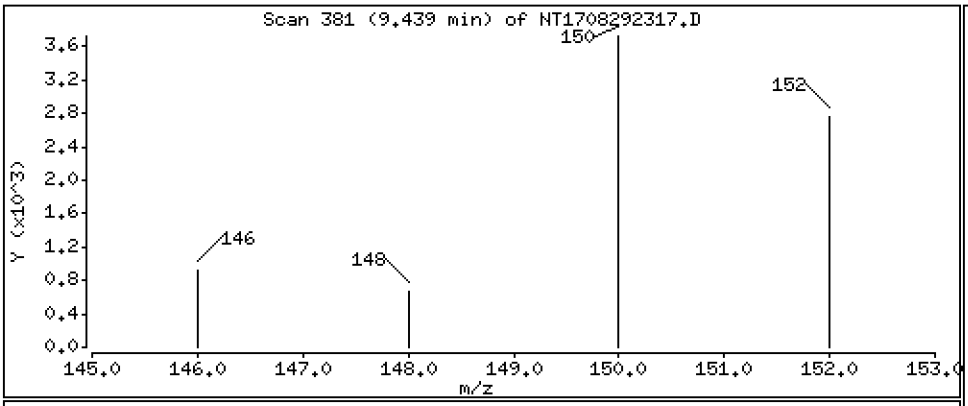
Operator: JGR

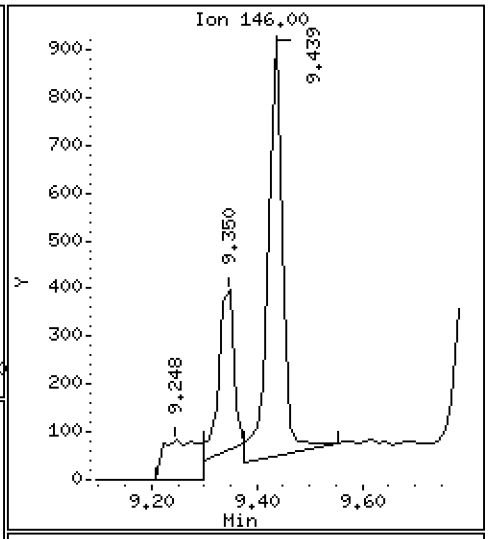
Column phase: ZB-5msi

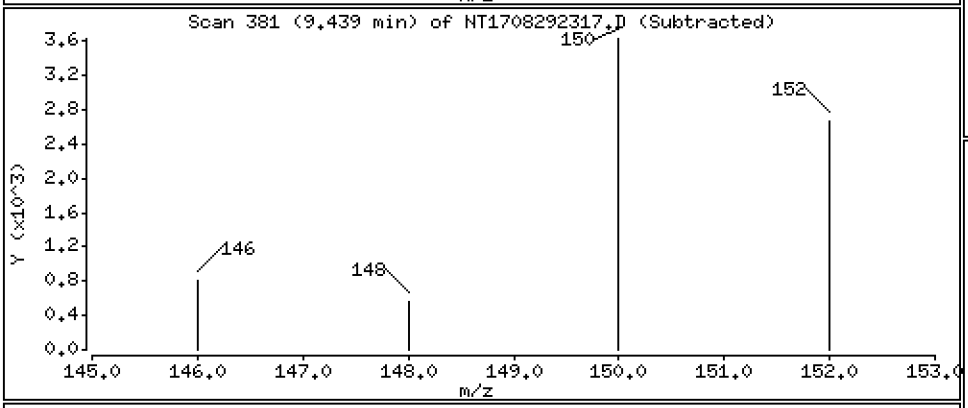
Column diameter: 0.25

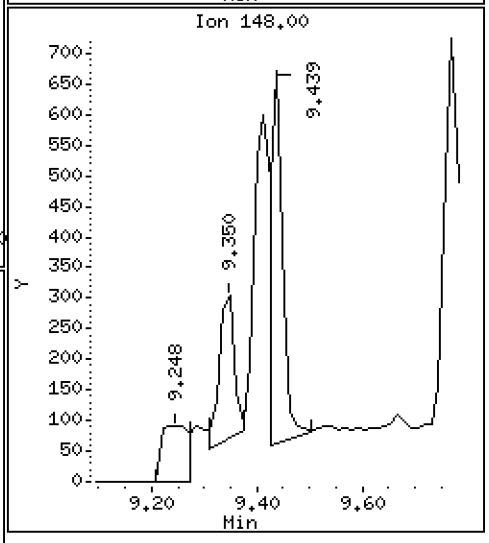
9 1,4-Dichlorobenzene

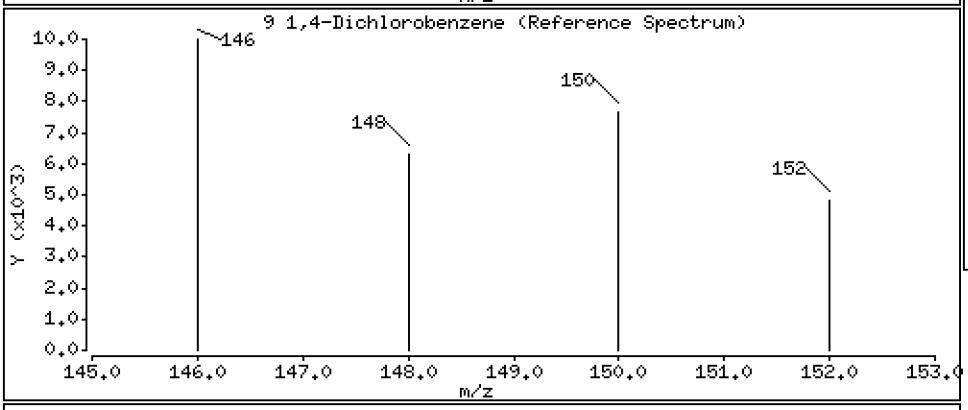
Concentration: 0.01124 ug/mL

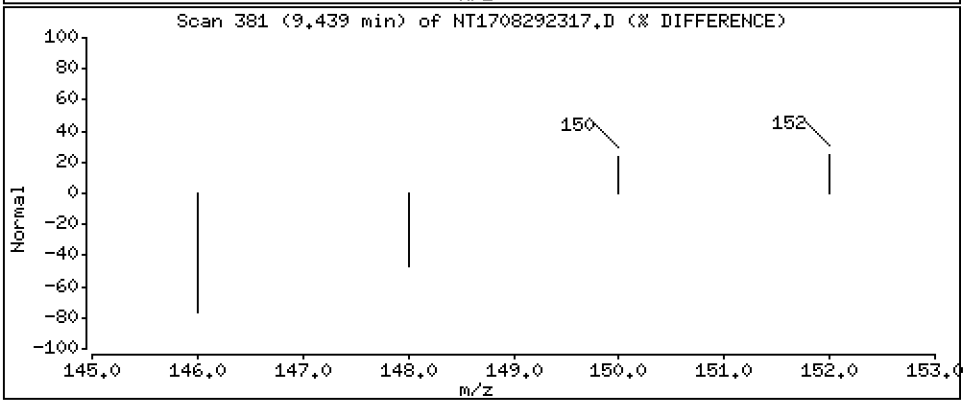












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

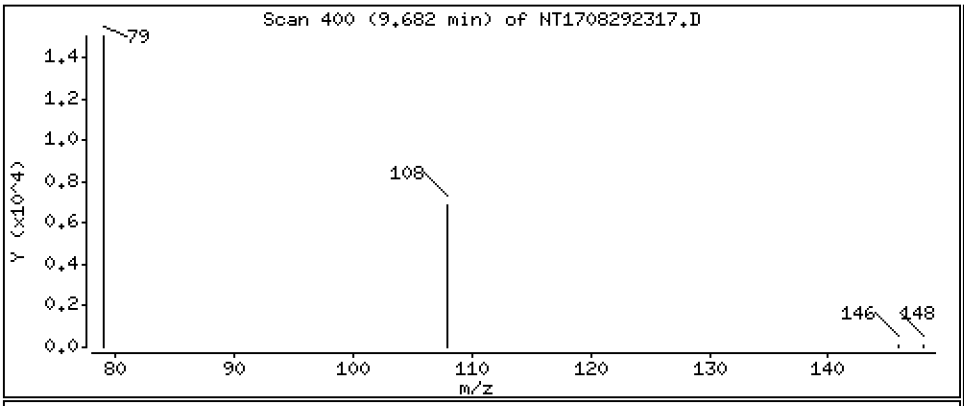
Operator: JGR

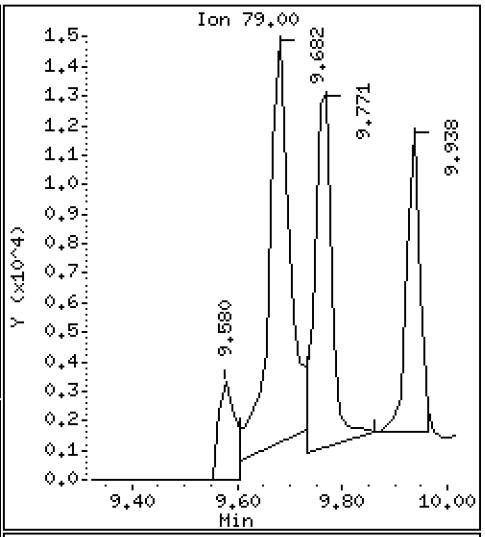
Column phase: ZB-5msi

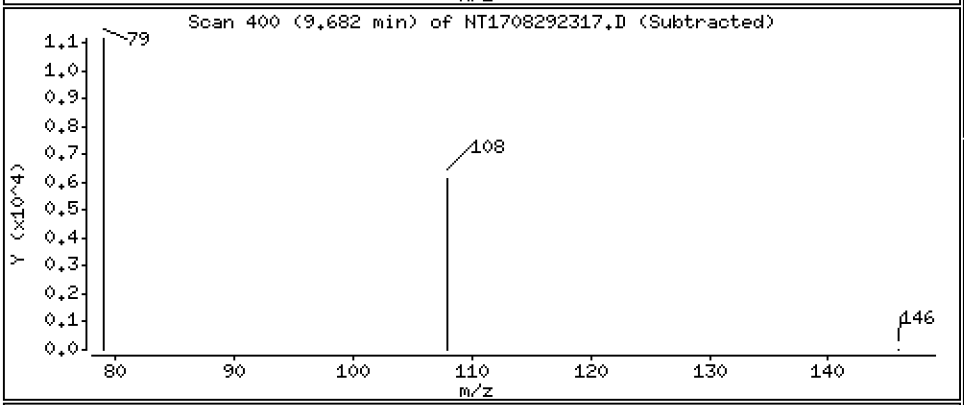
Column diameter: 0.25

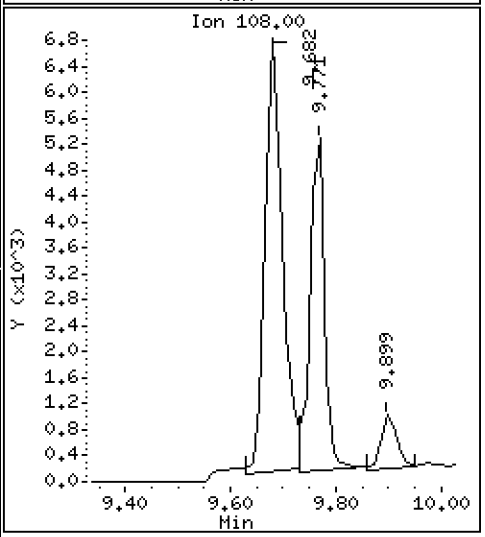
11 Benzyl alcohol

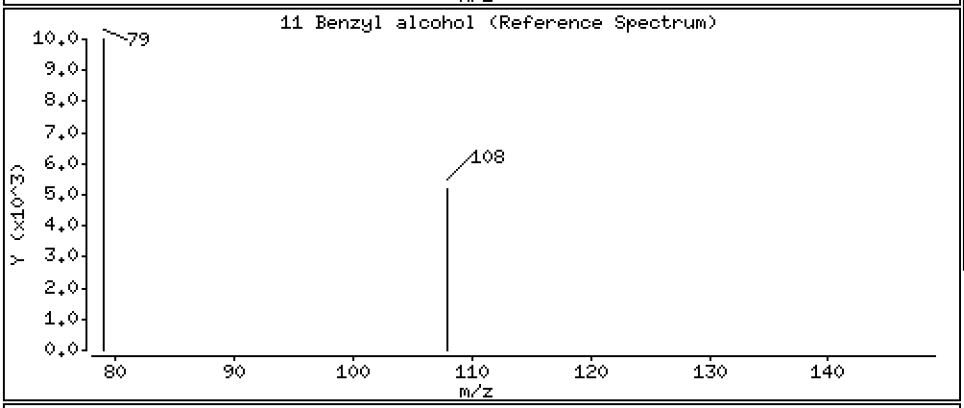
Concentration: 0.2373 ug/mL

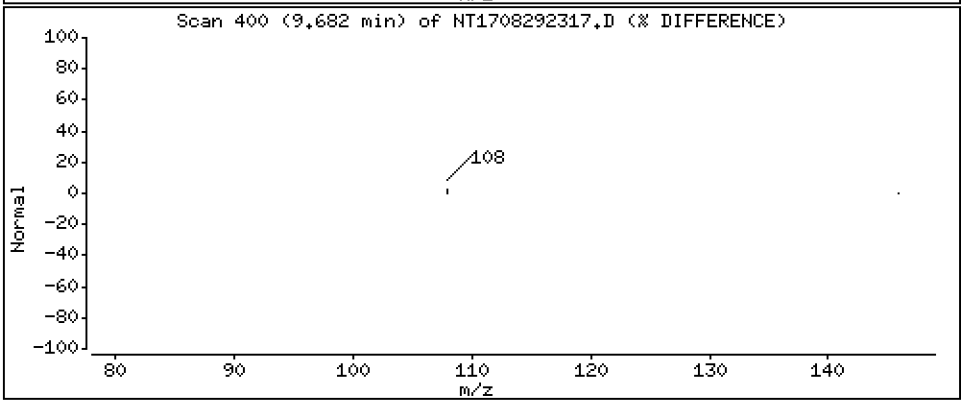












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

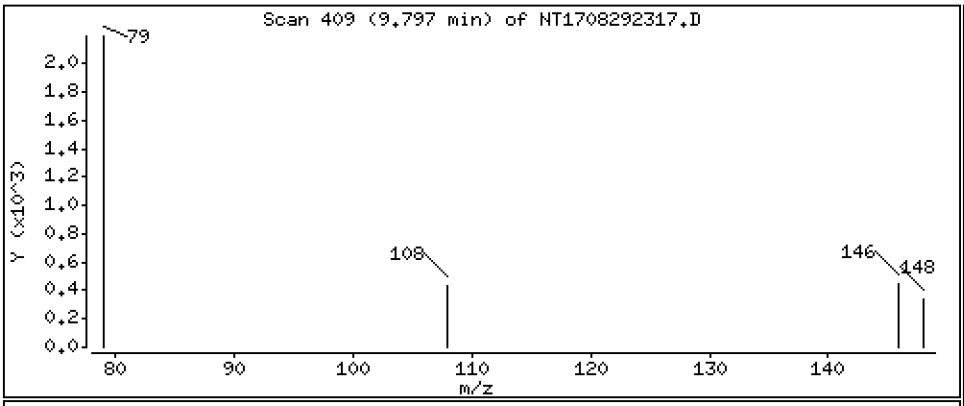
Operator: JGR

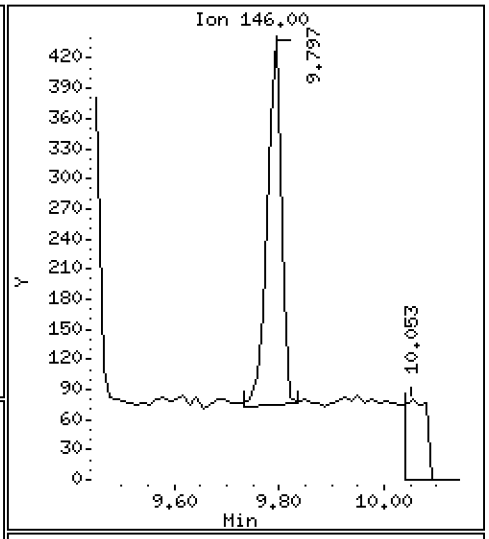
Column phase: ZB-5msi

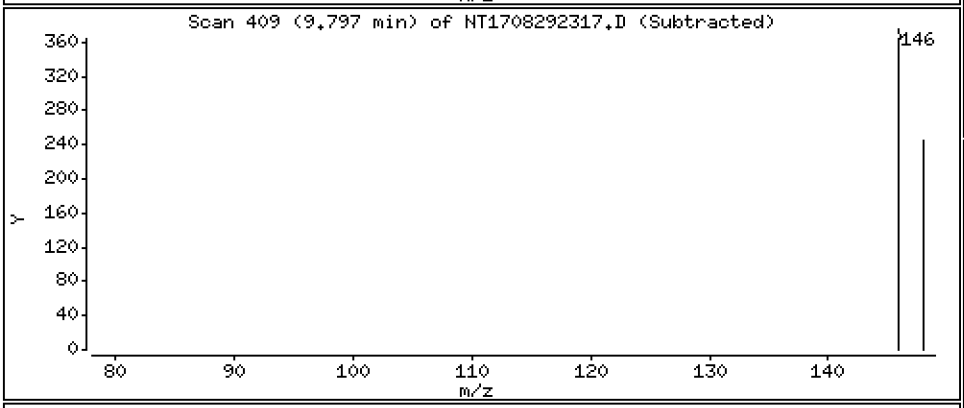
Column diameter: 0.25

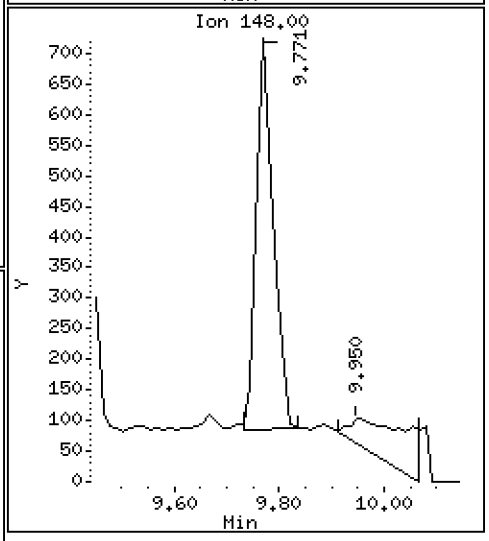
12 1,2-Dichlorobenzene

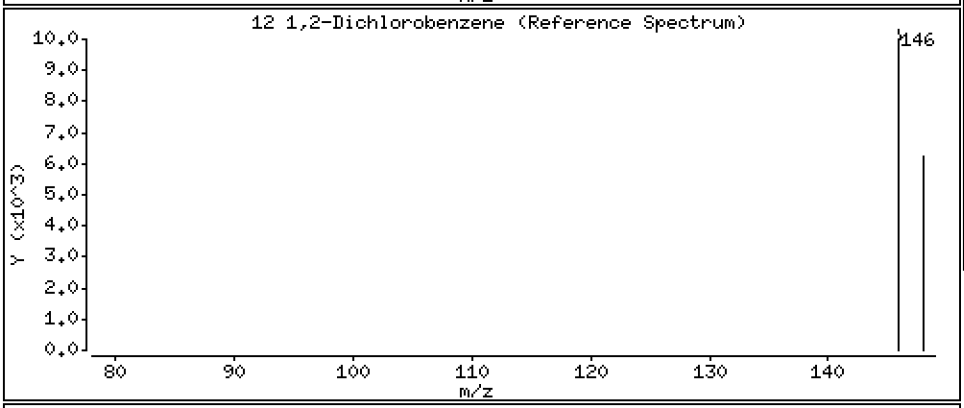
Concentration: 0.004644 ug/mL

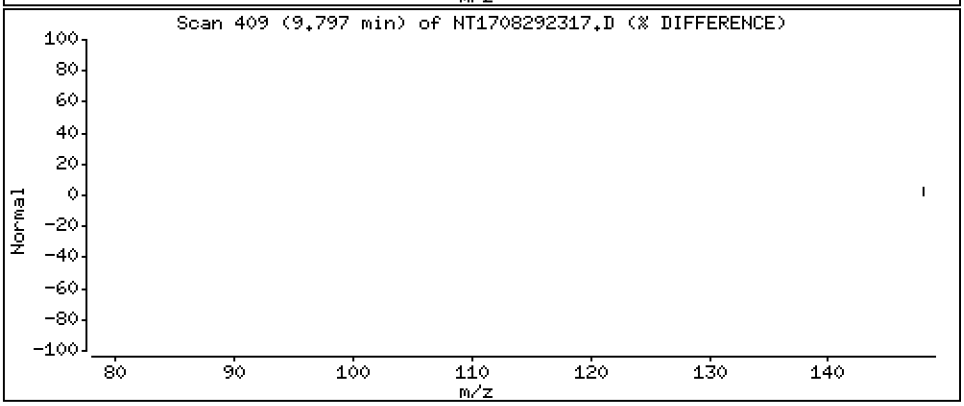












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

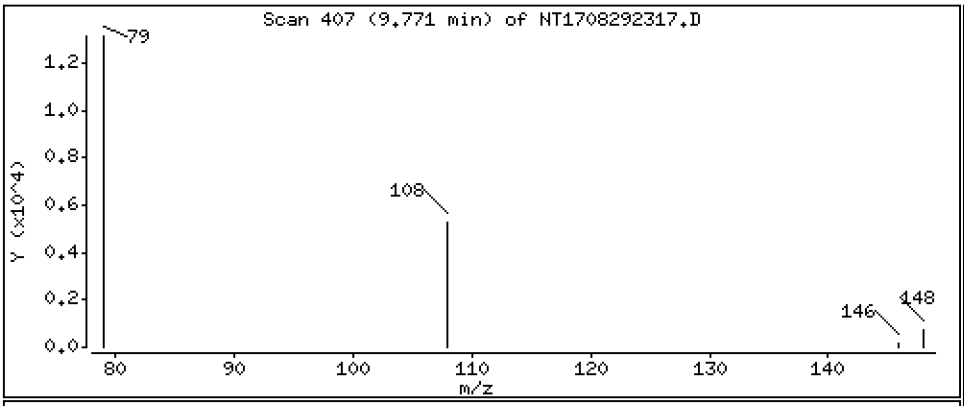
Operator: JGR

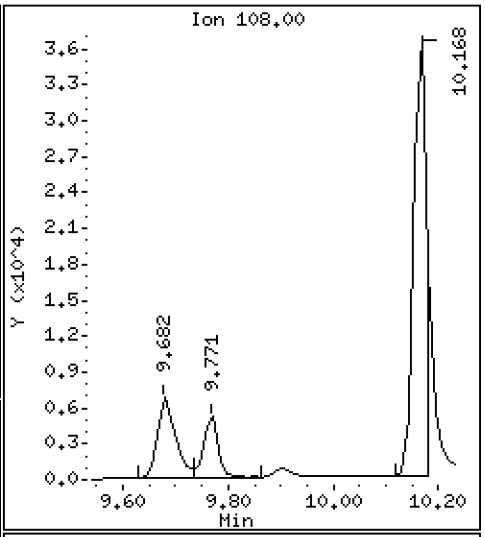
Column phase: ZB-5msi

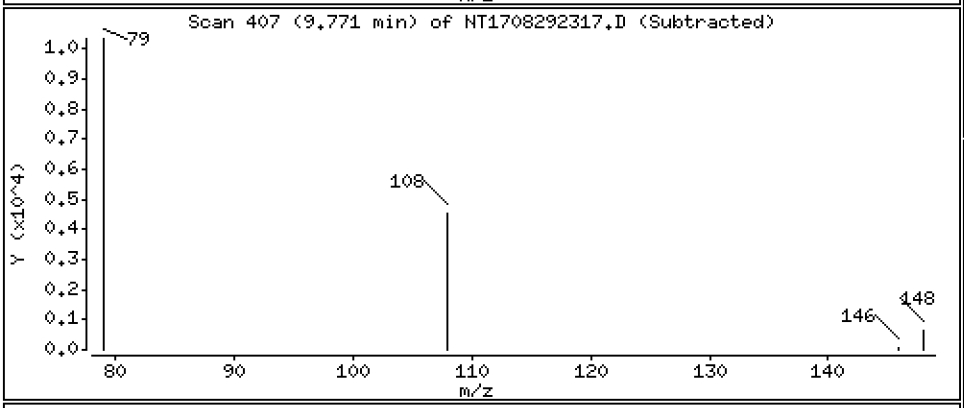
Column diameter: 0.25

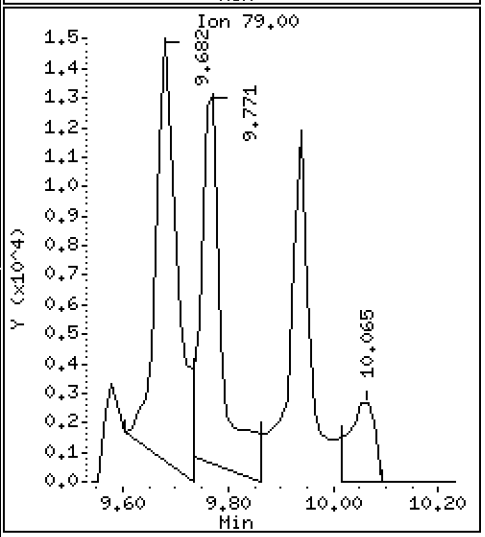
13 2-Methylphenol

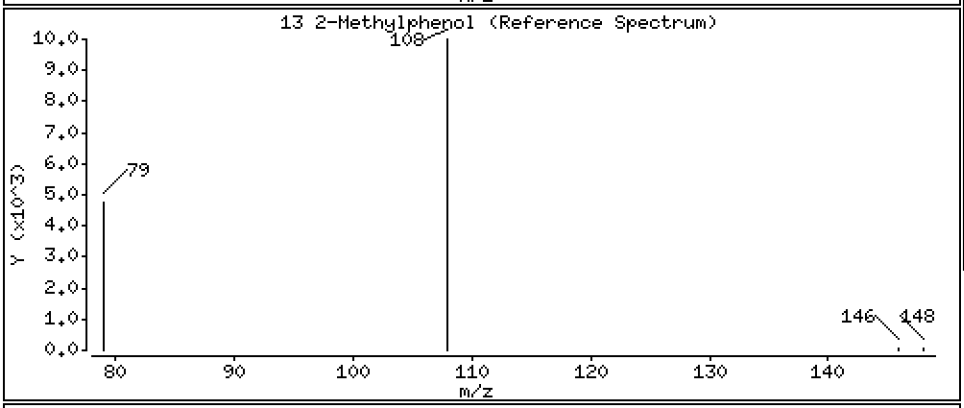
Concentration: 0.06894 ug/mL

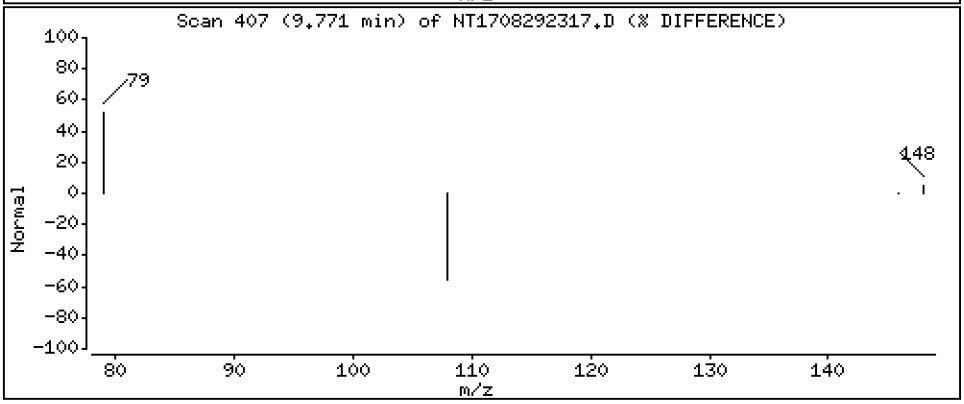












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

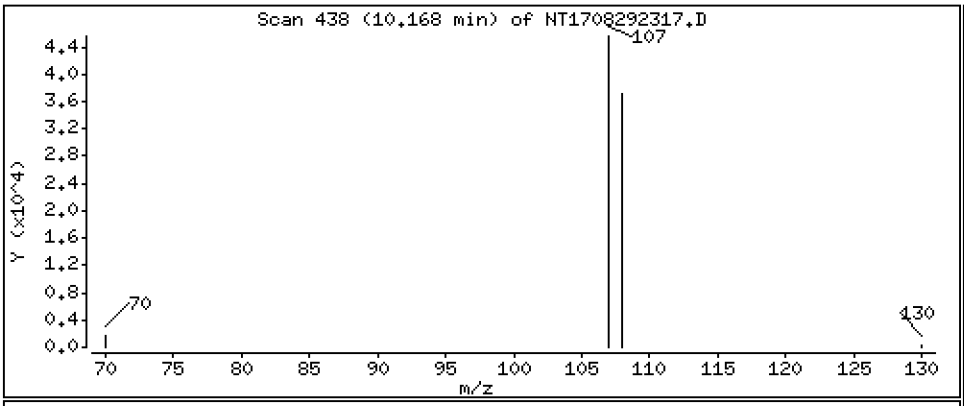
Operator: JGR

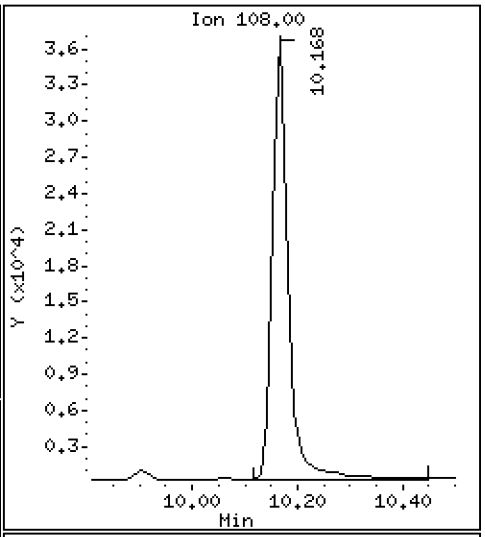
Column phase: ZB-5msi

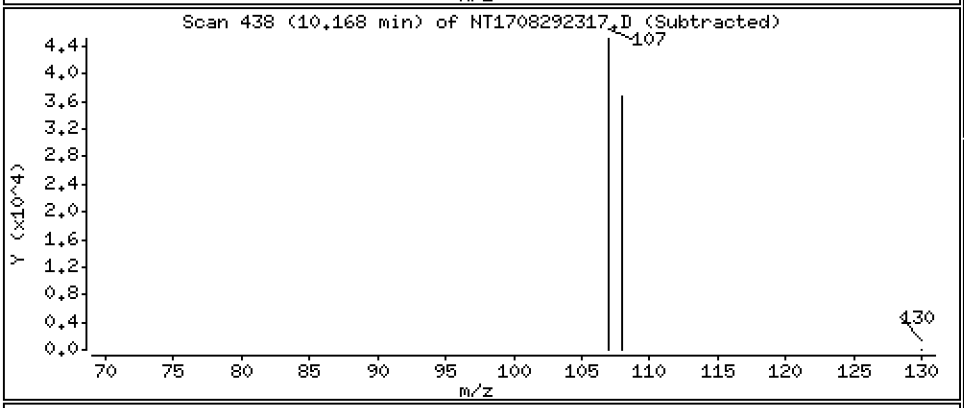
Column diameter: 0.25

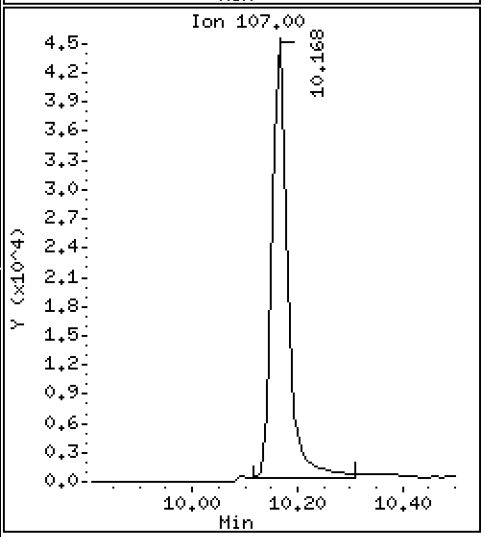
15 4-Methylphenol

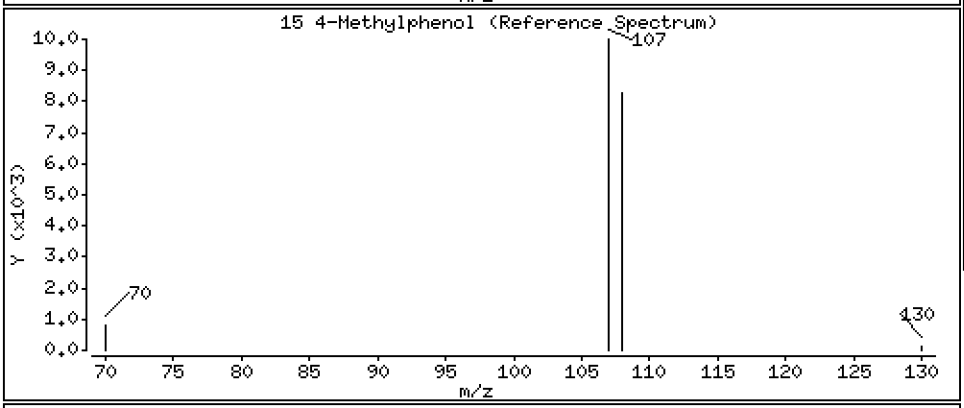
Concentration: 0.5177 ug/mL

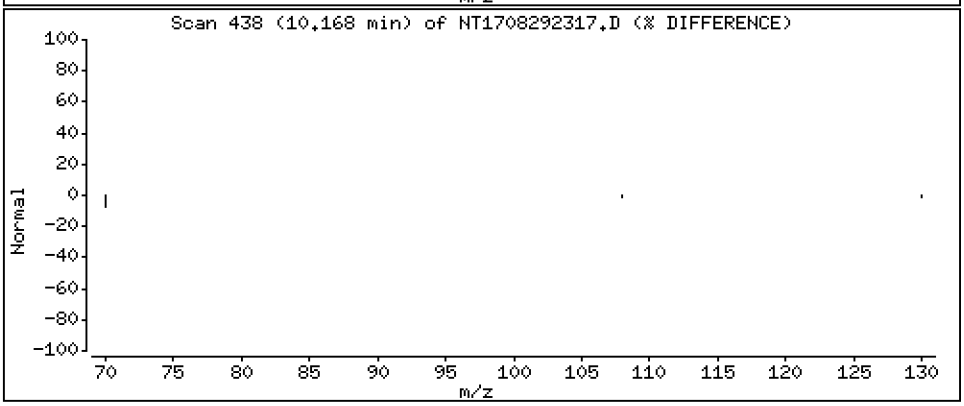












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

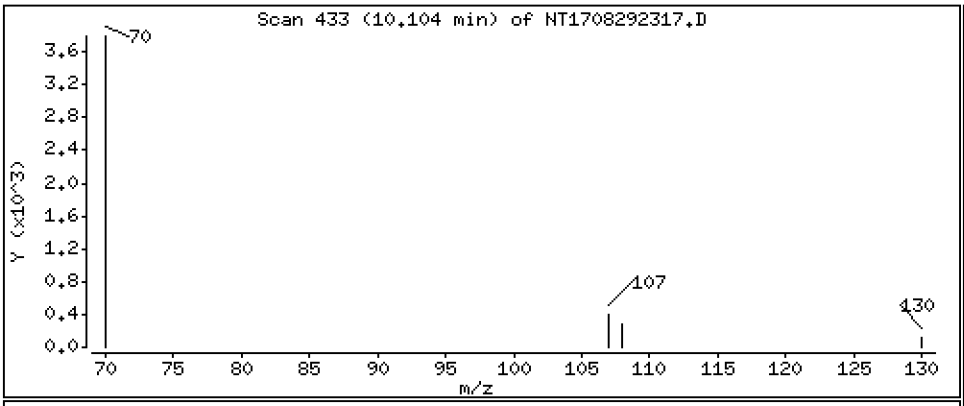
Operator: JGR

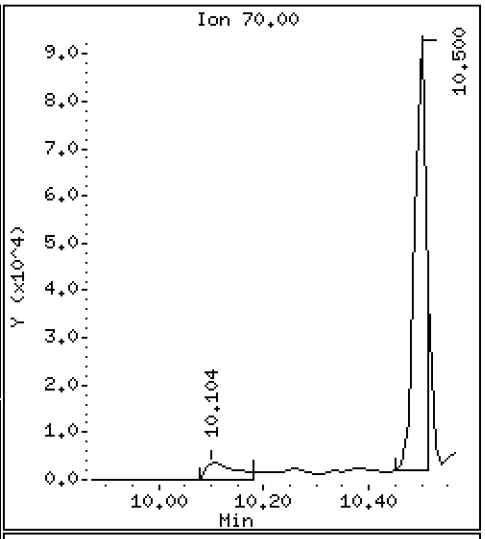
Column phase: ZB-5msi

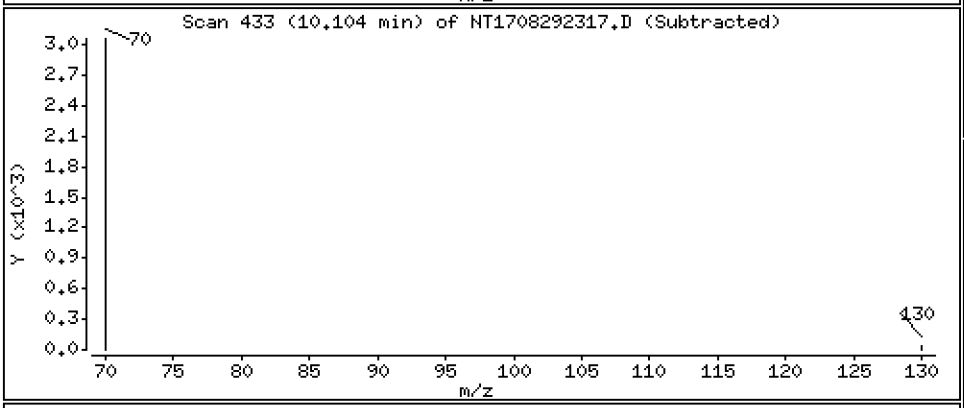
Column diameter: 0.25

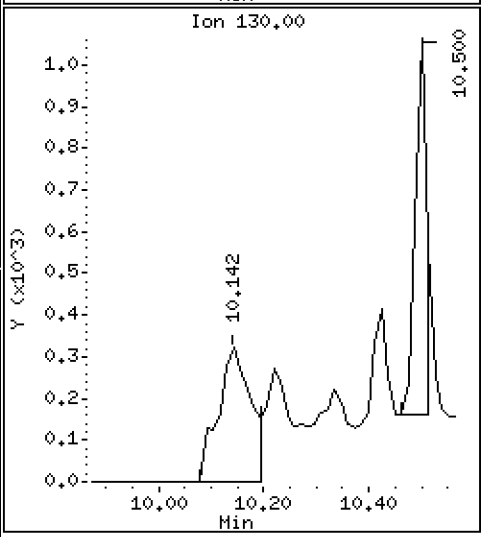
16 N-Nitroso-di-n-propylamine

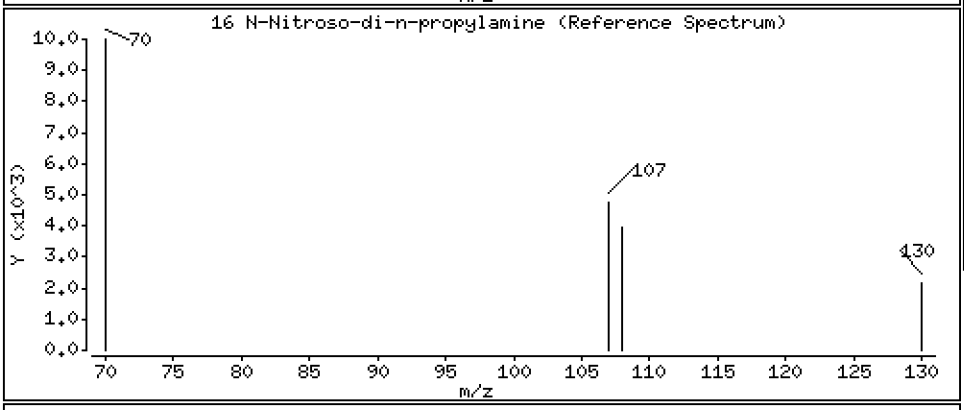
Concentration: 0.09907 ug/mL

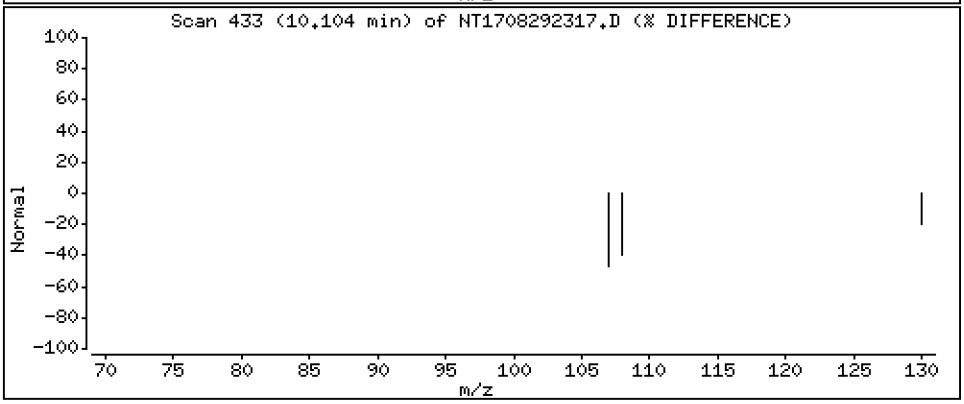












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

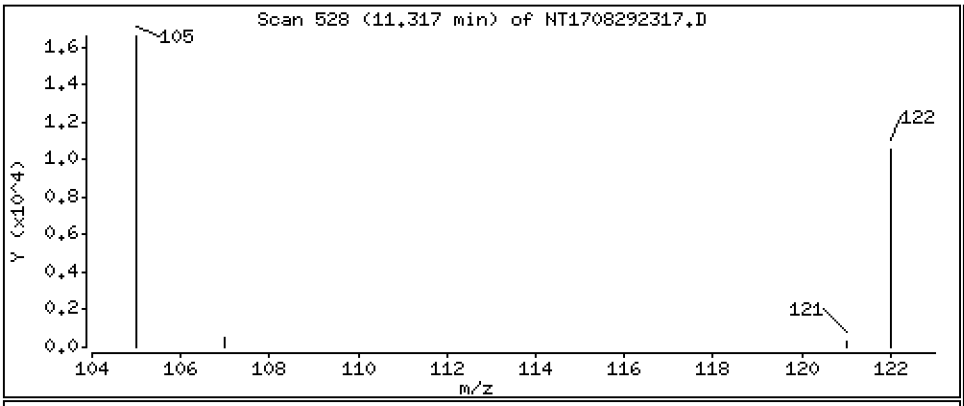
Operator: JGR

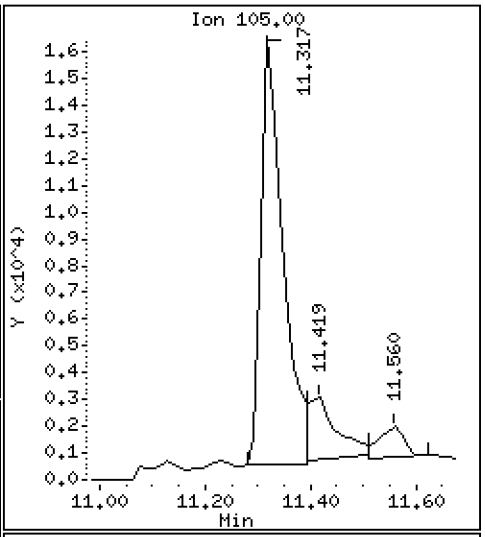
Column phase: ZB-5msi

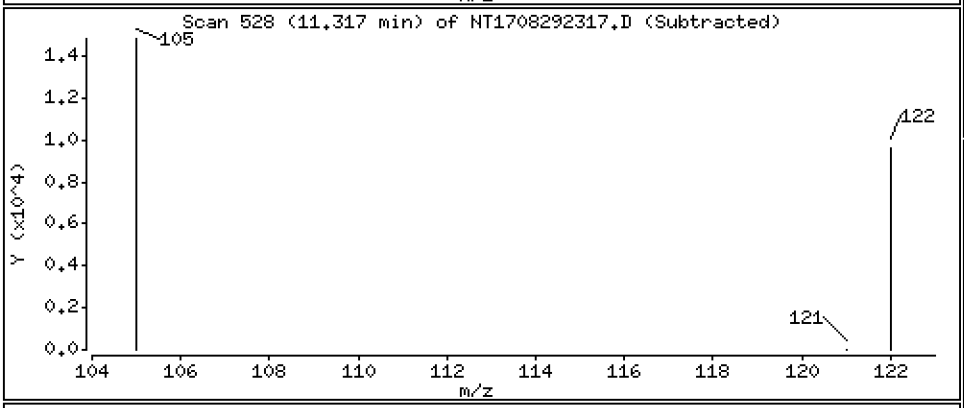
Column diameter: 0.25

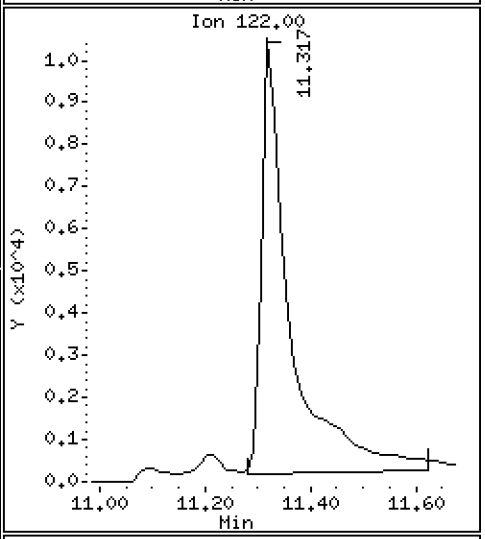
24 Benzoic acid

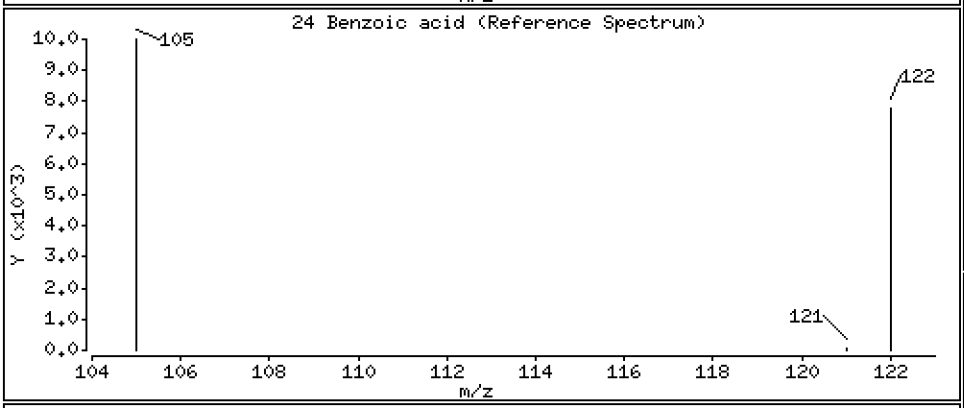
Concentration: 0.5373 ug/mL

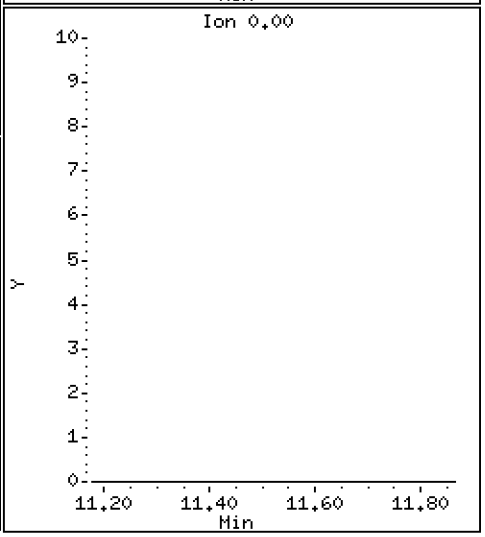


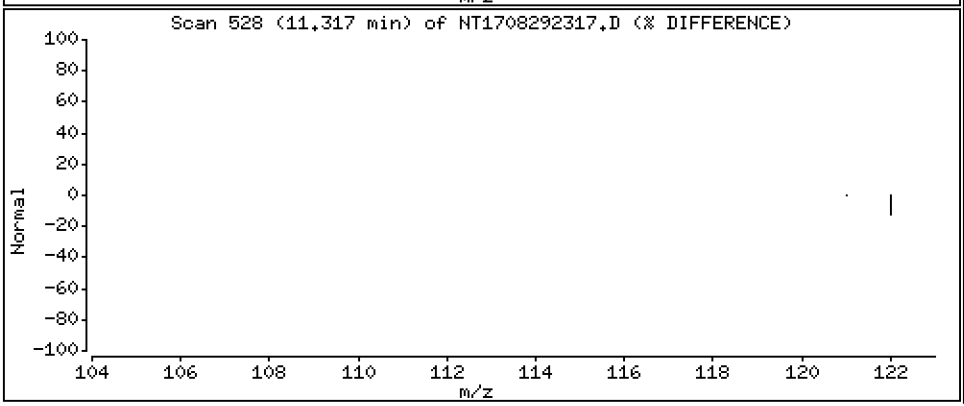












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

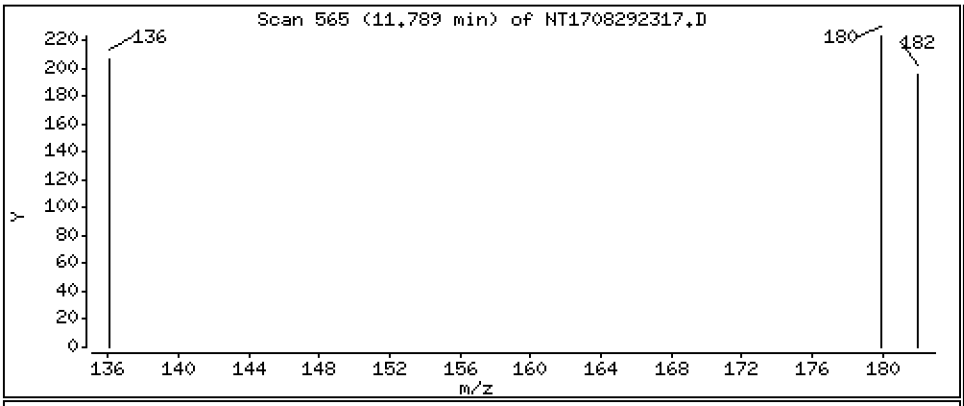
Operator: JGR

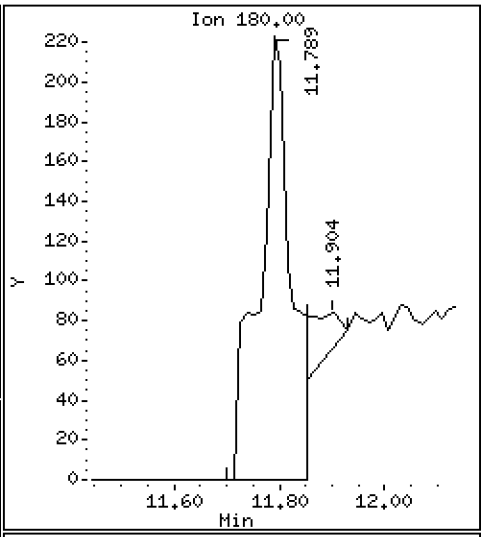
Column phase: ZB-5msi

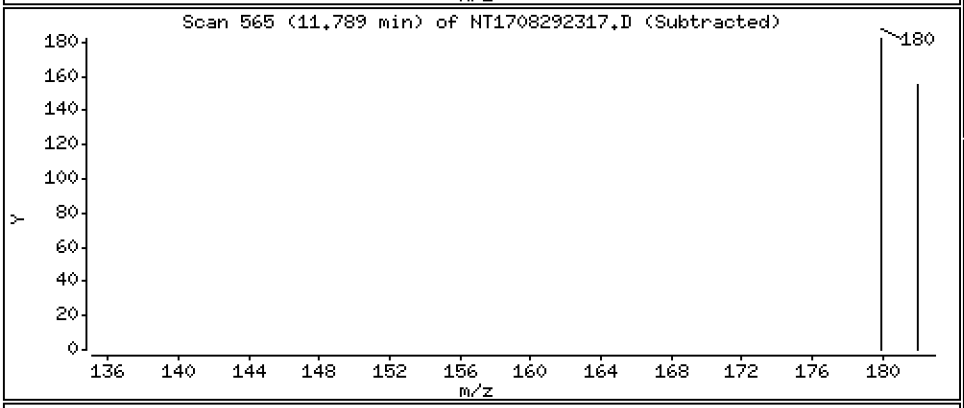
Column diameter: 0.25

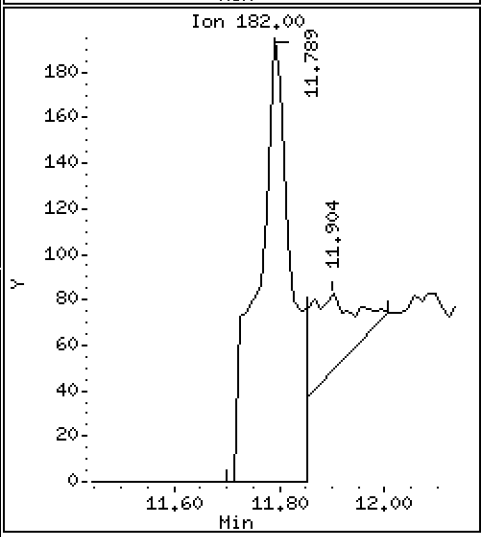
26 1,2,4-Trichlorobenzene

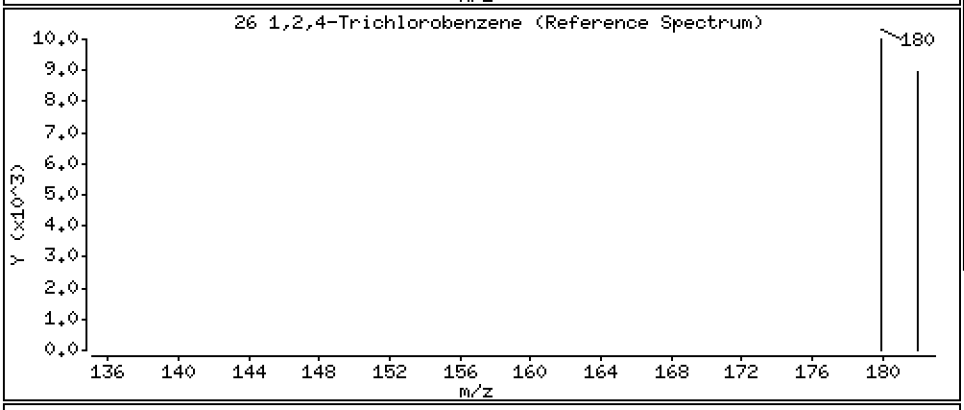
Concentration: 0.01034 ug/mL

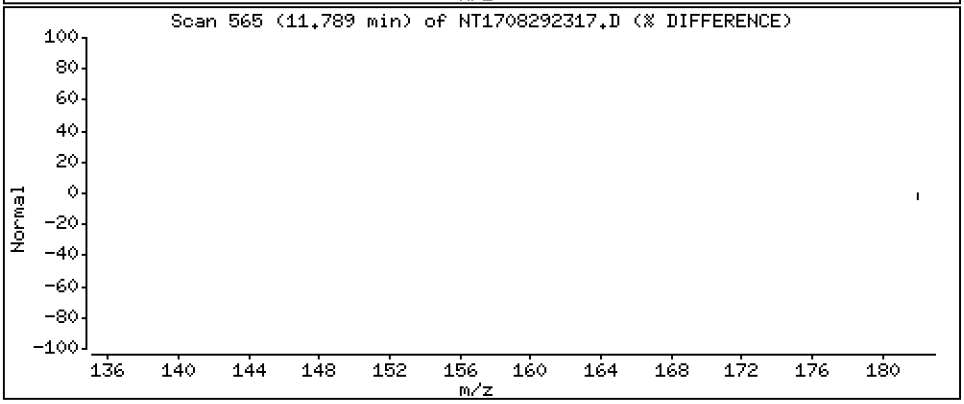












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

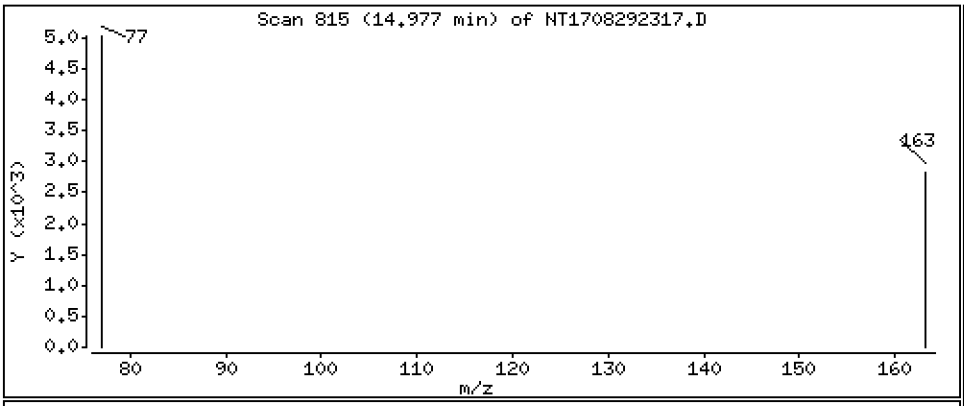
Operator: JGR

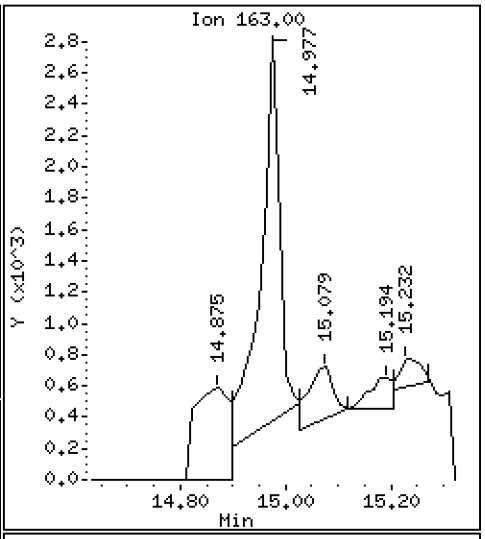
Column phase: ZB-5msi

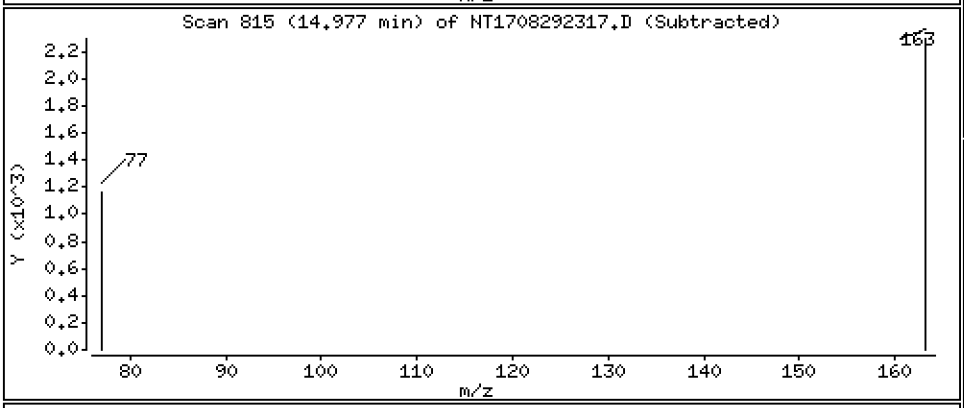
Column diameter: 0.25

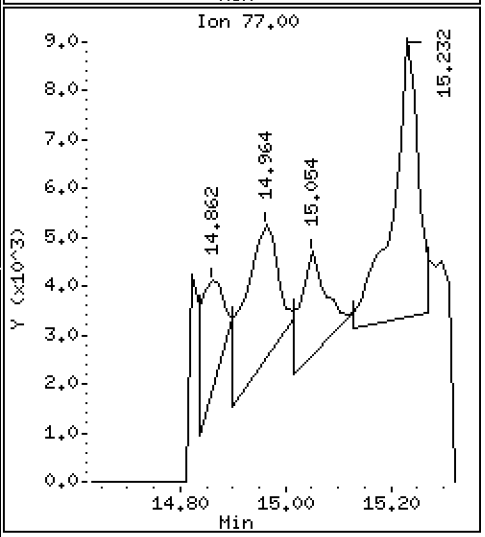
39 Dimethylphthalate

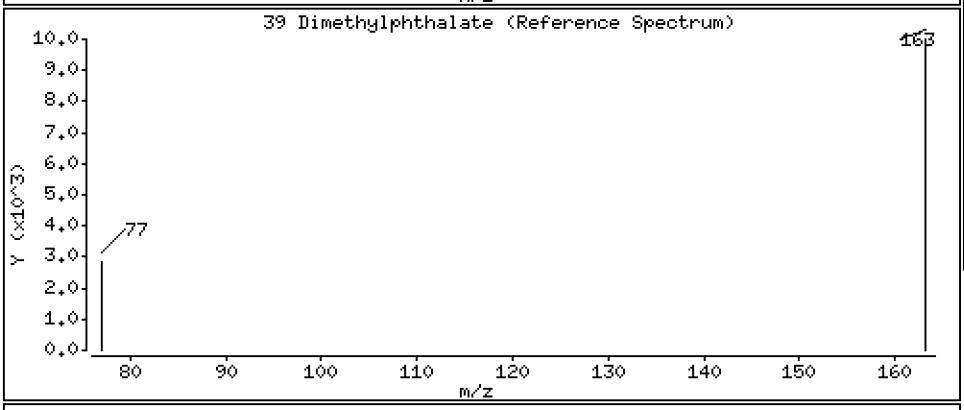
Concentration: 0.03924 ug/mL

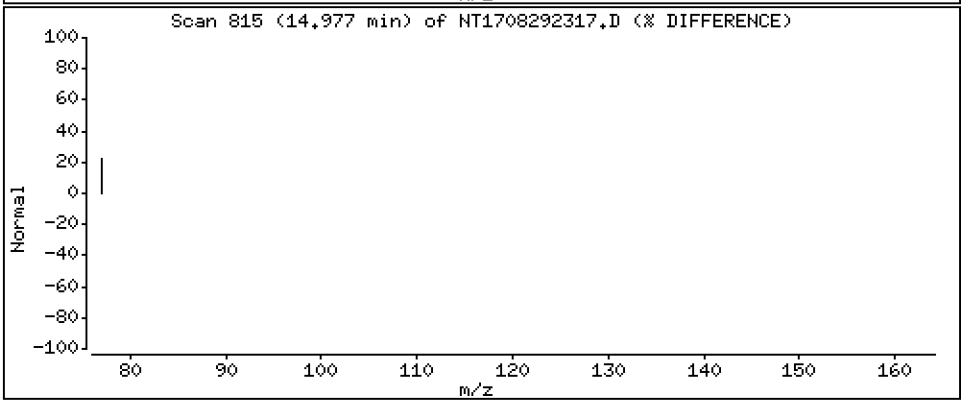












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

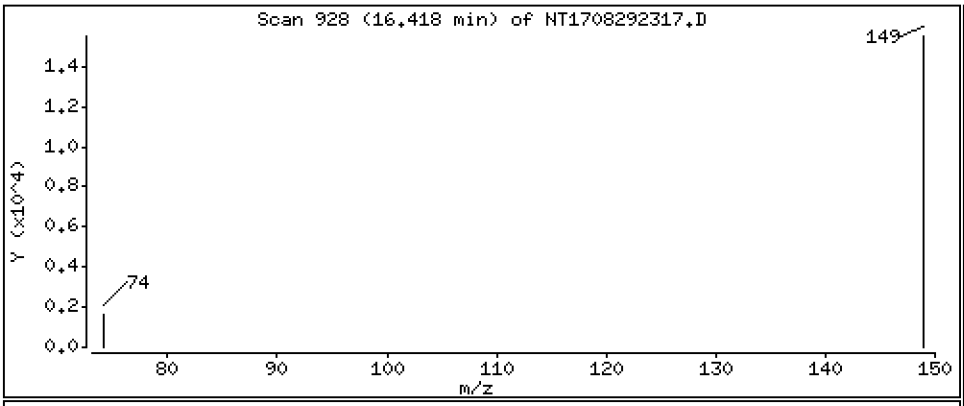
Operator: JGR

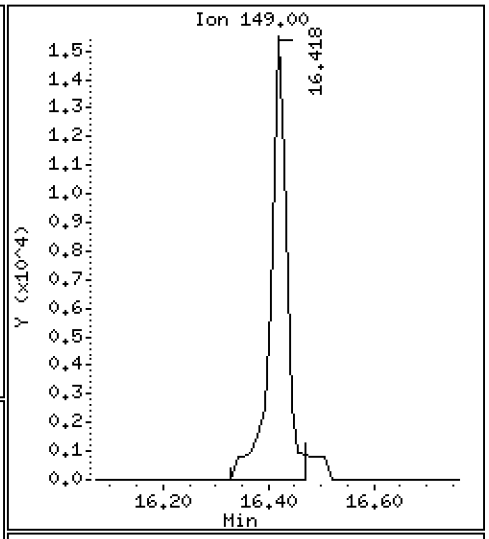
Column phase: ZB-5msi

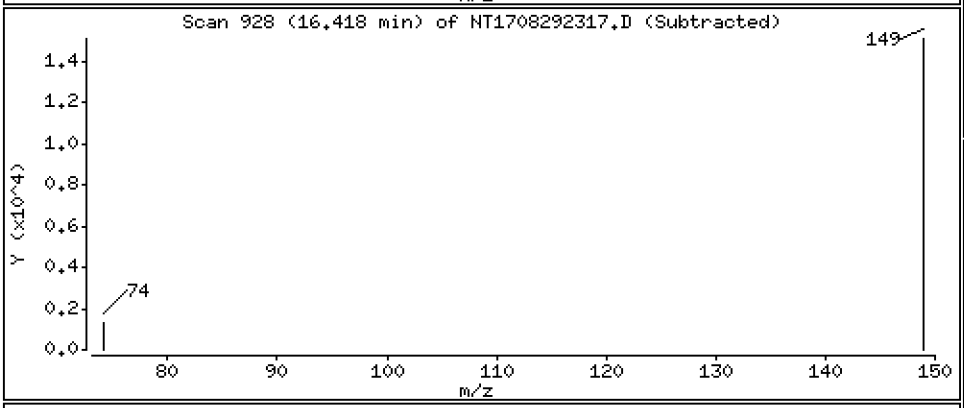
Column diameter: 0.25

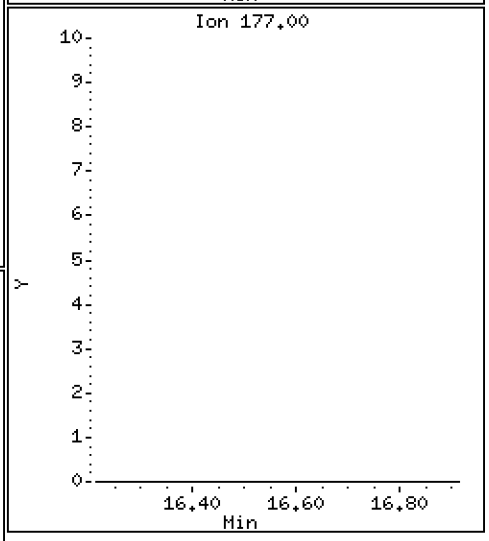
50 Diethylphthalate

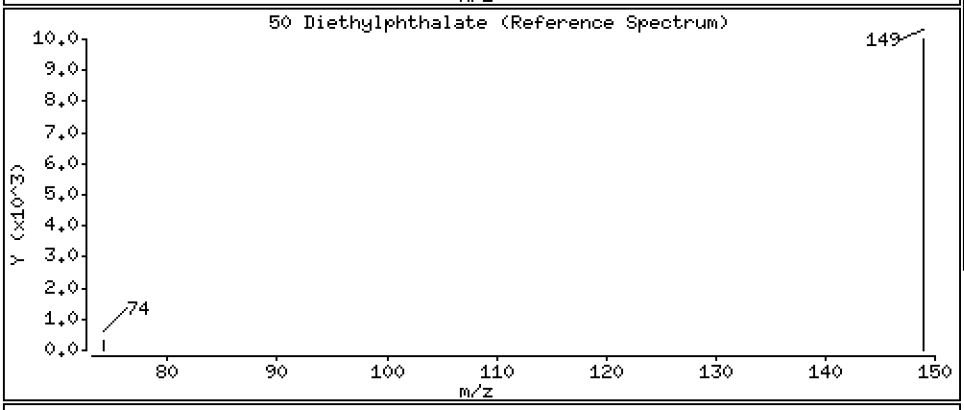
Concentration: 0.2074 ug/mL

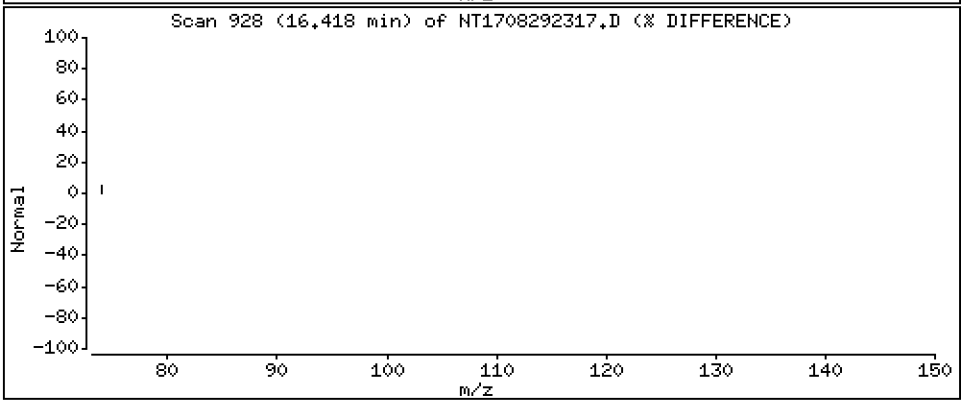












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

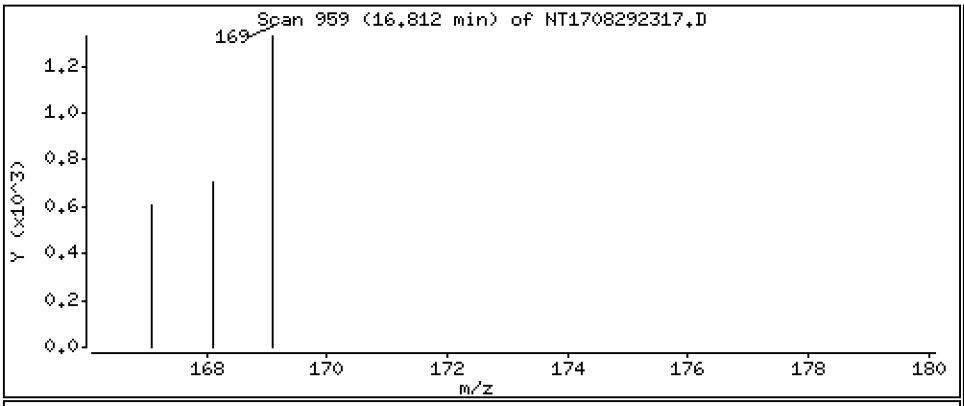
Operator: JGR

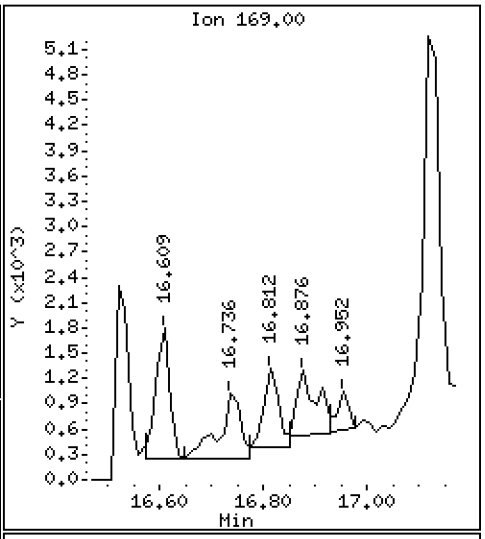
Column phase: ZB-5msi

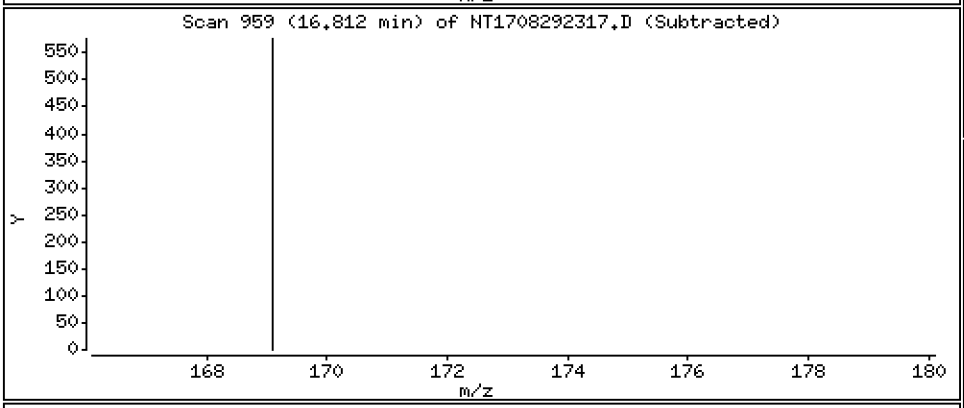
Column diameter: 0.25

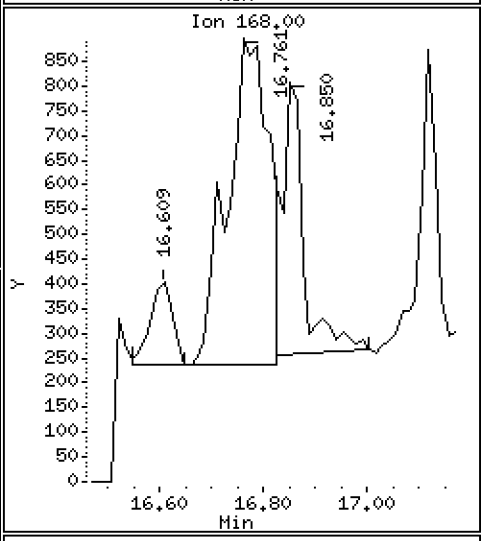
54 N-Nitrosodiphenylamine

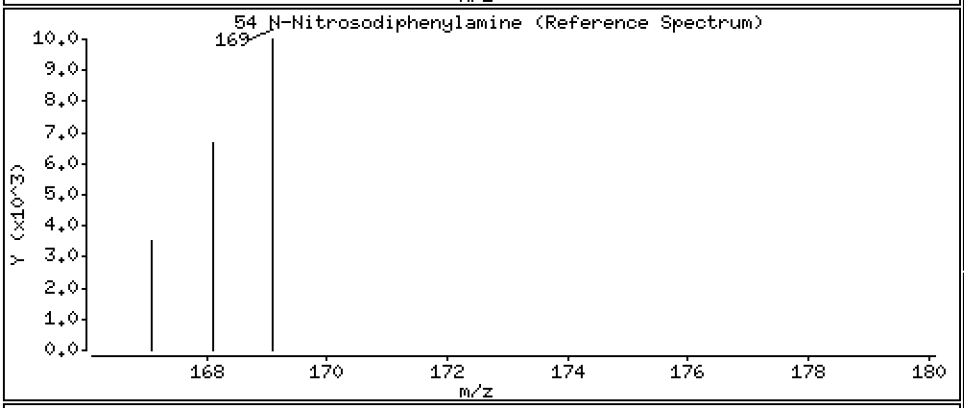
Concentration: 0.01919 ug/mL

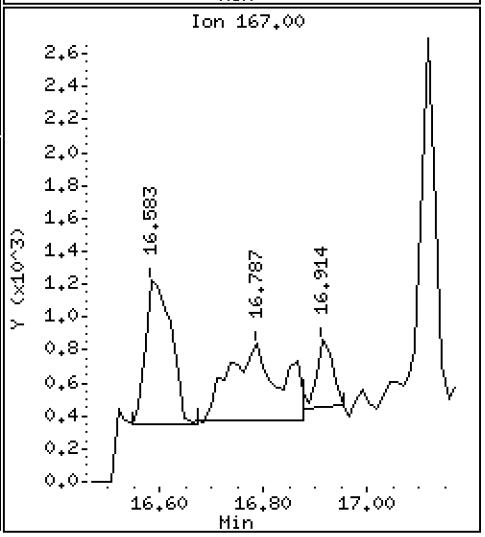


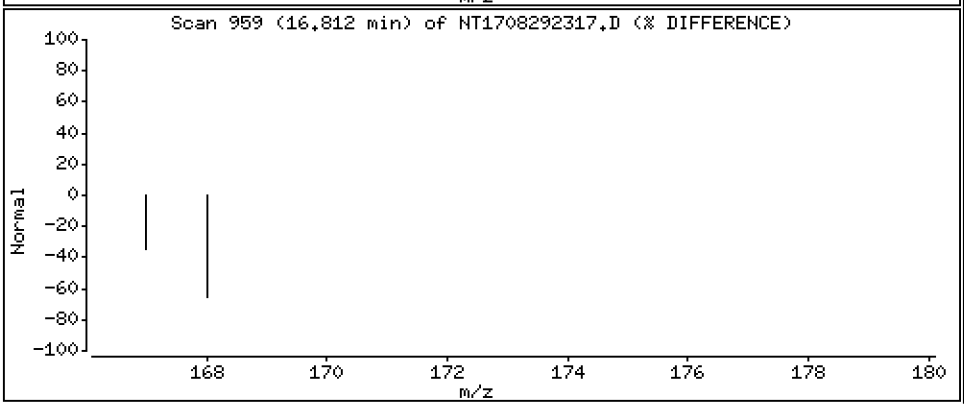












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

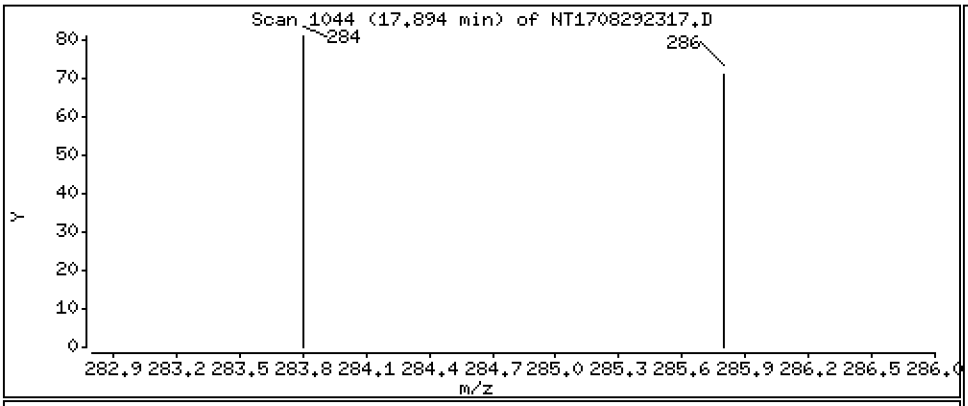
Operator: JGR

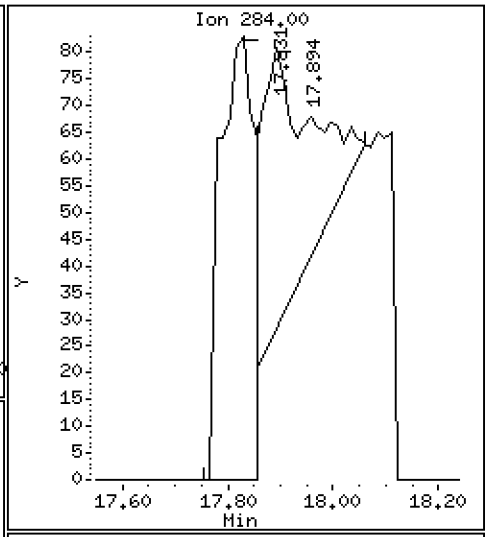
Column phase: ZB-5msi

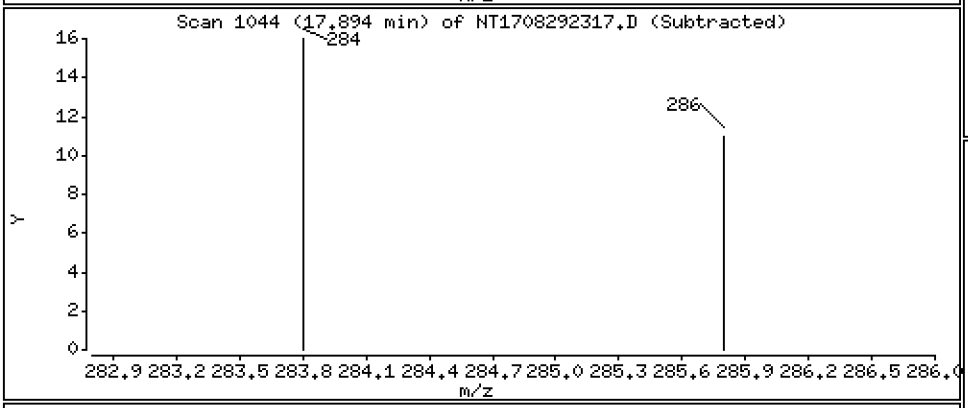
Column diameter: 0.25

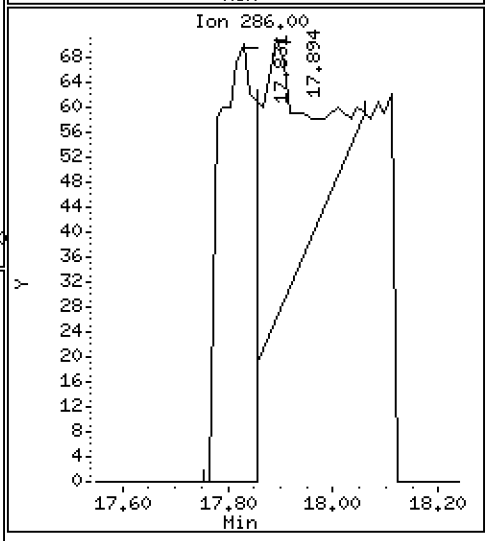
57 Hexachlorobenzene

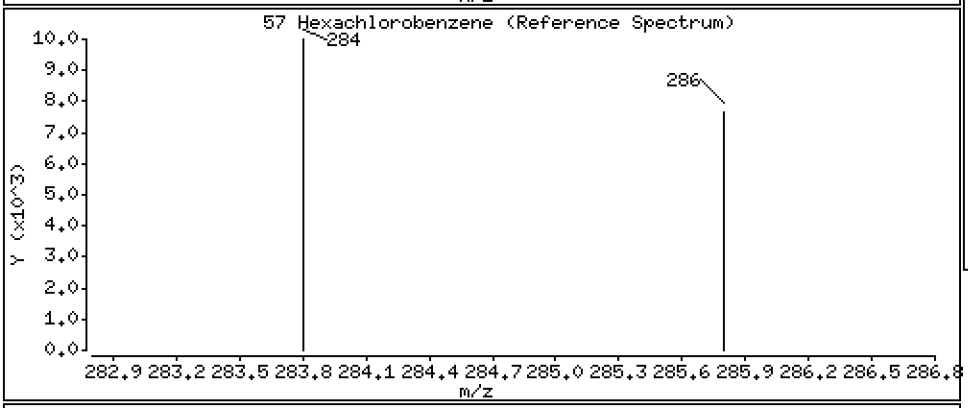
Concentration: 0.01032 ug/mL

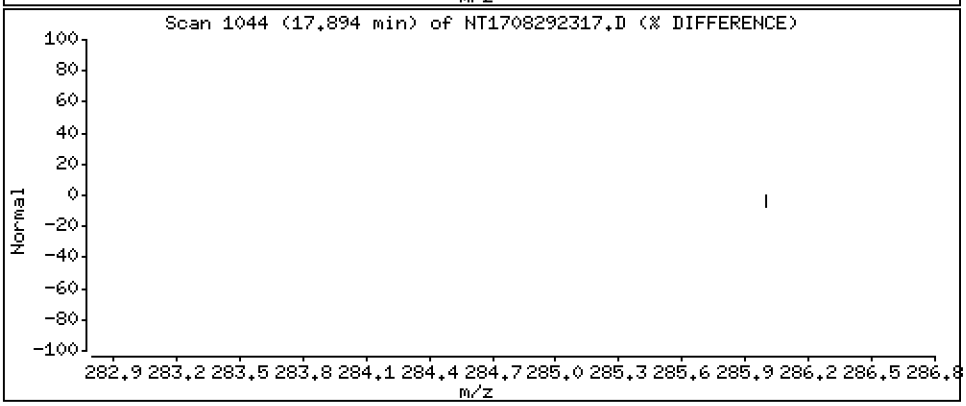












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

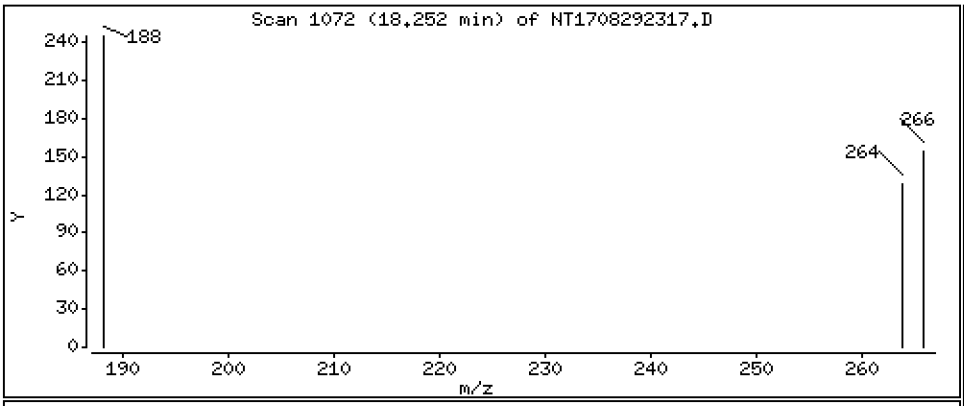
Operator: JGR

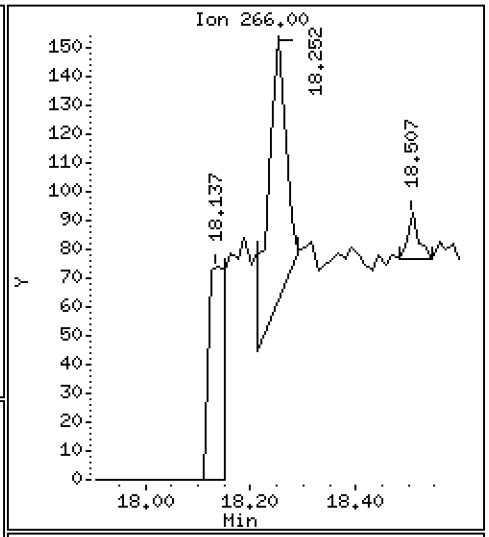
Column phase: ZB-5msi

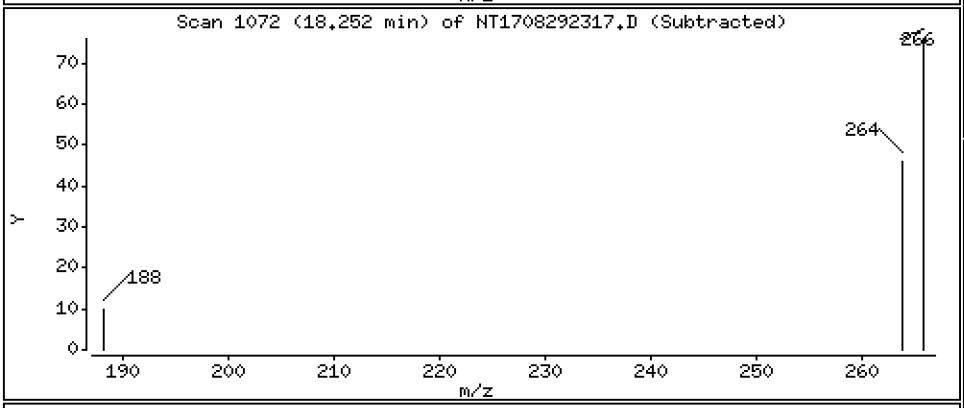
Column diameter: 0.25

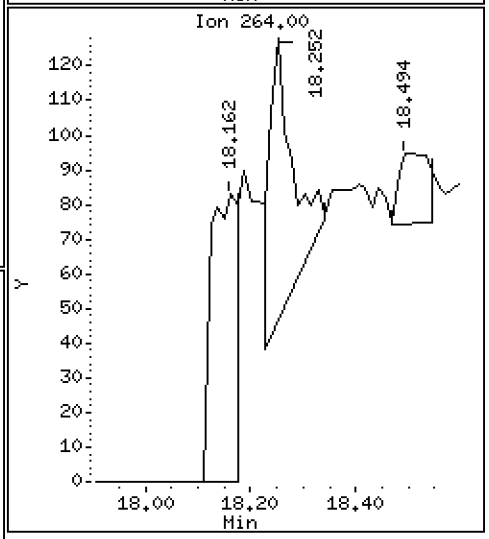
58 Pentachlorophenol

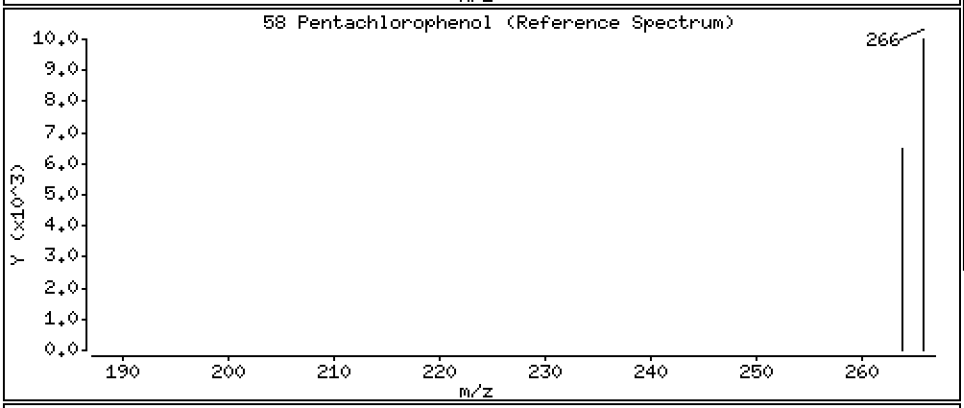
Concentration: 0.01023 ug/mL

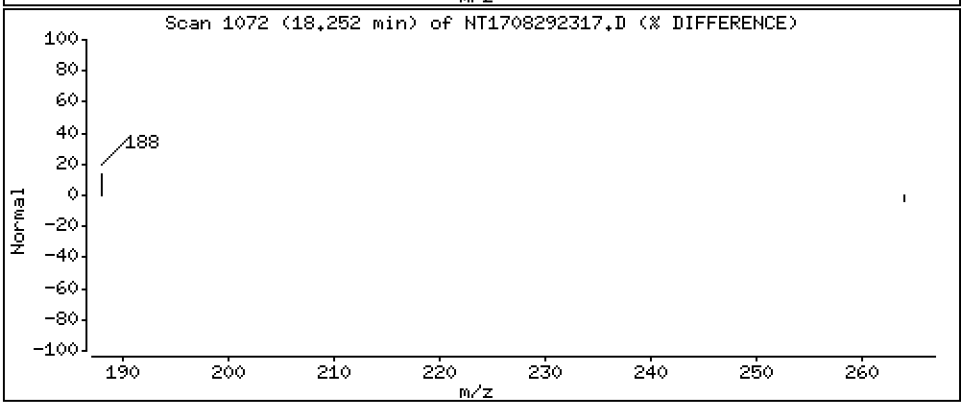












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

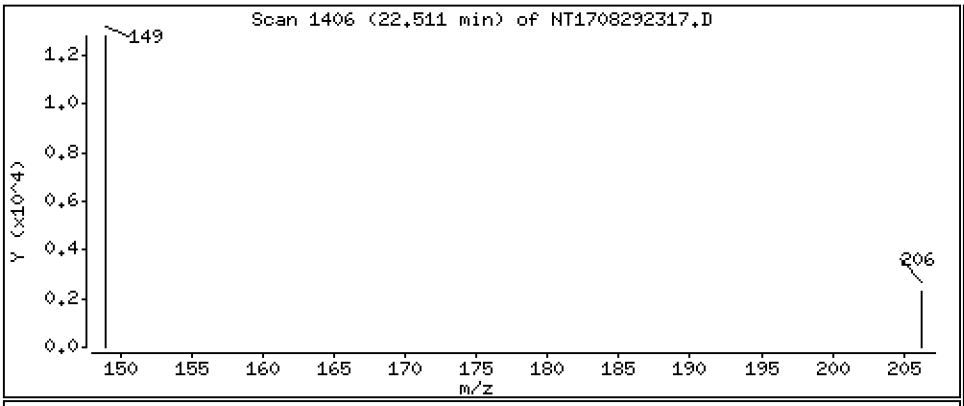
Operator: JGR

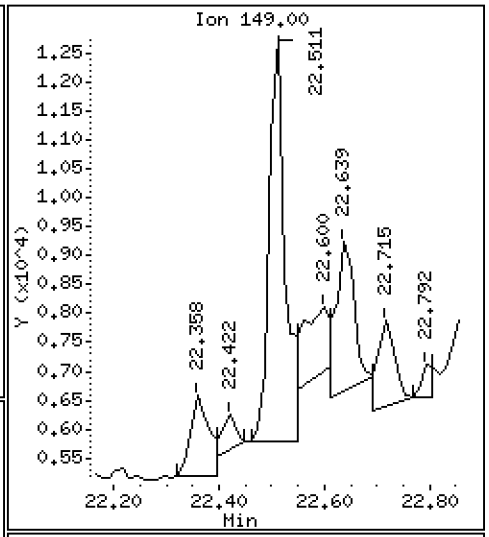
Column phase: ZB-5msi

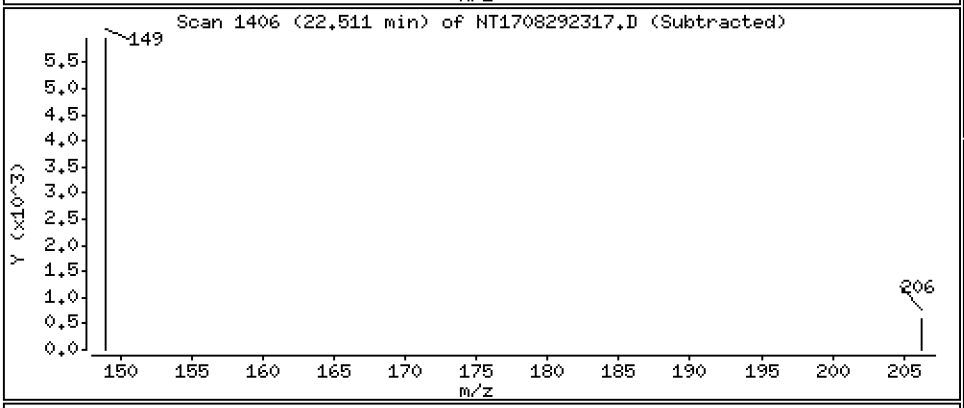
Column diameter: 0.25

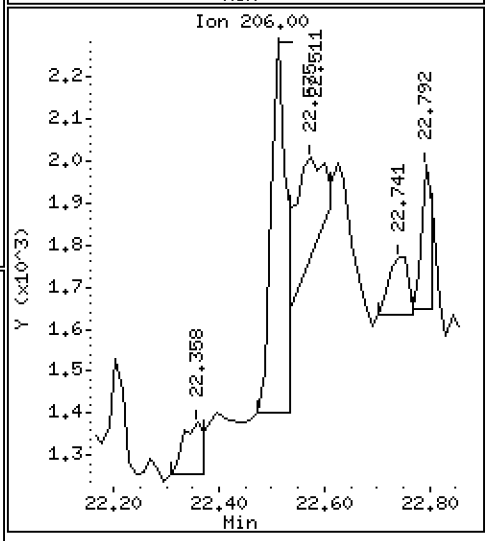
67 Butylbenzylphthalate

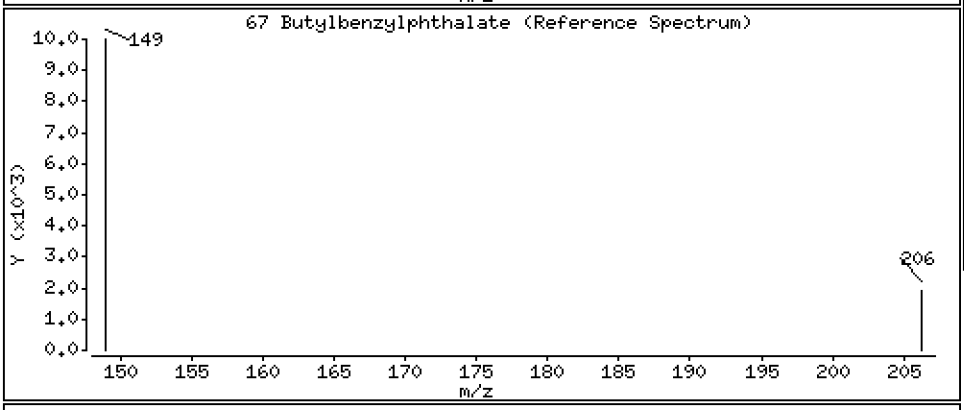
Concentration: 0.1323 ug/mL

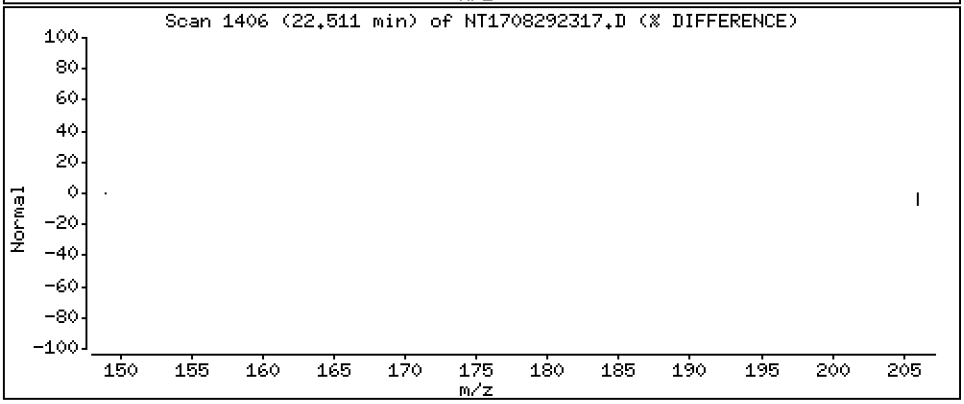












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

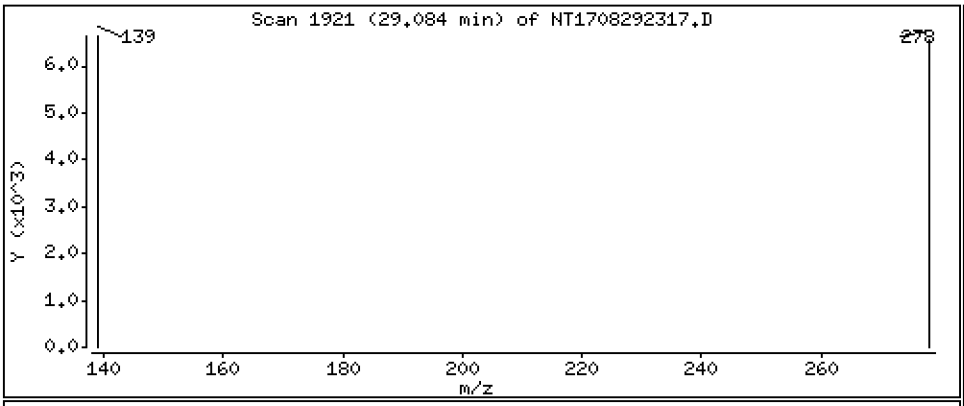
Operator: JGR

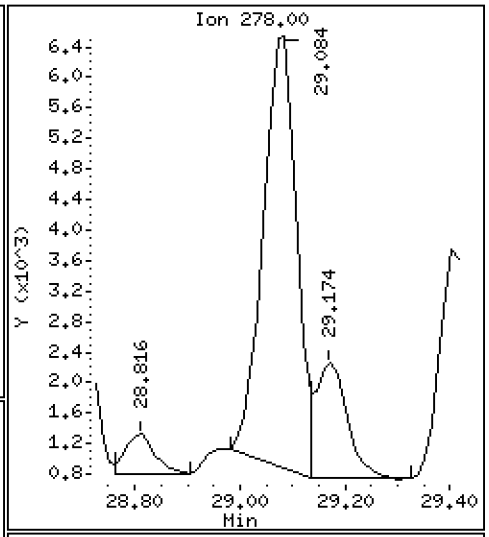
Column phase: ZB-5msi

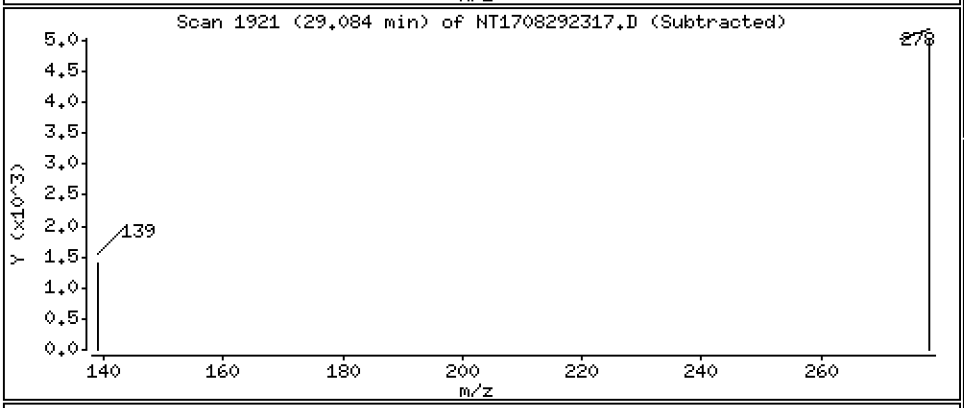
Column diameter: 0.25

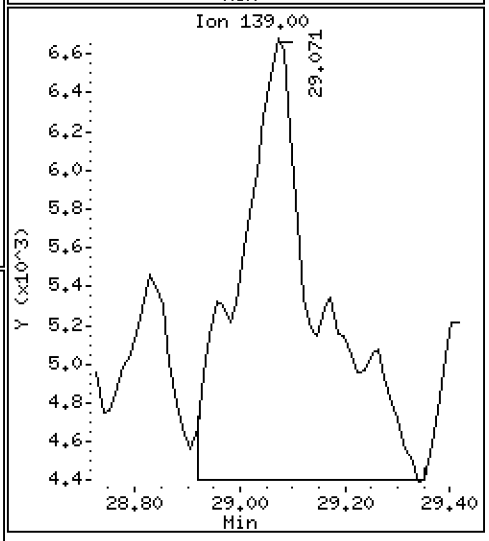
79 Dibenzo(a,h)anthracene

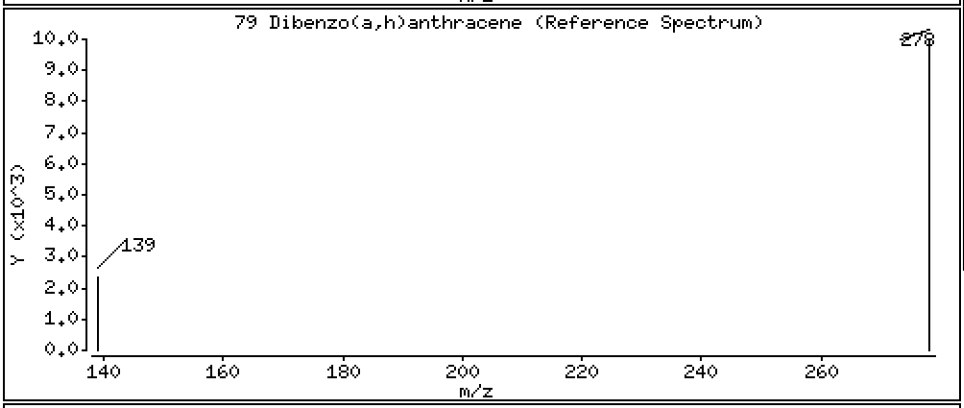
Concentration: 0.1275 ug/mL

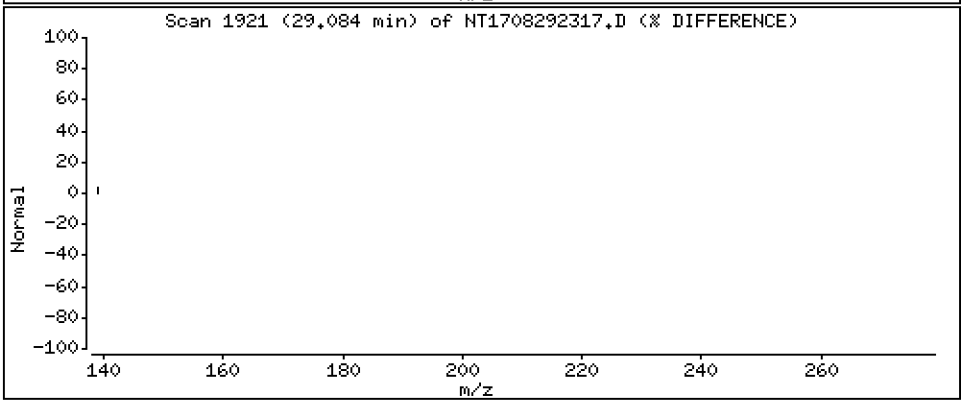












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Date : 29-AUG-2023 21:33

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-06

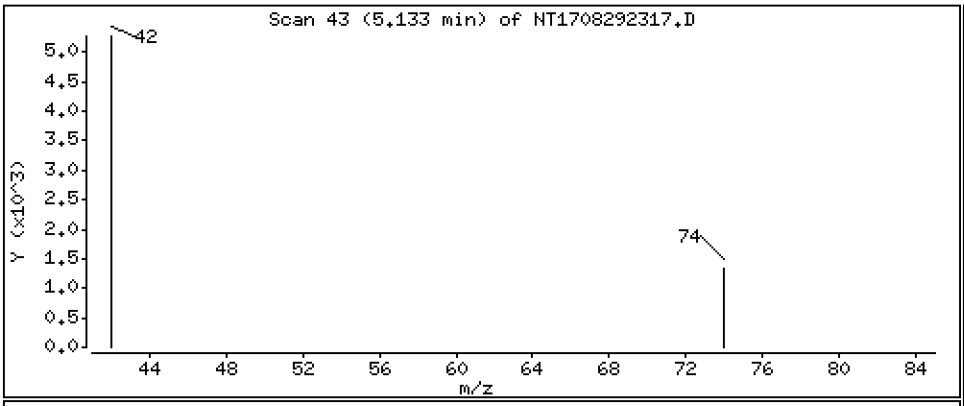
Operator: JGR

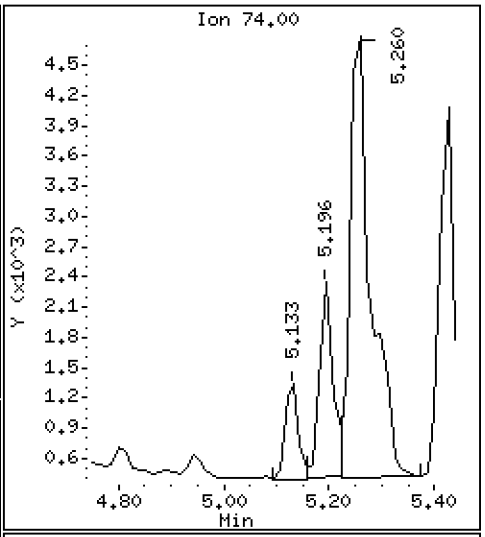
Column phase: ZB-5msi

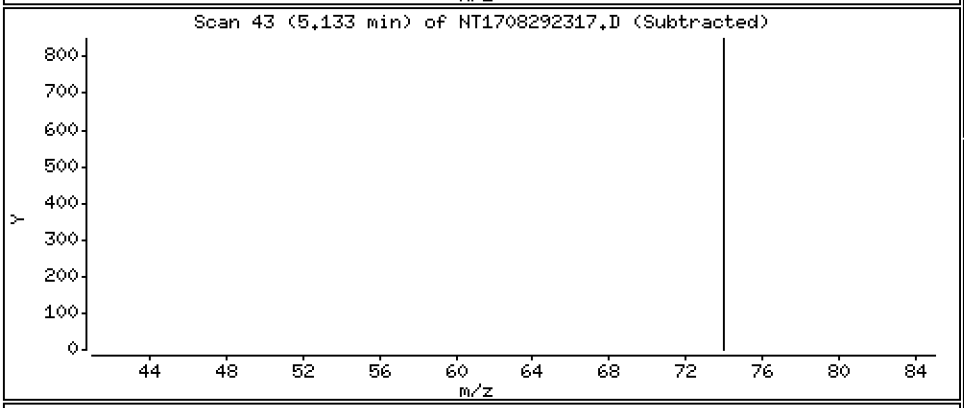
Column diameter: 0.25

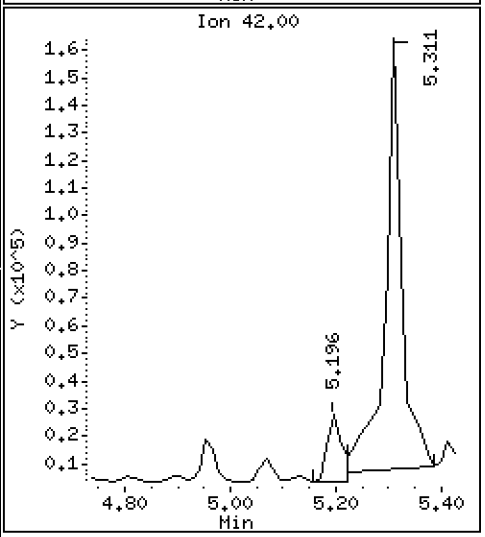
90 N-Nitrosodimethylamine

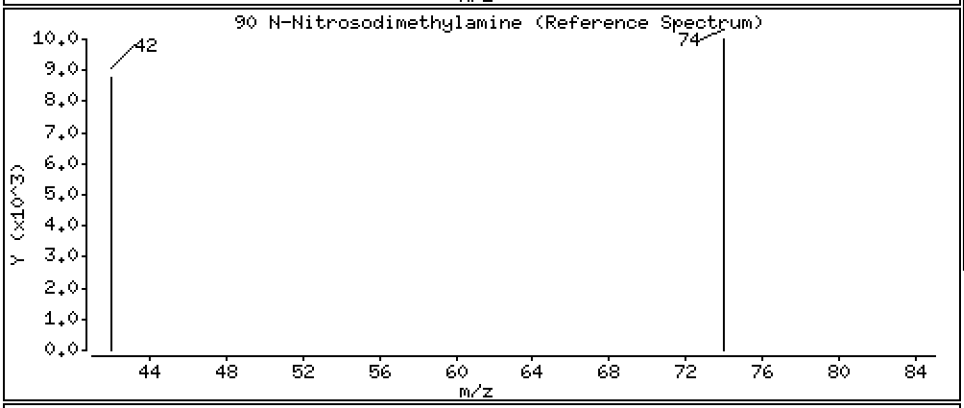
Concentration: 0.01143 ug/mL

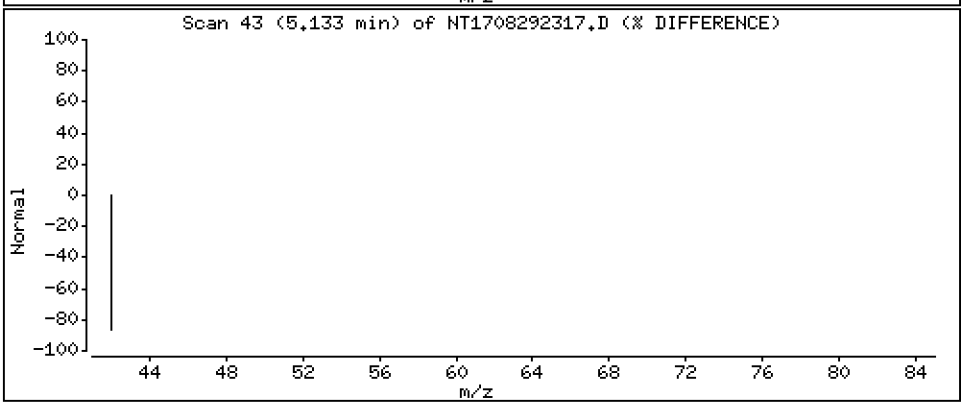












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292317.D
Lab Smp Id: 23H0579-06
Inj Date : 29-AUG-2023 21:33
Operator : JGR Inst ID: nt17.i
Smp Info : 23H0579-06
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 09:25 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.209	7.196	(0.766)	911791	5.95819	5.958(R)
	3 Phenol	94	8.789	8.776	(0.934)	24044	0.10307	0.1031
	7 1,3-Dichlorobenzene	146	9.349	9.349	(0.993)	697	0.00442	0.004417
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	368553	4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	1717	0.01124	0.01124
	11 Benzyl alcohol	79	9.681	9.669	(1.028)	38316	0.23731	0.2373
	12 1,2-Dichlorobenzene	146	9.796	9.797	(1.041)	688	0.00464	0.004644
	13 2-Methylphenol	108	9.771	9.886	(1.038)	9751	0.06894	0.06894
	15 4-Methylphenol	108	10.167	10.154	(1.080)	76539	0.51771	0.5177
	16 N-Nitroso-di-n-propylamine	70	10.103	10.218	(1.073)	14977	0.09907	0.09907
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	24 Benzoic acid	105	11.317	11.329	(0.953)	47447	0.53734	0.5373
	26 1,2,4-Trichlorobenzene	180	11.789	11.789	(0.992)	953	0.01034	0.01034
*	27 Naphthalene-d8	136	11.878	11.878	(1.000)	1344656	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.977	14.977	(0.967)	6114	0.03924	0.03924
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	479393	4.00000	
	50 Diethylphthalate	149	16.417	16.417	(1.060)	33596	0.20737	0.2074
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	1890	0.01919	0.01919
	57 Hexachlorobenzene	284	17.894	17.894	(0.966)	333	0.01032	0.01032
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	224	0.01023	0.01023
*	59 Phenanthrene-d10	188	18.519	18.506	(1.000)	685047	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	284527	4.66539	4.665(R)
	67 Butylbenzylphthalate	149	22.511	22.511	(0.958)	15469	0.13228	0.1323
*	69 Chrysene-d12	240	23.506	23.506	(1.000)	440712	4.00000	
*	77 Perylene-d12	264	26.236	26.223	(1.000)	675829	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.084	29.071	(1.109)	25449	0.12749	0.1275
	90 N-Nitrosodimethylamine	74	5.132	5.094	(0.545)	1780	0.01143	0.01143

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292317.D
Lab Smp Id: 23H0579-06
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 29-AUG-2023
Calibration Time: 12:37
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	296489	148245	592978	368553	24.31
27 Naphthalene-d8	1098892	549446	2197784	1344656	22.36
42 Acenaphthene-d10	443071	221536	886142	479393	8.20
59 Phenanthrene-d10	627744	313872	1255488	685047	9.13
69 Chrysene-d12	404122	202061	808244	440712	9.05
77 Perylene-d12	417323	208662	834646	675829	61.94

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	-0.00
27 Naphthalene-d8	11.88	11.38	12.38	11.88	-0.00
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	-0.00
59 Phenanthrene-d10	18.51	18.01	19.01	18.52	0.07
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.22	25.72	26.72	26.24	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292317.D

Lab ID: 23H0579-06
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   29-AUG-2023 21:33

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.038	1.050	-0.0122	2-Methylphenol
1.073	1.085	-0.0122	N-Nitroso-di-n-propylamine

RRT check based on Ccal File: SIM.b/NT1708292304.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1023A

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23H0579-07 A	SDG:	23H0579
Sampled:	01/13/23 10:35	Prepared:	08/25/23 12:39	File ID:	NT1708292318.D
% Solids:	50.21	Preparation:	EPA 3546 (Microwave)	Analyzed:	08/29/23 22:10
Batch:	BLH0669	Sequence:	SLH0447	Initial/Final:	19.97 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GH00045
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
105-67-9	2,4-Dimethylphenol	1	19.9	U	2.2	19.9

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	747.99	519	69.3	27 - 120	
p-Terphenyl-d14	498.66	457	91.7	37 - 120	Q

INTERNAL STANDARDS	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	428884	9.413	296489	9.413	
Naphthalene-d8	1583230	11.878	1098892	11.878	
Acenaphthene-d10	578162	15.487	443071	15.487	
Phenanthrene-d10	767219	18.519	627744	18.506	
Chrysene-d12	453486	23.505	404122	23.506	
Perylene-d12	720109	26.235	417323	26.223	

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292318.D

Date : 29-AUG-2023 22:10

Client ID:

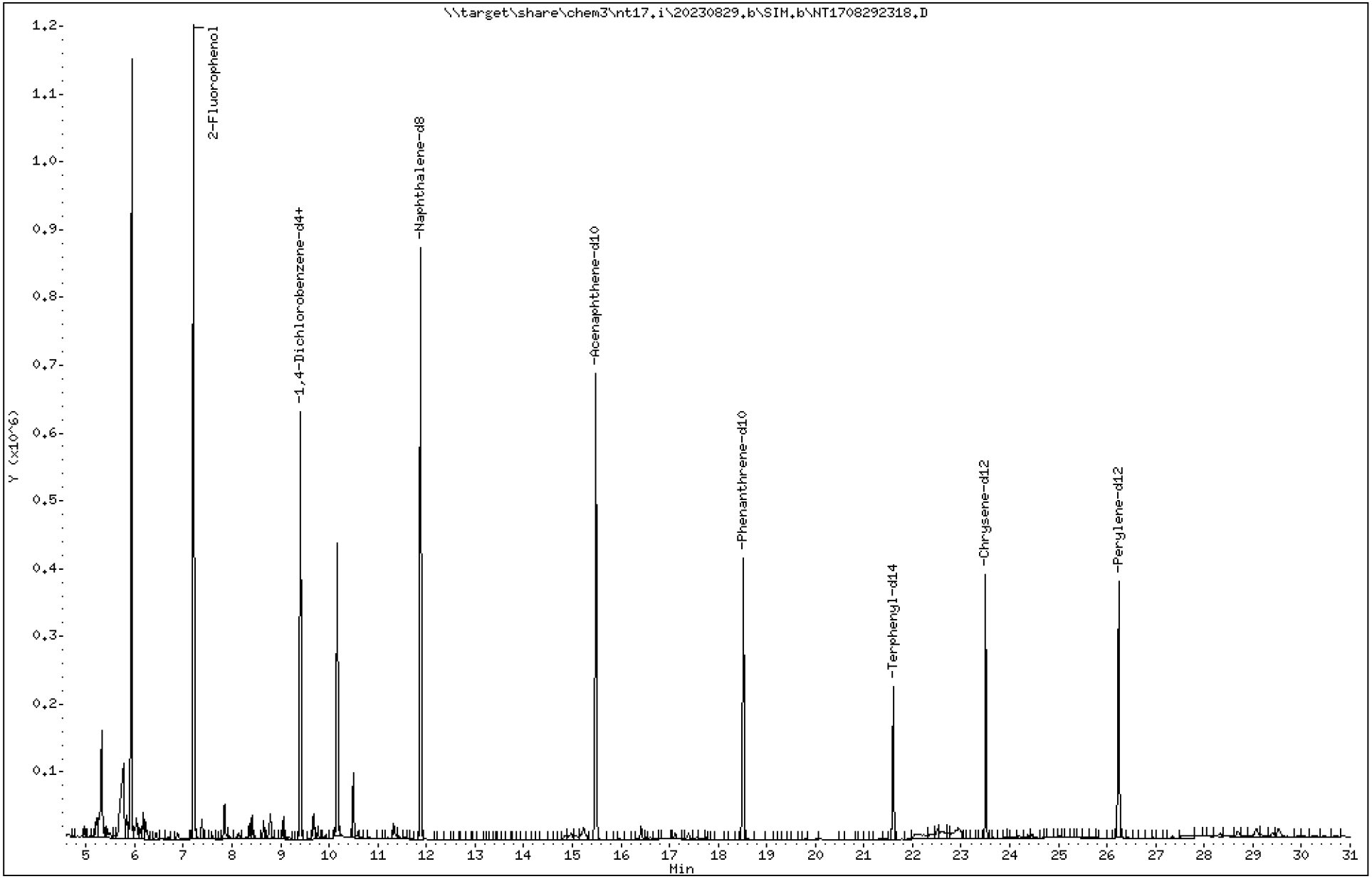
Sample Info: 23H0579-07

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292318.D

Date : 29-AUG-2023 22:10

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

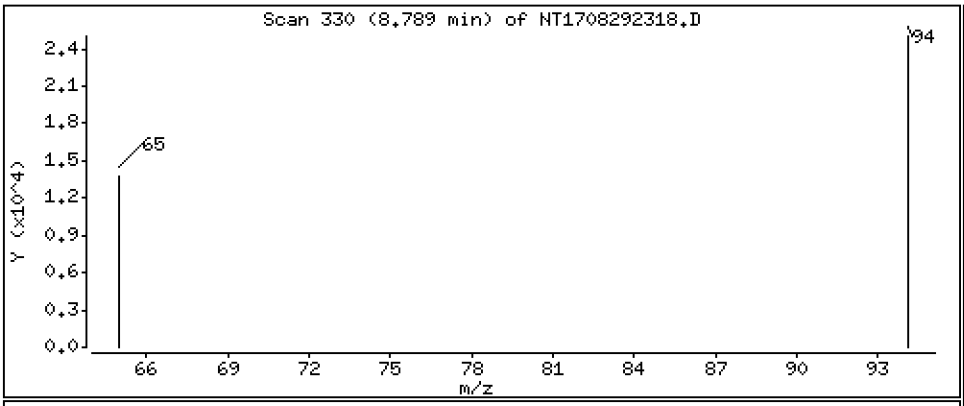
Operator: JGR

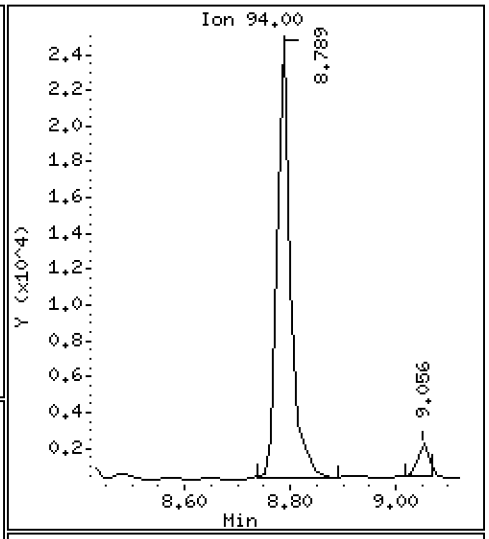
Column phase: ZB-5msi

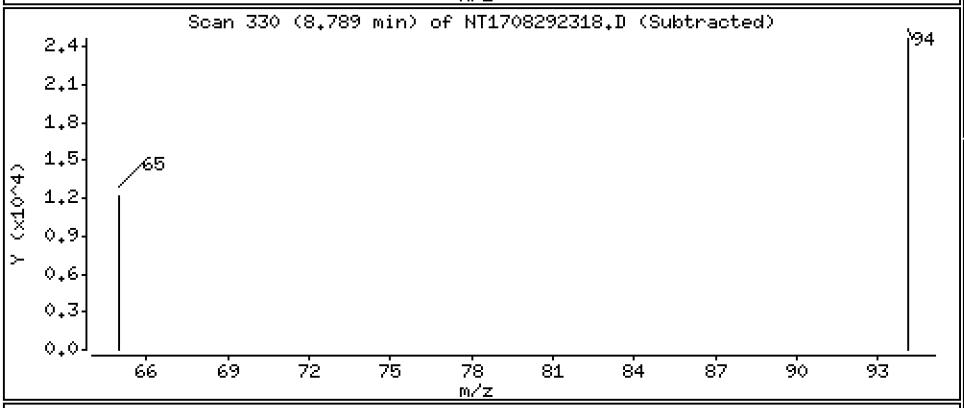
Column diameter: 0.25

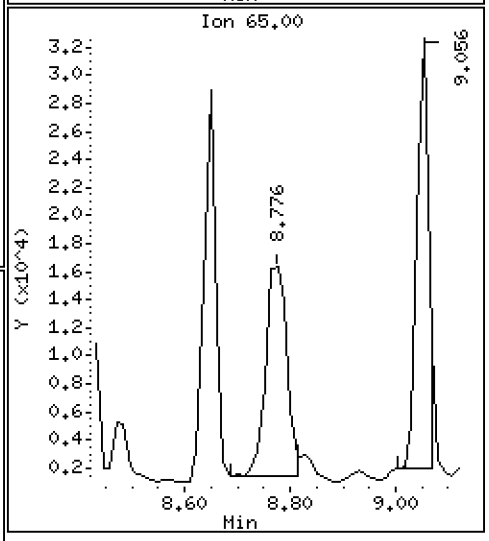
3 Phenol

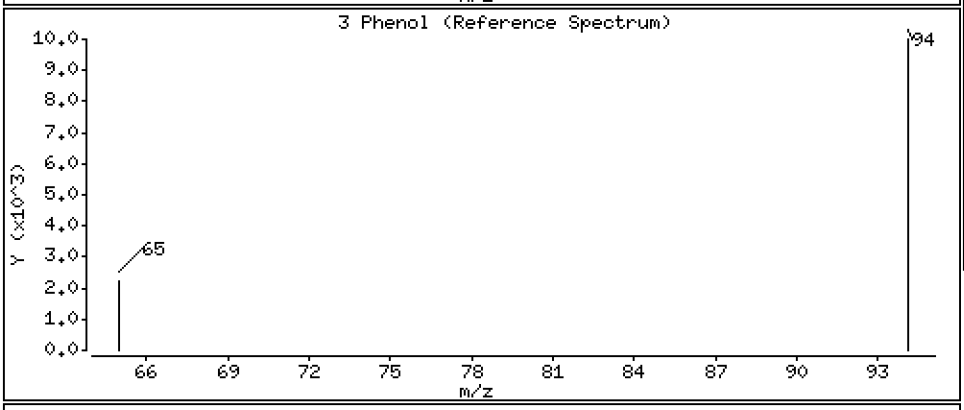
Concentration: 0.1682 ug/mL

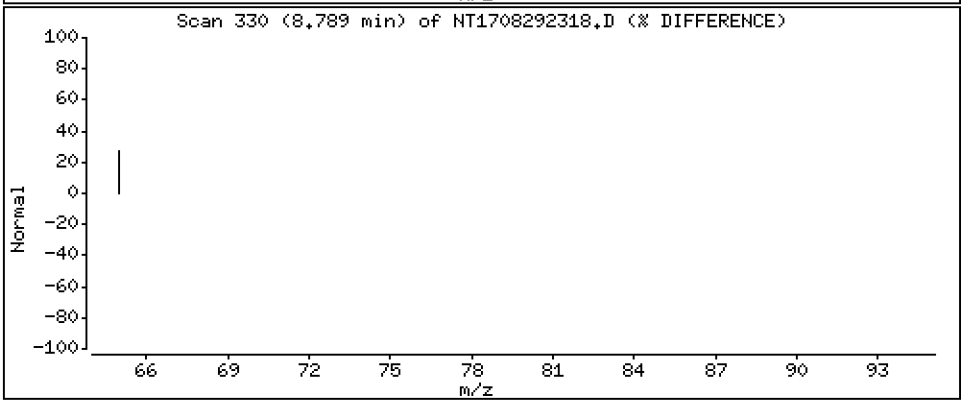












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Date : 29-AUG-2023 22:10

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

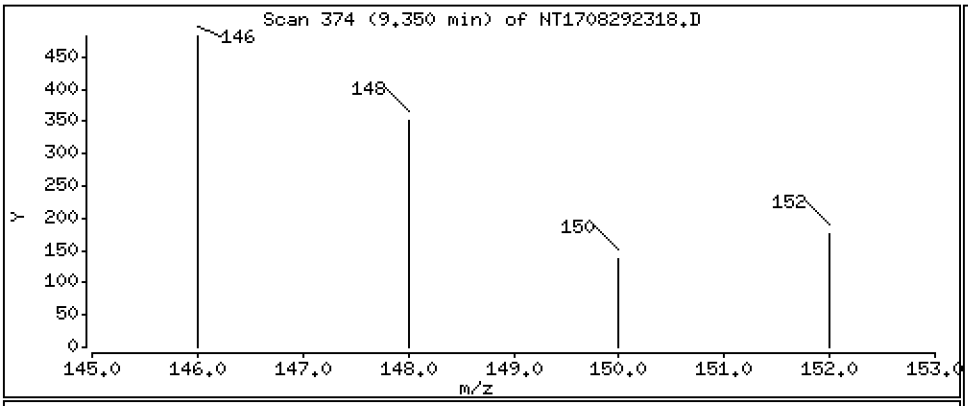
Operator: JGR

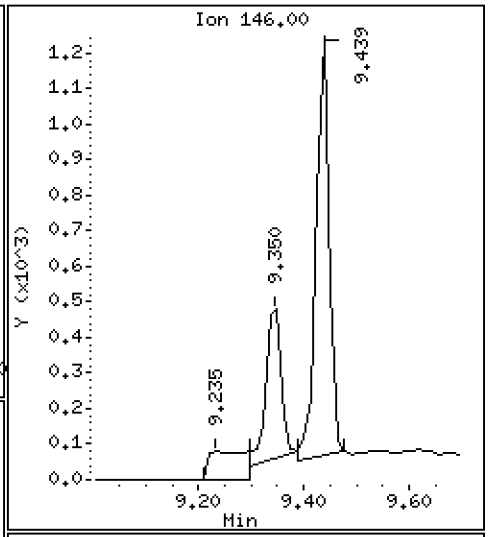
Column phase: ZB-5msi

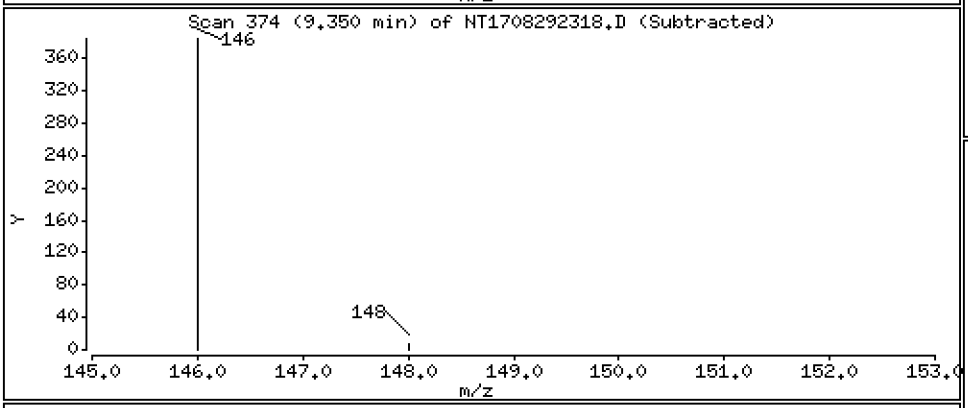
Column diameter: 0.25

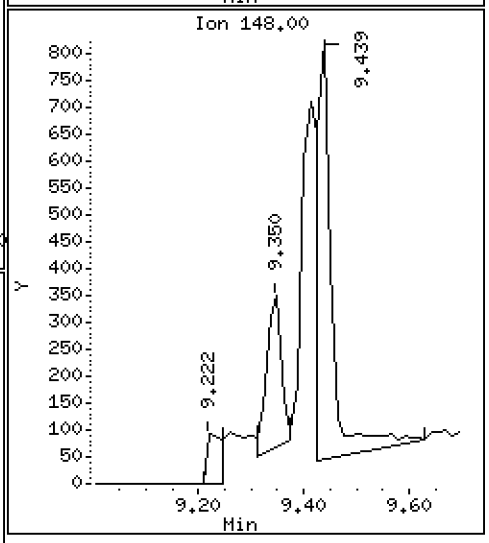
7 1,3-Dichlorobenzene

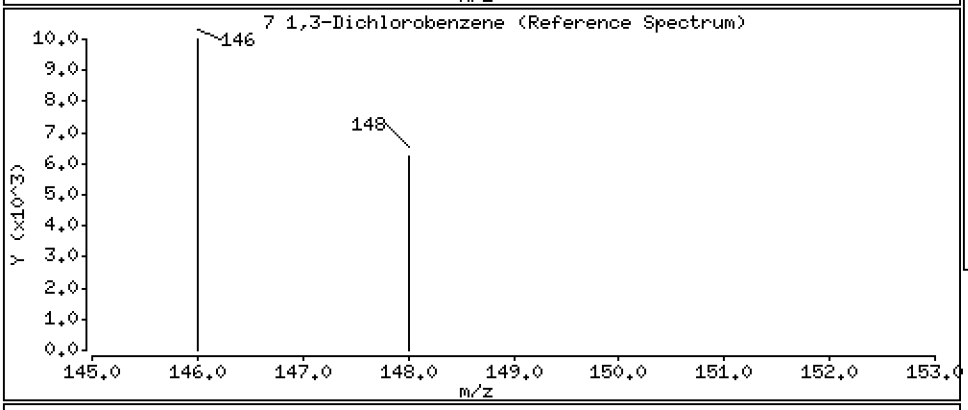
Concentration: 0.004738 ug/mL

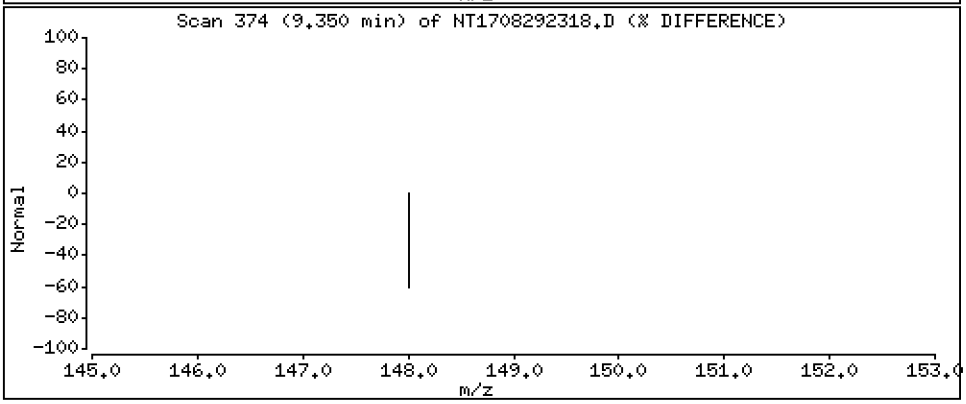












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Date : 29-AUG-2023 22:10

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

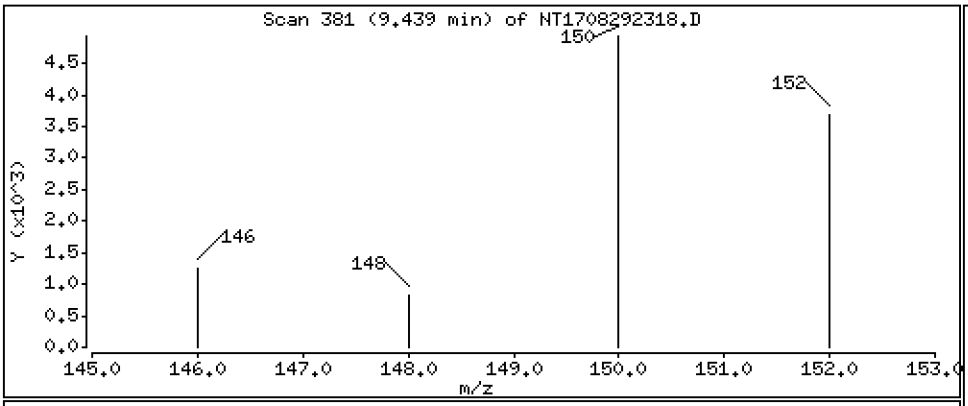
Operator: JGR

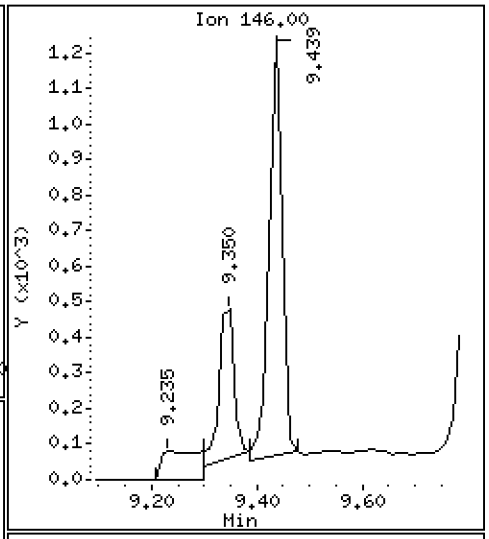
Column phase: ZB-5msi

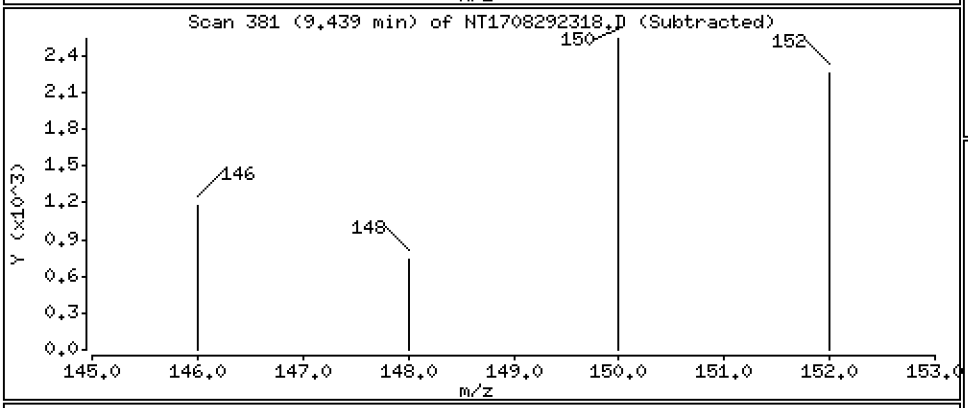
Column diameter: 0.25

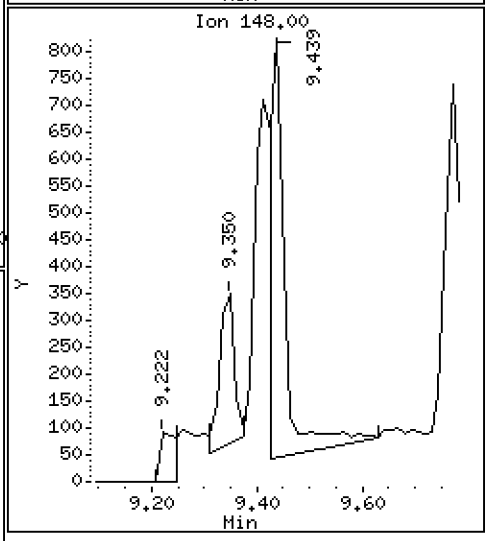
9 1,4-Dichlorobenzene

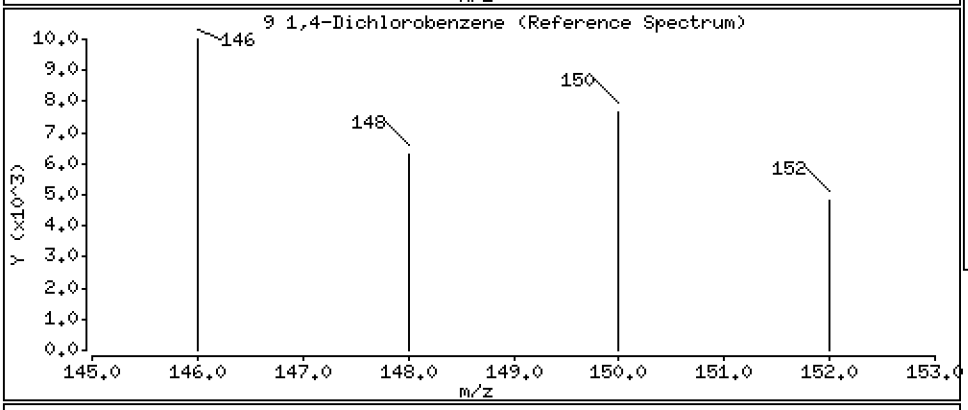
Concentration: 0.01150 ug/mL

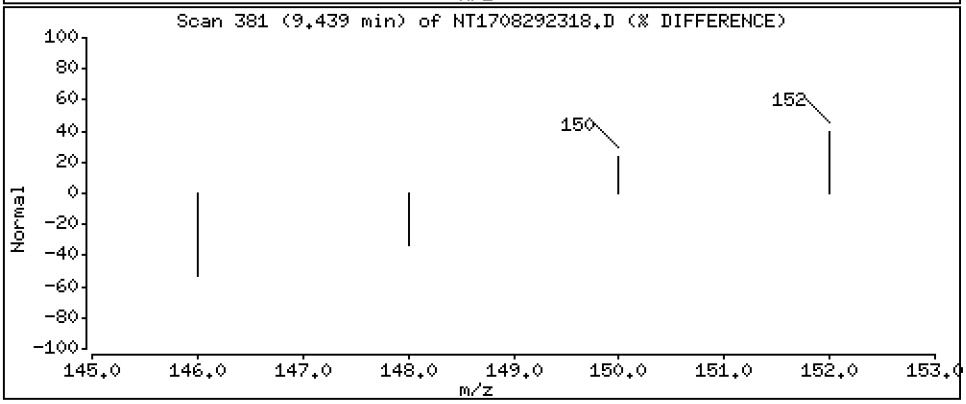












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Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

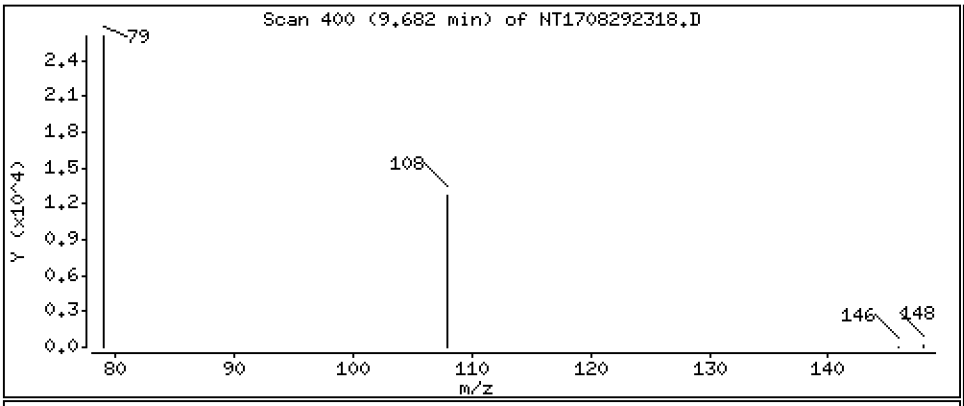
Operator: JGR

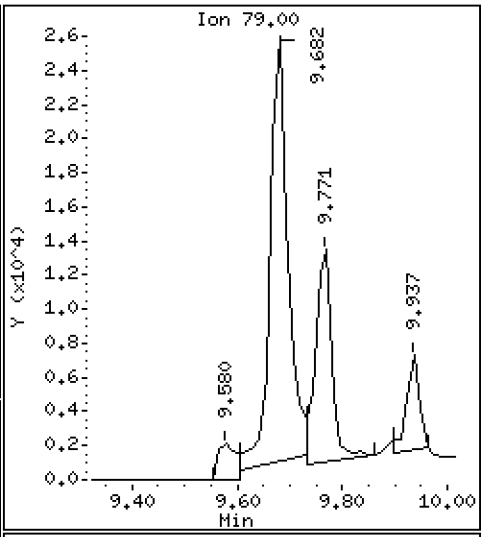
Column phase: ZB-5msi

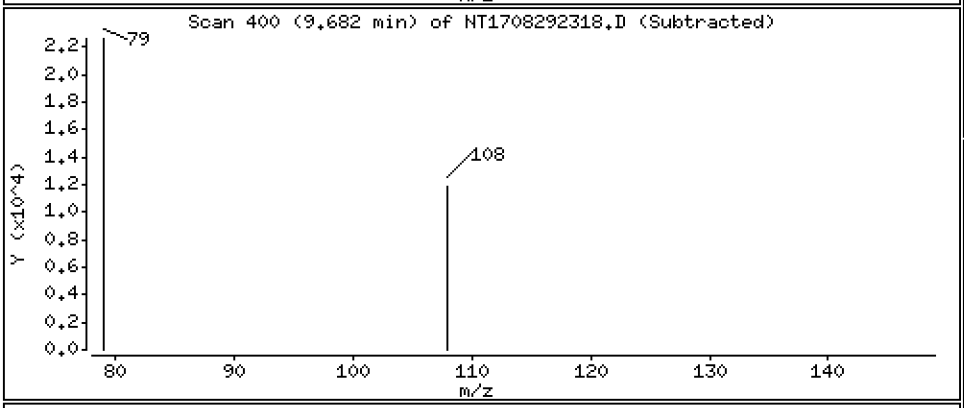
Column diameter: 0.25

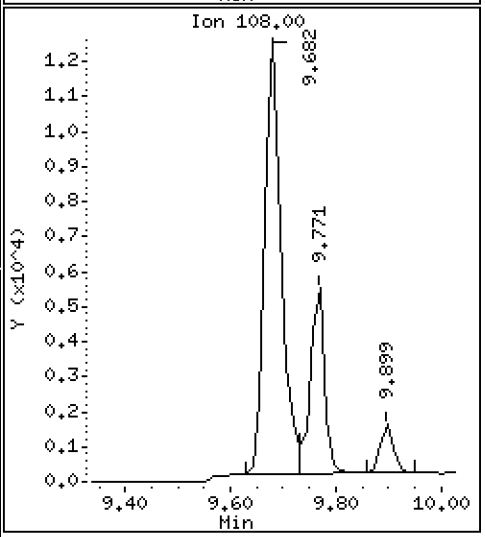
11 Benzyl alcohol

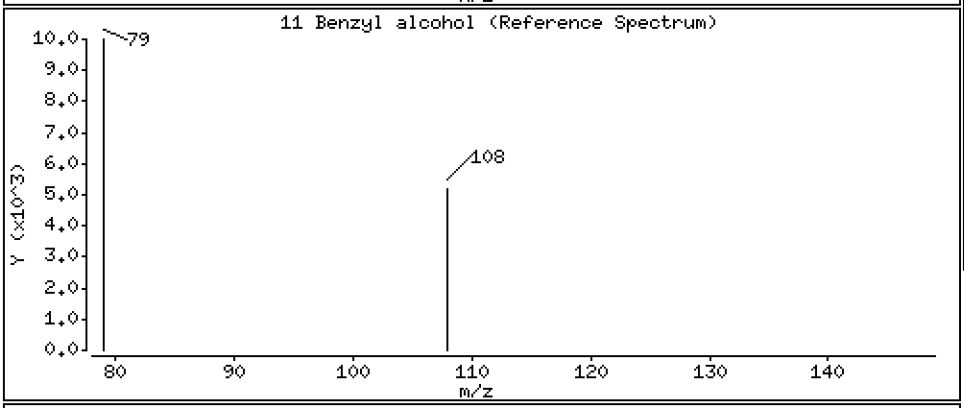
Concentration: 0.3210 ug/mL

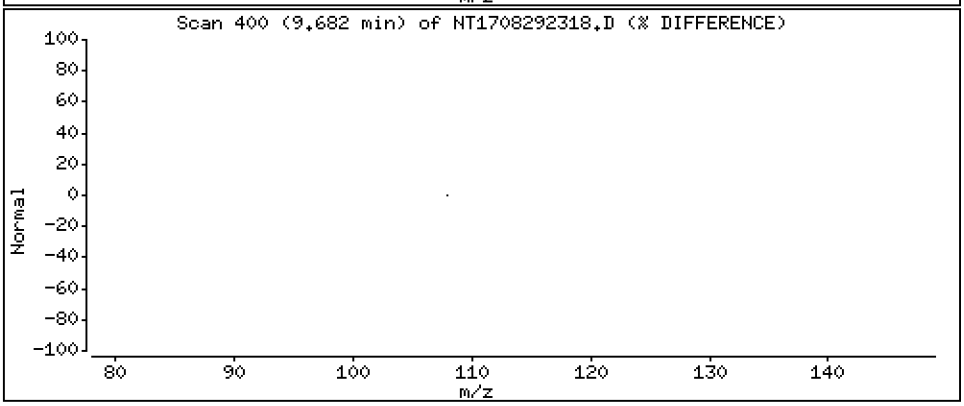












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Date : 29-AUG-2023 22:10

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

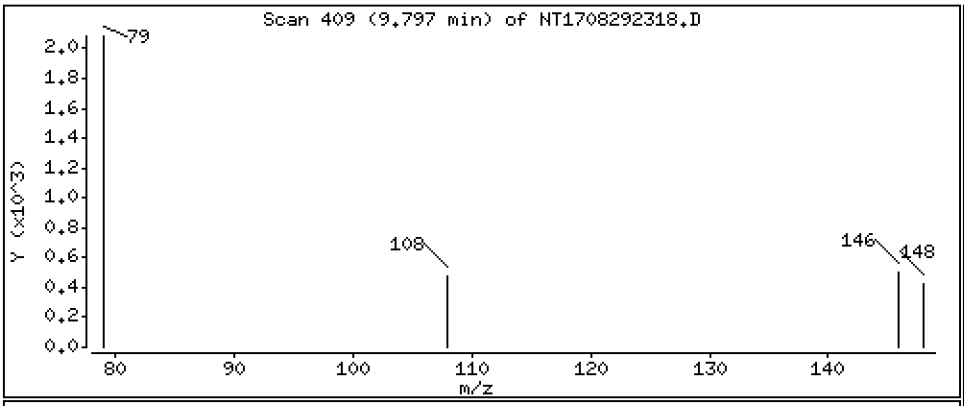
Operator: JGR

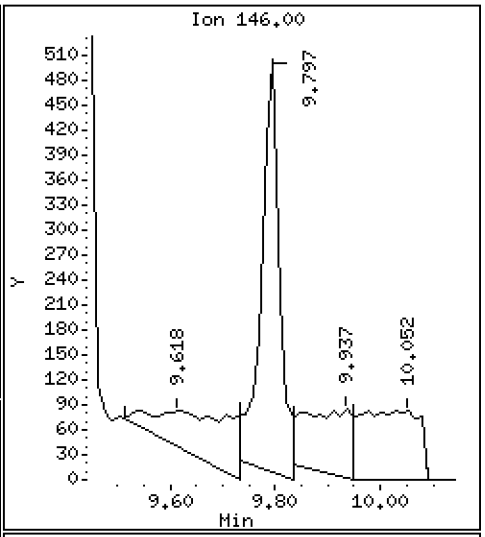
Column phase: ZB-5msi

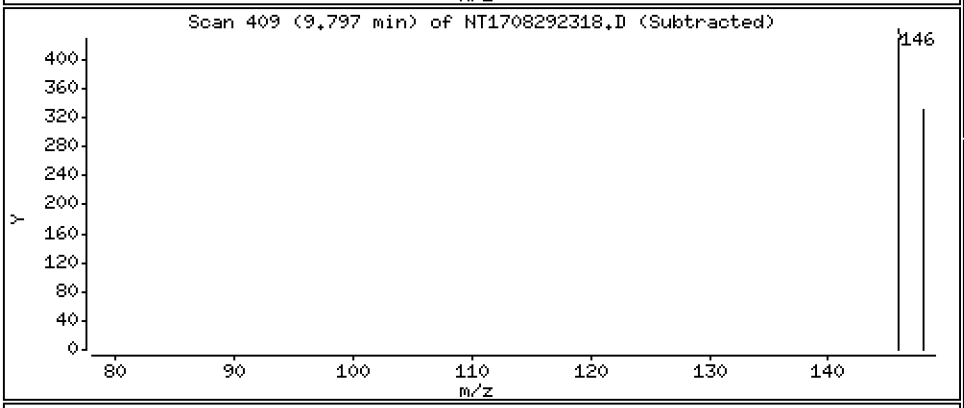
Column diameter: 0.25

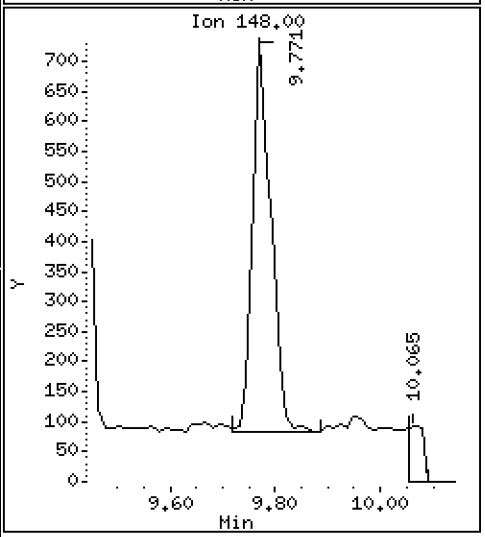
12 1,2-Dichlorobenzene

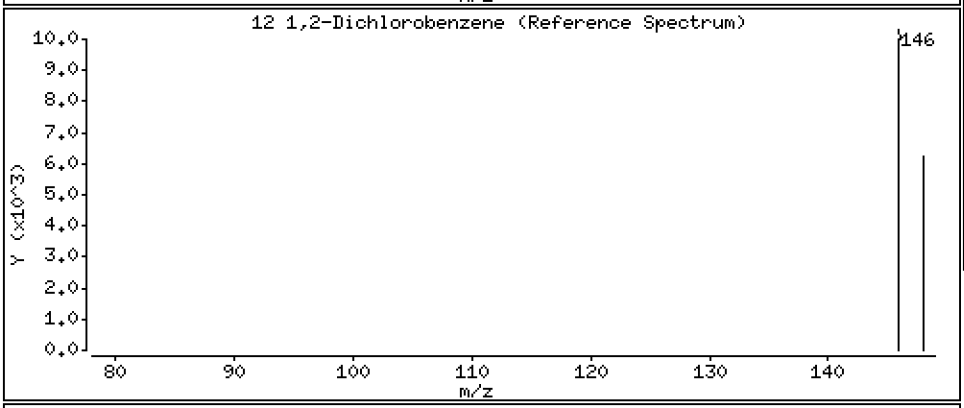
Concentration: 0.007228 ug/mL

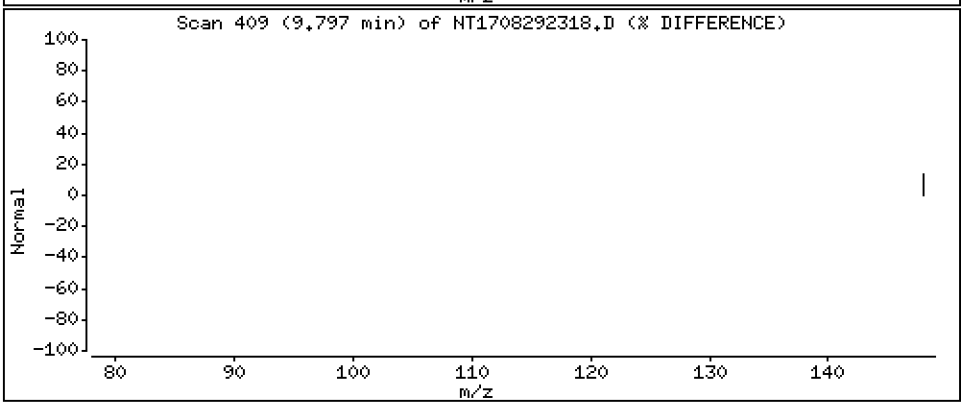












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Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

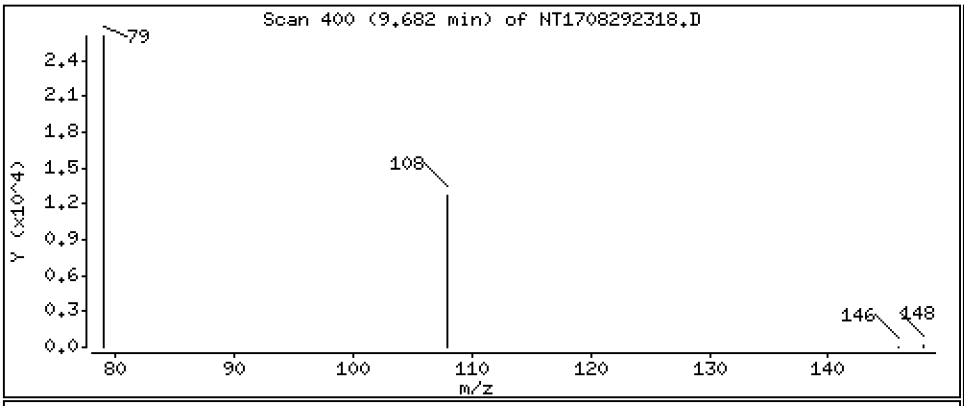
Operator: JGR

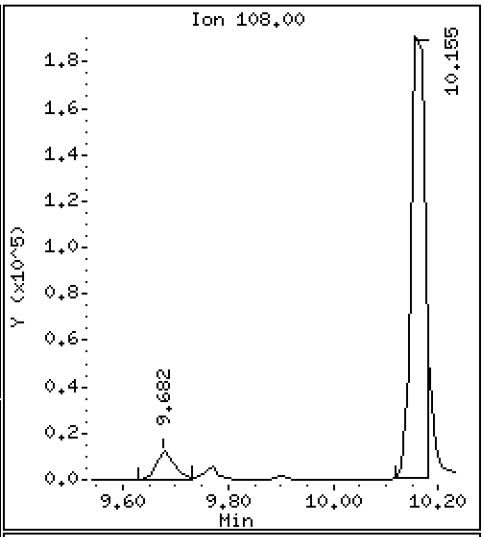
Column phase: ZB-5msi

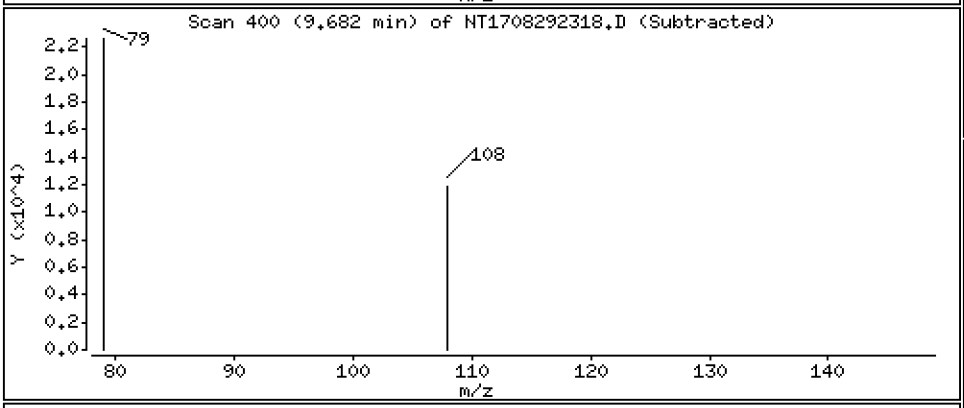
Column diameter: 0.25

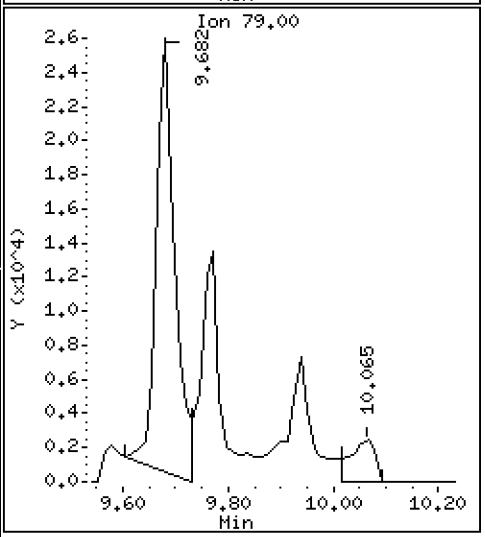
13 2-Methylphenol

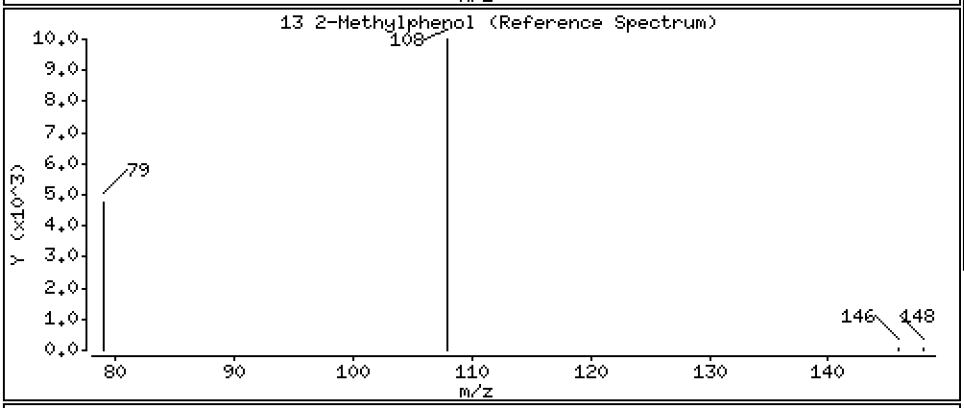
Concentration: 0.1683 ug/mL

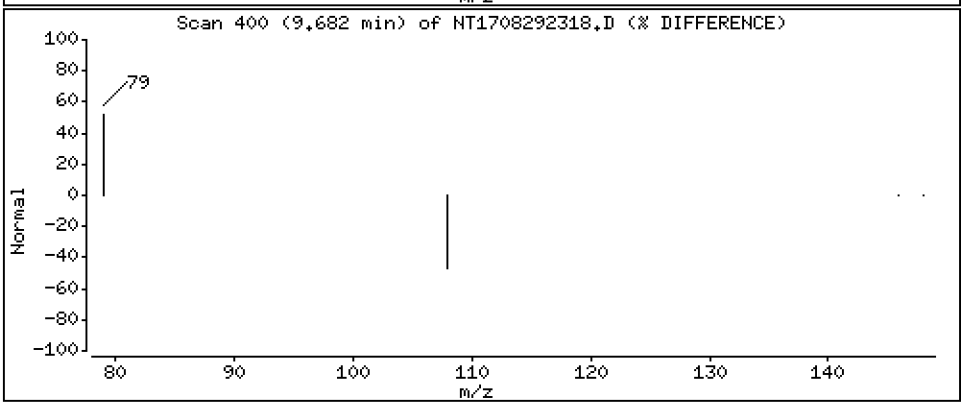












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Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

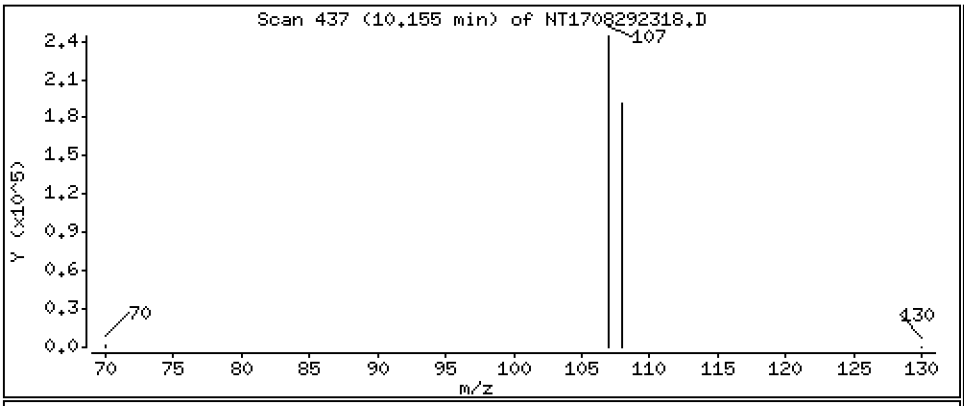
Operator: JGR

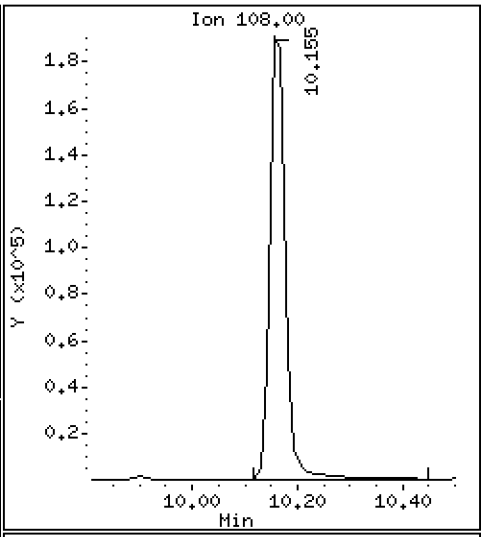
Column phase: ZB-5msi

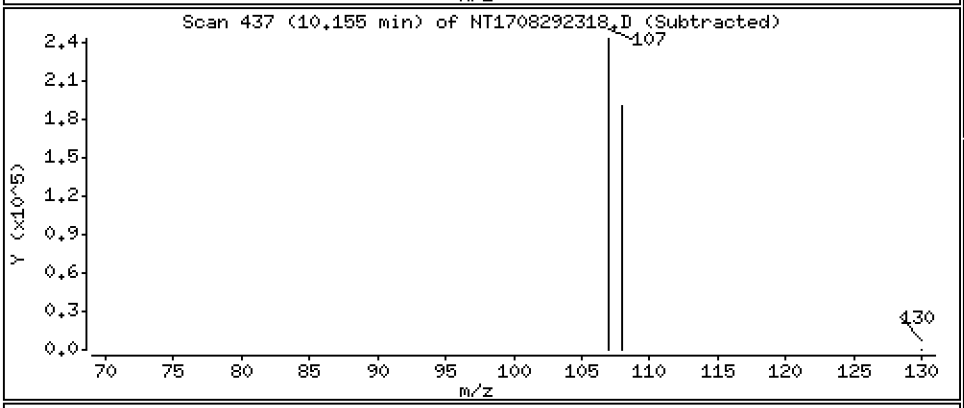
Column diameter: 0.25

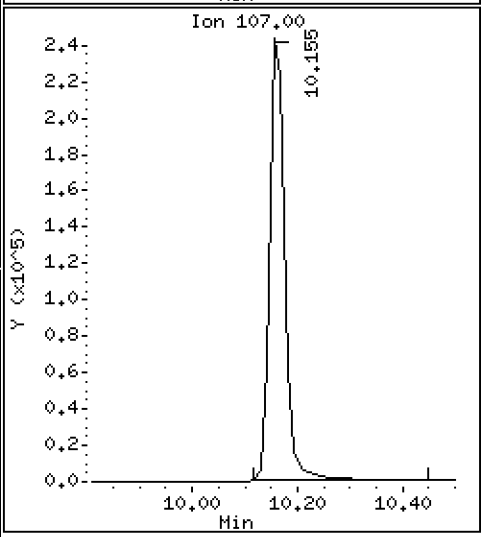
15 4-Methylphenol

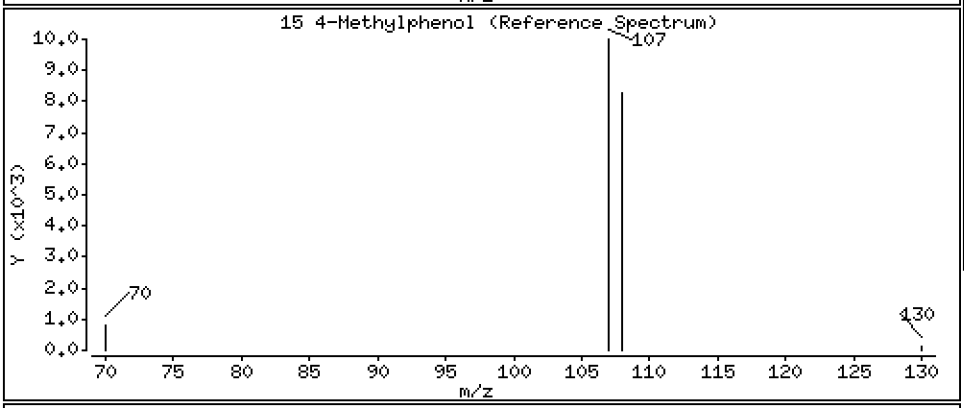
Concentration: 2.286 ug/mL

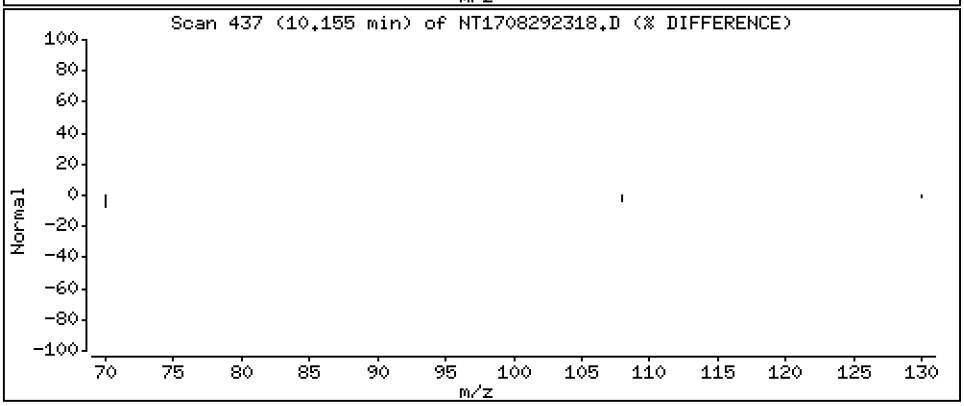












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Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

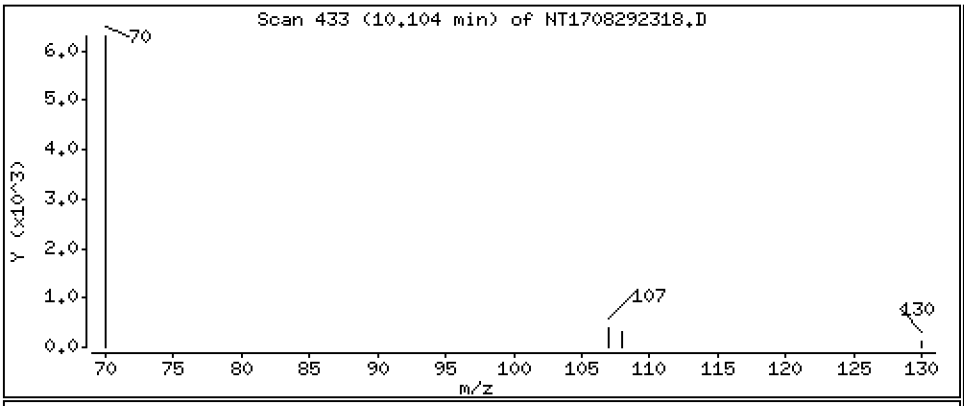
Operator: JGR

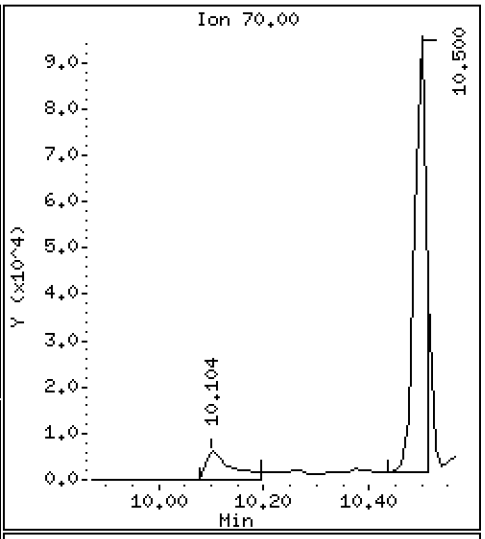
Column phase: ZB-5msi

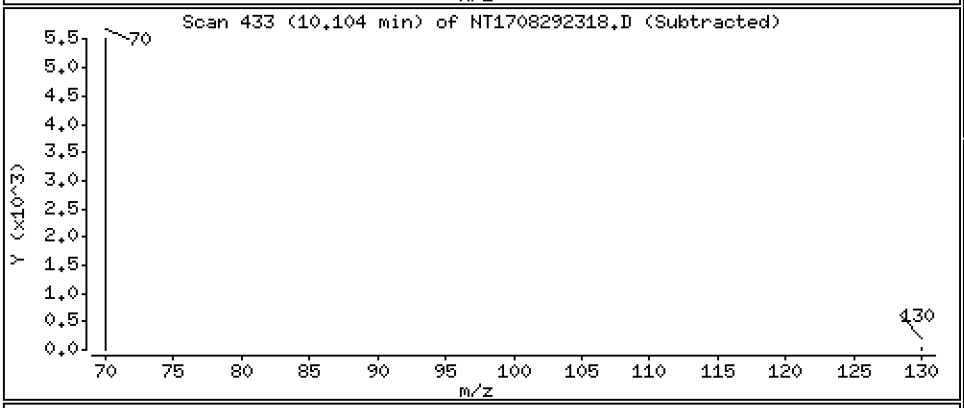
Column diameter: 0.25

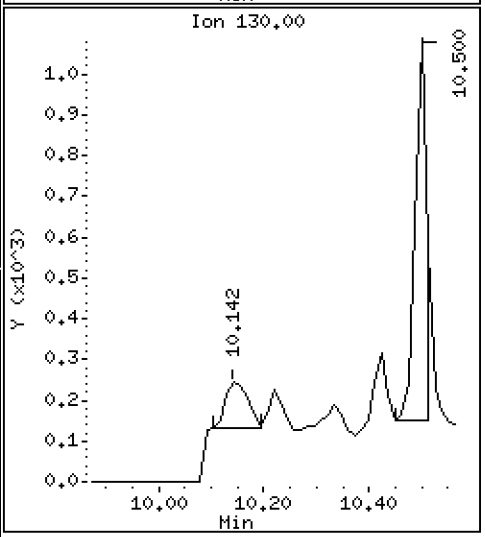
16 N-Nitroso-di-n-propylamine

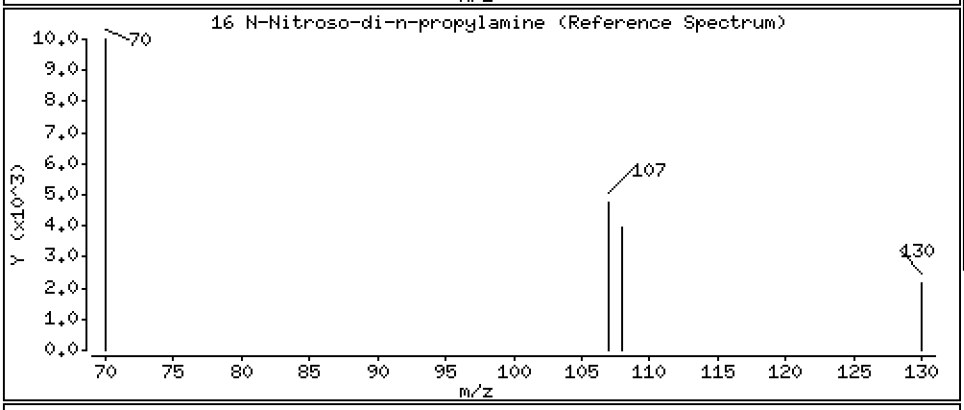
Concentration: 0.1222 ug/mL

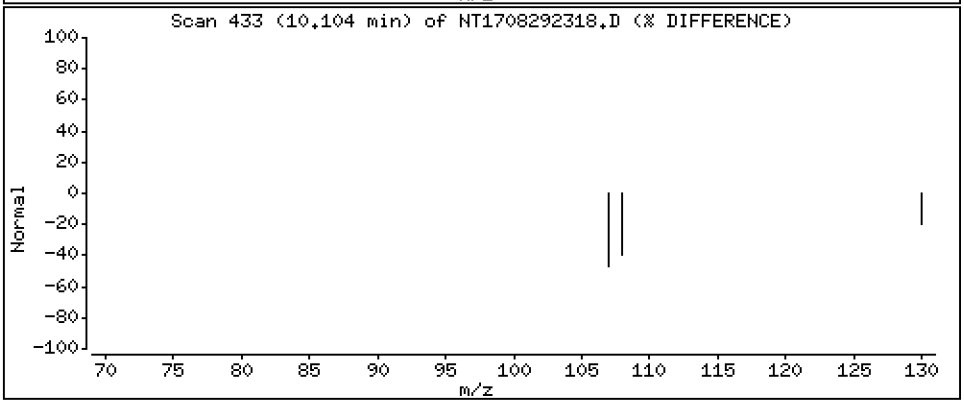












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Instrument: nt17.i

Sample Info: 23H0579-07

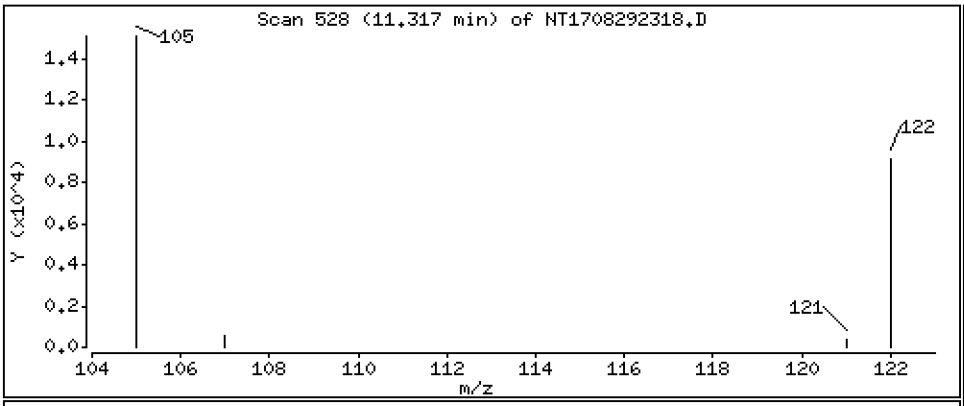
Operator: JGR

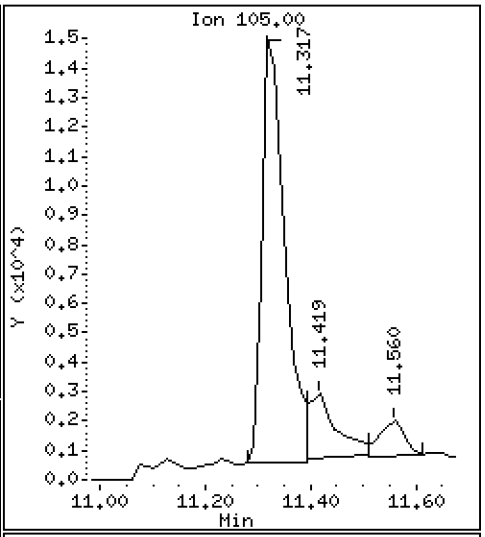
Column phase: ZB-5msi

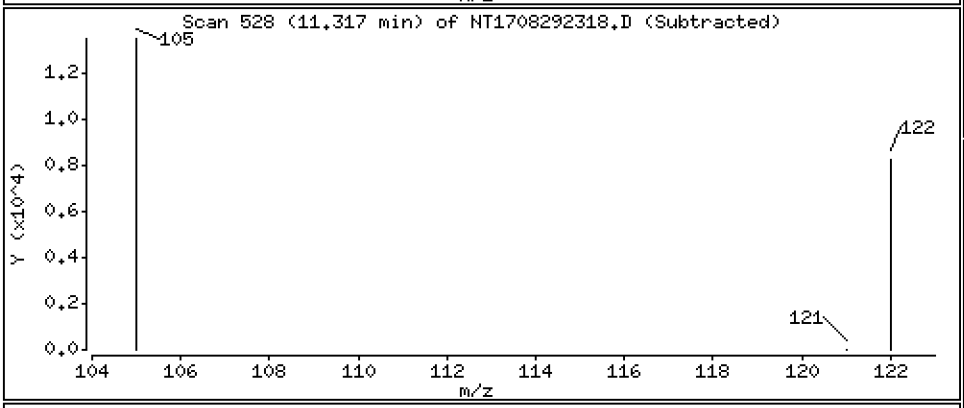
Column diameter: 0.25

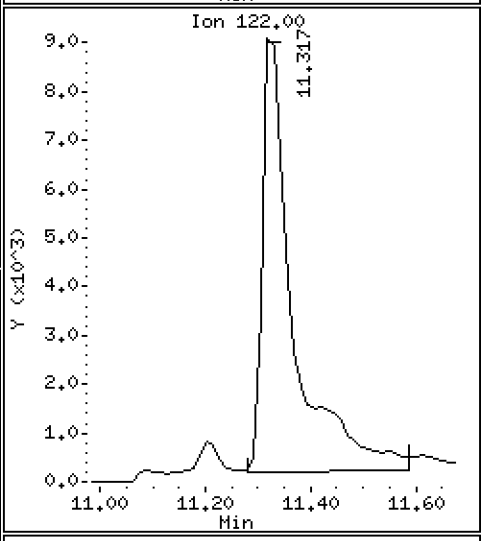
24 Benzoic acid

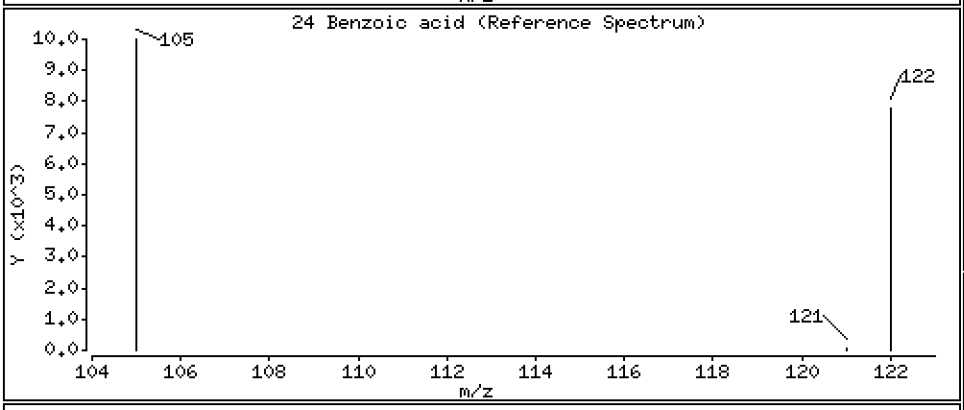
Concentration: 0.4315 ug/mL

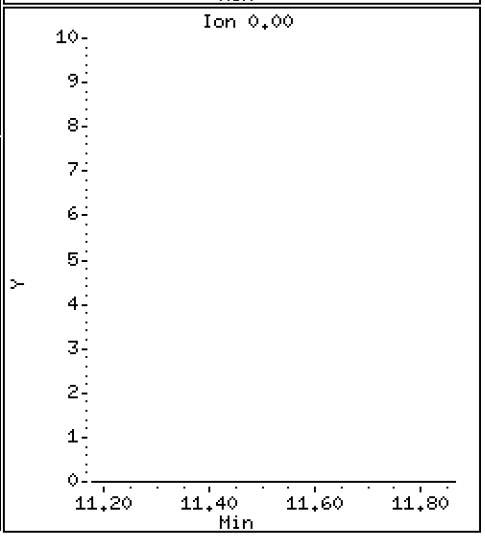


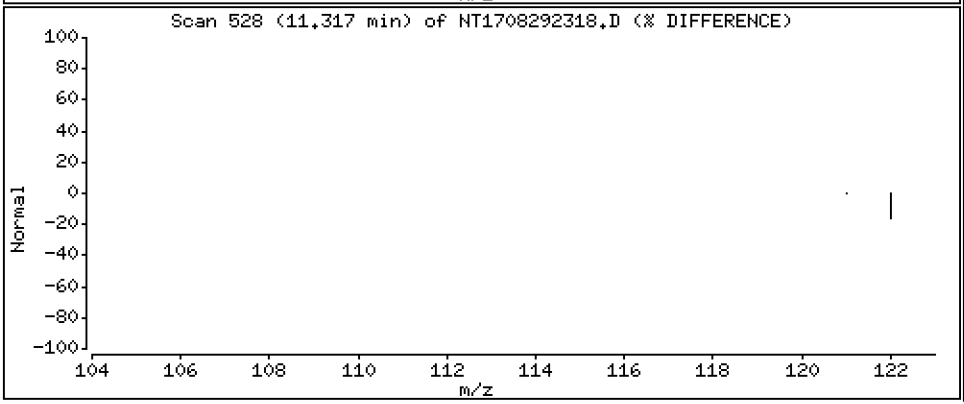












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Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

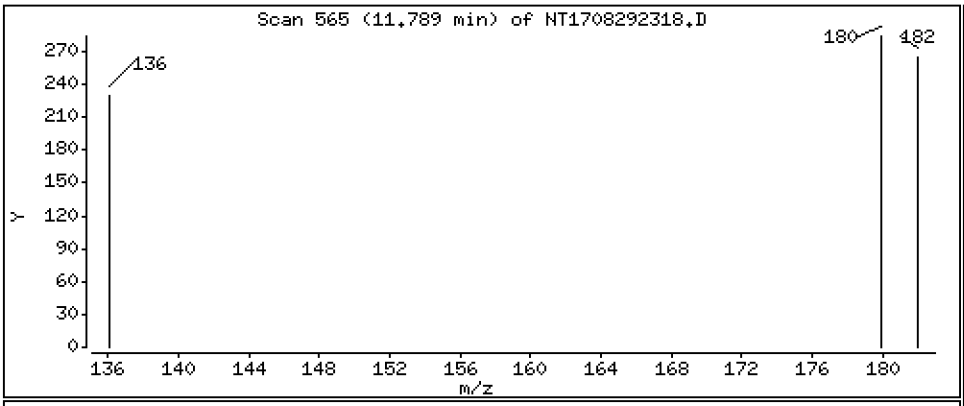
Operator: JGR

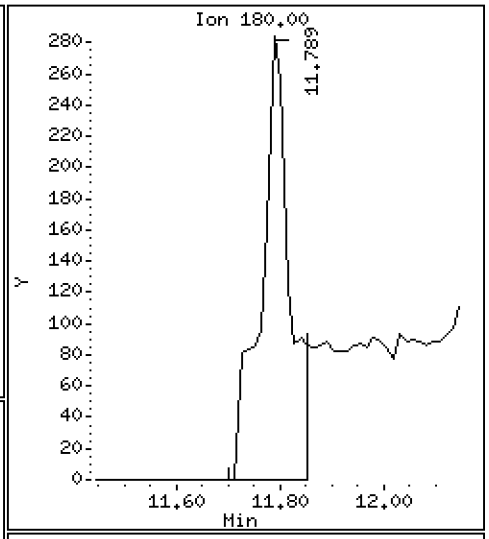
Column phase: ZB-5msi

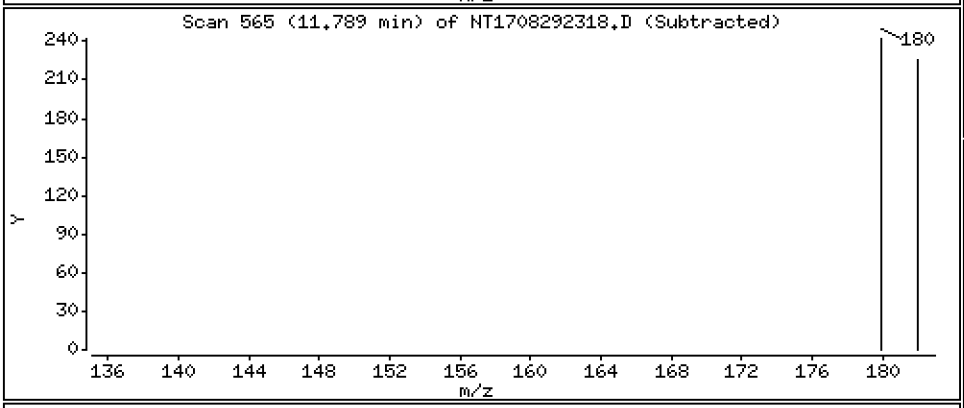
Column diameter: 0.25

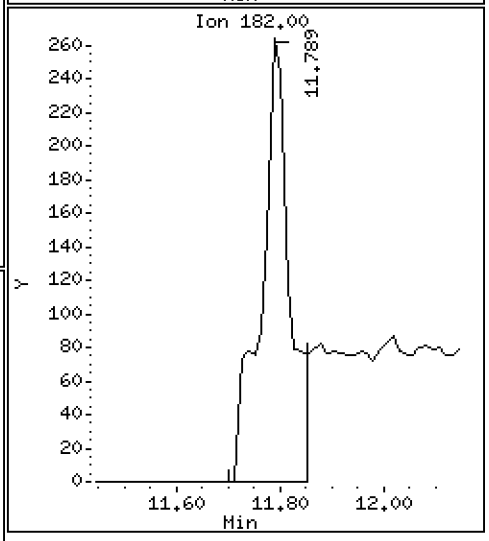
26 1,2,4-Trichlorobenzene

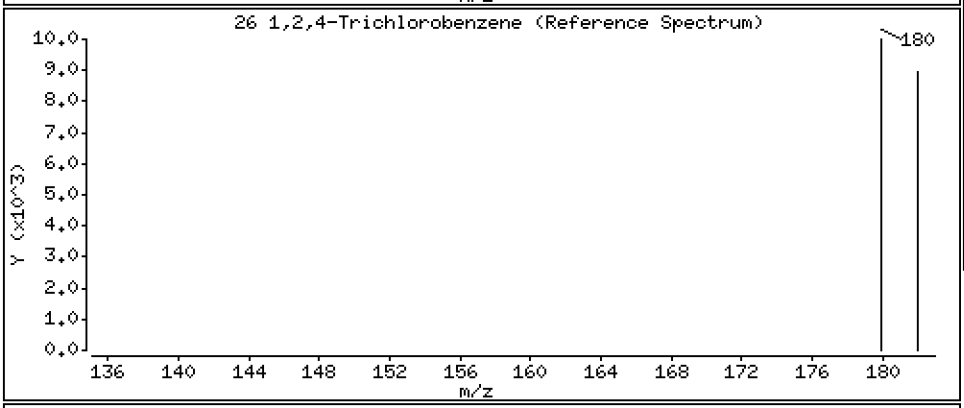
Concentration: 0.01013 ug/mL

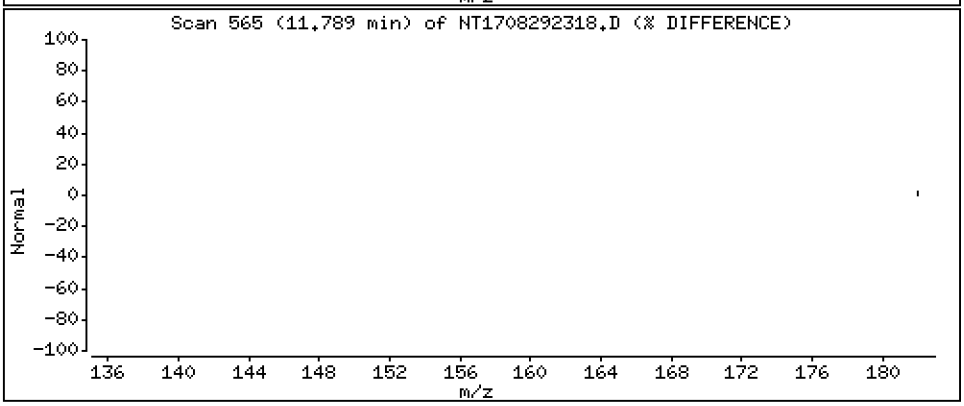












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Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

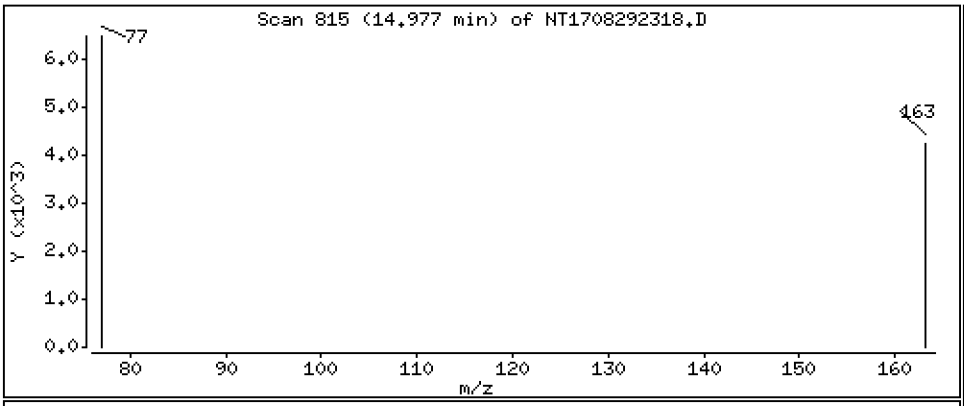
Operator: JGR

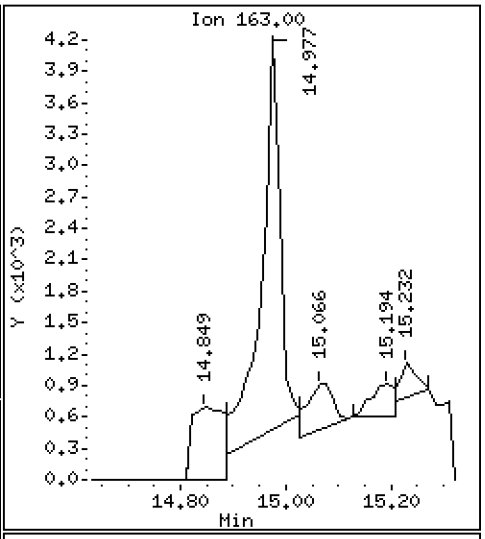
Column phase: ZB-5msi

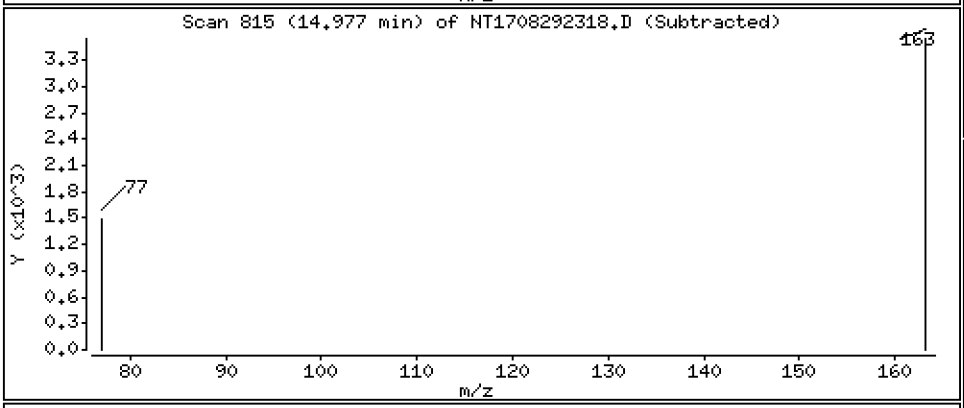
Column diameter: 0.25

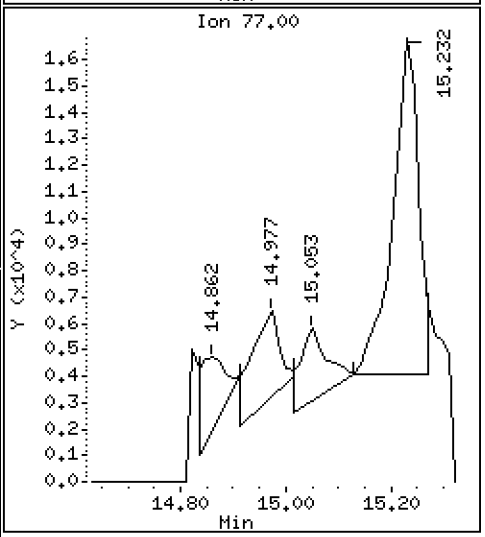
39 Dimethylphthalate

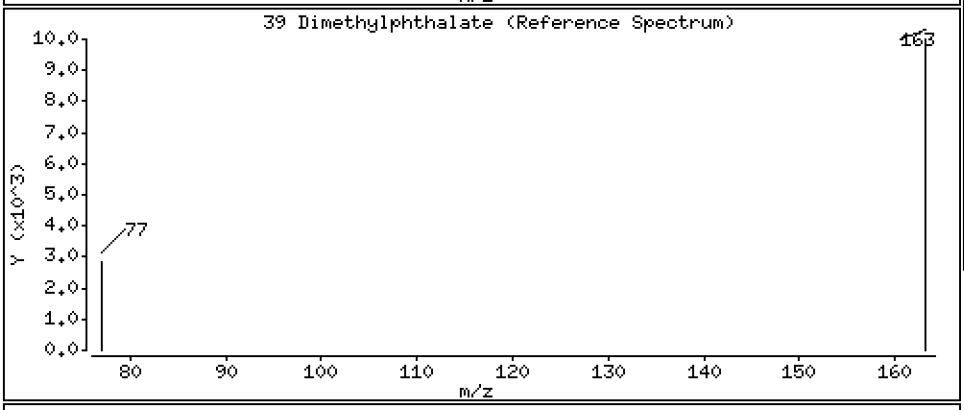
Concentration: 0.04955 ug/mL

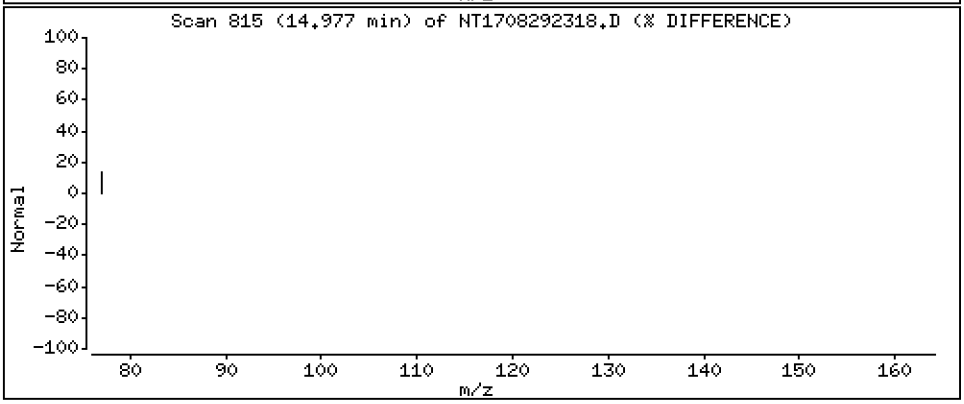












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Date : 29-AUG-2023 22:10

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

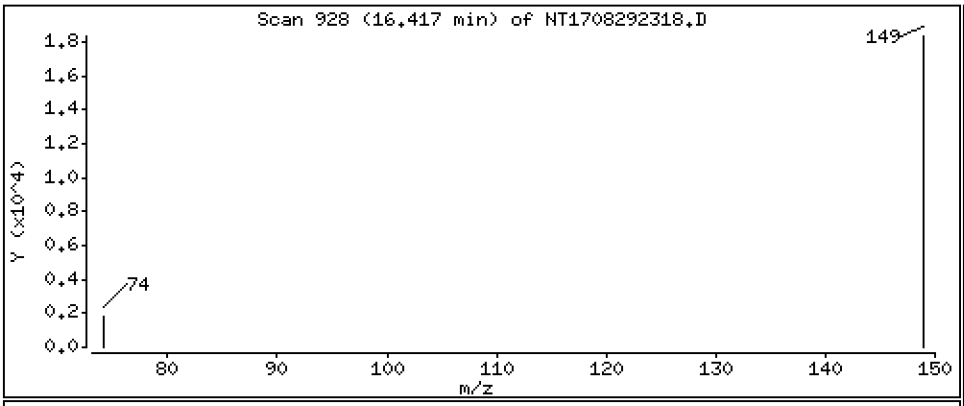
Operator: JGR

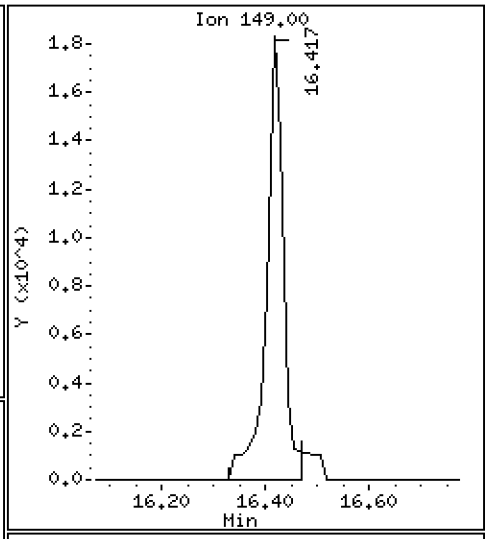
Column phase: ZB-5msi

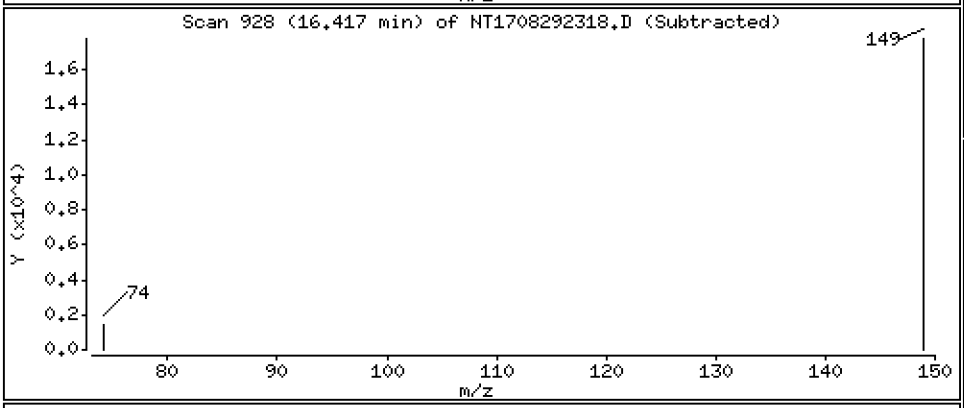
Column diameter: 0.25

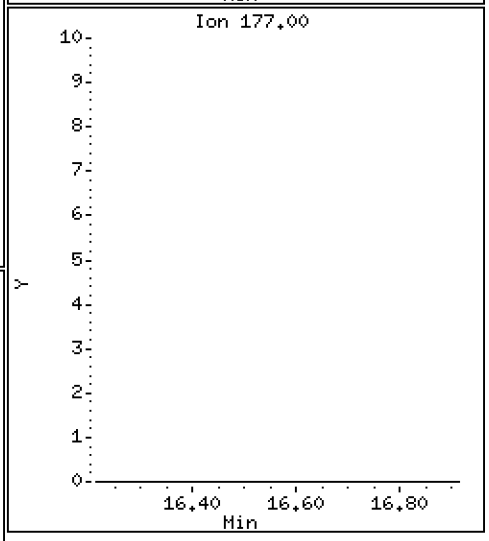
50 Diethylphthalate

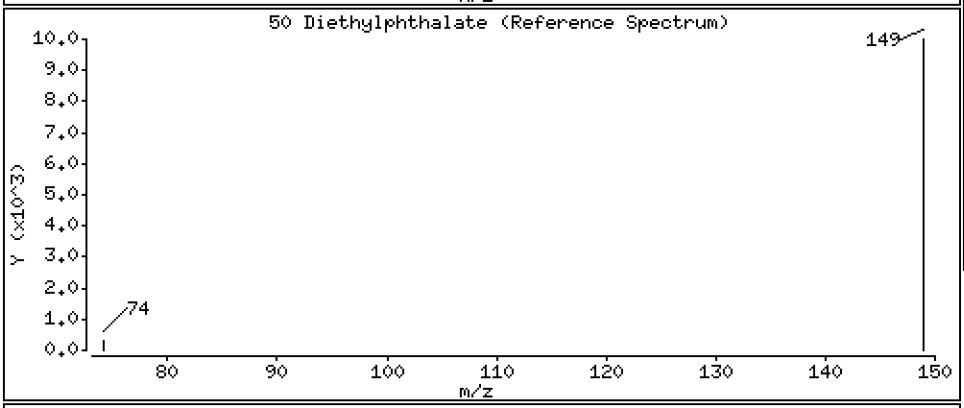
Concentration: 0.2127 ug/mL

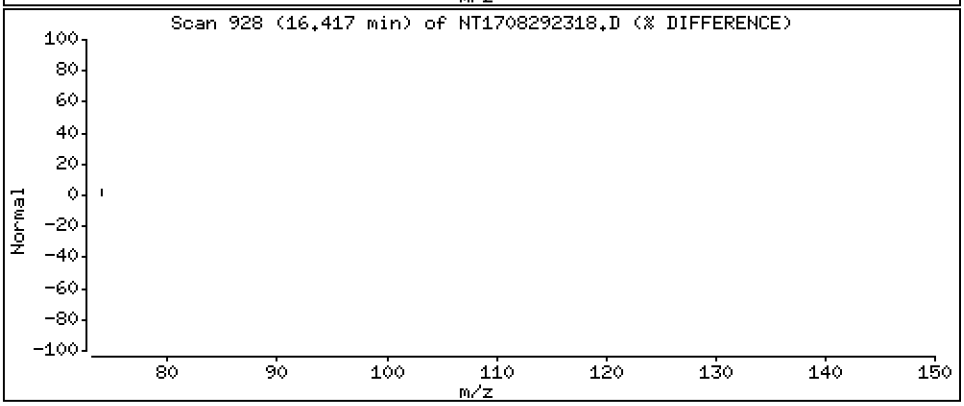












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Date : 29-AUG-2023 22:10

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

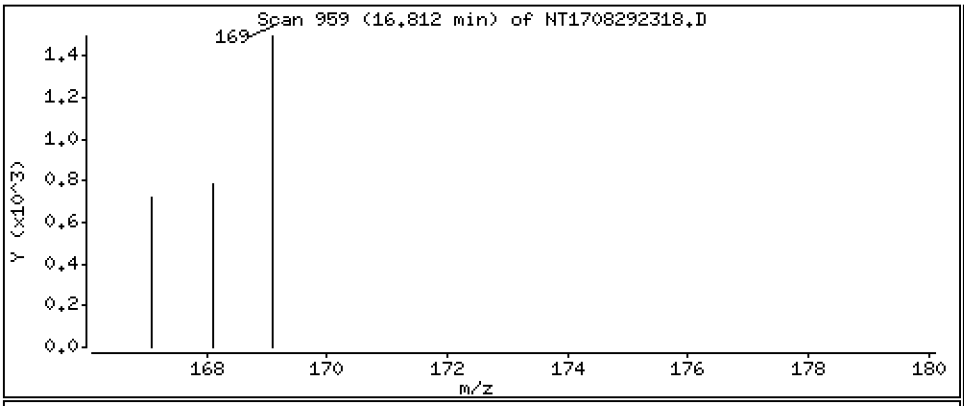
Operator: JGR

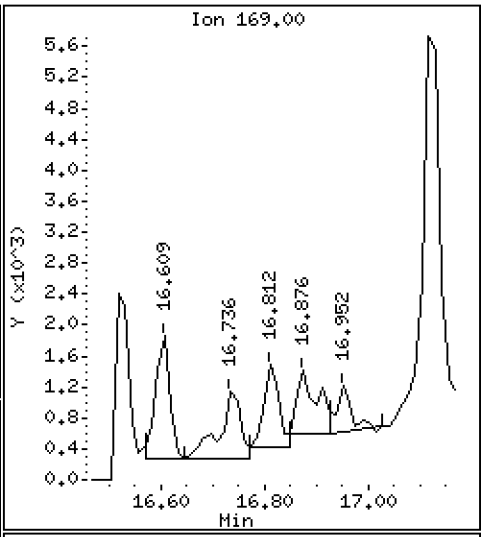
Column phase: ZB-5msi

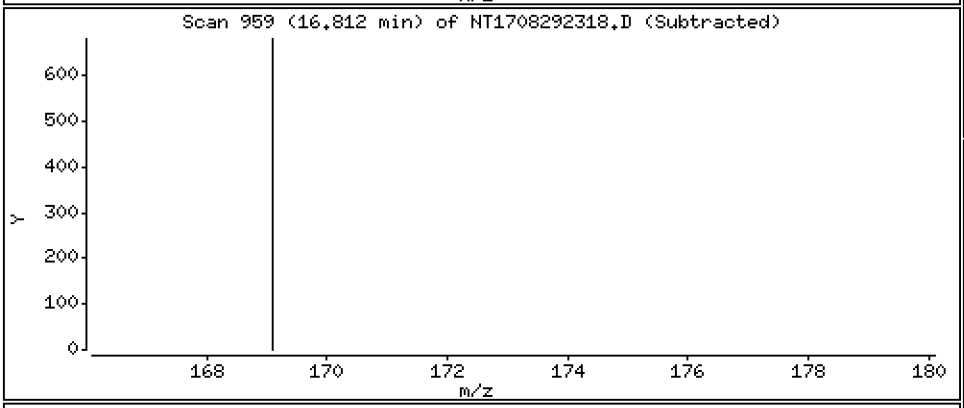
Column diameter: 0.25

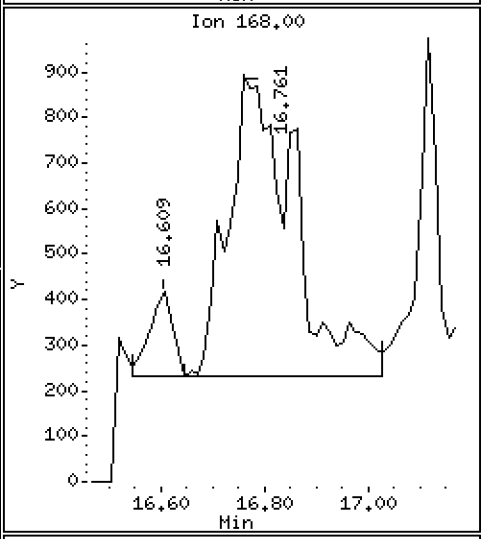
54 N-Nitrosodiphenylamine

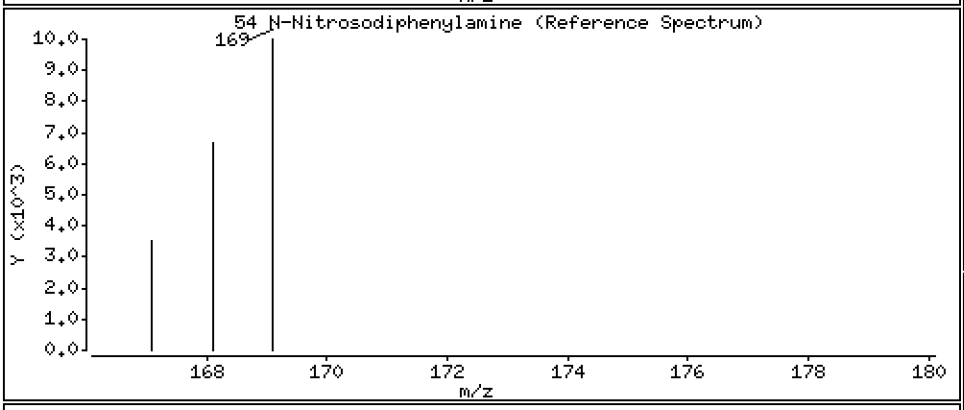
Concentration: 0.01931 ug/mL

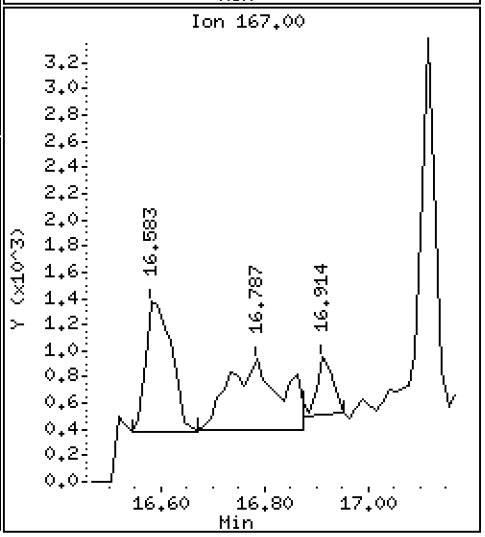


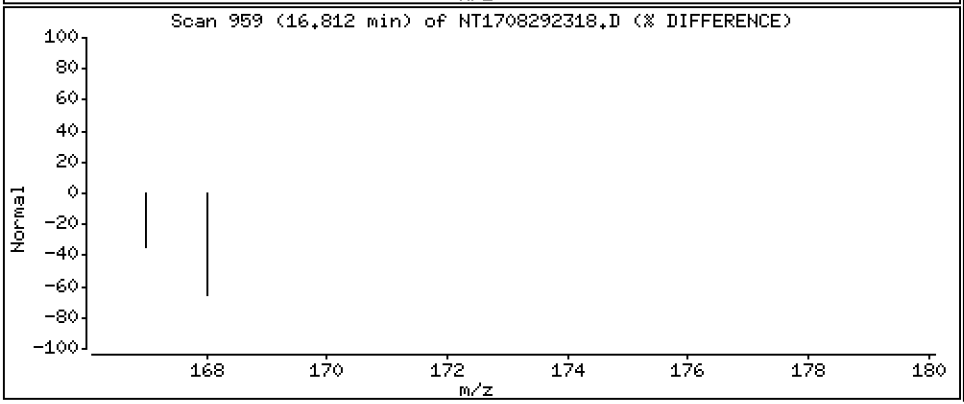












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Date : 29-AUG-2023 22:10

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

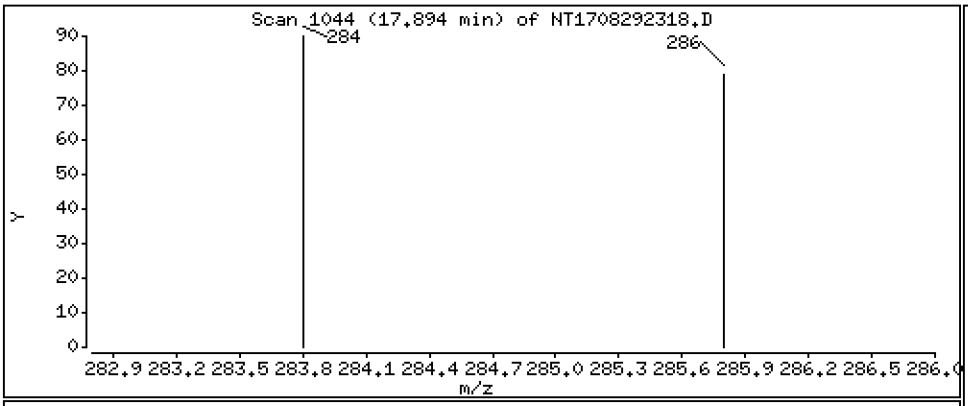
Operator: JGR

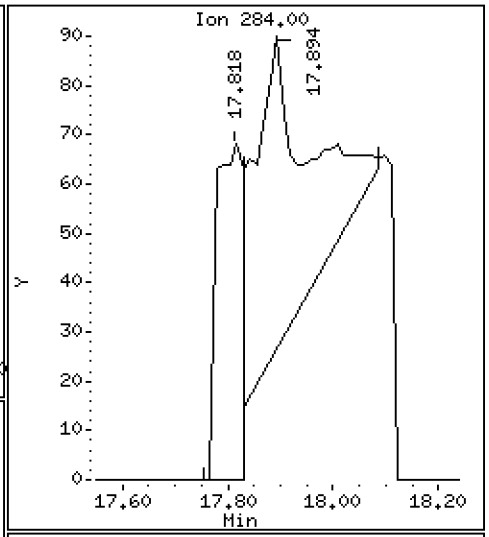
Column phase: ZB-5msi

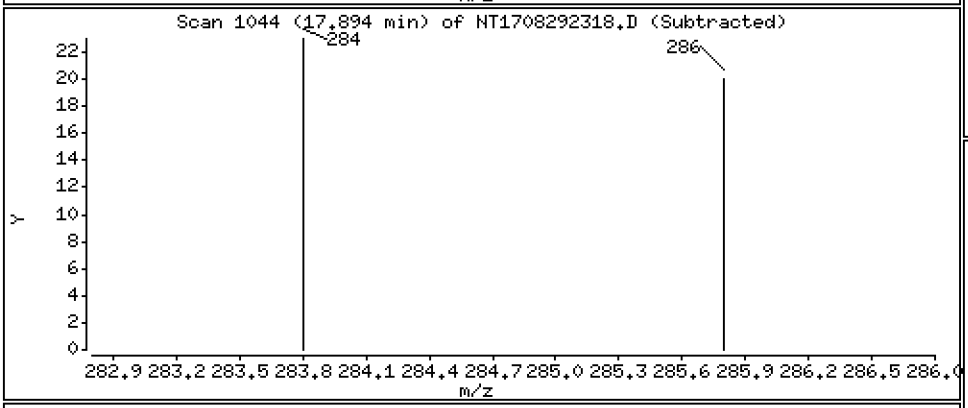
Column diameter: 0.25

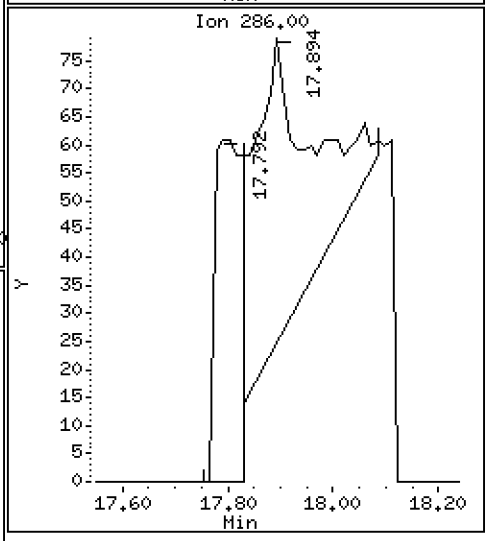
57 Hexachlorobenzene

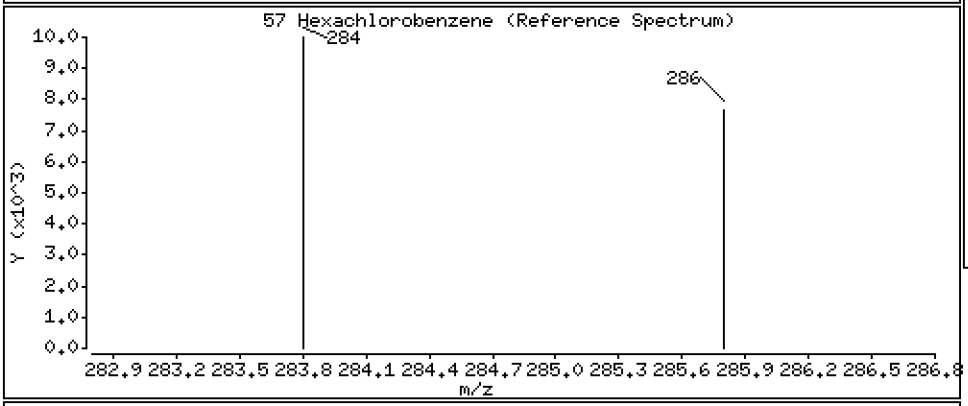
Concentration: 0.01292 ug/mL

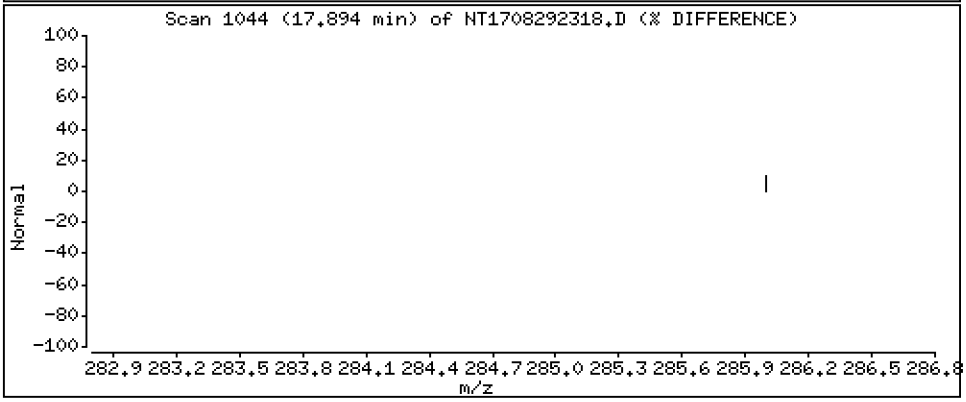












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Date : 29-AUG-2023 22:10

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

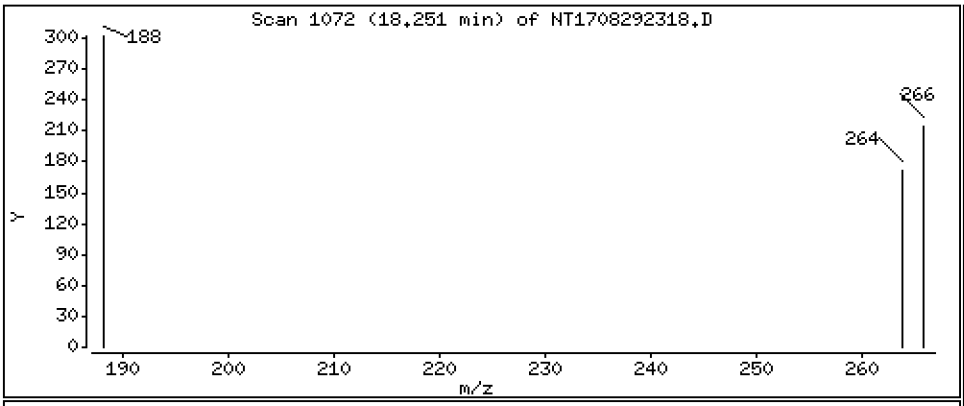
Operator: JGR

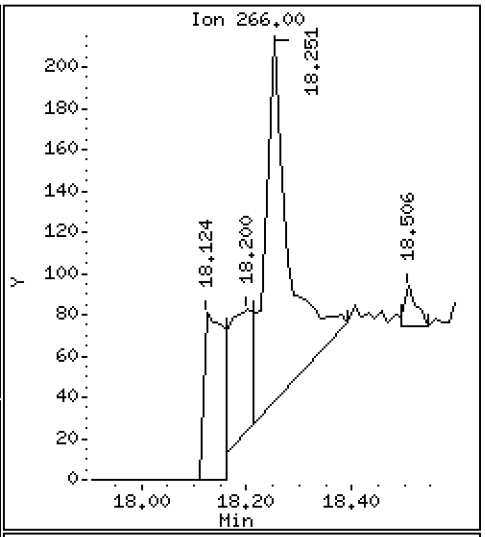
Column phase: ZB-5msi

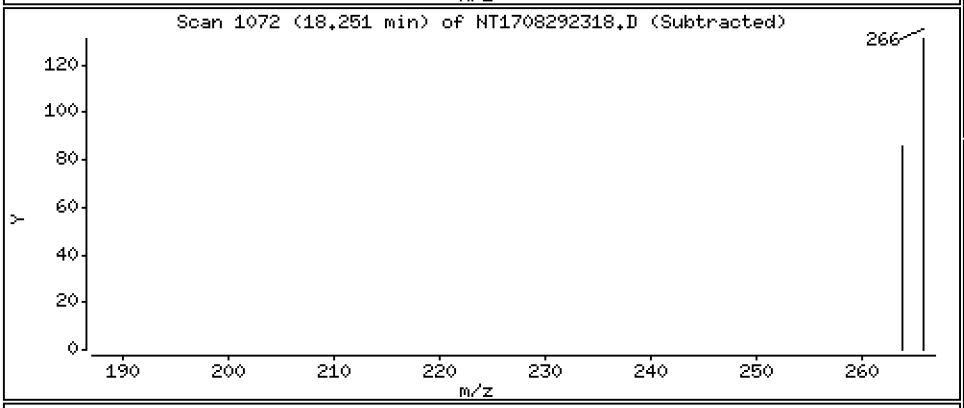
Column diameter: 0.25

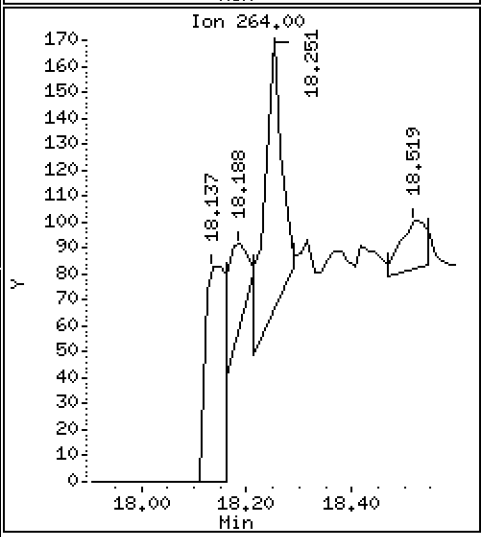
58 Pentachlorophenol

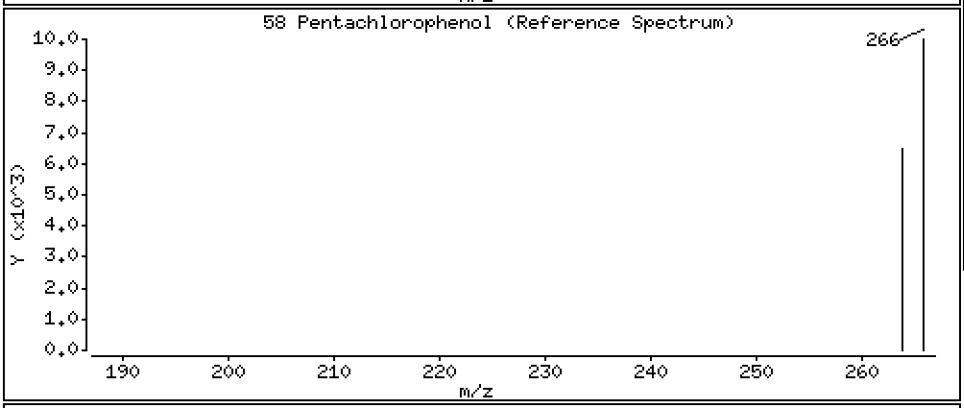
Concentration: 0.02320 ug/mL

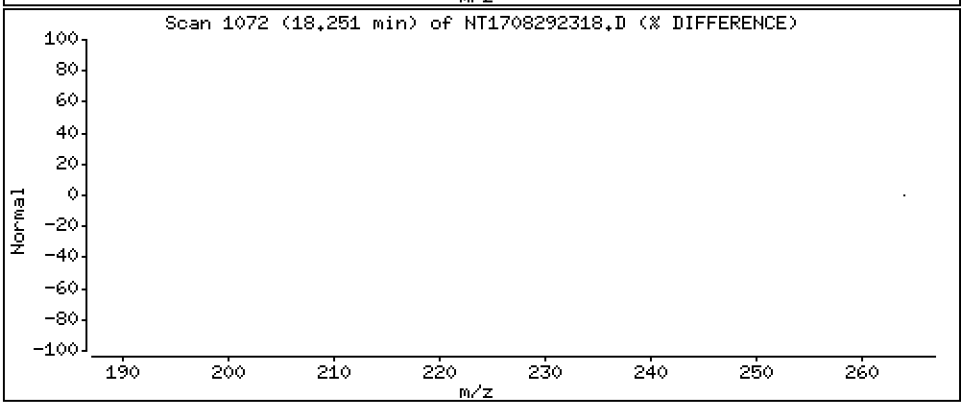












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Date : 29-AUG-2023 22:10

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

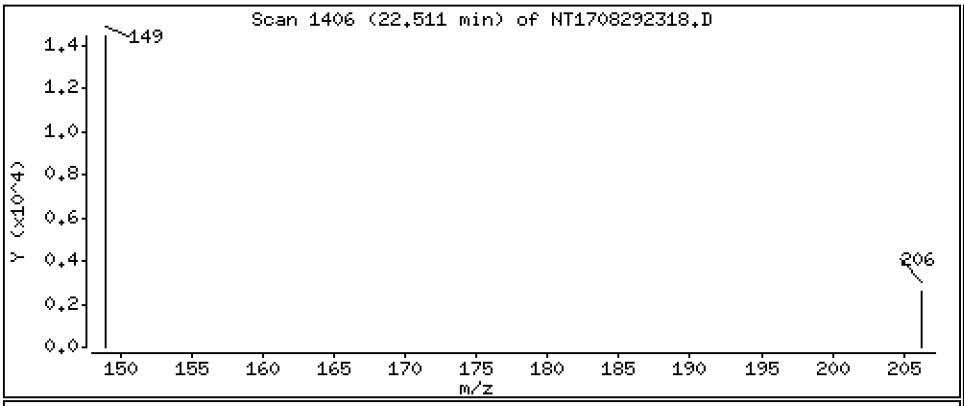
Operator: JGR

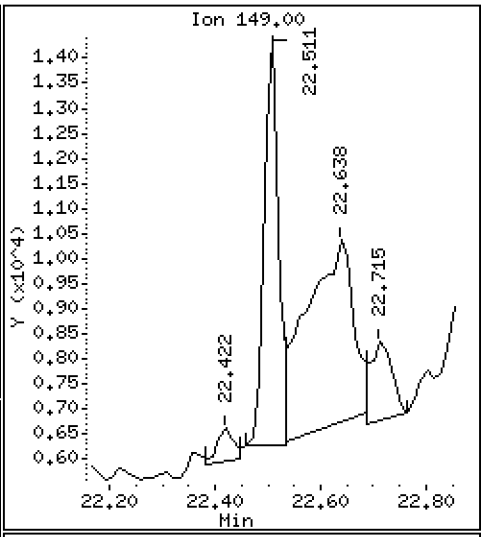
Column phase: ZB-5msi

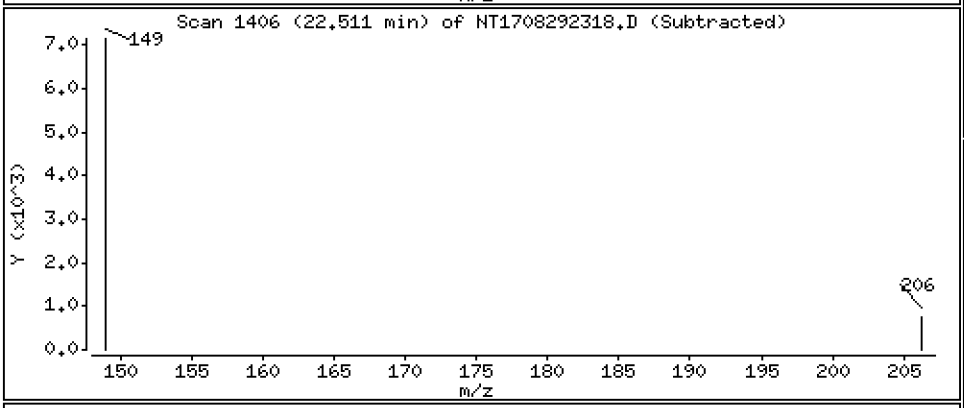
Column diameter: 0.25

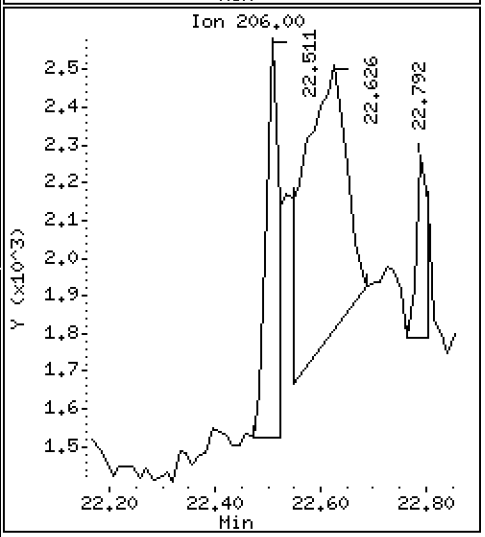
67 Butylbenzylphthalate

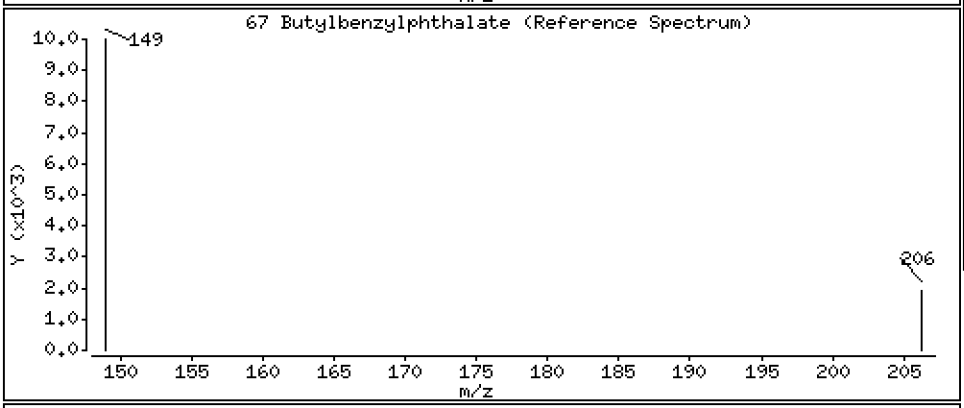
Concentration: 0.1334 ug/mL

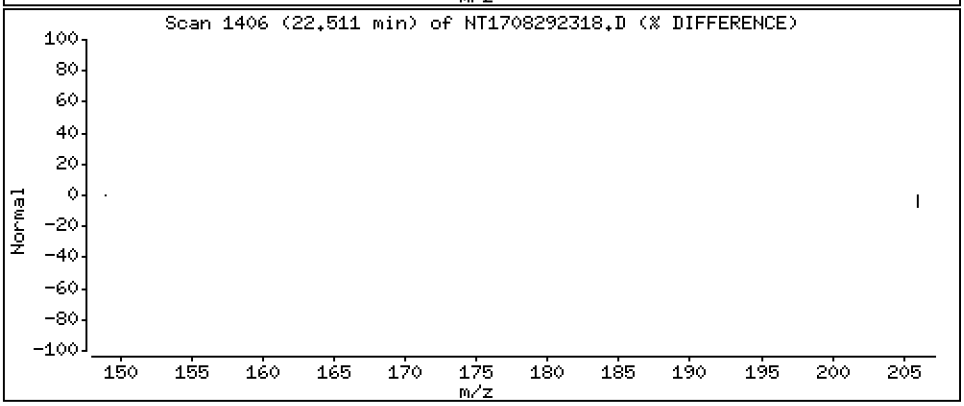












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Date : 29-AUG-2023 22:10

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

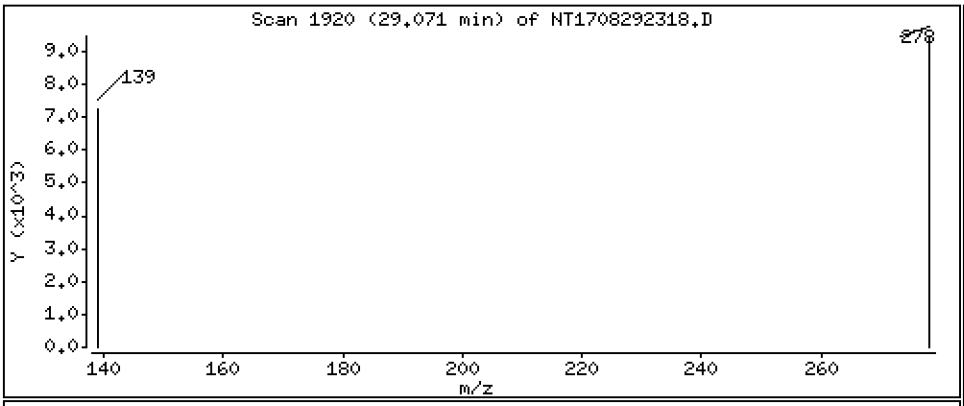
Operator: JGR

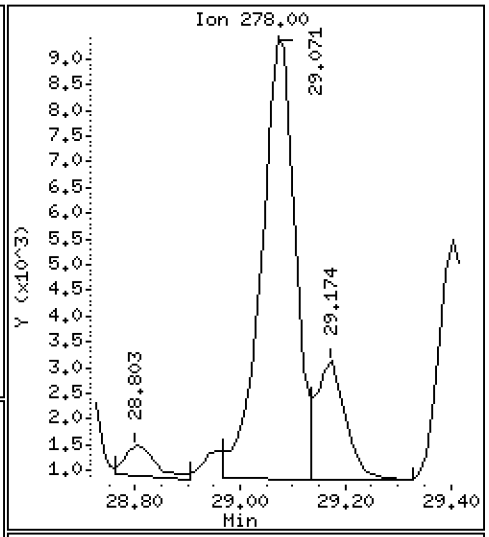
Column phase: ZB-5msi

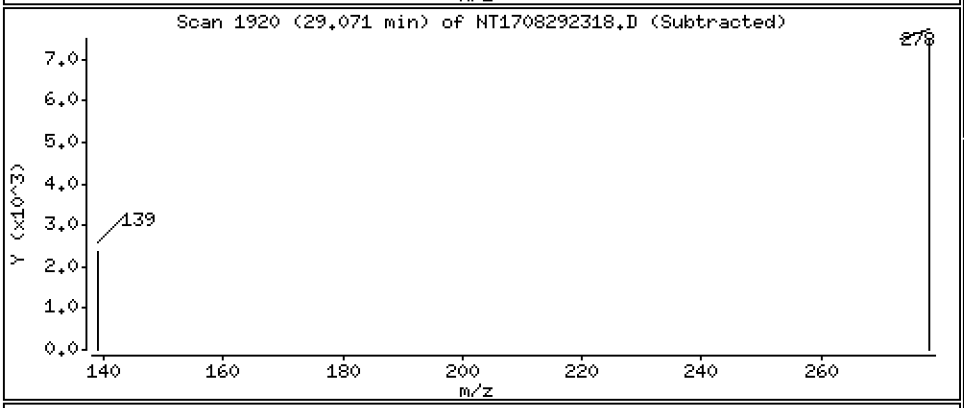
Column diameter: 0.25

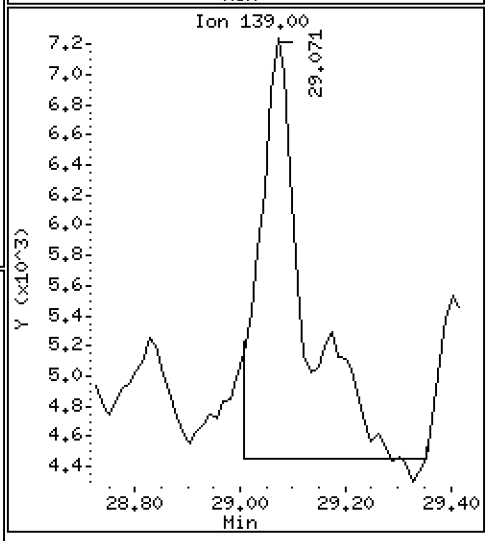
79 Dibenzo(a,h)anthracene

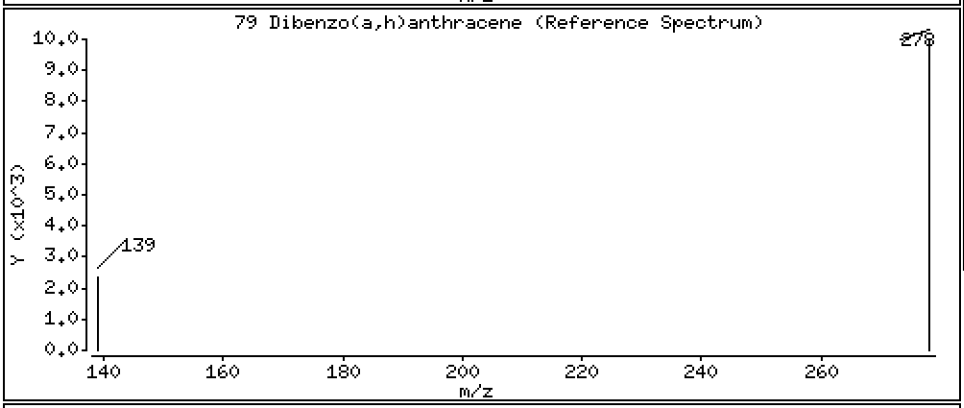
Concentration: 0.1867 ug/mL

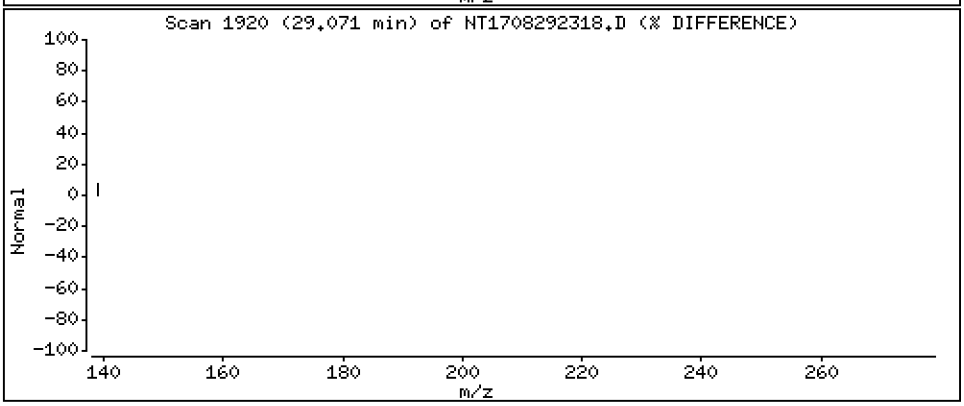












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Date : 29-AUG-2023 22:10

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-07

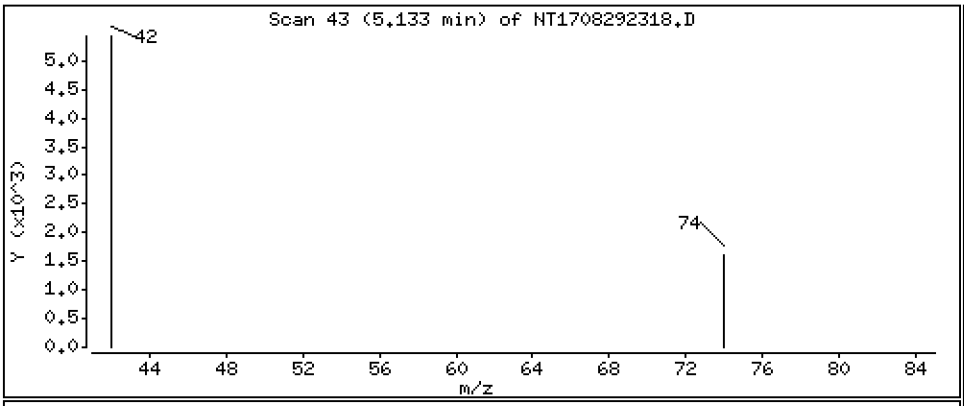
Operator: JGR

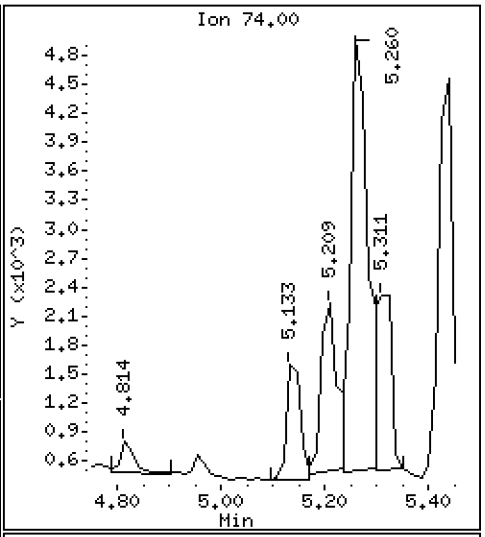
Column phase: ZB-5msi

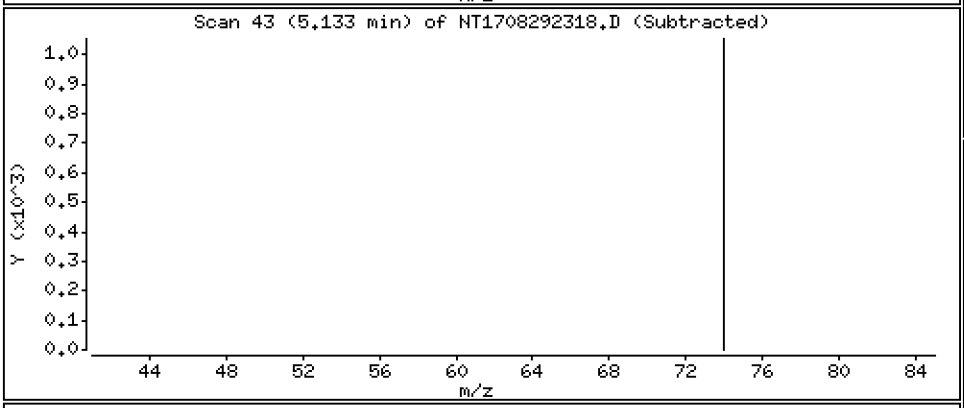
Column diameter: 0.25

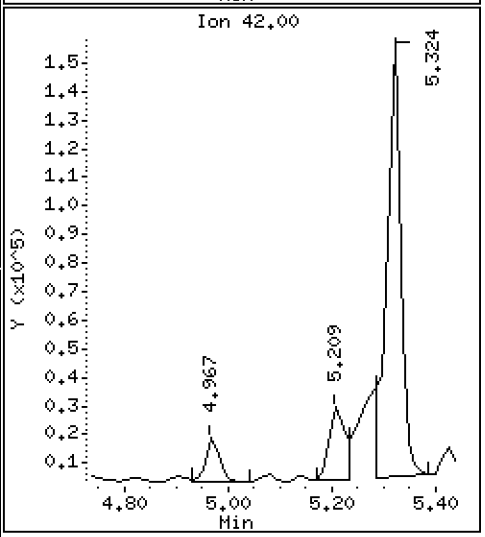
90 N-Nitrosodimethylamine

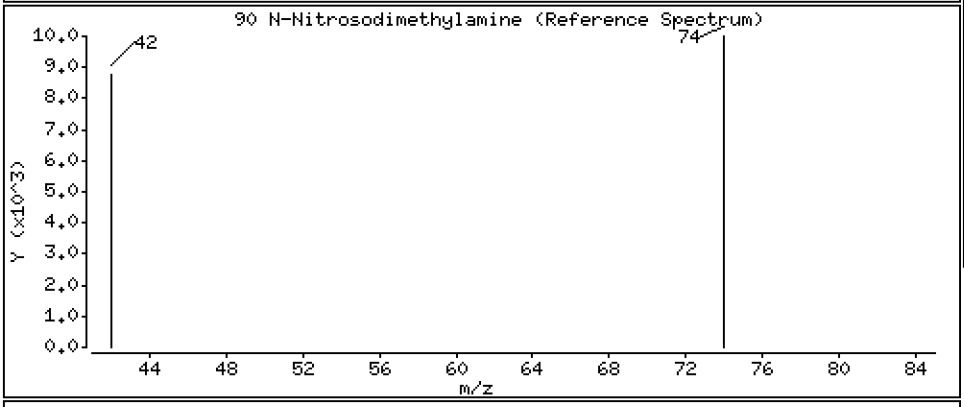
Concentration: 0.01255 ug/mL

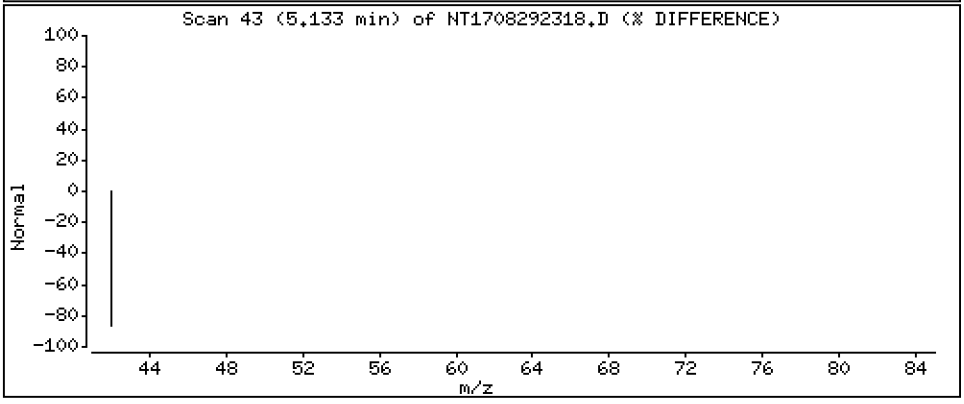












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292318.D
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Inj Date : 29-AUG-2023 22:10
Operator : JGR Inst ID: nt17.i
Smp Info : 23H0579-07
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 09:25 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.209	7.196	(0.766)	926040	5.20007	5.200(R)
	3 Phenol	94	8.788	8.776	(0.934)	45663	0.16821	0.1682
	7 1,3-Dichlorobenzene	146	9.349	9.349	(0.993)	870	0.00474	0.004738
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	428884	4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	2044	0.01150	0.01150
	11 Benzyl alcohol	79	9.681	9.669	(1.028)	60305	0.32095	0.3210
	12 1,2-Dichlorobenzene	146	9.796	9.797	(1.041)	1246	0.00723	0.007228
	13 2-Methylphenol	108	9.681	9.886	(1.028)	27698	0.16827	0.1683
	15 4-Methylphenol	108	10.154	10.154	(1.079)	393265	2.28587	2.286
	16 N-Nitroso-di-n-propylamine	70	10.103	10.218	(1.073)	21497	0.12219	0.1222
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	24 Benzoic acid	105	11.316	11.329	(0.953)	44840	0.43150	0.4315
	26 1,2,4-Trichlorobenzene	180	11.789	11.789	(0.992)	1099	0.01013	0.01013
*	27 Naphthalene-d8	136	11.878	11.878	(1.000)	1583230	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.976	14.977	(0.967)	9311	0.04955	0.04955
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	578162	4.00000	
	50 Diethylphthalate	149	16.417	16.417	(1.060)	41553	0.21267	0.2127
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	2130	0.01931	0.01931
	57 Hexachlorobenzene	284	17.894	17.894	(0.966)	467	0.01292	0.01292
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	569	0.02320	0.02320
*	59 Phenanthrene-d10	188	18.519	18.506	(1.000)	767219	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	287575	4.58255	4.583(R)
	67 Butylbenzylphthalate	149	22.510	22.511	(0.958)	16047	0.13335	0.1334
*	69 Chrysene-d12	240	23.505	23.506	(1.000)	453486	4.00000	
*	77 Perylene-d12	264	26.235	26.223	(1.000)	720109	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.071	29.071	(1.108)	39710	0.18670	0.1867
	90 N-Nitrosodimethylamine	74	5.132	5.094	(0.545)	2274	0.01255	0.01255

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 30-Aug-2023 09:26

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292318.D
Lab Smp Id: 23H0579-07
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 29-AUG-2023
Calibration Time: 12:37
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	296489	148245	592978	428884	44.65
27 Naphthalene-d8	1098892	549446	2197784	1583230	44.08
42 Acenaphthene-d10	443071	221536	886142	578162	30.49
59 Phenanthrene-d10	627744	313872	1255488	767219	22.22
69 Chrysene-d12	404122	202061	808244	453486	12.22
77 Perylene-d12	417323	208662	834646	720109	72.55

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	-0.00
27 Naphthalene-d8	11.88	11.38	12.38	11.88	-0.00
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	-0.00
59 Phenanthrene-d10	18.51	18.01	19.01	18.52	0.07
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.22	25.72	26.72	26.24	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292318.D

Lab ID: 23H0579-07
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   29-AUG-2023 22:10

RT	CO-ELUTION COMPOUNDS
9.682	2-Methylphenol and Benzyl alcohol

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.028	1.050	-0.0217	2-Methylphenol
1.073	1.085	-0.0122	N-Nitroso-di-n-propylamine

RRT check based on Ccal File: SIM.b/NT1708292304.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1017A

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23H0579-08 A	SDG:	23H0579
Sampled:	01/13/23 12:47	Prepared:	08/25/23 12:39	File ID:	NT1708292321.D
% Solids:	52.78	Preparation:	EPA 3546 (Microwave)	Analyzed:	08/30/23 00:01
Batch:	BLH0669	Sequence:	SLH0447	Initial/Final:	18.95 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GH00045
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	749.86	523	69.8	27 - 120	Q
p-Terphenyl-d14	499.91	397	79.3	37 - 120	Q

INTERNAL STANDARDS	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	348423	9.413	358343	9.413	
Naphthalene-d8	1238784	11.878	1242877	11.891	
Acenaphthene-d10	429846	15.487	464388	15.487	
Phenanthrene-d10	556898	18.519	660913	18.519	
Chrysene-d12	415079	23.506	477958	23.505	
Perylene-d12	705516	26.236	659026	26.235	

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292321.D

Date : 30-AUG-2023 00:01

Client ID:

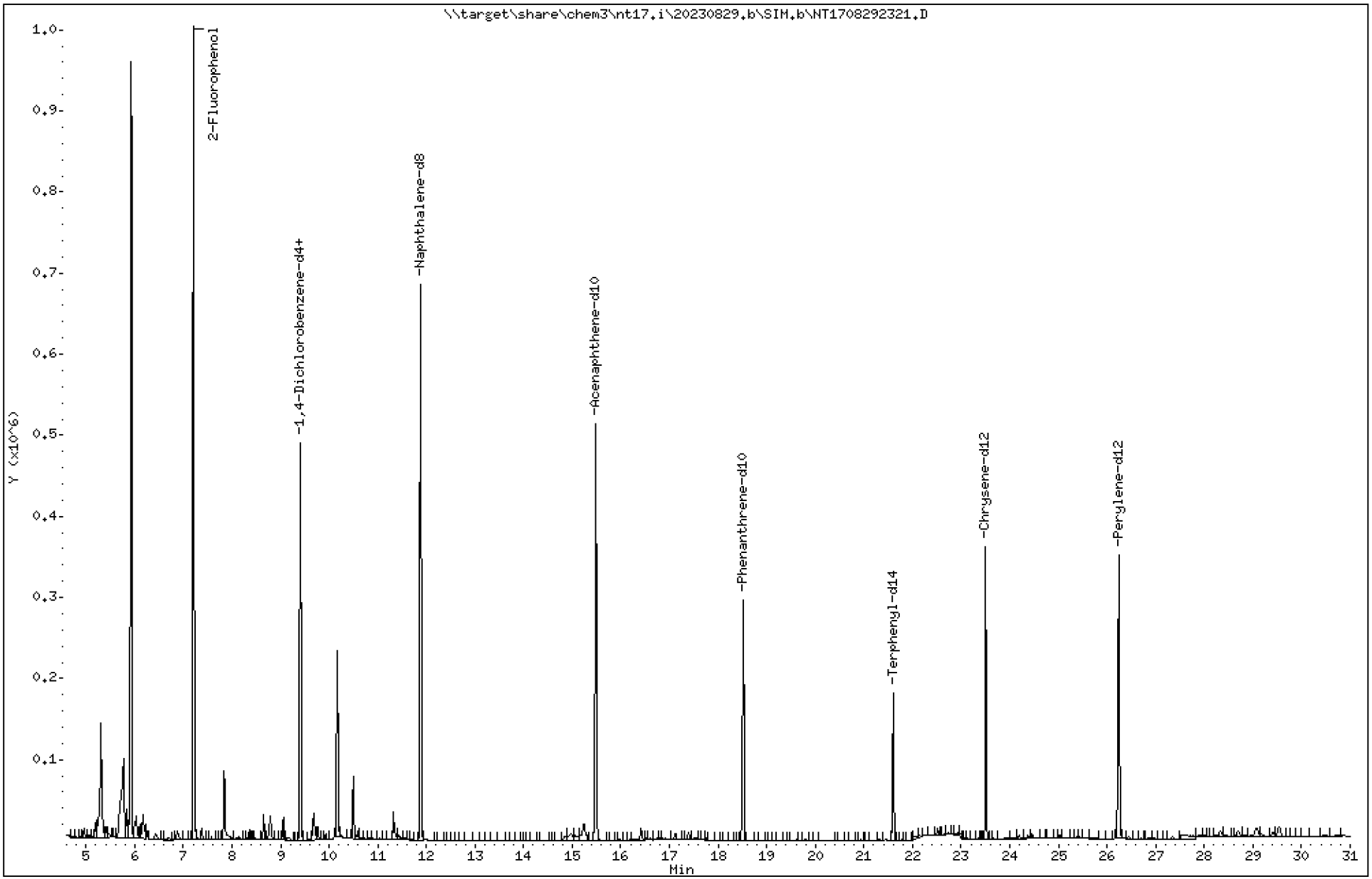
Sample Info: 23H0579-08

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

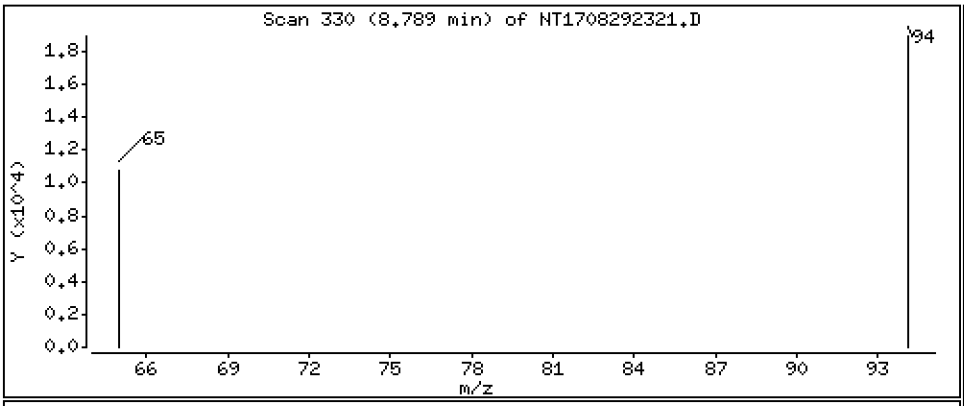
Operator: JGR

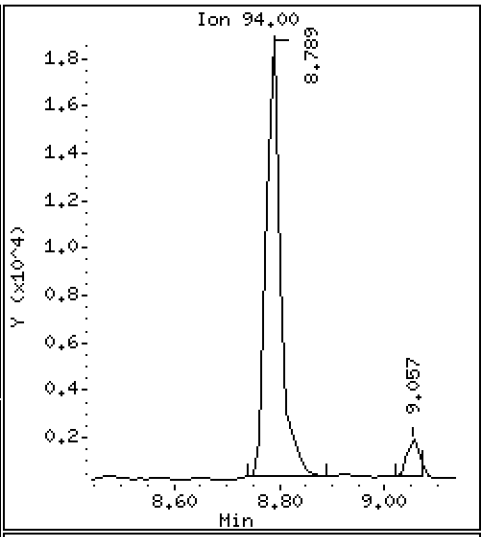
Column phase: ZB-5msi

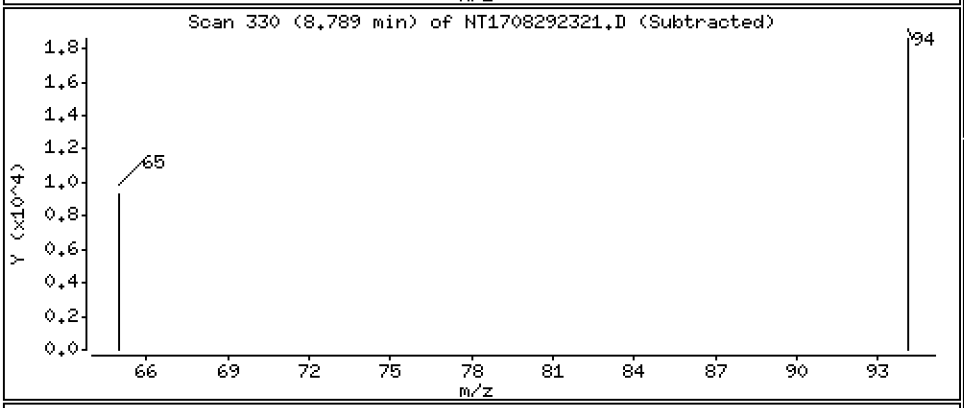
Column diameter: 0.25

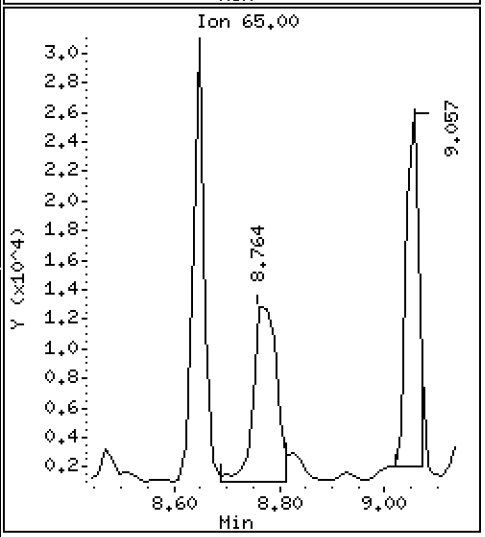
3 Phenol

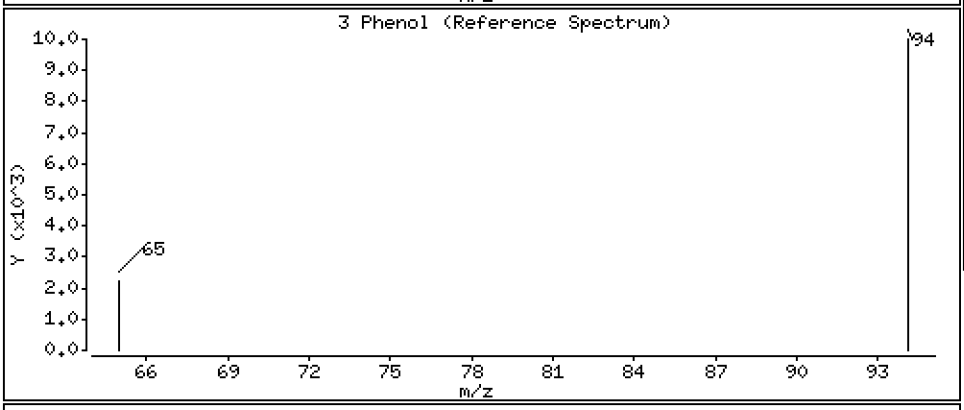
Concentration: 0.1597 ug/mL

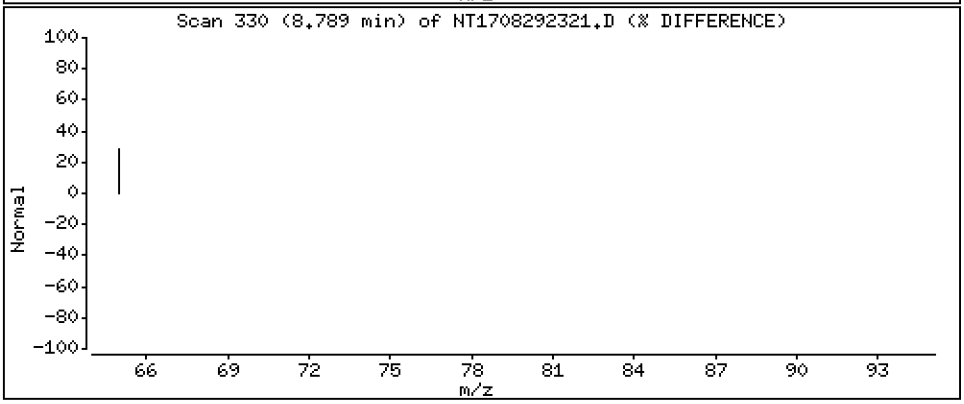












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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

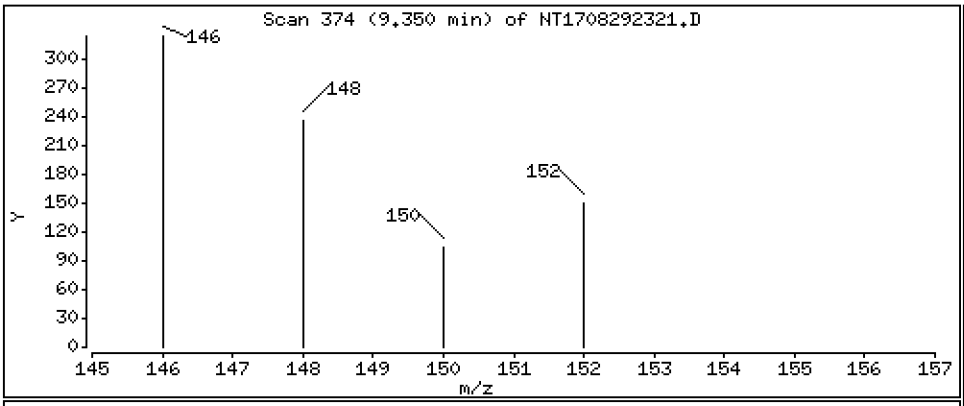
Operator: JGR

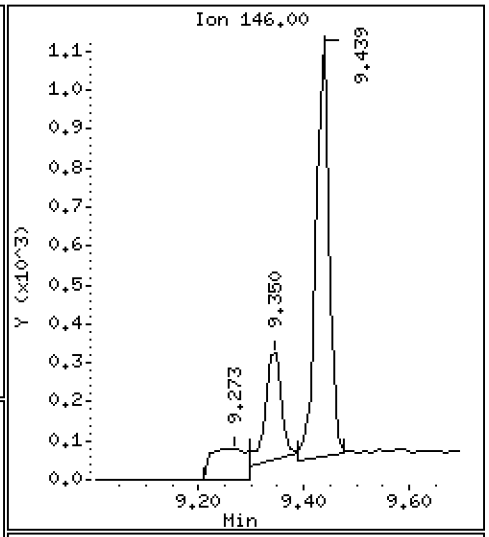
Column phase: ZB-5msi

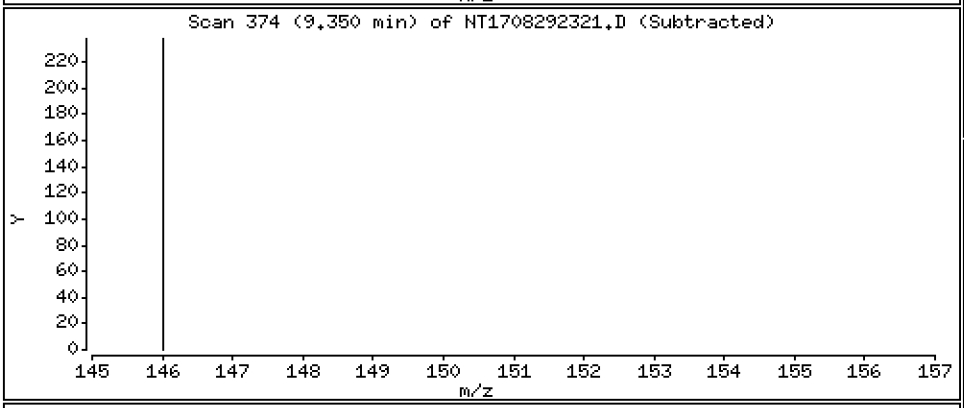
Column diameter: 0.25

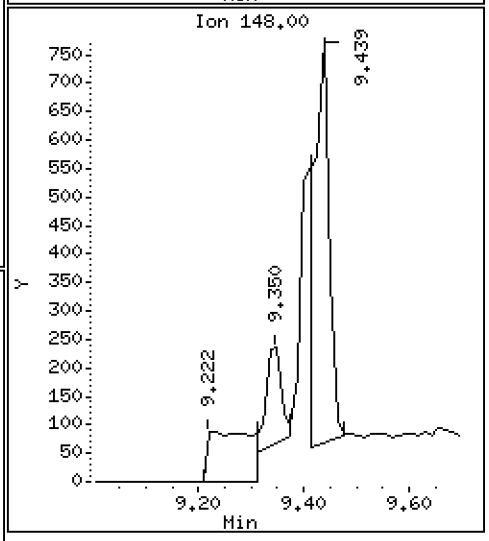
7 1,3-Dichlorobenzene

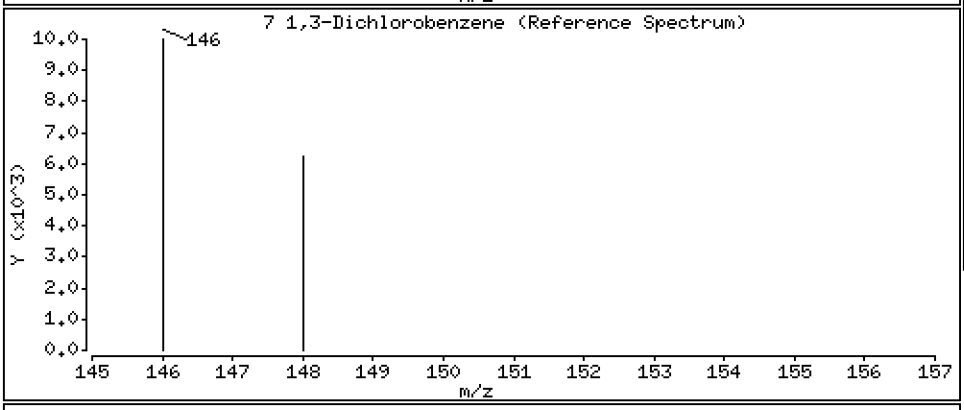
Concentration: 0.003989 ug/mL

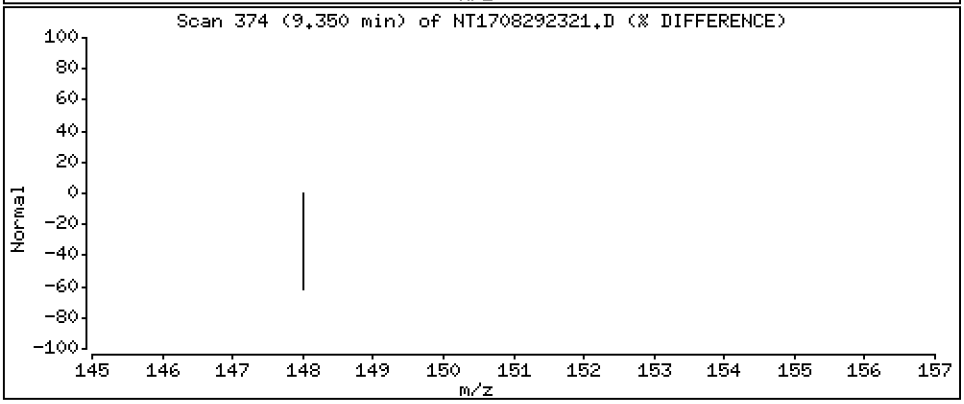












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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

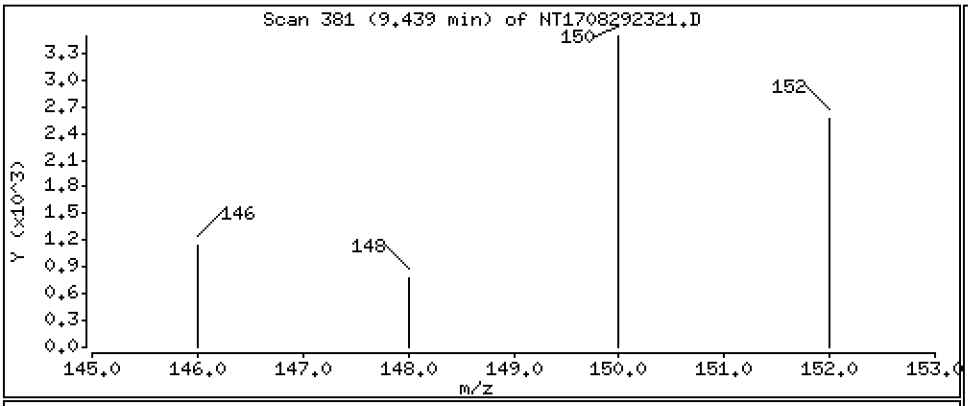
Operator: JGR

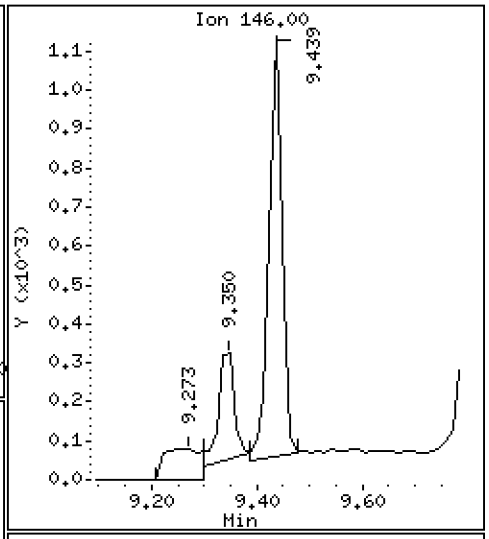
Column phase: ZB-5msi

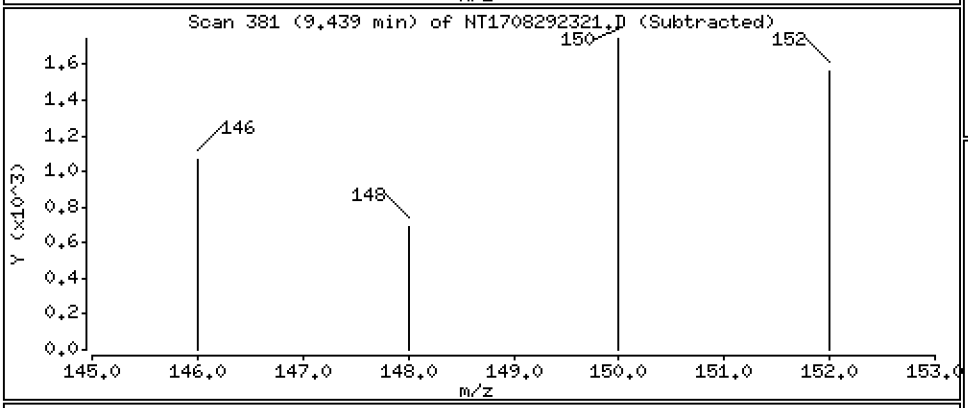
Column diameter: 0.25

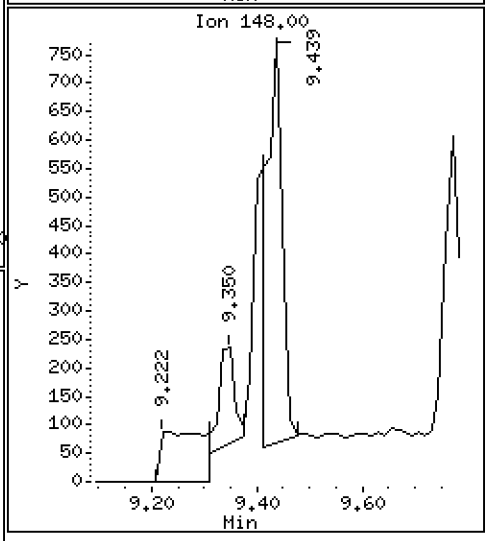
9 1,4-Dichlorobenzene

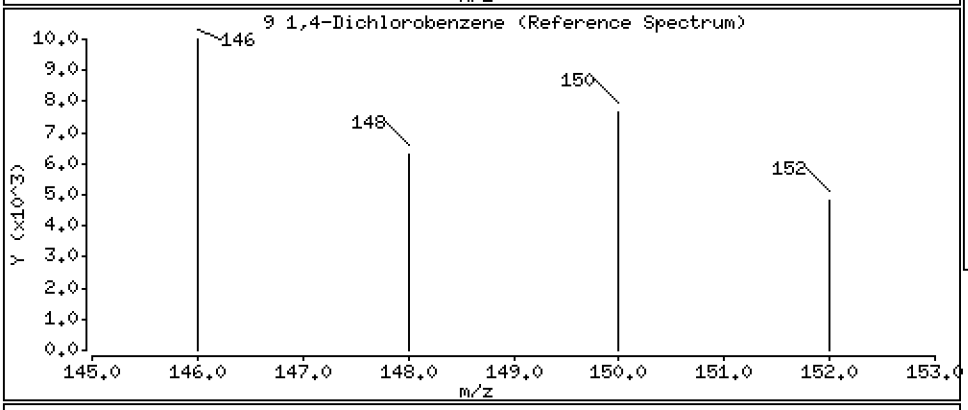
Concentration: 0.01304 ug/mL

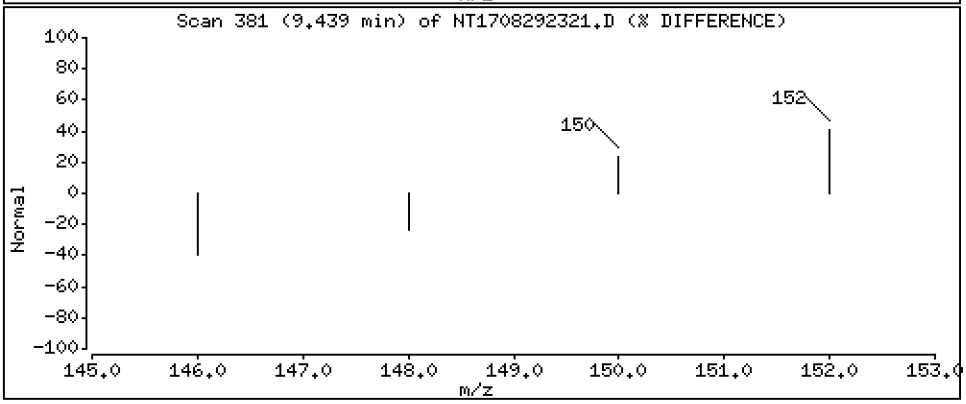












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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

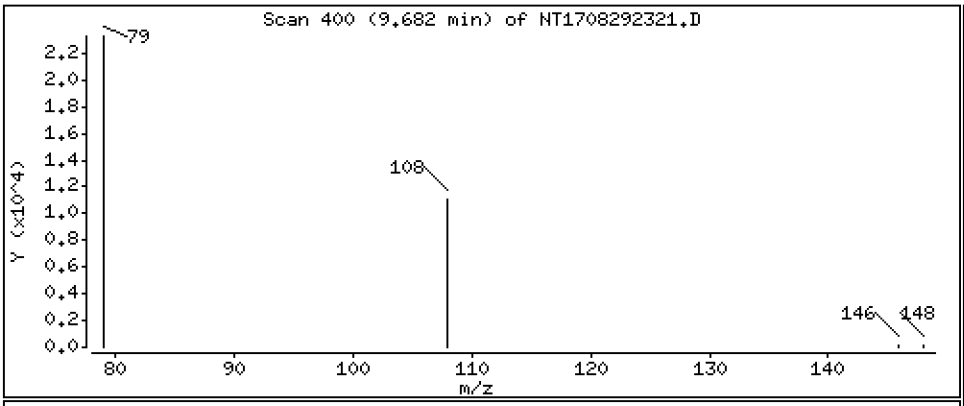
Operator: JGR

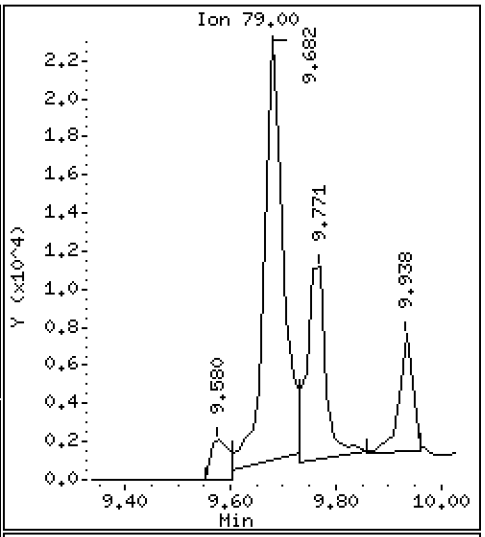
Column phase: ZB-5msi

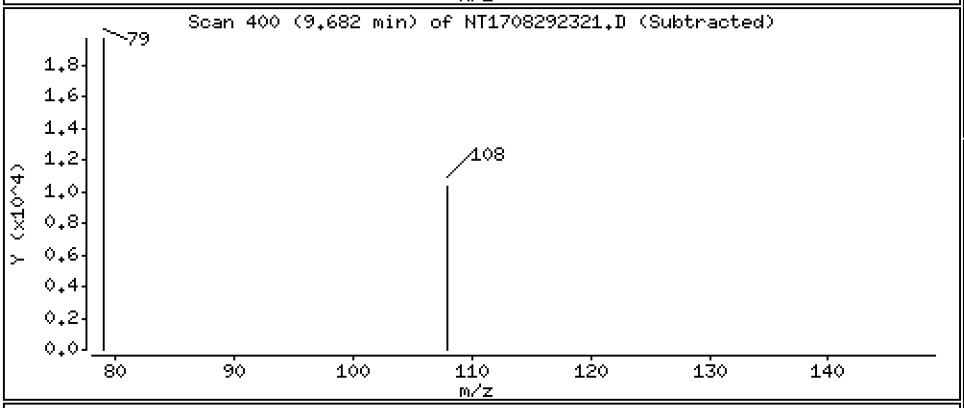
Column diameter: 0.25

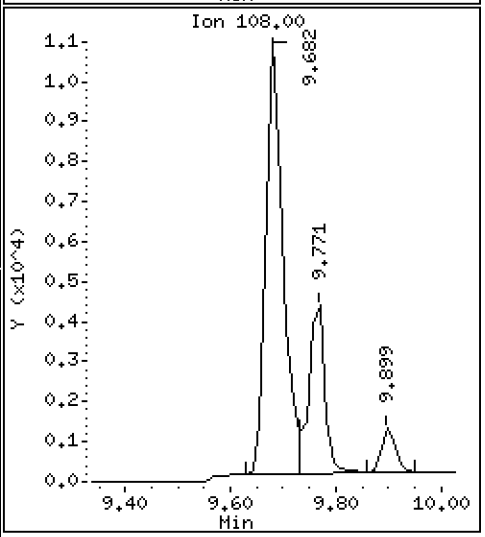
11 Benzyl alcohol

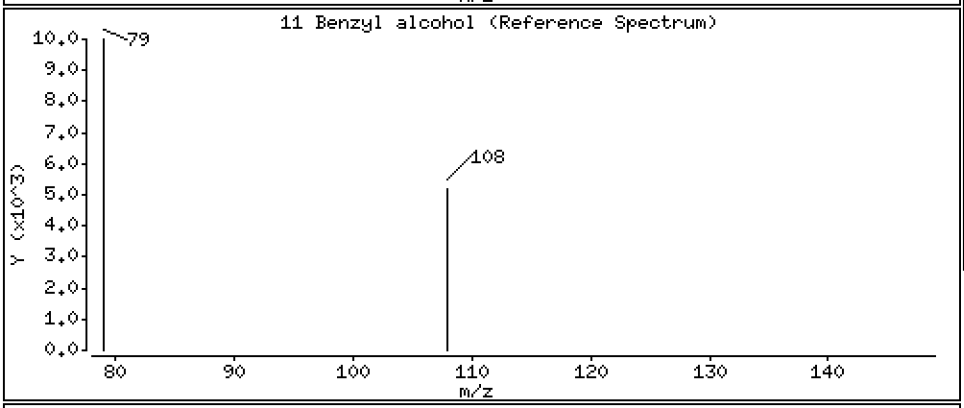
Concentration: 0.3763 ug/mL

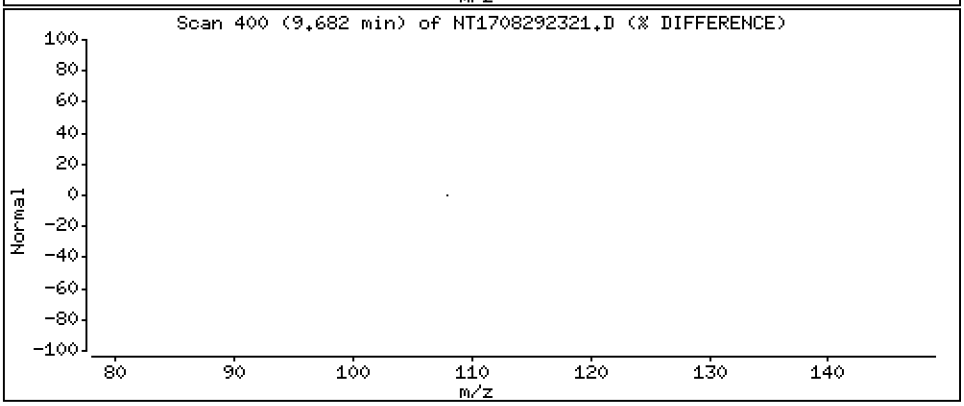












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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

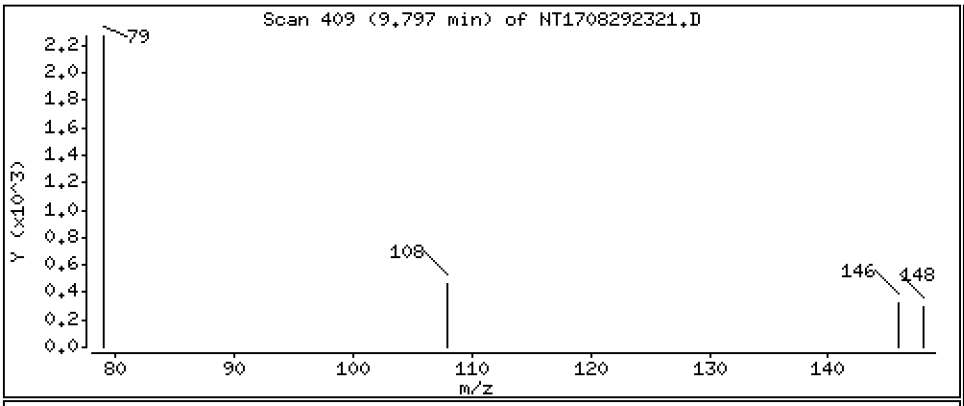
Operator: JGR

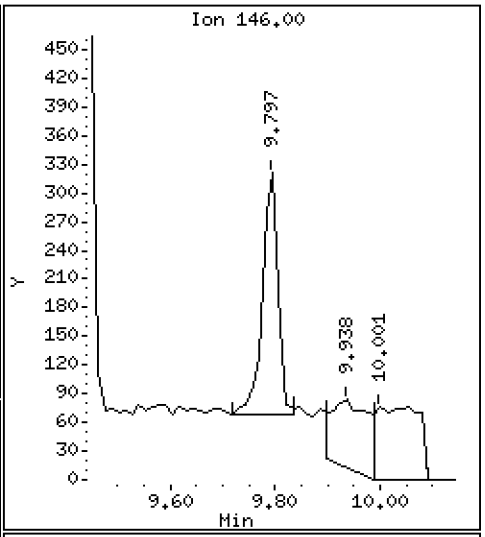
Column phase: ZB-5msi

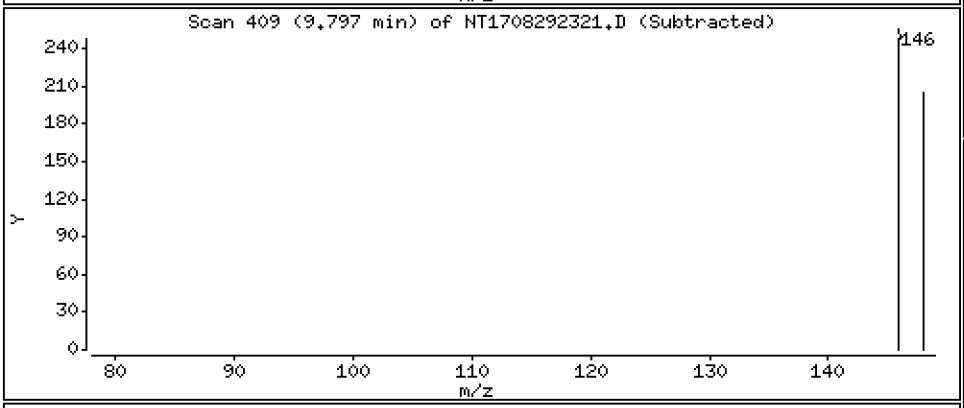
Column diameter: 0.25

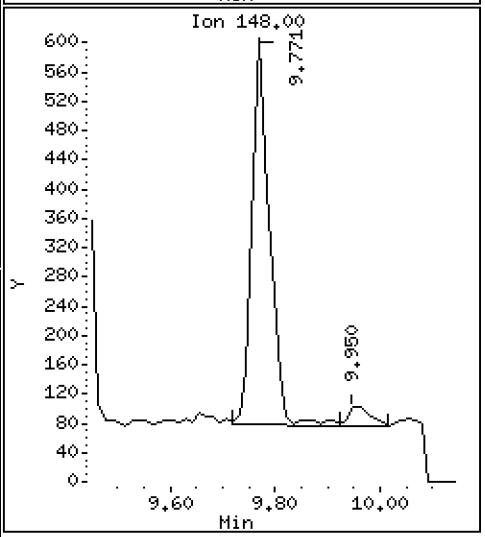
12 1,2-Dichlorobenzene

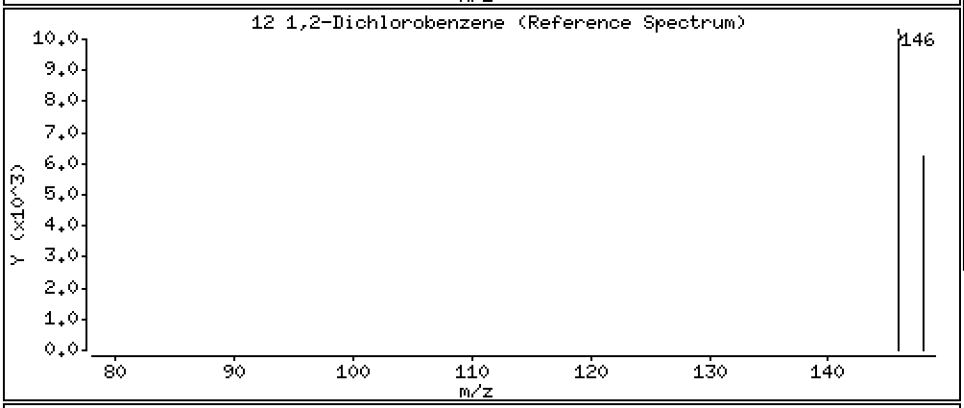
Concentration: 0.003735 ug/mL

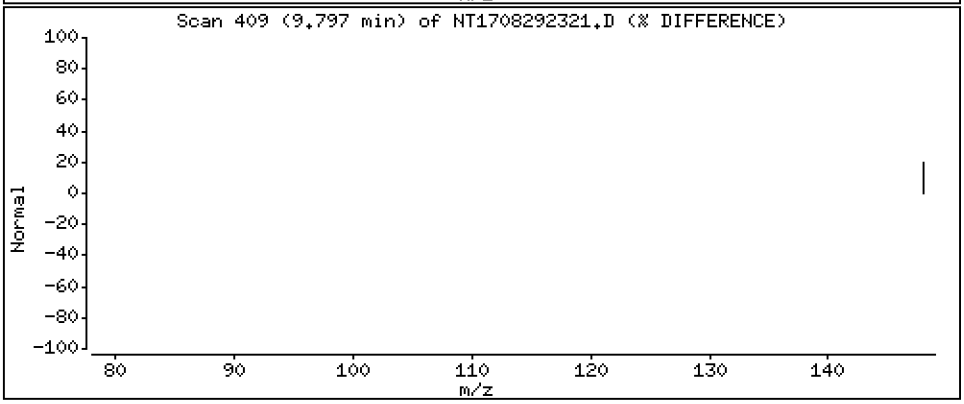












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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

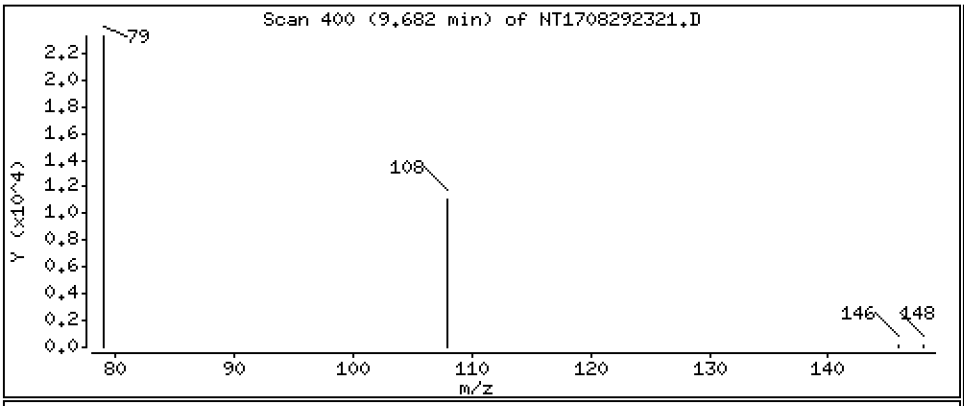
Operator: JGR

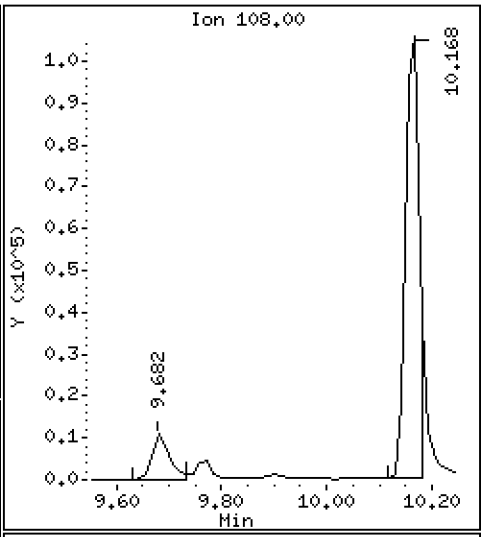
Column phase: ZB-5msi

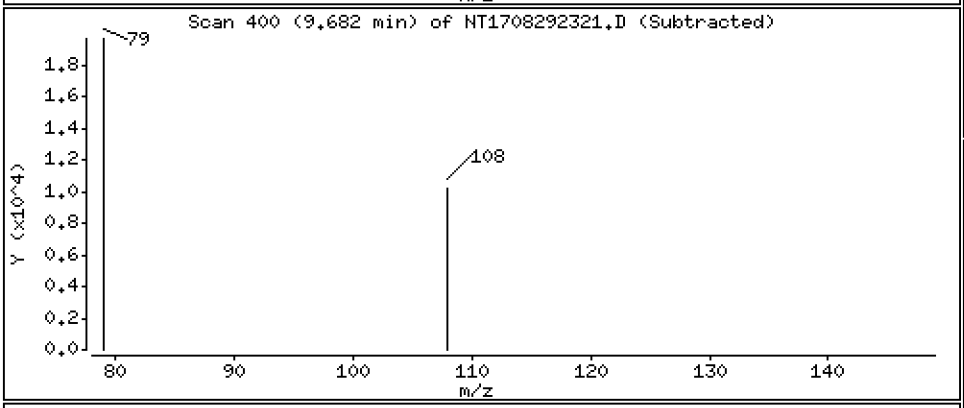
Column diameter: 0.25

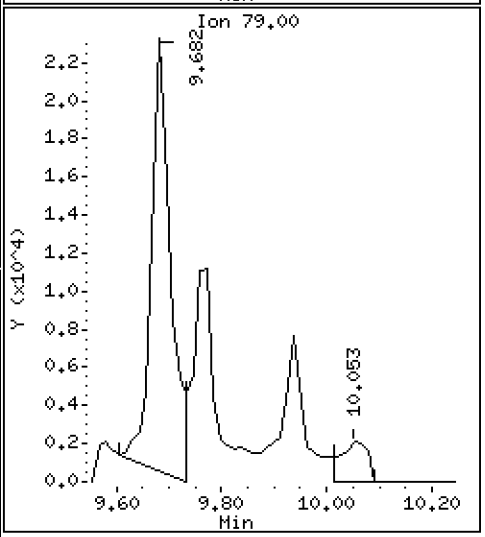
13 2-Methylphenol

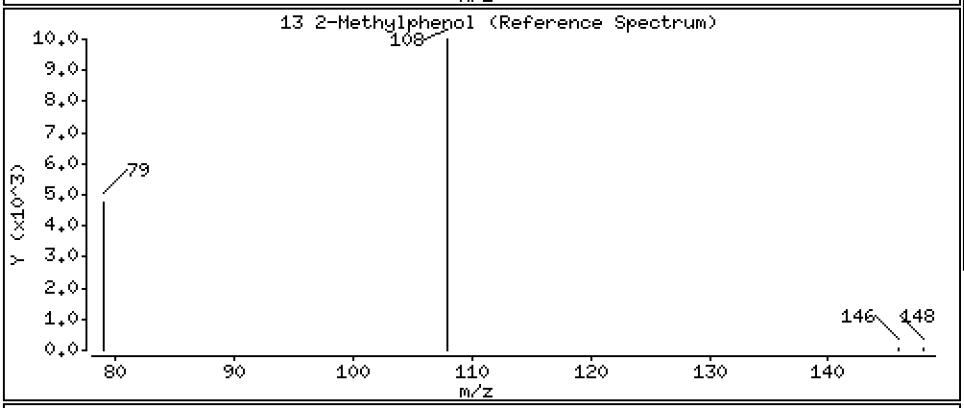
Concentration: 0.1878 ug/mL

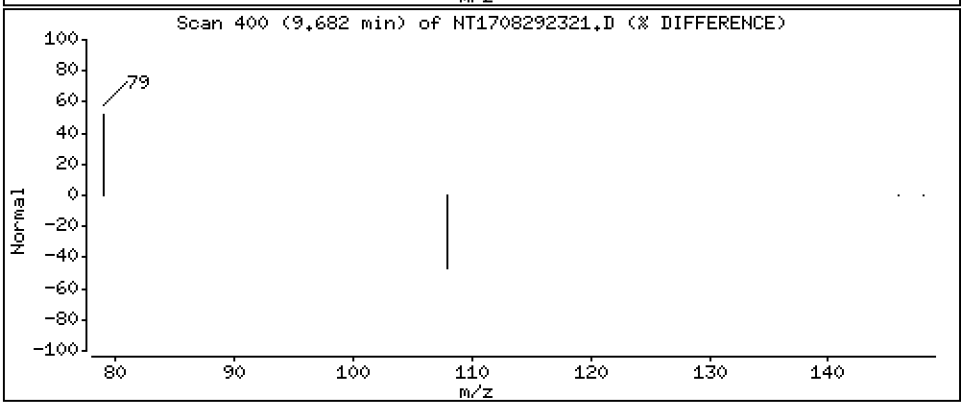












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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

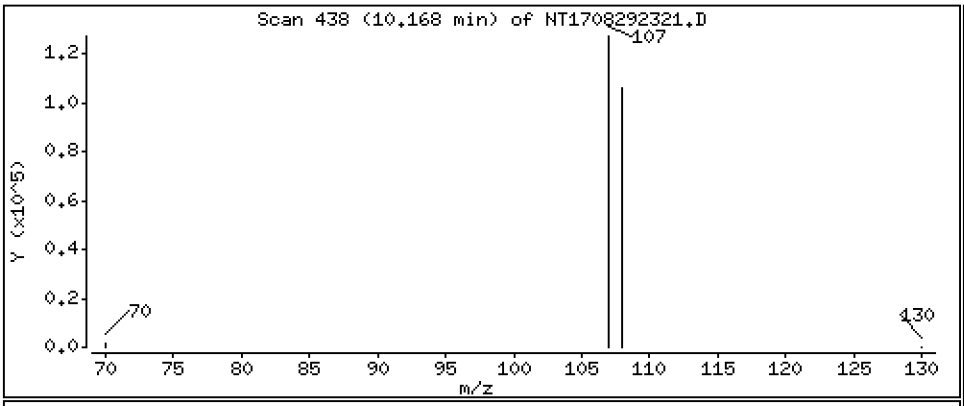
Operator: JGR

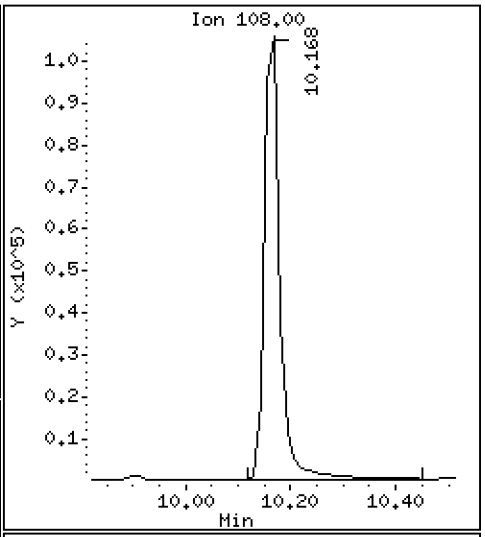
Column phase: ZB-5msi

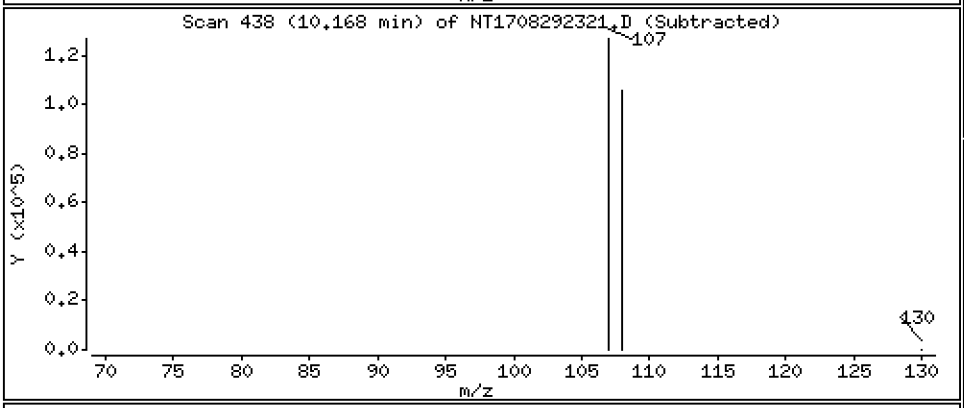
Column diameter: 0.25

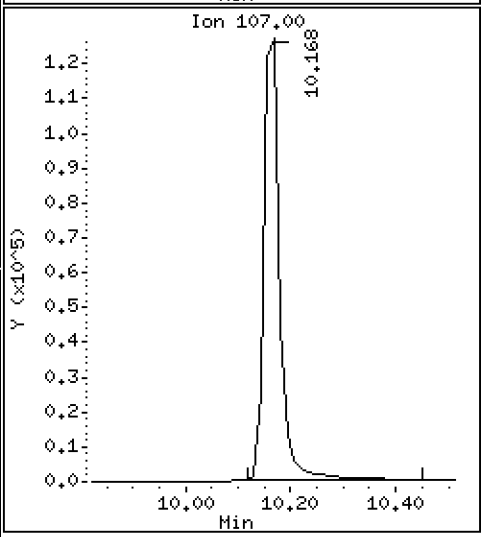
15 4-Methylphenol

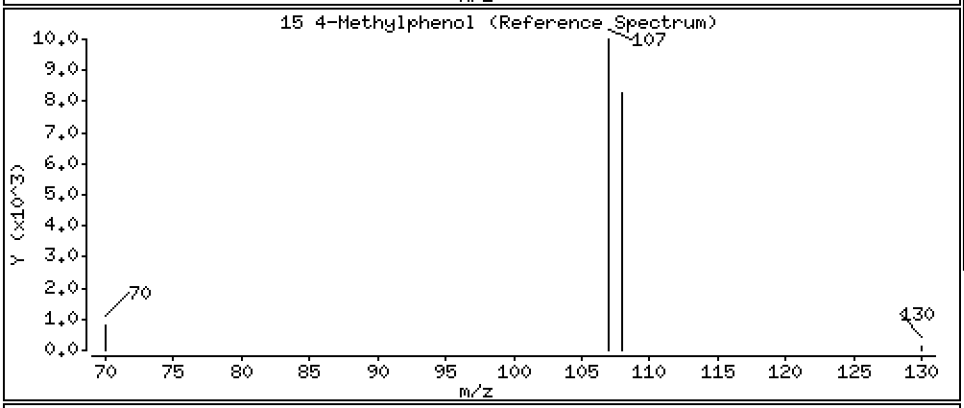
Concentration: 1.574 ug/mL

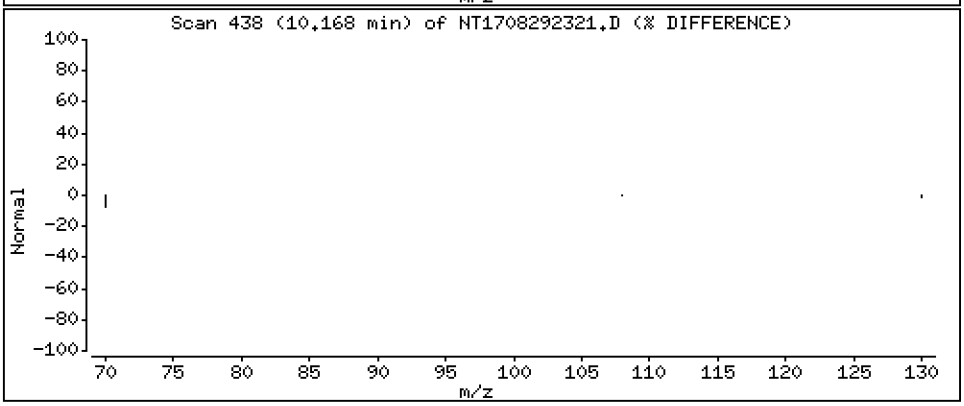












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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

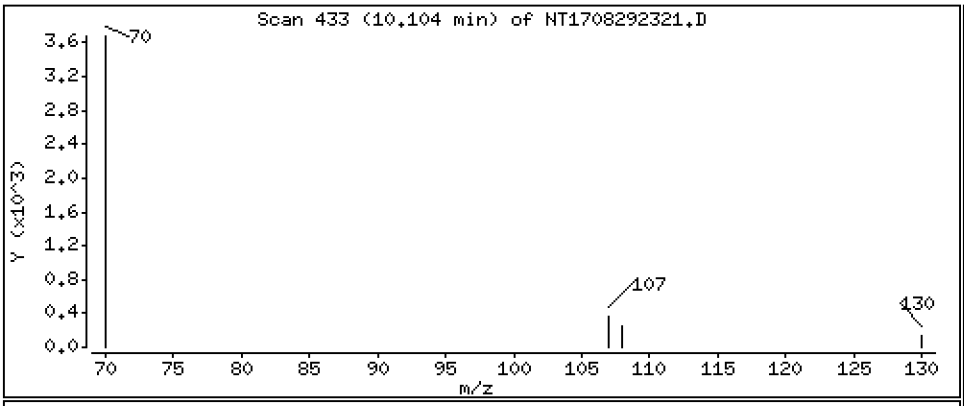
Operator: JGR

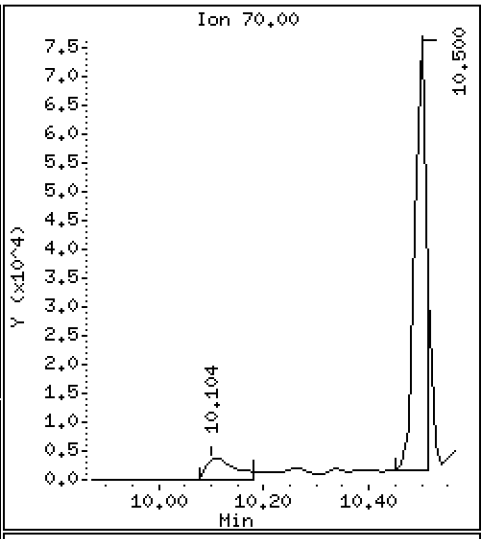
Column phase: ZB-5msi

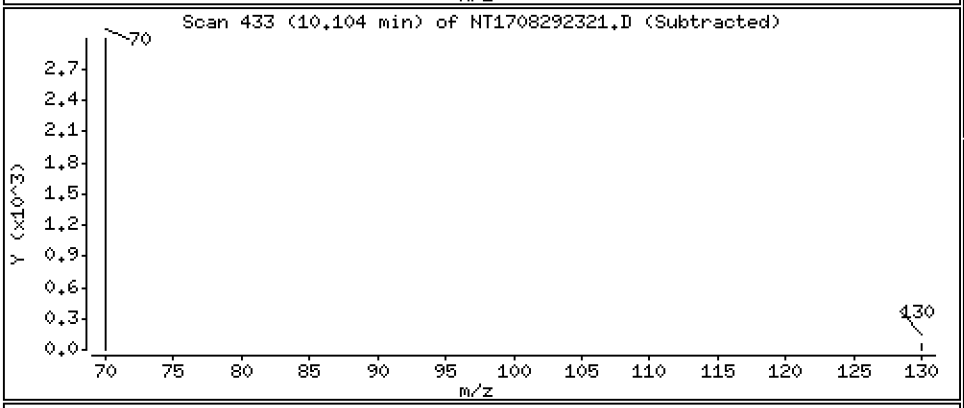
Column diameter: 0.25

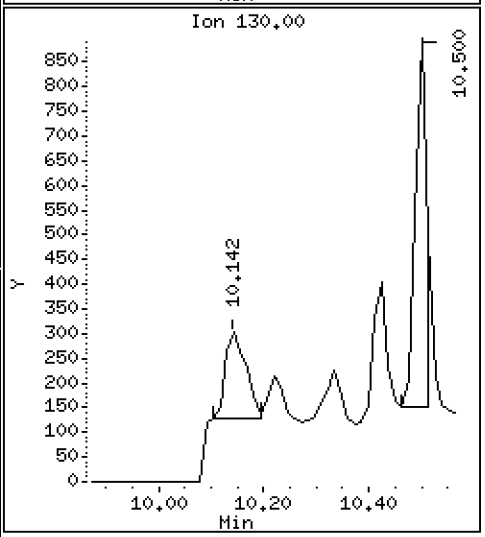
16 N-Nitroso-di-n-propylamine

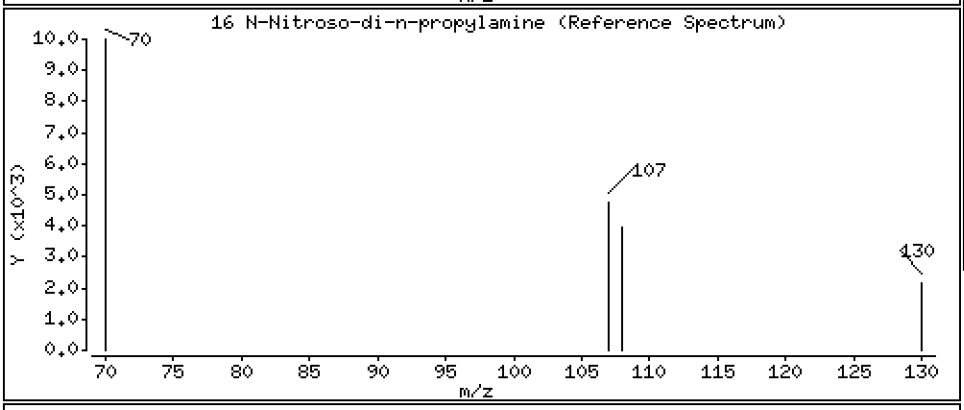
Concentration: 0.1031 ug/mL

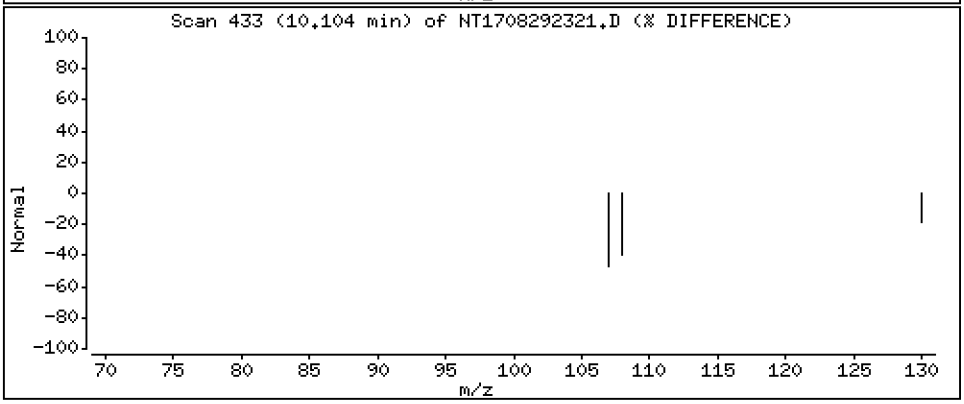












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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

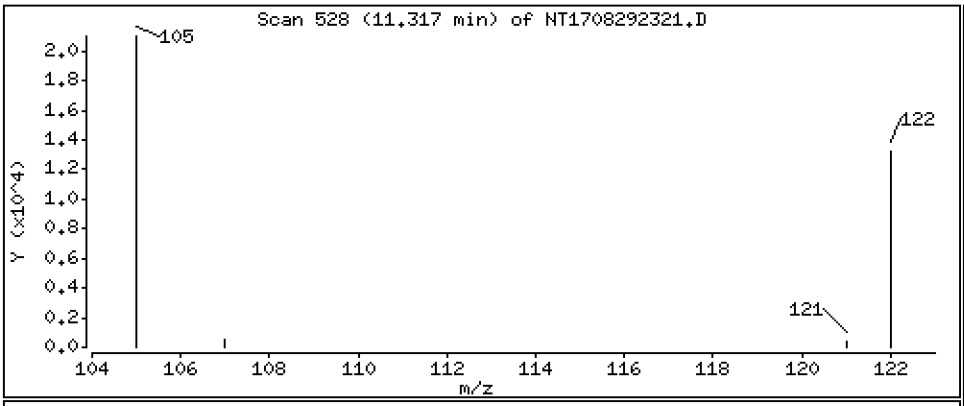
Operator: JGR

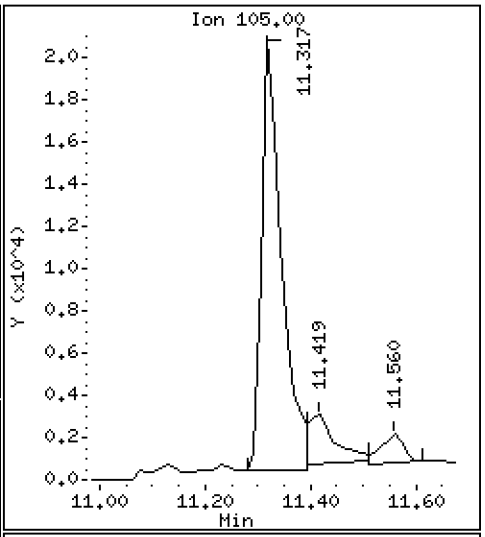
Column phase: ZB-5msi

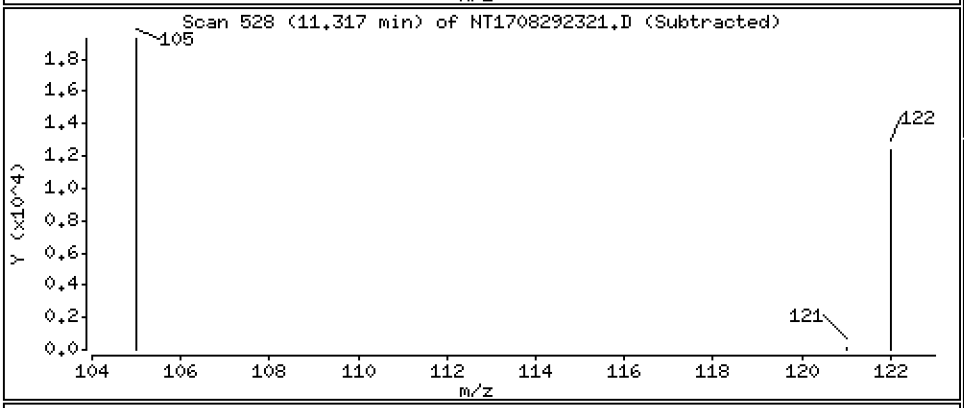
Column diameter: 0.25

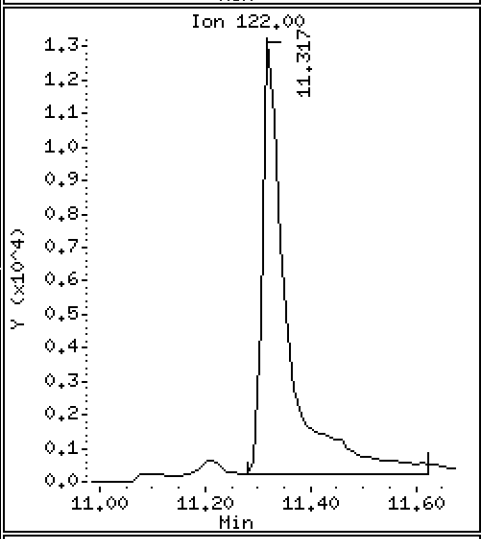
24 Benzoic acid

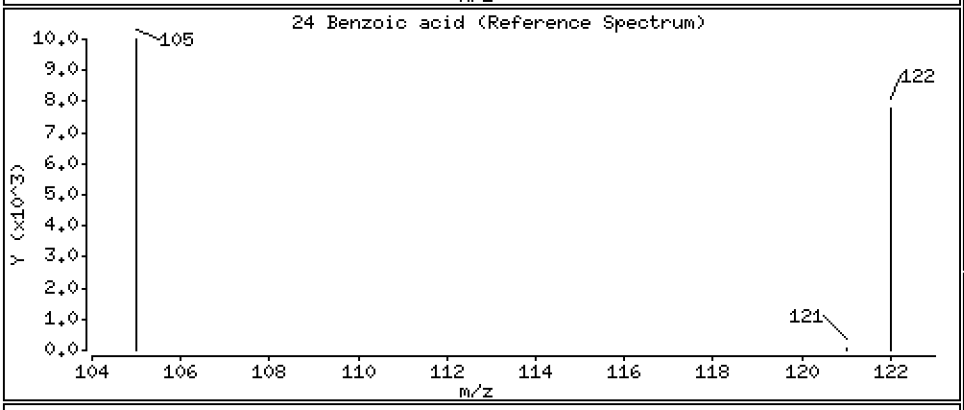
Concentration: 0.6719 ug/mL

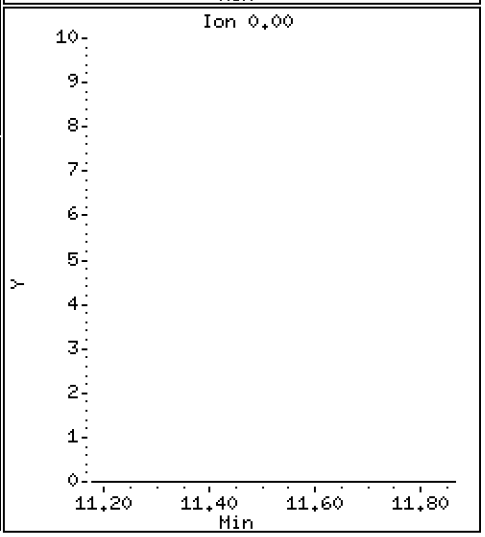


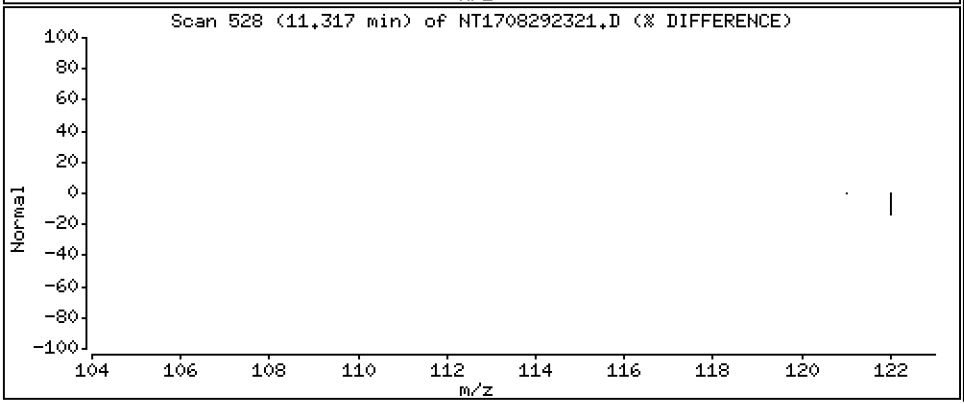












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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

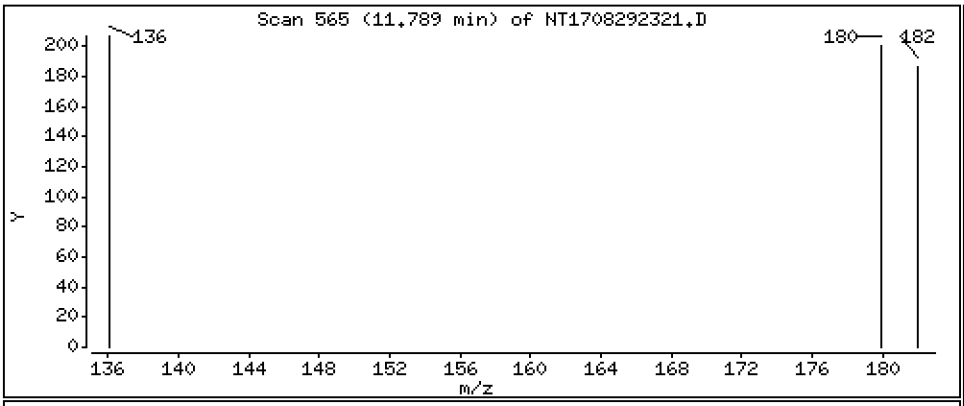
Operator: JGR

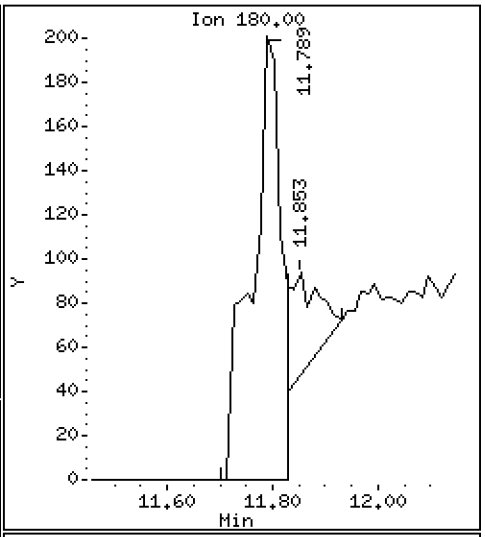
Column phase: ZB-5msi

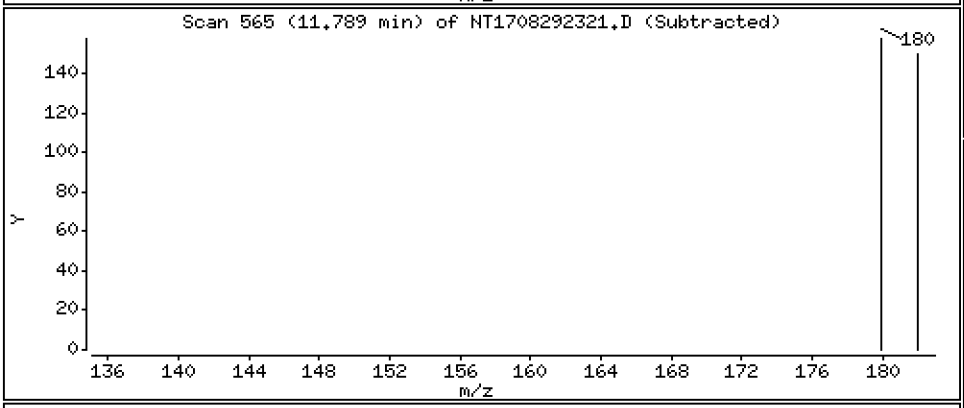
Column diameter: 0.25

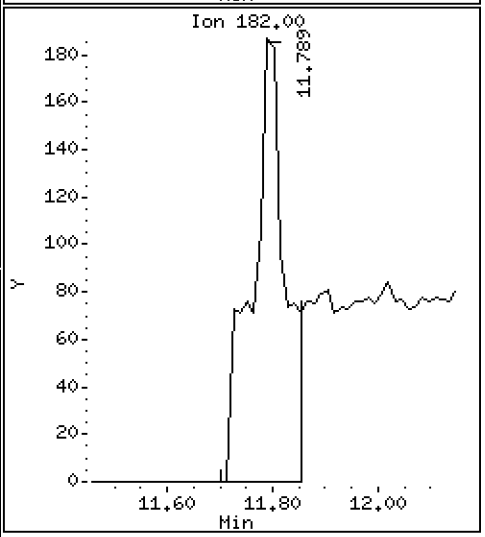
26 1,2,4-Trichlorobenzene

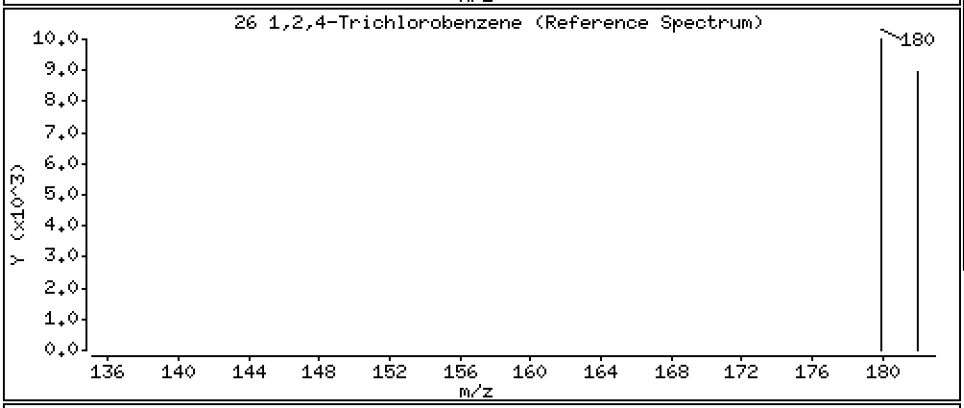
Concentration: 0.009267 ug/mL

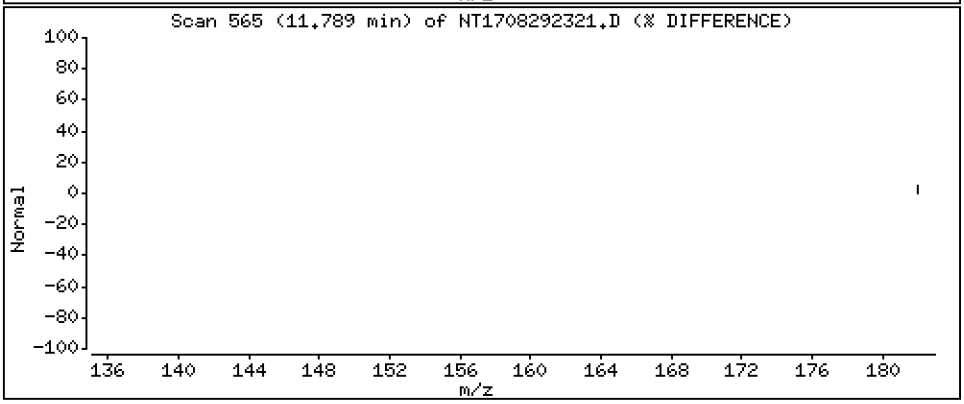












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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

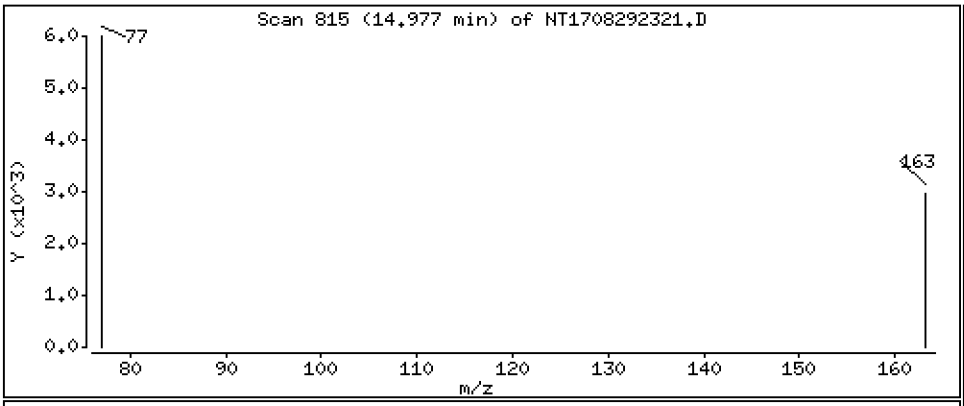
Operator: JGR

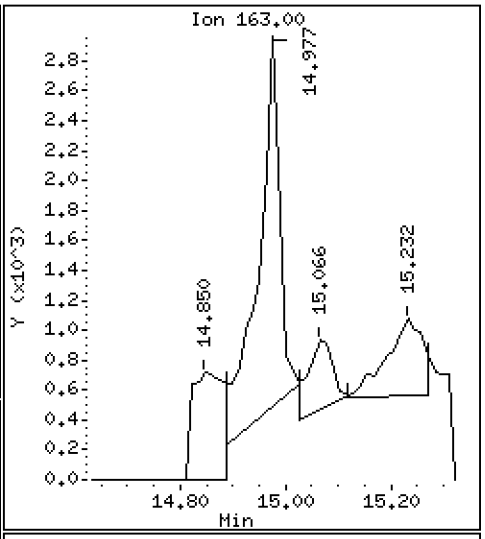
Column phase: ZB-5msi

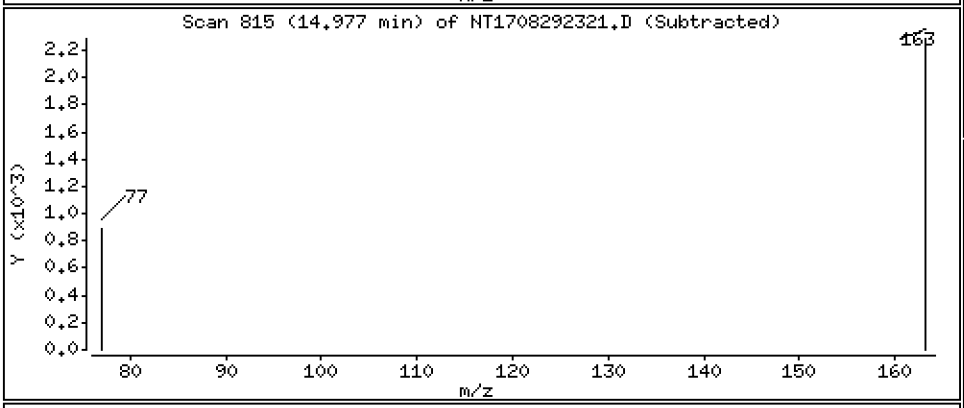
Column diameter: 0.25

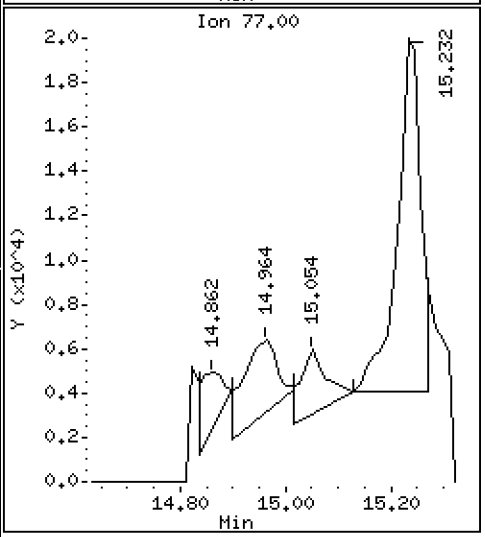
39 Dimethylphthalate

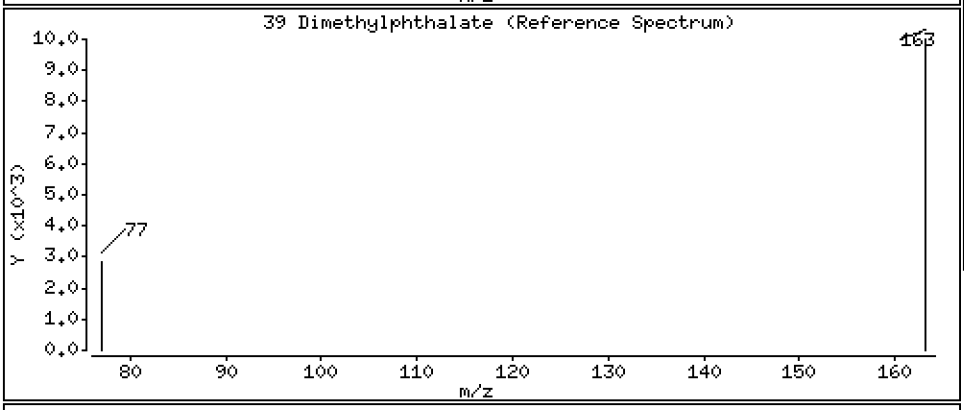
Concentration: 0.05095 ug/mL

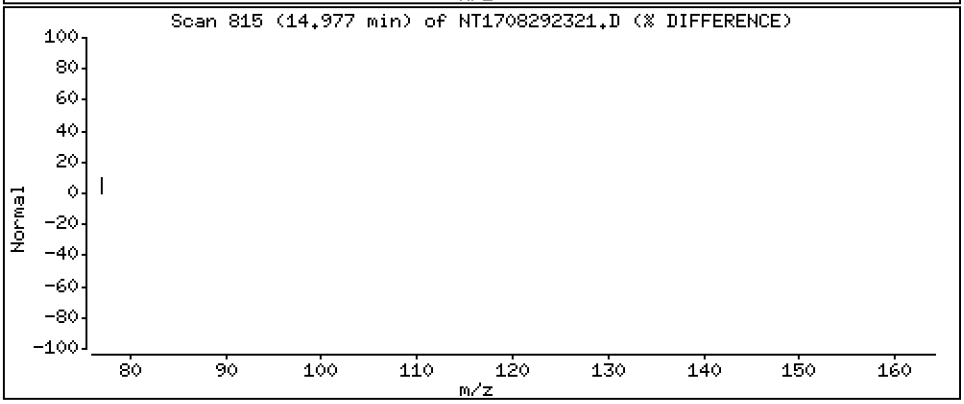












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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

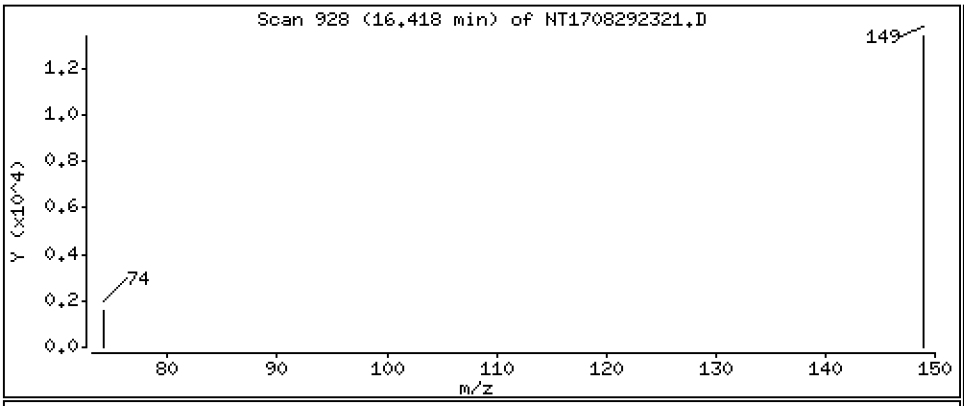
Operator: JGR

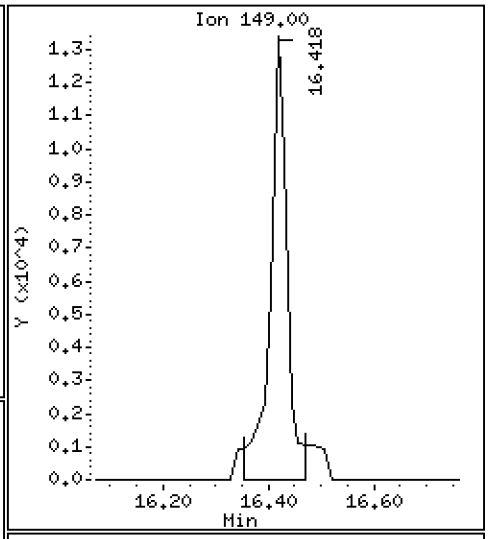
Column phase: ZB-5msi

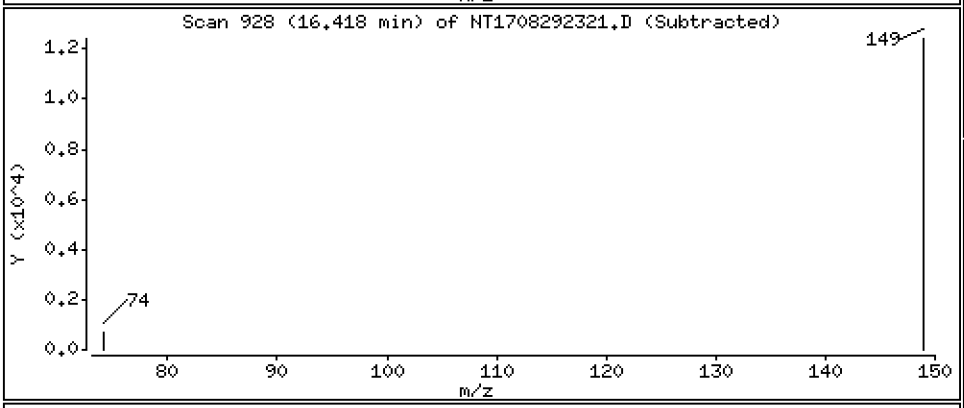
Column diameter: 0.25

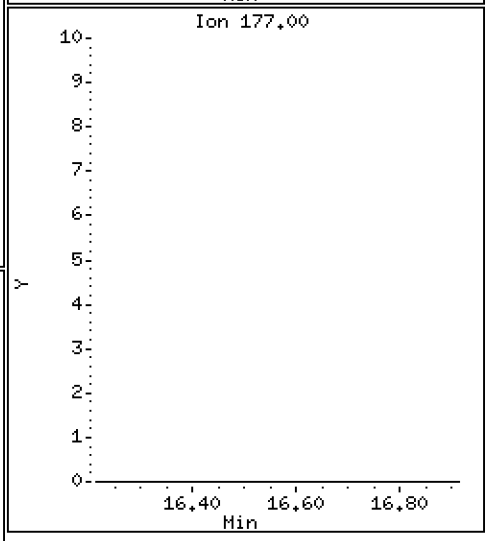
50 Diethylphthalate

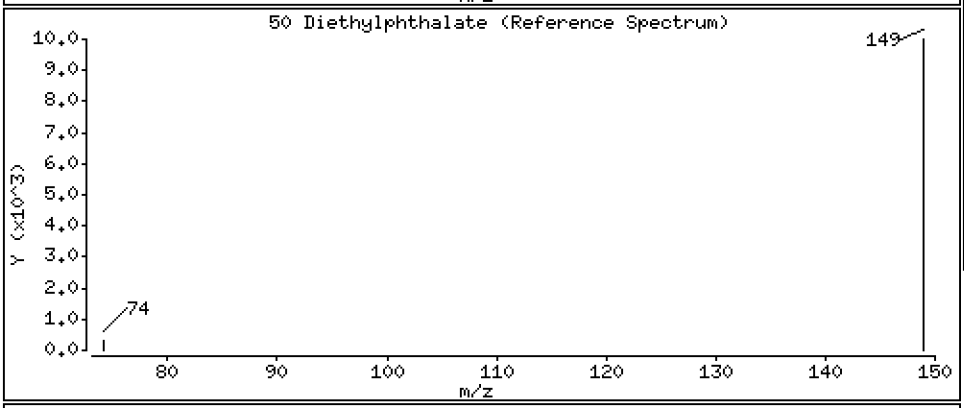
Concentration: 0.2068 ug/mL

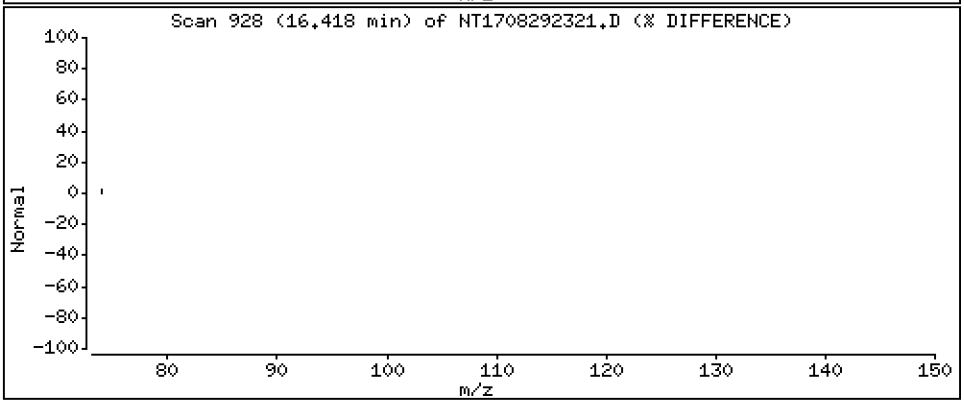












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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

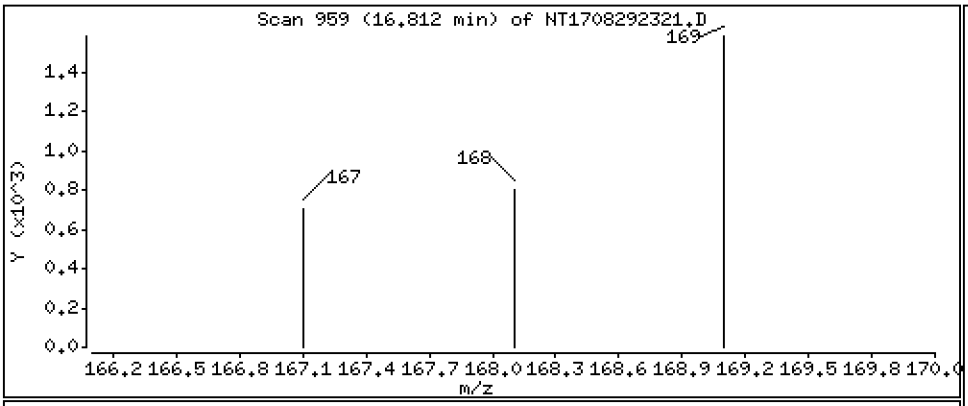
Operator: JGR

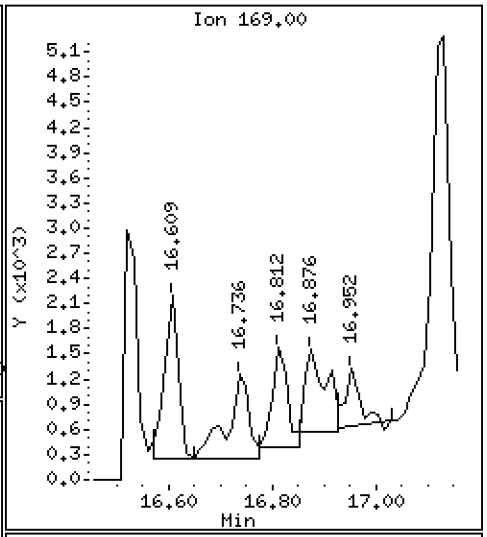
Column phase: ZB-5msi

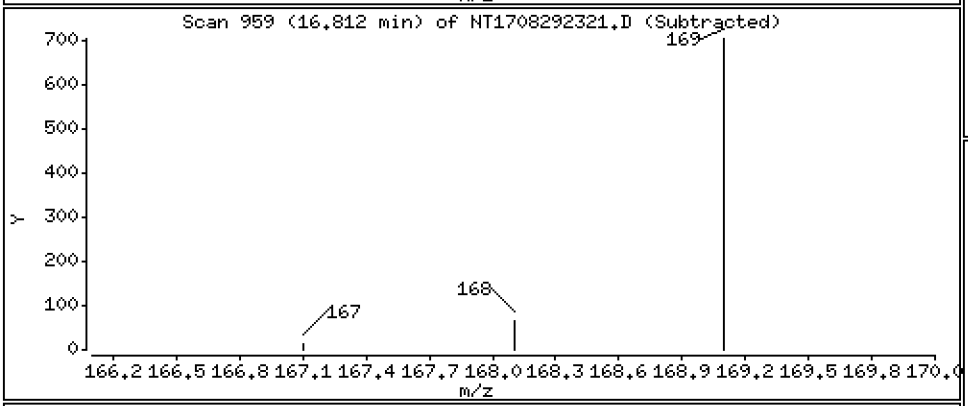
Column diameter: 0.25

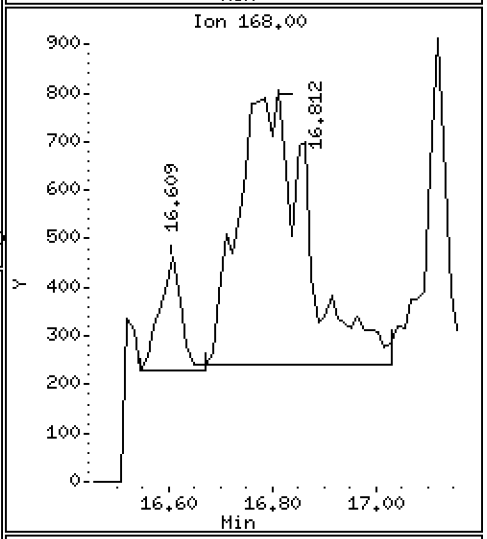
54 N-Nitrosodiphenylamine

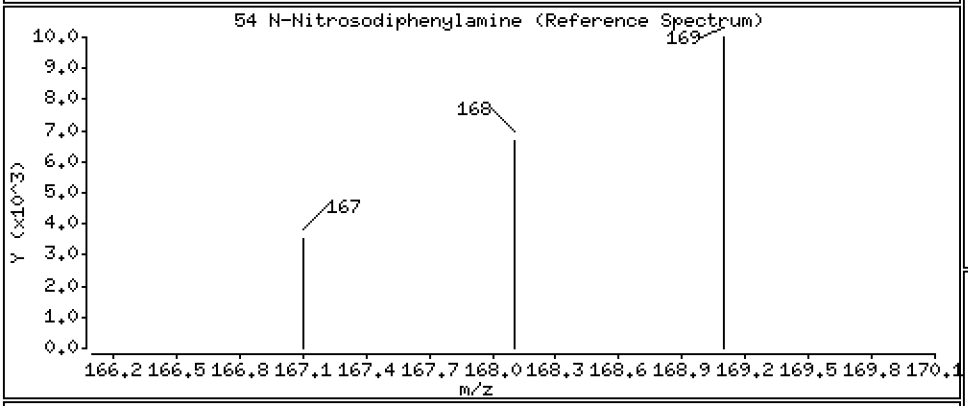
Concentration: 0.03034 ug/mL

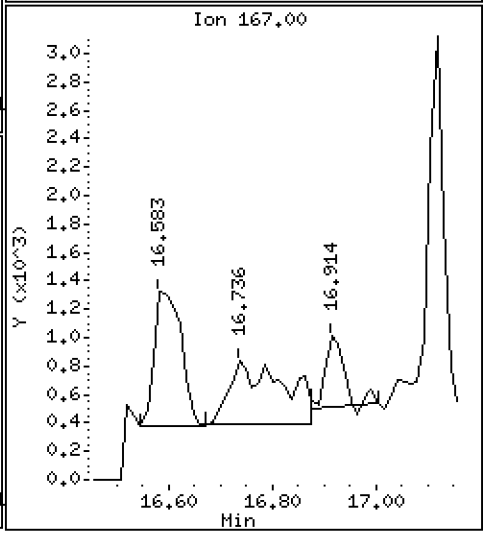


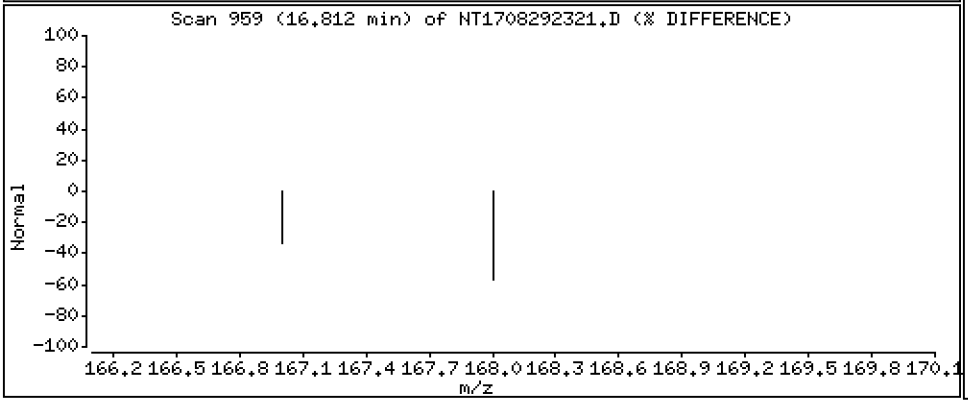












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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

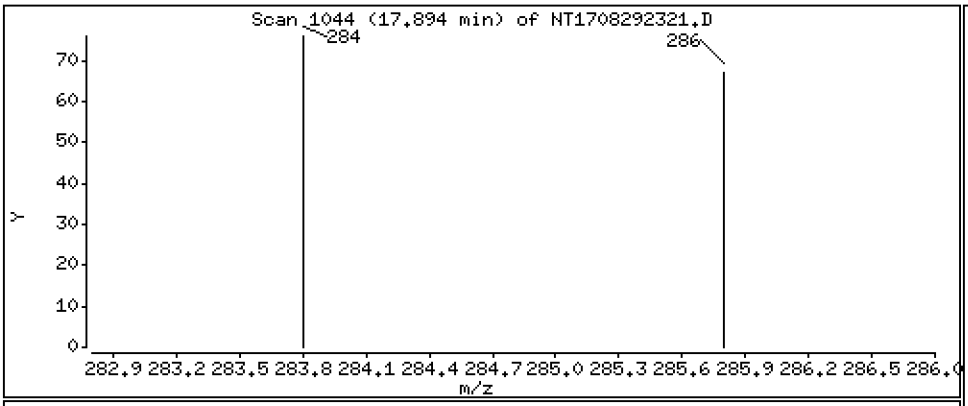
Operator: JGR

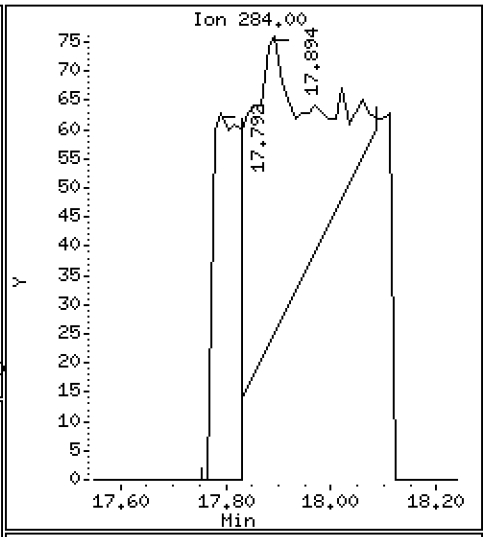
Column phase: ZB-5msi

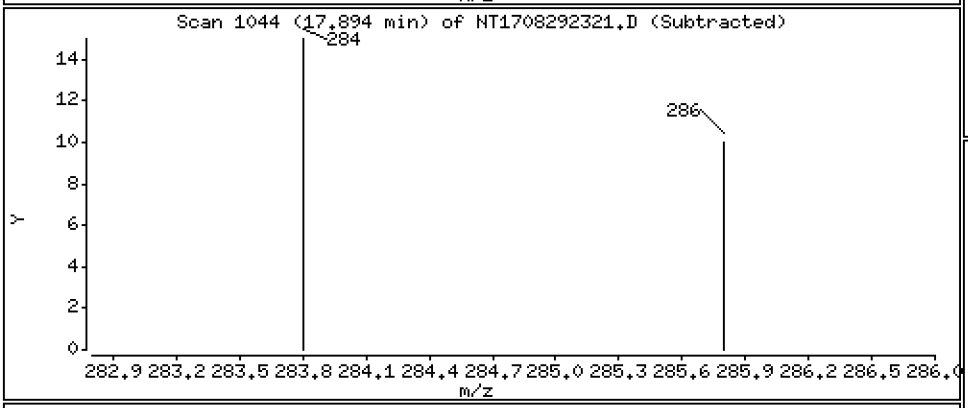
Column diameter: 0.25

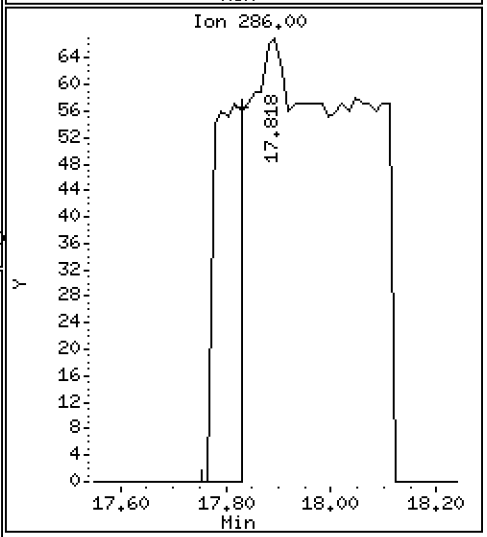
57 Hexachlorobenzene

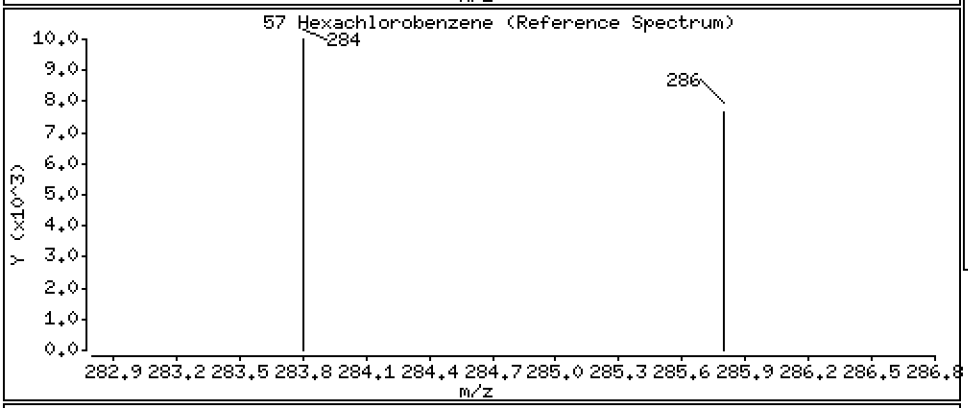
Concentration: 0.01681 ug/mL

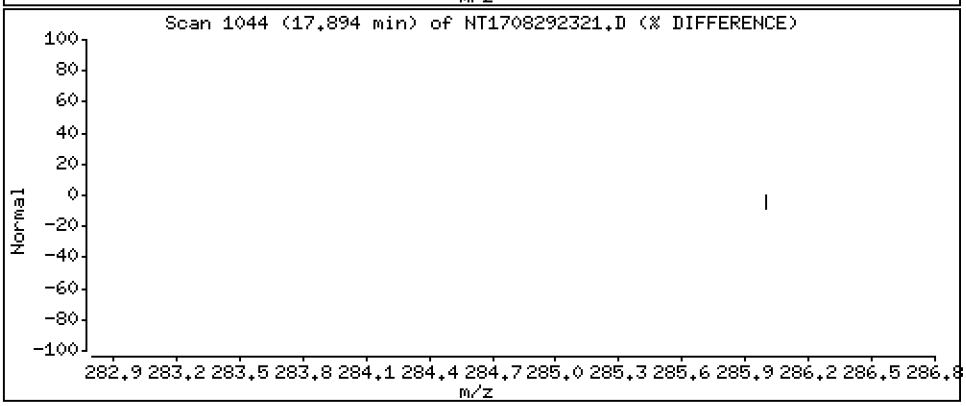












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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

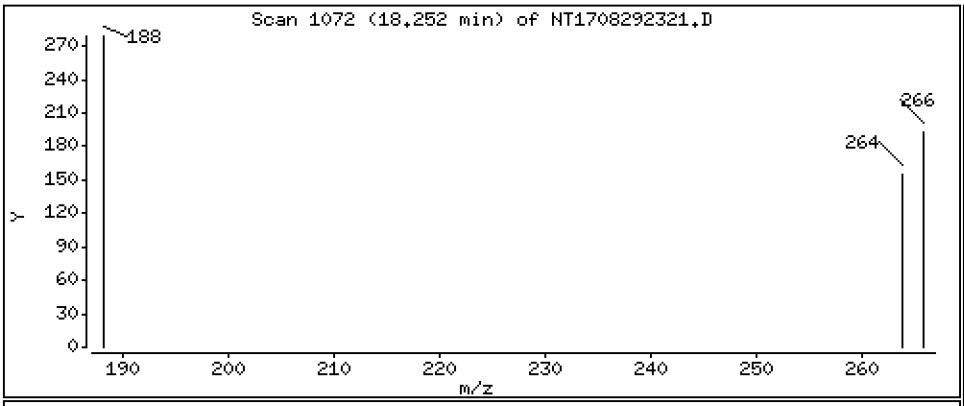
Operator: JGR

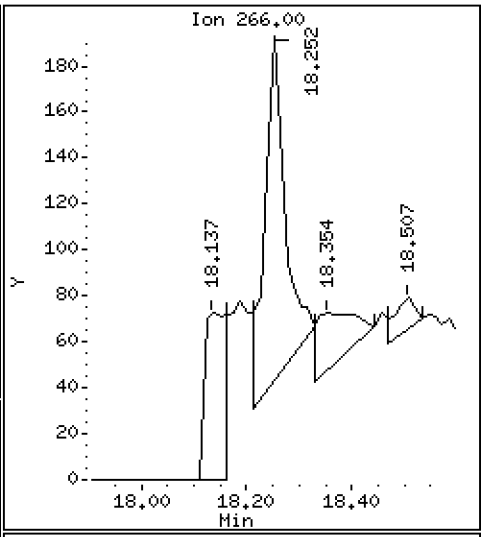
Column phase: ZB-5msi

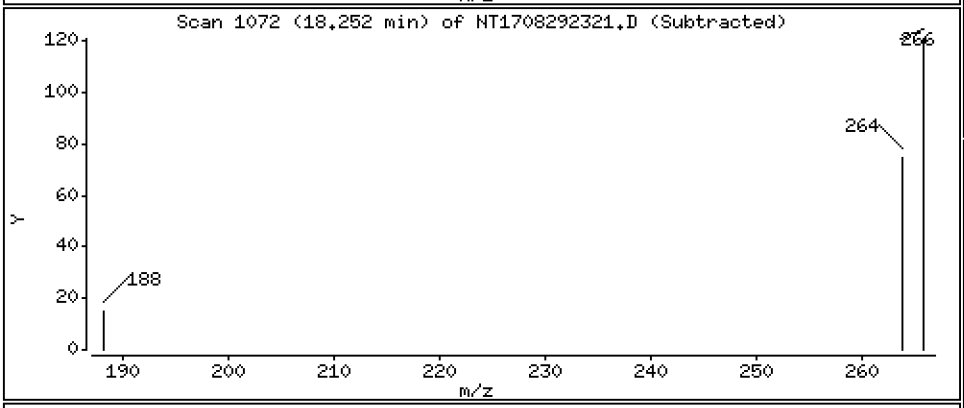
Column diameter: 0.25

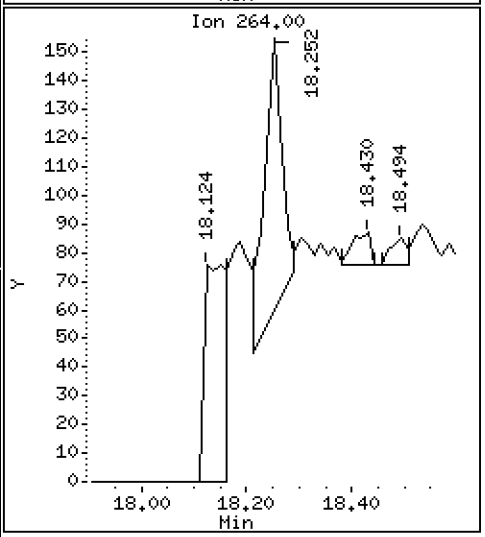
58 Pentachlorophenol

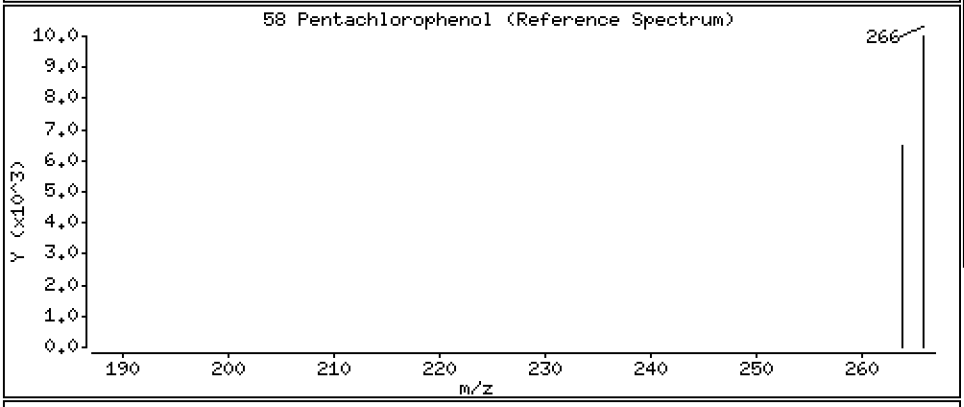
Concentration: 0.02303 ug/mL

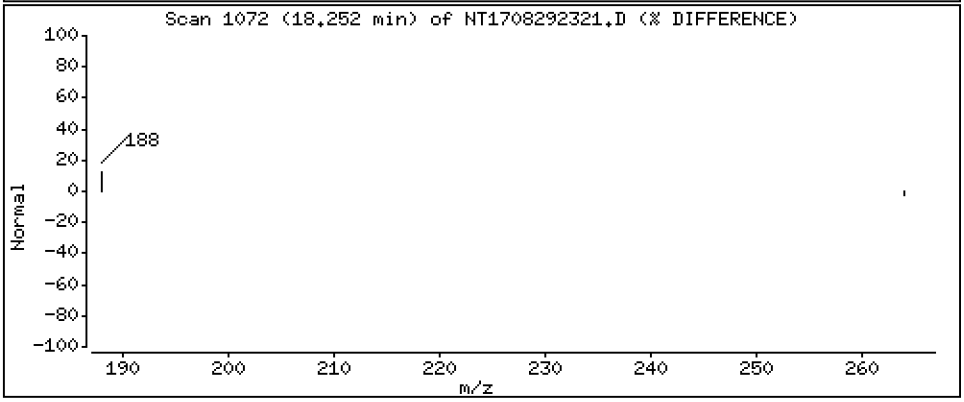












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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

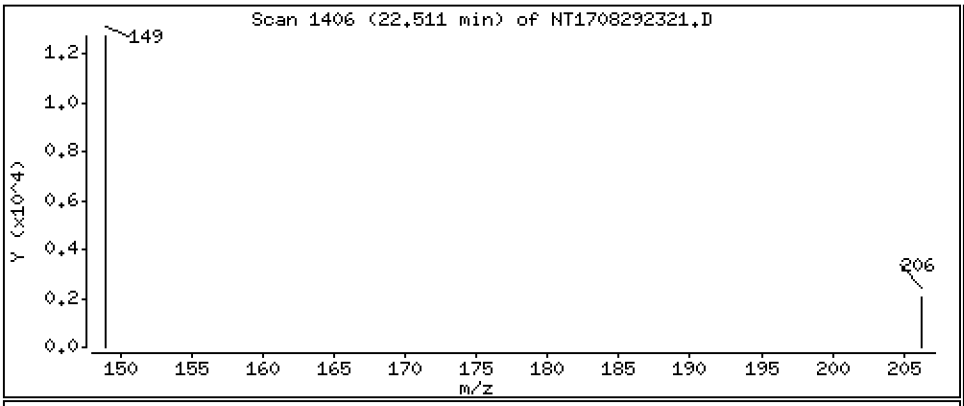
Operator: JGR

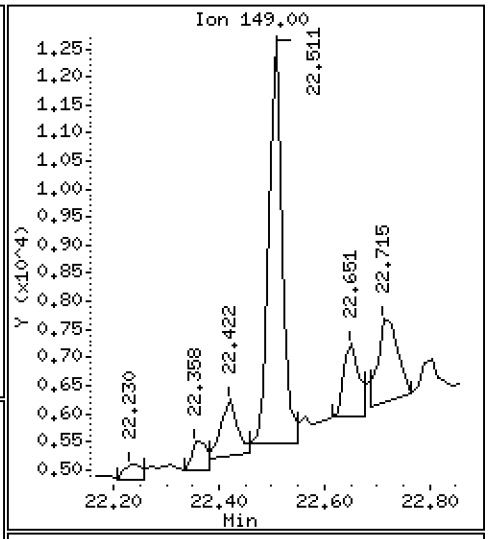
Column phase: ZB-5msi

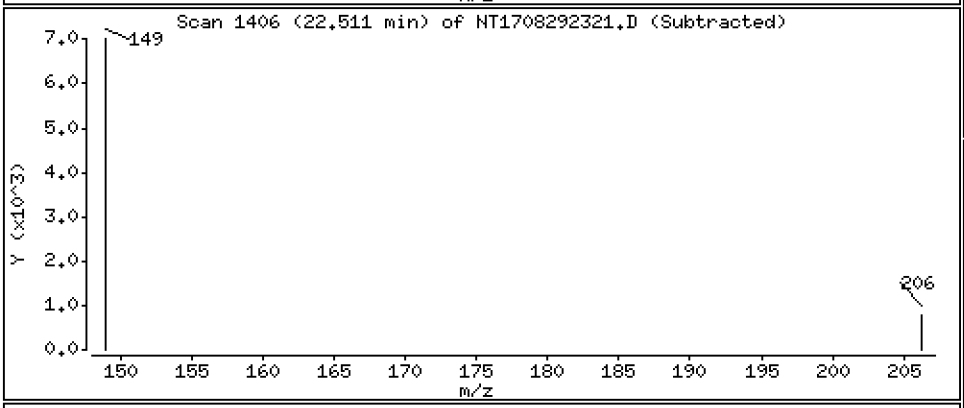
Column diameter: 0.25

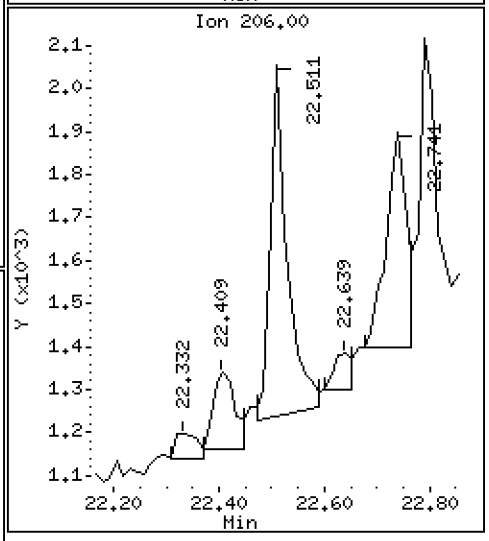
67 Butylbenzylphthalate

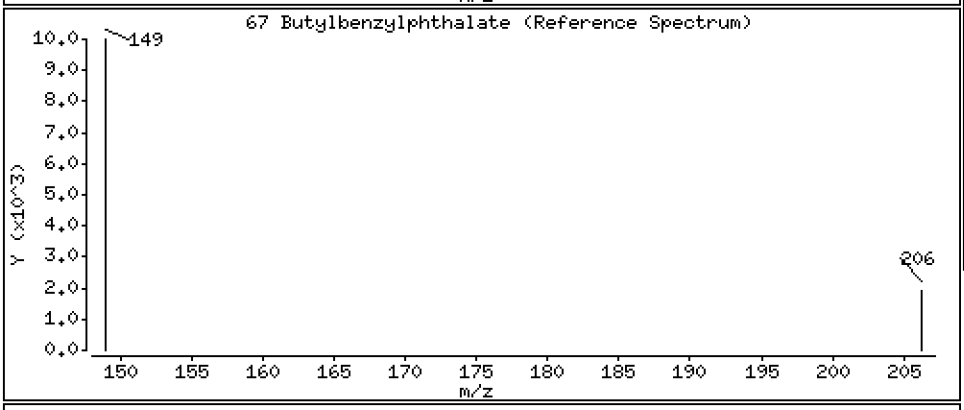
Concentration: 0.1165 ug/mL

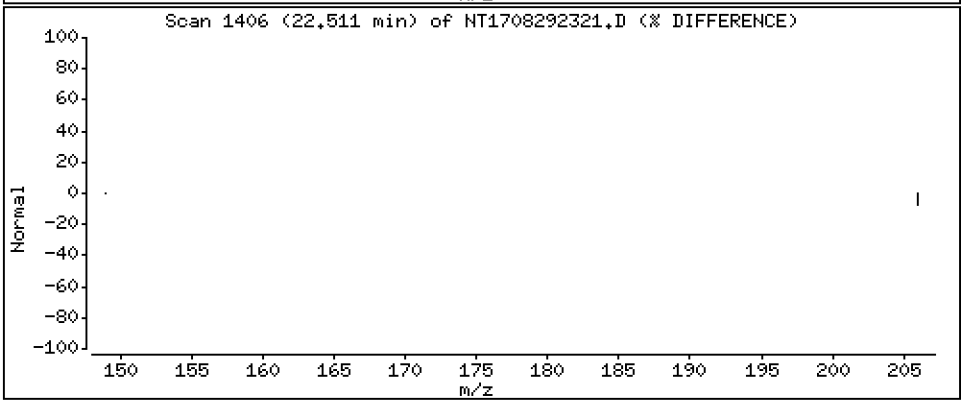












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Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

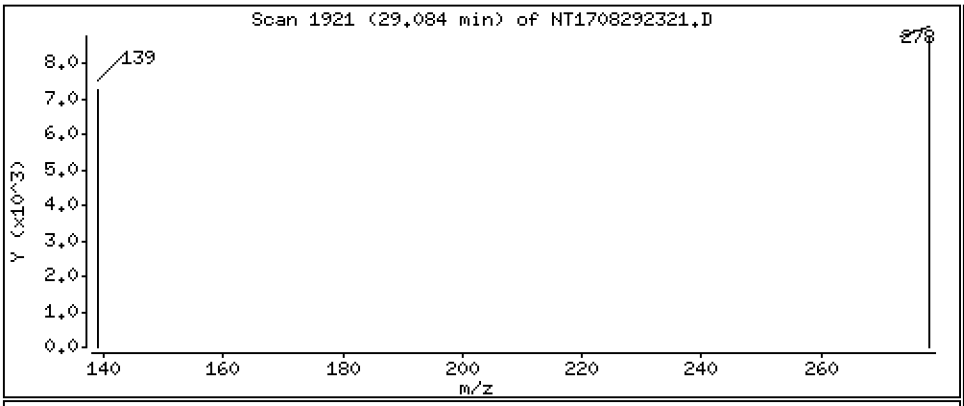
Operator: JGR

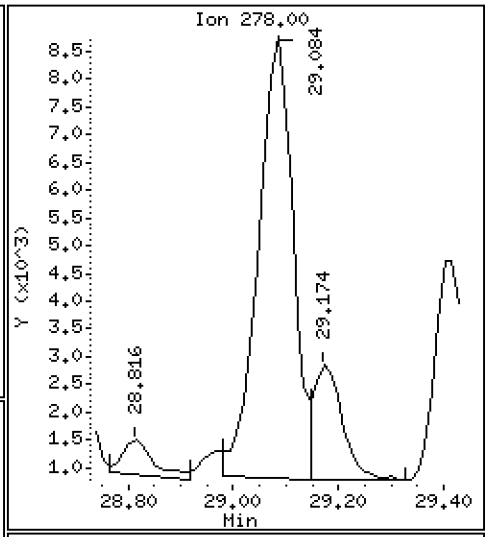
Column phase: ZB-5msi

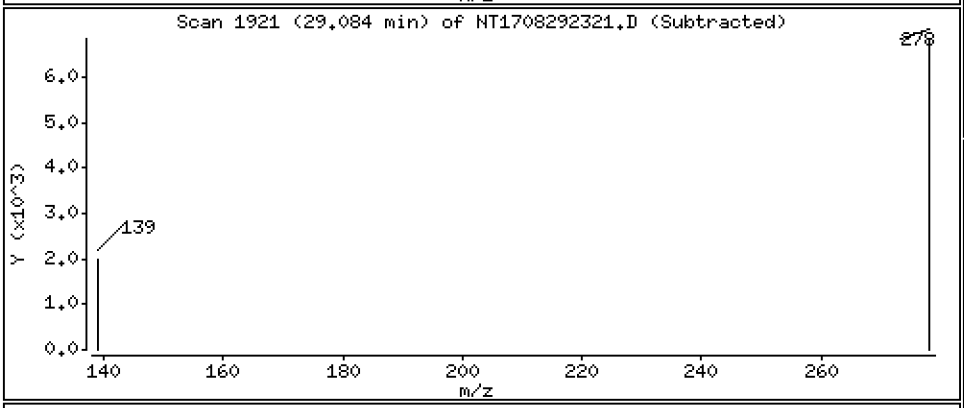
Column diameter: 0.25

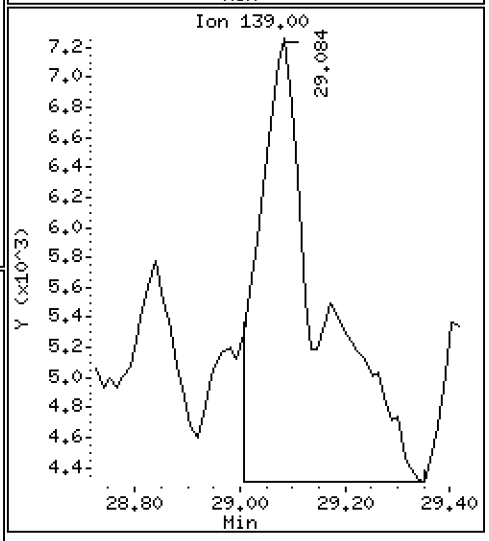
79 Dibenzo(a,h)anthracene

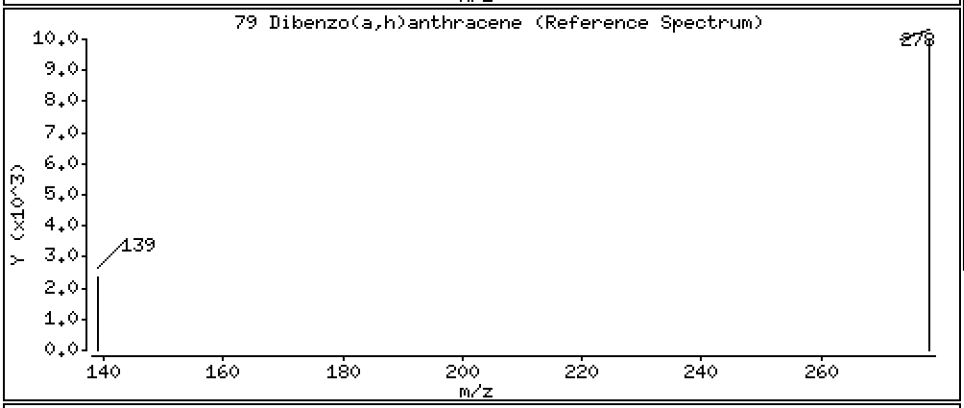
Concentration: 0.1767 ug/mL

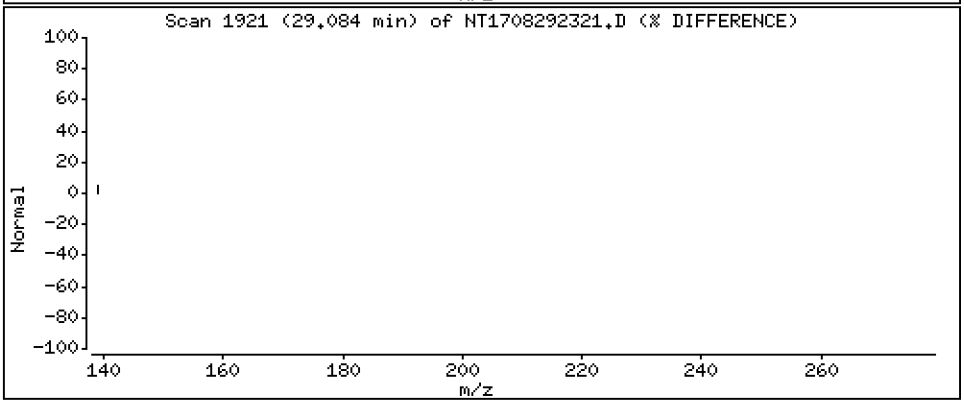












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292321.D

Date : 30-AUG-2023 00:01

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-08

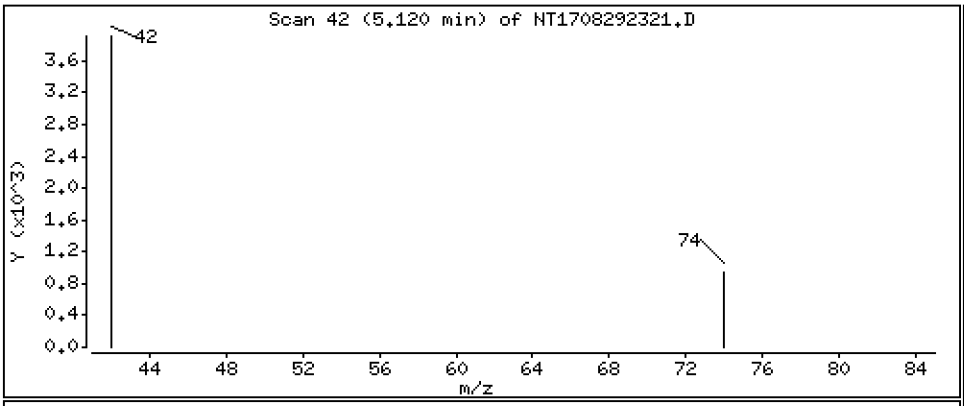
Operator: JGR

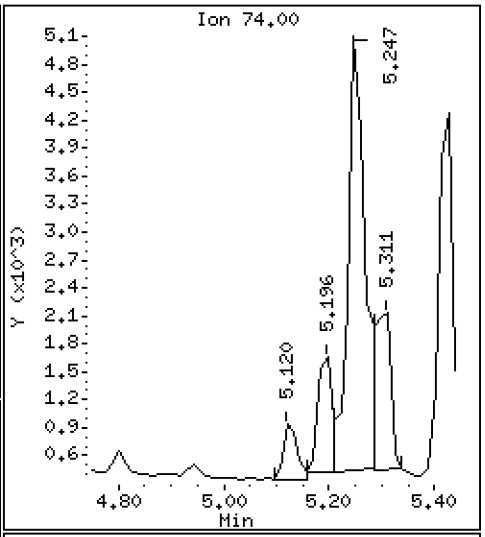
Column phase: ZB-5msi

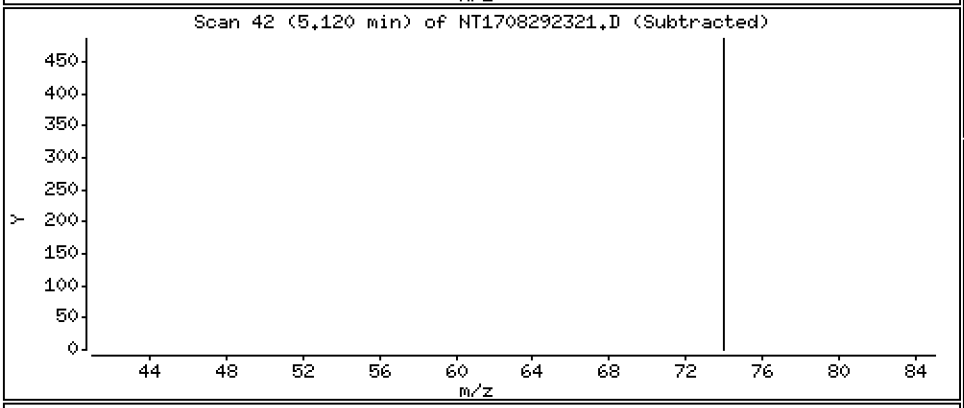
Column diameter: 0.25

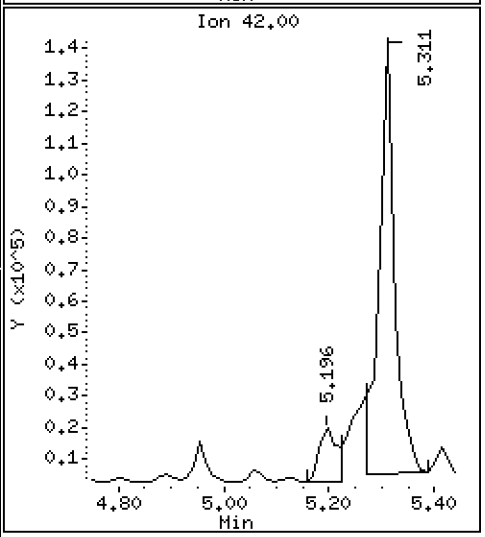
90 N-Nitrosodimethylamine

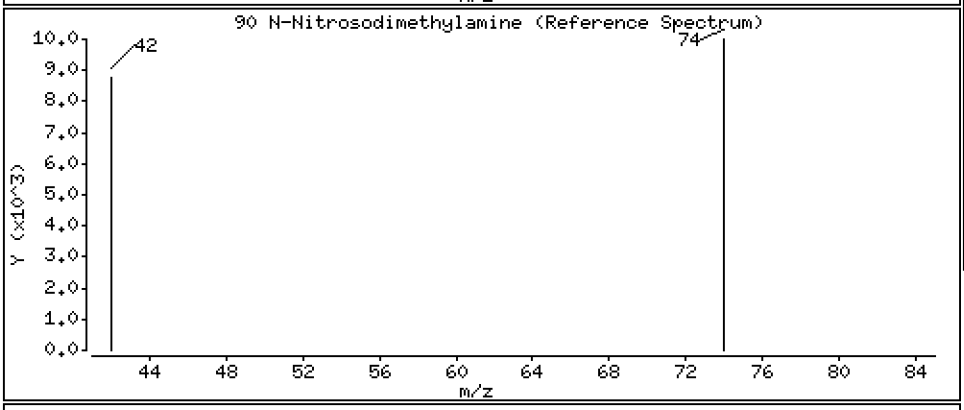
Concentration: 0.007567 ug/mL

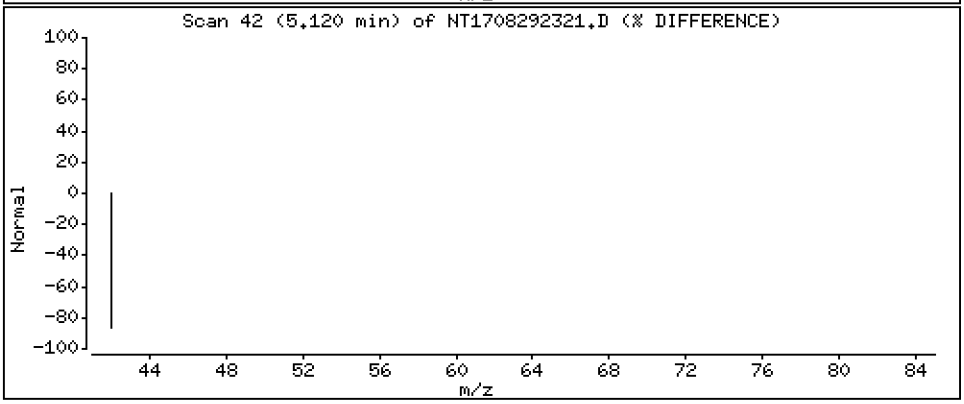












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292321.D
Lab Smp Id: 23H0579-08
Inj Date : 30-AUG-2023 00:01
Operator : JGR Inst ID: nt17.i
Smp Info : 23H0579-08
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 10:26 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.209	7.196	(0.766)	757018	5.23261	5.233(R)
	3 Phenol	94	8.789	8.788	(0.934)	35210	0.15965	0.1597
	7 1,3-Dichlorobenzene	146	9.349	9.349	(0.993)	595	0.00399	0.003989
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	348423	4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	1883	0.01304	0.01304
	11 Benzyl alcohol	79	9.681	9.681	(1.028)	57441	0.37631	0.3763
	12 1,2-Dichlorobenzene	146	9.796	9.796	(1.041)	523	0.00373	0.003735
	13 2-Methylphenol	108	9.681	9.899	(1.028)	25120	0.18785	0.1878
	15 4-Methylphenol	108	10.167	10.167	(1.080)	219990	1.57399	1.574
	16 N-Nitroso-di-n-propylamine	70	10.103	10.218	(1.073)	14740	0.10313	0.1031
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	24 Benzoic acid	105	11.317	11.329	(0.953)	54689	0.67190	0.6719
	26 1,2,4-Trichlorobenzene	180	11.789	11.801	(0.992)	787	0.00927	0.009267
*	27 Naphthalene-d8	136	11.878	11.891	(1.000)	1238784	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.977	14.976	(0.967)	7118	0.05095	0.05095
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	429846	4.00000	
	50 Diethylphthalate	149	16.417	16.417	(1.060)	30039	0.20679	0.2068
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	2429	0.03034	0.03034
	57 Hexachlorobenzene	284	17.894	17.894	(0.966)	441	0.01681	0.01681
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	410	0.02303	0.02303
*	59 Phenanthrene-d10	188	18.519	18.519	(1.000)	556898	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	227887	3.96742	3.967(R)
	67 Butylbenzylphthalate	149	22.511	22.510	(0.958)	12827	0.11646	0.1165
*	69 Chrysene-d12	240	23.506	23.505	(1.000)	415079	4.00000	
*	77 Perylene-d12	264	26.236	26.235	(1.000)	705516	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.084	29.084	(1.109)	36826	0.17672	0.1767
	90 N-Nitrosodimethylamine	74	5.120	5.094	(0.544)	1114	0.00757	0.007567

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292321.D
Lab Smp Id: 23H0579-08
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 29-AUG-2023
Calibration Time: 22:47
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	358343	179172	716686	348423	-2.77
27 Naphthalene-d8	1242877	621439	2485754	1238784	-0.33
42 Acenaphthene-d10	464388	232194	928776	429846	-7.44
59 Phenanthrene-d10	660913	330457	1321826	556898	-15.74
69 Chrysene-d12	477958	238979	955916	415079	-13.16
77 Perylene-d12	659026	329513	1318052	705516	7.05

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	0.00
27 Naphthalene-d8	11.89	11.39	12.39	11.88	-0.11
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	0.00
59 Phenanthrene-d10	18.52	18.02	19.02	18.52	0.00
69 Chrysene-d12	23.51	23.01	24.01	23.51	0.00
77 Perylene-d12	26.24	25.74	26.74	26.24	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292321.D

Lab ID: 23H0579-08
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   30-AUG-2023 00:01

RT	CO-ELUTION COMPOUNDS
9.682	2-Methylphenol and Benzyl alcohol

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.028	1.052	-0.0231	2-Methylphenol
1.073	1.085	-0.0122	N-Nitroso-di-n-propylamine

RRT check based on Ccal File: SIM.b/NT1708292319B.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1012A

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23H0579-09 A	SDG:	23H0579
Sampled:	01/16/23 13:13	Prepared:	08/25/23 12:39	File ID:	NT1708292322.D
% Solids:	56.64	Preparation:	EPA 3546 (Microwave)	Analyzed:	08/30/23 00:38
Batch:	BLH0669	Sequence:	SLH0447	Initial/Final:	17.76 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GH00045
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
105-67-9	2,4-Dimethylphenol	1	19.9	U	2.2	19.9

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	745.58	505	67.7	27 - 120	Q
p-Terphenyl-d14	497.05	409	82.3	37 - 120	Q

INTERNAL STANDARDS	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	333882	9.413	358343	9.413	
Naphthalene-d8	1158476	11.878	1242877	11.891	
Acenaphthene-d10	409849	15.487	464388	15.487	
Phenanthrene-d10	563788	18.519	660913	18.519	
Chrysene-d12	427830	23.506	477958	23.505	
Perylene-d12	687649	26.236	659026	26.235	

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292322.D

Date : 30-AUG-2023 00:38

Client ID:

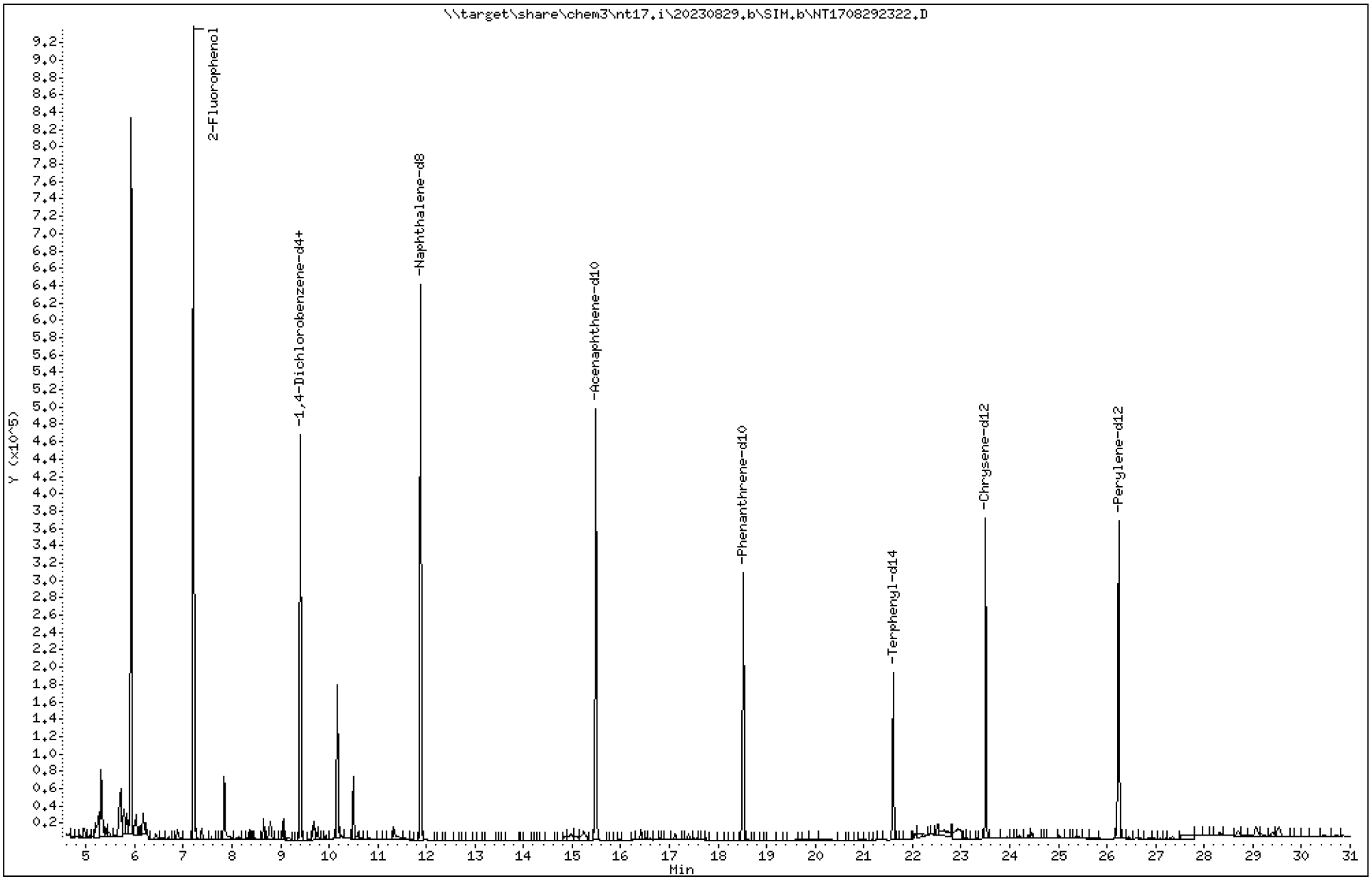
Sample Info: 23H0579-09

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292322.D

Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

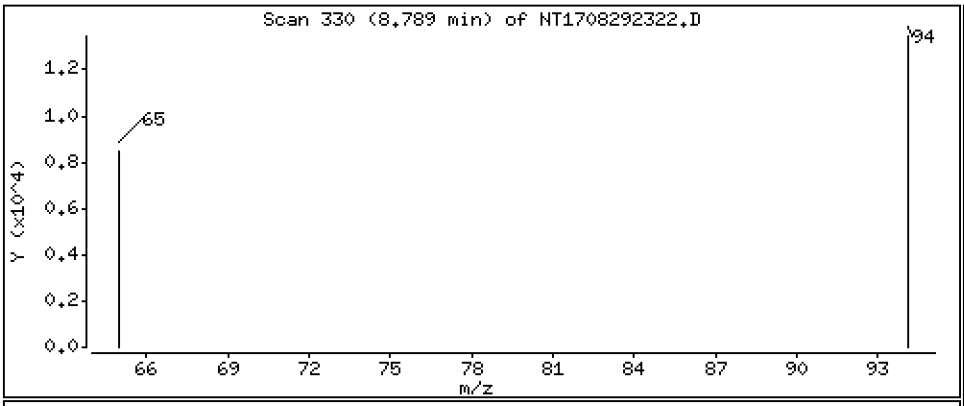
Operator: JGR

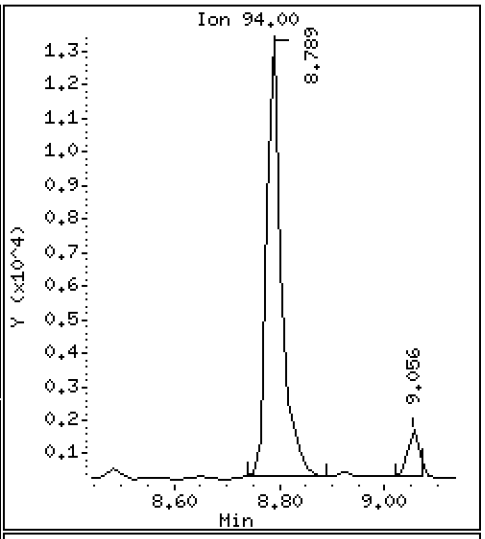
Column phase: ZB-5msi

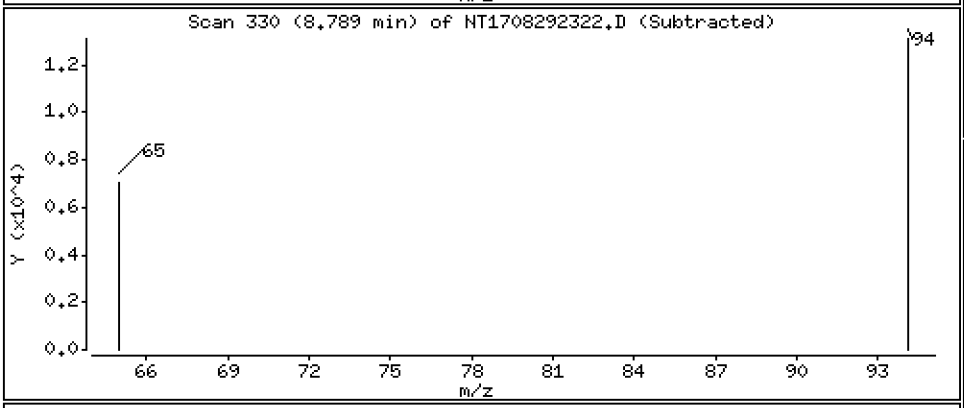
Column diameter: 0.25

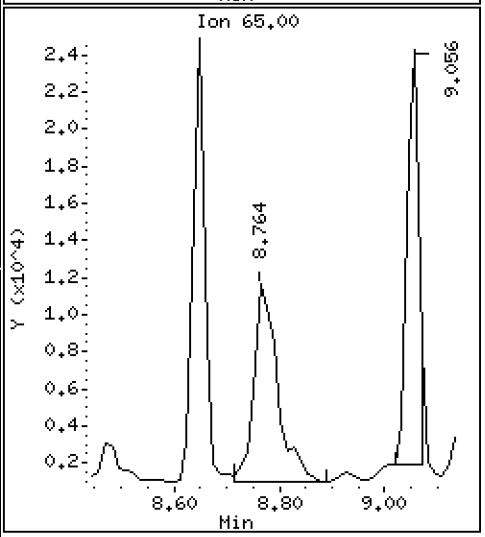
3 Phenol

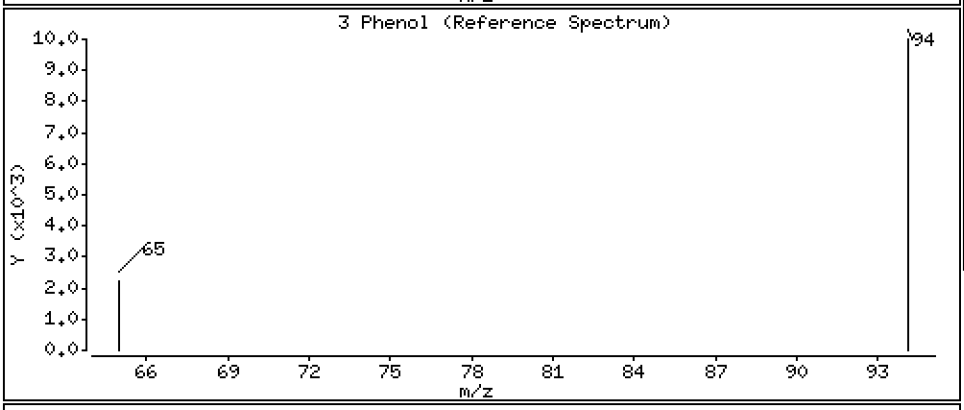
Concentration: 0.1210 ug/mL

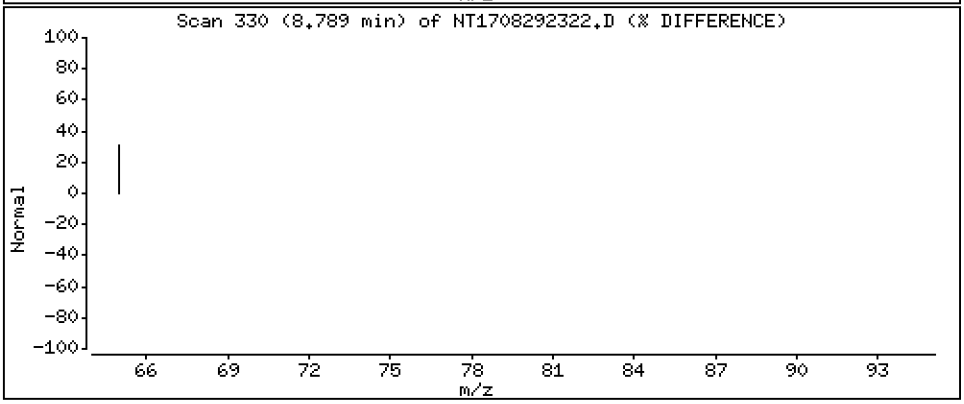












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Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

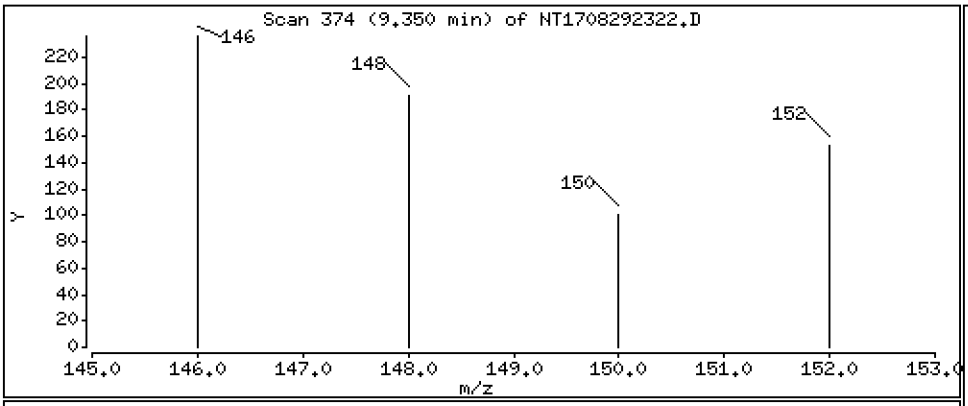
Operator: JGR

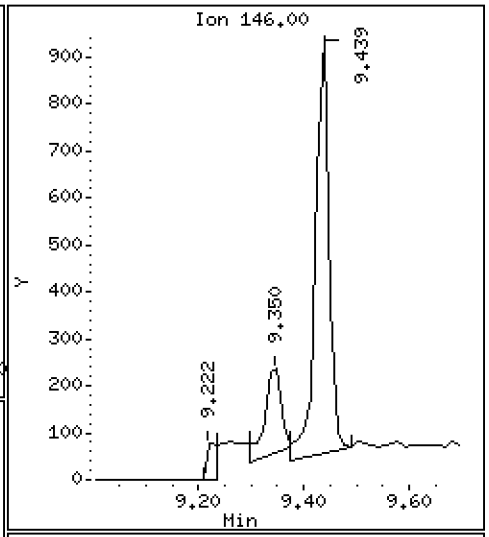
Column phase: ZB-5msi

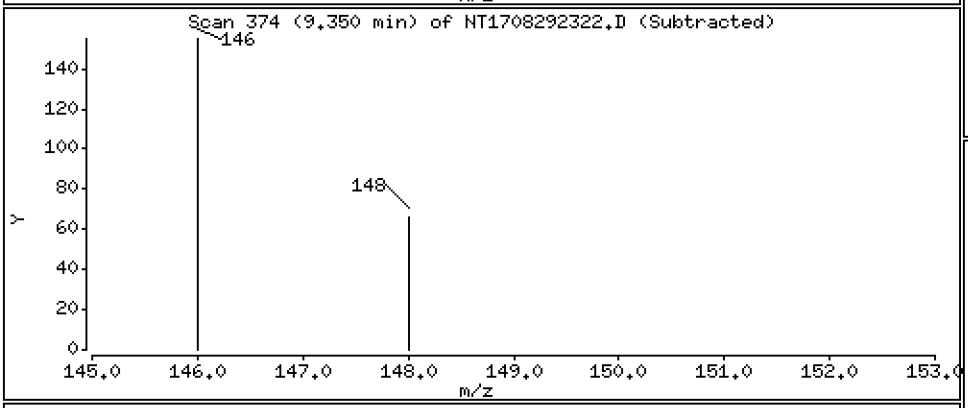
Column diameter: 0.25

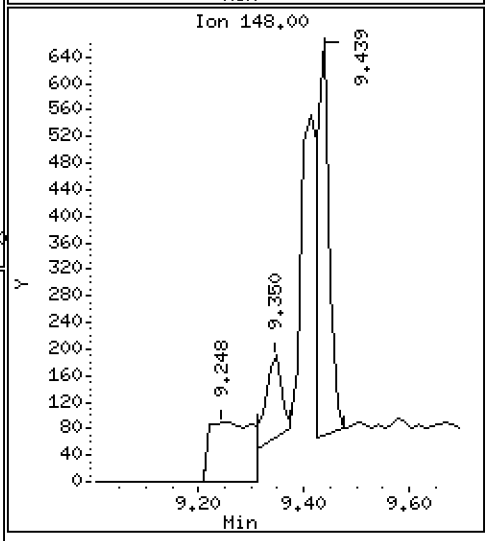
7 1,3-Dichlorobenzene

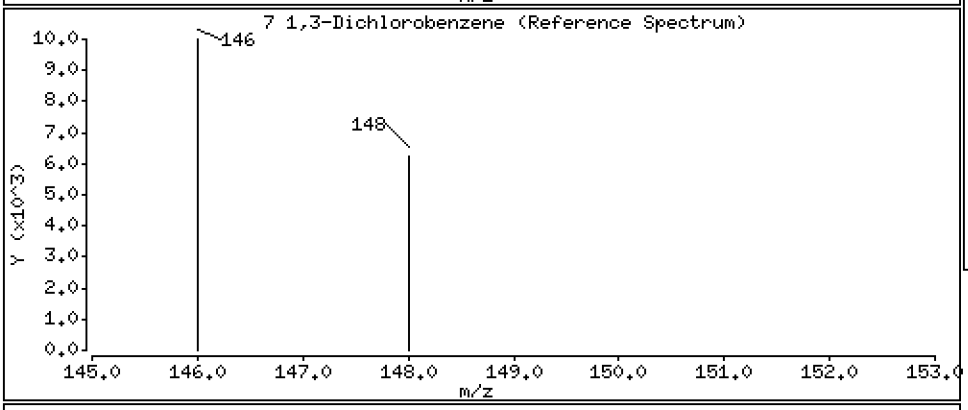
Concentration: 0.002959 ug/mL

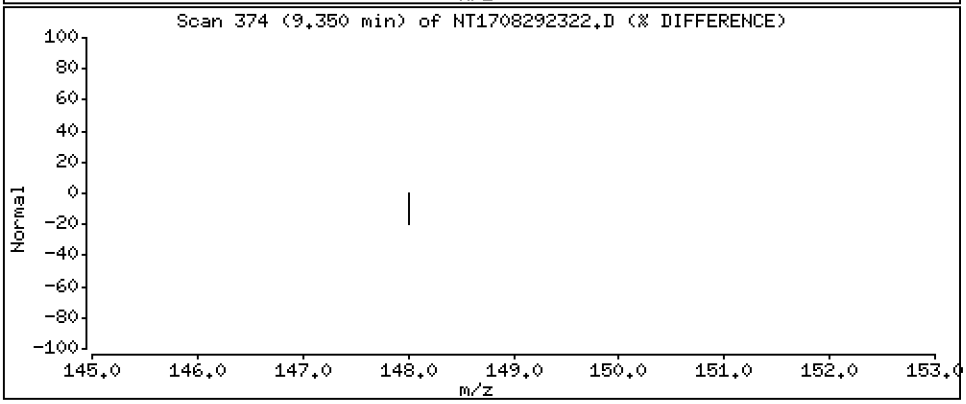












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292322.D

Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

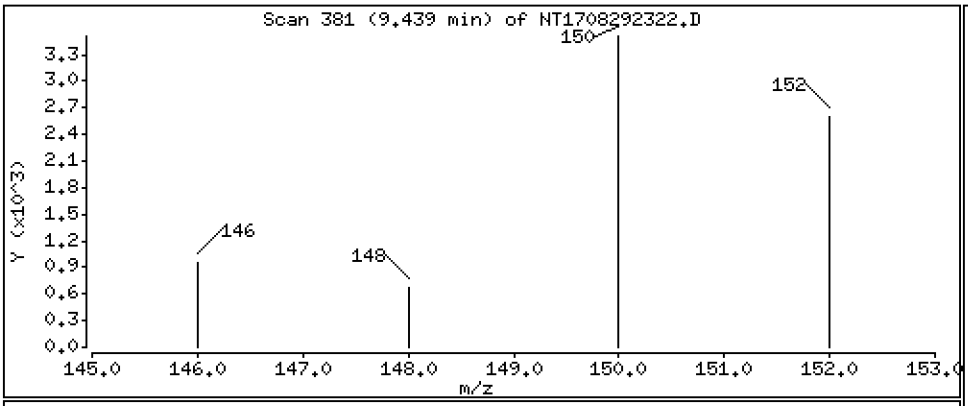
Operator: JGR

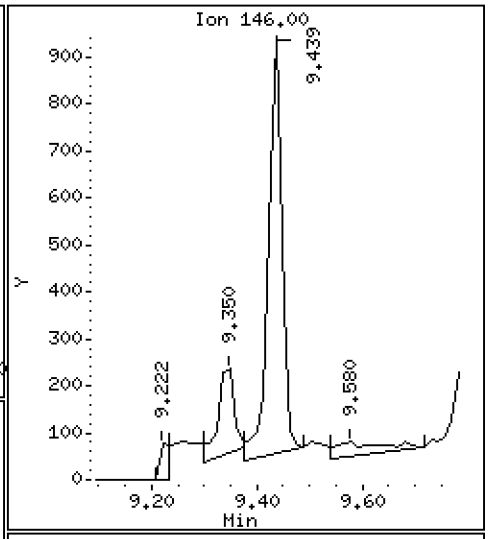
Column phase: ZB-5msi

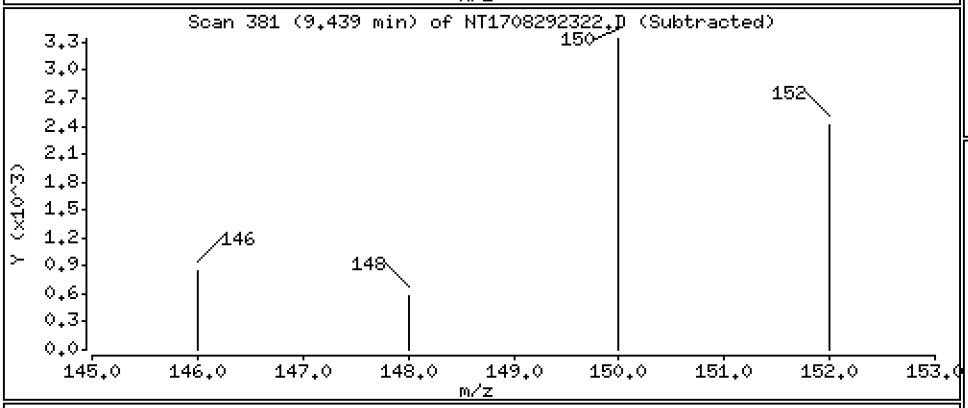
Column diameter: 0.25

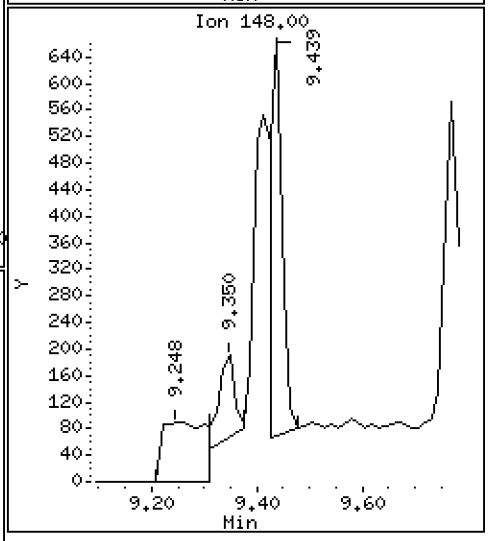
9 1,4-Dichlorobenzene

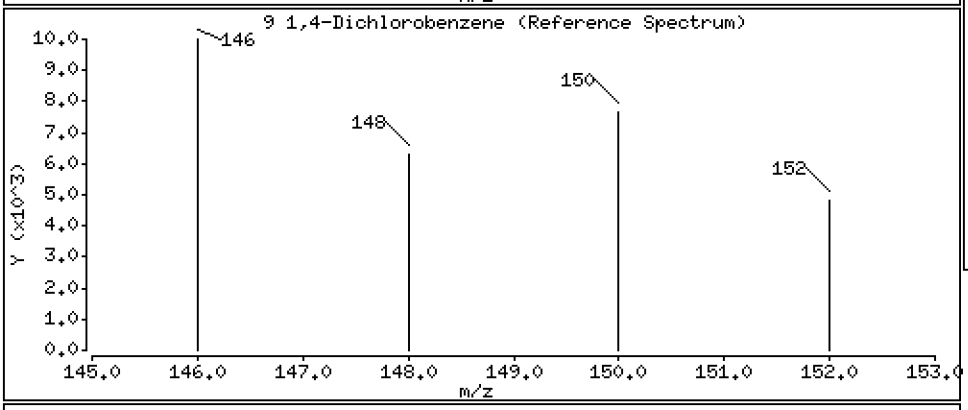
Concentration: 0.01171 ug/mL

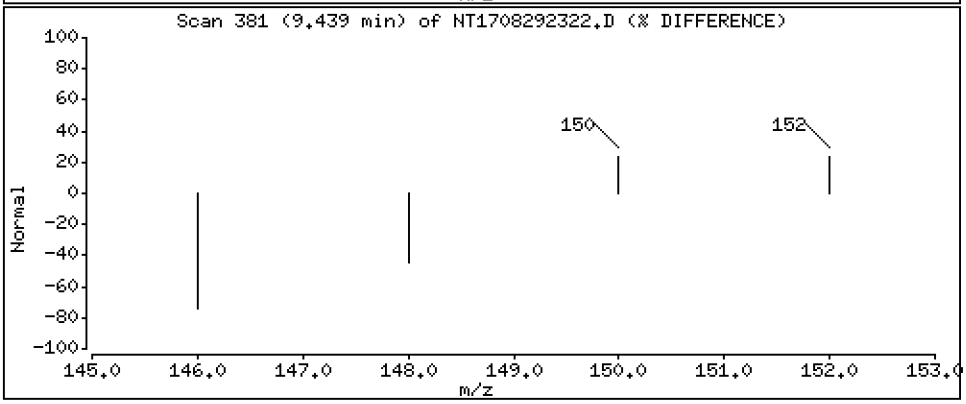












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Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

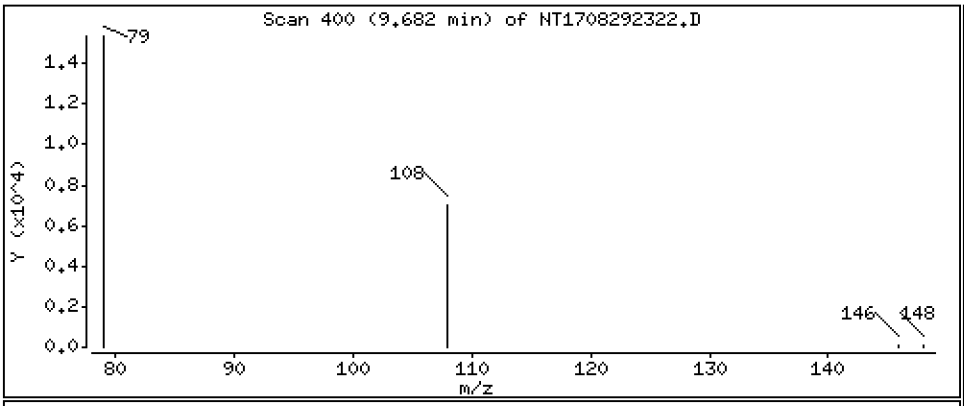
Operator: JGR

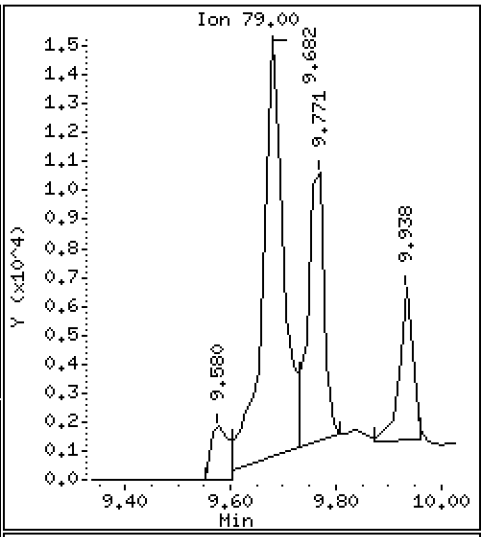
Column phase: ZB-5msi

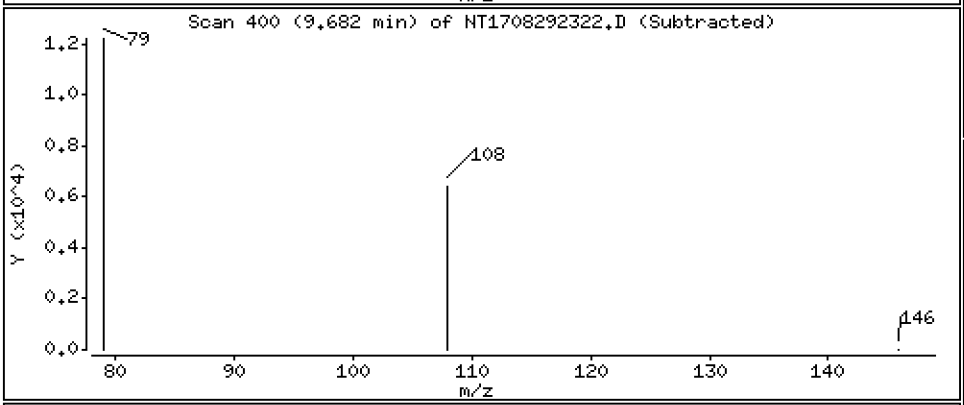
Column diameter: 0.25

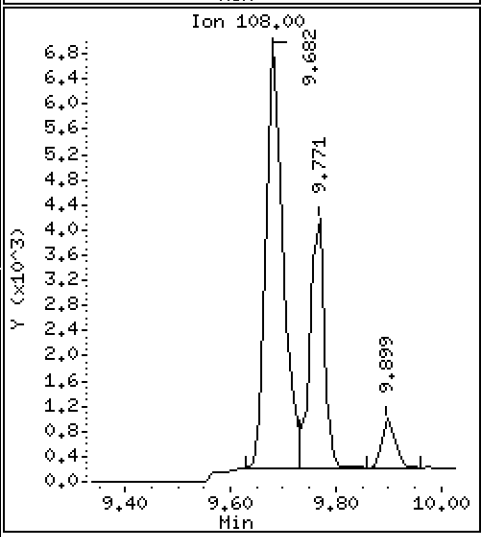
11 Benzyl alcohol

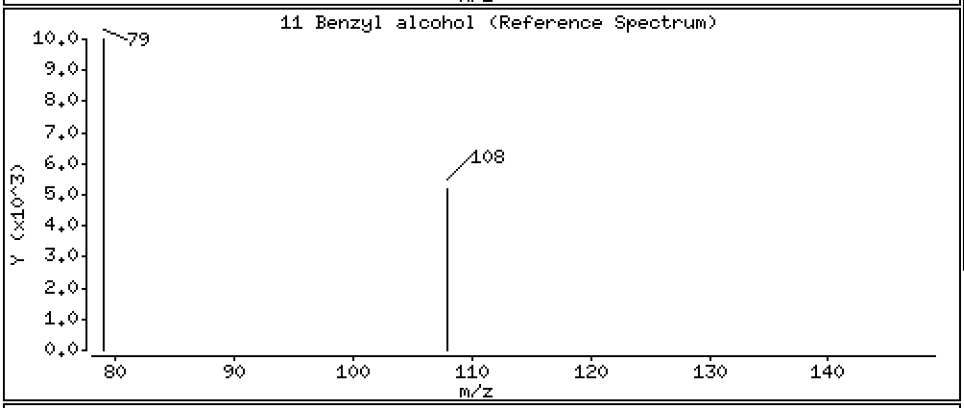
Concentration: 0.2802 ug/mL

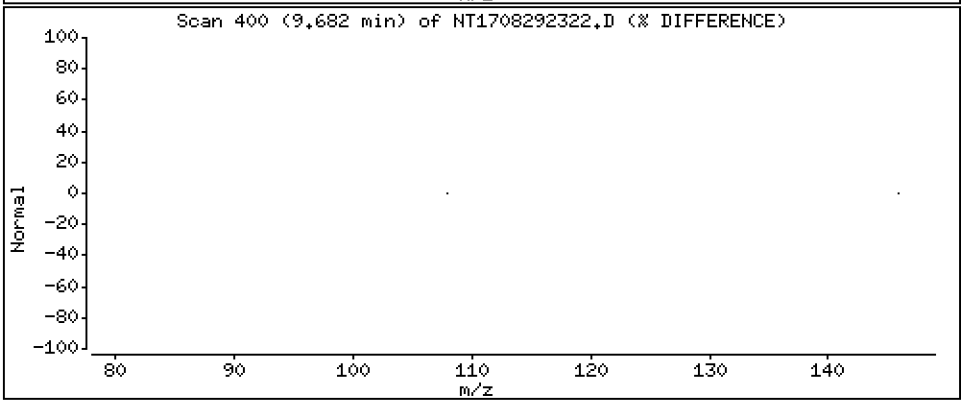












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Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

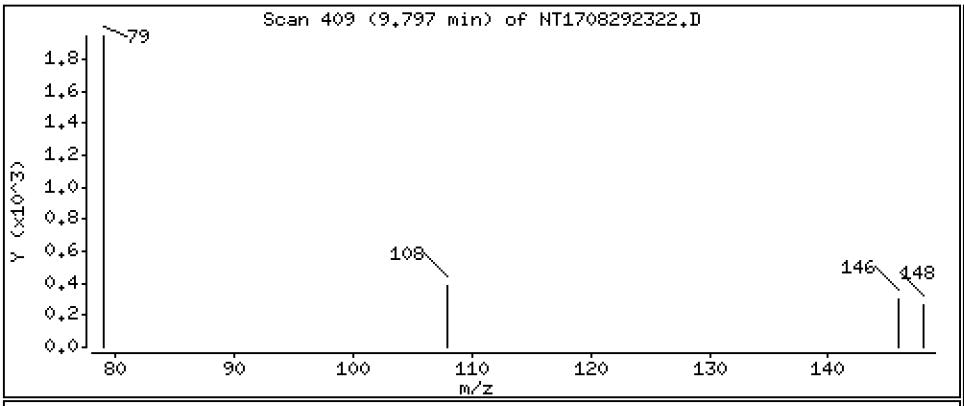
Operator: JGR

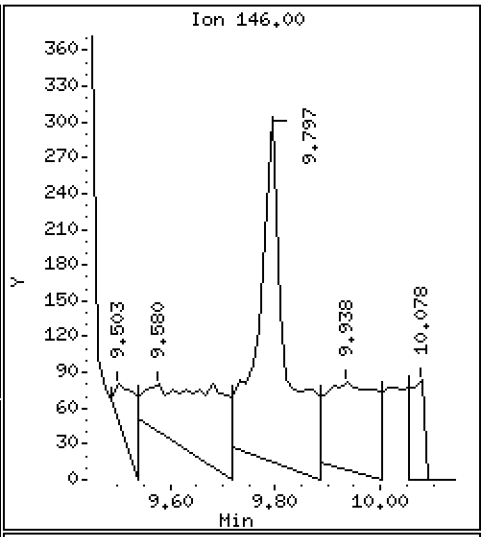
Column phase: ZB-5msi

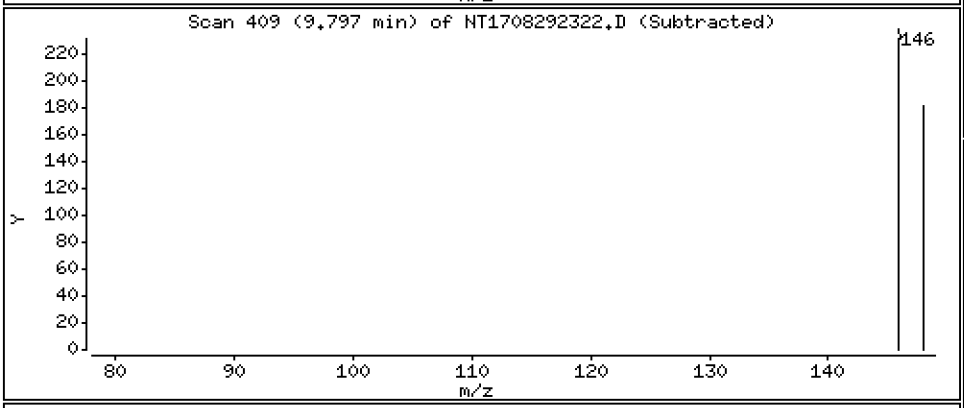
Column diameter: 0.25

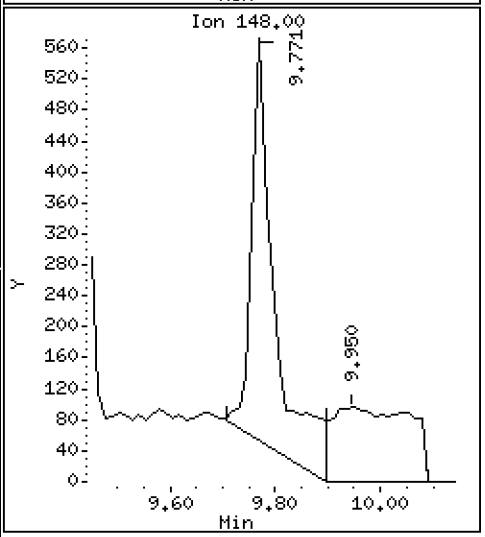
12 1,2-Dichlorobenzene

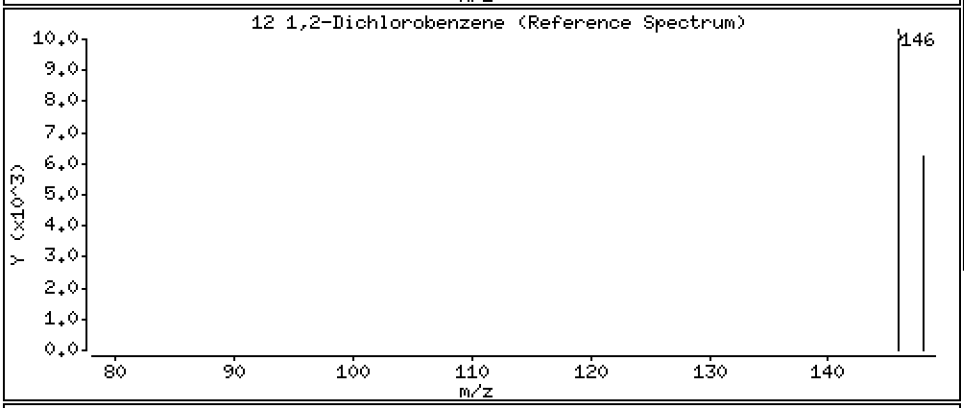
Concentration: 0.007936 ug/mL

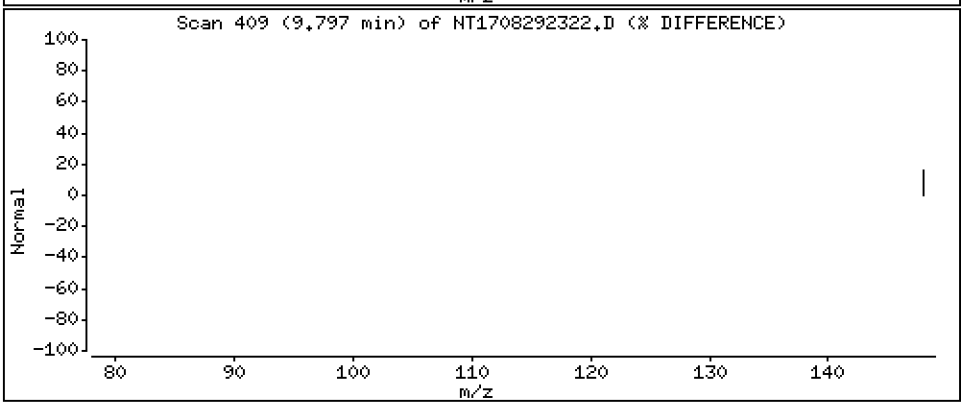












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Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

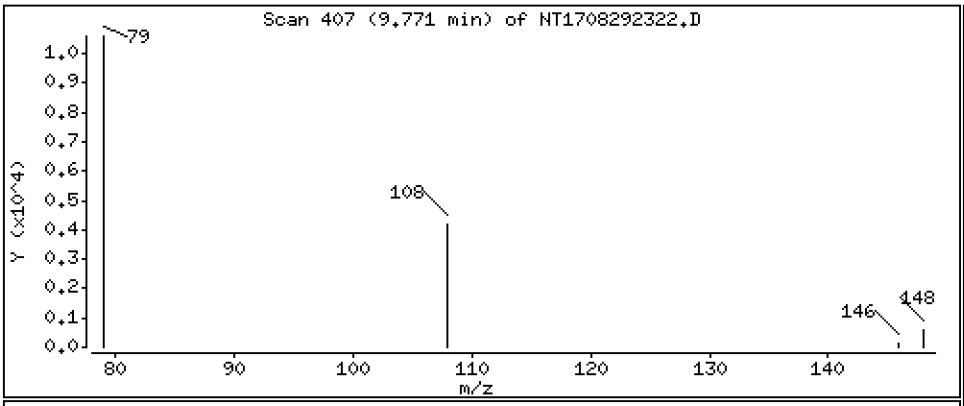
Operator: JGR

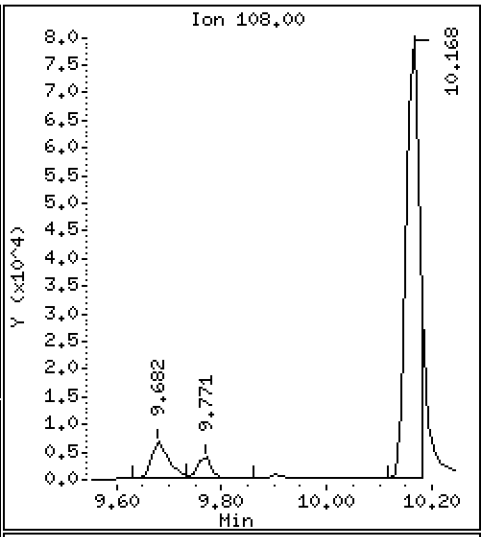
Column phase: ZB-5msi

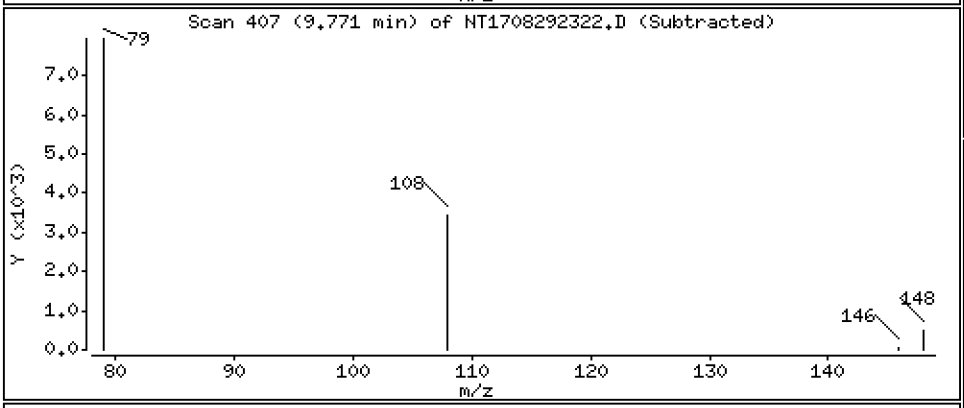
Column diameter: 0.25

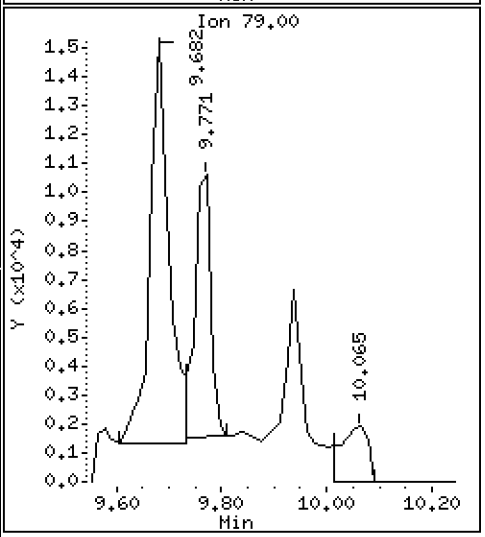
13 2-Methylphenol

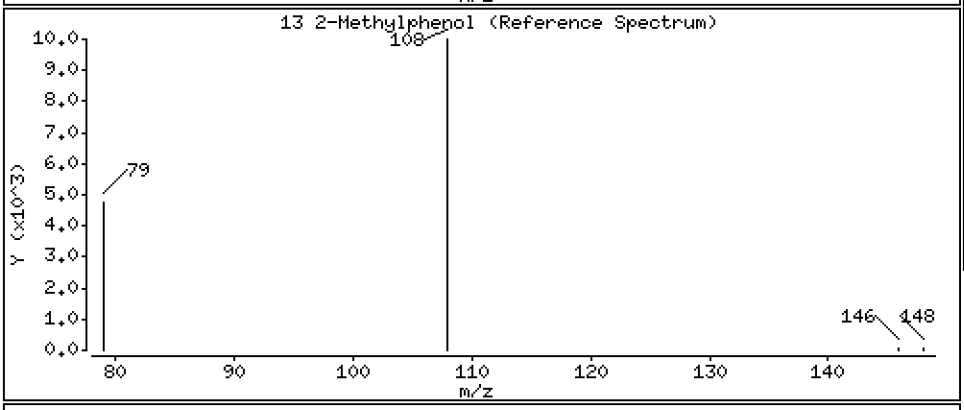
Concentration: 0.06105 ug/mL

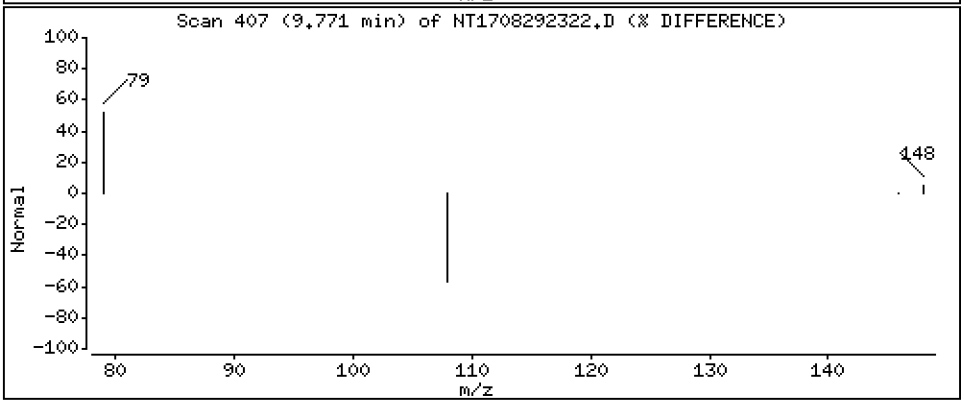












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Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

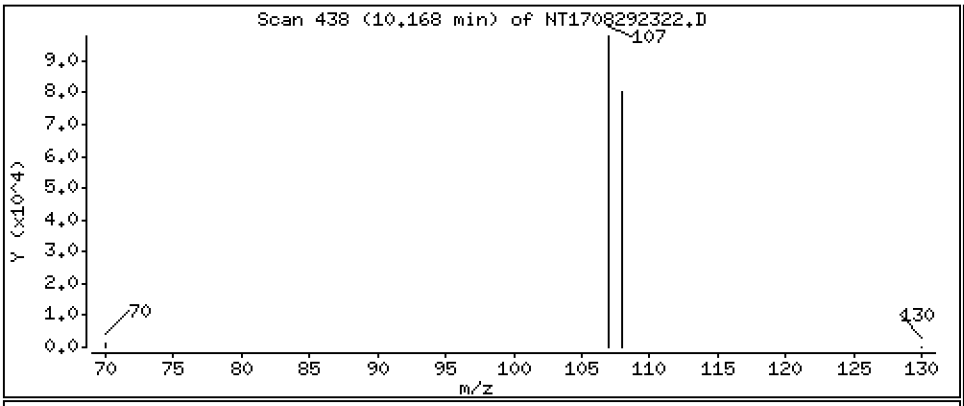
Operator: JGR

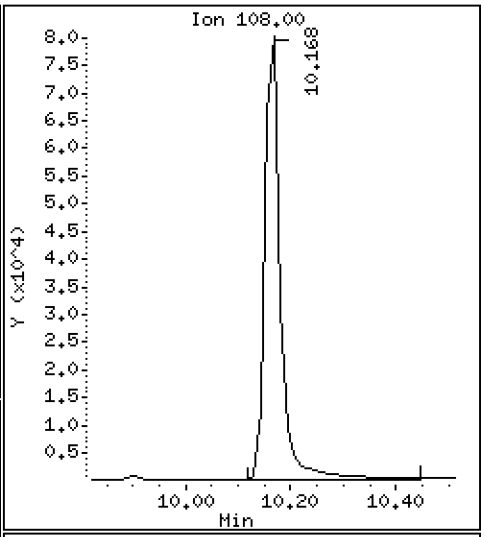
Column phase: ZB-5msi

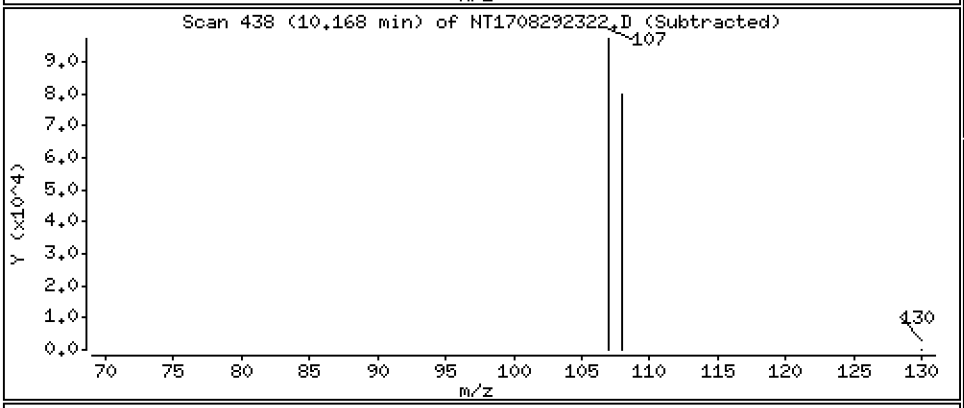
Column diameter: 0.25

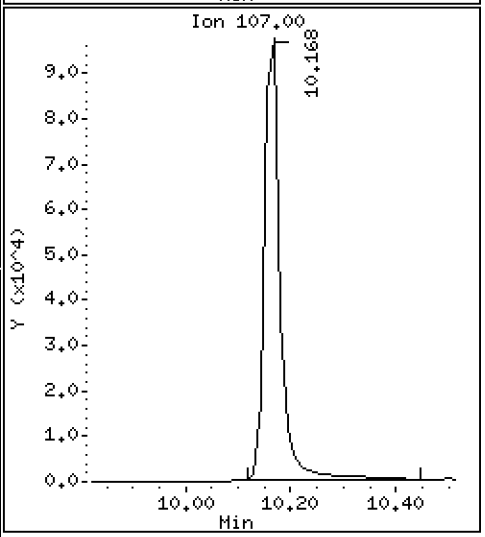
15 4-Methylphenol

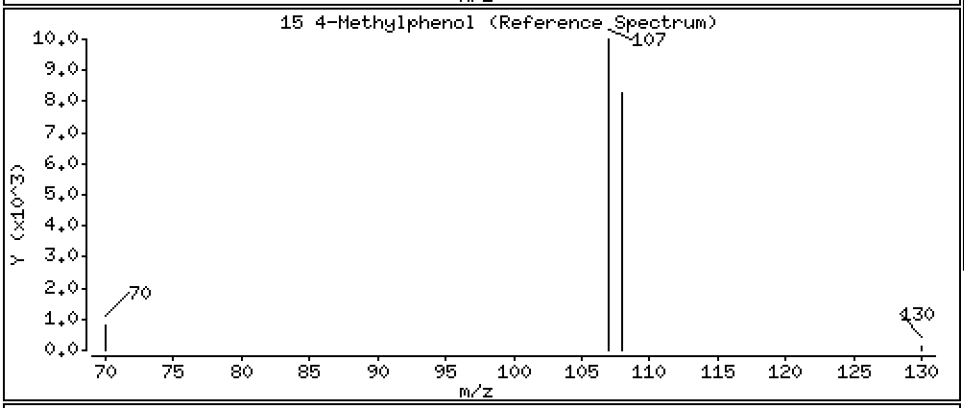
Concentration: 1.240 ug/mL

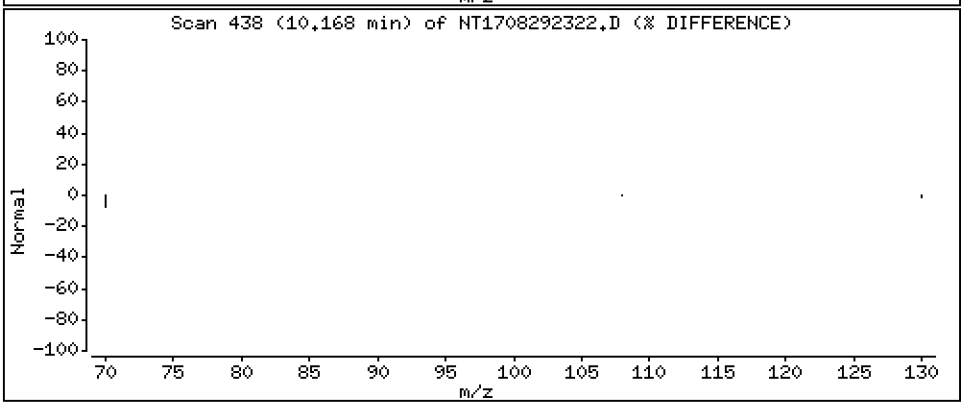












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Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

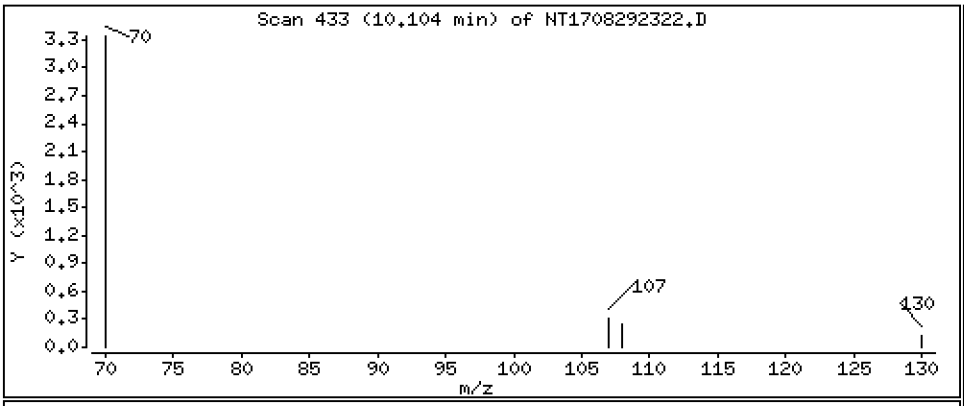
Operator: JGR

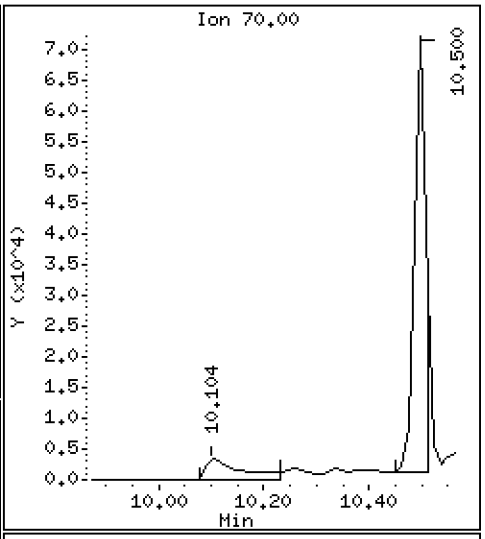
Column phase: ZB-5msi

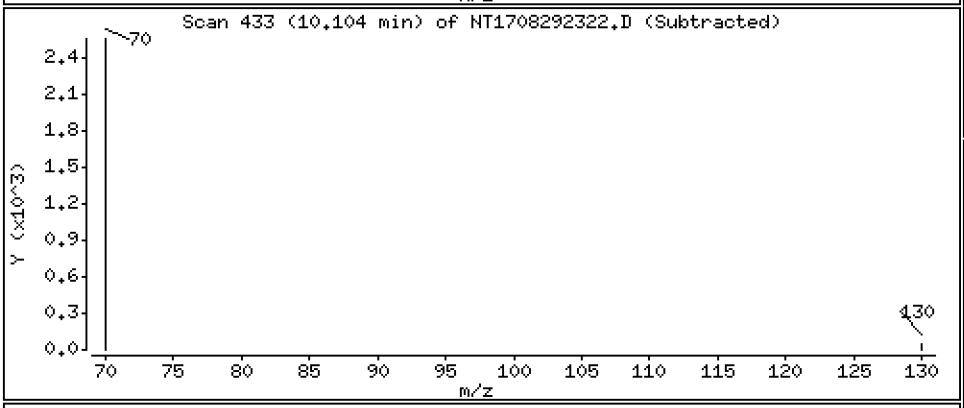
Column diameter: 0.25

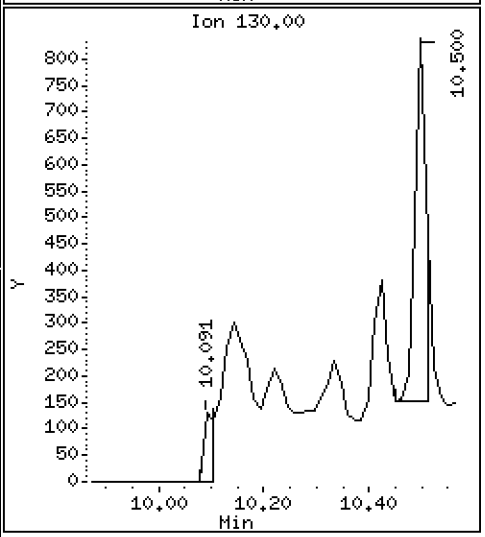
16 N-Nitroso-di-n-propylamine

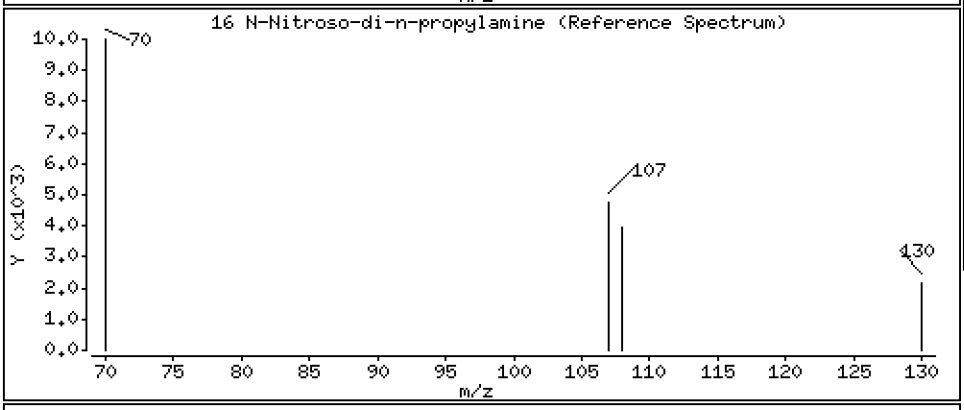
Concentration: 0.1202 ug/mL

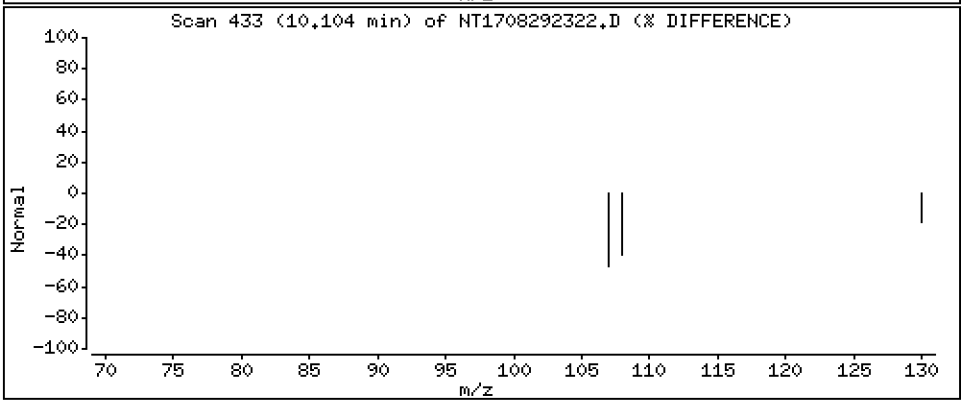












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Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

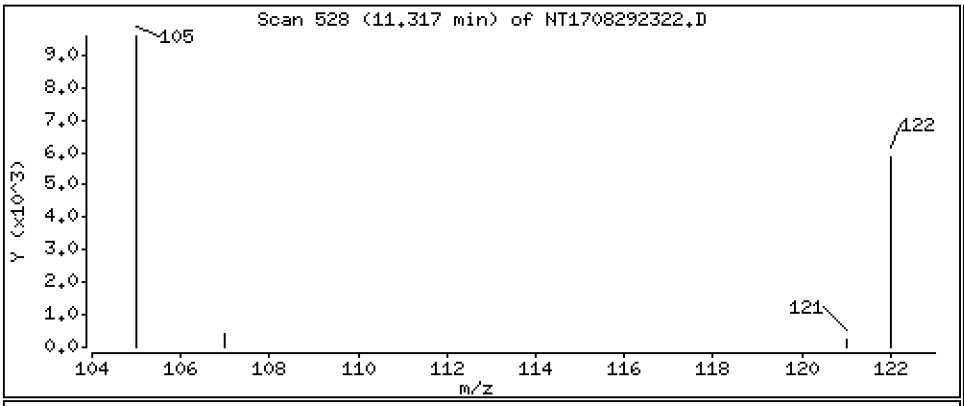
Operator: JGR

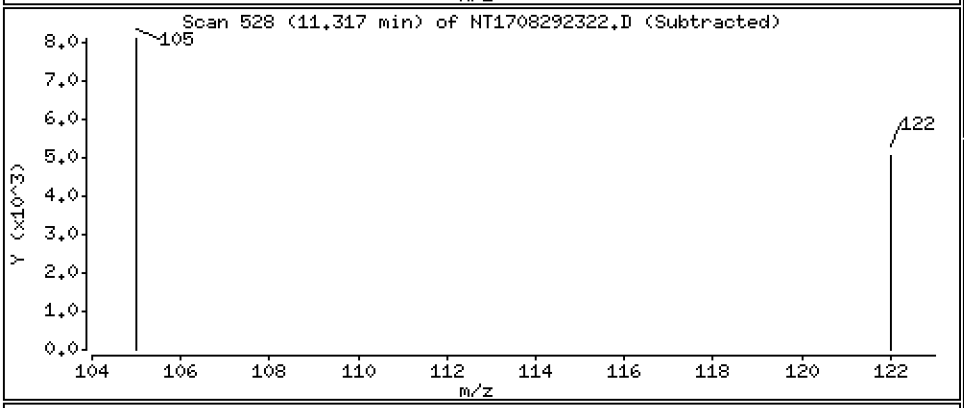
Column phase: ZB-5msi

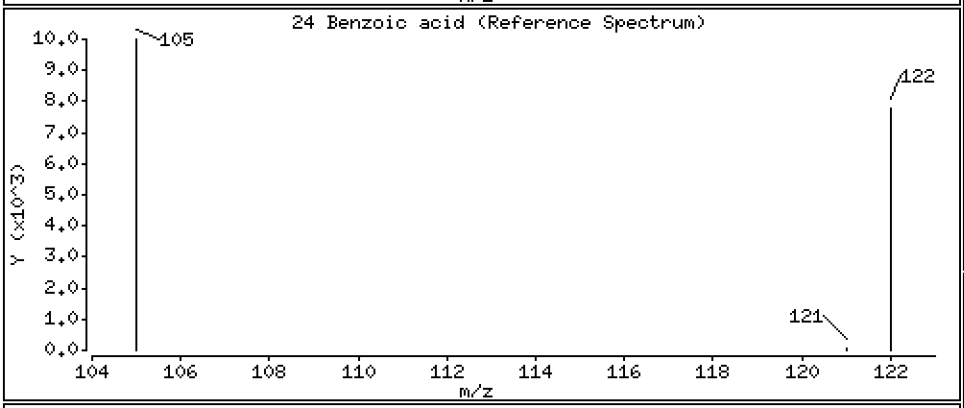
Column diameter: 0.25

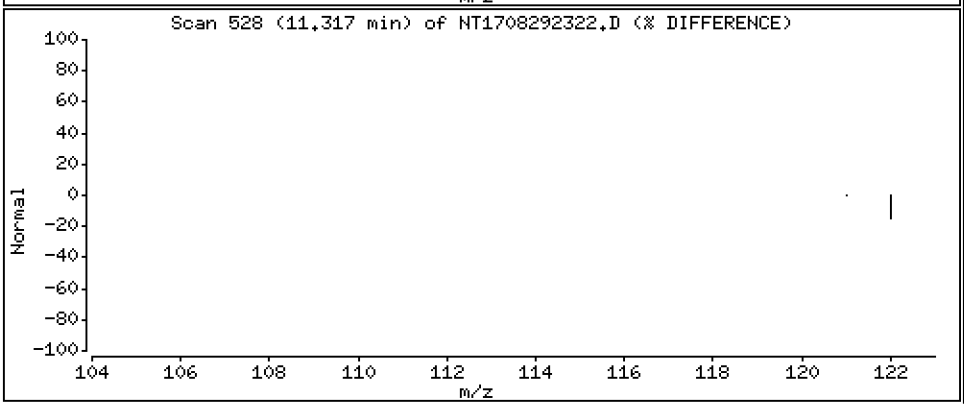
24 Benzoic acid

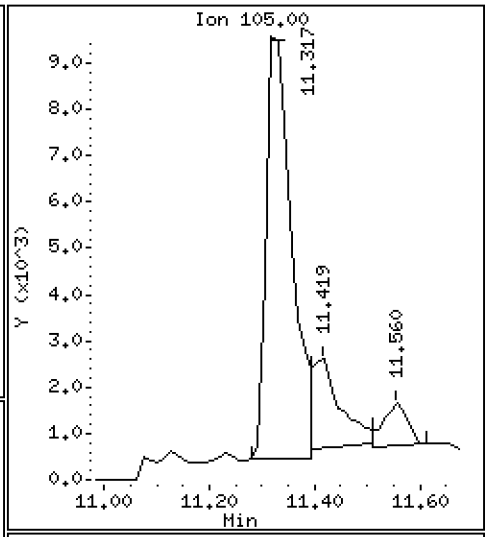
Concentration: 0.4189 ug/mL

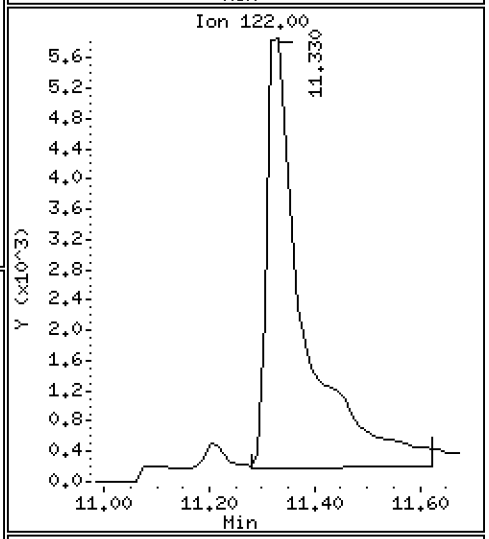


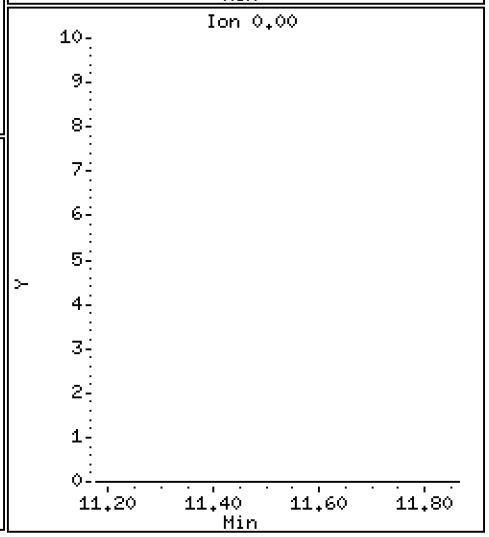












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Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

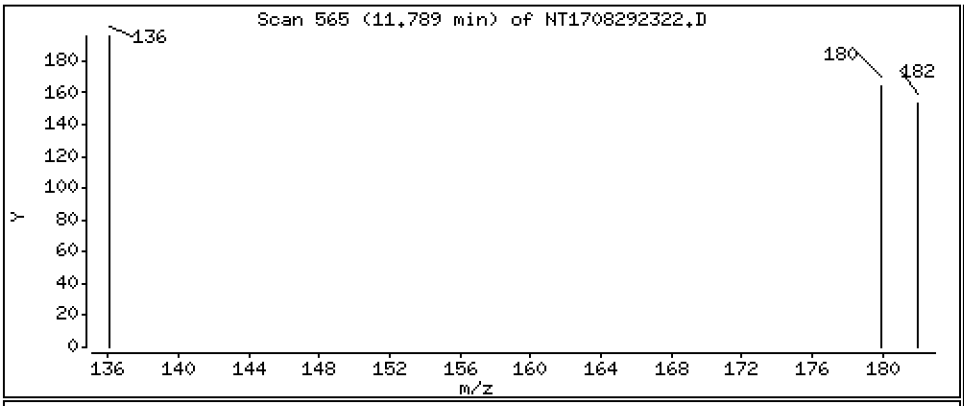
Operator: JGR

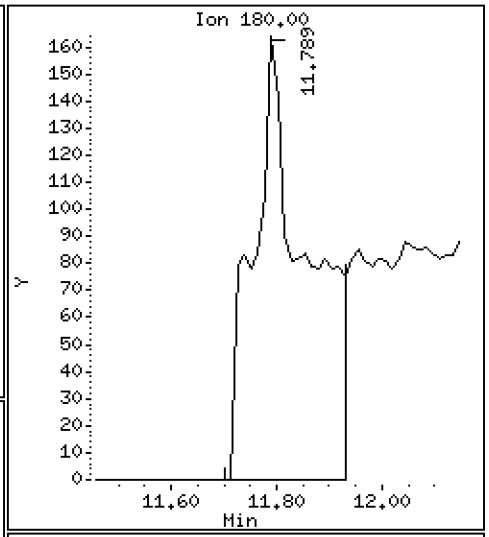
Column phase: ZB-5msi

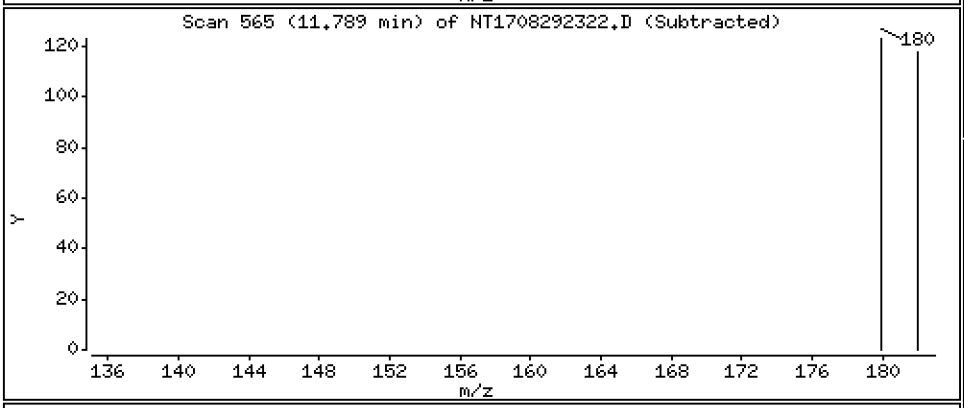
Column diameter: 0.25

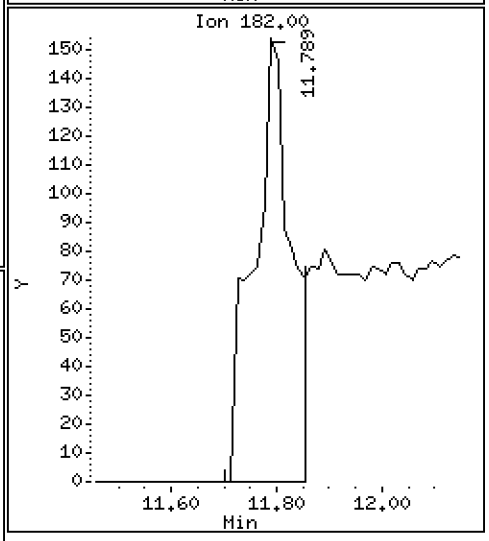
26 1,2,4-Trichlorobenzene

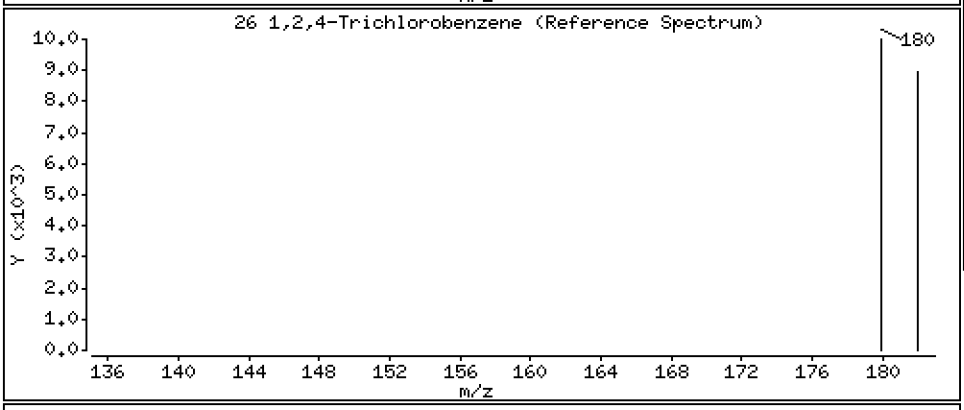
Concentration: 0.01483 ug/mL

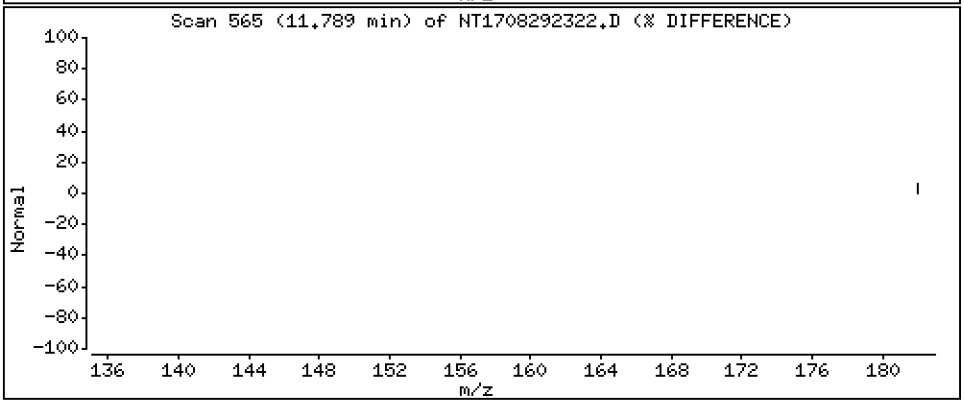












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Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

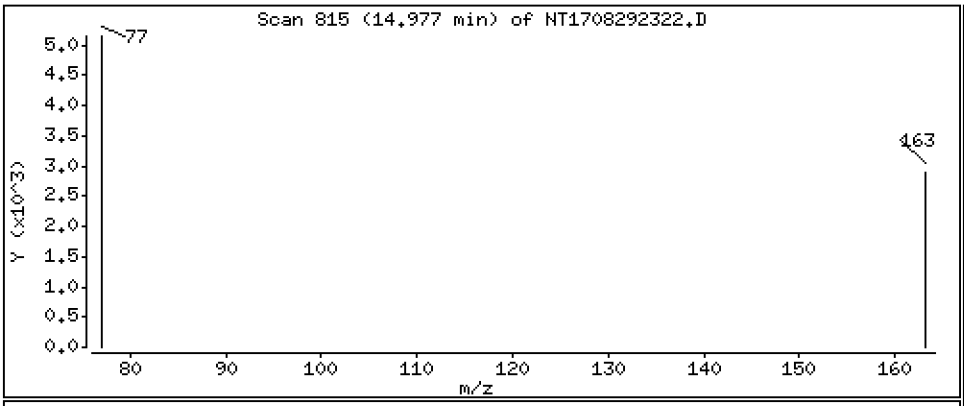
Operator: JGR

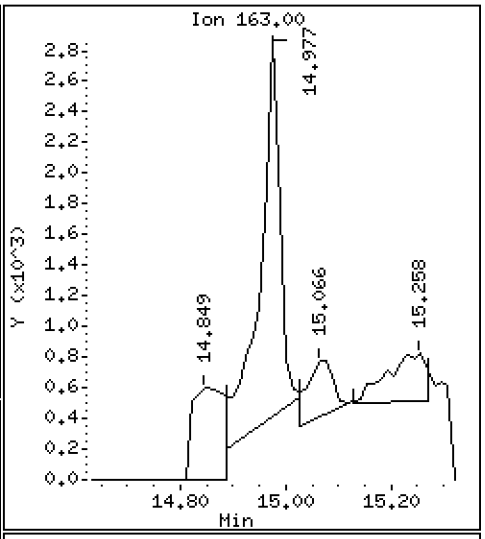
Column phase: ZB-5msi

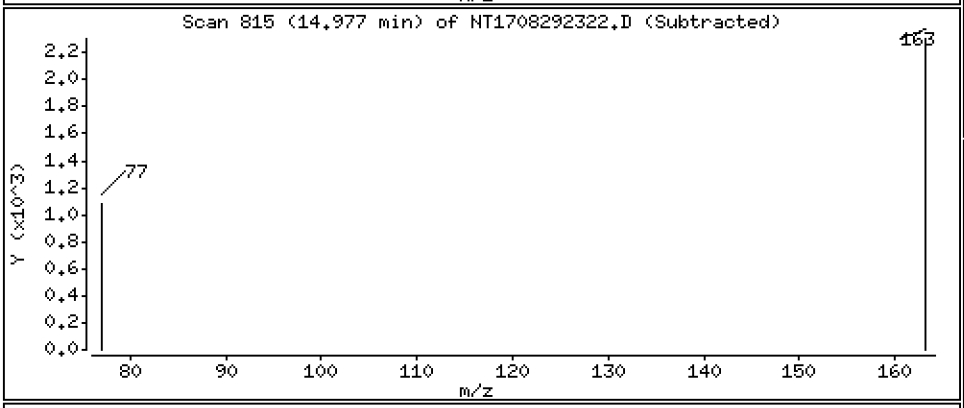
Column diameter: 0.25

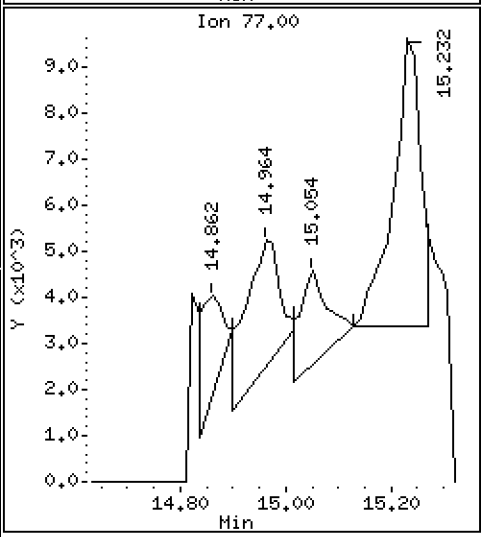
39 Dimethylphthalate

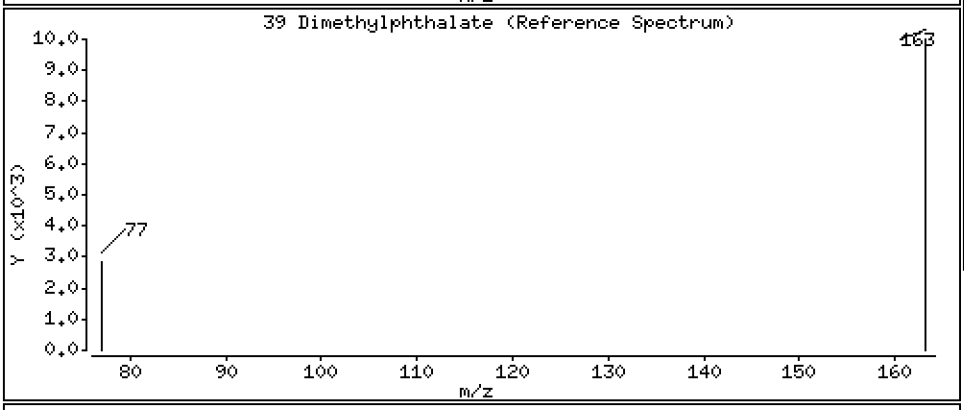
Concentration: 0.04977 ug/mL

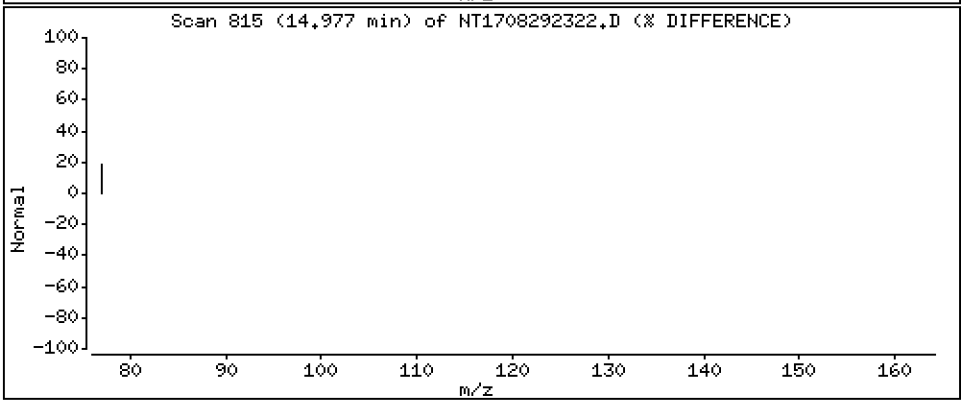












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Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

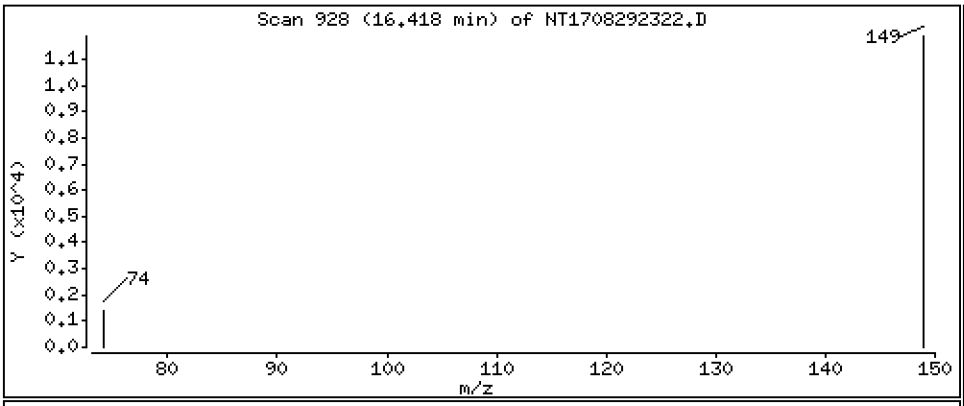
Operator: JGR

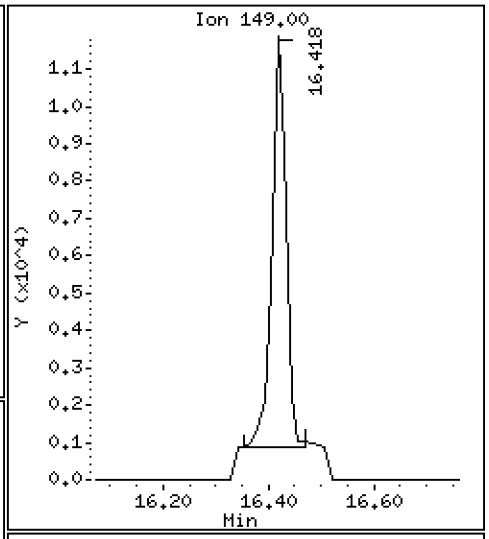
Column phase: ZB-5msi

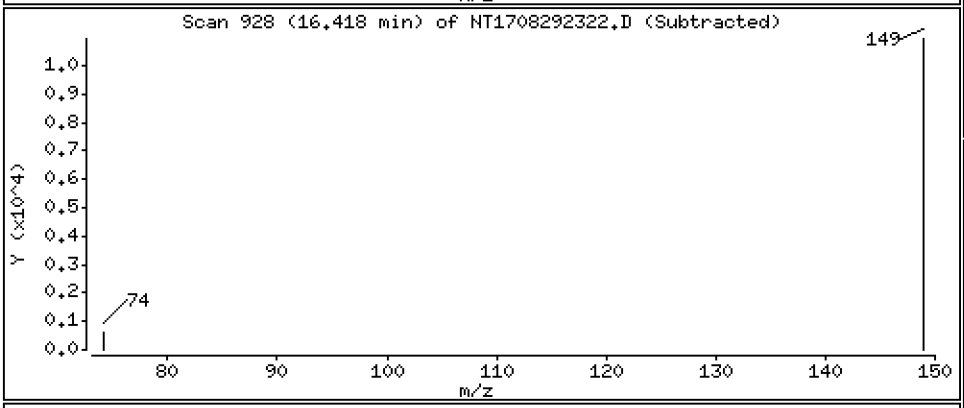
Column diameter: 0.25

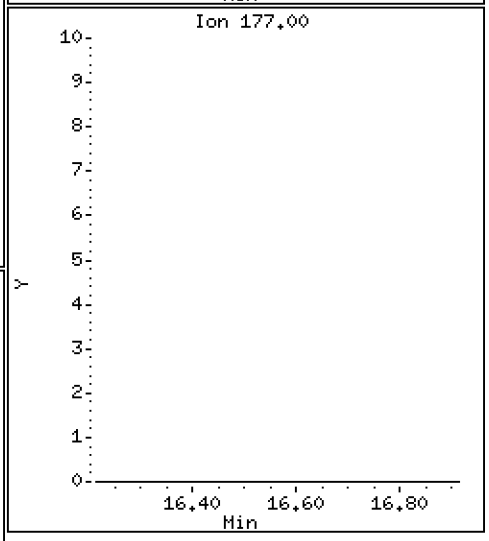
50 Diethylphthalate

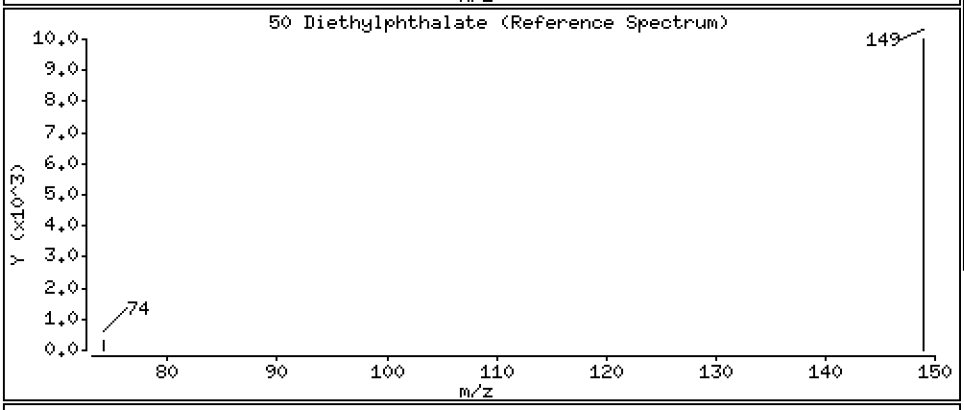
Concentration: 0.1473 ug/mL

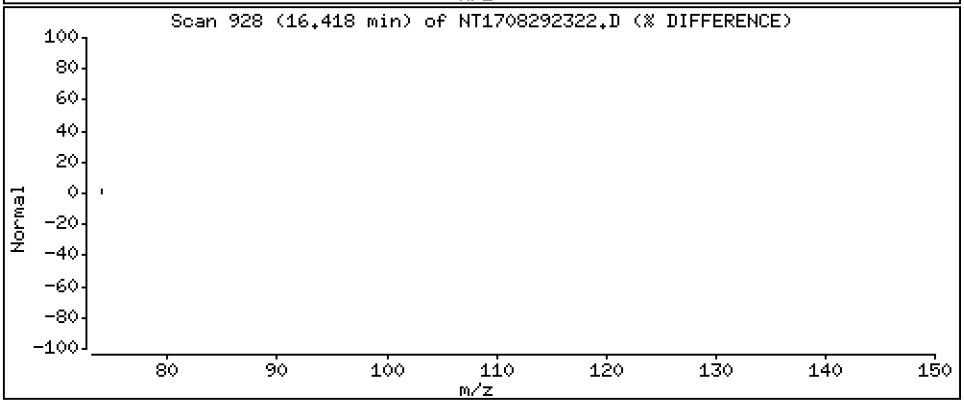












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292322.D

Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

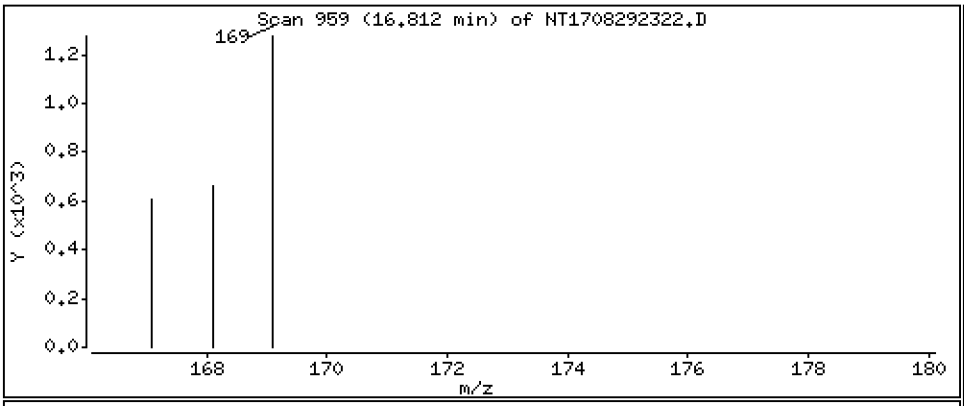
Operator: JGR

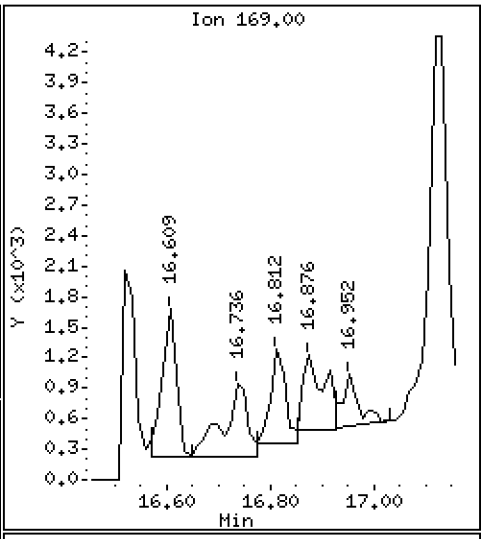
Column phase: ZB-5msi

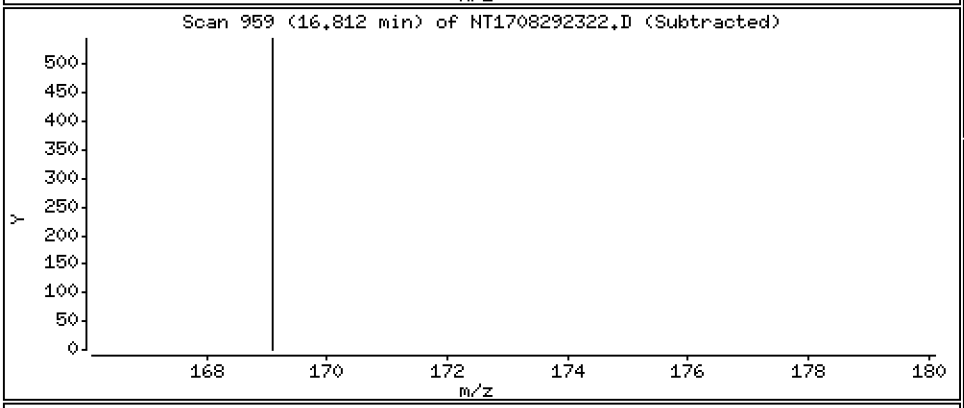
Column diameter: 0.25

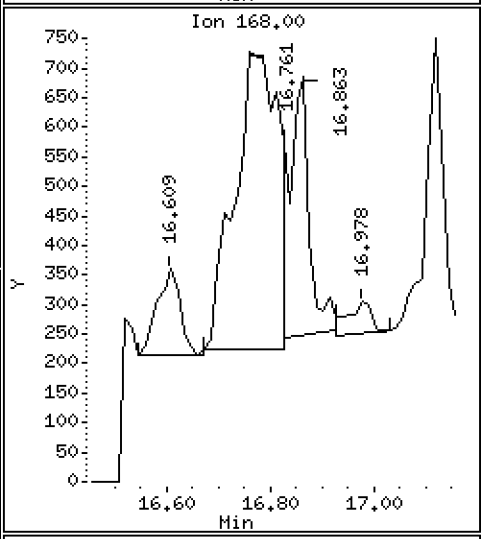
54 N-Nitrosodiphenylamine

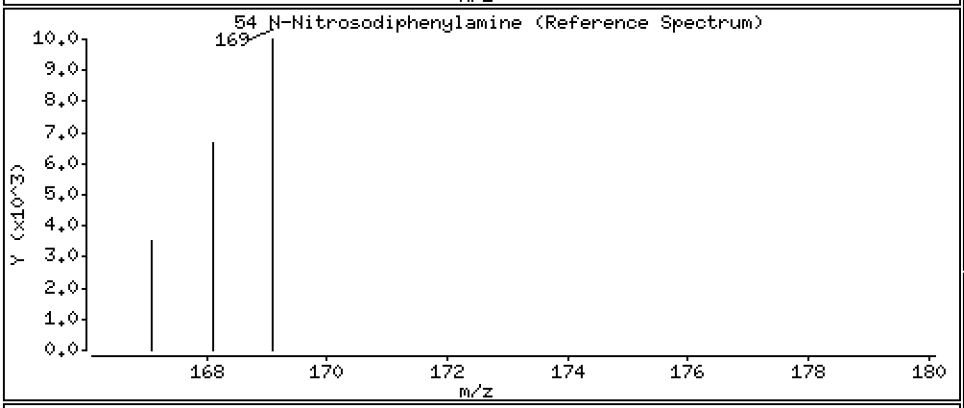
Concentration: 0.02278 ug/mL

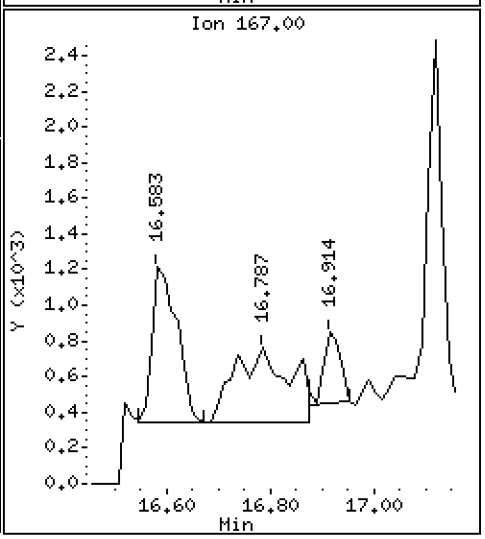


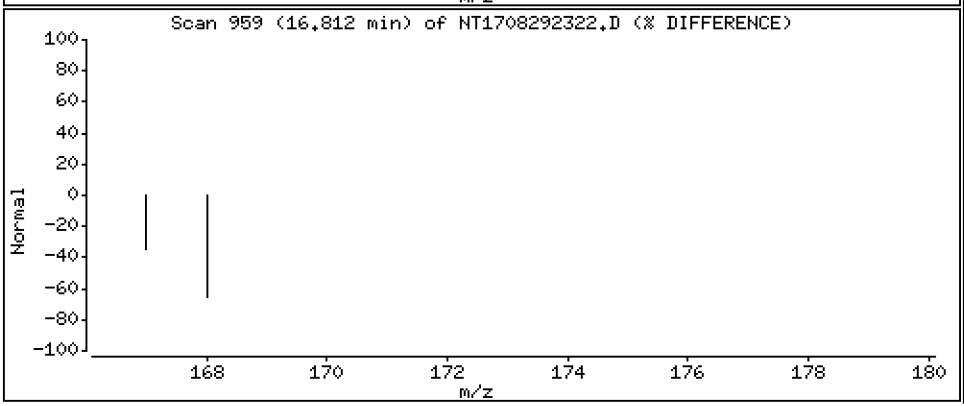












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292322.D

Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

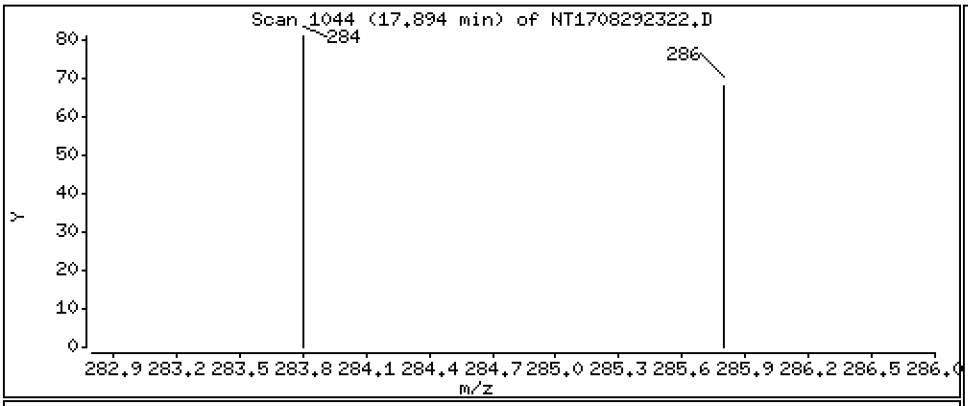
Operator: JGR

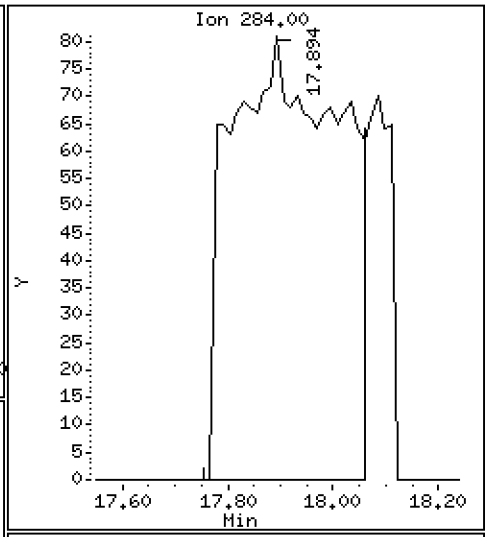
Column phase: ZB-5msi

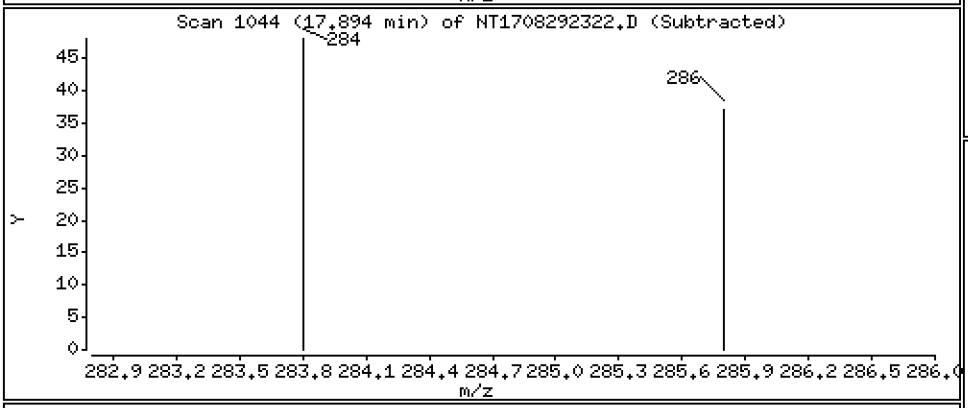
Column diameter: 0.25

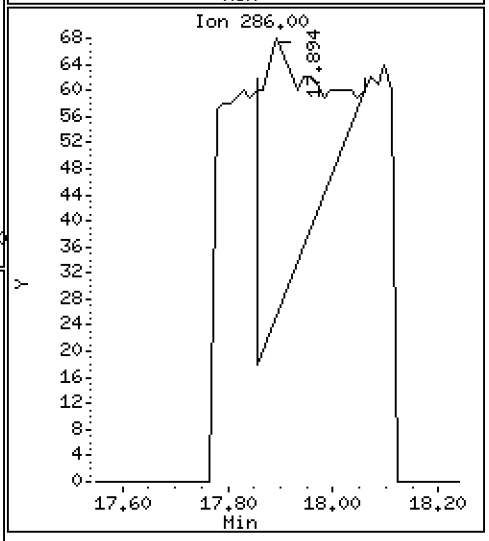
57 Hexachlorobenzene

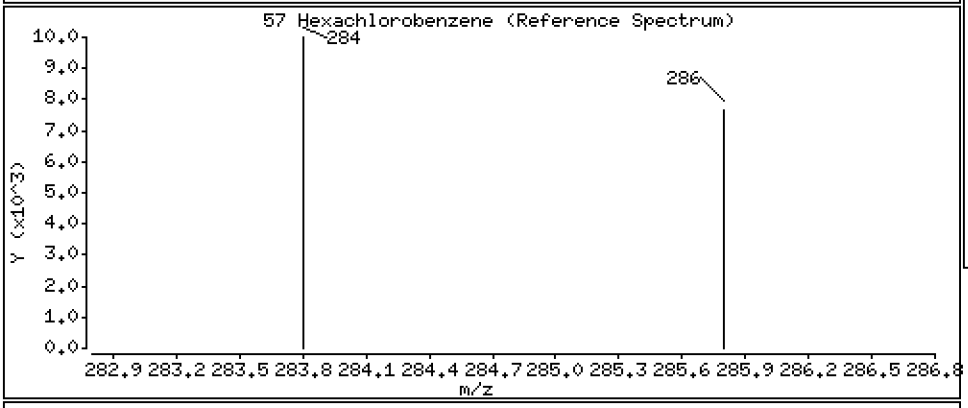
Concentration: 0.04477 ug/mL

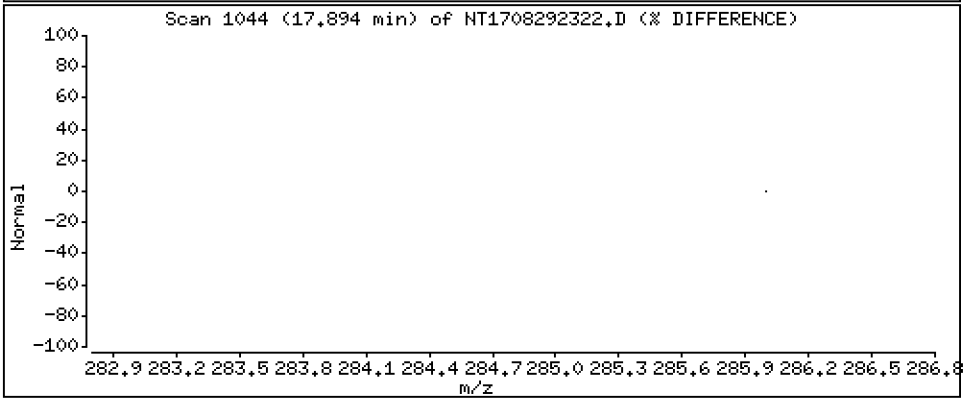












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292322.D

Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

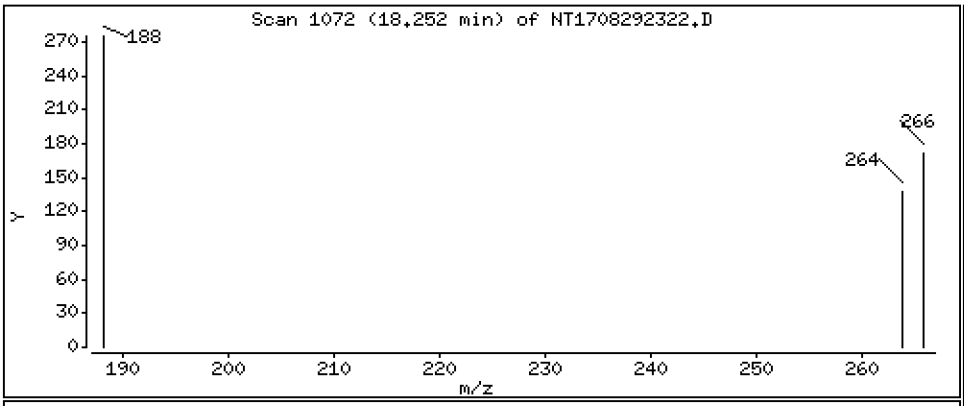
Operator: JGR

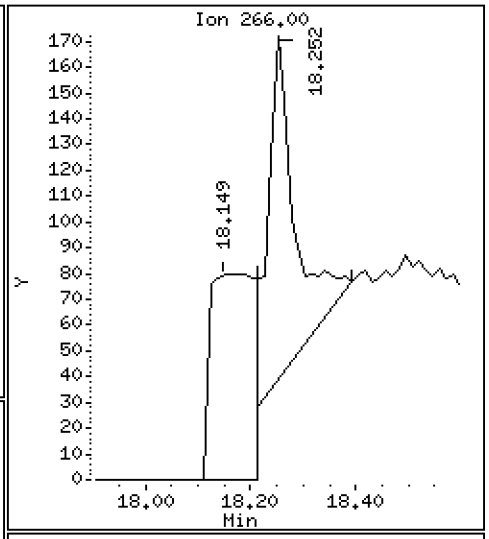
Column phase: ZB-5msi

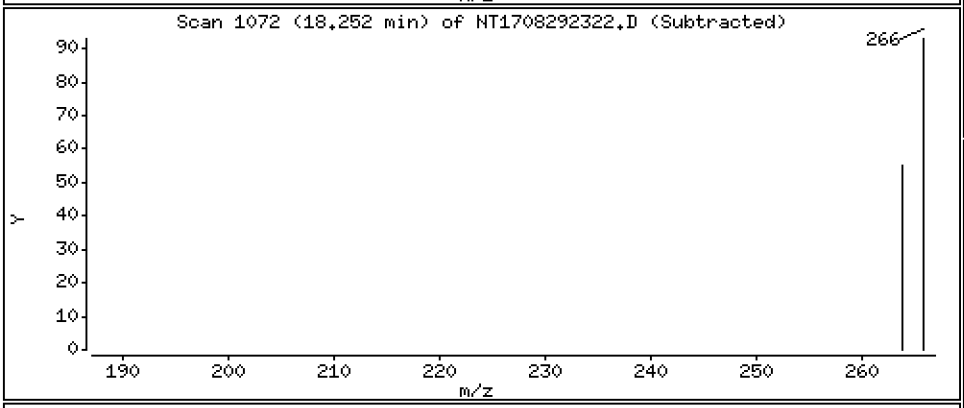
Column diameter: 0.25

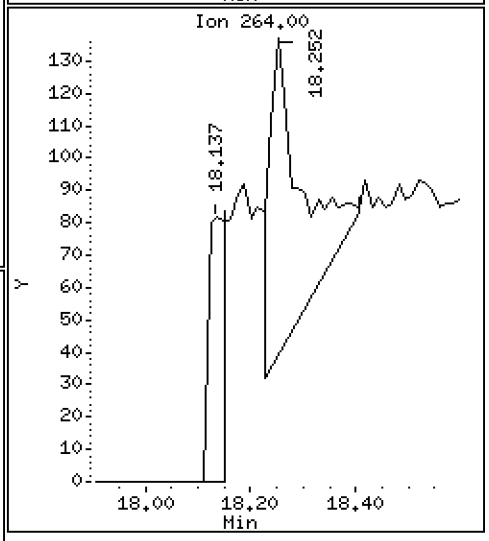
58 Pentachlorophenol

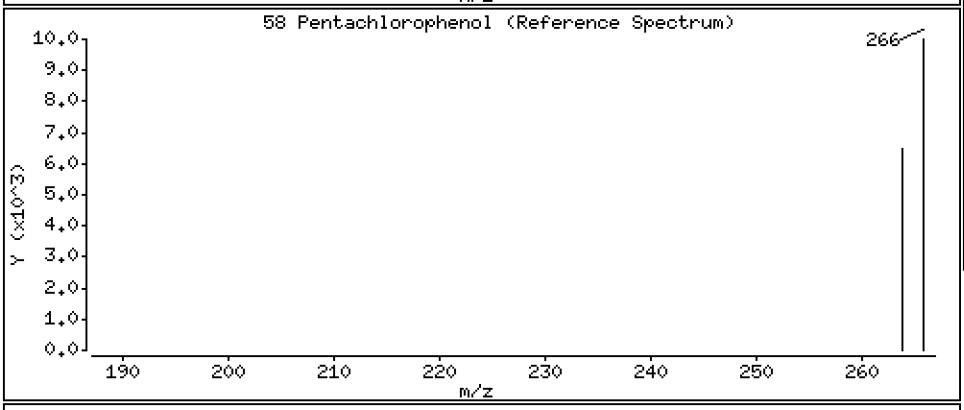
Concentration: 0.02697 ug/mL

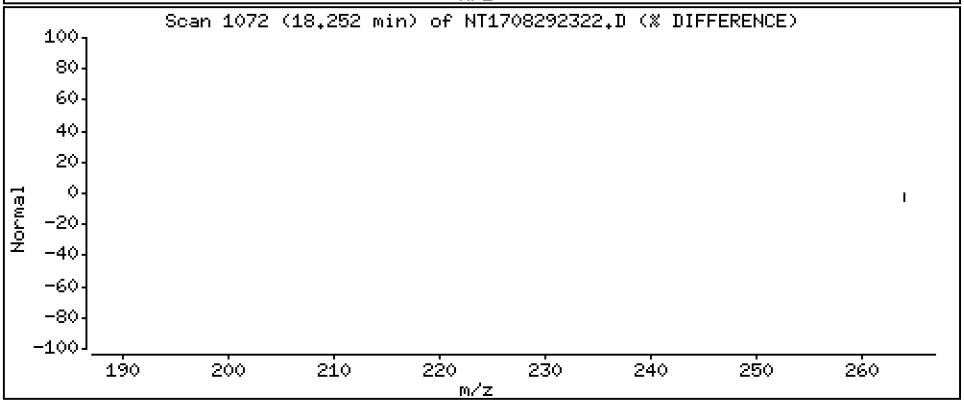












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Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

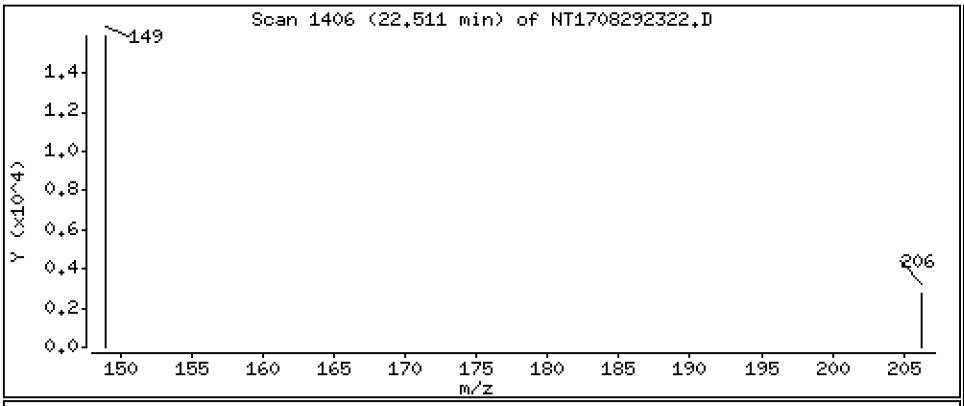
Operator: JGR

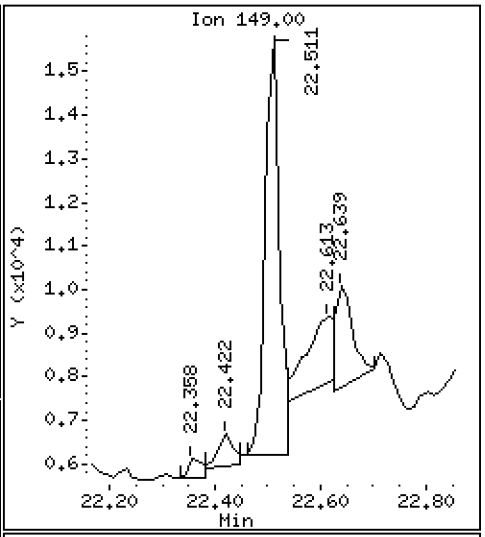
Column phase: ZB-5msi

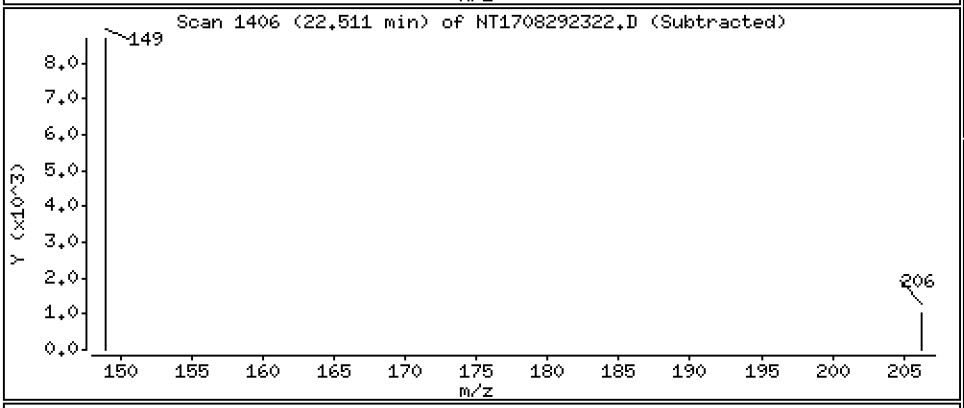
Column diameter: 0.25

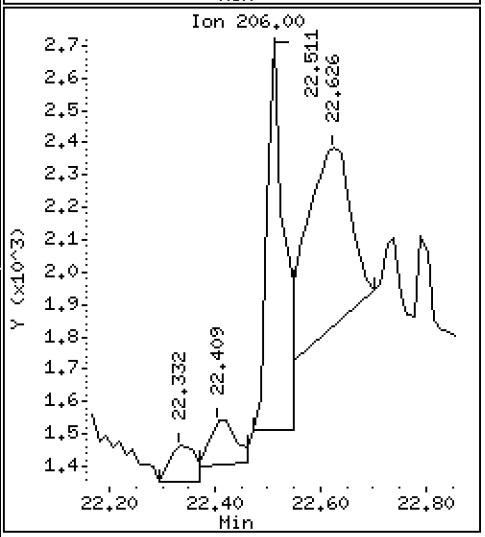
67 Butylbenzylphthalate

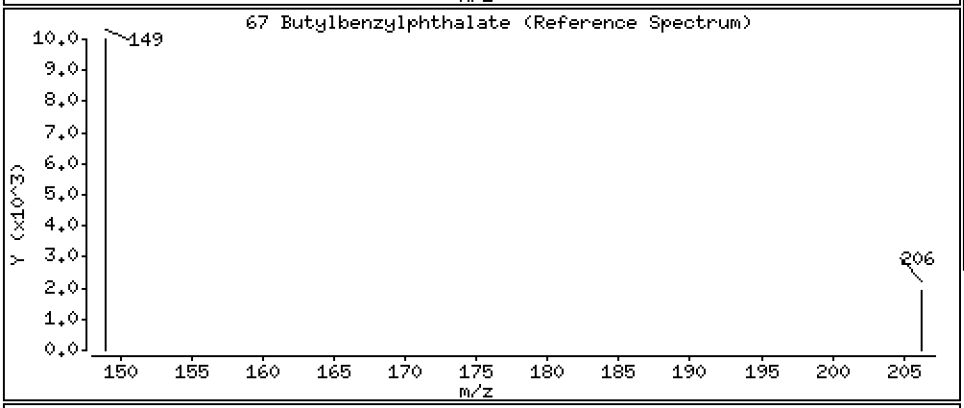
Concentration: 0.1630 ug/mL

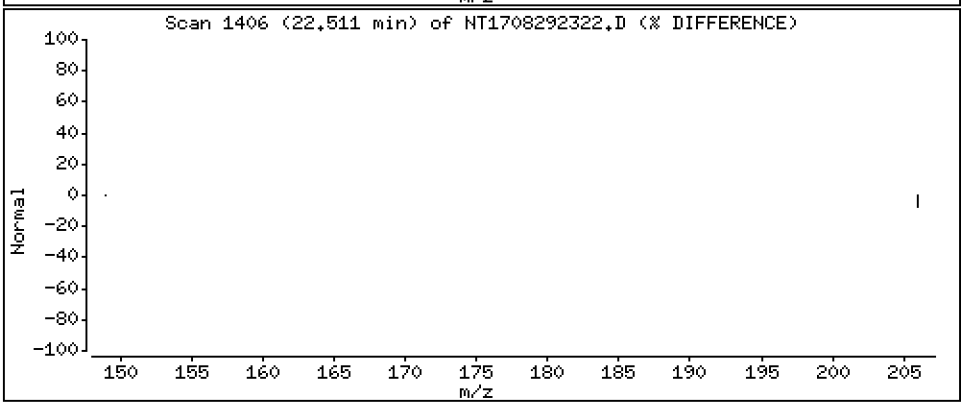












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Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

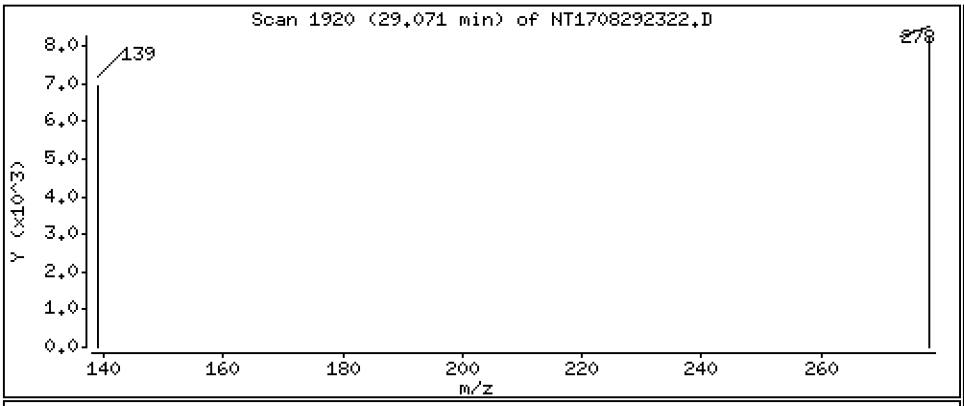
Operator: JGR

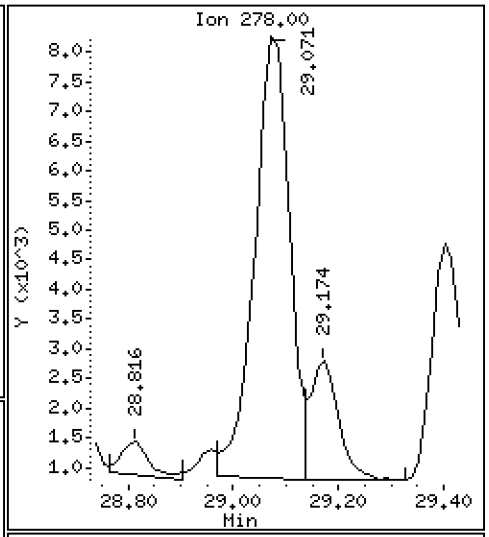
Column phase: ZB-5msi

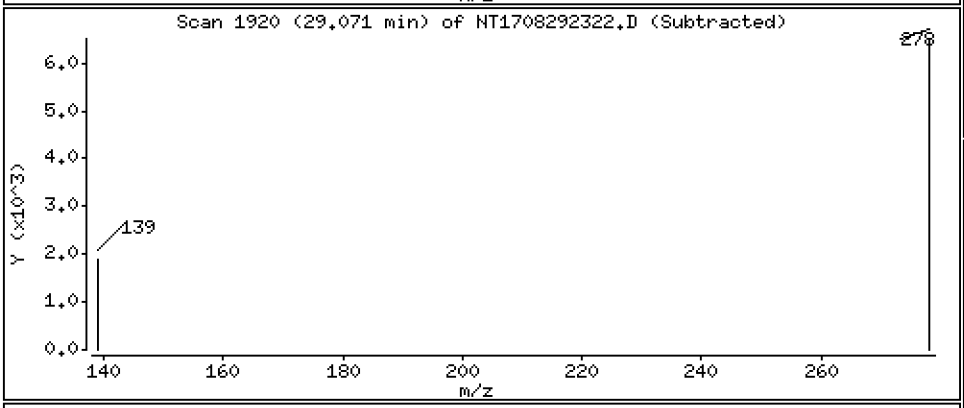
Column diameter: 0.25

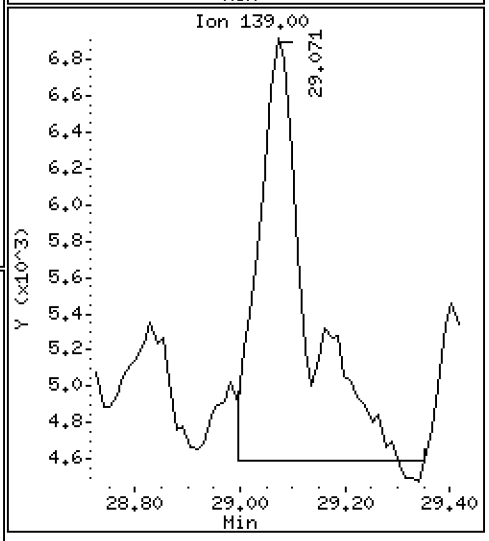
79 Dibenzo(a,h)anthracene

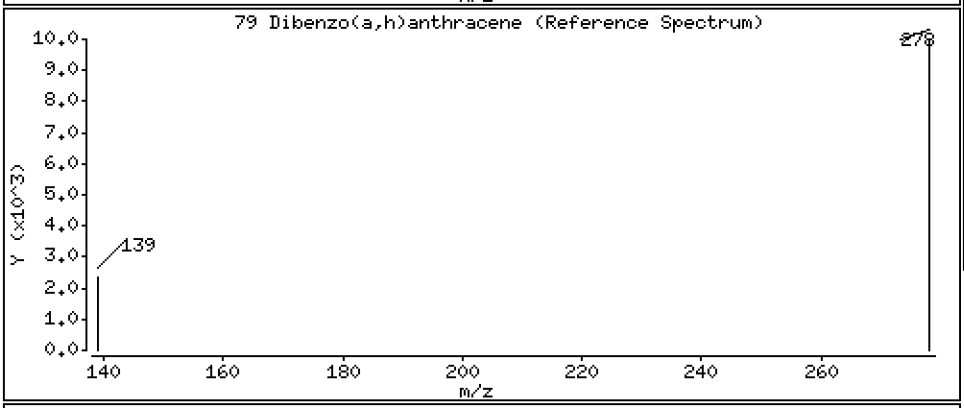
Concentration: 0.1690 ug/mL

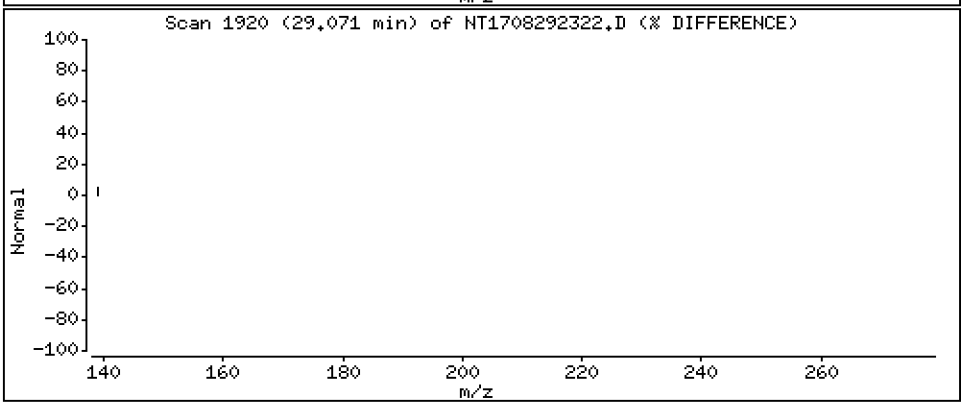












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Date : 30-AUG-2023 00:38

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-09

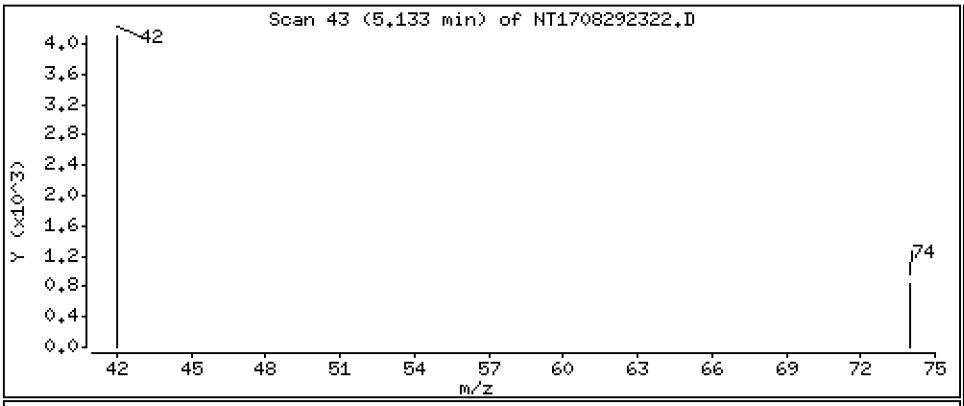
Operator: JGR

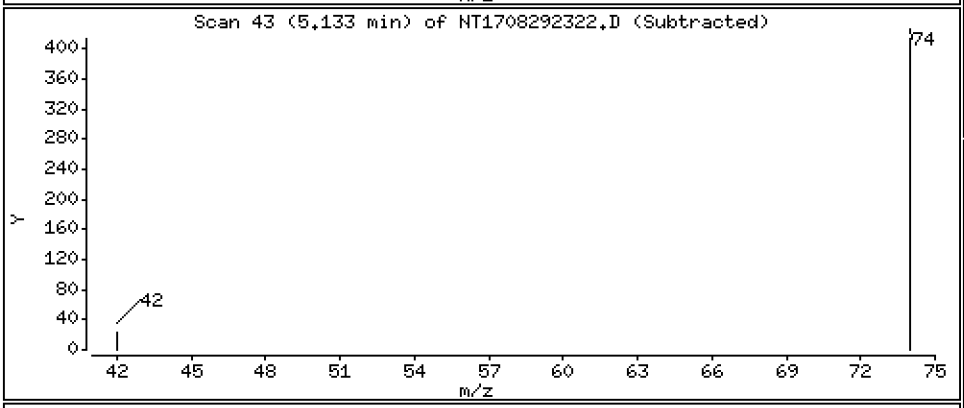
Column phase: ZB-5msi

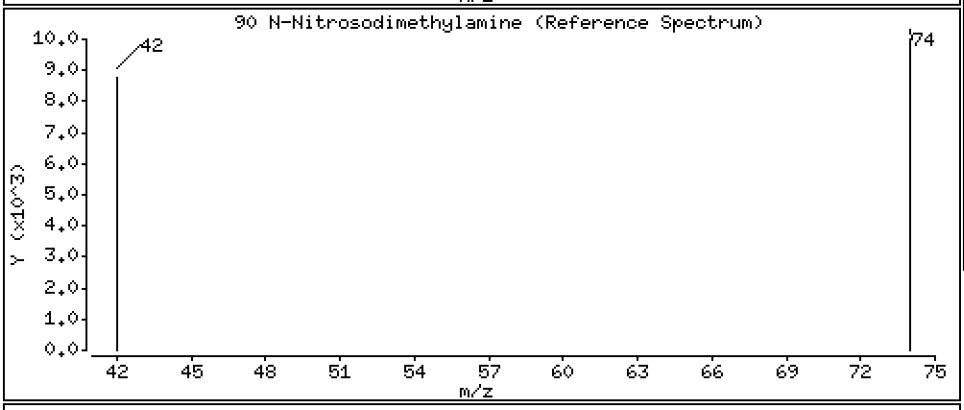
Column diameter: 0.25

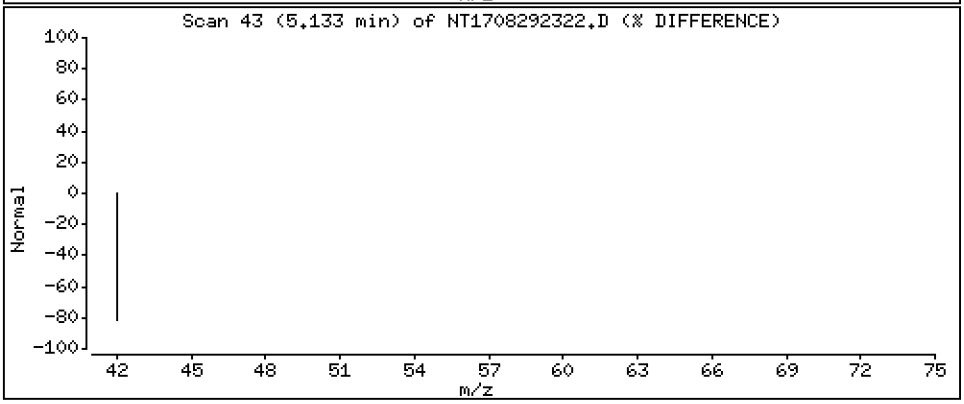
90 N-Nitrosodimethylamine

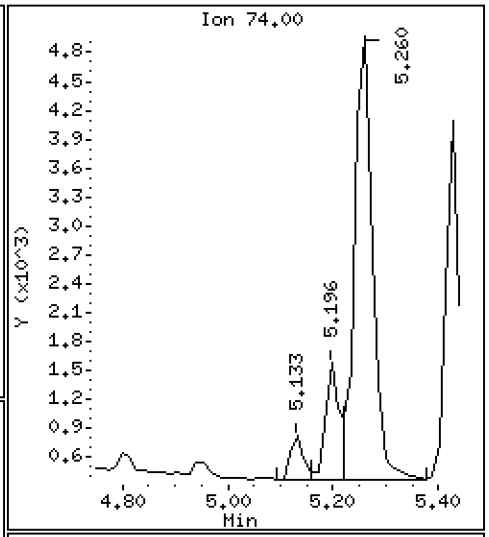
Concentration: 0.005551 ug/mL

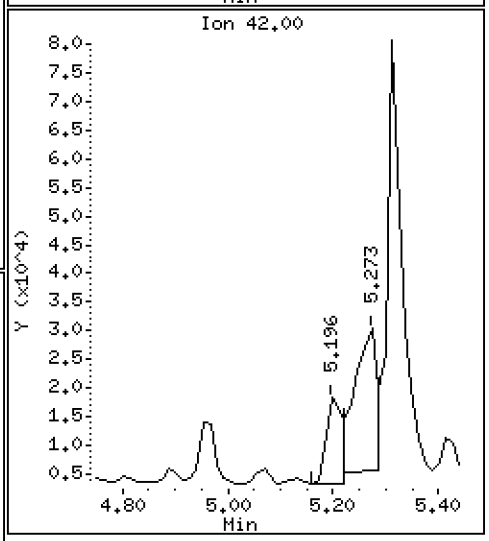












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292322.D
Lab Smp Id: 23H0579-09
Inj Date : 30-AUG-2023 00:38
Operator : JGR Inst ID: nt17.i
Smp Info : 23H0579-09
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 10:26 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.209	7.196	(0.766)	704090	5.07872	5.079(R)
	3 Phenol	94	8.789	8.788	(0.934)	25565	0.12097	0.1210
	7 1,3-Dichlorobenzene	146	9.349	9.349	(0.993)	423	0.00296	0.002959
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	333882	4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	1620	0.01171	0.01171
	11 Benzyl alcohol	79	9.681	9.681	(1.028)	40986	0.28020	0.2802
	12 1,2-Dichlorobenzene	146	9.796	9.796	(1.041)	1065	0.00794	0.007936
	13 2-Methylphenol	108	9.771	9.899	(1.038)	7823	0.06105	0.06105
	15 4-Methylphenol	108	10.167	10.167	(1.080)	166010	1.23950	1.240
	16 N-Nitroso-di-n-propylamine	70	10.103	10.218	(1.073)	16459	0.12017	0.1202
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	24 Benzoic acid	105	11.317	11.329	(0.953)	31854	0.41894	0.4189
	26 1,2,4-Trichlorobenzene	180	11.789	11.801	(0.992)	1178	0.01483	0.01483
*	27 Naphthalene-d8	136	11.878	11.891	(1.000)	1158476	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.977	14.976	(0.967)	6630	0.04977	0.04977
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	409849	4.00000	
	50 Diethylphthalate	149	16.417	16.417	(1.060)	20408	0.14734	0.1473
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	1846	0.02278	0.02278
	57 Hexachlorobenzene	284	17.894	17.894	(0.966)	1189	0.04477	0.04477
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	486	0.02697	0.02697
*	59 Phenanthrene-d10	188	18.519	18.519	(1.000)	563788	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	243606	4.11468	4.115(R)
	67 Butylbenzylphthalate	149	22.510	22.510	(0.958)	18510	0.16305	0.1630
*	69 Chrysene-d12	240	23.506	23.505	(1.000)	427830	4.00000	
*	77 Perylene-d12	264	26.236	26.235	(1.000)	687649	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.071	29.084	(1.108)	34316	0.16895	0.1690
	90 N-Nitrosodimethylamine	74	5.132	5.094	(0.545)	783	0.00555	0.005551

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i Calibration Date: 29-AUG-2023
Lab File ID: NT1708292322.D Calibration Time: 22:47
Lab Smp Id: 23H0579-09
Analysis Type: SV Level:
Quant Type: ISTD Sample Type:
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	358343	179172	716686	333882	-6.83
27 Naphthalene-d8	1242877	621439	2485754	1158476	-6.79
42 Acenaphthene-d10	464388	232194	928776	409849	-11.74
59 Phenanthrene-d10	660913	330457	1321826	563788	-14.70
69 Chrysene-d12	477958	238979	955916	427830	-10.49
77 Perylene-d12	659026	329513	1318052	687649	4.34

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	0.00
27 Naphthalene-d8	11.89	11.39	12.39	11.88	-0.11
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	0.00
59 Phenanthrene-d10	18.52	18.02	19.02	18.52	0.00
69 Chrysene-d12	23.51	23.01	24.01	23.51	0.00
77 Perylene-d12	26.24	25.74	26.74	26.24	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292322.D

Lab ID: 23H0579-09
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   30-AUG-2023 00:38

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.038	1.052	-0.0136	2-Methylphenol
1.073	1.085	-0.0122	N-Nitroso-di-n-propylamine

RRT check based on Ccal File: SIM.b/NT1708292319B.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1169A

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23H0579-10 A	SDG:	23H0579
Sampled:	01/17/23 11:08	Prepared:	08/25/23 12:39	File ID:	NT1708292323.D
% Solids:	55.24	Preparation:	EPA 3546 (Microwave)	Analyzed:	08/30/23 01:15
Batch:	BLH0669	Sequence:	SLH0447	Initial/Final:	18.17 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GH00045
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
105-67-9	2,4-Dimethylphenol	1	19.9	U	2.2	19.9

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	747.23	541	72.4	27 - 120	Q
p-Terphenyl-d14	498.15	427	85.8	37 - 120	Q

INTERNAL STANDARDS	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	396887	9.413	358343	9.413	
Naphthalene-d8	1463604	11.878	1242877	11.891	
Acenaphthene-d10	534724	15.487	464388	15.487	
Phenanthrene-d10	753603	18.519	660913	18.519	
Chrysene-d12	474184	23.506	477958	23.505	
Perylene-d12	731033	26.248	659026	26.235	

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292323.D

Date : 30-AUG-2023 01:15

Client ID:

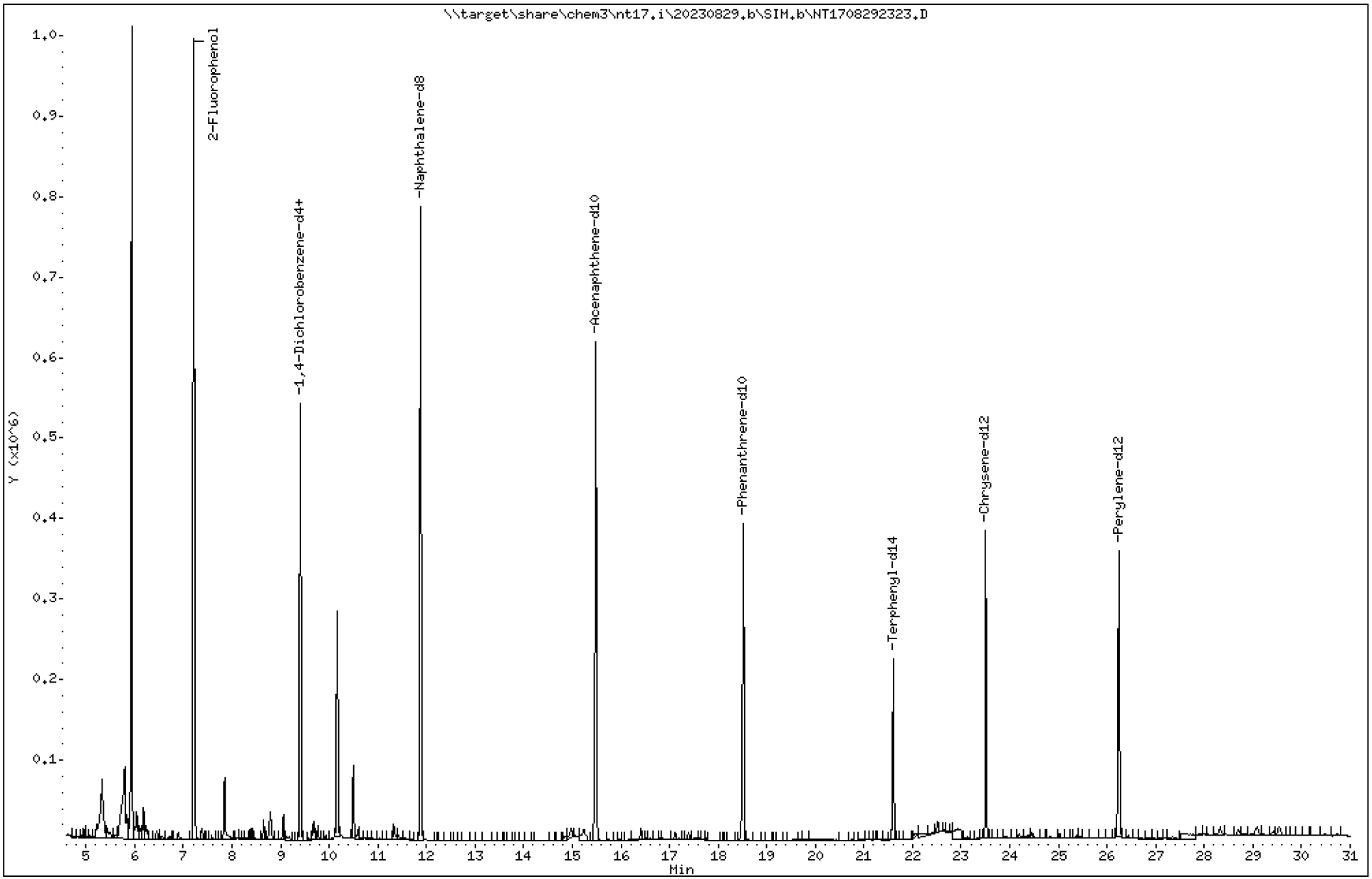
Sample Info: 23H0579-10

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

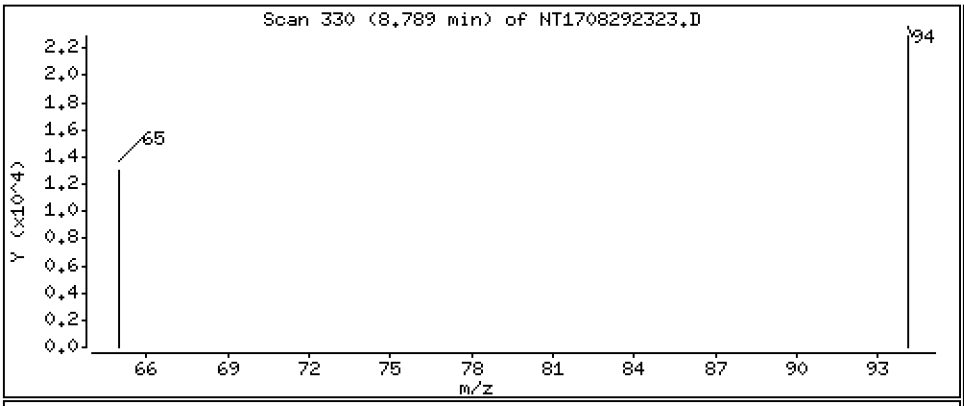
Operator: JGR

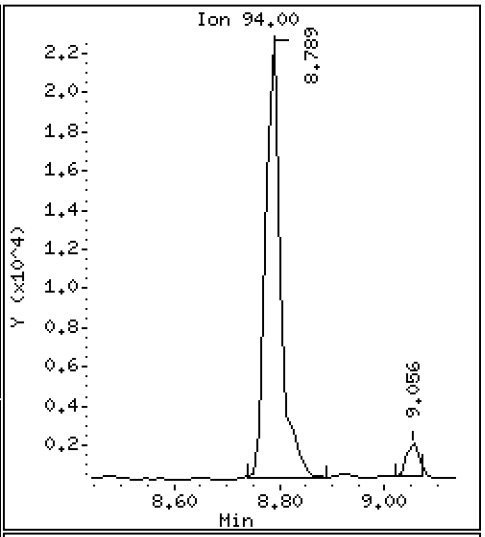
Column phase: ZB-5msi

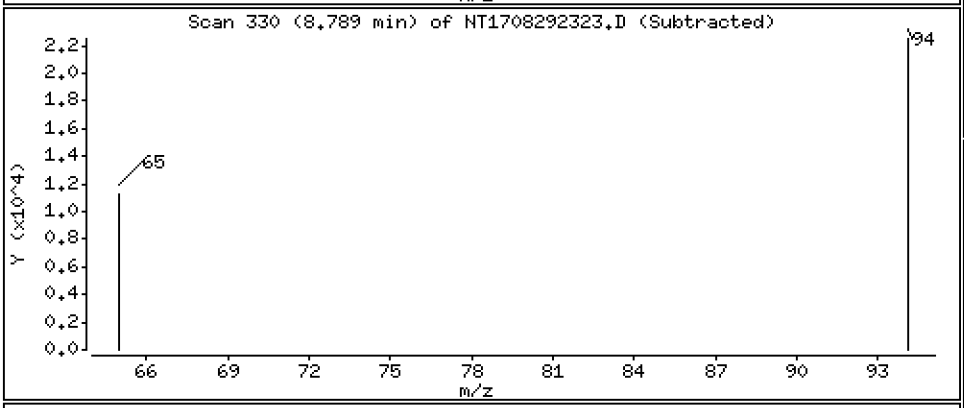
Column diameter: 0.25

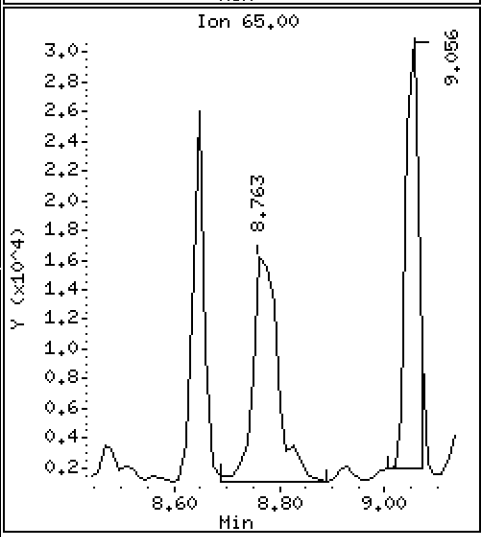
3 Phenol

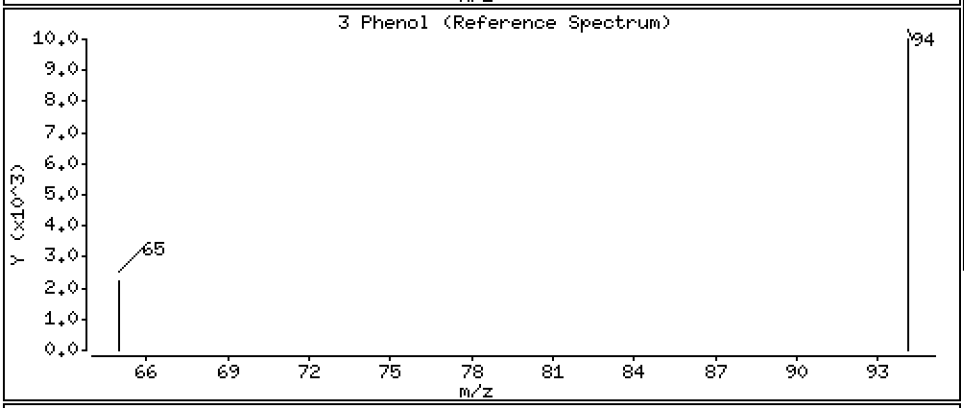
Concentration: 0.1750 ug/mL

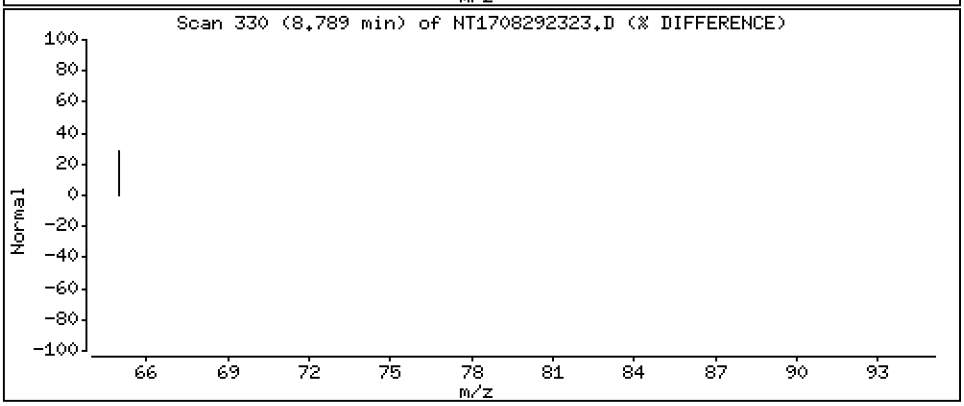












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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

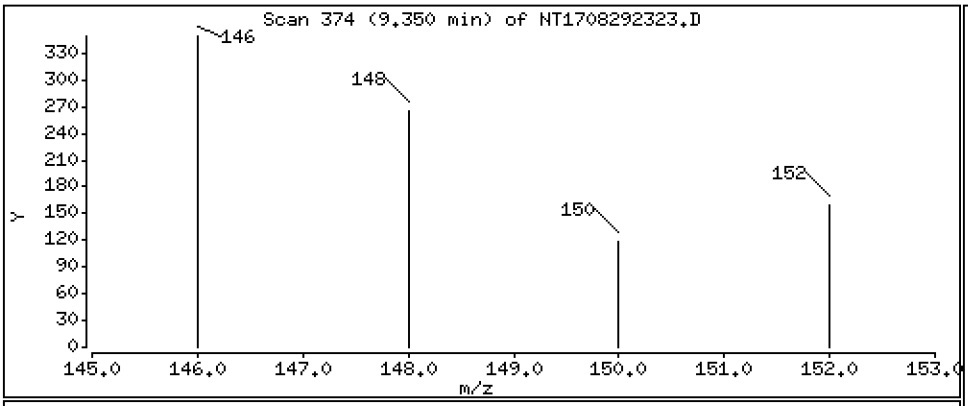
Operator: JGR

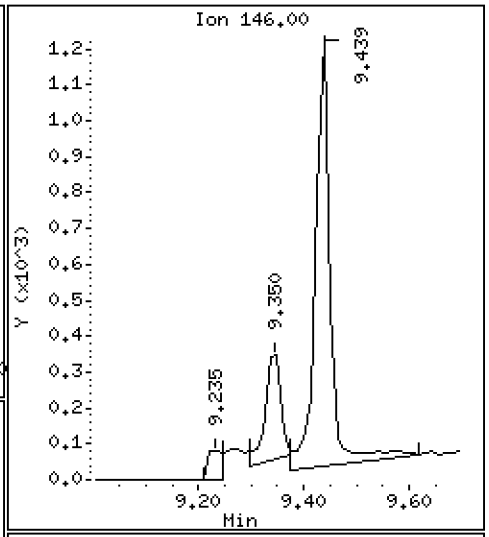
Column phase: ZB-5msi

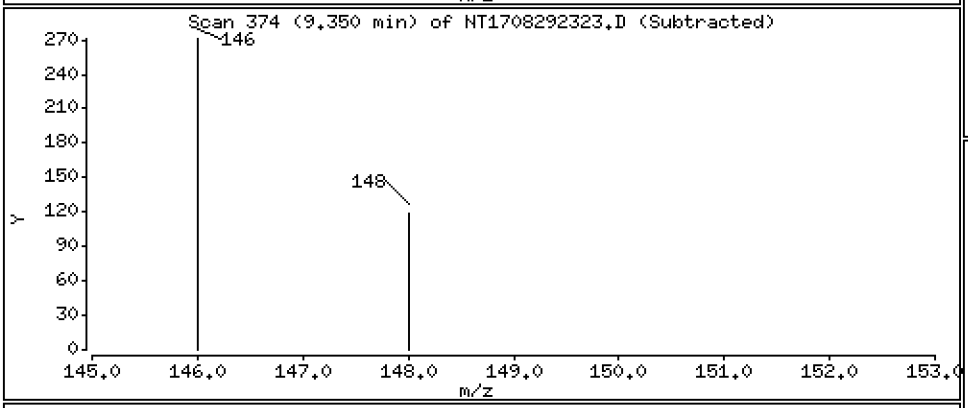
Column diameter: 0.25

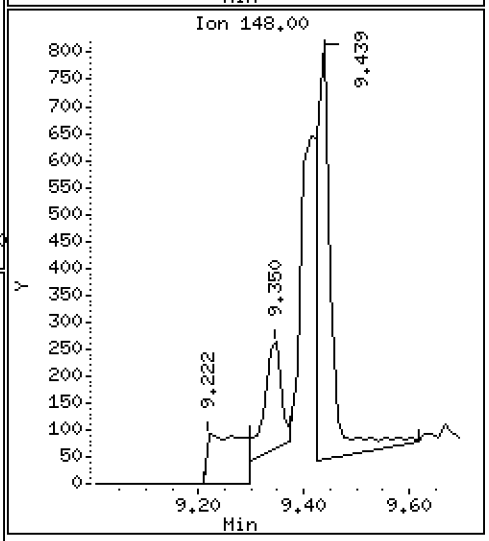
7 1,3-Dichlorobenzene

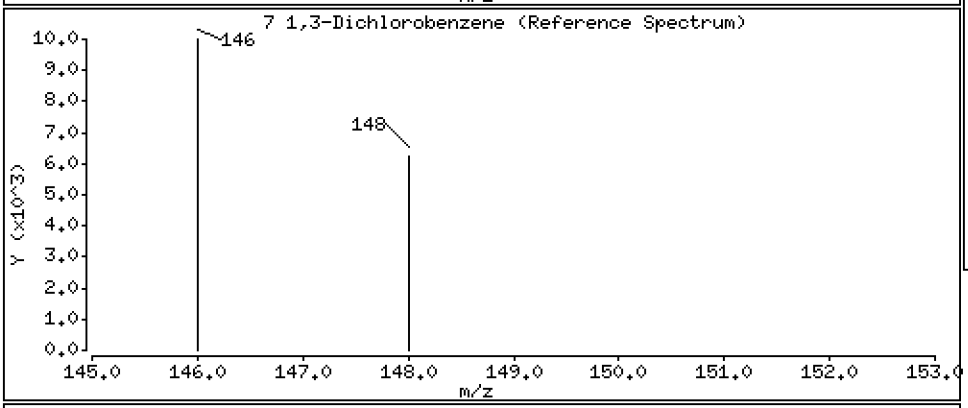
Concentration: 0.003702 ug/mL

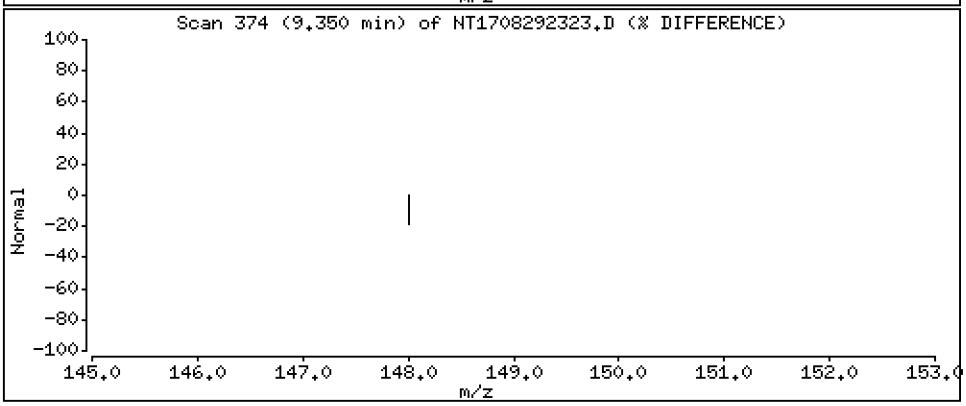












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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

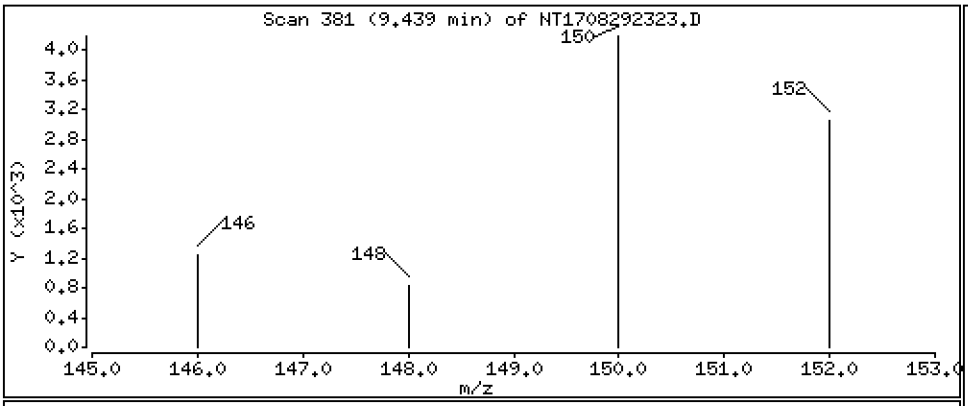
Operator: JGR

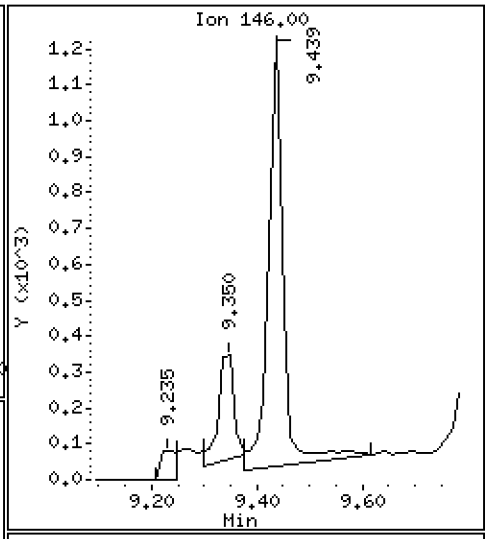
Column phase: ZB-5msi

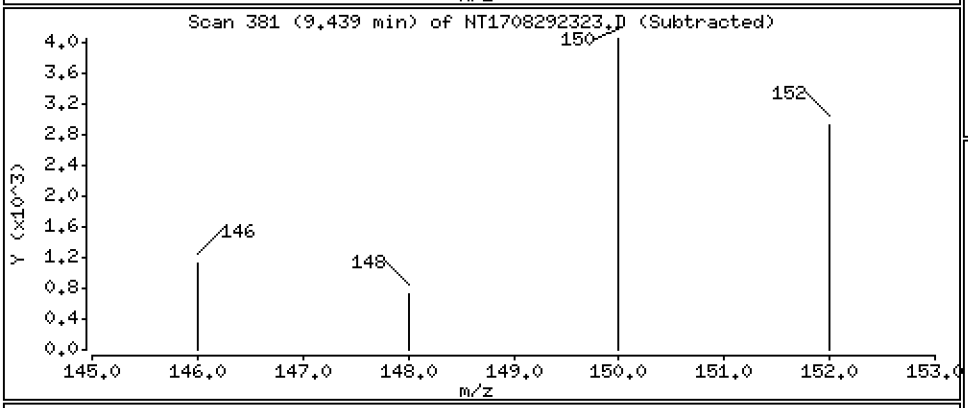
Column diameter: 0.25

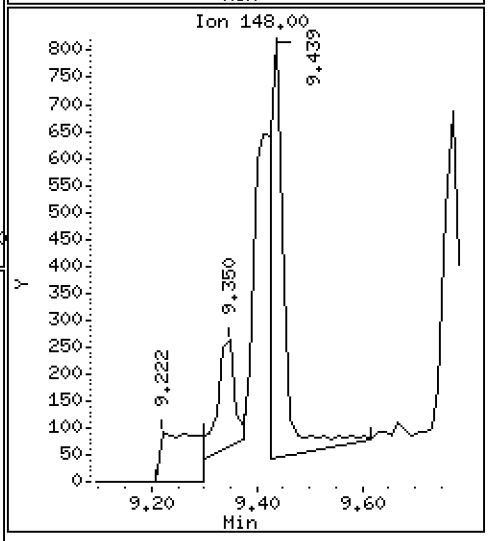
9 1,4-Dichlorobenzene

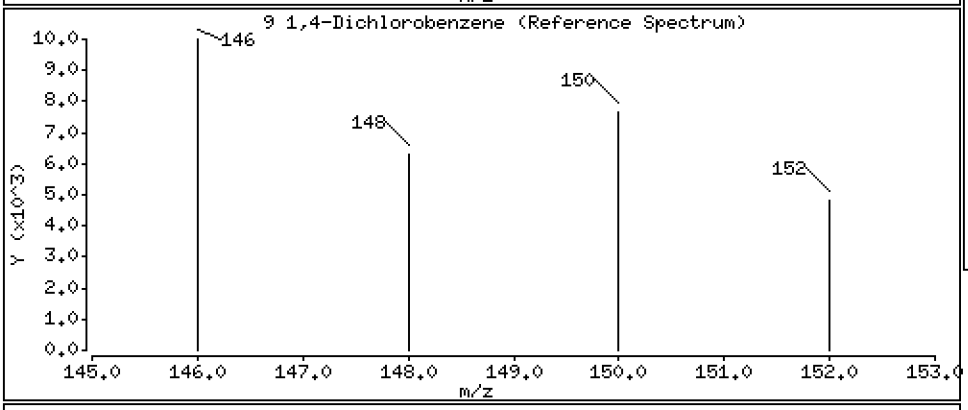
Concentration: 0.01413 ug/mL

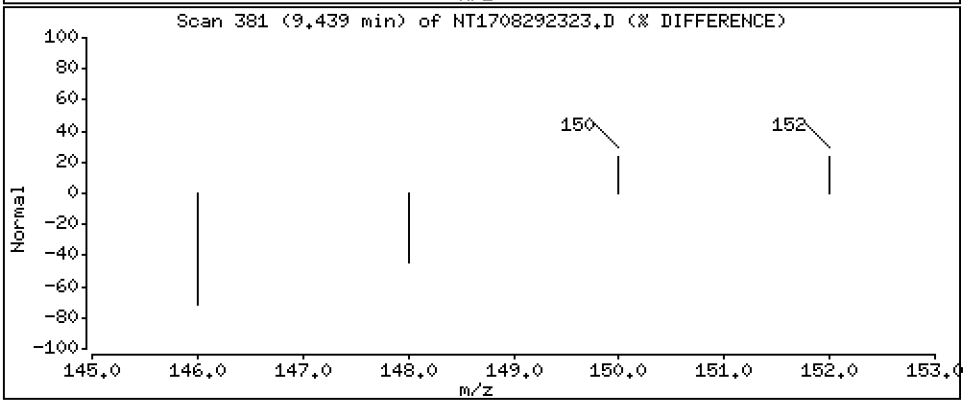












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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

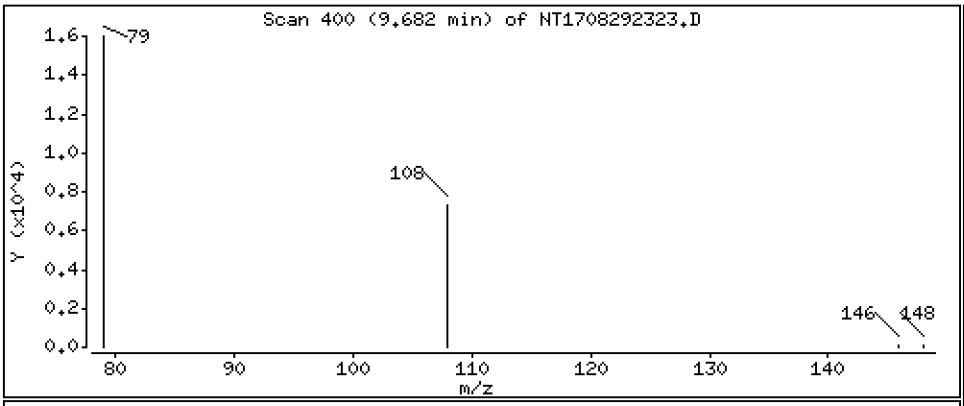
Operator: JGR

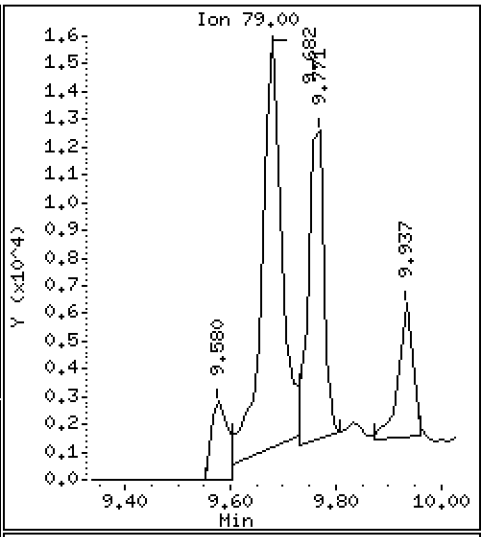
Column phase: ZB-5msi

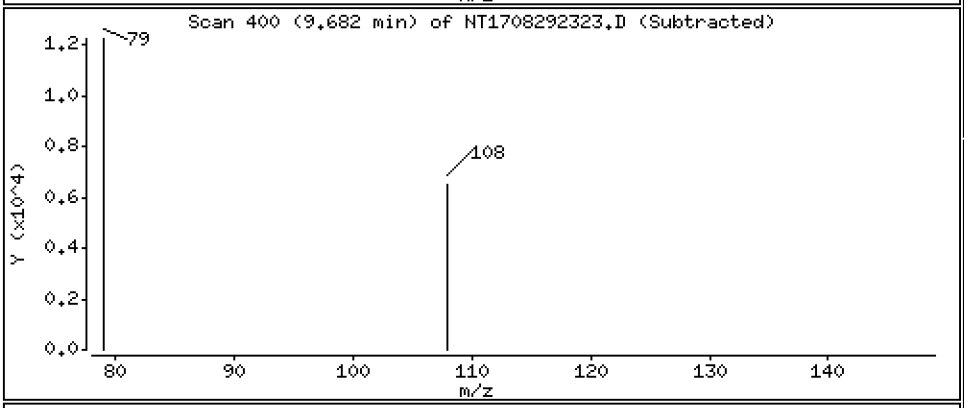
Column diameter: 0.25

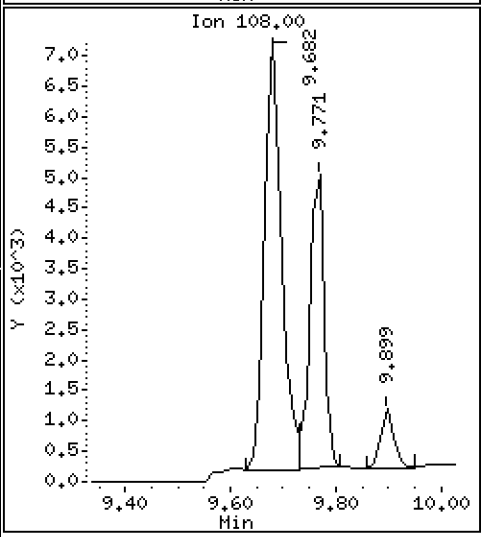
11 Benzyl alcohol

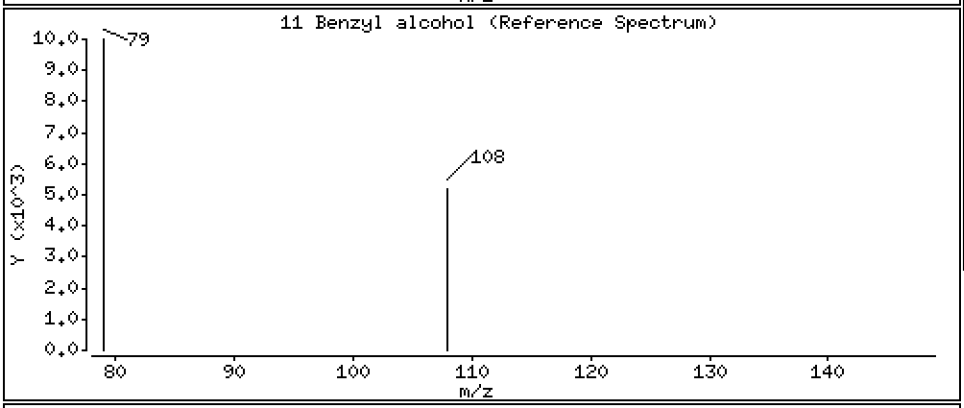
Concentration: 0.2295 ug/mL

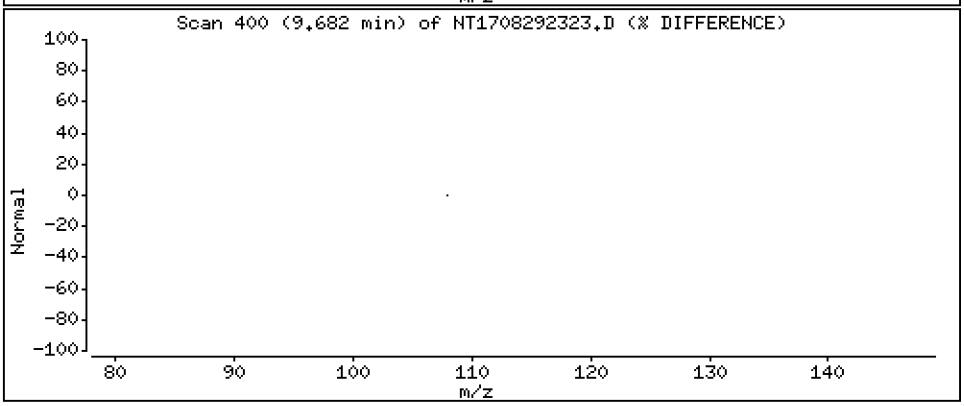












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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

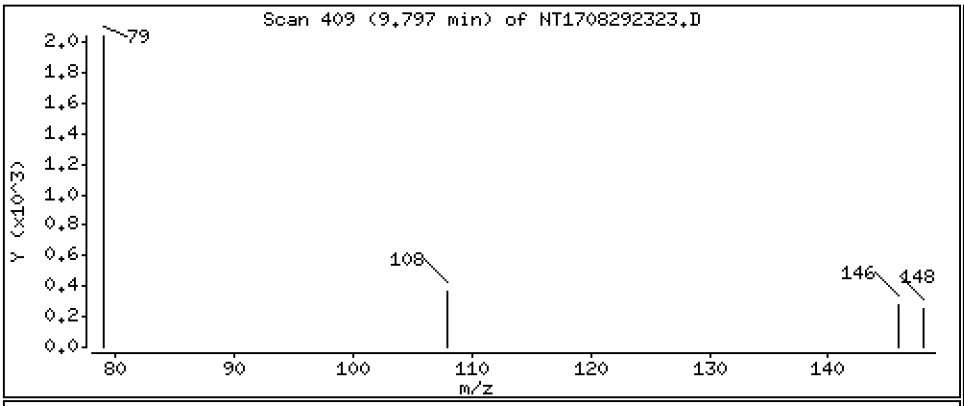
Operator: JGR

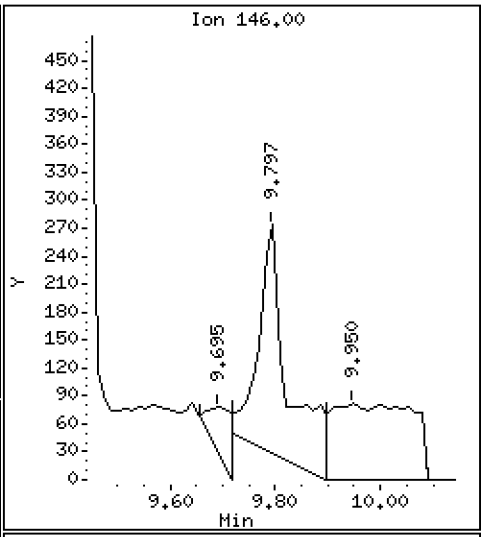
Column phase: ZB-5msi

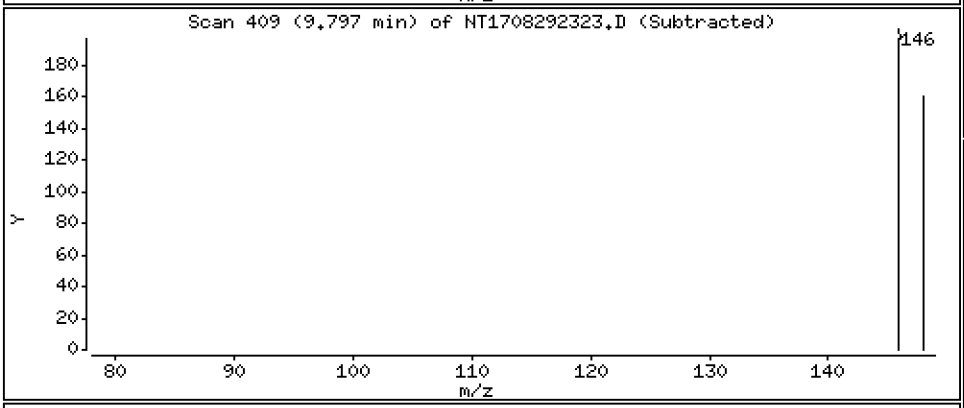
Column diameter: 0.25

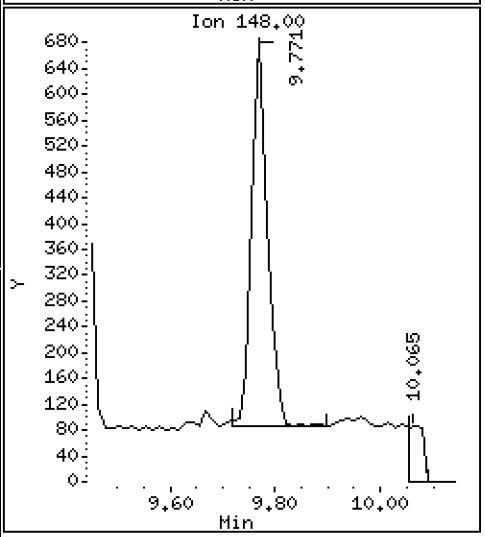
12 1,2-Dichlorobenzene

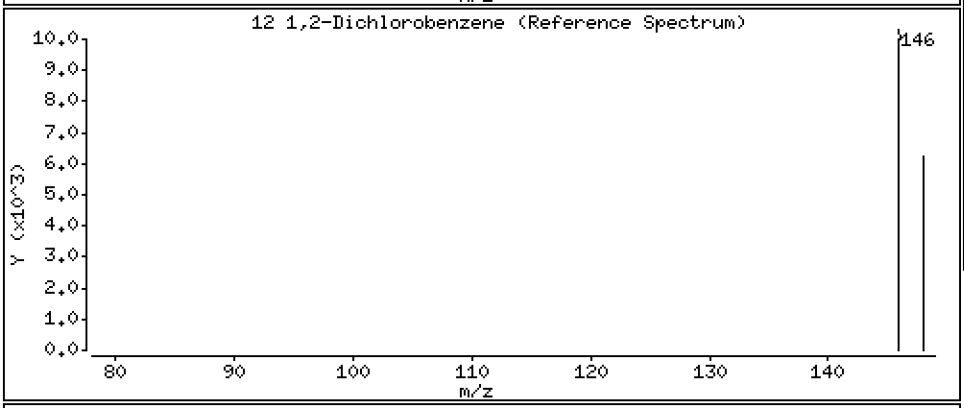
Concentration: 0.006219 ug/mL

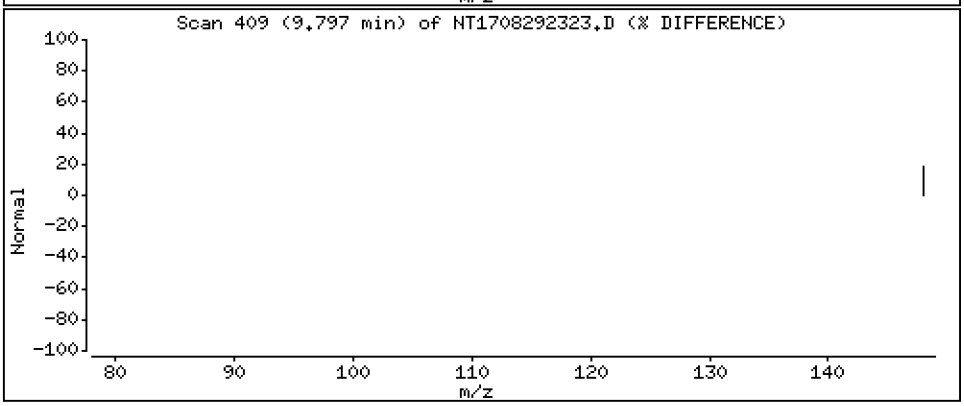












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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

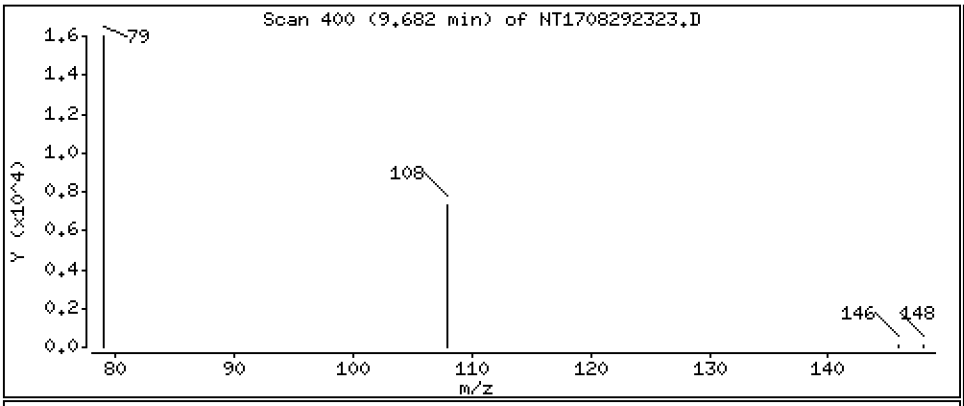
Operator: JGR

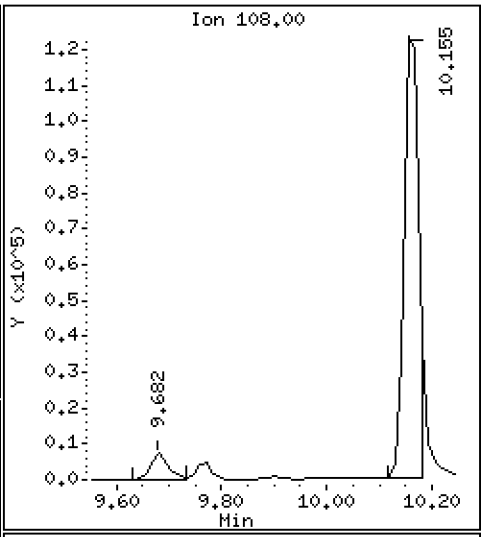
Column phase: ZB-5msi

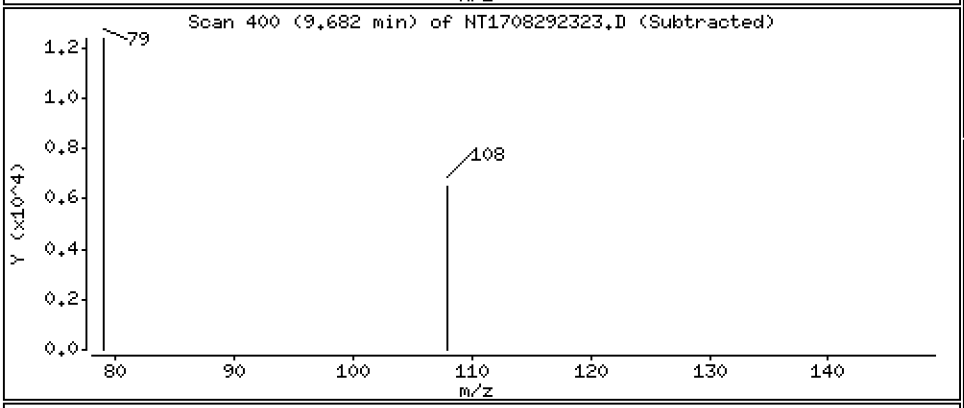
Column diameter: 0.25

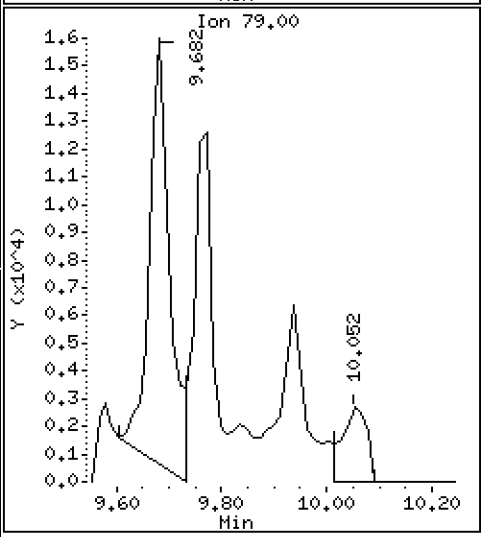
13 2-Methylphenol

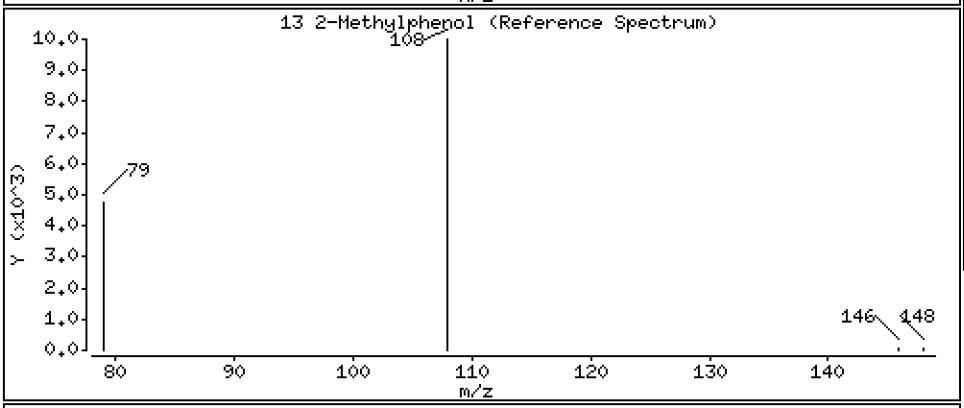
Concentration: 0.1074 ug/mL

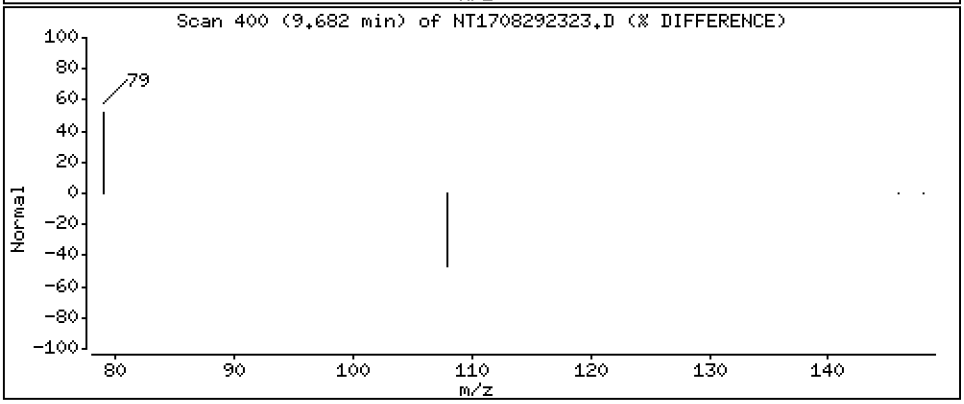












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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

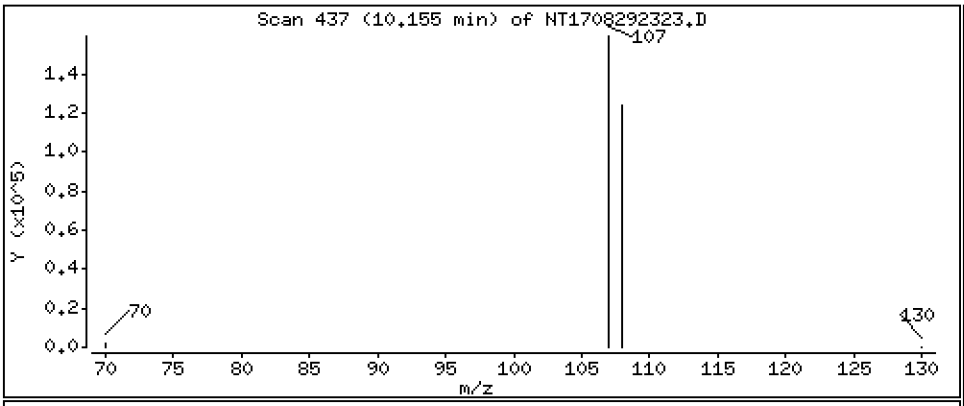
Operator: JGR

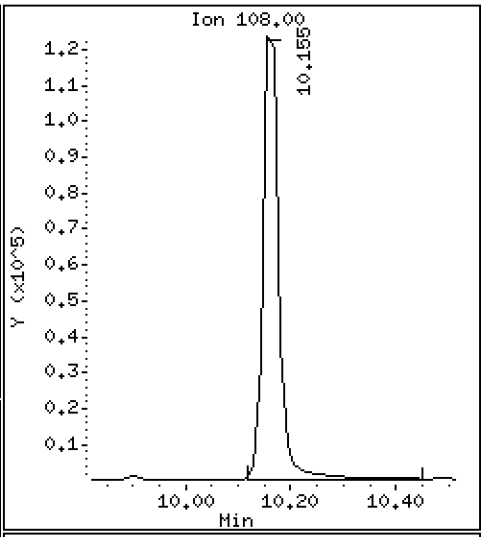
Column phase: ZB-5msi

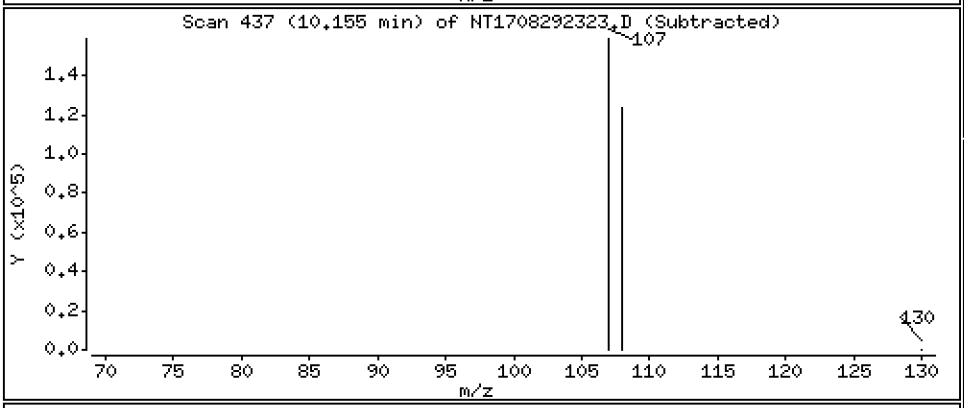
Column diameter: 0.25

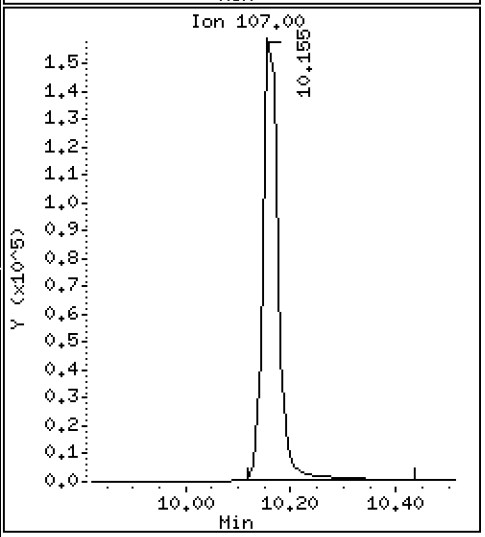
15 4-Methylphenol

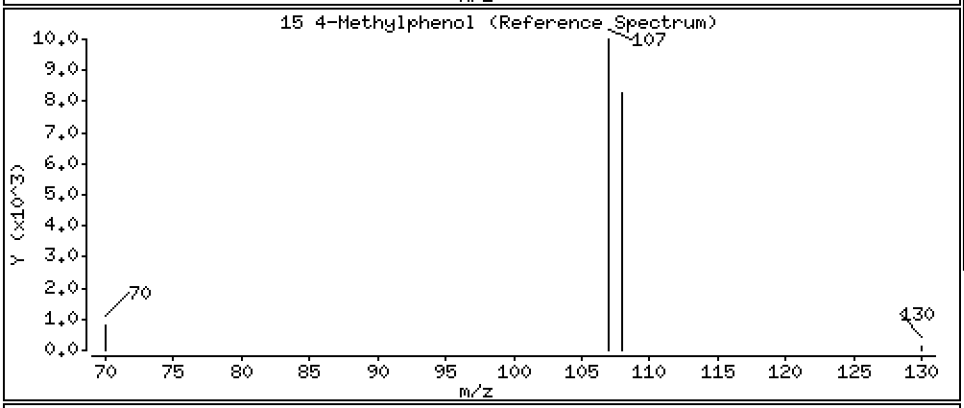
Concentration: 1.646 ug/mL

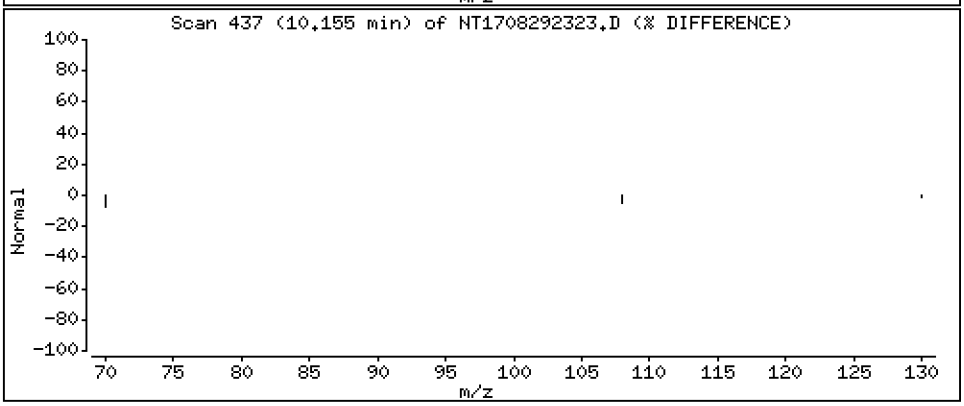












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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

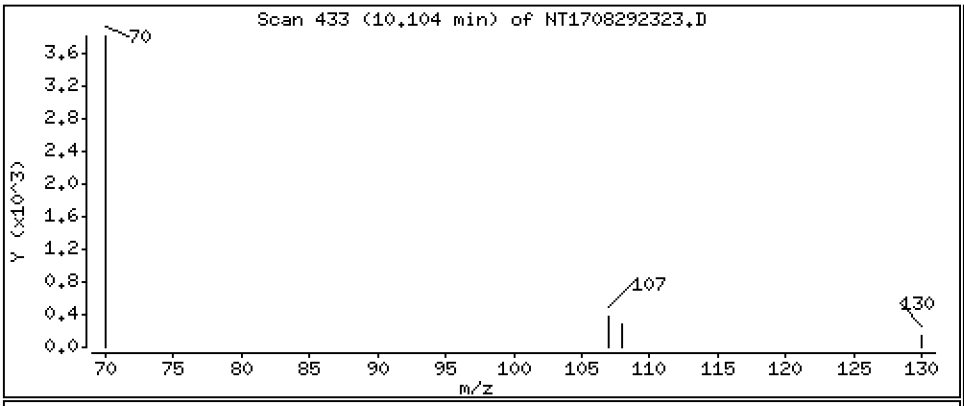
Operator: JGR

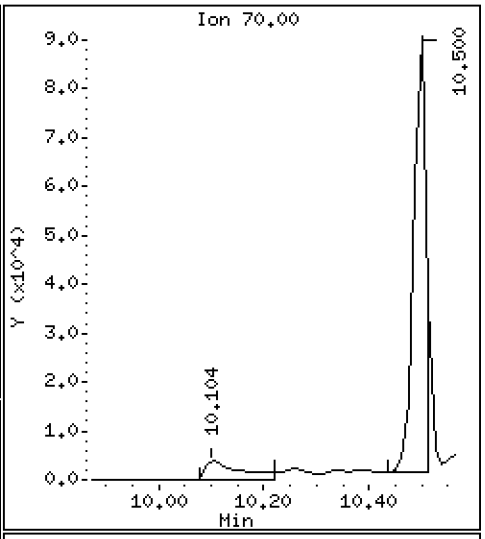
Column phase: ZB-5msi

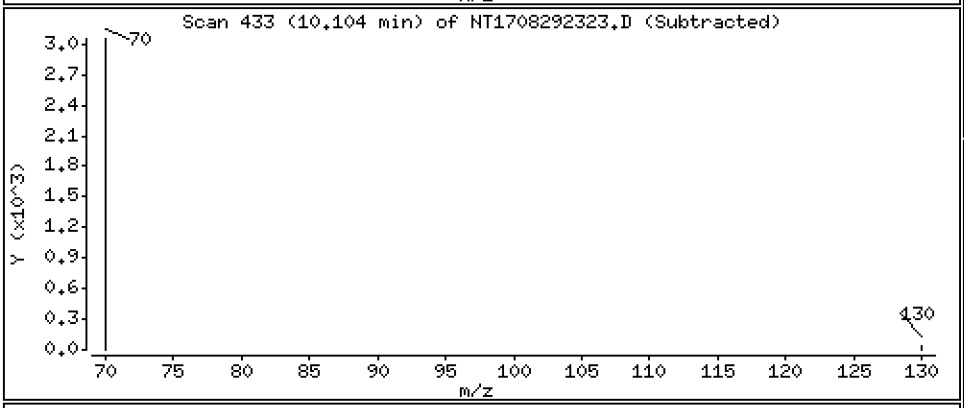
Column diameter: 0.25

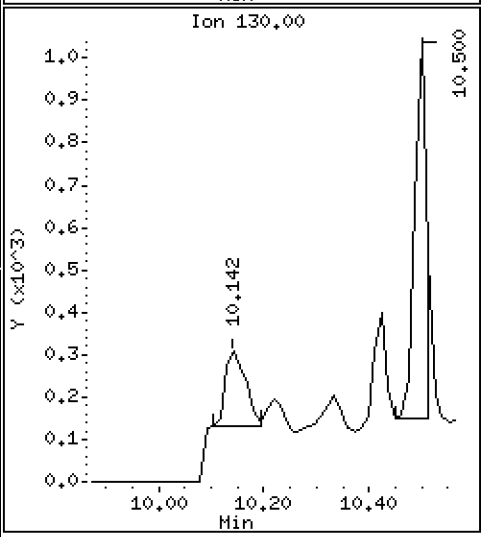
16 N-Nitroso-di-n-propylamine

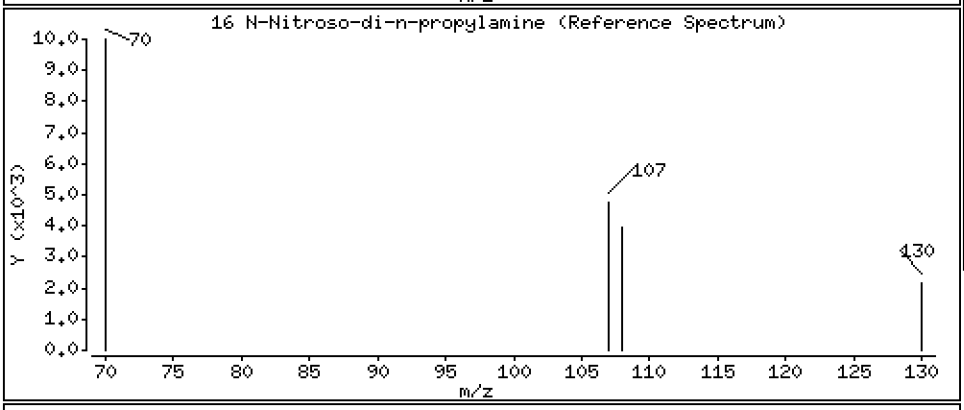
Concentration: 0.1117 ug/mL

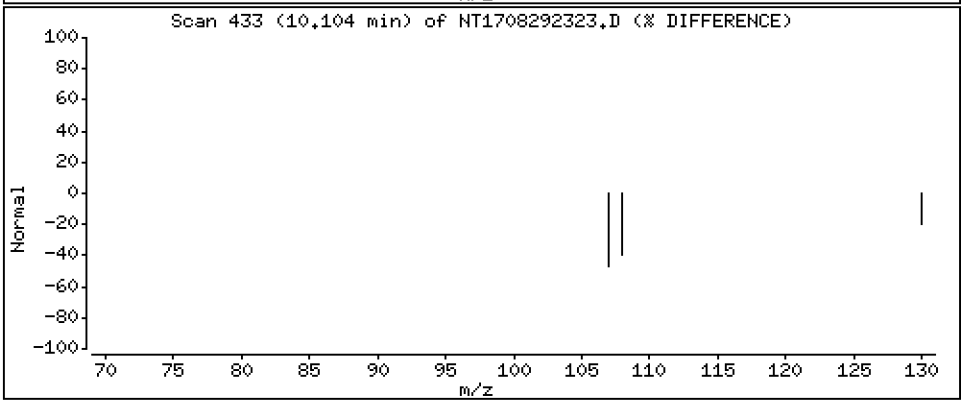












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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

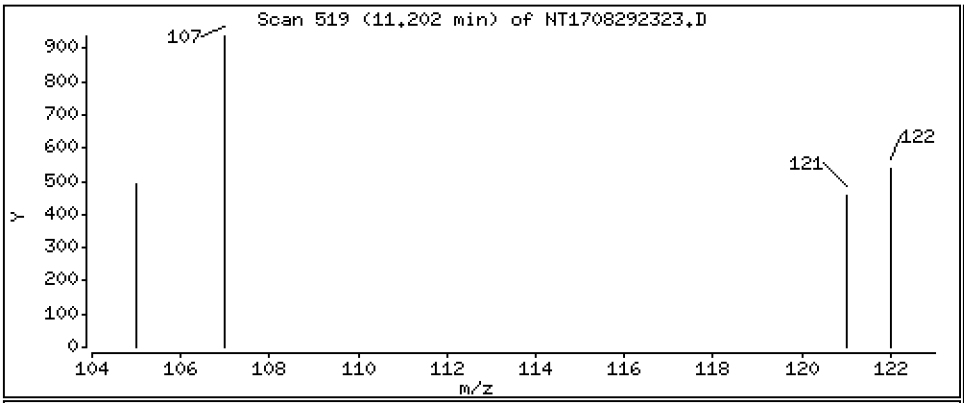
Operator: JGR

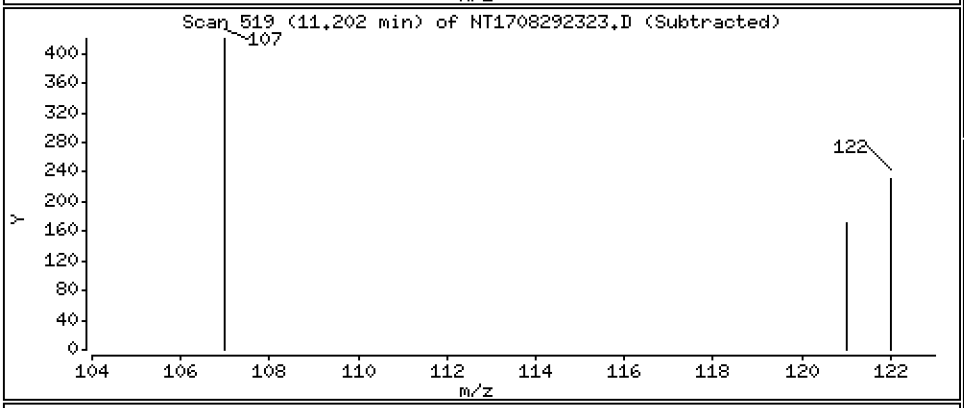
Column phase: ZB-5msi

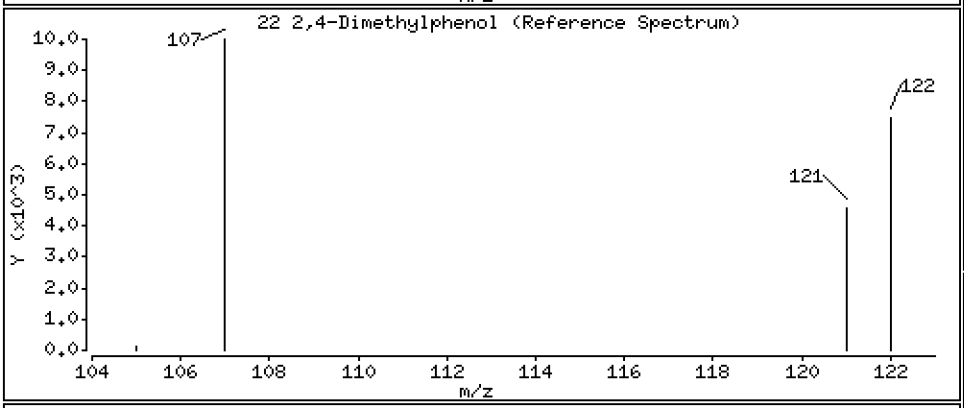
Column diameter: 0.25

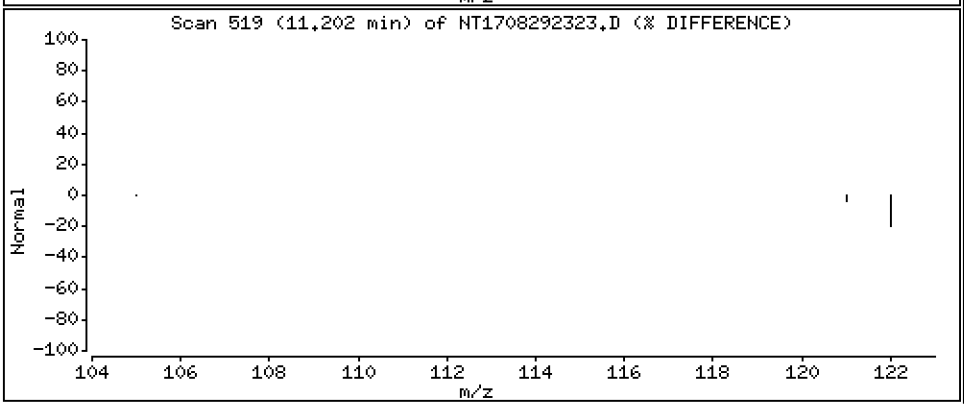
22 2,4-Dimethylphenol

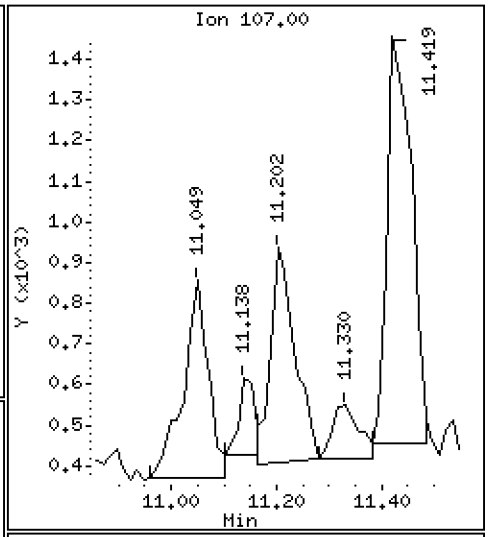
Concentration: 0.01184 ug/mL

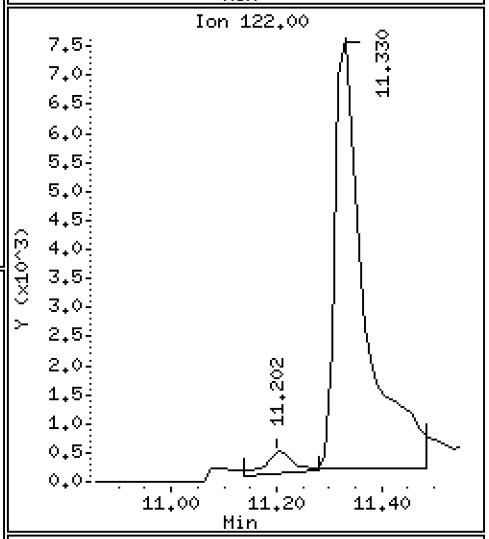


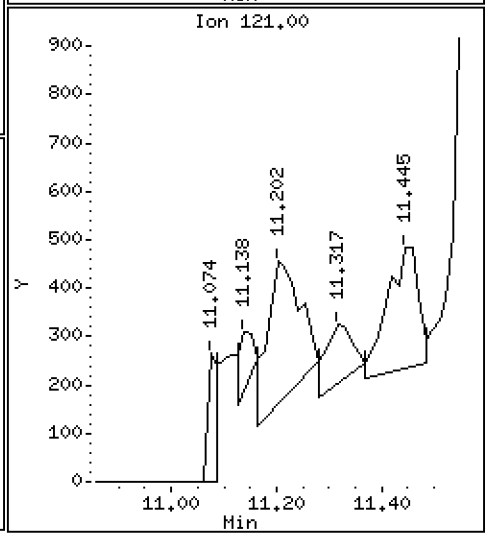












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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

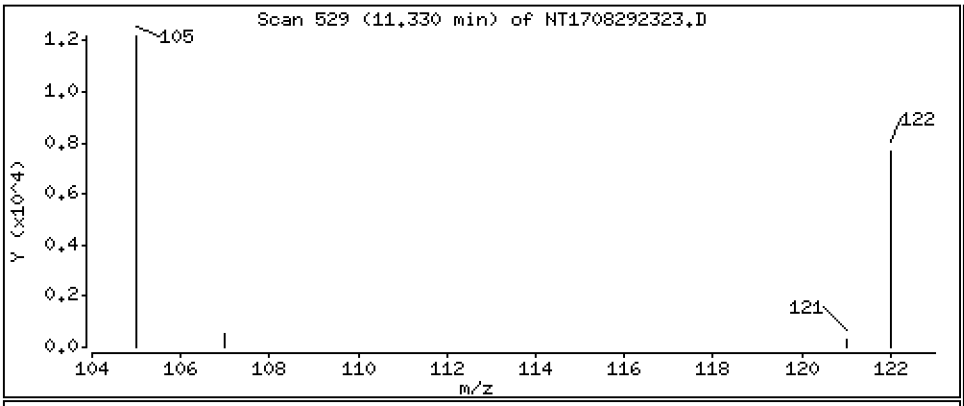
Operator: JGR

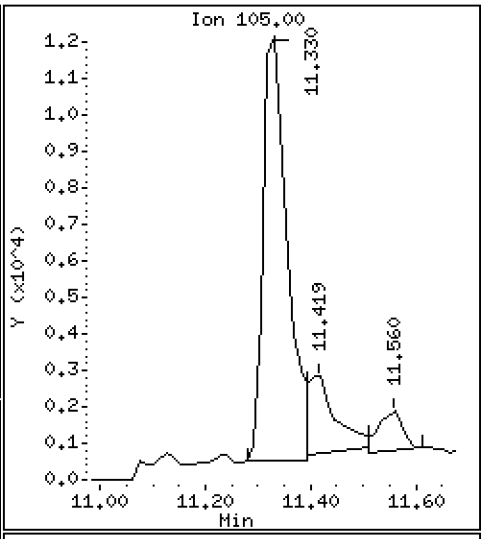
Column phase: ZB-5msi

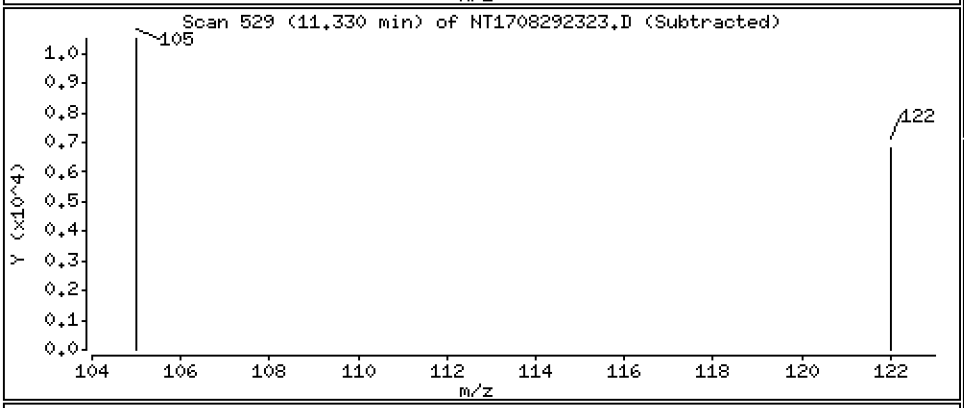
Column diameter: 0.25

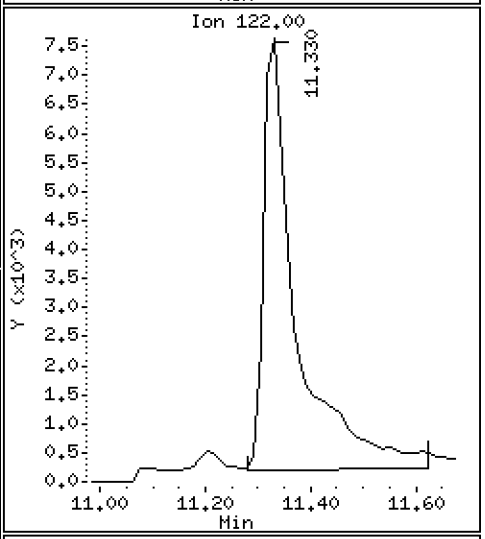
24 Benzoic acid

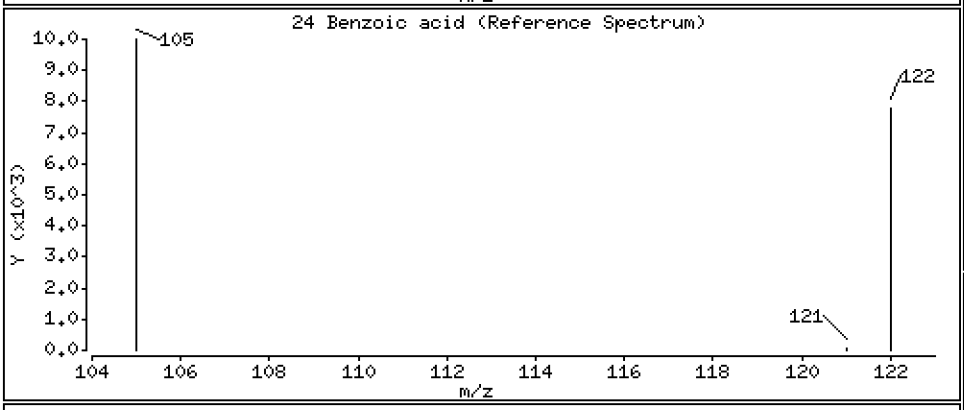
Concentration: 0.3976 ug/mL

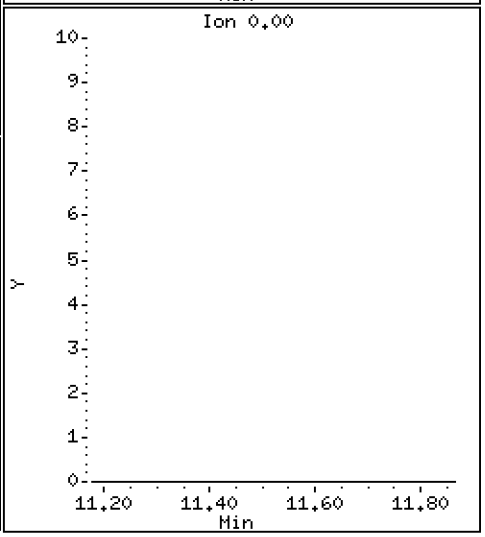


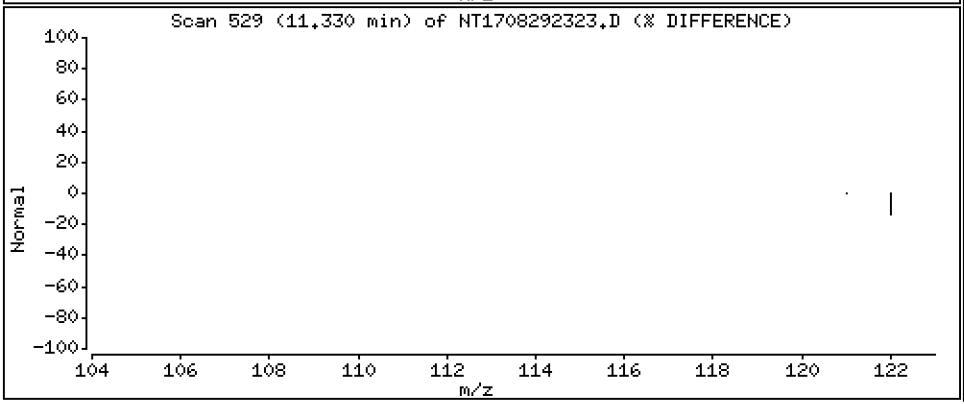












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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

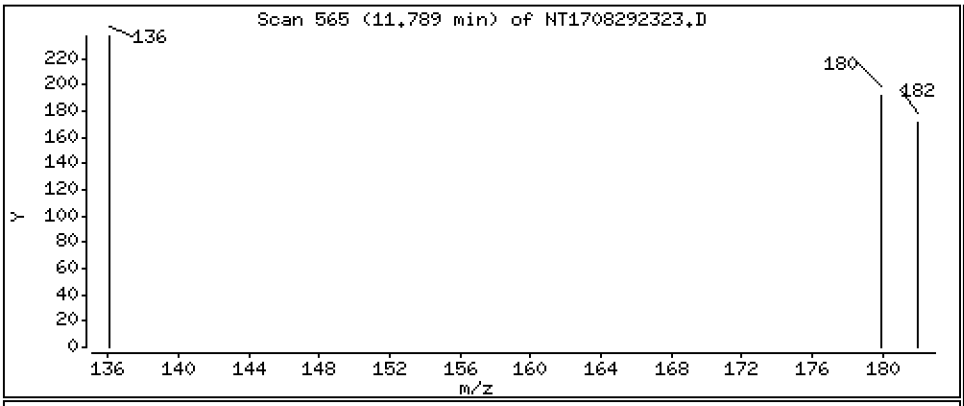
Operator: JGR

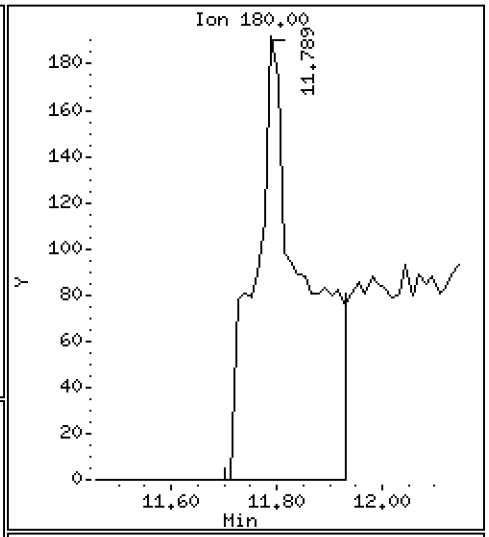
Column phase: ZB-5msi

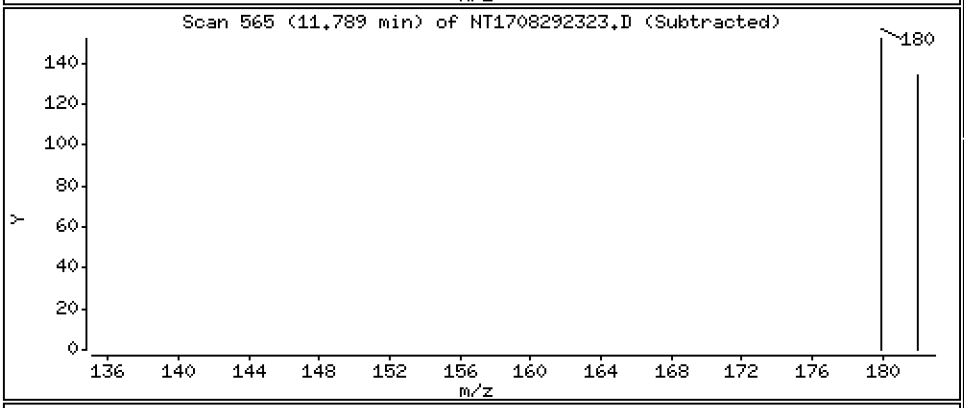
Column diameter: 0.25

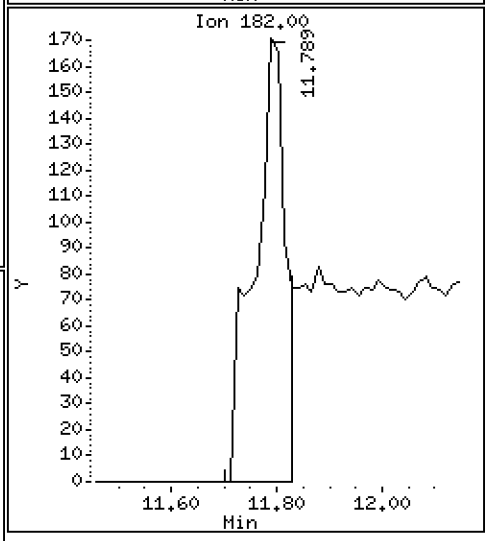
26 1,2,4-Trichlorobenzene

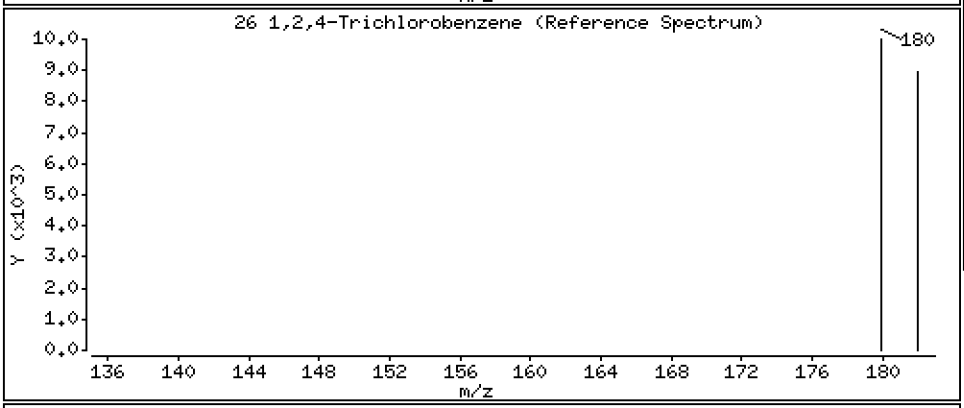
Concentration: 0.01262 ug/mL

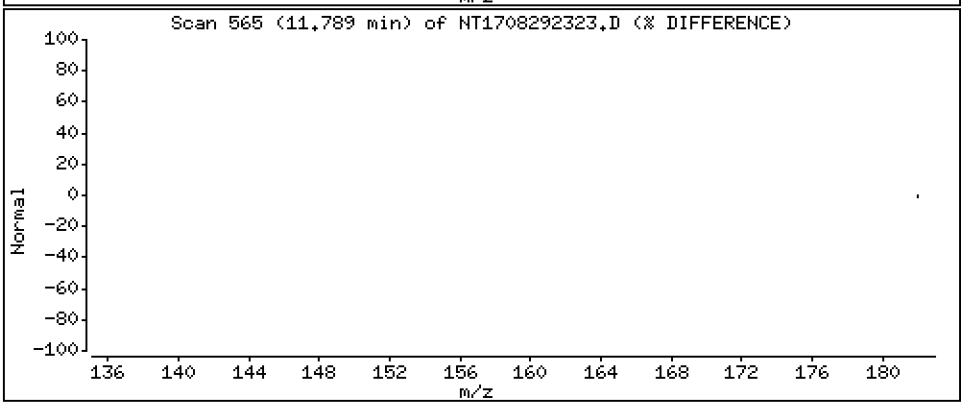












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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

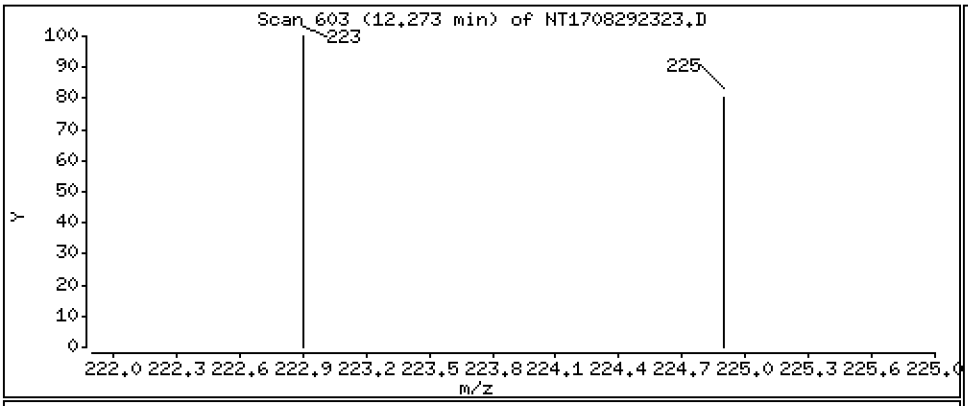
Operator: JGR

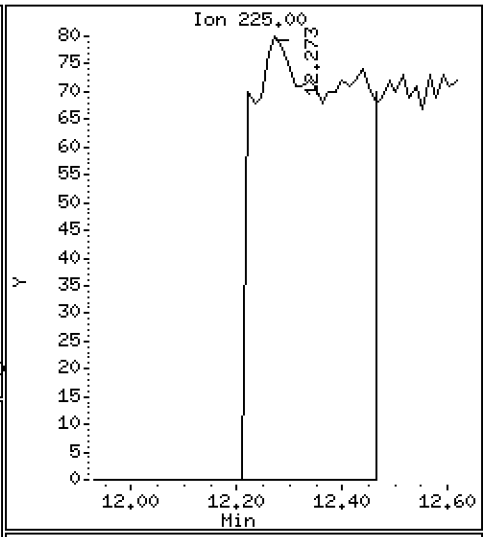
Column phase: ZB-5msi

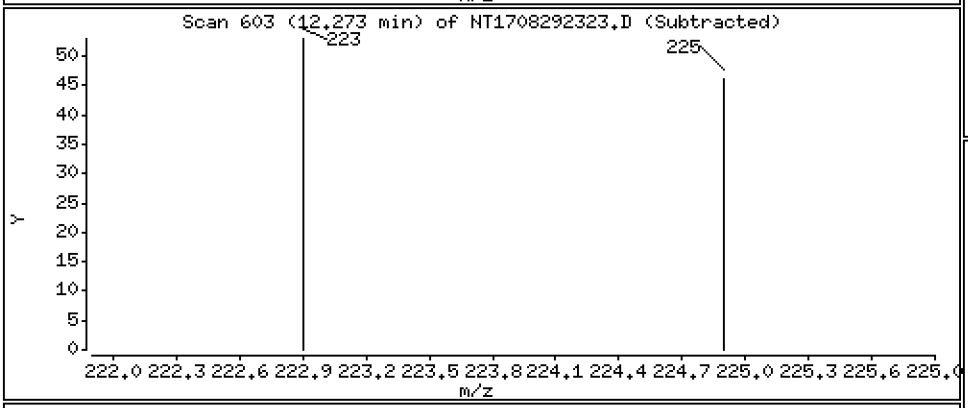
Column diameter: 0.25

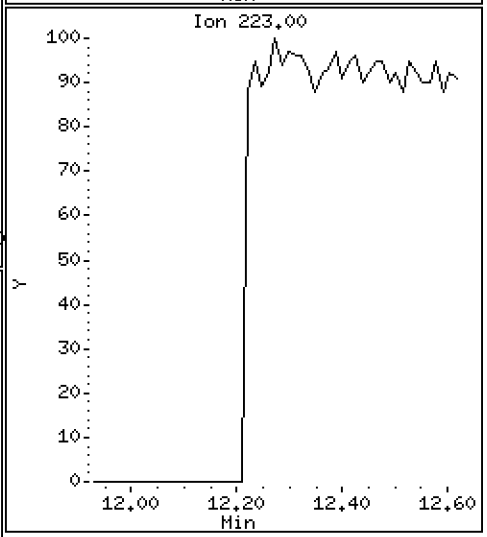
30 Hexachlorobutadiene

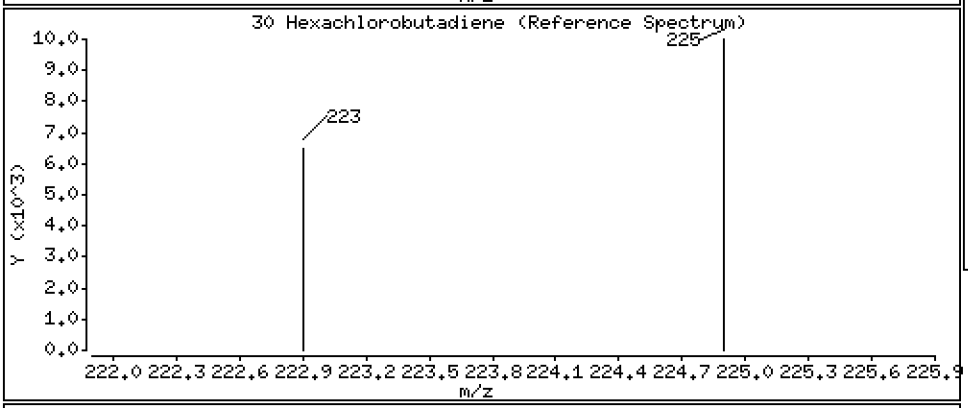
Concentration: 0.02341 ug/mL

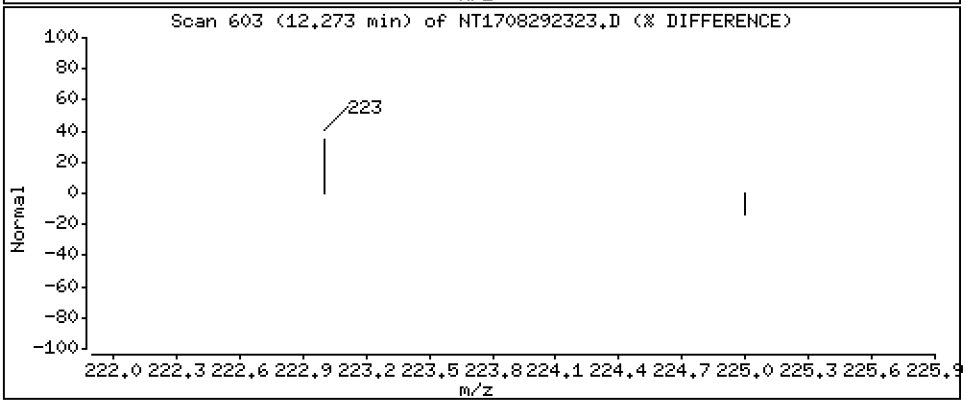












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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

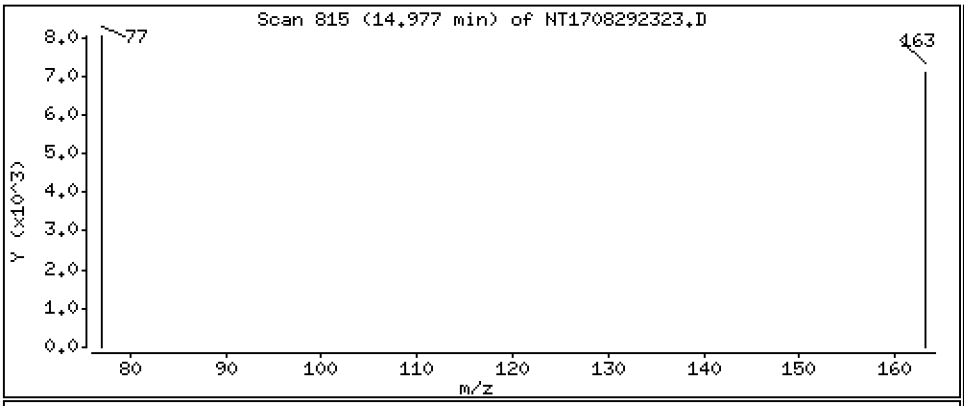
Operator: JGR

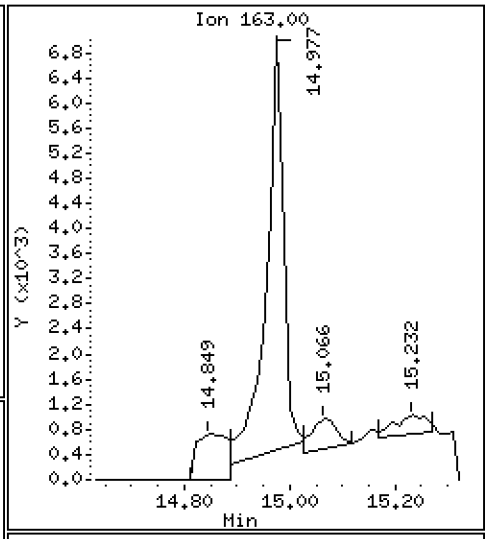
Column phase: ZB-5msi

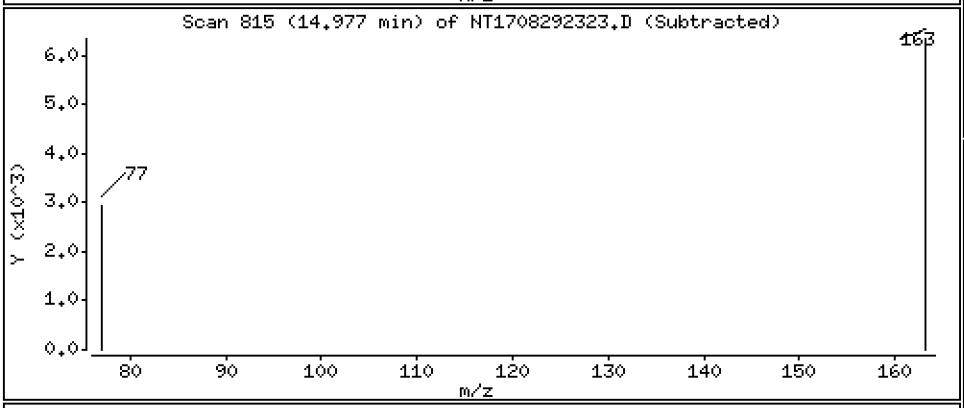
Column diameter: 0.25

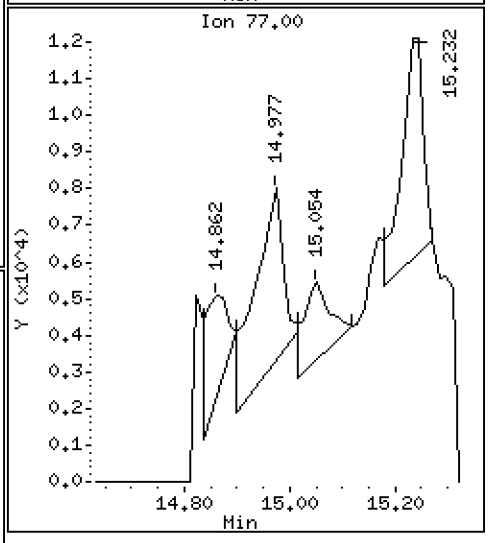
39 Dimethylphthalate

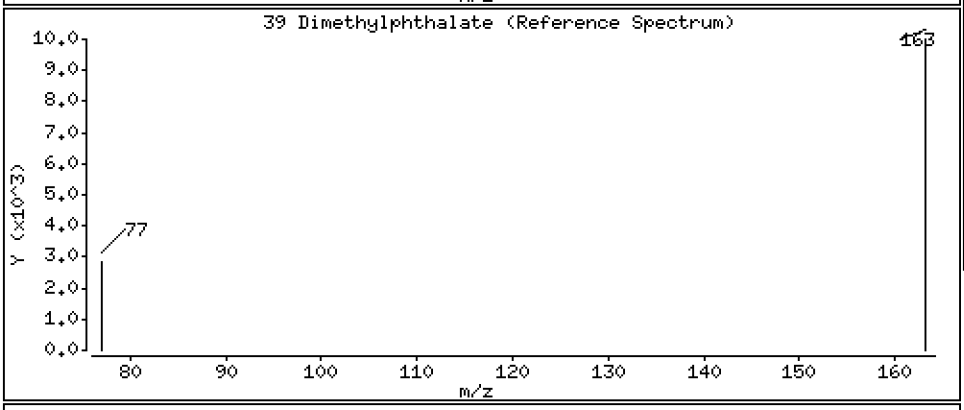
Concentration: 0.08615 ug/mL

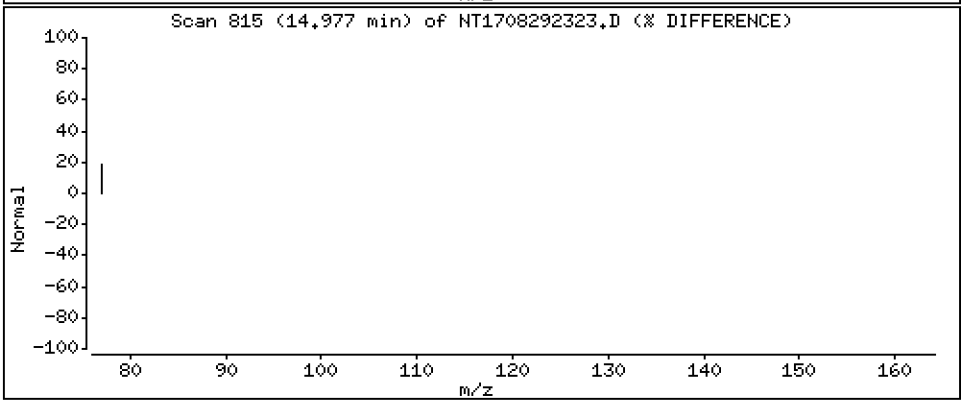












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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

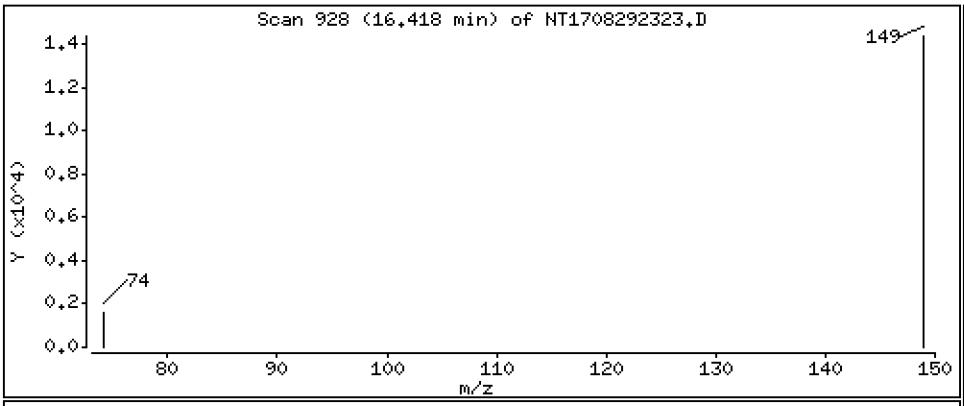
Operator: JGR

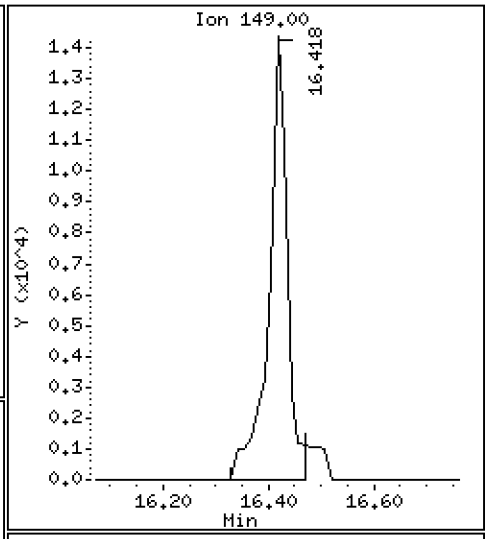
Column phase: ZB-5msi

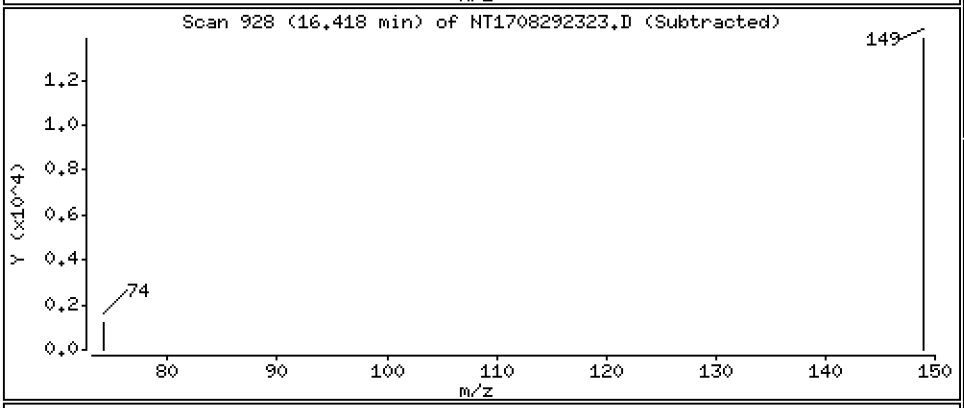
Column diameter: 0.25

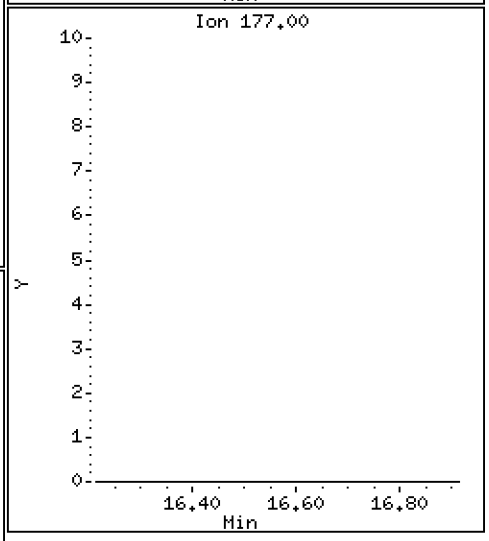
50 Diethylphthalate

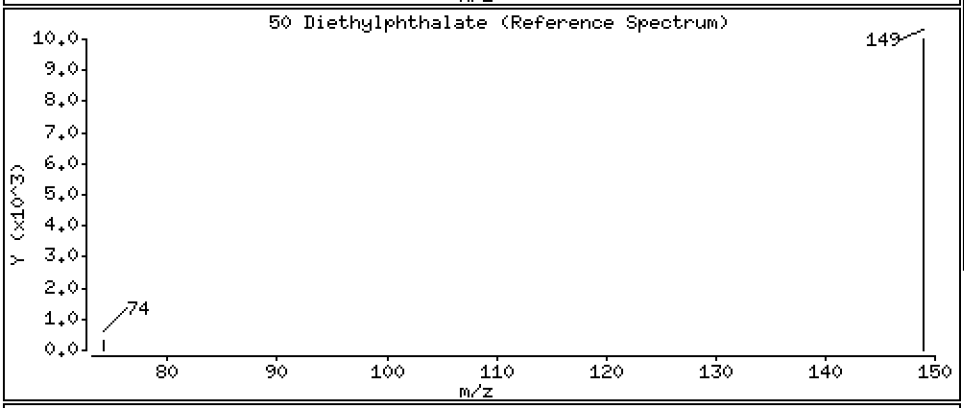
Concentration: 0.1937 ug/mL

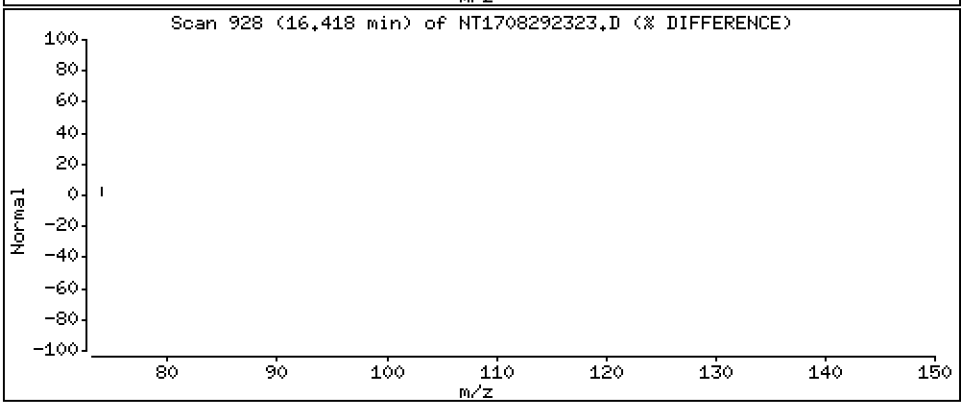












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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

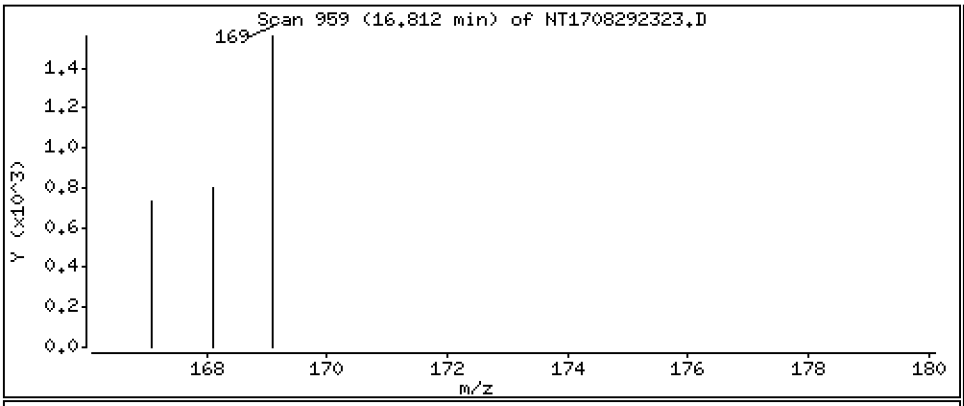
Operator: JGR

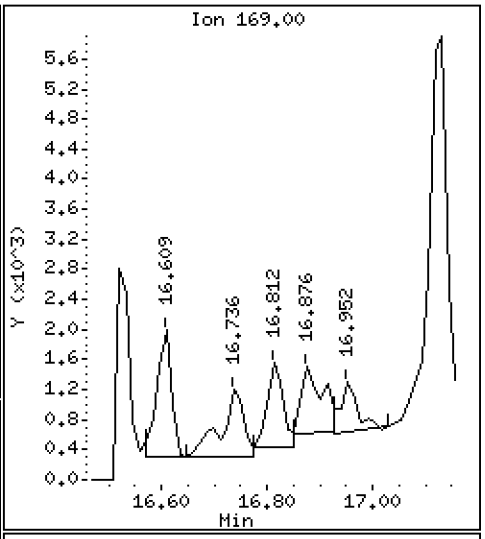
Column phase: ZB-5msi

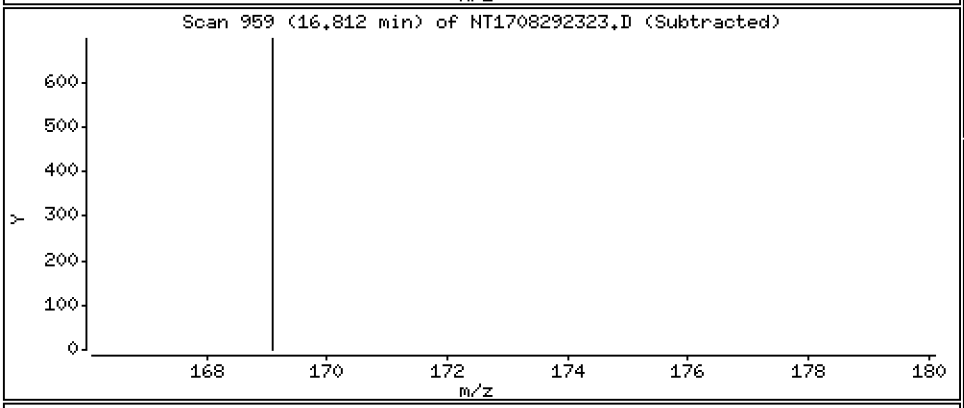
Column diameter: 0.25

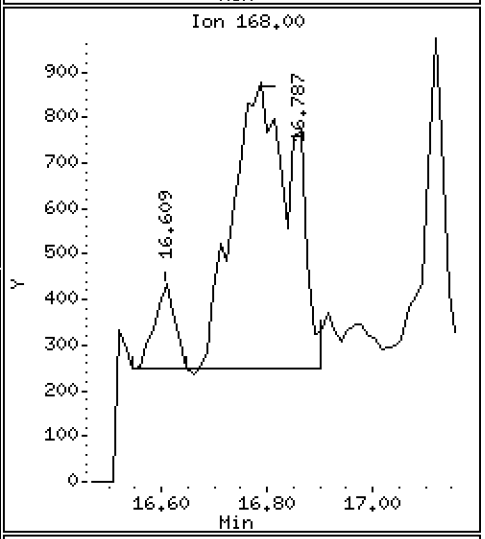
54 N-Nitrosodiphenylamine

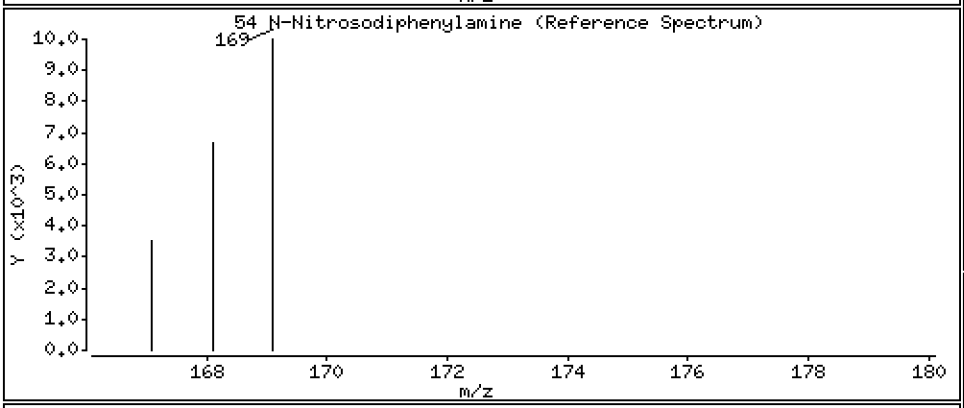
Concentration: 0.02204 ug/mL

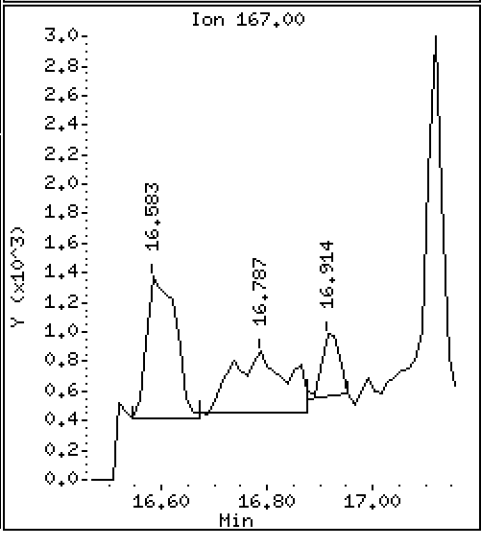


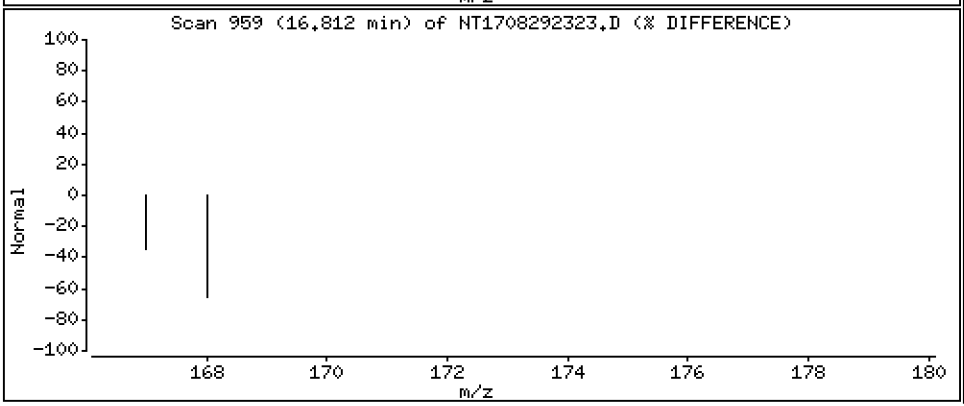












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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

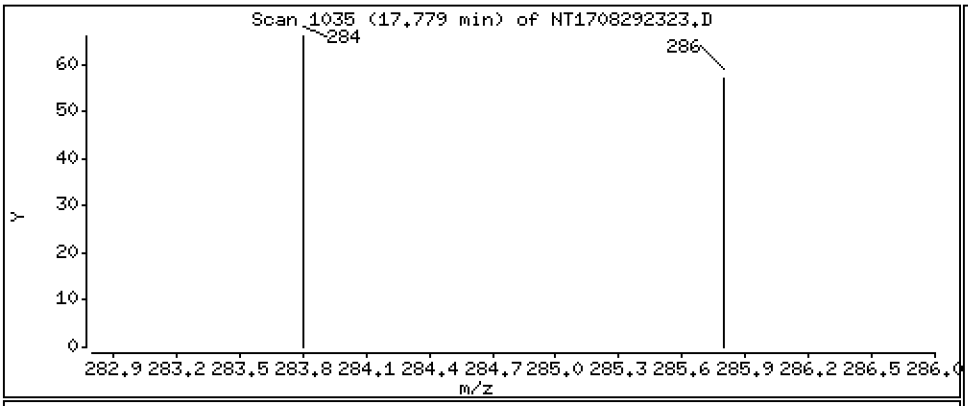
Operator: JGR

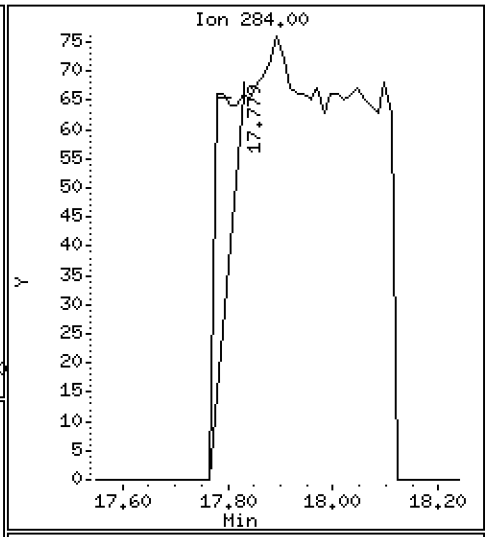
Column phase: ZB-5msi

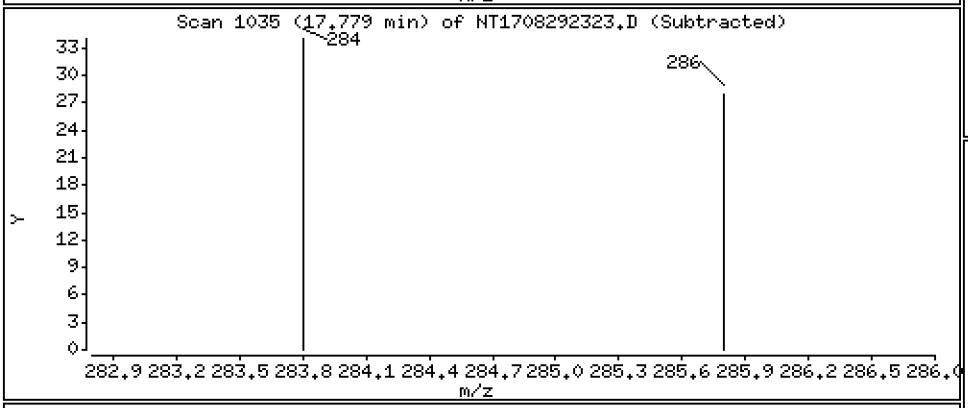
Column diameter: 0.25

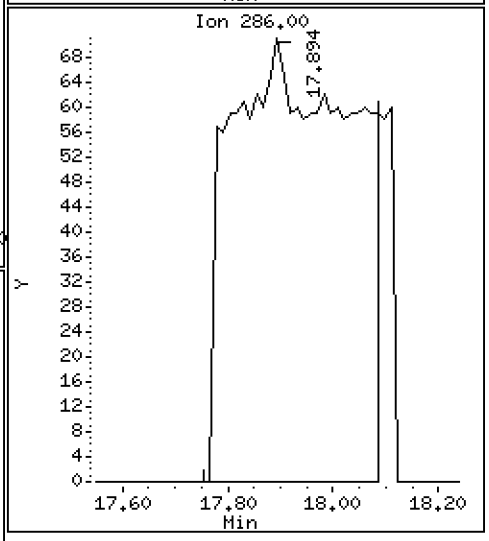
57 Hexachlorobenzene

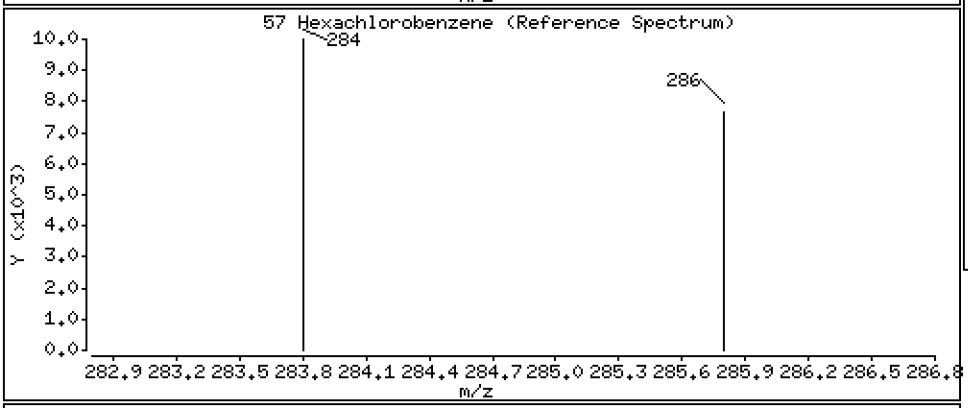
Concentration: 0.002733 ug/mL

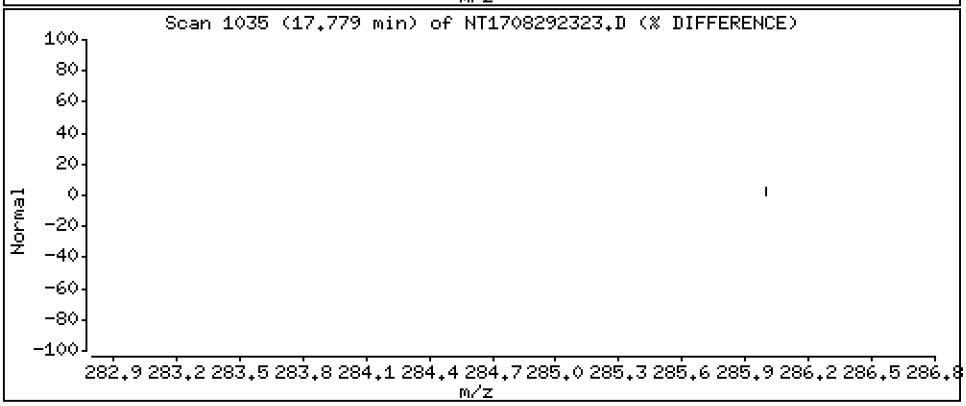












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292323.D

Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

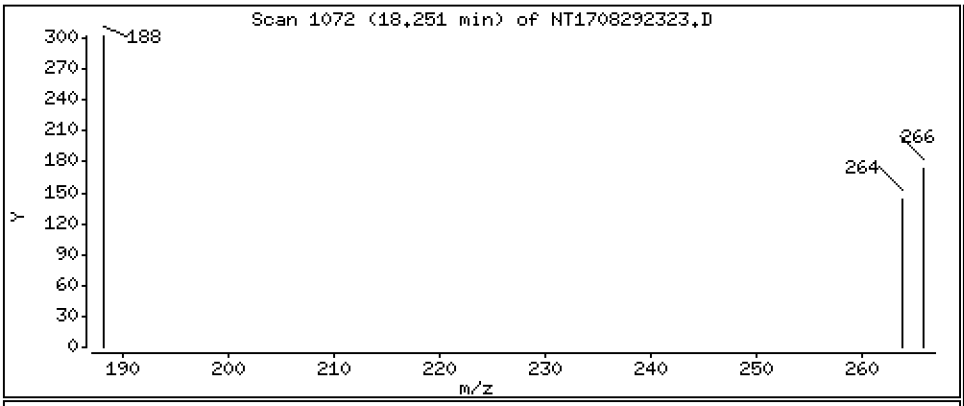
Operator: JGR

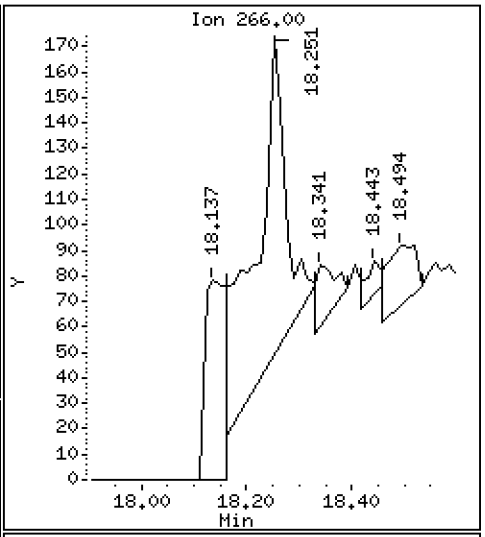
Column phase: ZB-5msi

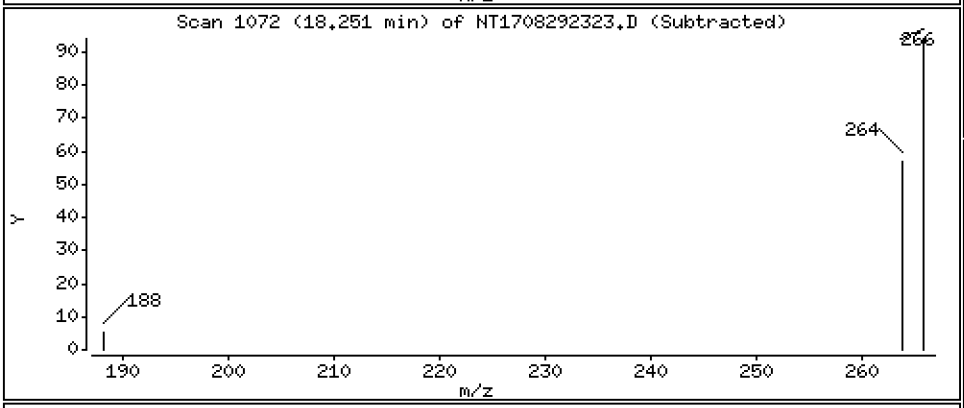
Column diameter: 0.25

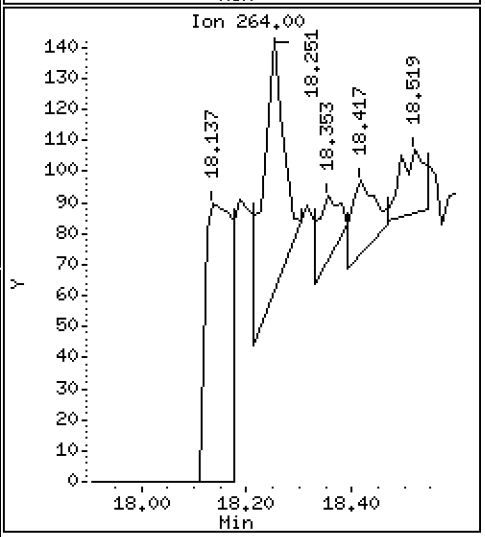
58 Pentachlorophenol

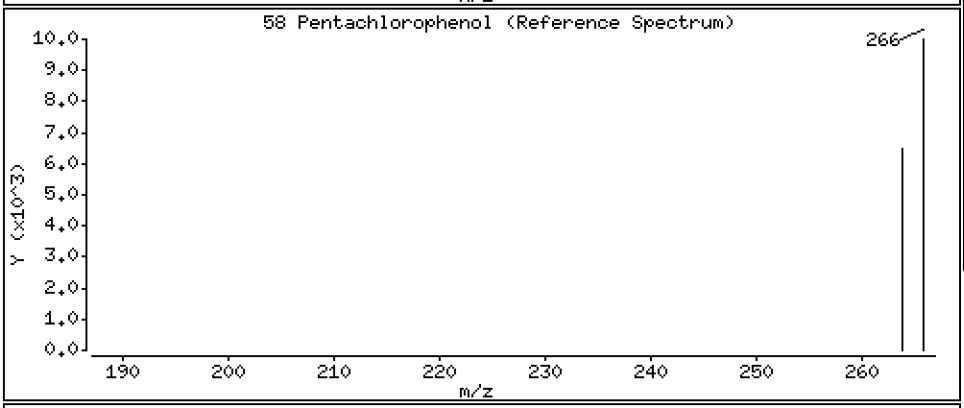
Concentration: 0.02146 ug/mL

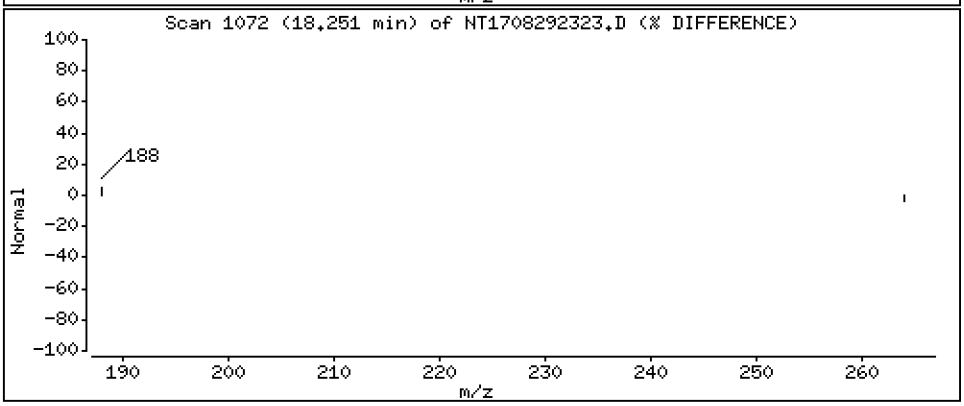












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Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

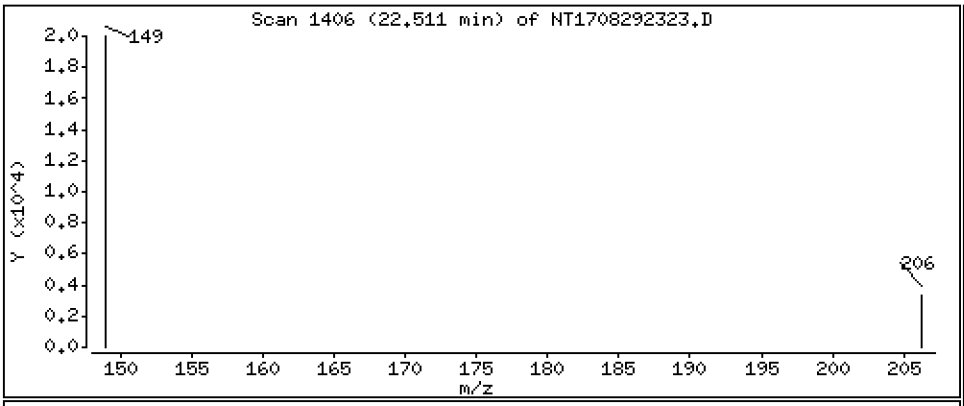
Operator: JGR

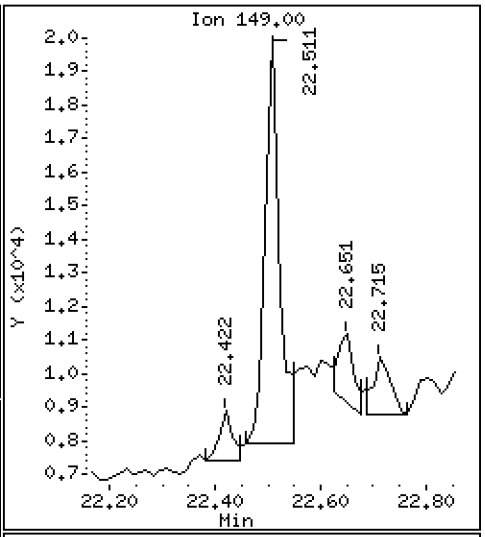
Column phase: ZB-5msi

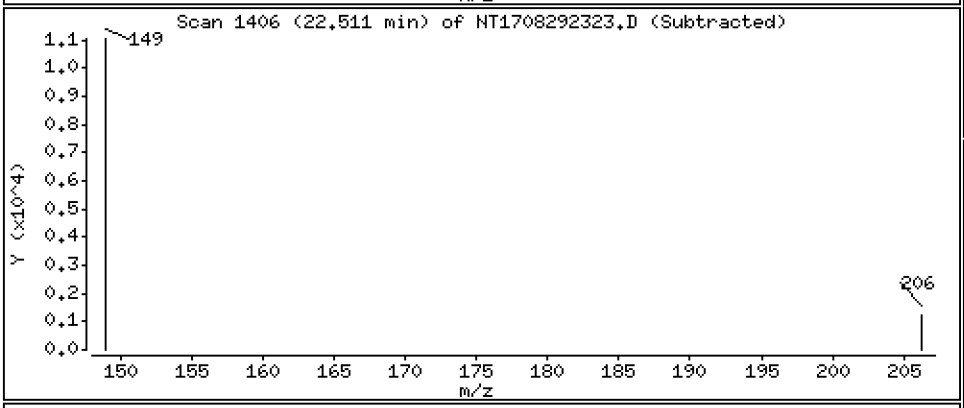
Column diameter: 0.25

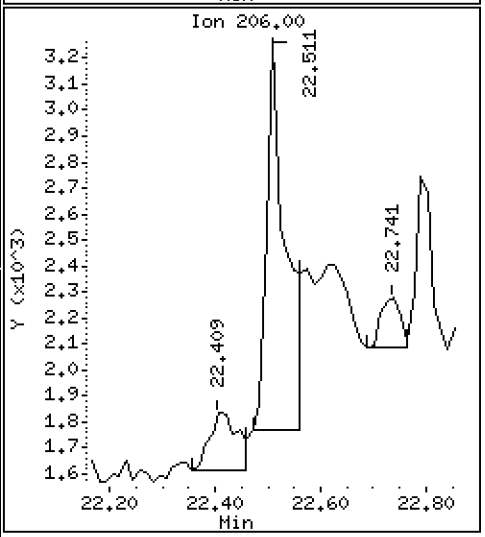
67 Butylbenzylphthalate

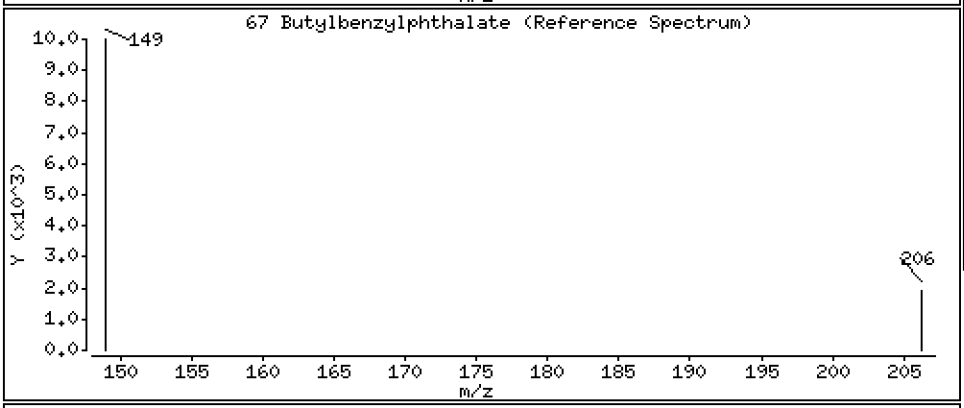
Concentration: 0.1853 ug/mL

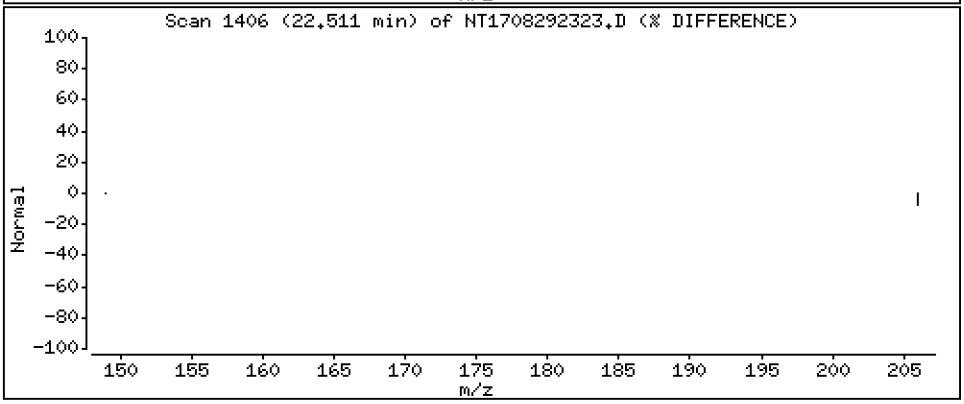












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292323.D

Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

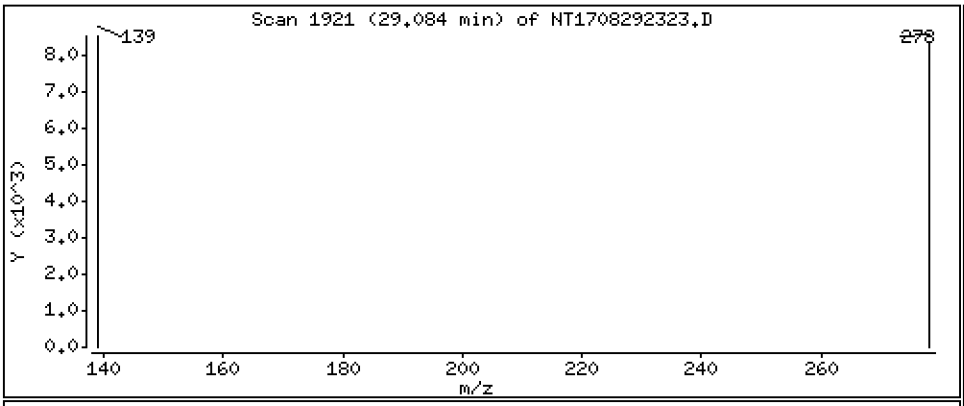
Operator: JGR

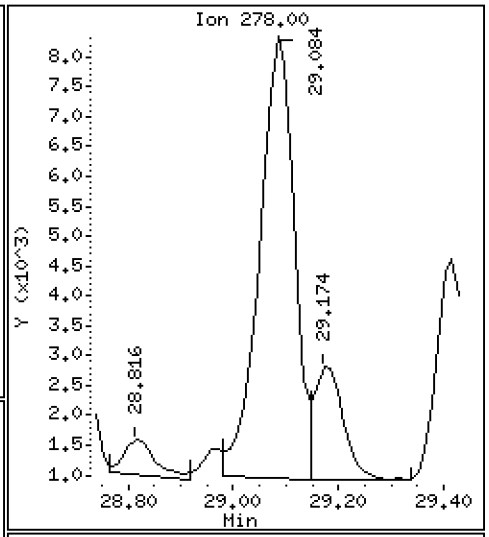
Column phase: ZB-5msi

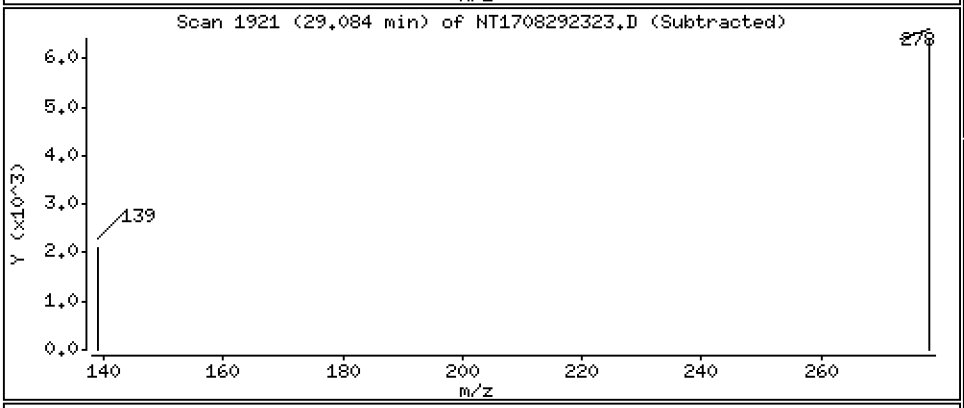
Column diameter: 0.25

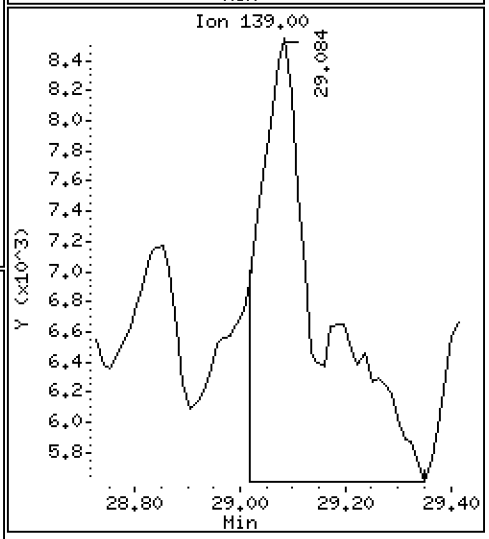
79 Dibenzo(a,h)anthracene

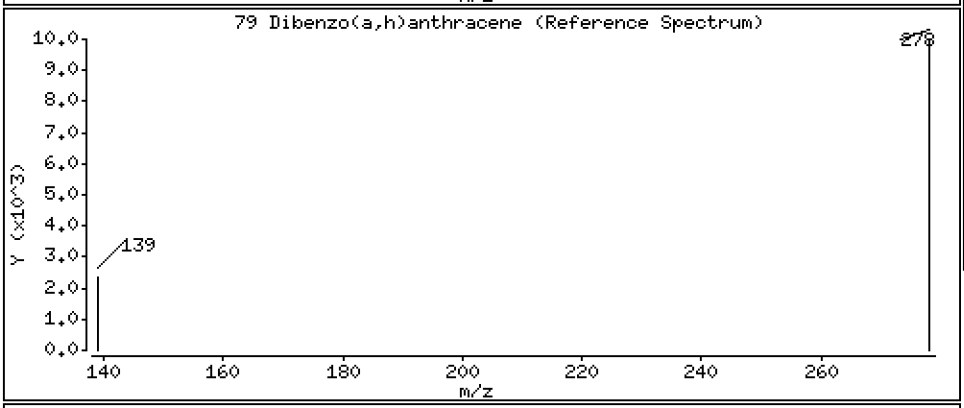
Concentration: 0.1585 ug/mL

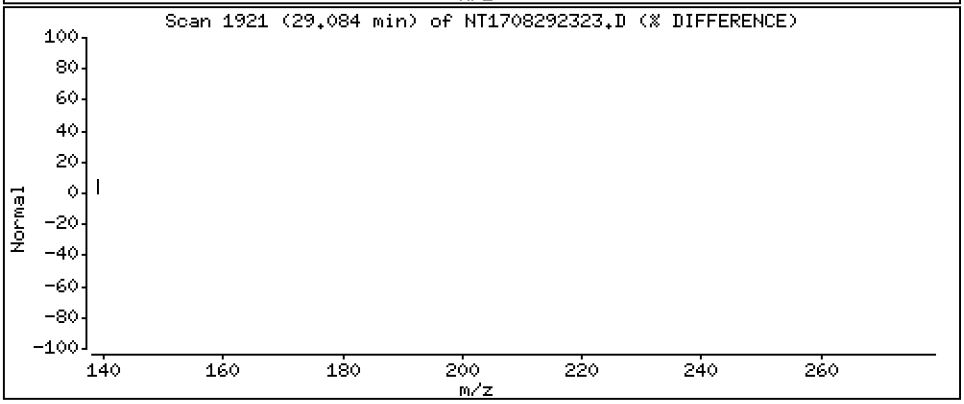












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292323.D

Date : 30-AUG-2023 01:15

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-10

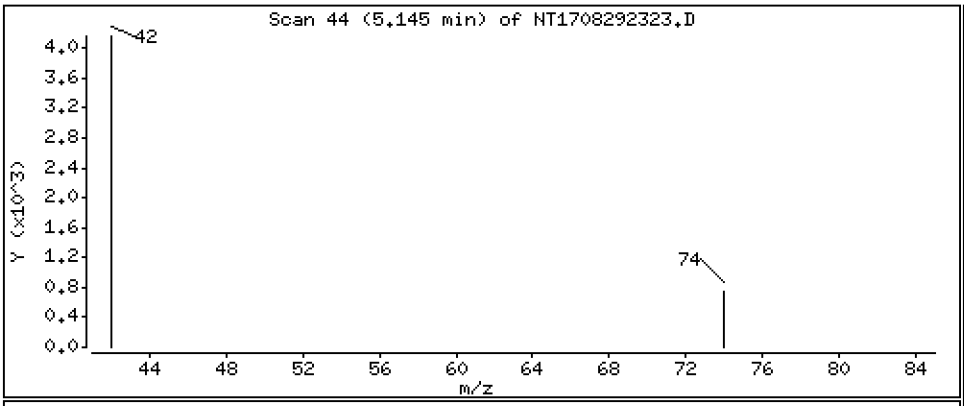
Operator: JGR

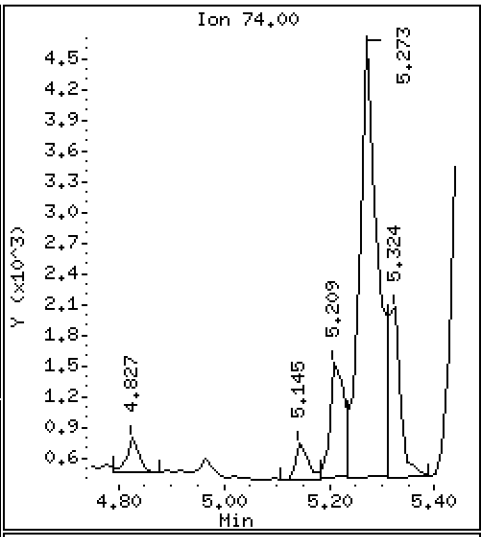
Column phase: ZB-5msi

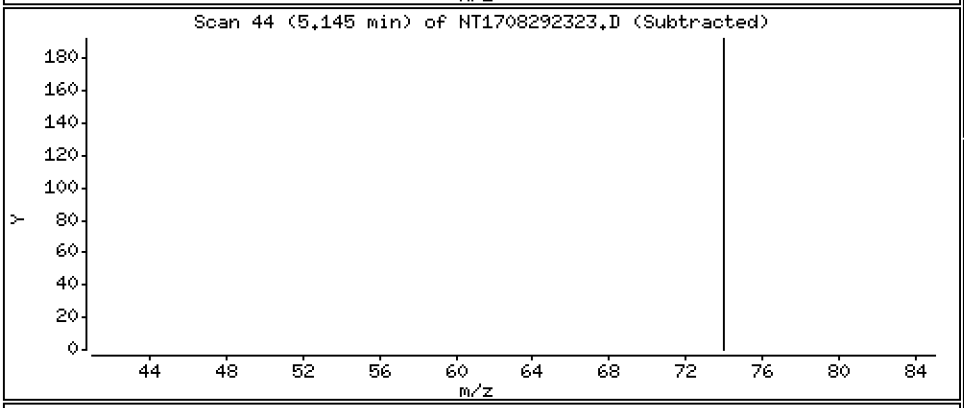
Column diameter: 0.25

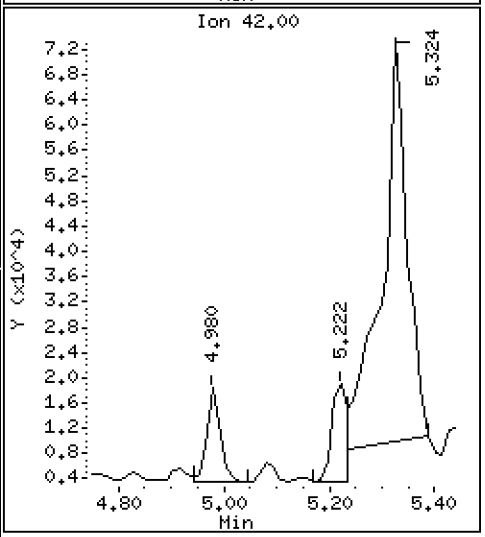
90 N-Nitrosodimethylamine

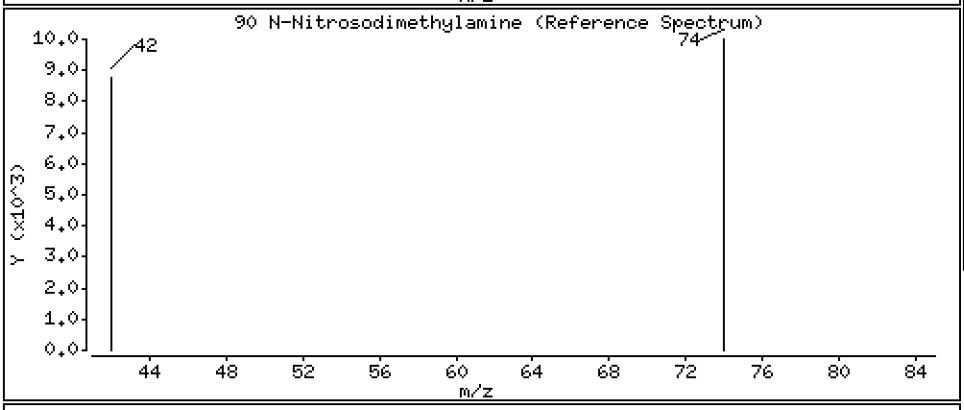
Concentration: 0.003817 ug/mL

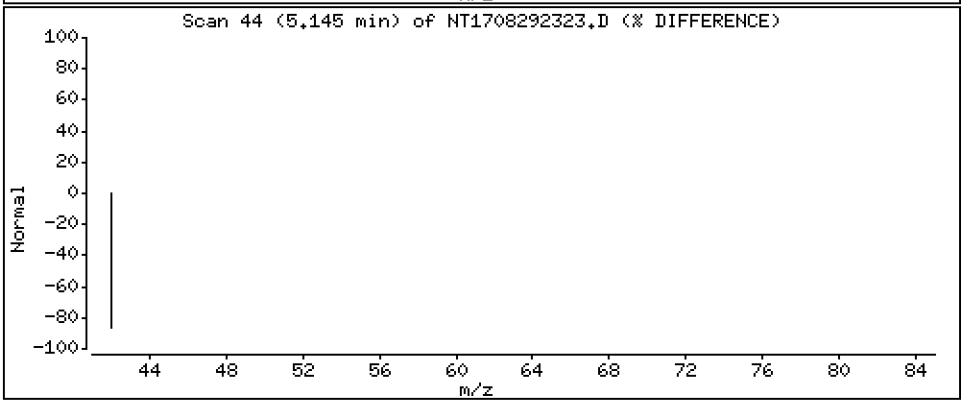












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292323.D
Lab Smp Id: 23H0579-10
Inj Date : 30-AUG-2023 01:15
Operator : JGR Inst ID: nt17.i
Smp Info : 23H0579-10
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 10:26 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.221	7.196	(0.767)	895369	5.43319	5.433(R)
	3 Phenol	94	8.788	8.788	(0.934)	43953	0.17496	0.1750
	7 1,3-Dichlorobenzene	146	9.349	9.349	(0.993)	629	0.00370	0.003702
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	396887	4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	2324	0.01413	0.01413
	11 Benzyl alcohol	79	9.681	9.681	(1.028)	39908	0.22952	0.2295
	12 1,2-Dichlorobenzene	146	9.796	9.796	(1.041)	992	0.00622	0.006219
	13 2-Methylphenol	108	9.681	9.899	(1.028)	16353	0.10736	0.1074
	15 4-Methylphenol	108	10.154	10.167	(1.079)	262044	1.64593	1.646
	16 N-Nitroso-di-n-propylamine	70	10.103	10.218	(1.073)	18184	0.11169	0.1117
	22 2,4-Dimethylphenol	107	11.202	11.202	(0.943)	1738	0.01184	0.01184
	24 Benzoic acid	105	11.329	11.329	(0.954)	38190	0.39760	0.3976
	26 1,2,4-Trichlorobenzene	180	11.789	11.801	(0.992)	1266	0.01262	0.01262
*	27 Naphthalene-d8	136	11.878	11.891	(1.000)	1463604	4.00000	
	30 Hexachlorobutadiene	225	12.273	12.273	(1.033)	1100	0.02341	0.02341
	39 Dimethylphthalate	163	14.977	14.976	(0.967)	14972	0.08615	0.08615
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	534724	4.00000	
	50 Diethylphthalate	149	16.417	16.417	(1.060)	35003	0.19370	0.1937
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	2388	0.02204	0.02204
	57 Hexachlorobenzene	284	17.779	17.894	(0.960)	97	0.00273	0.002733
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	517	0.02146	0.02146
*	59 Phenanthrene-d10	188	18.519	18.519	(1.000)	753603	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	281384	4.28817	4.288(R)
	67 Butylbenzylphthalate	149	22.510	22.510	(0.958)	23317	0.18531	0.1853
*	69 Chrysene-d12	240	23.506	23.505	(1.000)	474184	4.00000	
*	77 Perylene-d12	264	26.248	26.235	(1.000)	731033	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.084	29.084	(1.108)	34221	0.15849	0.1585
	90 N-Nitrosodimethylamine	74	5.145	5.094	(0.547)	640	0.00382	0.003817

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i Calibration Date: 29-AUG-2023
Lab File ID: NT1708292323.D Calibration Time: 22:47
Lab Smp Id: 23H0579-10
Analysis Type: SV Level:
Quant Type: ISTD Sample Type:
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	358343	179172	716686	396887	10.76
27 Naphthalene-d8	1242877	621439	2485754	1463604	17.76
42 Acenaphthene-d10	464388	232194	928776	534724	15.15
59 Phenanthrene-d10	660913	330457	1321826	753603	14.02
69 Chrysene-d12	477958	238979	955916	474184	-0.79
77 Perylene-d12	659026	329513	1318052	731033	10.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	0.00
27 Naphthalene-d8	11.89	11.39	12.39	11.88	-0.11
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	0.00
59 Phenanthrene-d10	18.52	18.02	19.02	18.52	0.00
69 Chrysene-d12	23.51	23.01	24.01	23.51	0.00
77 Perylene-d12	26.24	25.74	26.74	26.25	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292323.D

Lab ID: 23H0579-10
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   30-AUG-2023 01:15

RT	CO-ELUTION COMPOUNDS
9.682	2-Methylphenol and Benzyl alcohol

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.028	1.052	-0.0231	2-Methylphenol
1.073	1.085	-0.0122	N-Nitroso-di-n-propylamine
0.547	0.541	0.0054	N-Nitrosodimethylamine
0.960	0.966	-0.0062	Hexachlorobenzene

RRT check based on Ccal File: SIM.b/NT1708292319B.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1169B

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23H0579-11 A	SDG:	23H0579
Sampled:	01/17/23 11:08	Prepared:	08/25/23 12:39	File ID:	NT1708292324.D
% Solids:	51.32	Preparation:	EPA 3546 (Microwave)	Analyzed:	08/30/23 01:52
Batch:	BLH0669	Sequence:	SLH0447	Initial/Final:	19.55 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GH00045
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
105-67-9	2,4-Dimethylphenol	1	19.9	U	2.2	19.9

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	747.53	512	68.5	27 - 120	Q
p-Terphenyl-d14	498.35	387	77.7	37 - 120	Q

INTERNAL STANDARDS	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	351919	9.413	358343	9.413	
Naphthalene-d8	1272724	11.878	1242877	11.891	
Acenaphthene-d10	466488	15.487	464388	15.487	
Phenanthrene-d10	640962	18.519	660913	18.519	
Chrysene-d12	506500	23.506	477958	23.505	
Perylene-d12	757022	26.248	659026	26.235	

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292324.D

Date : 30-AUG-2023 01:52

Client ID:

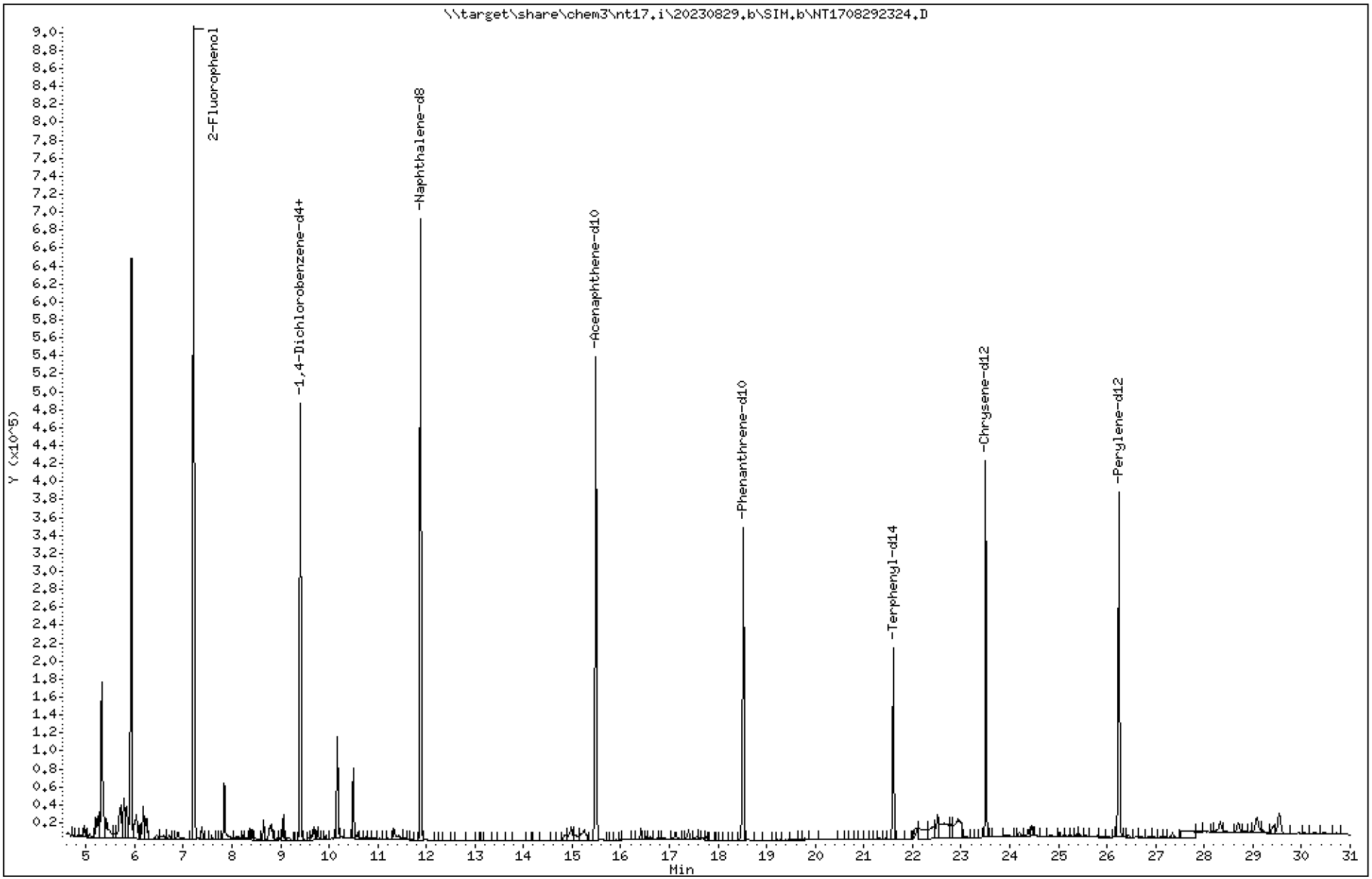
Sample Info: 23H0579-11

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

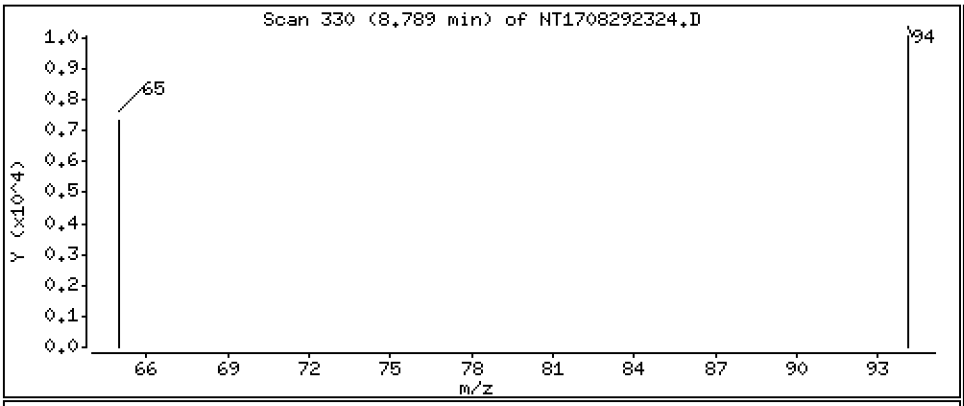
Operator: JGR

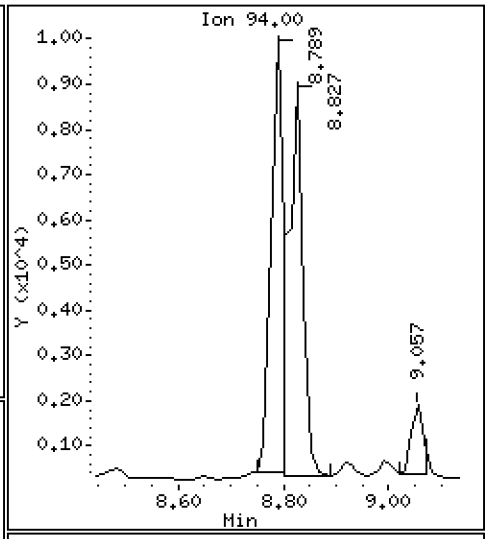
Column phase: ZB-5msi

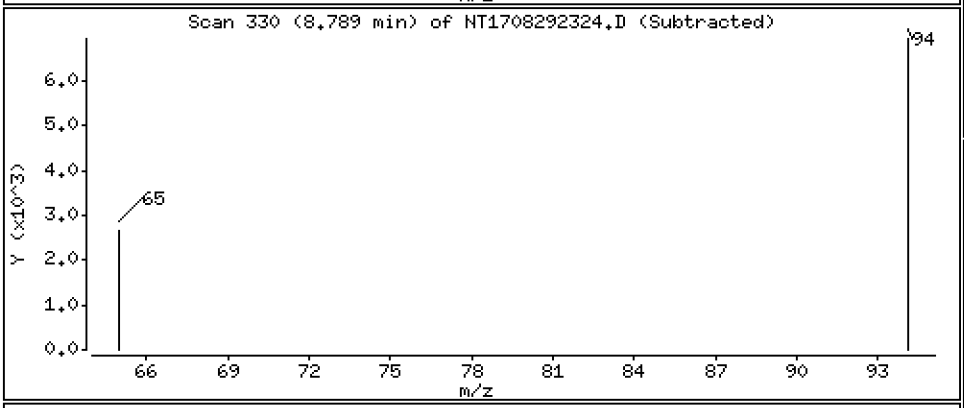
Column diameter: 0.25

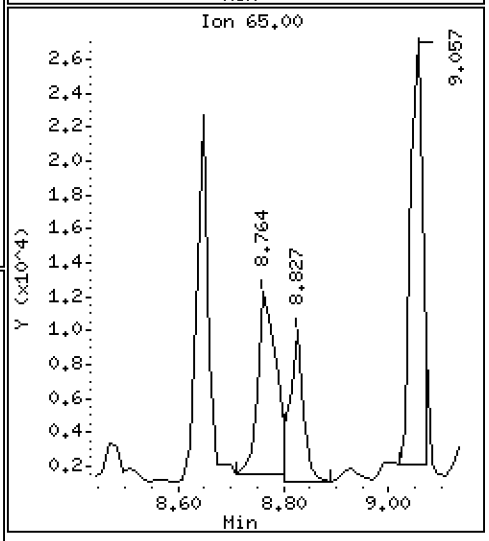
3 Phenol

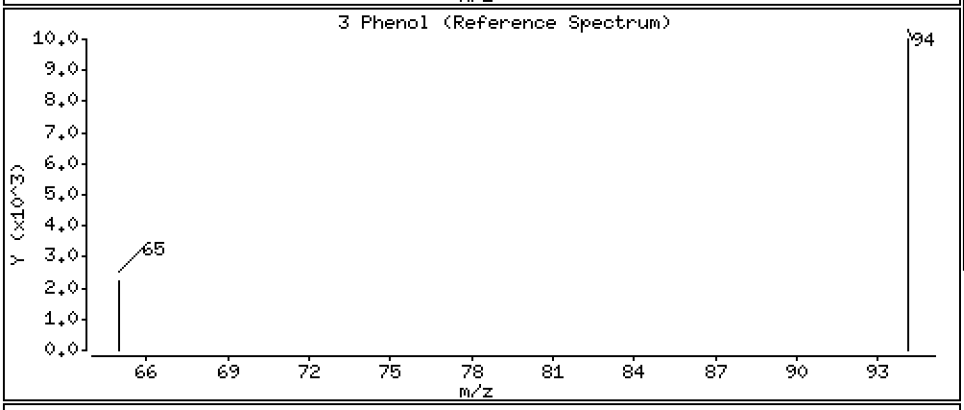
Concentration: 0.07052 ug/mL

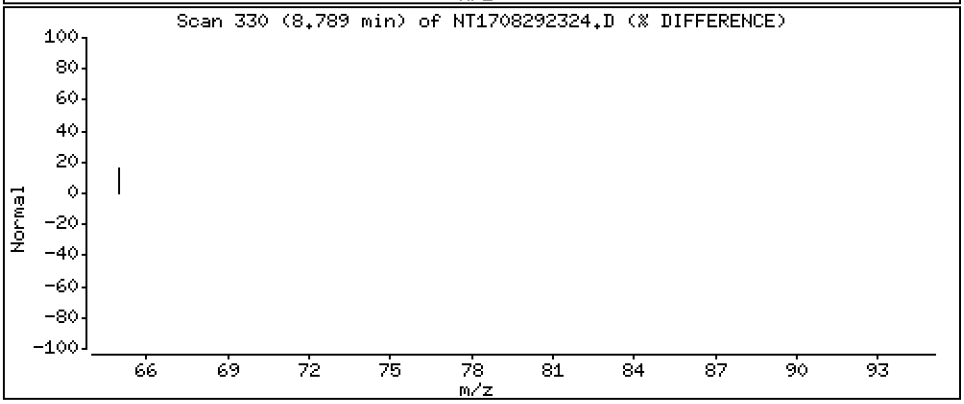












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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

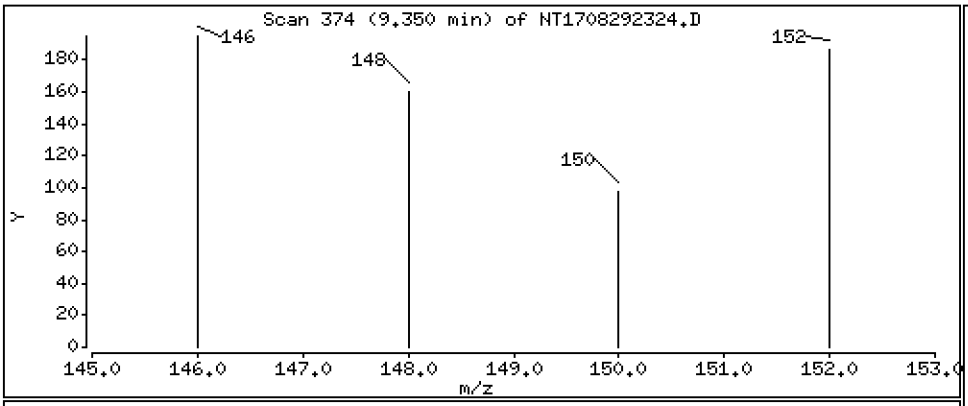
Operator: JGR

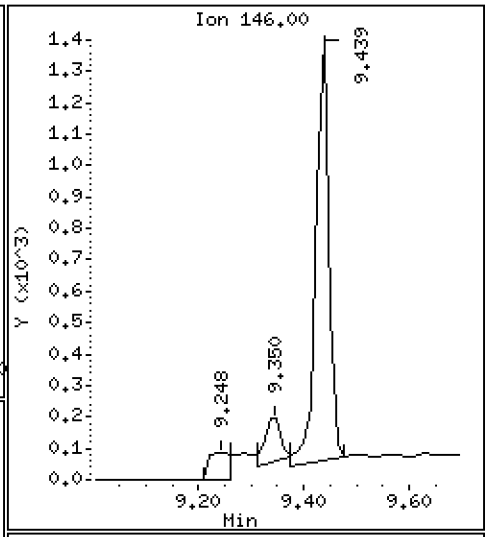
Column phase: ZB-5msi

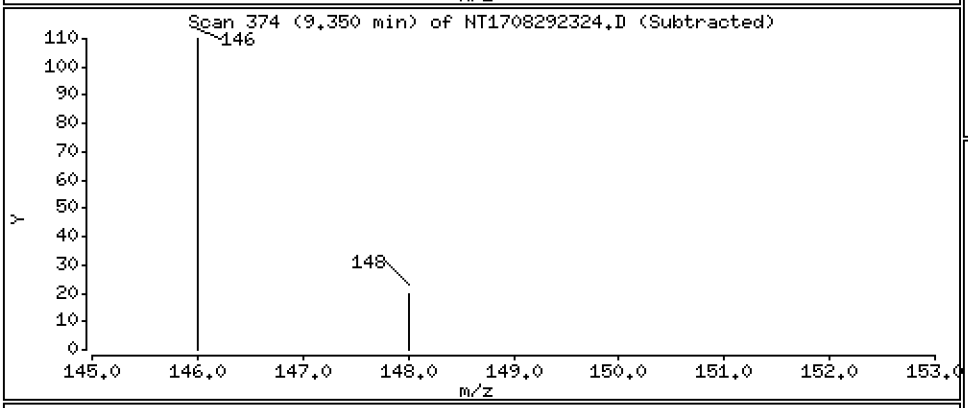
Column diameter: 0.25

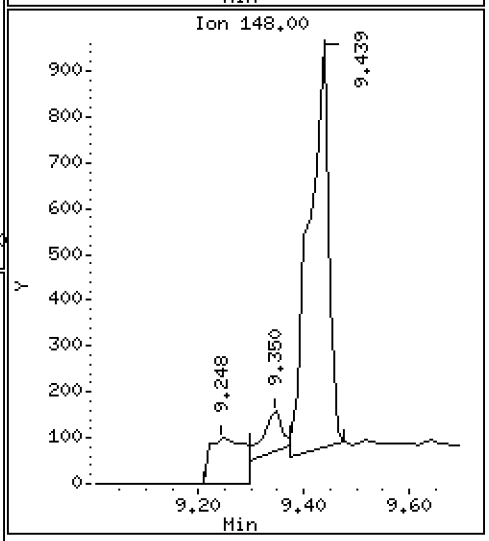
7 1,3-Dichlorobenzene

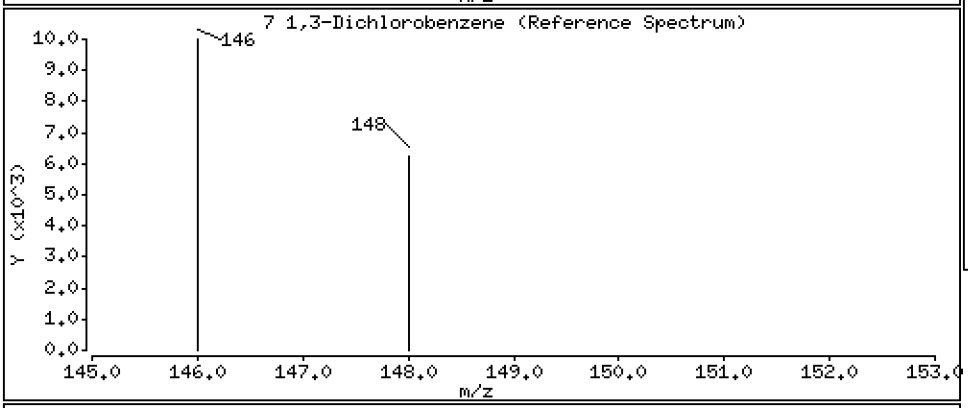
Concentration: 0.001991 ug/mL

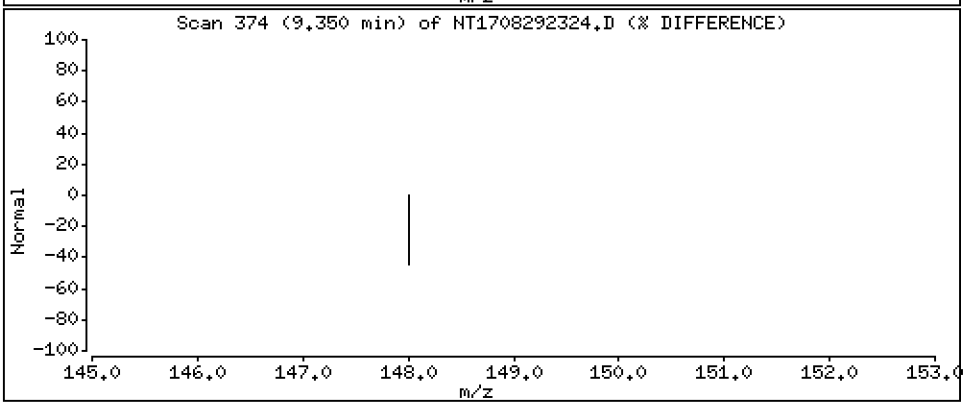












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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

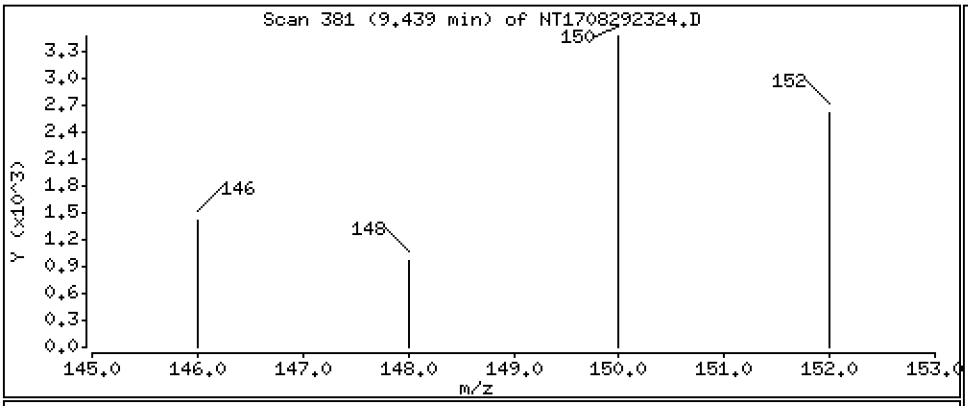
Operator: JGR

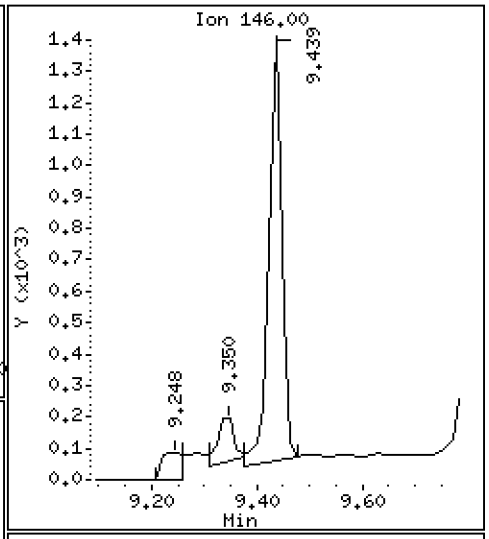
Column phase: ZB-5msi

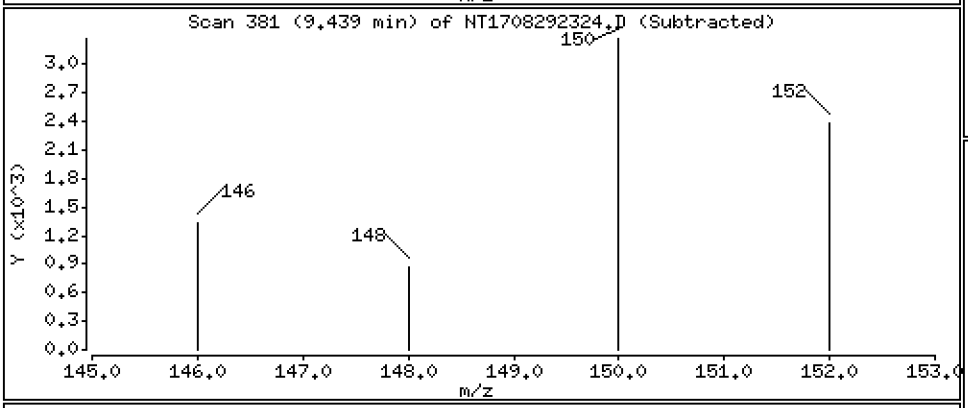
Column diameter: 0.25

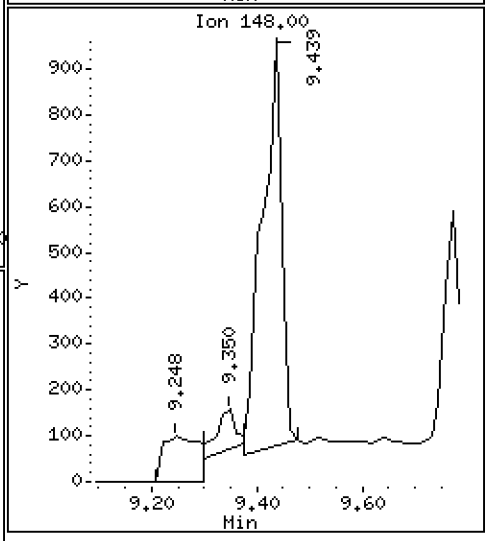
9 1,4-Dichlorobenzene

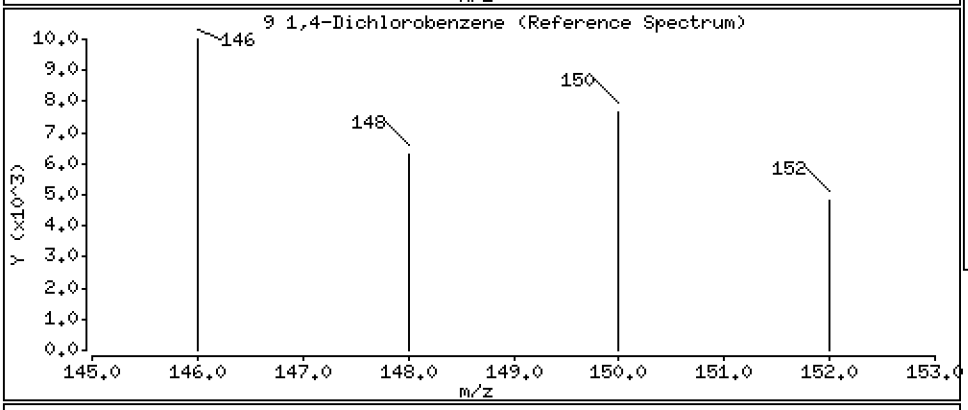
Concentration: 0.01590 ug/mL

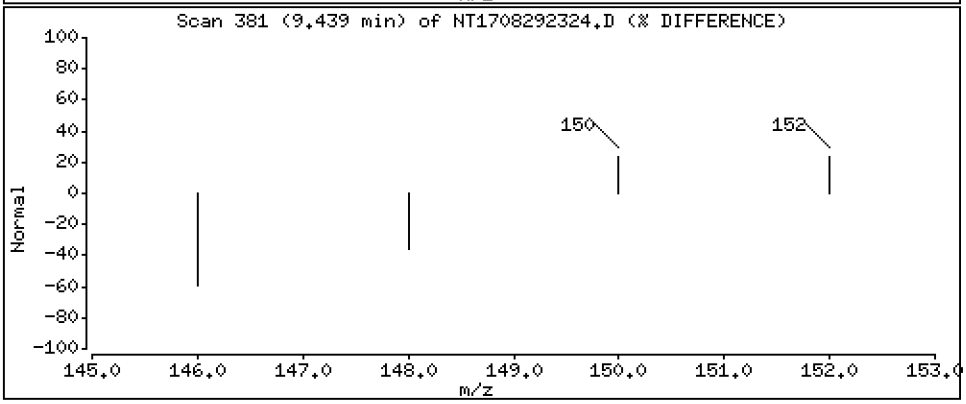












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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

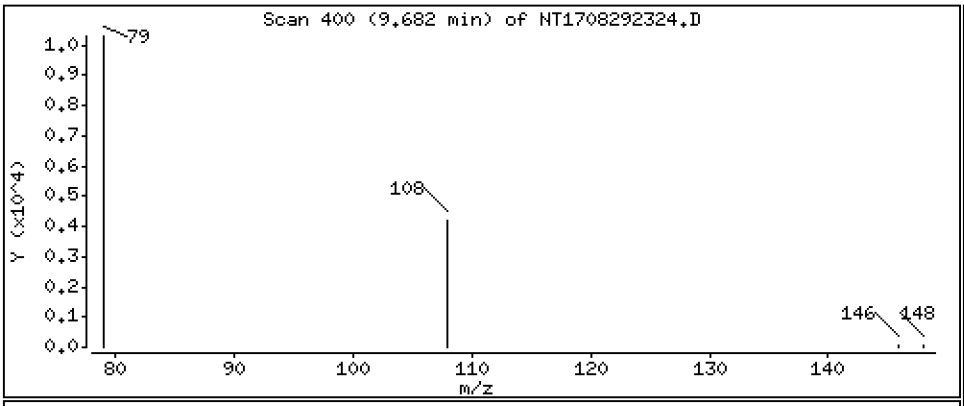
Operator: JGR

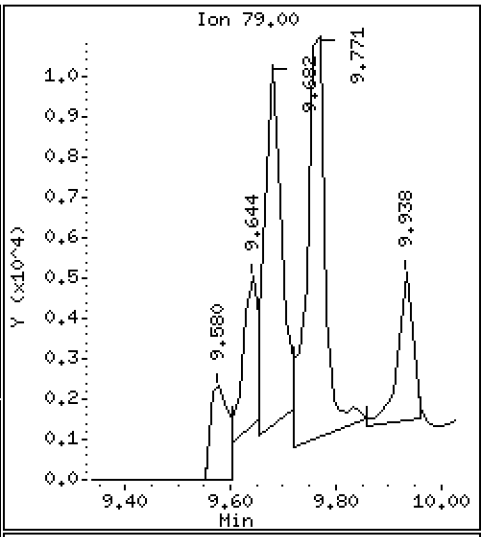
Column phase: ZB-5msi

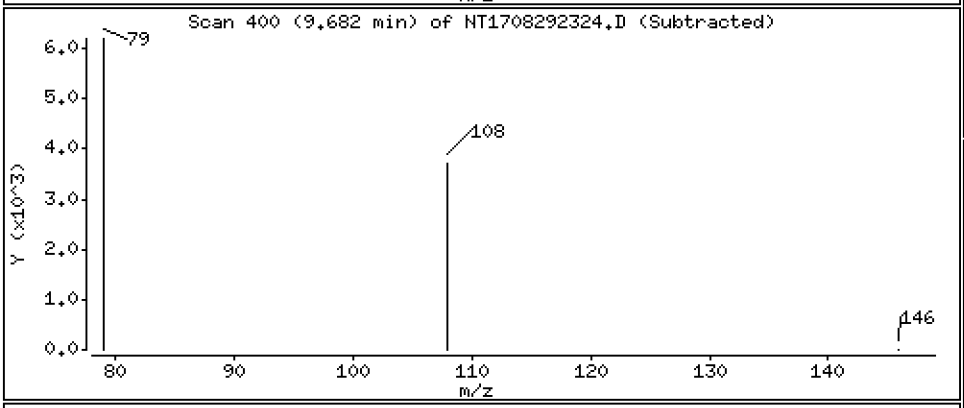
Column diameter: 0.25

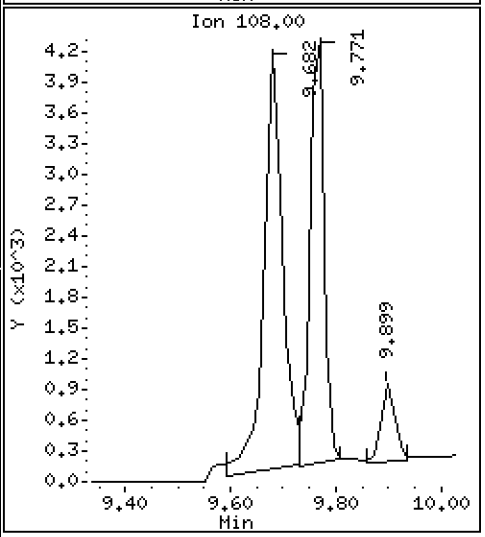
11 Benzyl alcohol

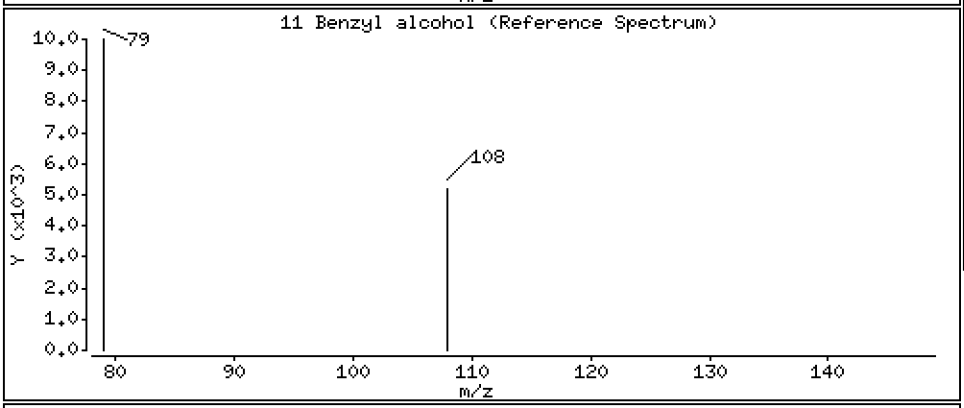
Concentration: 0.1353 ug/mL

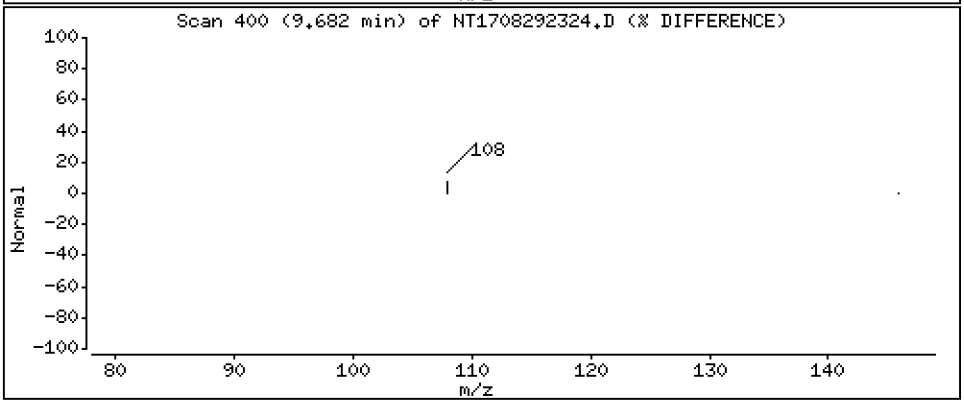












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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

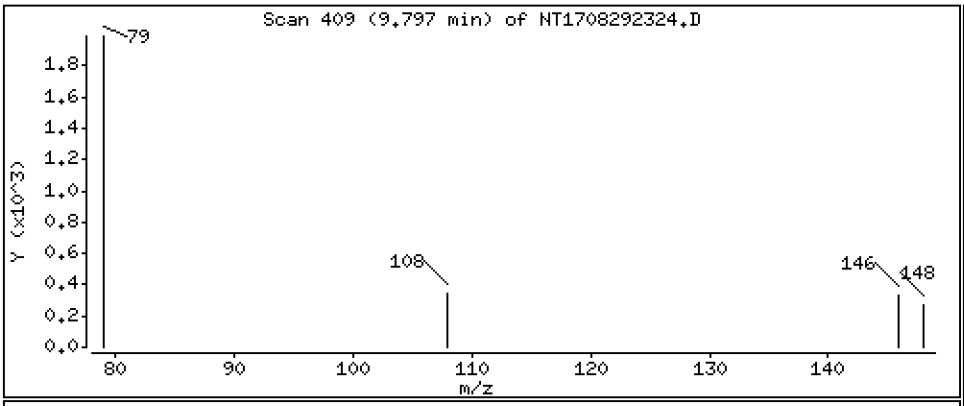
Operator: JGR

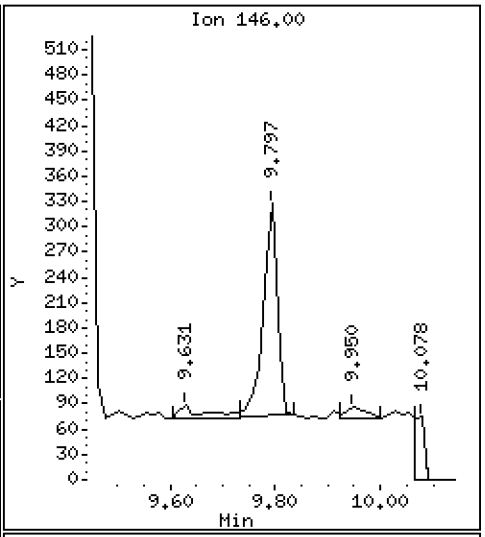
Column phase: ZB-5msi

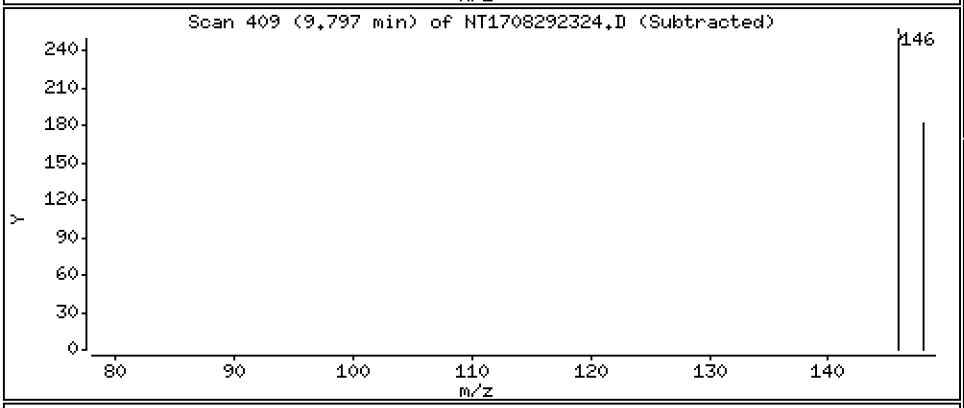
Column diameter: 0.25

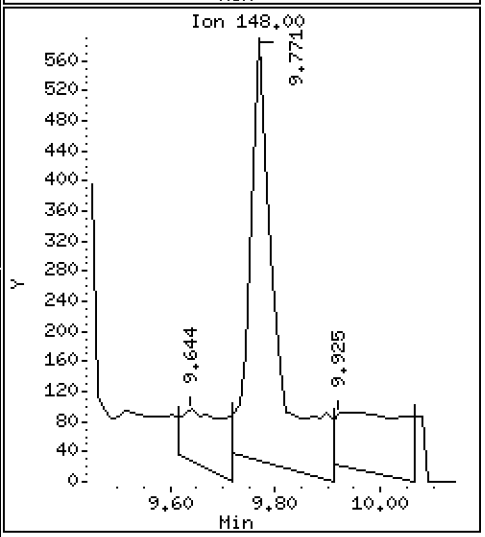
12 1,2-Dichlorobenzene

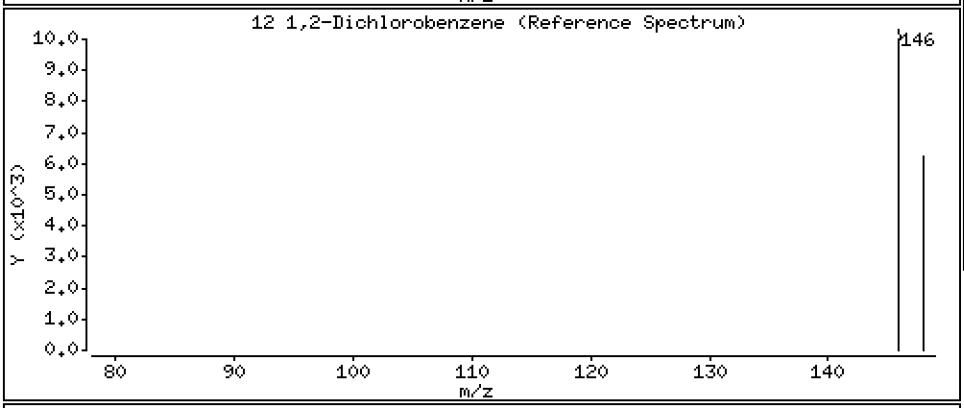
Concentration: 0.003259 ug/mL

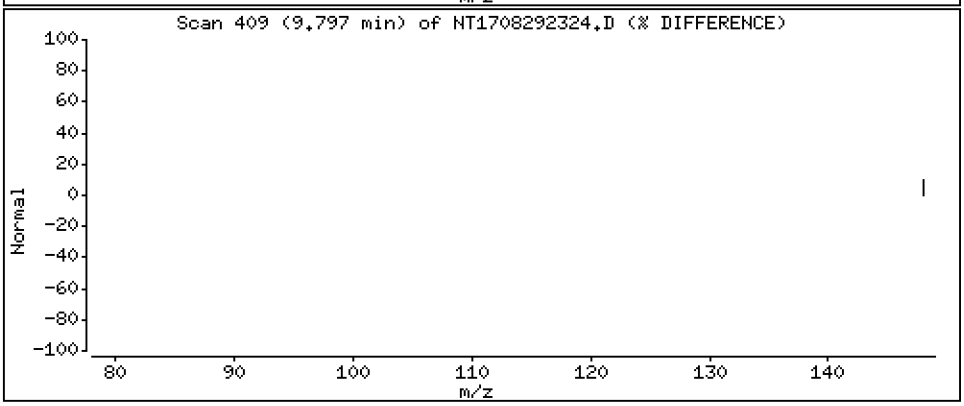












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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

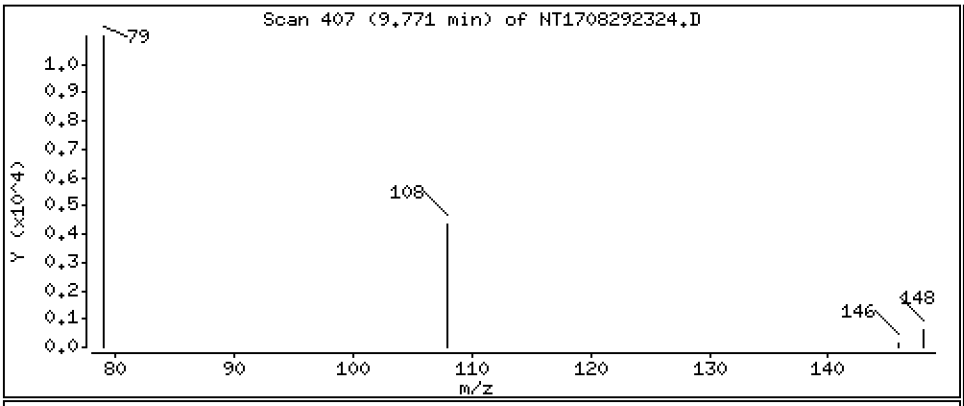
Operator: JGR

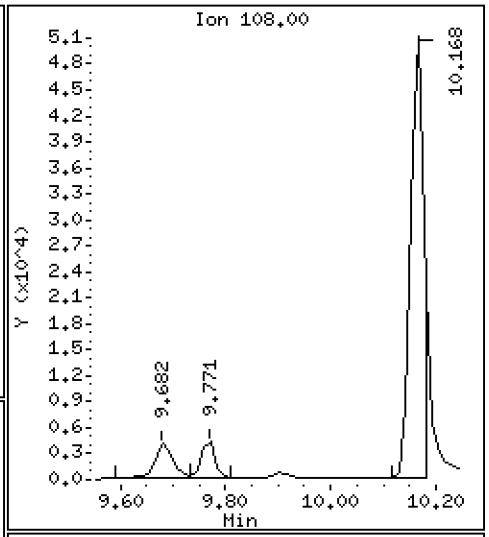
Column phase: ZB-5msi

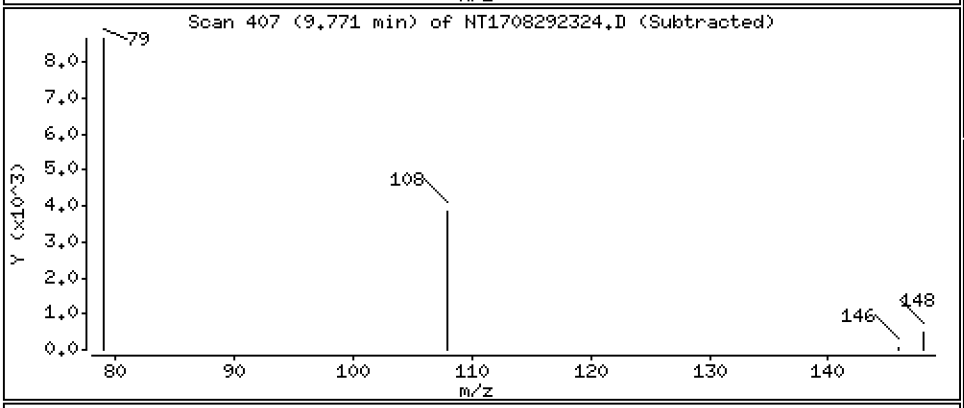
Column diameter: 0.25

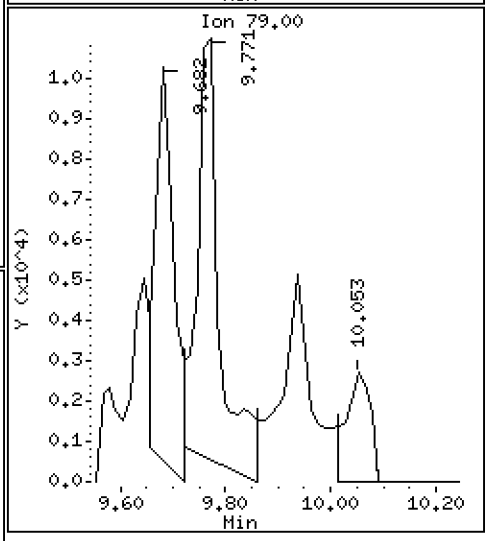
13 2-Methylphenol

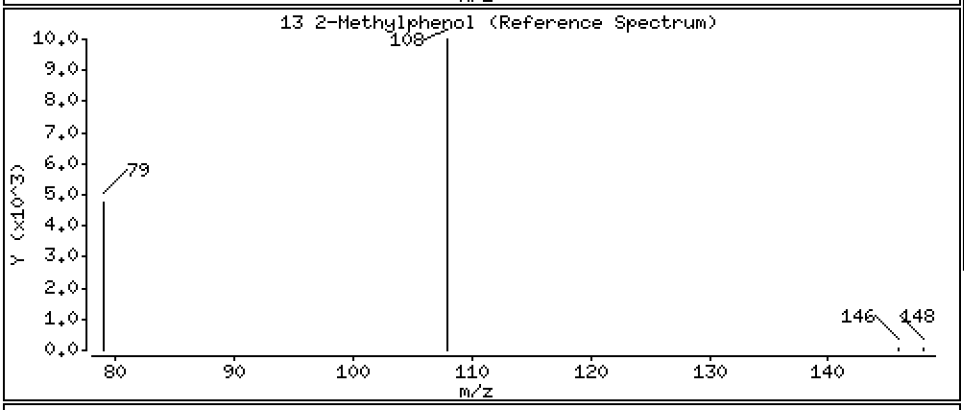
Concentration: 0.05766 ug/mL

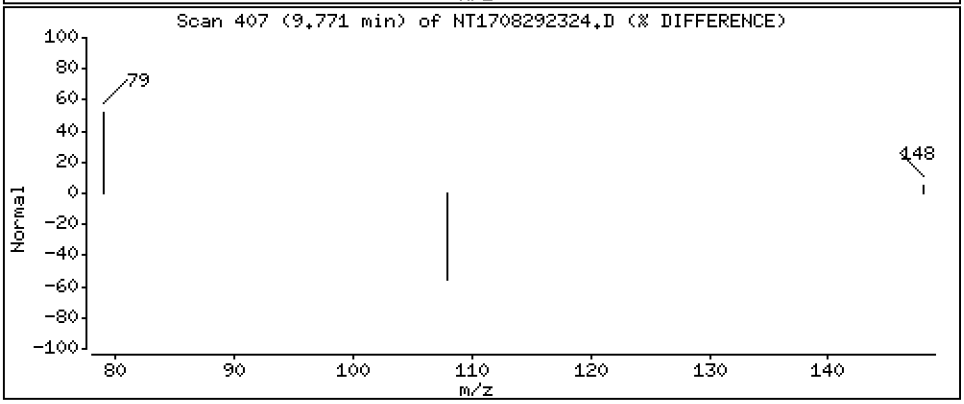












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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

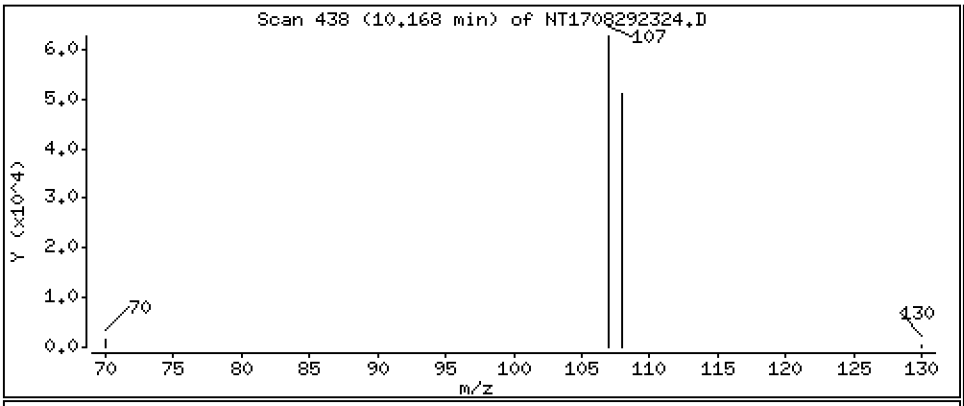
Operator: JGR

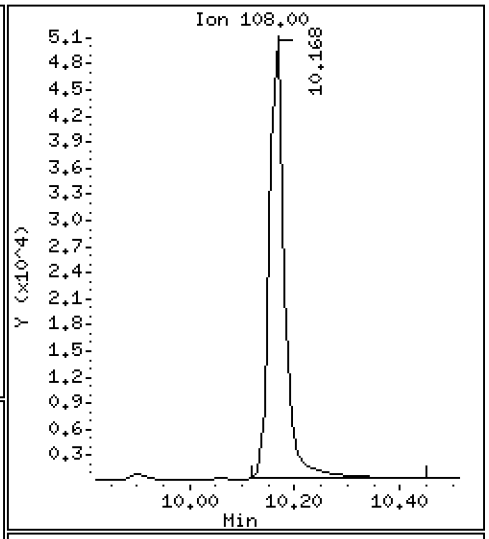
Column phase: ZB-5msi

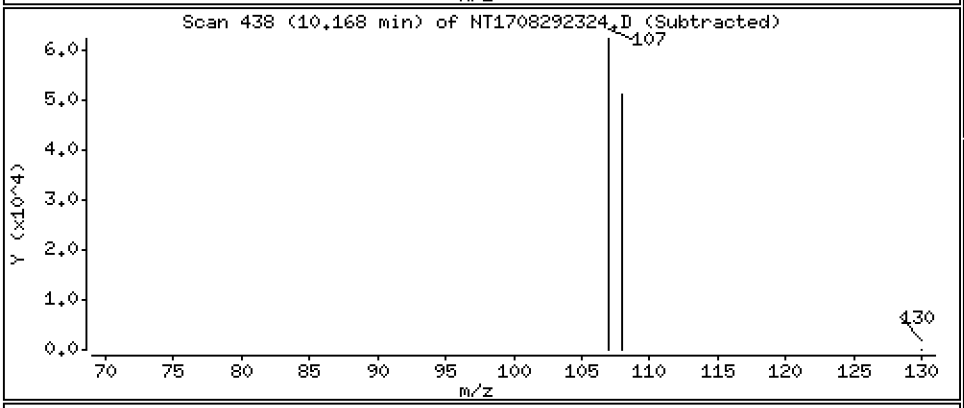
Column diameter: 0.25

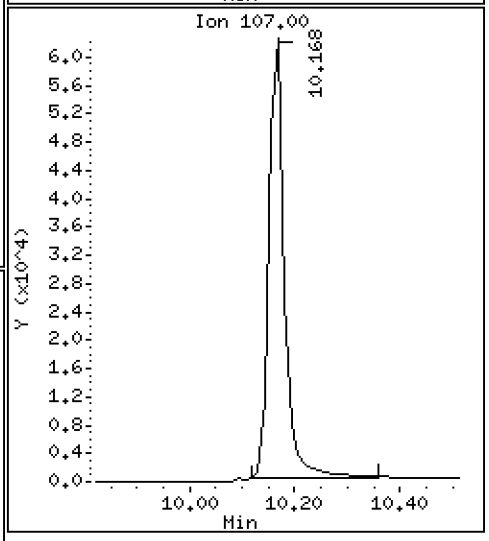
15 4-Methylphenol

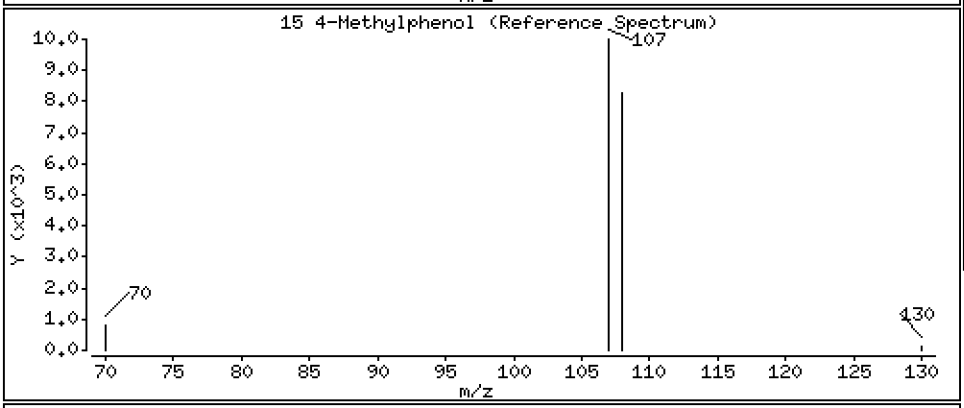
Concentration: 0.7416 ug/mL

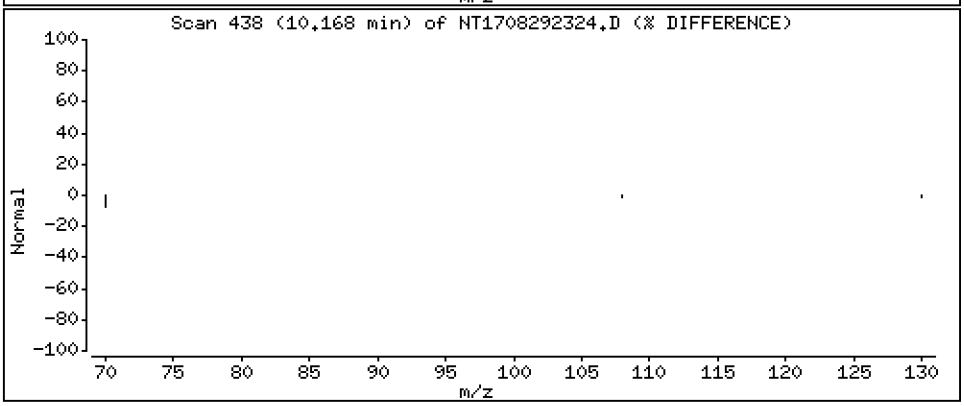












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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

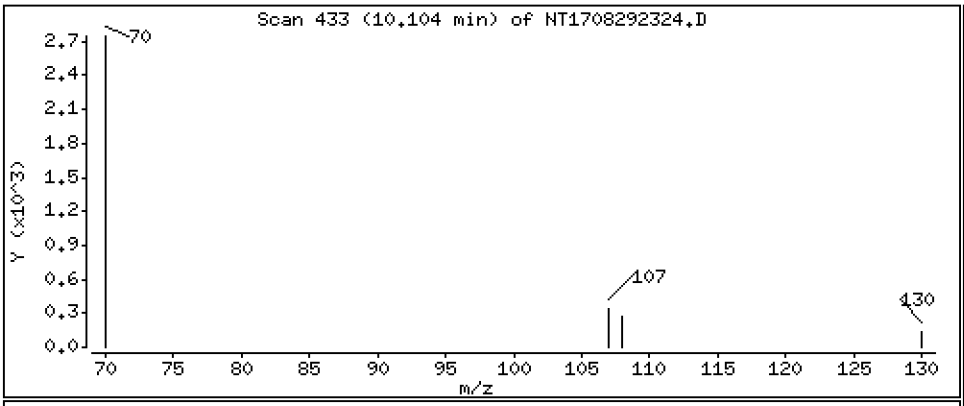
Operator: JGR

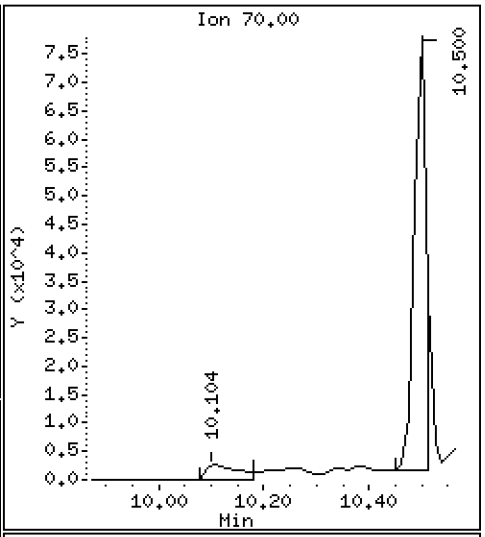
Column phase: ZB-5msi

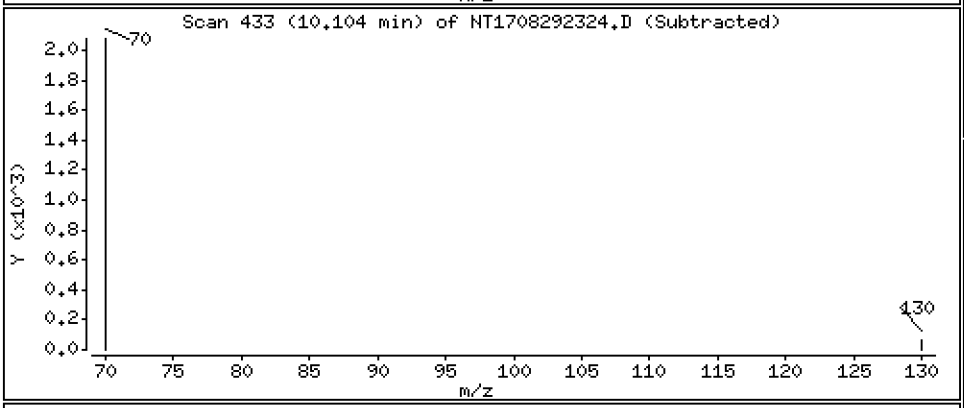
Column diameter: 0.25

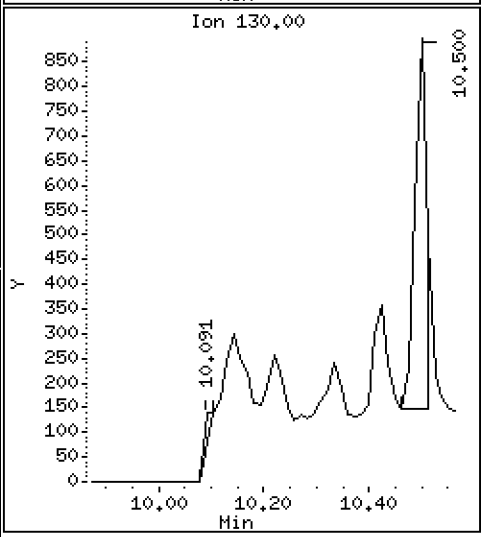
16 N-Nitroso-di-n-propylamine

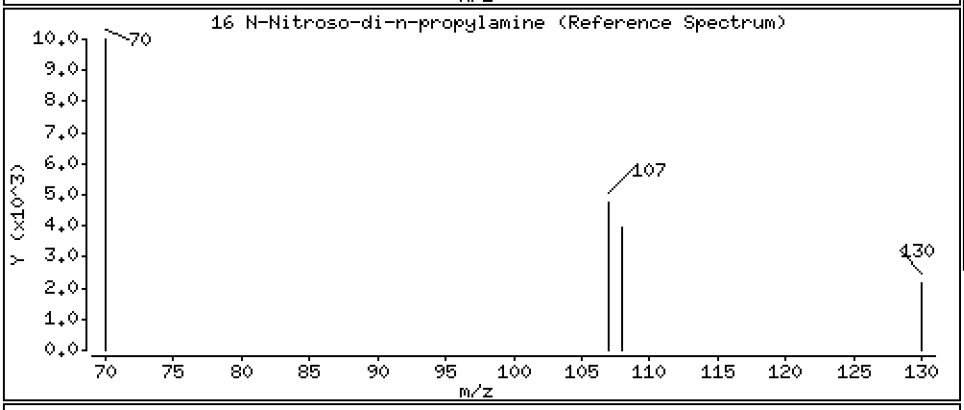
Concentration: 0.08207 ug/mL

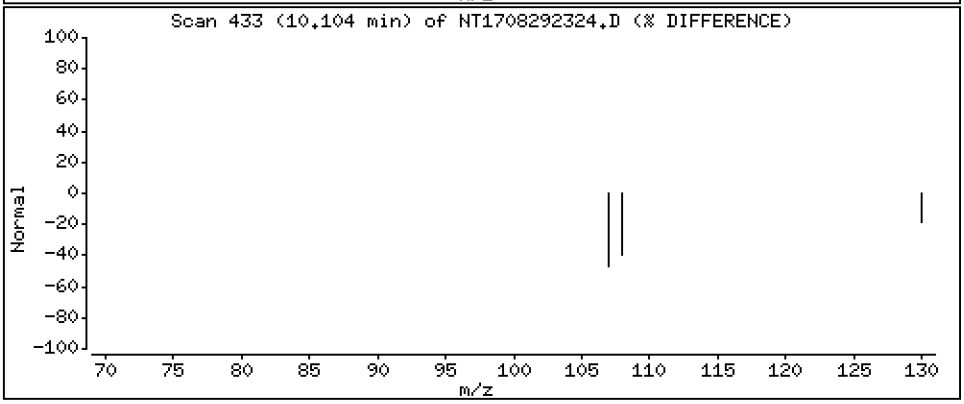












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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

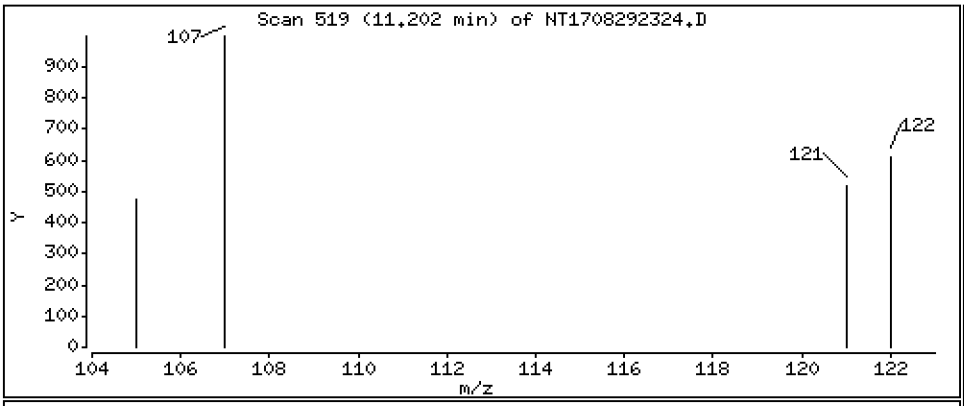
Operator: JGR

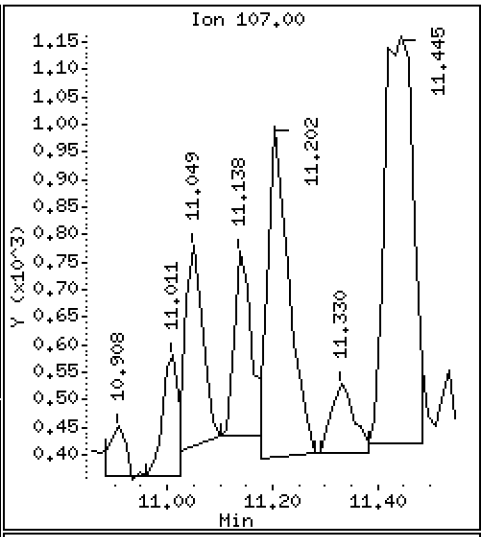
Column phase: ZB-5msi

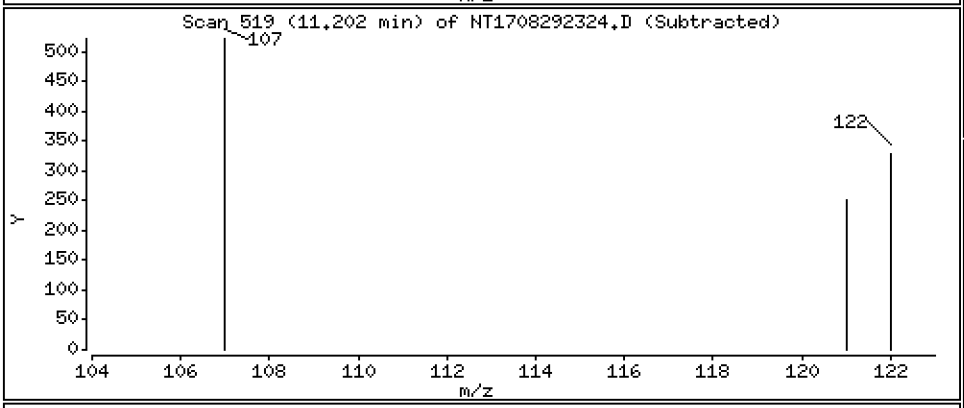
Column diameter: 0.25

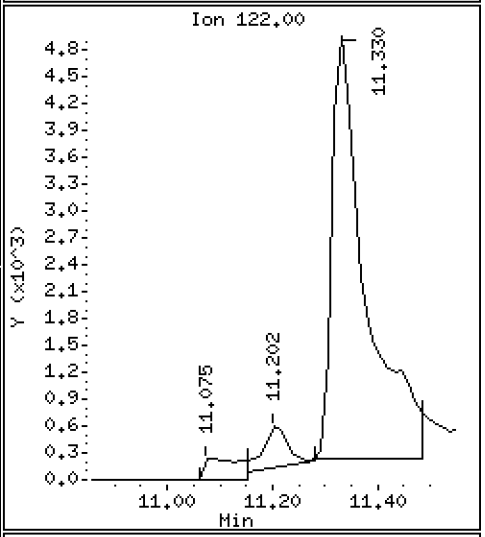
22 2,4-Dimethylphenol

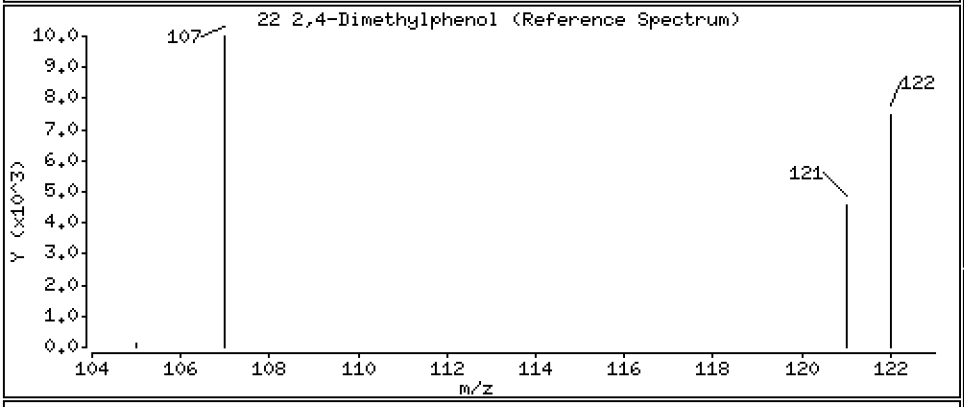
Concentration: 0.01364 ug/mL

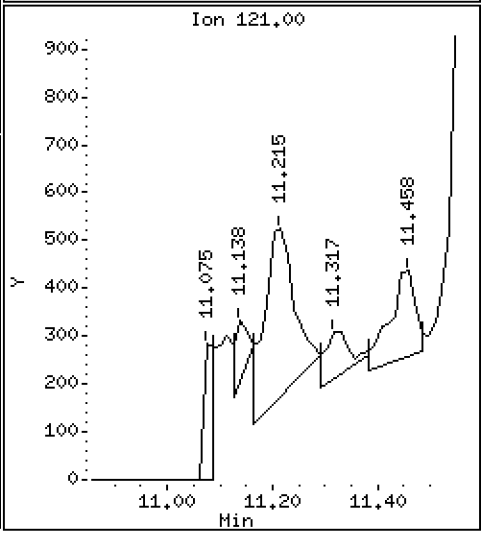


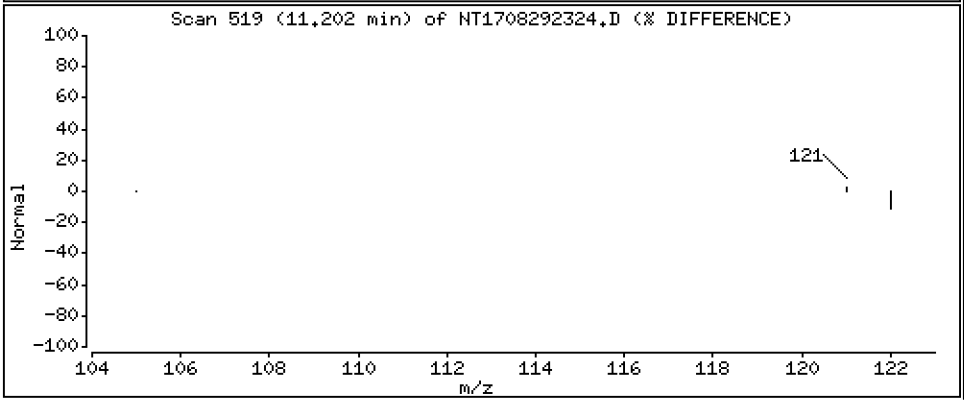












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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

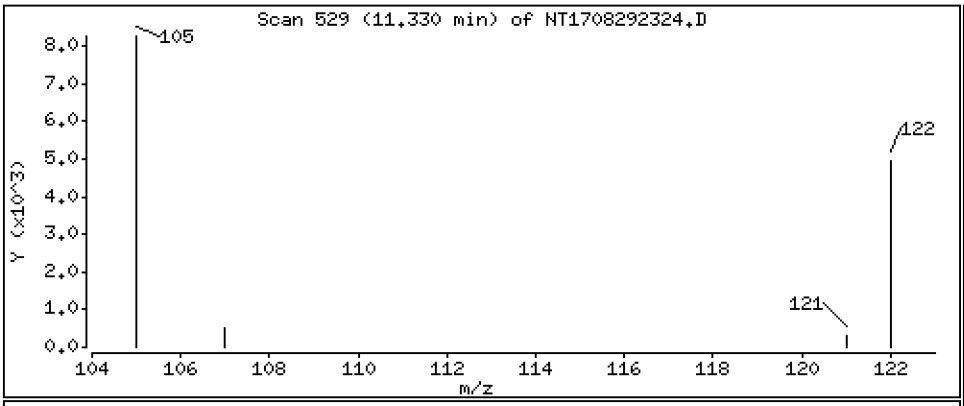
Operator: JGR

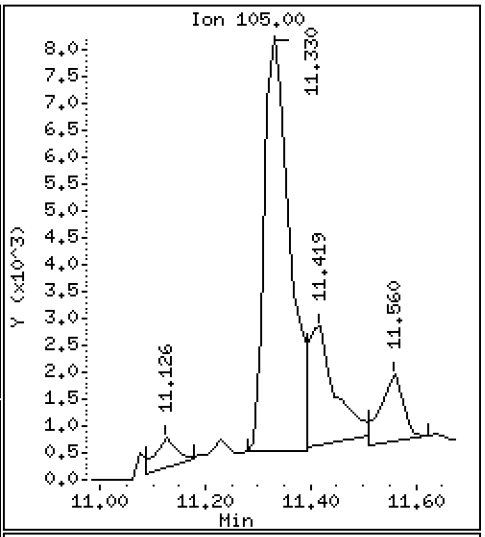
Column phase: ZB-5msi

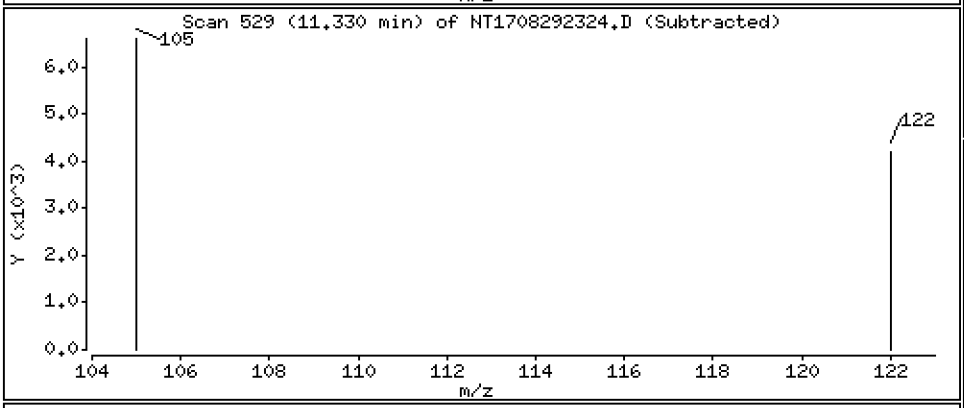
Column diameter: 0.25

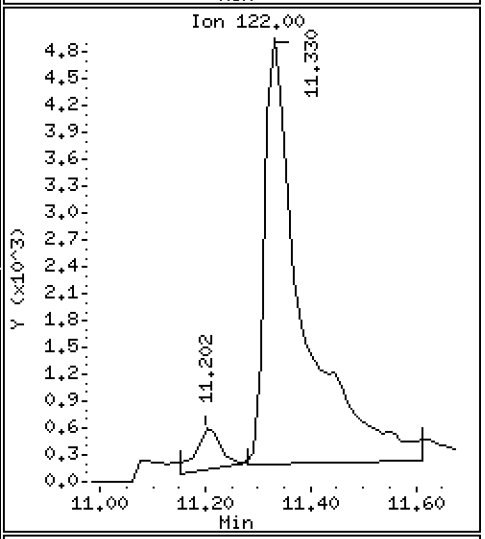
24 Benzoic acid

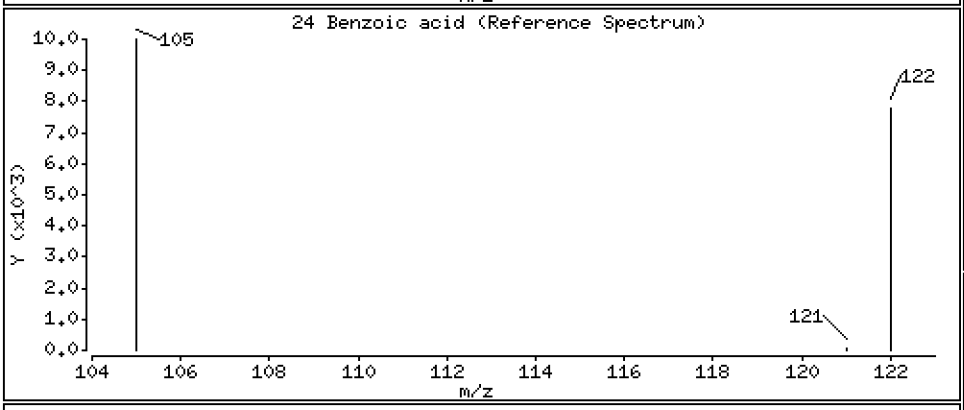
Concentration: 0.3203 ug/mL

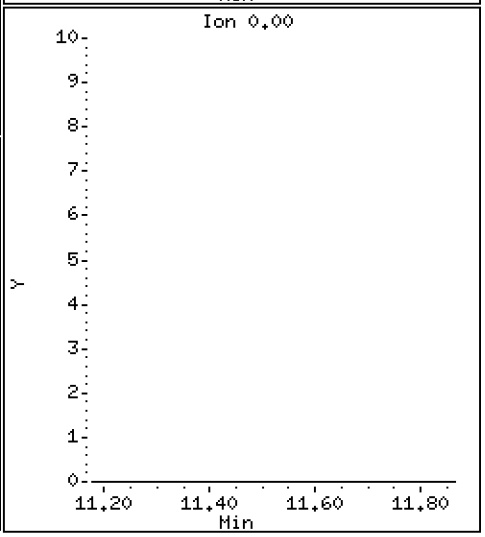


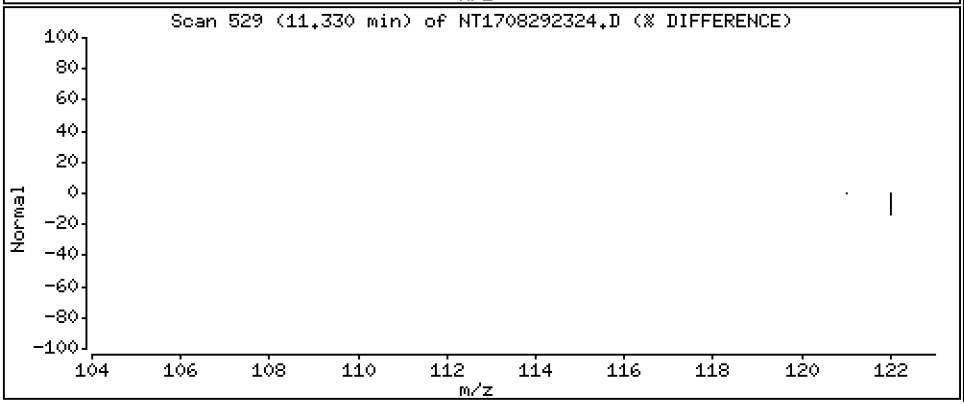












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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

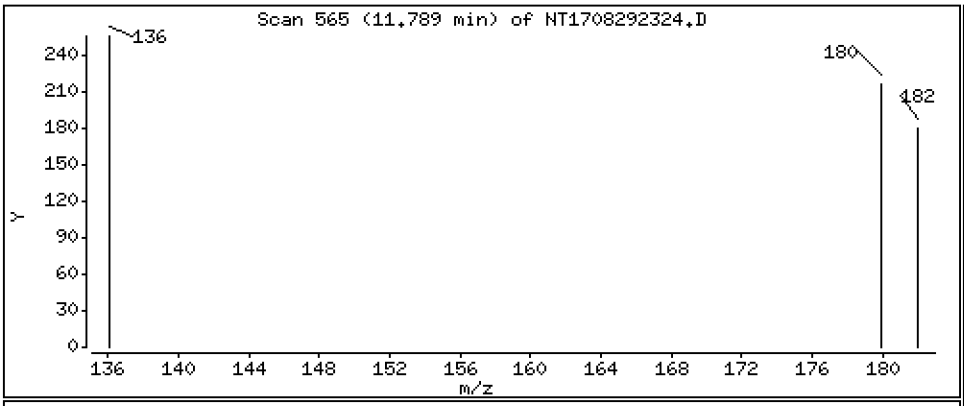
Operator: JGR

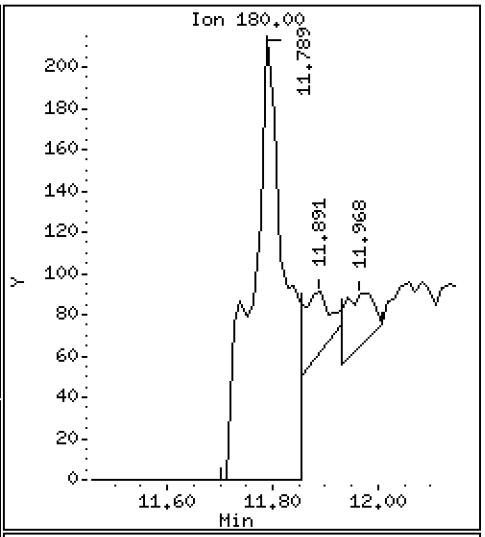
Column phase: ZB-5msi

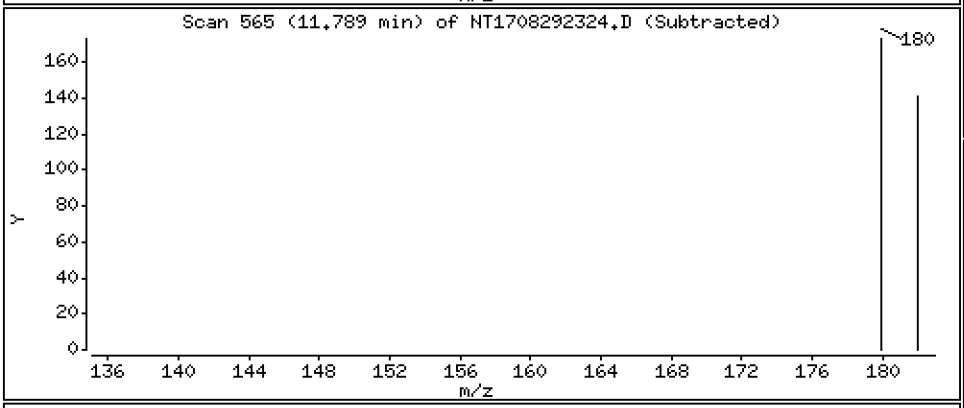
Column diameter: 0.25

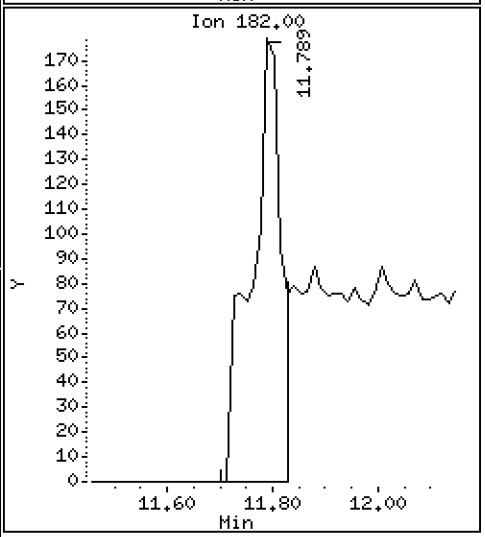
26 1,2,4-Trichlorobenzene

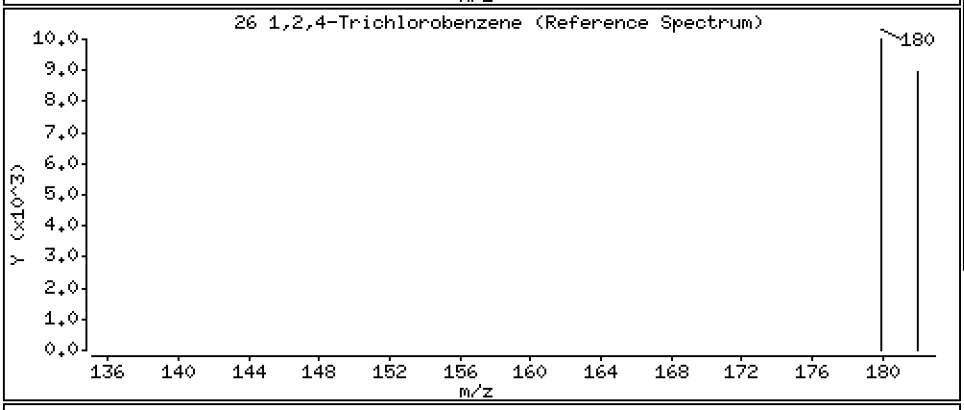
Concentration: 0.01072 ug/mL

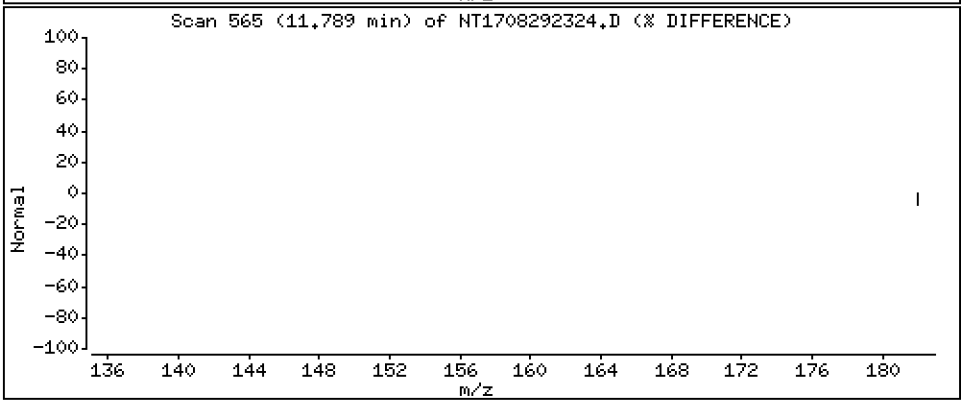












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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

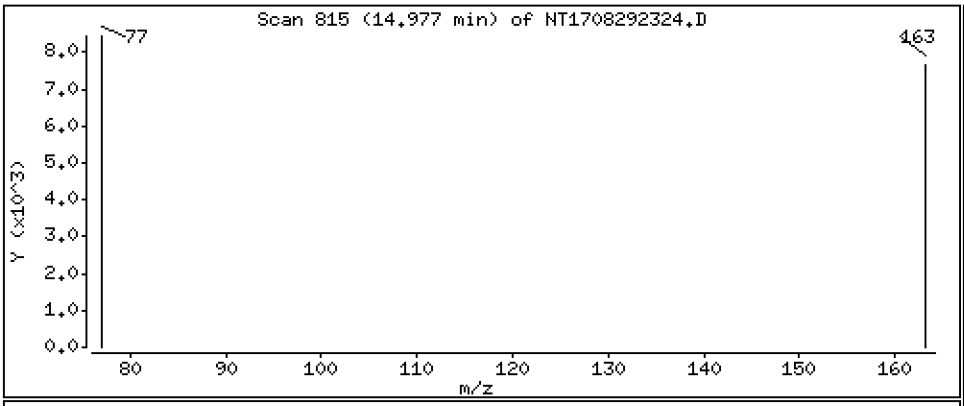
Operator: JGR

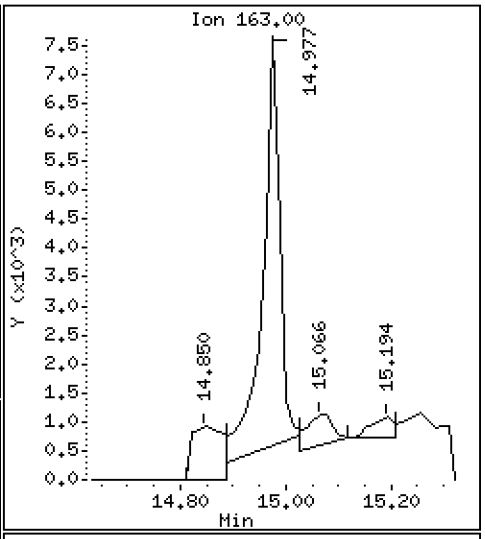
Column phase: ZB-5msi

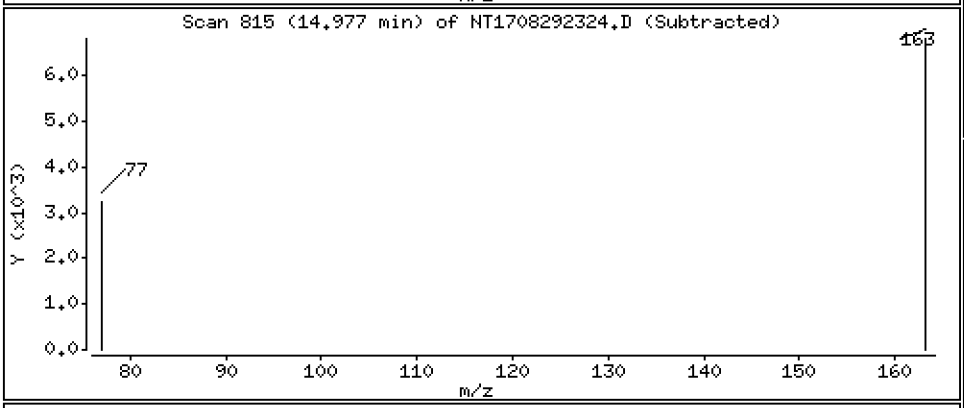
Column diameter: 0.25

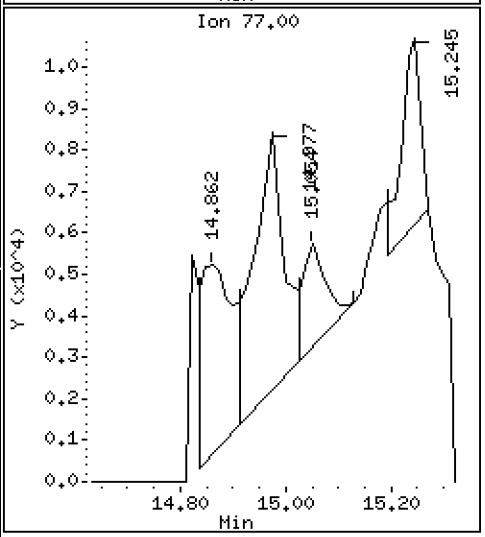
39 Dimethylphthalate

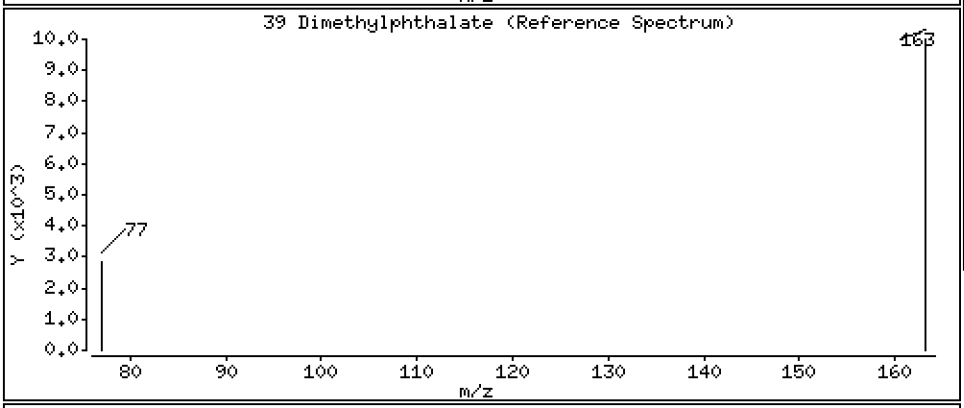
Concentration: 0.1058 ug/mL

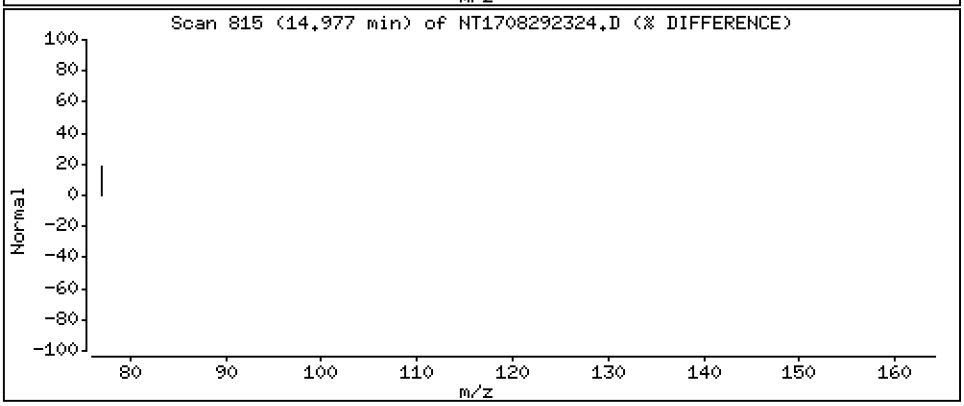












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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

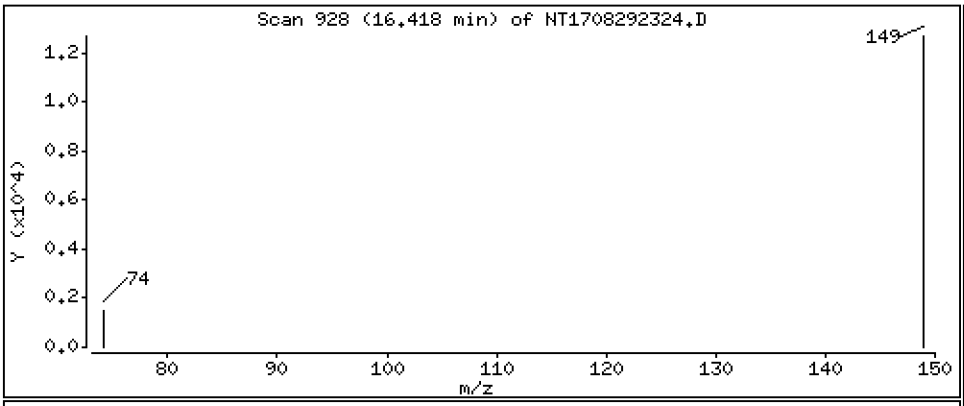
Operator: JGR

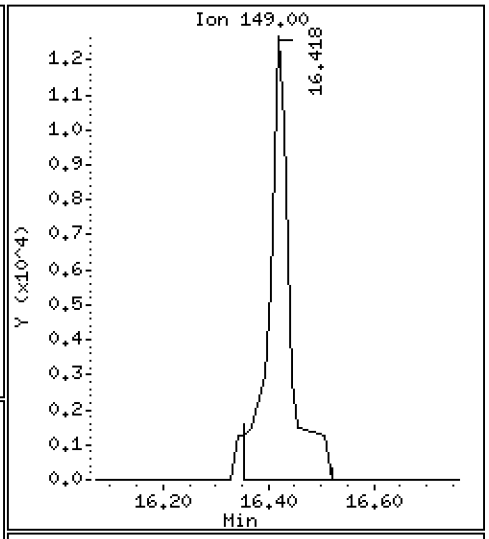
Column phase: ZB-5msi

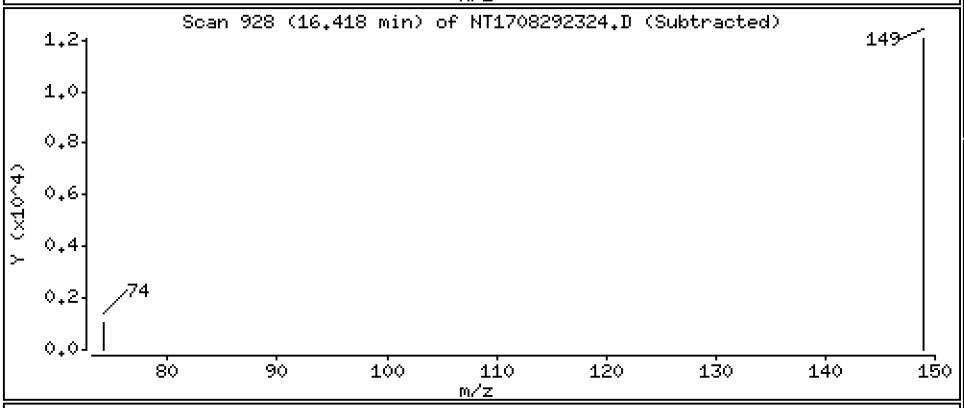
Column diameter: 0.25

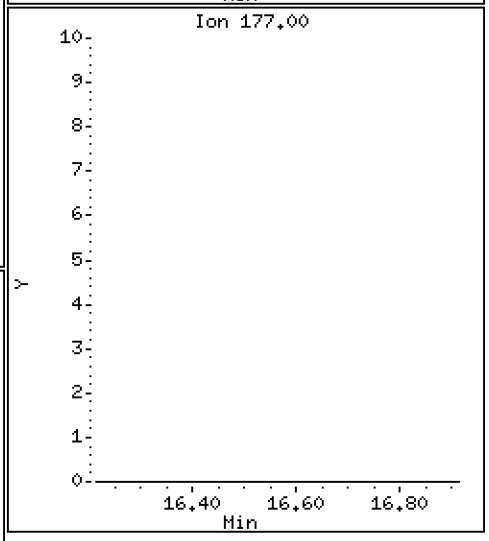
50 Diethylphthalate

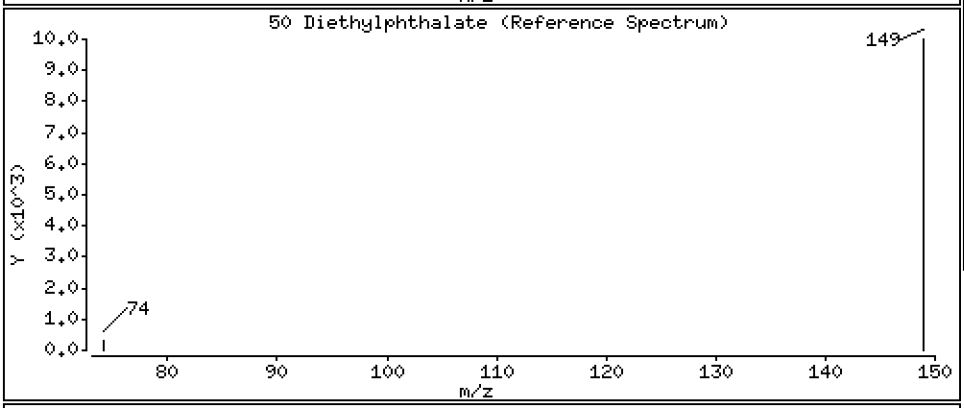
Concentration: 0.2227 ug/mL

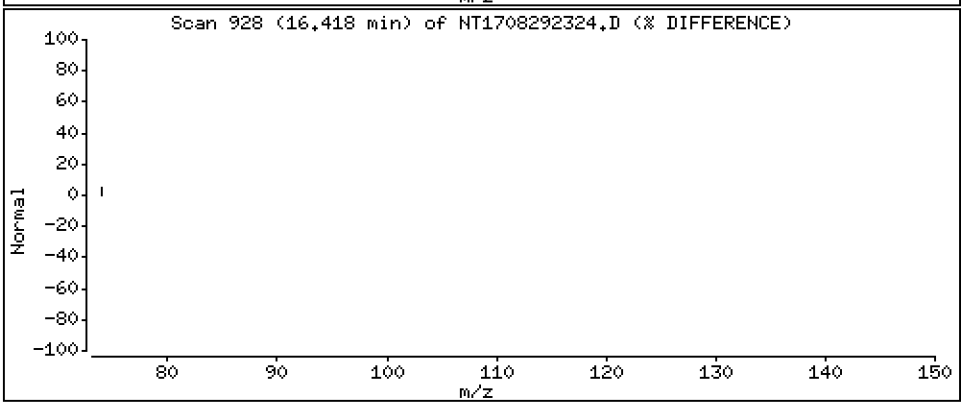












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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

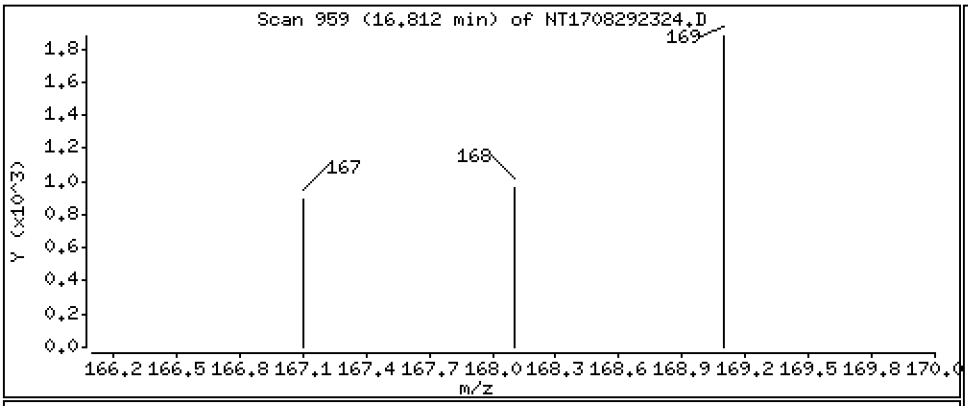
Operator: JGR

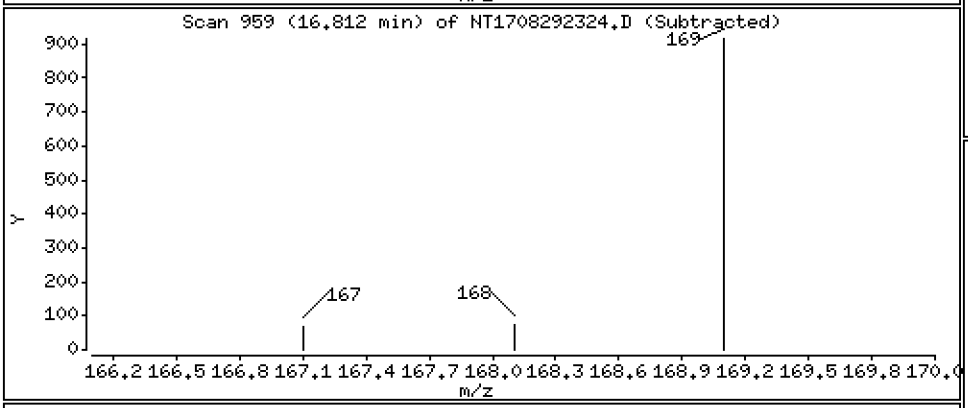
Column phase: ZB-5msi

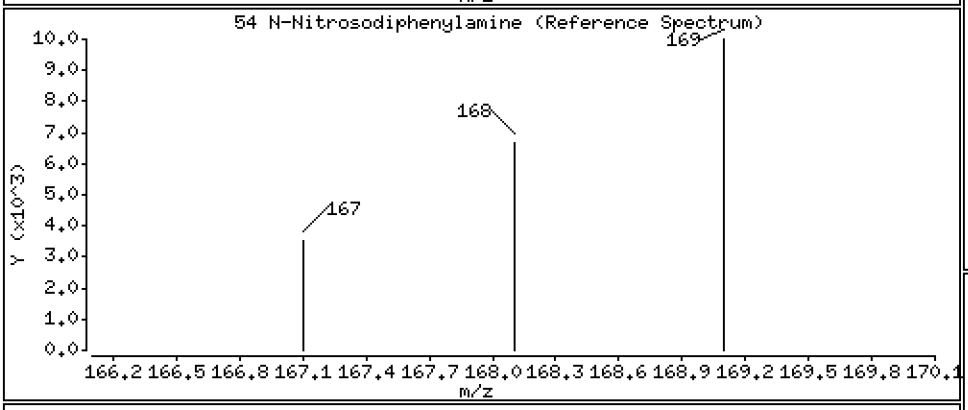
Column diameter: 0.25

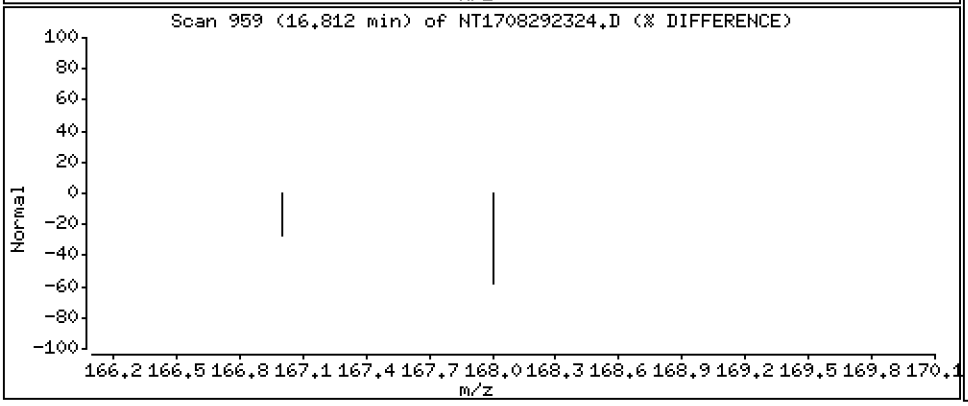
54 N-Nitrosodiphenylamine

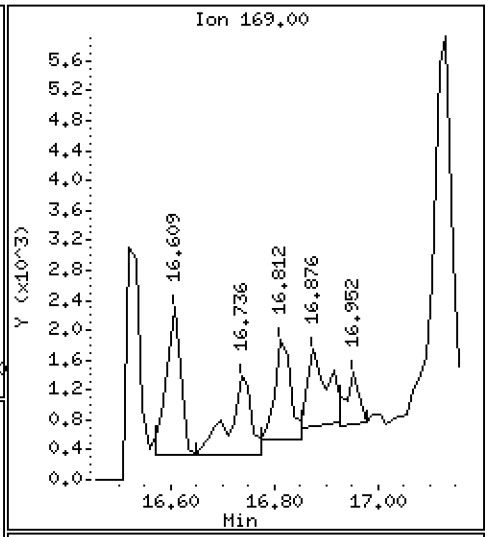
Concentration: 0.03140 ug/mL

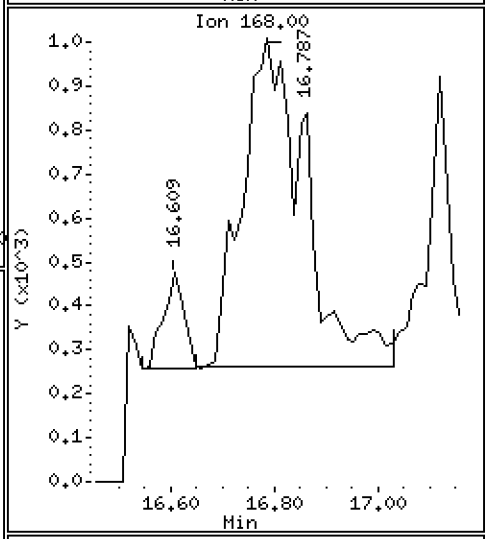


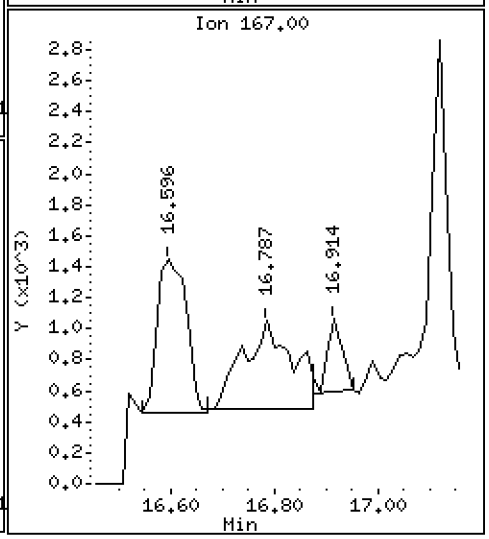












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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

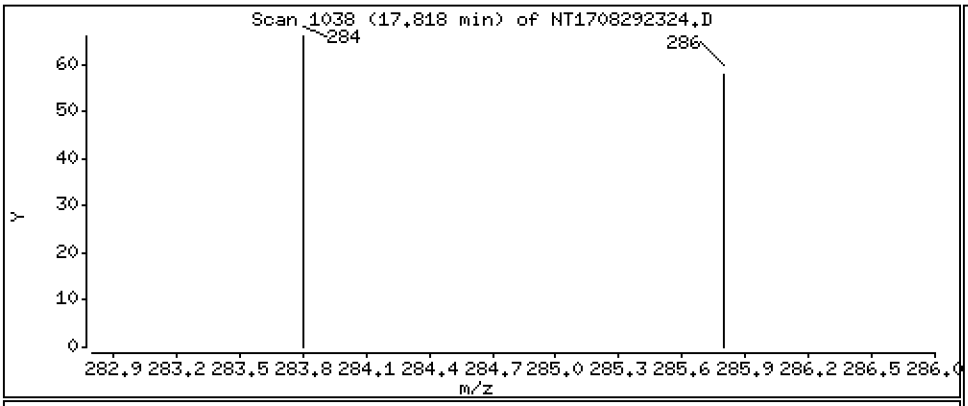
Operator: JGR

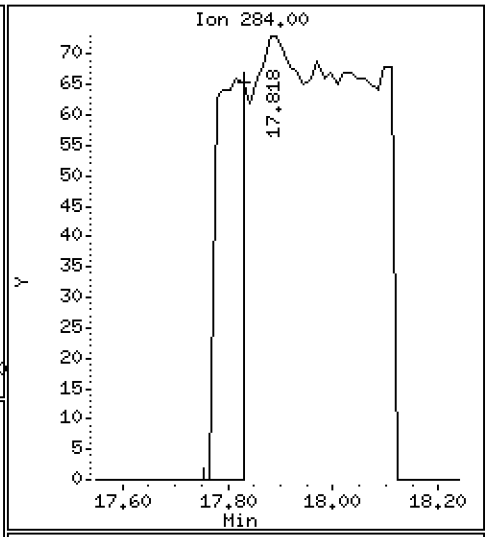
Column phase: ZB-5msi

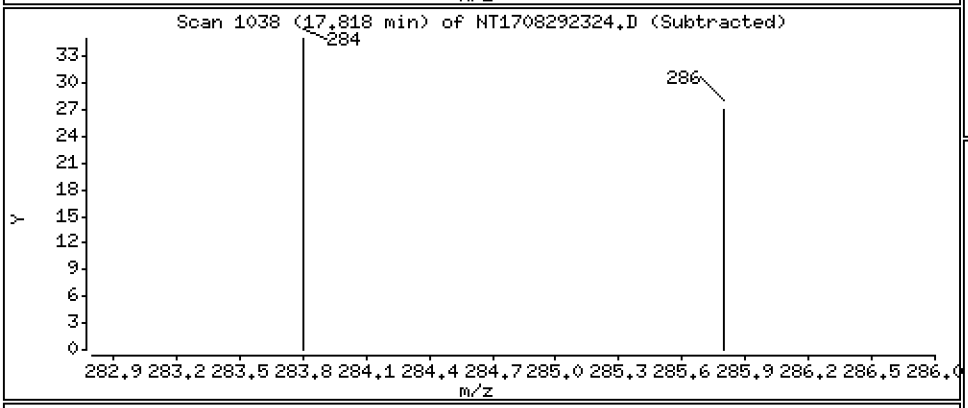
Column diameter: 0.25

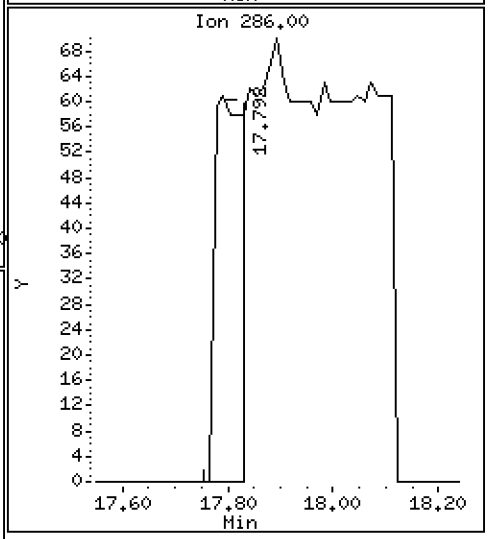
57 Hexachlorobenzene

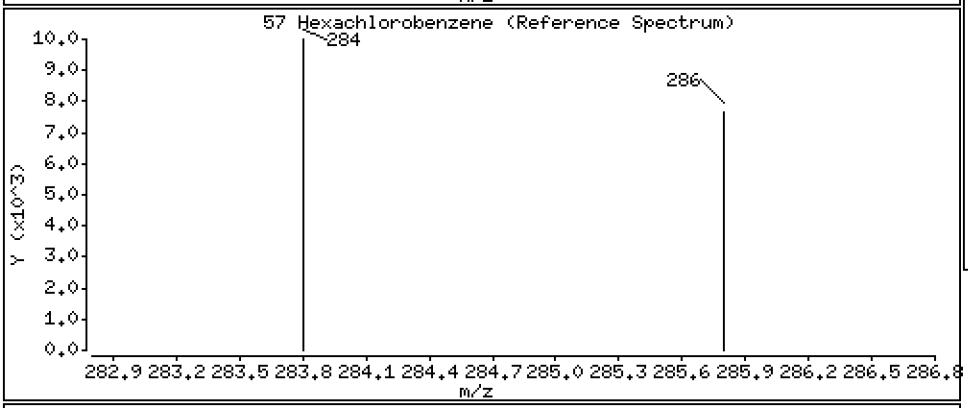
Concentration: 0.008148 ug/mL

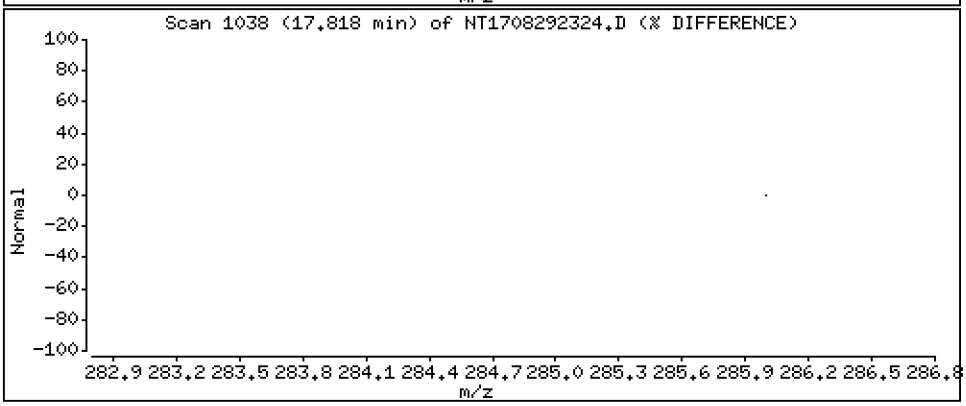












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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

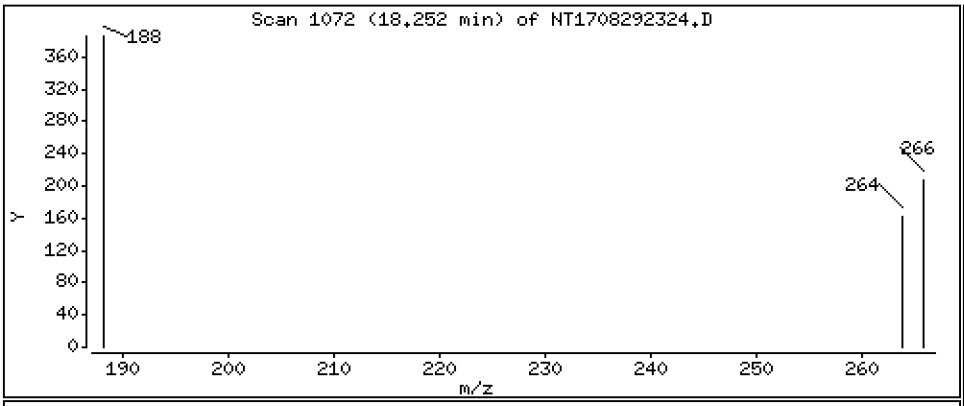
Operator: JGR

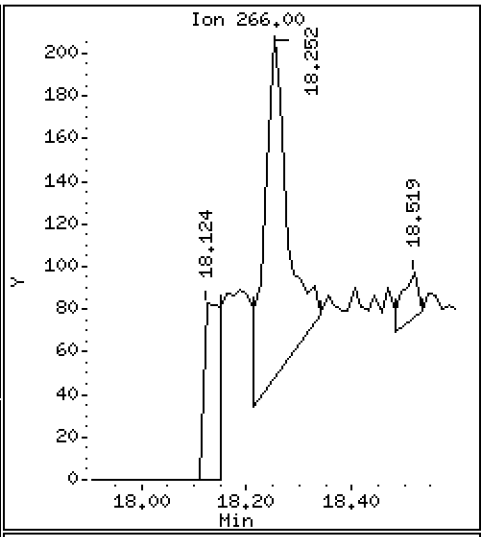
Column phase: ZB-5msi

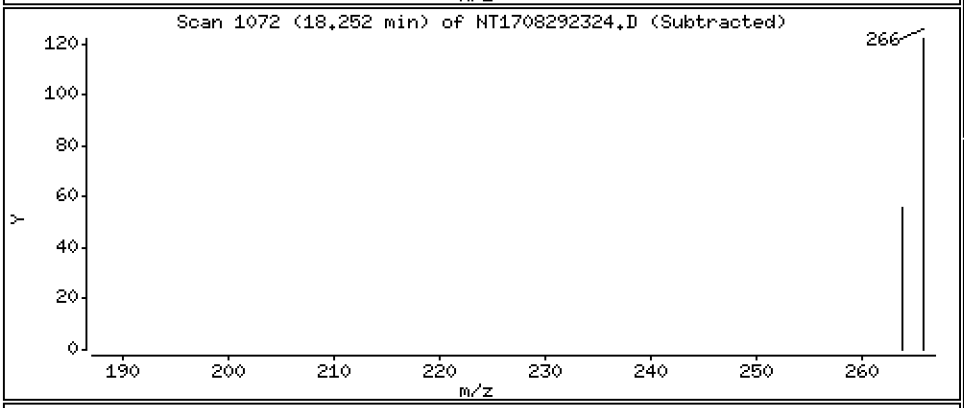
Column diameter: 0.25

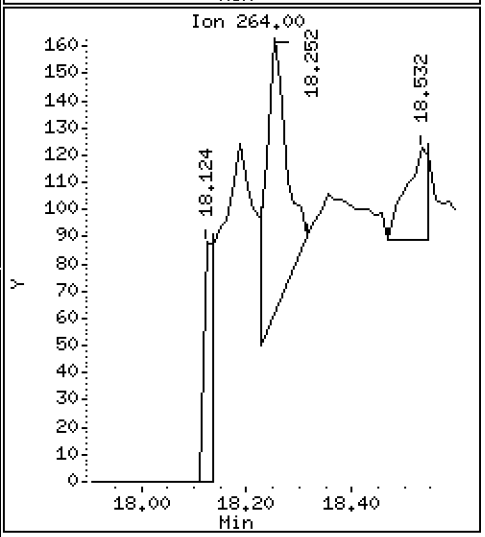
58 Pentachlorophenol

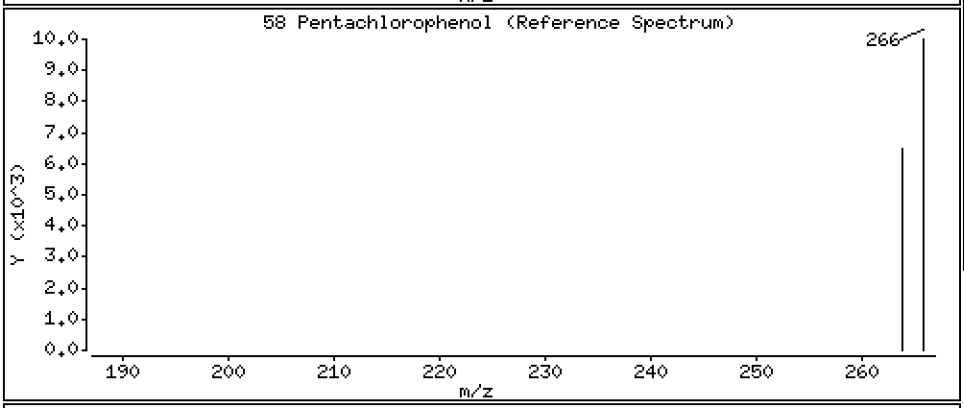
Concentration: 0.02426 ug/mL

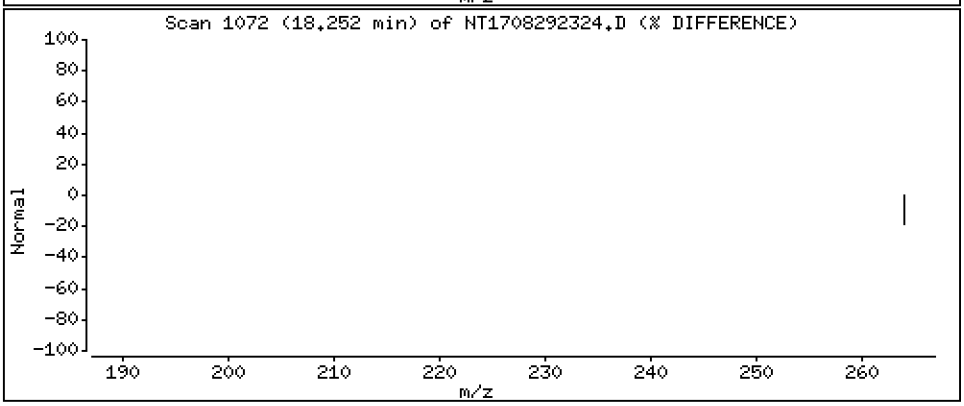












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Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

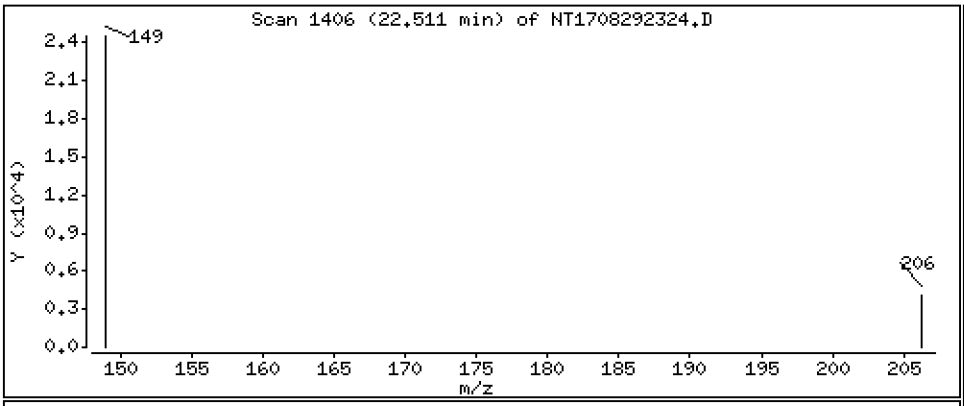
Operator: JGR

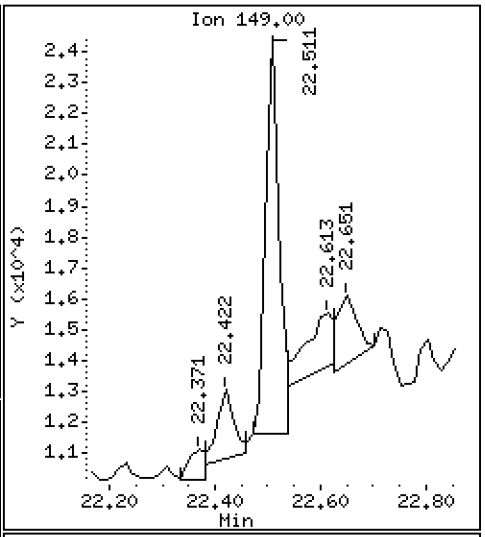
Column phase: ZB-5msi

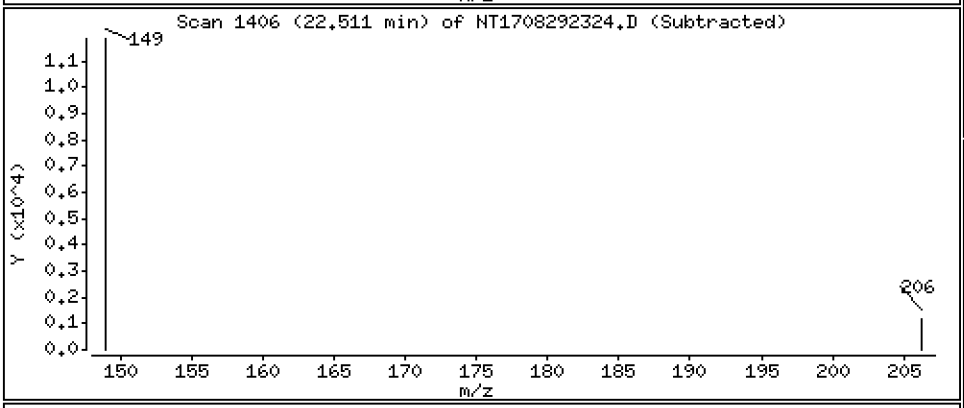
Column diameter: 0.25

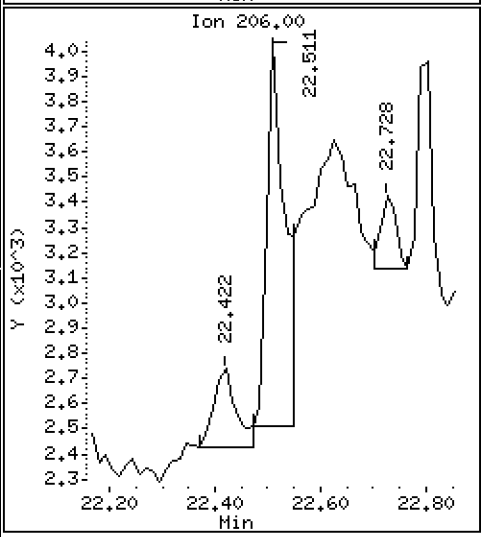
67 Butylbenzylphthalate

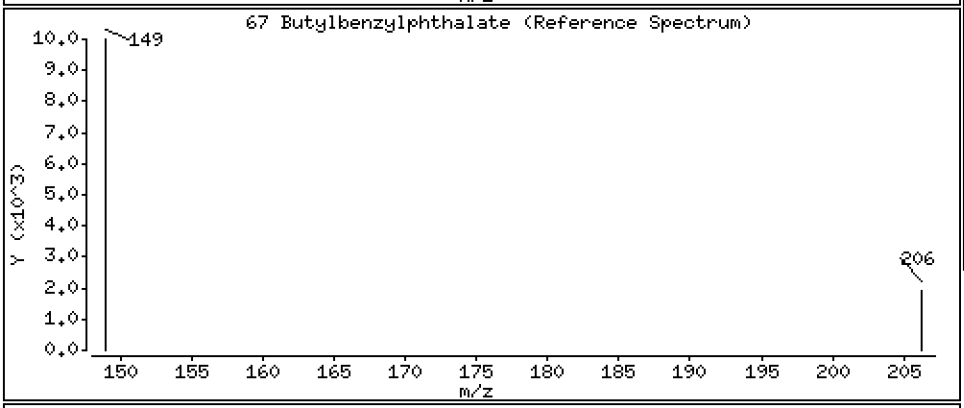
Concentration: 0.1718 ug/mL

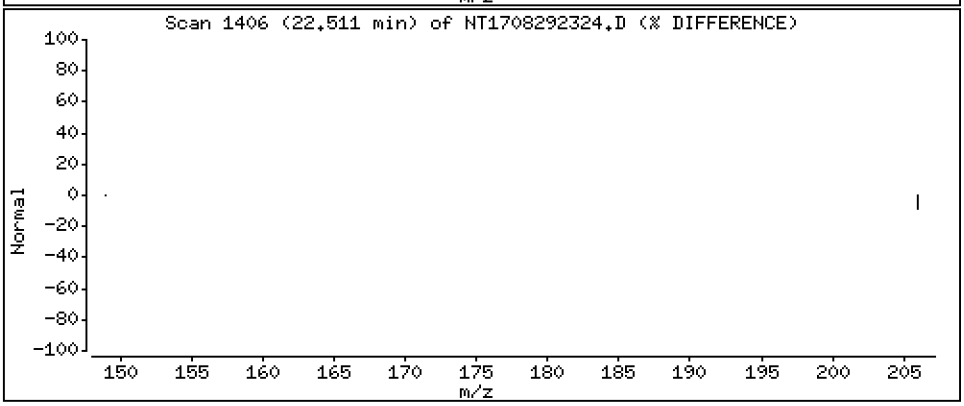












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292324.D

Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

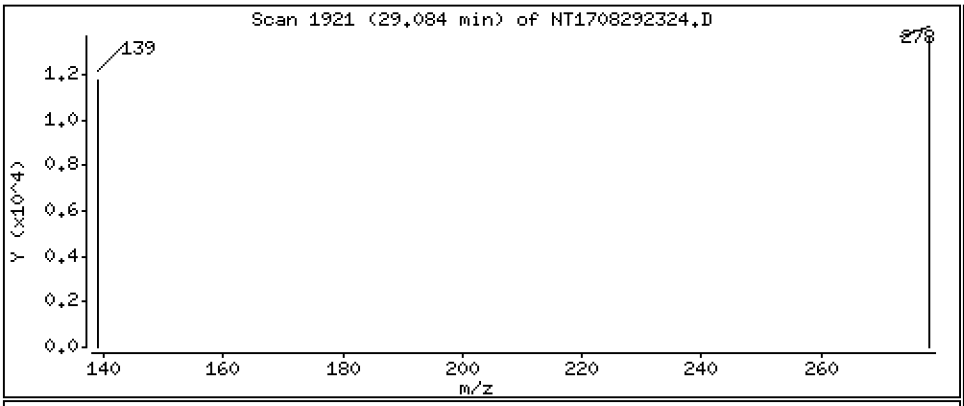
Operator: JGR

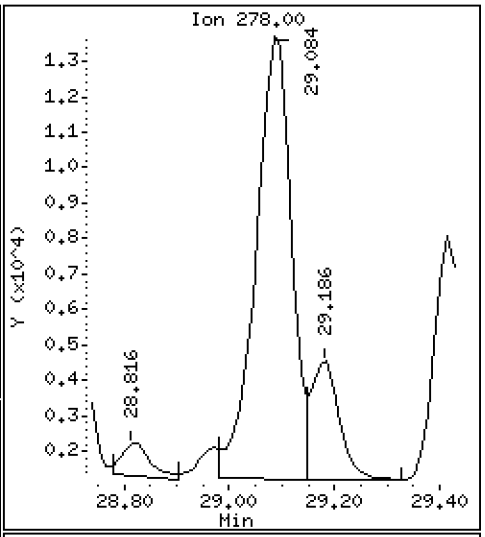
Column phase: ZB-5msi

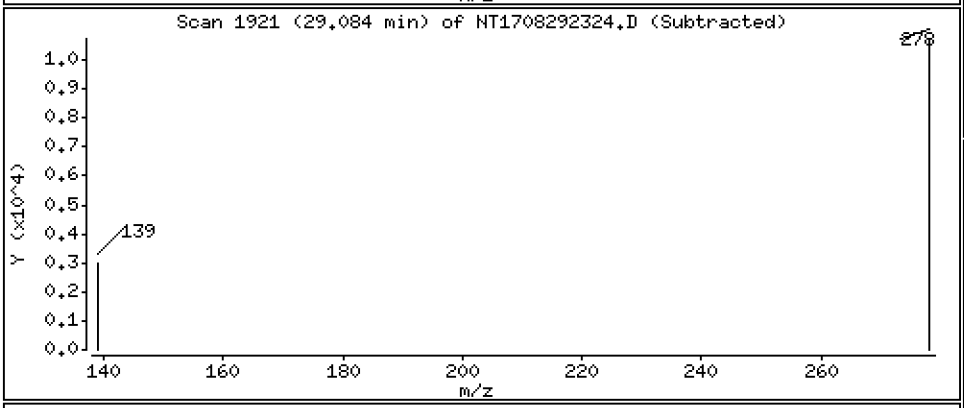
Column diameter: 0.25

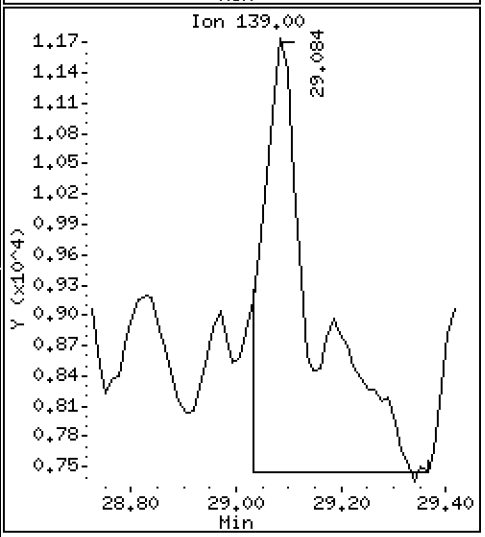
79 Dibenzo(a,h)anthracene

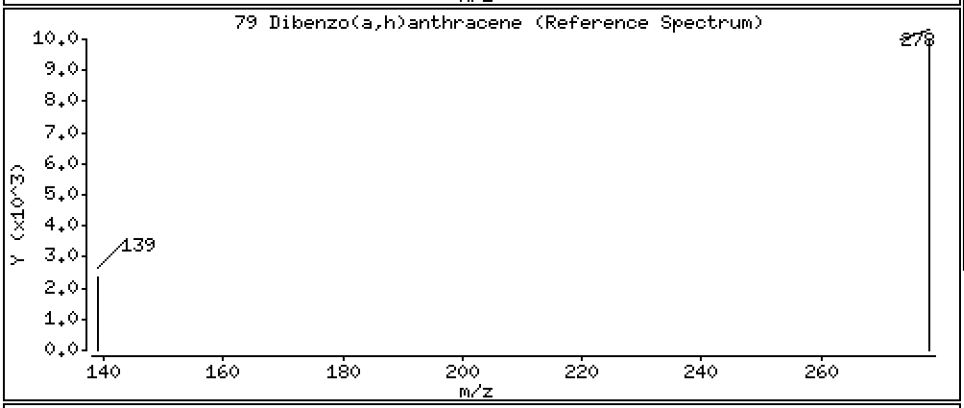
Concentration: 0.2617 ug/mL

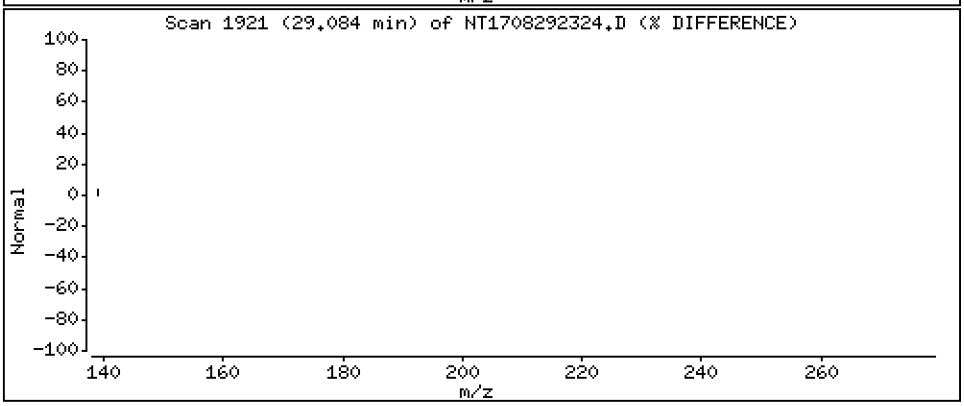












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292324.D

Date : 30-AUG-2023 01:52

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-11

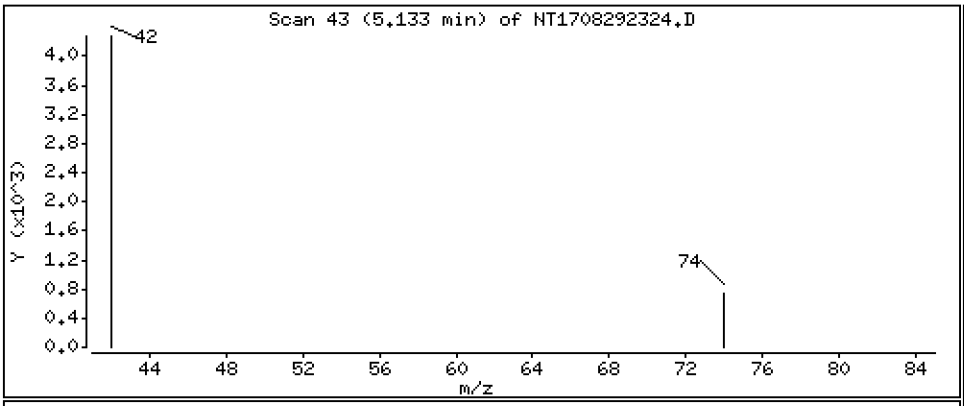
Operator: JGR

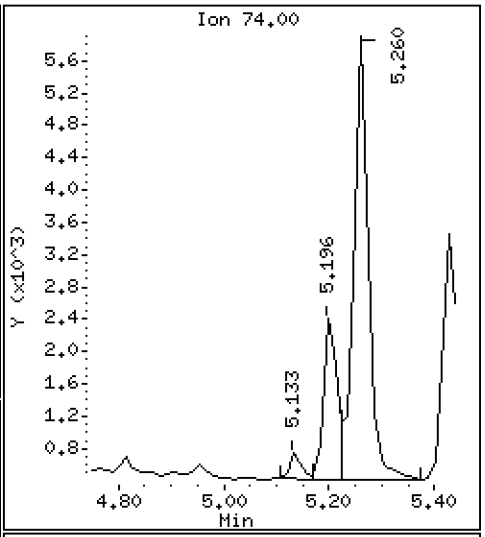
Column phase: ZB-5msi

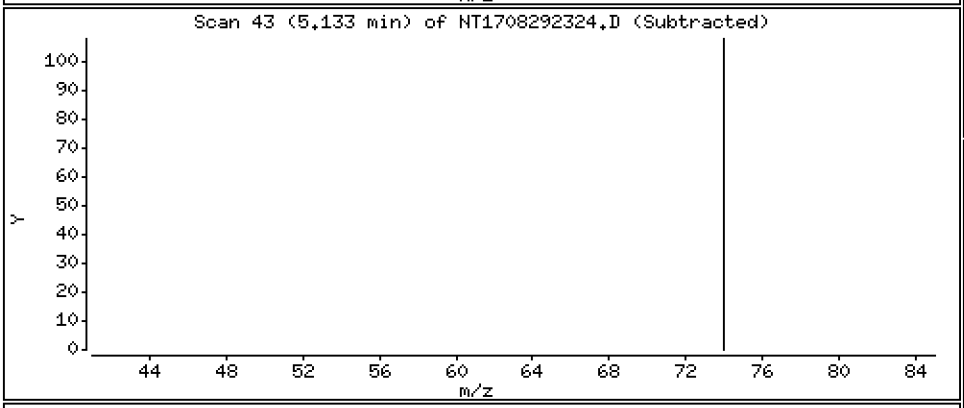
Column diameter: 0.25

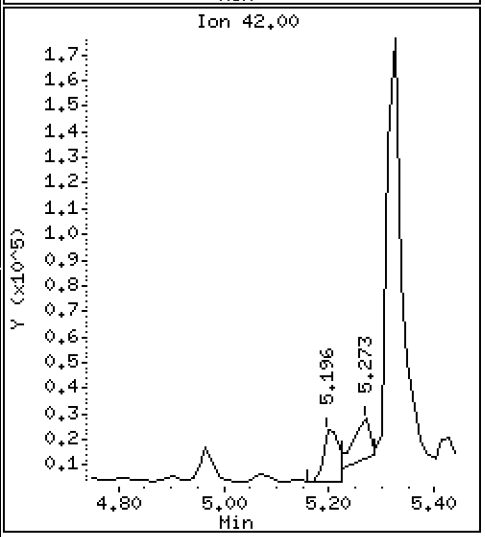
90 N-Nitrosodimethylamine

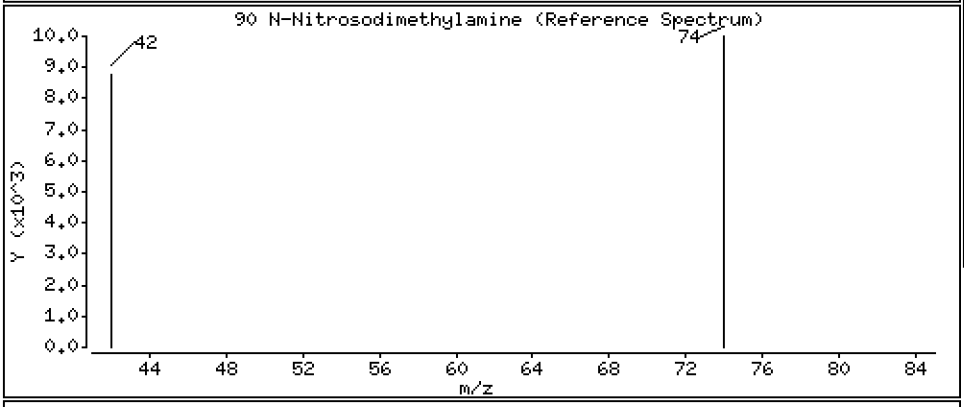
Concentration: 0.003807 ug/mL

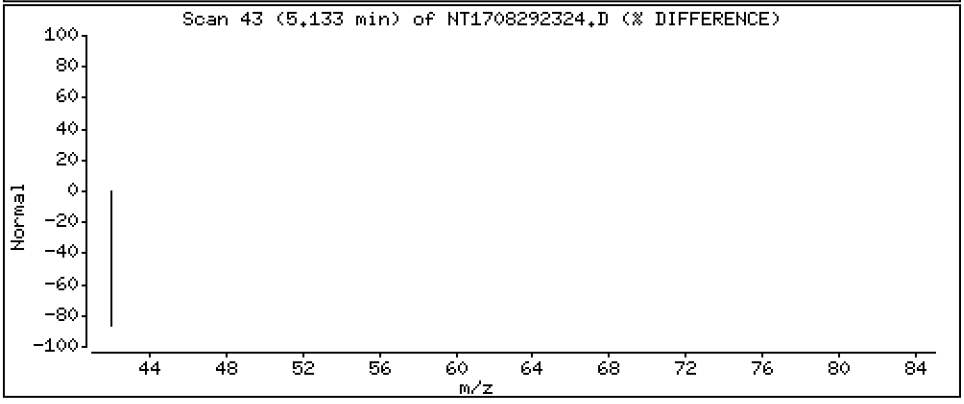












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292324.D
Lab Smp Id: 23H0579-11
Inj Date : 30-AUG-2023 01:52
Operator : JGR Inst ID: nt17.i
Smp Info : 23H0579-11
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 10:26 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.209	7.196	(0.766)	750553	5.13639	5.136(R)
	3 Phenol	94	8.789	8.788	(0.934)	15709	0.07052	0.07052
	7 1,3-Dichlorobenzene	146	9.349	9.349	(0.993)	300	0.00199	0.001991
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	351919	4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	2319	0.01590	0.01590
	11 Benzyl alcohol	79	9.681	9.681	(1.028)	20856	0.13527	0.1353
	12 1,2-Dichlorobenzene	146	9.796	9.796	(1.041)	461	0.00326	0.003259
	13 2-Methylphenol	108	9.771	9.899	(1.038)	7788	0.05766	0.05766
	15 4-Methylphenol	108	10.167	10.167	(1.080)	104696	0.74164	0.7416
	16 N-Nitroso-di-n-propylamine	70	10.103	10.218	(1.073)	11847	0.08207	0.08207
	22 2,4-Dimethylphenol	107	11.202	11.202	(0.943)	1742	0.01364	0.01364
	24 Benzoic acid	105	11.329	11.329	(0.954)	26741	0.32027	0.3203
	26 1,2,4-Trichlorobenzene	180	11.789	11.801	(0.992)	935	0.01072	0.01072
*	27 Naphthalene-d8	136	11.878	11.891	(1.000)	1272724	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.977	14.976	(0.967)	16039	0.10579	0.1058
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	466488	4.00000	
	50 Diethylphthalate	149	16.417	16.417	(1.060)	35115	0.22274	0.2227
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	2893	0.03140	0.03140
	57 Hexachlorobenzene	284	17.817	17.894	(0.962)	246	0.00815	0.008148
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	497	0.02426	0.02426
*	59 Phenanthrene-d10	188	18.519	18.519	(1.000)	640962	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	272371	3.88599	3.886(R)
	67 Butylbenzylphthalate	149	22.510	22.510	(0.958)	23085	0.17176	0.1718
*	69 Chrysene-d12	240	23.506	23.505	(1.000)	506500	4.00000	
*	77 Perylene-d12	264	26.248	26.235	(1.000)	757022	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.084	29.084	(1.108)	58526	0.26175	0.2617
	90 N-Nitrosodimethylamine	74	5.132	5.094	(0.545)	566	0.00381	0.003807

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i Calibration Date: 29-AUG-2023
Lab File ID: NT1708292324.D Calibration Time: 22:47
Lab Smp Id: 23H0579-11
Analysis Type: SV Level:
Quant Type: ISTD Sample Type:
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	358343	179172	716686	351919	-1.79
27 Naphthalene-d8	1242877	621439	2485754	1272724	2.40
42 Acenaphthene-d10	464388	232194	928776	466488	0.45
59 Phenanthrene-d10	660913	330457	1321826	640962	-3.02
69 Chrysene-d12	477958	238979	955916	506500	5.97
77 Perylene-d12	659026	329513	1318052	757022	14.87

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	0.00
27 Naphthalene-d8	11.89	11.39	12.39	11.88	-0.11
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	0.00
59 Phenanthrene-d10	18.52	18.02	19.02	18.52	0.00
69 Chrysene-d12	23.51	23.01	24.01	23.51	0.00
77 Perylene-d12	26.24	25.74	26.74	26.25	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292324.D

Lab ID: 23H0579-11
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   30-AUG-2023 01:52

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.038	1.052	-0.0136	2-Methylphenol
1.073	1.085	-0.0122	N-Nitroso-di-n-propylamine

RRT check based on Ccal File: SIM.b/NT1708292319B.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1162A

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23H0579-12 A	SDG:	23H0579
Sampled:	01/17/23 14:37	Prepared:	08/25/23 12:39	File ID:	NT1708292325.D
% Solids:	57.38	Preparation:	EPA 3546 (Microwave)	Analyzed:	08/30/23 02:29
Batch:	BLH0669	Sequence:	SLH0447	Initial/Final:	17.49 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GH00045
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
105-67-9	2,4-Dimethylphenol	1	19.9	U	2.2	19.9

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	747.33	551	73.7	27 - 120	Q
p-Terphenyl-d14	498.22	461	92.5	37 - 120	Q

INTERNAL STANDARDS	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	365024	9.413	358343	9.413	
Naphthalene-d8	1336535	11.878	1242877	11.891	
Acenaphthene-d10	490287	15.487	464388	15.487	
Phenanthrene-d10	675059	18.519	660913	18.519	
Chrysene-d12	433965	23.505	477958	23.505	
Perylene-d12	669794	26.235	659026	26.235	

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292325.D

Date : 30-AUG-2023 02:29

Client ID:

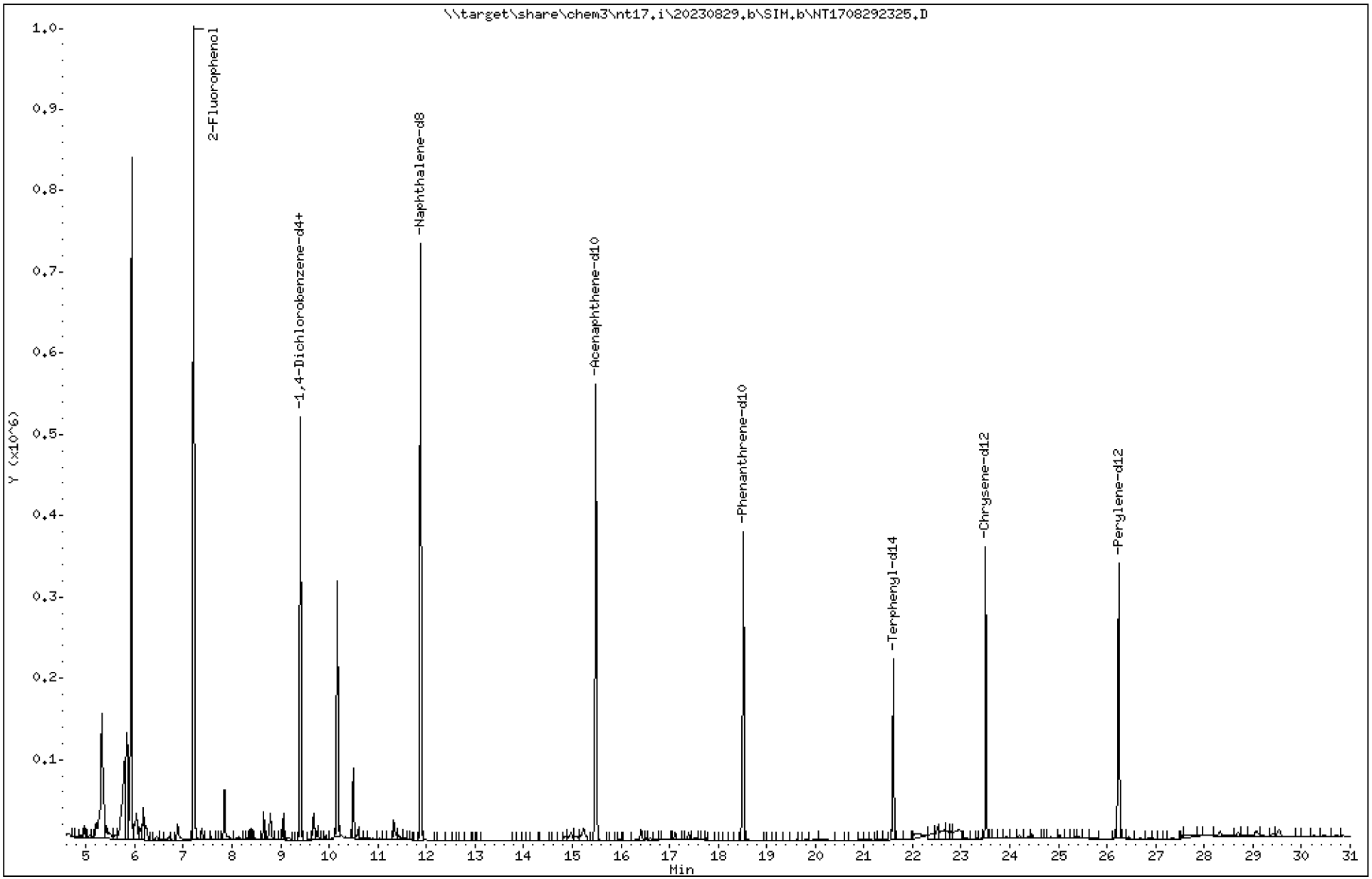
Sample Info: 23H0579-12

Instrument: nt17.i

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

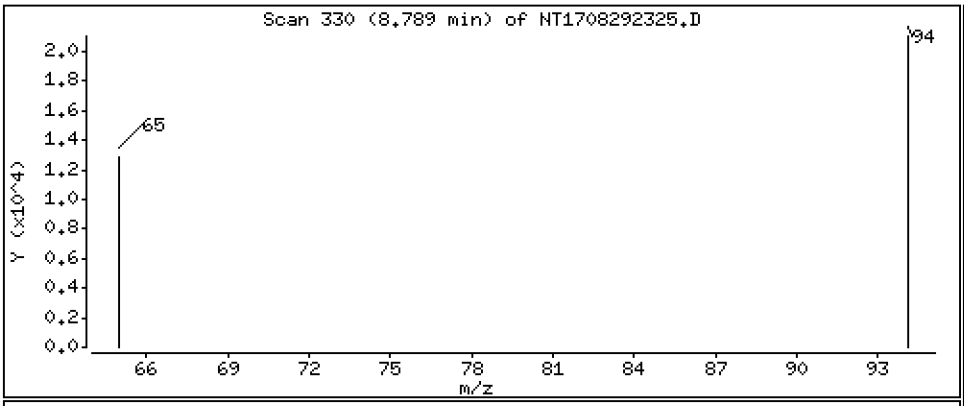
Operator: JGR

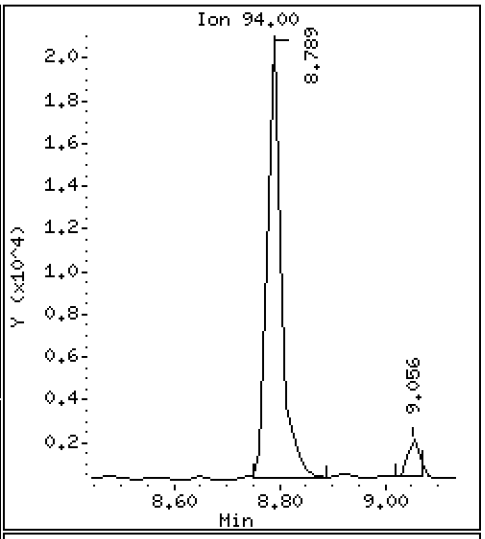
Column phase: ZB-5msi

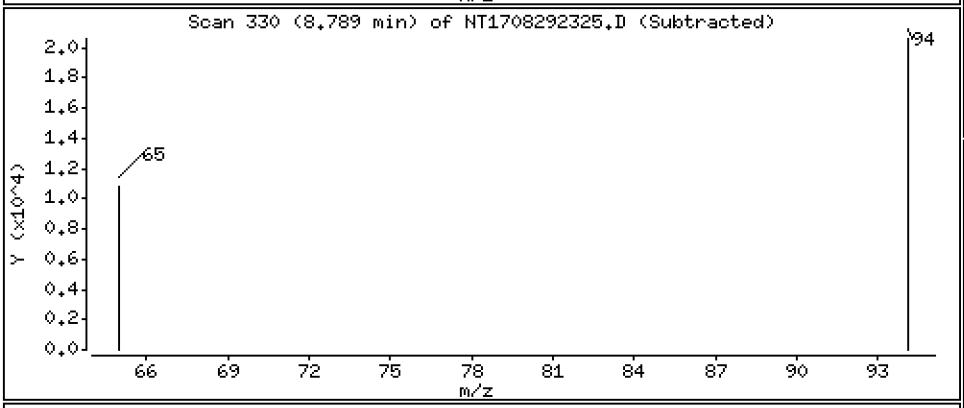
Column diameter: 0.25

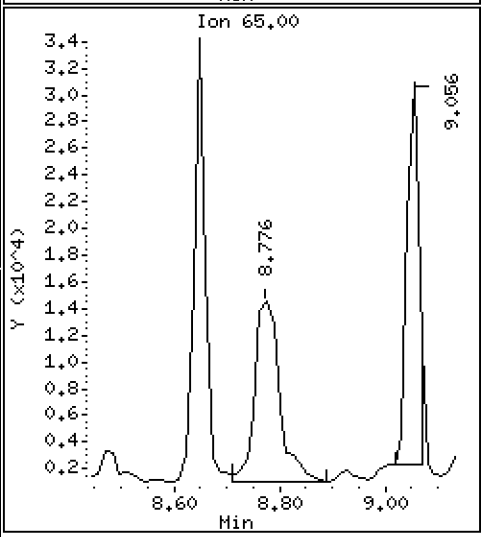
3 Phenol

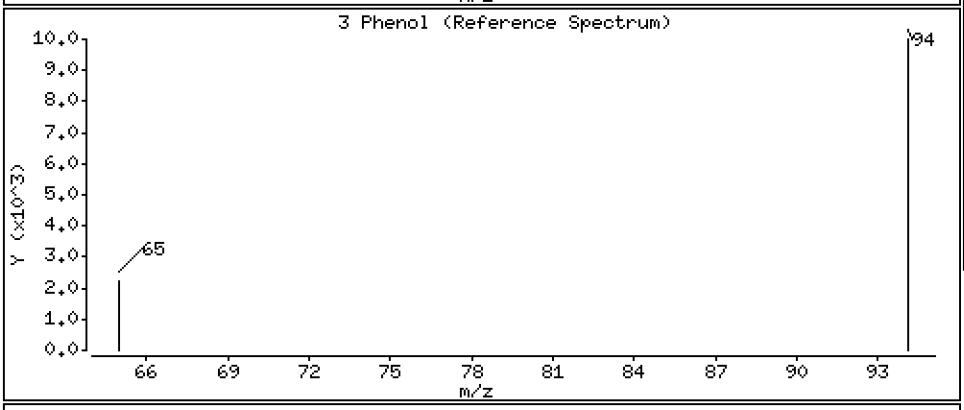
Concentration: 0.1639 ug/mL

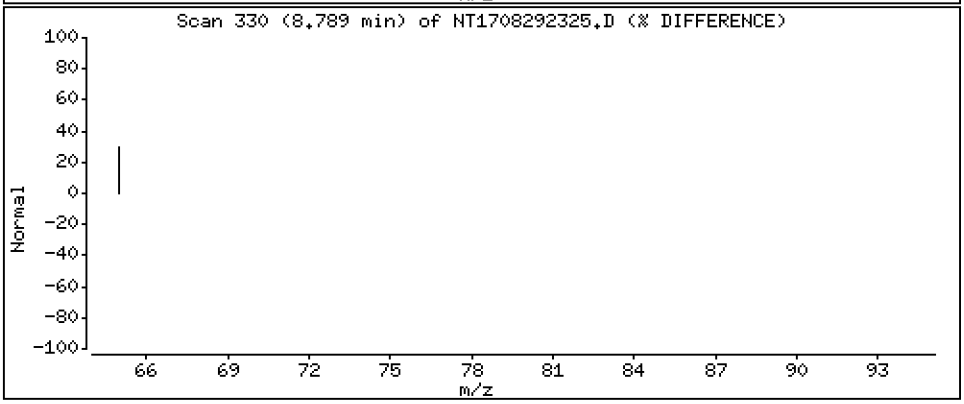












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Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

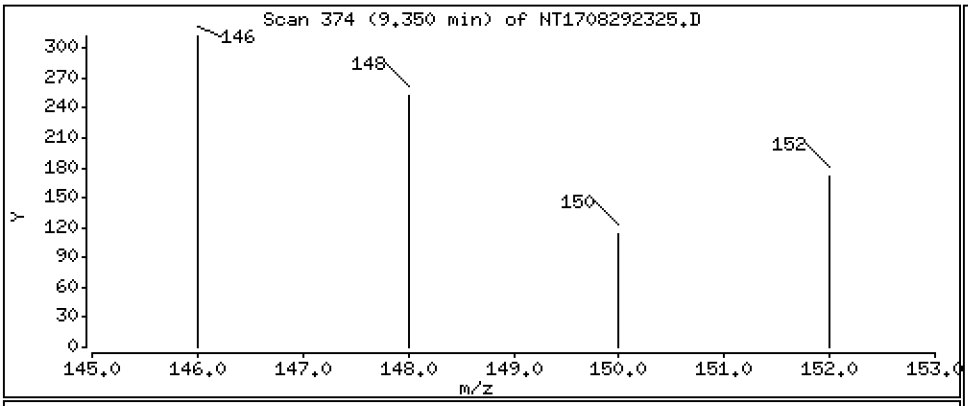
Operator: JGR

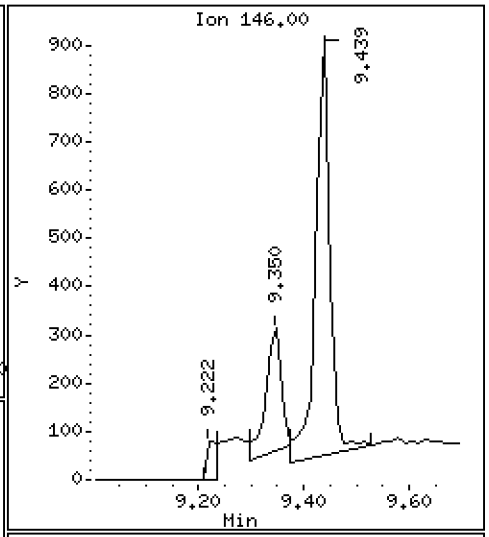
Column phase: ZB-5msi

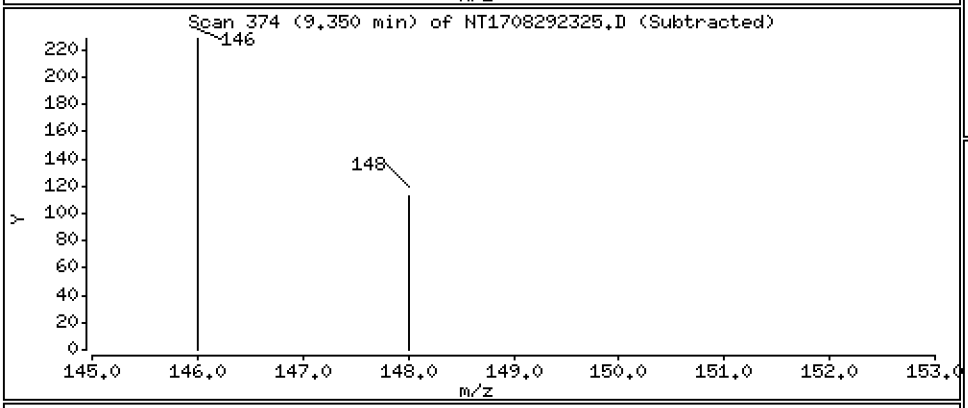
Column diameter: 0.25

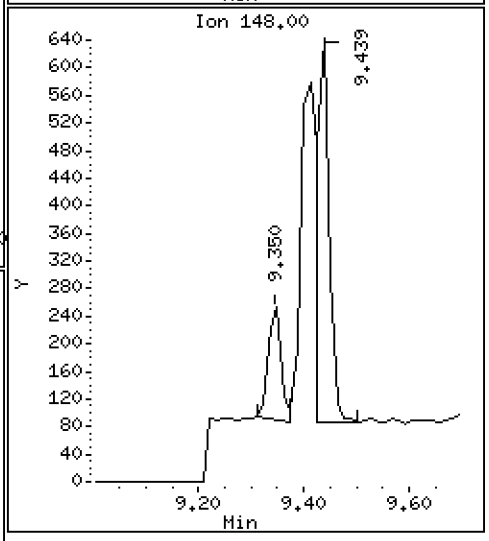
7 1,3-Dichlorobenzene

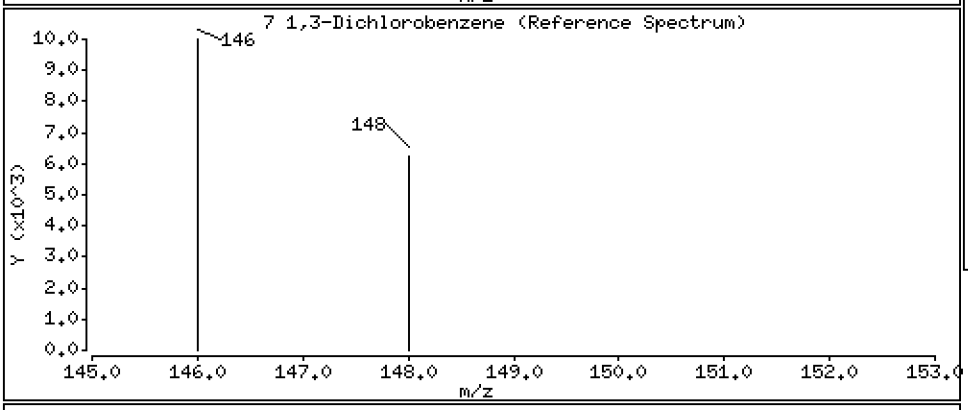
Concentration: 0.003462 ug/mL

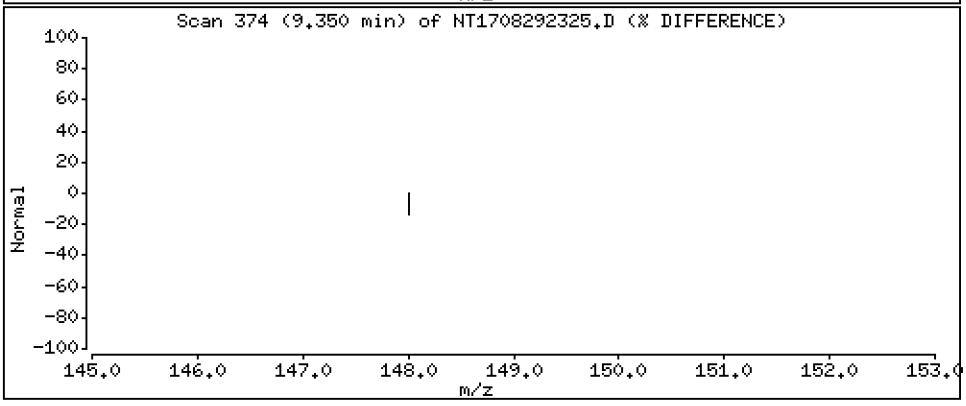












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Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

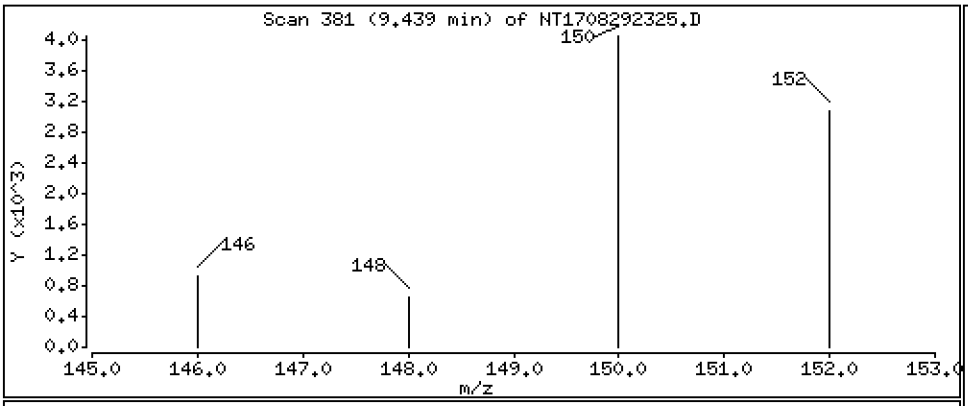
Operator: JGR

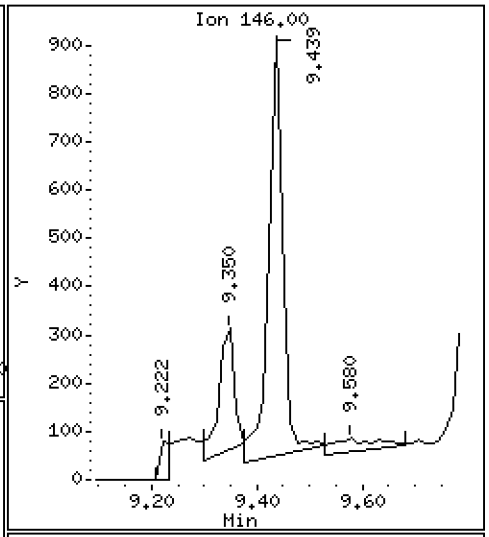
Column phase: ZB-5msi

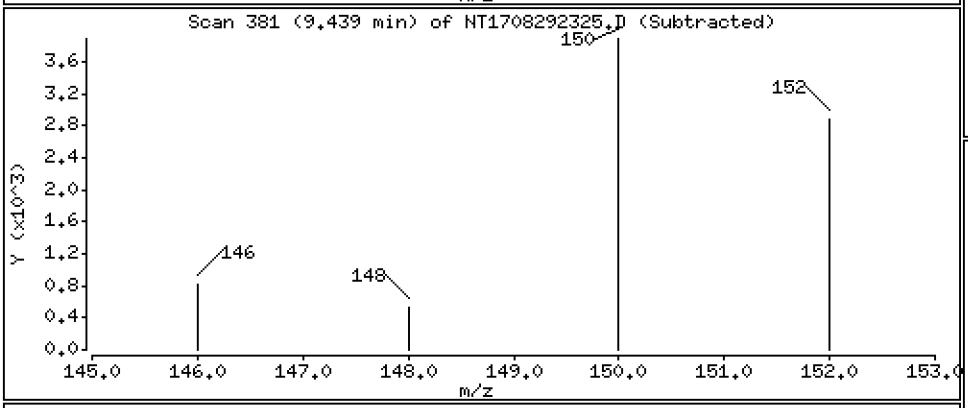
Column diameter: 0.25

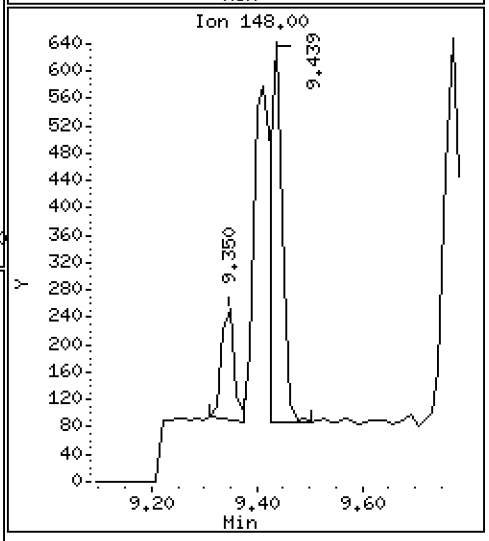
9 1,4-Dichlorobenzene

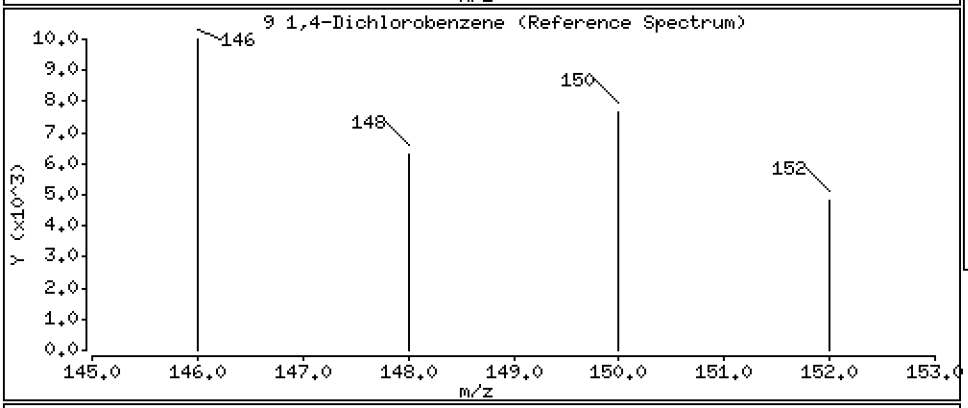
Concentration: 0.01082 ug/mL

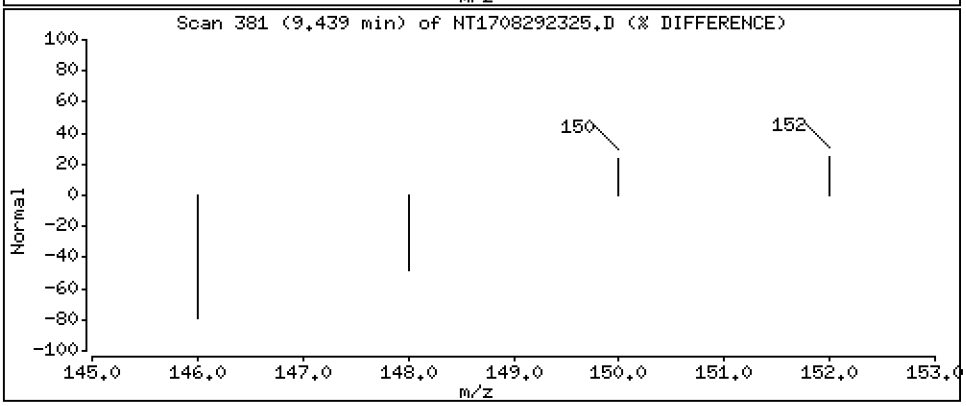












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Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

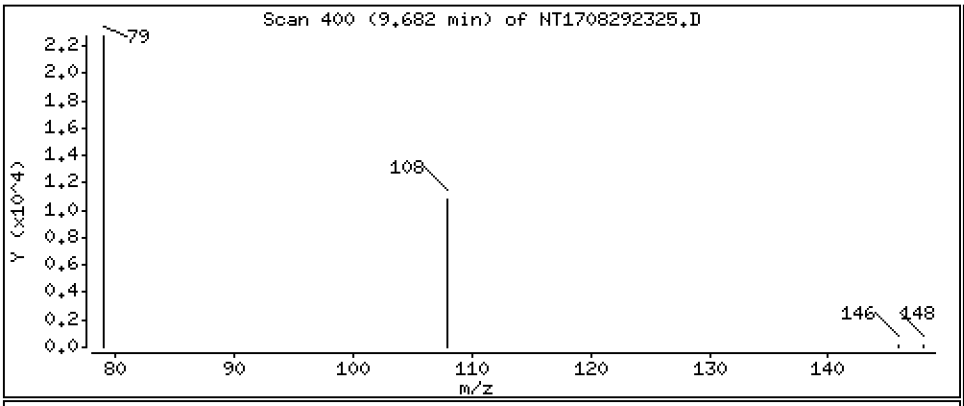
Operator: JGR

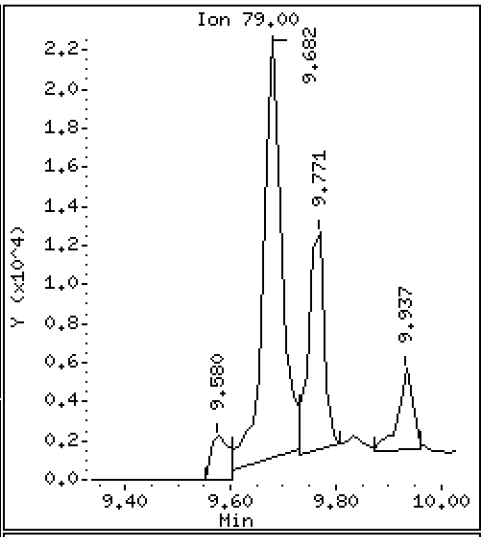
Column phase: ZB-5msi

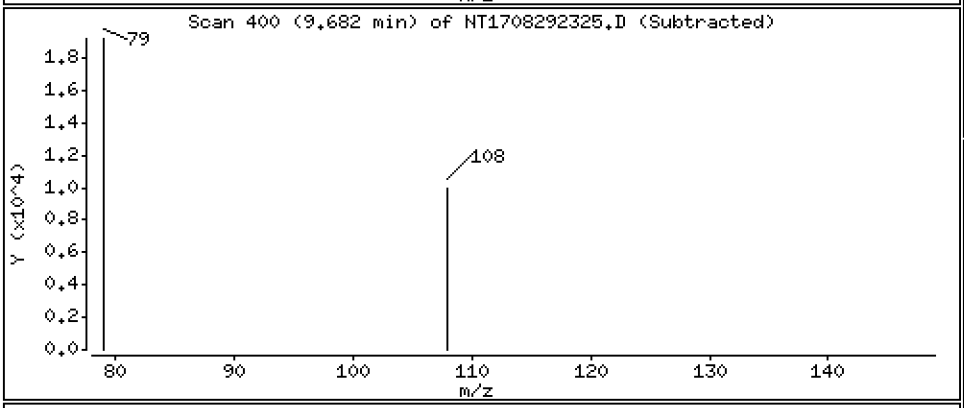
Column diameter: 0.25

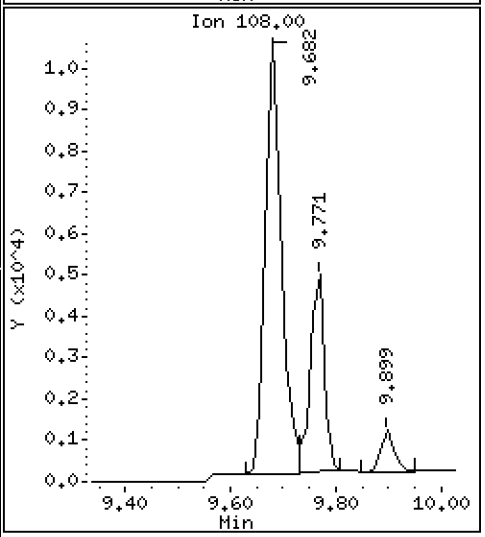
11 Benzyl alcohol

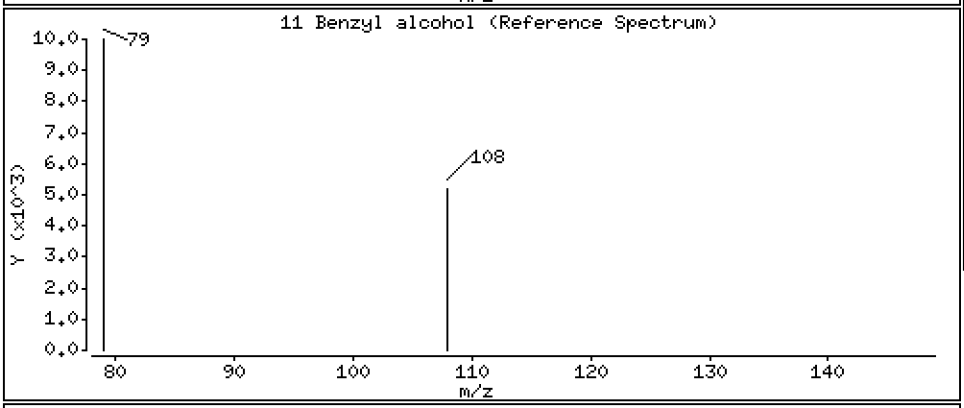
Concentration: 0.3365 ug/mL

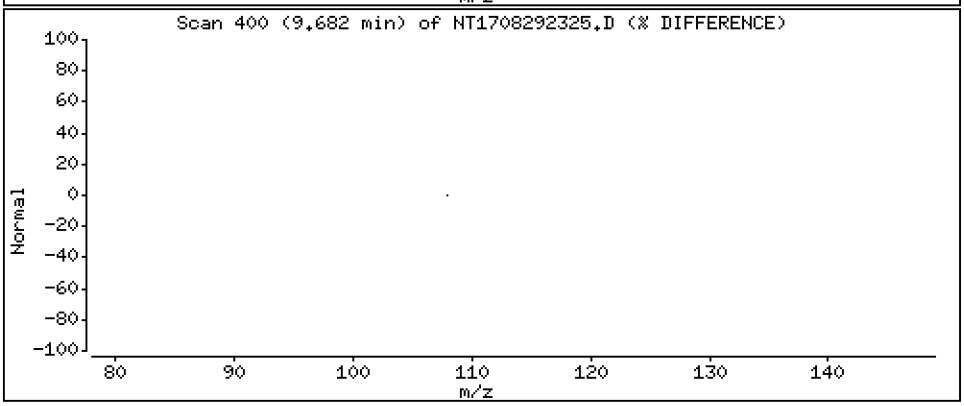












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292325.D

Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

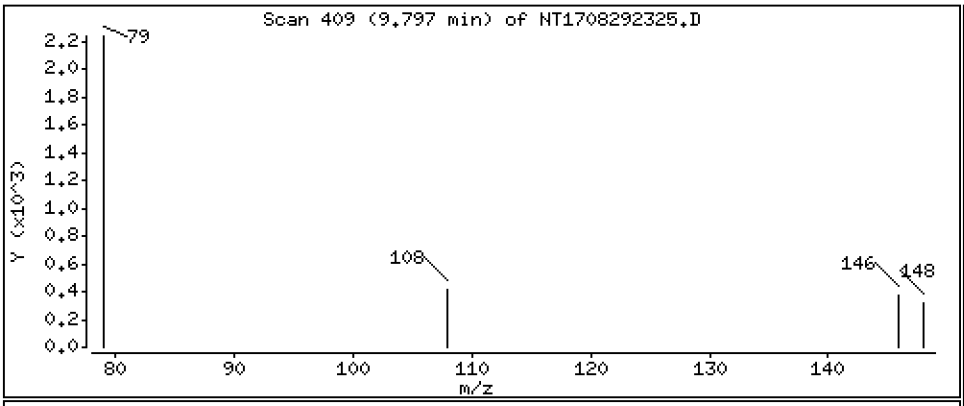
Operator: JGR

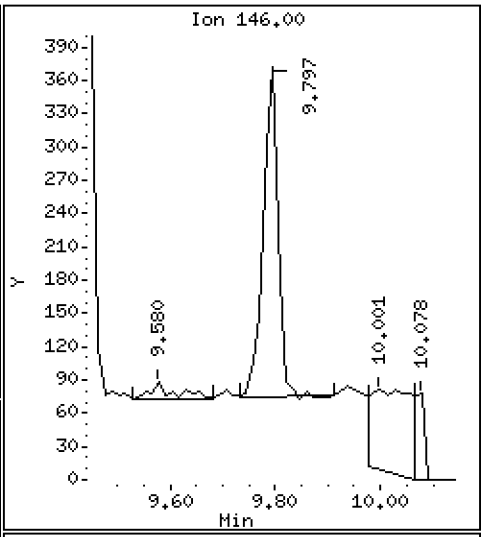
Column phase: ZB-5msi

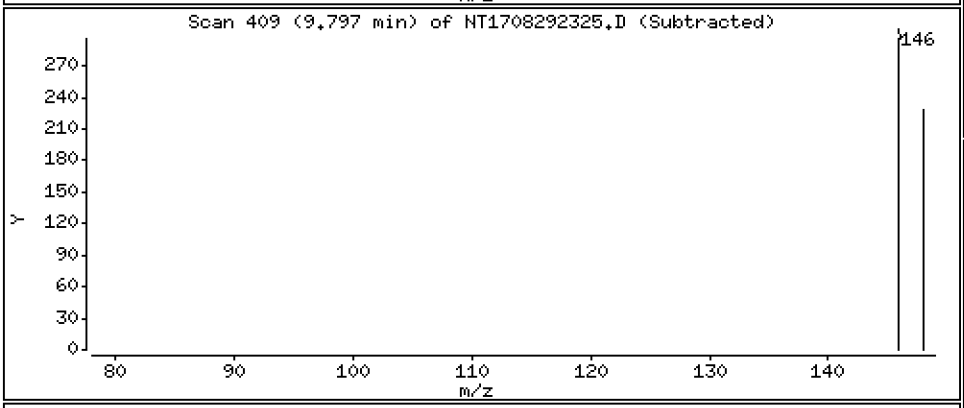
Column diameter: 0.25

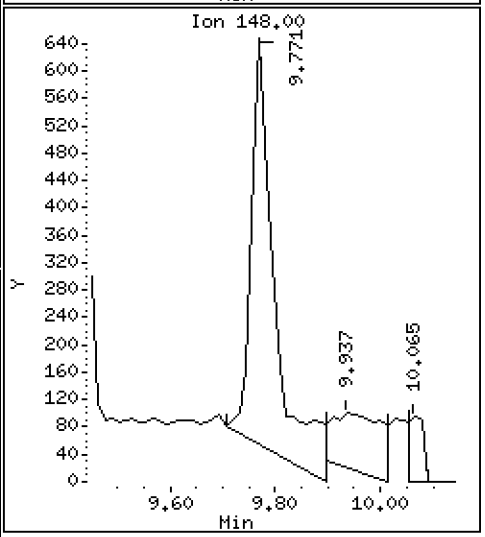
12 1,2-Dichlorobenzene

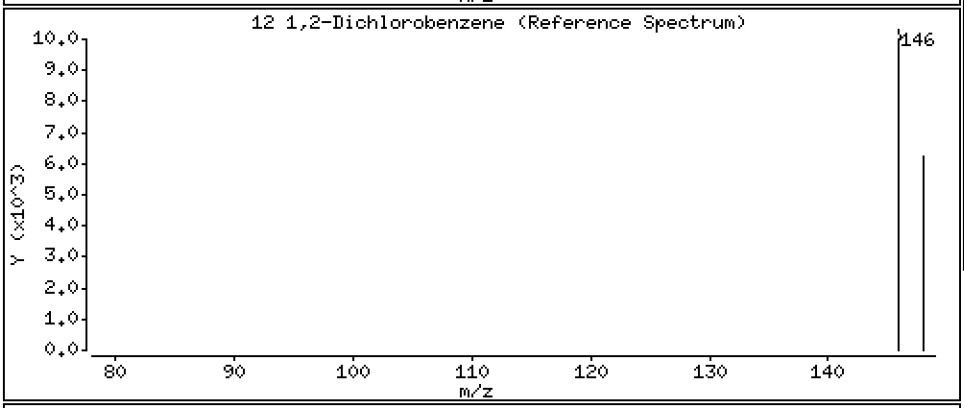
Concentration: 0.003946 ug/mL

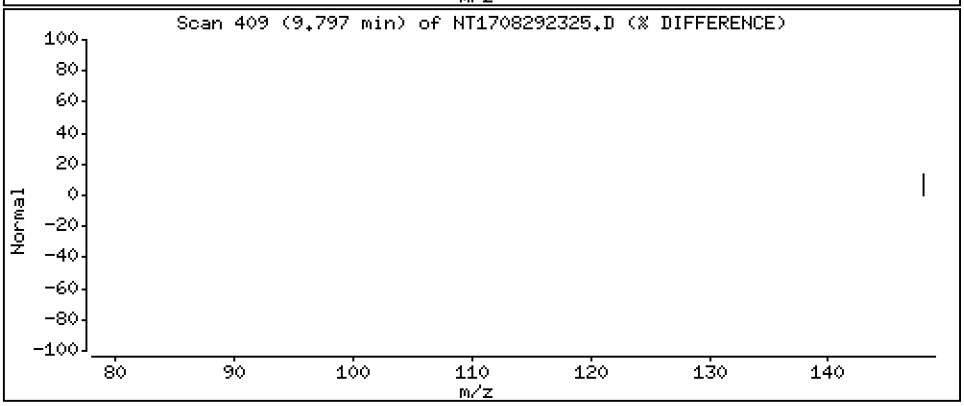












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Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

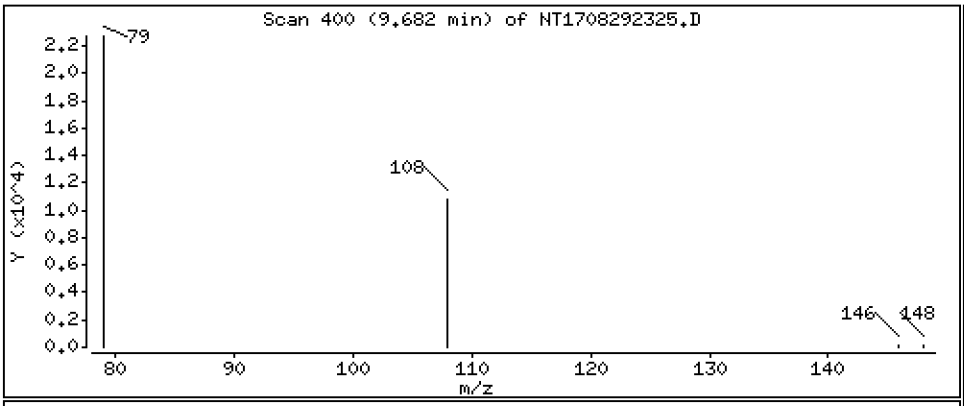
Operator: JGR

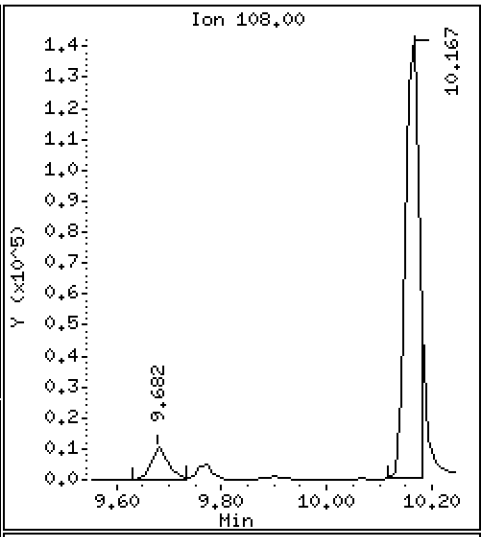
Column phase: ZB-5msi

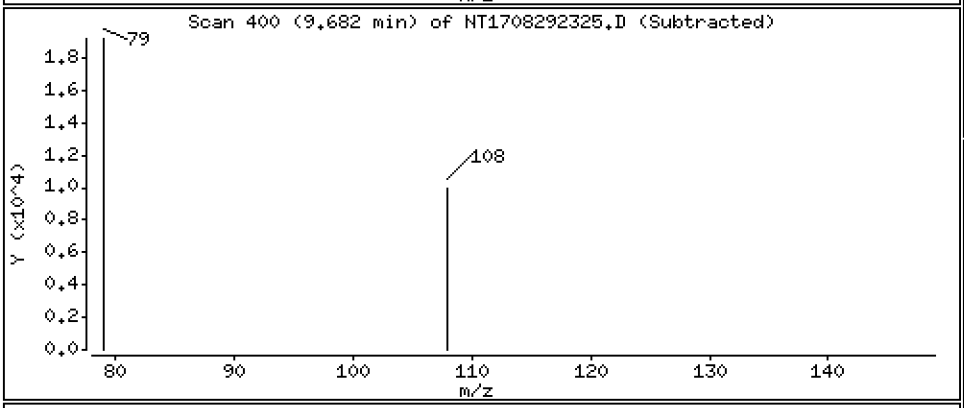
Column diameter: 0.25

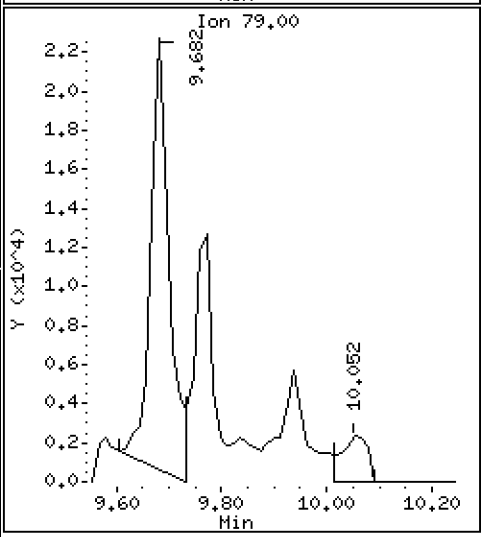
13 2-Methylphenol

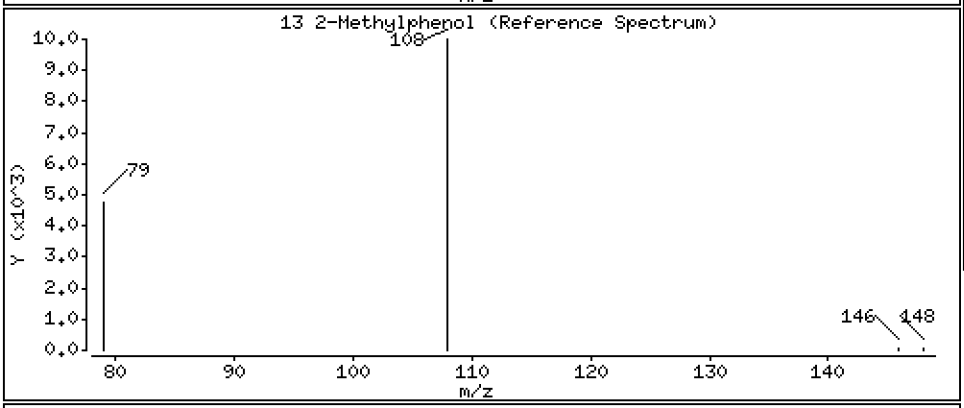
Concentration: 0.1642 ug/mL

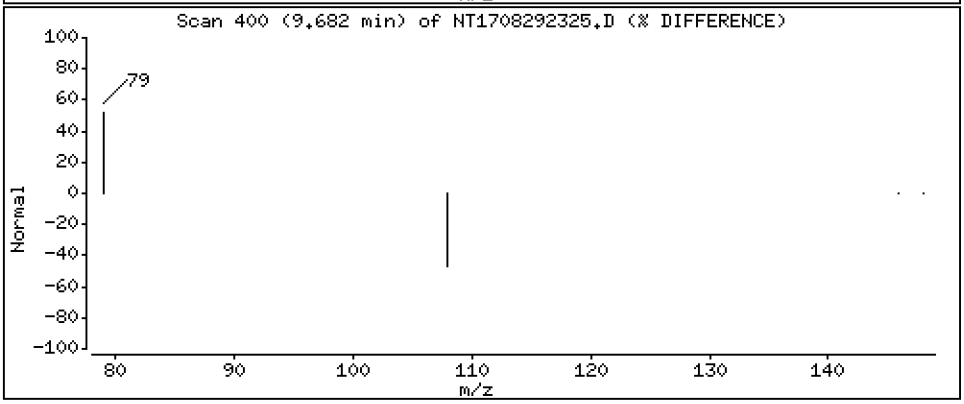












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Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

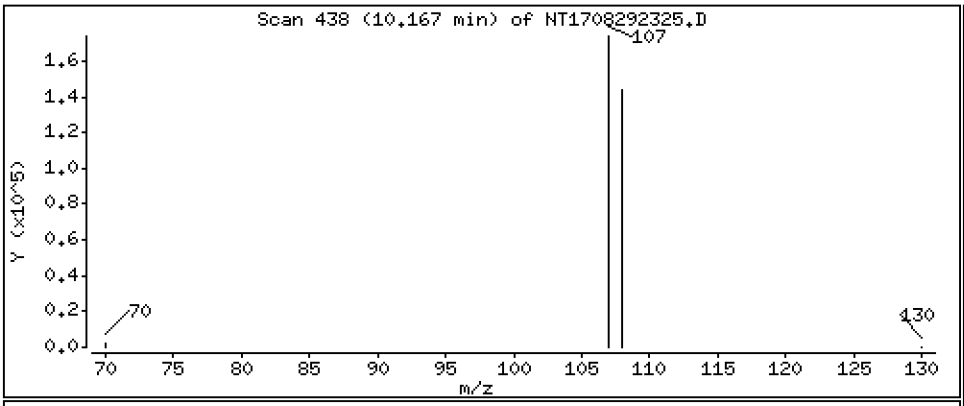
Operator: JGR

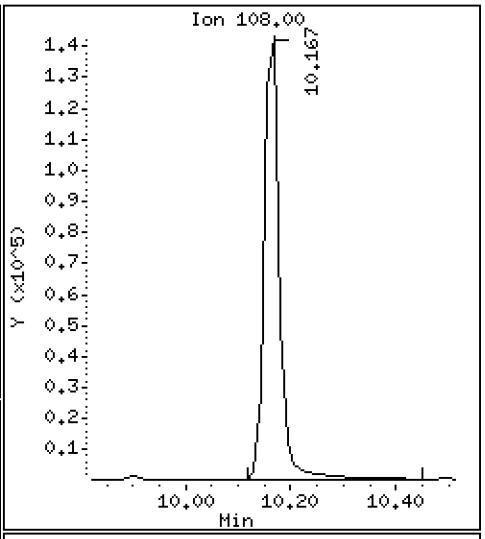
Column phase: ZB-5msi

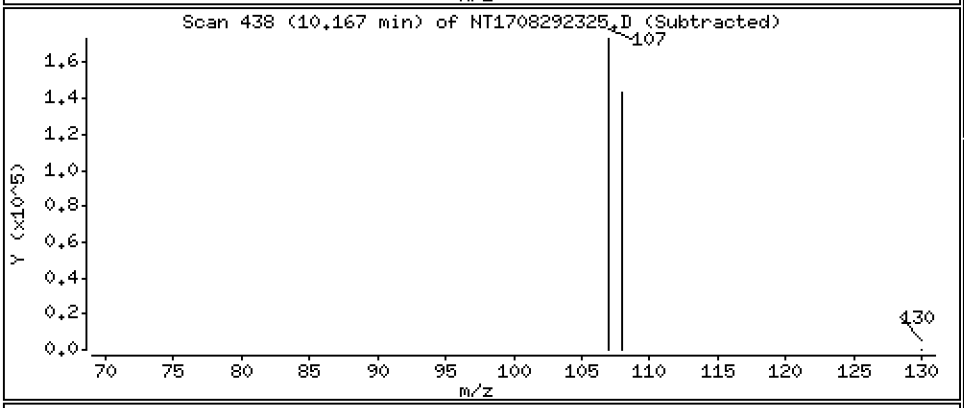
Column diameter: 0.25

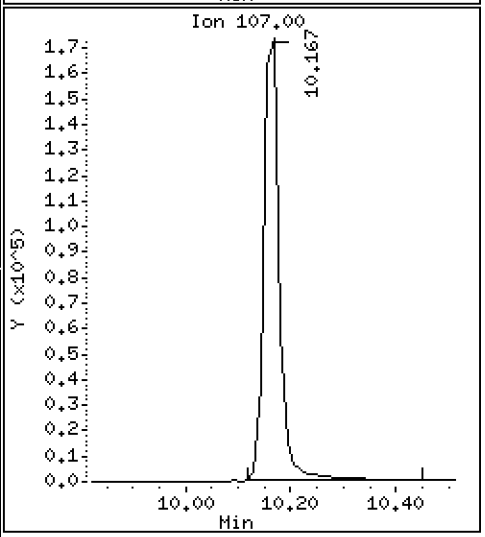
15 4-Methylphenol

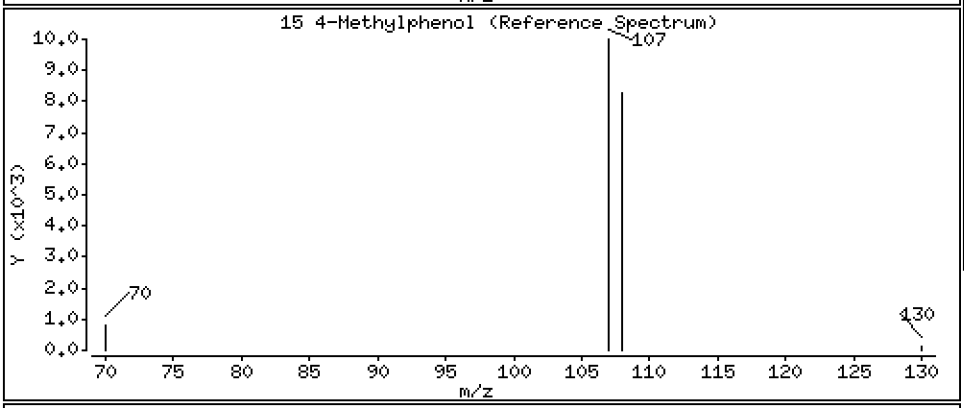
Concentration: 1.987 ug/mL

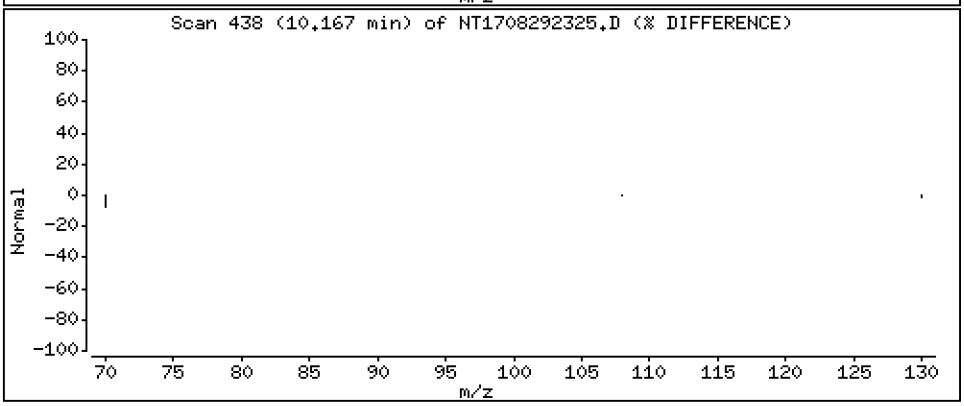












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Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

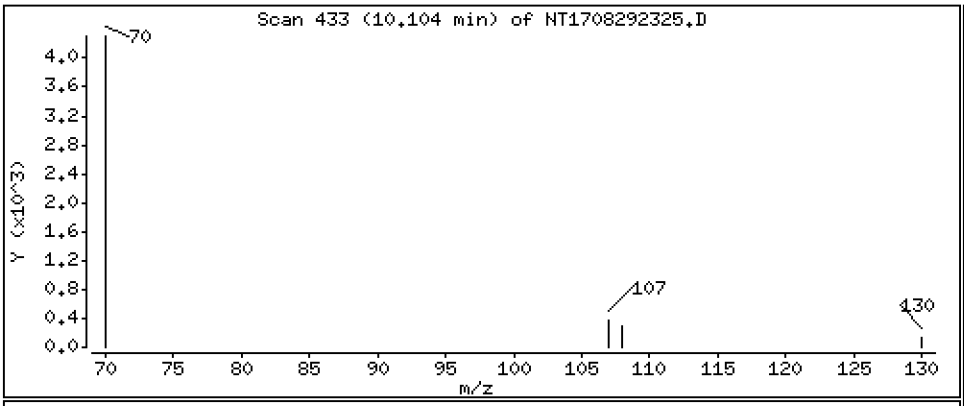
Operator: JGR

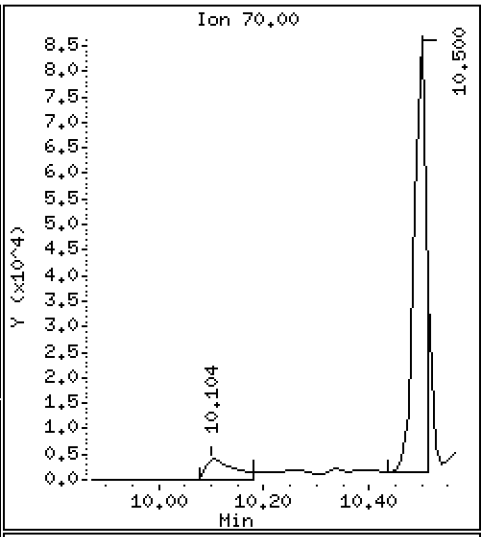
Column phase: ZB-5msi

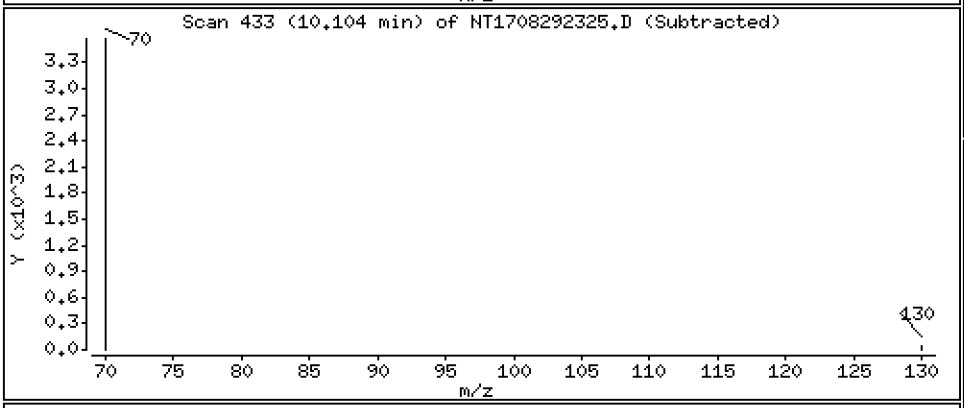
Column diameter: 0.25

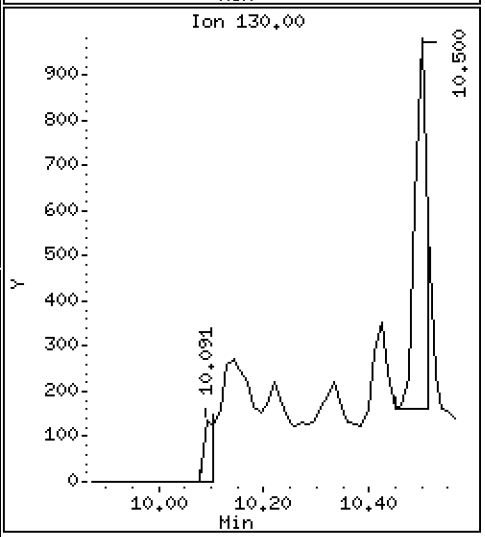
16 N-Nitroso-di-n-propylamine

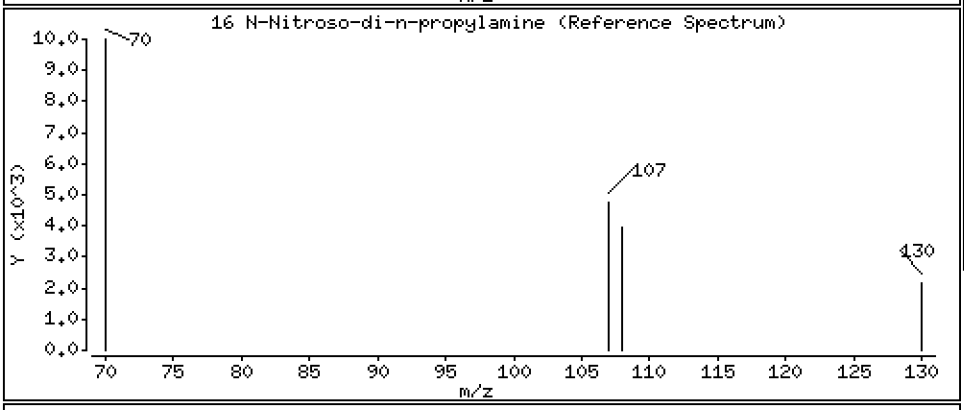
Concentration: 0.1059 ug/mL

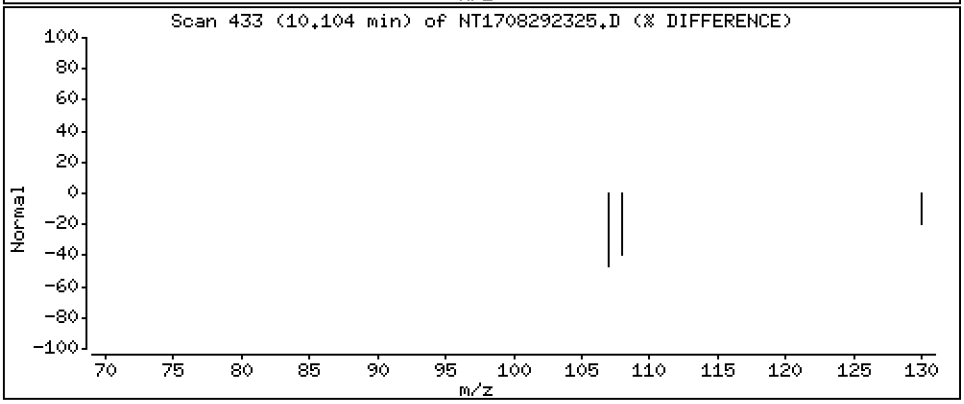












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Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

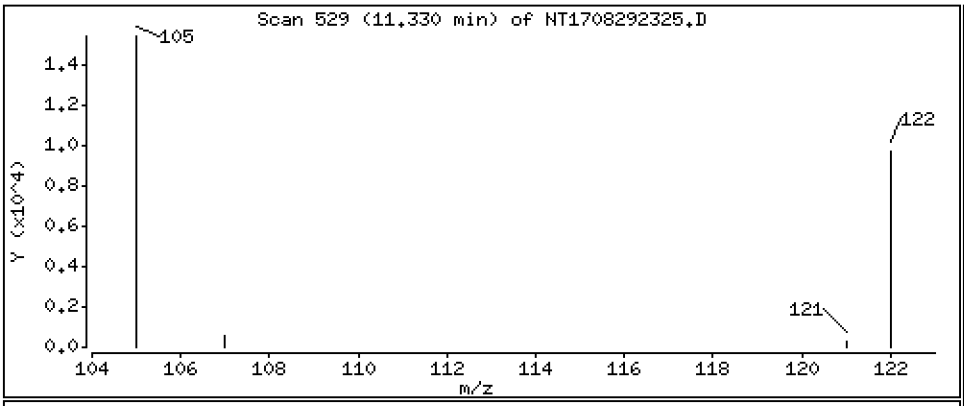
Operator: JGR

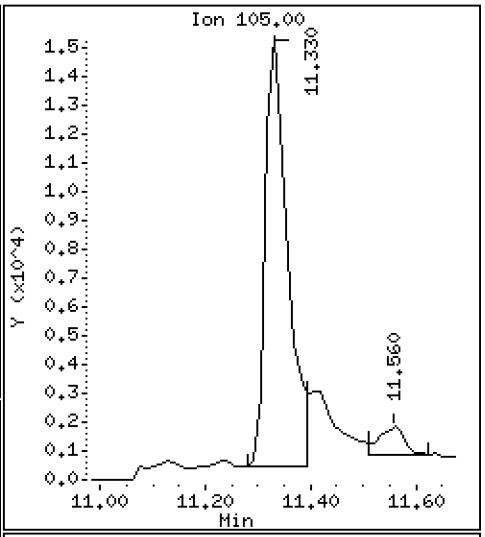
Column phase: ZB-5msi

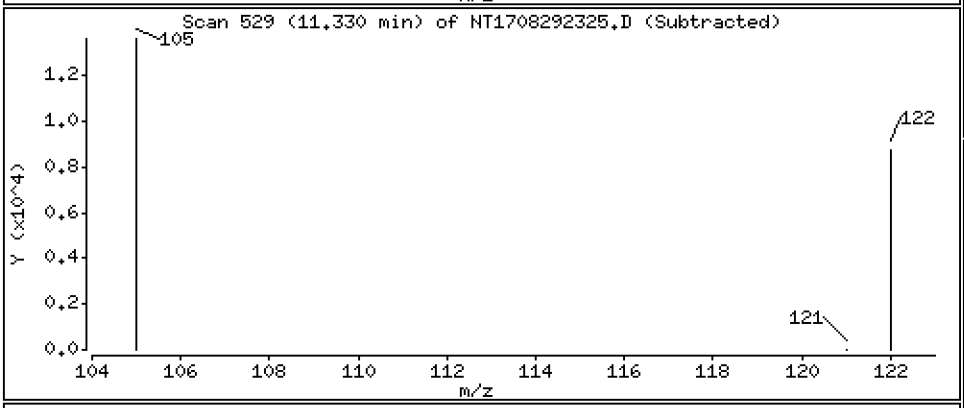
Column diameter: 0.25

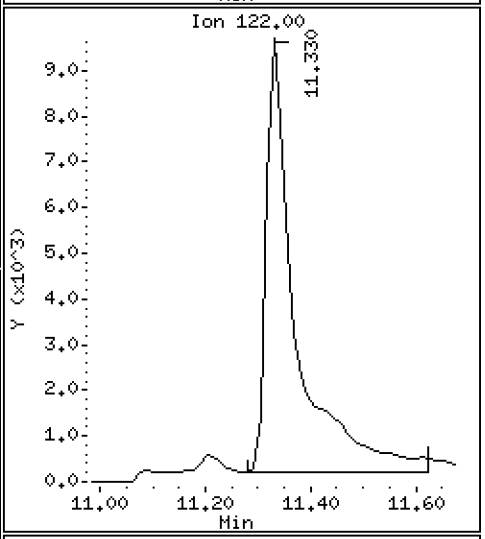
24 Benzoic acid

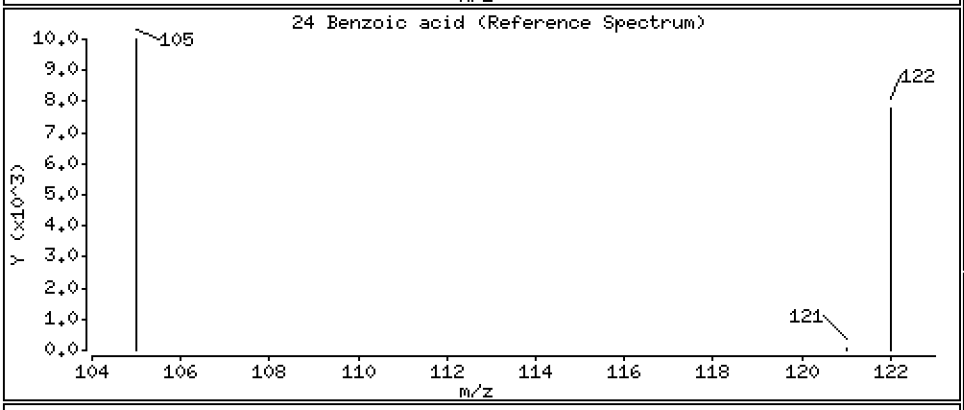
Concentration: 0.5074 ug/mL

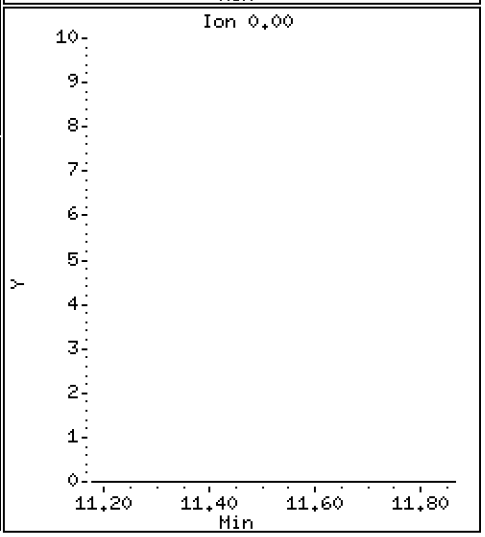


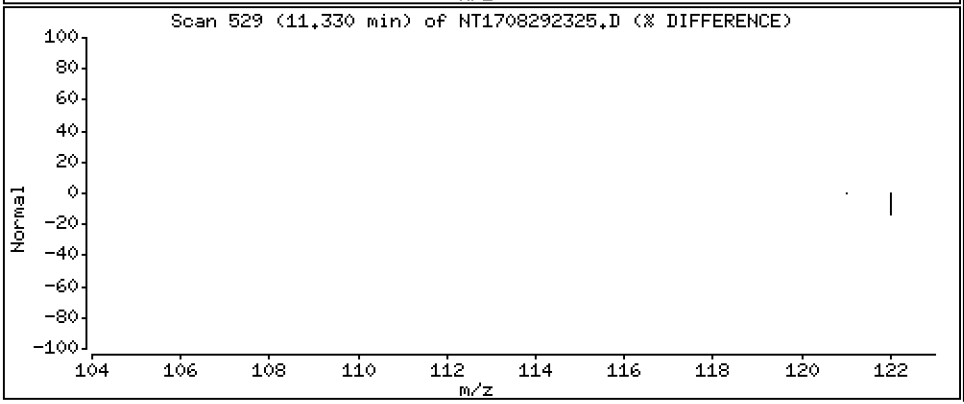












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Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

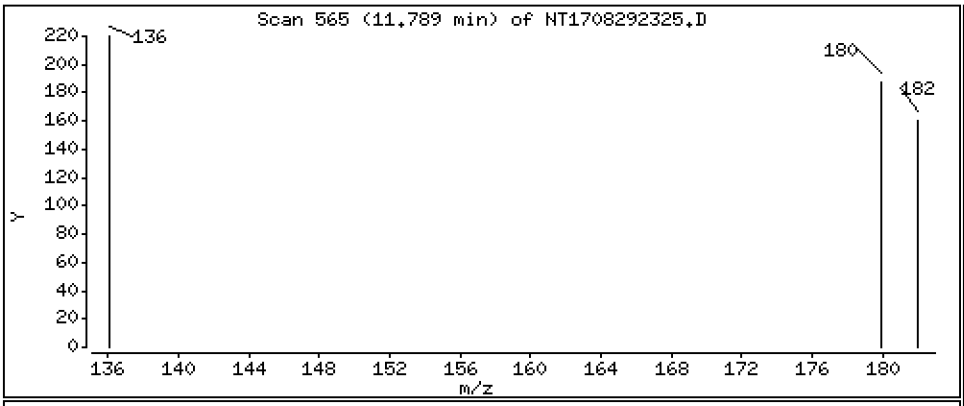
Operator: JGR

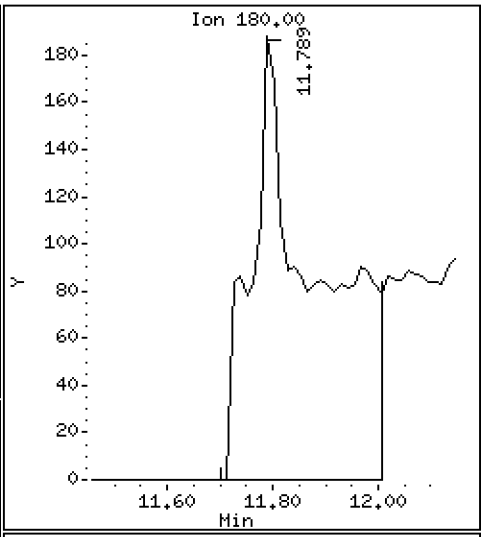
Column phase: ZB-5msi

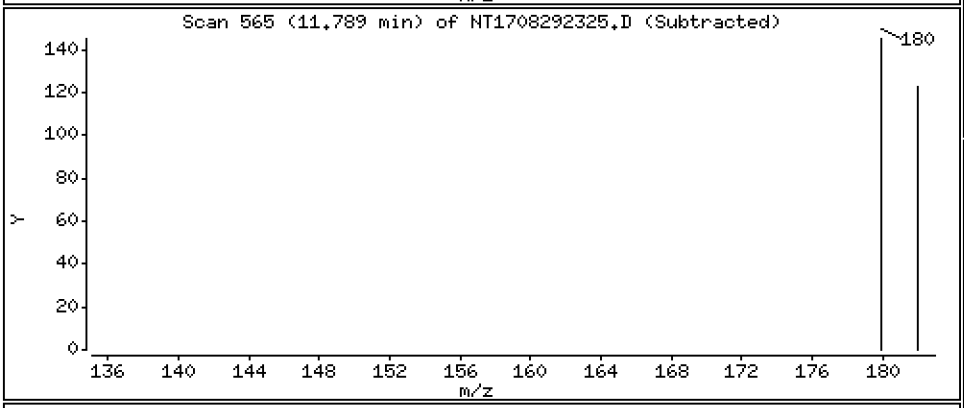
Column diameter: 0.25

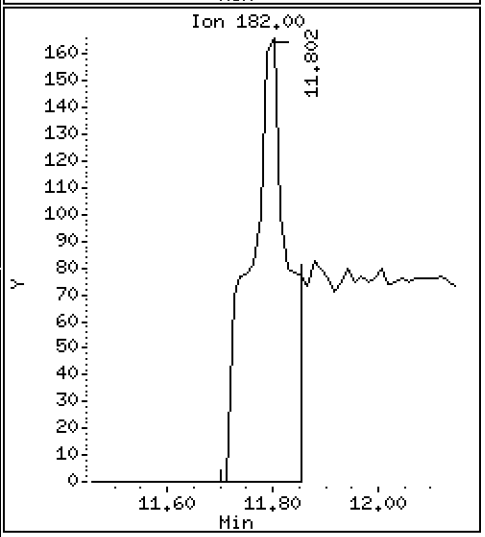
26 1,2,4-Trichlorobenzene

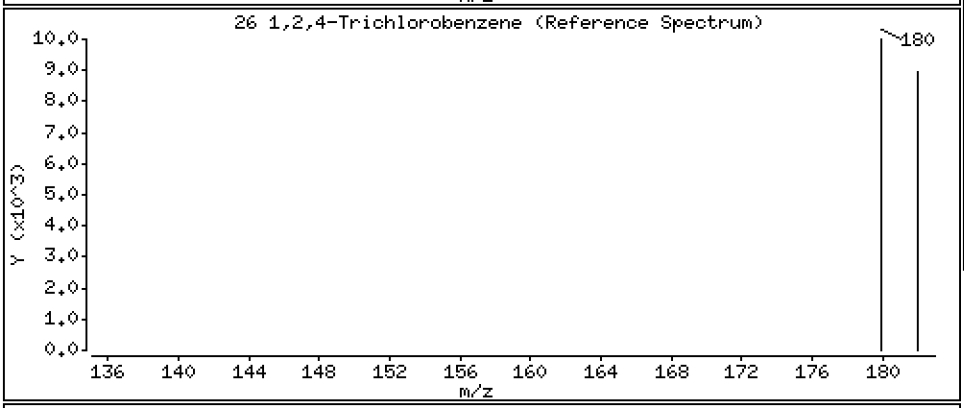
Concentration: 0.01807 ug/mL

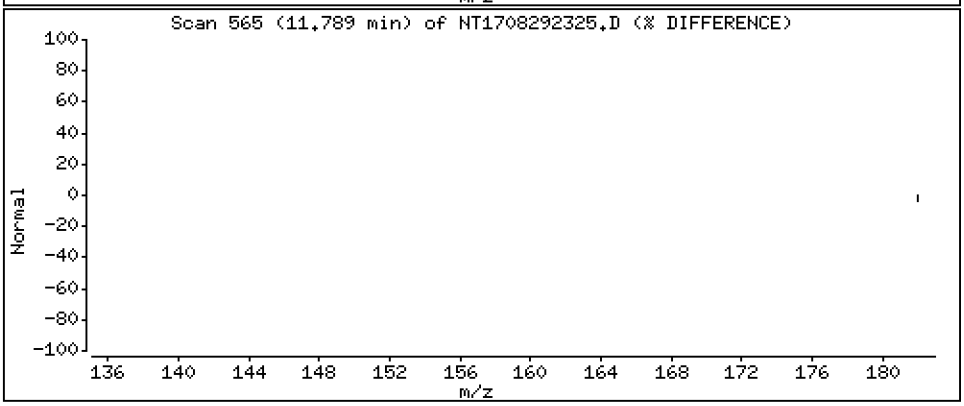












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Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

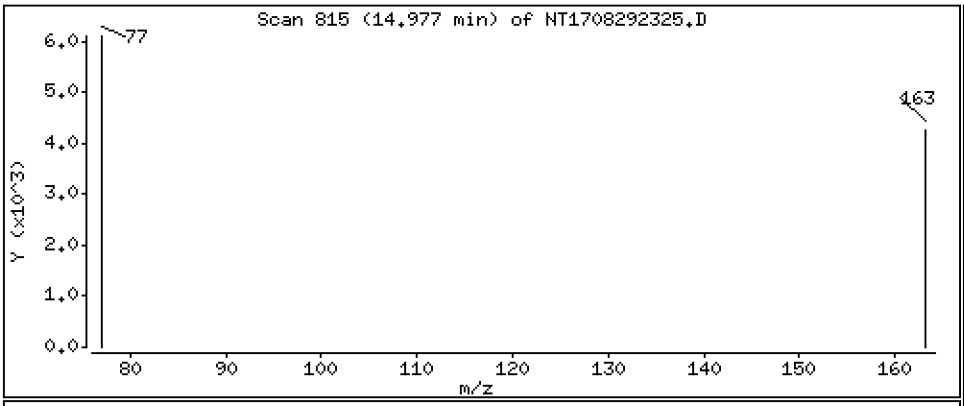
Operator: JGR

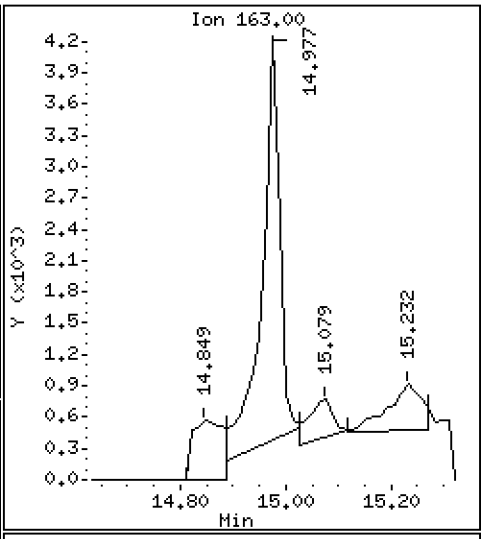
Column phase: ZB-5msi

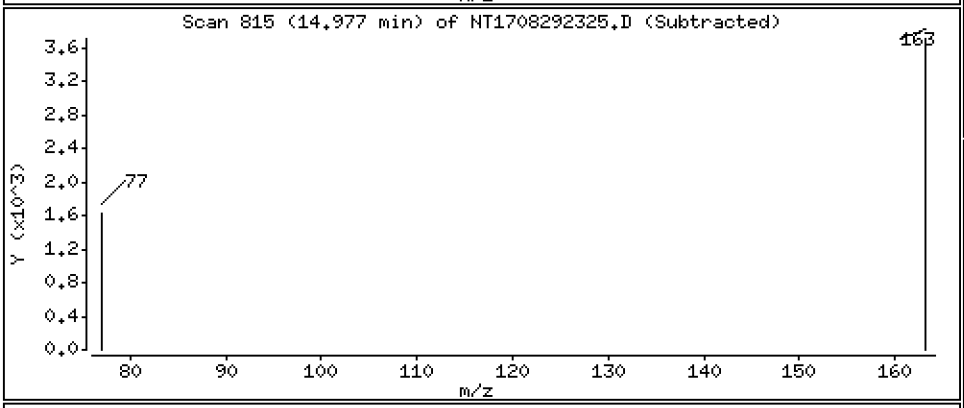
Column diameter: 0.25

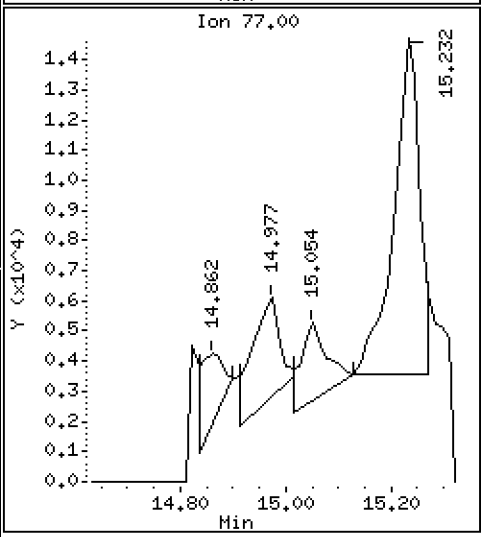
39 Dimethylphthalate

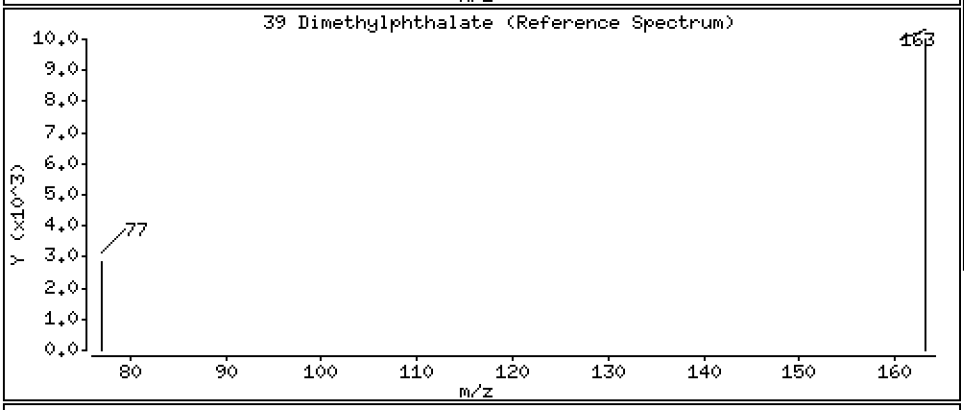
Concentration: 0.05696 ug/mL

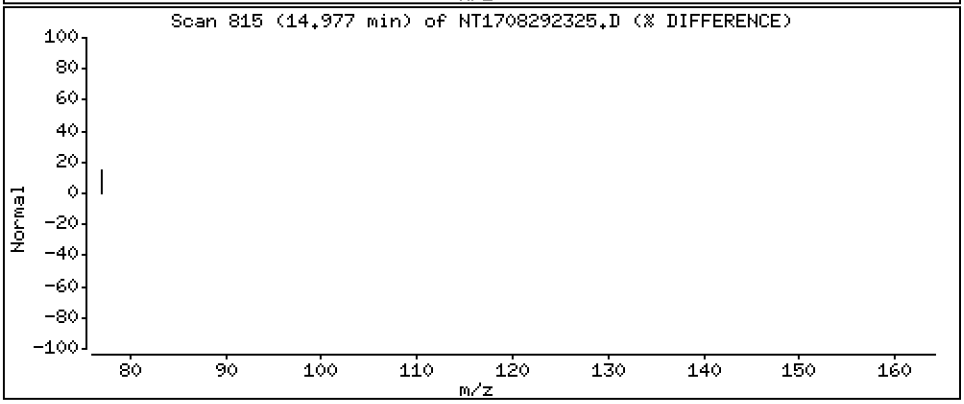












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Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

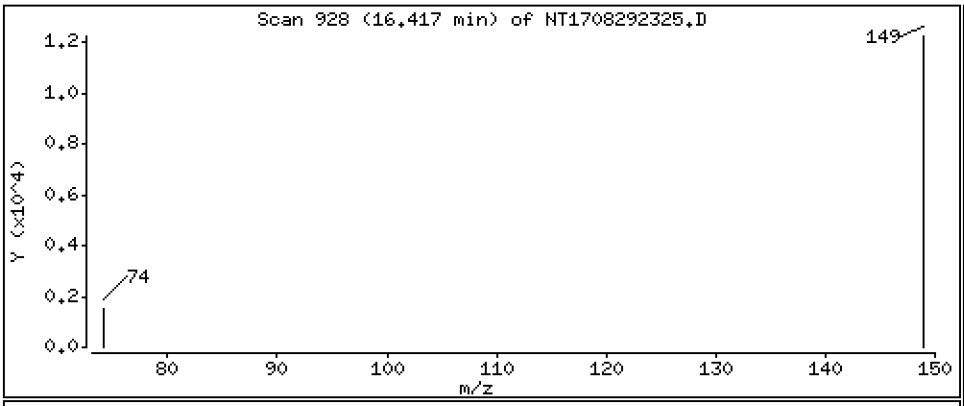
Operator: JGR

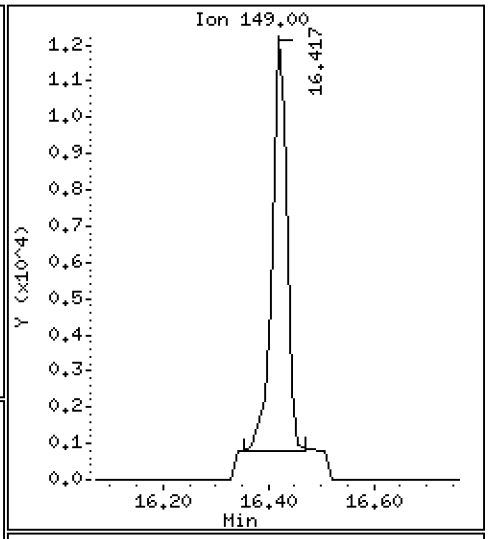
Column phase: ZB-5msi

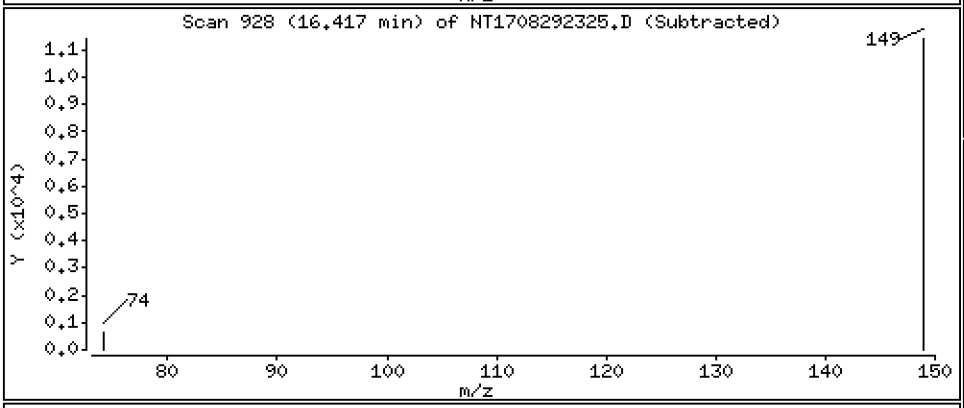
Column diameter: 0.25

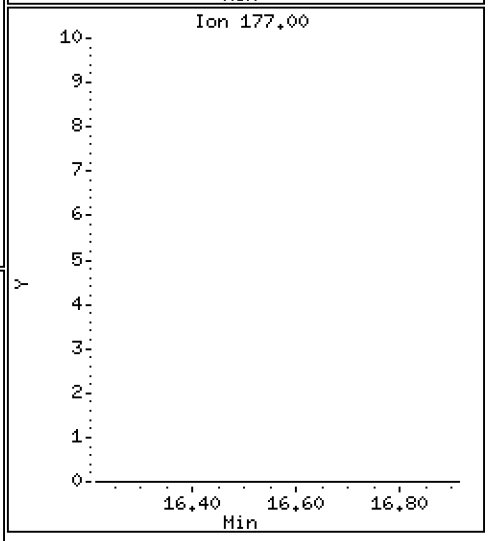
50 Diethylphthalate

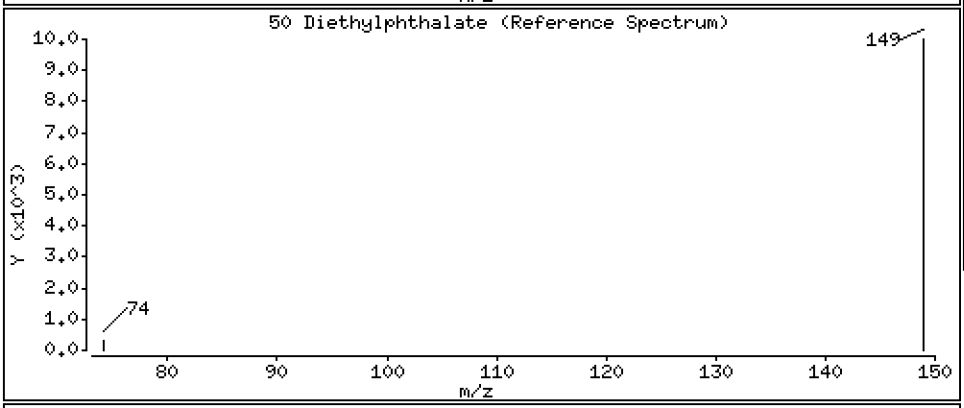
Concentration: 0.1339 ug/mL

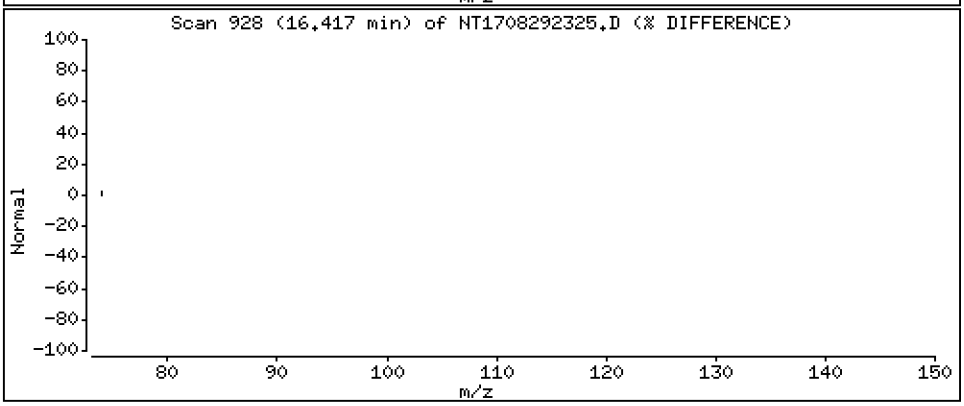












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Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

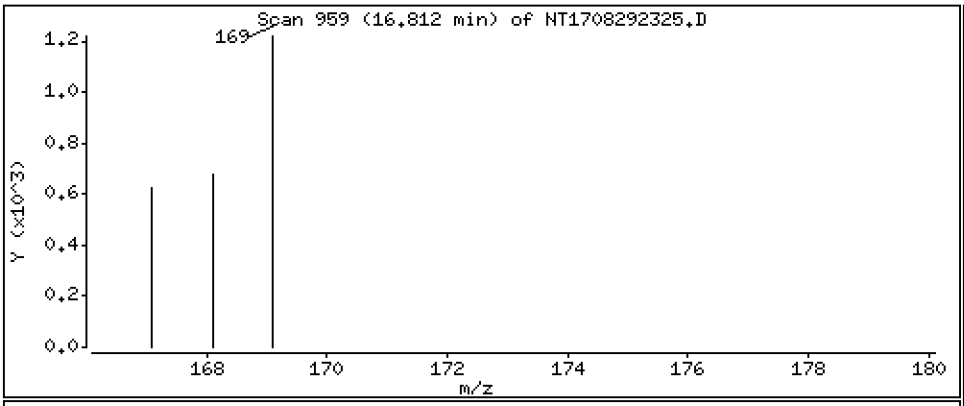
Operator: JGR

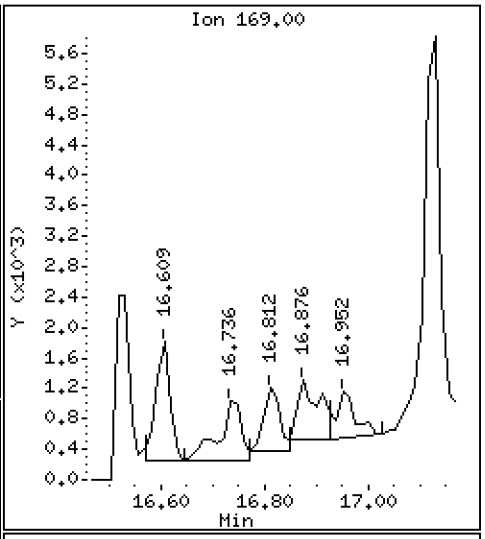
Column phase: ZB-5msi

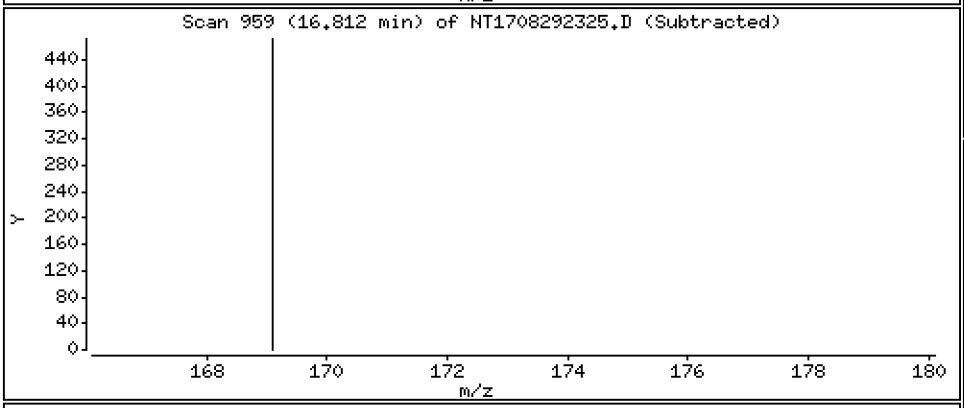
Column diameter: 0.25

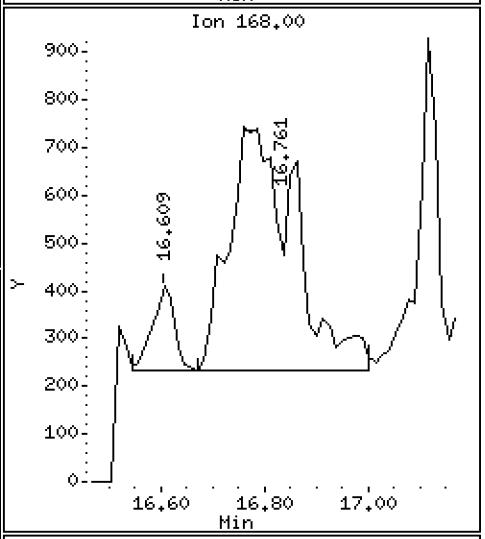
54 N-Nitrosodiphenylamine

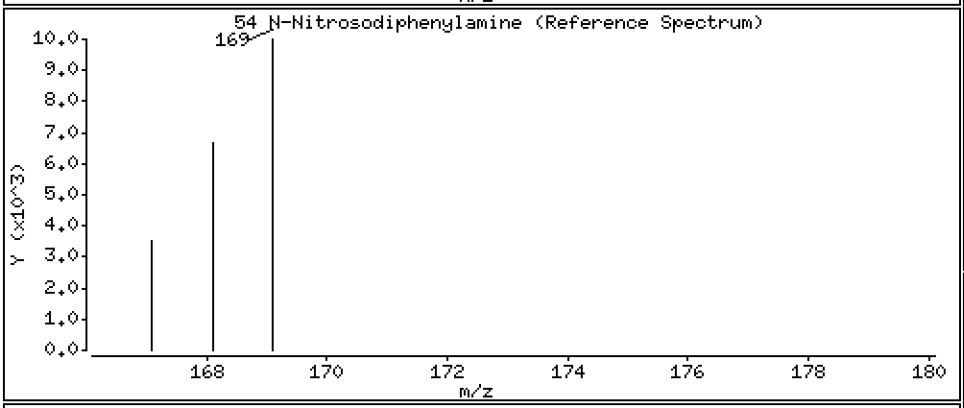
Concentration: 0.01878 ug/mL

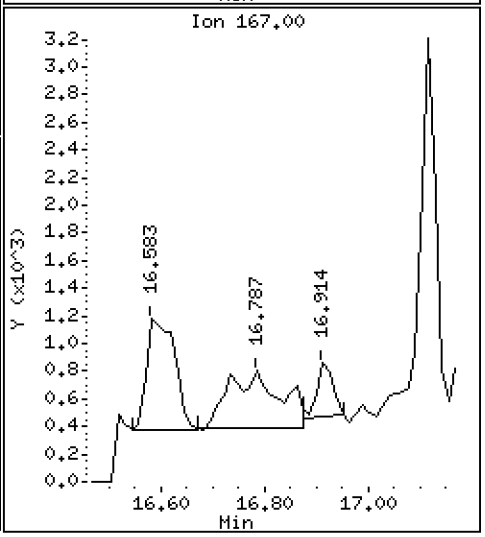


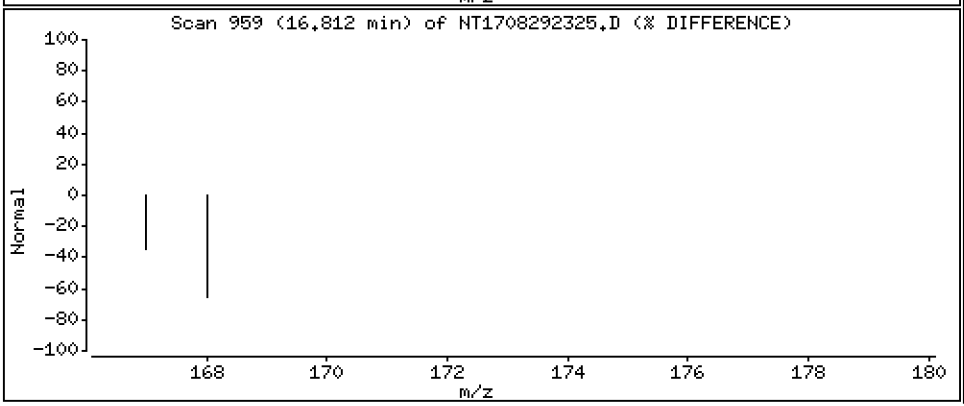












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292325.D

Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

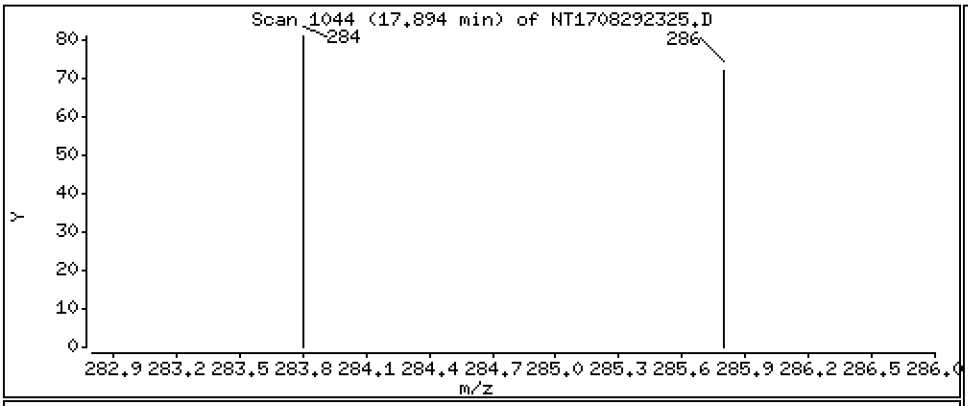
Operator: JGR

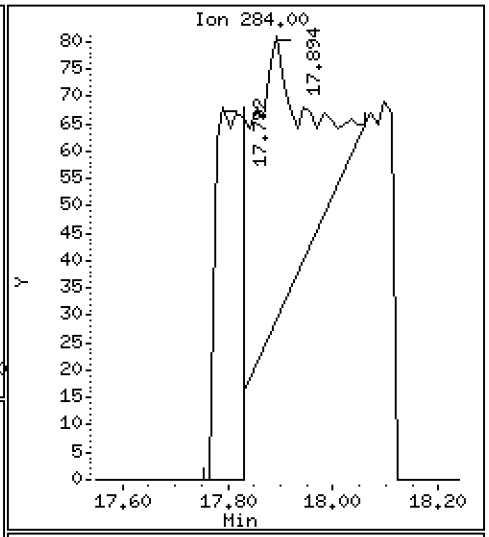
Column phase: ZB-5msi

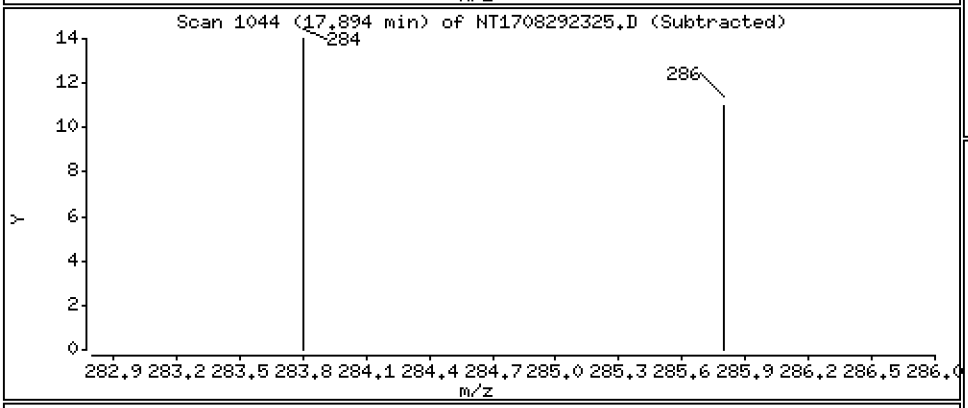
Column diameter: 0.25

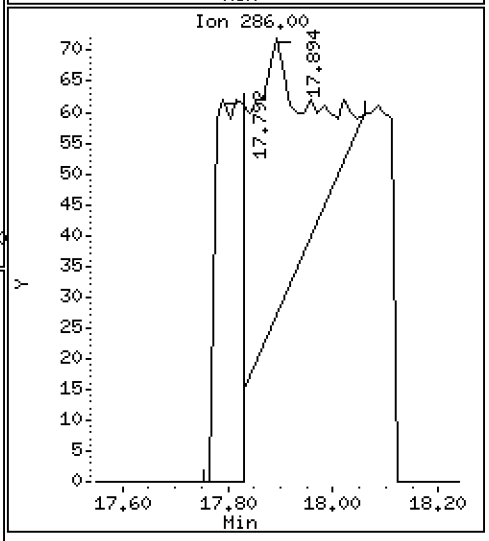
57 Hexachlorobenzene

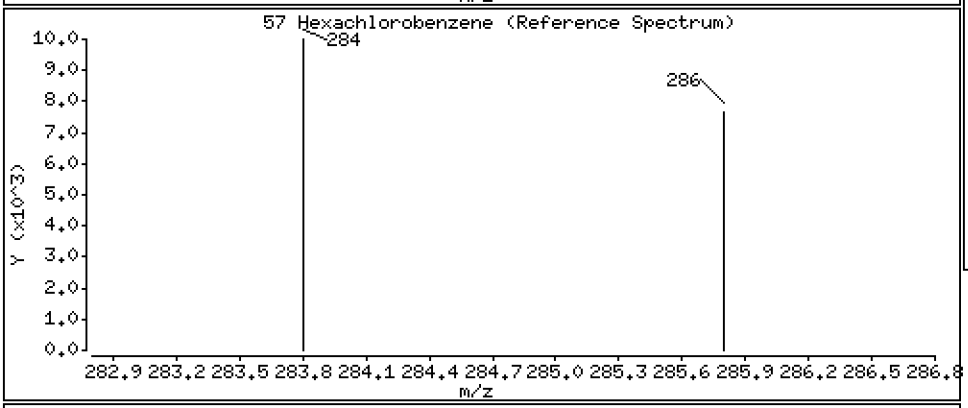
Concentration: 0.01233 ug/mL

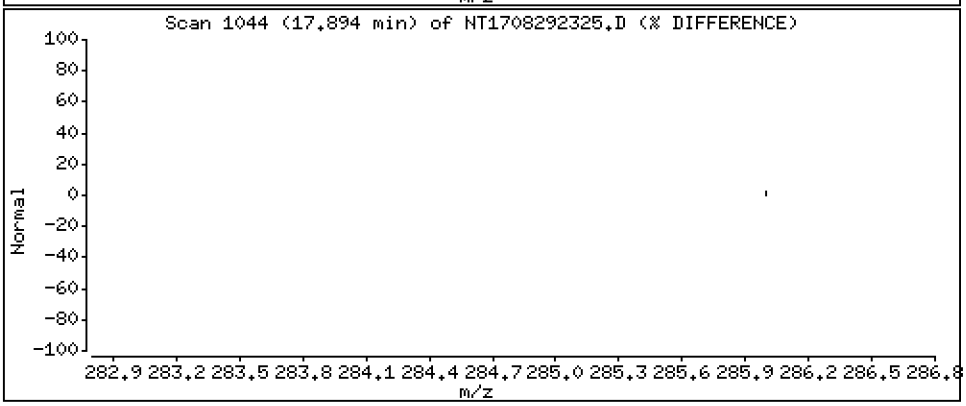












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Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

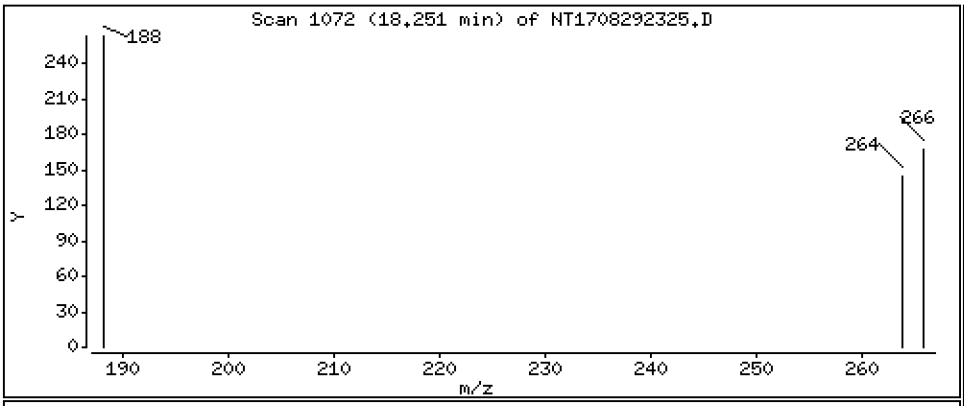
Operator: JGR

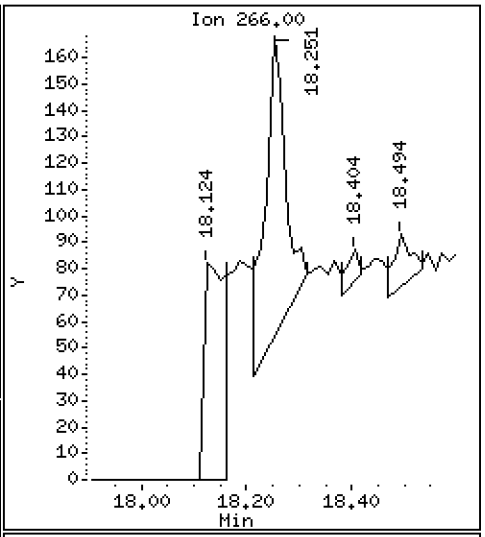
Column phase: ZB-5msi

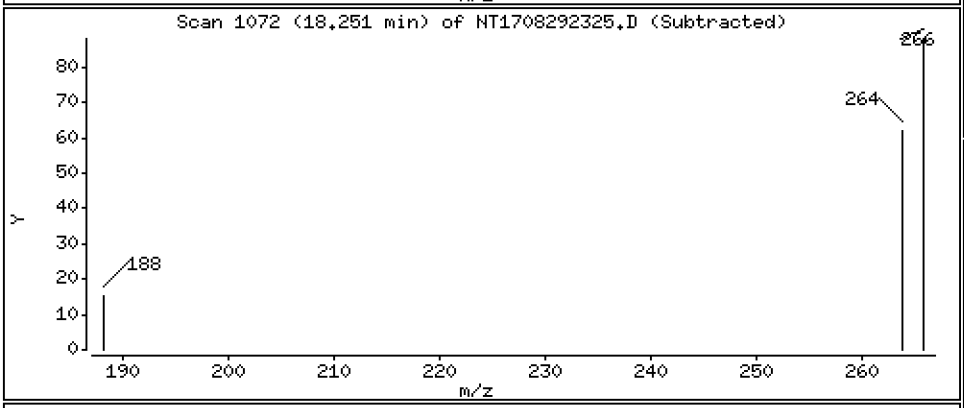
Column diameter: 0.25

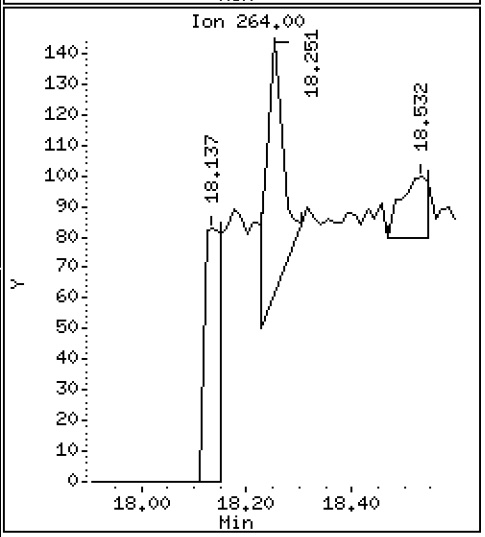
58 Pentachlorophenol

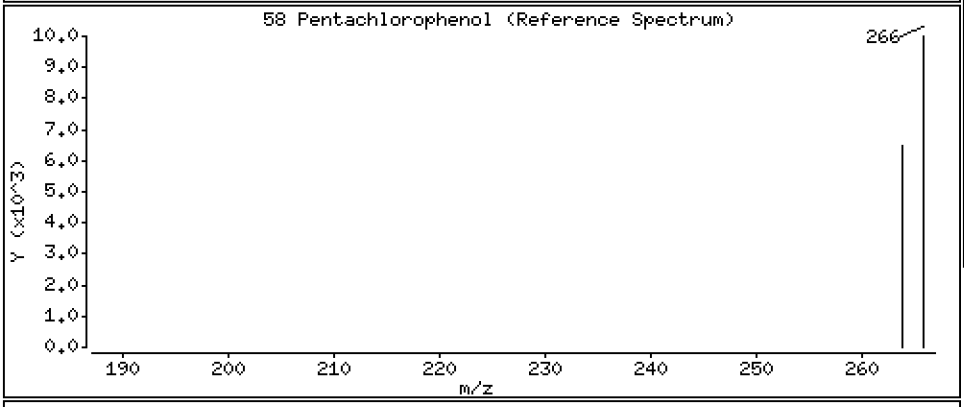
Concentration: 0.01474 ug/mL

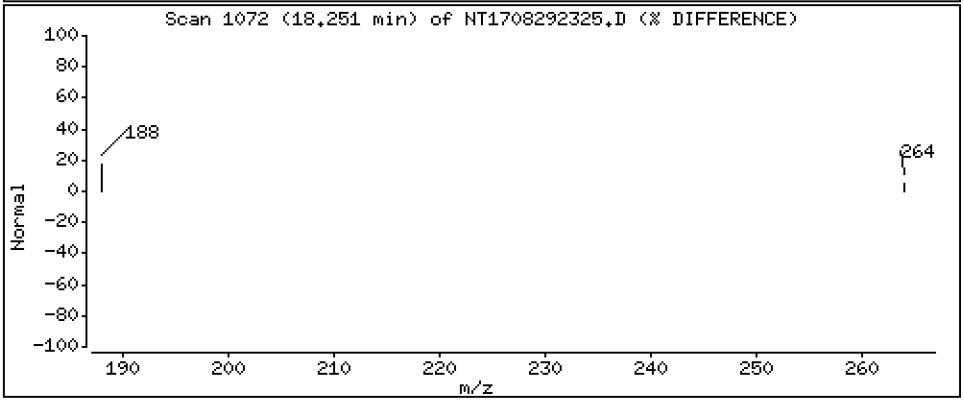












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292325.D

Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

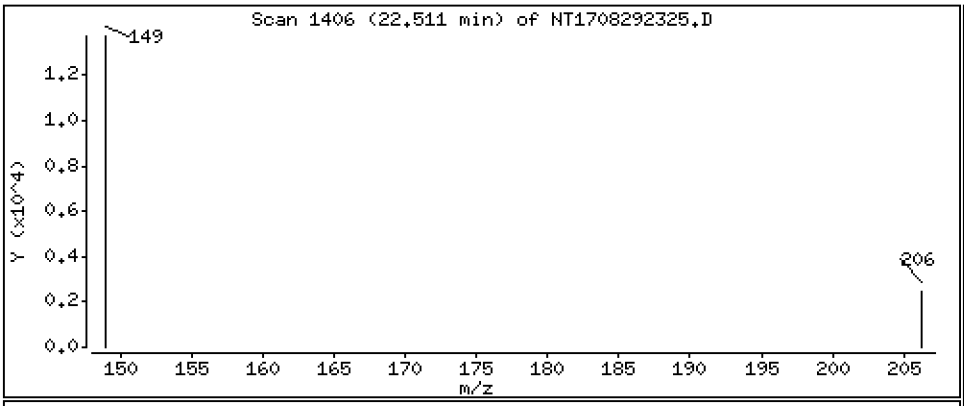
Operator: JGR

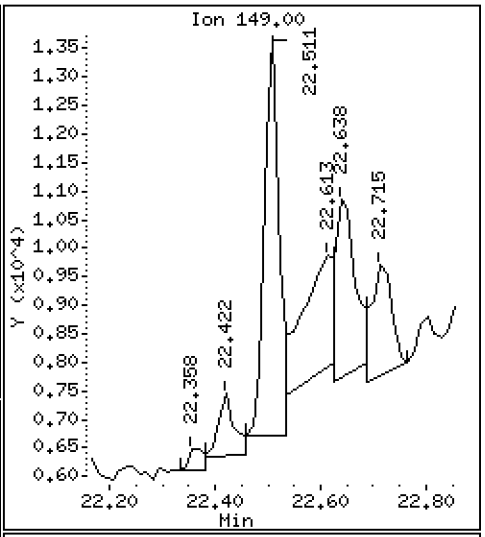
Column phase: ZB-5msi

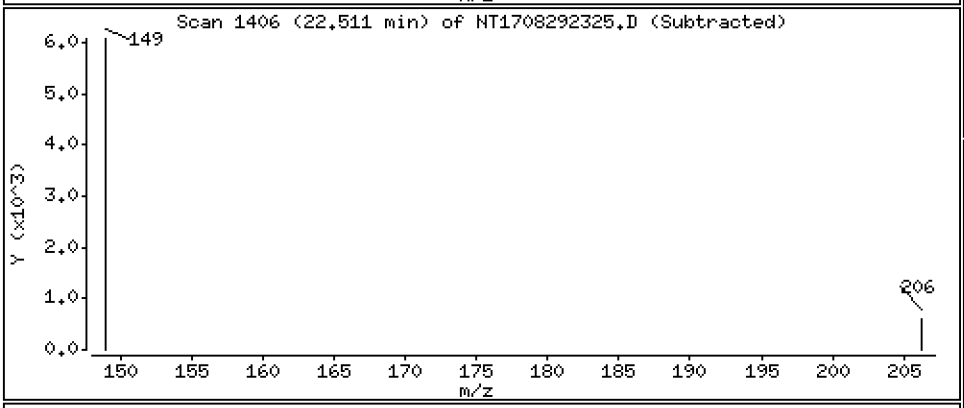
Column diameter: 0.25

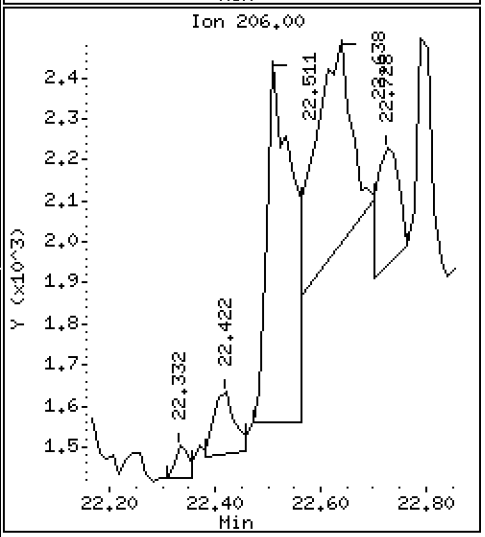
67 Butylbenzylphthalate

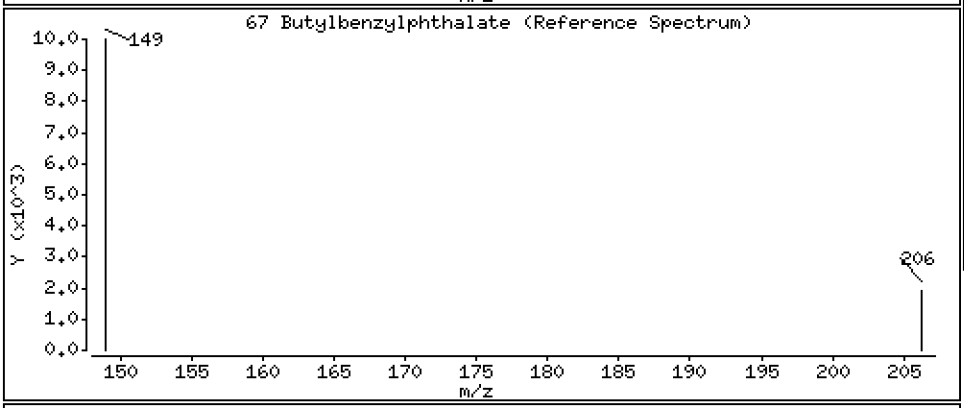
Concentration: 0.1223 ug/mL

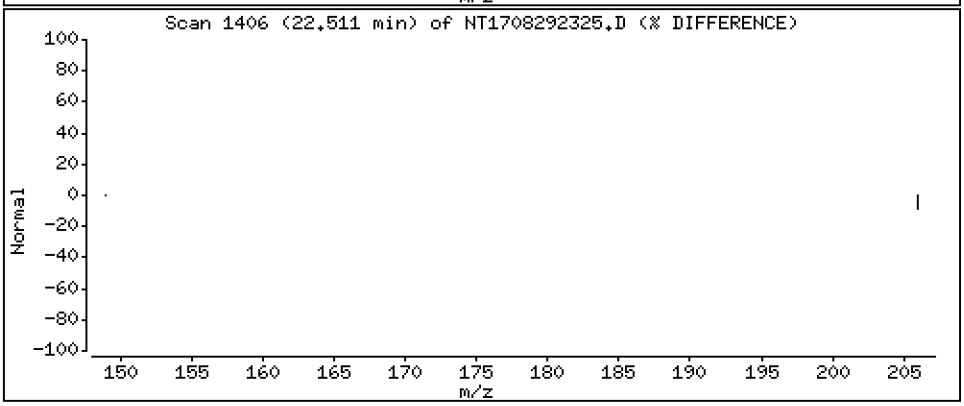












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292325.D

Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

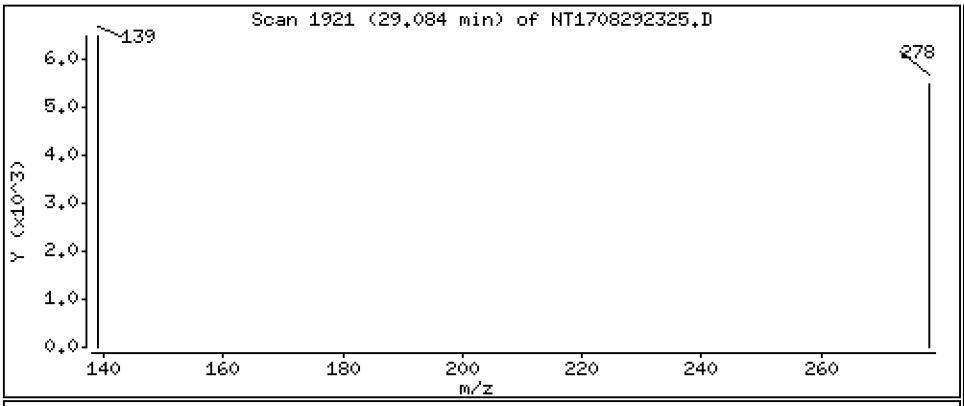
Operator: JGR

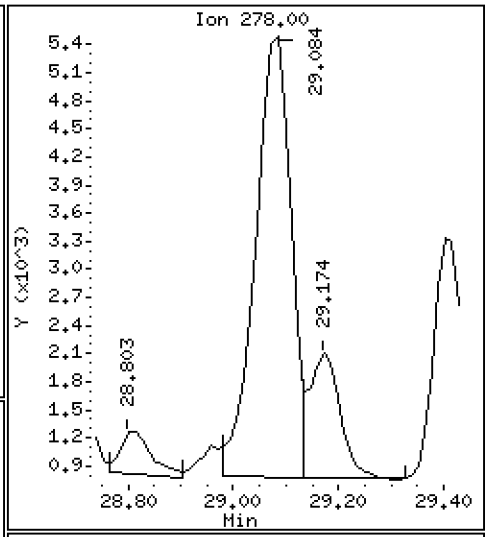
Column phase: ZB-5msi

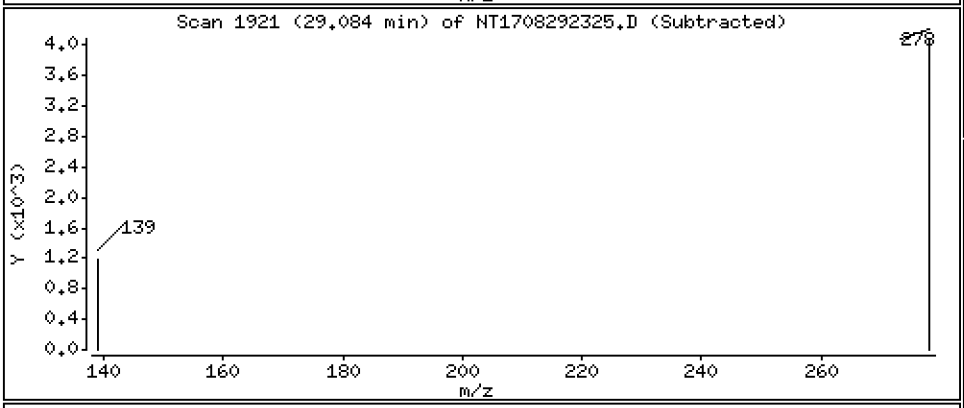
Column diameter: 0.25

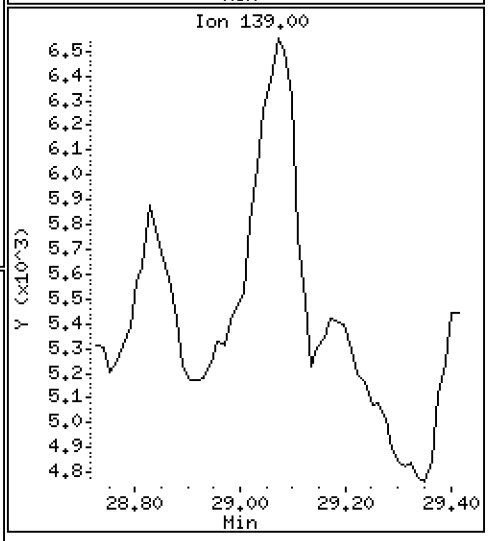
79 Dibenzo(a,h)anthracene

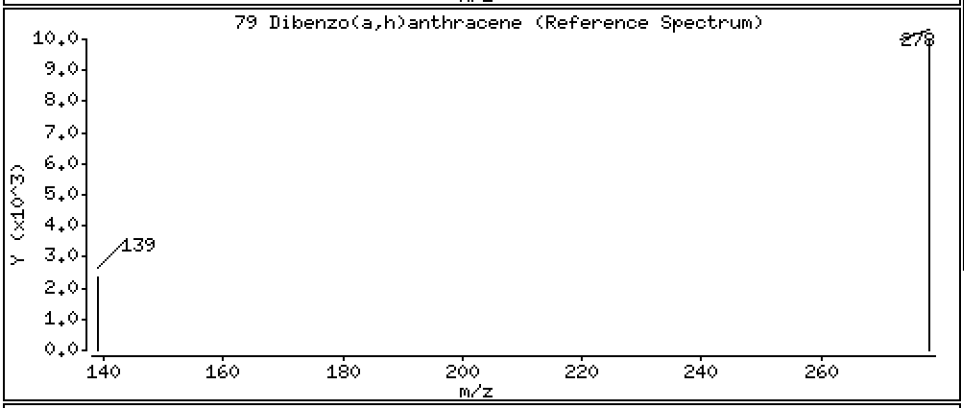
Concentration: 0.1122 ug/mL

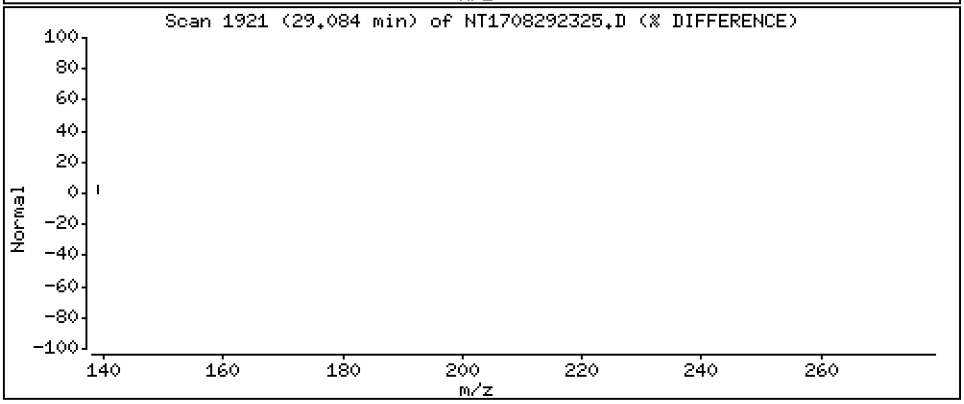












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292325.D

Date : 30-AUG-2023 02:29

Client ID:

Instrument: nt17.i

Sample Info: 23H0579-12

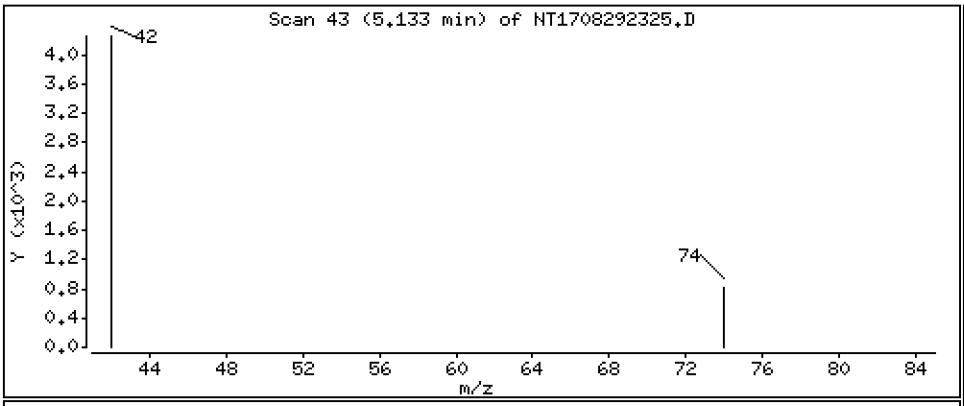
Operator: JGR

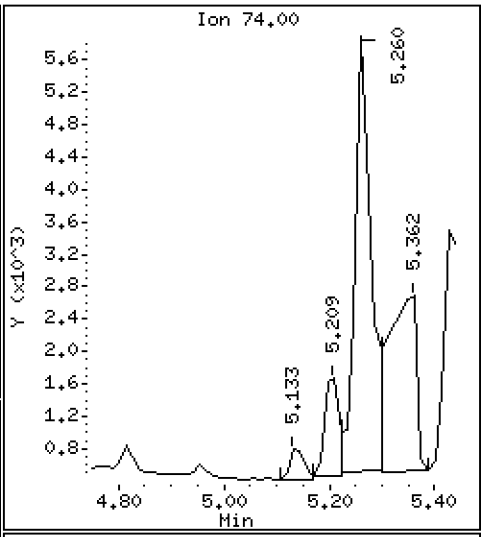
Column phase: ZB-5msi

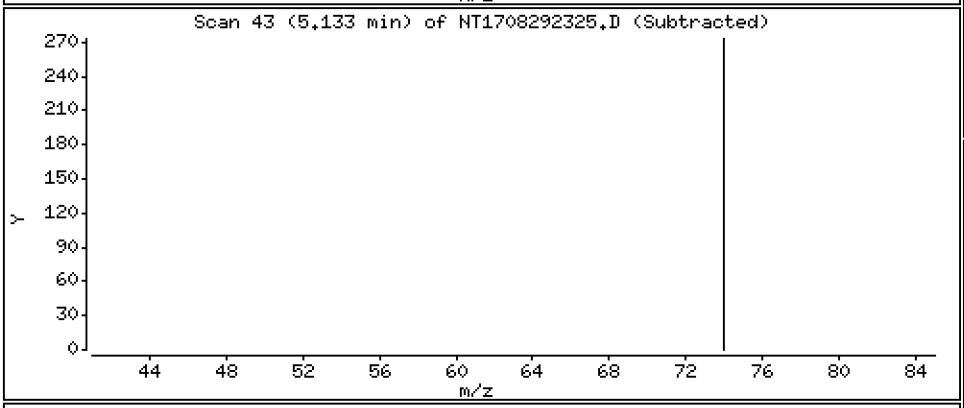
Column diameter: 0.25

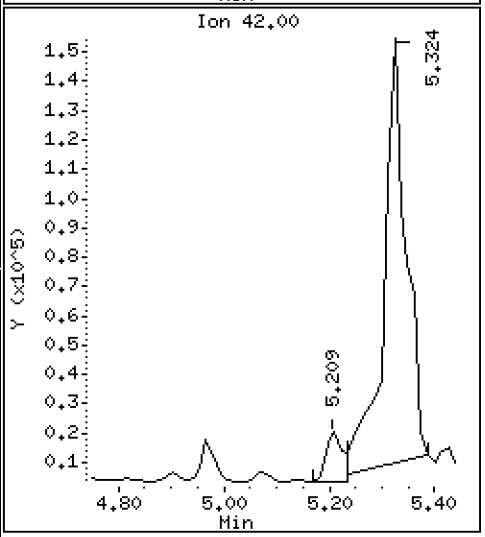
90 N-Nitrosodimethylamine

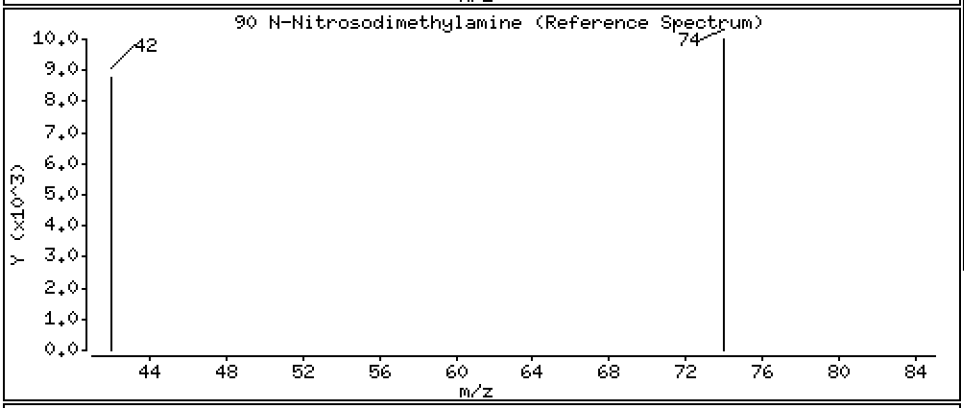
Concentration: 0.005071 ug/mL

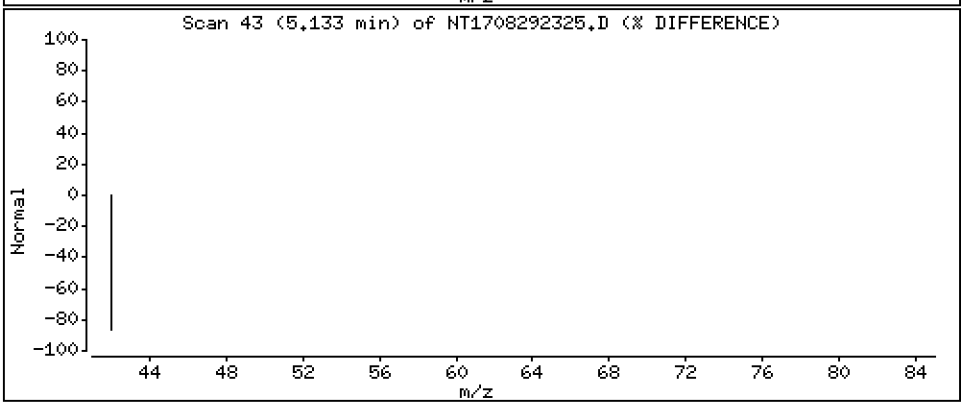












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292325.D
Lab Smp Id: 23H0579-12
Inj Date : 30-AUG-2023 02:29
Operator : JGR Inst ID: nt17.i
Smp Info : 23H0579-12
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 10:26 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.209	7.196	(0.766)	837641	5.52657	5.527(R)
	3 Phenol	94	8.788	8.788	(0.934)	37878	0.16394	0.1639
	7 1,3-Dichlorobenzene	146	9.349	9.349	(0.993)	541	0.00346	0.003462
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	365024	4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	1636	0.01082	0.01082
	11 Benzyl alcohol	79	9.681	9.681	(1.028)	53812	0.33650	0.3365
	12 1,2-Dichlorobenzene	146	9.796	9.796	(1.041)	579	0.00395	0.003946
	13 2-Methylphenol	108	9.681	9.899	(1.028)	22998	0.16416	0.1642
	15 4-Methylphenol	108	10.167	10.167	(1.080)	290951	1.98703	1.987
	16 N-Nitroso-di-n-propylamine	70	10.103	10.218	(1.073)	15857	0.10590	0.1059
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	24 Benzoic acid	105	11.329	11.329	(0.954)	44523	0.50736	0.5074
	26 1,2,4-Trichlorobenzene	180	11.789	11.801	(0.992)	1656	0.01807	0.01807
*	27 Naphthalene-d8	136	11.878	11.891	(1.000)	1336535	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.976	14.976	(0.967)	9077	0.05696	0.05696
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	490287	4.00000	
	50 Diethylphthalate	149	16.417	16.417	(1.060)	22179	0.13386	0.1339
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	1823	0.01878	0.01878
	57 Hexachlorobenzene	284	17.894	17.894	(0.966)	392	0.01233	0.01233
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	318	0.01474	0.01474
*	59 Phenanthrene-d10	188	18.519	18.519	(1.000)	675059	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	277803	4.62596	4.626(R)
	67 Butylbenzylphthalate	149	22.510	22.510	(0.958)	14089	0.12235	0.1223
*	69 Chrysene-d12	240	23.505	23.505	(1.000)	433965	4.00000	
*	77 Perylene-d12	264	26.235	26.235	(1.000)	669794	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.084	29.084	(1.109)	22201	0.11222	0.1122
	90 N-Nitrosodimethylamine	74	5.132	5.094	(0.545)	782	0.00507	0.005071

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292325.D
Lab Smp Id: 23H0579-12
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 29-AUG-2023
Calibration Time: 22:47
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	358343	179172	716686	365024	1.86
27 Naphthalene-d8	1242877	621439	2485754	1336535	7.54
42 Acenaphthene-d10	464388	232194	928776	490287	5.58
59 Phenanthrene-d10	660913	330457	1321826	675059	2.14
69 Chrysene-d12	477958	238979	955916	433965	-9.20
77 Perylene-d12	659026	329513	1318052	669794	1.63

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	0.00
27 Naphthalene-d8	11.89	11.39	12.39	11.88	-0.11
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	0.00
59 Phenanthrene-d10	18.52	18.02	19.02	18.52	0.00
69 Chrysene-d12	23.51	23.01	24.01	23.51	0.00
77 Perylene-d12	26.24	25.74	26.74	26.24	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292325.D

Lab ID: 23H0579-12
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   30-AUG-2023 02:29

RT	CO-ELUTION COMPOUNDS
9.682	2-Methylphenol and Benzyl alcohol

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.028	1.052	-0.0231	2-Methylphenol
1.073	1.085	-0.0122	N-Nitroso-di-n-propylamine

RRT check based on Ccal File: SIM.b/NT1708292319B.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

PREPARATION BATCH SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC | SDG: 23H0579

Client: Anchor QEA, LLC | Project: AOC5 MR Phase 1

Batch: BLH0669 | Batch Matrix: Solid | Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1156A	23H0579-01	NT1708292312.D	08/25/23 12:39	
LDW23-SC1226A	23H0579-02	NT1708292313.D	08/25/23 12:39	
LDW23-SS1269	23H0579-03	NT1708292314.D	08/25/23 12:39	
LDW23-SS1275	23H0579-04	NT1708292315.D	08/25/23 12:39	
LDW23-SC1221A	23H0579-05	NT1708292316.D	08/25/23 12:39	
LDW23-SC1038A	23H0579-06	NT1708292317.D	08/25/23 12:39	
LDW23-SC1023A	23H0579-07	NT1708292318.D	08/25/23 12:39	
LDW23-SC1017A	23H0579-08	NT1708292321.D	08/25/23 12:39	
LDW23-SC1012A	23H0579-09	NT1708292322.D	08/25/23 12:39	
LDW23-SC1169A	23H0579-10	NT1708292323.D	08/25/23 12:39	
LDW23-SC1169B	23H0579-11	NT1708292324.D	08/25/23 12:39	
LDW23-SC1162A	23H0579-12	NT1708292325.D	08/25/23 12:39	
Blank	BLH0669-BLK1	NT1708292306.D	08/25/23 12:39	
LCS	BLH0669-BS1	NT1708292307.D	08/25/23 12:39	
LCS Dup	BLH0669-BSD1	NT1708292308.D	08/25/23 12:39	
LDW23-SC1038A	BLH0669-MS1	NT1708292309.D	08/25/23 12:39	
LDW23-SC1038A	BLH0669-MSD1	NT1708292310.D	08/25/23 12:39	
Reference	BLH0669-SRM1	NT1708292311.D	08/25/23 12:39	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLH0669RE

Prepared using: EPA 3546 (Microwave)

8270E-SIM Dual Scan SVOC in Solid (Version:AOC4 List)

Matrix: Solid **Date Prepared:** 8/25/23 **Balance ID:** B139298002 **Set Up By:** CT 8/24/23

WO Comments

23H0579: Copy/Relog from 23F0143. <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L004753-54, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
QLS 14	QLS Spike (Freezer)
QLS 25	SIM QLS Spike (Freezer)

Analysis: 8270E-SIM Dual Scan SVOC

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23H0579-01 A	55.6	(18.00) 18.03	(1:1)	1mL	1	0.5	
23H0579-02 A	54.4	(18.38) 18.39	(1:1)	1mL	1	0.5	
23H0579-03 A	59.8	(16.71) 16.71	(1:1)	1mL	1	0.5	
23H0579-04 A	57.5	(17.41) 17.45	(1:1)	1mL	1	0.5	
23H0579-05 A	53.2	(18.82) 18.87	(1:1)	1mL	1	0.5	
23H0579-06 A	94.3	(10.60) 10.60	(1:1)	1mL	1	0.5	
23H0579-07 A	50.2	(19.92) 19.97	(1:1)	1mL	1	0.5	
23H0579-08 A	52.8	(18.95) 18.95	(1:1)	1mL	1	0.5	
23H0579-09 A	56.6	(17.66) 17.76	(1:1)	1mL	1	0.5	
23H0579-10 A	55.2	(18.10) 18.17	(1:1)	1mL	1	0.5	
23H0579-11 A	51.3	(19.49) 19.55	(1:1)	1mL	1	0.5	
23H0579-12 A	57.4	(17.43) 17.49	(1:1)	1mL	1	0.5	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLH0669-BLK1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate
BLH0669-BS1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate
BLH0669-BSD1	100.0	(10.00) 10.00	(1:1)	1mL	1	0.5	Use 5g Neutral Sodium Sulfate
BLH0669-MS1	94.3	(10.60) 10.60	(1:1)	1mL	1	0.5	Use 23H0579-06
BLH0669-MSD1	94.3	(10.60) 10.60	(1:1)	1mL	1	0.5	Use 23H0579-06
BLH0669-SRM1	100.0	~~(10.00)~~ (1.00) 1.00	(1:1)	1mL	1	0.5	Use K003477

RT 8/25/23 — Client ID verified By / Date

Preparation Reviewed By / Date

08/25/23 12:42 — Extraction Date and Time

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLH0669

Prepared using: EPA 3546 (Microwave)

8270E-SIM Dual Scan SVOC in Solid (Version:AOC4 List)

WO Comments

23H0579: Copy/Relog from 23F0143. <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L004753-54, Dup </H> Store in freezer (except GS)

Prep Steps

Microwave
1 (2) 3
CT 8/25/23
Analyst/Date

KD 100°C
(0) 1 2 3 4 (5) 6
LN 08/26/23
Analyst/Date

TurboVap
1 2 3 (4) 5
CT 8/27/23
Analyst/Date

GPC
Prep Filter (1:1)
CT 8/27/23
Analyst/Date

Post GPC
KD 80 - 85°C
1 (2) 3 4 5 6
TL 8/28/23
Analyst/Date

TurboVap
1 2 3 4 5
Analyst/Date

Water Wash
Analyst/Date

Vialing
Analyst/Date

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: CT Date: 8/25/23	
Anhydrous Sodium Sulfate	L008725
Pre-Deactivated Glasswool	L008024
1:1 Methylene Chloride/Acetone	L009468
Methylene Chloride	L009515
Pre GPC KD Analyst: LN Date: 08/26/23	
Pre-Deactivated Glasswool	—
Anhydrous Sodium Sulfate	L008725
Methylene Chloride	L009515
Hexane	L008982
GPC Filter Prep Analyst: CT Date: 8/27/23	
Methylene Chloride	L009515
GPC Filter	
GPC Analyst: CT Date: 8/27/23	
Methylene Chloride	L009515
GPC Calibration File	
Post GPC KD Analyst: TL Date: 8/28/23	
Methylene Chloride	L009515
Vialing Analyst: Date:	
Methylene Chloride	

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 100/150µg/mL	A L008220 Exp Date: 7/26/2024	50µL	CT	
Full List Spike (Freezer) 100µg/mL	7 L008426 (V) Exp L008216 Date: 3/31/2024	50µL	CT	
Base Spike 200µg/mL	56 L008426 (V) Exp L001778 Date: 2/19/2024	50µL	CT	
Acid Spike 100/150µg/mL	38 L008426 (V) Exp L001779 Date: 2/19/2024	50µL	CT	

MANUALLY ENTER EXPIRATION DATES!

(V) indicates a virtual standard combining two or more physical standards. In these cases the Standard ID refers to the virtual standard, not the parent standards.

If a Standard ID is missing, but should be present, check the standard definition in Element LIMS to be sure Standard Info 6 has the correct letter or number designator matching the vial designator inthe Standard ID column. If it is correct, check the batch and bench sheet in Element LIMS to be sure the correct standards are selected for surrogate(s) and spike(s).

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLH0669

Prepared using: EPA 3546 (Microwave)

8270E-SIM Dual Scan SVOC in Solid (Version:AOC4 List)

WO Comments

23H0579: Copy/Relog from 23F0143. <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L004753-54, Dup </H> Store in freezer (except GS)

Prep Instructions	
SPECIAL INSTRUCTIONS: 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessel. Note: do not fill vessel more than 2/3rd full. Some samples may require two vessels). 3. Add DCM ONLY to the vessels (until solvent is 3" above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-re-homogenize while hot-then let cool 15 min minimum in cold water. Re-homogenize while cool. 7. Decant DCM into Erlenmeyer flask with a funnel containing pre-deactivated glasswool. 8. Rinse with DCM. 9. Microwave a 2nd time using 1:1 DCM/ACE only (until solvent is 3" above soil layer after homogenization). 10. Let cool and decant solvent then empty the soil into the funnel and rinse with DCM. 11. KD Add 10 mL Hexane directly to extract in the KD. 12. GPC REQ = 100°C water bath (CLP). KD to 5 mL. Transfer to TurboTube in DCM. 13. (After GPC): KD at 80°C. 14. TurboVap. 15. Vial in DCM. 16. Water Wash Required 17. 0.5mL (1:2) Split to Lab. A. Need Total Solids Y / N B. Archive/Freeze Y / N	

Analytical Resources, ~~Incorporated~~ LLC
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: SVOA Batch Number: BLH1066g RE

Element Batch:T/S BLFQ165/166 Work Order(s): 23H0579

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☑ No Anomalies (standard soil/wet sediment/sand/gravel)= Φ1-Φ3, Φ5, Φ7-1Φ, 12	RT 8/25/23
☑ Standing Water Decanted (Not shared)= Φ4, 11	RT 8/25/23
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☑ Organics (Leaves/sticks/grass)= Φ6	RT 8/25/23
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Other (Details)= Samples Previously Frozen	CRD 8/24/23
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☑ Share Samples Y / (N)	RT 8/25/23
☑ Multiple Jars Y / (N)	RT 8/25/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLH0207	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Reference	BLH0669-SRM1	NT1708292311.D	08/28/2023	
LDW23-SC1017A	23H0579-08	NT1708292321.D	08/28/2023	
LDW23-SC1023A	23H0579-07	NT1708292318.D	08/28/2023	
LDW23-SC1038A	23H0579-06	NT1708292317.D	08/28/2023	
LDW23-SC1156A	23H0579-01	NT1708292312.D	08/28/2023	
LDW23-SC1162A	23H0579-12	NT1708292325.D	08/28/2023	
LDW23-SC1169A	23H0579-10	NT1708292323.D	08/28/2023	
LDW23-SC1226A	23H0579-02	NT1708292313.D	08/28/2023	
LDW23-SC1221A	23H0579-05	NT1708292316.D	08/28/2023	
LDW23-SC1169B	23H0579-11	NT1708292324.D	08/28/2023	
LDW23-SS1269	23H0579-03	NT1708292314.D	08/28/2023	
LDW23-SS1275	23H0579-04	NT1708292315.D	08/28/2023	
Blank	BLH0669-BLK1	NT1708292306.D	08/28/2023	
LCS	BLH0669-BS1	NT1708292307.D	08/28/2023	
LCS Dup	BLH0669-BSD1	NT1708292308.D	08/28/2023	
Matrix Spike	BLH0669-MS1	NT1708292309.D	08/28/2023	
Matrix Spike Dup	BLH0669-MSD1	NT1708292310.D	08/28/2023	
LDW23-SC1012A	23H0579-09	NT1708292322.D	08/28/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLH0207

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLC0092-GPC1** **Printed: 8/28/2023 2:38:50PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23H0579-01	A	LDW23-SC1156A	A 01	1	1	8270E-SIM Dual Scan SVOC	8/28/2023	CTO	
23H0579-02	A	LDW23-SC1226A	A 01	1	1	8270E-SIM Dual Scan SVOC	8/28/2023	CTO	
23H0579-03	A	LDW23-SS1269	A 01	1	1	8270E-SIM Dual Scan SVOC	8/28/2023	CTO	
23H0579-04	A	LDW23-SS1275	A 01	1	1	8270E-SIM Dual Scan SVOC	8/28/2023	CTO	
23H0579-05	A	LDW23-SC1221A	A 01	1	1	8270E-SIM Dual Scan SVOC	8/28/2023	CTO	
23H0579-06	A	LDW23-SC1038A	A 01	1	1	8270E-SIM Dual Scan SVOC	8/28/2023	CTO	
23H0579-07	A	LDW23-SC1023A	A 01	1	1	8270E-SIM Dual Scan SVOC	8/28/2023	CTO	
23H0579-08	A	LDW23-SC1017A	A 01	1	1	8270E-SIM Dual Scan SVOC	8/28/2023	CTO	
23H0579-09	A	LDW23-SC1012A	A 01	1	1	8270E-SIM Dual Scan SVOC	8/28/2023	CTO	
23H0579-10	A	LDW23-SC1169A	A 01	1	1	8270E-SIM Dual Scan SVOC	8/28/2023	CTO	
23H0579-11	A	LDW23-SC1169B	A 01	1	1	8270E-SIM Dual Scan SVOC	8/28/2023	CTO	
23H0579-12	A	LDW23-SC1162A	A 01	1	1	8270E-SIM Dual Scan SVOC	8/28/2023	CTO	
BLH0669-BLK1	-	Blank	-	1	1	-	8/28/2023	CTO	
BLH0669-BS1	-	LCS	-	1	1	-	8/28/2023	CTO	
BLH0669-BSD1	-	LCS Dup	-	1	1	-	8/28/2023	CTO	
BLH0669-MS1	-	Matrix Spike	-	1	1	-	8/28/2023	CTO	
BLH0669-MSD1	-	Matrix Spike Dup	-	1	1	-	8/28/2023	CTO	
BLH0669-SRM1	-	Reference	-	1	1	-	8/28/2023	CTO	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8270E-SIM

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23H0579
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLH0669-BLK1	File ID:	NT1708292306.D
Sampled:	N/A	Prepared:	08/25/23 12:39	Analyzed:	08/29/23 14:43
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 1 mL
Batch:	BLH0669	Sequence:	SLH0447	Calibration:	GH00045
Instrument:	NT17	Column:	ZB-5MS	Cleanups:	GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	5.0	U	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
100-51-6	Benzyl Alcohol	1	20.0	U	2.5	20.0
65-85-0	Benzoic acid	1	100	U	13.4	100
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	20.0	U	2.1	20.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	543	72.3	27 - 120	
p-Terphenyl-d14	500.00	573	115	37 - 120	Q

INTERNAL STANDARDS	AREA	RT	REF AREA	REF RT	Q
1,4-Dichlorobenzene-d4	288440	9.4	296489	9.413	
Naphthalene-d8	1091361	11.878	1098892	11.878	
Acenaphthene-d10	440875	15.487	443071	15.487	
Phenanthrene-d10	637565	18.506	627744	18.506	
Chrysene-d12	374668	23.506	404122	23.506	
Perylene-d12	342493	26.223	417323	26.223	

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292306.D

Date : 29-AUG-2023 14:43

Client ID:

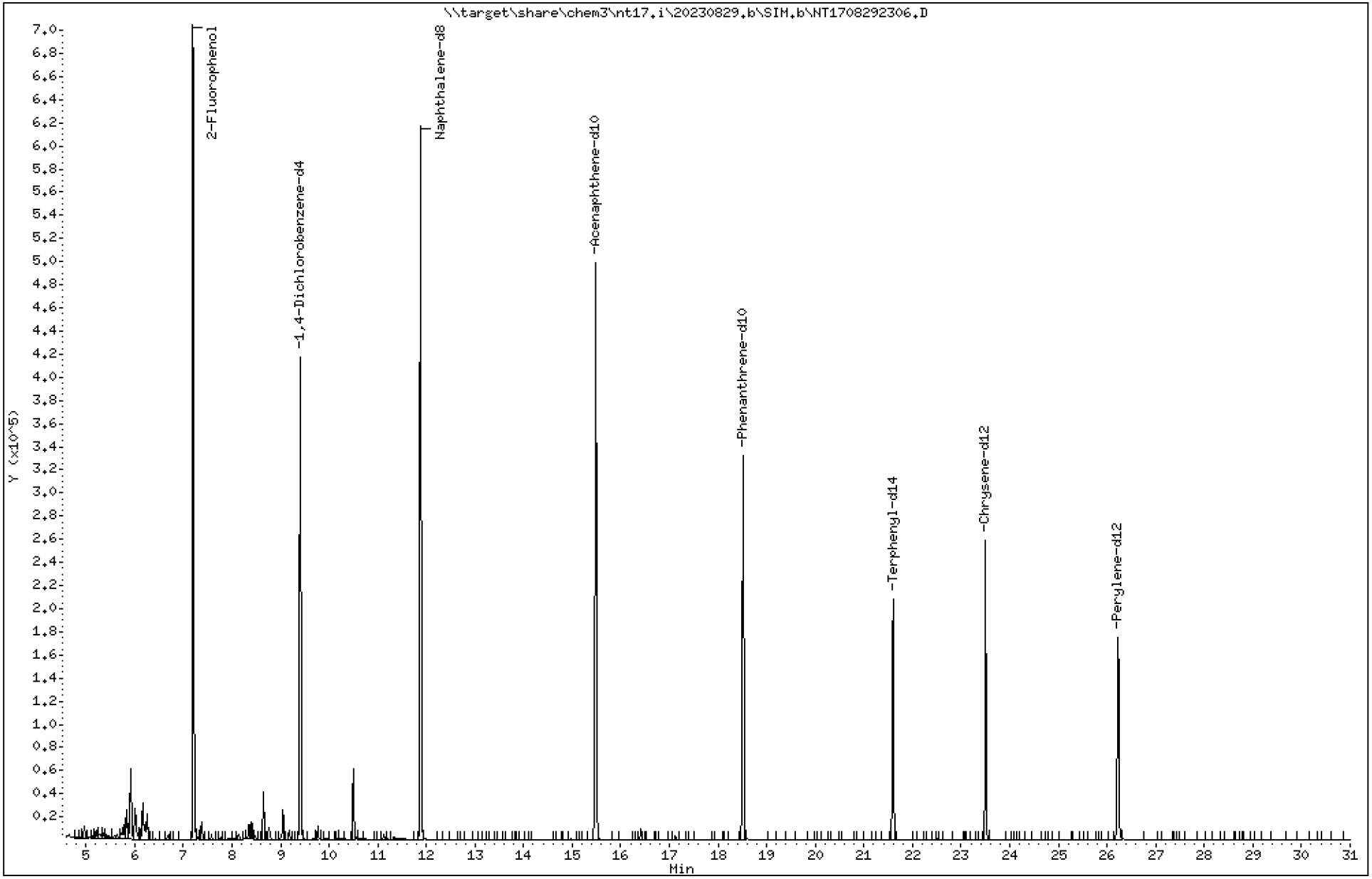
Sample Info: BLH0669-BLK1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 29-AUG-2023 14:43

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BLK1

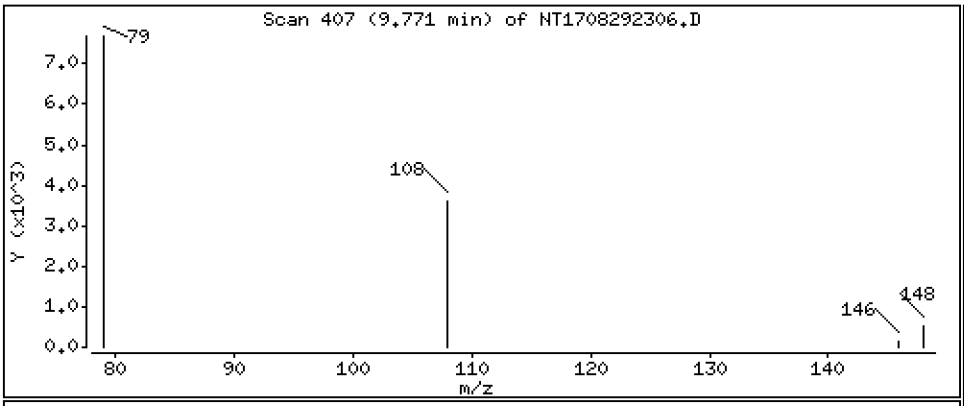
Operator: JGR

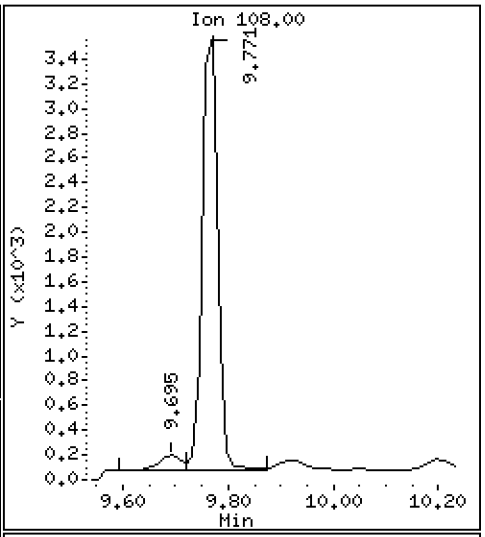
Column phase: ZB-5msi

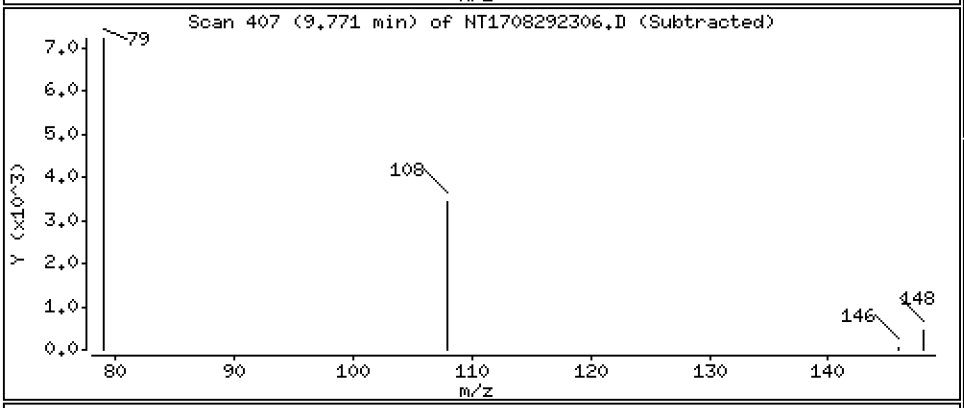
Column diameter: 0.25

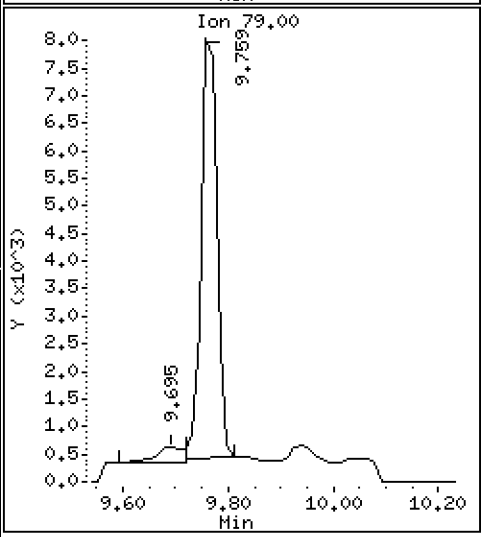
13 2-Methylphenol

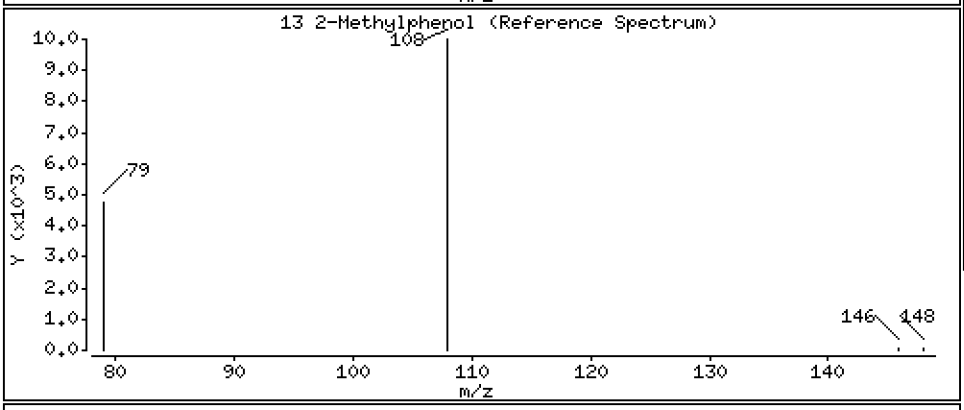
Concentration: 0.06281 ug/mL

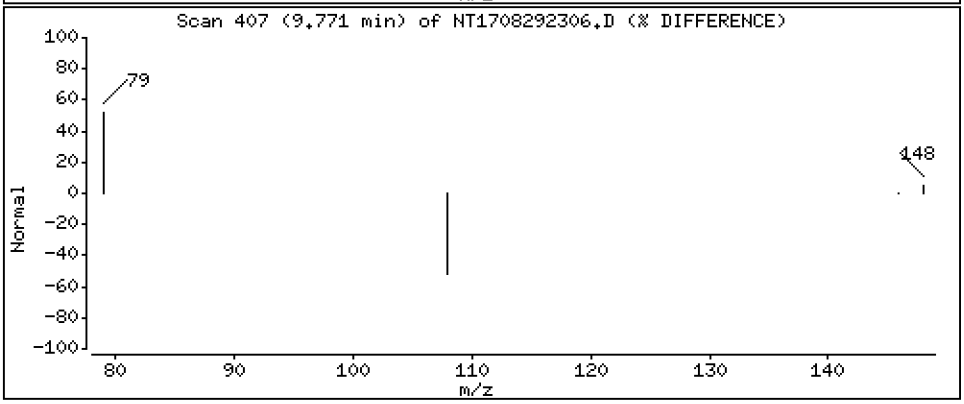












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Date : 29-AUG-2023 14:43

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BLK1

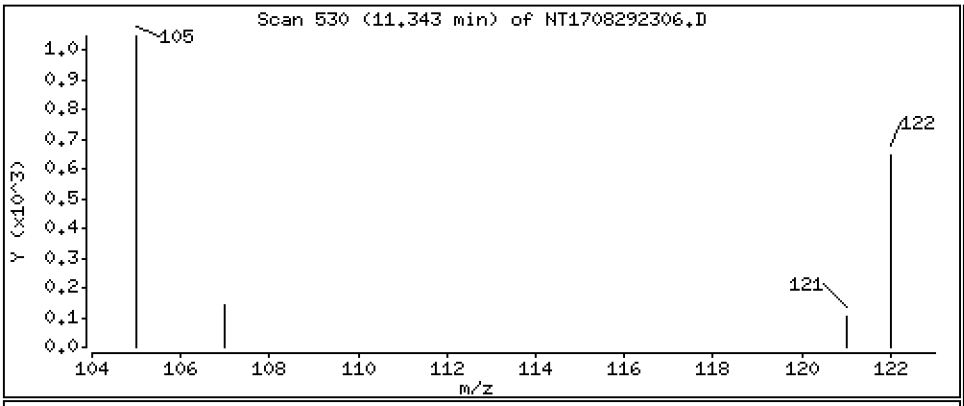
Operator: JGR

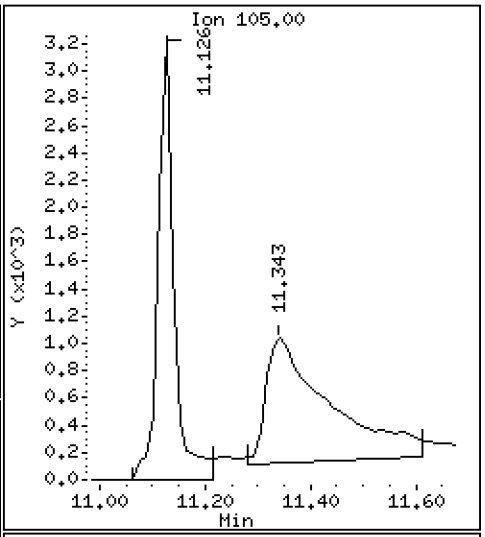
Column phase: ZB-5msi

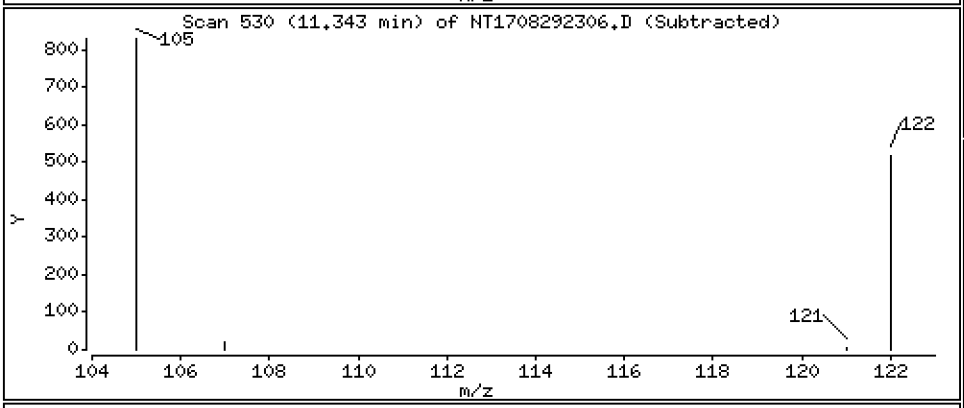
Column diameter: 0.25

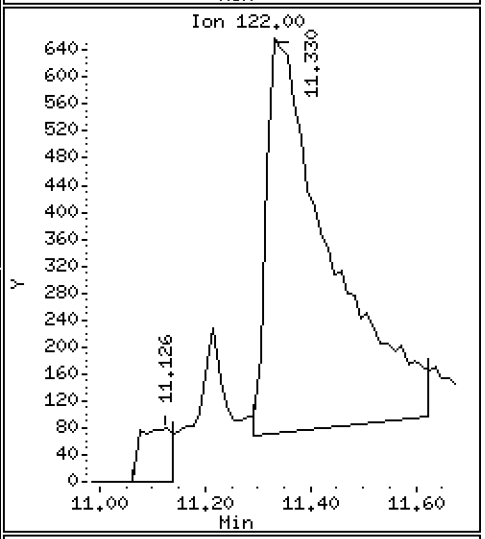
24 Benzoic acid

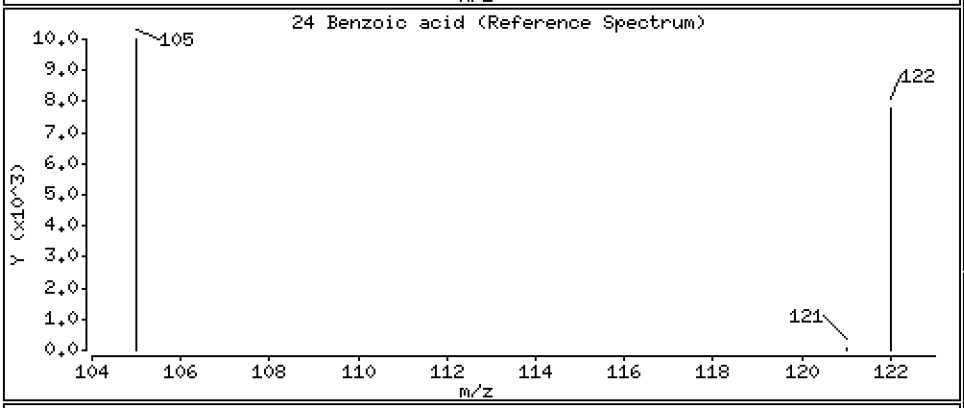
Concentration: 0.1083 ug/mL

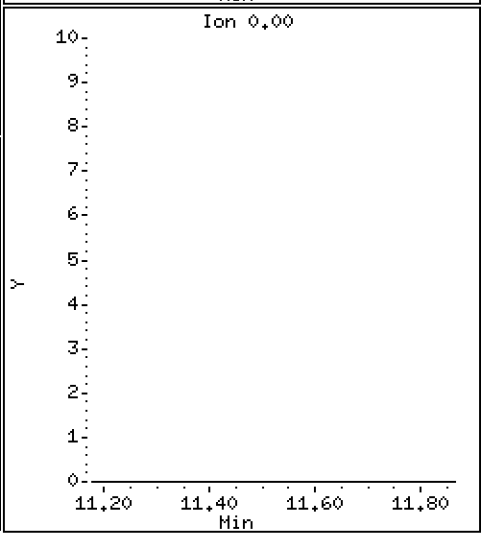


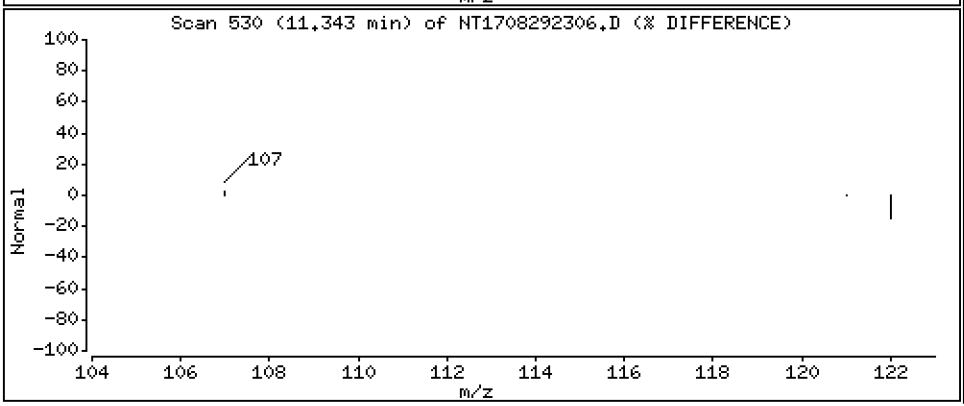












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Date : 29-AUG-2023 14:43

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BLK1

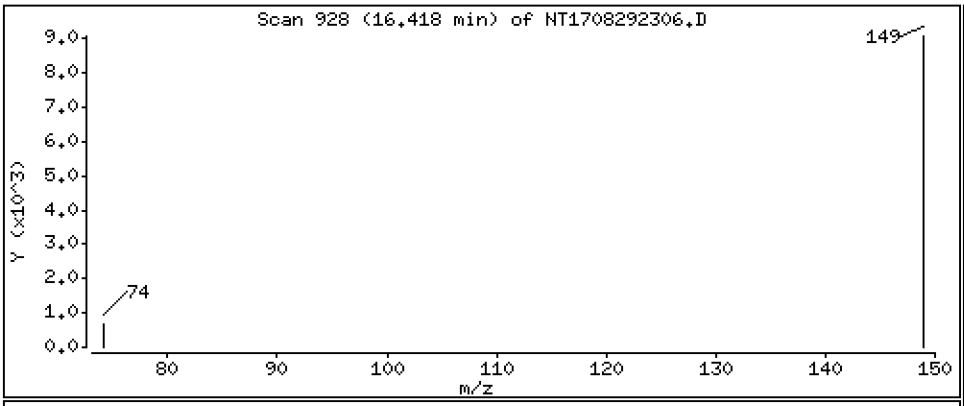
Operator: JGR

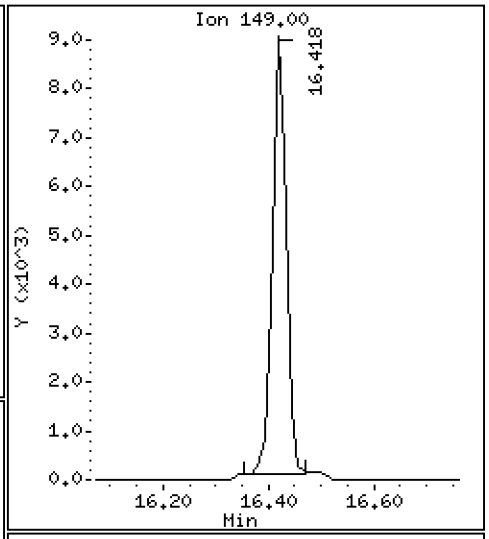
Column phase: ZB-5msi

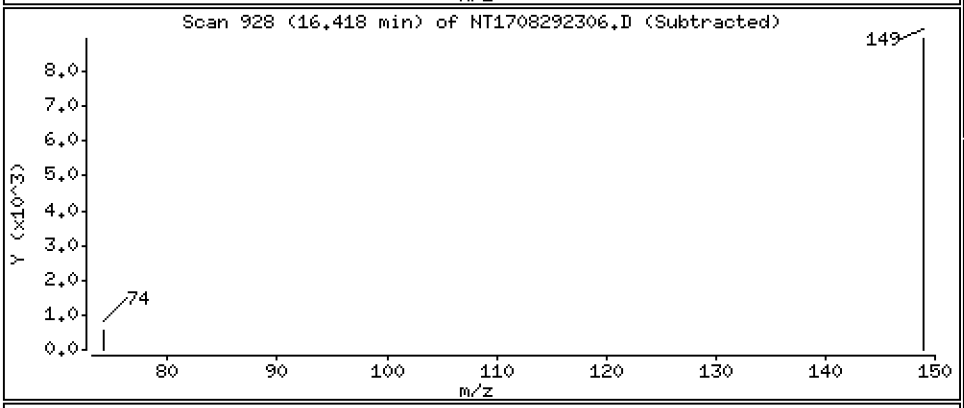
Column diameter: 0.25

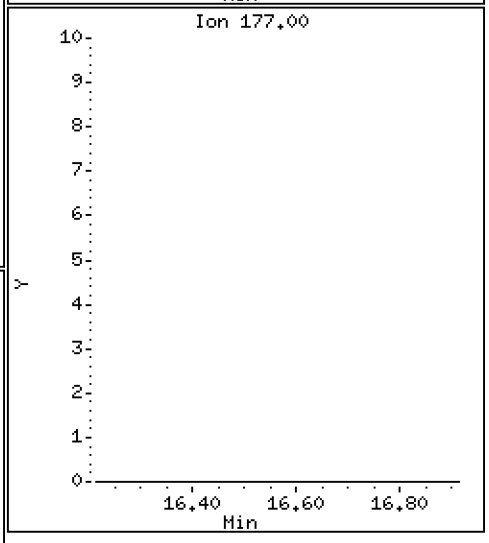
50 Diethylphthalate

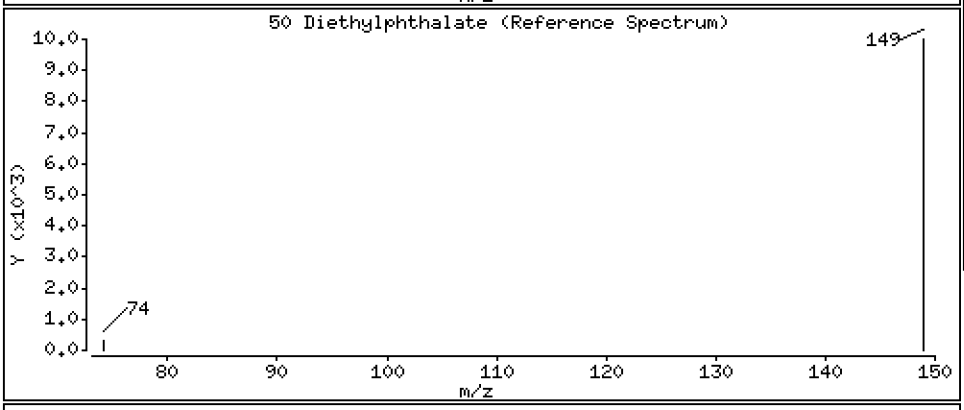
Concentration: 0.1101 ug/mL

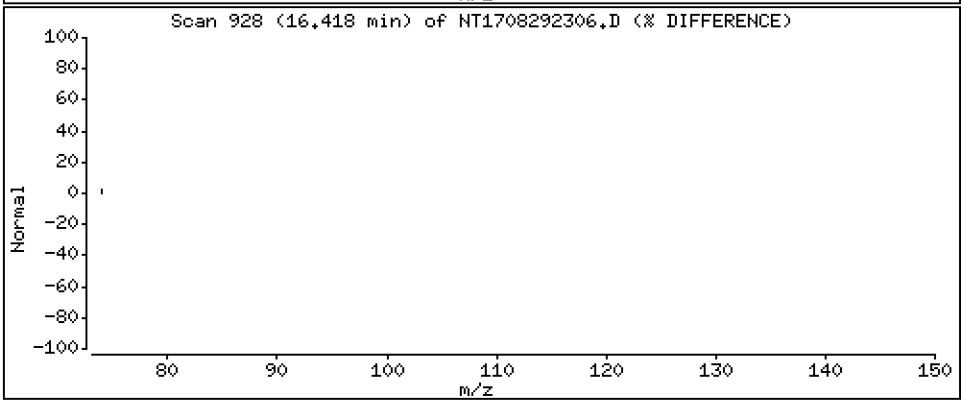












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292306.D

Date : 29-AUG-2023 14:43

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BLK1

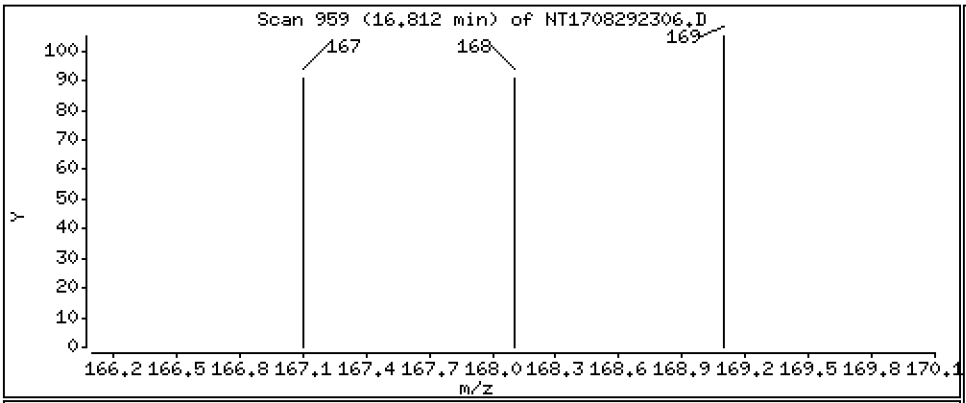
Operator: JGR

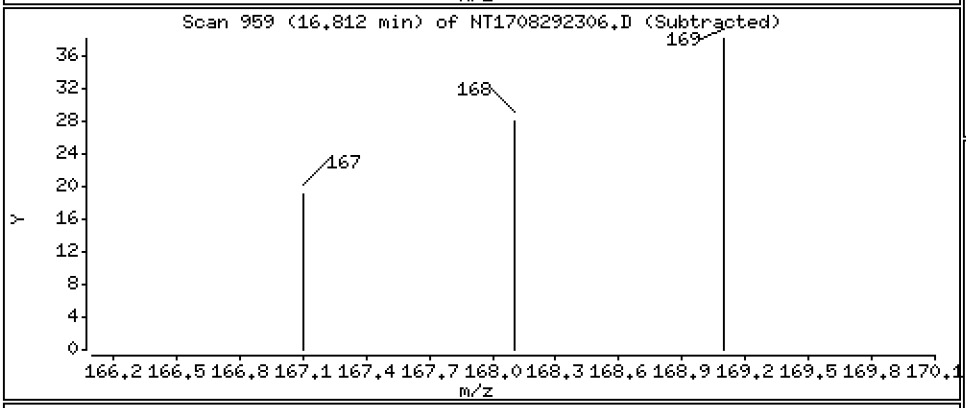
Column phase: ZB-5msi

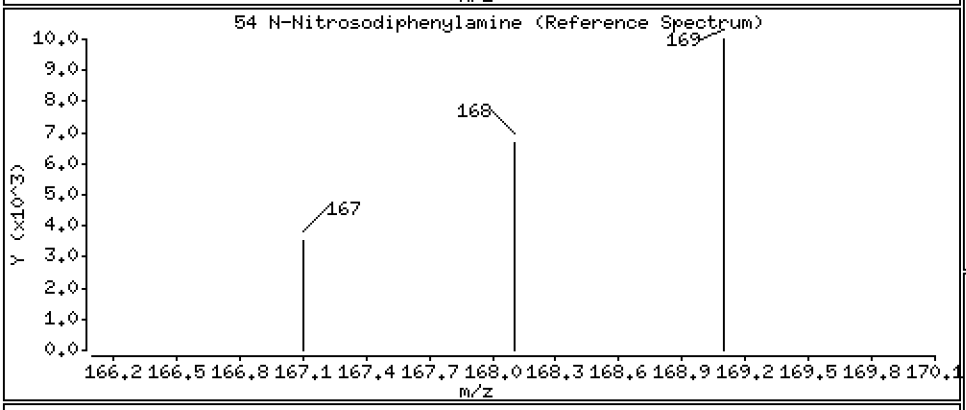
Column diameter: 0.25

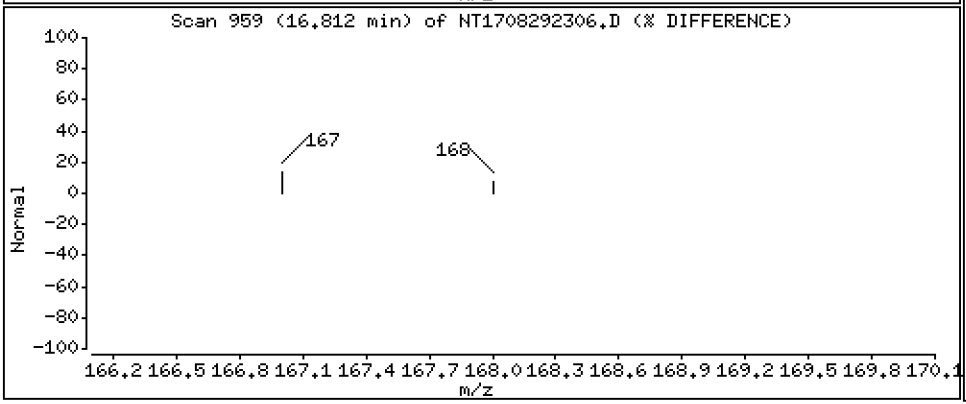
54 N-Nitrosodiphenylamine

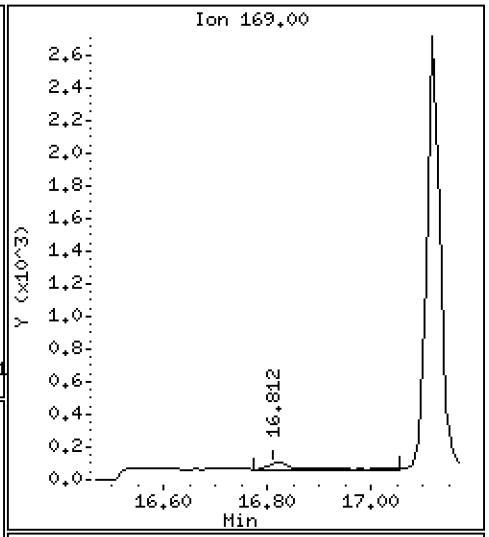
Concentration: 0.001418 ug/mL

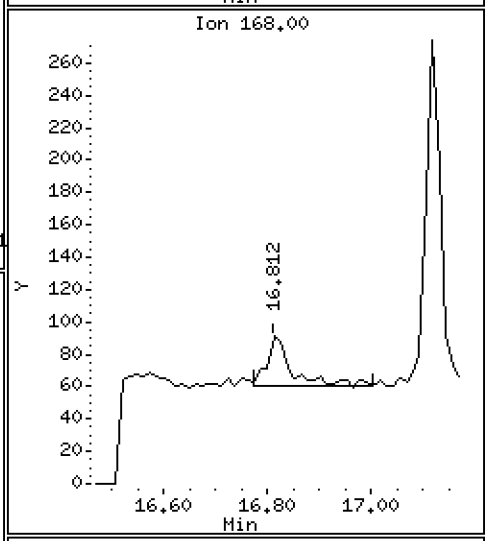


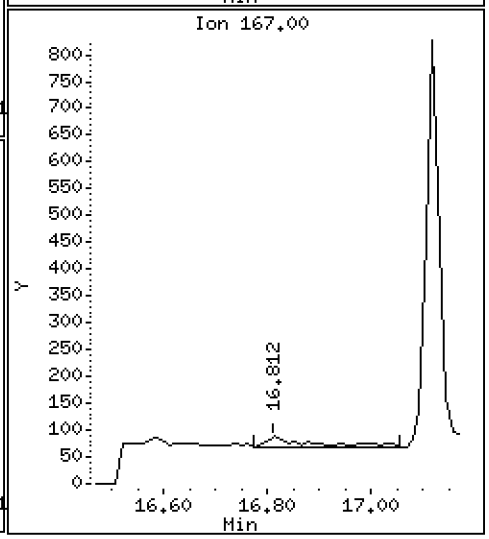












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292306.D
Lab Smp Id: BLH0669-BLK1
Inj Date : 29-AUG-2023 14:43
Operator : JGR Inst ID: nt17.i
Smp Info : BLH0669-BLK1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 09:25 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1	2-Fluorophenol	112	7.209	7.196	(0.767)	649846	5.42593	5.426(R)
	3	Phenol	94	Compound Not Detected.					
	7	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8	1,4-Dichlorobenzene-d4	152	9.400	9.413	(1.000)	288440	4.00000	
	9	1,4-Dichlorobenzene	146	Compound Not Detected.					
	11	Benzyl alcohol	79	Compound Not Detected.					
	12	1,2-Dichlorobenzene	146	Compound Not Detected.					
	13	2-Methylphenol	108	9.771	9.886	(1.039)	6953	0.06281	0.06281
	15	4-Methylphenol	108	Compound Not Detected.					
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22	2,4-Dimethylphenol	107	Compound Not Detected.					
	24	Benzoic acid	105	11.342	11.329	(0.955)	7748	0.10832	0.1083
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27	Naphthalene-d8	136	11.878	11.878	(1.000)	1091361	4.00000	
	30	Hexachlorobutadiene	225	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
*	42	Acenaphthene-d10	162	15.487	15.487	(1.000)	440875	4.00000	
	50	Diethylphthalate	149	16.417	16.417	(1.060)	16404	0.11010	0.1101
	54	N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	130	0.00142	0.001418
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	18.506	18.506	(1.000)	637565	4.00000	
$	66	Terphenyl-d14	244	21.605	21.605	(0.919)	296872	5.72588	5.726(R)
	67	Butylbenzylphthalate	149	Compound Not Detected.					
*	69	Chrysene-d12	240	23.506	23.506	(1.000)	374668	4.00000	
*	77	Perylene-d12	264	26.223	26.223	(1.000)	342493	4.00000	
	79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 30-Aug-2023 09:25

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292306.D
Lab Smp Id: BLH0669-BLK1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 29-AUG-2023
Calibration Time: 12:37
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	296489	148245	592978	288440	-2.71
27 Naphthalene-d8	1098892	549446	2197784	1091361	-0.69
42 Acenaphthene-d10	443071	221536	886142	440875	-0.50
59 Phenanthrene-d10	627744	313872	1255488	637565	1.56
69 Chrysene-d12	404122	202061	808244	374668	-7.29
77 Perylene-d12	417323	208662	834646	342493	-17.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.40	-0.14
27 Naphthalene-d8	11.88	11.38	12.38	11.88	-0.00
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	-0.00
59 Phenanthrene-d10	18.51	18.01	19.01	18.51	-0.00
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.22	25.72	26.72	26.22	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292306.D

Lab ID: BLH0669-BLK1
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   29-AUG-2023 14:43

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.039	1.050	-0.0108	2-Methylphenol

RRT check based on Ccal File: SIM.b/NT1708292304.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

LCS / LCS DUPLICATE RECOVERY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	08/29/23 15:21
Batch:	BLH0669	Laboratory ID:	BLH0669-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	10 g / 1 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	500.00	302		60.5	36 - 120
1,2-Dichlorobenzene	500.00	306		61.2	36 - 120
Benzyl Alcohol	500.00	371		74.2	25 - 123
Benzoic acid	2300.0	2590		113	10 - 160
2,4-Dimethylphenol	1300.0	1310		100	10 - 120
1,2,4-Trichlorobenzene	500.00	302		60.5	35 - 120
N-Nitrosodiphenylamine	500.00	376		75.1	27 - 120
Pentachlorophenol	1300.0	1290		98.9	26 - 120

* Indicates values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

LCS / LCS DUPLICATE RECOVERY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	08/29/23 15:58
Batch:	BLH0669	Laboratory ID:	BLH0669-BSD1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS Dup
Initial/Final:	10 g / 1 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	500.00	349		69.8	14.4	30	36 - 120
1,2-Dichlorobenzene	500.00	351		70.1	13.6	30	36 - 120
Benzyl Alcohol	500.00	411		82.3	10.3	30	25 - 123
Benzoic acid	2300.0	2700		117	3.94	30	10 - 160
2,4-Dimethylphenol	1300.0	833	*	64.1	44.2 *	30	10 - 120
1,2,4-Trichlorobenzene	500.00	360		72.0	17.4	30	35 - 120
N-Nitrosodiphenylamine	500.00	436		87.2	14.9	30	27 - 120
Pentachlorophenol	1300.0	1340		103	4.46	30	26 - 120

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292307.D

Date : 29-AUG-2023 15:21

Client ID:

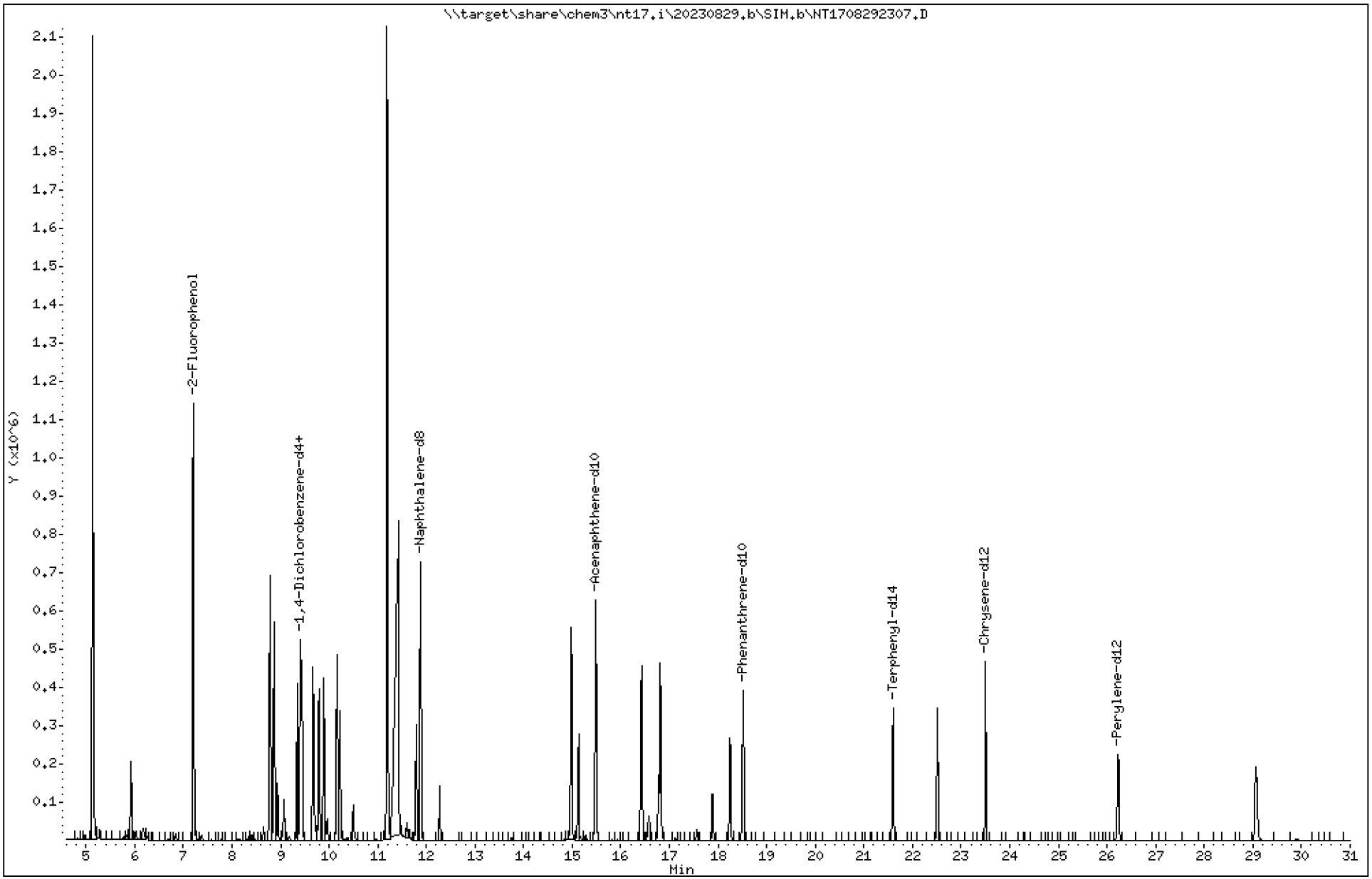
Sample Info: BLH0669-BS1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

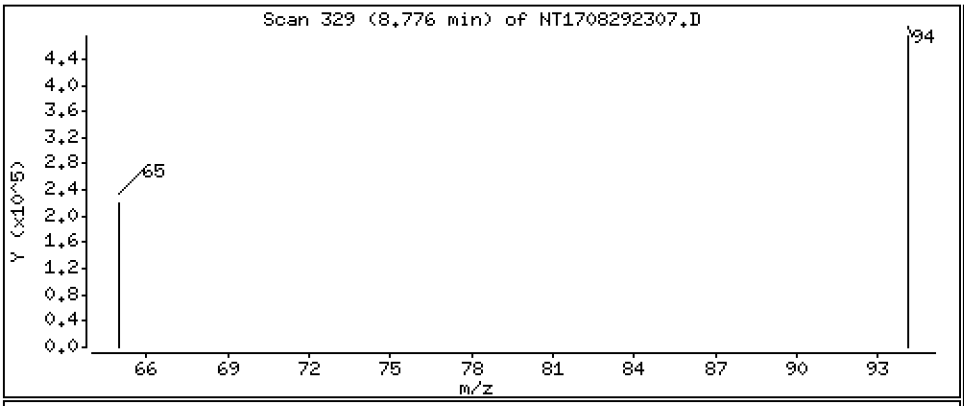
Operator: JGR

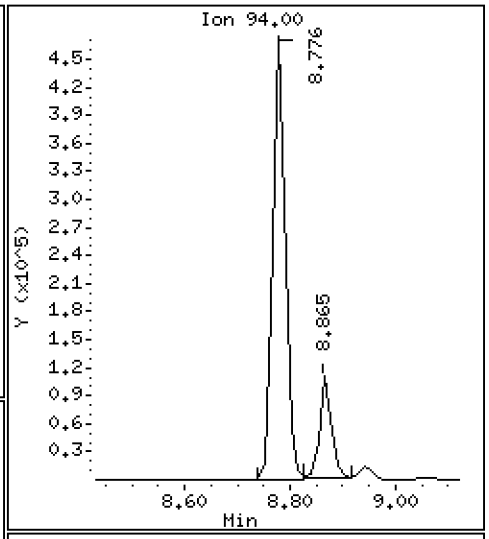
Column phase: ZB-5msi

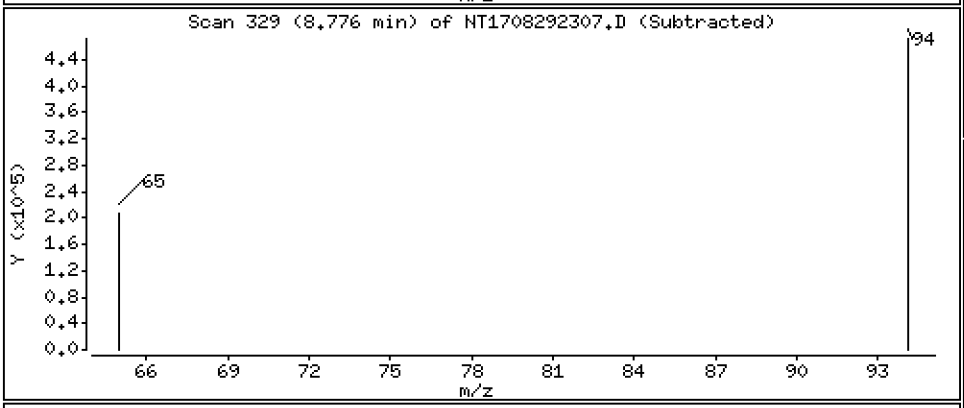
Column diameter: 0.25

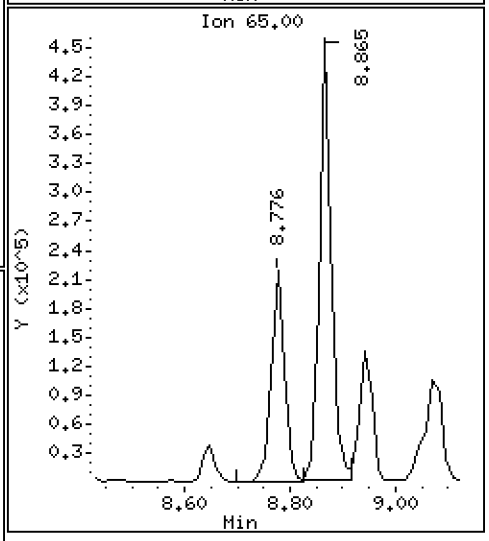
3 Phenol

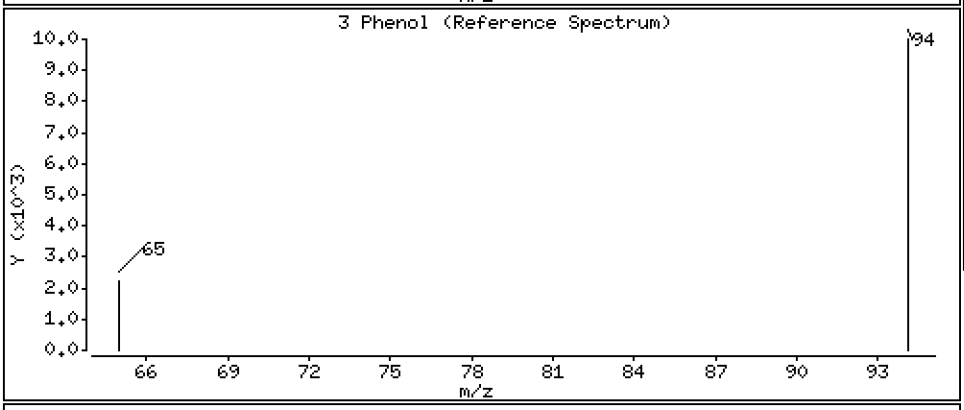
Concentration: 3.548 ug/mL

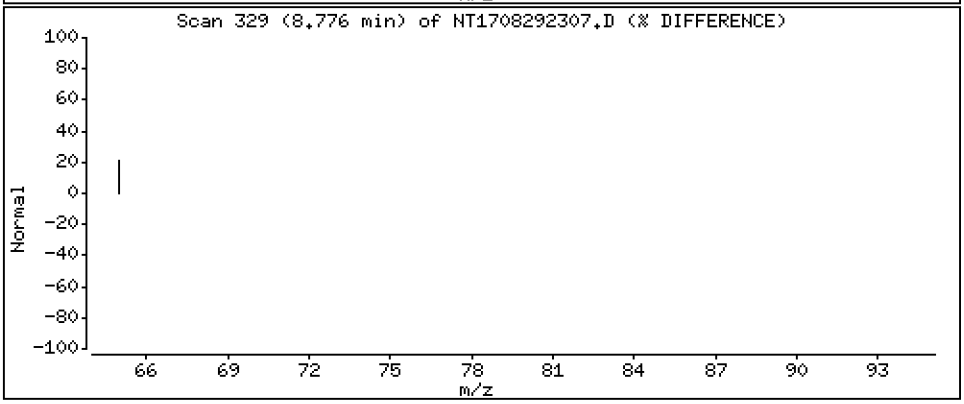












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

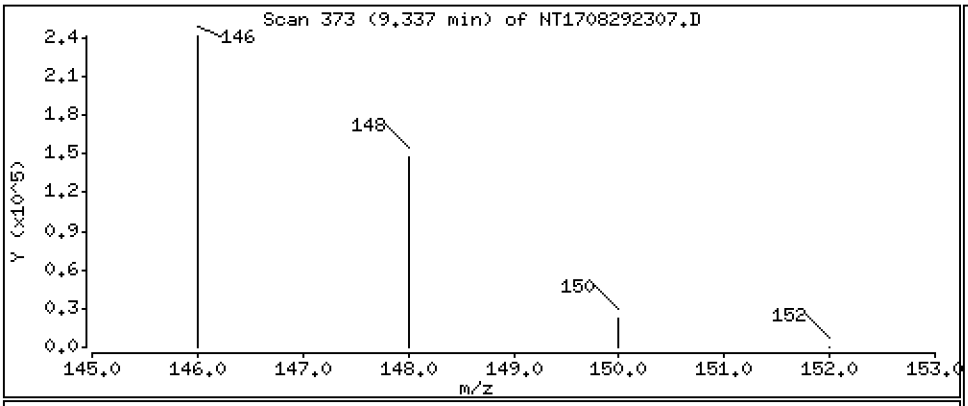
Operator: JGR

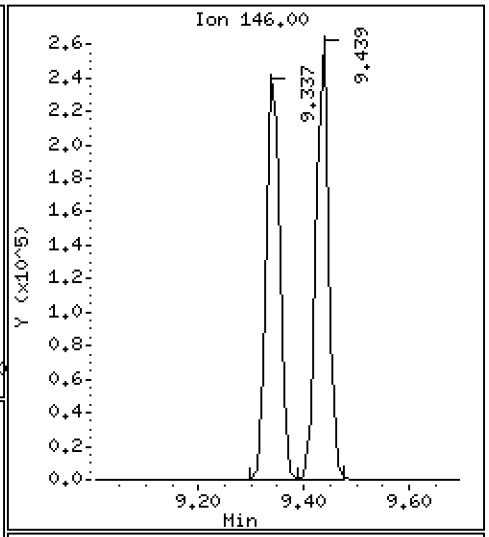
Column phase: ZB-5msi

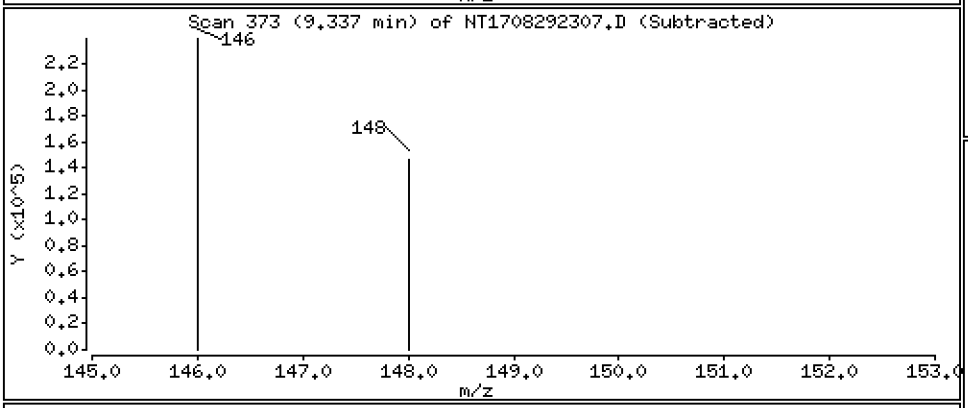
Column diameter: 0.25

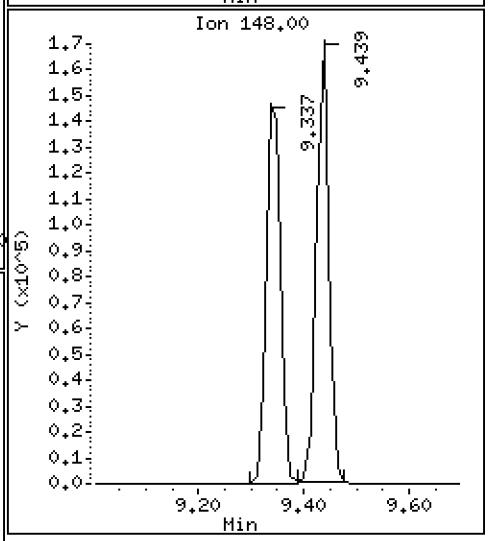
7 1,3-Dichlorobenzene

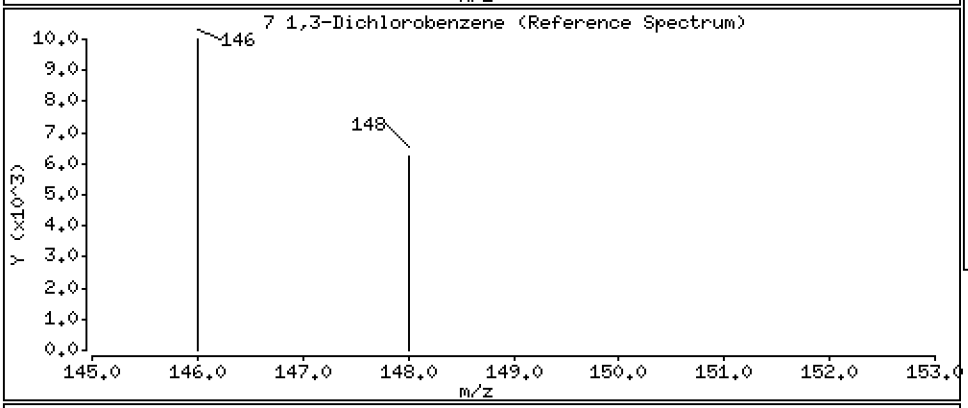
Concentration: 2.950 ug/mL

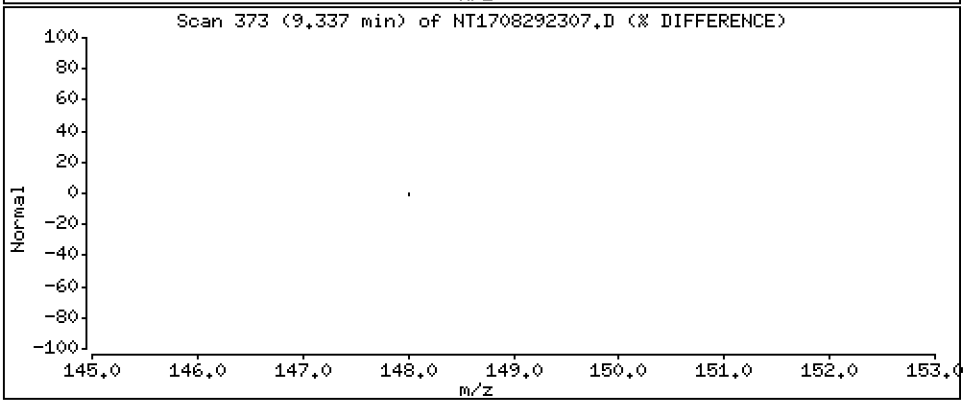












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

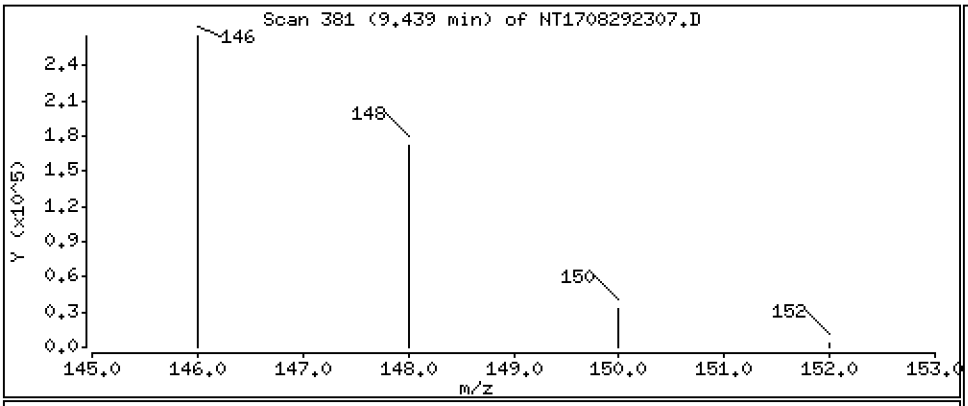
Operator: JGR

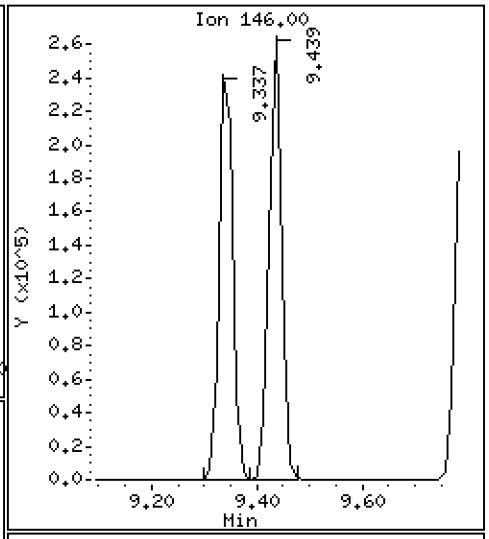
Column phase: ZB-5msi

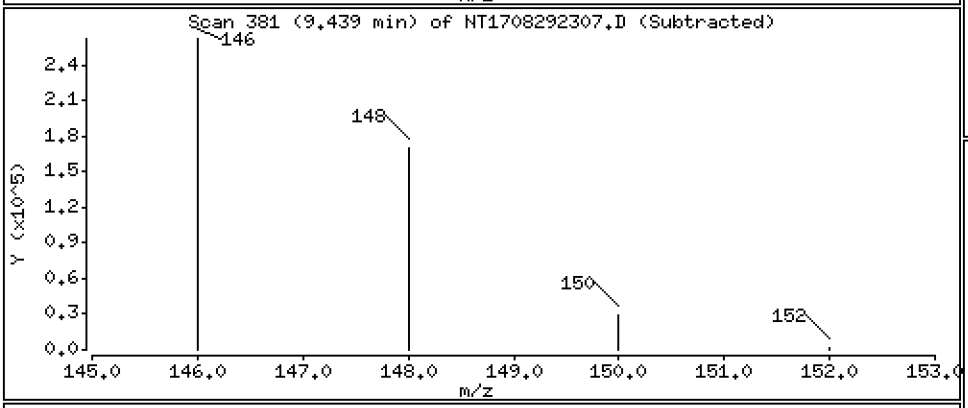
Column diameter: 0.25

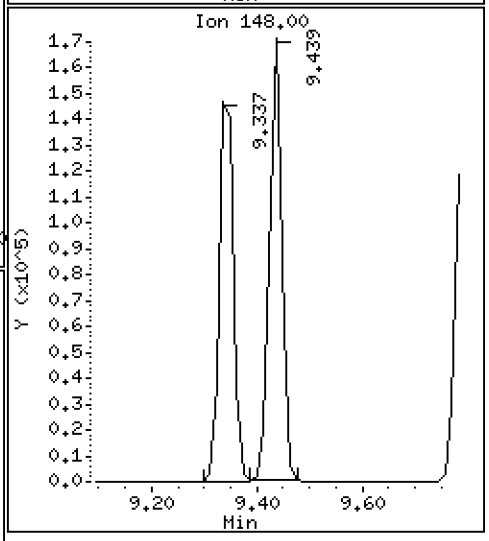
9 1,4-Dichlorobenzene

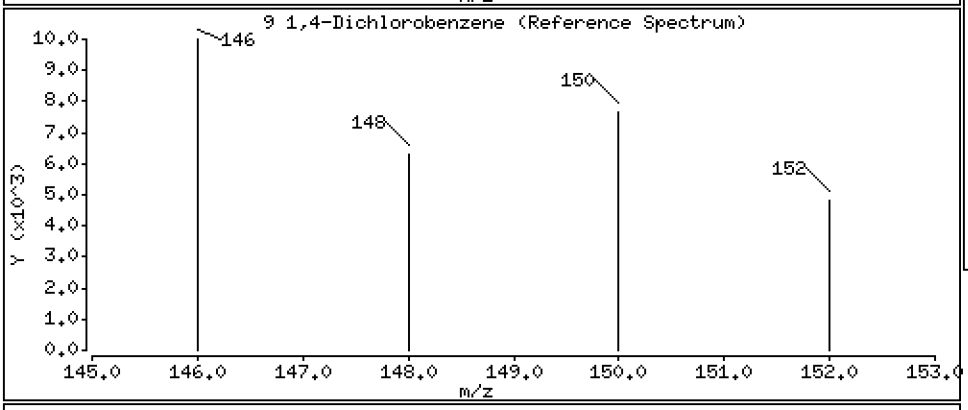
Concentration: 3.023 ug/mL

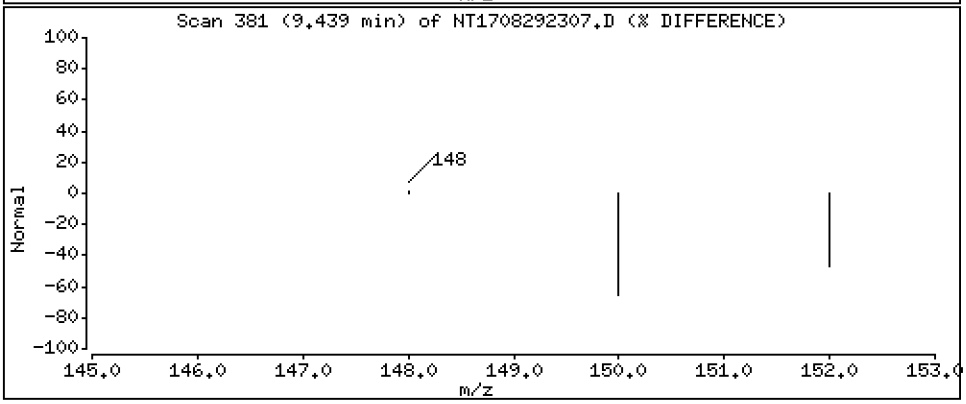












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292307.D

Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

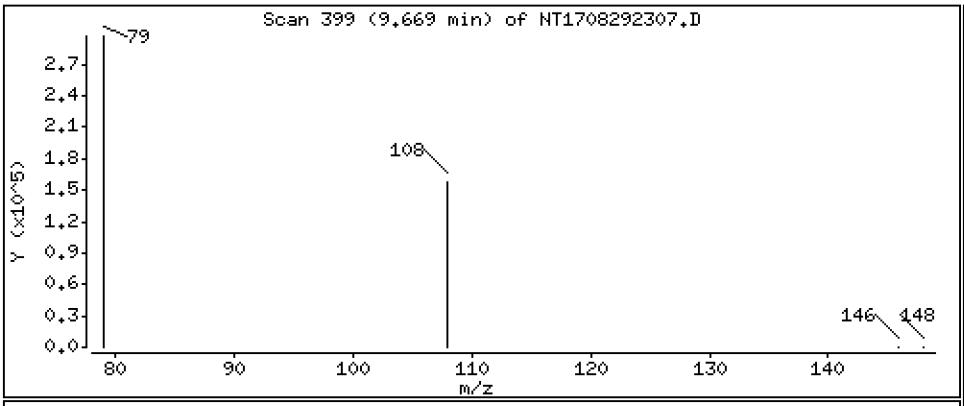
Operator: JGR

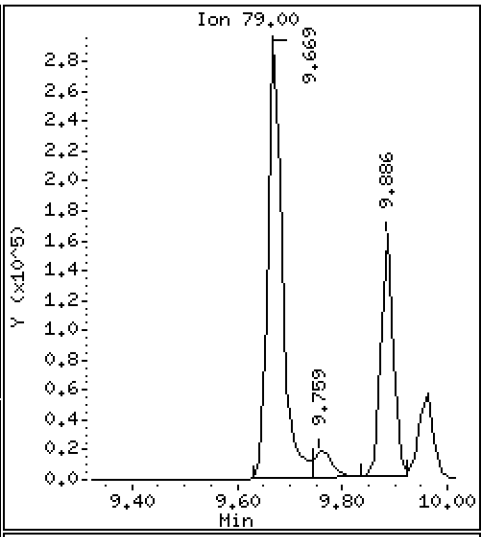
Column phase: ZB-5msi

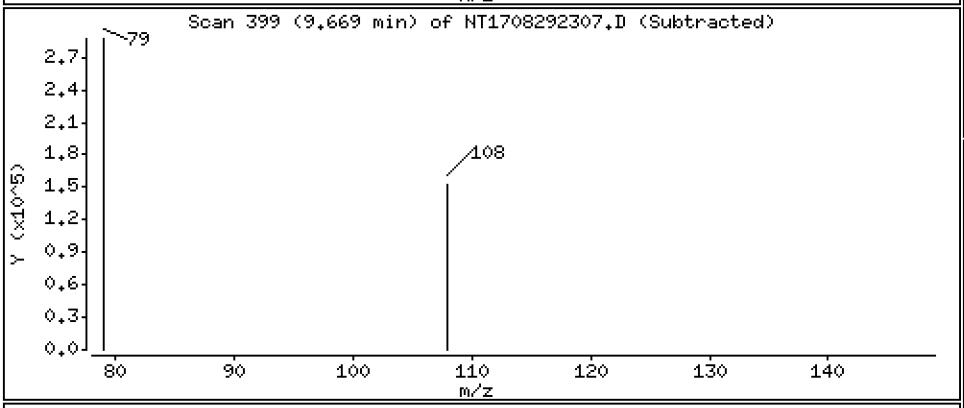
Column diameter: 0.25

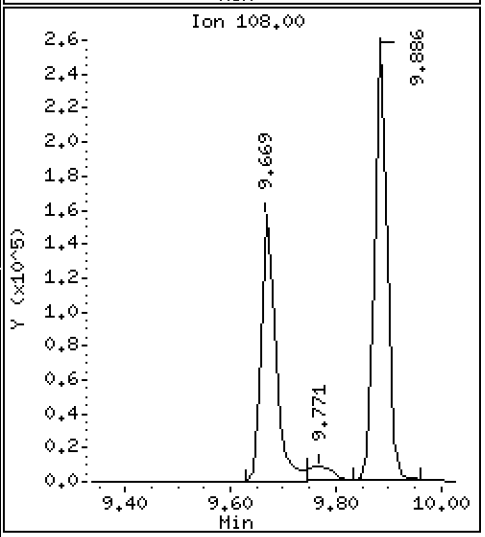
11 Benzyl alcohol

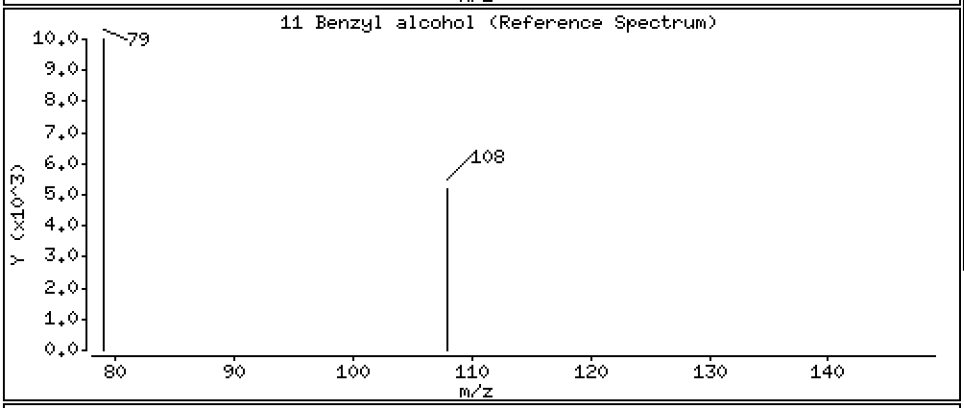
Concentration: 3.712 ug/mL

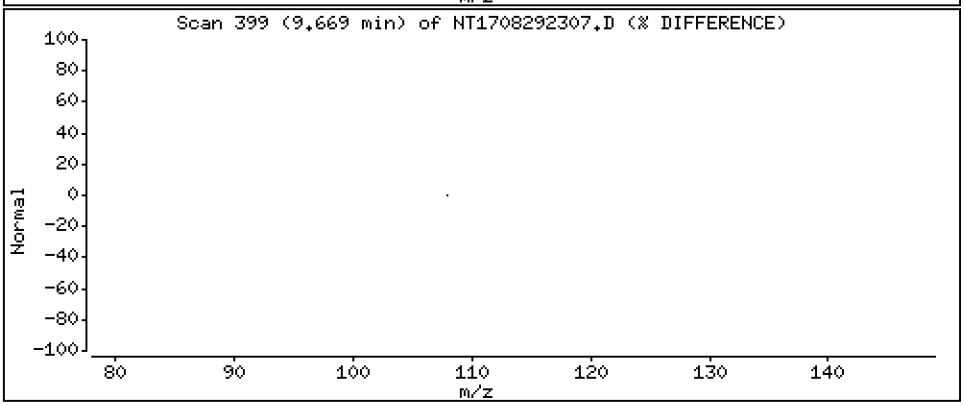












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

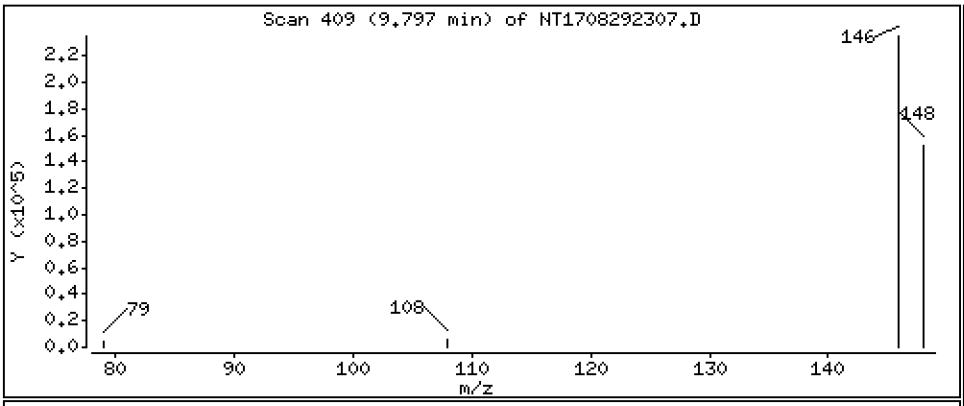
Operator: JGR

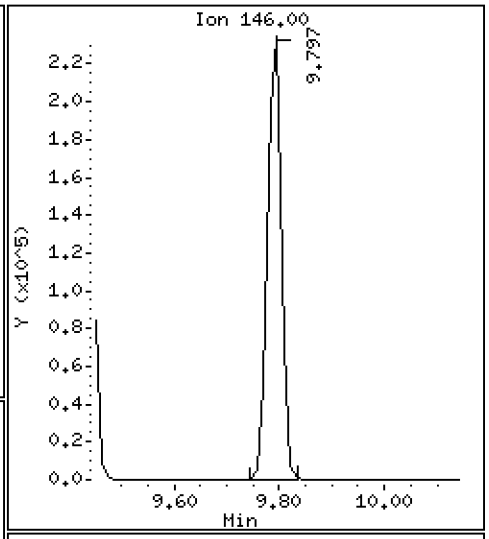
Column phase: ZB-5msi

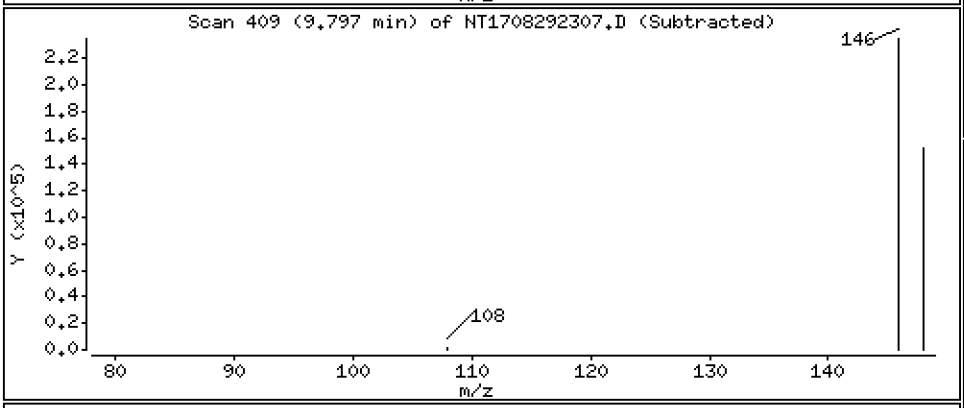
Column diameter: 0.25

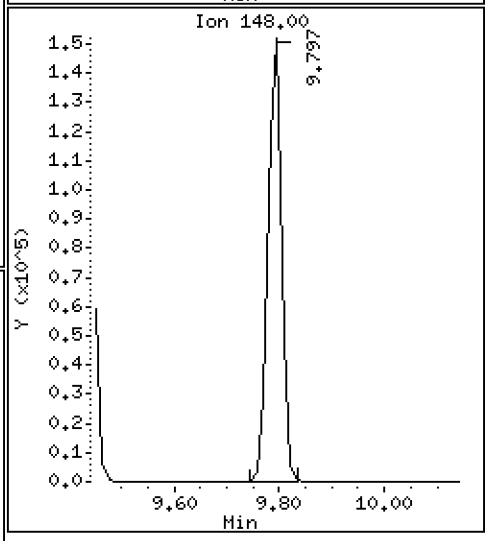
12 1,2-Dichlorobenzene

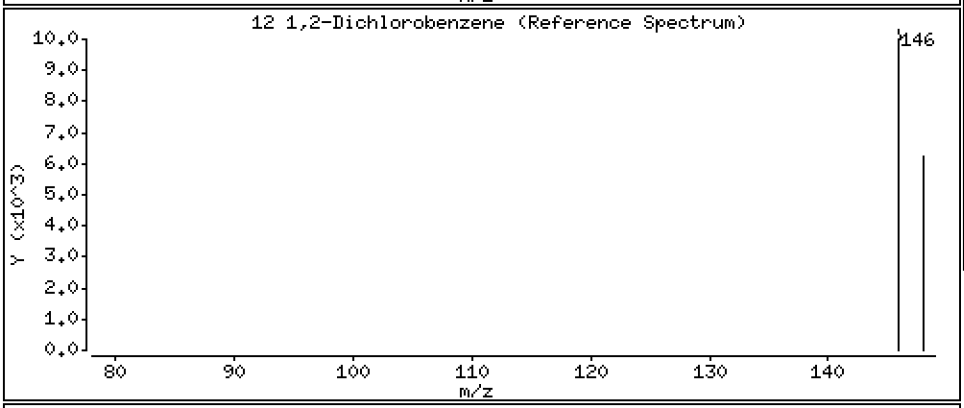
Concentration: 3.061 ug/mL

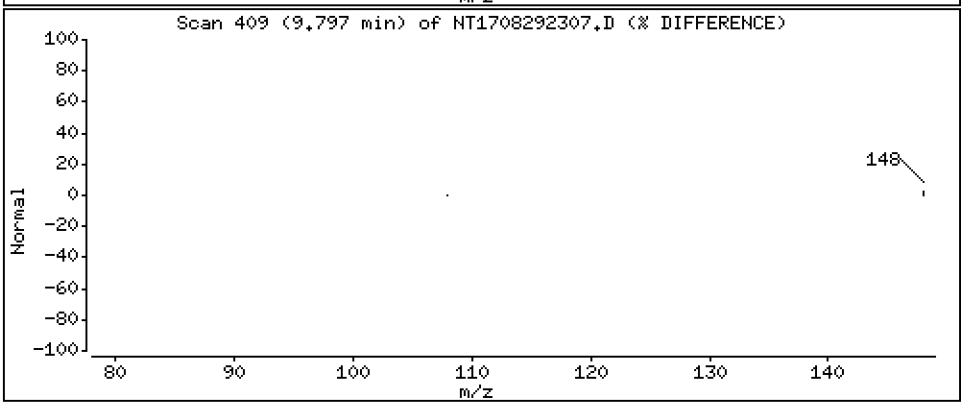












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

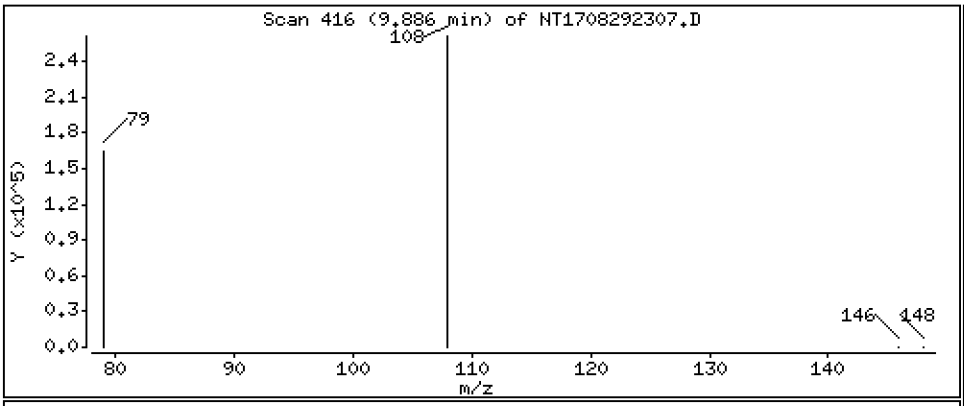
Operator: JGR

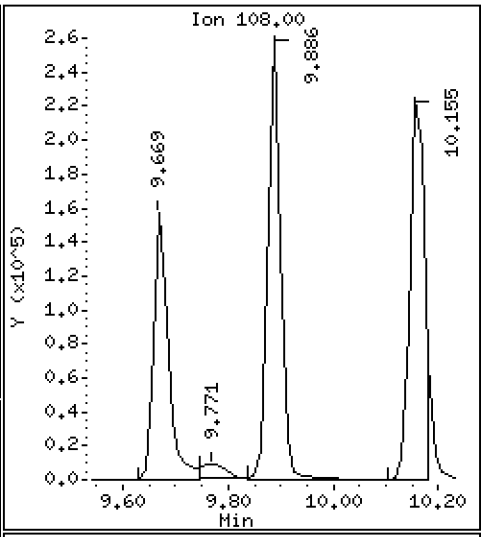
Column phase: ZB-5msi

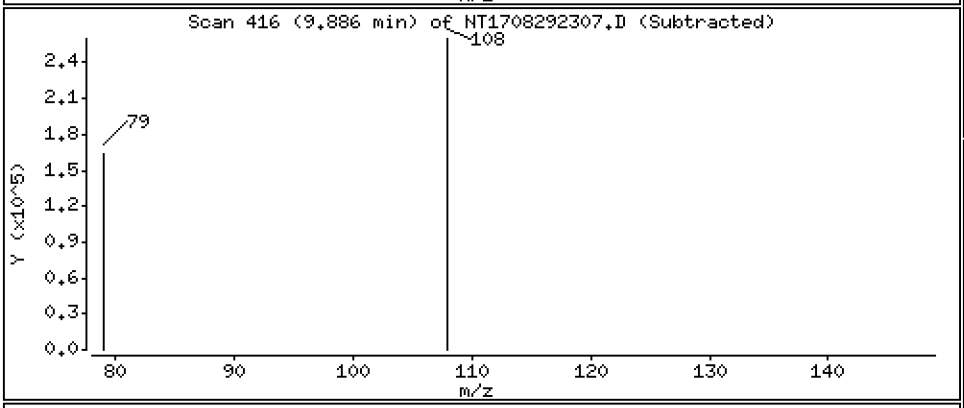
Column diameter: 0.25

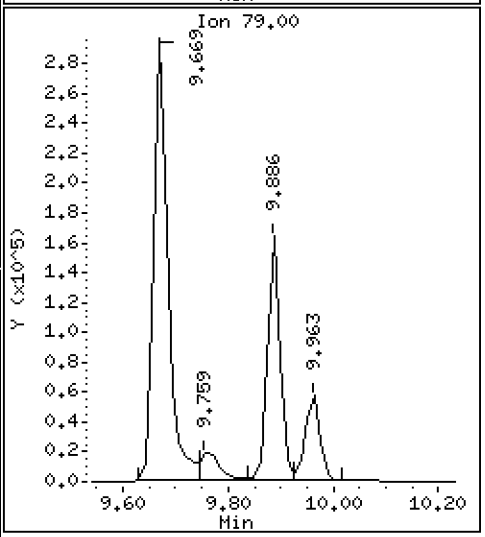
13 2-Methylphenol

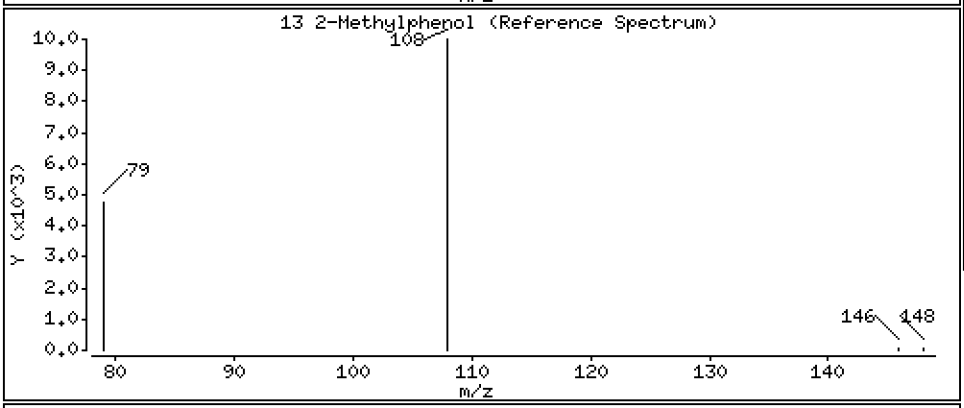
Concentration: 3.247 ug/mL

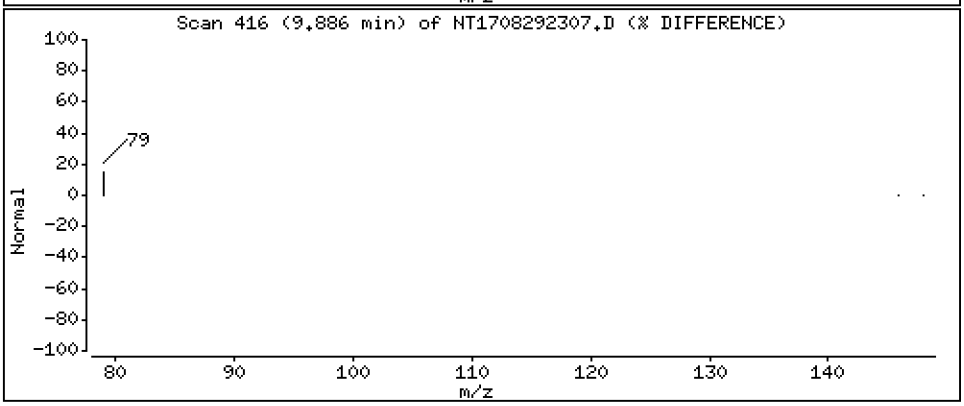












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

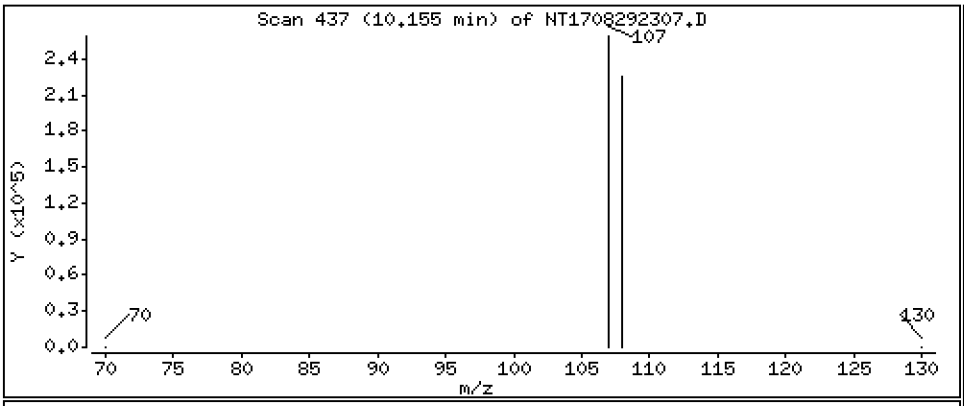
Operator: JGR

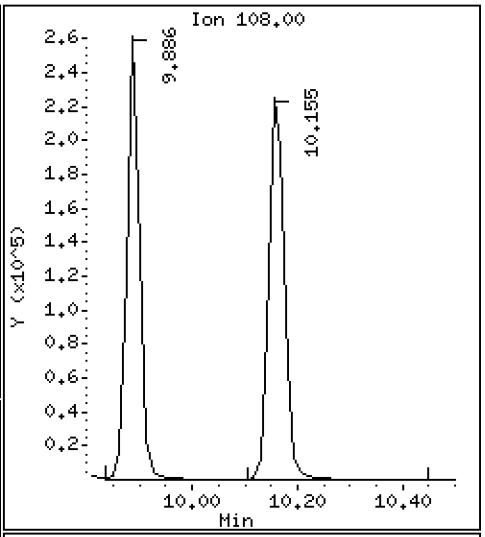
Column phase: ZB-5msi

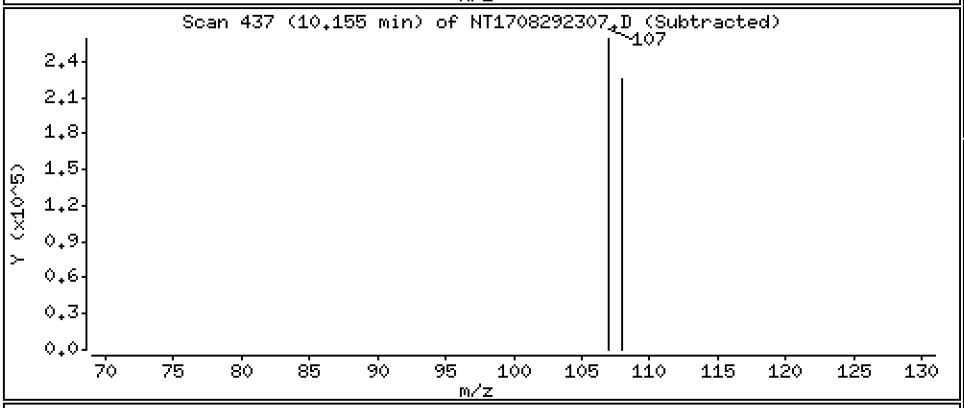
Column diameter: 0.25

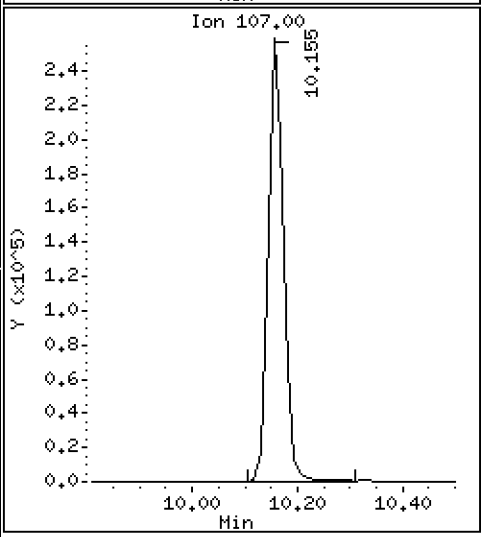
15 4-Methylphenol

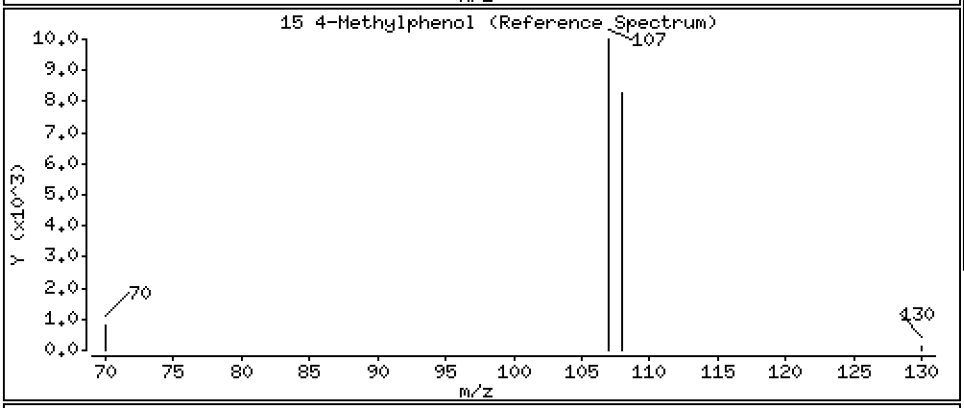
Concentration: 3.345 ug/mL

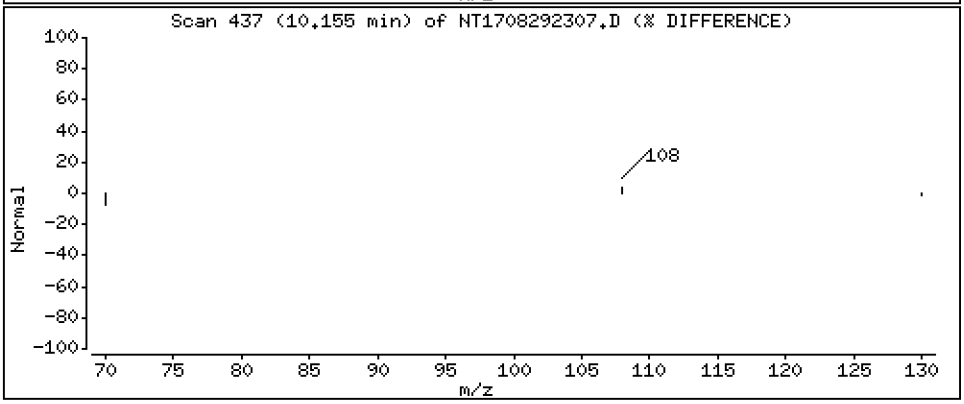












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

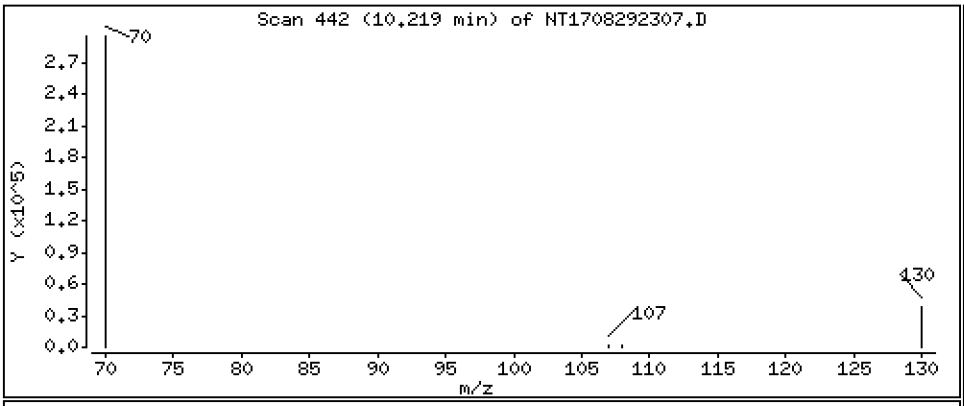
Operator: JGR

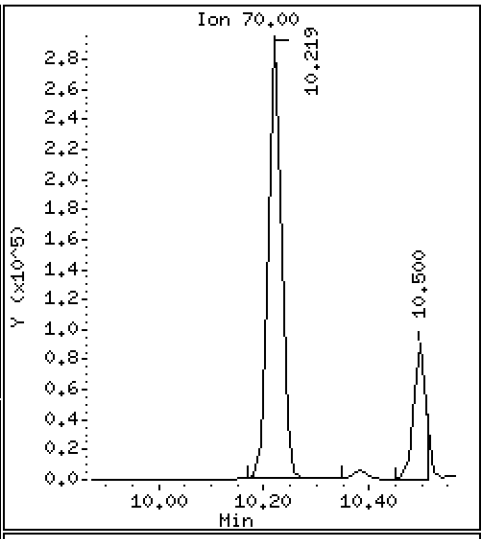
Column phase: ZB-5msi

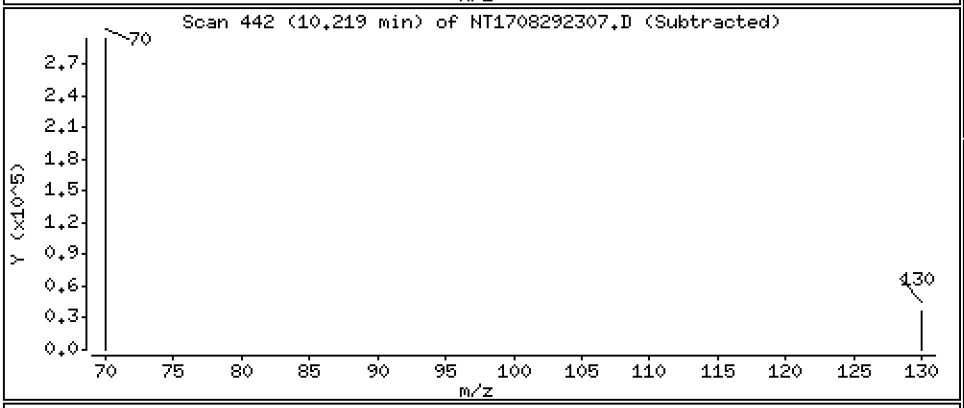
Column diameter: 0.25

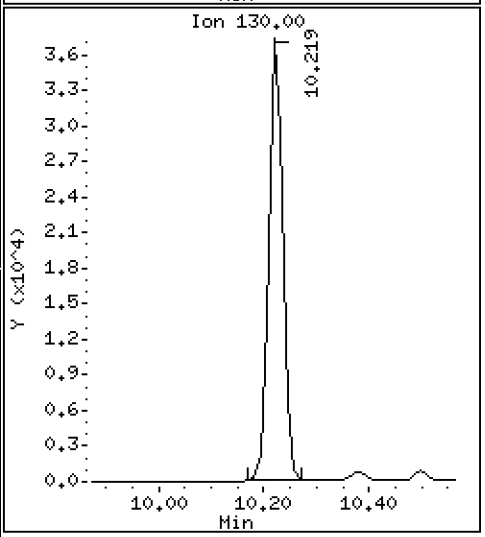
16 N-Nitroso-di-n-propylamine

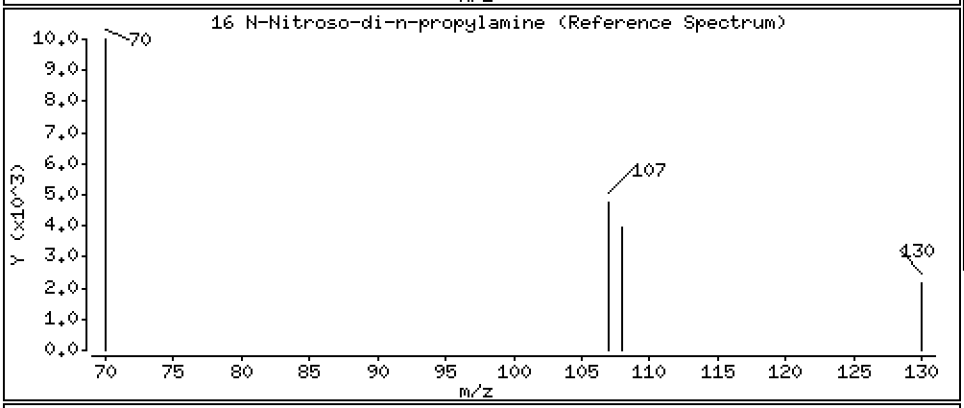
Concentration: 3.596 ug/mL

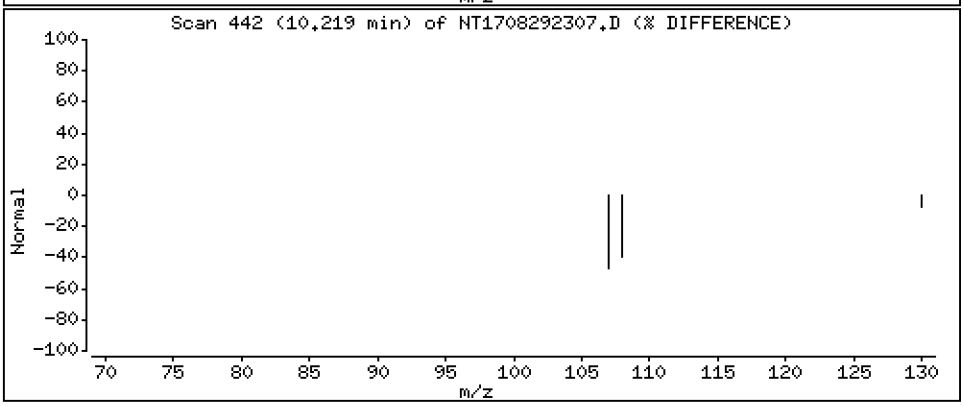












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

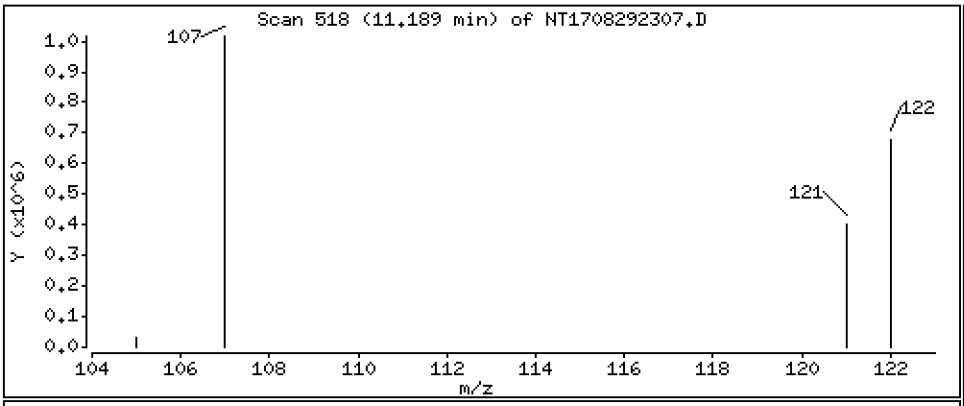
Operator: JGR

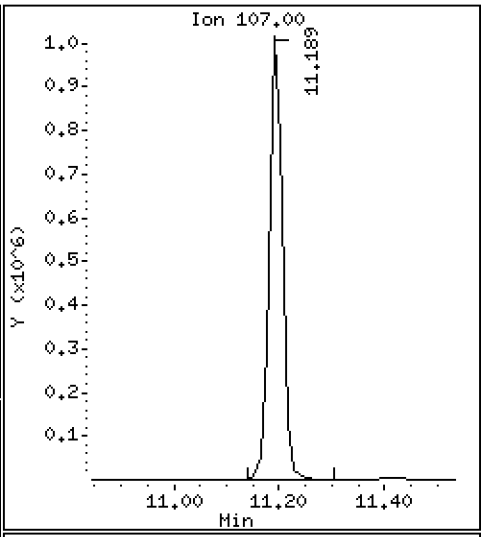
Column phase: ZB-5msi

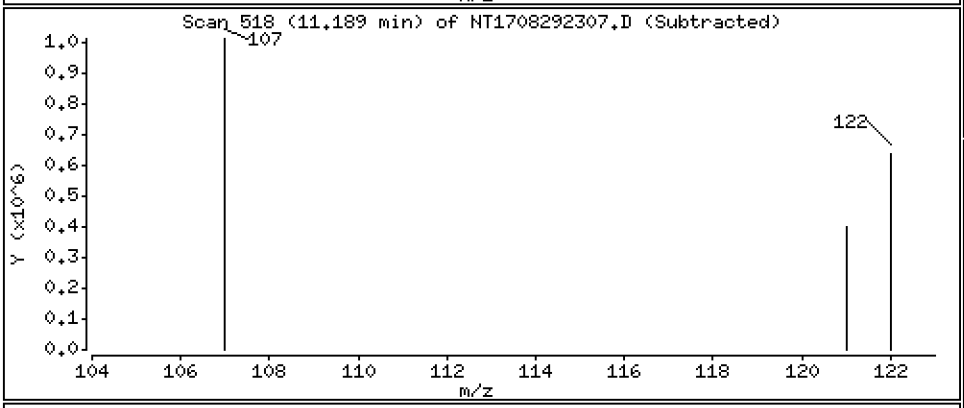
Column diameter: 0.25

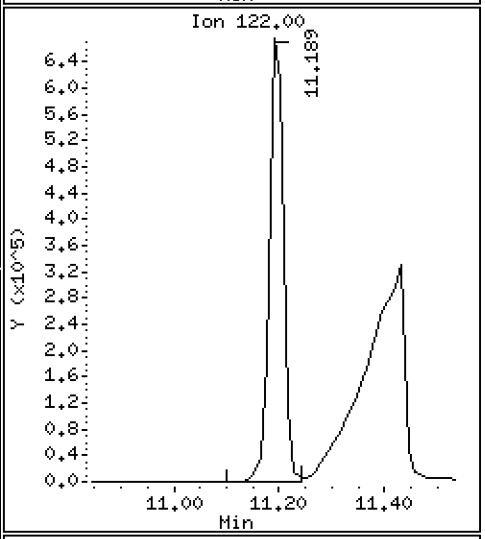
22 2,4-Dimethylphenol

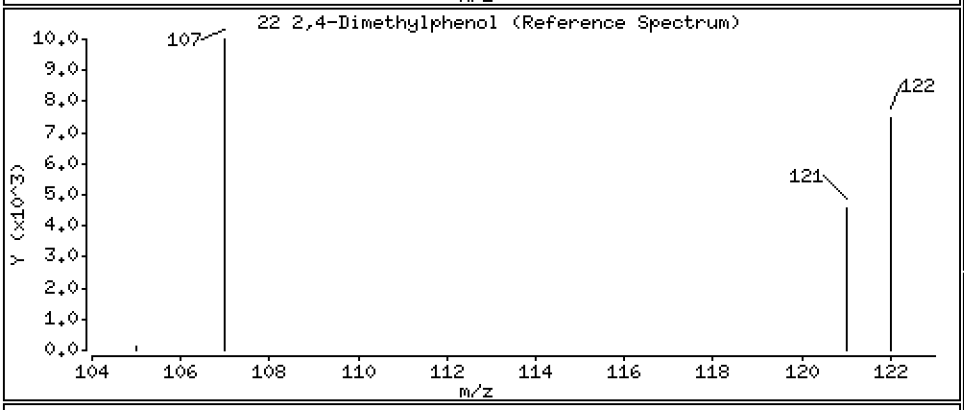
Concentration: 13.06 ug/mL

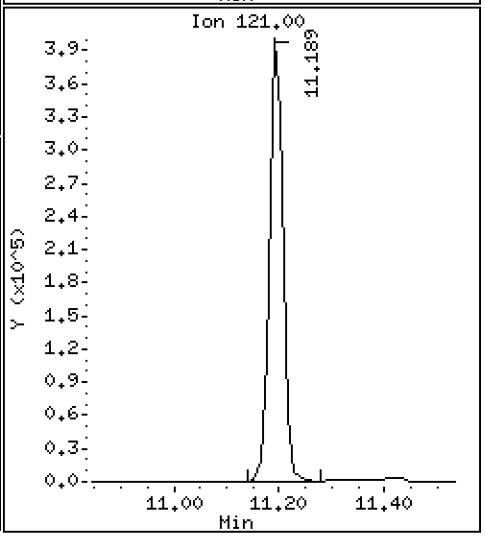


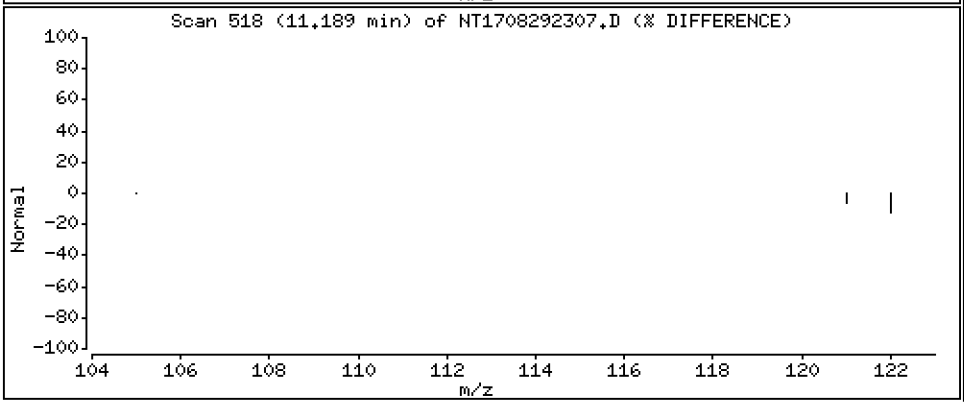












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

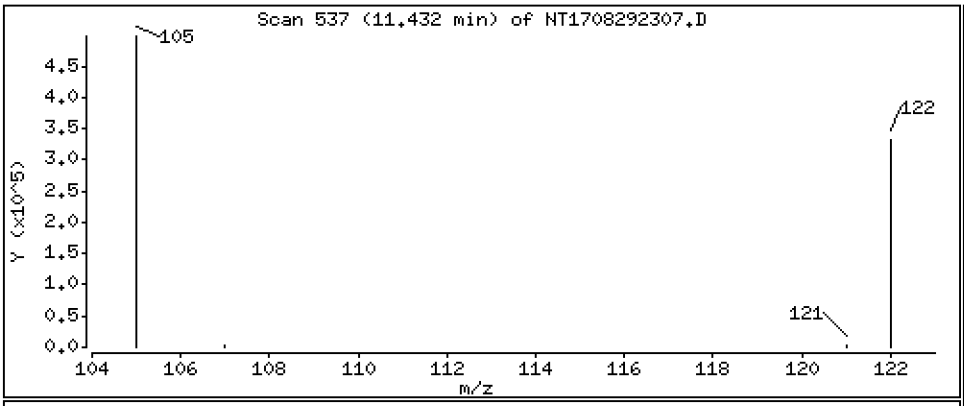
Operator: JGR

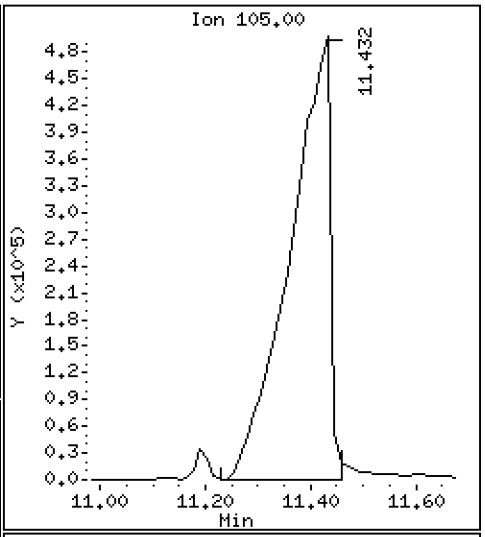
Column phase: ZB-5msi

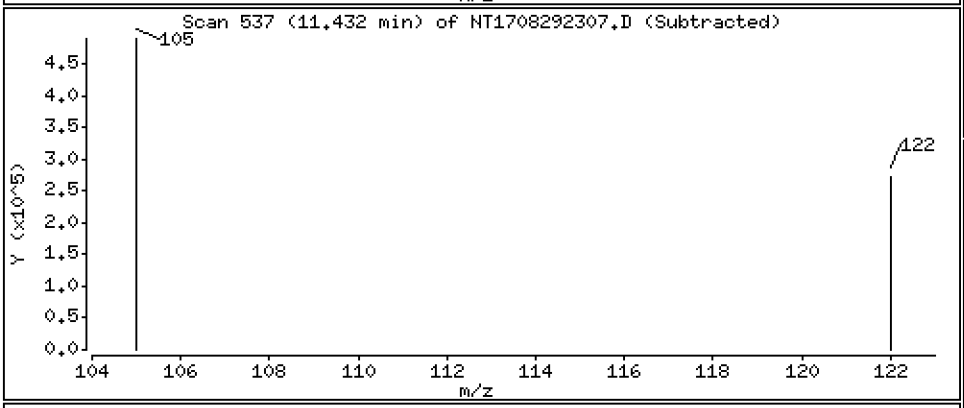
Column diameter: 0.25

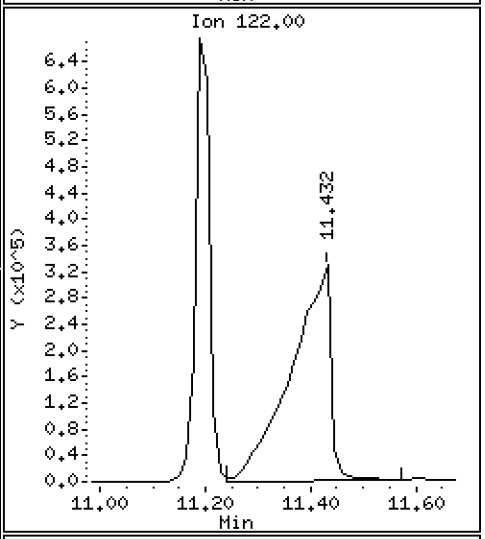
24 Benzoic acid

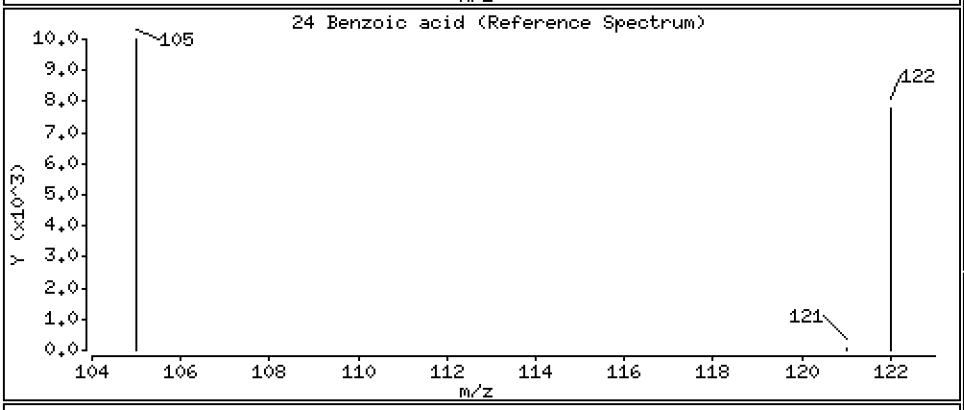
Concentration: 25.93 ug/mL

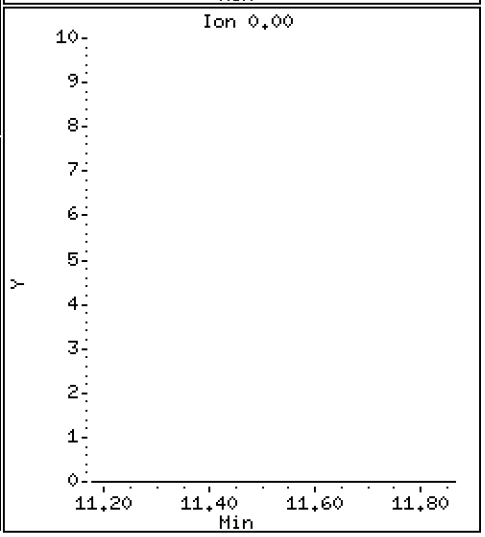


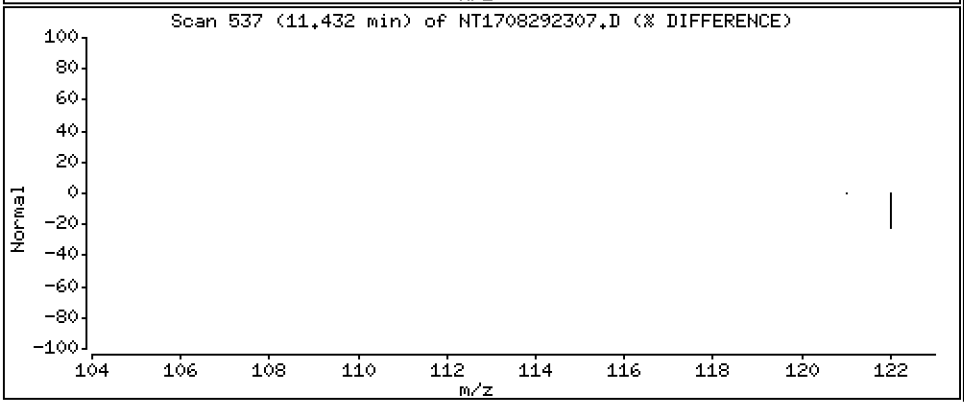












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

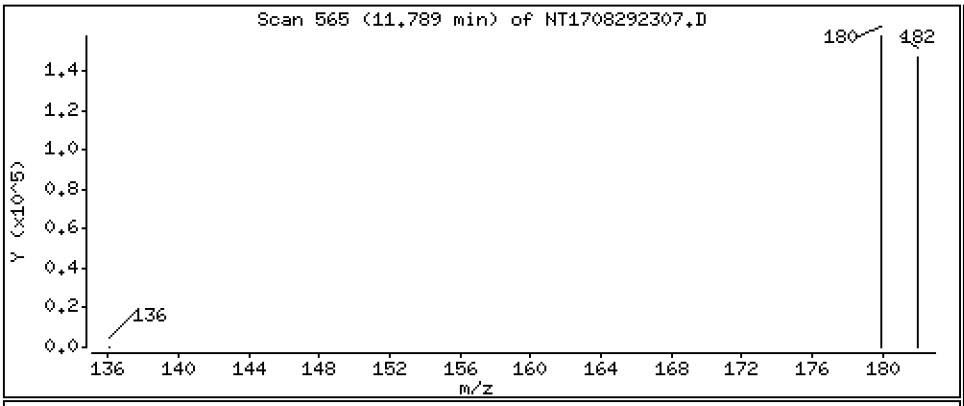
Operator: JGR

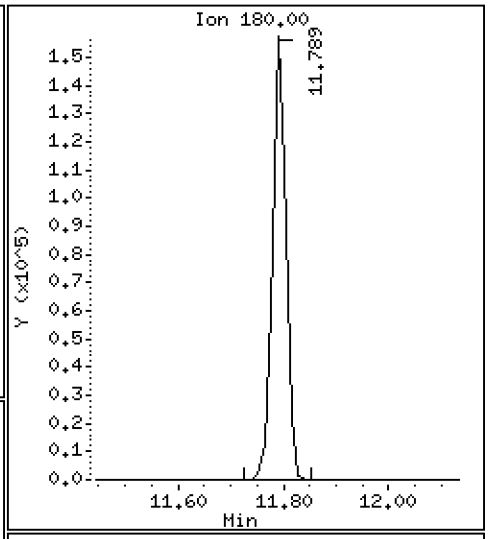
Column phase: ZB-5msi

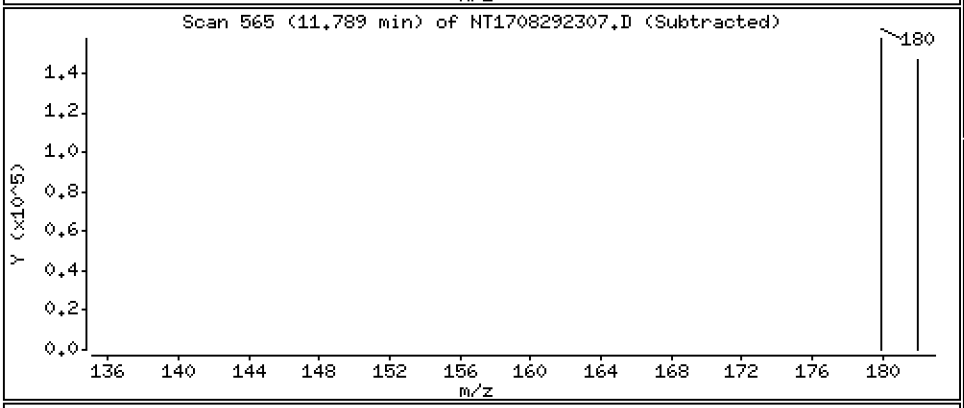
Column diameter: 0.25

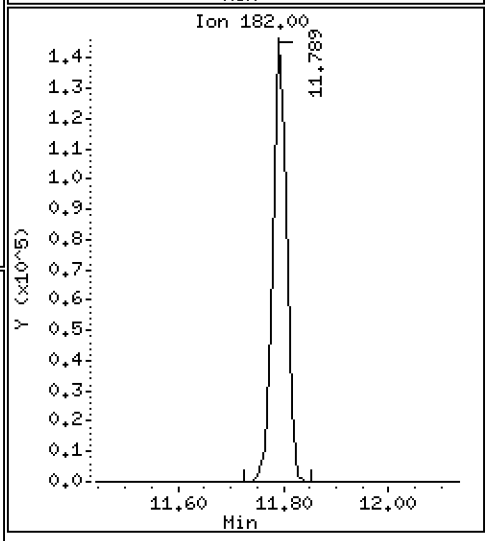
26 1,2,4-Trichlorobenzene

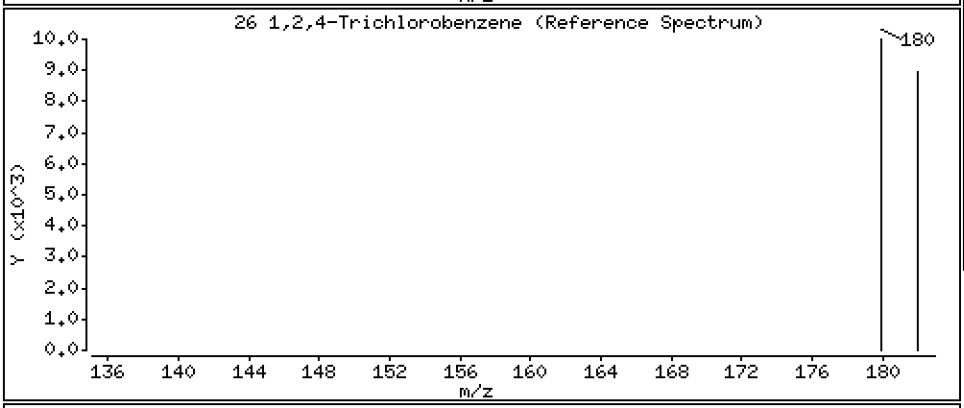
Concentration: 3.023 ug/mL

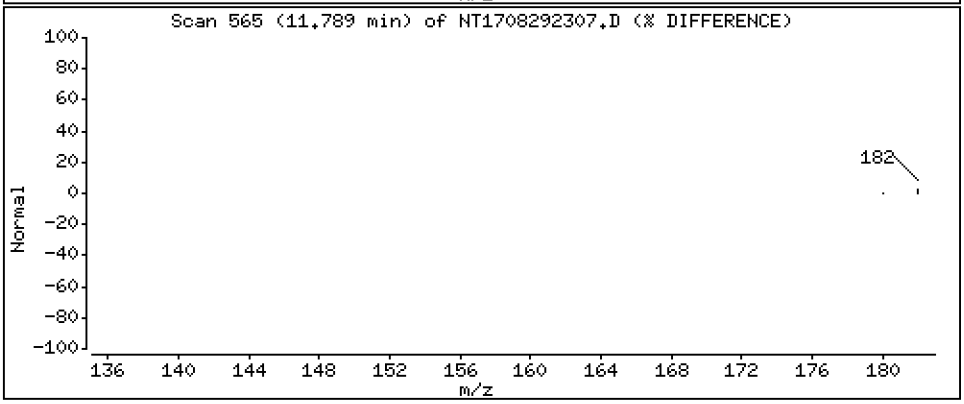












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

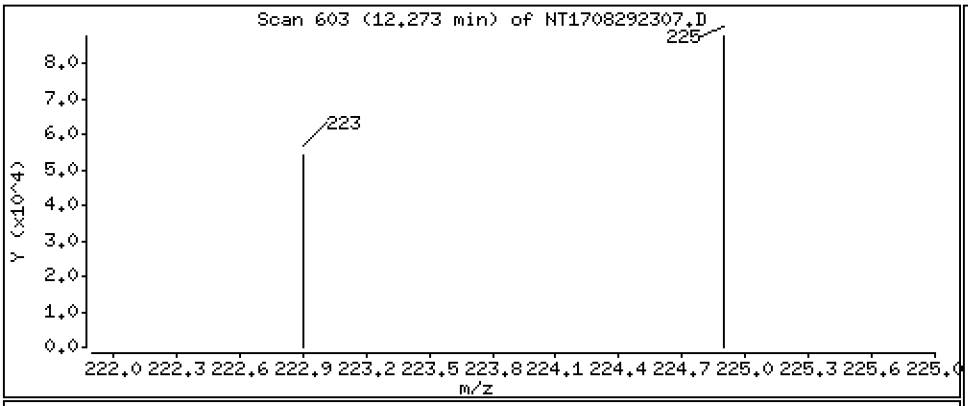
Operator: JGR

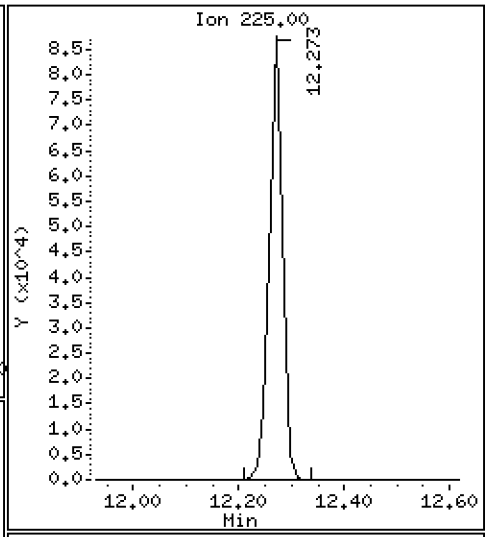
Column phase: ZB-5msi

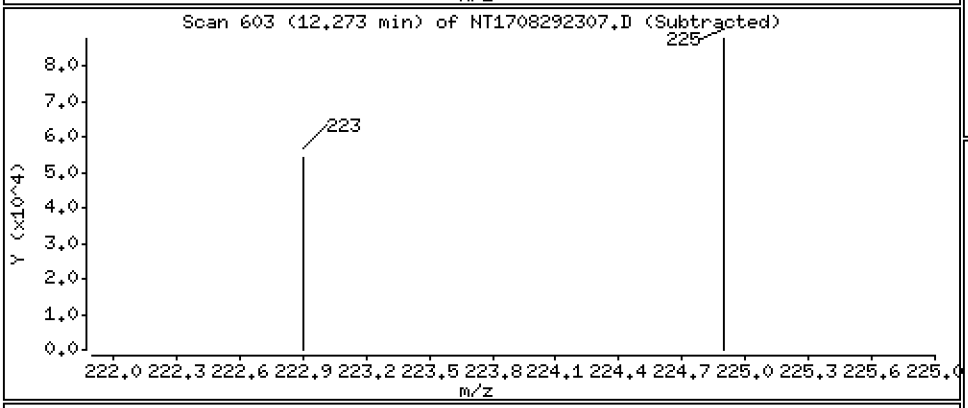
Column diameter: 0.25

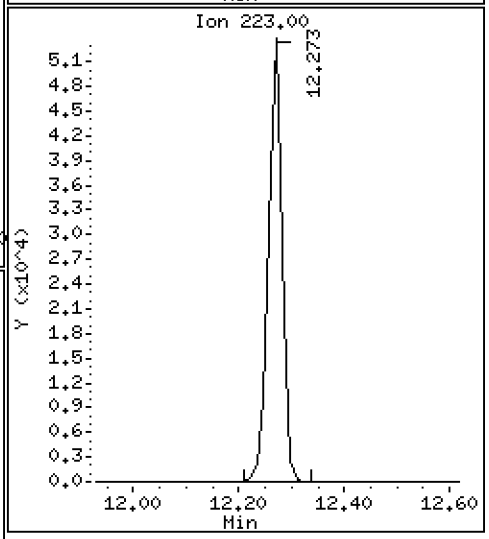
30 Hexachlorobutadiene

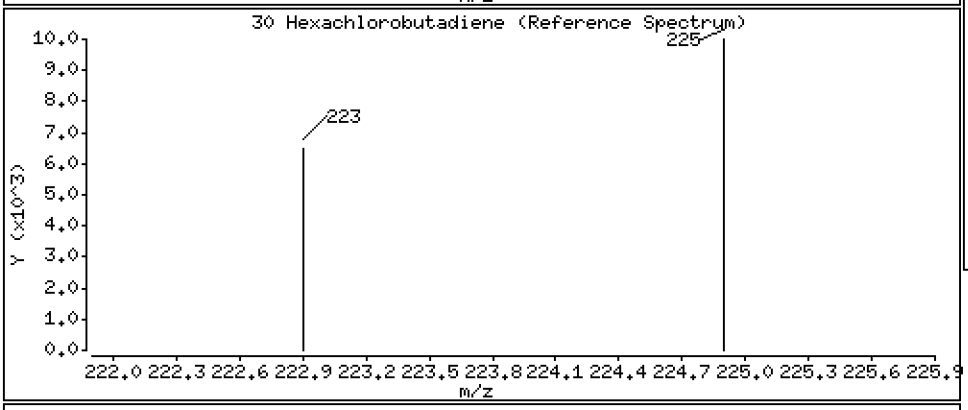
Concentration: 3.559 ug/mL

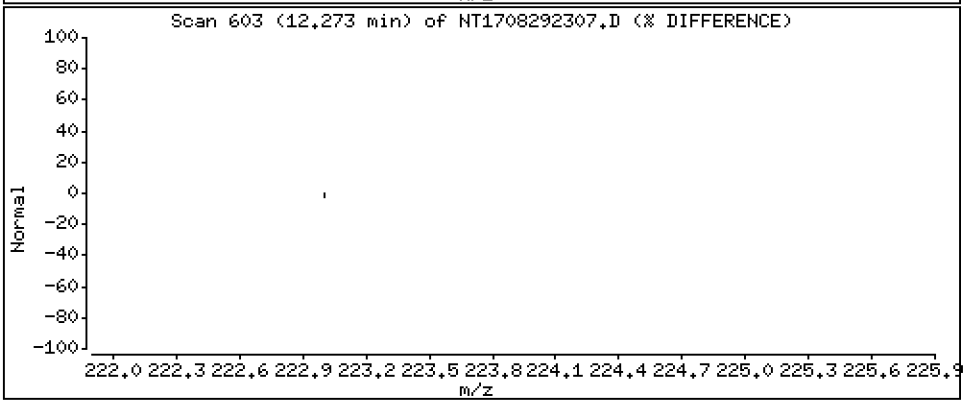












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

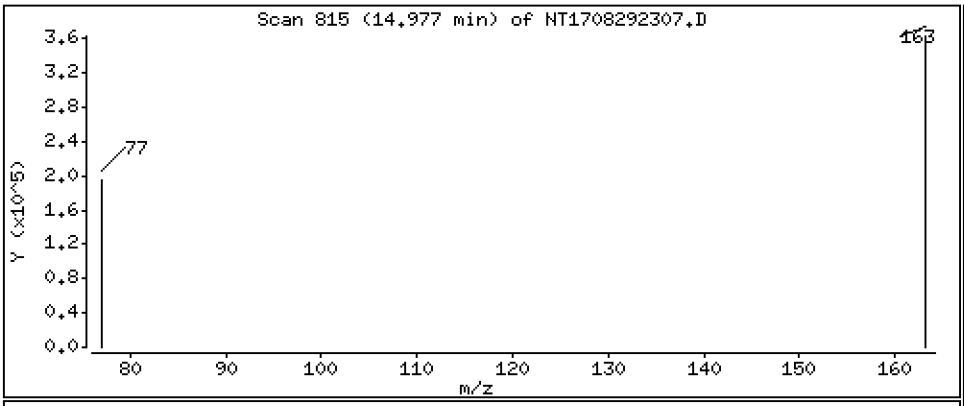
Operator: JGR

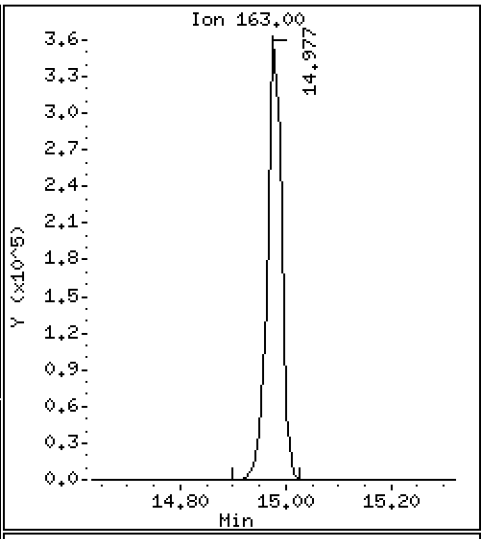
Column phase: ZB-5msi

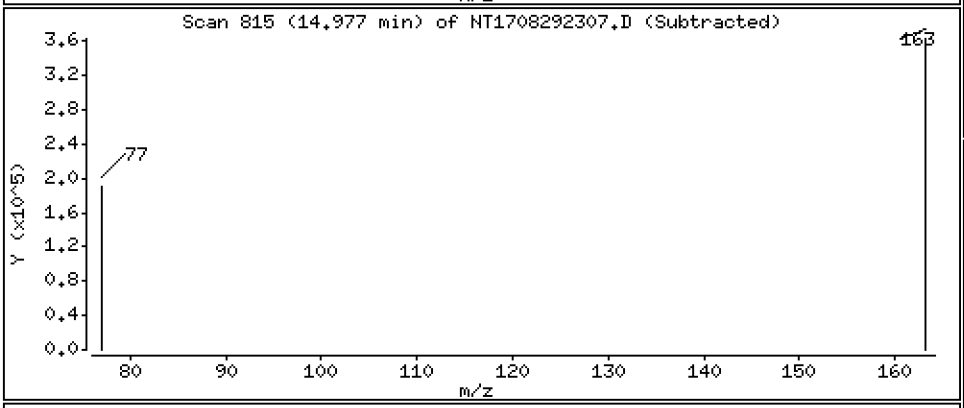
Column diameter: 0.25

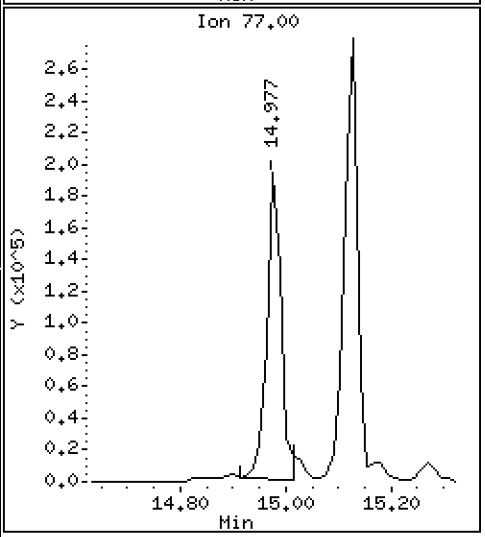
39 Dimethylphthalate

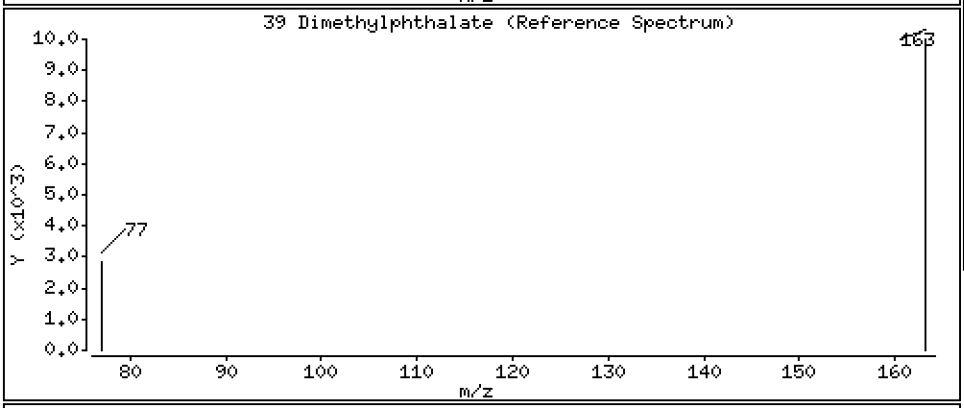
Concentration: 3.842 ug/mL

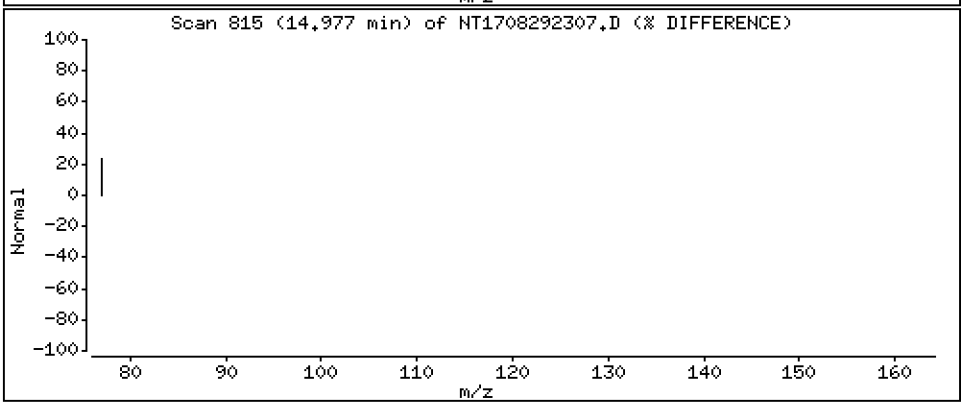












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

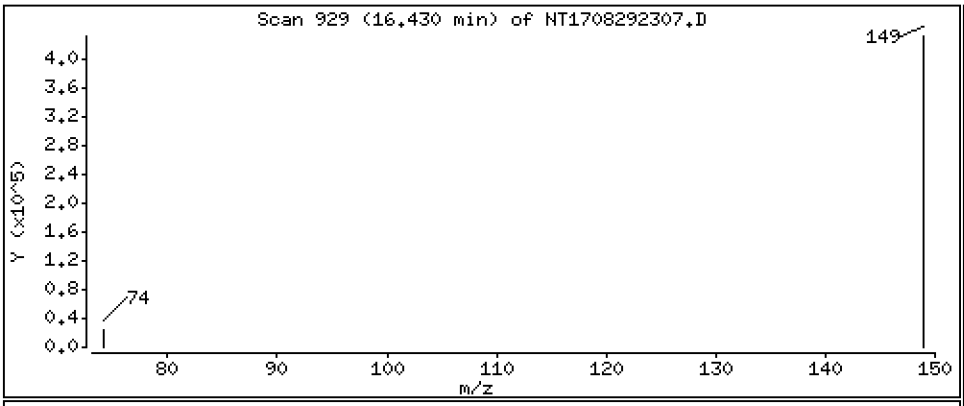
Operator: JGR

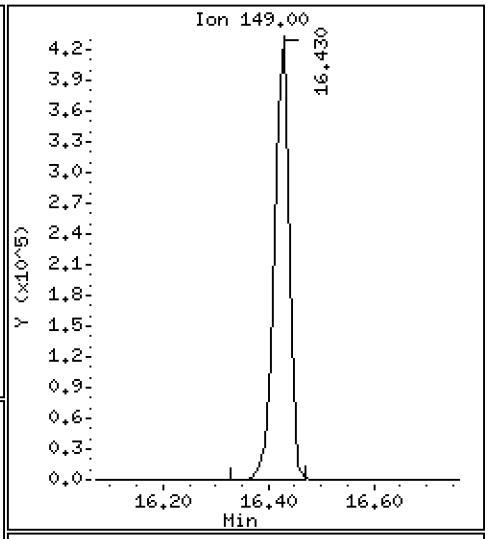
Column phase: ZB-5msi

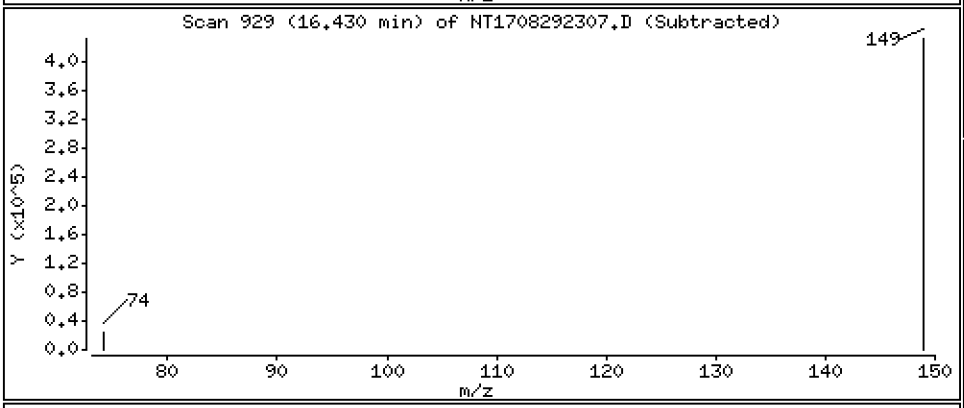
Column diameter: 0.25

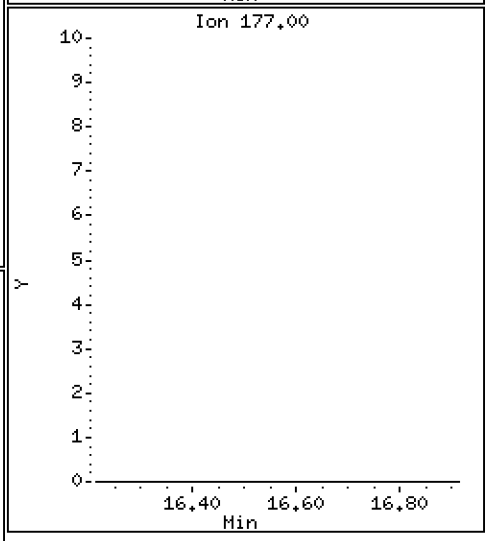
50 Diethylphthalate

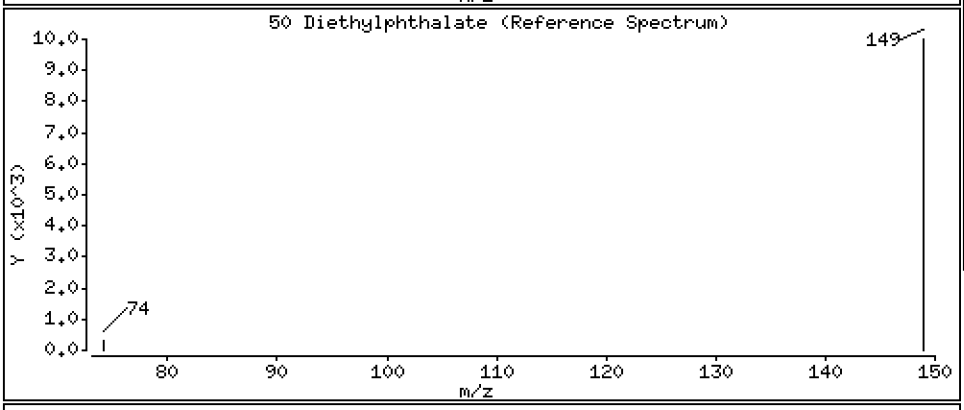
Concentration: 4.546 ug/mL

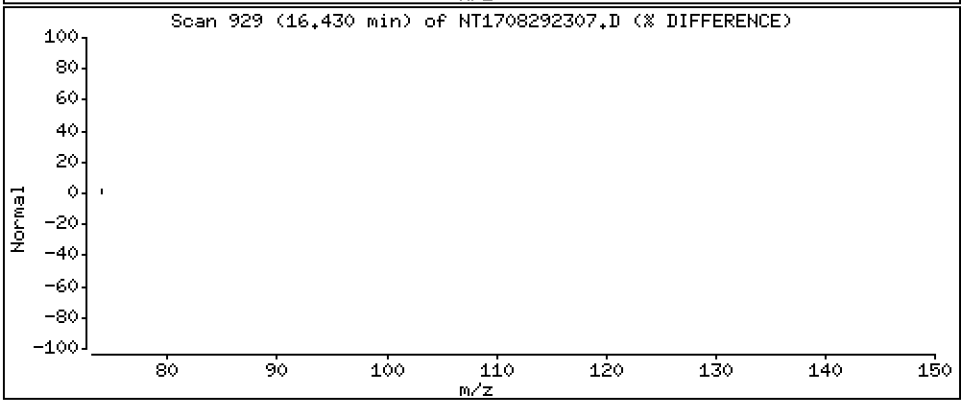












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

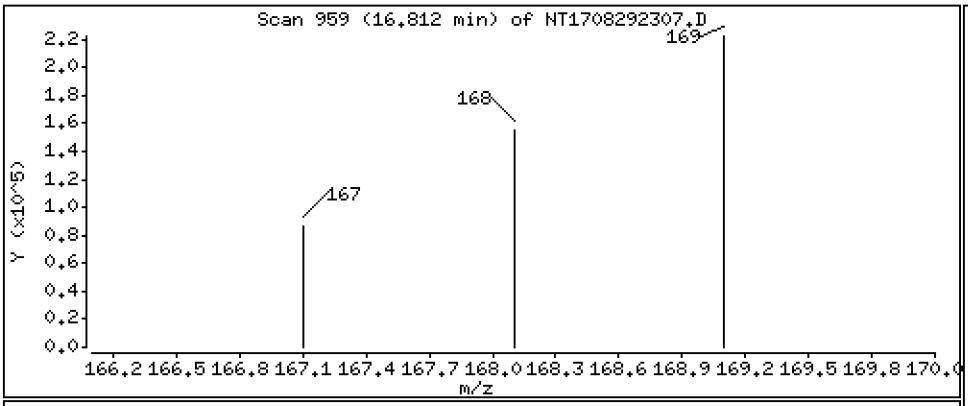
Operator: JGR

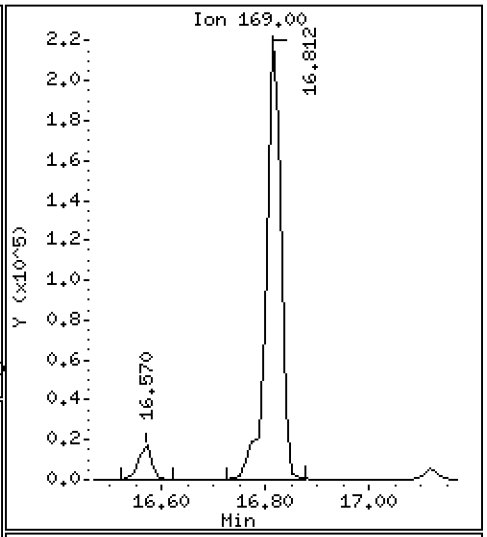
Column phase: ZB-5msi

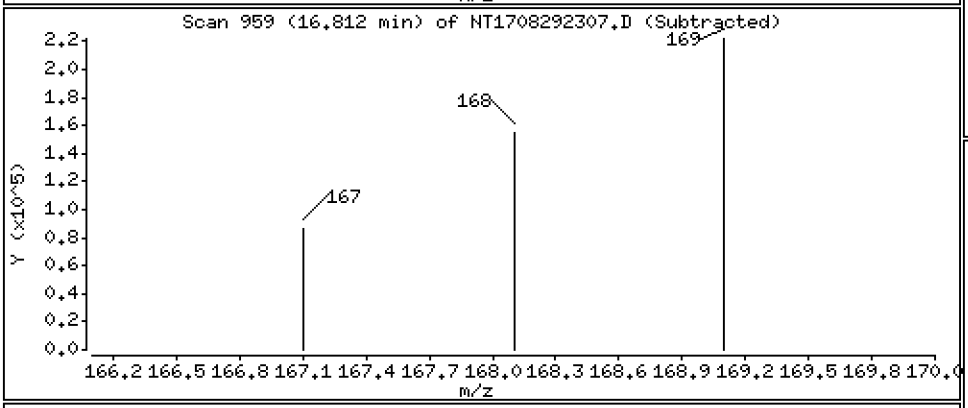
Column diameter: 0.25

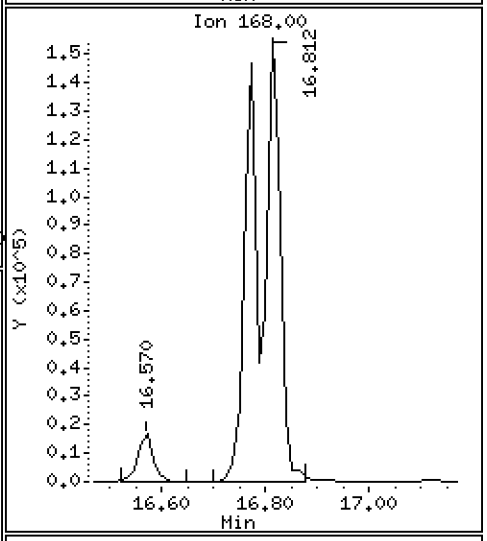
54 N-Nitrosodiphenylamine

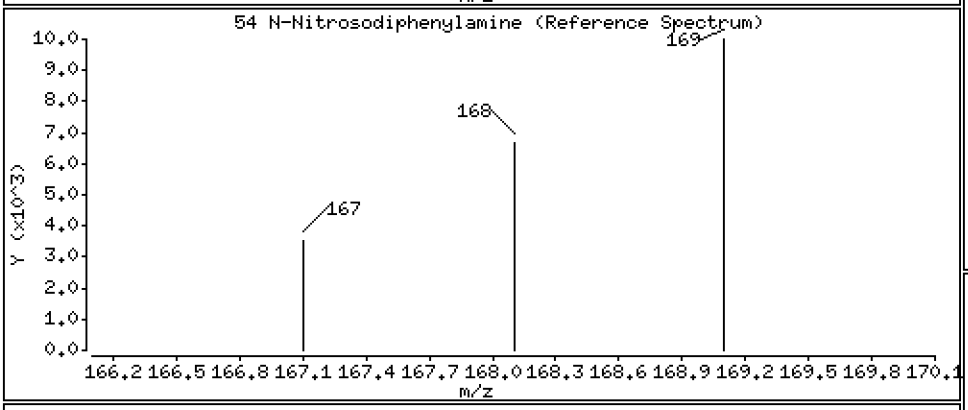
Concentration: 3.757 ug/mL

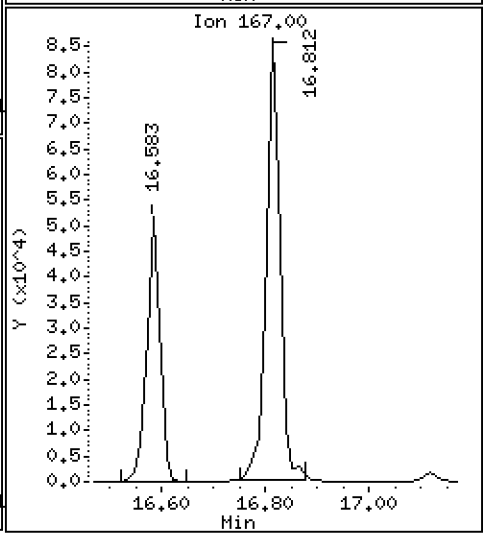


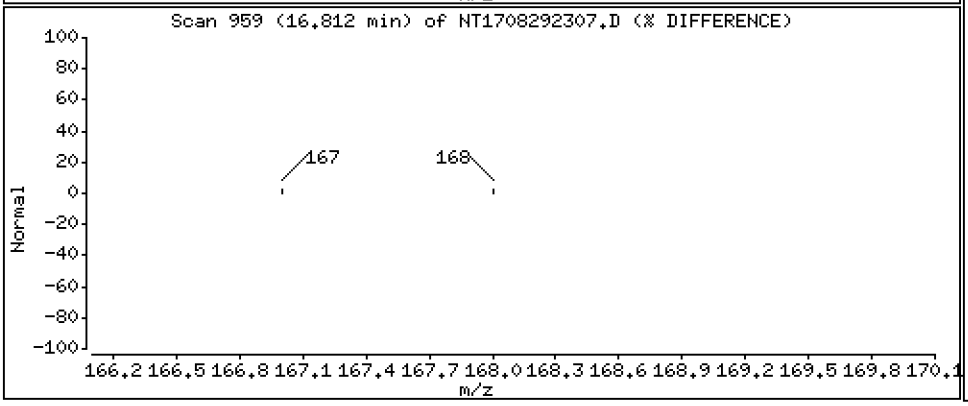












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

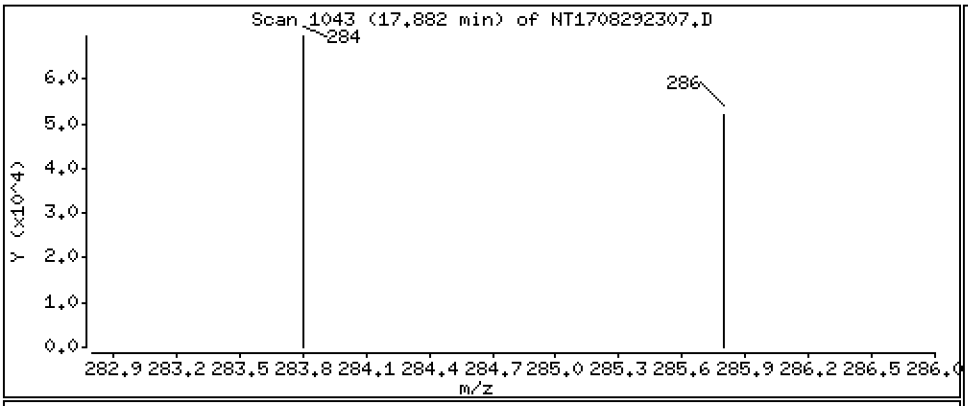
Operator: JGR

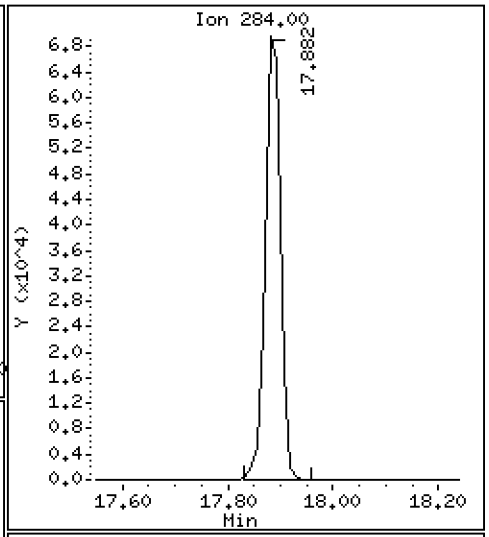
Column phase: ZB-5msi

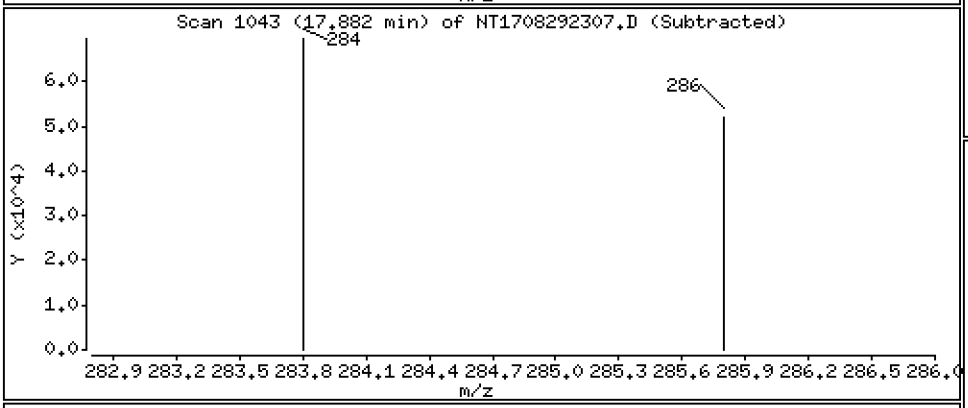
Column diameter: 0.25

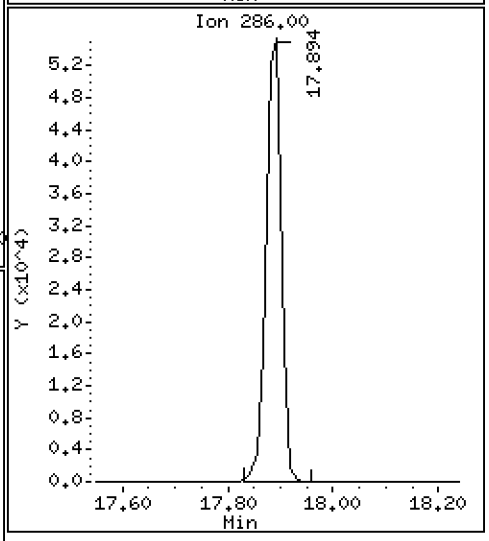
57 Hexachlorobenzene

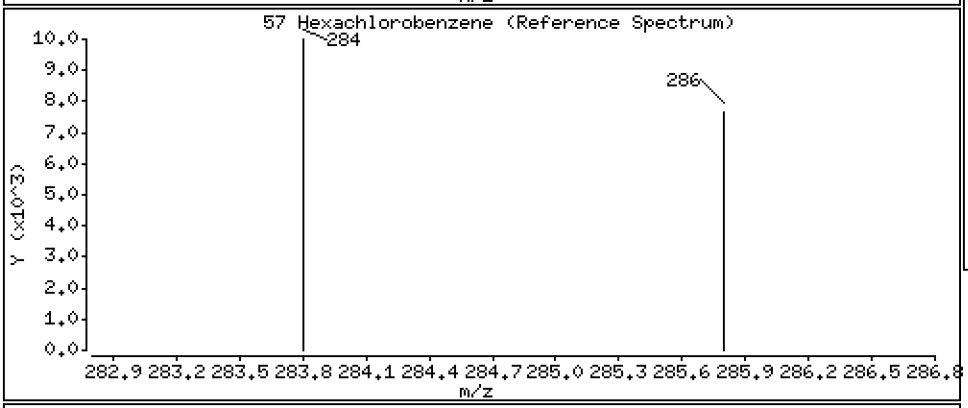
Concentration: 3.744 ug/mL

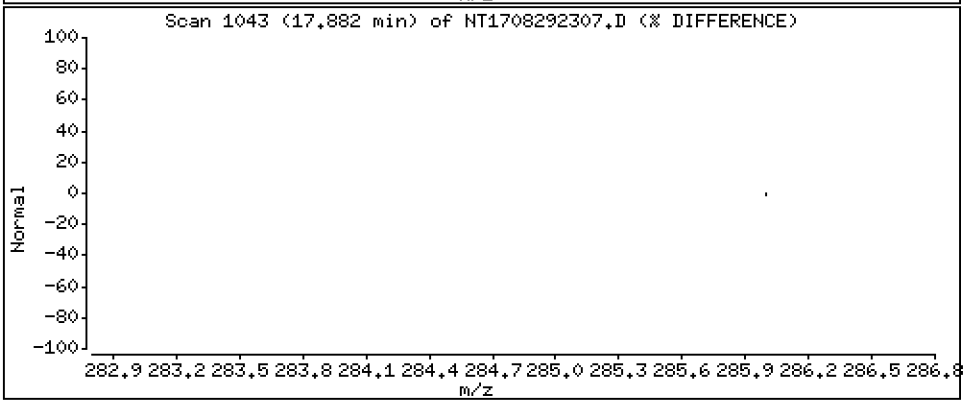












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

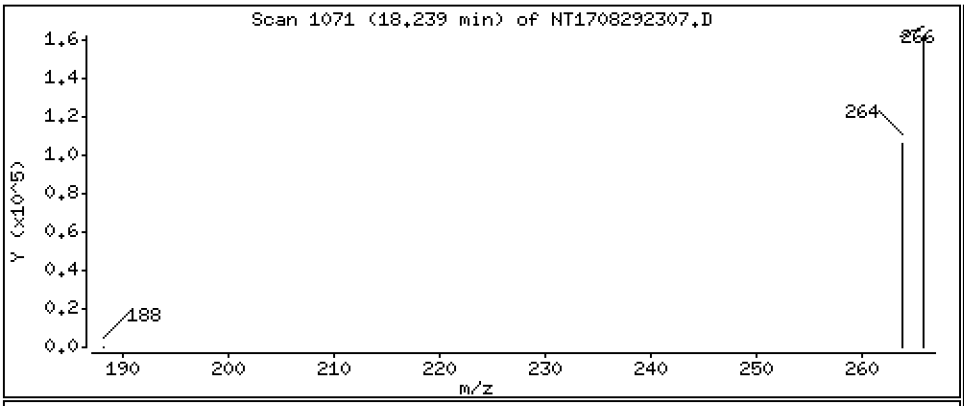
Operator: JGR

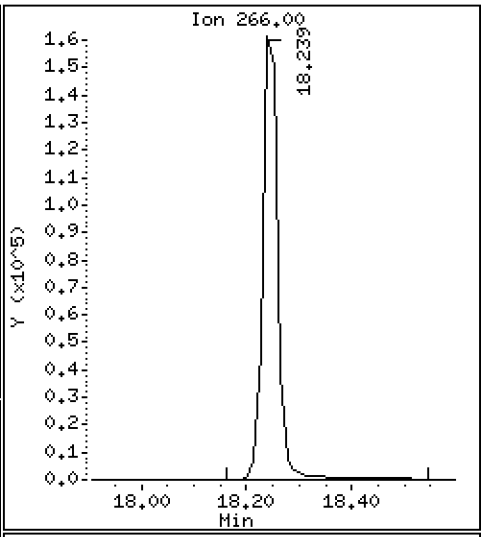
Column phase: ZB-5msi

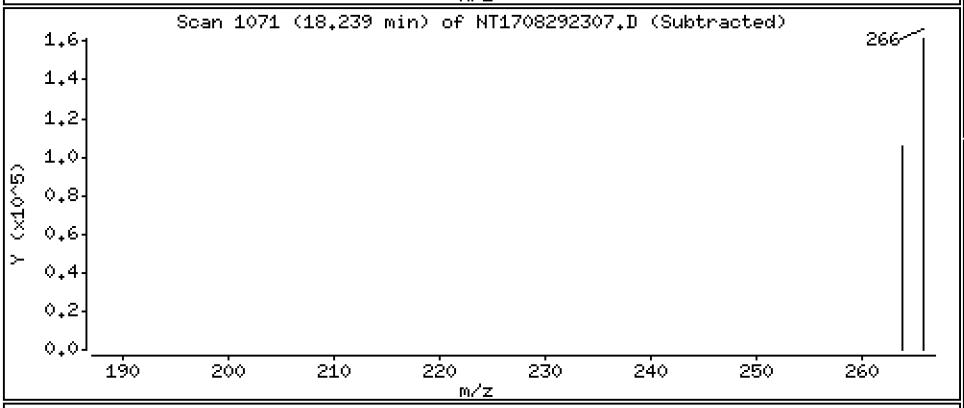
Column diameter: 0.25

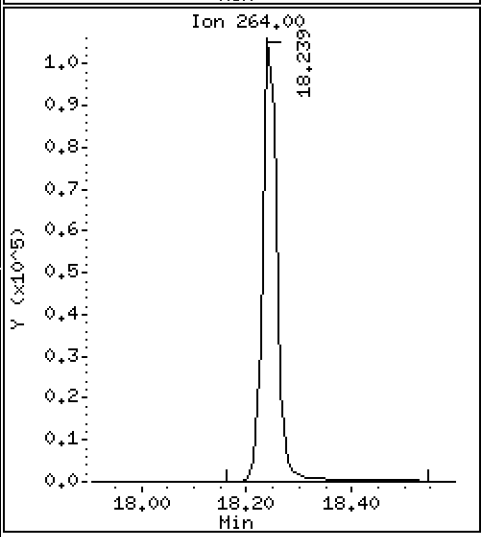
58 Pentachlorophenol

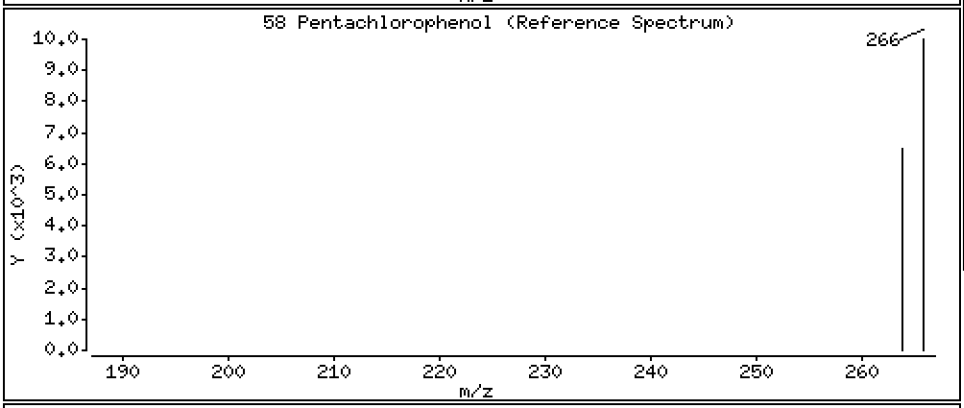
Concentration: 12.85 ug/mL

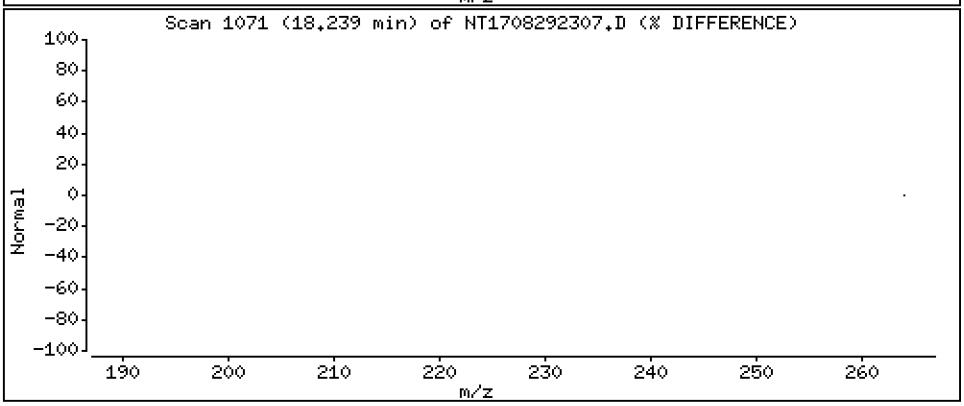












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

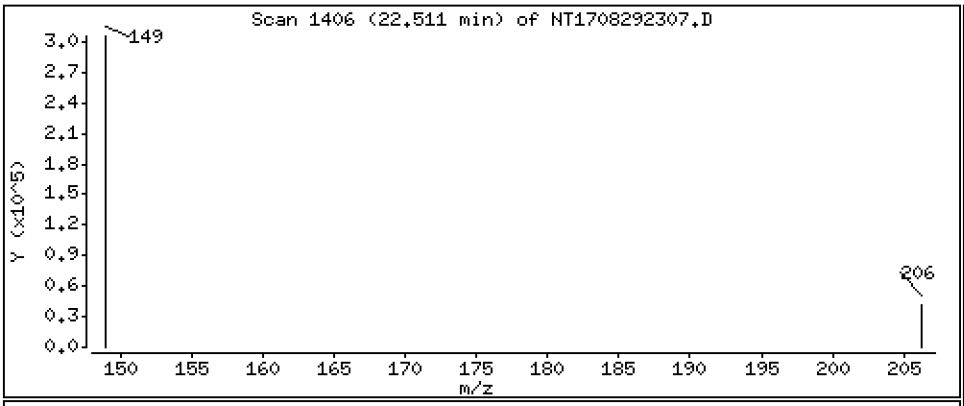
Operator: JGR

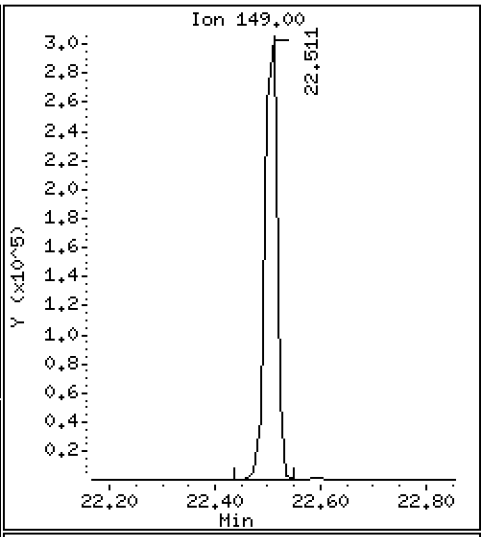
Column phase: ZB-5msi

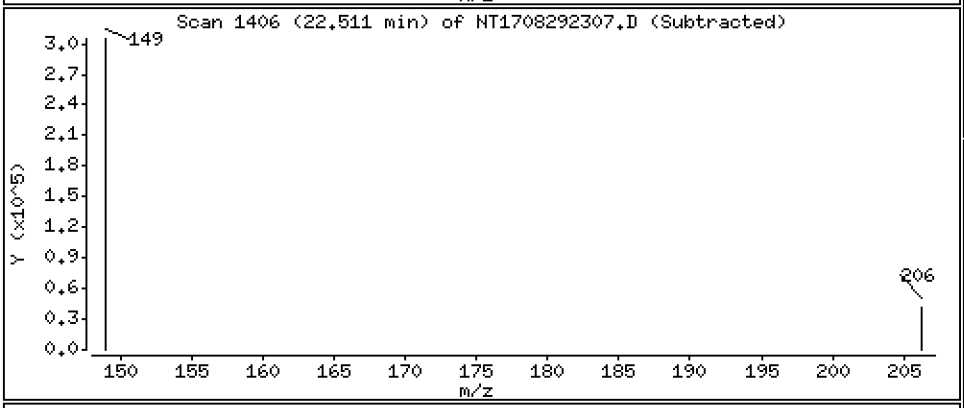
Column diameter: 0.25

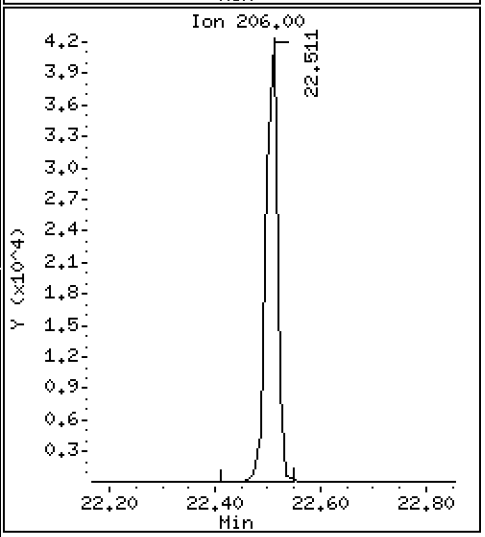
67 Butylbenzylphthalate

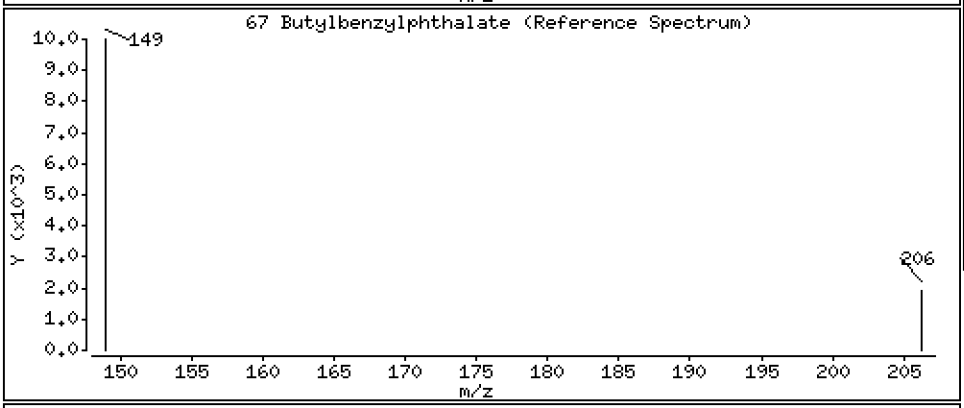
Concentration: 3.439 ug/mL

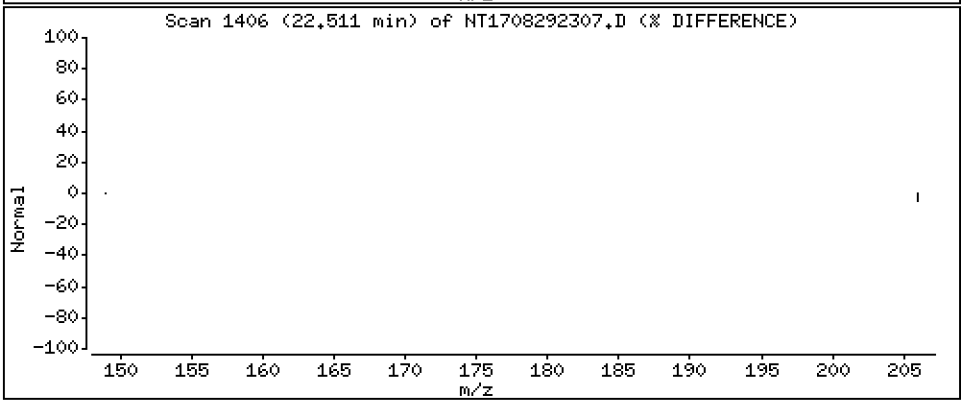












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

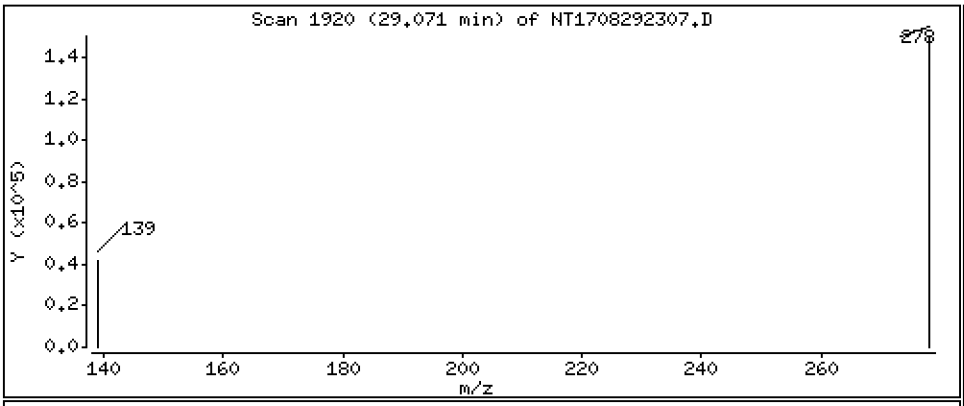
Operator: JGR

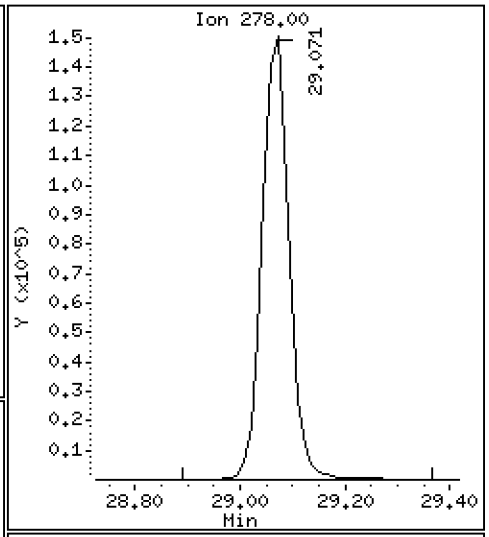
Column phase: ZB-5msi

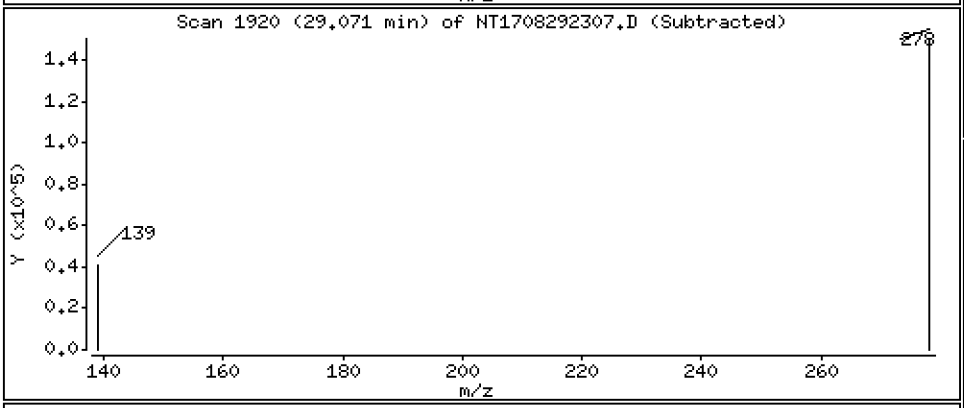
Column diameter: 0.25

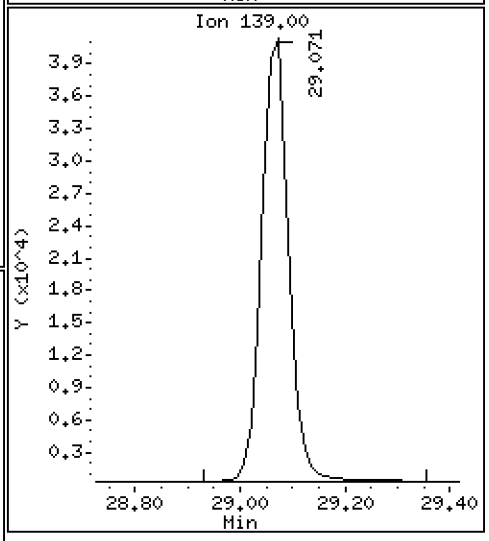
79 Dibenzo(a,h)anthracene

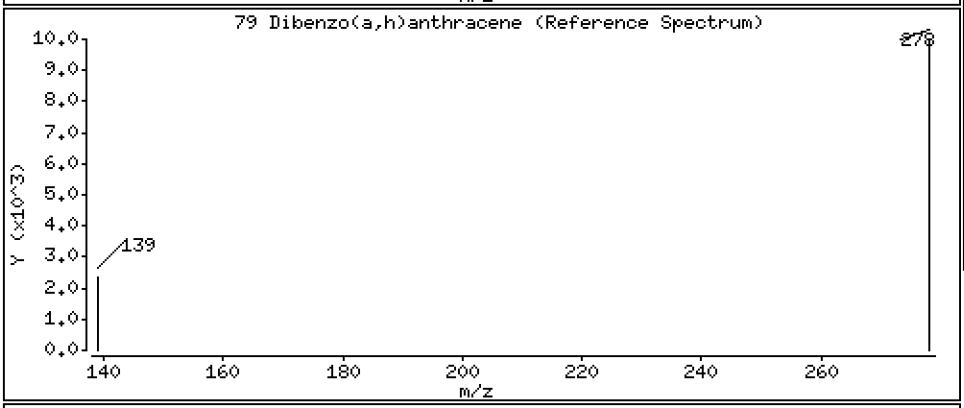
Concentration: 3.954 ug/mL

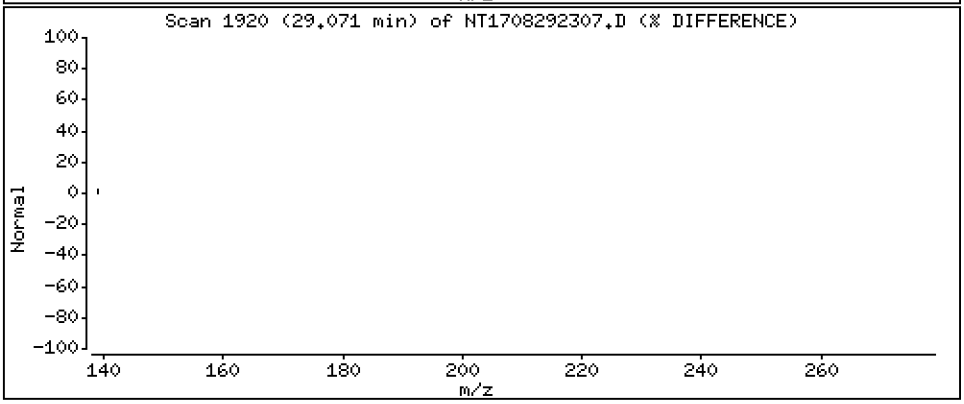












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Date : 29-AUG-2023 15:21

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BS1

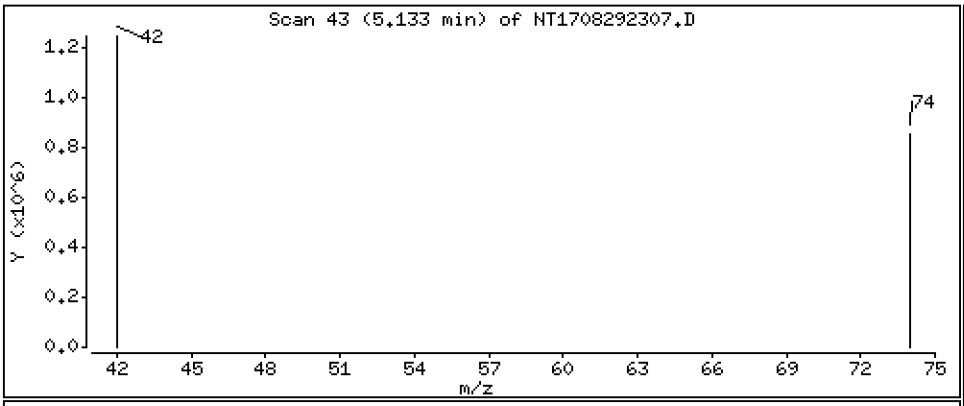
Operator: JGR

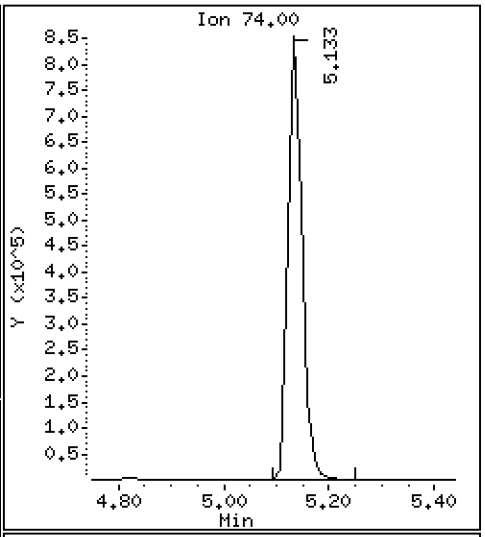
Column phase: ZB-5msi

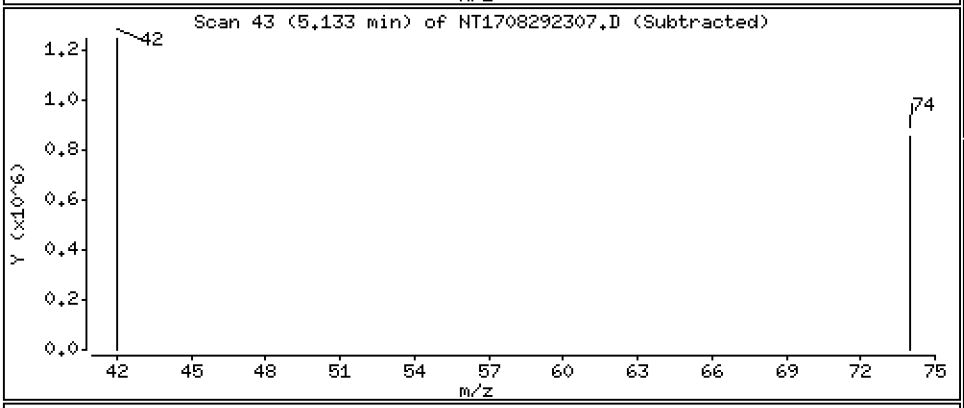
Column diameter: 0.25

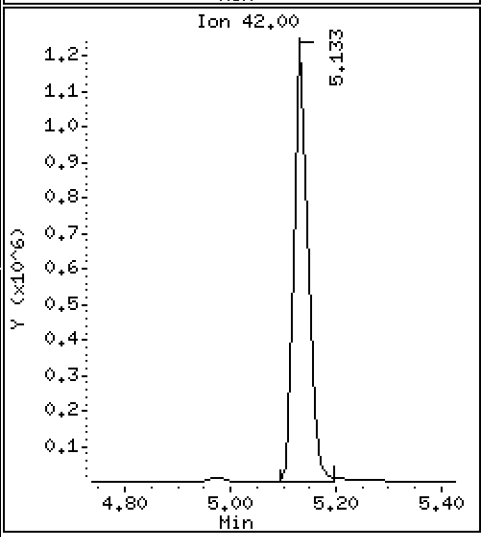
90 N-Nitrosodimethylamine

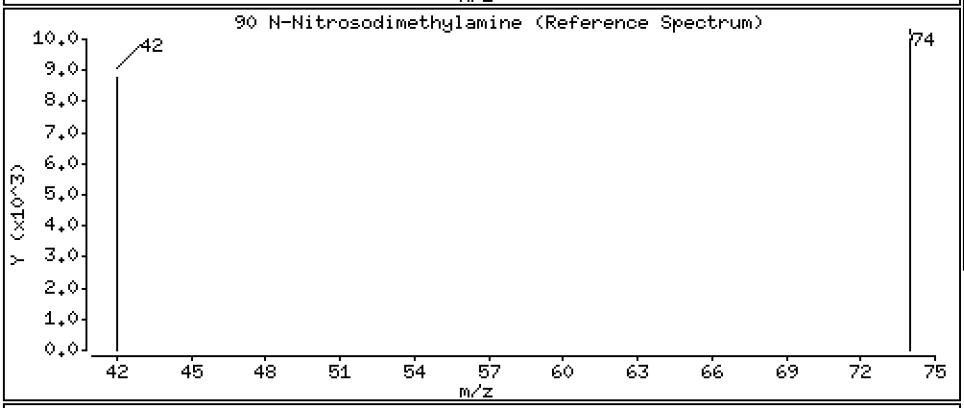
Concentration: 10.16 ug/mL

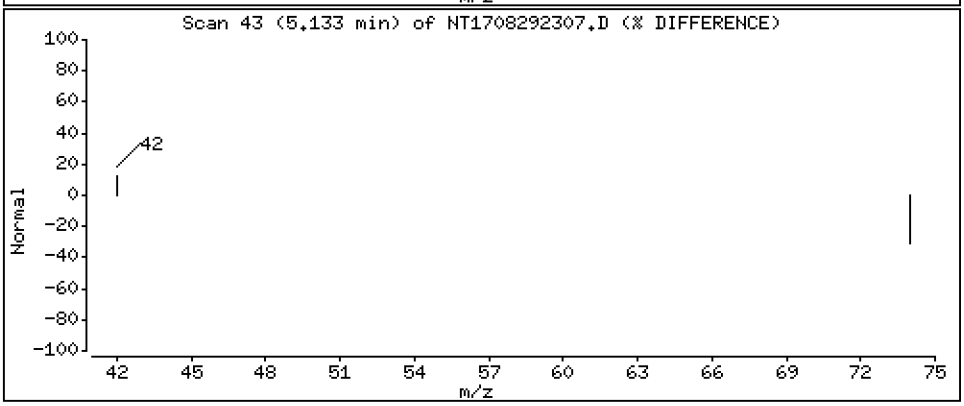












ARI Labs, Inc.

METHOD 8270D-SIM

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Operator : JGR Inst ID: nt17.i
Smp Info : BLH0669-BS1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 09:25 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

								CONCENTRATIONS	
		QUANT SIG						ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/mL)
$	1 2-Fluorophenol	112	7.209	7.196	(0.766)	968315		6.64870	6.649(R)
	3 Phenol	94	8.776	8.776	(0.932)	787719		3.54807	3.548
	7 1,3-Dichlorobenzene	146	9.337	9.349	(0.992)	442979		2.94977	2.950
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	350751		4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	439295		3.02266	3.023
	11 Benzyl alcohol	79	9.669	9.669	(1.027)	570415		3.71210	3.712
	12 1,2-Dichlorobenzene	146	9.796	9.797	(1.041)	431599		3.06145	3.061
	13 2-Methylphenol	108	9.886	9.886	(1.050)	437040		3.24652	3.247
	15 4-Methylphenol	108	10.154	10.154	(1.079)	470650		3.34506	3.345
	16 N-Nitroso-di-n-propylamine	70	10.218	10.218	(1.086)	517422		3.59619	3.596
	22 2,4-Dimethylphenol	107	11.189	11.189	(0.942)	1770980		13.0645	13.06
	24 Benzoic acid	105	11.431	11.329	(0.962)	2636909		25.9300	25.93
	26 1,2,4-Trichlorobenzene	180	11.789	11.789	(0.992)	280006		3.02319	3.023
*	27 Naphthalene-d8	136	11.878	11.878	(1.000)	1351036		4.00000	
	30 Hexachlorobutadiene	225	12.273	12.273	(1.033)	154355		3.55865	3.559
	39 Dimethylphthalate	163	14.977	14.977	(0.967)	689300		3.84192	3.842
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	552016		4.00000	
	50 Diethylphthalate	149	16.430	16.417	(1.061)	848129		4.54630	4.546
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	432299		3.75714	3.757
	57 Hexachlorobenzene	284	17.881	17.894	(0.966)	141127		3.74366	3.744
	58 Pentachlorophenol	266	18.238	18.251	(0.985)	328830		12.8539	12.85
*	59 Phenanthrene-d10	188	18.519	18.506	(1.000)	800338		4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	474419		6.08444	6.084(R)
	67 Butylbenzylphthalate	149	22.510	22.511	(0.958)	514221		3.43925	3.439
*	69 Chrysene-d12	240	23.506	23.506	(1.000)	563458		4.00000	
*	77 Perylene-d12	264	26.223	26.223	(1.000)	454454		4.00000	
	79 Dibenzo(a,h)anthracene	278	29.071	29.071	(1.109)	530772		3.95420	3.954
	90 N-Nitrosodimethylamine	74	5.132	5.094	(0.545)	1505062		10.1560	10.16

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 30-Aug-2023 09:25

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292307.D
Lab Smp Id: BLH0669-BS1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 29-AUG-2023
Calibration Time: 12:37
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	296489	148245	592978	350751	18.30
27 Naphthalene-d8	1098892	549446	2197784	1351036	22.95
42 Acenaphthene-d10	443071	221536	886142	552016	24.59
59 Phenanthrene-d10	627744	313872	1255488	800338	27.49
69 Chrysene-d12	404122	202061	808244	563458	39.43
77 Perylene-d12	417323	208662	834646	454454	8.90

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	-0.00
27 Naphthalene-d8	11.88	11.38	12.38	11.88	-0.00
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	-0.00
59 Phenanthrene-d10	18.51	18.01	19.01	18.52	0.07
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.22	25.72	26.72	26.22	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292307.D

Lab ID: BLH0669-BS1
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   29-AUG-2023 15:21

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.962	0.954	0.0086	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1708292304.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292308.D

Date : 29-AUG-2023 15:58

Client ID:

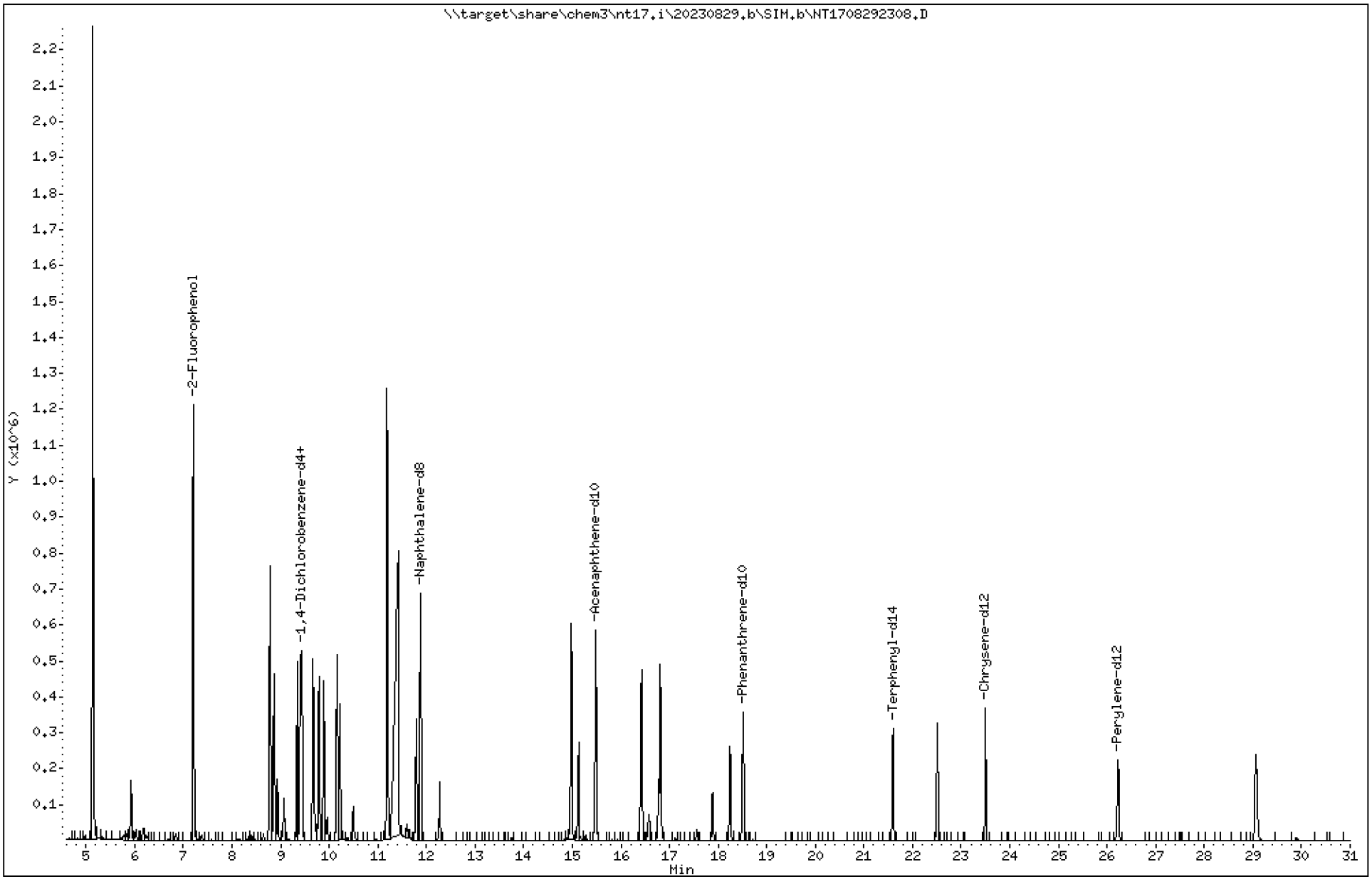
Sample Info: BLH0669-BSD1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

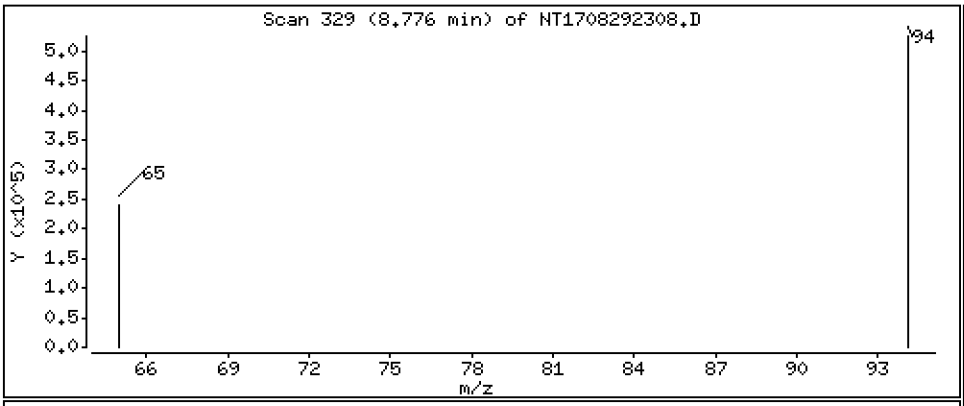
Operator: JGR

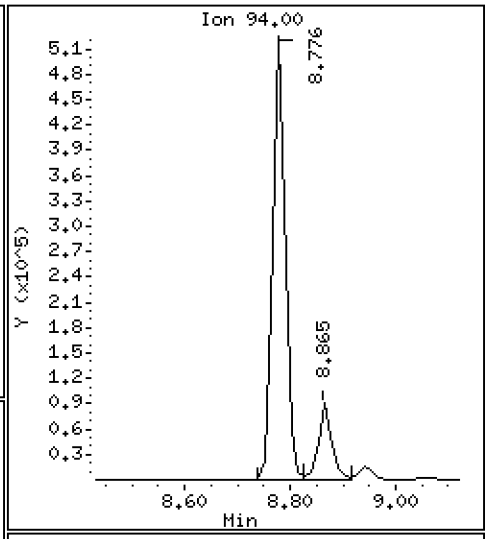
Column phase: ZB-5msi

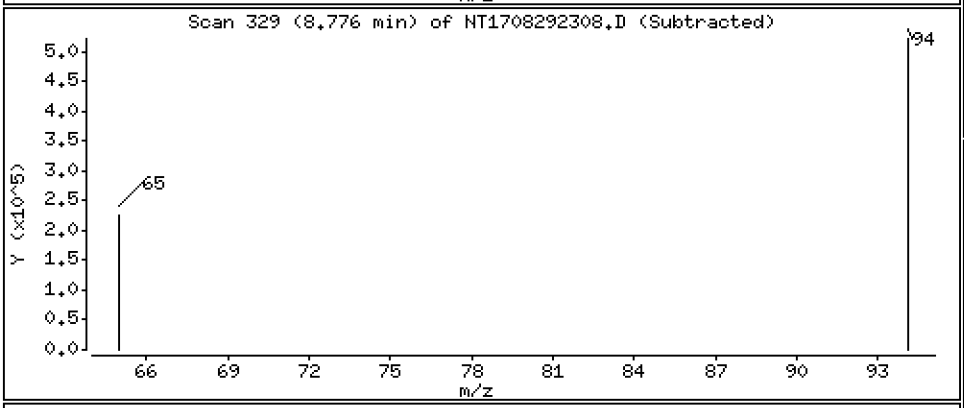
Column diameter: 0.25

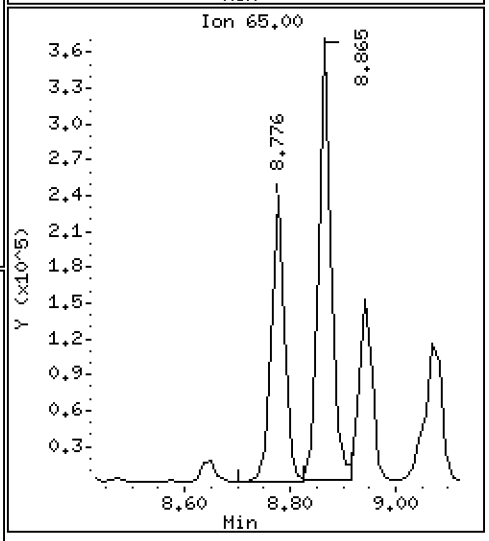
3 Phenol

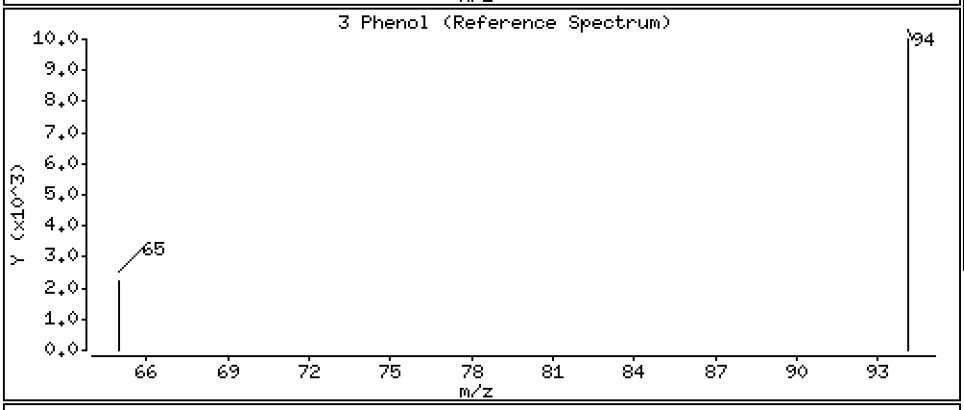
Concentration: 3.913 ug/mL

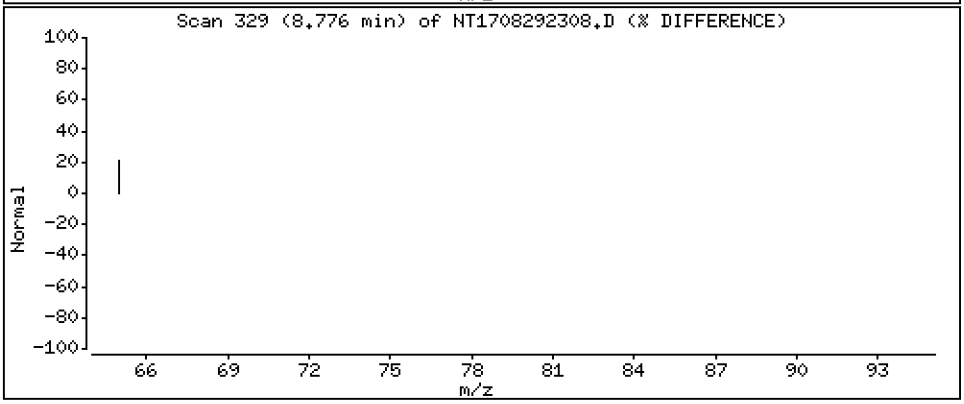












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292308.D

Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

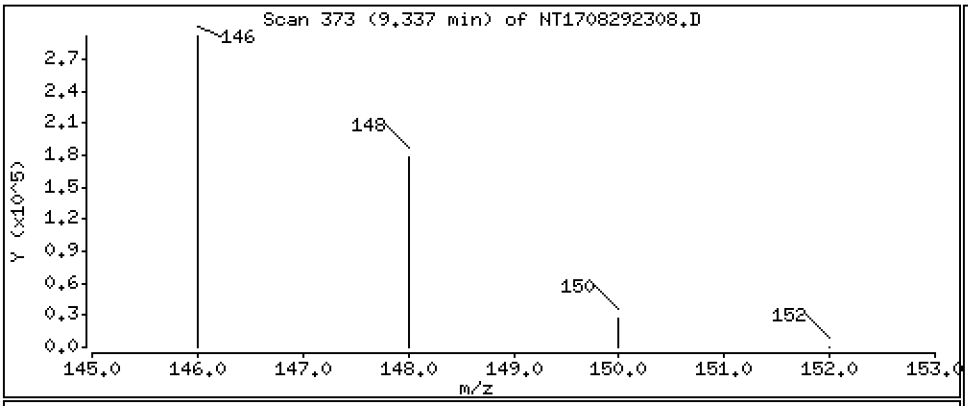
Operator: JGR

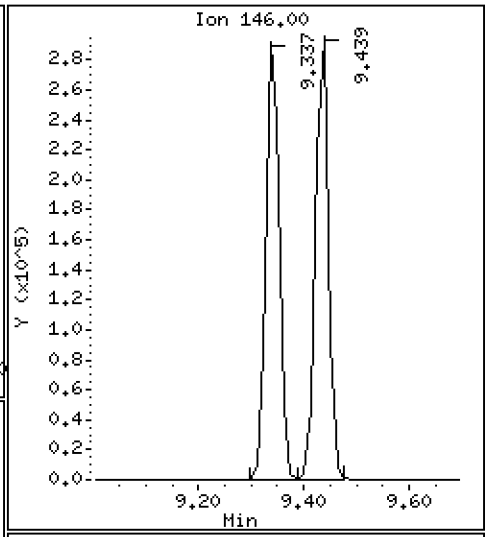
Column phase: ZB-5msi

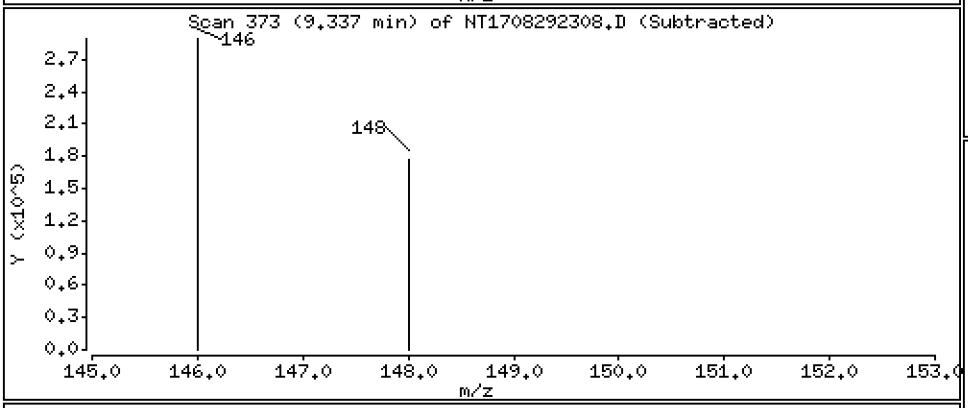
Column diameter: 0.25

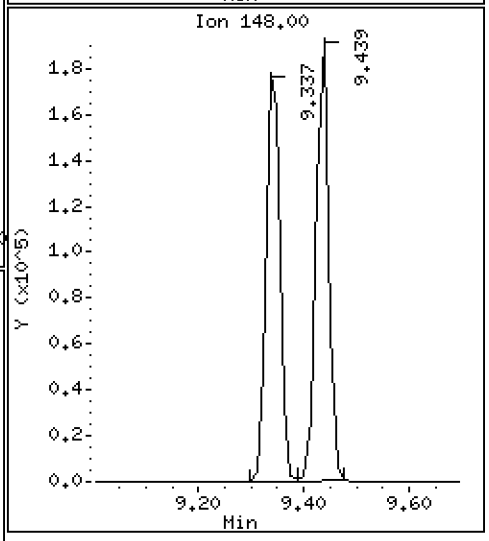
7 1,3-Dichlorobenzene

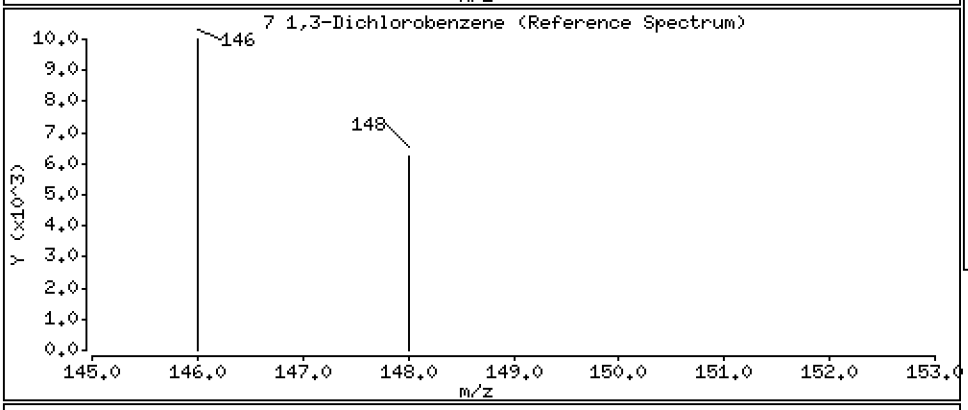
Concentration: 3.440 ug/mL

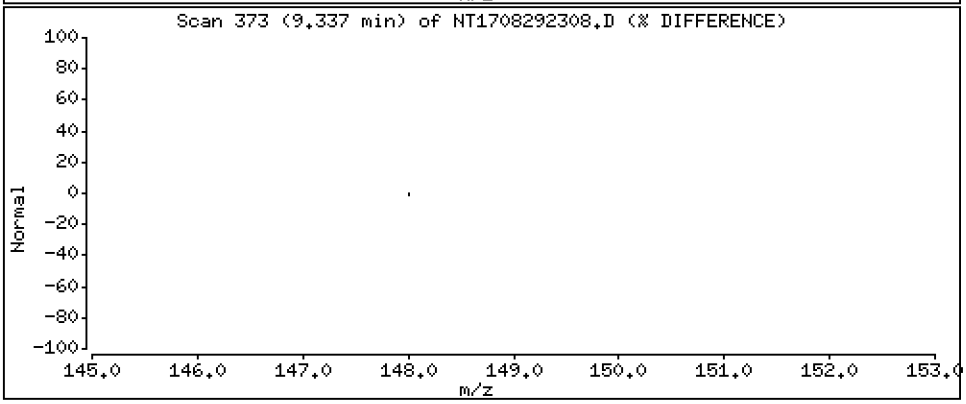












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Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

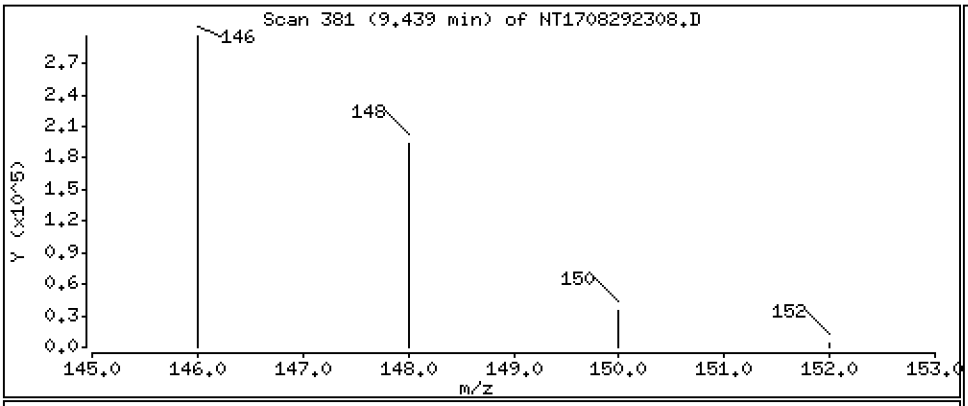
Operator: JGR

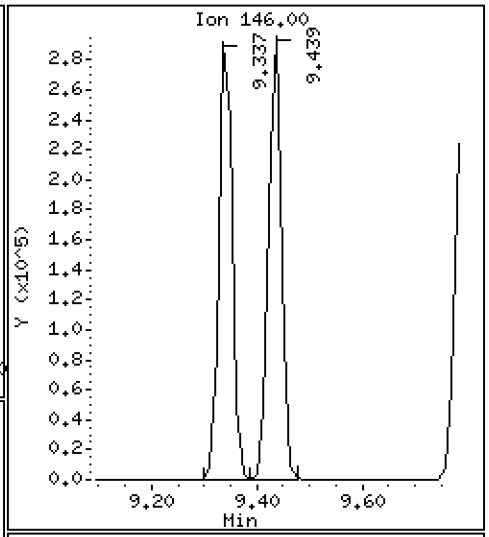
Column phase: ZB-5msi

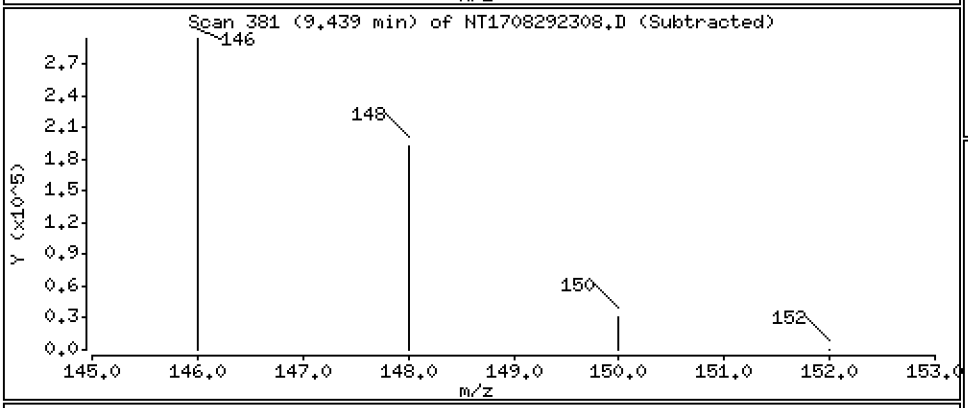
Column diameter: 0.25

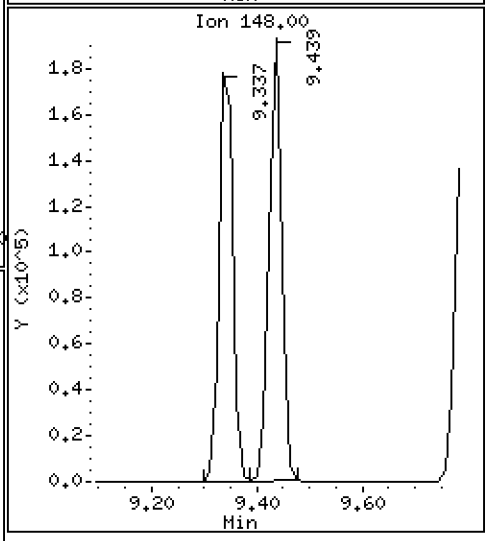
9 1,4-Dichlorobenzene

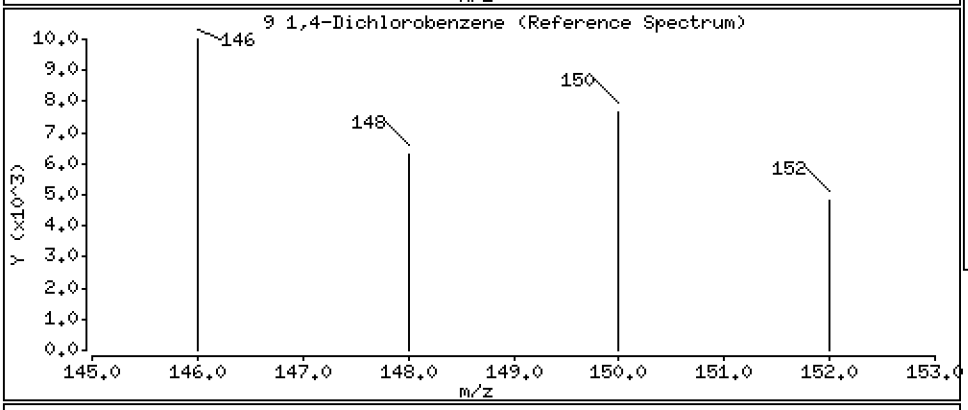
Concentration: 3.490 ug/mL

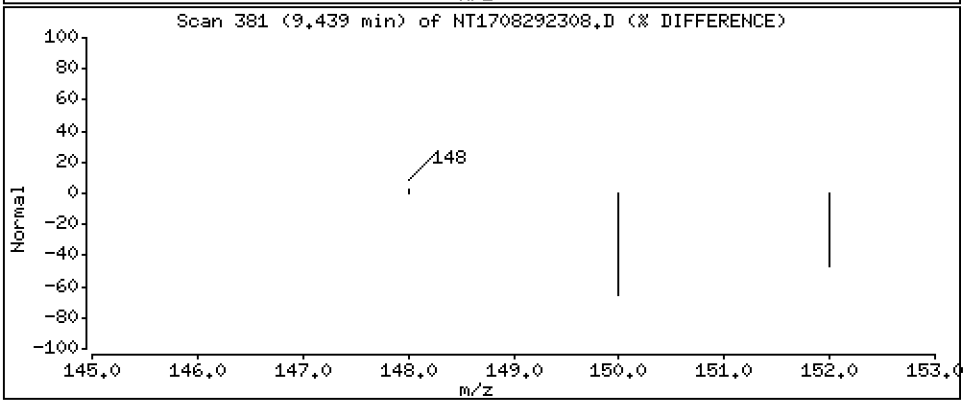












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Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

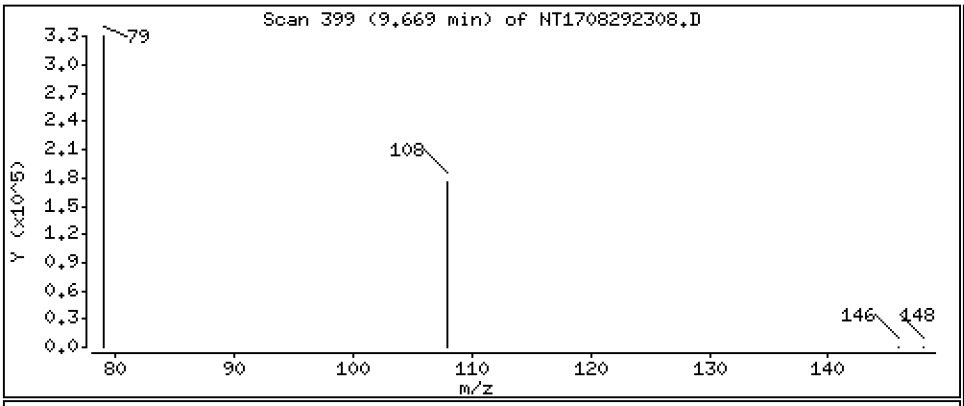
Operator: JGR

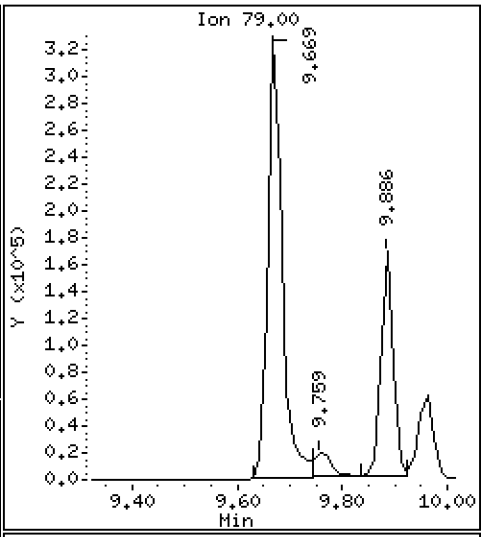
Column phase: ZB-5msi

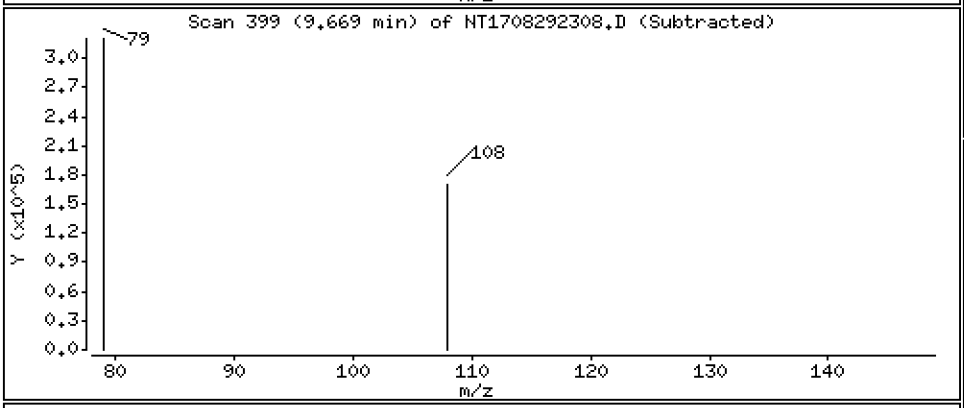
Column diameter: 0.25

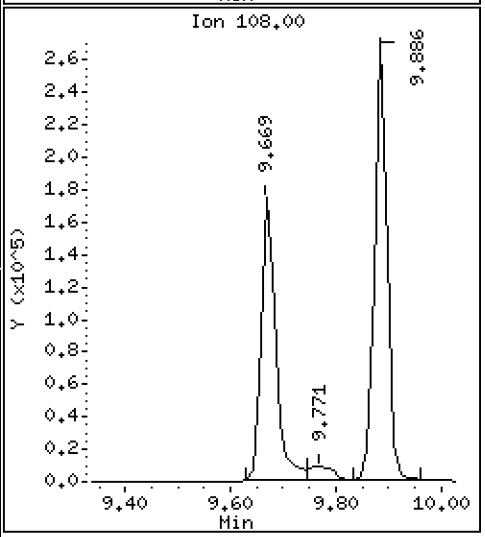
11 Benzyl alcohol

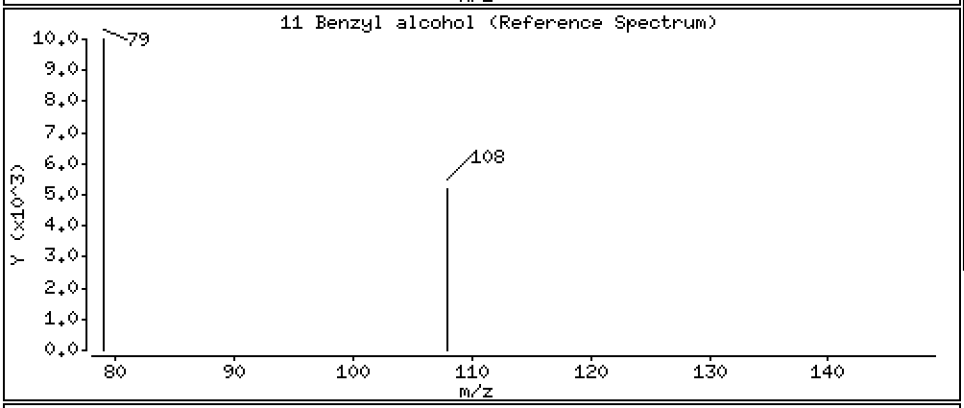
Concentration: 4.113 ug/mL

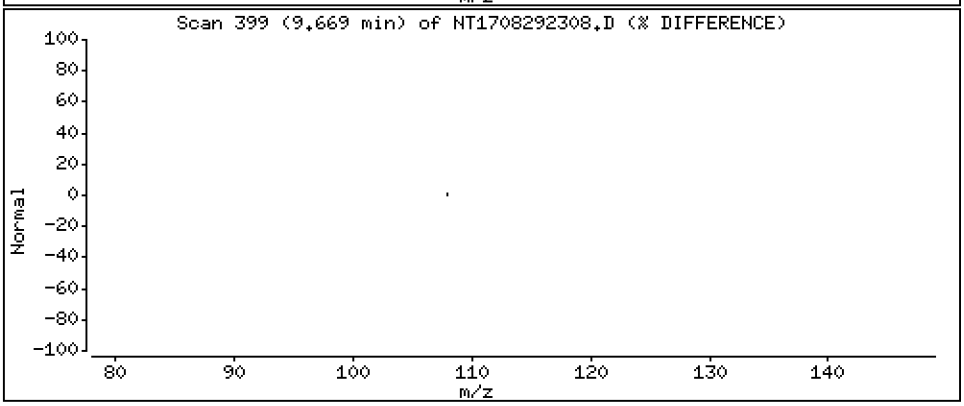












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292308.D

Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

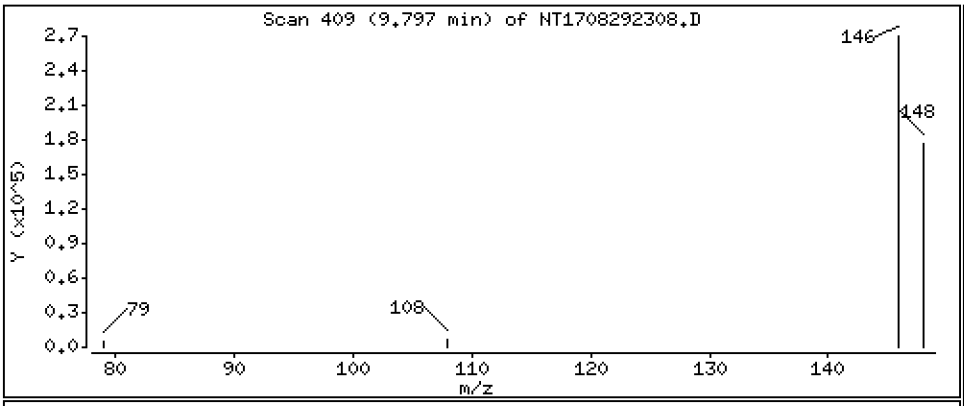
Operator: JGR

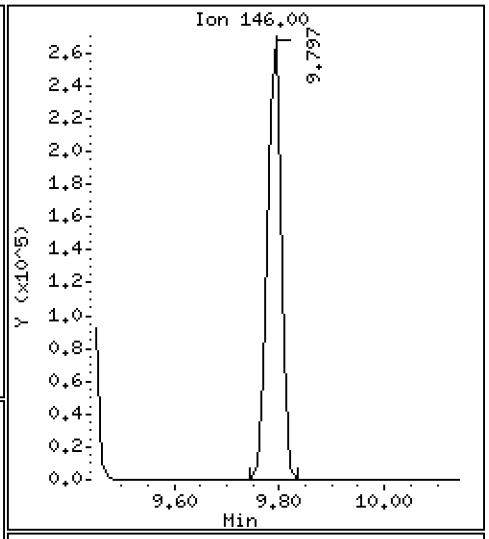
Column phase: ZB-5msi

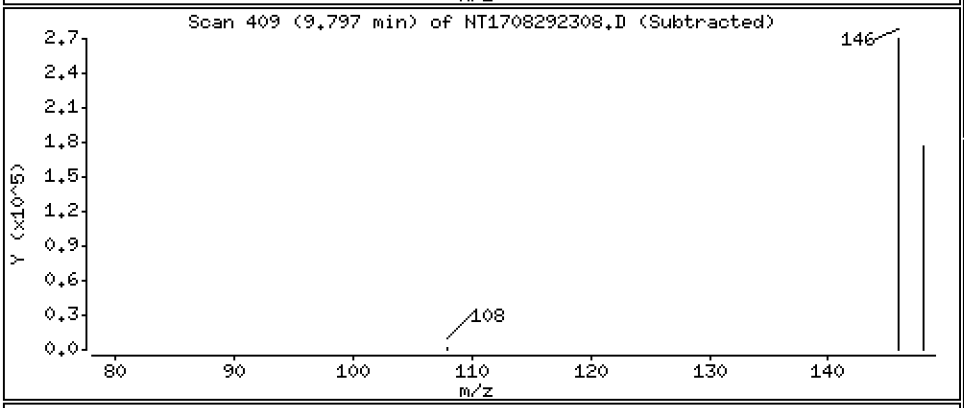
Column diameter: 0.25

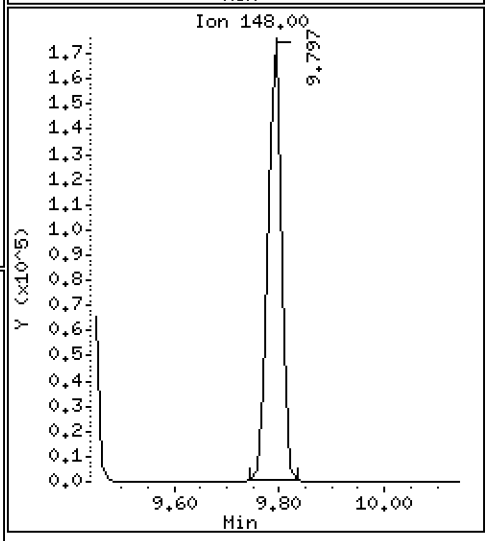
12 1,2-Dichlorobenzene

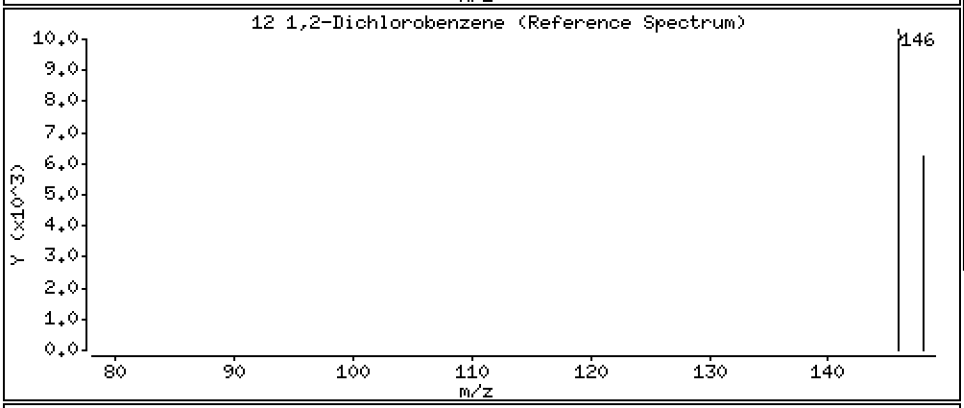
Concentration: 3.507 ug/mL

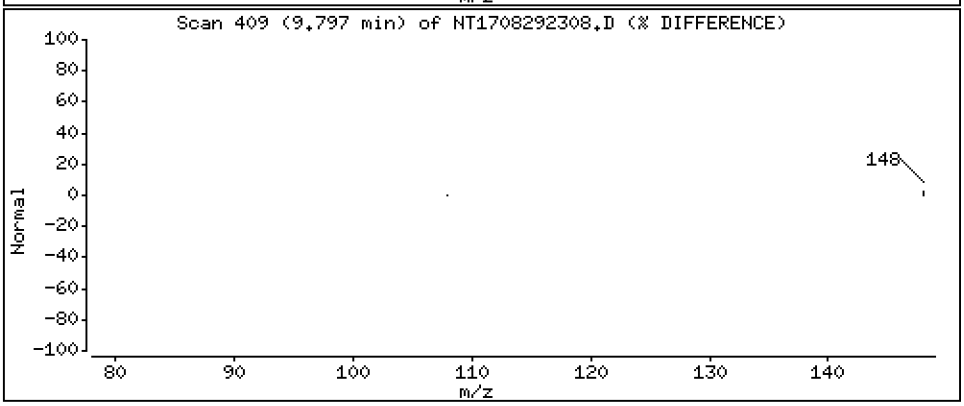












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Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

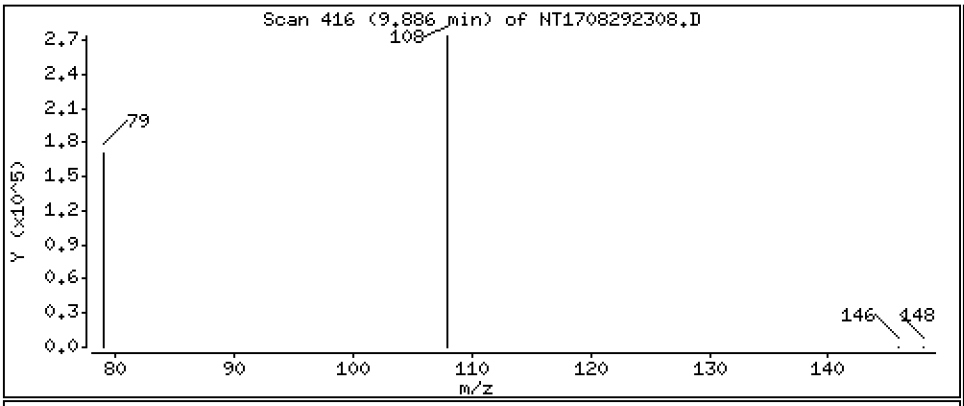
Operator: JGR

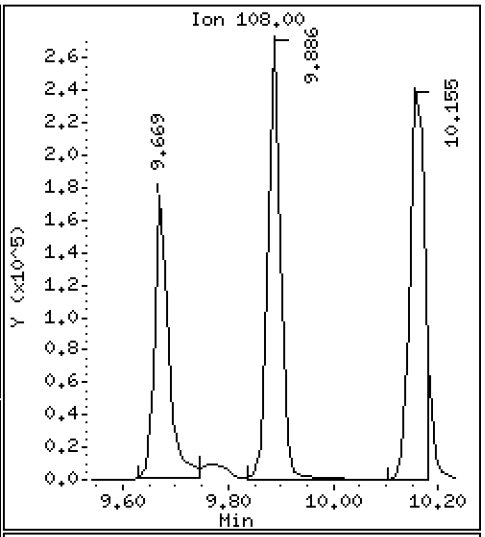
Column phase: ZB-5msi

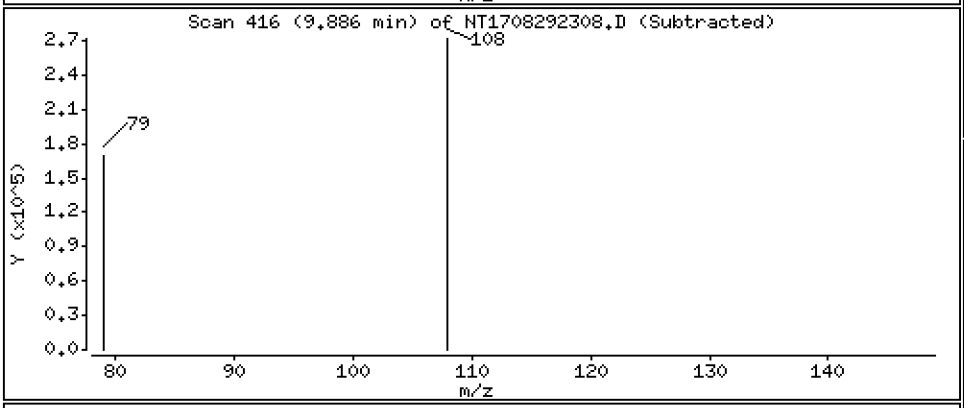
Column diameter: 0.25

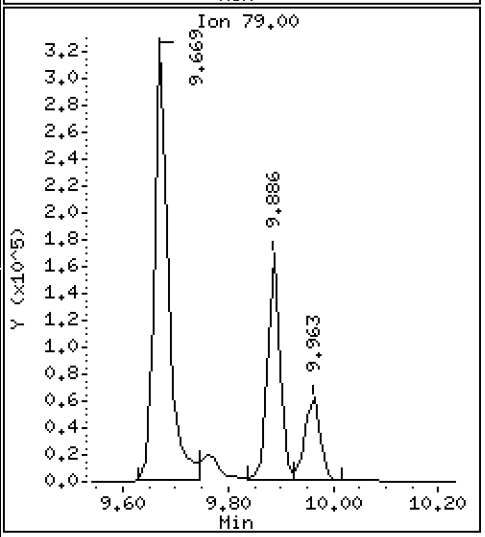
13 2-Methylphenol

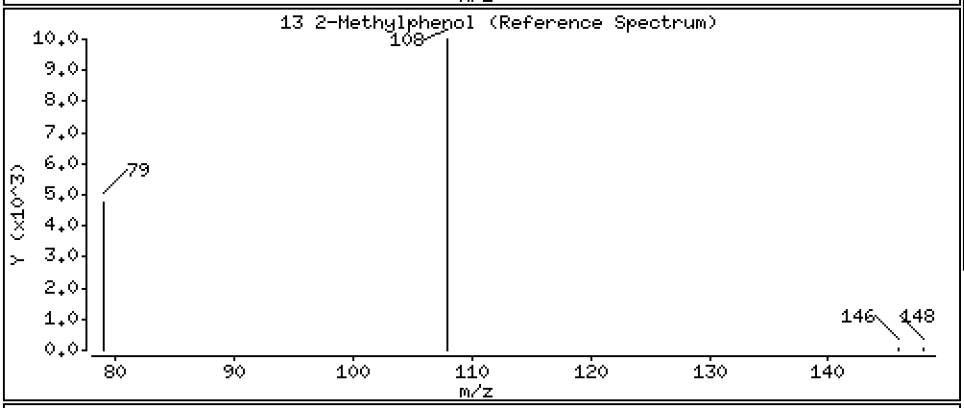
Concentration: 3.356 ug/mL

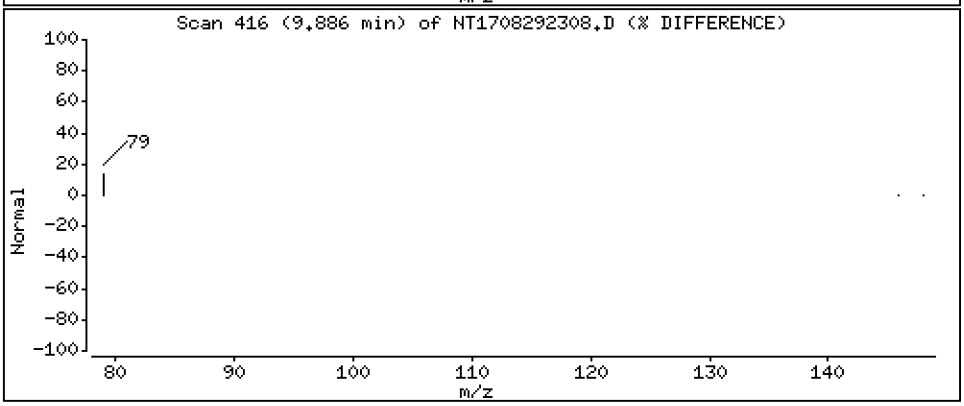












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Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

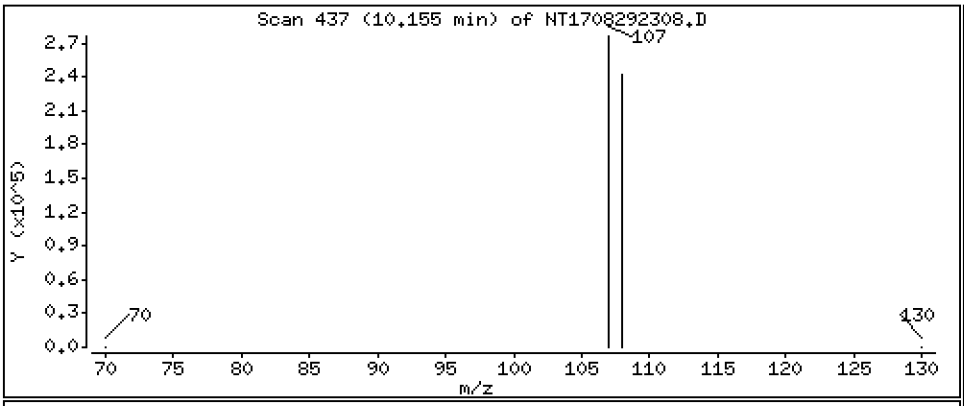
Operator: JGR

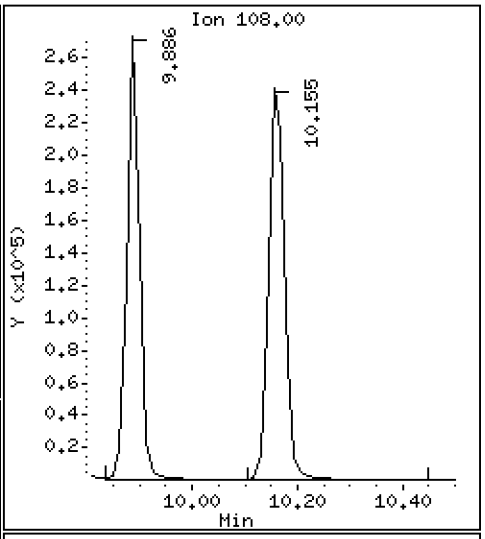
Column phase: ZB-5msi

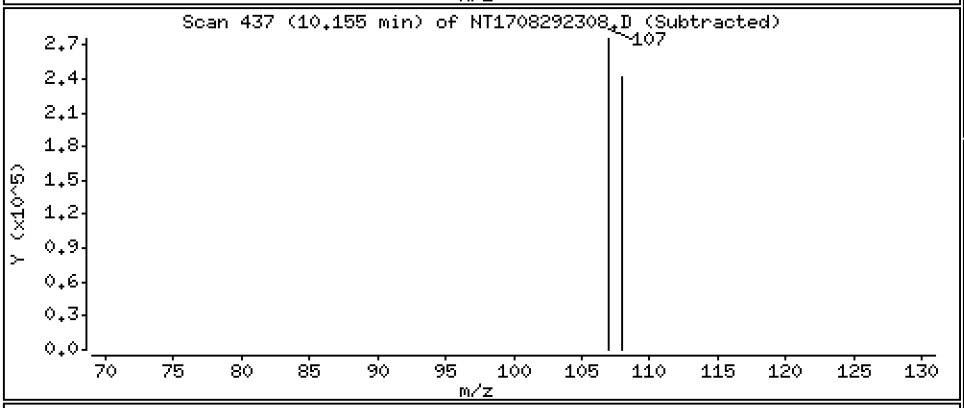
Column diameter: 0.25

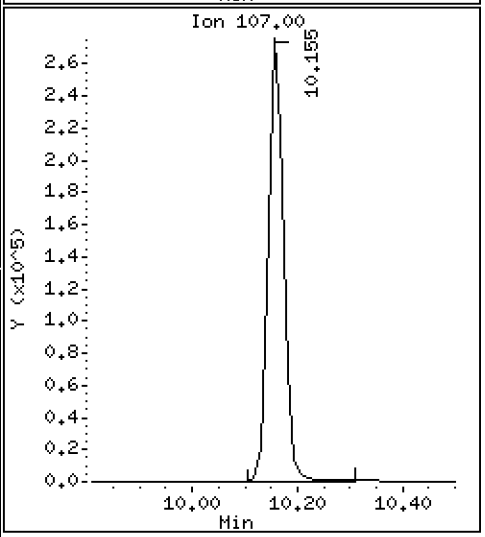
15 4-Methylphenol

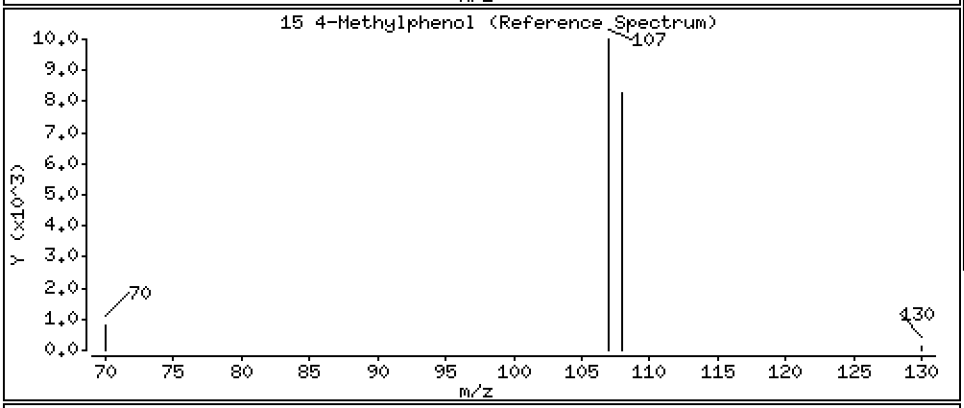
Concentration: 3.616 ug/mL

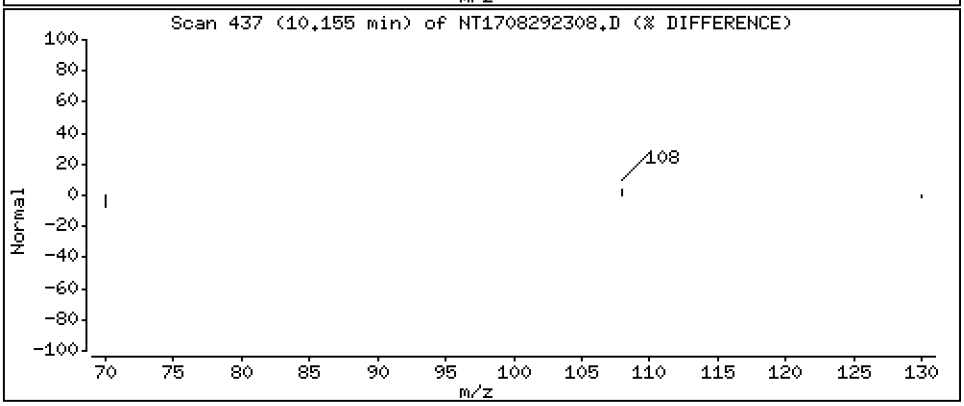












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Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

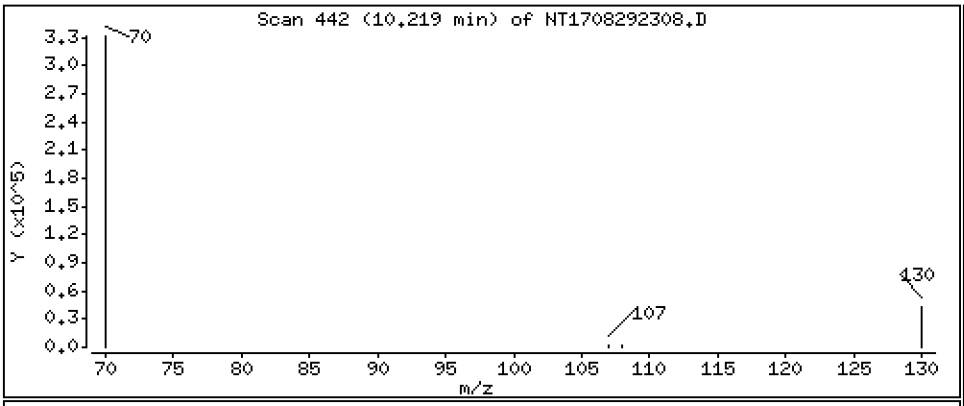
Operator: JGR

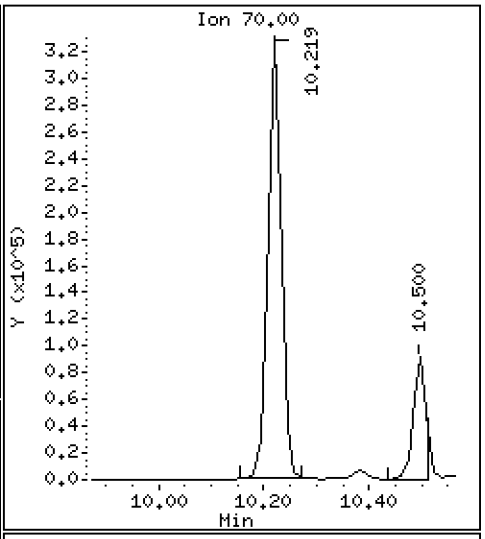
Column phase: ZB-5msi

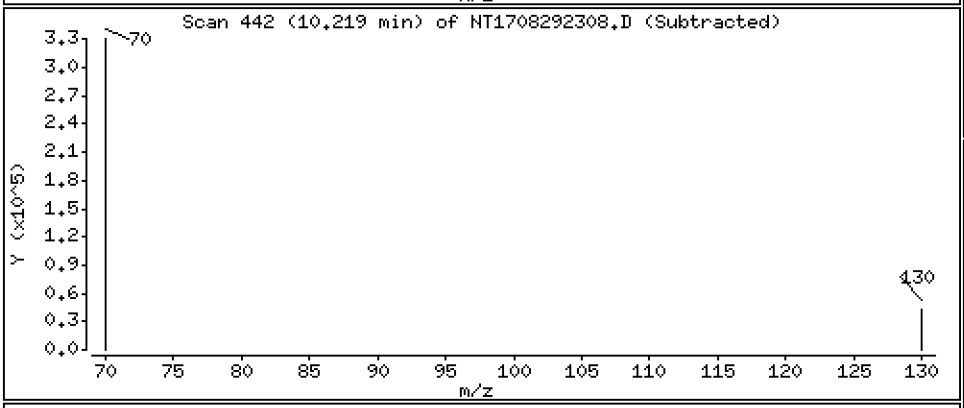
Column diameter: 0.25

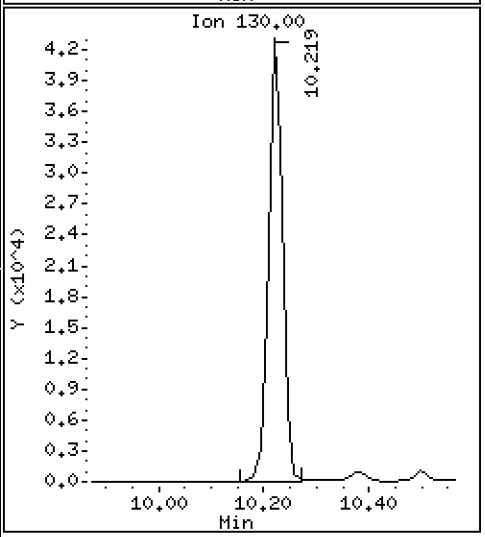
16 N-Nitroso-di-n-propylamine

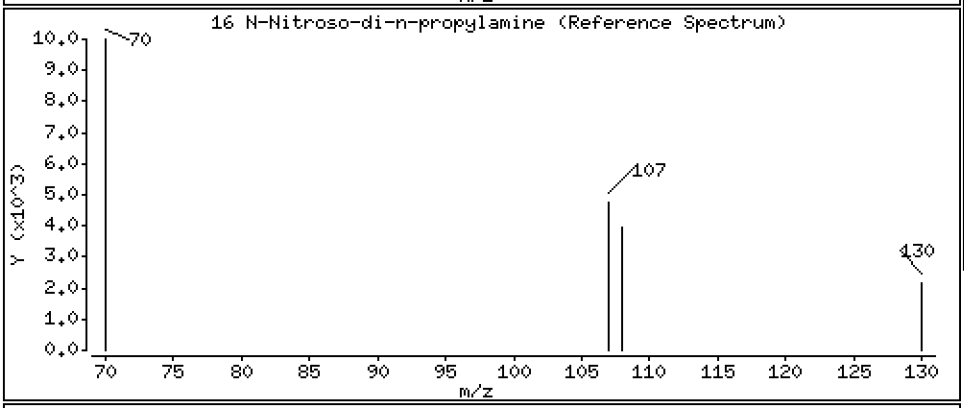
Concentration: 4.032 ug/mL

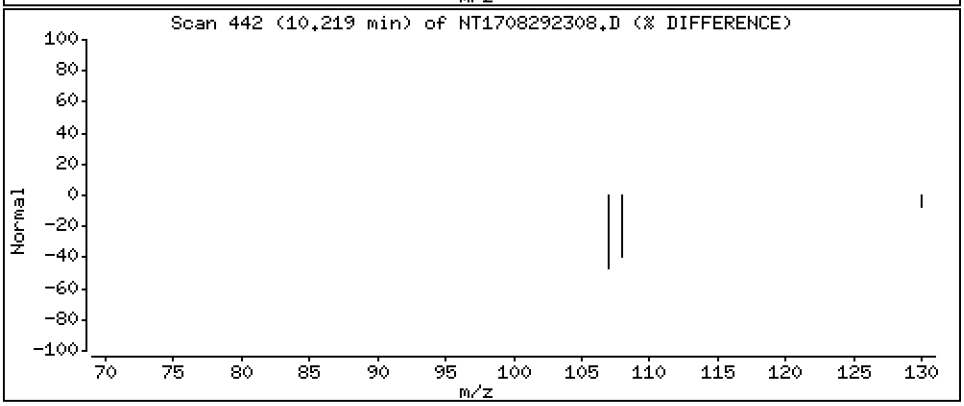












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Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

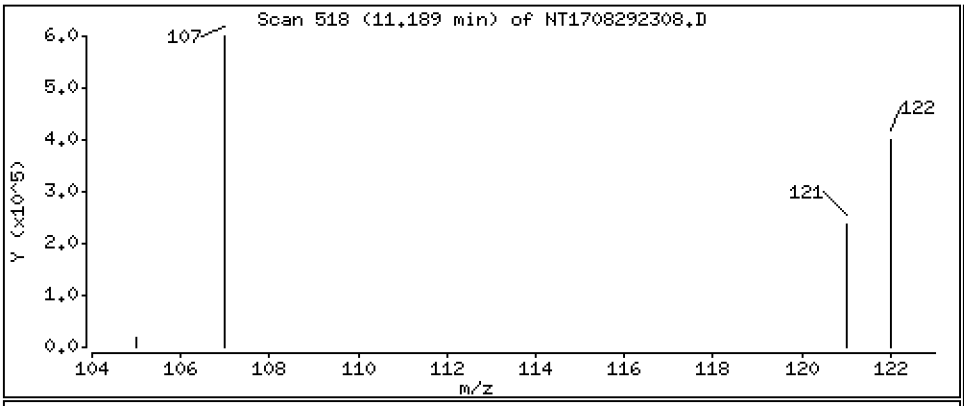
Operator: JGR

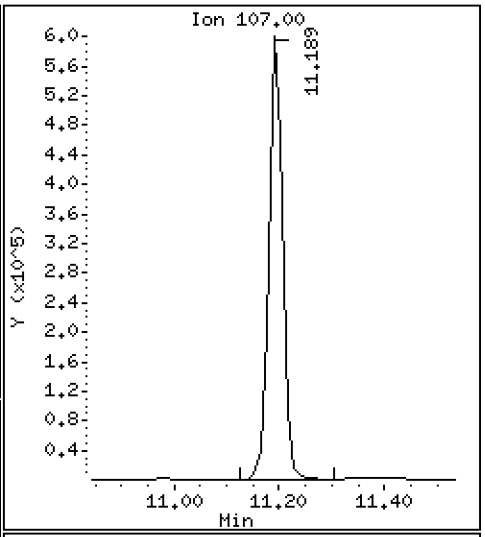
Column phase: ZB-5msi

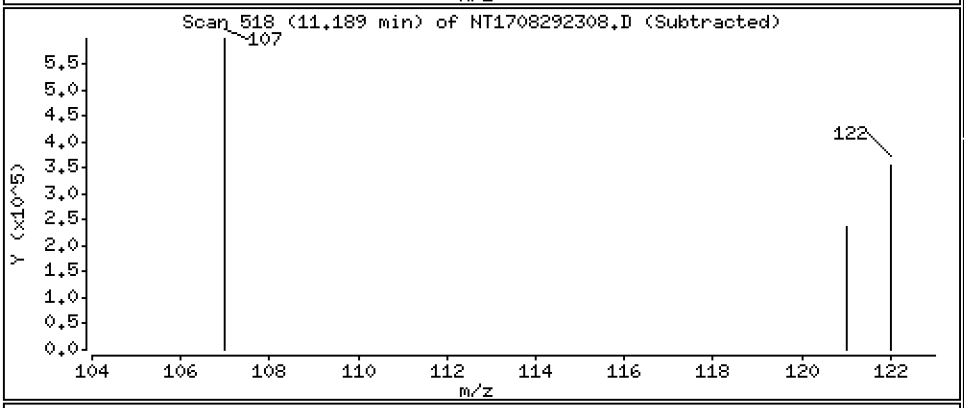
Column diameter: 0.25

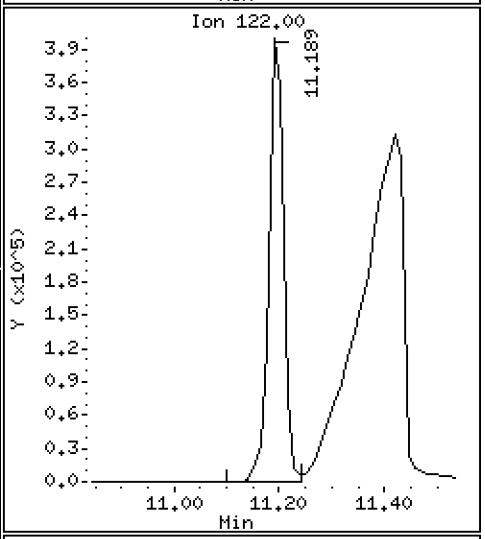
22 2,4-Dimethylphenol

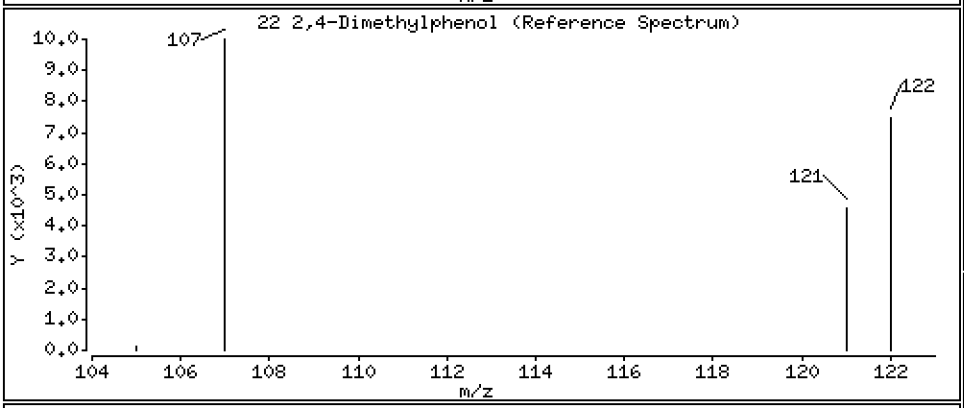
Concentration: 8.335 ug/mL

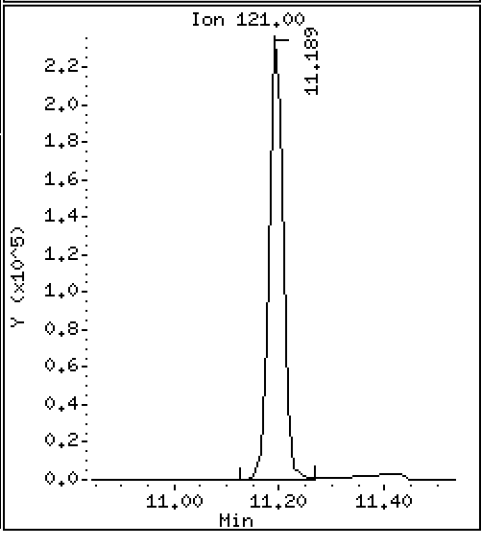


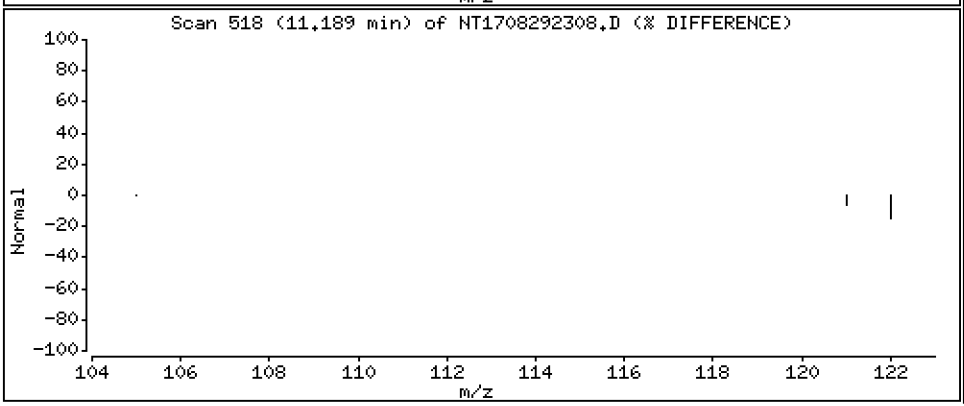












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Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

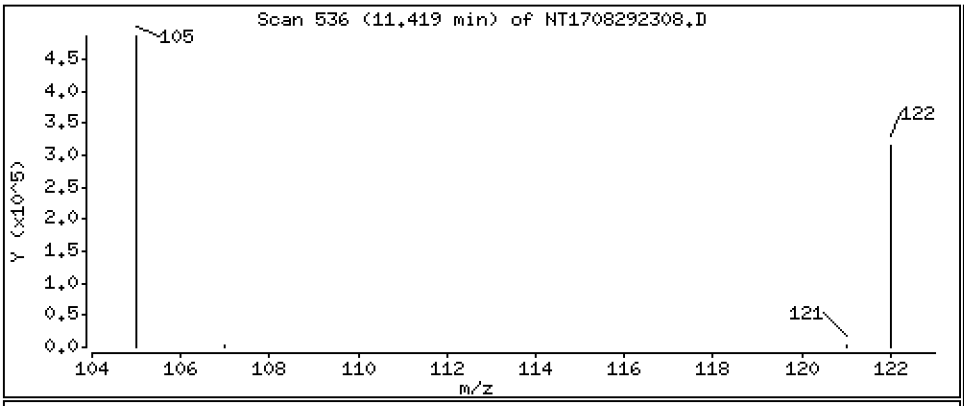
Operator: JGR

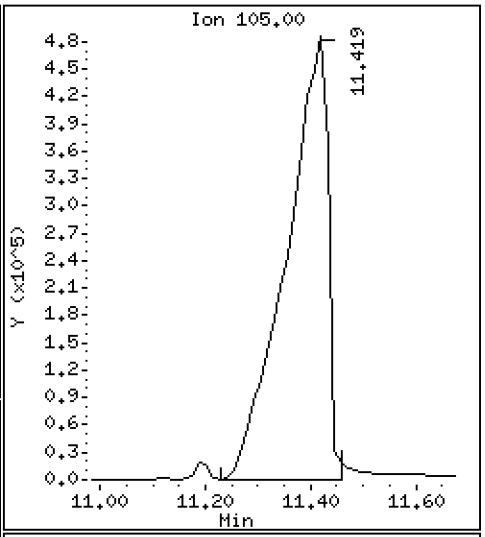
Column phase: ZB-5msi

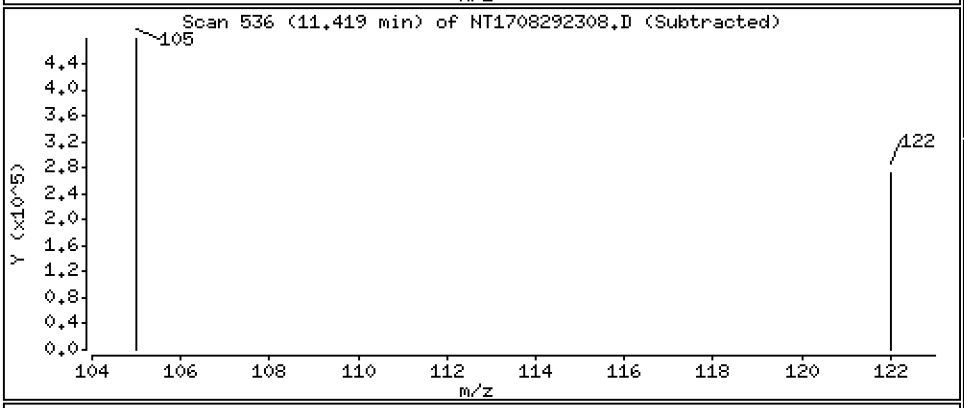
Column diameter: 0.25

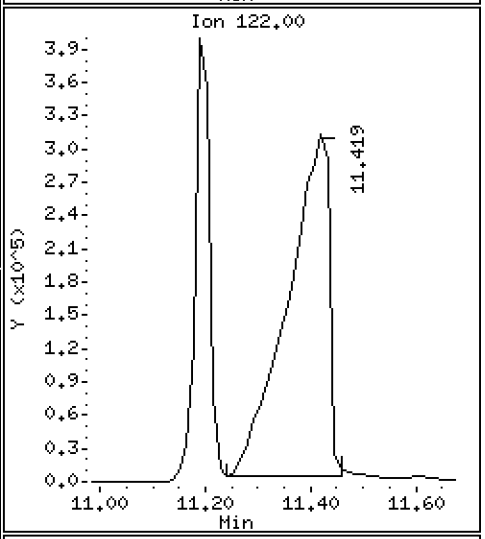
24 Benzoic acid

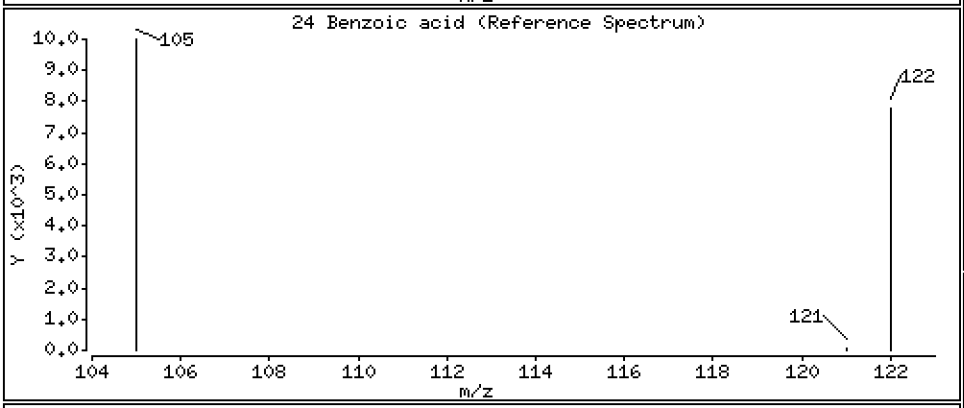
Concentration: 26.97 ug/mL

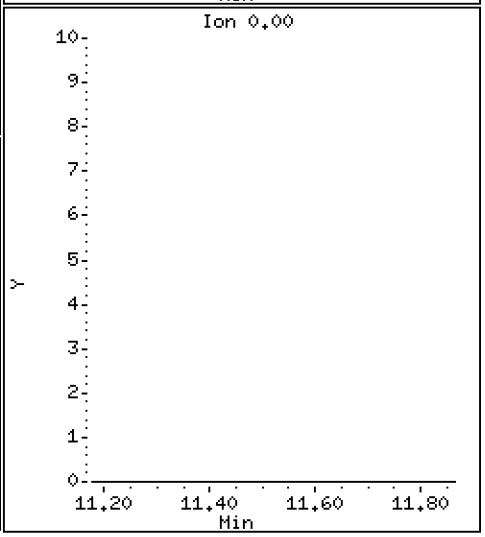


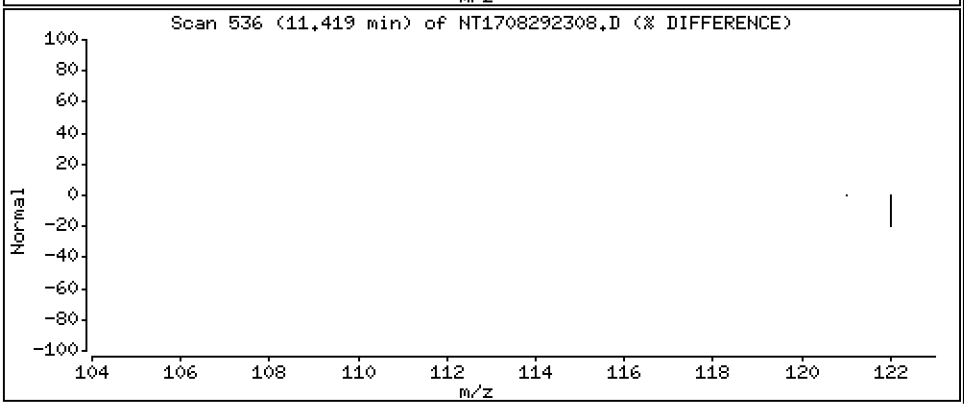












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Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

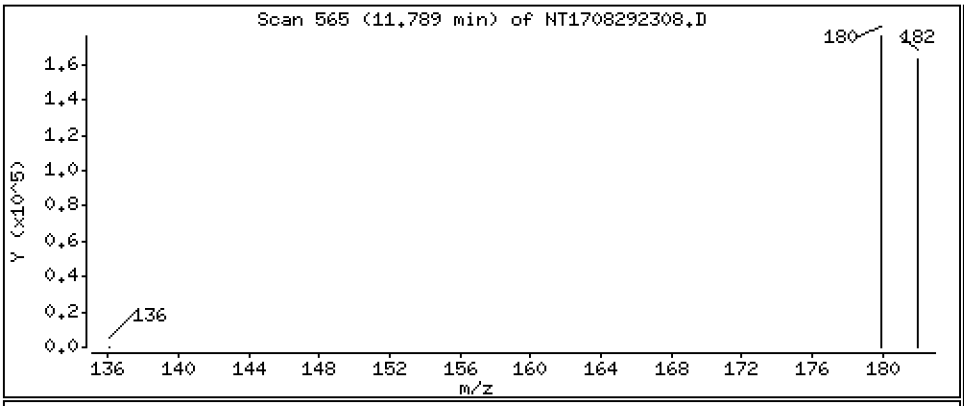
Operator: JGR

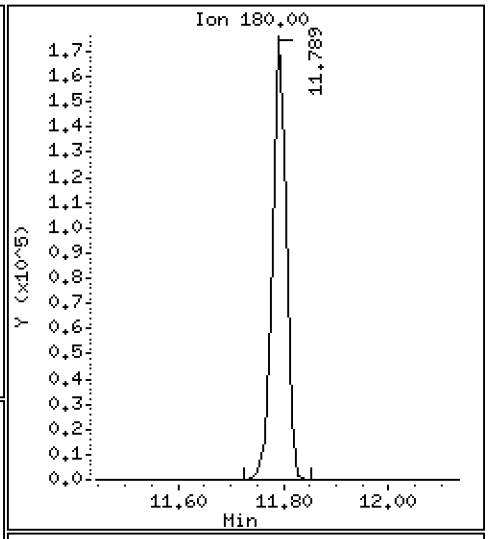
Column phase: ZB-5msi

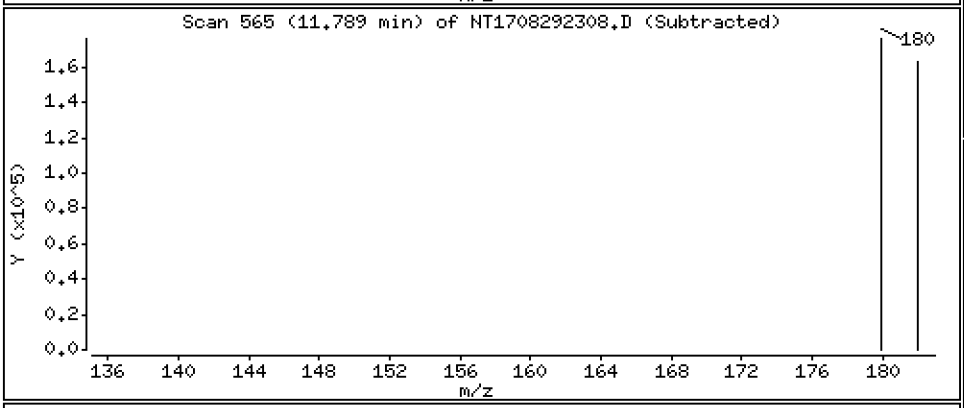
Column diameter: 0.25

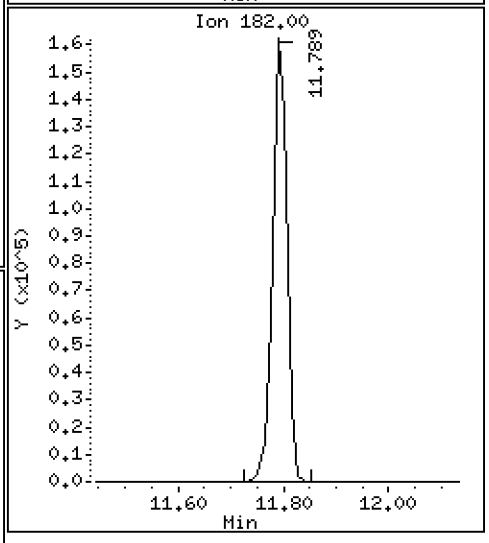
26 1,2,4-Trichlorobenzene

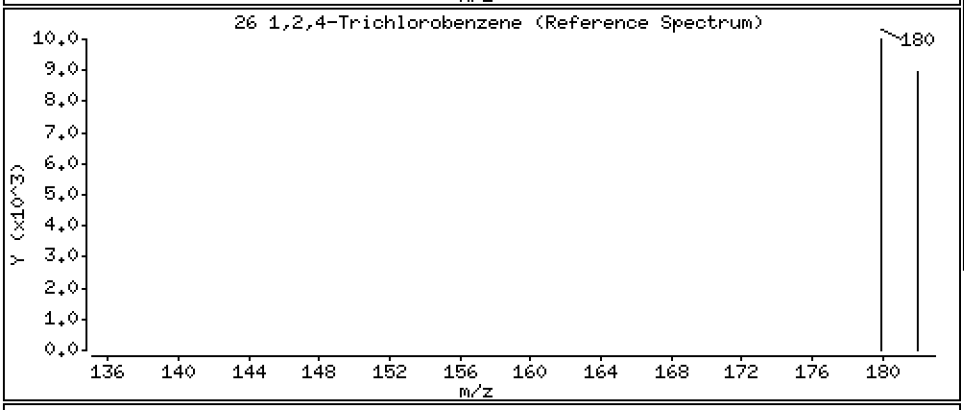
Concentration: 3.600 ug/mL

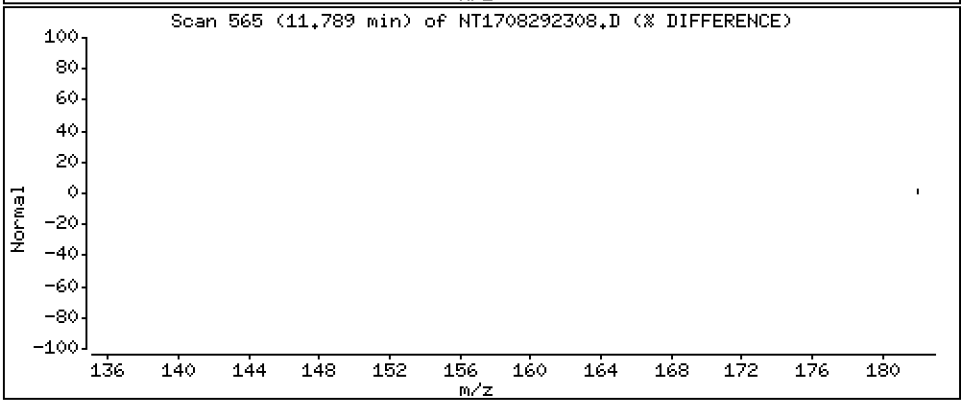












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Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

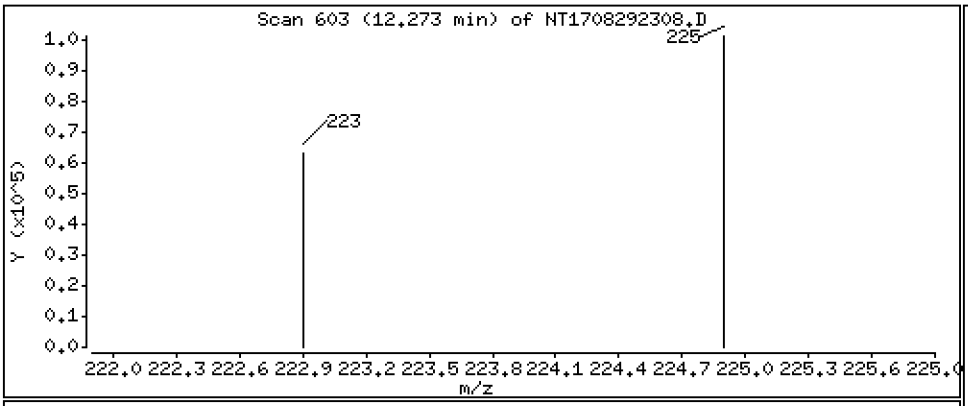
Operator: JGR

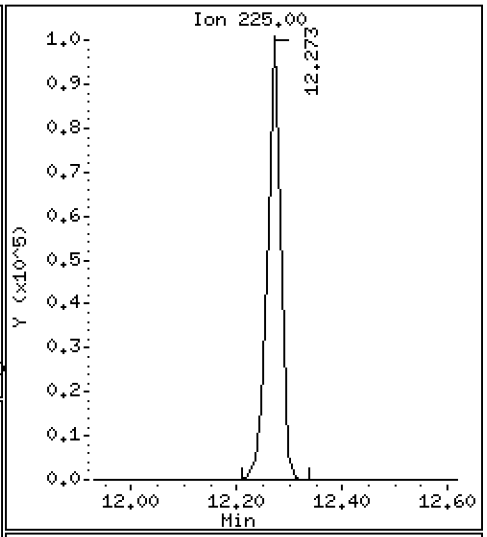
Column phase: ZB-5msi

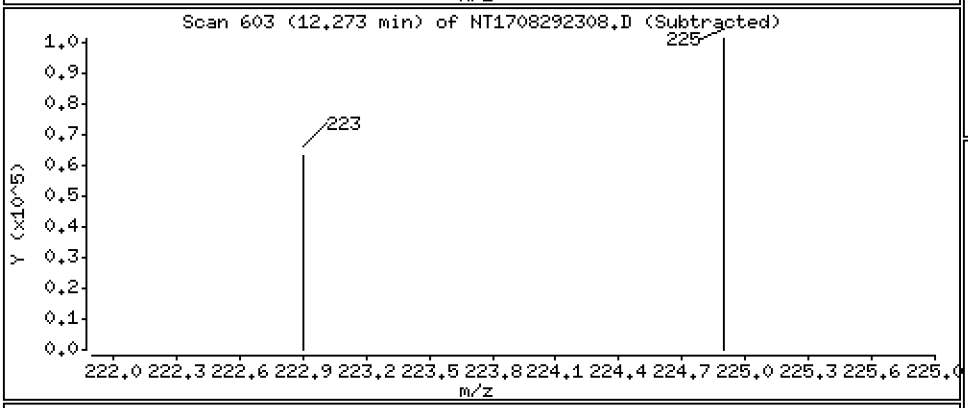
Column diameter: 0.25

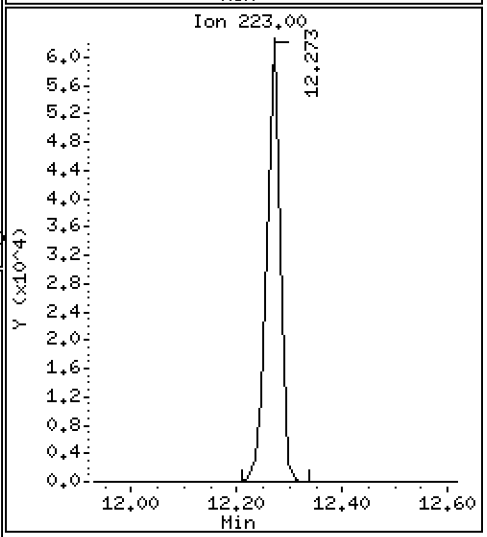
30 Hexachlorobutadiene

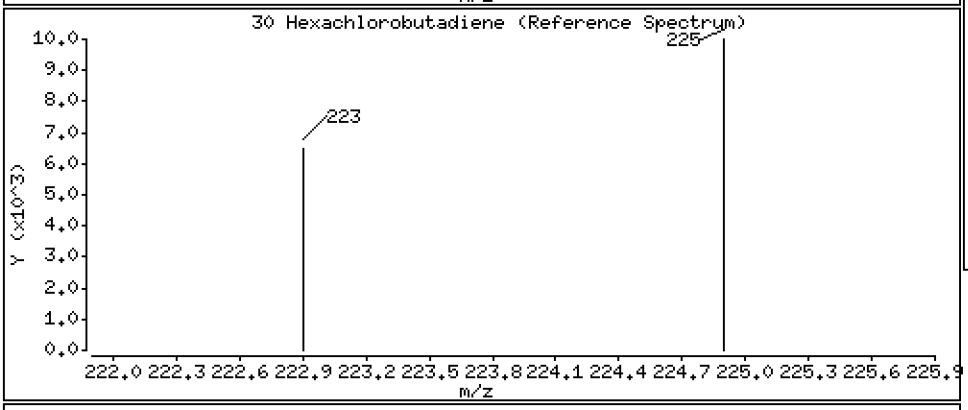
Concentration: 4.232 ug/mL

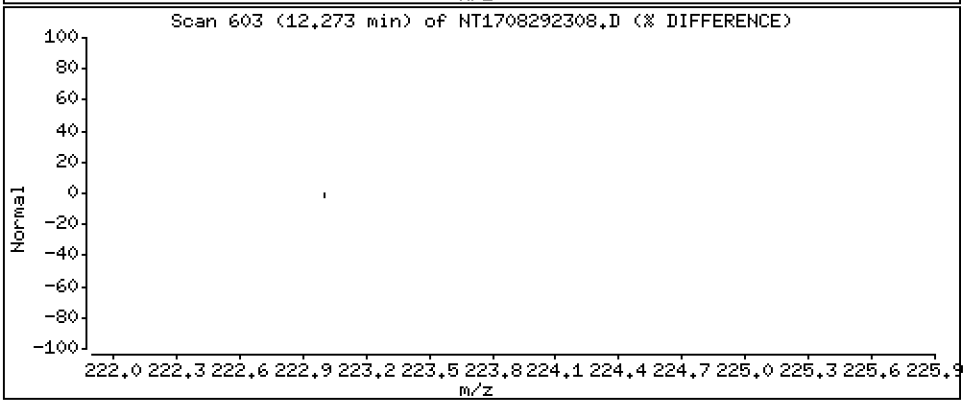












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Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

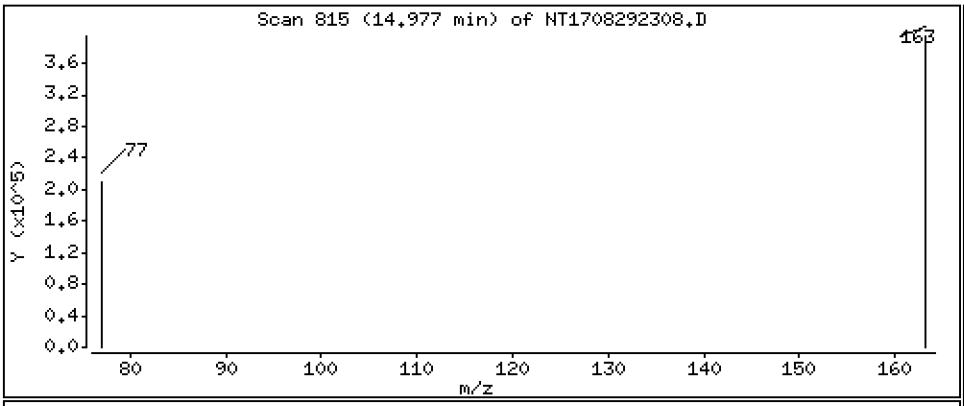
Operator: JGR

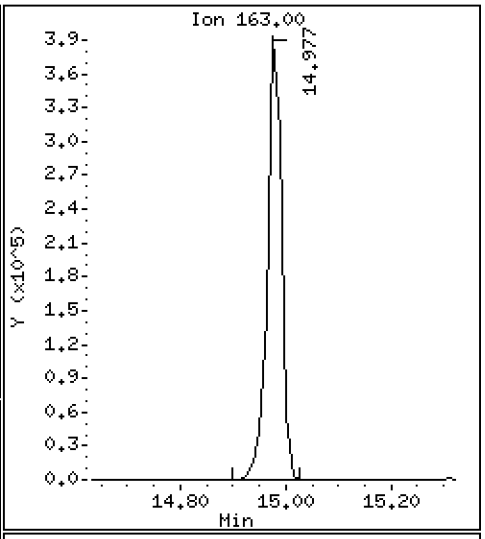
Column phase: ZB-5msi

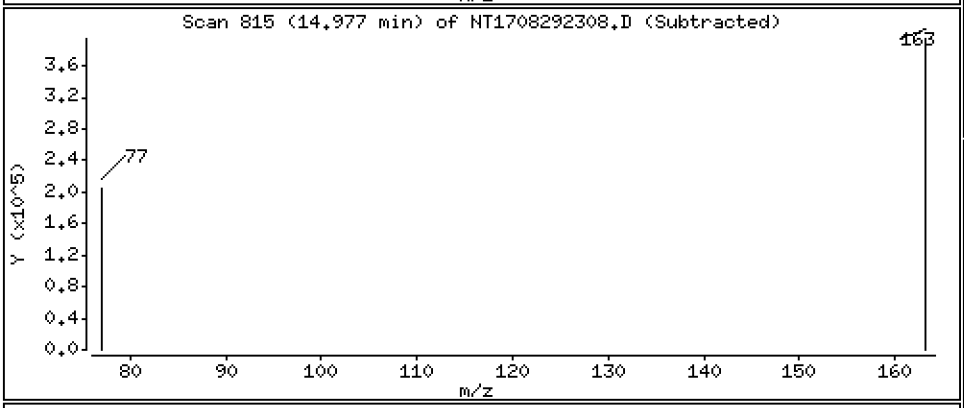
Column diameter: 0.25

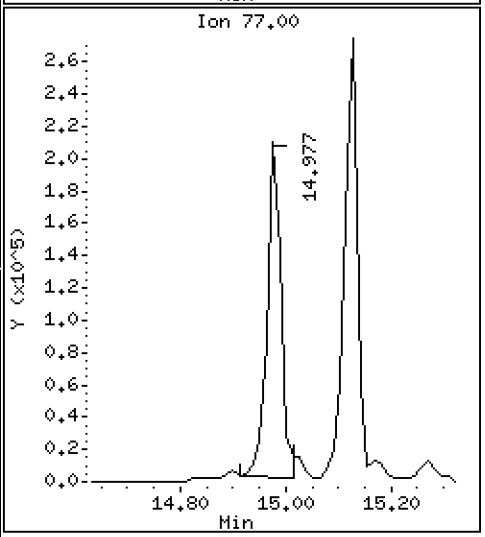
39 Dimethylphthalate

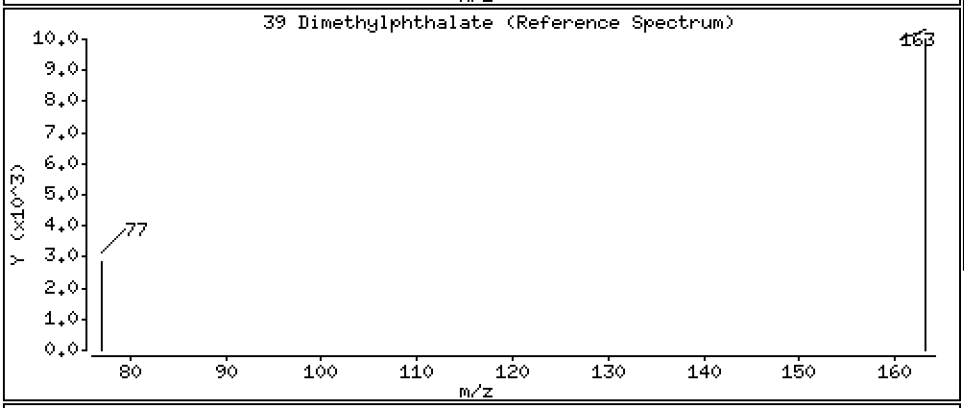
Concentration: 4.410 ug/mL

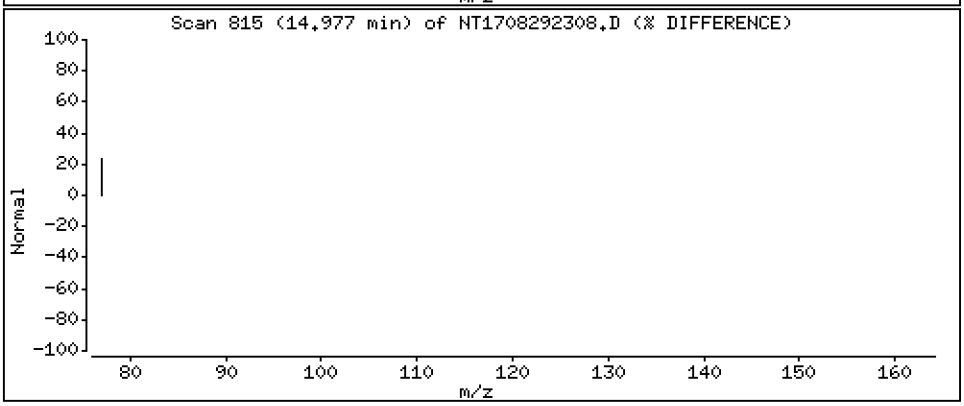












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Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

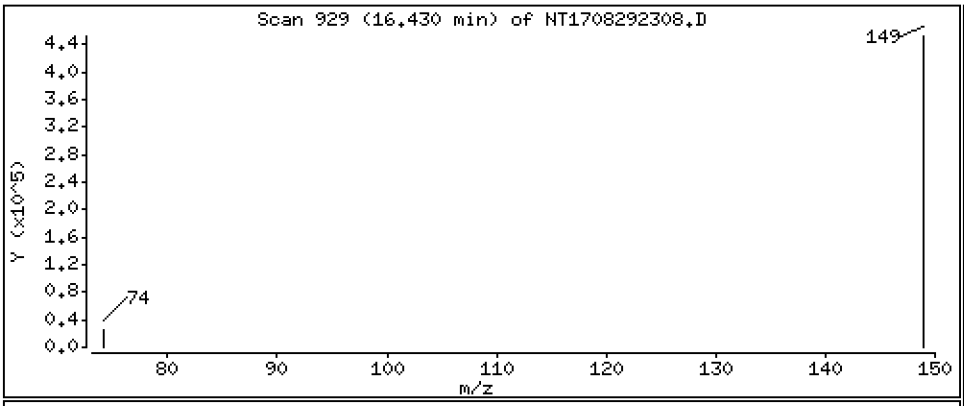
Operator: JGR

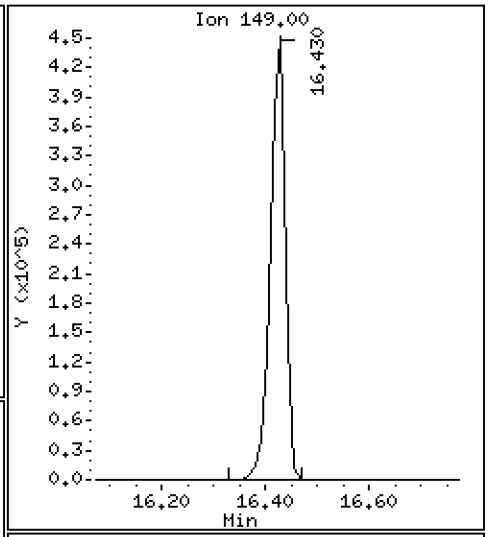
Column phase: ZB-5msi

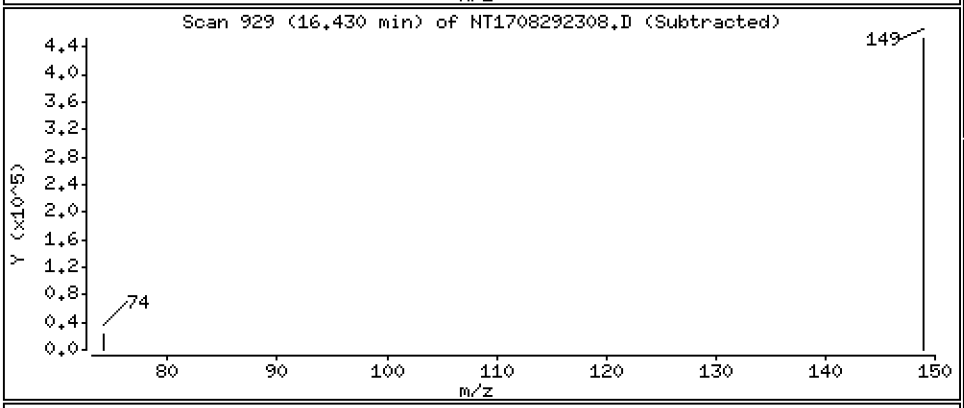
Column diameter: 0.25

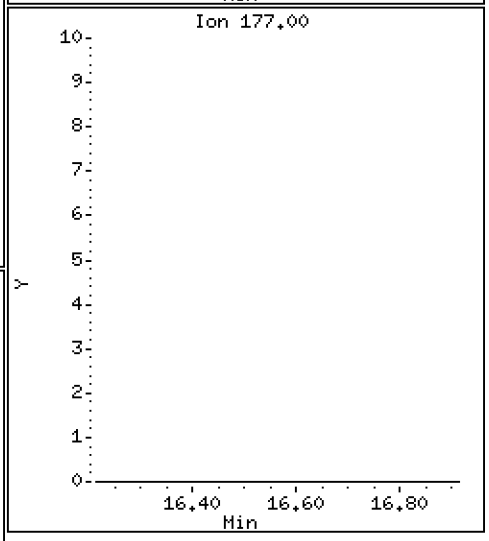
50 Diethylphthalate

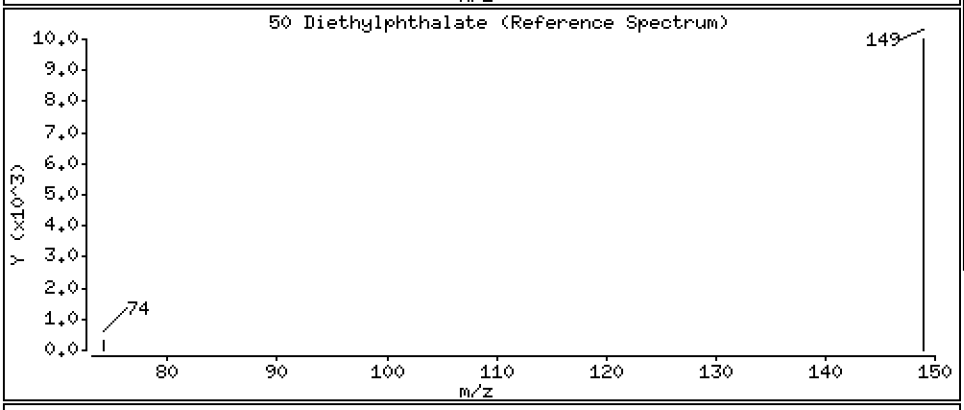
Concentration: 5.095 ug/mL

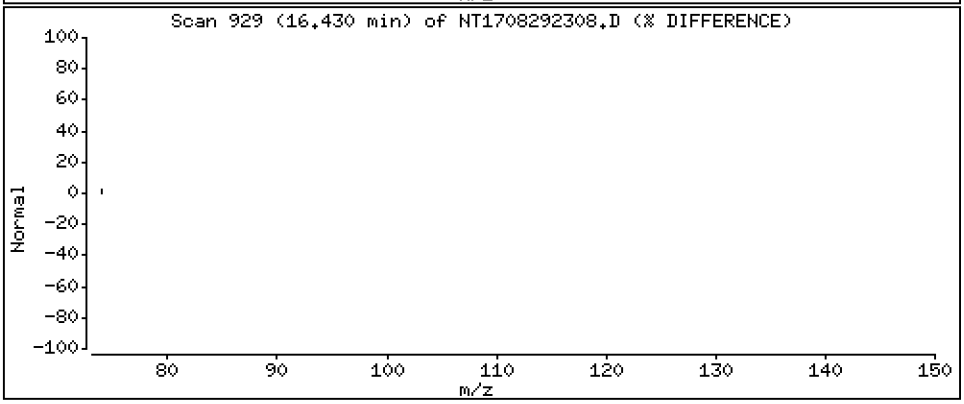












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Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

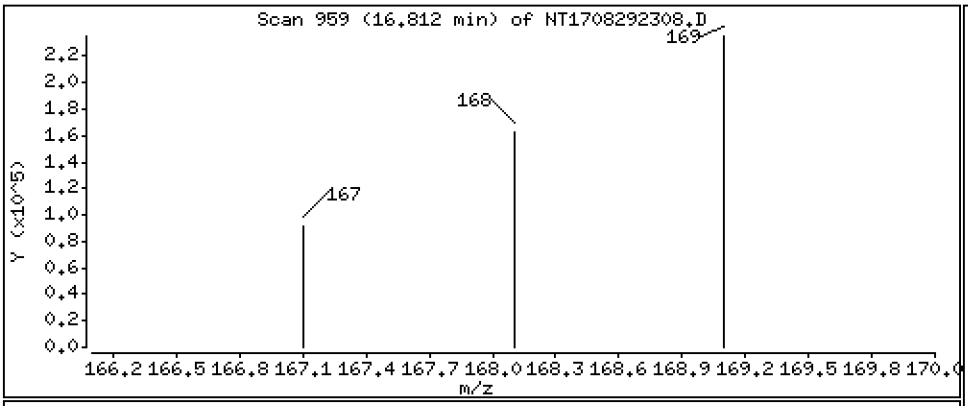
Operator: JGR

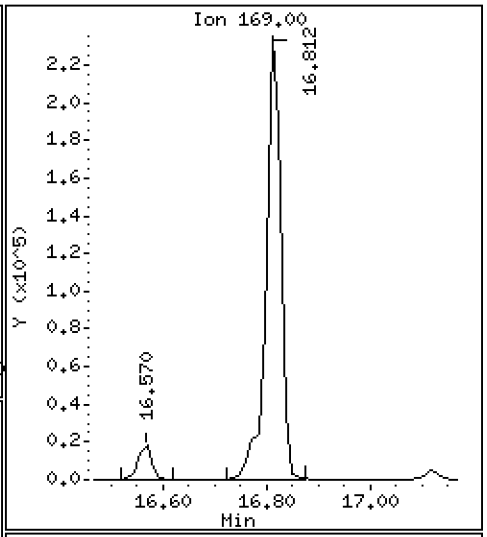
Column phase: ZB-5msi

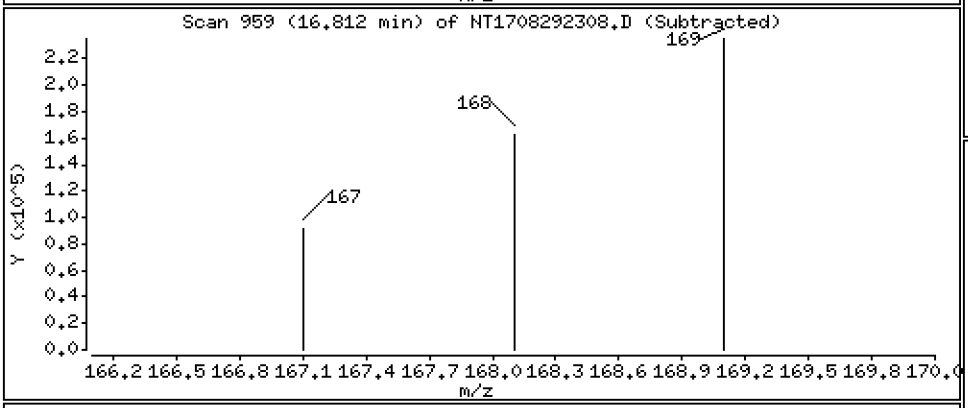
Column diameter: 0.25

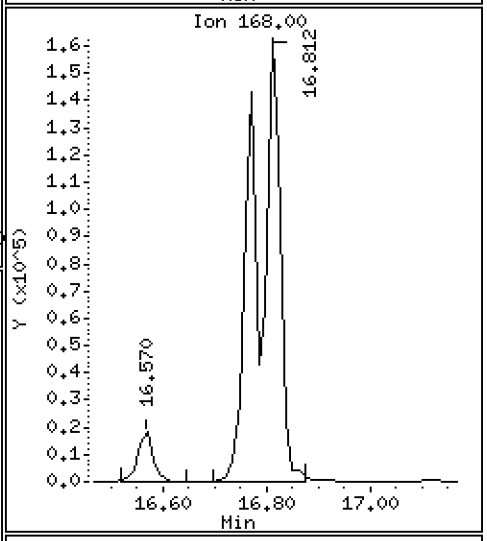
54 N-Nitrosodiphenylamine

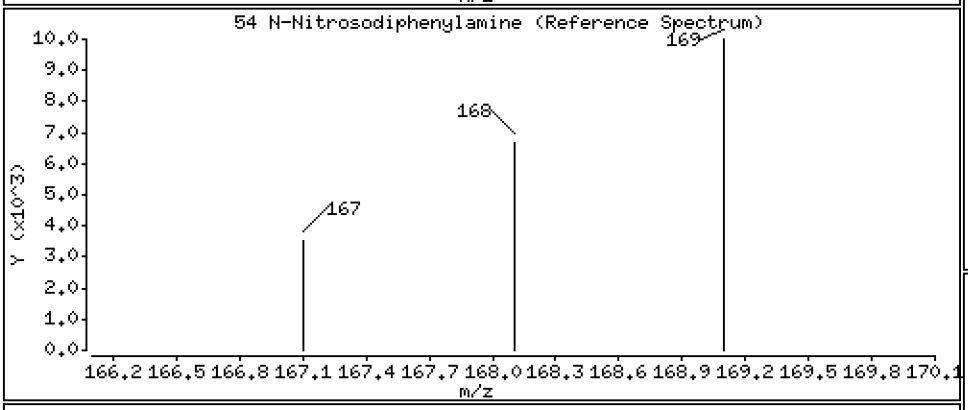
Concentration: 4.360 ug/mL

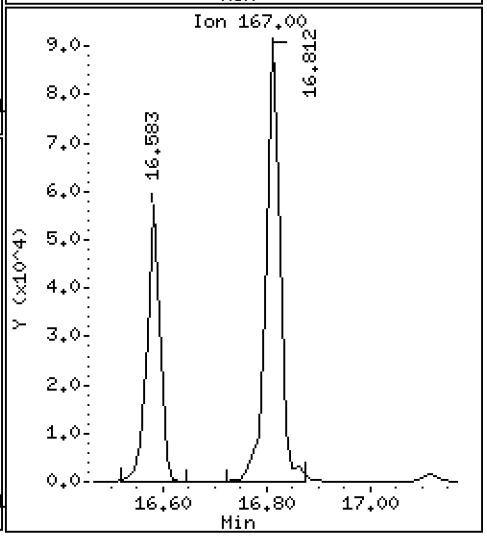


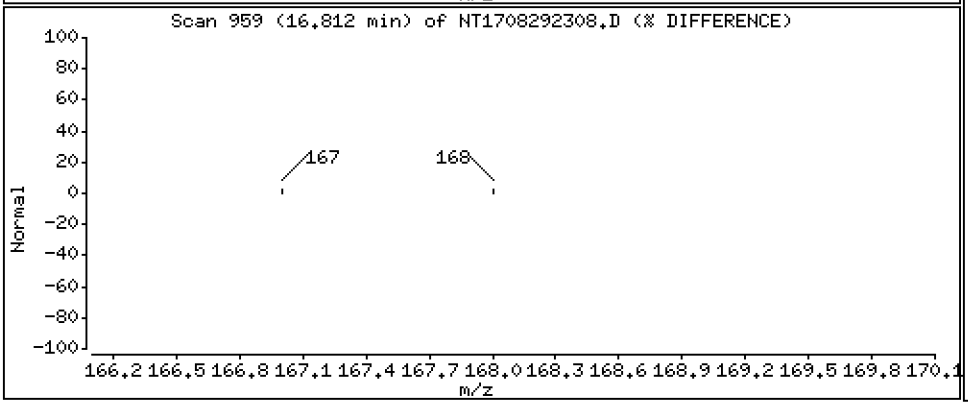












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292308.D

Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

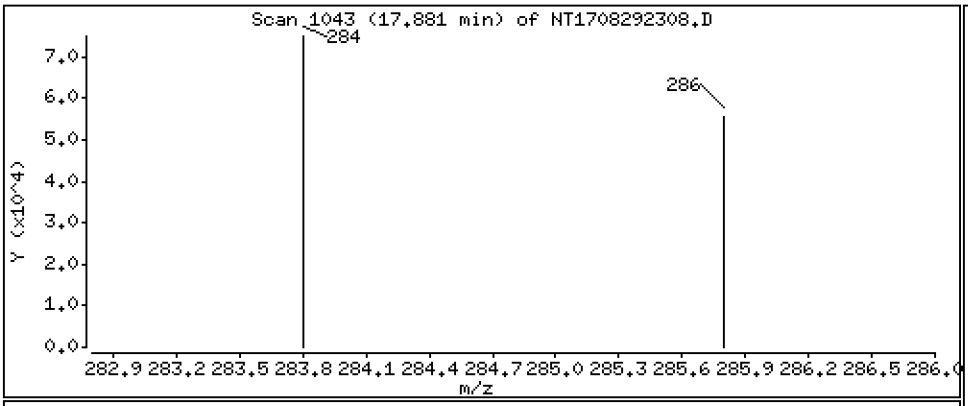
Operator: JGR

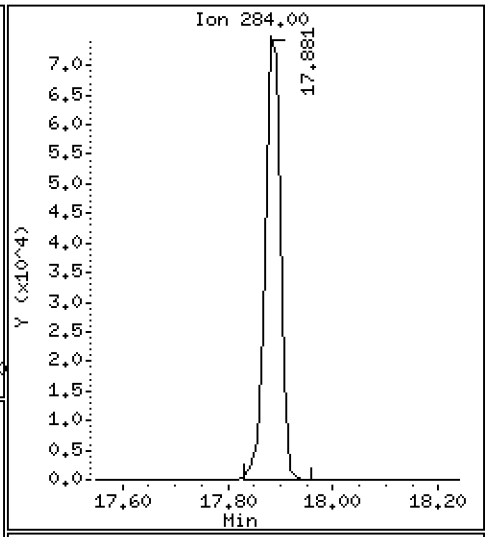
Column phase: ZB-5msi

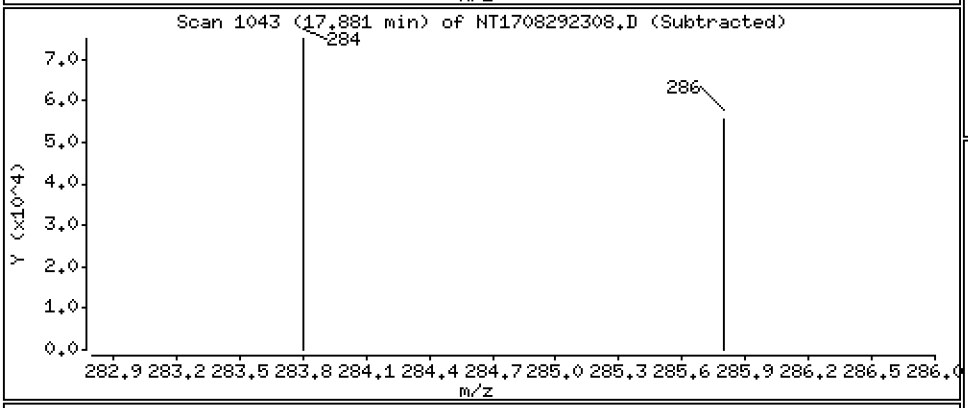
Column diameter: 0.25

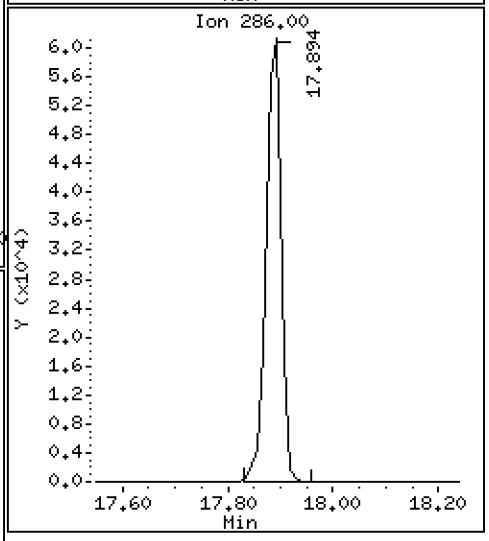
57 Hexachlorobenzene

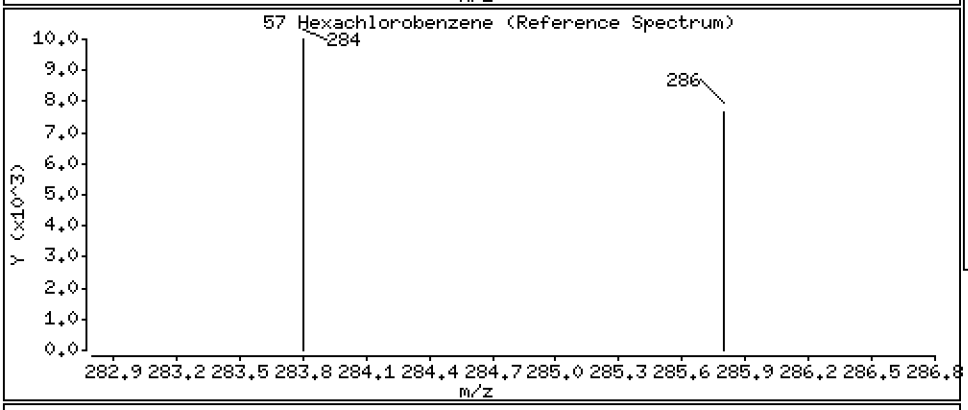
Concentration: 4.438 ug/mL

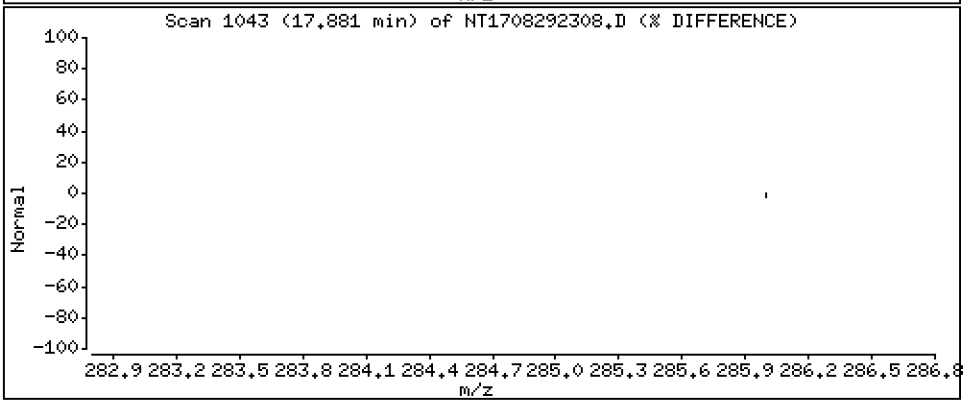












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292308.D

Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

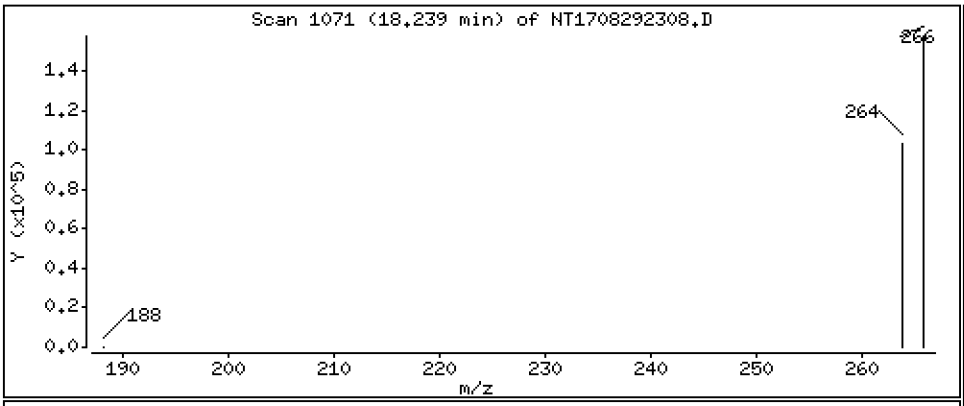
Operator: JGR

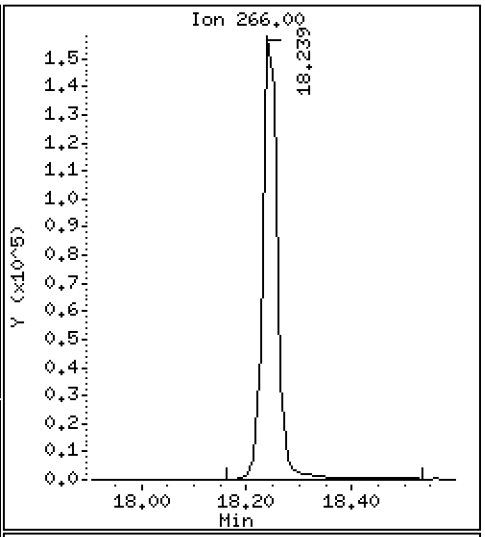
Column phase: ZB-5msi

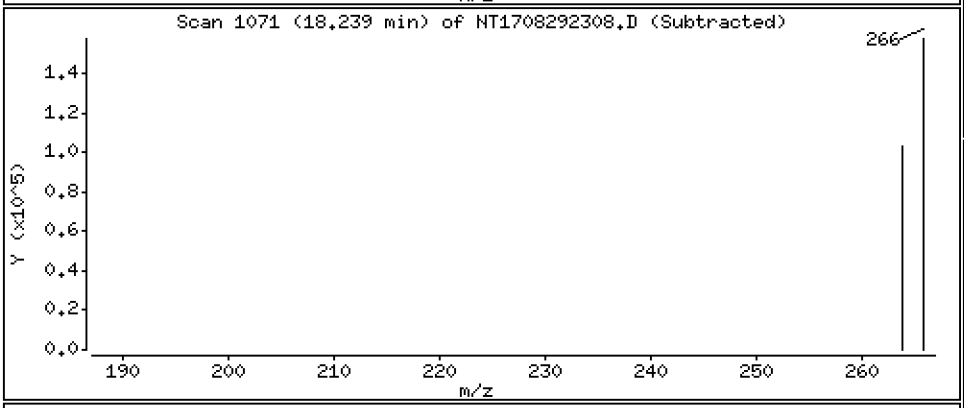
Column diameter: 0.25

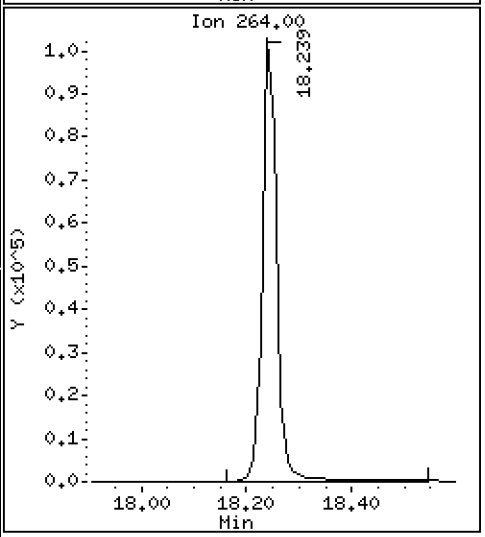
58 Pentachlorophenol

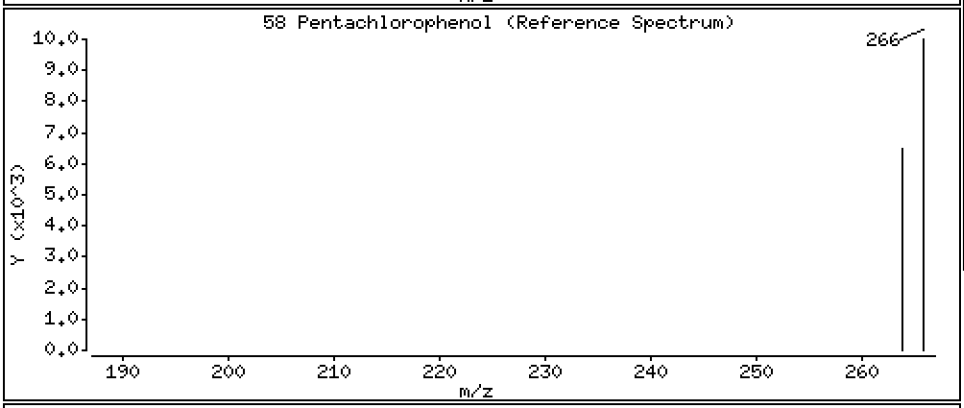
Concentration: 13.44 ug/mL

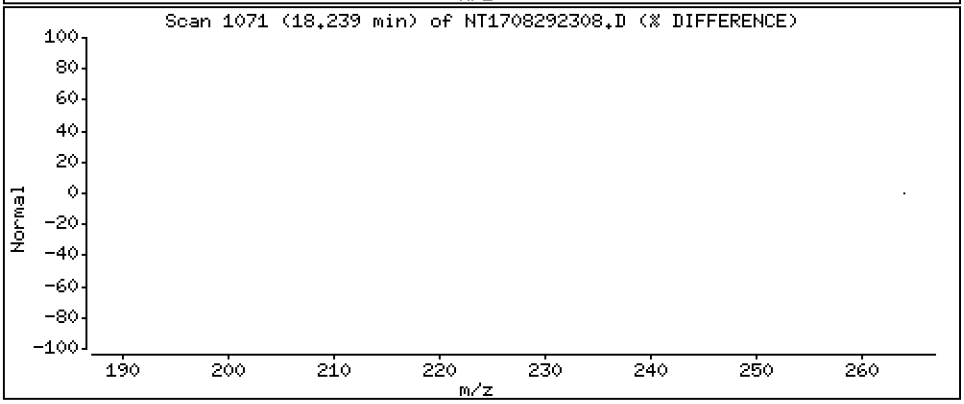












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292308.D

Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

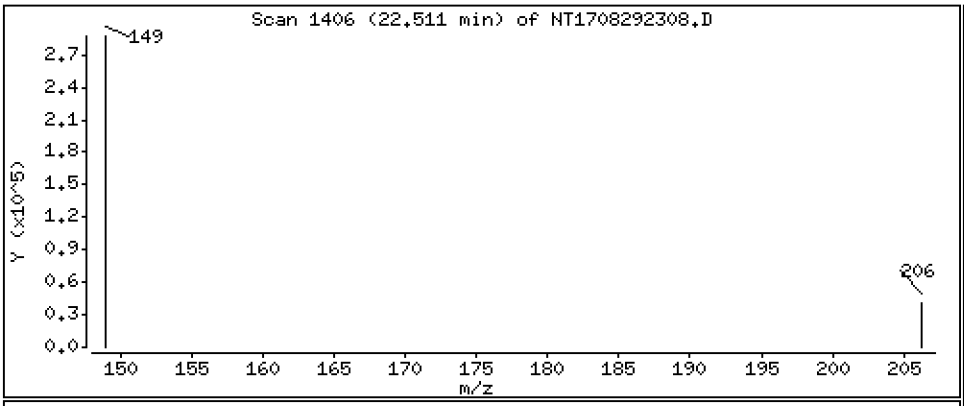
Operator: JGR

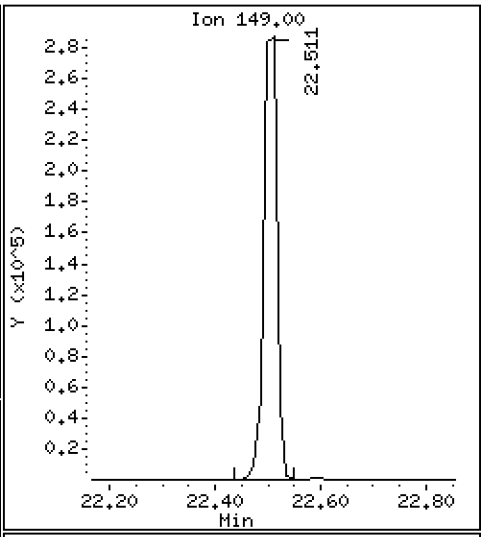
Column phase: ZB-5msi

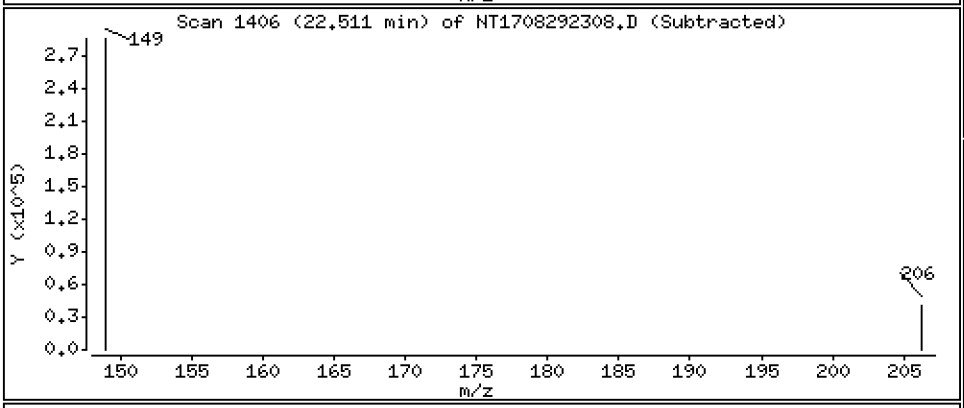
Column diameter: 0.25

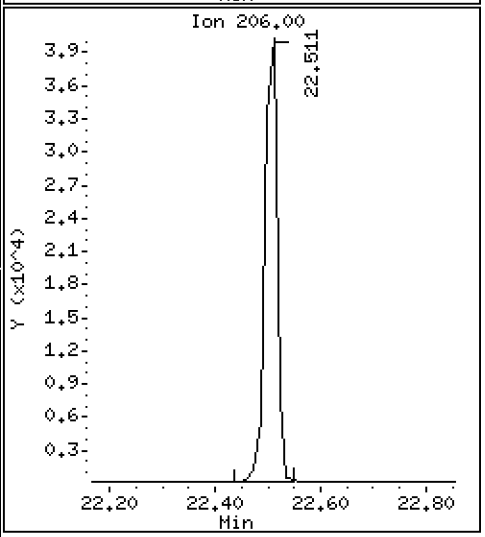
67 Butylbenzylphthalate

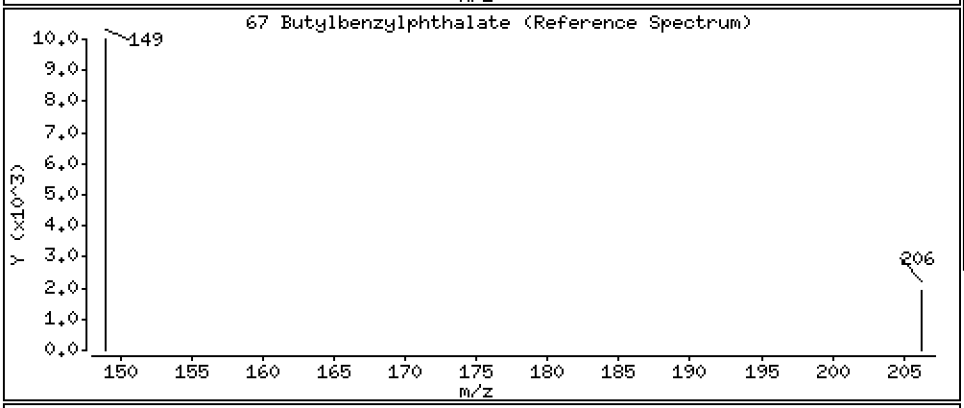
Concentration: 3.935 ug/mL

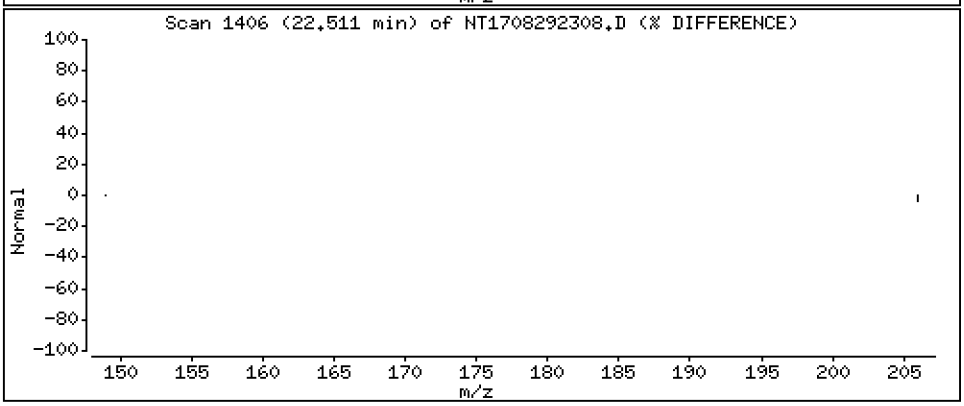












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292308.D

Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

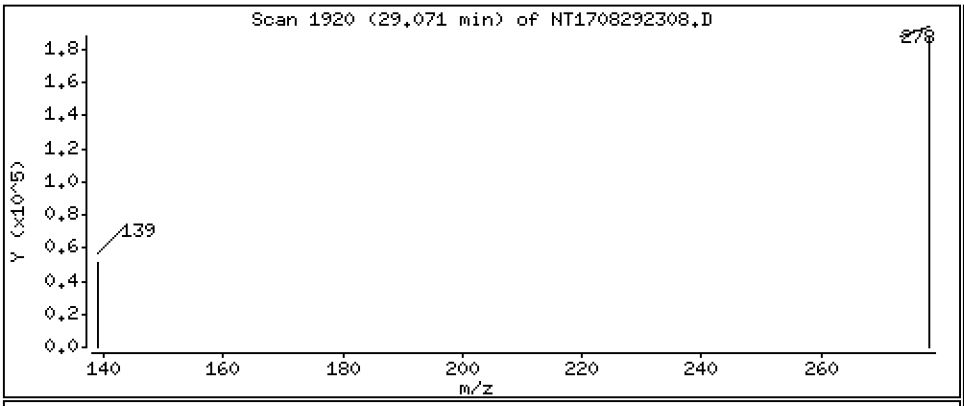
Operator: JGR

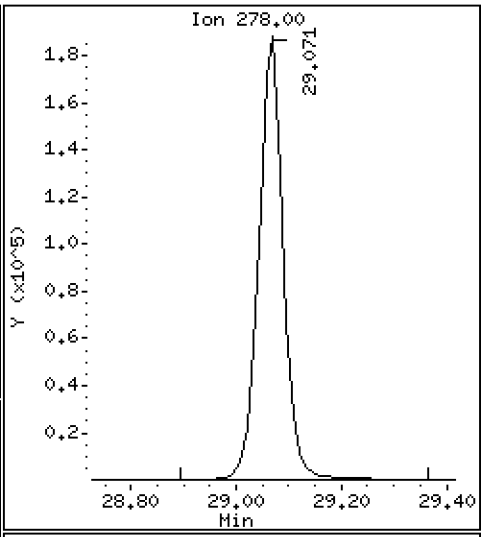
Column phase: ZB-5msi

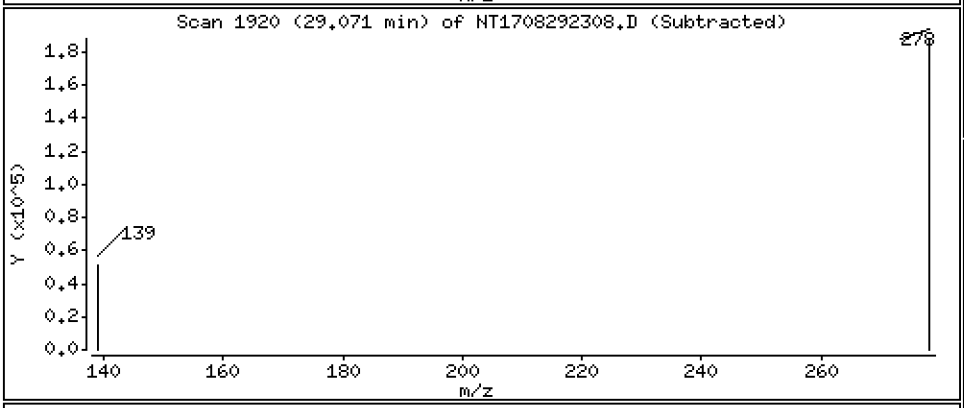
Column diameter: 0.25

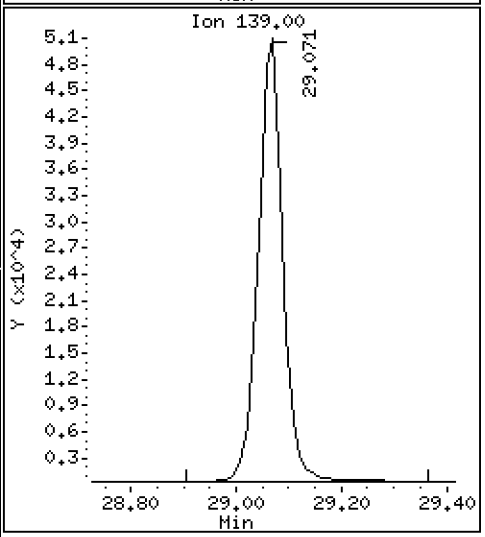
79 Dibenzo(a,h)anthracene

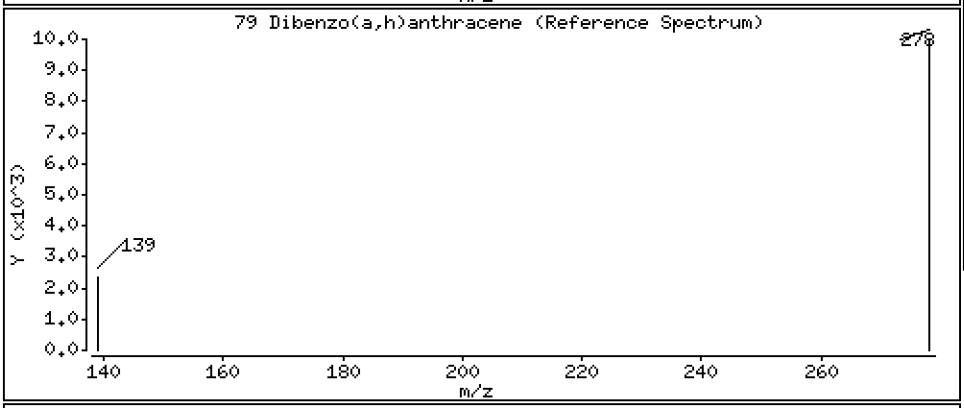
Concentration: 4.801 ug/mL

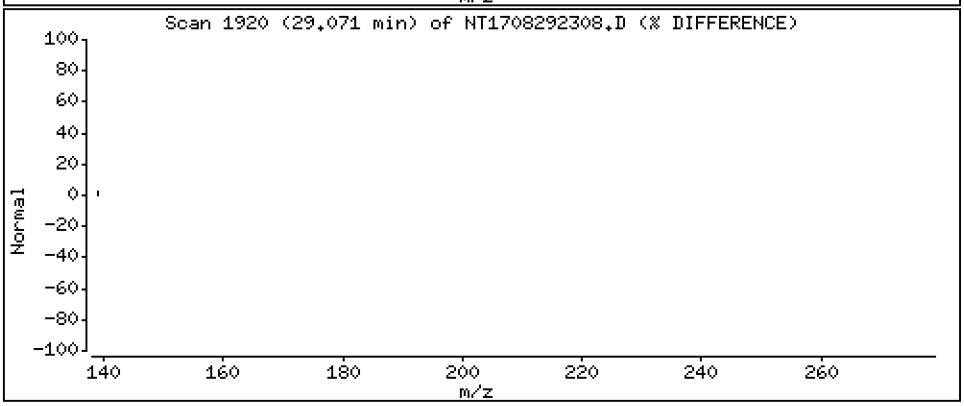












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292308.D

Date : 29-AUG-2023 15:58

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-BSD1

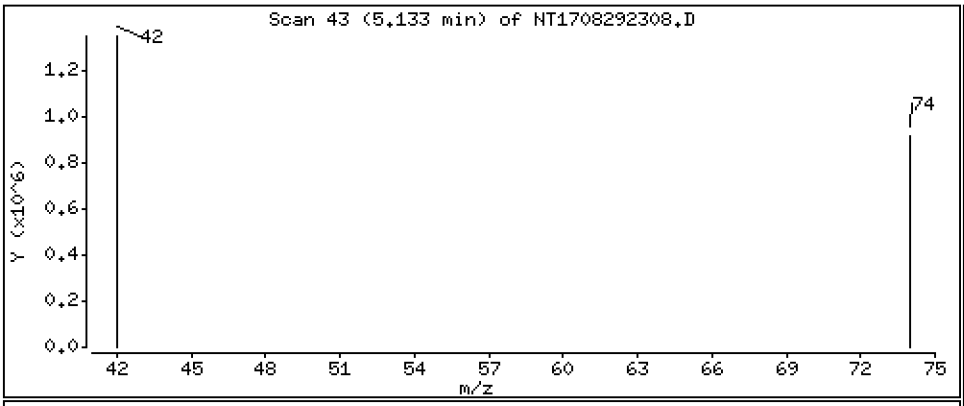
Operator: JGR

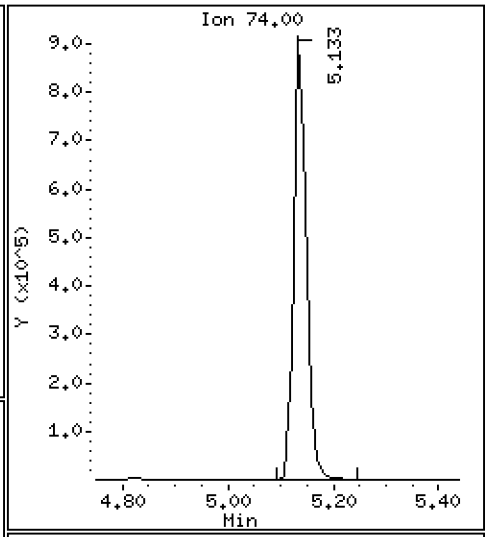
Column phase: ZB-5msi

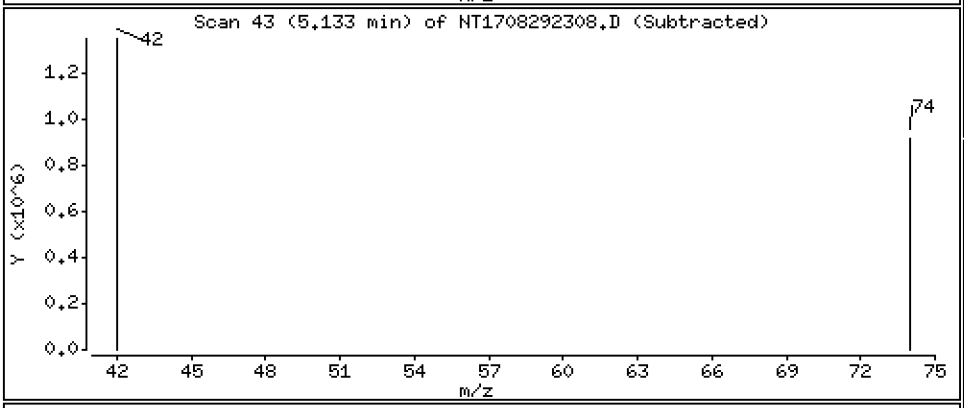
Column diameter: 0.25

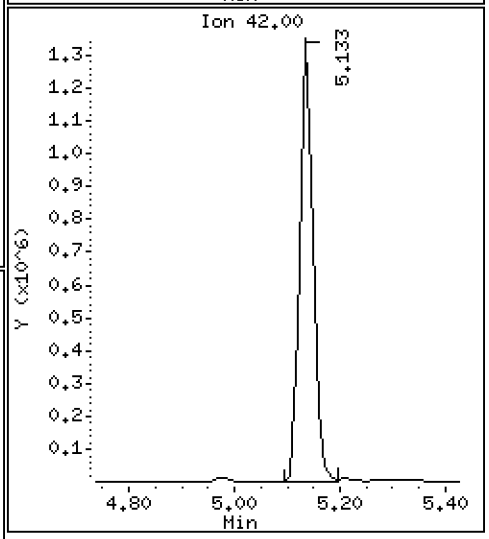
90 N-Nitrosodimethylamine

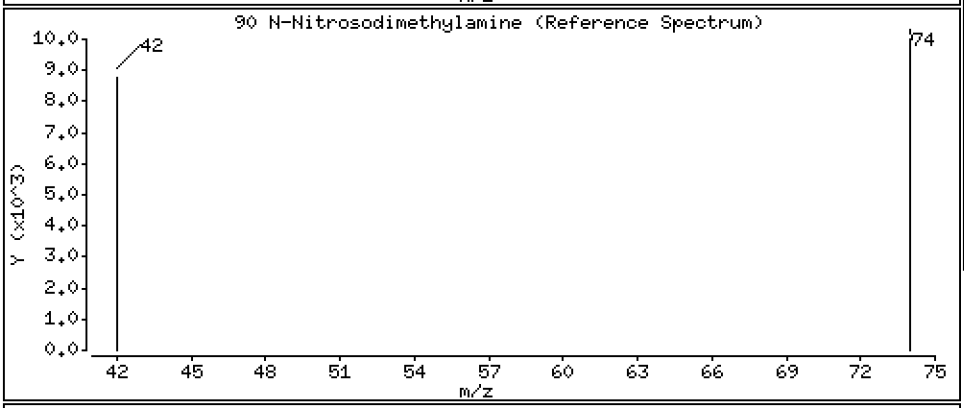
Concentration: 10.87 ug/mL

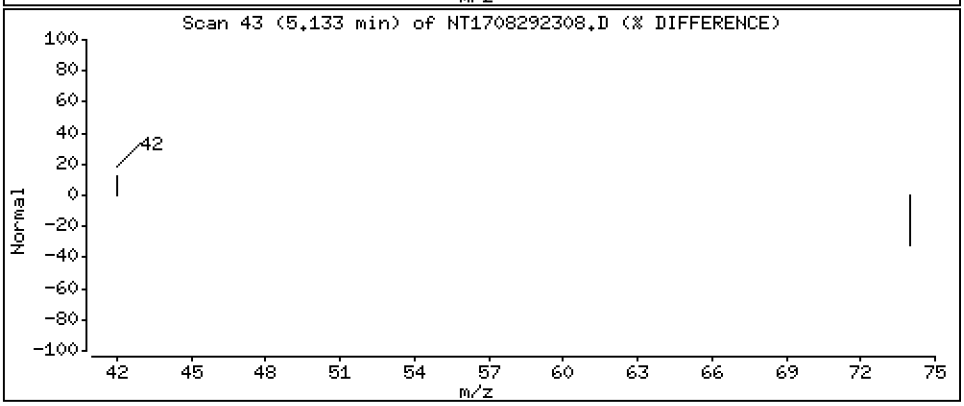












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292308.D
Lab Smp Id: BLH0669-BSD1
Inj Date : 29-AUG-2023 15:58
Operator : JGR Inst ID: nt17.i
Smp Info : BLH0669-BSD1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 09:25 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.209	7.196	(0.767)	989212	6.76751	6.768(R)
	3 Phenol	94	8.776	8.776	(0.934)	871917	3.91305	3.913
	7 1,3-Dichlorobenzene	146	9.336	9.349	(0.993)	518522	3.44026	3.440
*	8 1,4-Dichlorobenzene-d4	152	9.400	9.413	(1.000)	352030	4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.004)	509097	3.49022	3.490
	11 Benzyl alcohol	79	9.669	9.669	(1.029)	634388	4.11342	4.113
	12 1,2-Dichlorobenzene	146	9.796	9.797	(1.042)	496279	3.50745	3.507
	13 2-Methylphenol	108	9.886	9.886	(1.052)	453371	3.35560	3.356
	15 4-Methylphenol	108	10.154	10.154	(1.080)	510594	3.61577	3.616
	16 N-Nitroso-di-n-propylamine	70	10.218	10.218	(1.087)	582193	4.03166	4.032
	22 2,4-Dimethylphenol	107	11.189	11.189	(0.942)	1089282	8.33479	8.335
	24 Benzoic acid	105	11.419	11.329	(0.961)	2663491	26.9735	26.97
	26 1,2,4-Trichlorobenzene	180	11.789	11.789	(0.992)	321443	3.59977	3.600
*	27 Naphthalene-d8	136	11.878	11.878	(1.000)	1302547	4.00000	
	30 Hexachlorobutadiene	225	12.273	12.273	(1.033)	176983	4.23223	4.232
	39 Dimethylphthalate	163	14.977	14.977	(0.967)	742559	4.40986	4.410
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	518082	4.00000	
	50 Diethylphthalate	149	16.430	16.417	(1.061)	892109	5.09528	5.095
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	459134	4.36028	4.360
	57 Hexachlorobenzene	284	17.881	17.894	(0.966)	153114	4.43816	4.438
	58 Pentachlorophenol	266	18.238	18.251	(0.986)	314664	13.4405	13.44
*	59 Phenanthrene-d10	188	18.506	18.506	(1.000)	732439	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	461977	6.64457	6.645(R)
	67 Butylbenzylphthalate	149	22.510	22.511	(0.958)	524558	3.93456	3.935
*	69 Chrysene-d12	240	23.506	23.506	(1.000)	502427	4.00000	
*	77 Perylene-d12	264	26.223	26.223	(1.000)	441994	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.071	29.071	(1.109)	626826	4.80143	4.801
	90 N-Nitrosodimethylamine	74	5.132	5.094	(0.546)	1617029	10.8719	10.87

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292308.D
Lab Smp Id: BLH0669-BSD1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 29-AUG-2023
Calibration Time: 12:37
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	296489	148245	592978	352030	18.73
27 Naphthalene-d8	1098892	549446	2197784	1302547	18.53
42 Acenaphthene-d10	443071	221536	886142	518082	16.93
59 Phenanthrene-d10	627744	313872	1255488	732439	16.68
69 Chrysene-d12	404122	202061	808244	502427	24.33
77 Perylene-d12	417323	208662	834646	441994	5.91

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.40	-0.14
27 Naphthalene-d8	11.88	11.38	12.38	11.88	-0.00
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	-0.00
59 Phenanthrene-d10	18.51	18.01	19.01	18.51	-0.00
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.22	25.72	26.72	26.22	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292308.D

Lab ID: BLH0669-BSD1
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   29-AUG-2023 15:58

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.961	0.954	0.0075	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1708292304.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1038A

MS / MS DUPLICATE RECOVERY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	08/29/23 16:35
Batch:	BLH0669	Laboratory ID:	BLH0669-MS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike
Initial/Final:	10.6 g / 1 mL	Source Sample:	LDW23-SC1038A

COMPOUND	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	Q	MS CONCENTRATION (ug/kg dry)	Q	MS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	500.16	1.1	J	333		66.4	36 - 120
1,2-Dichlorobenzene	500.16	ND	U	335		66.9	36 - 120
Benzyl Alcohol	500.16	23.7		408		76.8	25 - 123
Benzoic acid	2300.7	53.8	J	1470		61.4	10 - 160
2,4-Dimethylphenol	1300.4	ND	U	1720	*	132 *	10 - 120
1,2,4-Trichlorobenzene	500.16	ND	U	351		70.2	35 - 120
N-Nitrosodiphenylamine	500.16	1.9	J	455		90.5	27 - 120
Pentachlorophenol	1300.4	ND	U	1460		113	26 - 120

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SC1038A

MS / MS DUPLICATE RECOVERY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	08/29/23 17:13
Batch:	BLH0669	Laboratory ID:	BLH0669-MSD1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	Matrix Spike Dup
Initial/Final:	10.6 g / 1 mL	Source Sample:	LDW23-SC1038A

COMPOUND	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	Q	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	500.16	333		66.4	0.0519	30	36 - 120
1,2-Dichlorobenzene	500.16	331		66.3	0.990	30	36 - 120
Benzyl Alcohol	500.16	439		83.1	7.35	30	25 - 123
Benzoic acid	2300.7	1700		71.7	14.9	30	10 - 160
2,4-Dimethylphenol	1300.4	1720	*	132 *	0.103	30	10 - 120
1,2,4-Trichlorobenzene	500.16	351		70.2	0.0296	30	35 - 120
N-Nitrosodiphenylamine	500.16	455		90.6	0.118	30	27 - 120
Pentachlorophenol	1300.4	1470		113	0.0840	30	26 - 120

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292309.D

Date : 29-AUG-2023 16:35

Client ID:

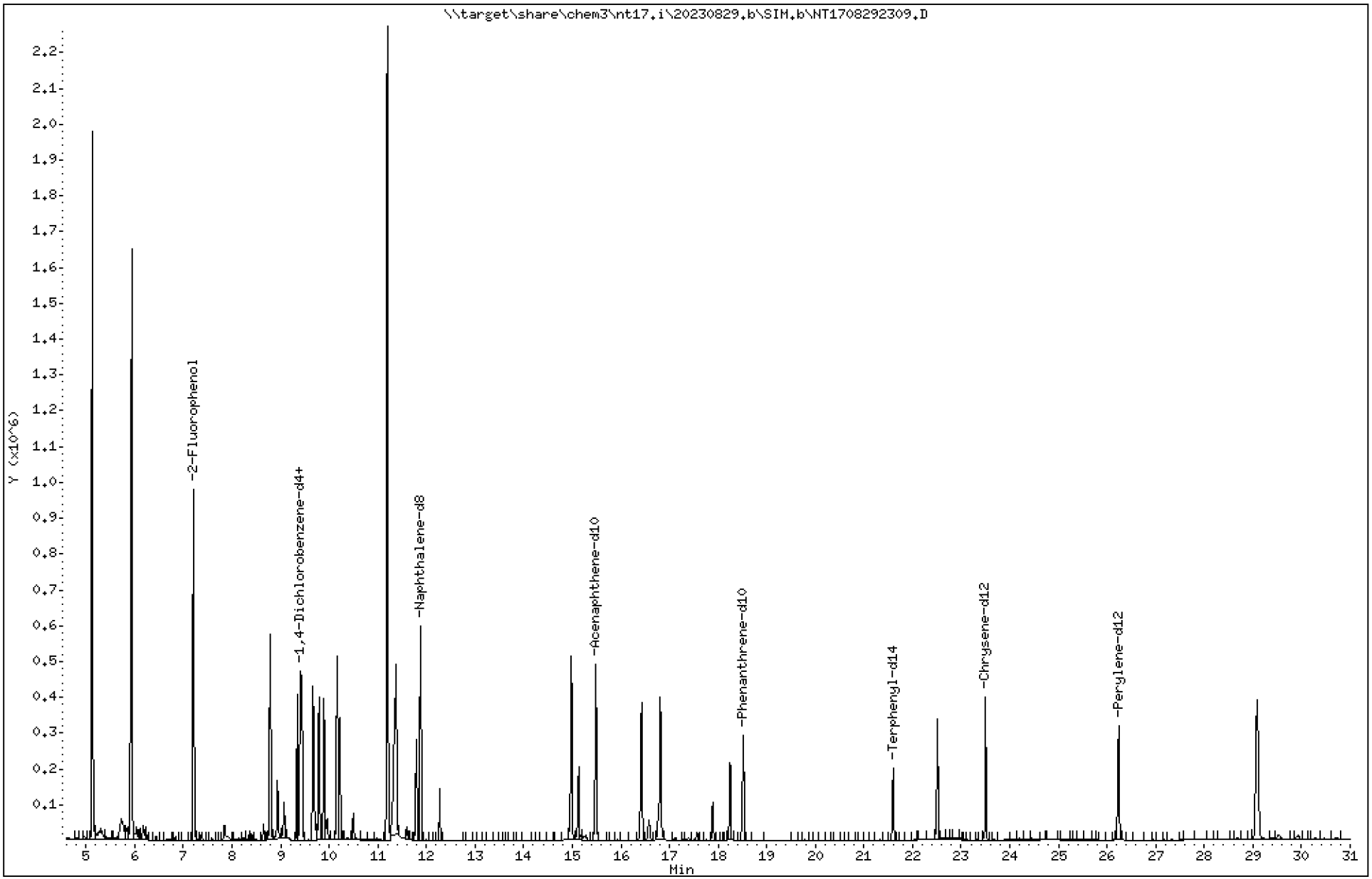
Sample Info: BLH0669-MS1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

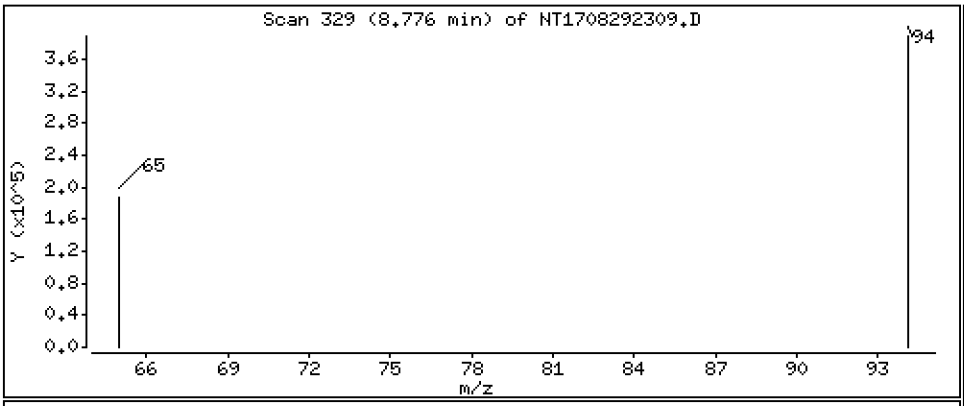
Operator: JGR

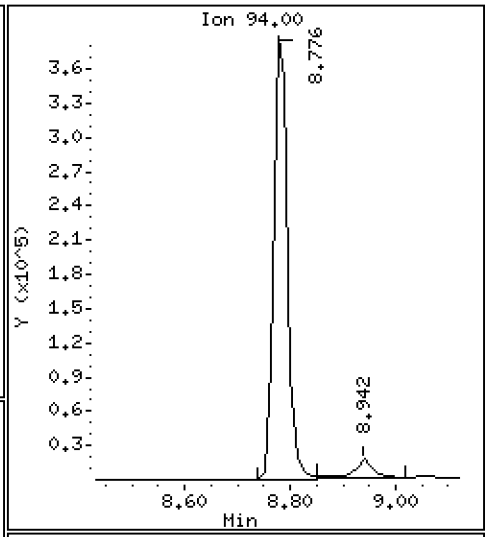
Column phase: ZB-5msi

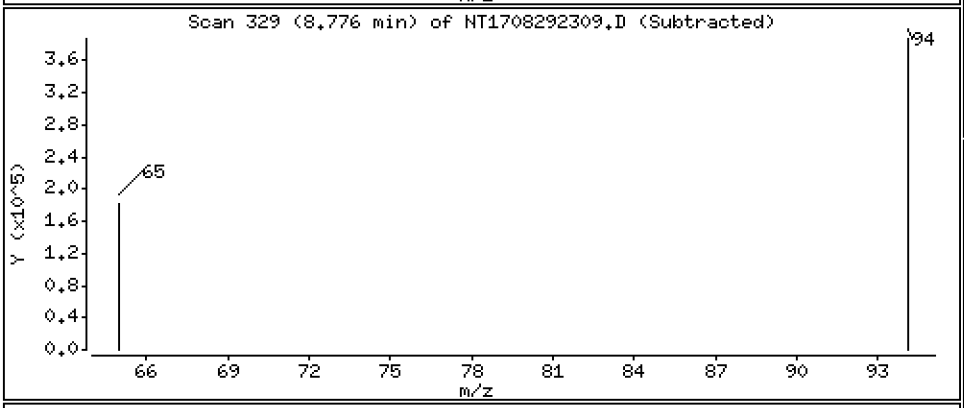
Column diameter: 0.25

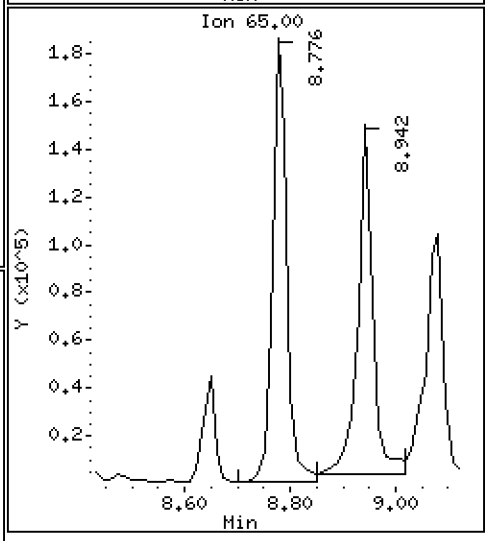
3 Phenol

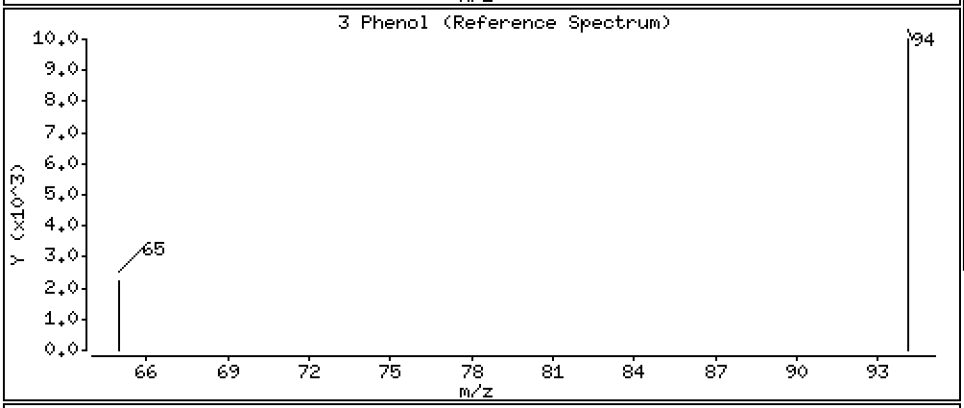
Concentration: 3.713 ug/mL

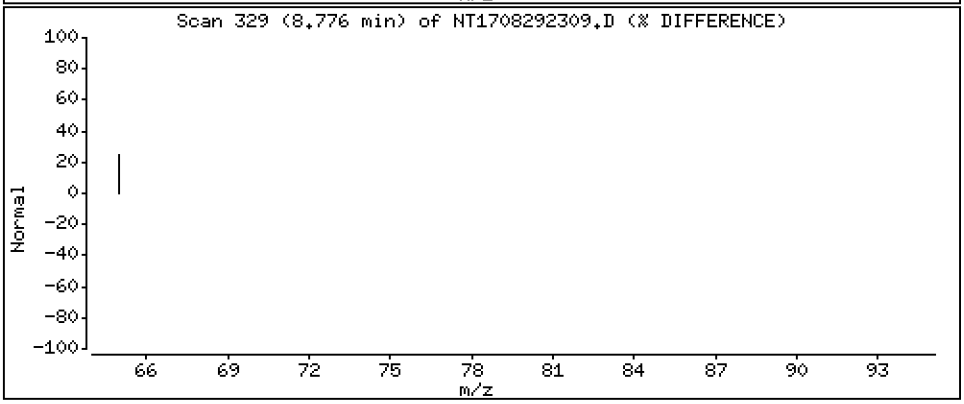












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

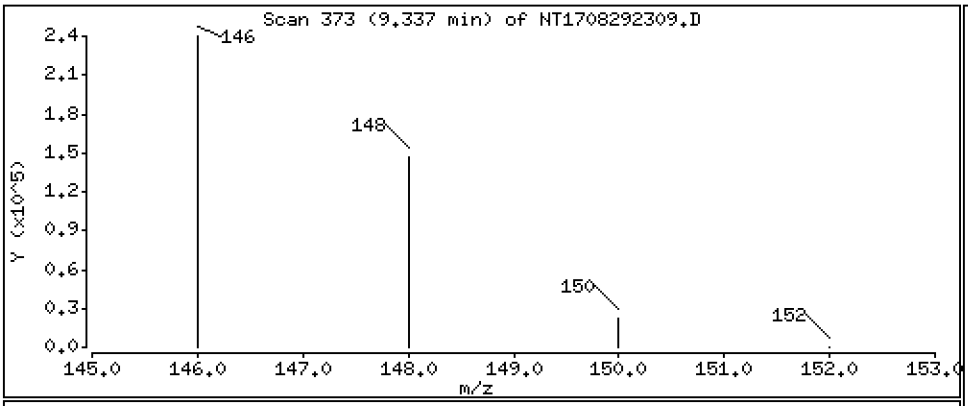
Operator: JGR

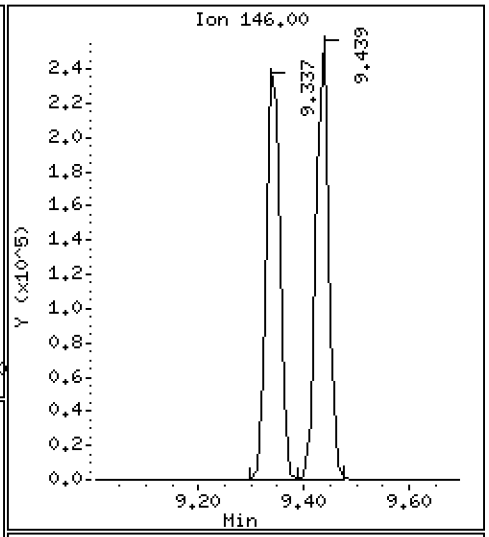
Column phase: ZB-5msi

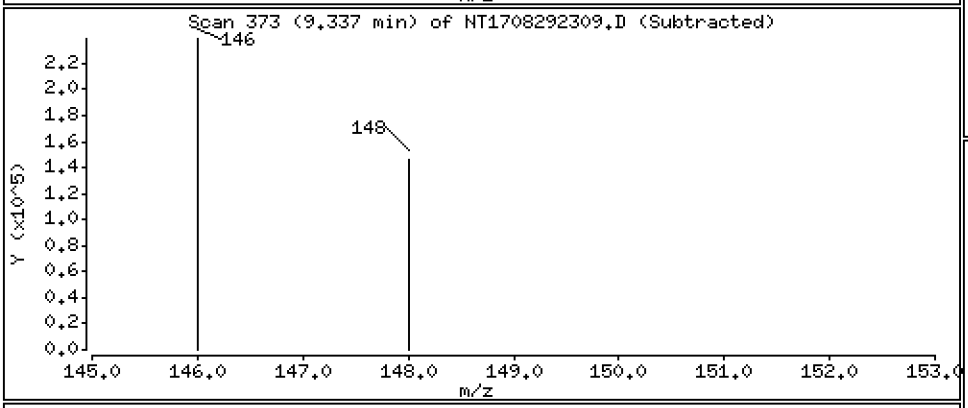
Column diameter: 0.25

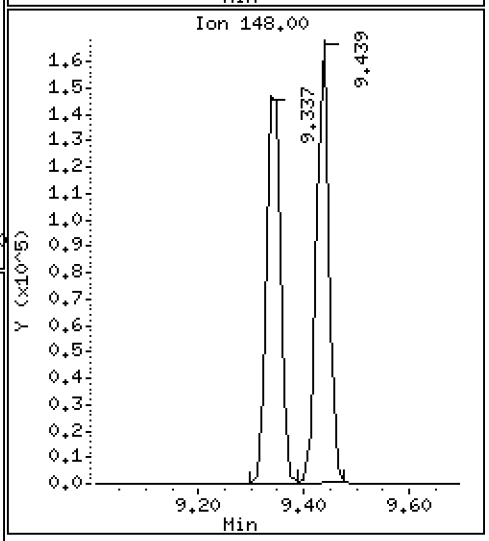
7 1,3-Dichlorobenzene

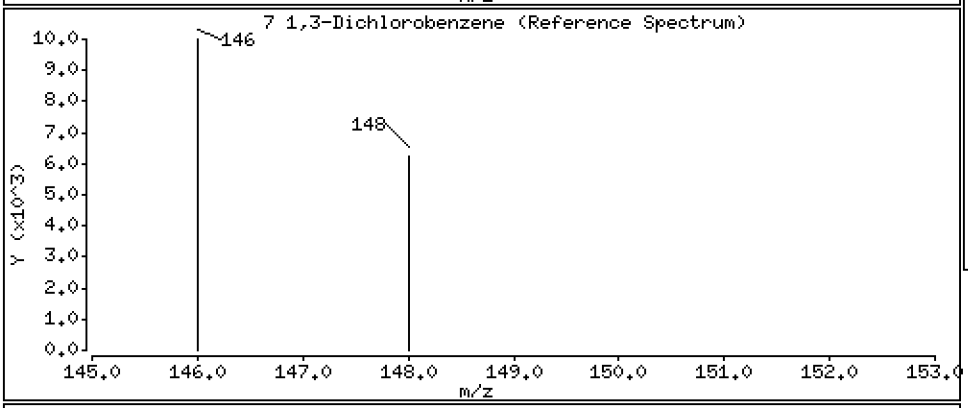
Concentration: 3.283 ug/mL

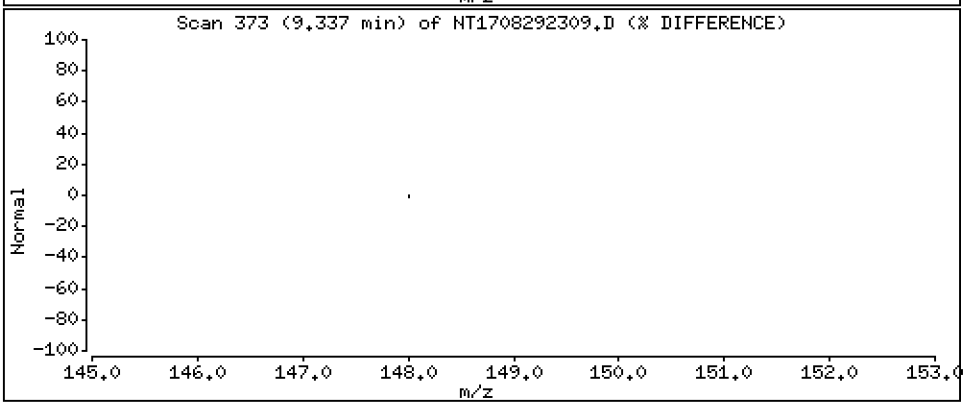












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

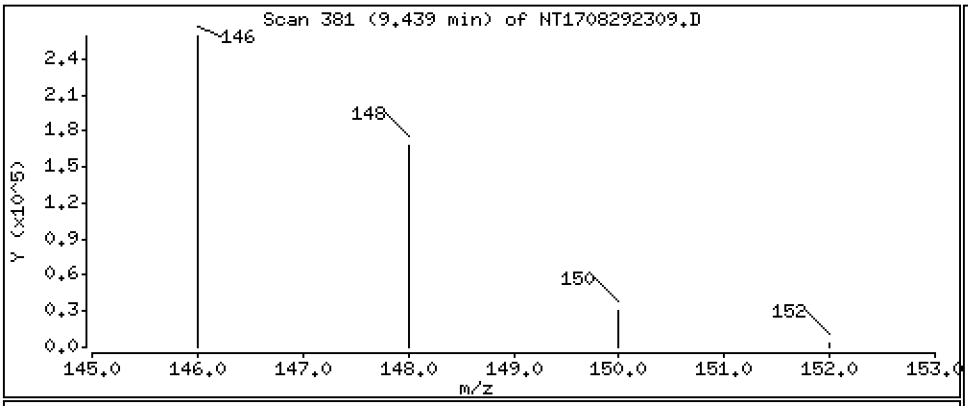
Operator: JGR

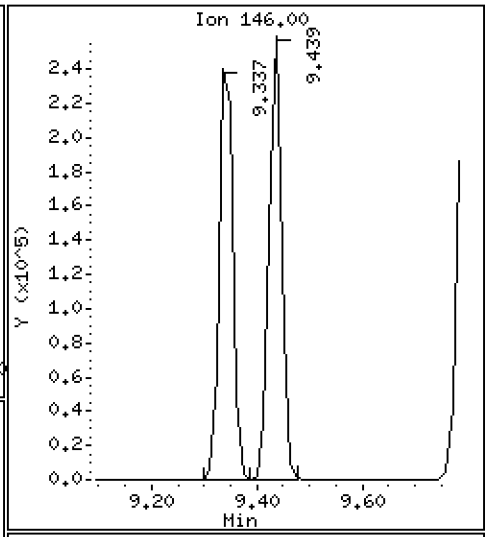
Column phase: ZB-5msi

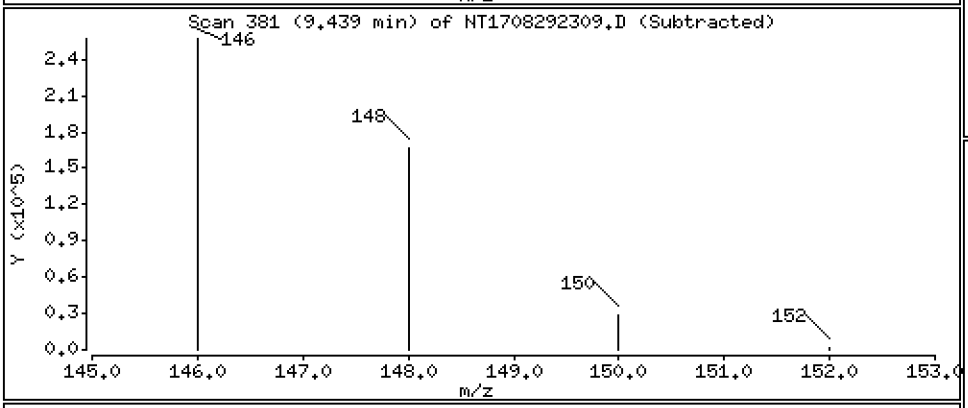
Column diameter: 0.25

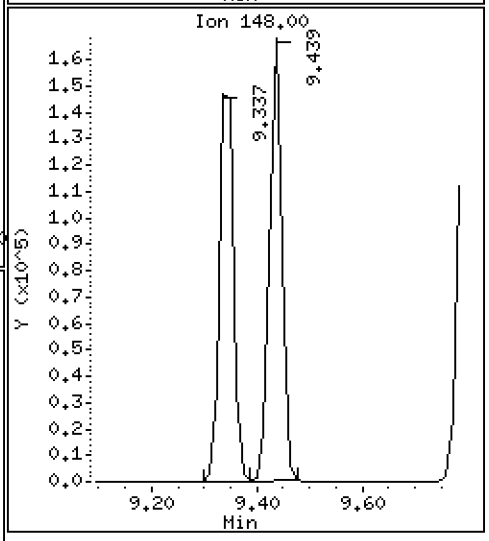
9 1,4-Dichlorobenzene

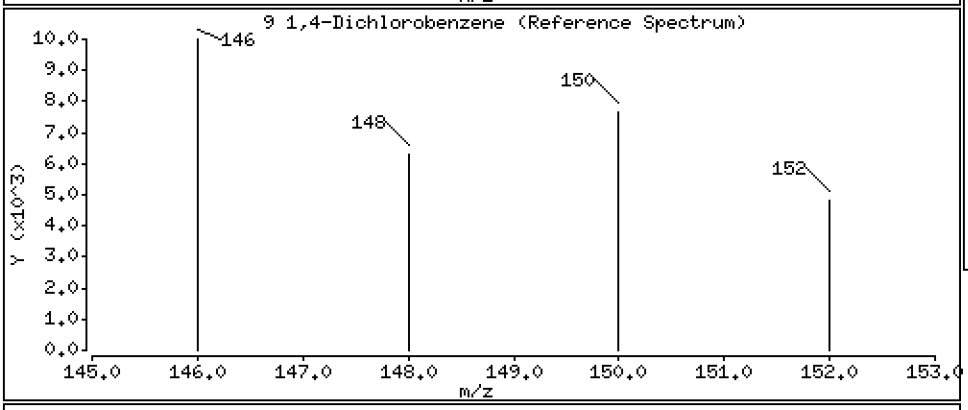
Concentration: 3.331 ug/mL

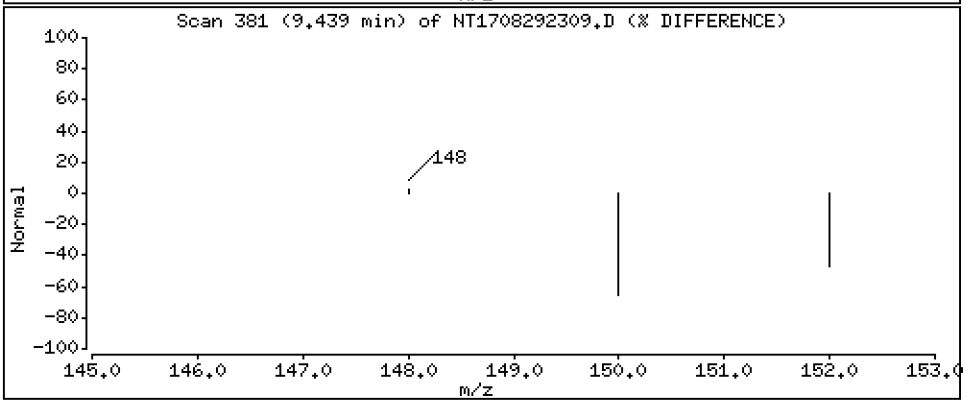












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

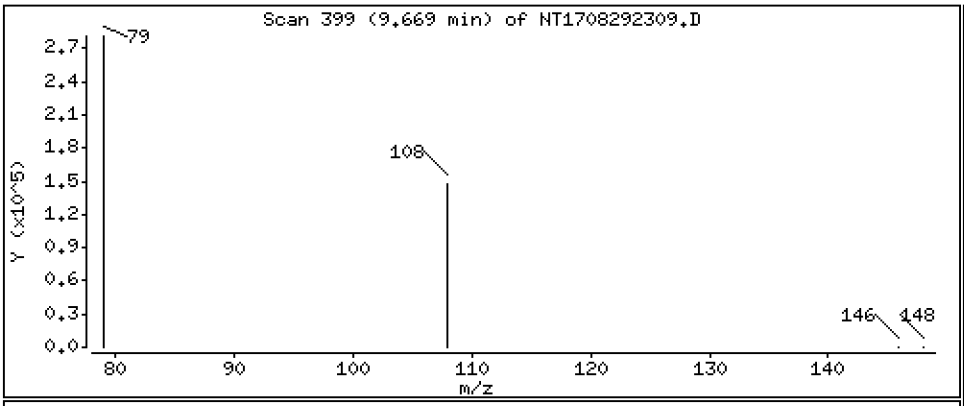
Operator: JGR

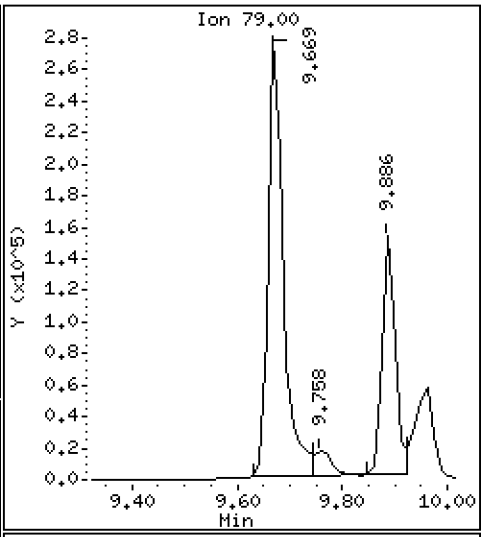
Column phase: ZB-5msi

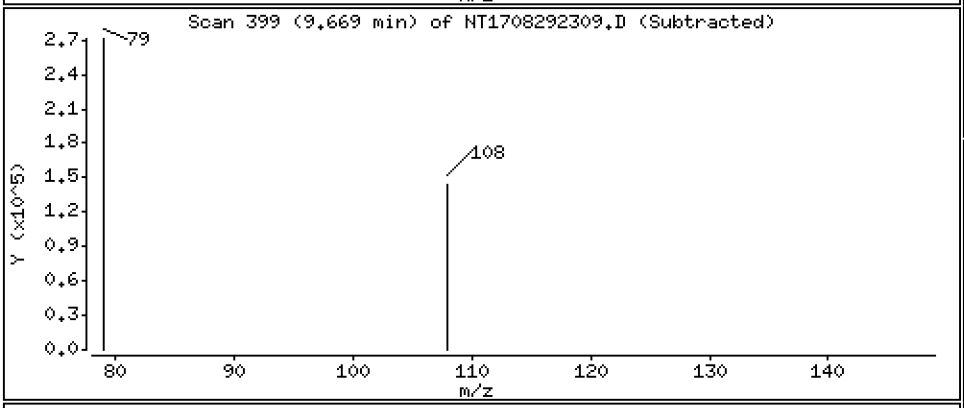
Column diameter: 0.25

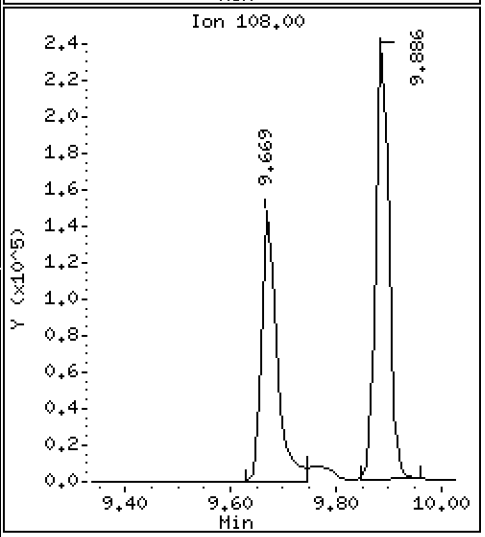
11 Benzyl alcohol

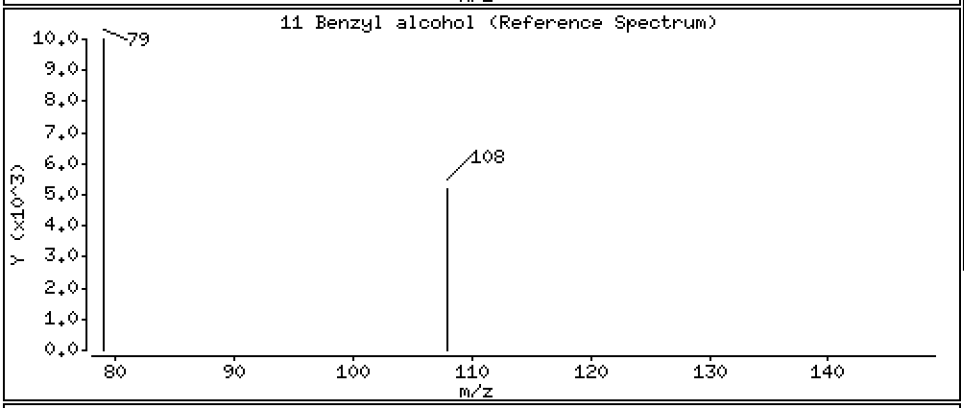
Concentration: 4.079 ug/mL

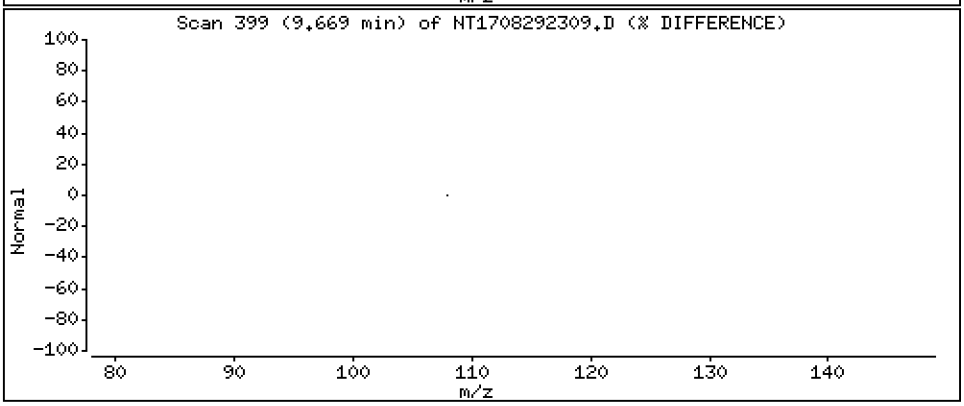












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

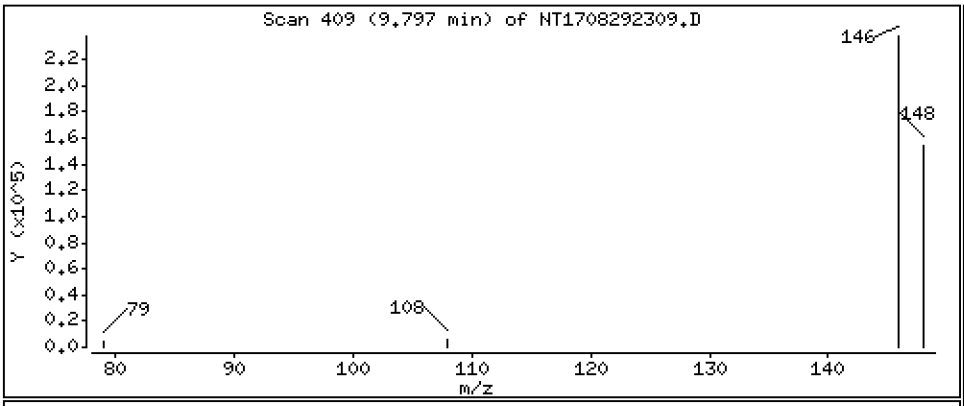
Operator: JGR

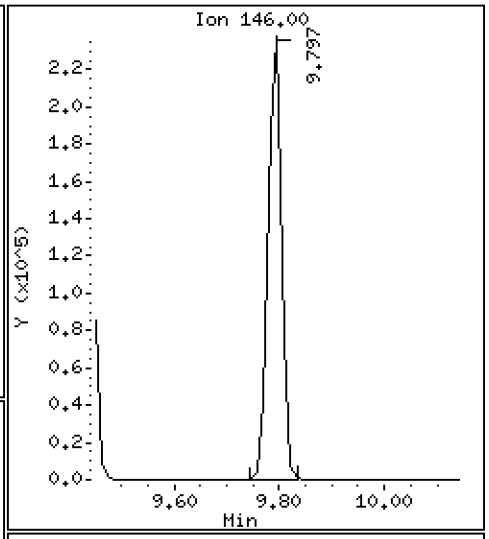
Column phase: ZB-5msi

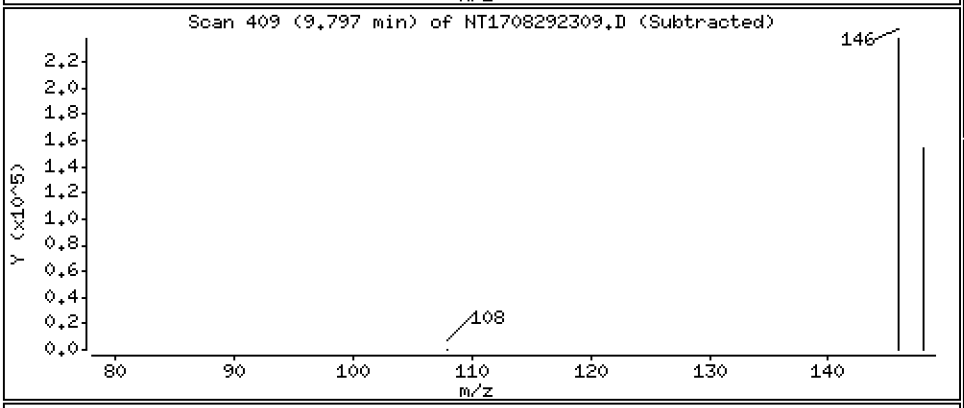
Column diameter: 0.25

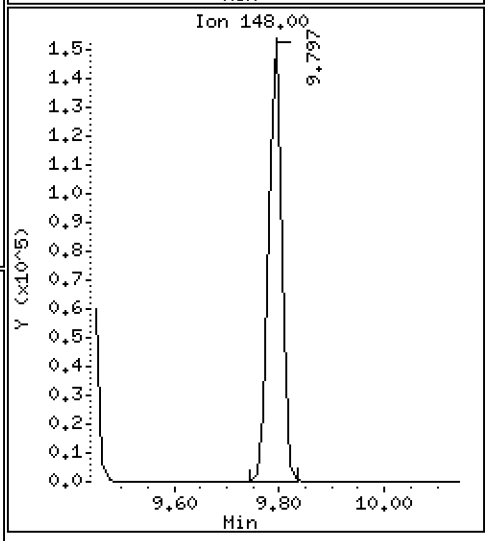
12 1,2-Dichlorobenzene

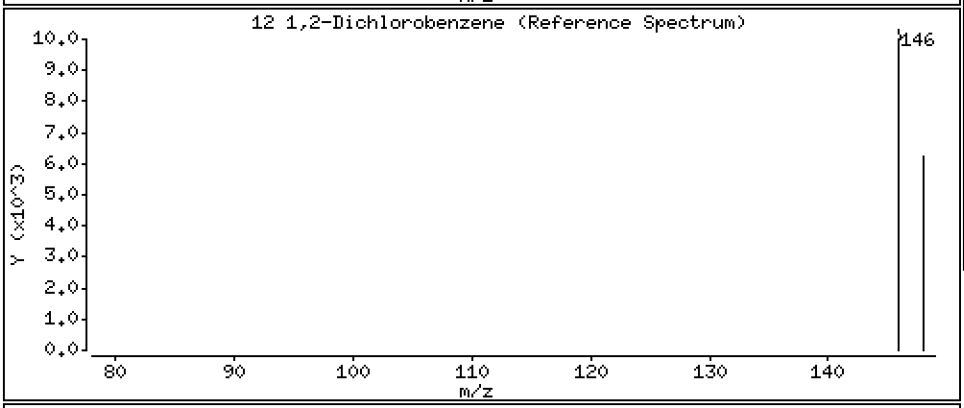
Concentration: 3.346 ug/mL

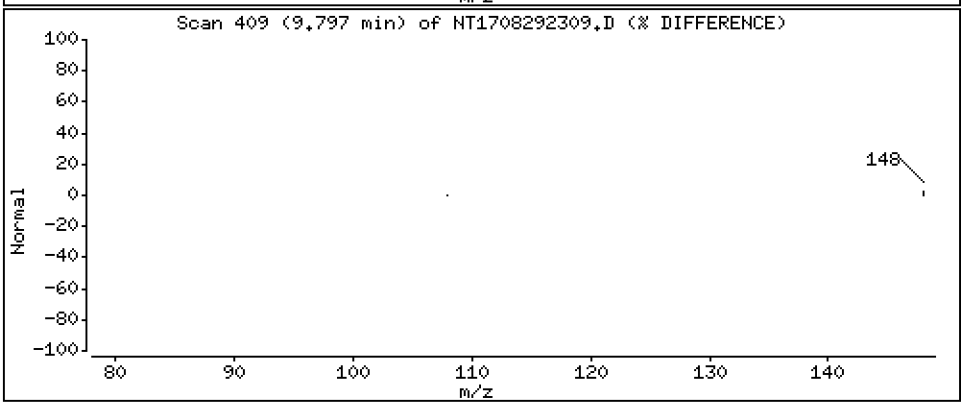












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

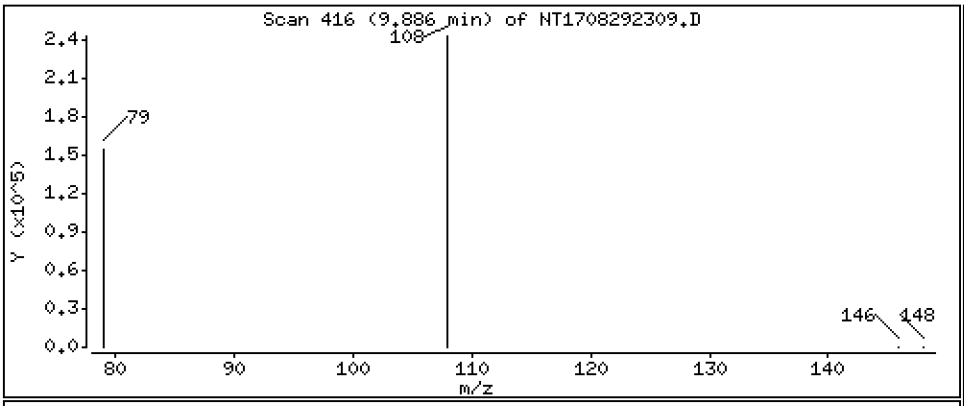
Operator: JGR

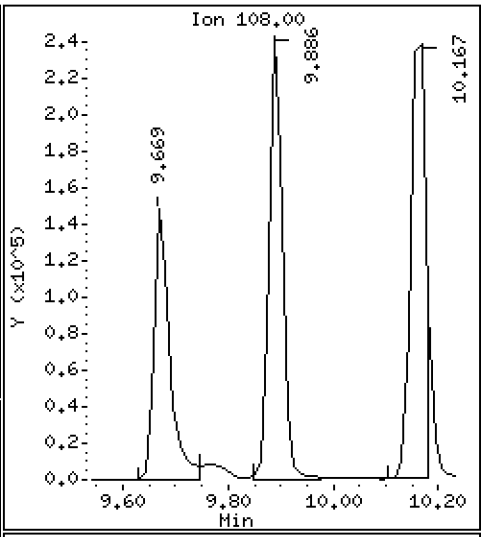
Column phase: ZB-5msi

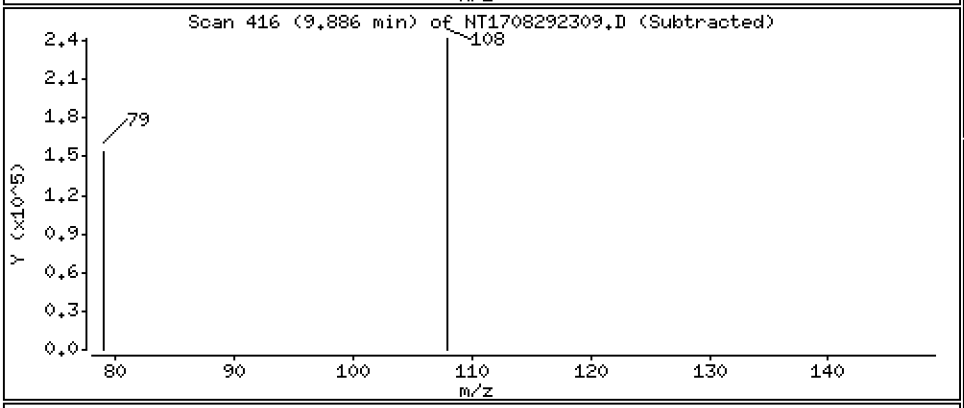
Column diameter: 0.25

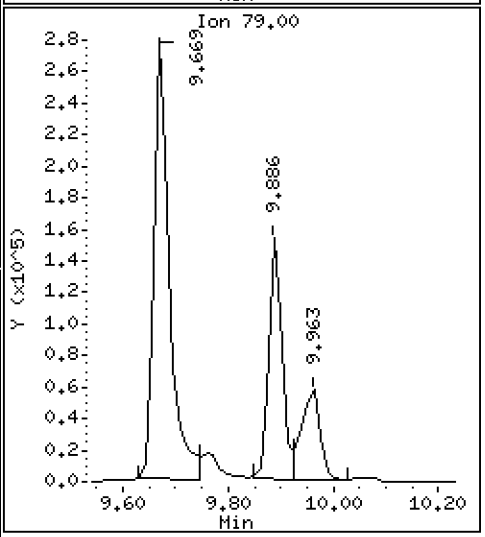
13 2-Methylphenol

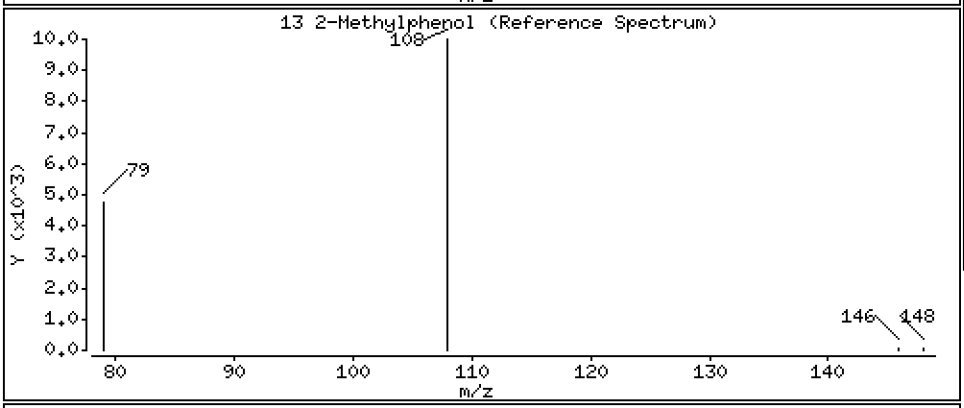
Concentration: 3.564 ug/mL

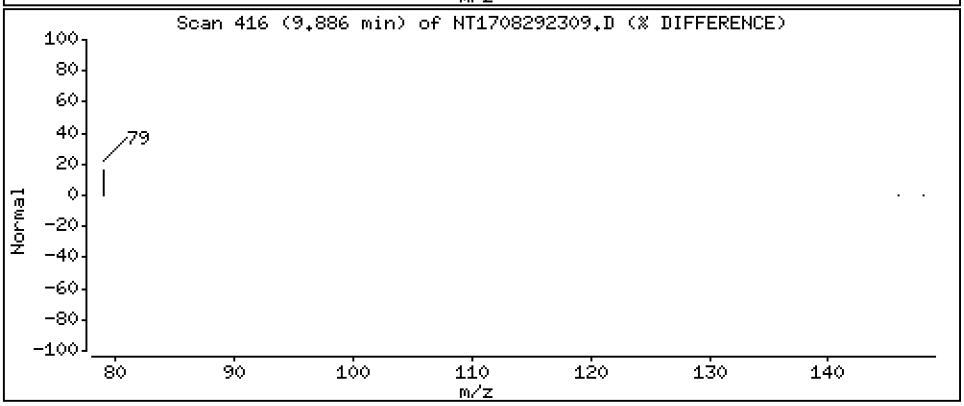












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

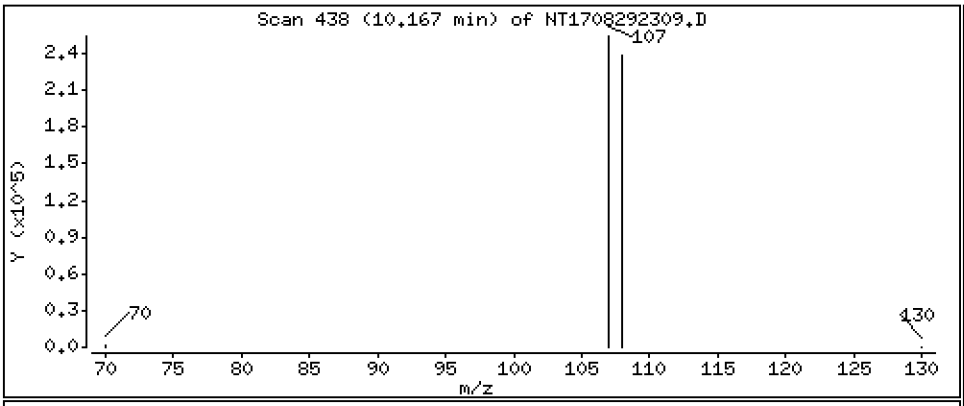
Operator: JGR

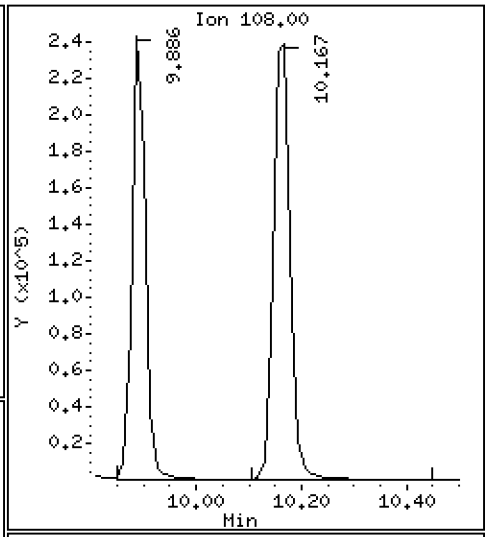
Column phase: ZB-5msi

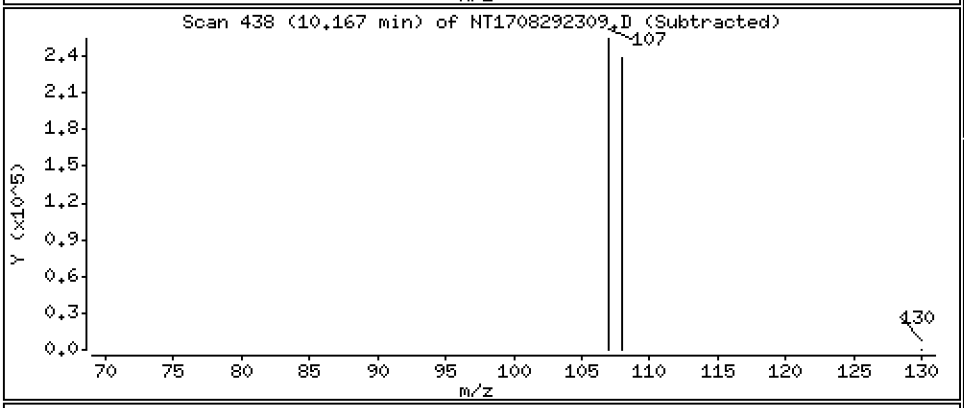
Column diameter: 0.25

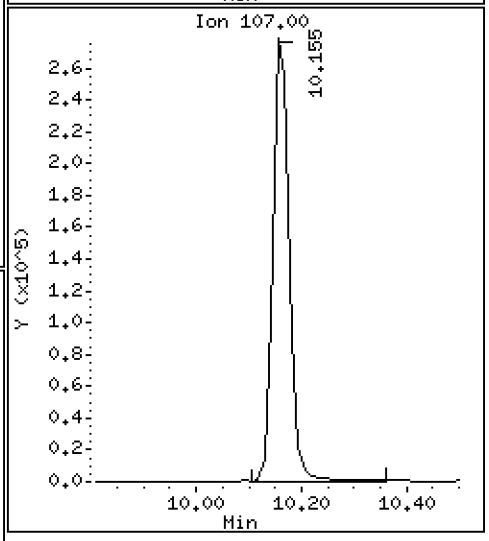
15 4-Methylphenol

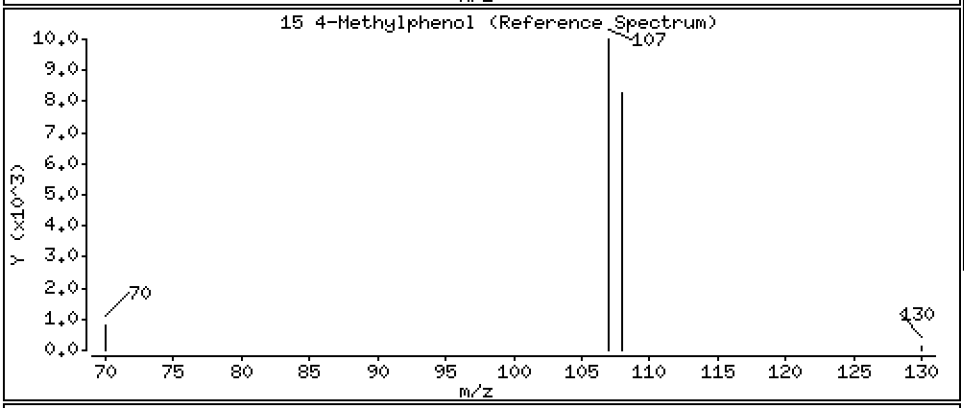
Concentration: 4.200 ug/mL

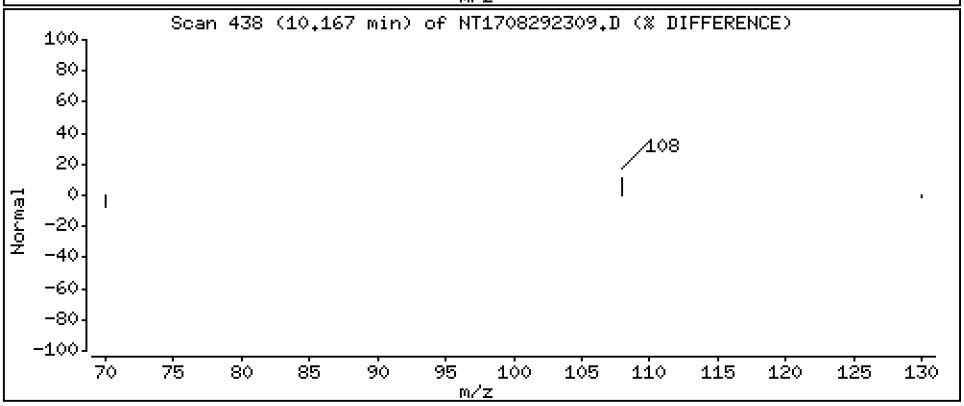












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

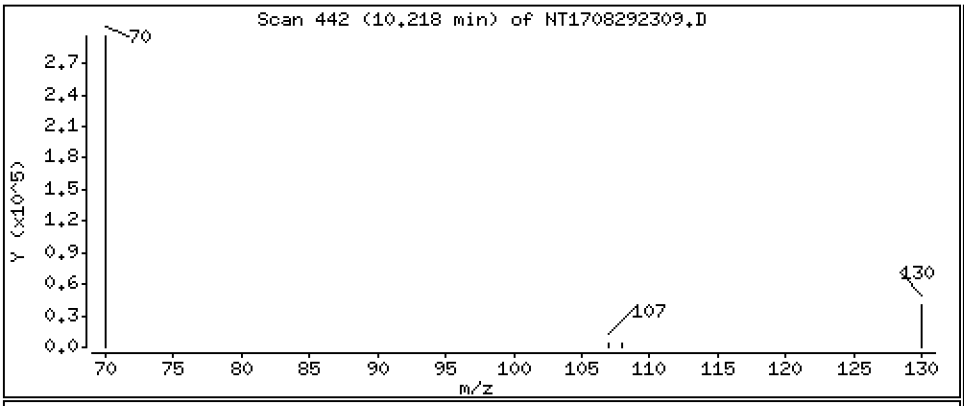
Operator: JGR

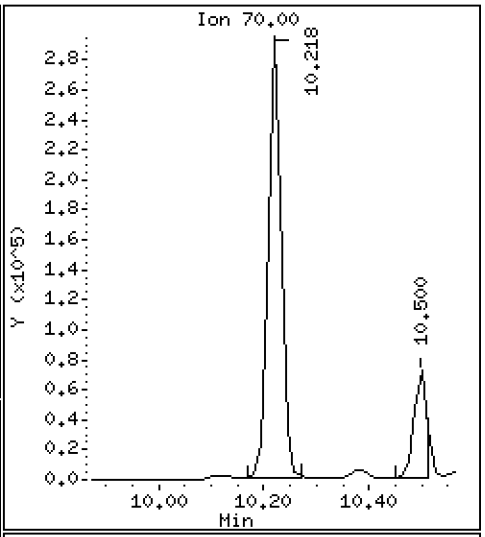
Column phase: ZB-5msi

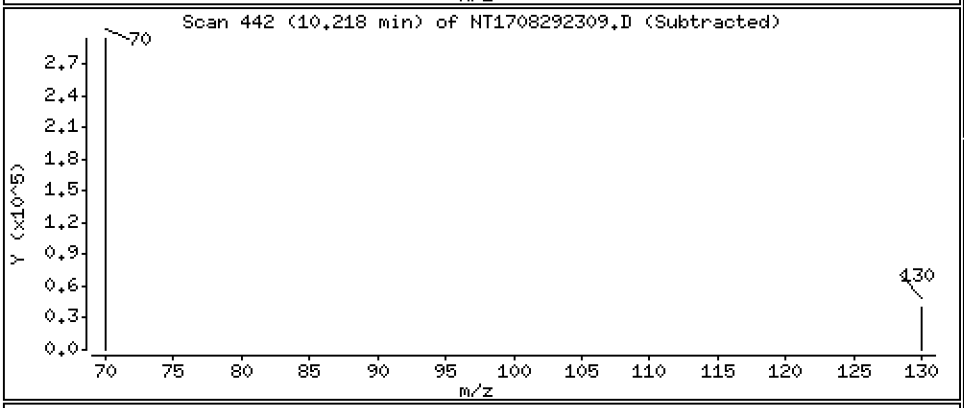
Column diameter: 0.25

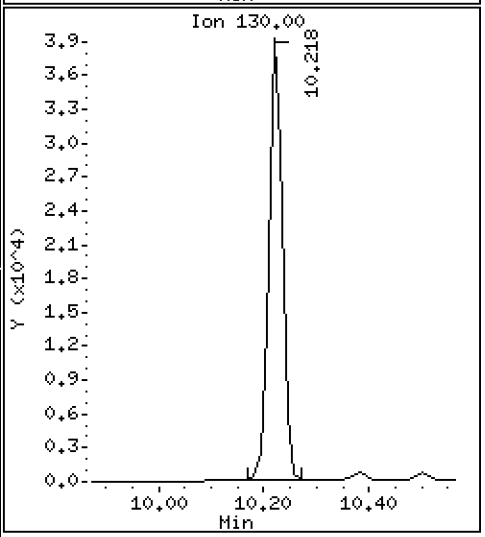
16 N-Nitroso-di-n-propylamine

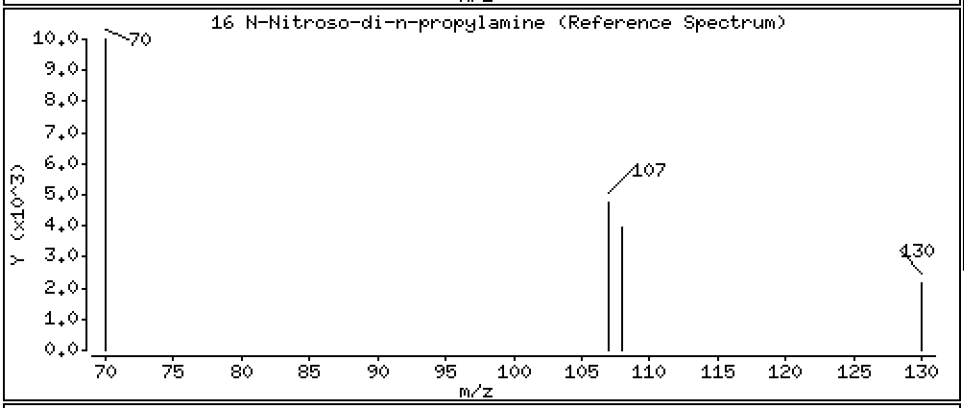
Concentration: 3.919 ug/mL

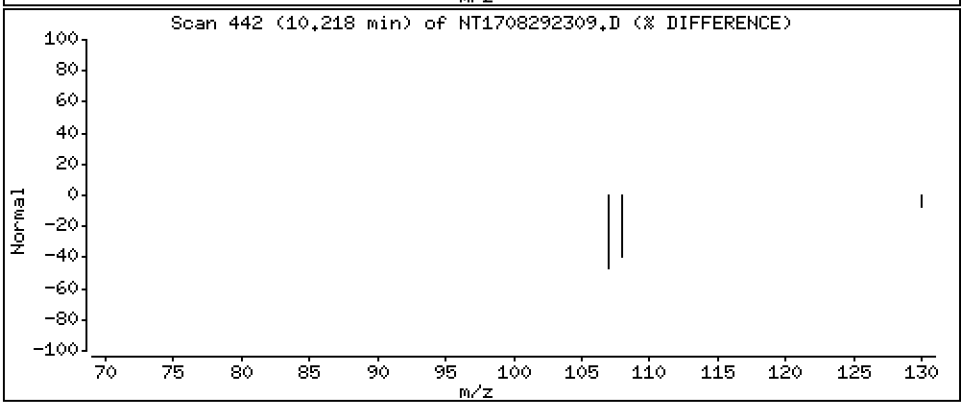












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

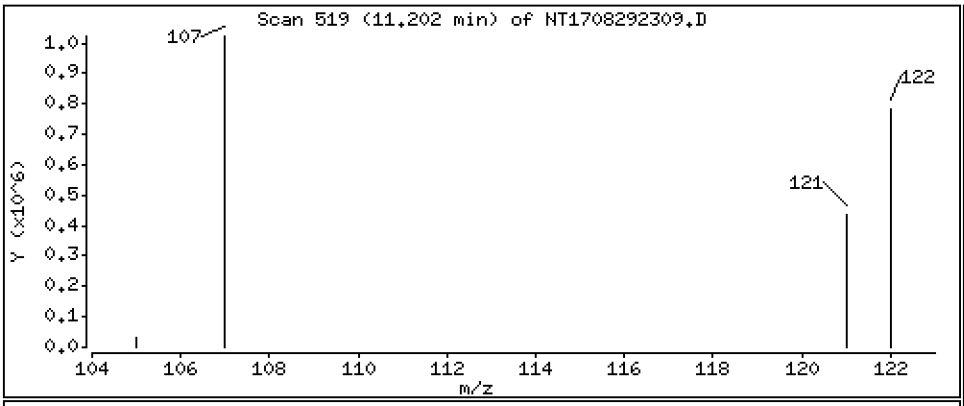
Operator: JGR

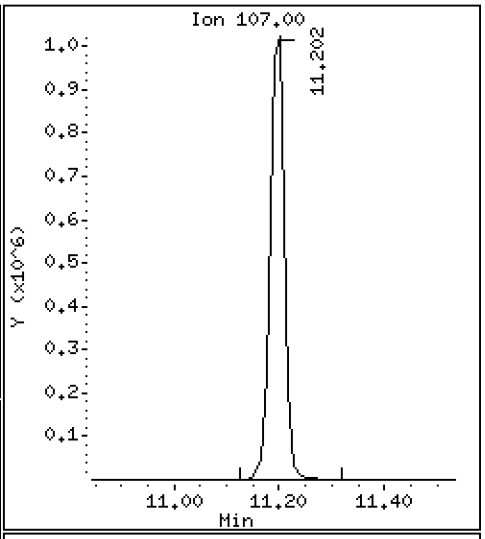
Column phase: ZB-5msi

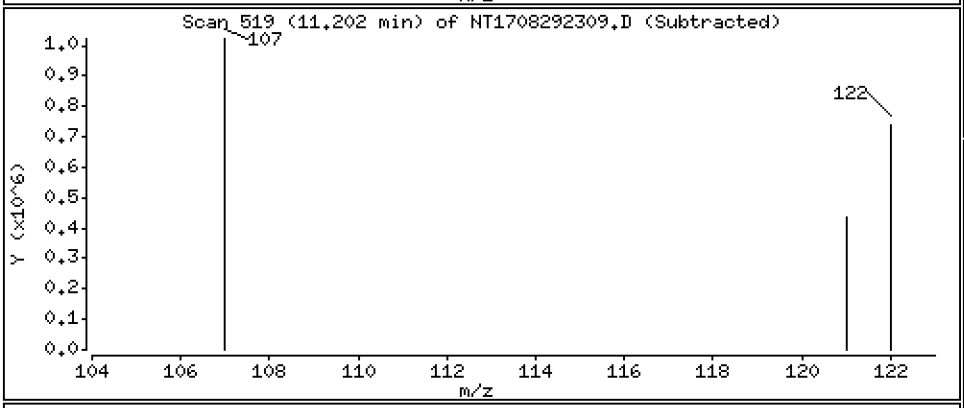
Column diameter: 0.25

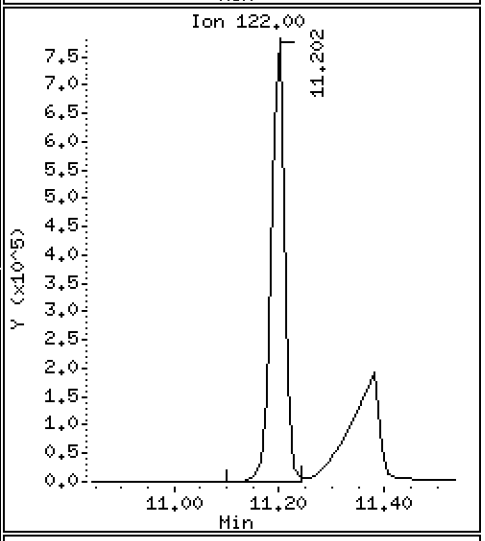
22 2,4-Dimethylphenol

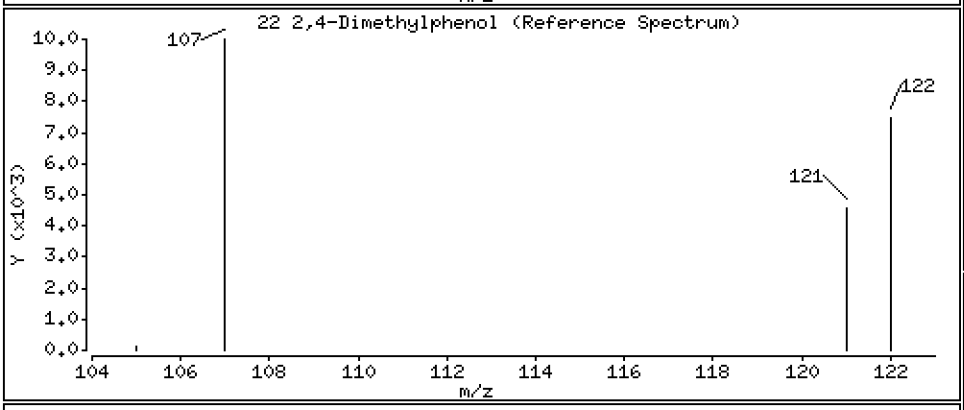
Concentration: 17.21 ug/mL

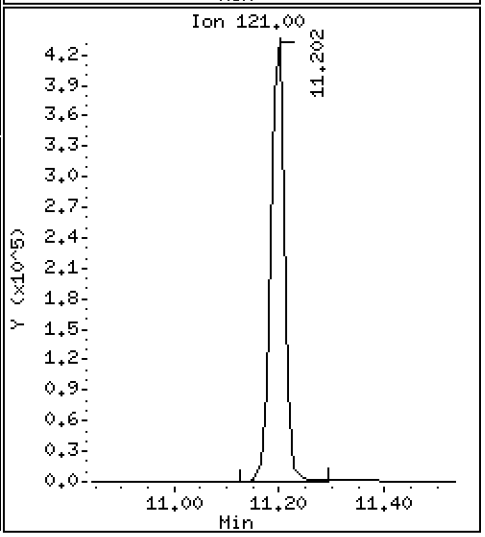


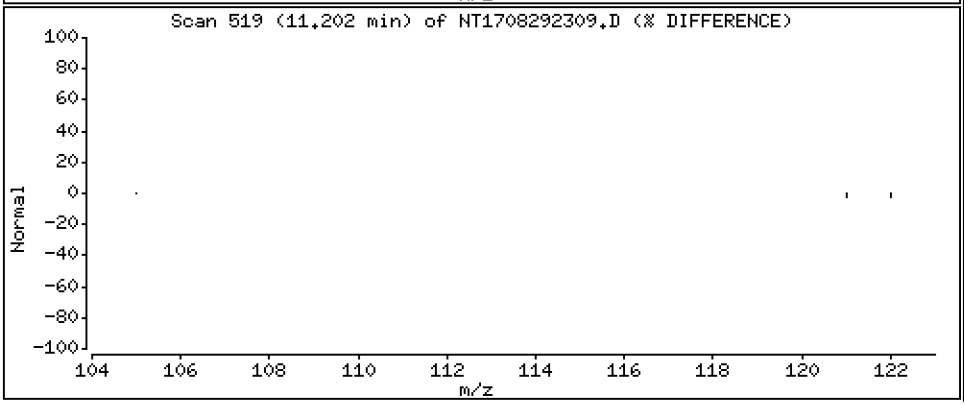












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

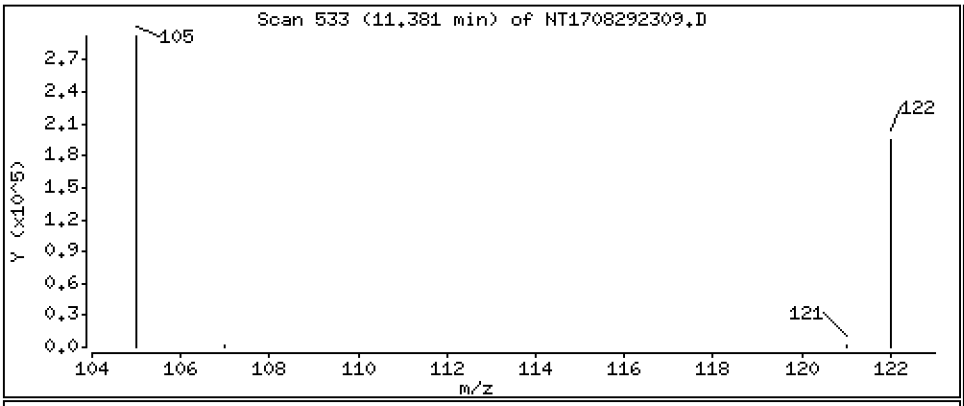
Operator: JGR

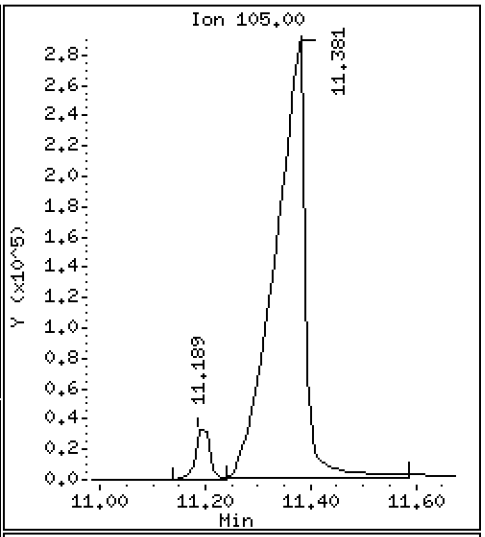
Column phase: ZB-5msi

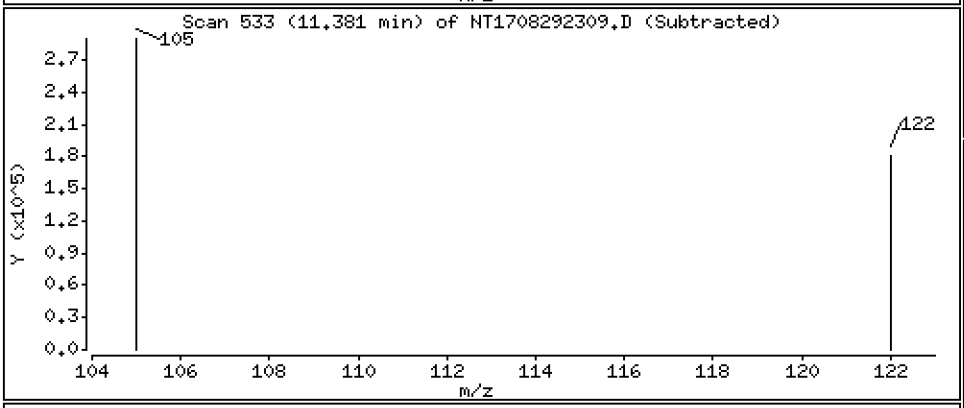
Column diameter: 0.25

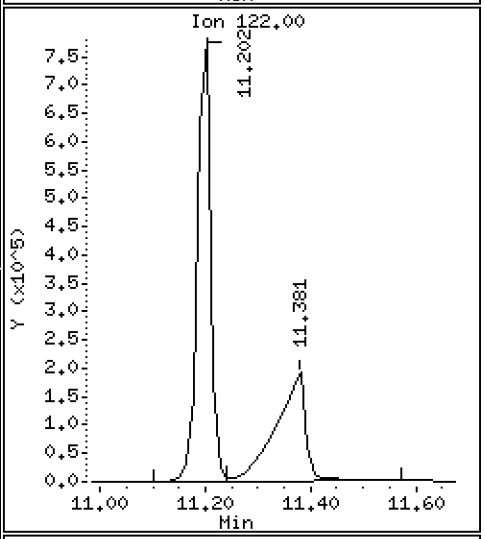
24 Benzoic acid

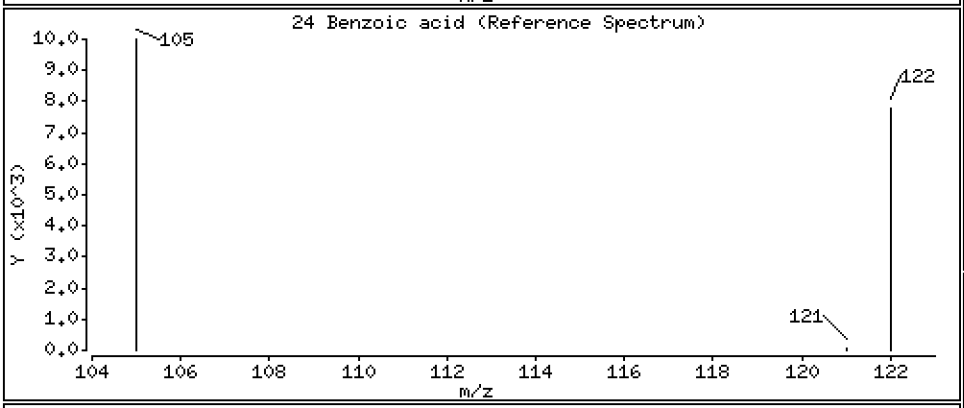
Concentration: 14.66 ug/mL

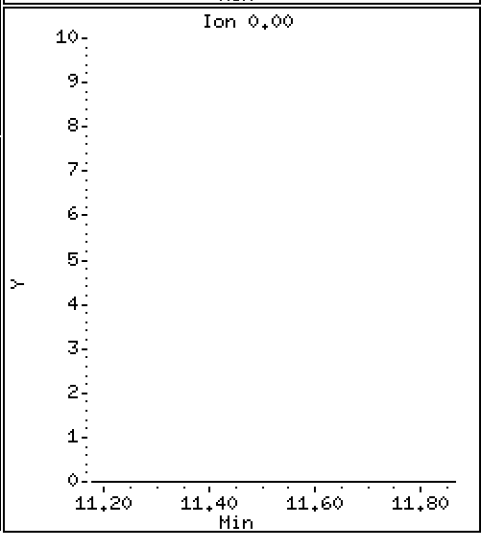


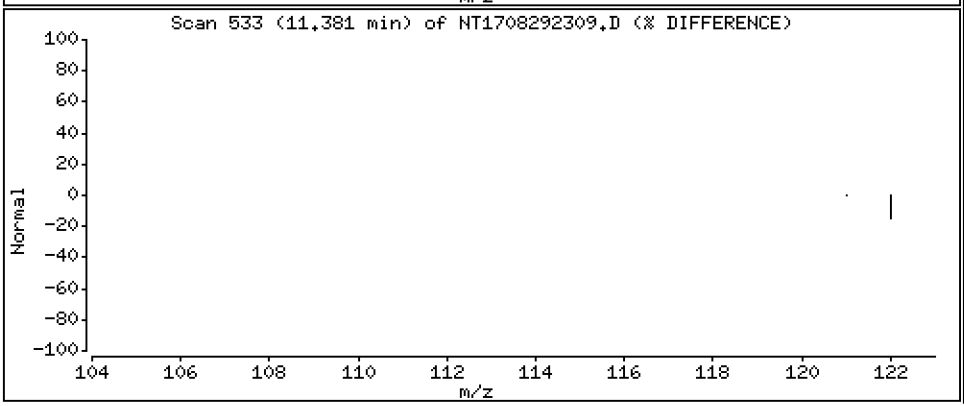












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

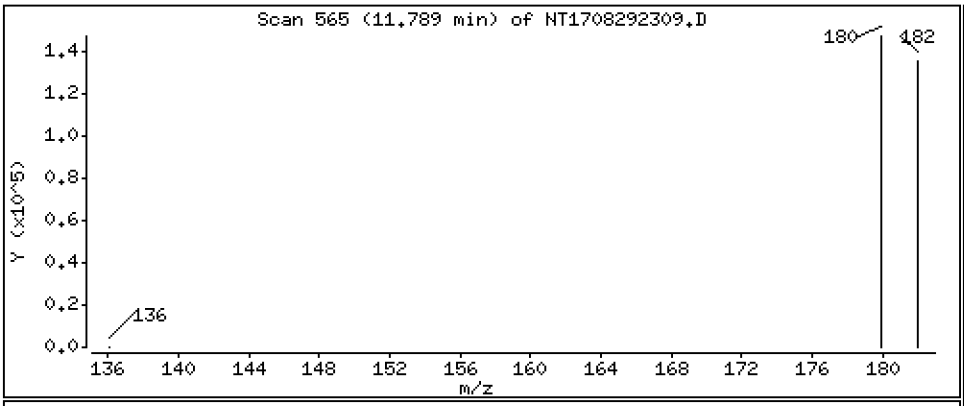
Operator: JGR

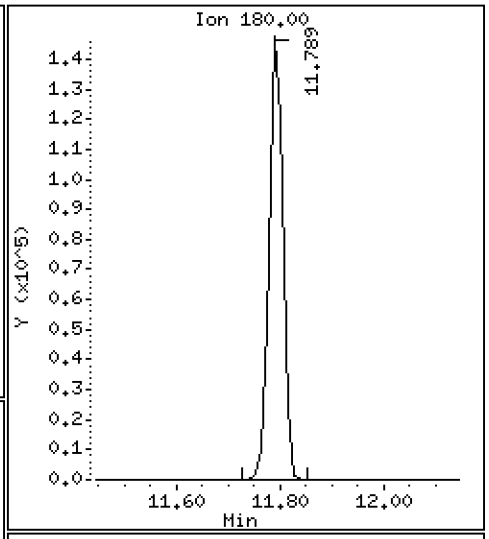
Column phase: ZB-5msi

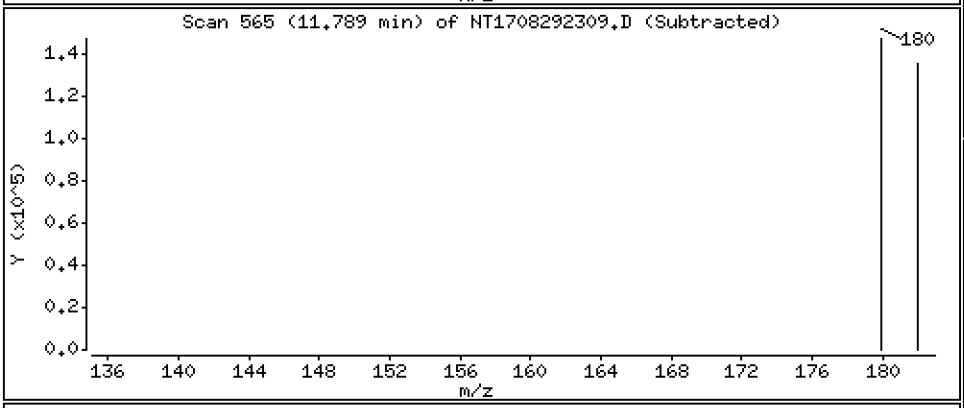
Column diameter: 0.25

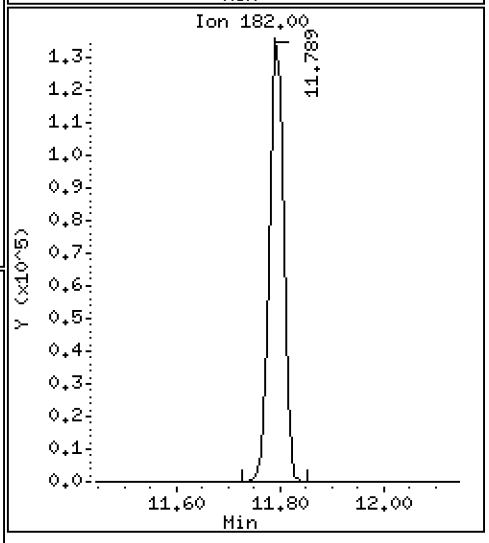
26 1,2,4-Trichlorobenzene

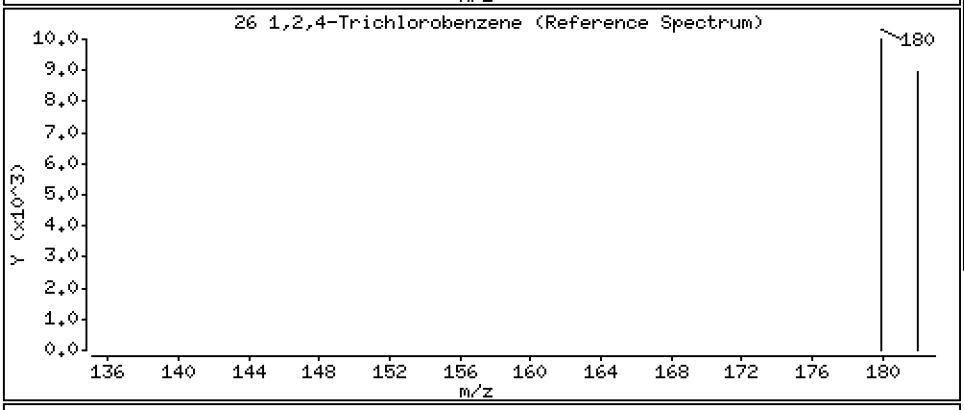
Concentration: 3.508 ug/mL

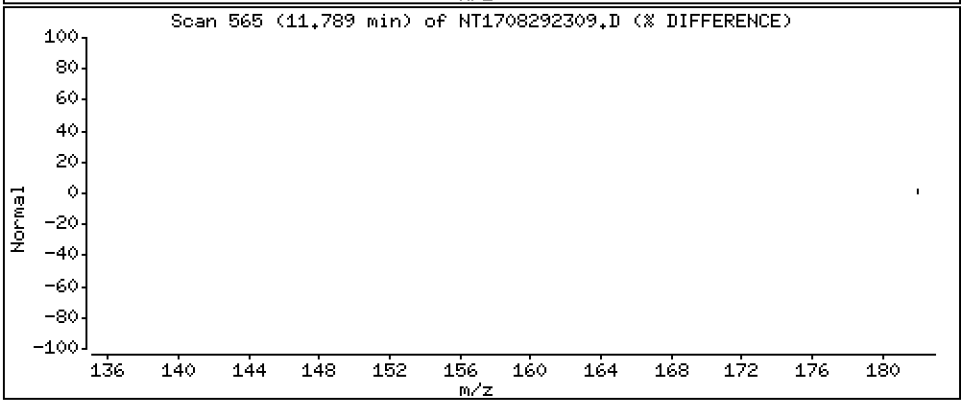












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

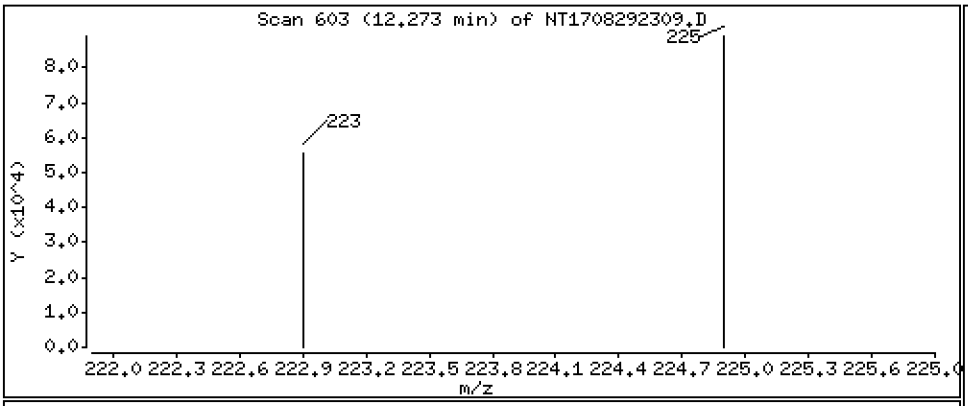
Operator: JGR

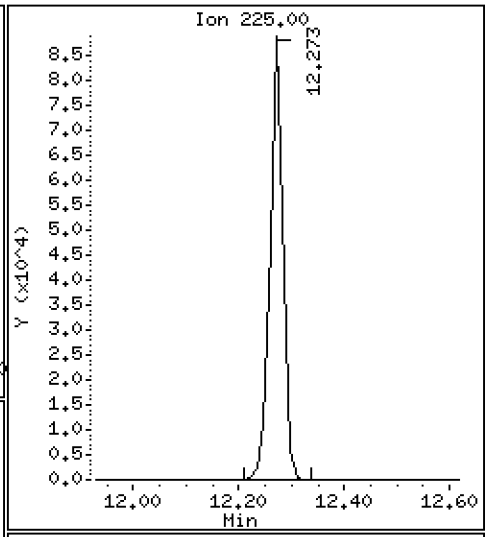
Column phase: ZB-5msi

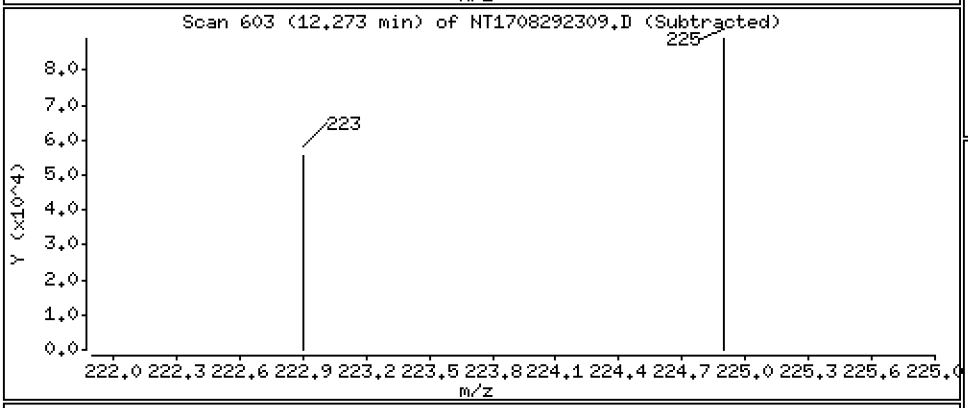
Column diameter: 0.25

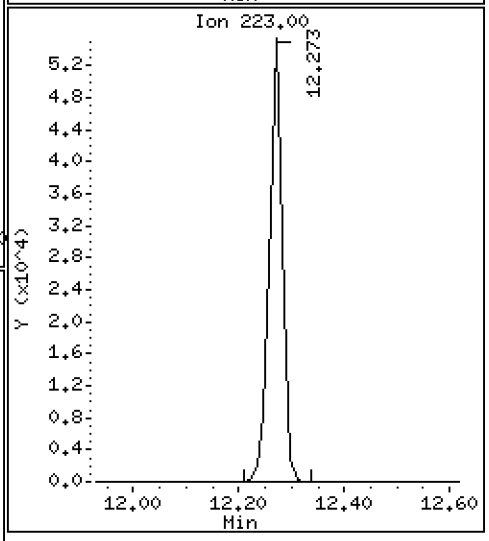
30 Hexachlorobutadiene

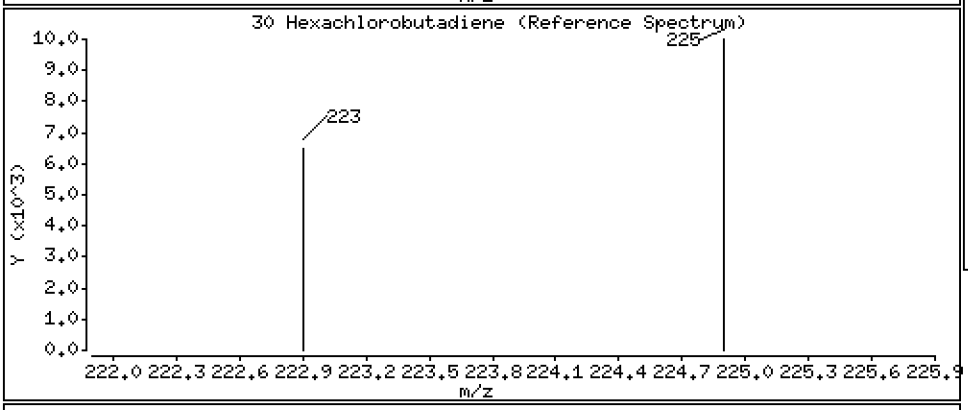
Concentration: 4.166 ug/mL

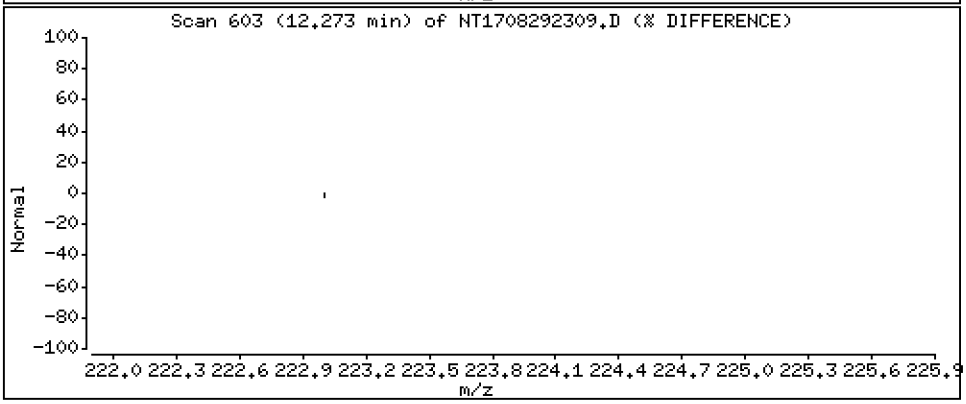












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

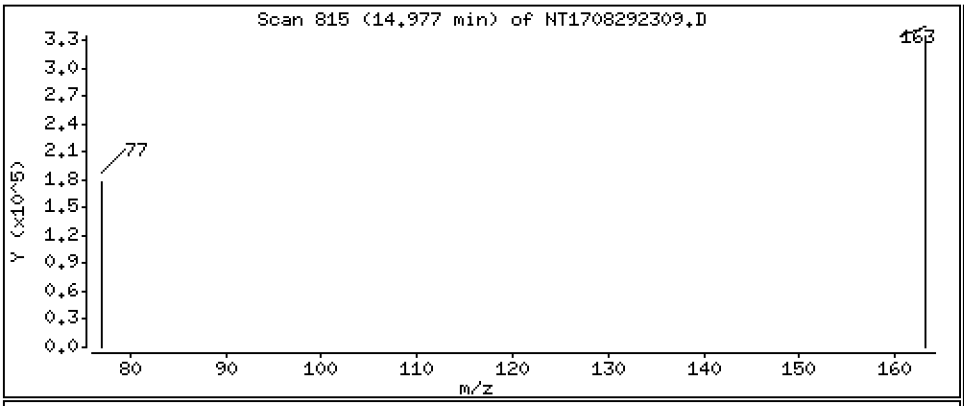
Operator: JGR

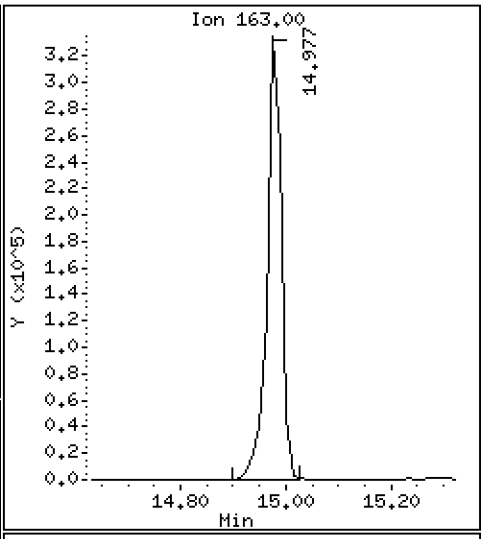
Column phase: ZB-5msi

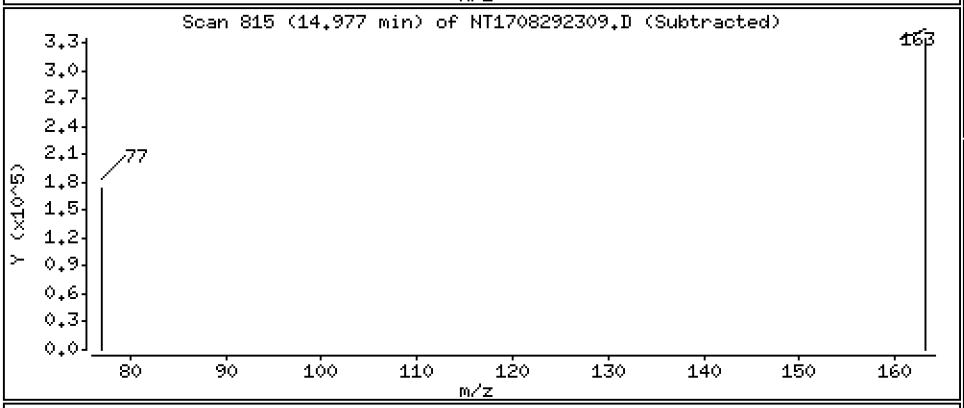
Column diameter: 0.25

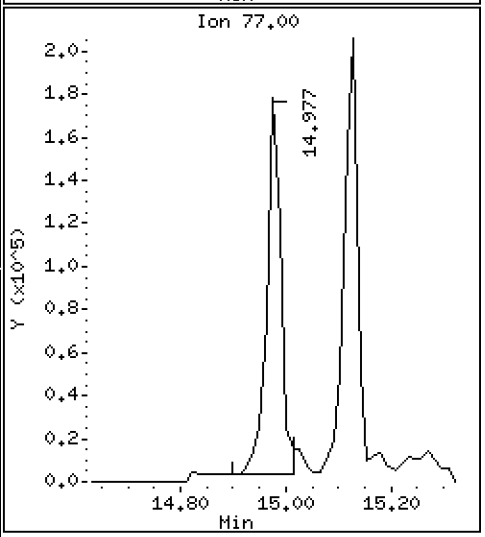
39 Dimethylphthalate

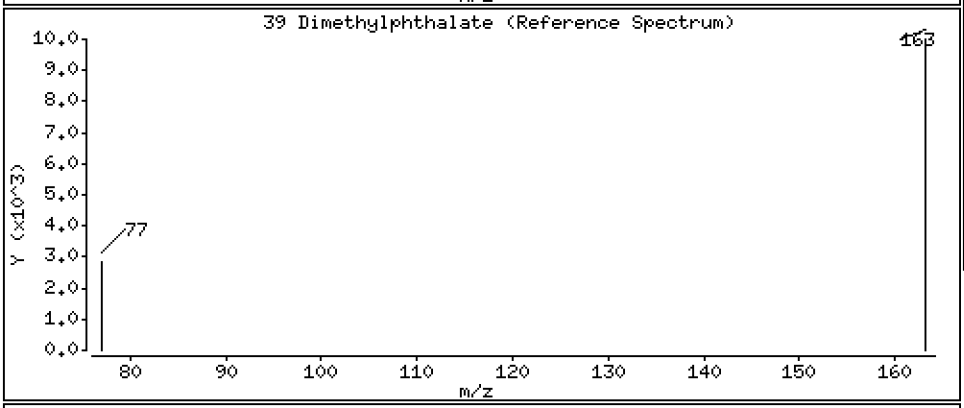
Concentration: 4.458 ug/mL

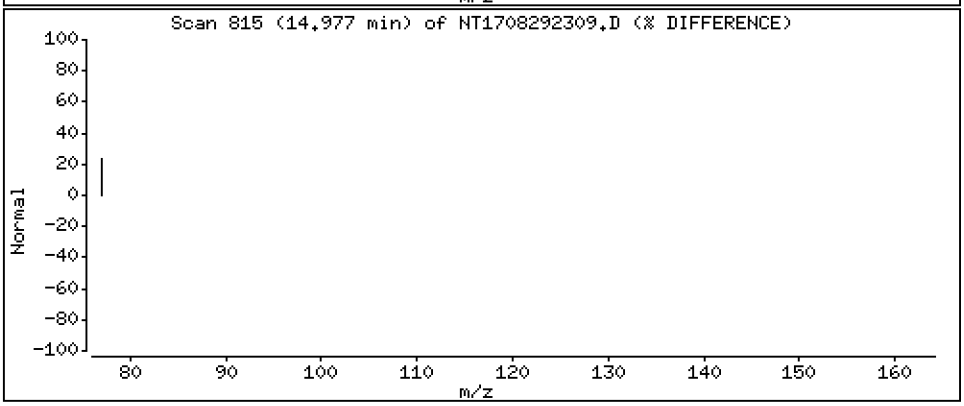












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

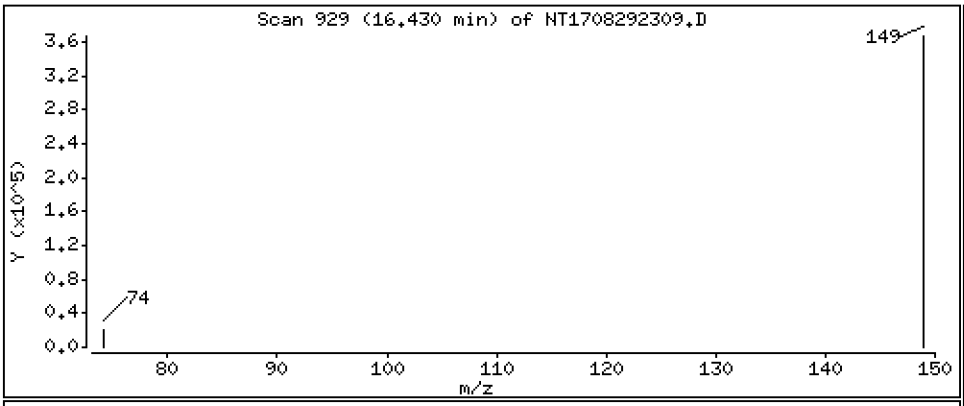
Operator: JGR

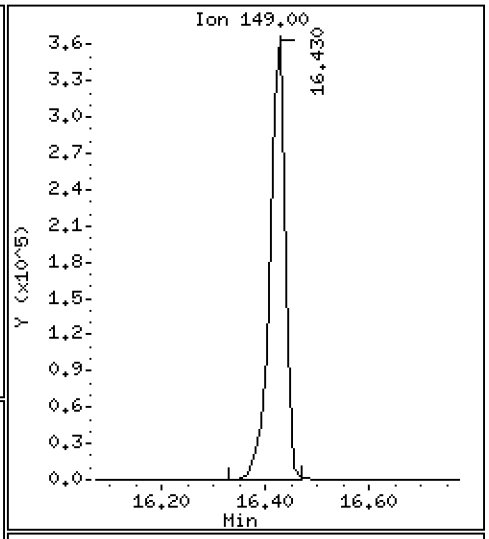
Column phase: ZB-5msi

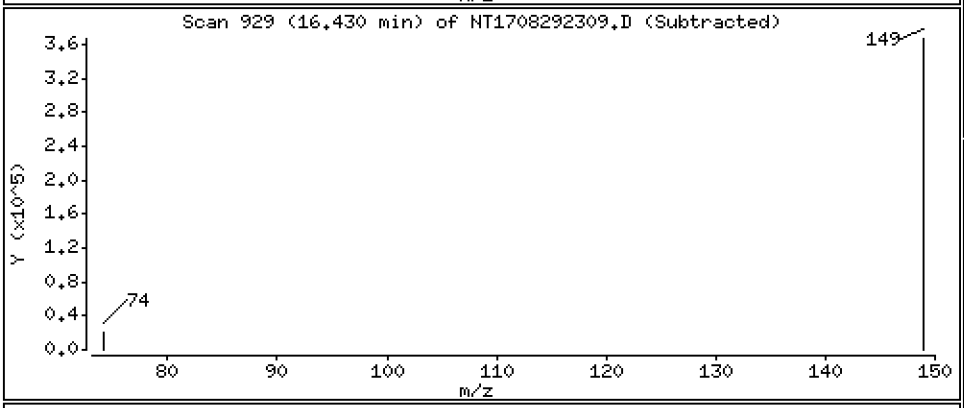
Column diameter: 0.25

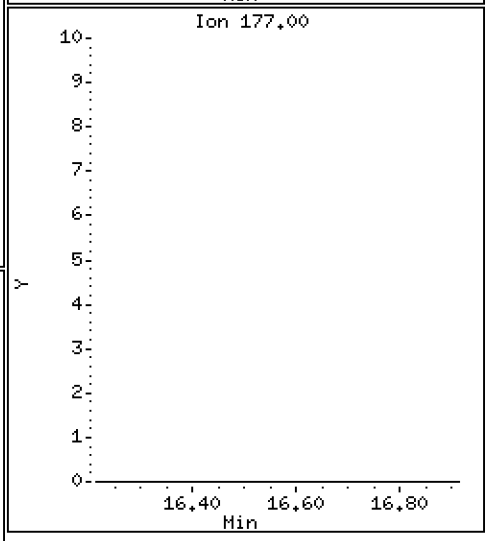
50 Diethylphthalate

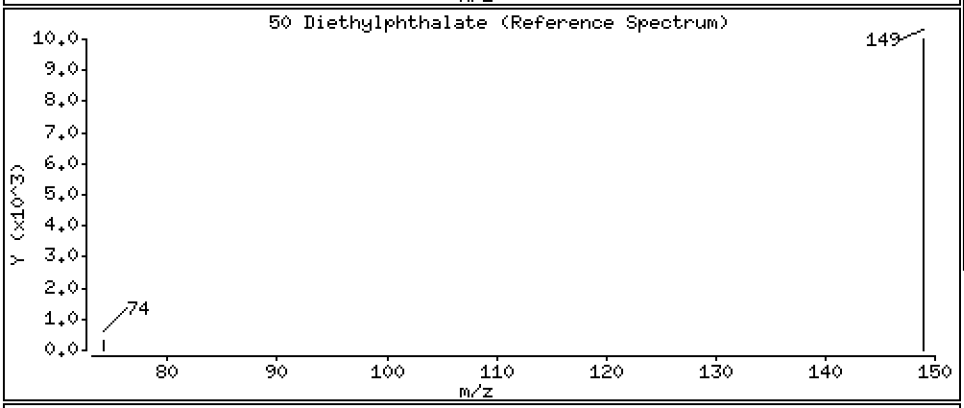
Concentration: 5.103 ug/mL

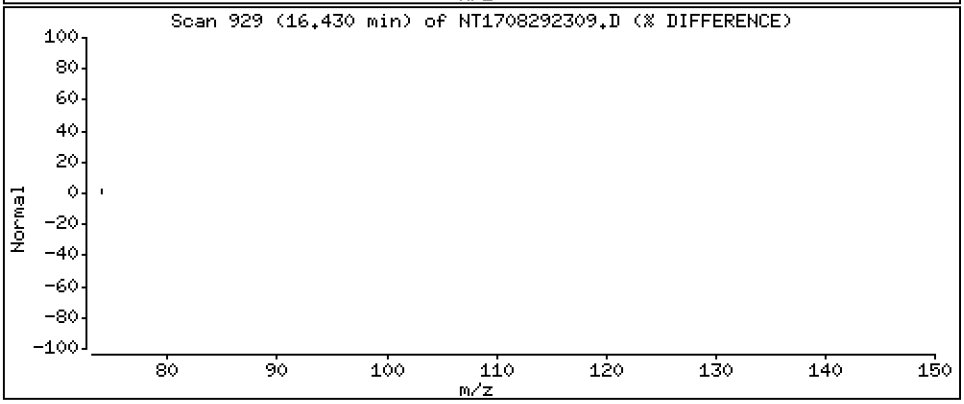












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

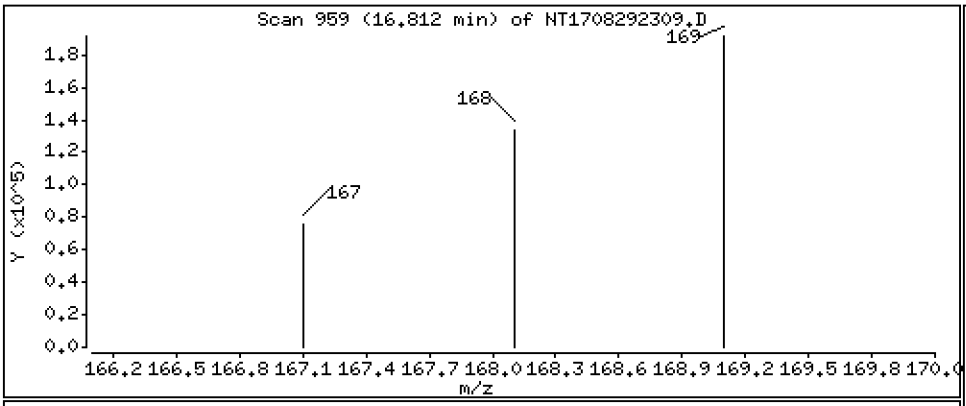
Operator: JGR

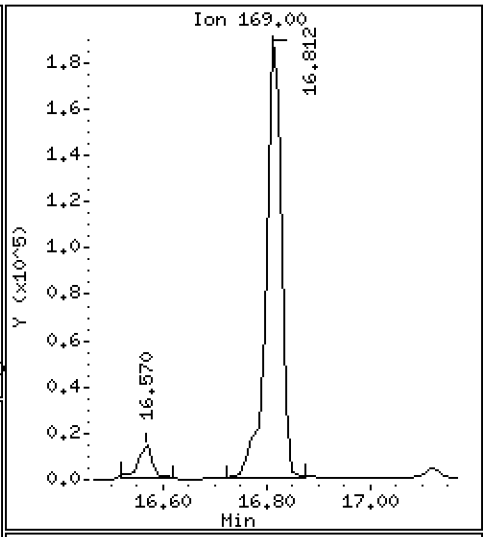
Column phase: ZB-5msi

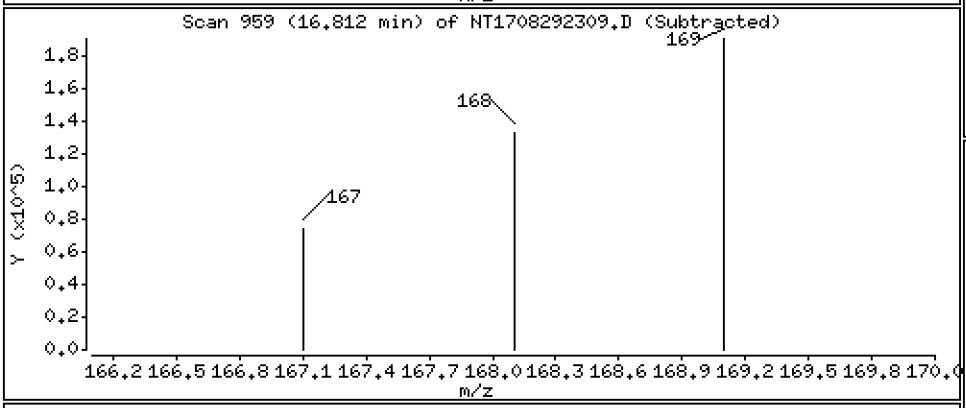
Column diameter: 0.25

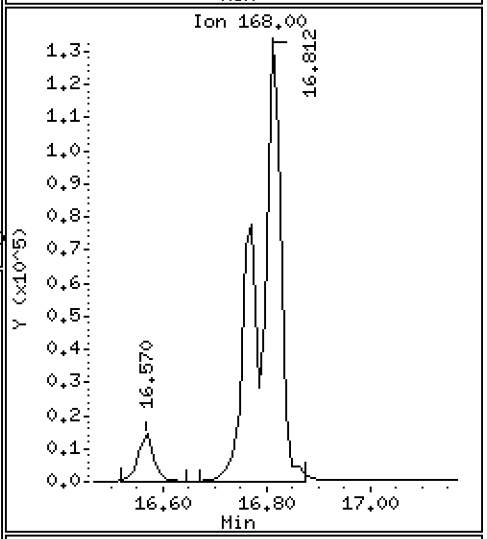
54 N-Nitrosodiphenylamine

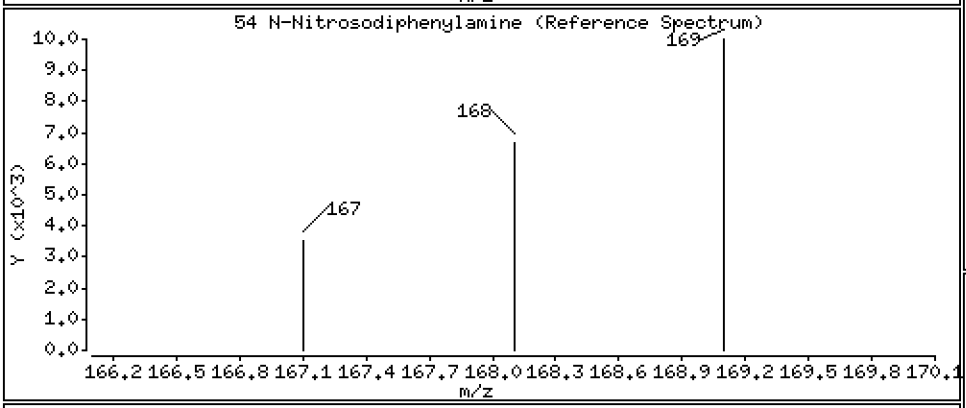
Concentration: 4.544 ug/mL

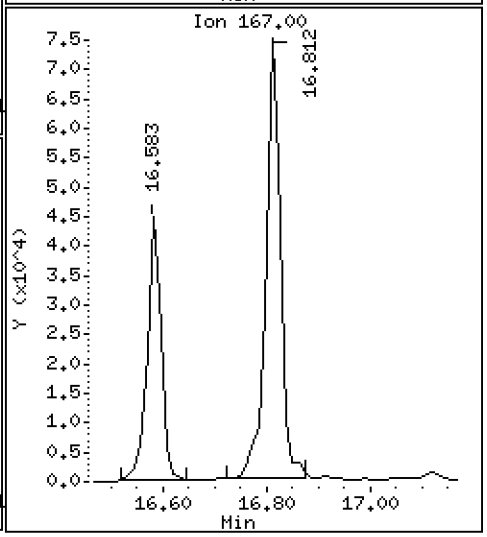


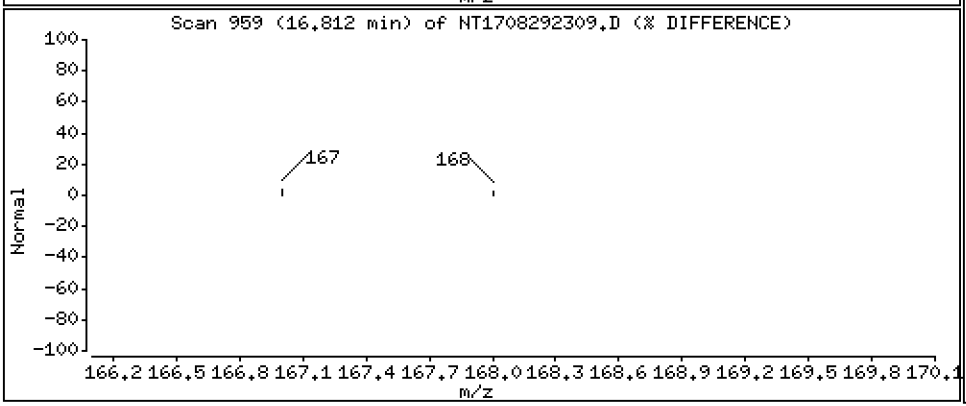












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

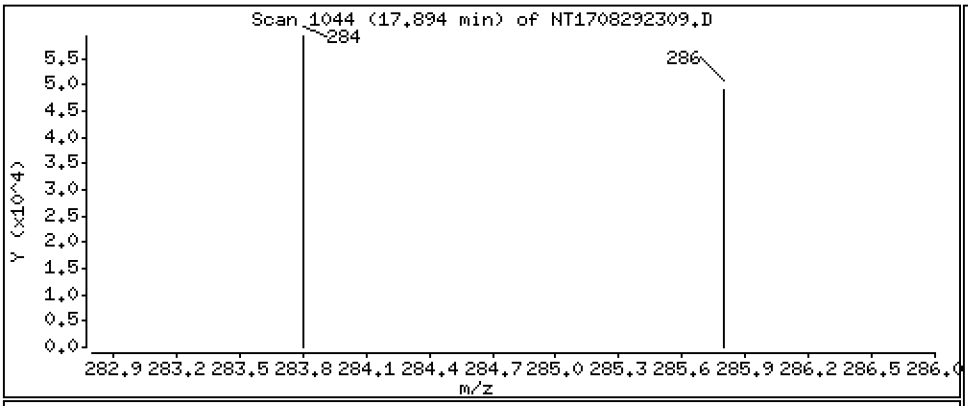
Operator: JGR

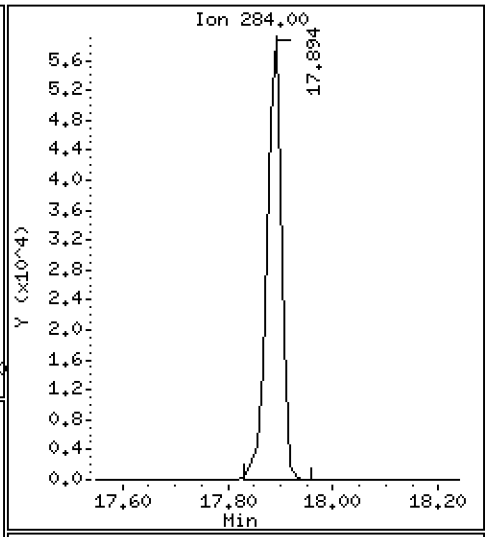
Column phase: ZB-5msi

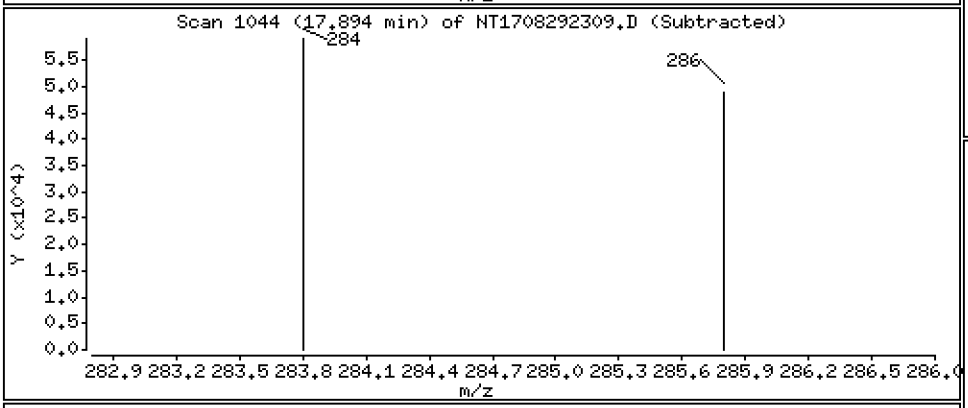
Column diameter: 0.25

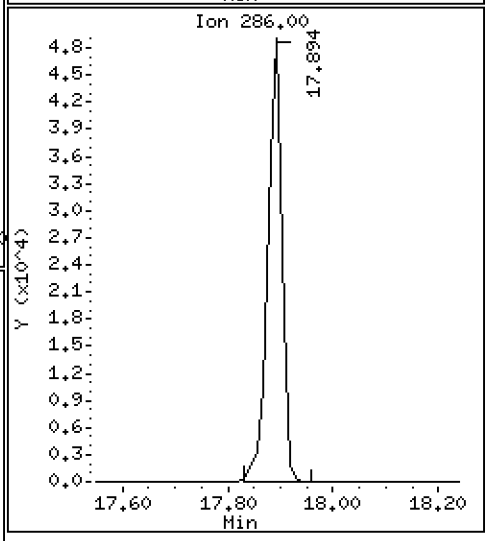
57 Hexachlorobenzene

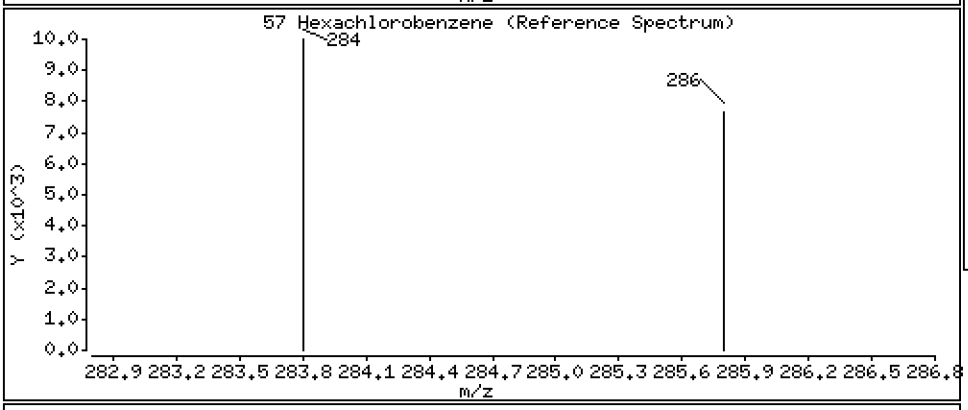
Concentration: 4.104 ug/mL

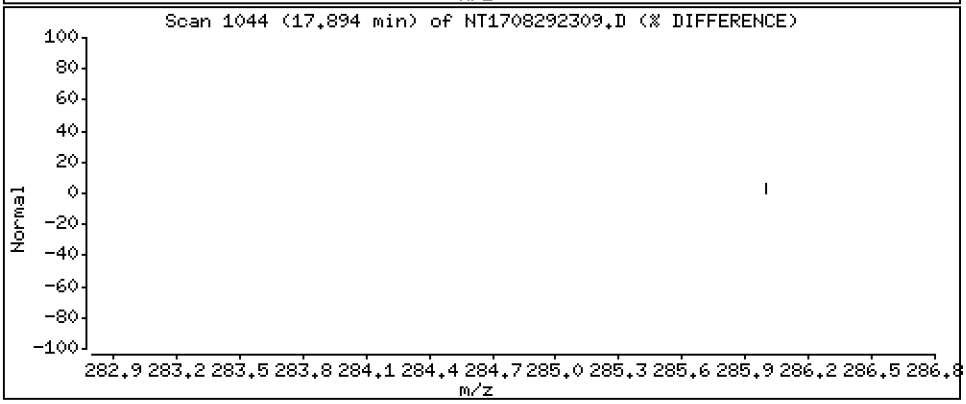












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

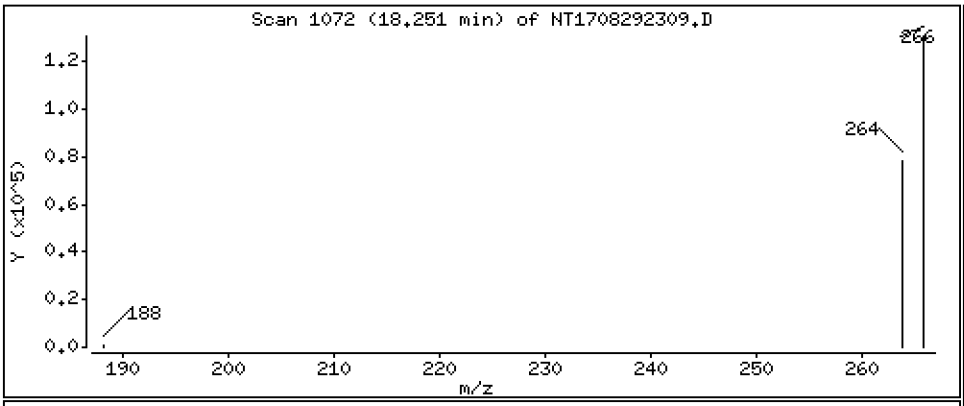
Operator: JGR

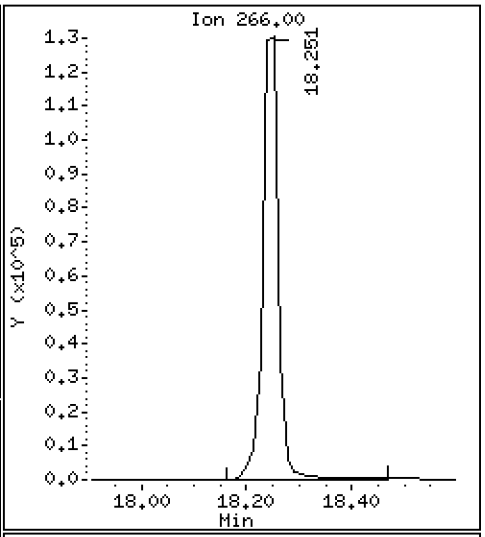
Column phase: ZB-5msi

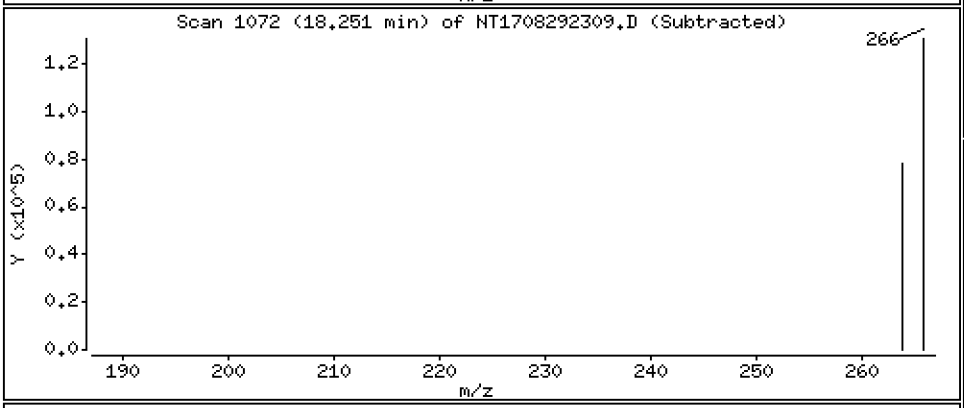
Column diameter: 0.25

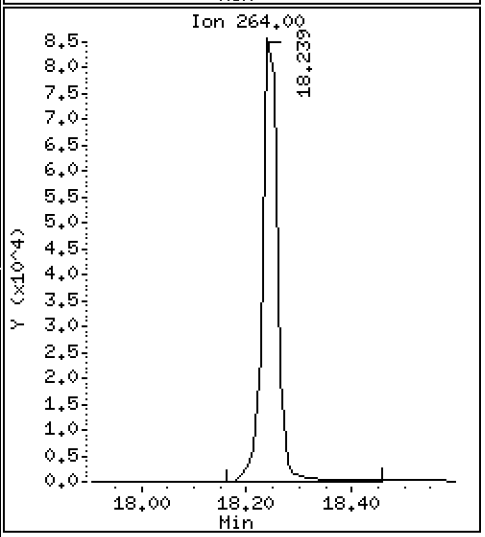
58 Pentachlorophenol

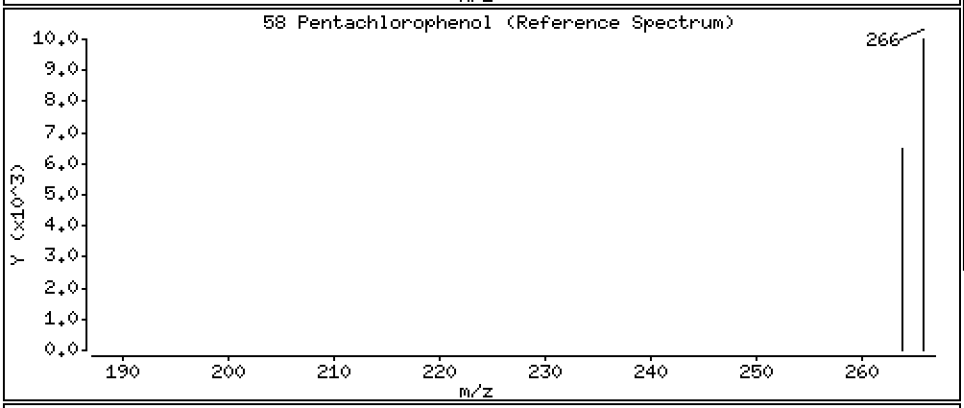
Concentration: 14.64 ug/mL

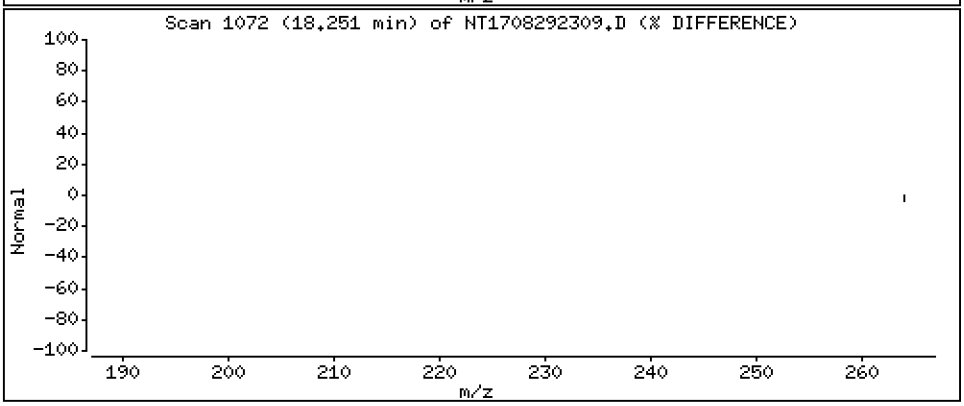












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292309.D

Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

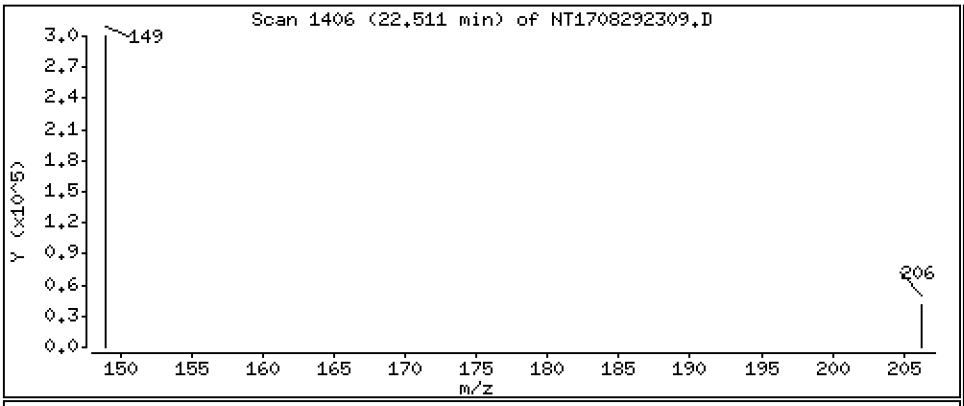
Operator: JGR

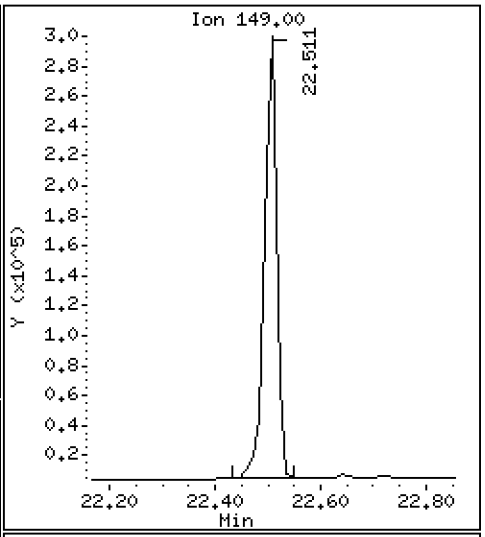
Column phase: ZB-5msi

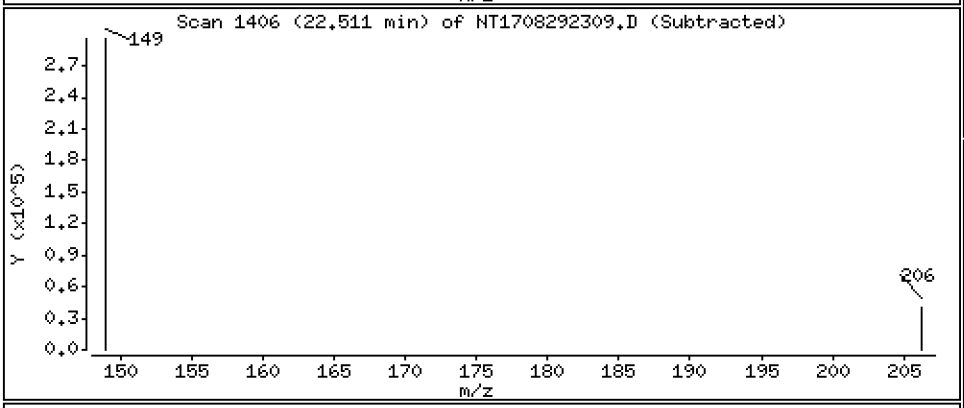
Column diameter: 0.25

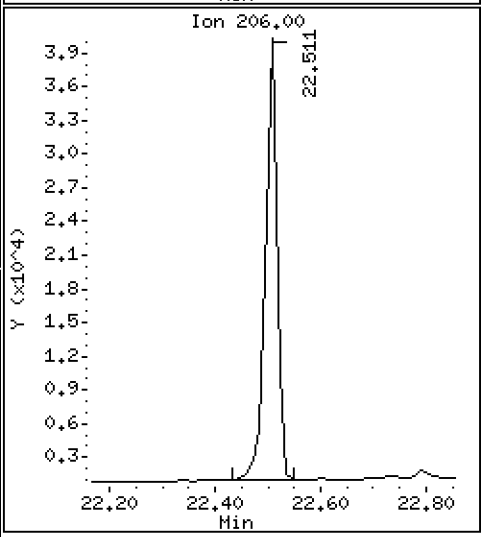
67 Butylbenzylphthalate

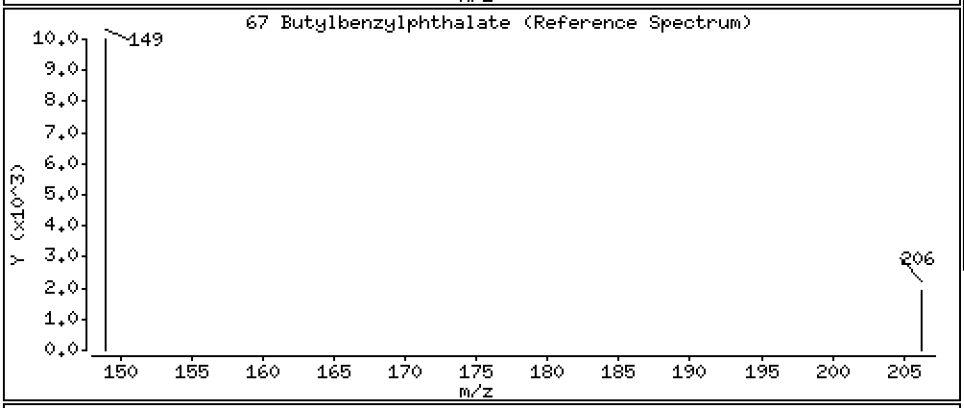
Concentration: 3.750 ug/mL

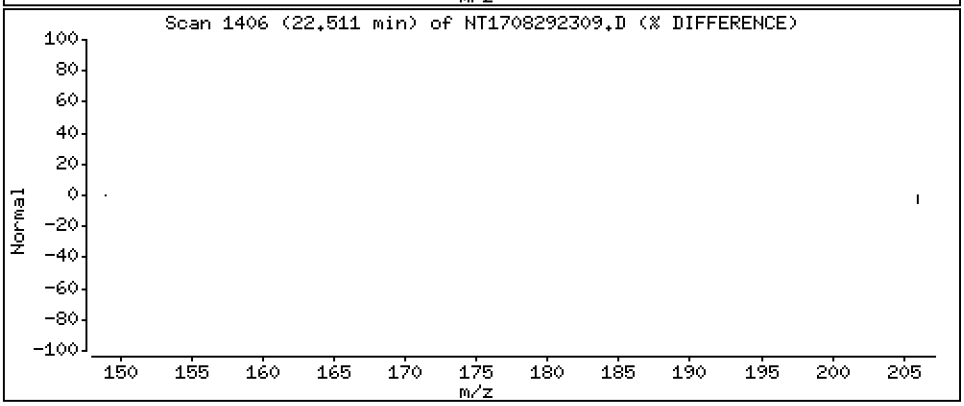












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Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

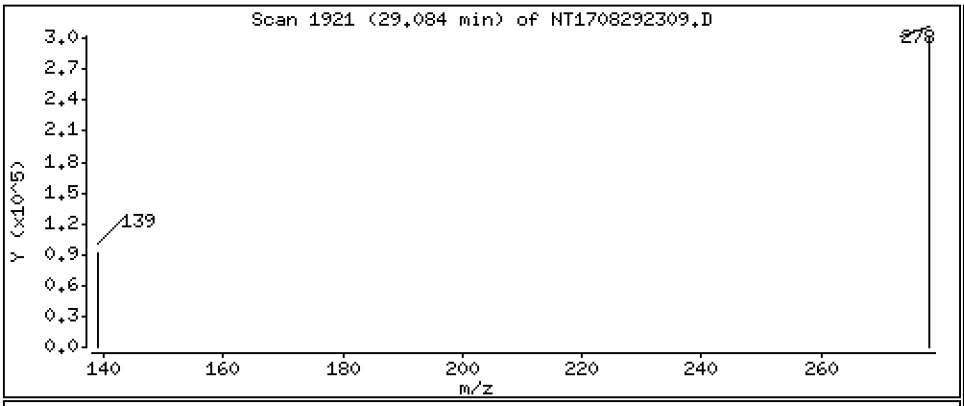
Operator: JGR

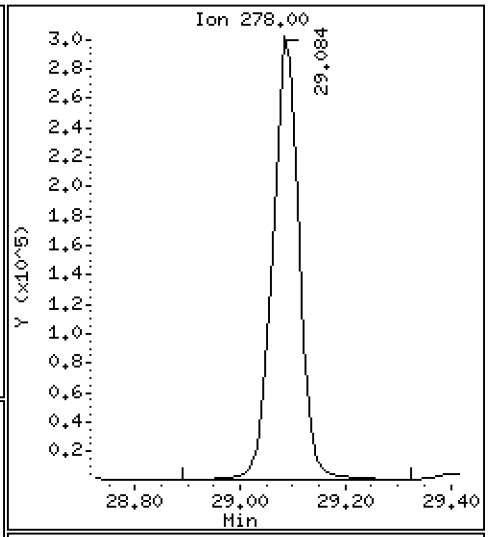
Column phase: ZB-5msi

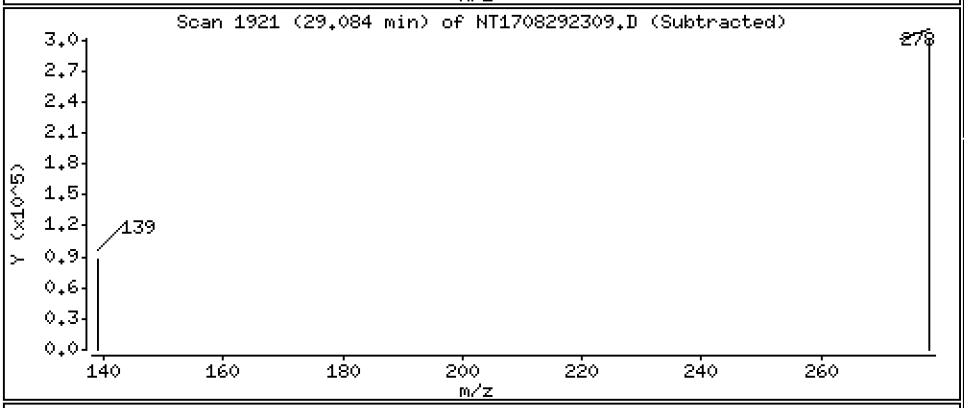
Column diameter: 0.25

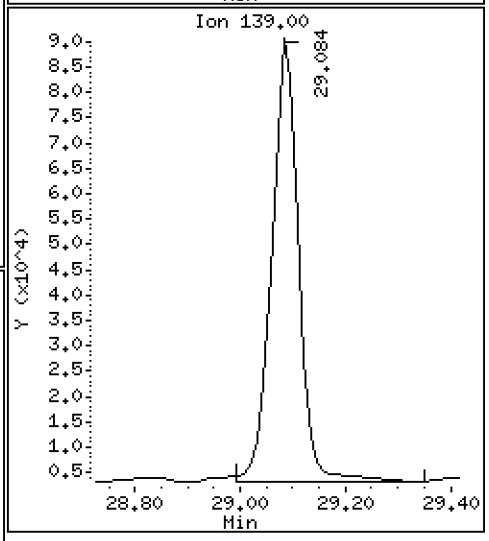
79 Dibenzo(a,h)anthracene

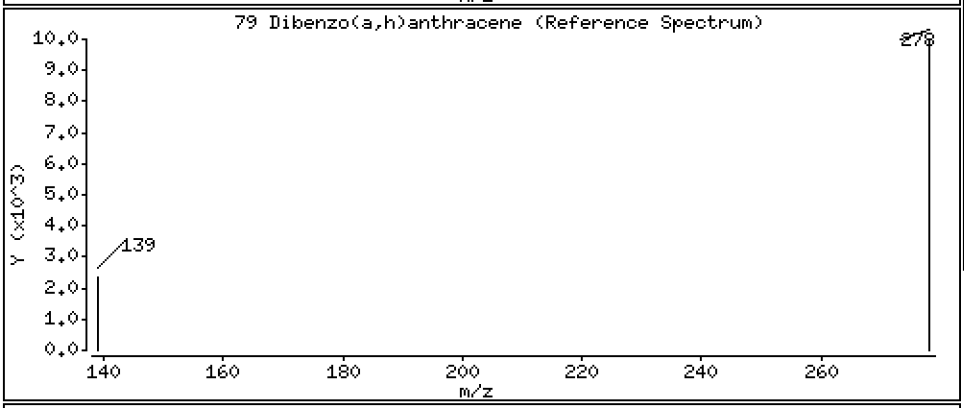
Concentration: 5.817 ug/mL

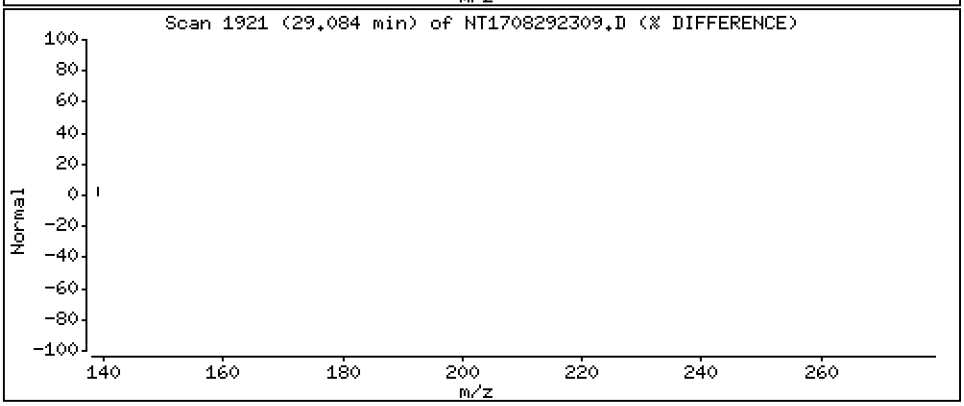












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292309.D

Date : 29-AUG-2023 16:35

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MS1

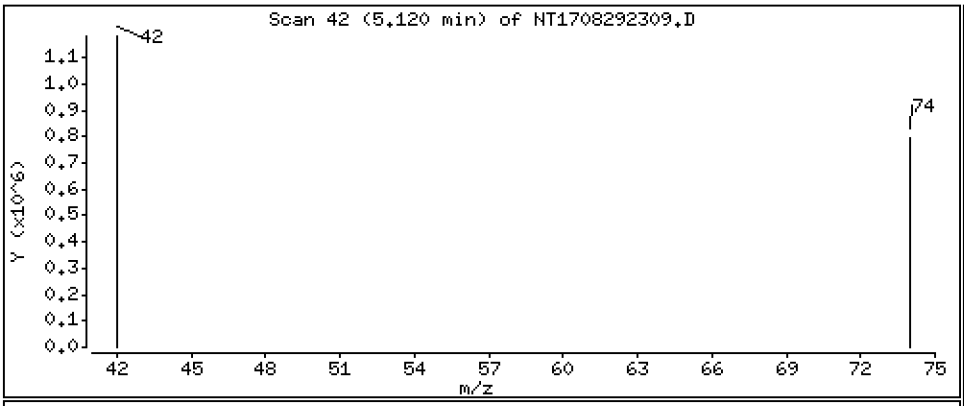
Operator: JGR

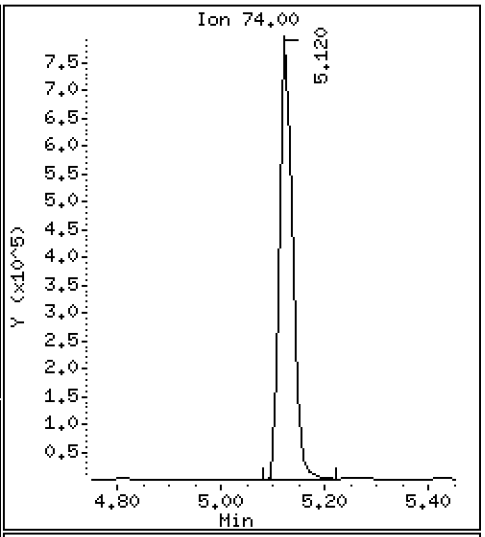
Column phase: ZB-5msi

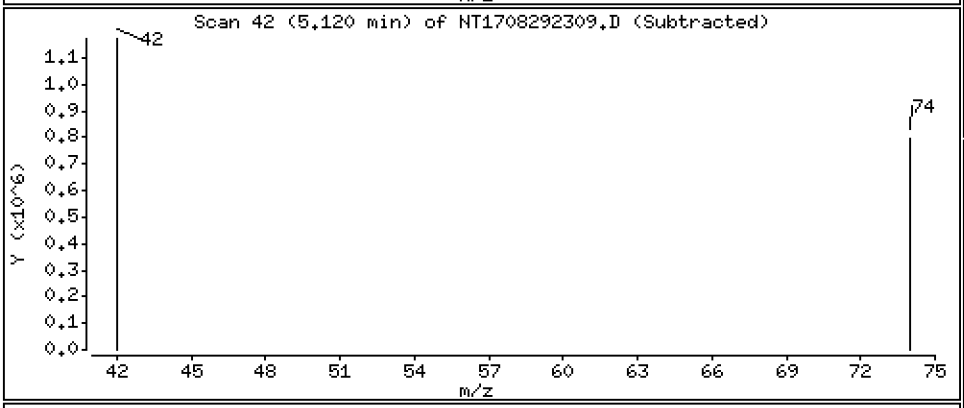
Column diameter: 0.25

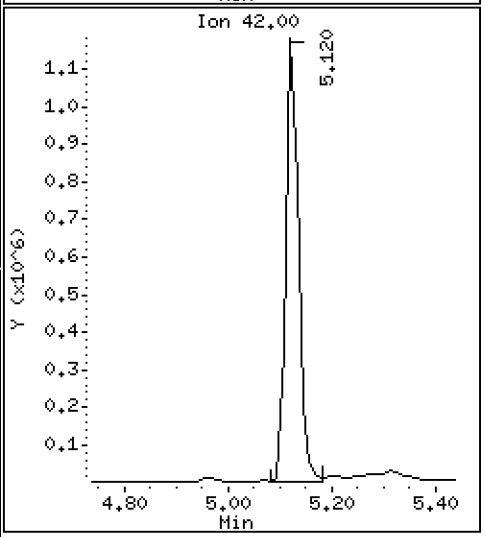
90 N-Nitrosodimethylamine

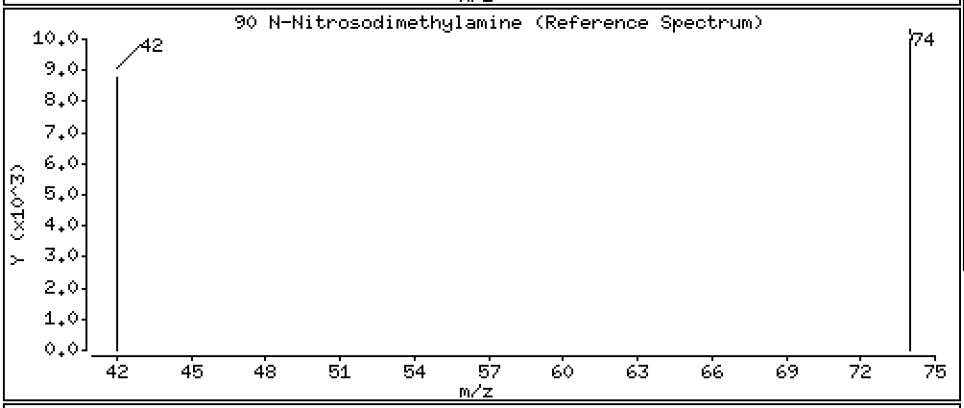
Concentration: 10.42 ug/mL

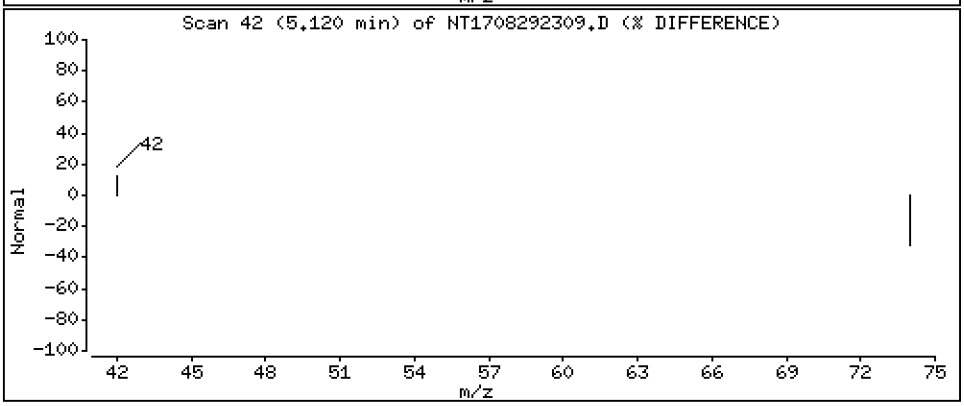












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292309.D
Lab Smp Id: BLH0669-MS1
Inj Date : 29-AUG-2023 16:35
Operator : JGR Inst ID: nt17.i
Smp Info : BLH0669-MS1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 09:25 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.209	7.196	(0.766)	765768	5.85870	5.859(R)
	3 Phenol	94	8.776	8.776	(0.932)	739747	3.71268	3.713
	7 1,3-Dichlorobenzene	146	9.336	9.349	(0.992)	442465	3.28297	3.283
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	314786	4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	434533	3.33149	3.331
	11 Benzyl alcohol	79	9.669	9.669	(1.027)	562492	4.07877	4.079
	12 1,2-Dichlorobenzene	146	9.796	9.797	(1.041)	423359	3.34610	3.346
	13 2-Methylphenol	108	9.886	9.886	(1.050)	430581	3.56398	3.564
	15 4-Methylphenol	108	10.167	10.154	(1.080)	530390	4.20035	4.200
	16 N-Nitroso-di-n-propylamine	70	10.218	10.218	(1.086)	506031	3.91885	3.919
	22 2,4-Dimethylphenol	107	11.202	11.189	(0.943)	1954714	17.2141	17.21
	24 Benzoic acid	105	11.380	11.329	(0.958)	1167152	14.6635	14.66
	26 1,2,4-Trichlorobenzene	180	11.789	11.789	(0.992)	272164	3.50791	3.508
*	27 Naphthalene-d8	136	11.878	11.878	(1.000)	1131741	4.00000	
	30 Hexachlorobutadiene	225	12.273	12.273	(1.033)	151378	4.16627	4.166
	39 Dimethylphthalate	163	14.976	14.977	(0.967)	627639	4.45784	4.458
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	433189	4.00000	
	50 Diethylphthalate	149	16.430	16.417	(1.061)	746994	5.10256	5.103
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	386491	4.54449	4.544
	57 Hexachlorobenzene	284	17.894	17.894	(0.966)	114356	4.10410	4.104
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	276746	14.6359	14.64
*	59 Phenanthrene-d10	188	18.519	18.506	(1.000)	591563	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	281036	4.18580	4.186(R)
	67 Butylbenzylphthalate	149	22.510	22.511	(0.958)	482729	3.74953	3.750
*	69 Chrysene-d12	240	23.505	23.506	(1.000)	485180	4.00000	
*	77 Perylene-d12	264	26.235	26.223	(1.000)	626739	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.084	29.071	(1.109)	1076782	5.81676	5.817
	90 N-Nitrosodimethylamine	74	5.119	5.094	(0.544)	1386014	10.4212	10.42

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 30-Aug-2023 09:25

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292309.D
Lab Smp Id: BLH0669-MS1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 29-AUG-2023
Calibration Time: 12:37
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	296489	148245	592978	314786	6.17
27 Naphthalene-d8	1098892	549446	2197784	1131741	2.99
42 Acenaphthene-d10	443071	221536	886142	433189	-2.23
59 Phenanthrene-d10	627744	313872	1255488	591563	-5.76
69 Chrysene-d12	404122	202061	808244	485180	20.06
77 Perylene-d12	417323	208662	834646	626739	50.18

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	-0.00
27 Naphthalene-d8	11.88	11.38	12.38	11.88	-0.00
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	-0.00
59 Phenanthrene-d10	18.51	18.01	19.01	18.52	0.07
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.22	25.72	26.72	26.24	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292309.D

Lab ID: BLH0669-MS1
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   29-AUG-2023 16:35

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1708292304.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292310.D

Date : 29-AUG-2023 17:13

Client ID:

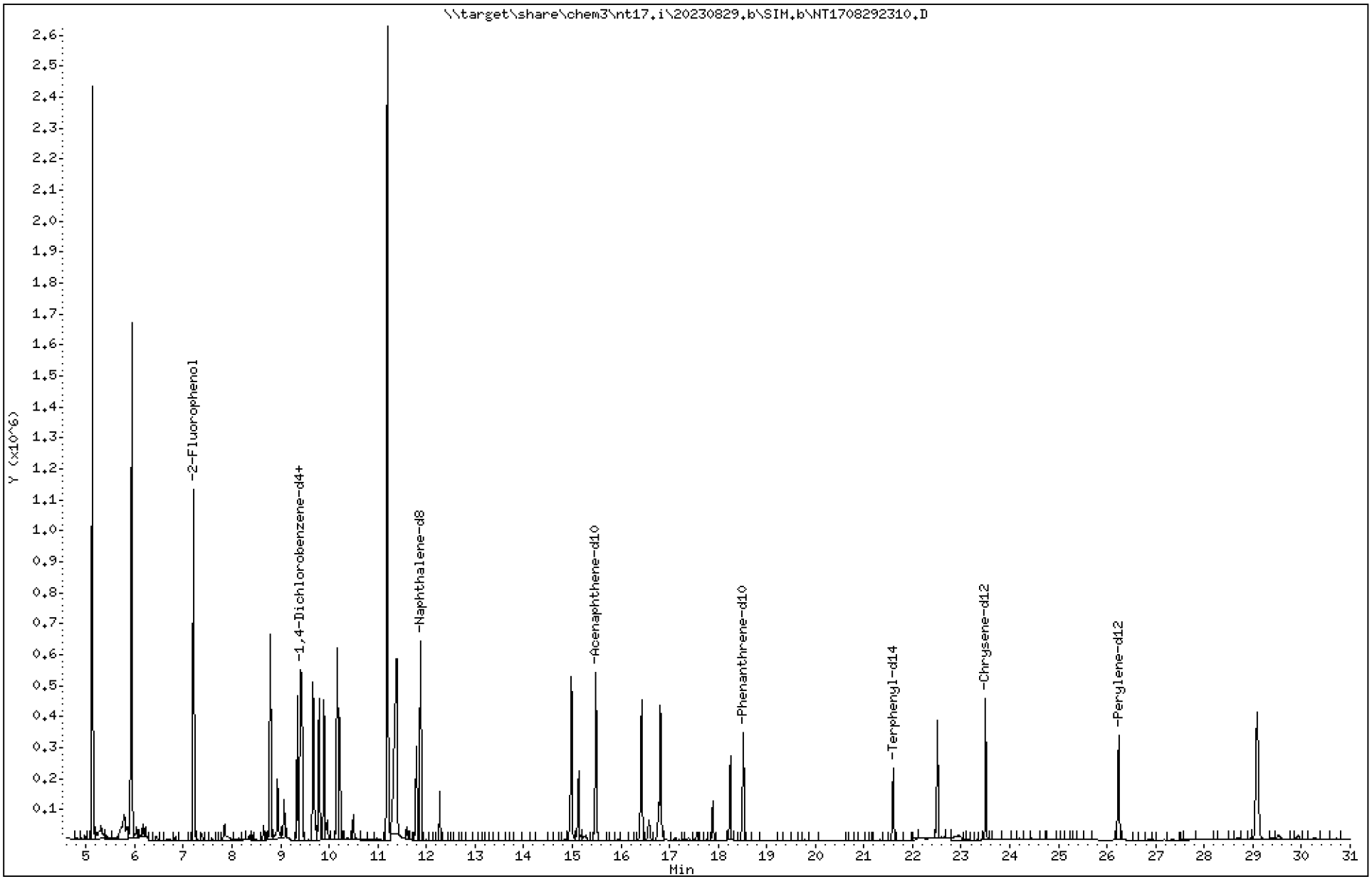
Sample Info: BLH0669-MSD1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

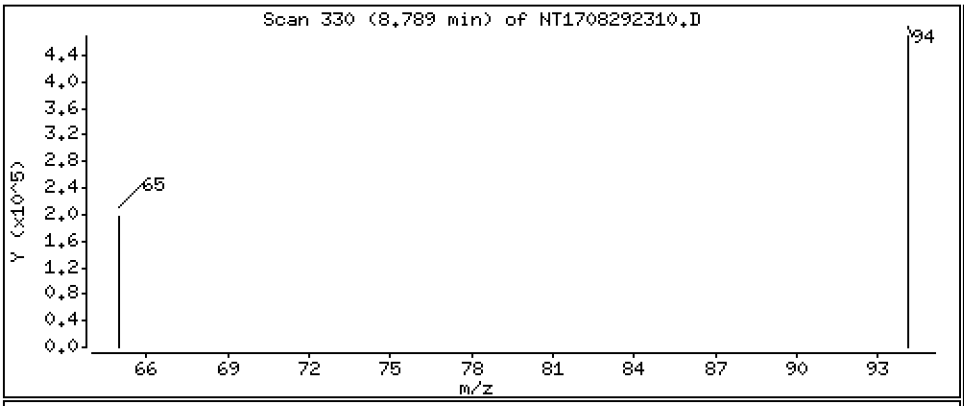
Operator: JGR

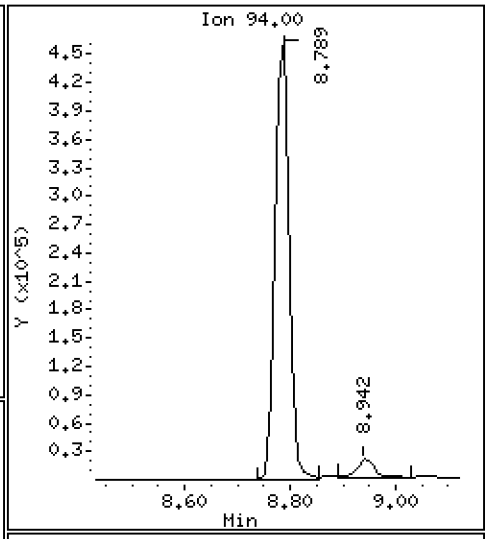
Column phase: ZB-5msi

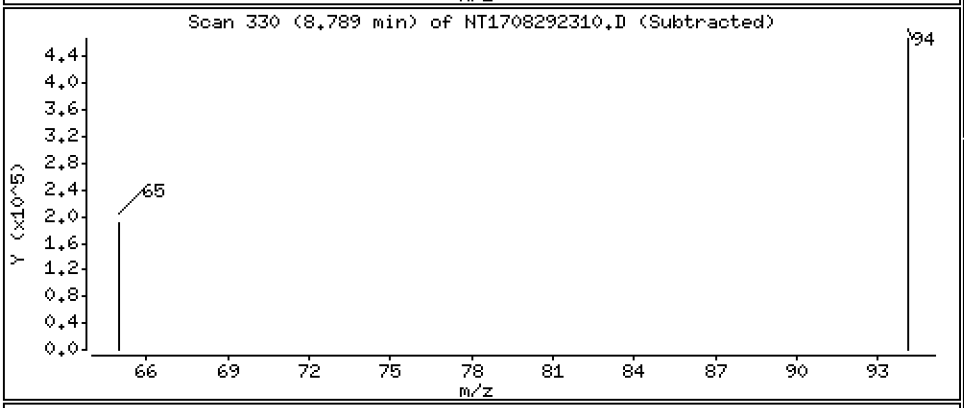
Column diameter: 0.25

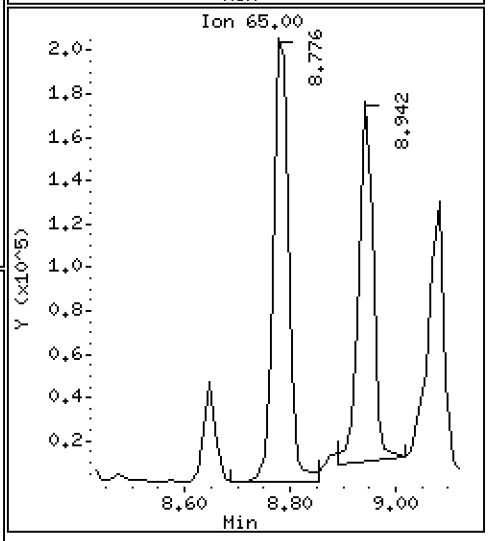
3 Phenol

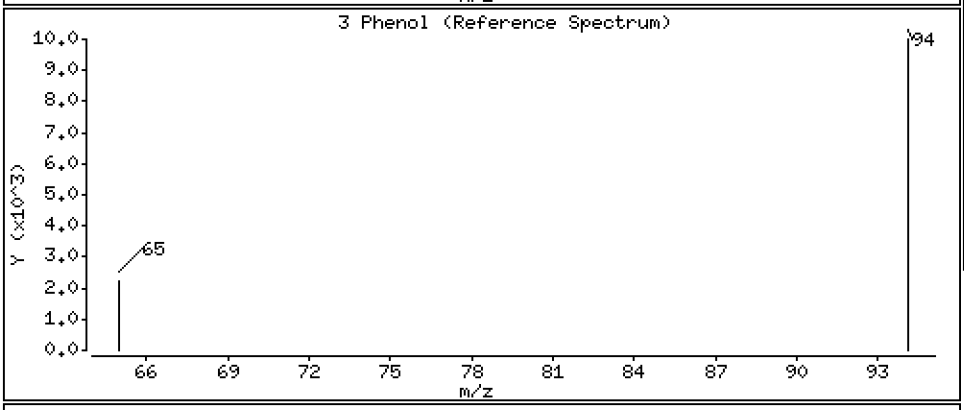
Concentration: 3.927 ug/mL

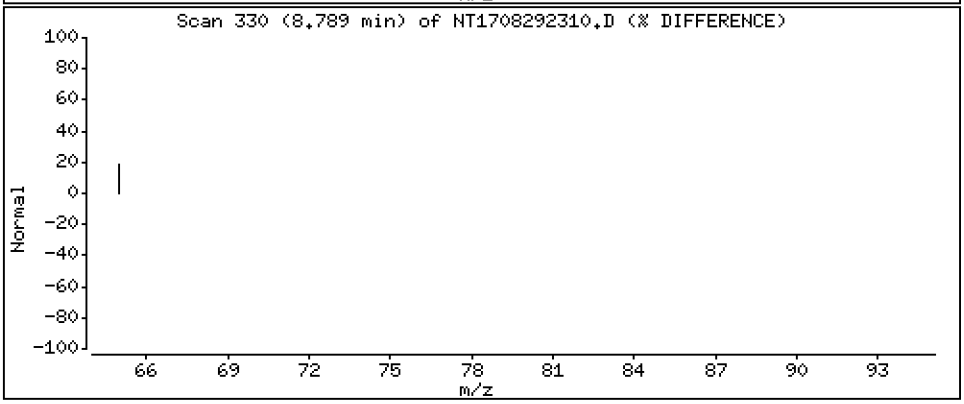












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Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

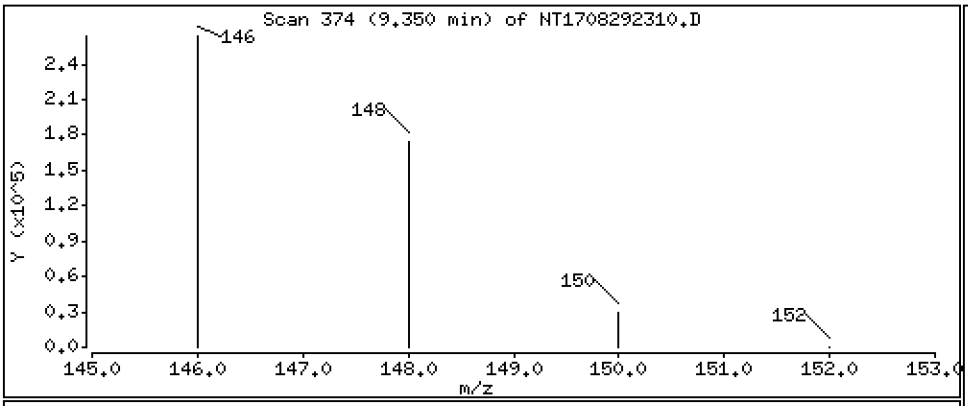
Operator: JGR

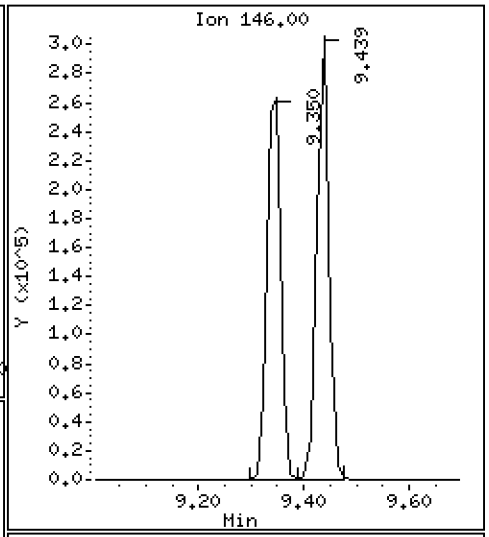
Column phase: ZB-5msi

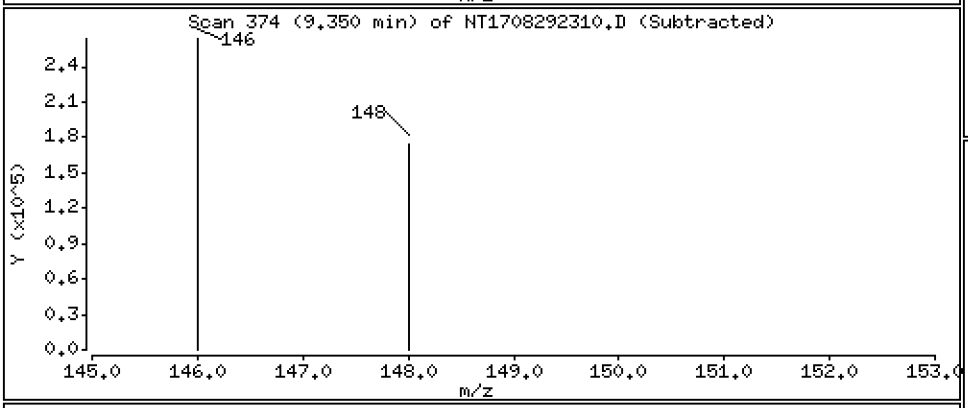
Column diameter: 0.25

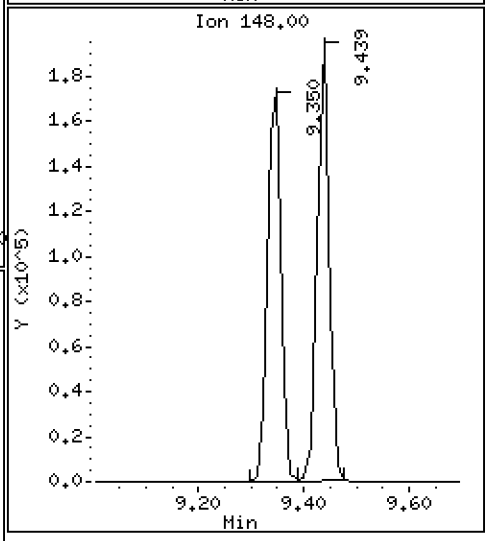
7 1,3-Dichlorobenzene

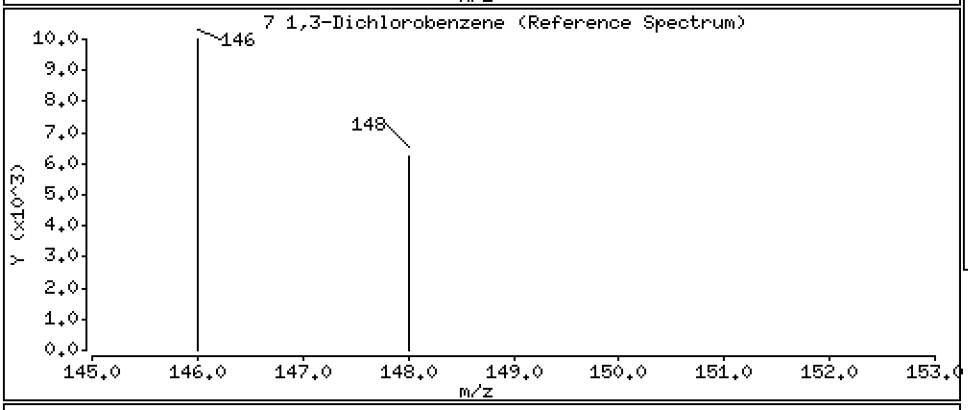
Concentration: 3.268 ug/mL

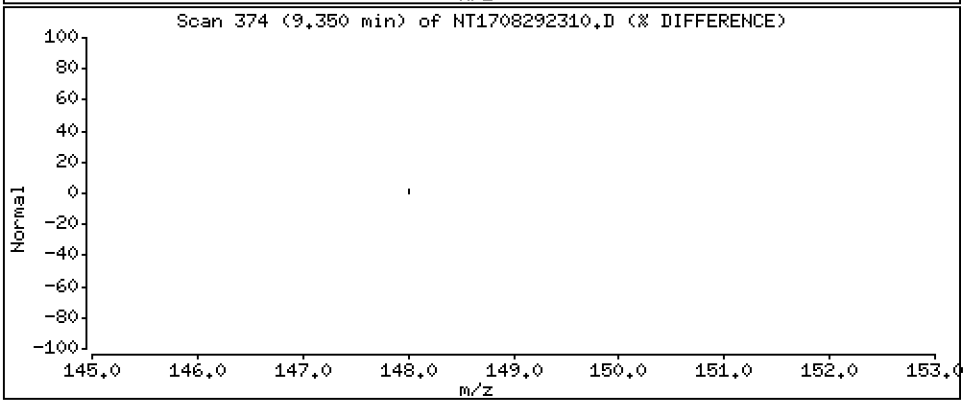












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292310.D

Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

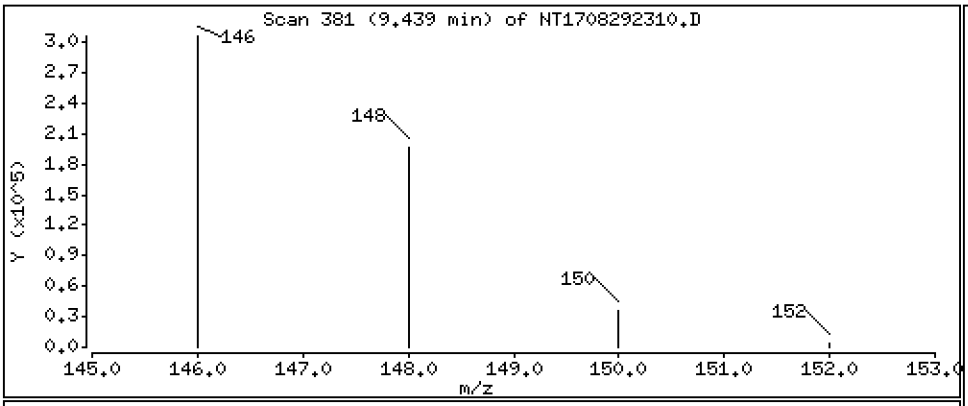
Operator: JGR

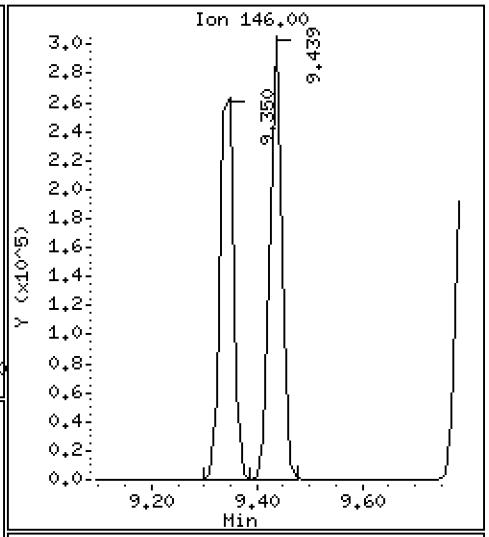
Column phase: ZB-5msi

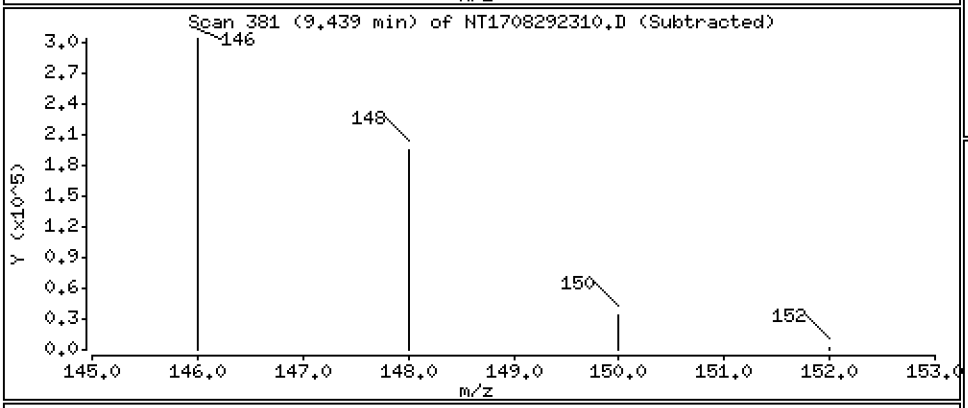
Column diameter: 0.25

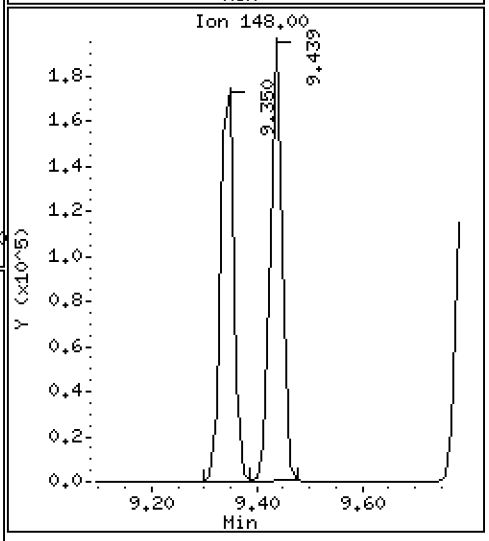
9 1,4-Dichlorobenzene

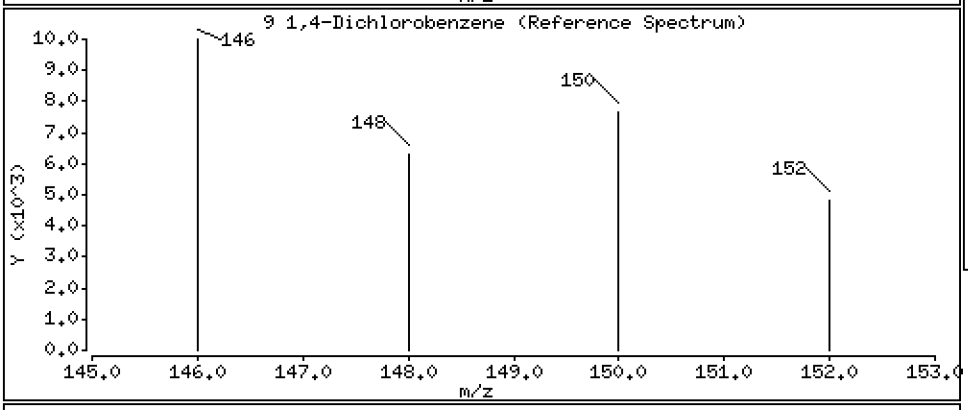
Concentration: 3.333 ug/mL

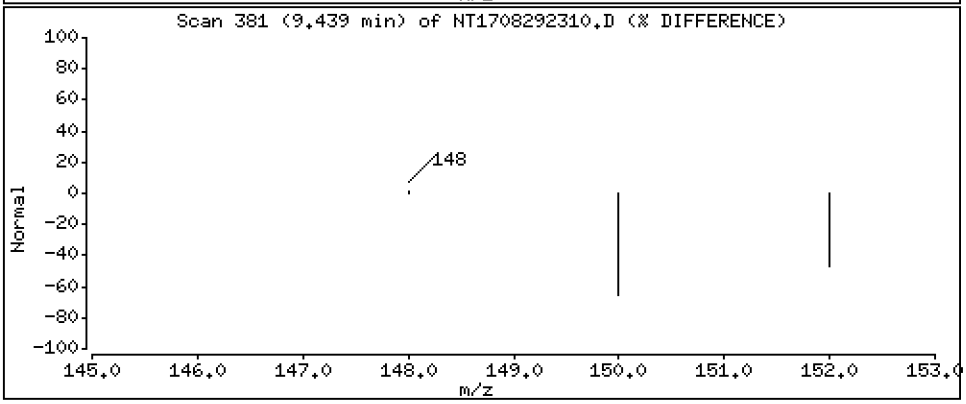












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292310.D

Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

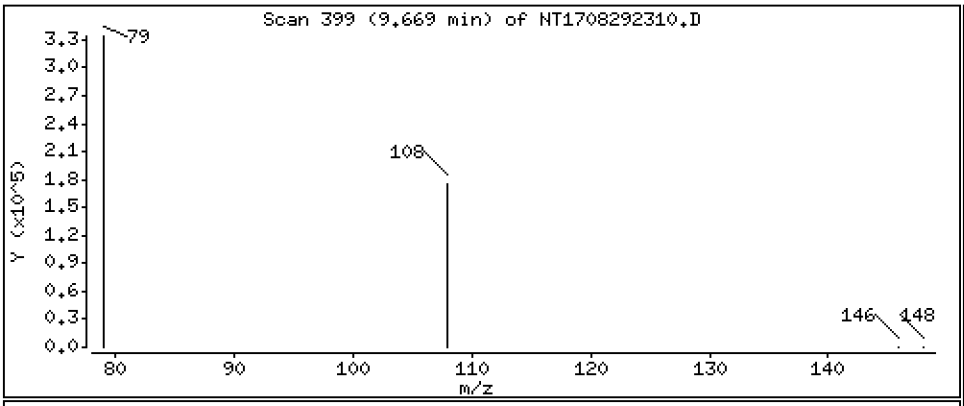
Operator: JGR

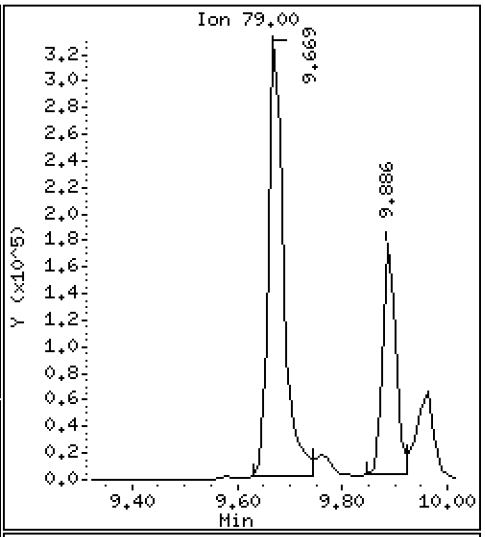
Column phase: ZB-5msi

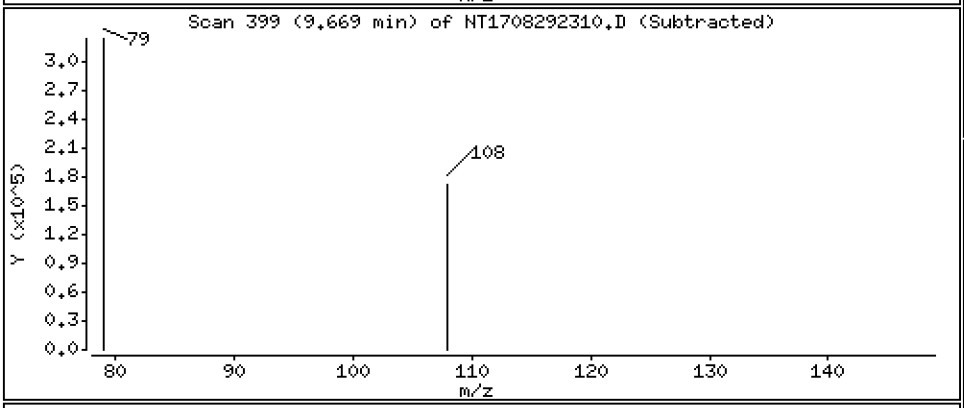
Column diameter: 0.25

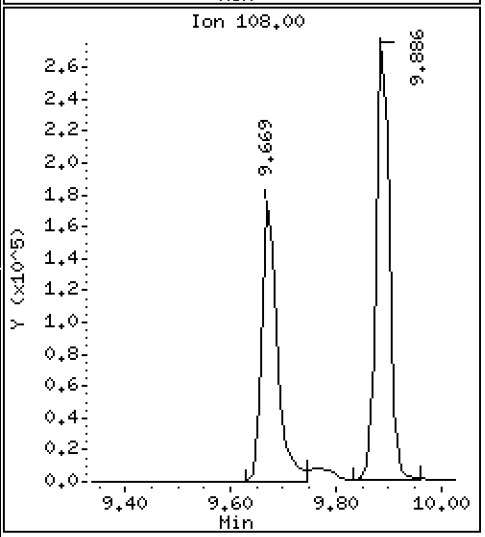
11 Benzyl alcohol

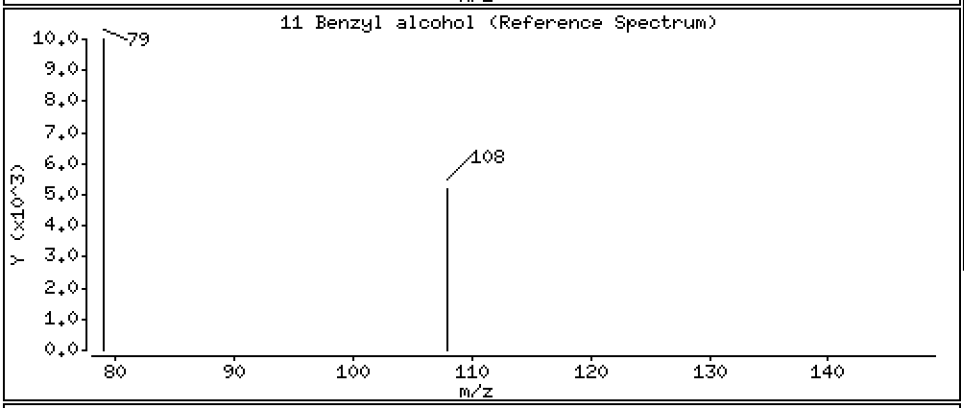
Concentration: 4.390 ug/mL

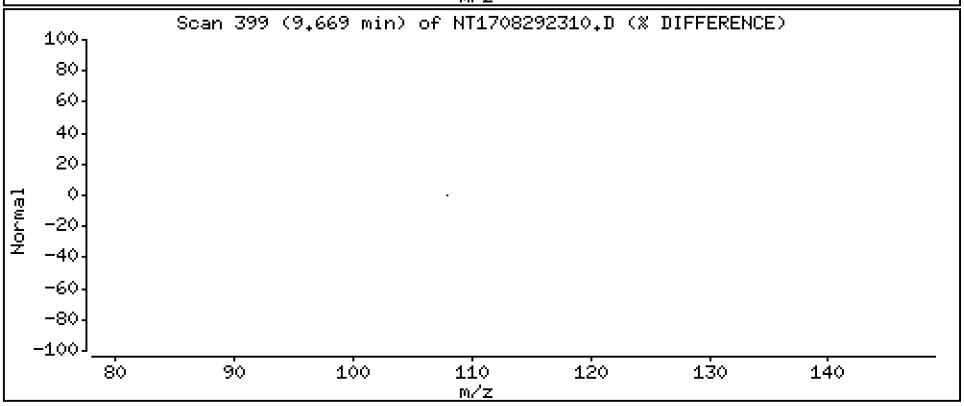












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Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

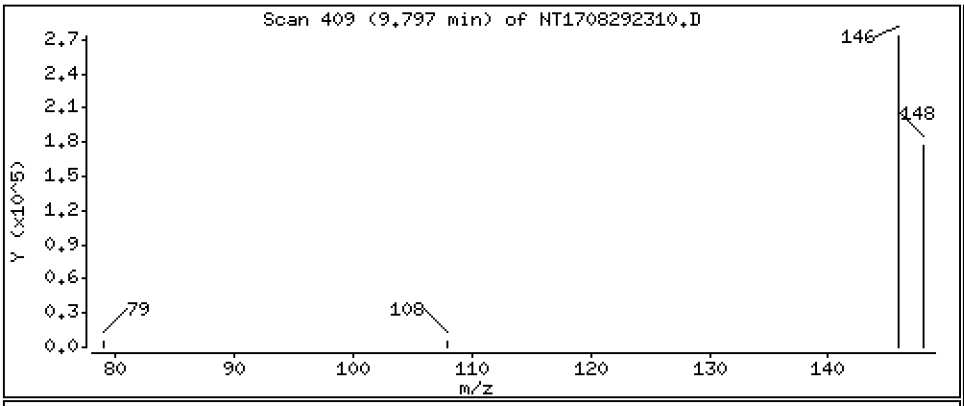
Operator: JGR

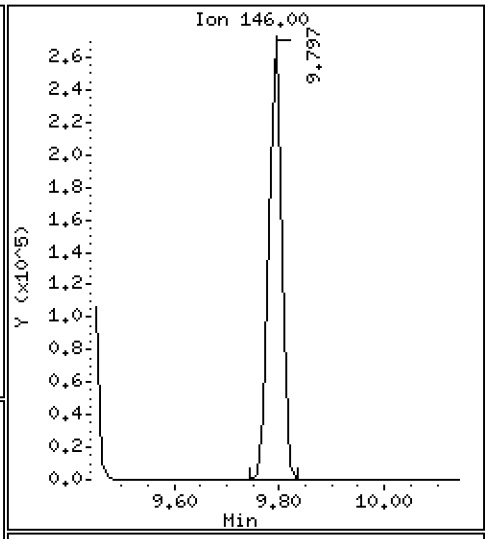
Column phase: ZB-5msi

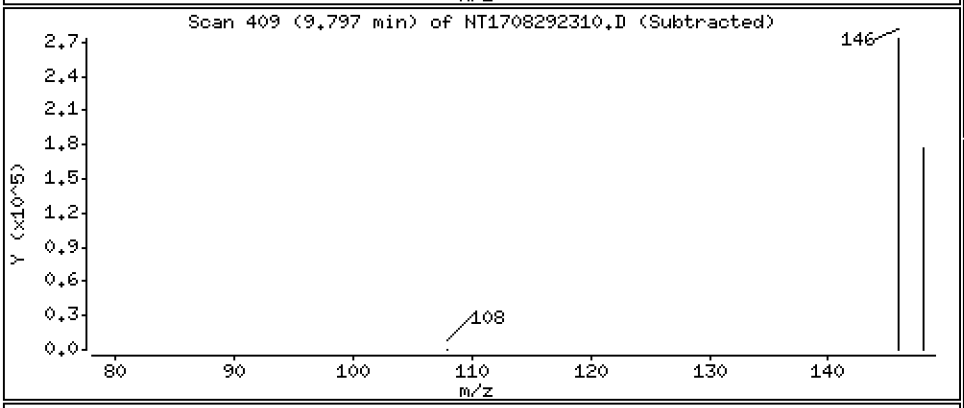
Column diameter: 0.25

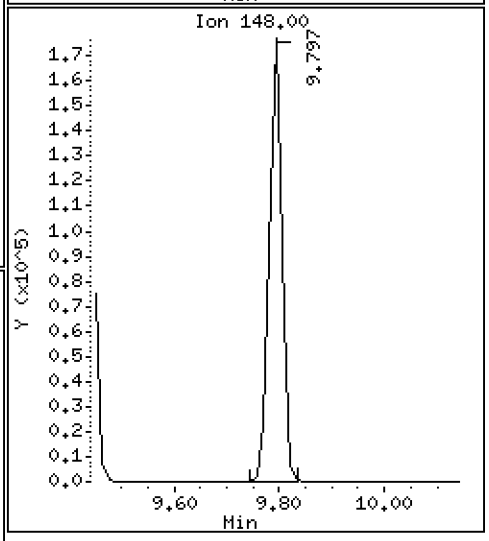
12 1,2-Dichlorobenzene

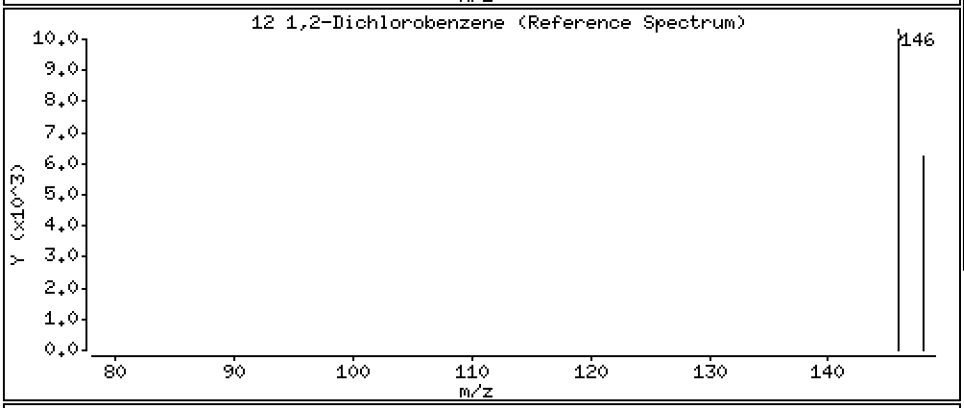
Concentration: 3.313 ug/mL

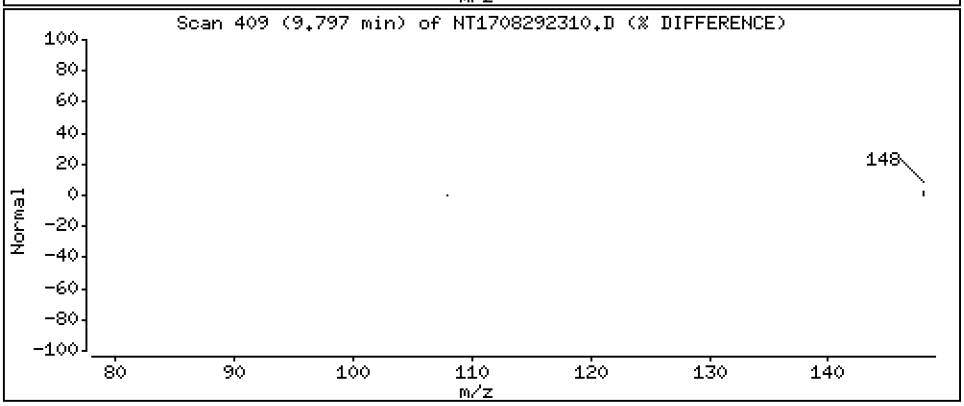












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Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

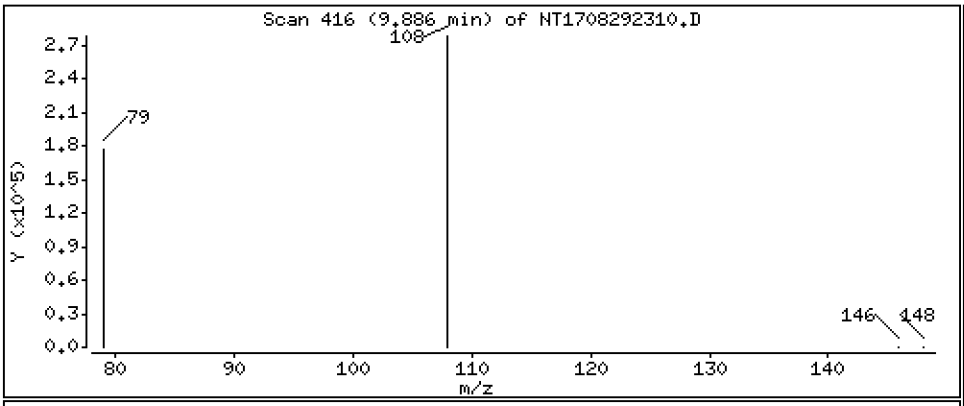
Operator: JGR

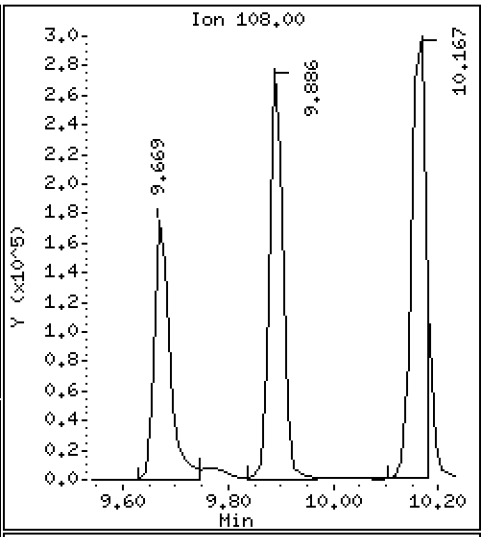
Column phase: ZB-5msi

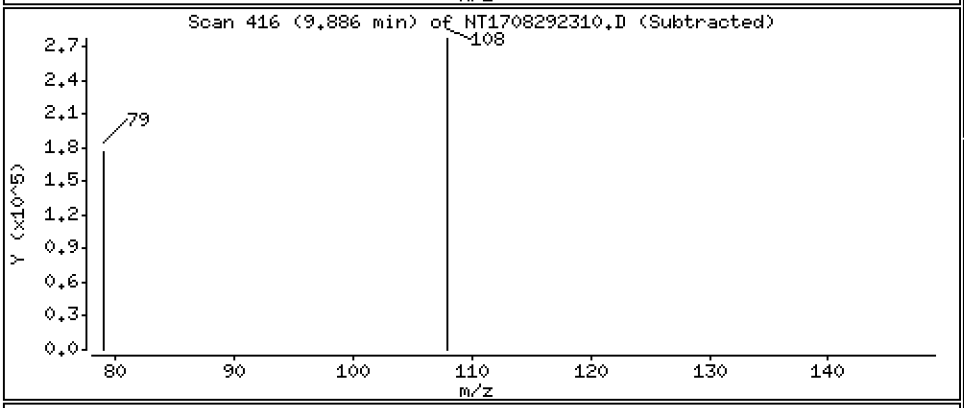
Column diameter: 0.25

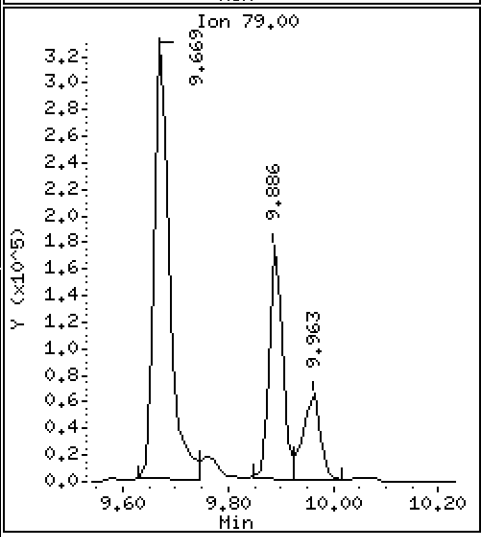
13 2-Methylphenol

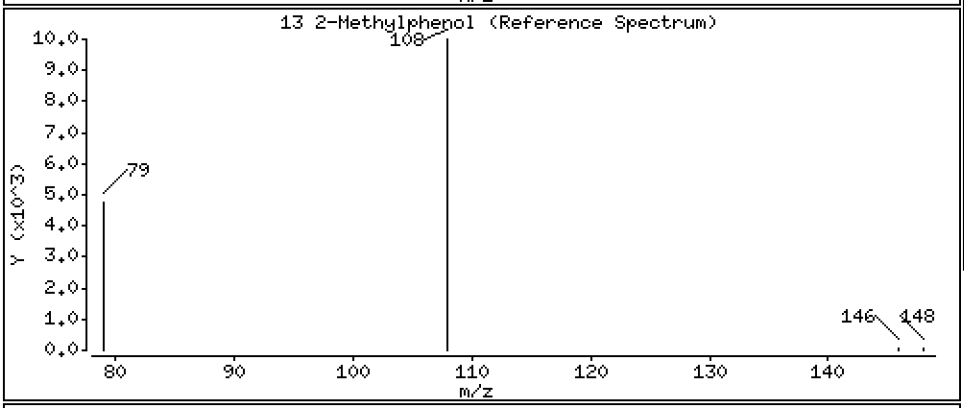
Concentration: 3.675 ug/mL

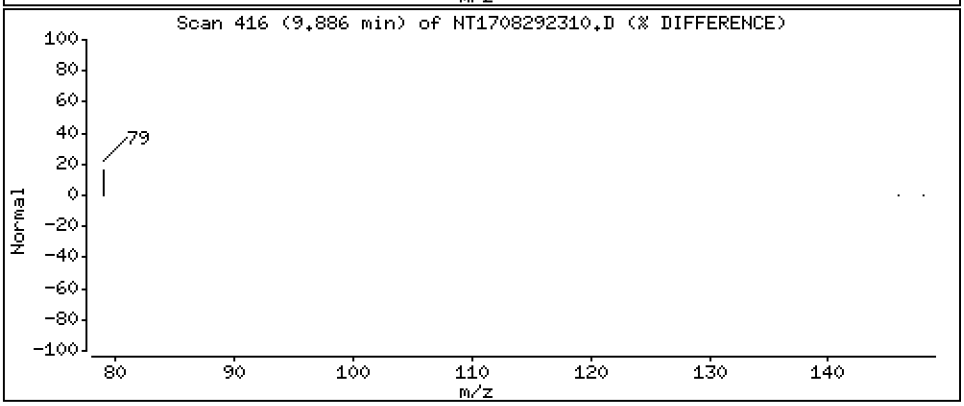












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Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

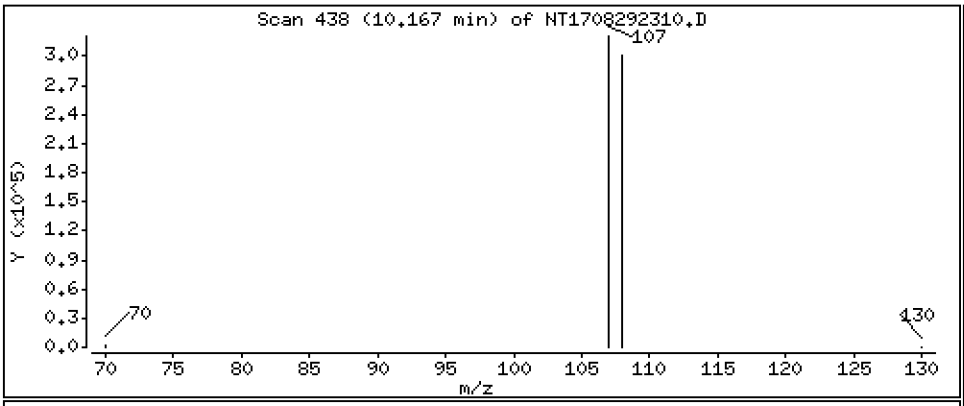
Operator: JGR

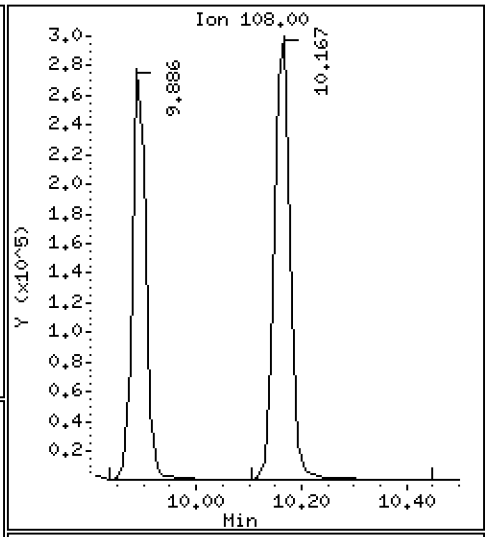
Column phase: ZB-5msi

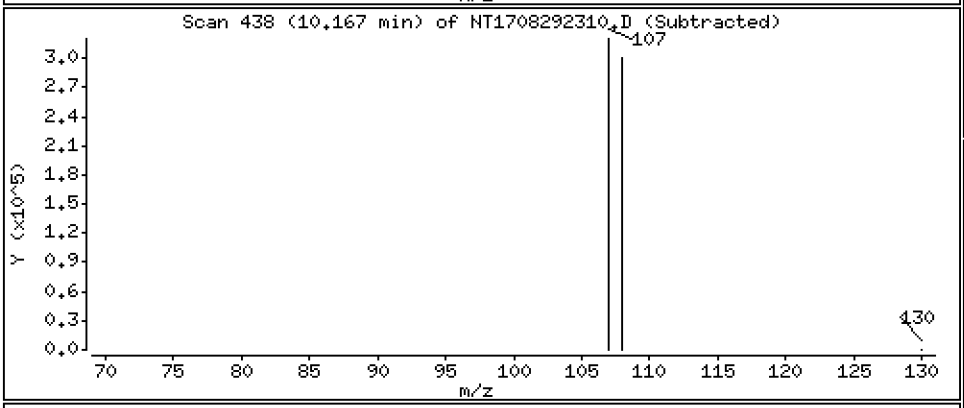
Column diameter: 0.25

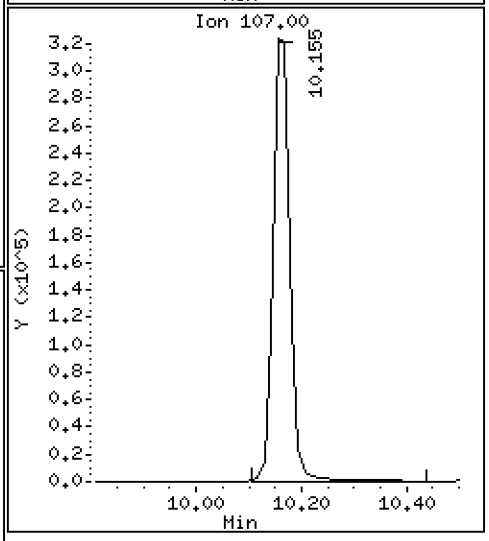
15 4-Methylphenol

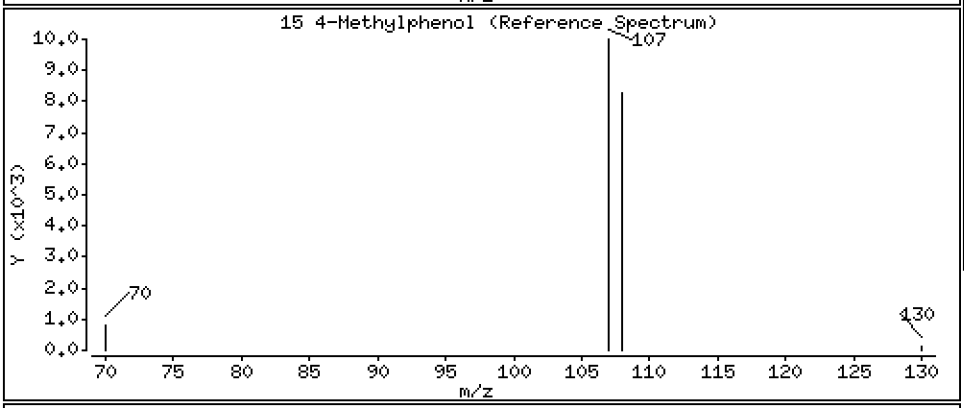
Concentration: 4.493 ug/mL

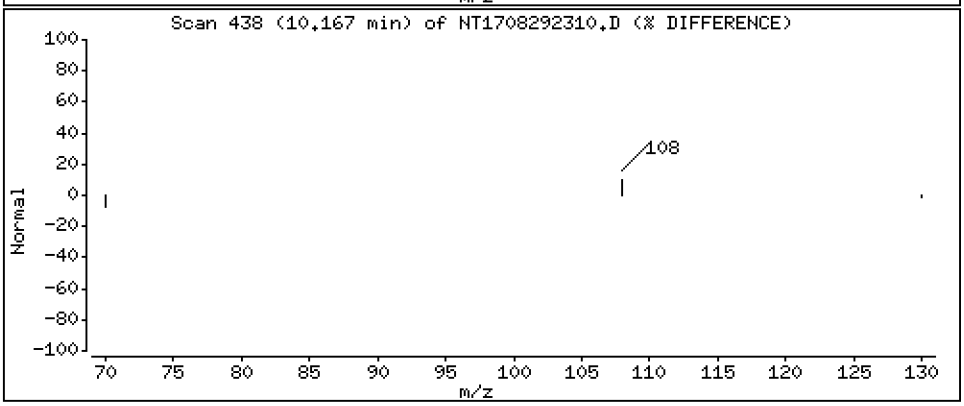












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Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

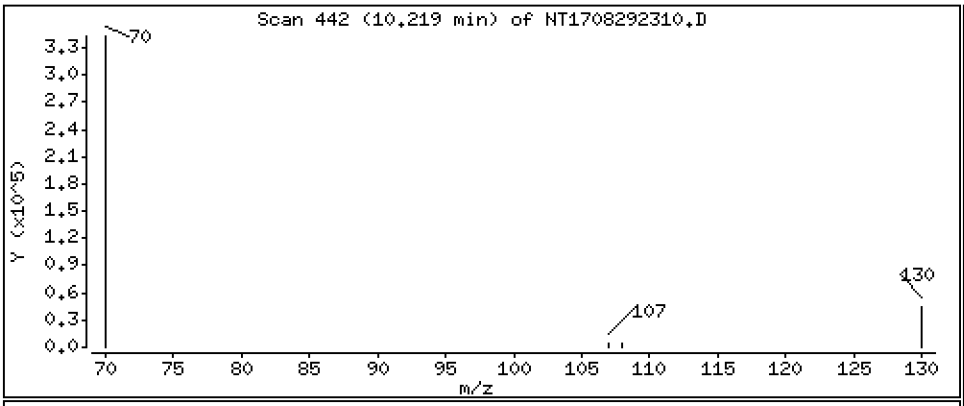
Operator: JGR

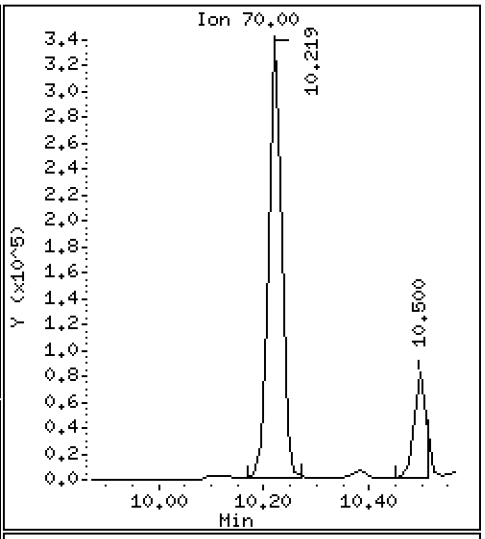
Column phase: ZB-5msi

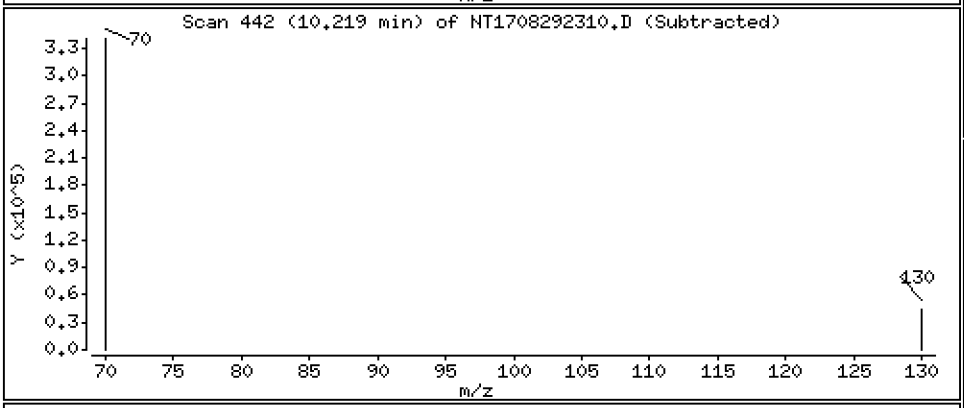
Column diameter: 0.25

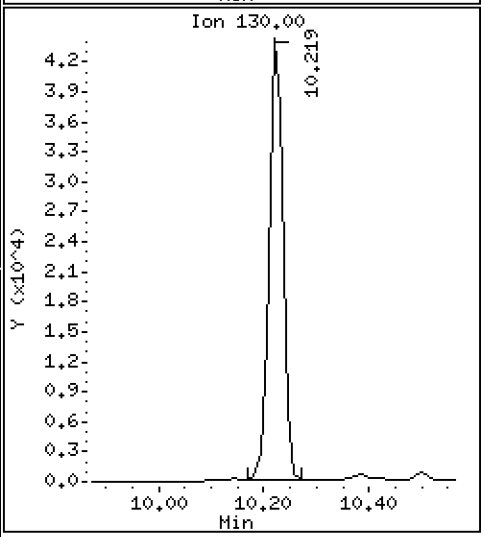
16 N-Nitroso-di-n-propylamine

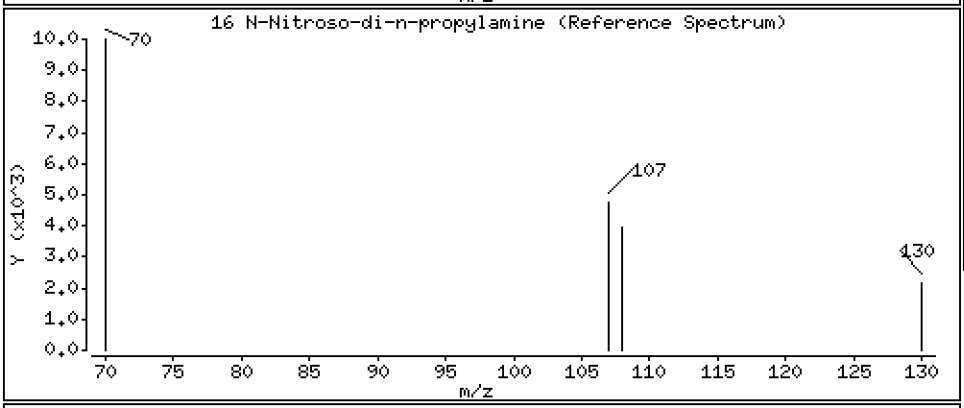
Concentration: 4.062 ug/mL

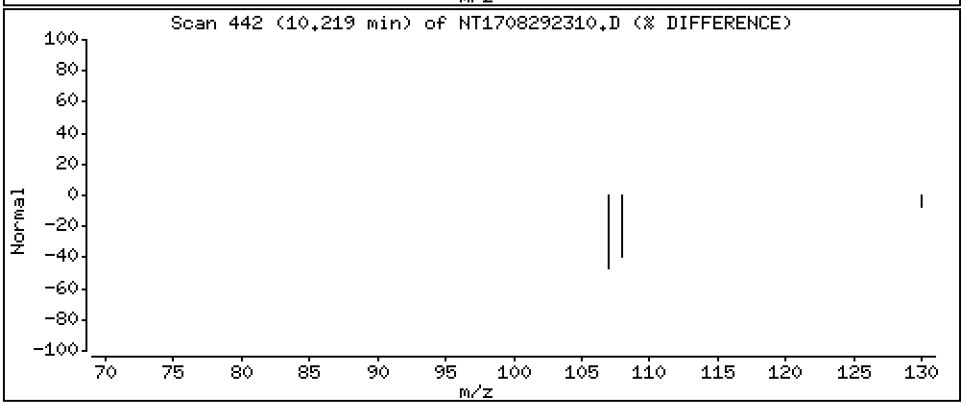












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Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

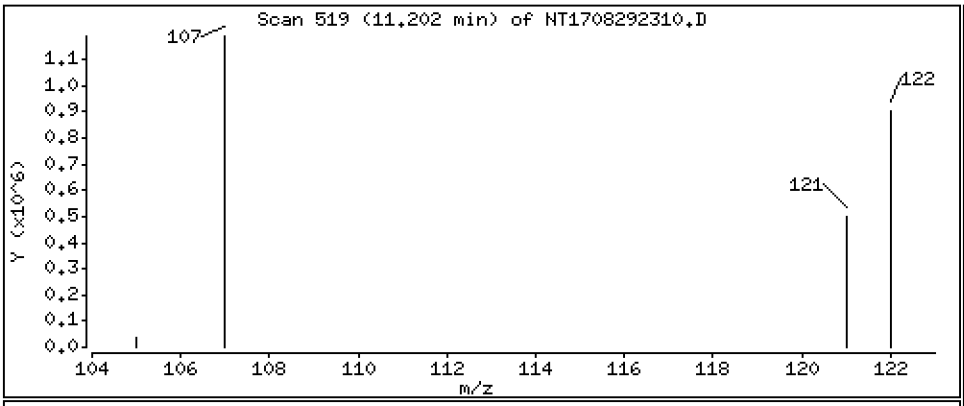
Operator: JGR

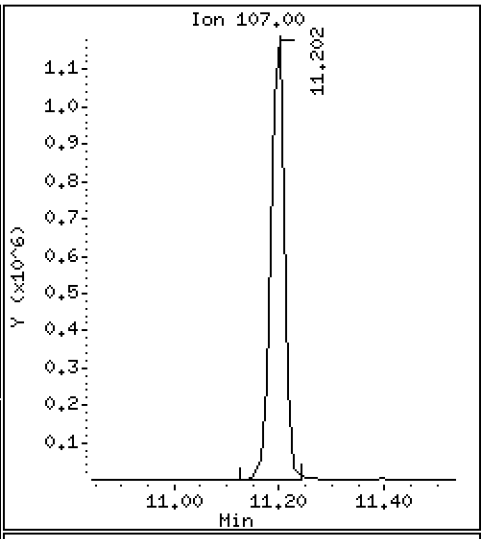
Column phase: ZB-5msi

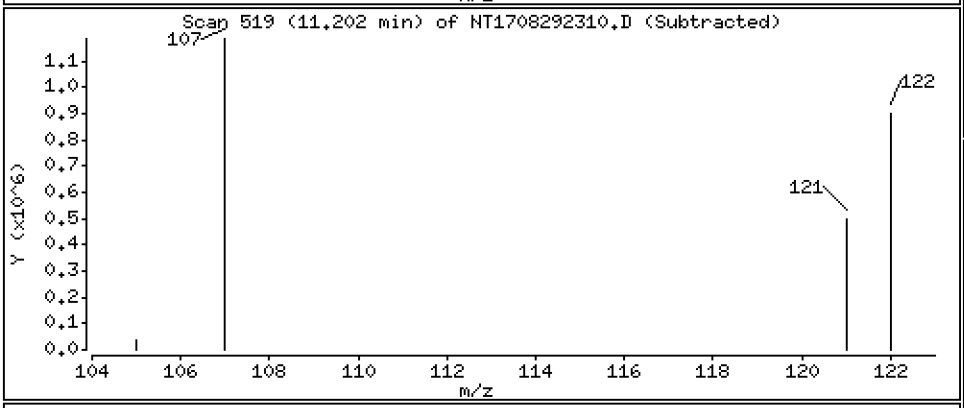
Column diameter: 0.25

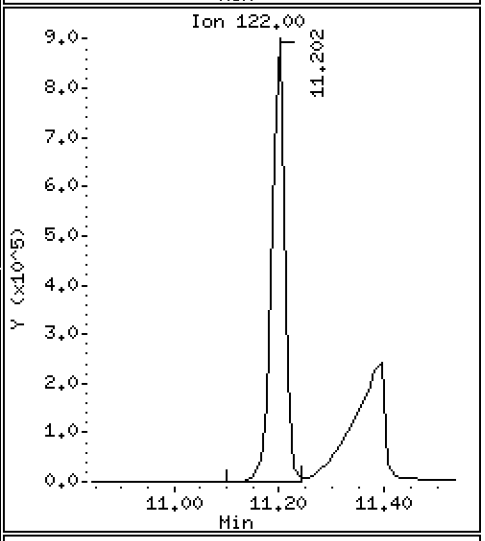
22 2,4-Dimethylphenol

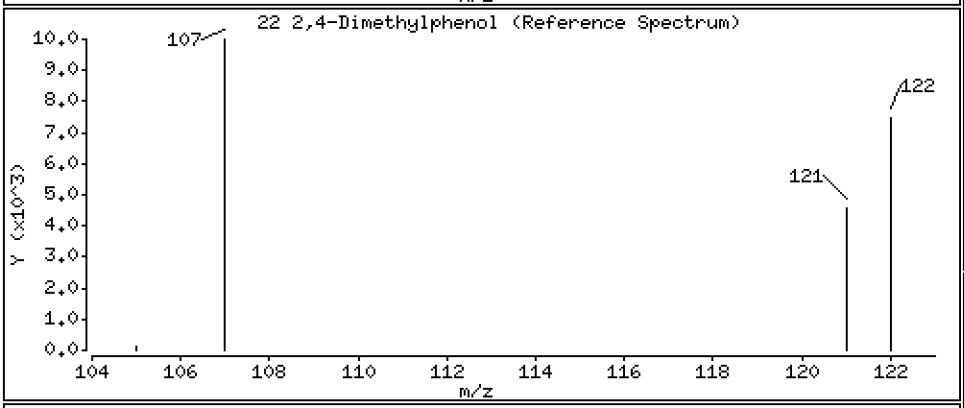
Concentration: 17.20 ug/mL

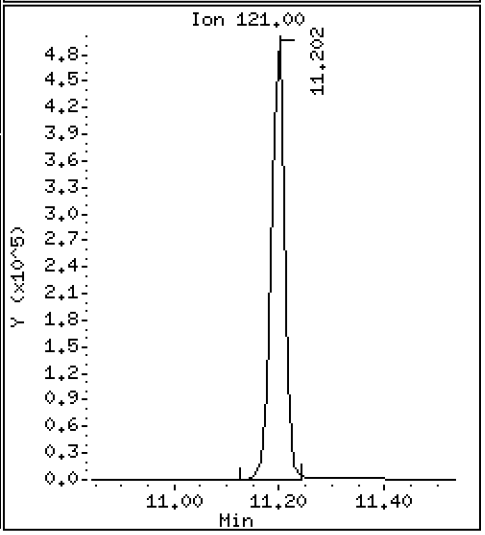


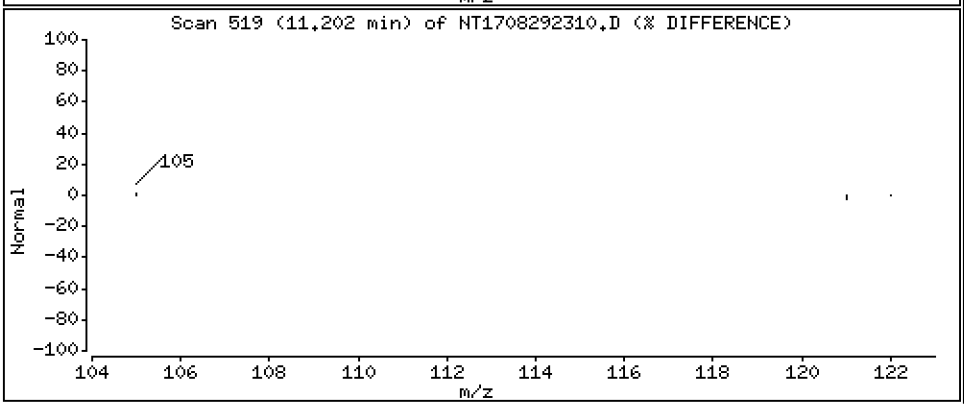












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Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

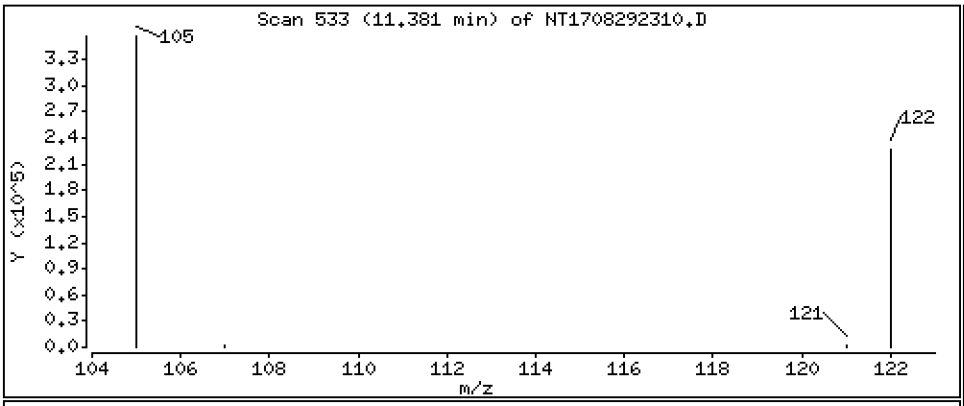
Operator: JGR

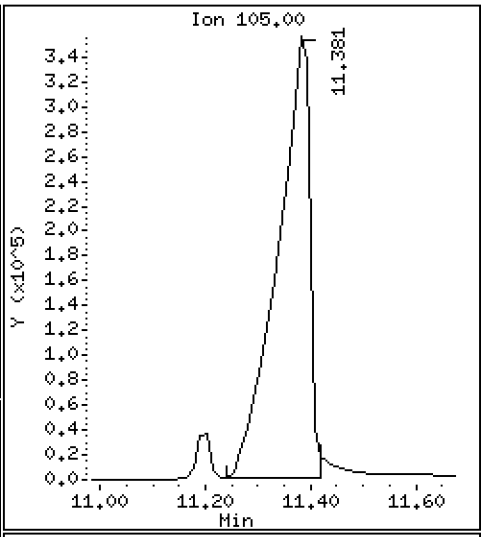
Column phase: ZB-5msi

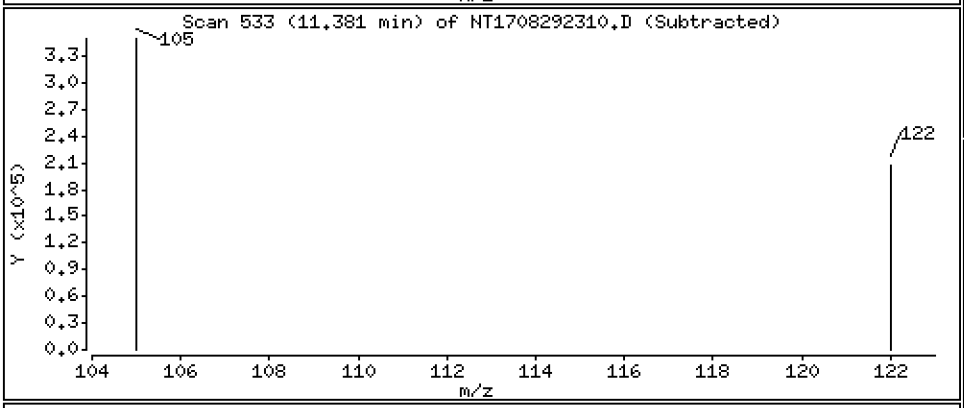
Column diameter: 0.25

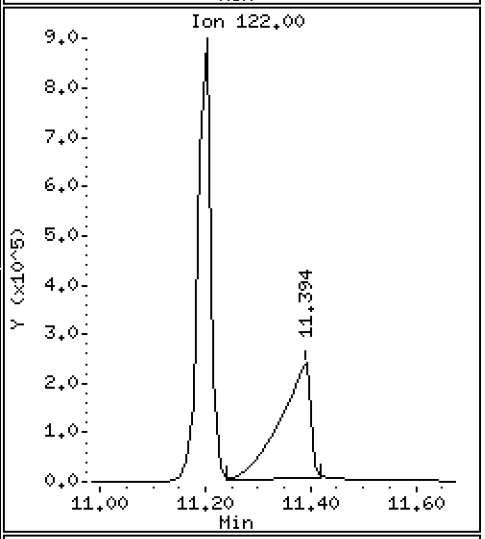
24 Benzoic acid

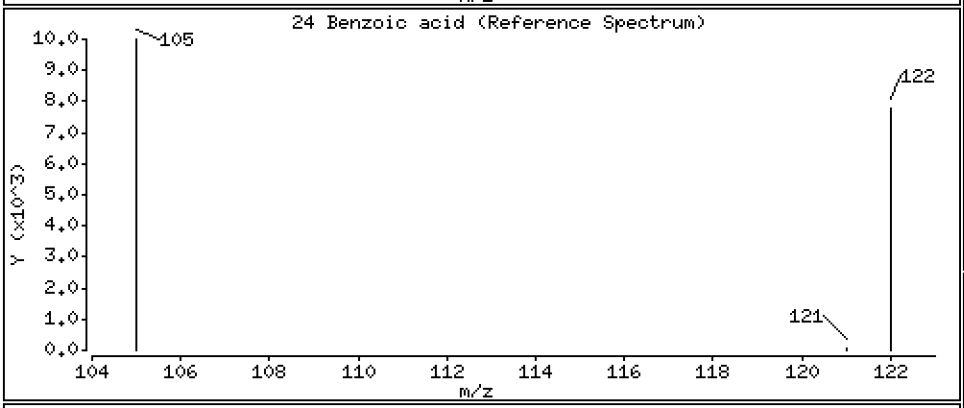
Concentration: 17.02 ug/mL

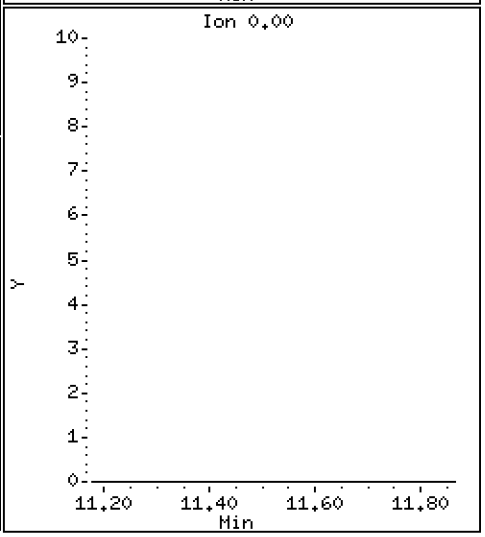


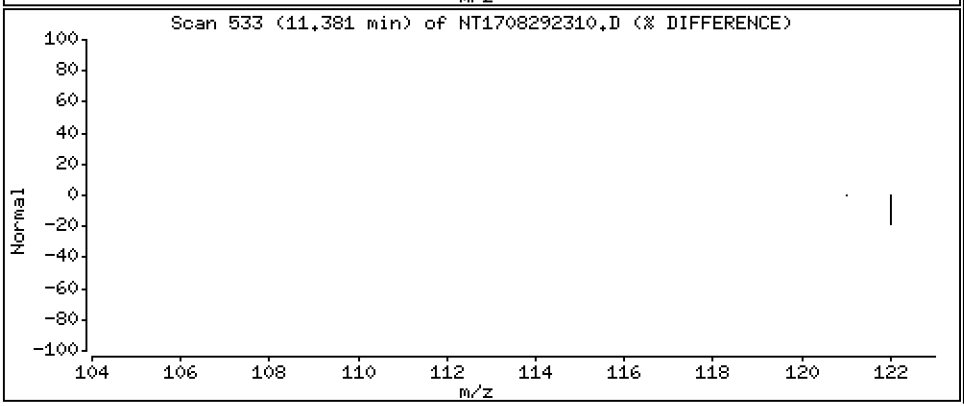












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Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

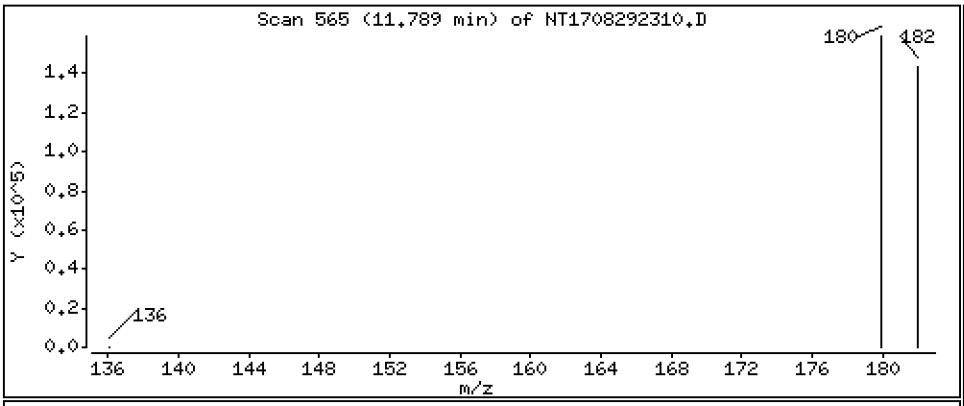
Operator: JGR

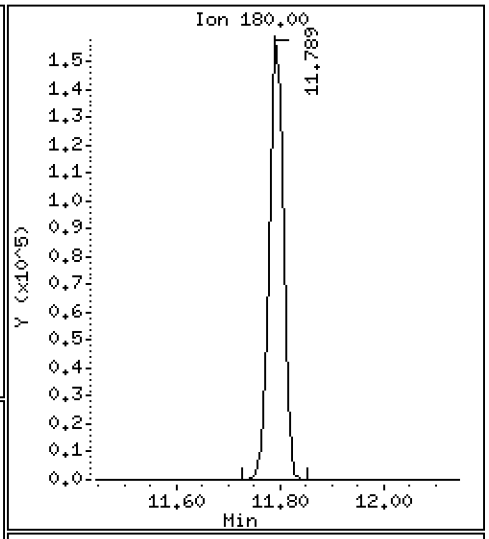
Column phase: ZB-5msi

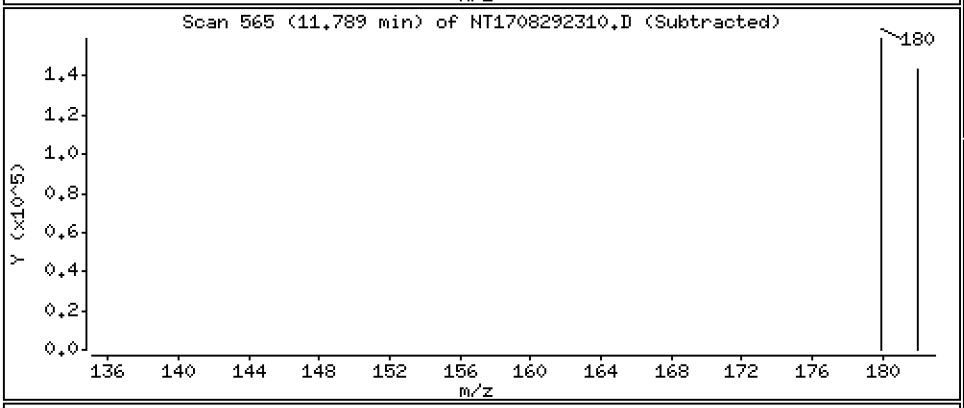
Column diameter: 0.25

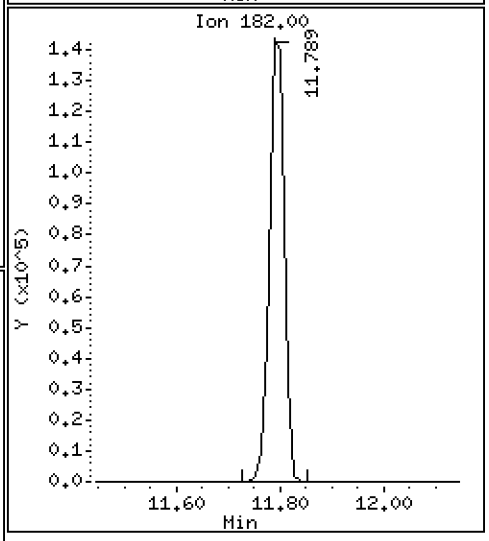
26 1,2,4-Trichlorobenzene

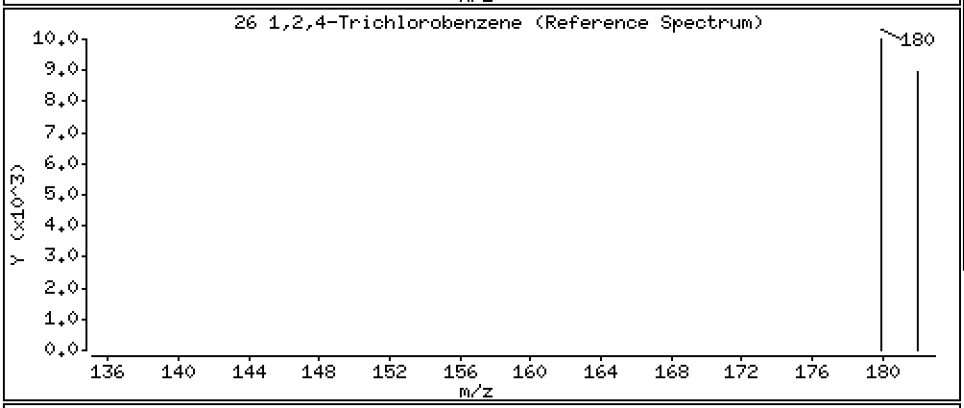
Concentration: 3.509 ug/mL

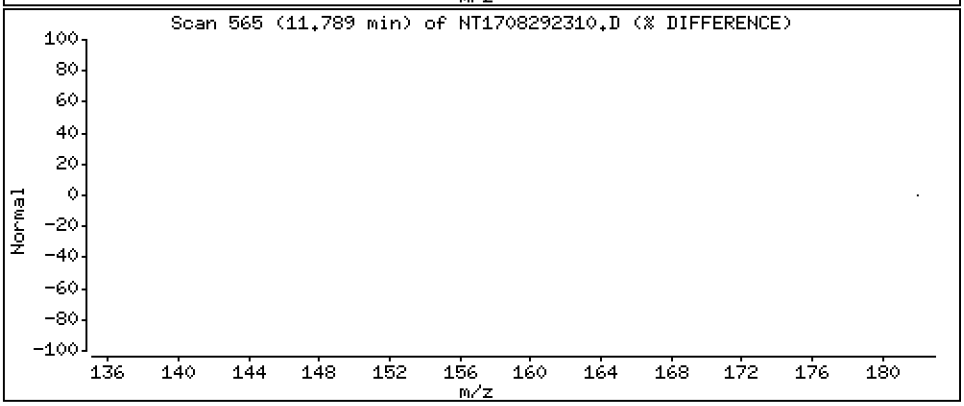












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Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

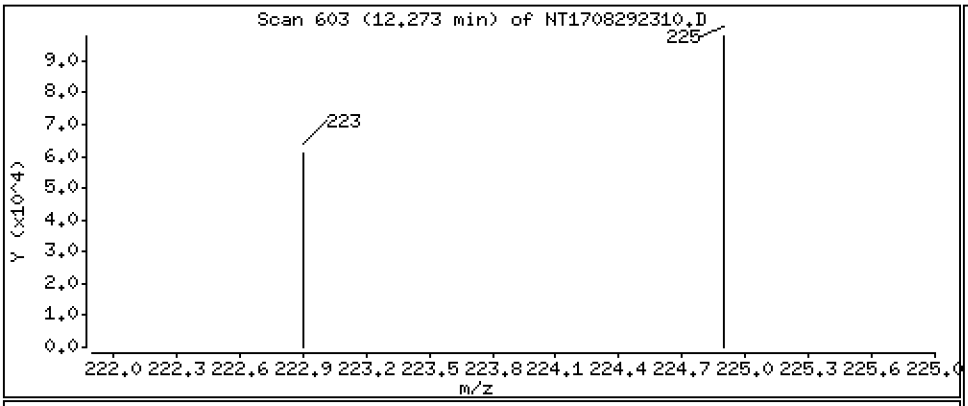
Operator: JGR

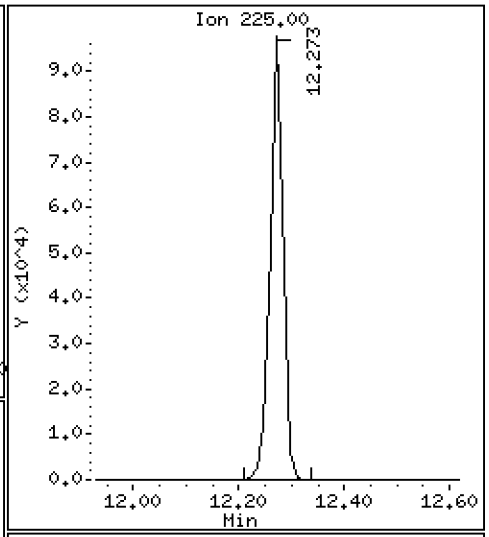
Column phase: ZB-5msi

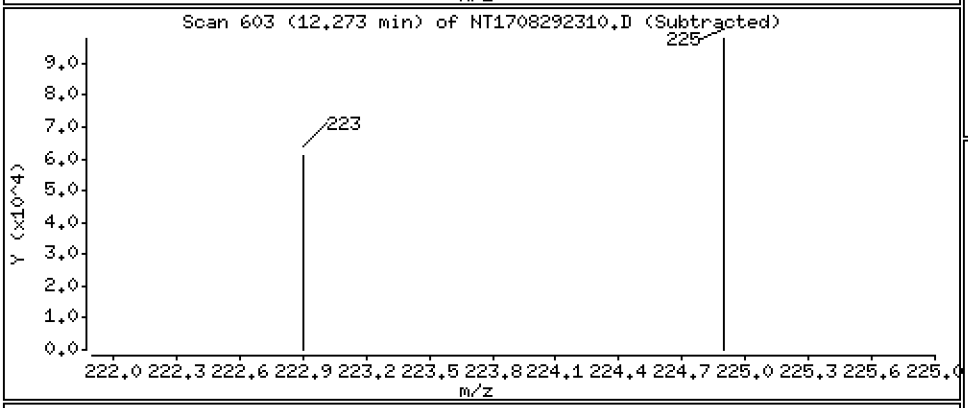
Column diameter: 0.25

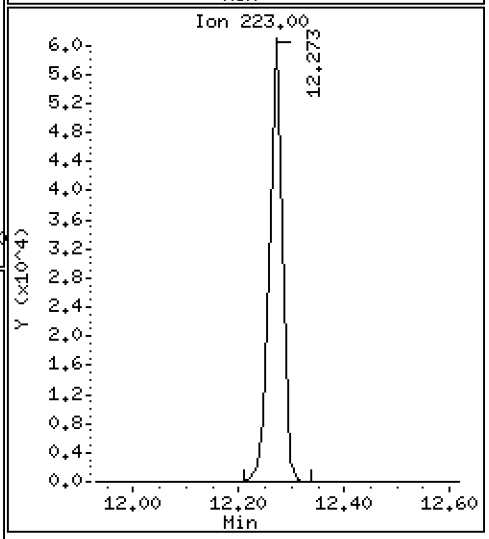
30 Hexachlorobutadiene

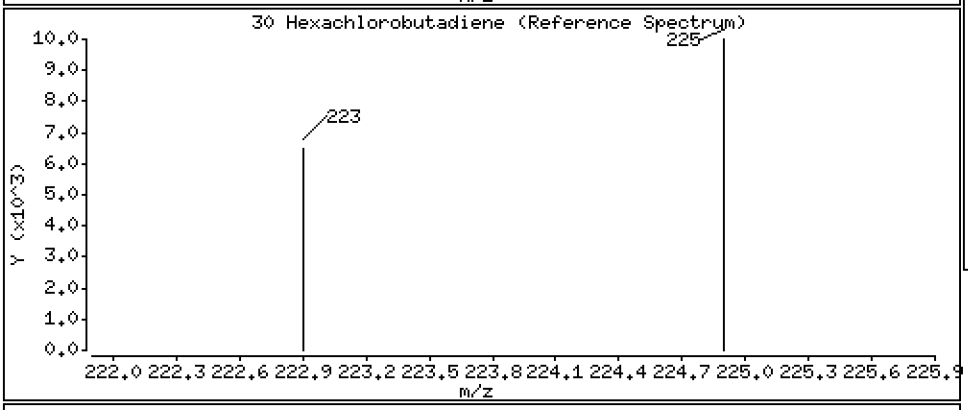
Concentration: 4.128 ug/mL

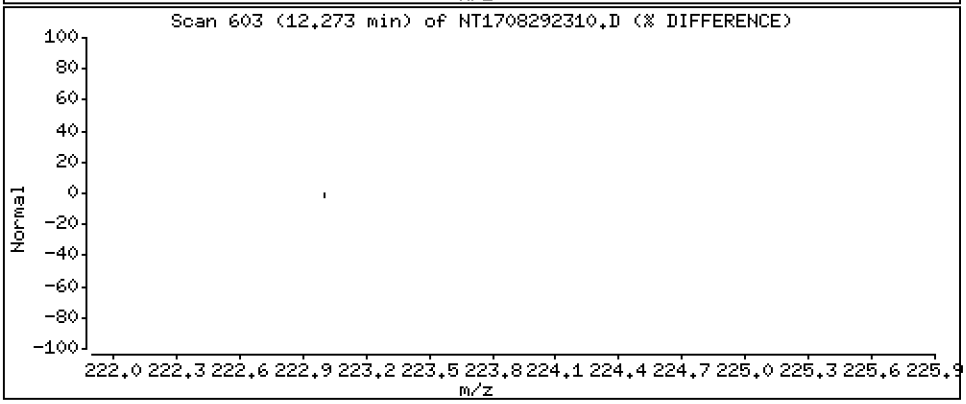












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Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

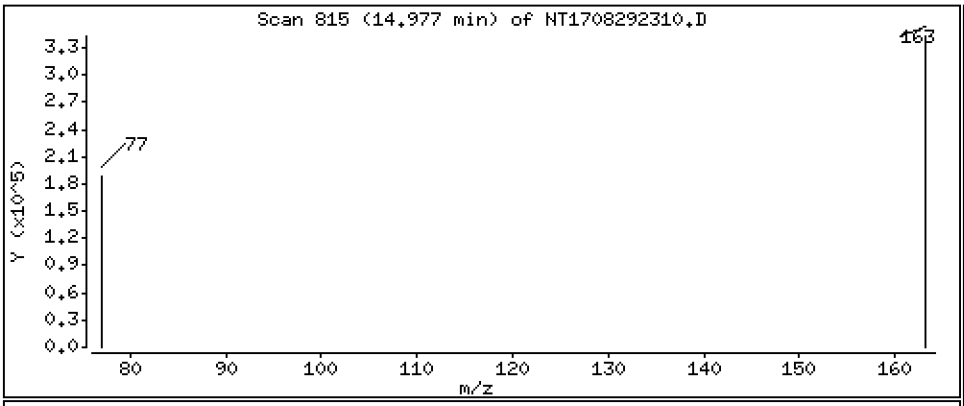
Operator: JGR

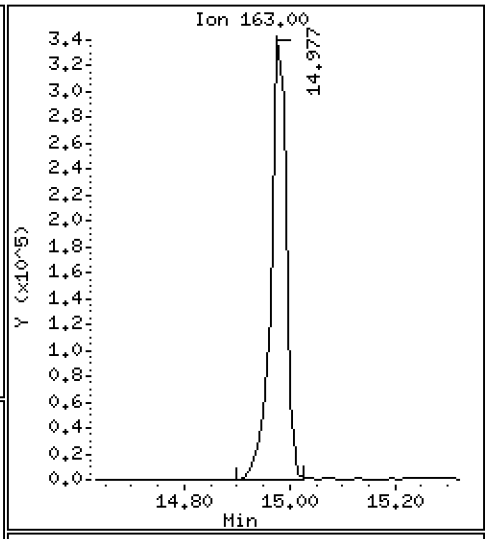
Column phase: ZB-5msi

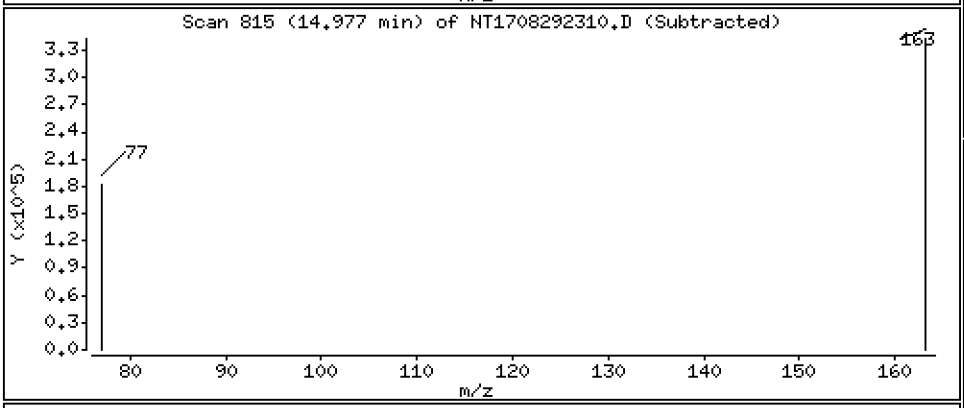
Column diameter: 0.25

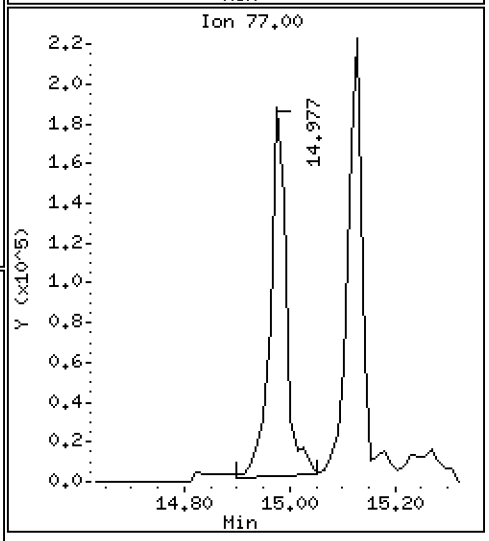
39 Dimethylphthalate

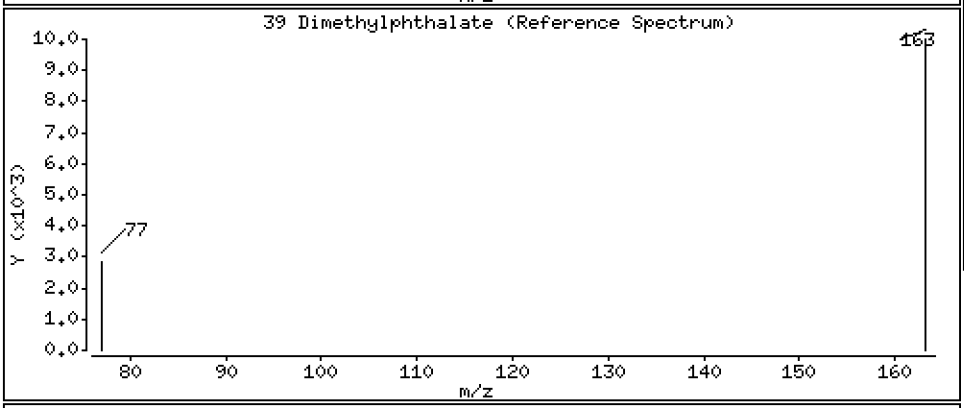
Concentration: 4.495 ug/mL

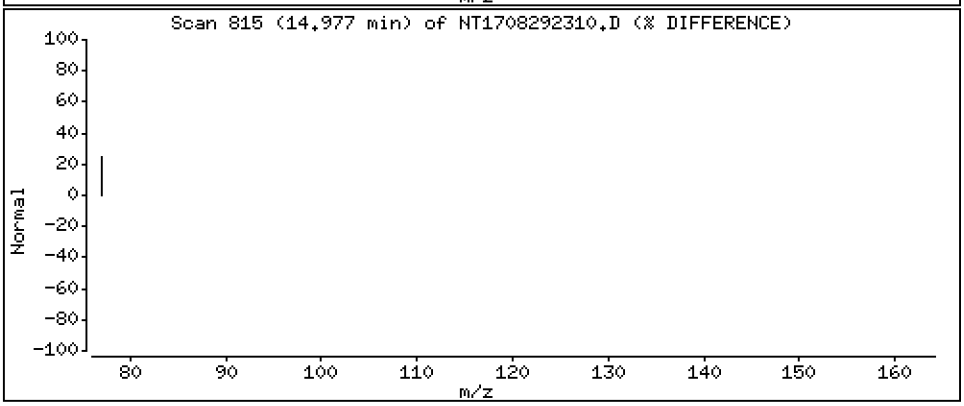












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Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

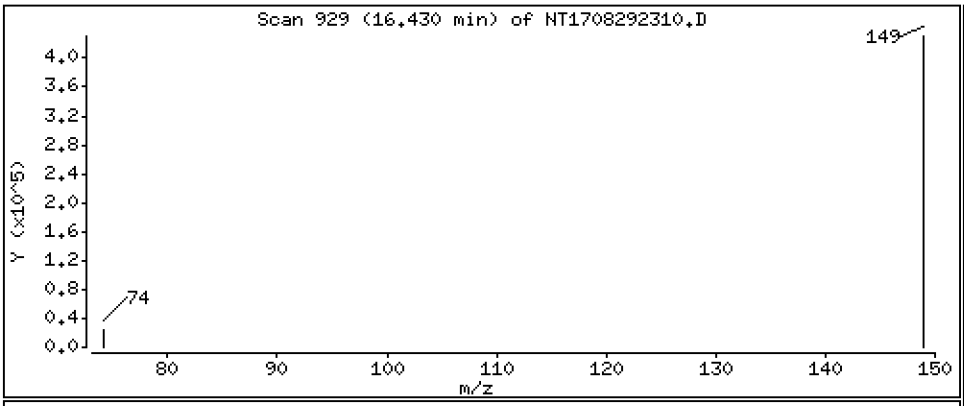
Operator: JGR

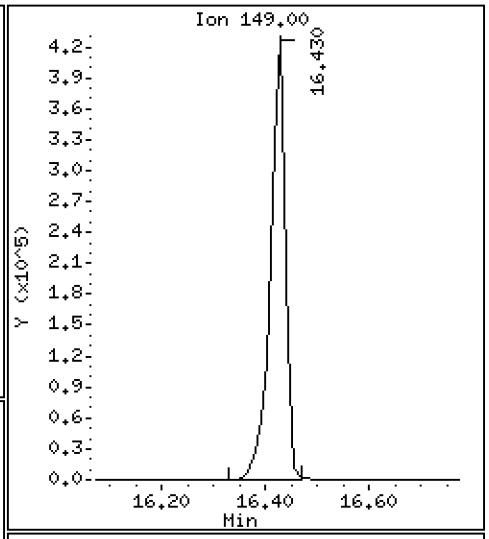
Column phase: ZB-5msi

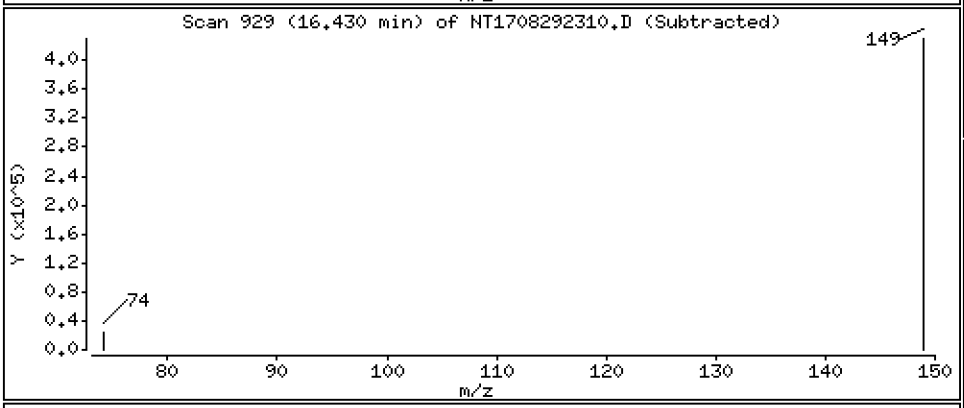
Column diameter: 0.25

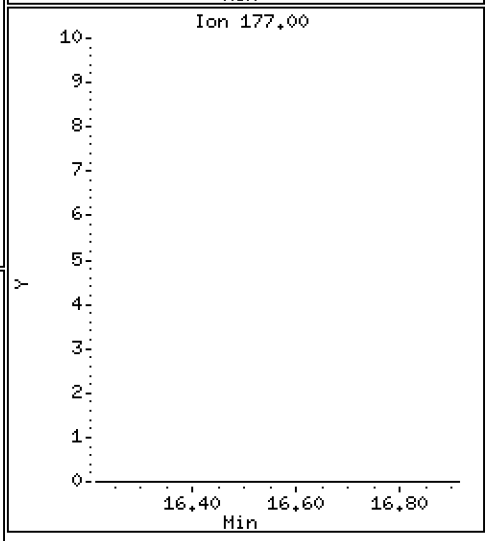
50 Diethylphthalate

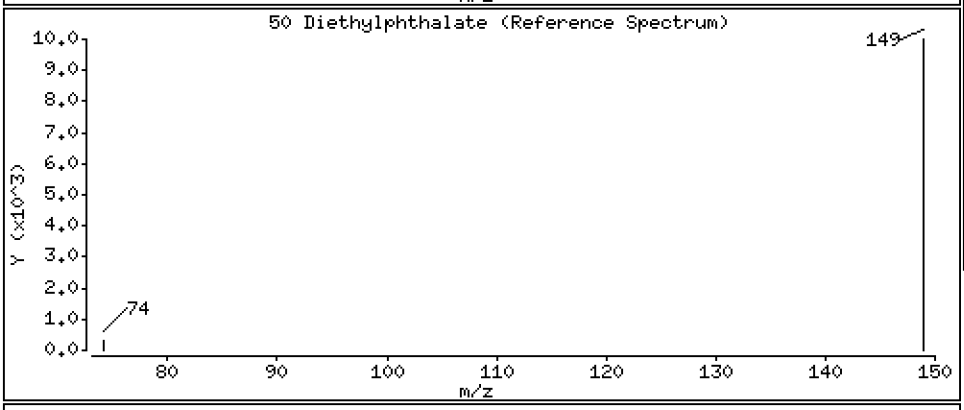
Concentration: 5.262 ug/mL

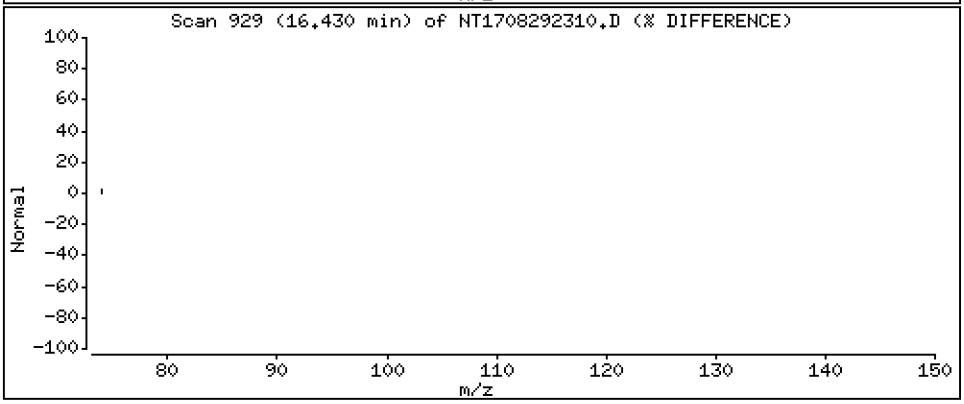












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Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

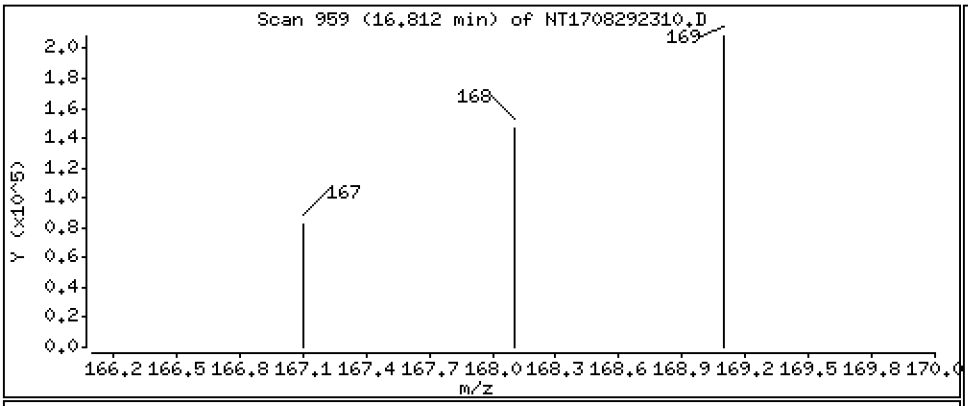
Operator: JGR

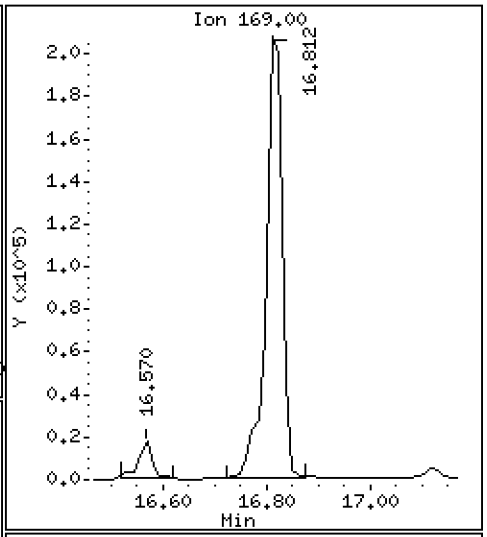
Column phase: ZB-5msi

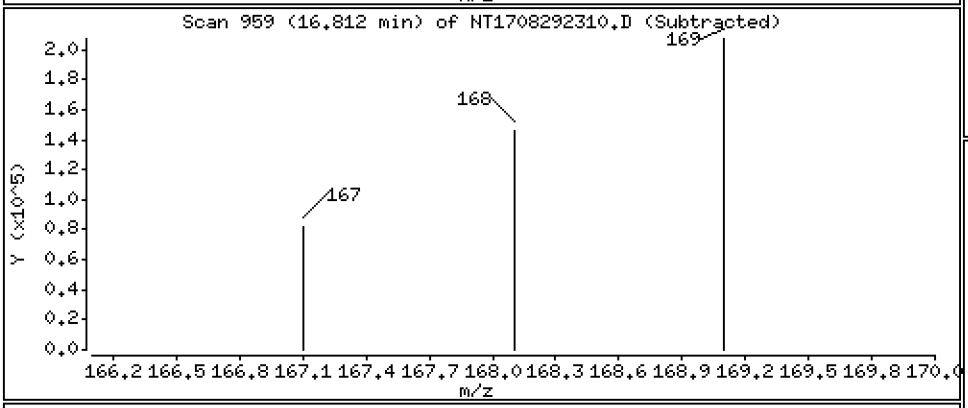
Column diameter: 0.25

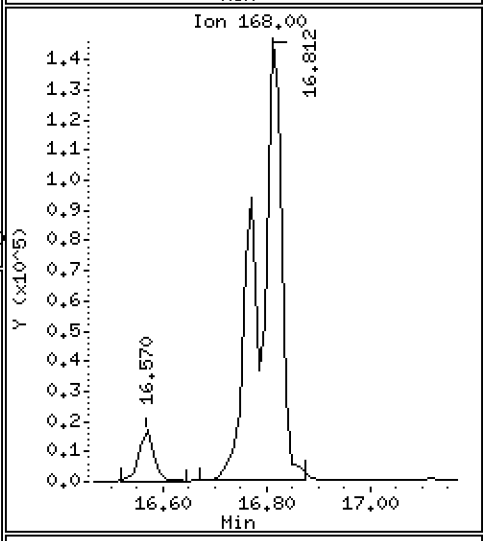
54 N-Nitrosodiphenylamine

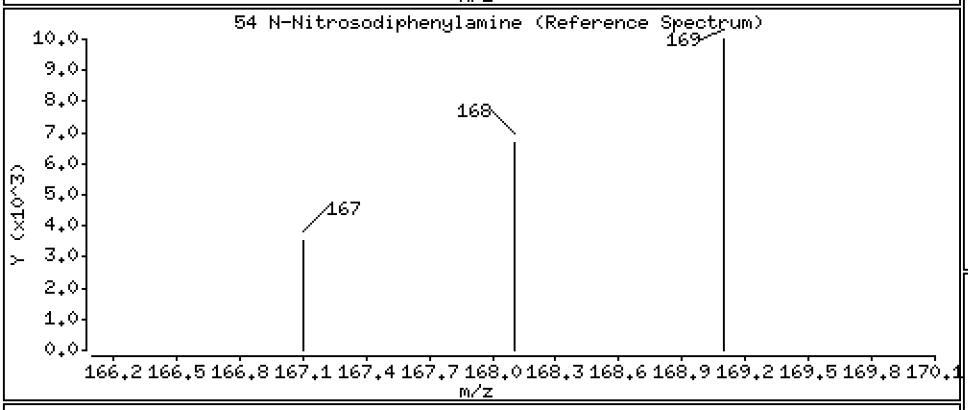
Concentration: 4.550 ug/mL

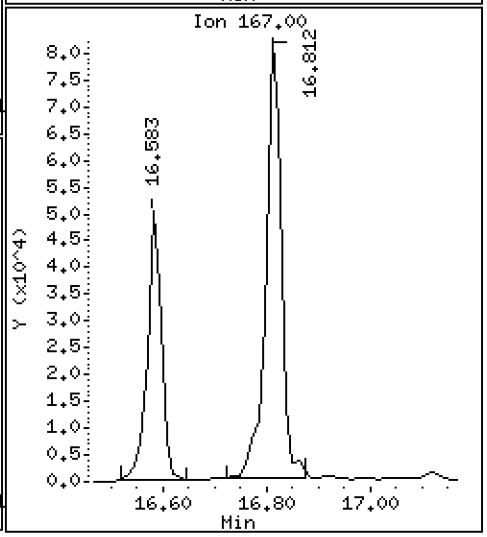


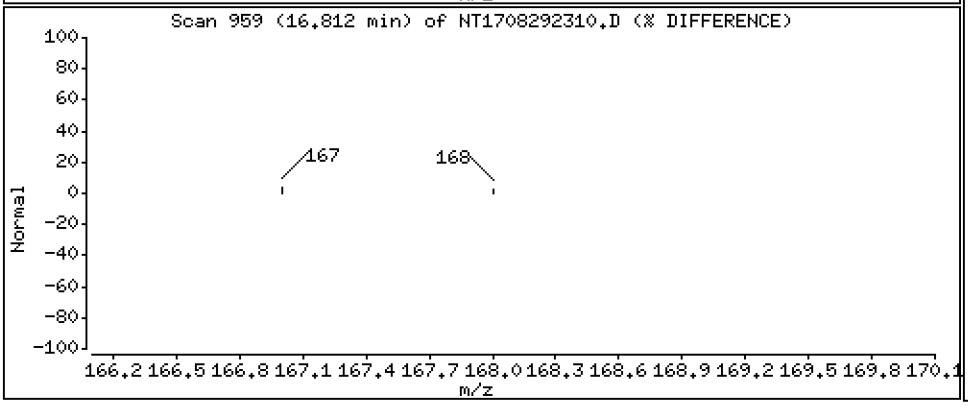












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Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

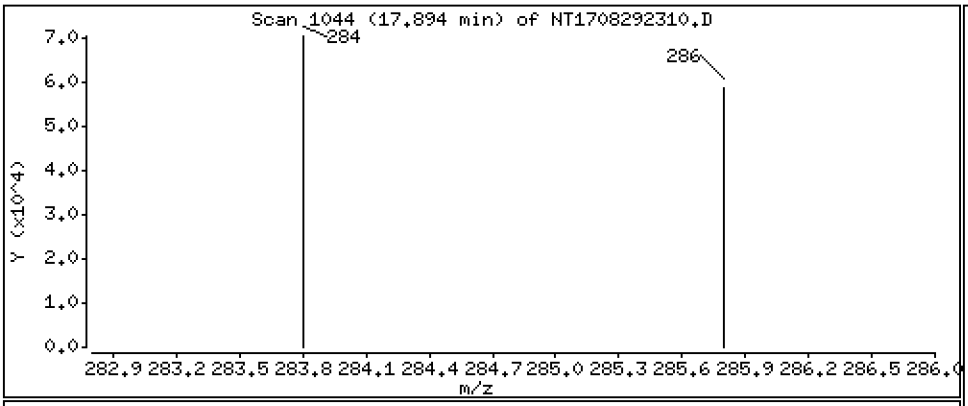
Operator: JGR

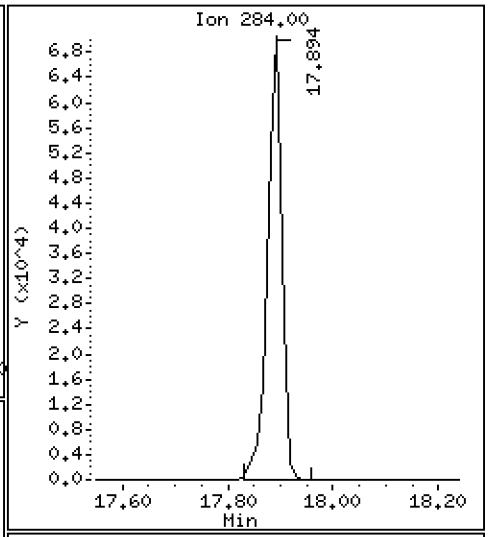
Column phase: ZB-5msi

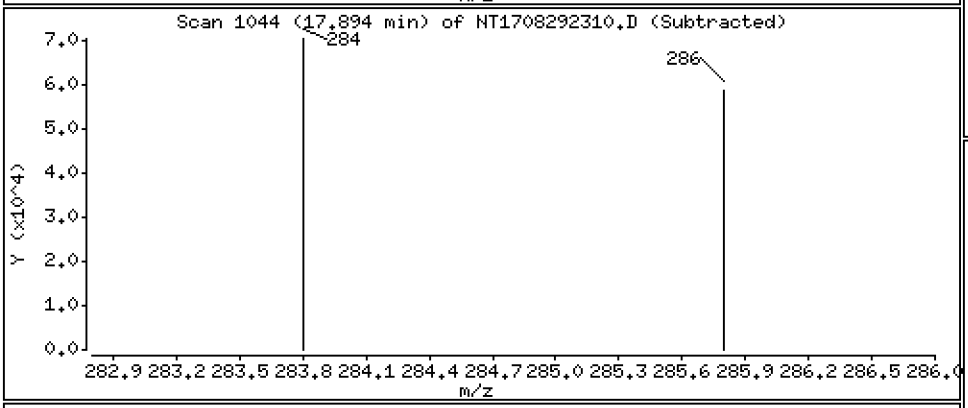
Column diameter: 0.25

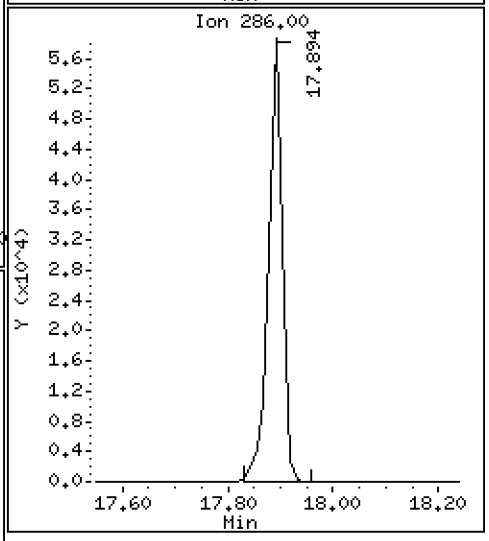
57 Hexachlorobenzene

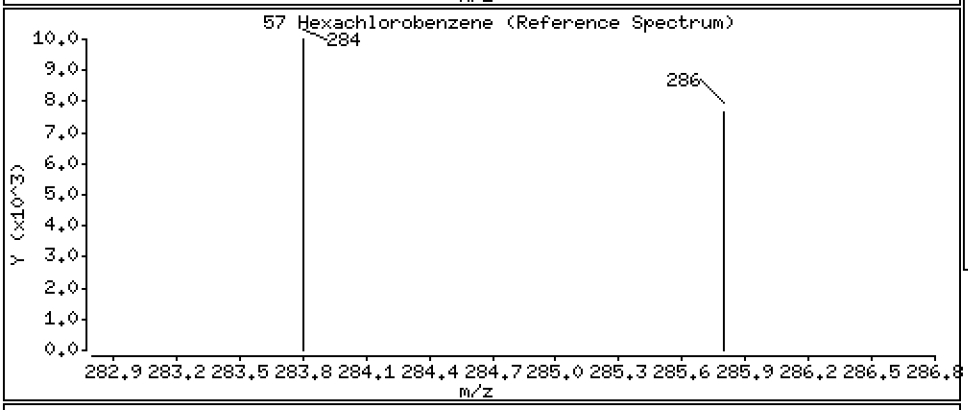
Concentration: 4.144 ug/mL

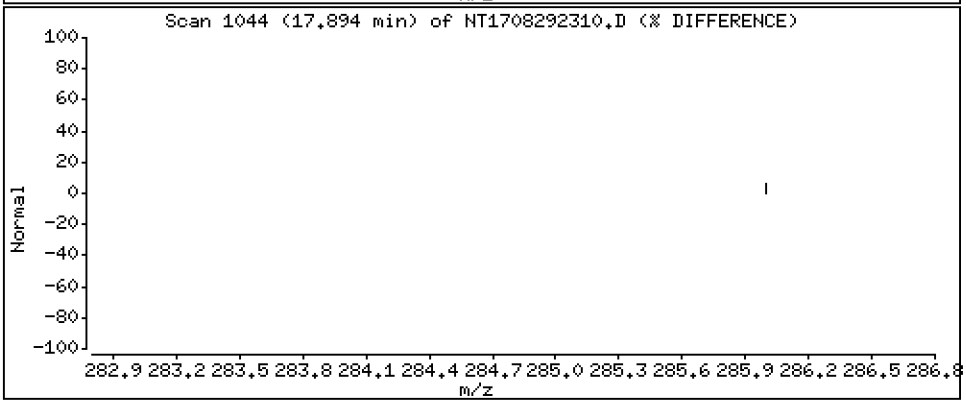












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Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

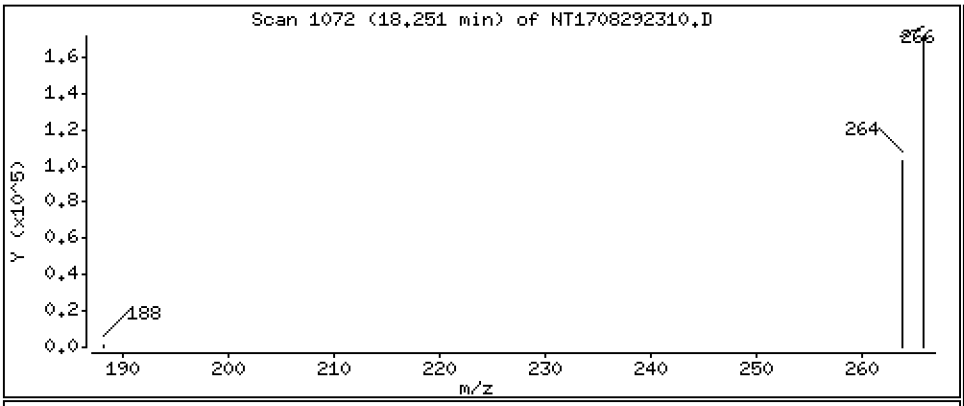
Operator: JGR

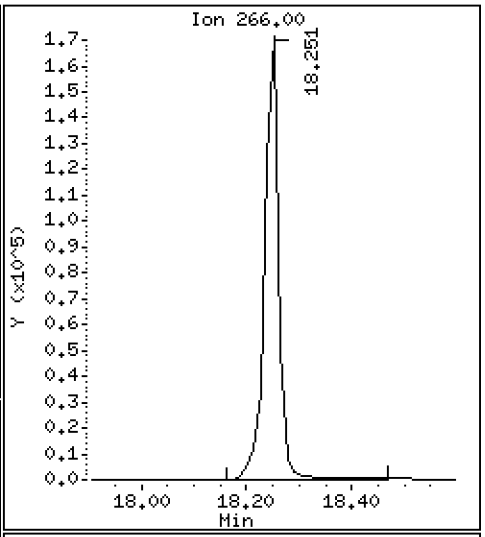
Column phase: ZB-5msi

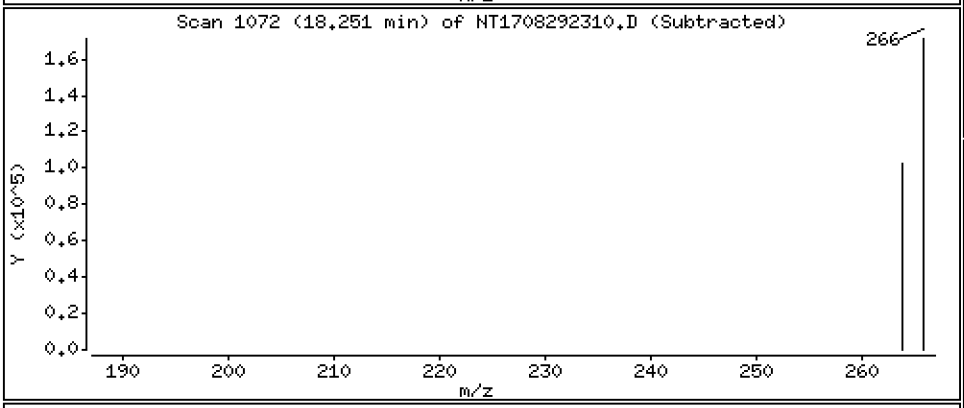
Column diameter: 0.25

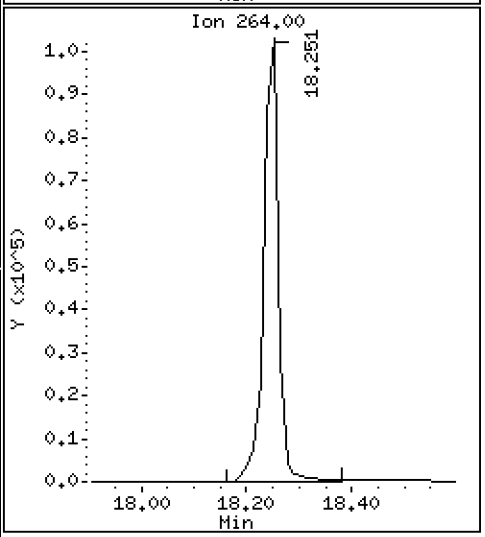
58 Pentachlorophenol

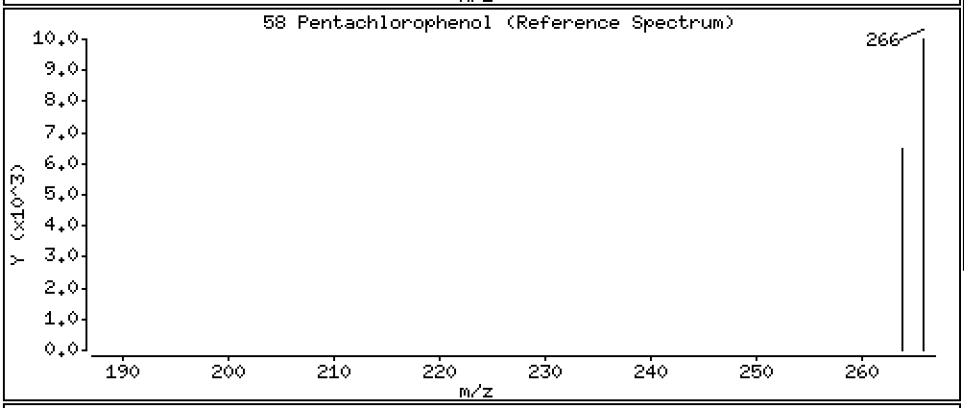
Concentration: 14.65 ug/mL

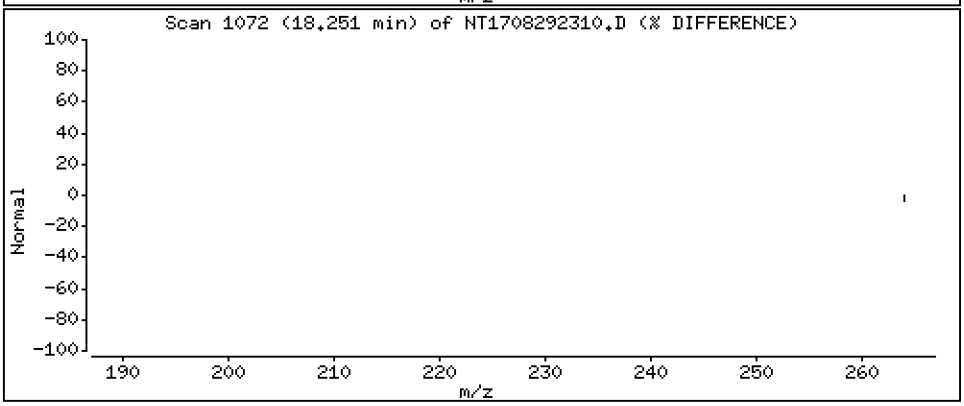












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Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

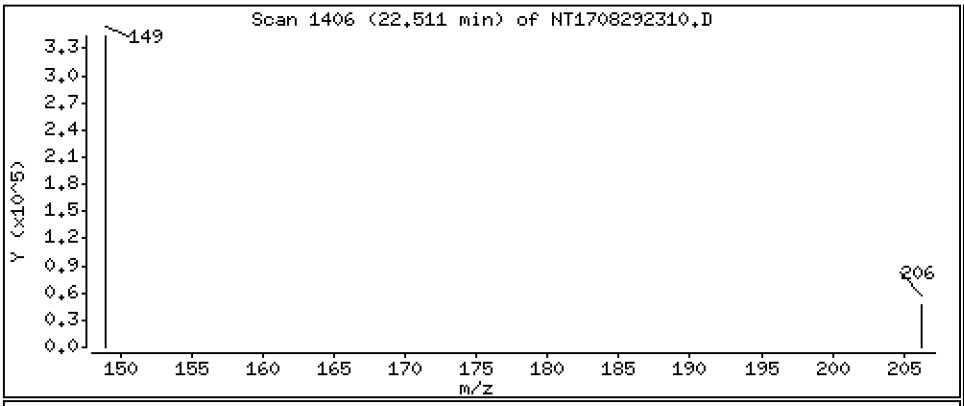
Operator: JGR

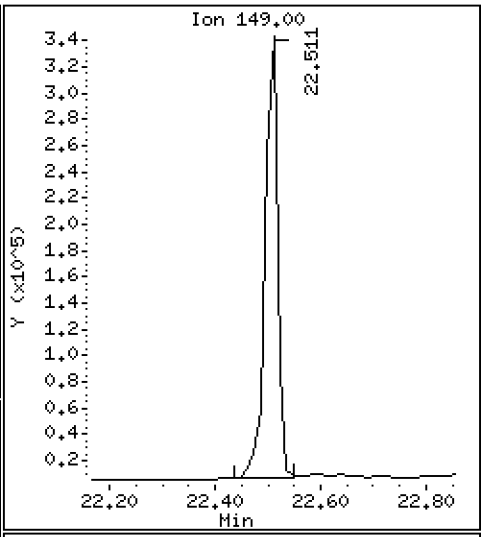
Column phase: ZB-5msi

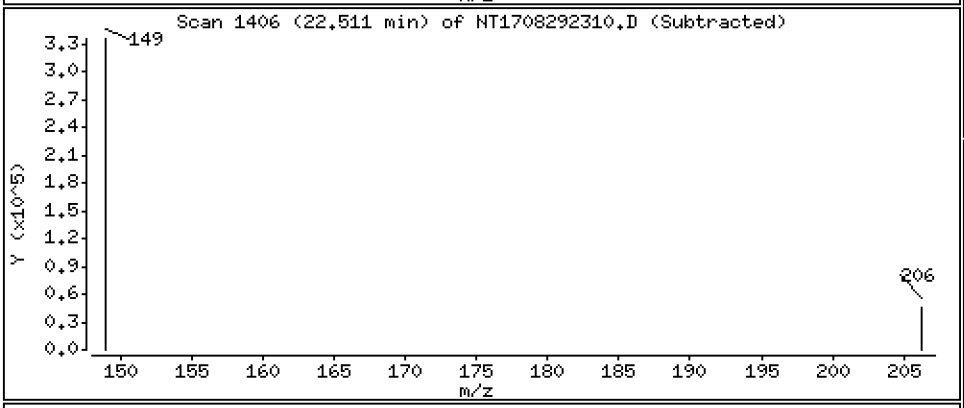
Column diameter: 0.25

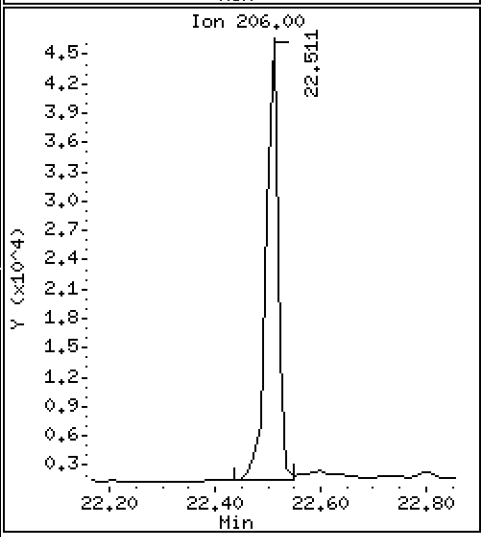
67 Butylbenzylphthalate

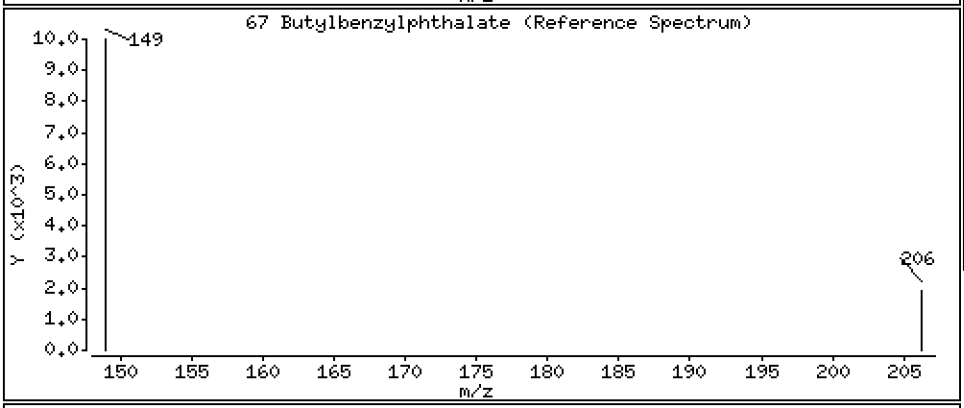
Concentration: 4.023 ug/mL

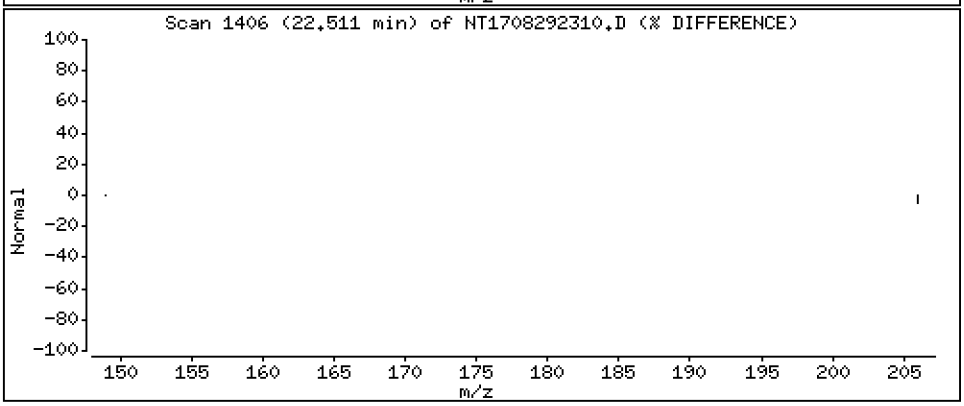












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Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

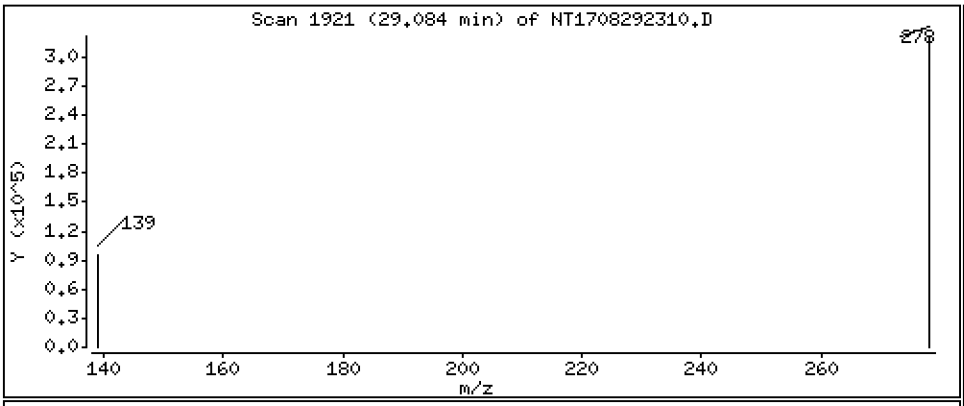
Operator: JGR

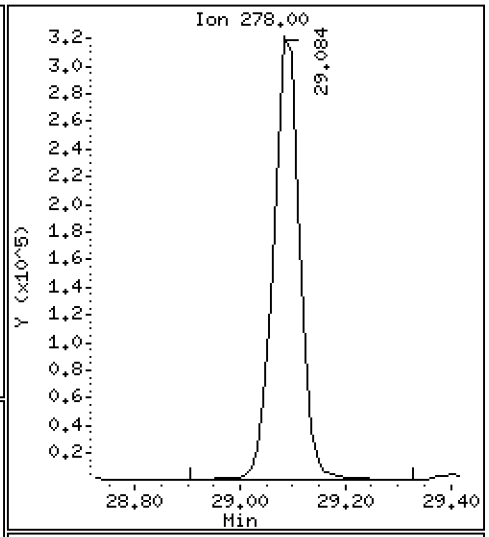
Column phase: ZB-5msi

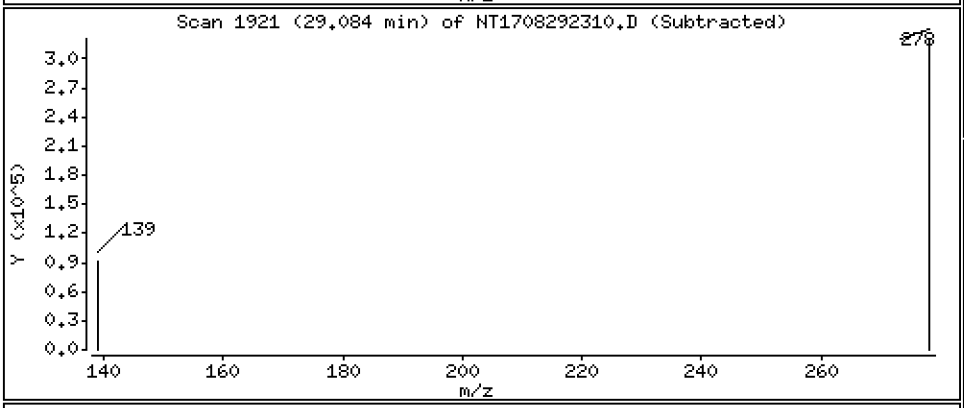
Column diameter: 0.25

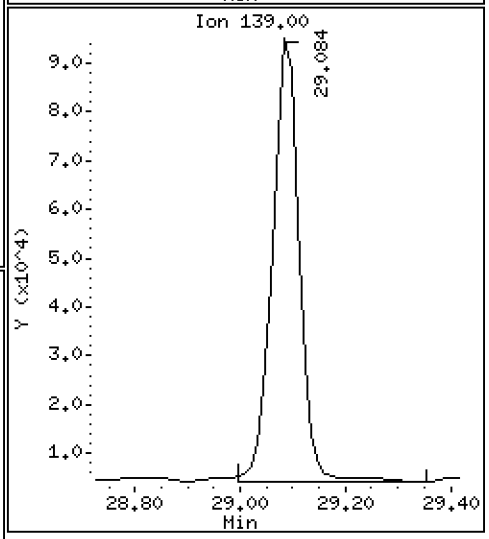
79 Dibenzo(a,h)anthracene

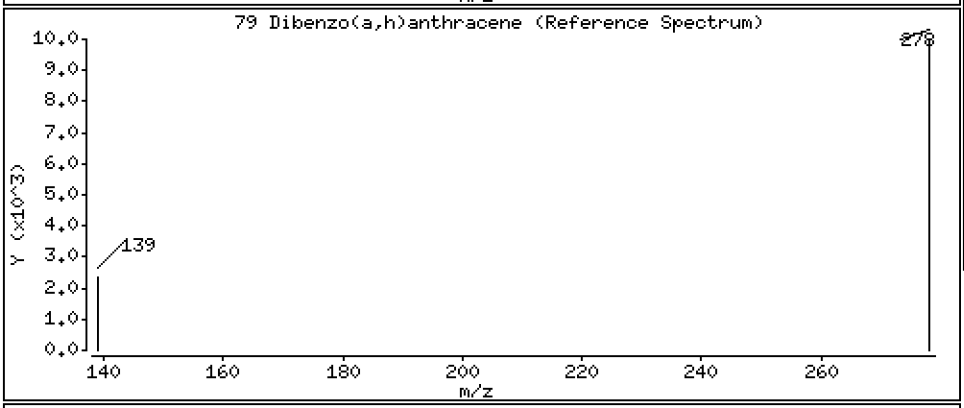
Concentration: 5.695 ug/mL

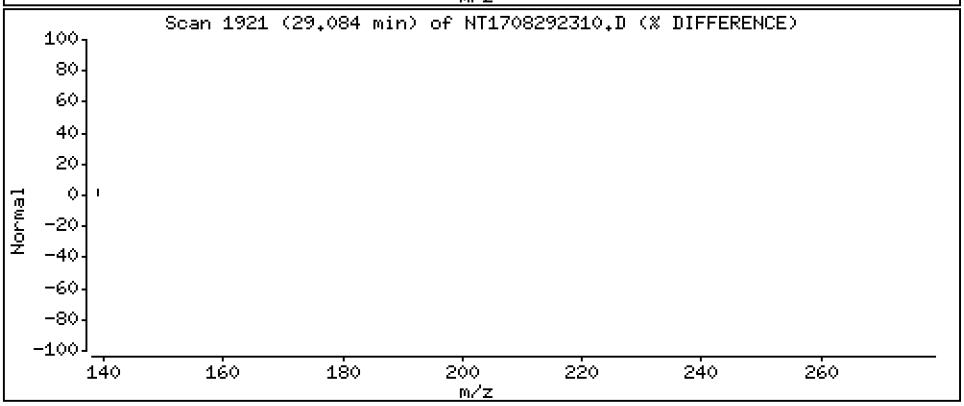












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Date : 29-AUG-2023 17:13

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-MSD1

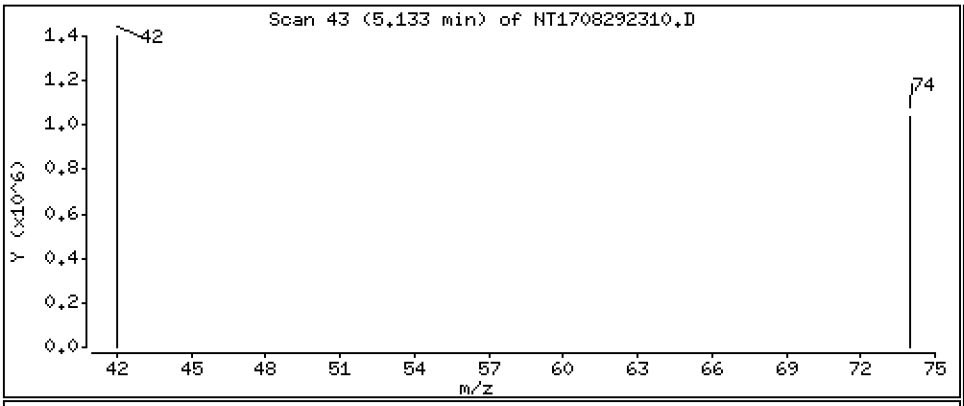
Operator: JGR

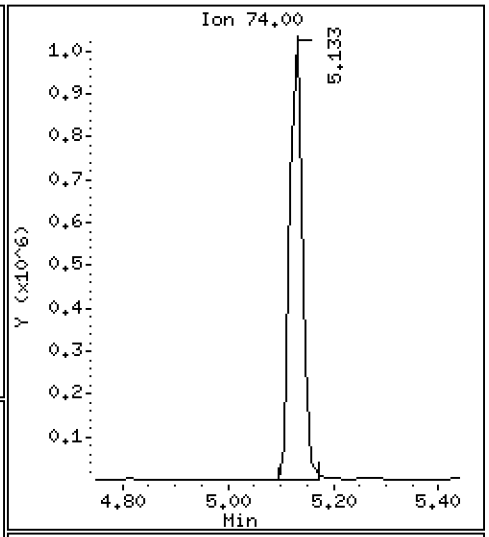
Column phase: ZB-5msi

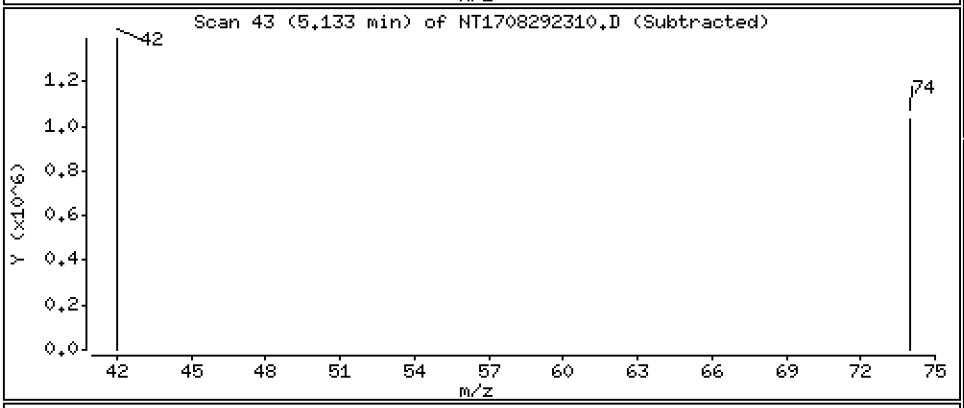
Column diameter: 0.25

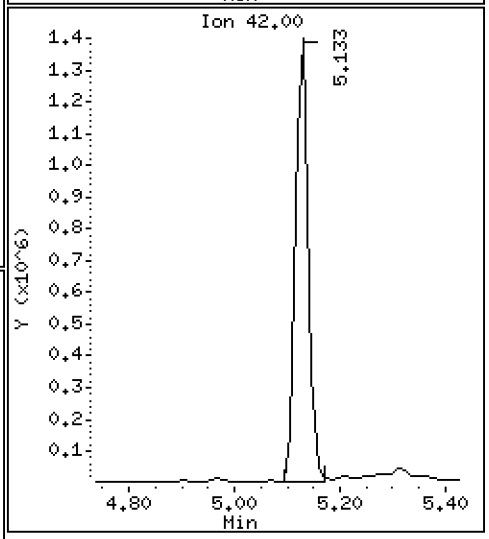
90 N-Nitrosodimethylamine

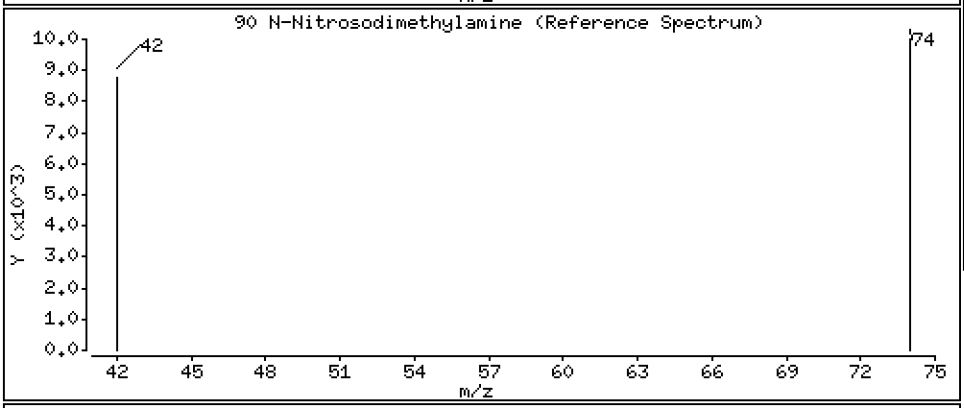
Concentration: 10.99 ug/mL

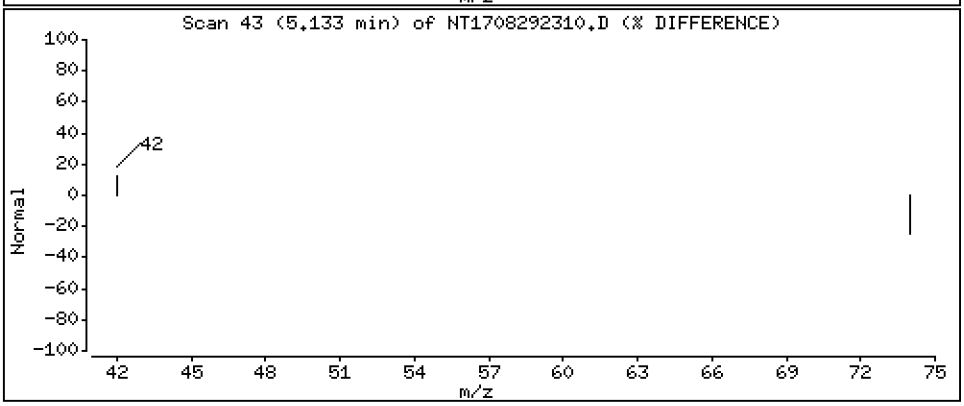












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292310.D
Lab Smp Id: BLH0669-MSD1
Inj Date : 29-AUG-2023 17:13
Operator : JGR Inst ID: nt17.i
Smp Info : BLH0669-MSD1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 09:25 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.209	7.196	(0.766)	885214	6.07152	6.072(R)
	3 Phenol	94	8.788	8.776	(0.934)	872896	3.92746	3.927
	7 1,3-Dichlorobenzene	146	9.349	9.349	(0.993)	491333	3.26820	3.268
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	351132	4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	484957	3.33322	3.333
	11 Benzyl alcohol	79	9.669	9.669	(1.027)	675319	4.39002	4.390
	12 1,2-Dichlorobenzene	146	9.796	9.797	(1.041)	467588	3.31313	3.313
	13 2-Methylphenol	108	9.886	9.886	(1.050)	495285	3.67520	3.675
	15 4-Methylphenol	108	10.167	10.154	(1.080)	632781	4.49250	4.493
	16 N-Nitroso-di-n-propylamine	70	10.218	10.218	(1.086)	585024	4.06162	4.062
	22 2,4-Dimethylphenol	107	11.202	11.189	(0.943)	2164586	17.1964	17.20
	24 Benzoic acid	105	11.380	11.329	(0.958)	1521367	17.0198	17.02
	26 1,2,4-Trichlorobenzene	180	11.789	11.789	(0.992)	301784	3.50895	3.509
*	27 Naphthalene-d8	136	11.878	11.878	(1.000)	1254538	4.00000	
	30 Hexachlorobutadiene	225	12.273	12.273	(1.033)	166272	4.12825	4.128
	39 Dimethylphthalate	163	14.976	14.977	(0.967)	696995	4.49536	4.495
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	477043	4.00000	
	50 Diethylphthalate	149	16.430	16.417	(1.061)	848368	5.26229	5.262
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	446916	4.54984	4.550
	57 Hexachlorobenzene	284	17.894	17.894	(0.966)	133349	4.14355	4.144
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	319905	14.6482	14.65
*	59 Phenanthrene-d10	188	18.519	18.506	(1.000)	683245	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	328019	4.37565	4.376(R)
	67 Butylbenzylphthalate	149	22.510	22.511	(0.958)	578245	4.02264	4.023
*	69 Chrysene-d12	240	23.505	23.506	(1.000)	541722	4.00000	
*	77 Perylene-d12	264	26.235	26.223	(1.000)	664414	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.084	29.071	(1.109)	1117565	5.69474	5.695
	90 N-Nitrosodimethylamine	74	5.132	5.094	(0.545)	1630883	10.9931	10.99

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 30-Aug-2023 09:25

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292310.D
Lab Smp Id: BLH0669-MSD1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 29-AUG-2023
Calibration Time: 12:37
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	296489	148245	592978	351132	18.43
27 Naphthalene-d8	1098892	549446	2197784	1254538	14.16
42 Acenaphthene-d10	443071	221536	886142	477043	7.67
59 Phenanthrene-d10	627744	313872	1255488	683245	8.84
69 Chrysene-d12	404122	202061	808244	541722	34.05
77 Perylene-d12	417323	208662	834646	664414	59.21

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	-0.00
27 Naphthalene-d8	11.88	11.38	12.38	11.88	-0.00
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	-0.00
59 Phenanthrene-d10	18.51	18.01	19.01	18.52	0.07
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.22	25.72	26.72	26.24	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292310.D

Lab ID: BLH0669-MSD1
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   29-AUG-2023 17:13

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1708292304.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23H0579
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLH0669-SRM1
Batch: BLH0669
Initial/Final: 1 g / 1 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 08/29/2023 17:50
Standard ID: K003477
Expires: 01/31/2024
Standard Lot#: CRM 143 (LRAC8918)
Description: CRM 143 BNAs - Sandy Loam

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
2,4-Dimethylphenol	6357.0	5650	21.7	200		88.9	0 - 220
1,2,4-Trichlorobenzene	1477.0	882	26.8	50.0		59.7	10 - 193
N-Nitrosodiphenylamine	2854.0	3340	13.1	50.0		117	40 - 160
Pentachlorophenol	3411.0	2930	21.3	200		85.9	10 - 206

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292311.D

Date : 29-AUG-2023 17:50

Client ID:

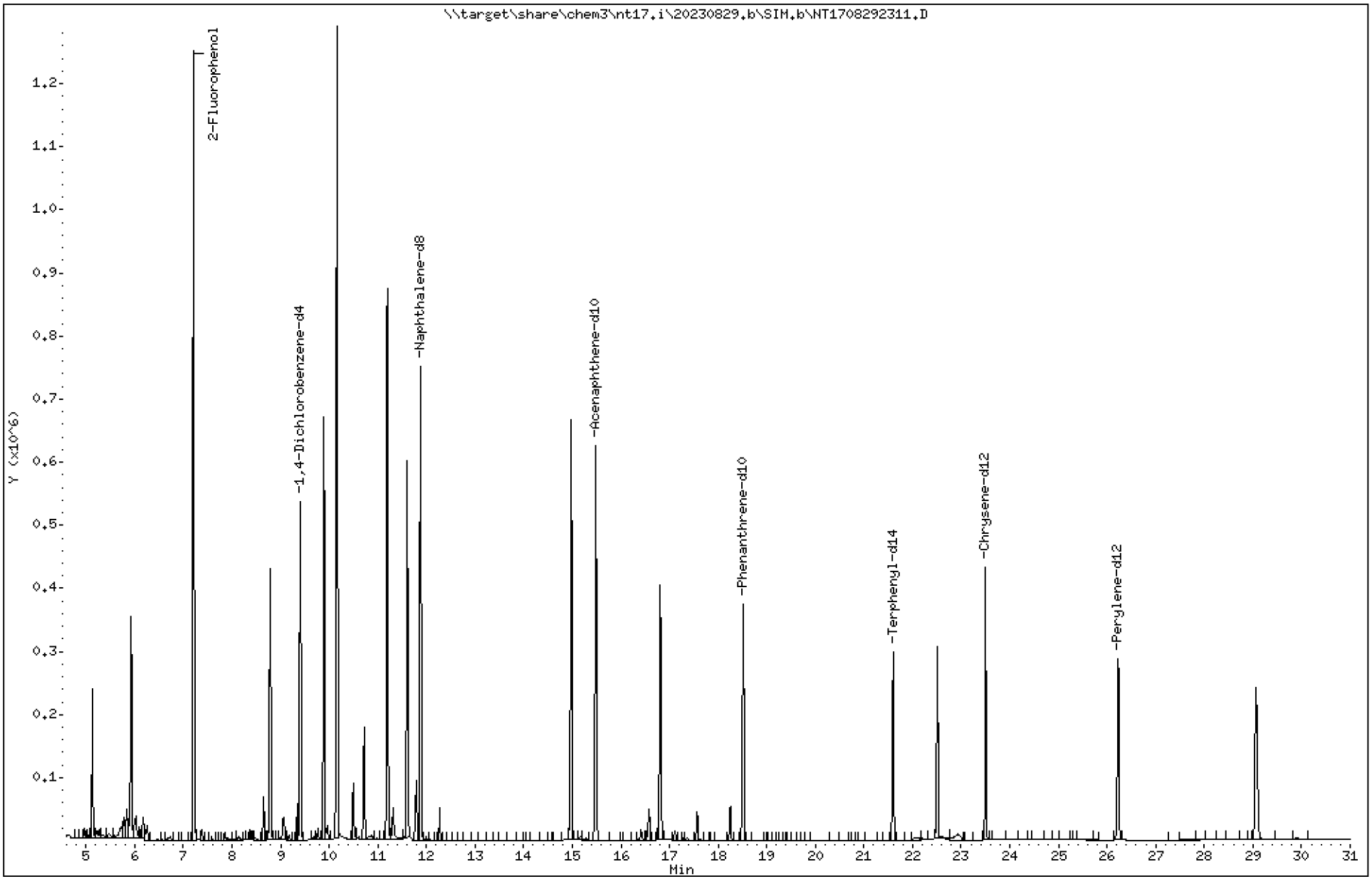
Sample Info: BLH0669-SRM1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

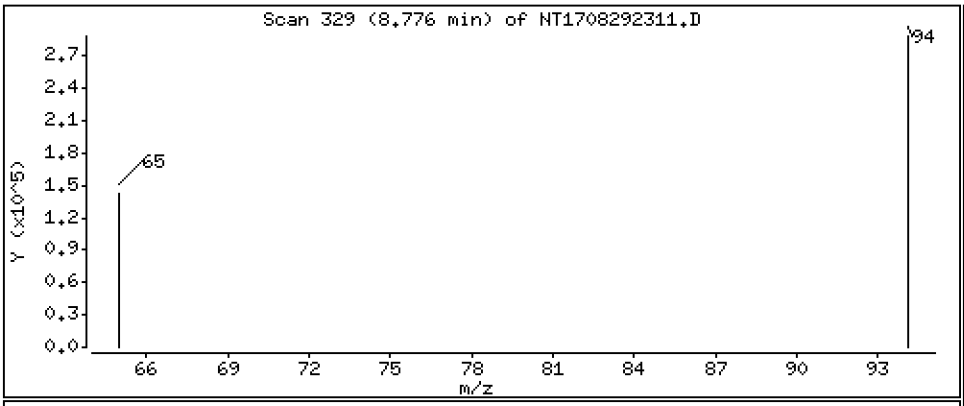
Operator: JGR

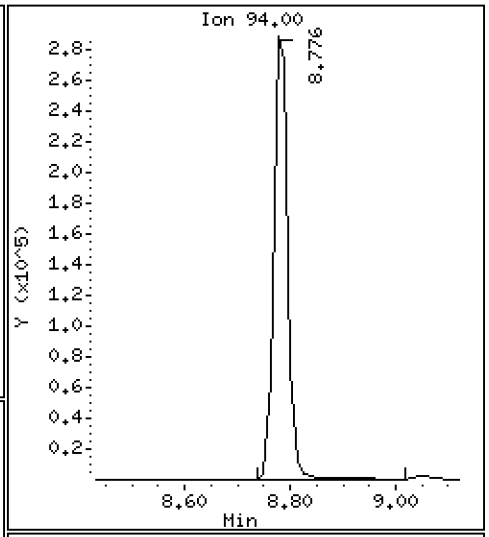
Column phase: ZB-5msi

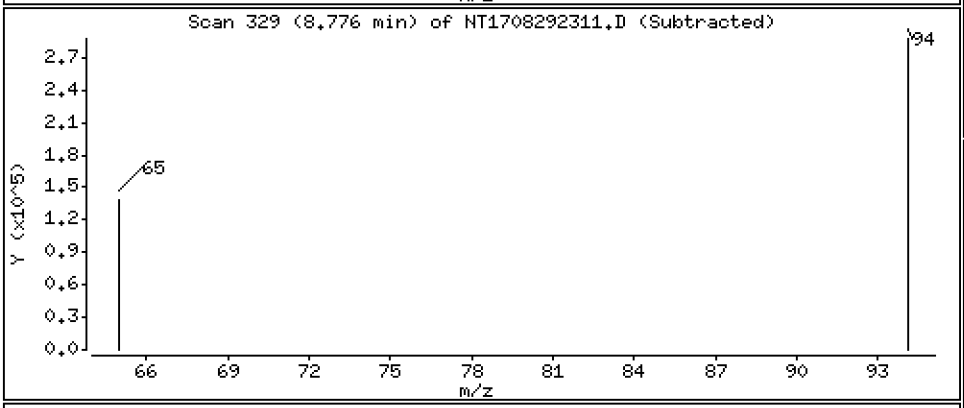
Column diameter: 0.25

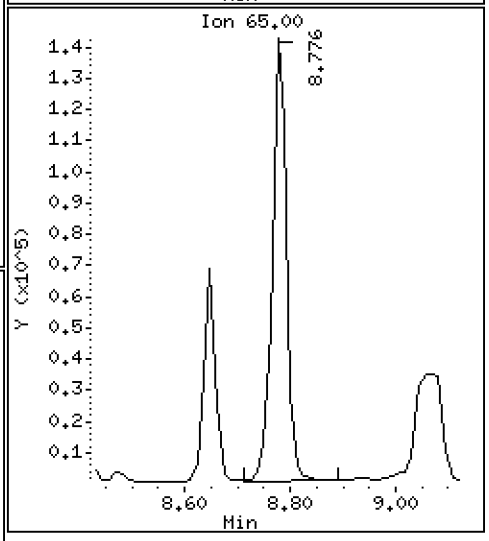
3 Phenol

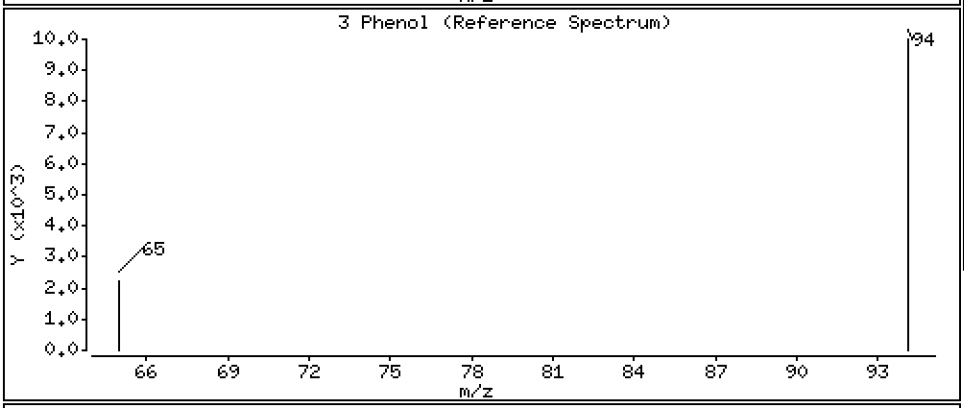
Concentration: 2.249 ug/mL

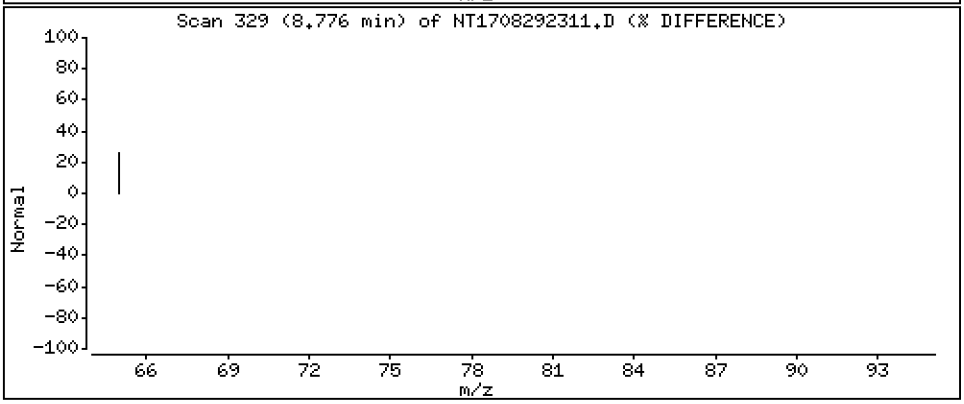












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Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

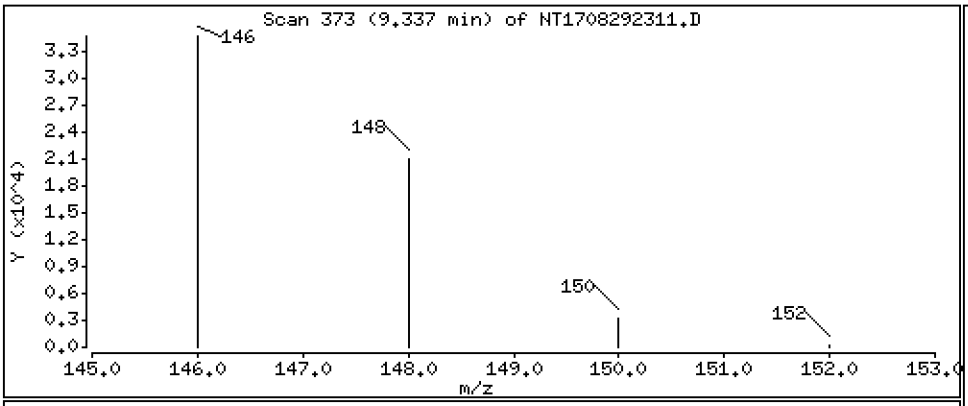
Operator: JGR

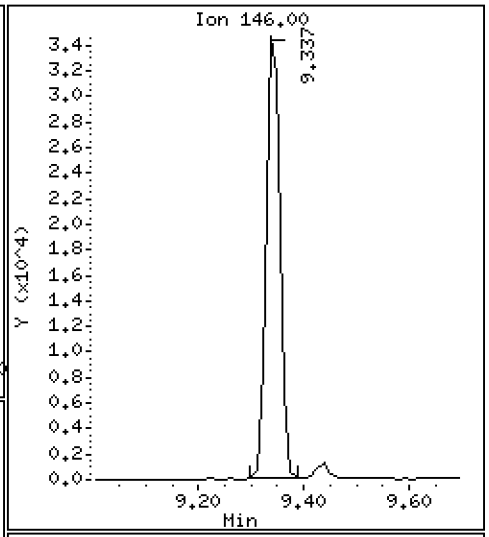
Column phase: ZB-5msi

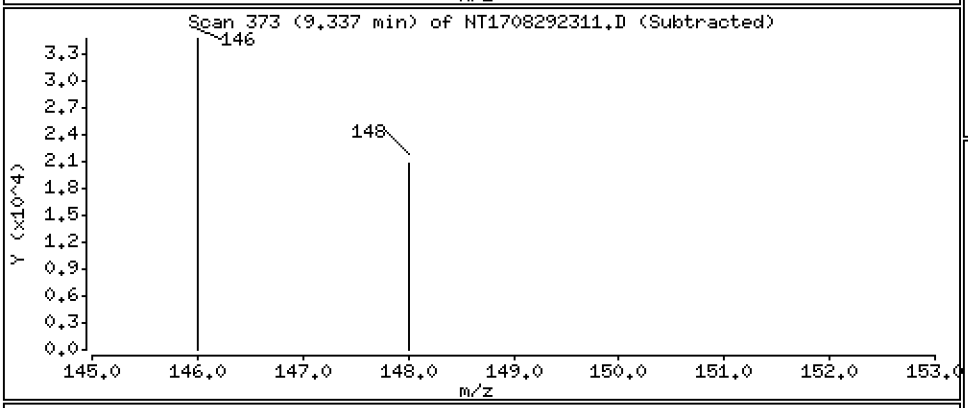
Column diameter: 0.25

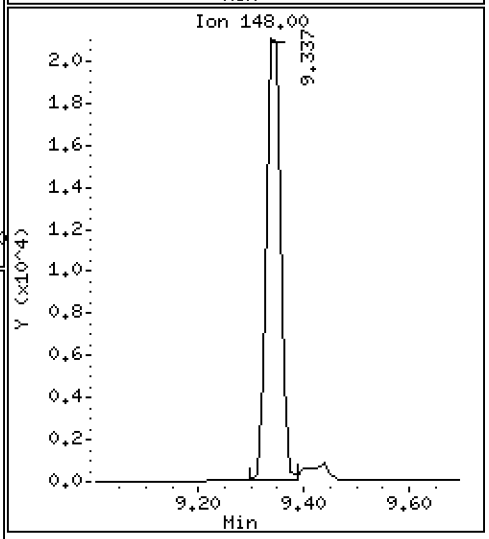
7 1,3-Dichlorobenzene

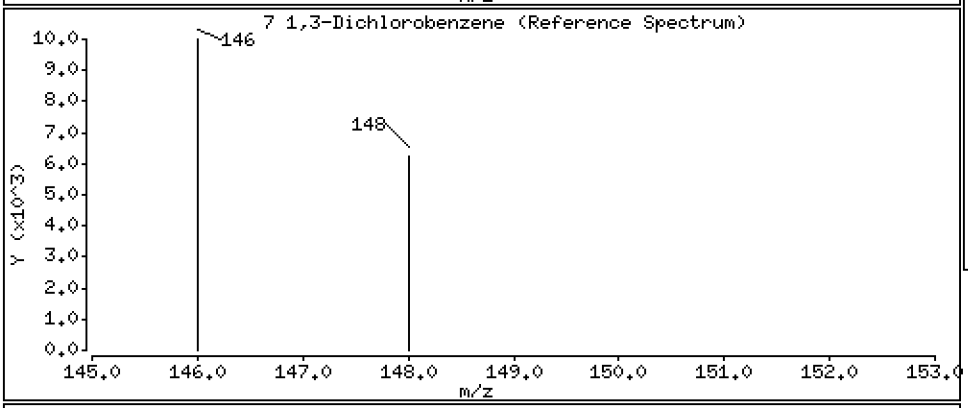
Concentration: 0.3833 ug/mL

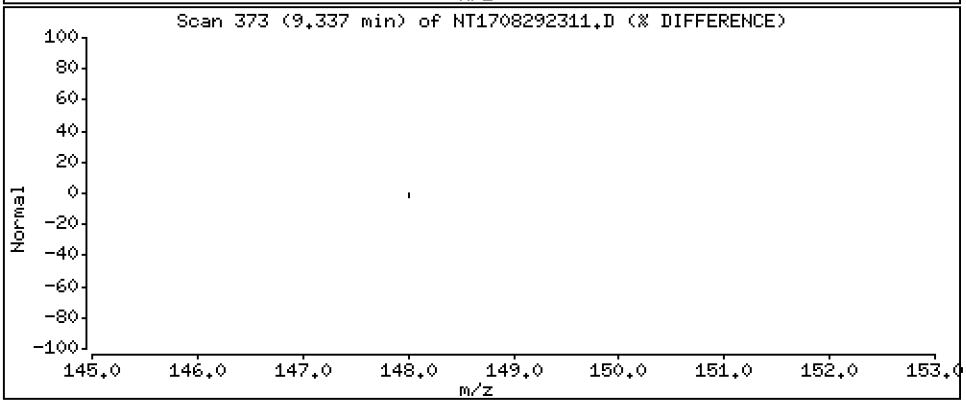












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Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

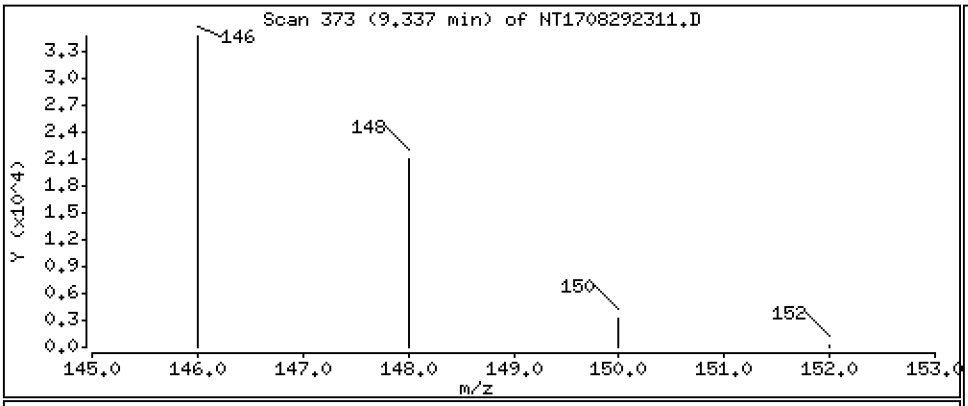
Operator: JGR

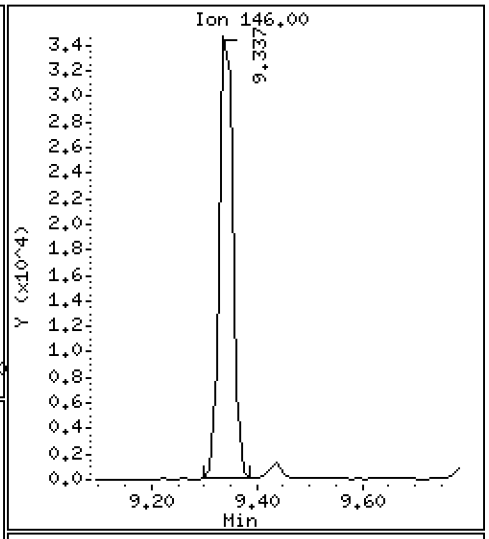
Column phase: ZB-5msi

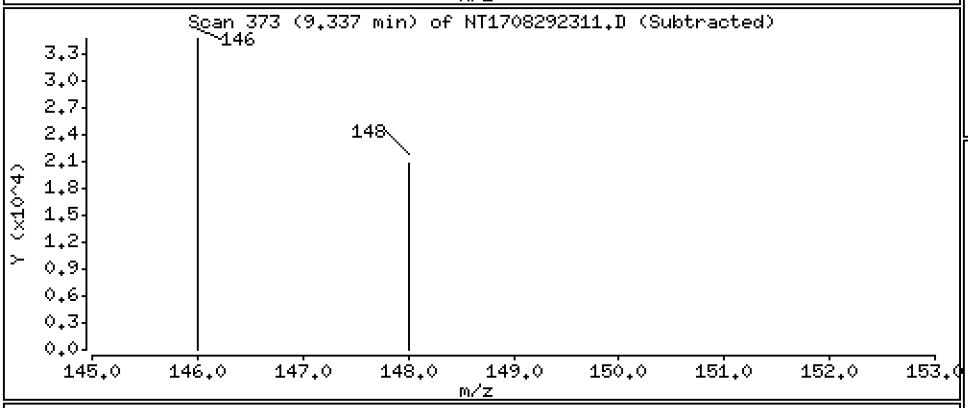
Column diameter: 0.25

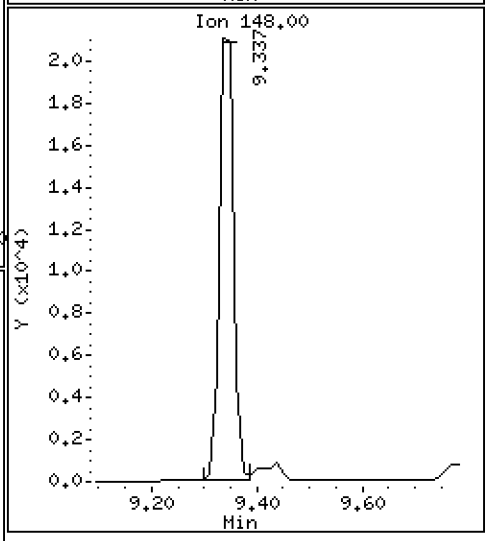
9 1,4-Dichlorobenzene

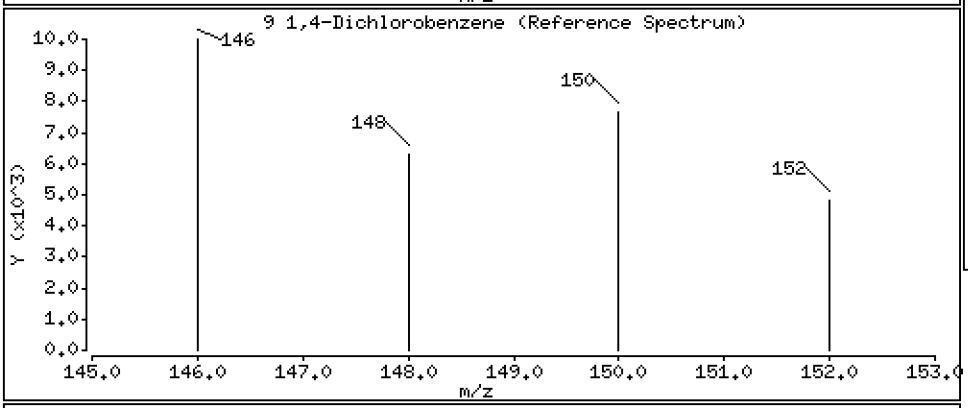
Concentration: 0.3961 ug/mL

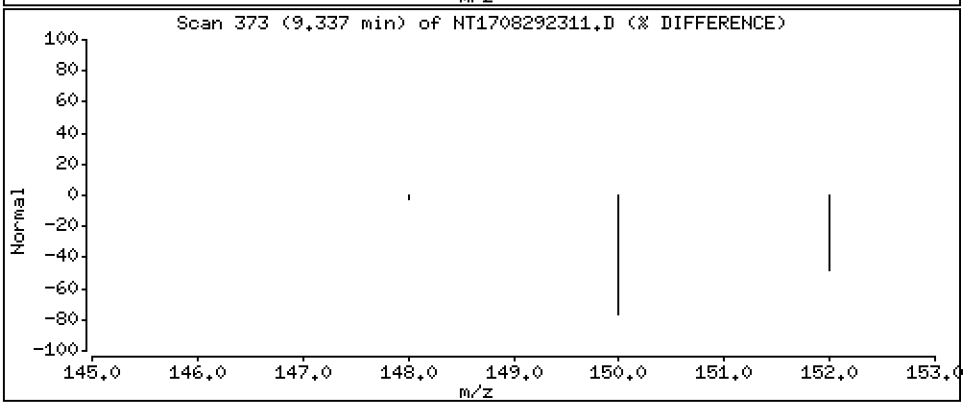












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292311.D

Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

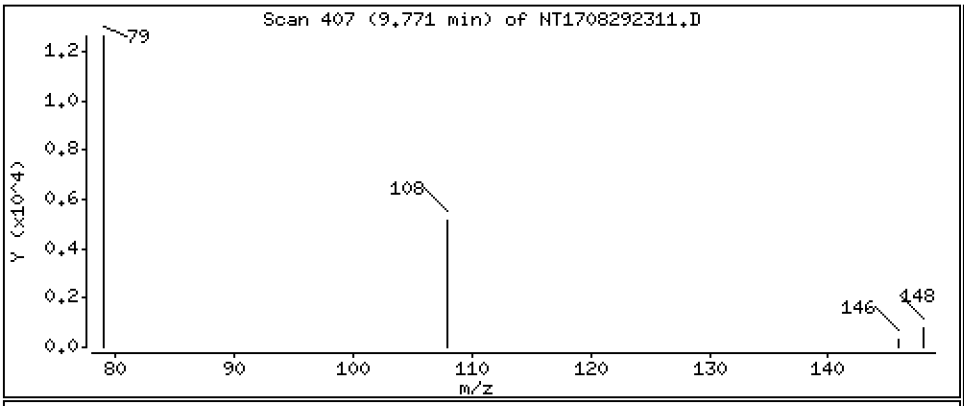
Operator: JGR

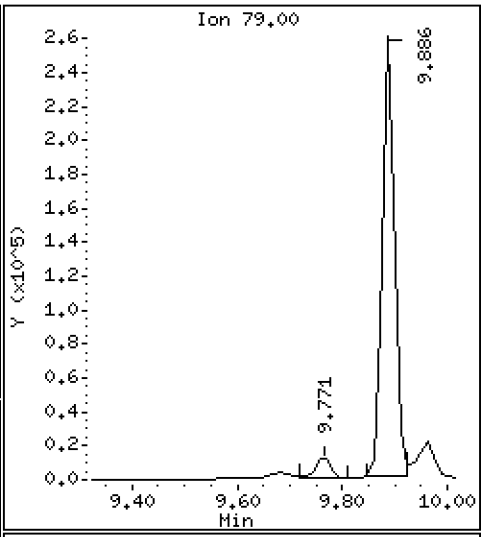
Column phase: ZB-5msi

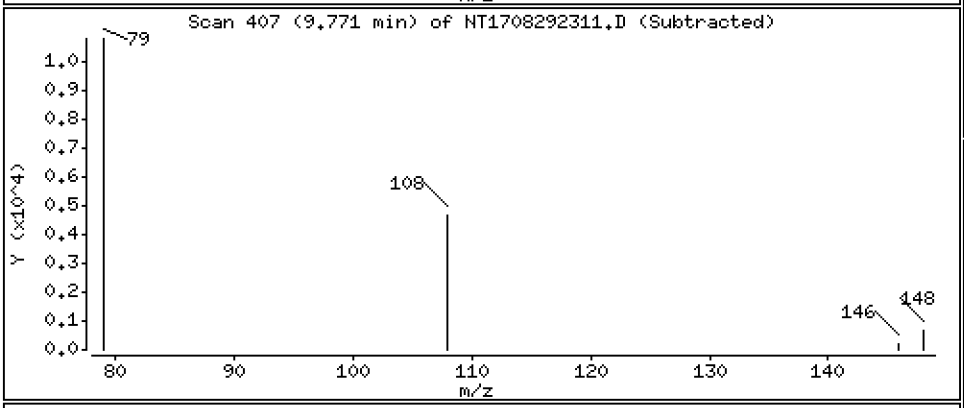
Column diameter: 0.25

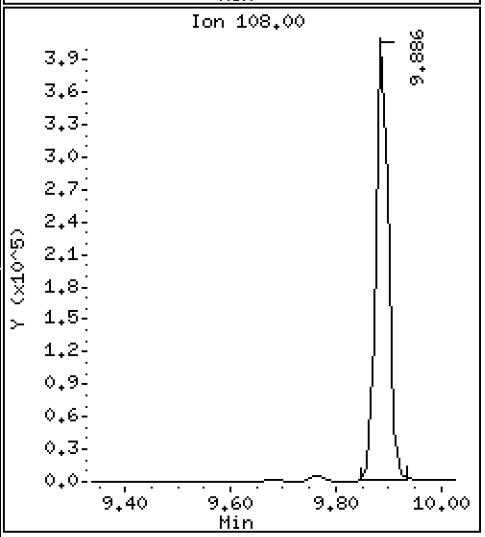
11 Benzyl alcohol

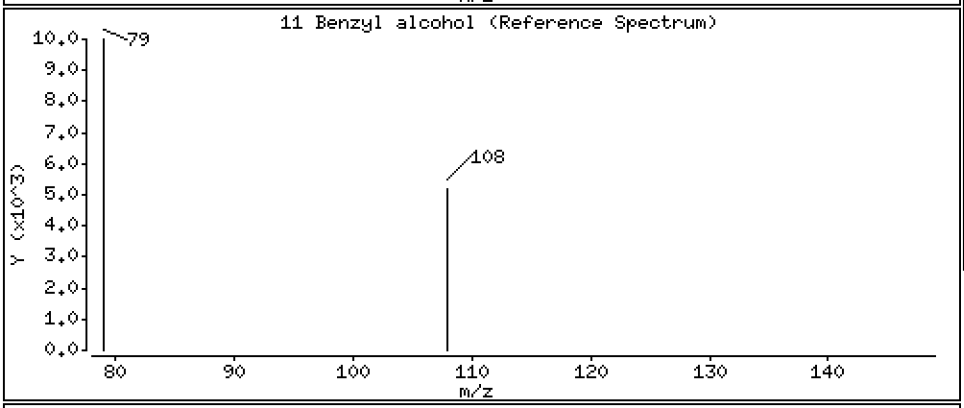
Concentration: 0.1413 ug/mL

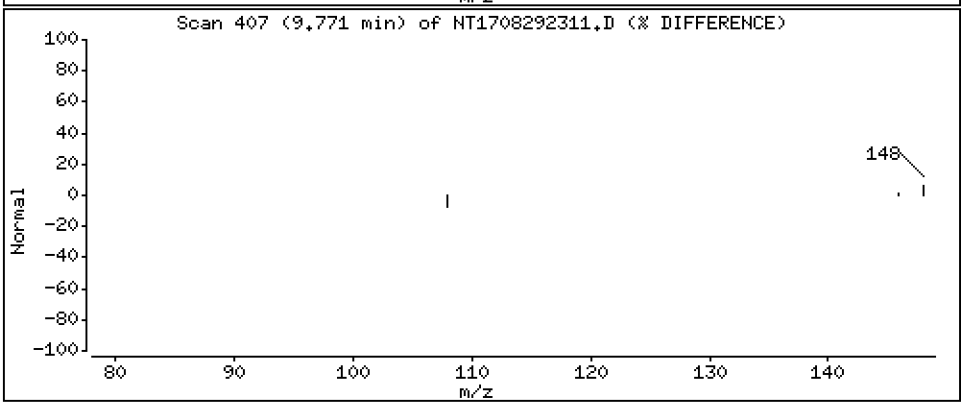












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292311.D

Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

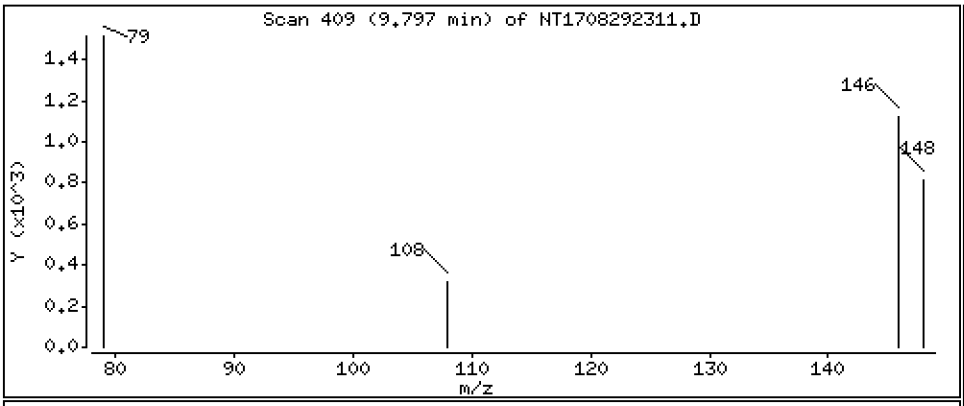
Operator: JGR

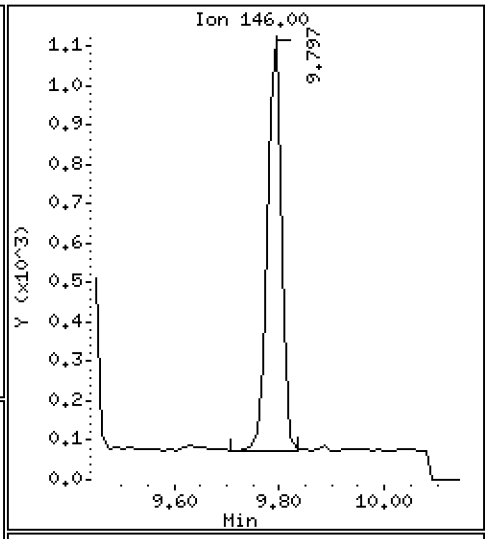
Column phase: ZB-5msi

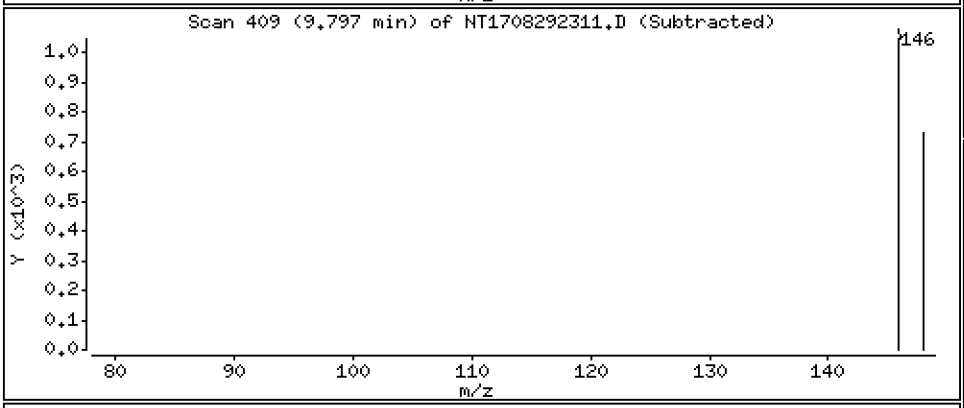
Column diameter: 0.25

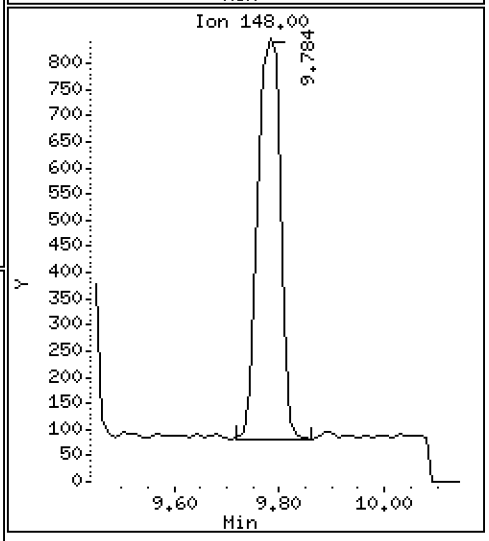
12 1,2-Dichlorobenzene

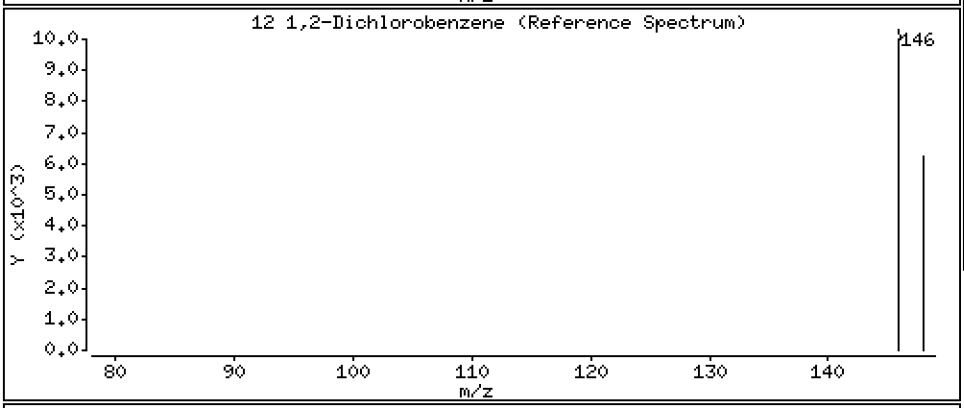
Concentration: 0.01266 ug/mL

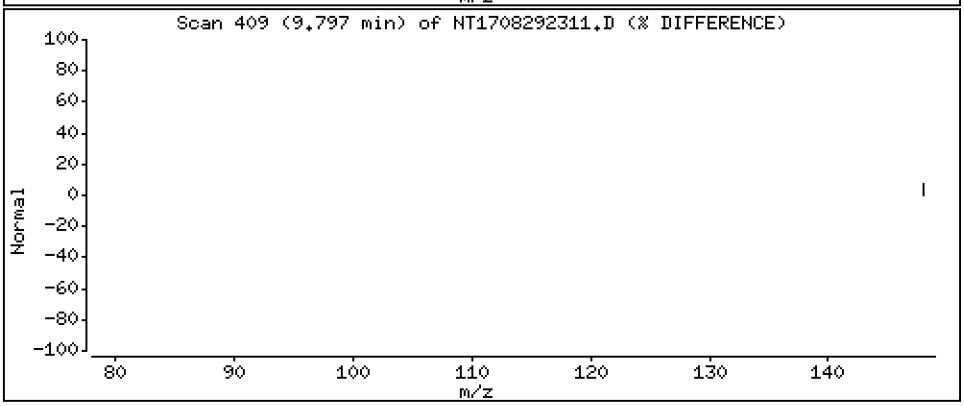












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Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

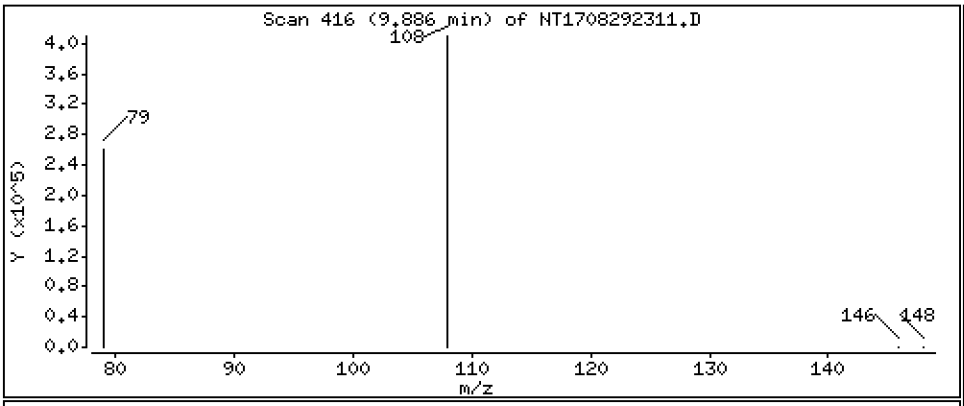
Operator: JGR

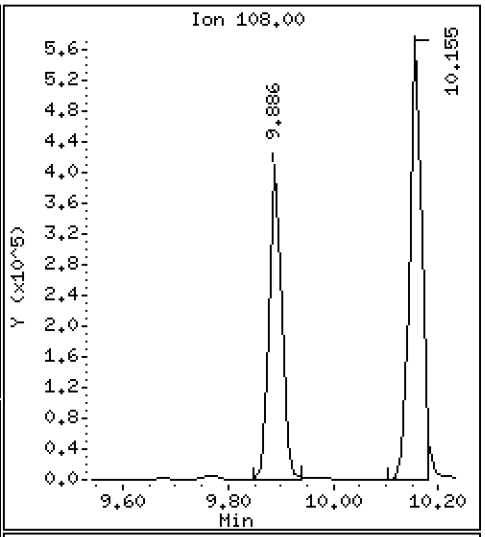
Column phase: ZB-5msi

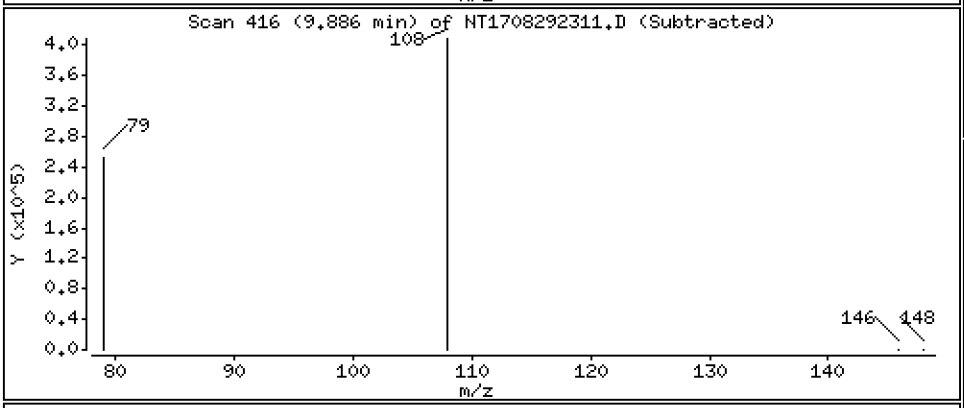
Column diameter: 0.25

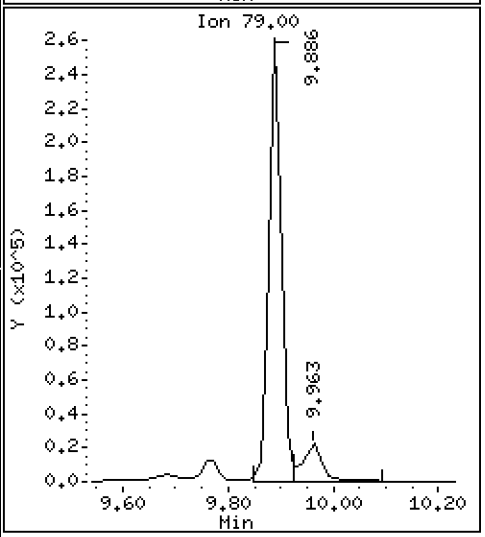
13 2-Methylphenol

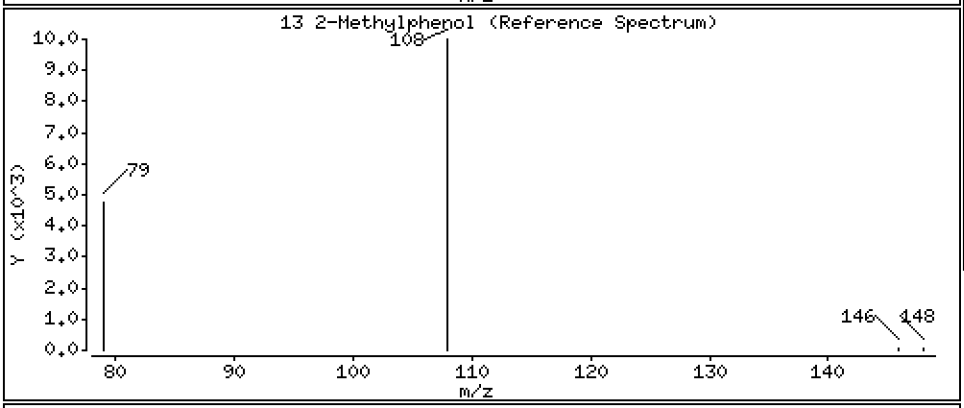
Concentration: 4.551 ug/mL

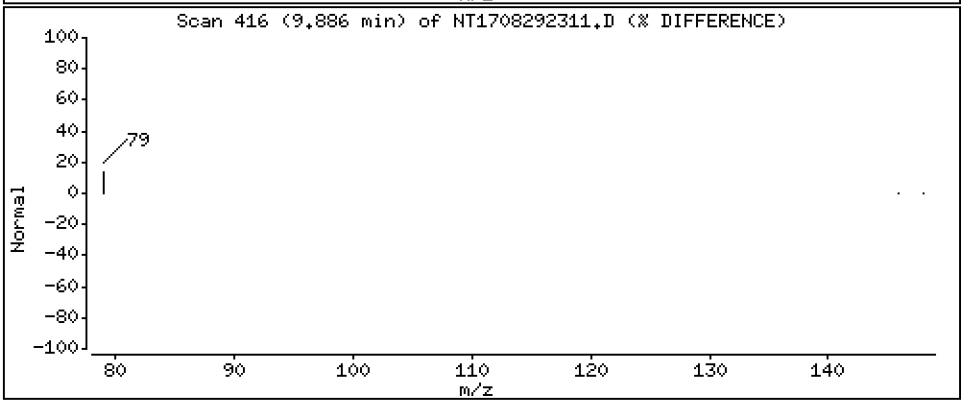












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Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

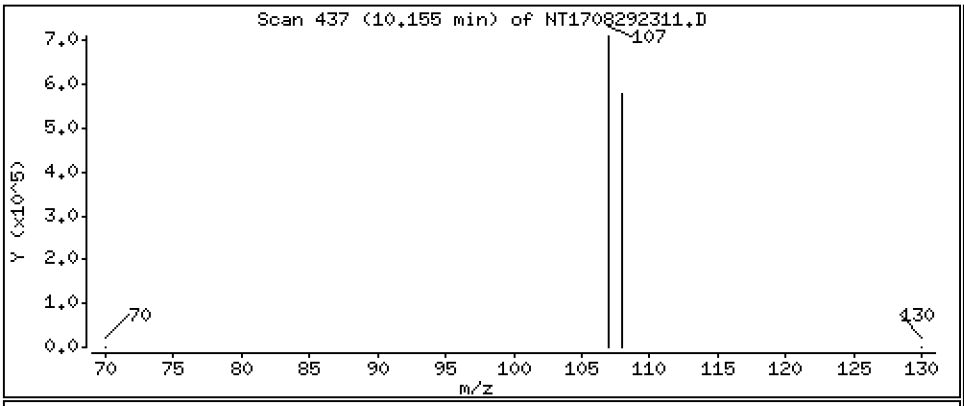
Operator: JGR

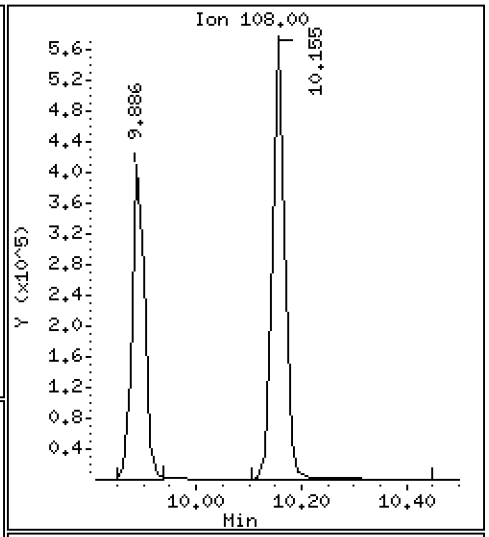
Column phase: ZB-5msi

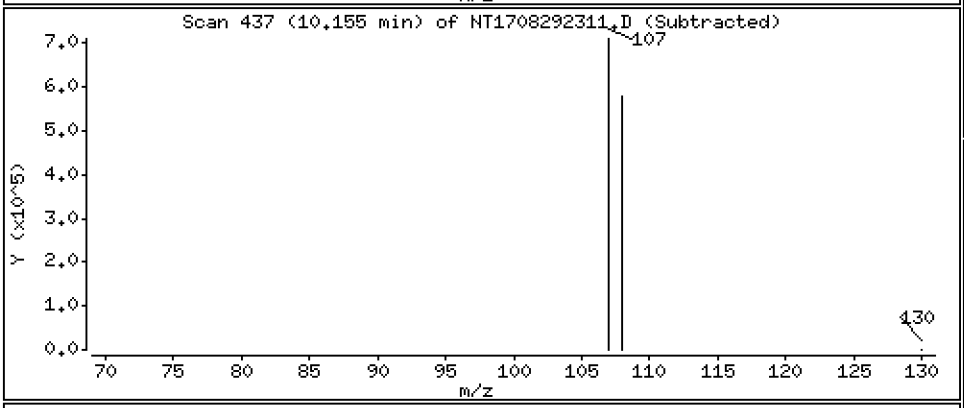
Column diameter: 0.25

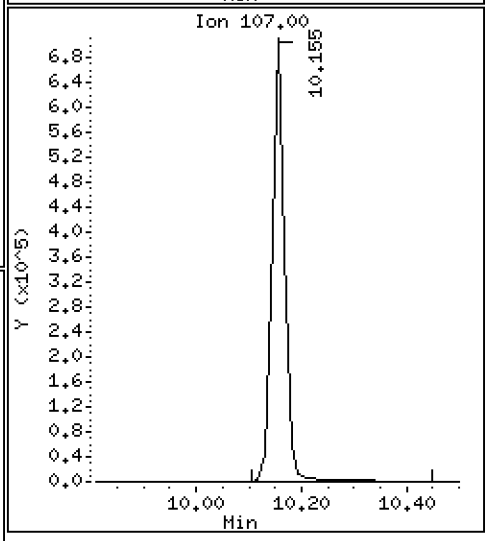
15 4-Methylphenol

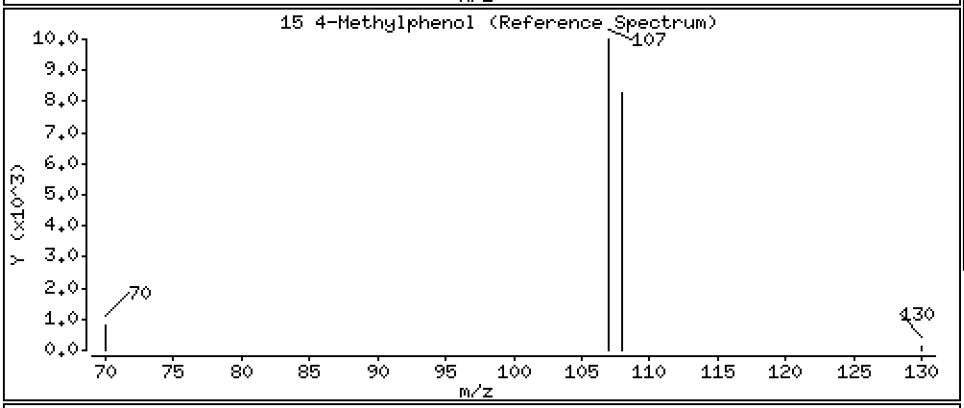
Concentration: 6.118 ug/mL

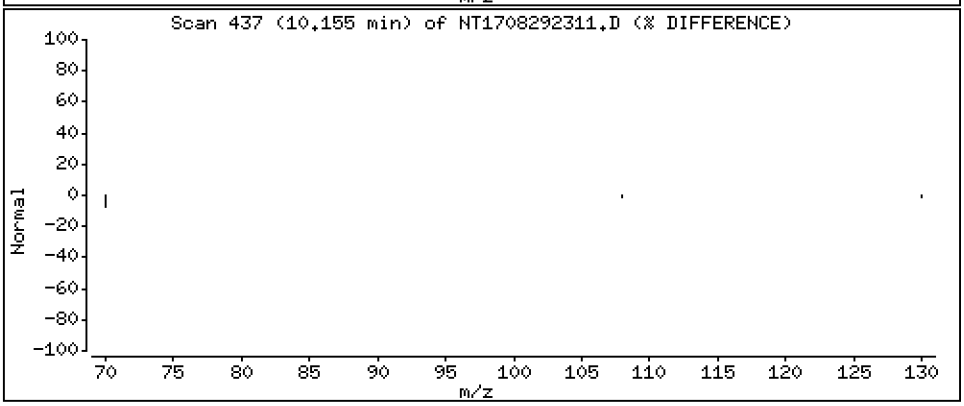












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Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

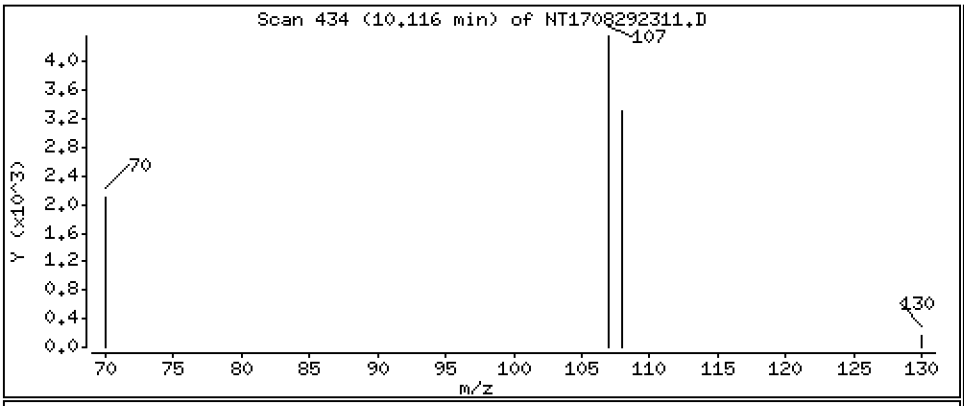
Operator: JGR

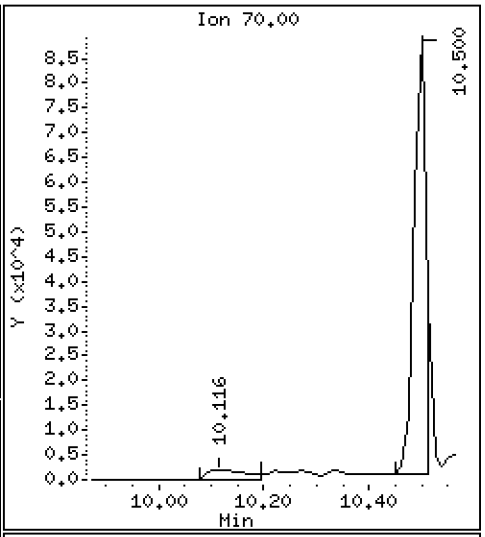
Column phase: ZB-5msi

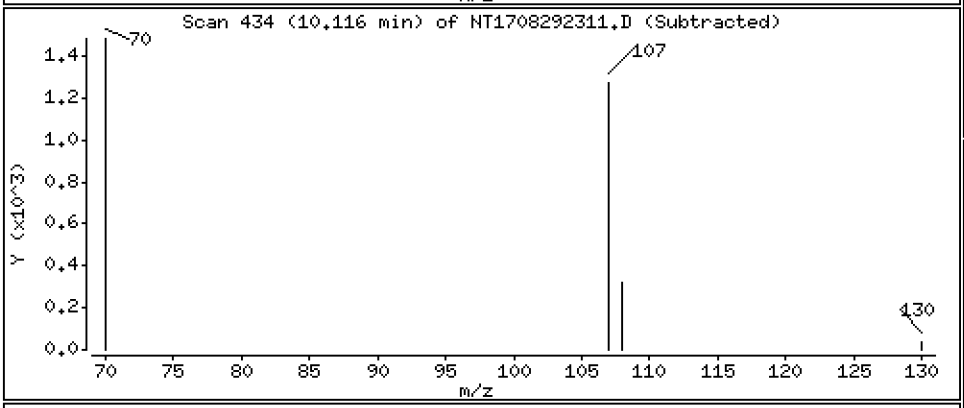
Column diameter: 0.25

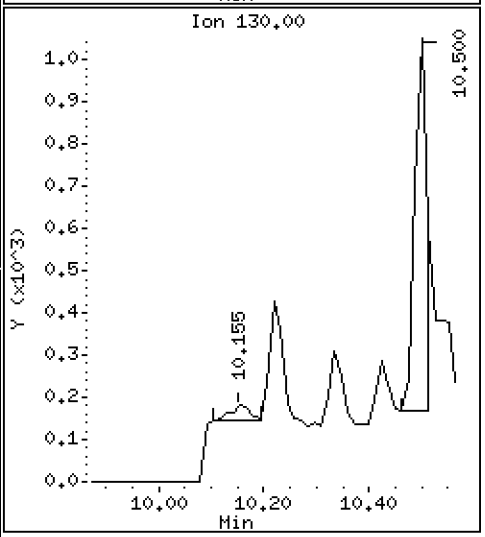
16 N-Nitroso-di-n-propylamine

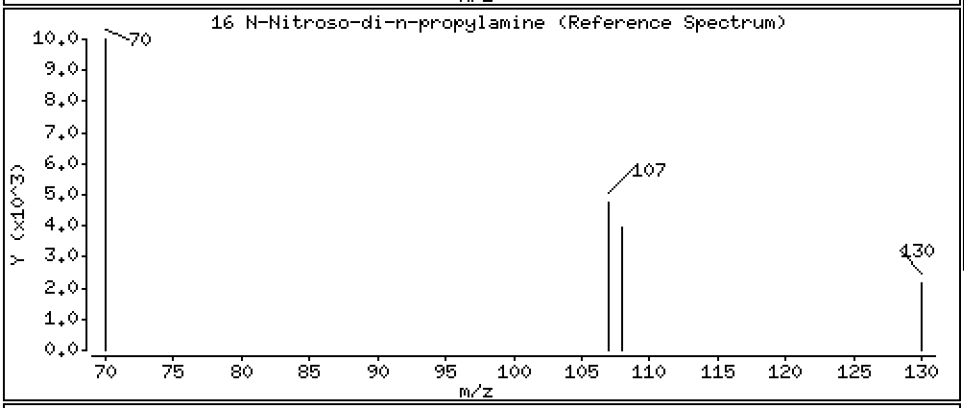
Concentration: 0.06735 ug/mL

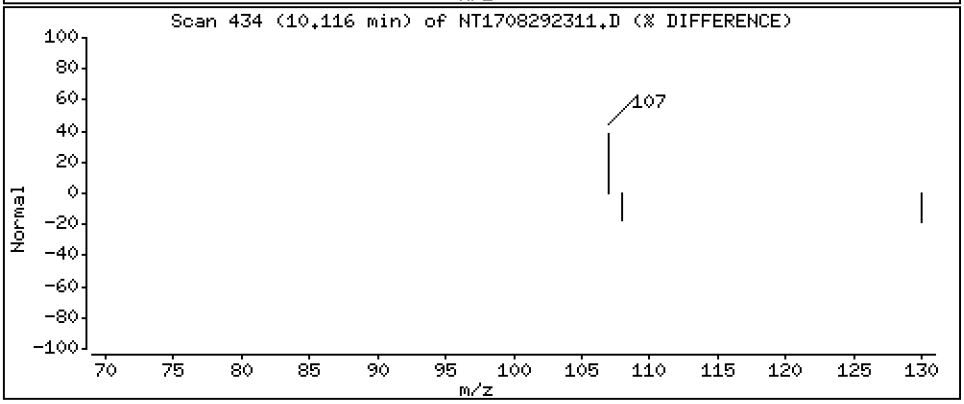












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Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

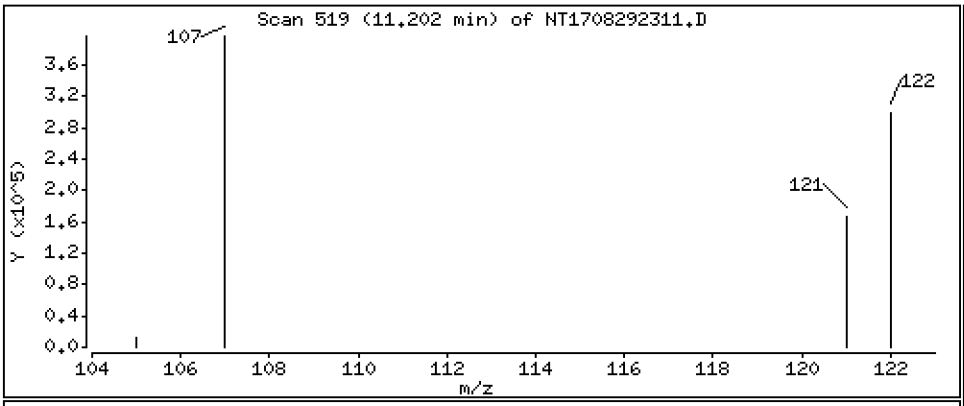
Operator: JGR

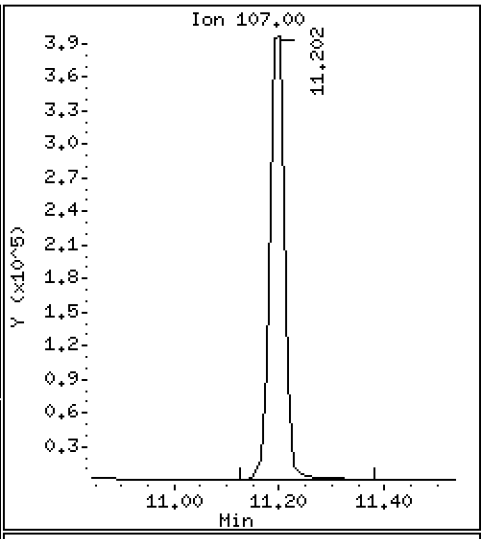
Column phase: ZB-5msi

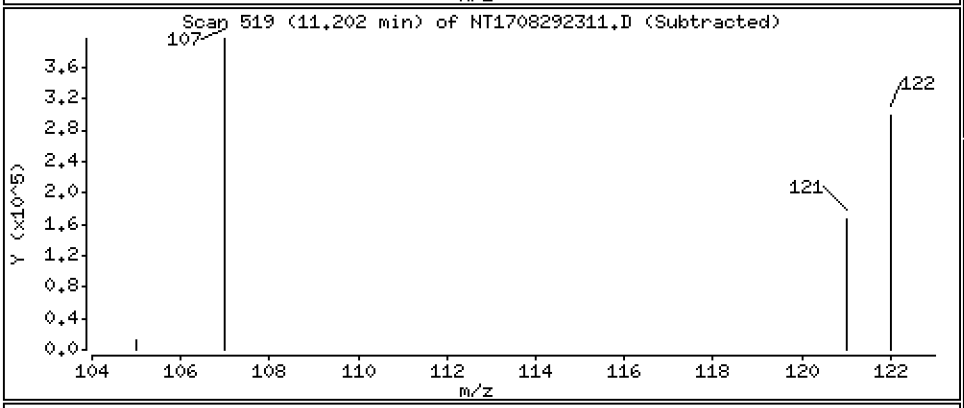
Column diameter: 0.25

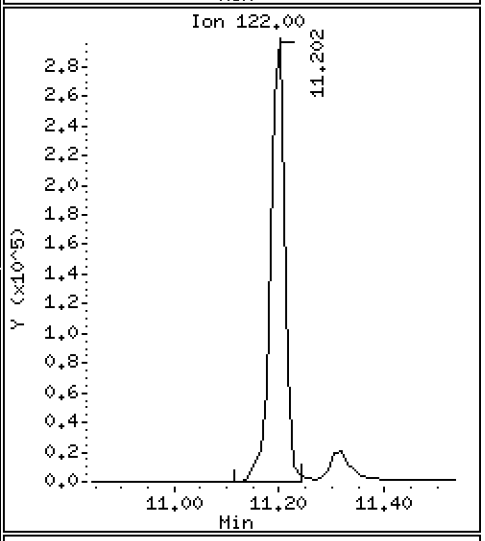
22 2,4-Dimethylphenol

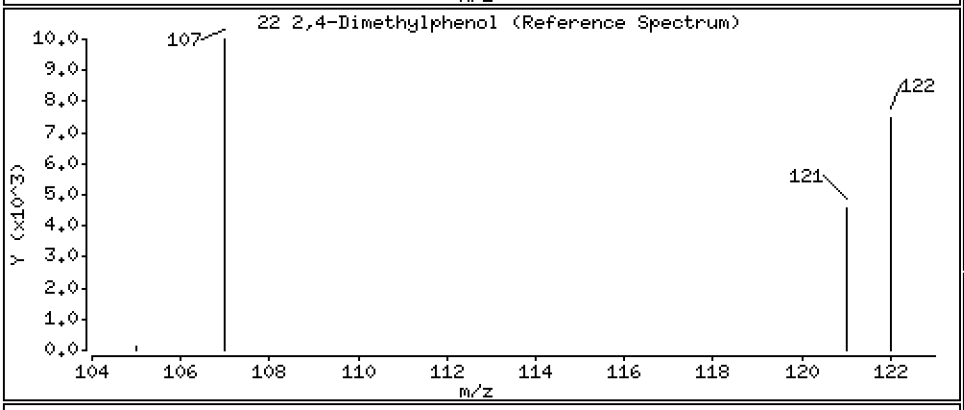
Concentration: 5.652 ug/mL

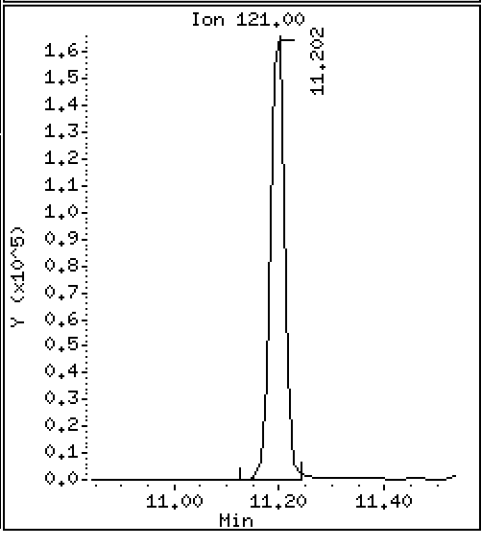


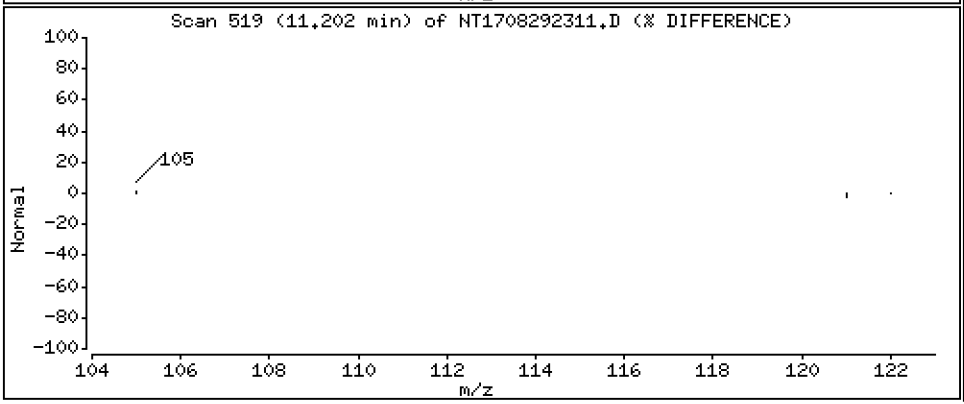












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292311.D

Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

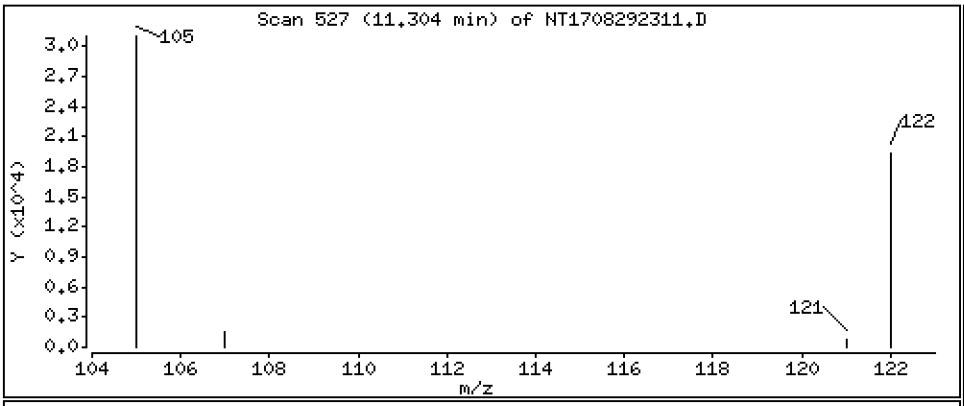
Operator: JGR

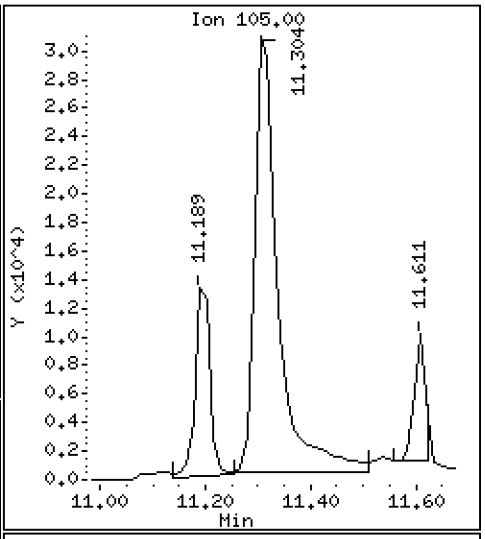
Column phase: ZB-5msi

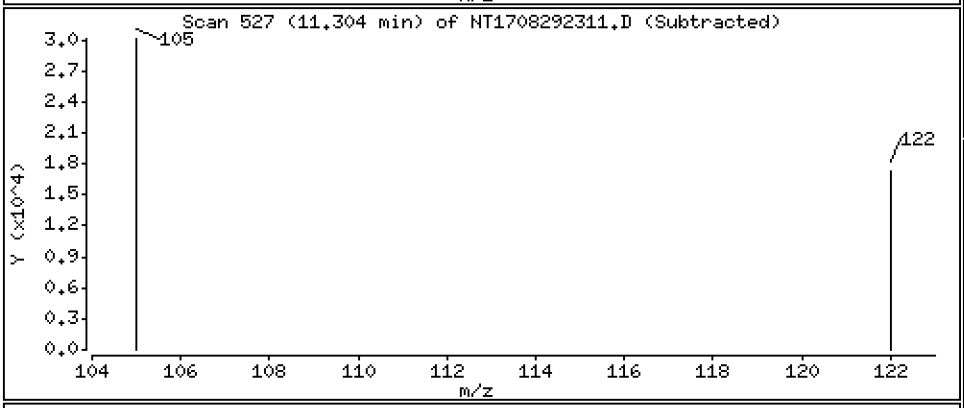
Column diameter: 0.25

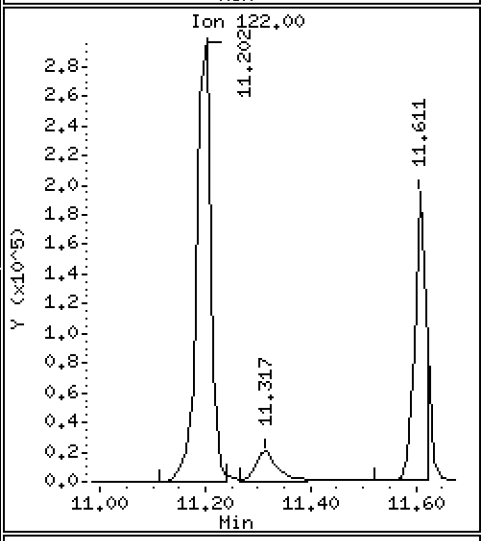
24 Benzoic acid

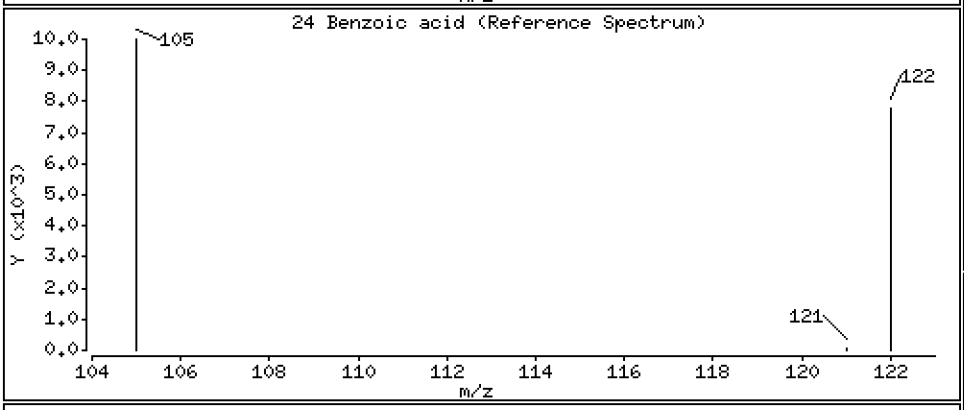
Concentration: 1.036 ug/mL

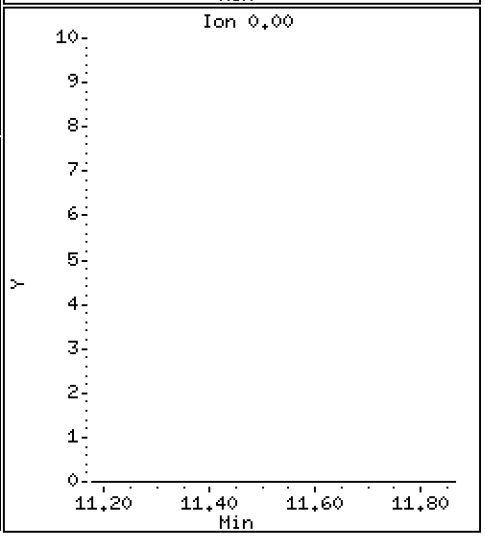


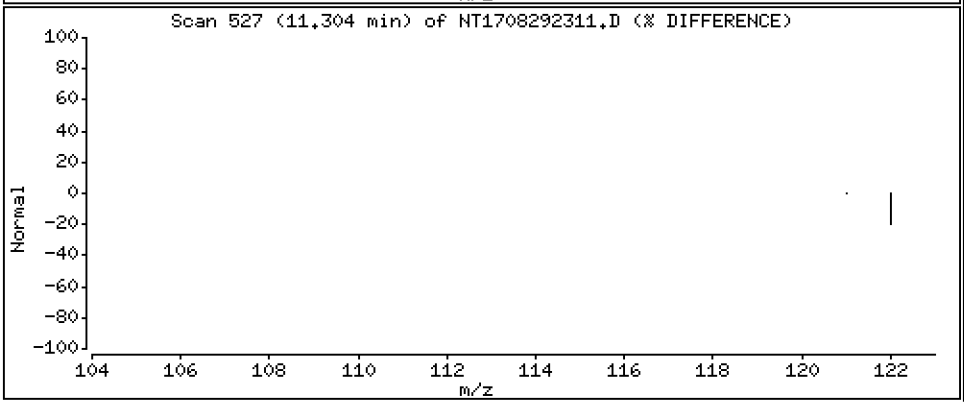












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Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

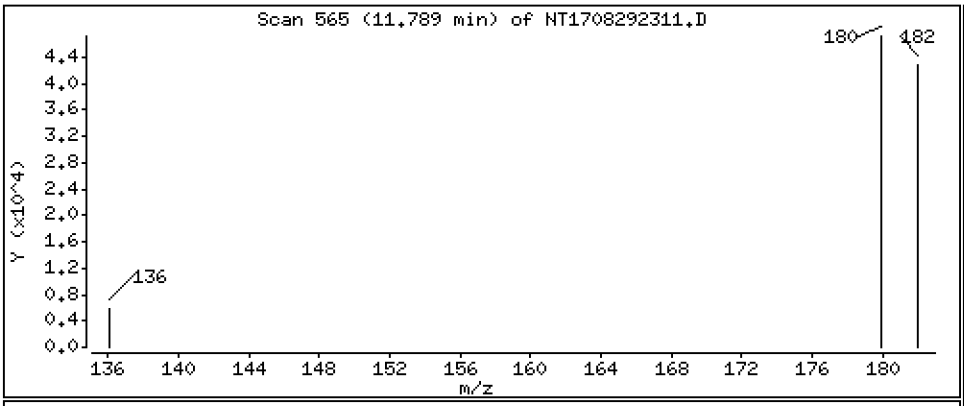
Operator: JGR

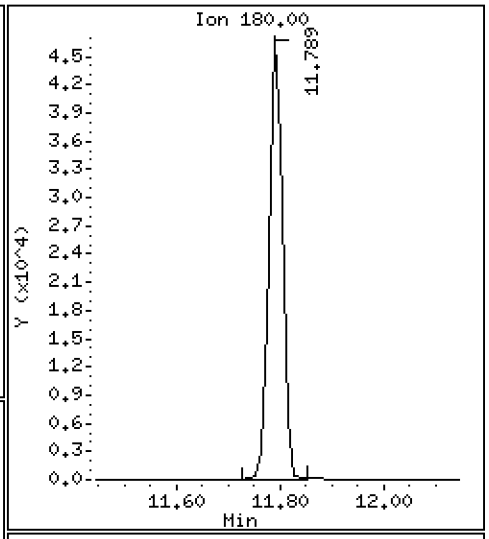
Column phase: ZB-5msi

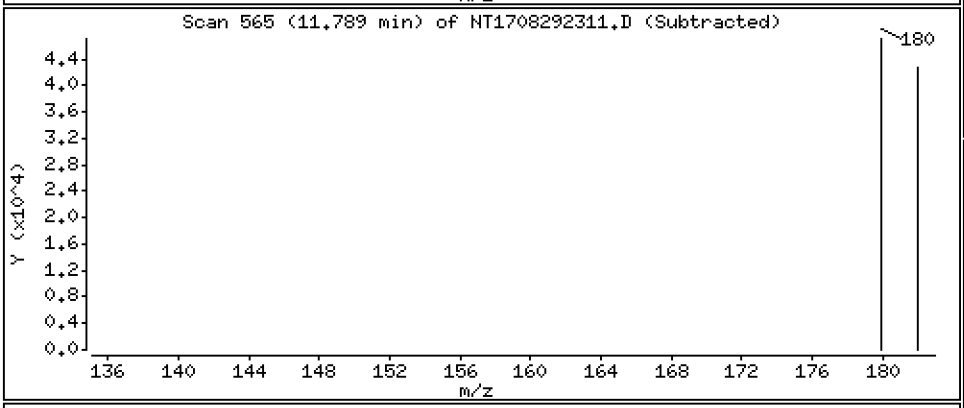
Column diameter: 0.25

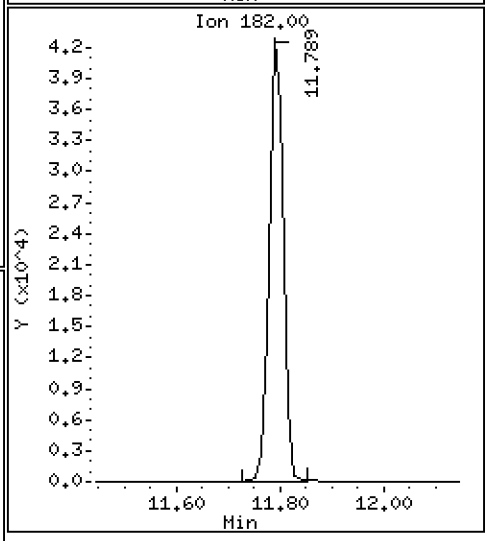
26 1,2,4-Trichlorobenzene

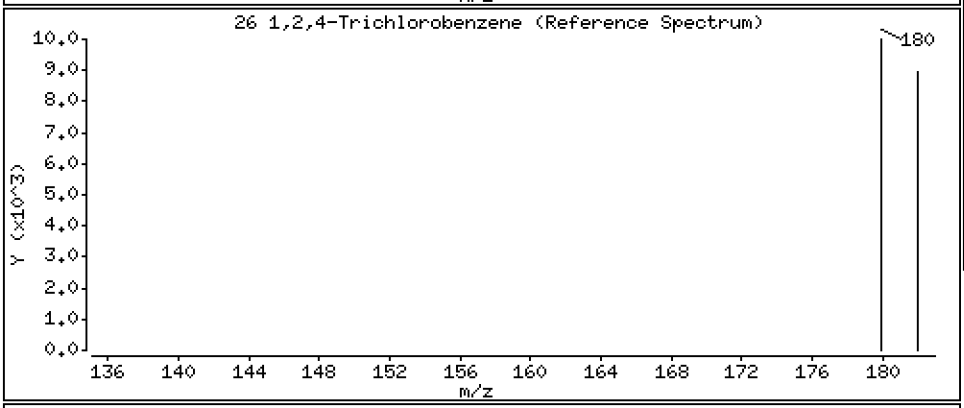
Concentration: 0.8816 ug/mL

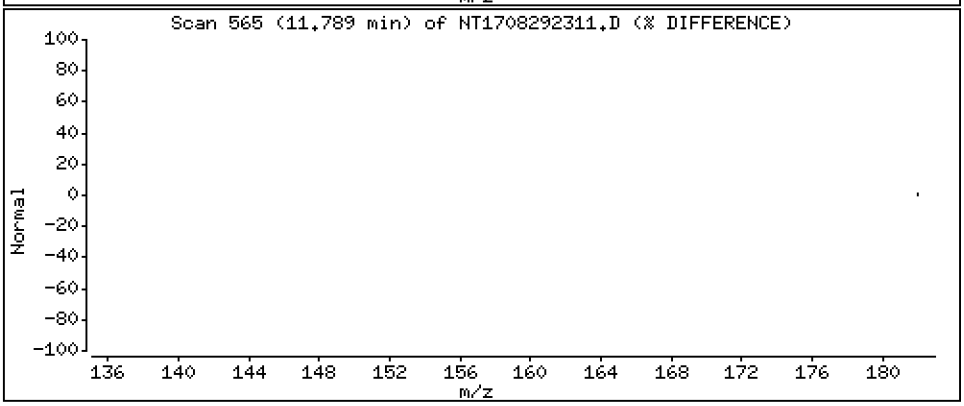












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Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

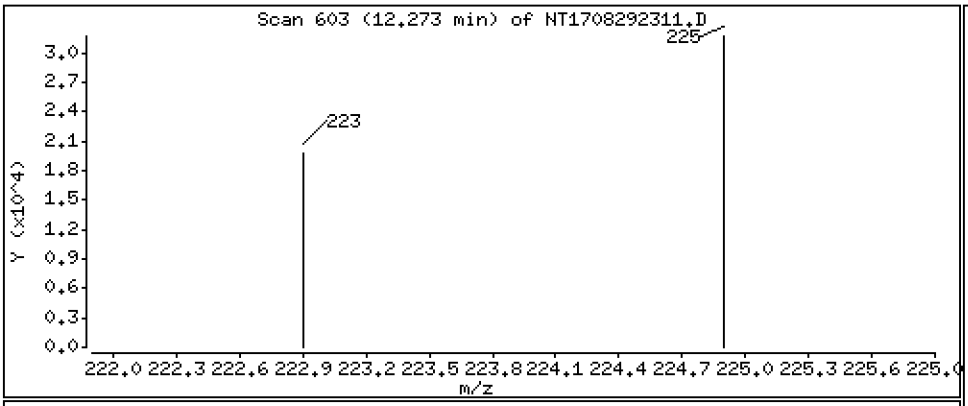
Operator: JGR

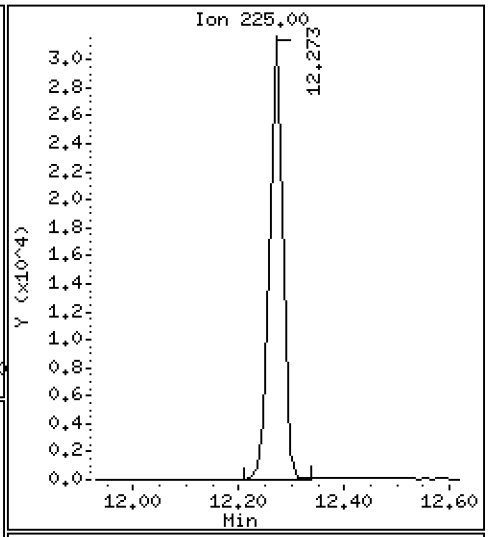
Column phase: ZB-5msi

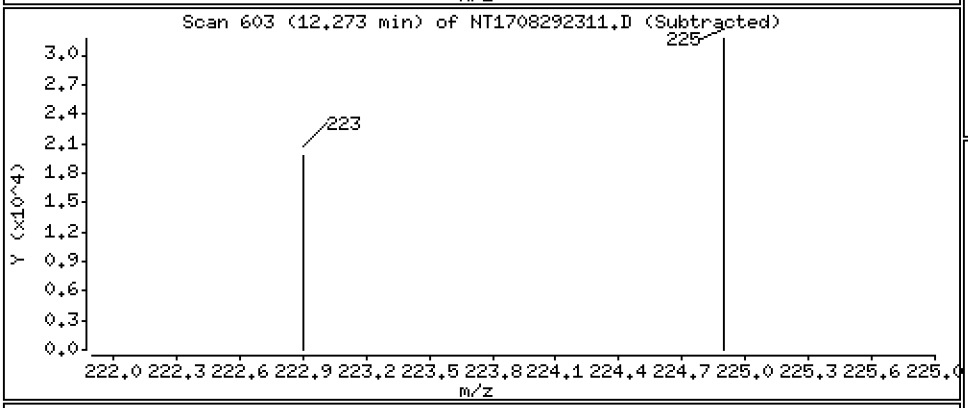
Column diameter: 0.25

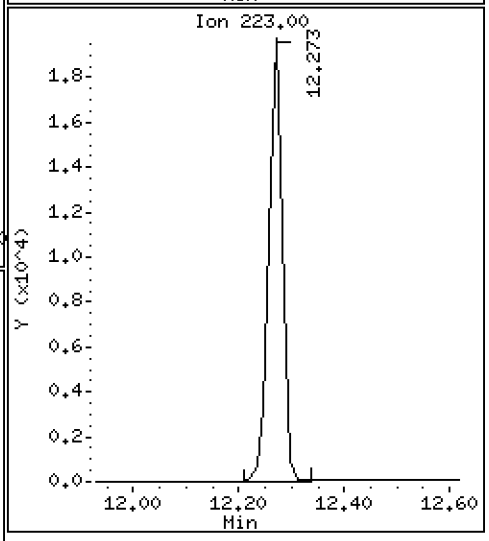
30 Hexachlorobutadiene

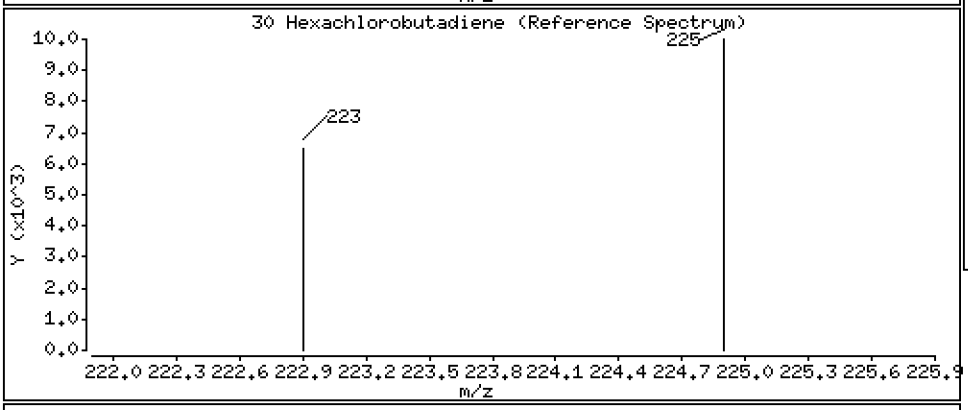
Concentration: 1.255 ug/mL

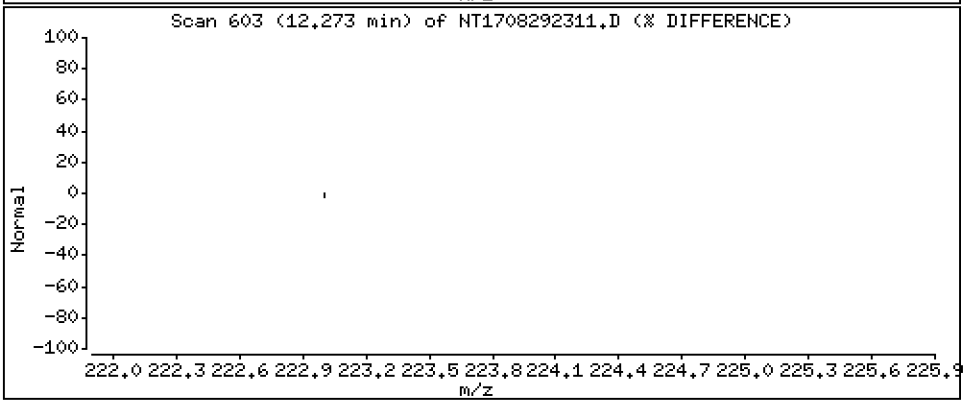












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Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

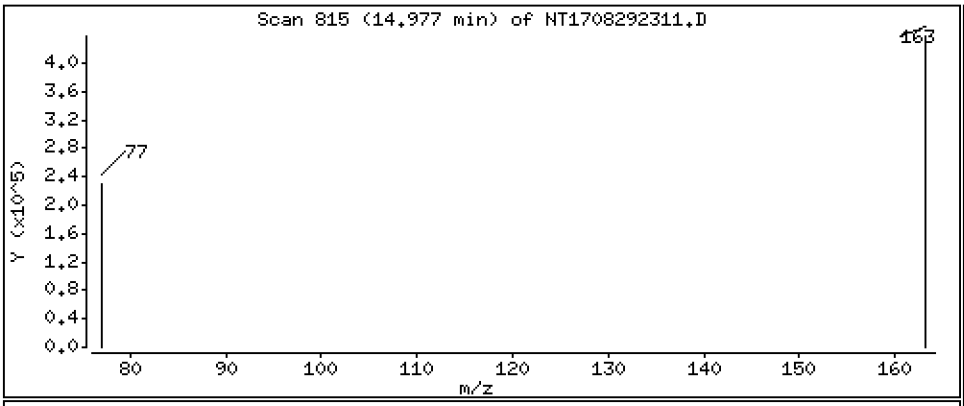
Operator: JGR

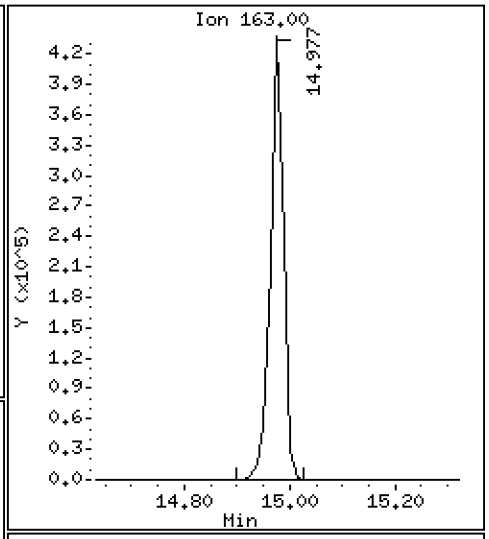
Column phase: ZB-5msi

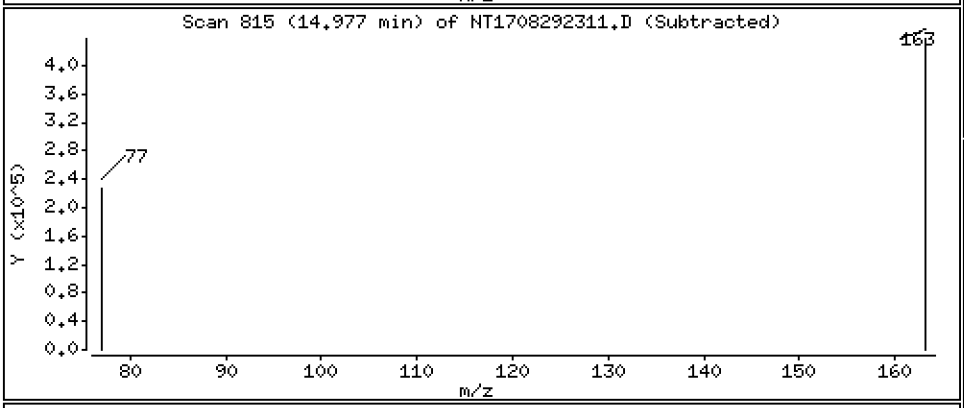
Column diameter: 0.25

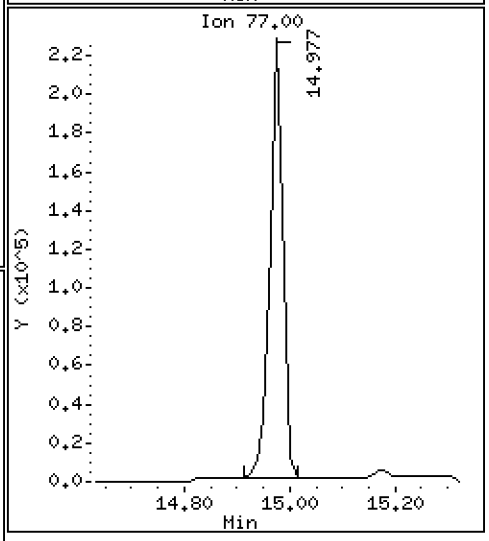
39 Dimethylphthalate

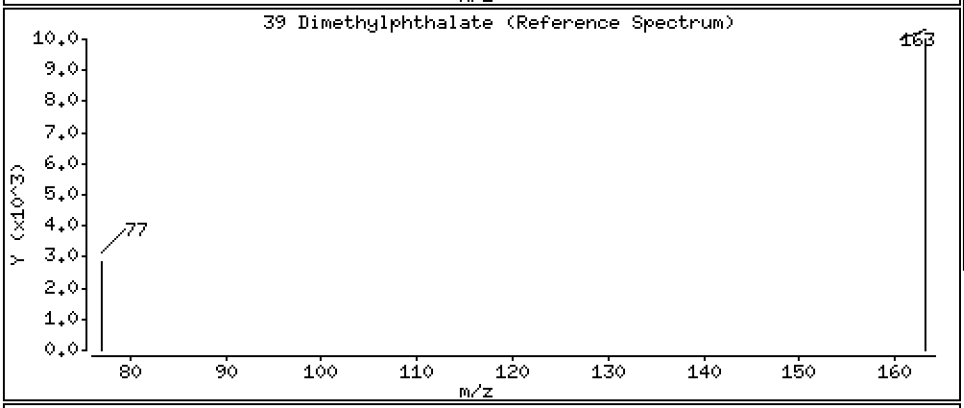
Concentration: 4.333 ug/mL

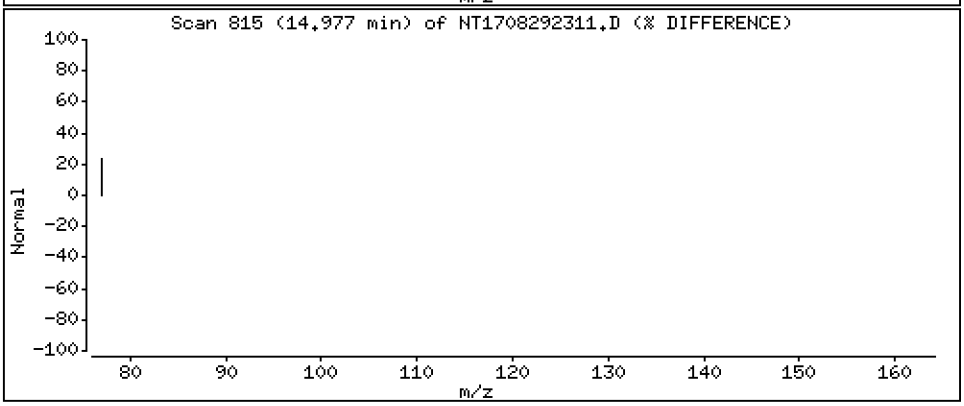












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Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

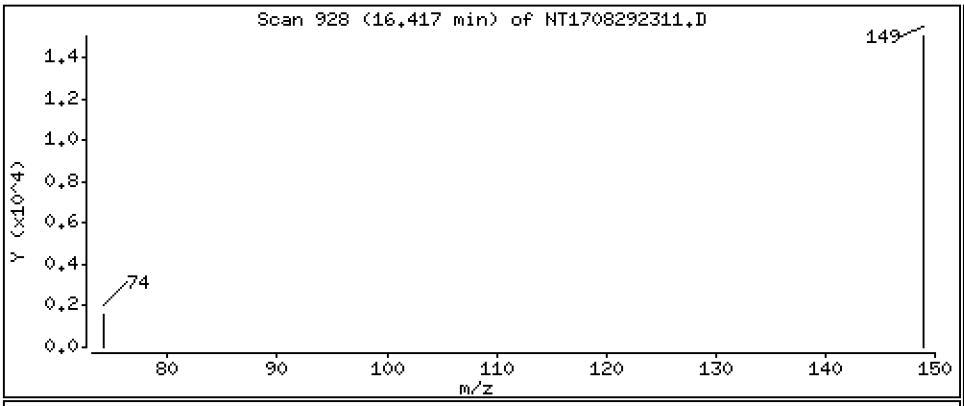
Operator: JGR

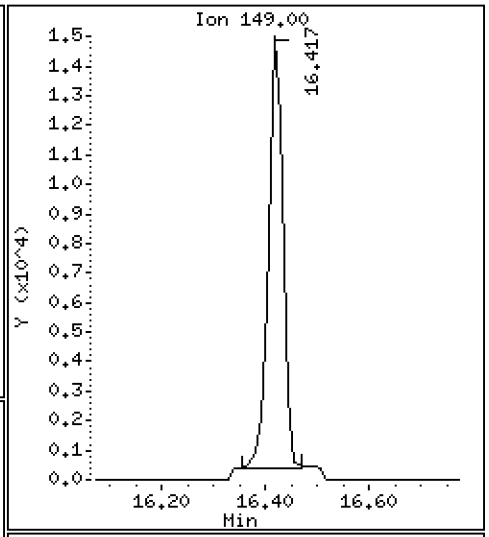
Column phase: ZB-5msi

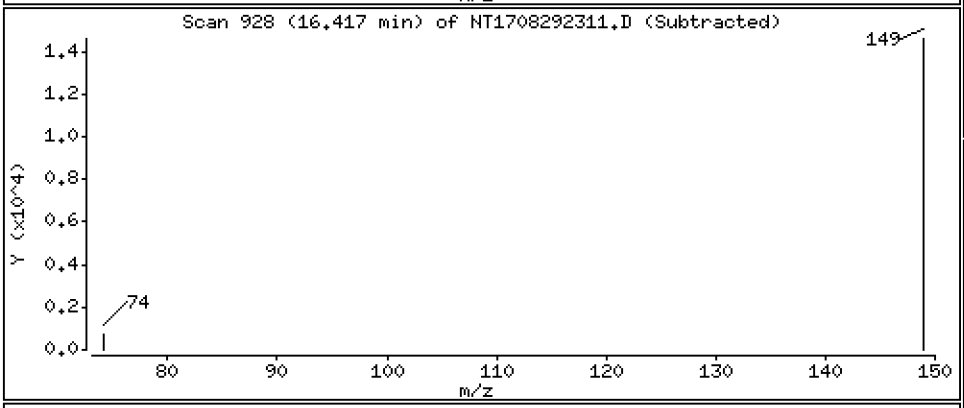
Column diameter: 0.25

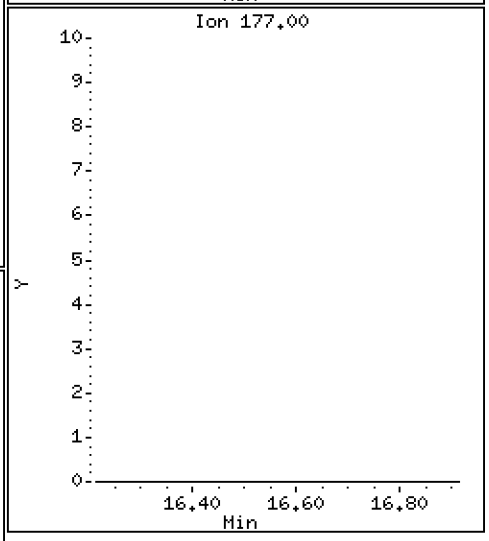
50 Diethylphthalate

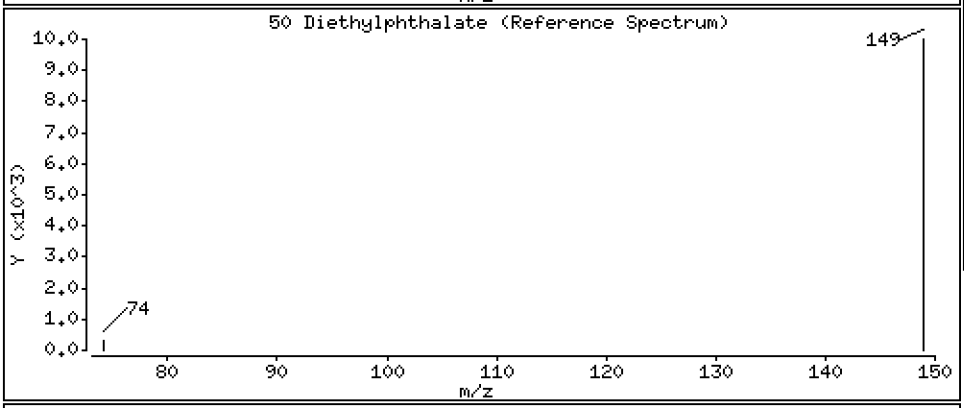
Concentration: 0.1556 ug/mL

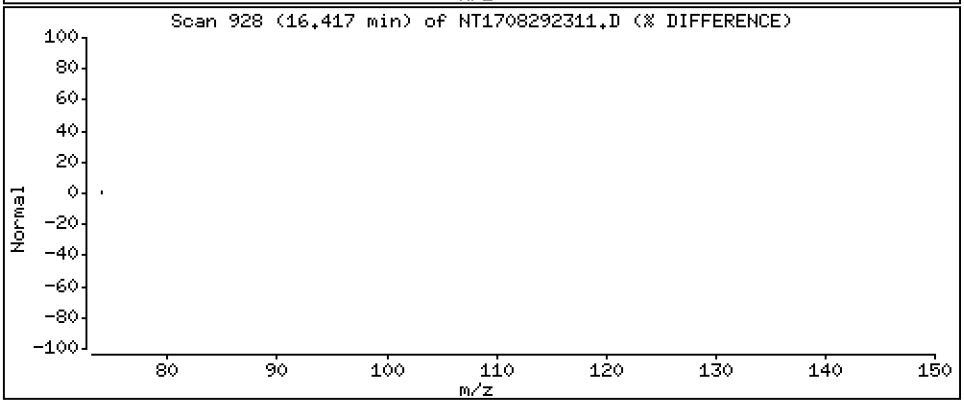












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292311.D

Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

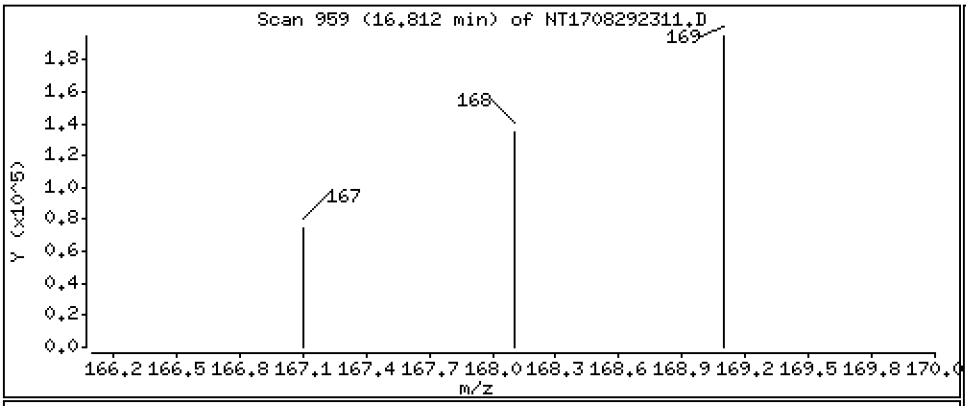
Operator: JGR

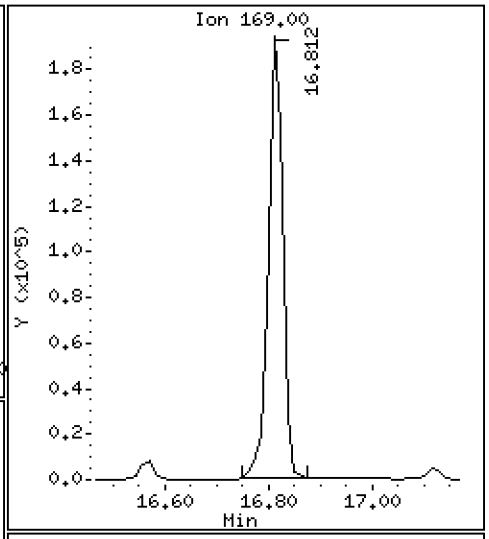
Column phase: ZB-5msi

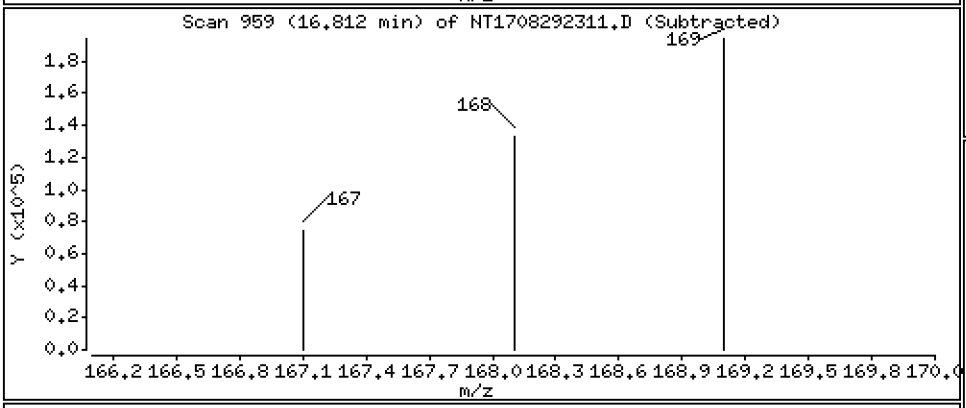
Column diameter: 0.25

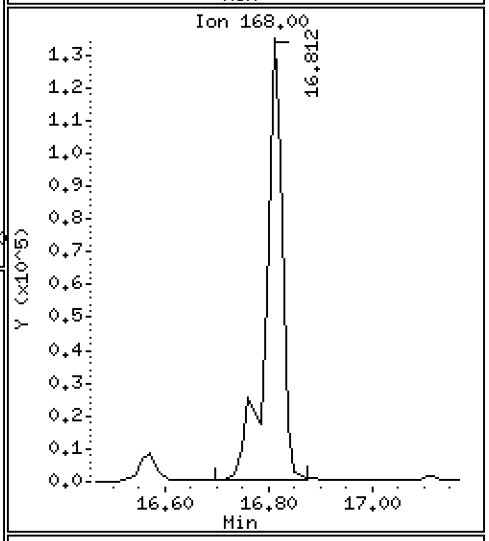
54 N-Nitrosodiphenylamine

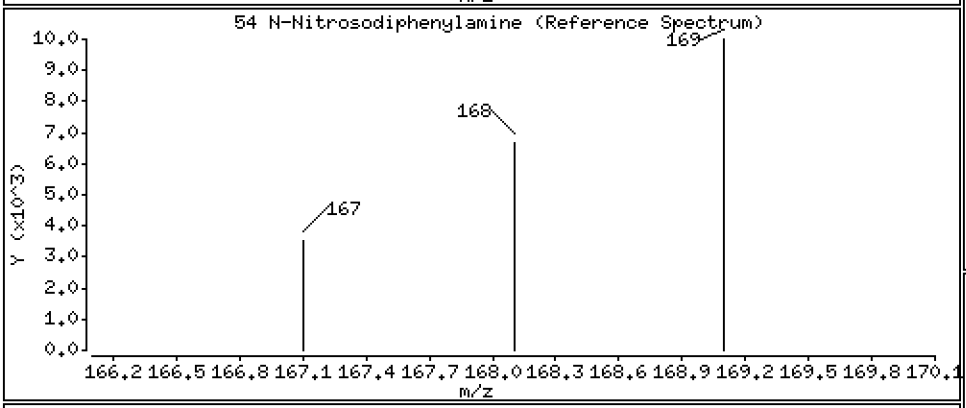
Concentration: 3.340 ug/mL

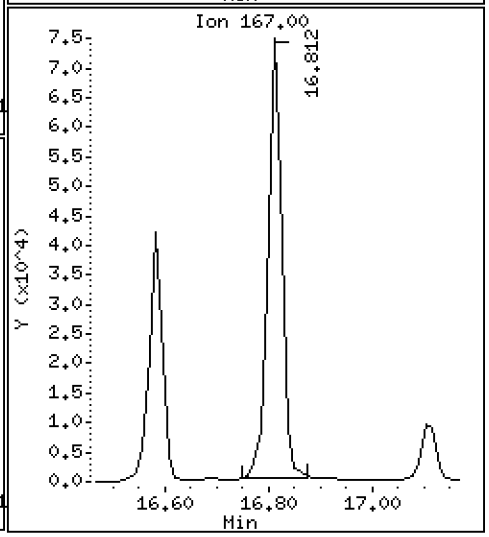


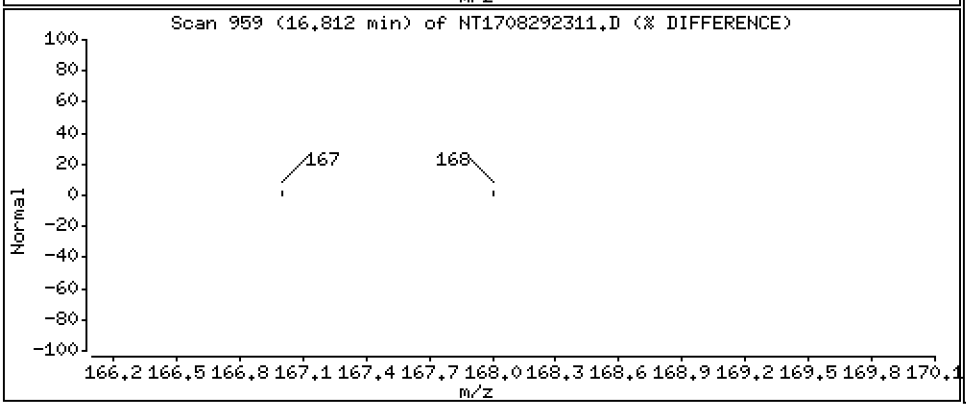












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Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

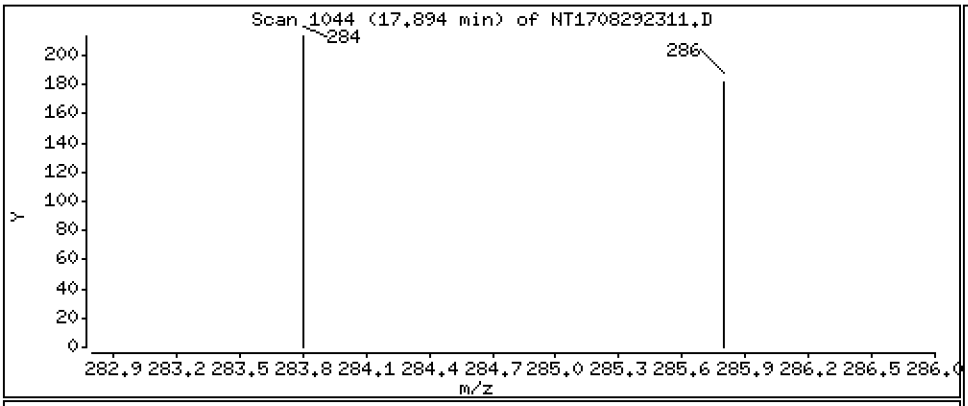
Operator: JGR

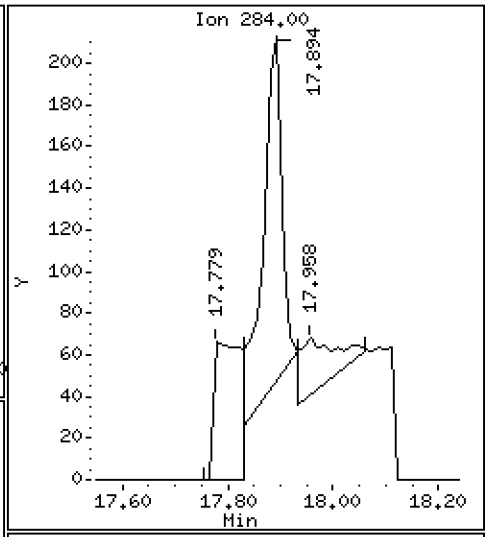
Column phase: ZB-5msi

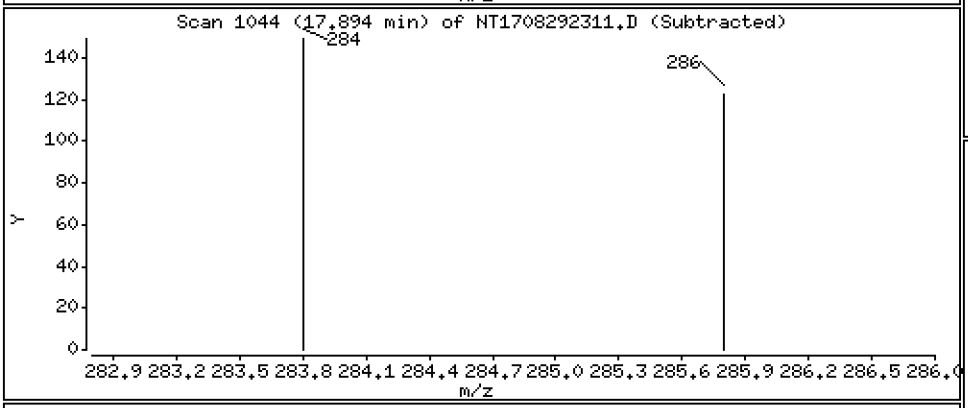
Column diameter: 0.25

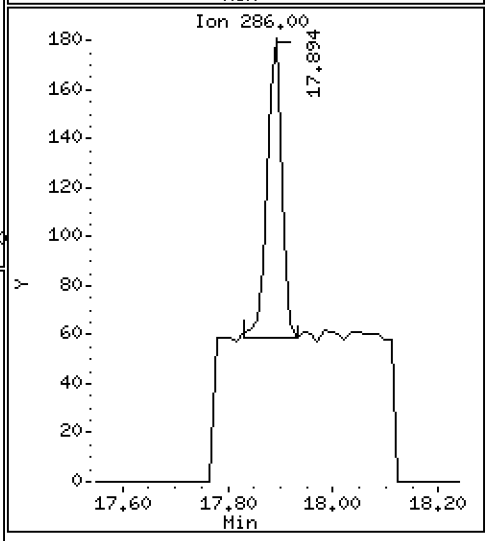
57 Hexachlorobenzene

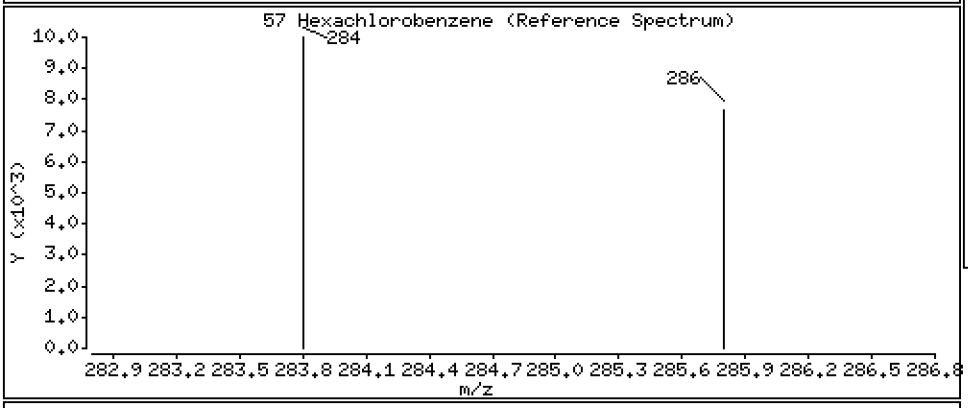
Concentration: 0.01199 ug/mL

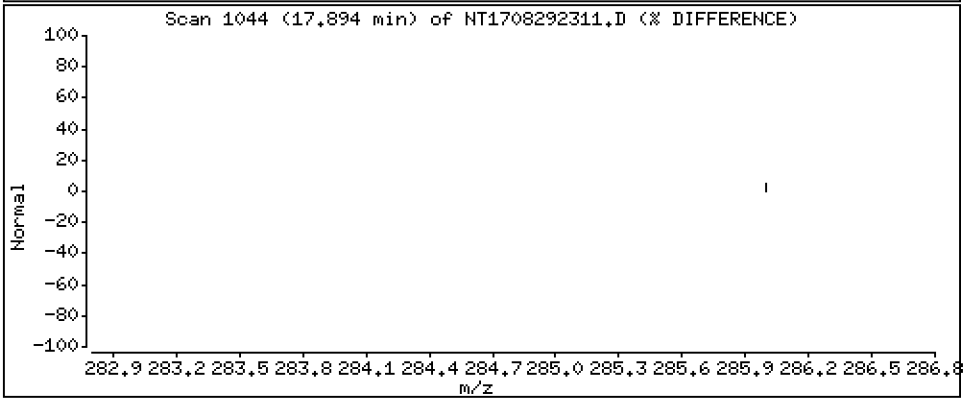












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Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

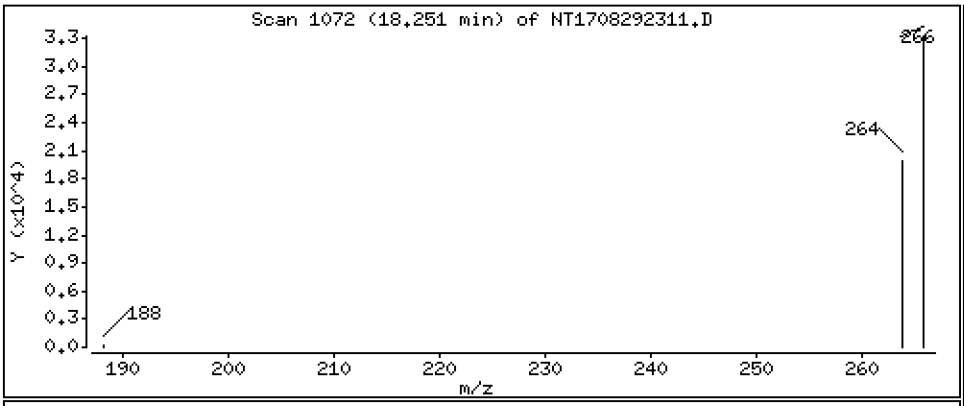
Operator: JGR

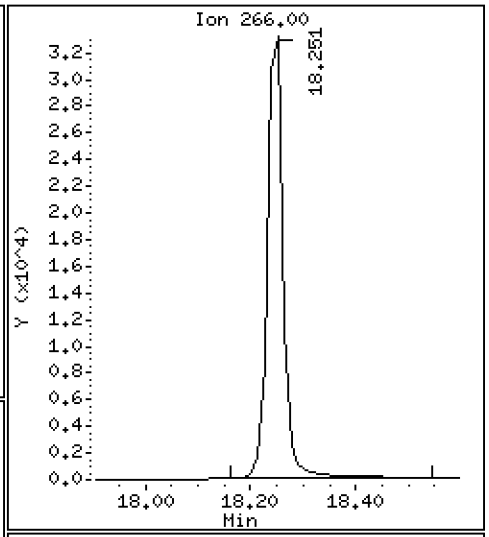
Column phase: ZB-5msi

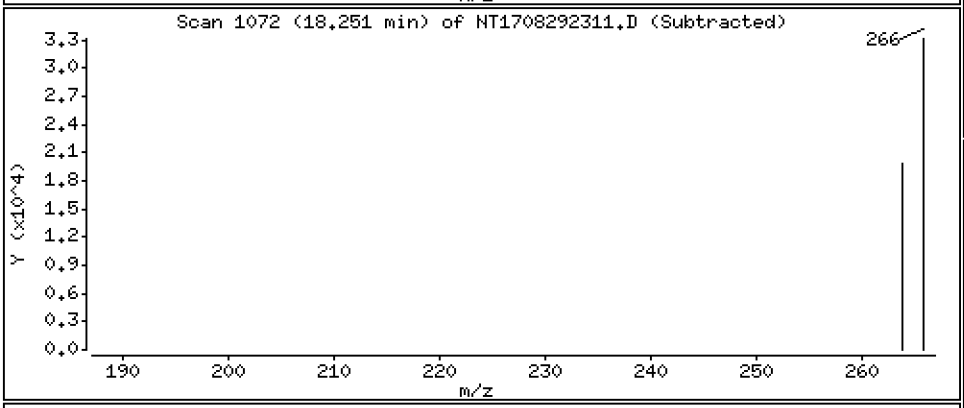
Column diameter: 0.25

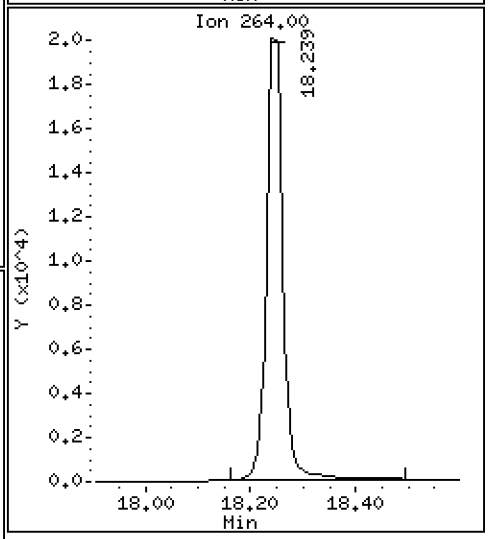
58 Pentachlorophenol

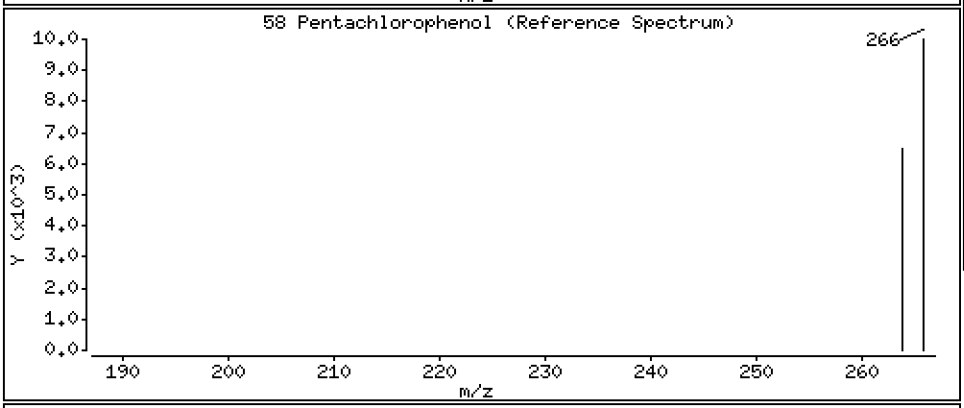
Concentration: 2.931 ug/mL

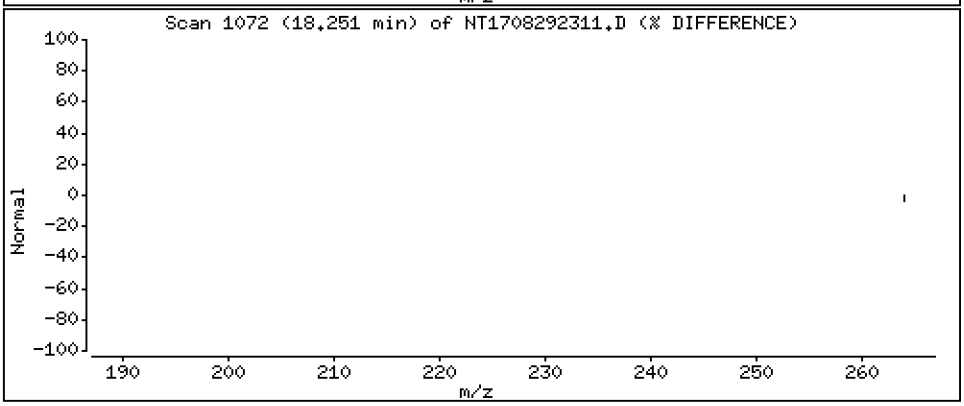












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Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

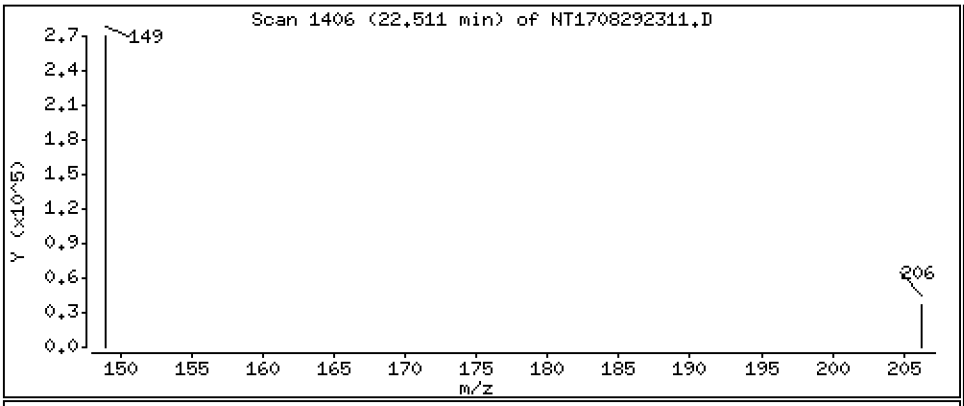
Operator: JGR

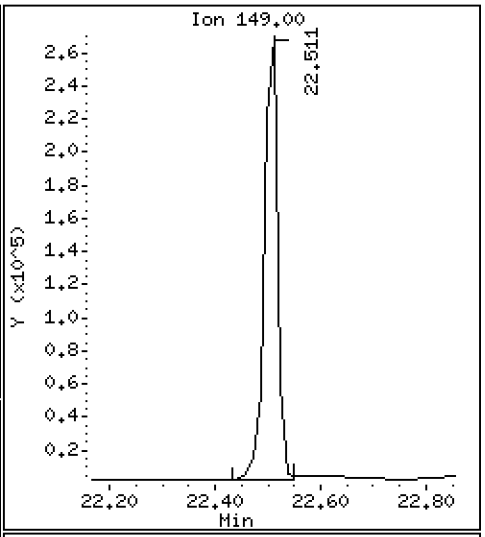
Column phase: ZB-5msi

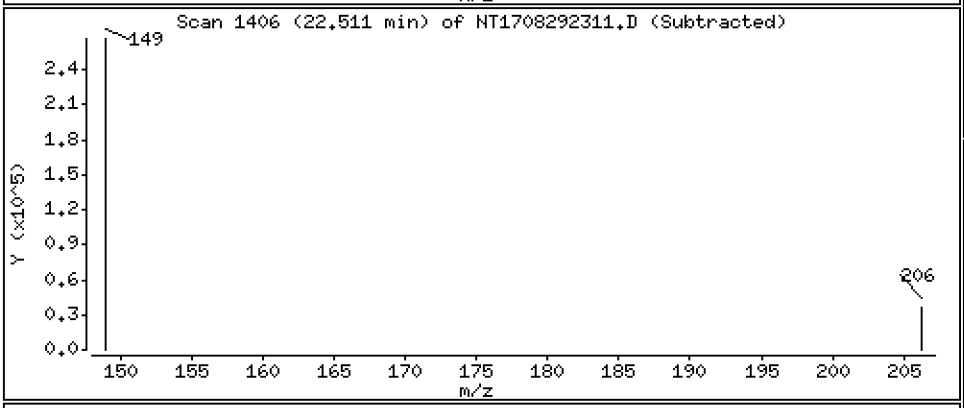
Column diameter: 0.25

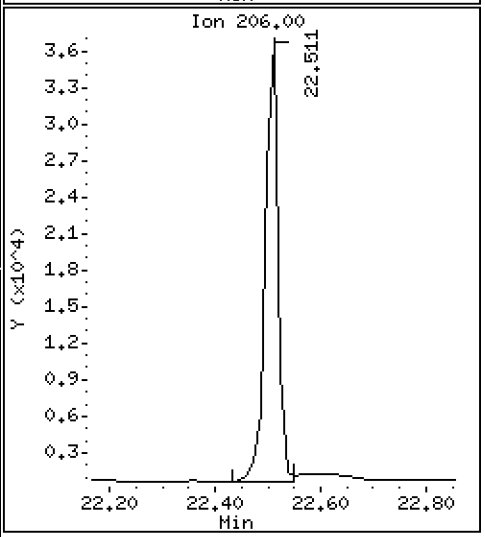
67 Butylbenzylphthalate

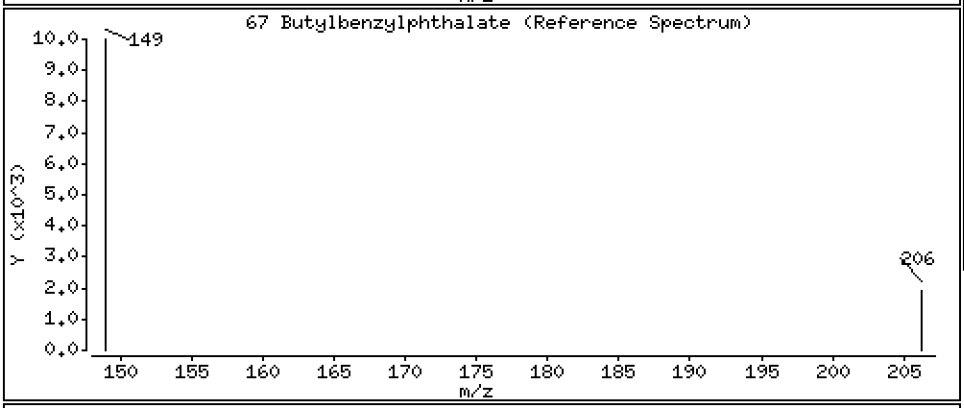
Concentration: 3.338 ug/mL

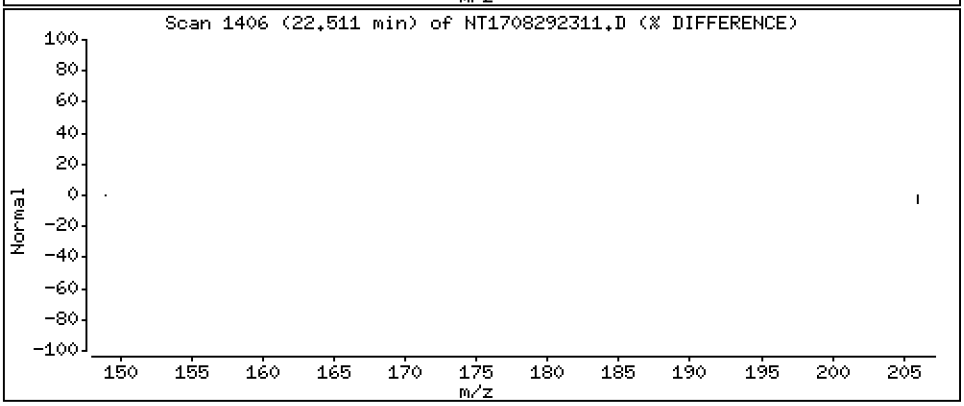












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Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

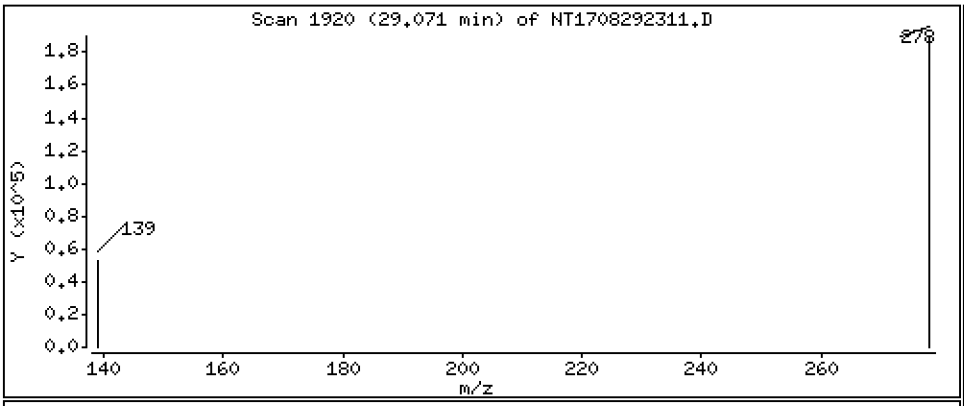
Operator: JGR

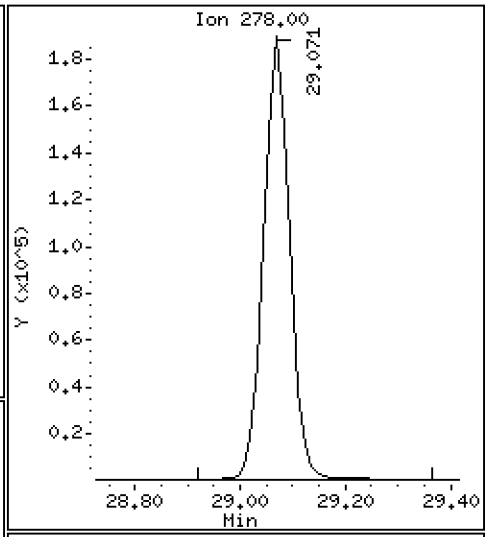
Column phase: ZB-5msi

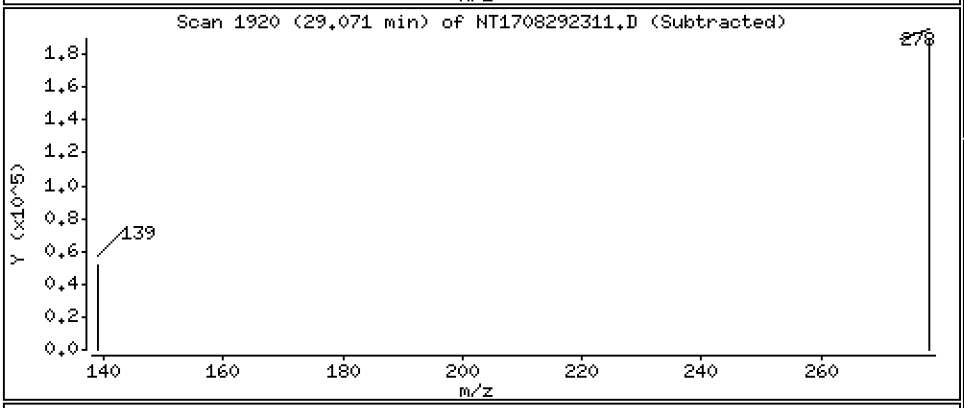
Column diameter: 0.25

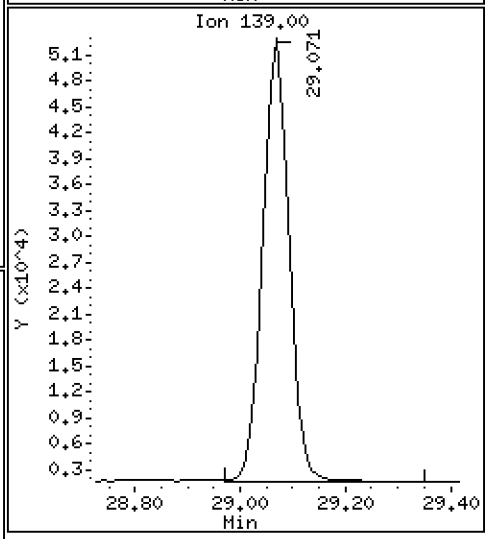
79 Dibenzo(a,h)anthracene

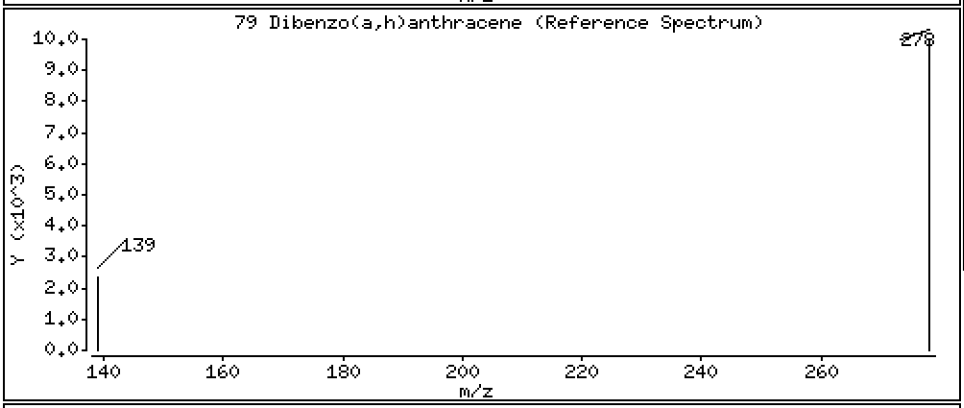
Concentration: 3.833 ug/mL

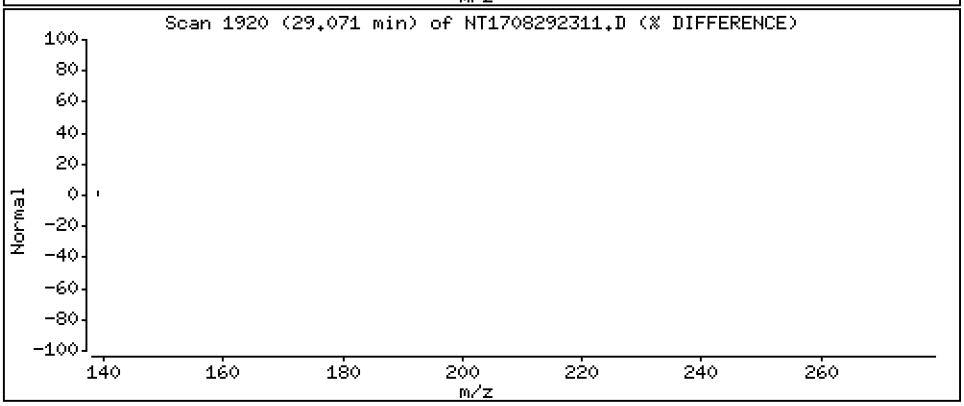












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Date : 29-AUG-2023 17:50

Client ID:

Instrument: nt17.i

Sample Info: BLH0669-SRM1

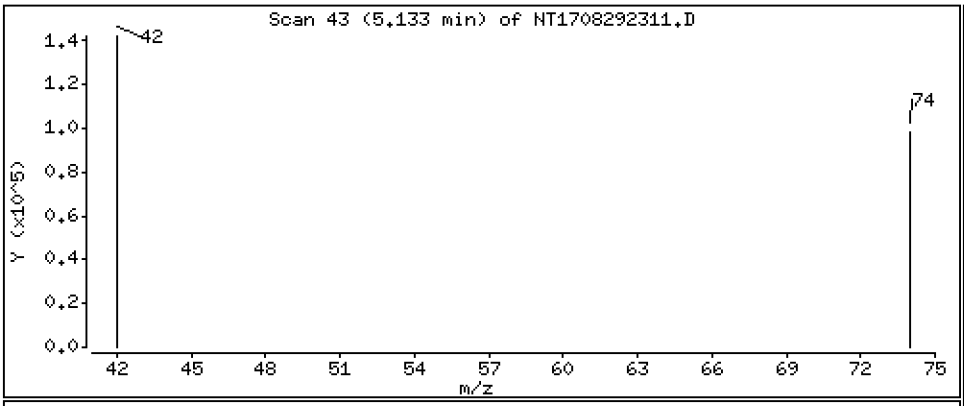
Operator: JGR

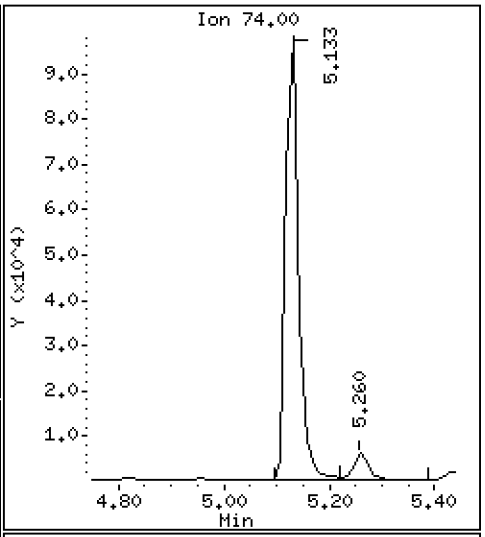
Column phase: ZB-5msi

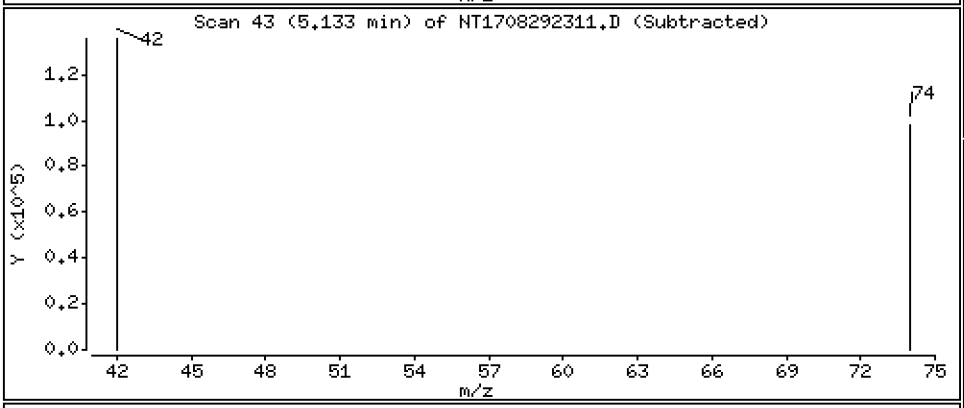
Column diameter: 0.25

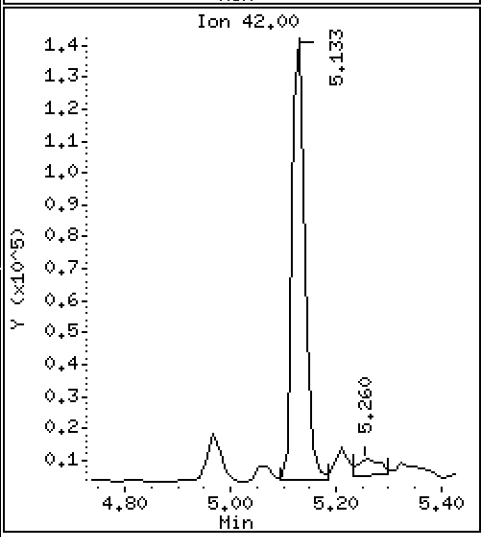
90 N-Nitrosodimethylamine

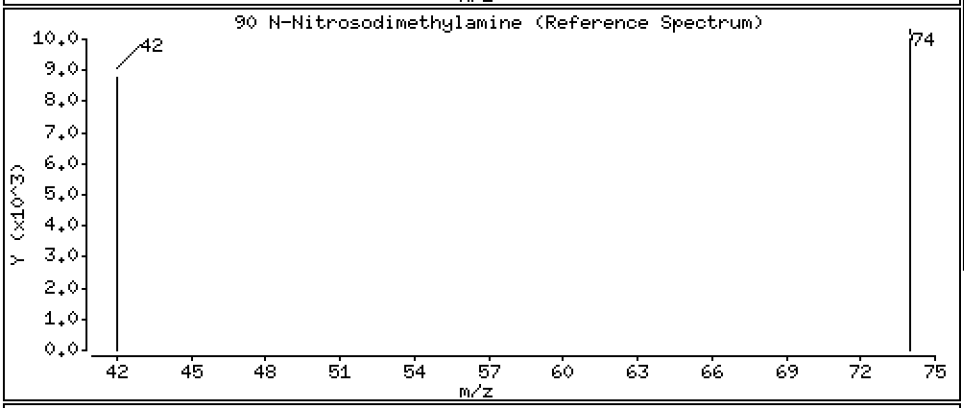
Concentration: 1.034 ug/mL

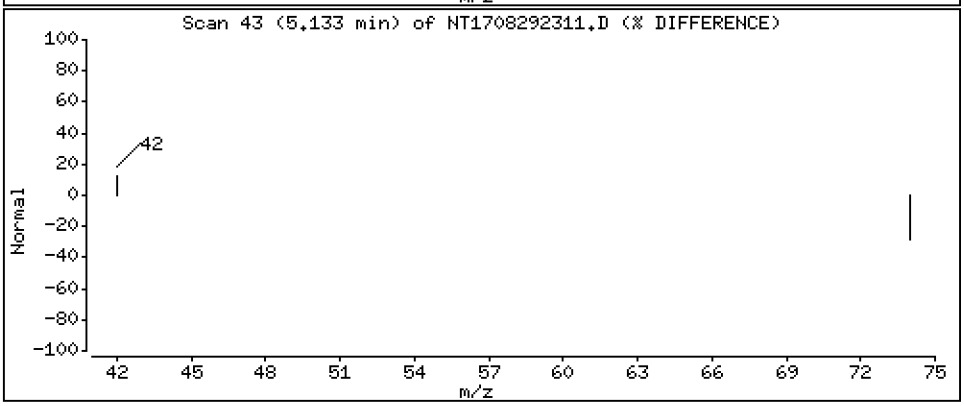












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292311.D
Lab Smp Id: BLH0669-SRM1
Inj Date : 29-AUG-2023 17:50
Operator : JGR Inst ID: nt17.i
Smp Info : BLH0669-SRM1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 09:25 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

								CONCENTRATIONS	
		QUANT SIG						ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/mL)
$	1 2-Fluorophenol	112	7.209	7.196	(0.766)	946710		5.89362	5.894(R)
	3 Phenol	94	8.776	8.776	(0.932)	550670		2.24883	2.249
	7 1,3-Dichlorobenzene	146	9.336	9.349	(0.992)	63489		0.38331	0.3833
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	386860		4.00000	
	9 1,4-Dichlorobenzene	146	9.336	9.439	(0.992)	63489		0.39607	0.3961
	11 Benzyl alcohol	79	9.771	9.669	(1.038)	23943		0.14127	0.1413
	12 1,2-Dichlorobenzene	146	9.796	9.797	(1.041)	1969		0.01266	0.01266
	13 2-Methylphenol	108	9.886	9.886	(1.050)	675679		4.55074	4.551
	15 4-Methylphenol	108	10.154	10.154	(1.079)	949474		6.11835	6.118
	16 N-Nitroso-di-n-propylamine	70	10.116	10.218	(1.075)	10688		0.06735	0.06735
	22 2,4-Dimethylphenol	107	11.202	11.189	(0.943)	789171		5.65231	5.652
	24 Benzoic acid	105	11.304	11.329	(0.952)	94842		1.03565	1.036
	26 1,2,4-Trichlorobenzene	180	11.789	11.789	(0.992)	84099		0.88158	0.8816
*	27 Naphthalene-d8	136	11.878	11.878	(1.000)	1391531		4.00000	
	30 Hexachlorobutadiene	225	12.273	12.273	(1.033)	56084		1.25539	1.255
	39 Dimethylphthalate	163	14.976	14.977	(0.967)	753592		4.33253	4.333
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	535164		4.00000	
	50 Diethylphthalate	149	16.417	16.417	(1.060)	28138		0.15558	0.1556
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	365724		3.33978	3.340
	57 Hexachlorobenzene	284	17.894	17.894	(0.966)	430		0.01199	0.01199
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	71365		2.93117	2.931
*	59 Phenanthrene-d10	188	18.519	18.506	(1.000)	761697		4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	413718		5.60422	5.604(R)
	67 Butylbenzylphthalate	149	22.510	22.511	(0.958)	472494		3.33782	3.338
*	69 Chrysene-d12	240	23.505	23.506	(1.000)	533469		4.00000	
*	77 Perylene-d12	264	26.223	26.223	(1.000)	565075		4.00000	
	79 Dibenzo(a,h)anthracene	278	29.071	29.071	(1.109)	639667		3.83255	3.833
	90 N-Nitrosodimethylamine	74	5.132	5.094	(0.545)	169055		1.03429	1.034

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 30-Aug-2023 09:25

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292311.D
Lab Smp Id: BLH0669-SRM1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 29-AUG-2023
Calibration Time: 12:37
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	296489	148245	592978	386860	30.48
27 Naphthalene-d8	1098892	549446	2197784	1391531	26.63
42 Acenaphthene-d10	443071	221536	886142	535164	20.79
59 Phenanthrene-d10	627744	313872	1255488	761697	21.34
69 Chrysene-d12	404122	202061	808244	533469	32.01
77 Perylene-d12	417323	208662	834646	565075	35.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	-0.00
27 Naphthalene-d8	11.88	11.38	12.38	11.88	-0.00
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	-0.00
59 Phenanthrene-d10	18.51	18.01	19.01	18.52	0.07
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.22	25.72	26.72	26.22	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292311.D

Lab ID: BLH0669-SRM1
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   29-AUG-2023 17:50

RT	CO-ELUTION COMPOUNDS
9.337	1,4-Dichlorobenzene and 1,3-Dichlorobenzene

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.992	1.003	-0.0108	1,4-Dichlorobenzene
1.038	1.027	0.0109	Benzyl alcohol
1.075	1.085	-0.0108	N-Nitroso-di-n-propylamine

RRT check based on Ccal File: SIM.b/NT1708292304.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Lab File ID:	NT1708102301S.D	Injection Date:	08/10/23
Instrument ID:	NT17	Injection Time:	12:15
Sequence:	SLH0217	Lab Sample ID:	SLH0217-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	1.61	PASS
69	Less than 100% of 198	96.3	PASS
70	Less than 2% of 69	0.553	PASS
197	Less than 2% of 198	0.0334	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.89	PASS
365	1 - 100% of 198	3.24	PASS
441	Less than 150% of 443	79.5	PASS
442	1 - 200% of 198	56.5	PASS
443	15 - 24% of 442	19.6	PASS
4,4'-DDD	Less than 20% of 4,4'-DDT		
4,4'-DDE	Less than 20% of 4,4'-DDT		
4,4'-DDT	Base peak, 100% relative abundance		

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLH0217-TUN1	NT1708102301S.D	08/10/2023	12:15
Cal Standard	SLH0217-CAL8	NT1708102303S.D	08/10/2023	13:09
Cal Standard	SLH0217-CAL7	NT1708102304S.D	08/10/2023	13:47
Cal Standard	SLH0217-CAL6	NT1708102305S.D	08/10/2023	14:24
Cal Standard	SLH0217-CAL5	NT1708102306S.D	08/10/2023	15:01
Cal Standard	SLH0217-CAL4	NT1708102307S.D	08/10/2023	15:38
Cal Standard	SLH0217-CAL3	NT1708102308S.D	08/10/2023	16:16
Cal Standard	SLH0217-CAL2	NT1708102309S.D	08/10/2023	16:53
Cal Standard	SLH0217-CAL1	NT1708102310S.D	08/10/2023	17:30
Initial Cal Blank	SLH0217-ICB1	NT1708102311S.D	08/10/2023	18:08
Secondary Cal Check	SLH0217-SCV1	NT1708102312S.D	08/10/2023	18:45

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GH00045	Instrument:	NT17
Calibration Date:	08/10/2023	Column (1):	ZB-5MS

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
1,4-Dichlorobenzene	0.05	1.766426	0.1	1.722538	0.2	1.678806	0.5	1.597697	1	1.633369	2.5	1.608926
1,2-Dichlorobenzene	0.05	1.673429	0.1	1.650657	0.2	1.616777	0.5	1.562582	1	1.60544	2.5	1.574369
Benzyl Alcohol			0.1	1.505653	0.2	1.564615	0.5	1.632215	1	1.757706	2.5	1.837519
Benzoic acid			0.4	4.99192E-03	0.8	2.414152E-02	2	0.0946368	4	0.1870916	10	0.2503652
2,4-Dimethylphenol	0.1	0.3271465	0.2	0.361254	0.4	0.385741	1	0.4072252	2	0.4353778	5	0.4308484
1,2,4-Trichlorobenzene	0.05	0.2901968	0.1	0.2861176	0.2	0.2764782	0.5	0.2665739	1	0.2712762	2.5	0.266585
N-Nitrosodiphenylamine	0.05	0.4384	0.1	0.5274403	0.2	0.5749941	0.5	0.602814	1	0.6275451	2.5	0.6055804
Pentachlorophenol	0.1	2.271078E-02	0.2	3.107108E-02	0.4	3.987312E-02	1	6.102517E-02	2	8.308538E-02	5	0.1026895
2-Fluorophenol	0.075	1.484209	0.15	1.534042	0.3	1.622434	0.75	1.661254	1.5	1.780374	3.75	1.746755
p-Terphenyl-d14	0.05	0.4650079	0.1	0.4926282	0.2	0.5344296	0.5	0.5564622	1	0.5882472	2.5	0.5759886

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GH00045	Instrument:	NT17
Calibration Date:	08/10/2023	Column (1):	ZB-5MS

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
1,4-Dichlorobenzene	5	1.631547	10	1.619927								
1,2-Dichlorobenzene	5	1.596567	10	1.582066								
Benzyl Alcohol	5	1.959984	10	2.009069								
Benzoic acid	20	0.3037179	40	0.336233								
2,4-Dimethylphenol	10	0.4319227	20	0.4312047								
1,2,4-Trichlorobenzene	5	0.269655	10	0.2668597								
N-Nitrosodiphenylamine	5	0.6033702	10	0.62034								
Pentachlorophenol	10	0.1188098	20	0.1315011								
2-Fluorophenol	7.5	1.734678	15	1.723369								
p-Terphenyl-d14	5	0.6008668	10	0.6145996								

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GH00045	Instrument:	NT17
Calibration Date:	08/10/2023	Column (1):	ZB-5MS

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
1,4-Dichlorobenzene	1.657404	3.6			RSD (15)	
1,2-Dichlorobenzene	1.607736	2.4			RSD (15)	
Benzyl Alcohol	1.752394	11.1			RSD (15)	
Benzoic acid	0.1715968	77.6		0.9959	QCOD (0.99)	
2,4-Dimethylphenol	0.40134	10.0			RSD (15)	
1,2,4-Trichlorobenzene	0.2742178	3.4			RSD (15)	
N-Nitrosodiphenylamine	0.5750605	11.0			RSD (15)	
Pentachlorophenol	7.384574E-02	56.1	0.9922		LCOD (0.99)	
2-Fluorophenol	1.660889	6.4			RSD (15)	
p-Terphenyl-d14	0.5535288	9.6			RSD (15)	

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLH0217

Instrument: NT17
Calibration ID: GH00045

Printed: 8/16/2023 2:03:57PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLH0217-TUN1	QC		1		L005045			
SLH0217-CAL8	QC		2		L009088	L006982		
SLH0217-CAL7	QC		3		L009089	L006982		
SLH0217-CAL6	QC		4		L009090	L006982		
SLH0217-CAL5	QC		5		L009091	L006982		
SLH0217-CAL4	QC		6		L009092	L006982		
SLH0217-CAL3	QC		7		L009093	L006982		
SLH0217-CAL2	QC		8		L009094	L006982		
SLH0217-CAL1	QC		9		L009095	L006982		
SLH0217-ICB1	QC		10		L006701	L006982		
SLH0217-SCV1	QC		11		L006700	L006982		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230810.b\SIM.B

	Inject Date/Time	Filename	DF	LabID	ClientID
1	10-AUG-2023 12:32	NT1708102302S.D	1	SEQ-CAL7	
2	10-AUG-2023 13:09	NT1708102303S.D	1	SEQ-CAL6	
3	10-AUG-2023 13:47	NT1708102304S.D	1	SEQ-CAL5	
4	10-AUG-2023 14:24	NT1708102305S.D	1	SEQ-CAL4	
5	10-AUG-2023 15:01	NT1708102306S.D	1	SEQ-CAL3	
6	10-AUG-2023 15:38	NT1708102307S.D	1	SEQ-CAL2	
7	10-AUG-2023 16:16	NT1708102308S.D	1	SEQ-CAL1	
8	10-AUG-2023 16:53	NT1708102309S.D	1	SEQ-SIM2	
9	10-AUG-2023 17:30	NT1708102310S.D	1	SEQ-SIM1	
10	10-AUG-2023 18:08	NT1708102311S.D	1	SEQ-ICB1	
11	10-AUG-2023 18:45	NT1708102312S.D	1	SEQ-SCV1	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230810.b\SIM.B

ARI Job No.: SEQ- Method: SIM.B\SIMABN2.m Instrument: nt17.i Date: 10-AUG-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1232	NT1708102302S.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
1309	NT1708102303S.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
1347	NT1708102304S.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
1424	NT1708102305S.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
1501	NT1708102306S.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
1538	NT1708102307S.D	SEQ-CAL2		1	N-Nitrosodimethylamine, 2-Fluorophenol,
1616	NT1708102308S.D	SEQ-CAL1		1	N-Nitrosodimethylamine, 2-Fluorophenol,
1653	NT1708102309S.D	SEQ-SIM2		1	Benzoic acid, N-Nitrosodimethylamine, Hexachlorobenzene, Pentachlorophenol, 2-Fluorophenol,
1730	NT1708102310S.D	SEQ-SIM1		1	N-Nitrosodimethylamine, Pentachlorophenol, 2-Fluorophenol,
1808	NT1708102311S.D	SEQ-ICB1		1	2-Fluorophenol,
1845	NT1708102312S.D	SEQ-SCV1		1	N-Nitrosodimethylamine,

Security Status Report

Date: 16-Aug-2023 15:17

NT1708102302S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102303S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102304S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102305S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102306S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102307S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102308S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102309S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102310S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102311S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102312S.D	Data Locked	jrains, 16-Aug-2023 15:17

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-JUL-2023 13:37
End Cal Date : 10-AUG-2023 17:30
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Last Edit : 11-Aug-2023 07:38 jrains

Calibration File Names:
Level 1: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102310S.D
Level 2: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102309S.D
Level 3: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102308S.D
Level 4: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102307S.D
Level 5: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102306S.D
Level 6: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102305S.D
Level 7: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102304S.D
Level 8: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102303S.D

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Last Edit : 11-Aug-2023 07:38 jrains

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
141 Diallate B	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
142 1,2-Dibromo-3-Chloropropane	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
135 2,3,5,6-Tetrachlorophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
136 2,3,4,5-tetrachlorophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
137 NewCpnd_131	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
133 Butylatedhydroxytoluene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
132 3,6-Dimethylphenanthrene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-JUL-2023 13:37
End Cal Date : 10-AUG-2023 17:30
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Last Edit : 11-Aug-2023 07:38 jrains

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
146 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-JUL-2023 13:37
End Cal Date : 10-AUG-2023 17:30
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Last Edit : 11-Aug-2023 07:38 jrains

Compound	0.0500000 Level 1 / 5.0000 Level 7	0.1000000 Level 2 / 10.0000 Level 8	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
144 alpha-Terpineol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
125 Safrole	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
124 3,4-Dimethylphenol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
123 Acetophenone	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
122 Furfuraldehyde	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
143 1,4-Dioxane	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
121 Quinoline	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-JUL-2023 13:37
End Cal Date : 10-AUG-2023 17:30
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Last Edit : 11-Aug-2023 07:38 jrains

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
120 2,3,4,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
117 Butyl Diphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
116 Dibutyl Phenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-JUL-2023 13:37
End Cal Date : 10-AUG-2023 17:30
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Last Edit : 11-Aug-2023 07:38 jrains

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
111 Azobenzene (1,2-DP-Hydrazine)	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
109 3,4,5-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
108 4,5,6-Trichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
107 4,5-Dichloro-2-Methoxyphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

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Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Last Edit : 11-Aug-2023 07:38 jrains

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
105 1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
3 Phenol	2.36594	2.45463	2.53006	2.50884	2.62894	2.59867					
	2.59848	2.56936					AVRG		2.53186		3.46136
4 Bis(2-Chloroethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
6 2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
7 1,3-Dichlorobenzene	1.82987	1.78796	1.73870	1.66499	1.69747	1.65595					
	1.66408	1.66179					AVRG		1.71260		3.87022
9 1,4-Dichlorobenzene	1.76643	1.72254	1.67881	1.59770	1.63337	1.60893					
	1.63155	1.61993					AVRG		1.65740		3.61667

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	5.0000 Level 7	10.0000 Level 8									
11 Benzyl alcohol	+++++	1.50565	1.56462	1.63222	1.75771	1.83752					
	1.95998	2.00907					AVRG		1.75239		11.09552
12 1,2-Dichlorobenzene	1.67343	1.65066	1.61678	1.56258	1.60544	1.57437					
	1.59657	1.58207					AVRG		1.60774		2.37206
13 2-Methylphenol	1.32820	1.35072	1.44351	1.49484	1.61403	1.64007					
	1.70056	1.70966					AVRG		1.53520		9.90663
14 2,2'-oxybis(1-Chloropropane)	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
15 4-Methylphenol	1.36514	1.40348	1.46067	1.53911	1.67649	1.74532					
	1.82188	1.82437					AVRG		1.60456		11.61830
16 N-Nitroso-di-n-propylamine	1.37788	1.43191	1.52037	1.62267	1.75059	1.75513					
	1.81245	1.85563					AVRG		1.64083		11.00722
17 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
19 Nitrobenzene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
20 Isophorone	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
21 2-Nitrophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
22 2,4-Dimethylphenol	0.32715	0.36125	0.38574	0.40723	0.43538	0.43085					
	0.43192	0.43120					AVRG		0.40134		9.98708
23 Bis(2-Chloroethoxy)methane	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
24 Benzoic acid	*****	*****	5997	59987	238483	785060					
	1865065	3965055					QUAD	0.000e+000	3.81605	-0.25346	0.99843
25 2,4-Dichlorophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
26 1,2,4-Trichlorobenzene	0.29020	0.28612	0.27648	0.26657	0.27128	0.26659					
	0.26965	0.26686					AVRG		0.27422		3.38281
28 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
29 4-Chloroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
30 Hexachlorobutadiene	0.13008	0.12860	0.12603	0.12280	0.12736	0.12723					
	0.13036	0.13489					AVRG		0.12842		2.76455
31 4-Chloro-3-methylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
32 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
33 Hexachlorocyclopentadiene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
34 2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
35 2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
37 2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
38 2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
39 Dimethylphthalate	1.11839	1.19110	1.25118	1.30296	1.36887	1.36296					
	1.42746	1.37766					AVRG		1.30007		8.13071
40 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
41 2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
43 3-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
44 Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
45 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
46 Dibenzofuran	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
47 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
48 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
49 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
50 Diethylphthalate	1.01999	1.13927	1.26561	1.38298	1.47018	1.48118					
	1.53786	1.51732					AVRG		1.35180		14.15889
51 4-Chlorophenyl-phenylether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
52 4-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
53 4,6-Dinitro-2-methylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
54 N-Nitrosodiphenylamine	0.43840	0.52744	0.57499	0.60281	0.62755	0.60558					
	0.60337	0.62034					AVRG		0.57506		11.04741
56 4-Bromophenyl-phenylether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
57 Hexachlorobenzene	0.18795	0.18796	0.18918	0.18574	0.18897	0.18296					
	0.19055	0.19395					AVRG		0.18841		1.71840

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	5.0000 Level 7	10.0000 Level 8									
58 Pentachlorophenol	+++++	1335	3438	13784	38046	115250					
	259110	548910					LINR	0.000e+000	0.12786		0.99163
60 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
61 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
62 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
63 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
64 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
65 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
67 Butylbenzylphthalate	2383	5890	14439	52682	135239	376310					
	820420	1656382					LINR	0.000e+000	1.06141		0.99689
68 Benzo(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
70 3,3'-Dichlorobenzidine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
71 Chrysene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
72 bis(2-Ethylhexyl)phthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
73 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
74 Benzo(b)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
75 Benzo(k)fluoranthene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
76 Benzo(a)pyrene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
78 Indeno(1,2,3-cd)pyrene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
79 Dibenzo(a,h)anthracene	5853	13315	28334	78464	175811	438775					
	905428	1802136					LINR	0.000e+000	1.18146		0.99912
80 Benzo(g,h,i)perylene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
90 N-Nitrosodimethylamine	1.61661	1.67753	1.71394	1.69516	1.77599	1.71670					
	1.69087	1.63340					AVRG		1.69003		2.95450
91 Aniline	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
101 Cholesterol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
102 beta-Sitosterol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
103 Pyridine	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 1 2-Fluorophenol	1.48421	1.53404	1.62243	1.66125	1.78037	1.74676					
	1.73468	1.72337					AVRG		1.66089		6.42787
$ 145 d8-1,4-Dioxane	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 2 Phenol-d5	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 5 2-Chlorophenol-d4	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
$ 10 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 18 Nitrobenzene-d5	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 36 2-Fluorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 55 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 66 Terphenyl-d14	0.46501	0.49263	0.53443	0.55646	0.58825	0.57599					
	0.60087	0.61460					AVRG		0.55353		9.55923
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 10-JUL-2023 13:37
End Cal Date : 10-AUG-2023 17:30
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Last Edit : 11-Aug-2023 07:38 jrains

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 88 Dibenz(a,h)anthracene-d14	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 95 D10-1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

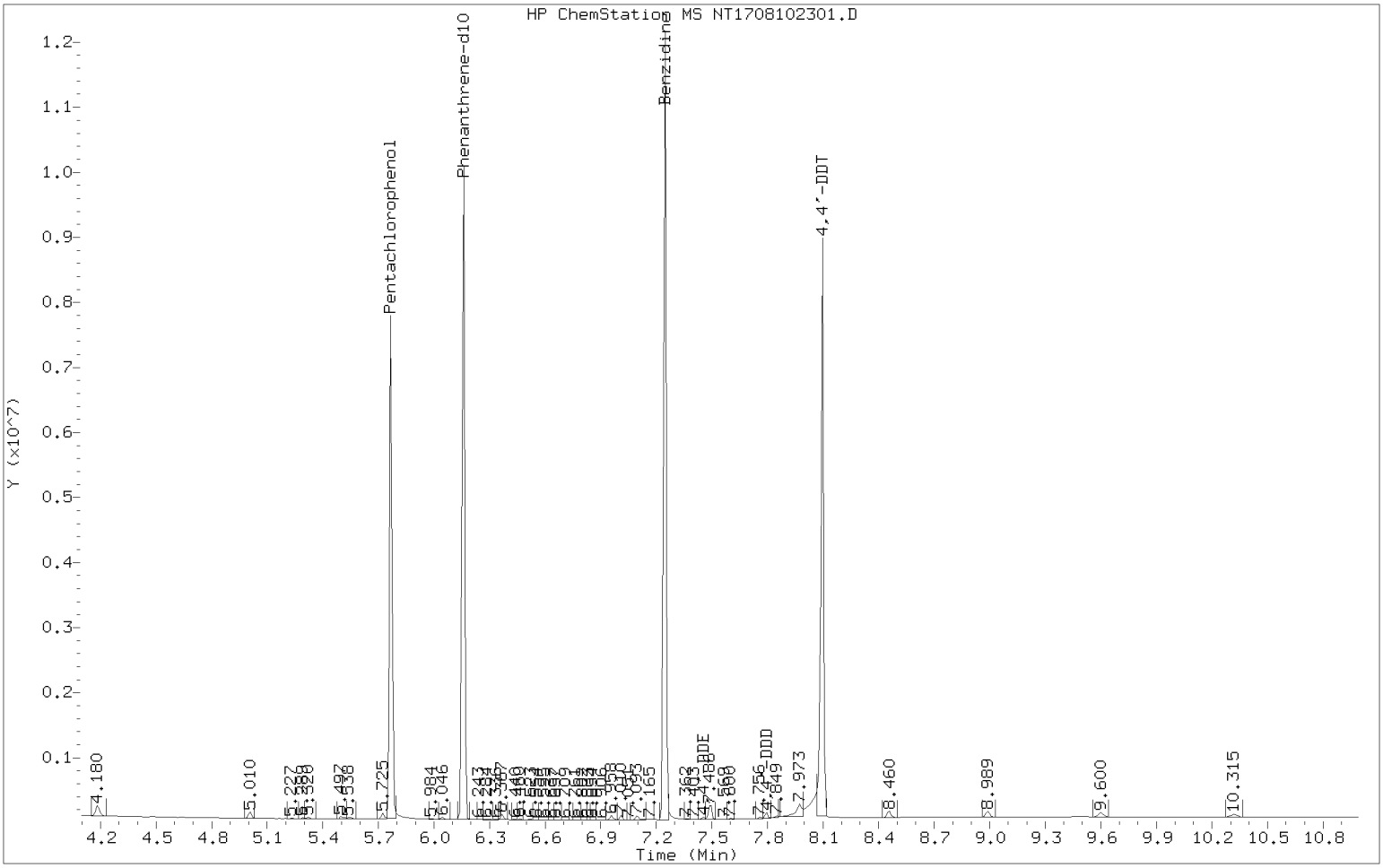
INITIAL CALIBRATION DATA

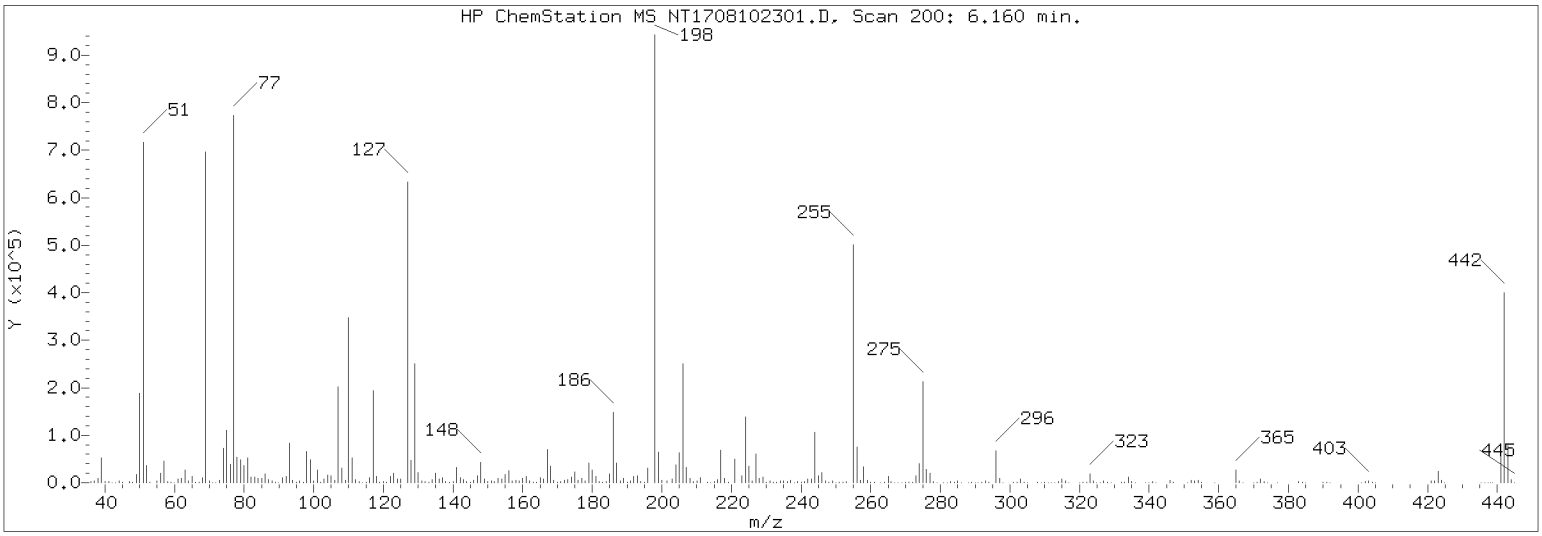
Start Cal Date : 10-JUL-2023 13:37
End Cal Date : 10-AUG-2023 17:30
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Last Edit : 11-Aug-2023 07:38 jrains

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

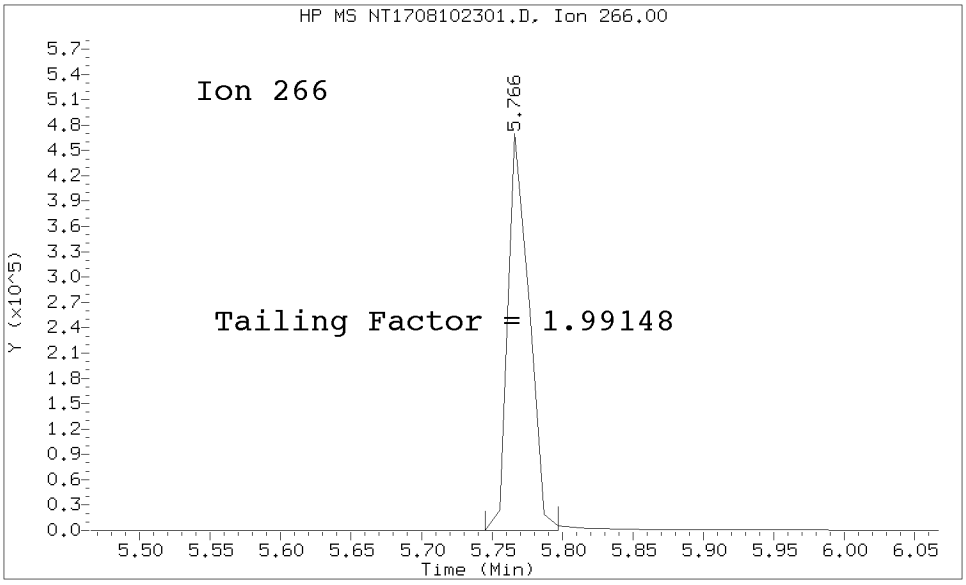
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230810.b/NT1708102301.D/NT1708102301.D
Method Used: \20230810.b\DFTPP8270E.m Inst: nt17
Injection Date: 10-AUG-2023 12:15 Operator: JGR
Sample Info: SEQ-TUN1 SEQ-TUN1
Report Date: 08/15/2023 16:04



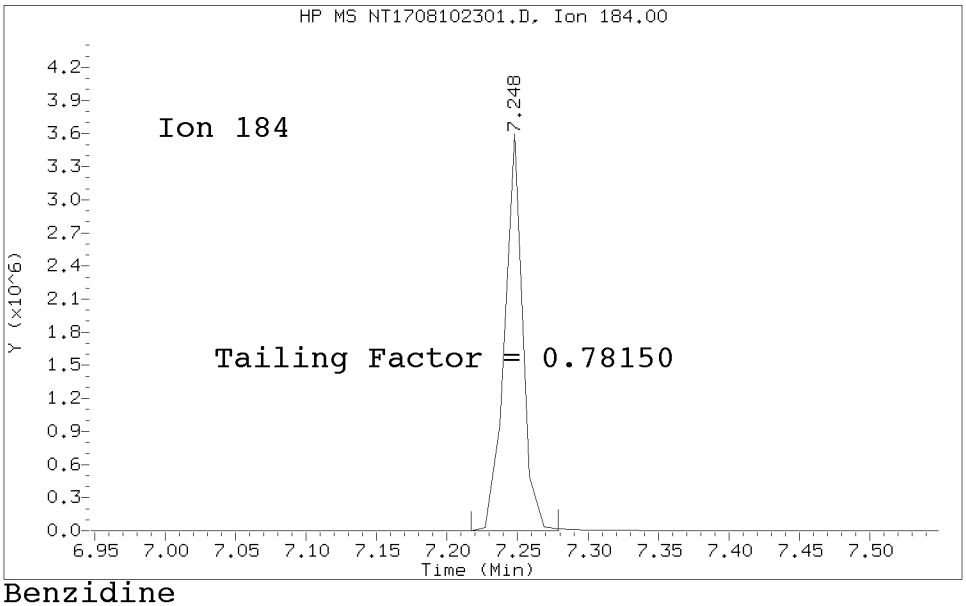


Datafile Analyzed: /20230810.b/NT1708102301.D/NT1708102301.D
Method Used: \20230810.b\DFTPP8270E.m\sw846ddt.m Inst: nt17
Injection Date: 10-AUG-2023 12:15 Operator: JGR
Sample Info: SEQ-TUN1
Report Date: 08/15/2023 16:04



Pentachlorophenol
==========
Exp. RT = 5.766
Found RT = 5.766

Tail Factor = 1.991 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 7.248
Found RT = 7.248

Tail Factor = 0.781 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.9914821	2.000	PASS
Benzidine	0.7814961	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	961501			N/A
4,4-DDE	2620	0.3	20.0	PASS
4,4-DDD	10748	1.1	20.0	PASS
4,4-DDD + DDE	13368	1.4	20.0	PASS

Tuning Sample, nt17.i/20230810.b/NT1708102301.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	1.55 (1.61)
69	Mass 69 relative abundance	96.32
70	Less than 2.00% of mass 69	0.53 (0.55)
197	Less than 2.00% of mass 198	0.03
199	5.00 - 9.00% of mass 198	6.89
365	1.00 - 100.00% of mass 198	3.24
441	Less than 150.00% of mass 443	8.81 (79.51)
442	Less than 200.00% of mass 198	56.54
443	15.00 - 24.00% of mass 442	11.09 (19.61)

Data File: NT1708102301.D
Spectrum: Avg. Scans 199-201 (6.16), Background Scan 194
Location of Maximum: 77.00
Number of points: 330

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	82	123.00	10031	208.00	4182	296.00	31208
37.00	1910	124.00	4411	209.00	1416	297.00	4357
38.00	5472	125.00	4254	210.00	1877	298.00	284
39.00	33024	127.00	315968	211.00	4645	301.00	356
40.00	1456	128.00	23968	212.00	212	302.00	489
41.00	828	129.00	125688	213.00	306	303.00	3453
43.00	225	130.00	10849	214.00	64	304.00	845
44.00	266	131.00	2106	215.00	1391	305.00	80
45.00	825	132.00	1221	216.00	2888	308.00	416
48.00	306	133.00	393	217.00	30976	309.00	238
49.00	2089	134.00	3537	218.00	4143	310.00	234
50.00	114632	135.00	10083	219.00	319	311.00	72
51.00	430400	136.00	4090	221.00	20792	312.00	94
52.00	21768	137.00	5638	222.00	1012	313.00	275
53.00	931	138.00	1085	223.00	6687	314.00	1468
55.00	1964	139.00	549	224.00	61440	315.00	3547
56.00	11861	140.00	1489	225.00	15511	316.00	1650
57.00	27016	141.00	15833	226.00	1779	317.00	288
58.00	1231	142.00	5060	227.00	27440	320.00	73
59.00	500	143.00	3436	228.00	4044	321.00	867
60.00	270	144.00	991	229.00	5455	322.00	427
61.00	4916	145.00	832	230.00	819	323.00	8246
62.00	5868	146.00	2735	231.00	2094	324.00	1560
63.00	15651	147.00	7707	232.00	420	325.00	93
64.00	2234	148.00	21392	233.00	503	326.00	116
65.00	7855	149.00	4072	234.00	1724	327.00	1758
66.00	616	150.00	1083	235.00	1953	328.00	890
67.00	491	151.00	1909	236.00	1509	329.00	134
68.00	6462	152.00	1078	237.00	2280	332.00	684
69.00	400576	153.00	4491	238.00	306	333.00	855
70.00	2216	154.00	3573	239.00	1199	334.00	5654
71.00	258	155.00	8302	240.00	898	335.00	1429
72.00	239	156.00	11994	241.00	1469	336.00	191
73.00	2966	157.00	2230	242.00	3347	339.00	98
74.00	41464	158.00	2440	243.00	3743	340.00	88
75.00	62480	159.00	1968	244.00	46392	341.00	1006
76.00	22256	160.00	4391	245.00	6279	342.00	233
77.00	435584	161.00	6342	246.00	9831	346.00	2307
78.00	30656	162.00	1772	247.00	1984	347.00	382
79.00	27096	163.00	444	248.00	411	351.00	128
80.00	20592	164.00	630	249.00	1471	352.00	2604
81.00	28880	165.00	5174	250.00	204	353.00	1818
82.00	6977	166.00	4167	251.00	407	354.00	2520
83.00	6489	167.00	33312	252.00	518	355.00	479
84.00	881	168.00	17592	253.00	1117	359.00	123
85.00	5001	169.00	2608	255.00	218816	365.00	13470
86.00	8342	170.00	903	256.00	32696	366.00	1907
87.00	3823	171.00	1114	257.00	2612	367.00	97
88.00	1541	172.00	2416	258.00	14911	370.00	240

89.00	713	173.00	3104	259.00	2405	371.00	614
90.00	154	174.00	5553	260.00	433	372.00	4211
91.00	5981	175.00	10445	261.00	271	373.00	1060
92.00	6902	176.00	2798	263.00	96	374.00	78
93.00	46200	177.00	4567	264.00	525	377.00	82
94.00	3007	178.00	1668	265.00	6028	383.00	1033
95.00	602	179.00	19360	266.00	865	384.00	319
96.00	1926	180.00	12919	267.00	122	385.00	88
97.00	885	181.00	6089	268.00	89	390.00	546
98.00	35376	182.00	1015	269.00	54	391.00	367
99.00	26632	183.00	508	270.00	228	392.00	222
100.00	2398	184.00	1477	271.00	468	401.00	273
101.00	14173	185.00	8995	272.00	704	402.00	1572
102.00	801	186.00	67632	273.00	6801	403.00	2301
103.00	4294	187.00	18856	274.00	17880	404.00	868
104.00	8572	188.00	2127	275.00	91240	405.00	72
105.00	8245	189.00	4571	276.00	12167	421.00	1903
106.00	2776	190.00	771	277.00	9353	422.00	1931
107.00	106104	191.00	2140	278.00	1458	423.00	13311
108.00	16216	192.00	6264	279.00	213	424.00	3128
109.00	3037	193.00	6714	281.00	219	425.00	312
110.00	177216	194.00	1329	282.00	208	435.00	63
111.00	27536	195.00	795	283.00	1045	436.00	106
112.00	3673	196.00	13226	284.00	690	437.00	159
113.00	1087	197.00	139	285.00	1558	438.00	375
114.00	234	198.00	415872	286.00	179	439.00	186
115.00	406	199.00	28640	288.00	77	440.00	291
116.00	5388	200.00	2360	289.00	283	441.00	36656
117.00	102712	201.00	1949	290.00	234	442.00	235136
118.00	7087	203.00	3486	291.00	146	443.00	46104
119.00	875	204.00	17104	292.00	339	444.00	4203
120.00	1315	205.00	28768	293.00	1908	445.00	226
121.00	569	206.00	110592	294.00	532		
122.00	6879	207.00	14413	295.00	170		

Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023025.D

Date : 10-AUG-2023 12:32

Client ID:

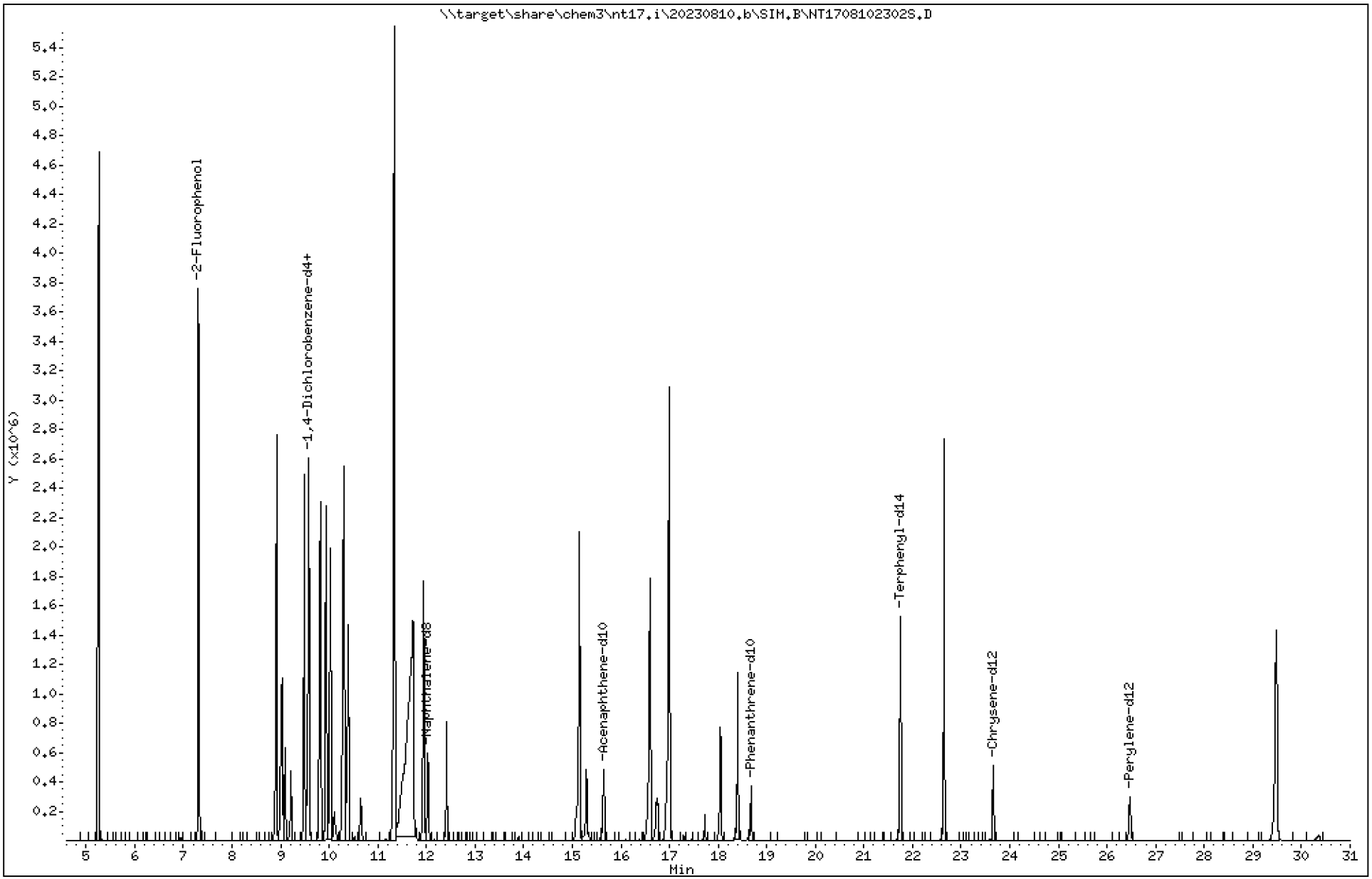
Sample Info: SEQ-CAL7

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

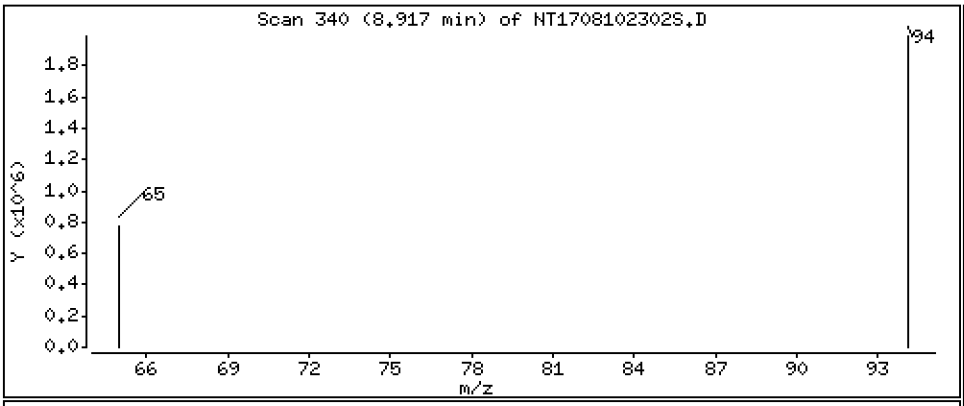
Operator: JGR

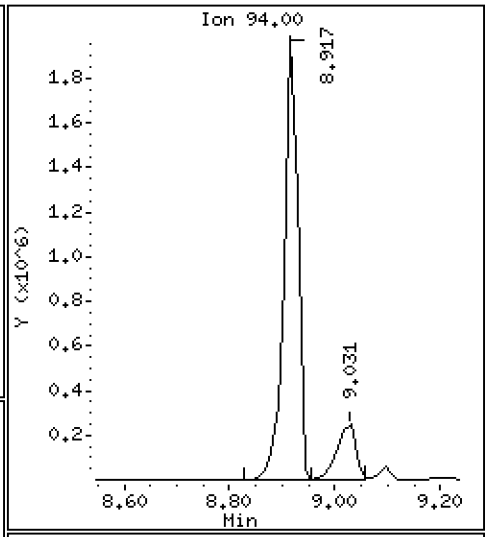
Column phase: ZB-5msi

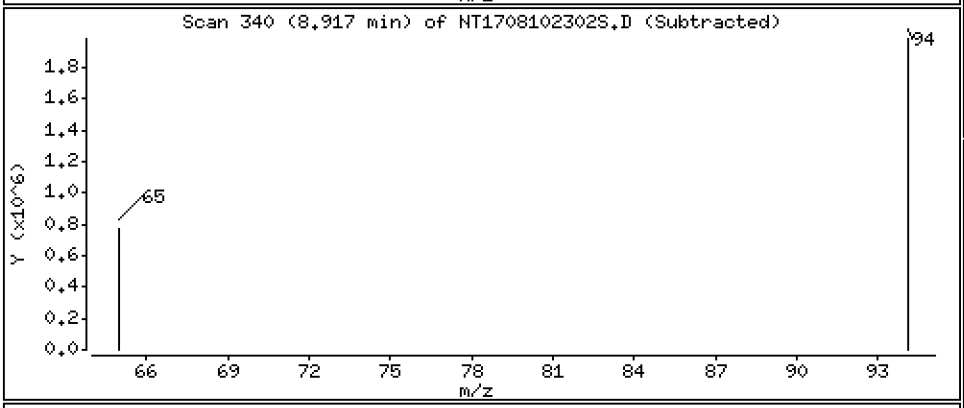
Column diameter: 0.25

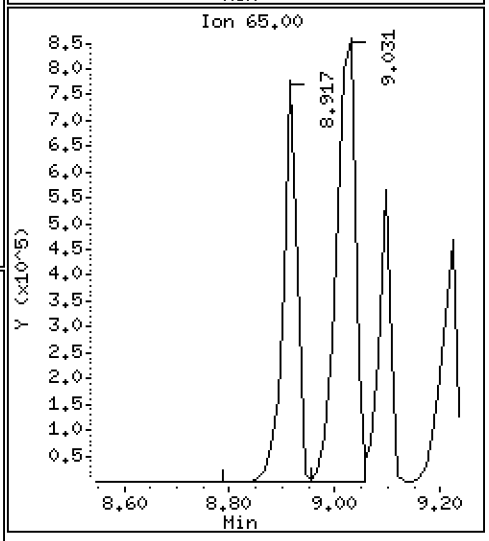
3 Phenol

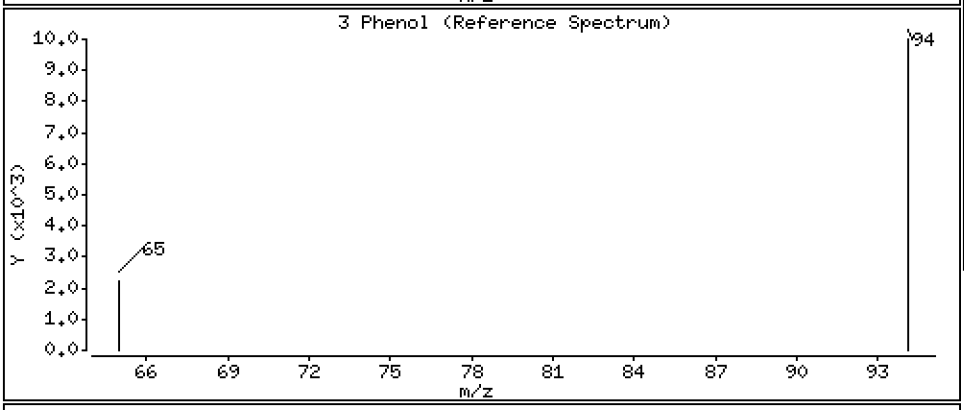
Concentration: 20.44 ug/mL

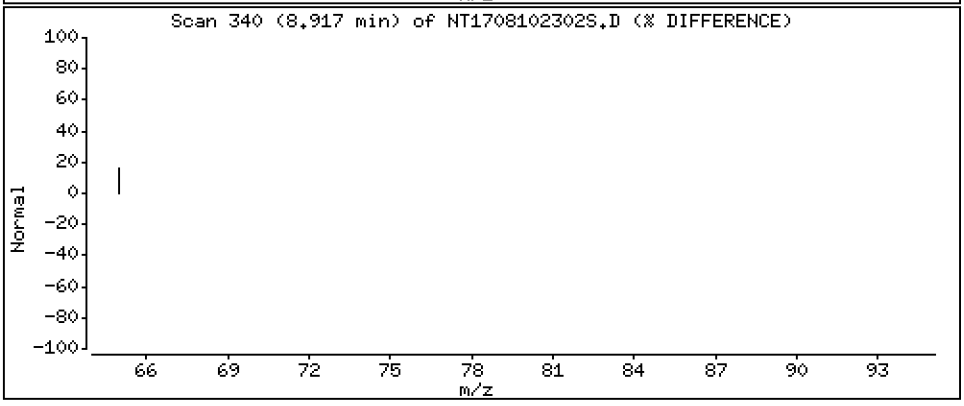












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

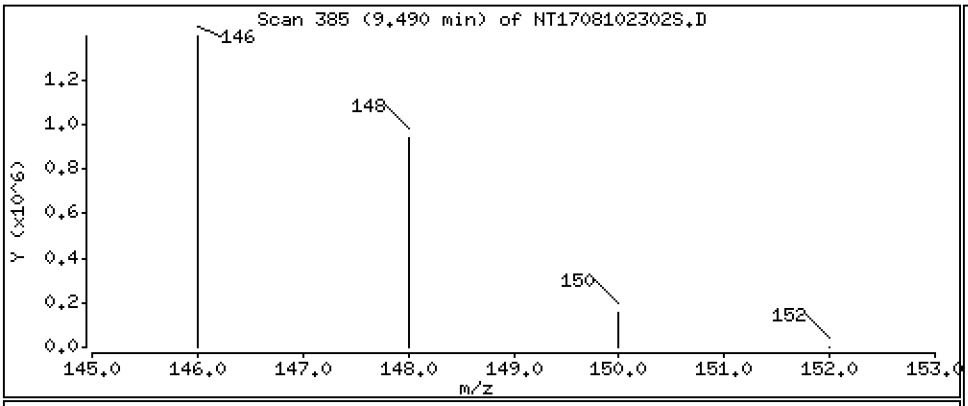
Operator: JGR

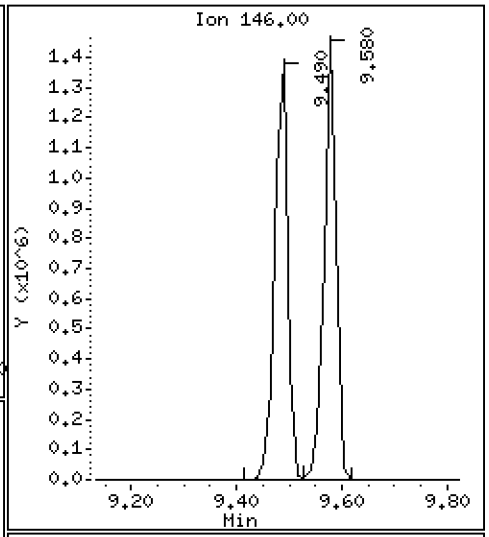
Column phase: ZB-5msi

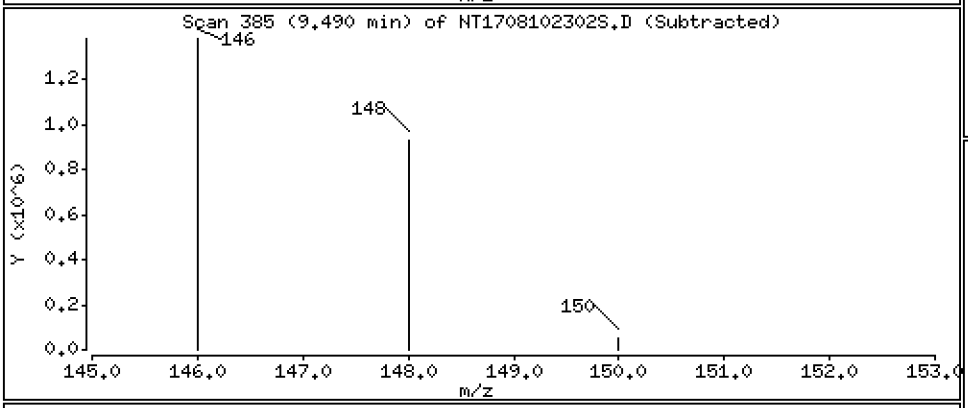
Column diameter: 0.25

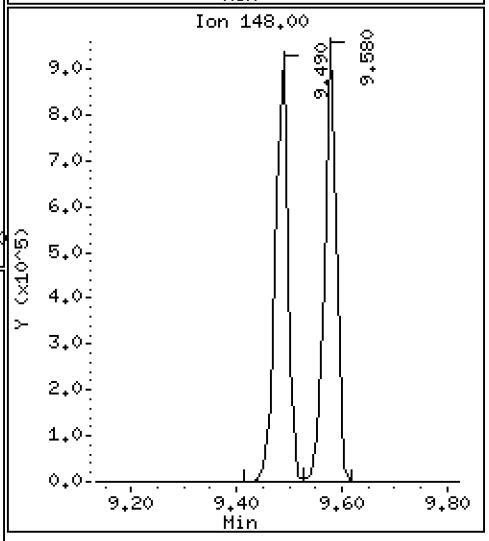
7 1,3-Dichlorobenzene

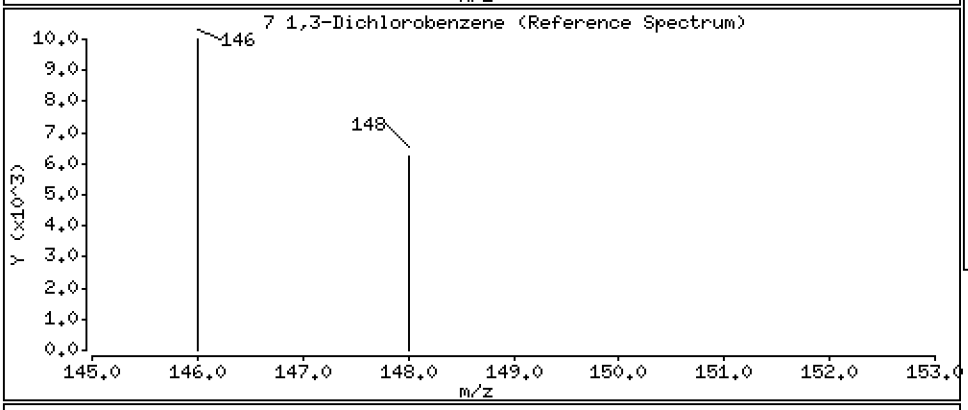
Concentration: 20.16 ug/mL

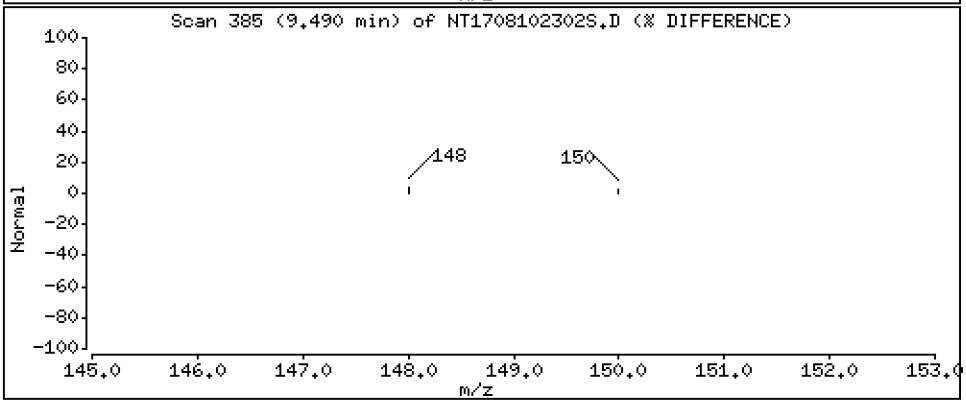












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

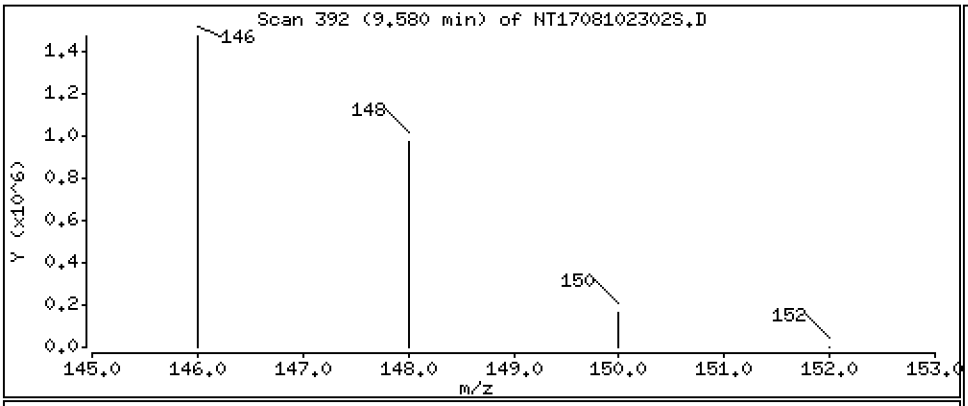
Operator: JGR

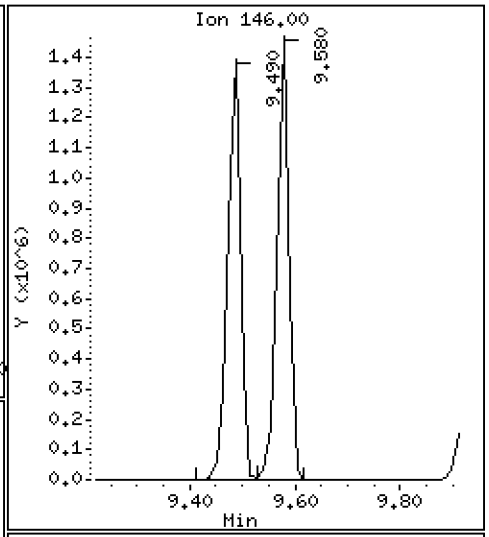
Column phase: ZB-5msi

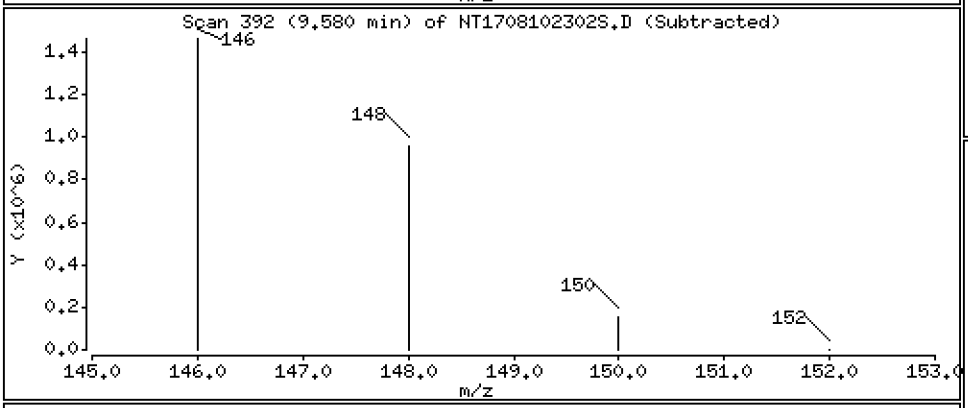
Column diameter: 0.25

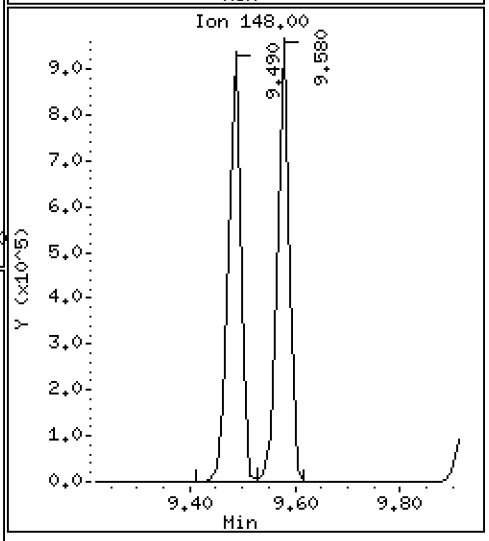
9 1,4-Dichlorobenzene

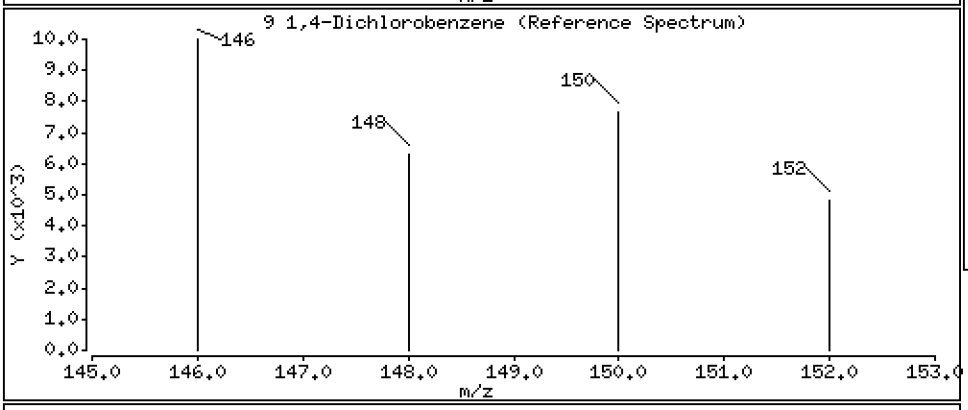
Concentration: 20.08 ug/mL

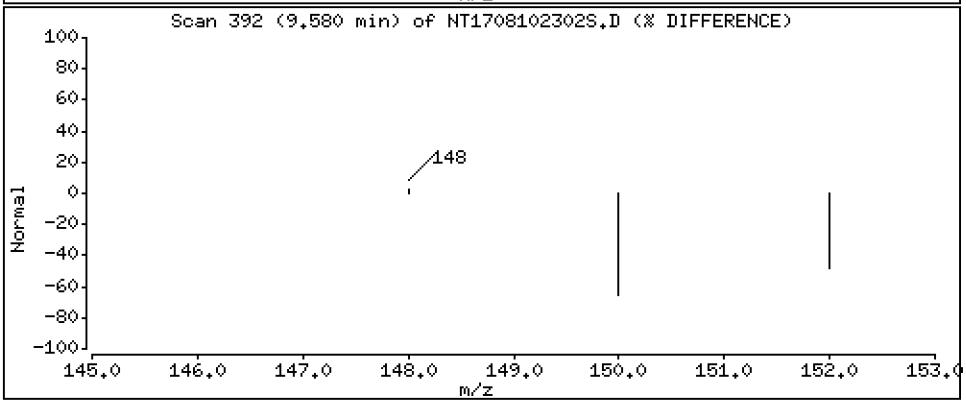












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

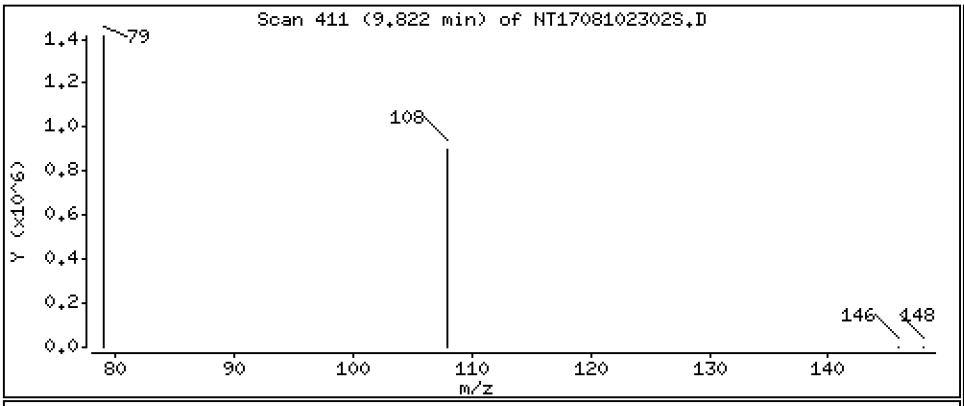
Operator: JGR

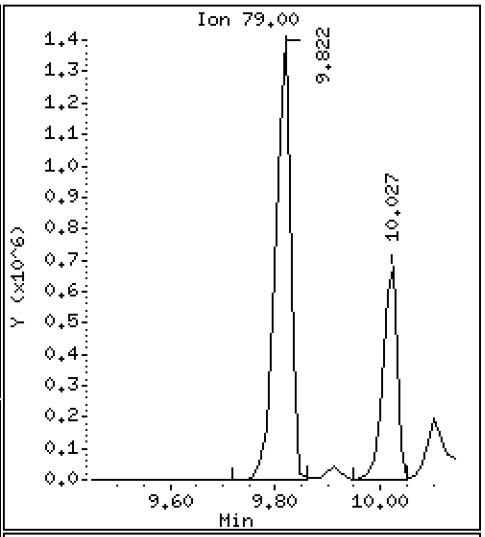
Column phase: ZB-5msi

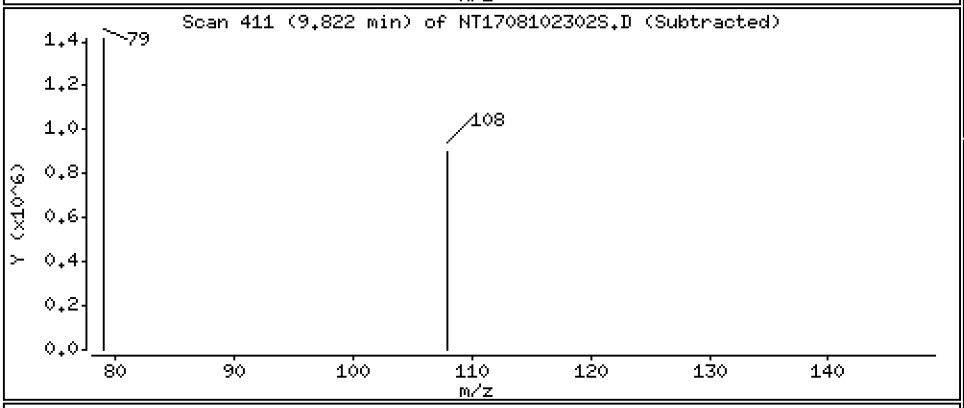
Column diameter: 0.25

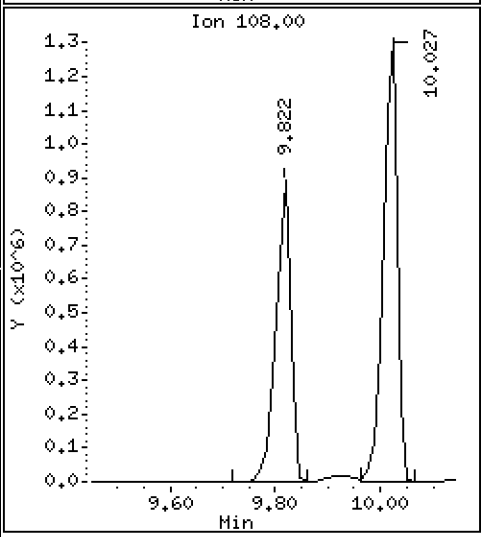
11 Benzyl alcohol

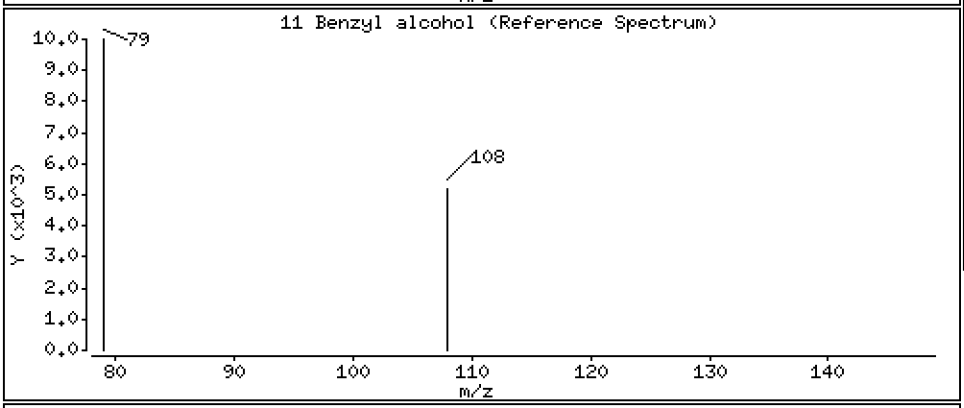
Concentration: 23.23 ug/mL

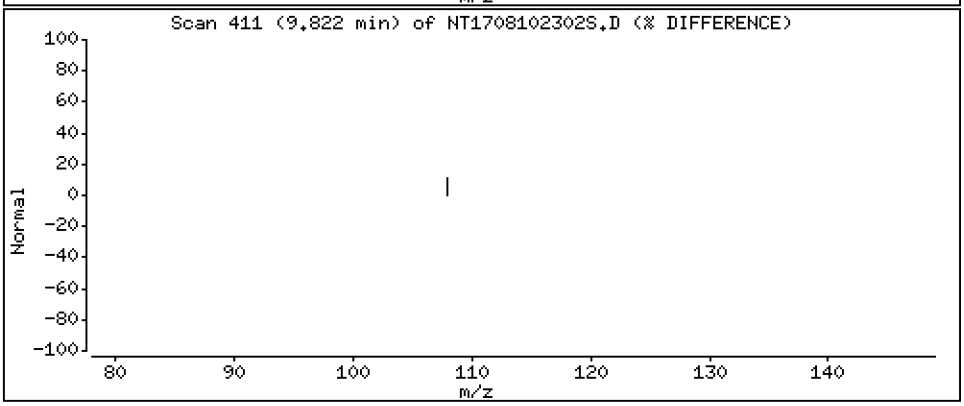












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

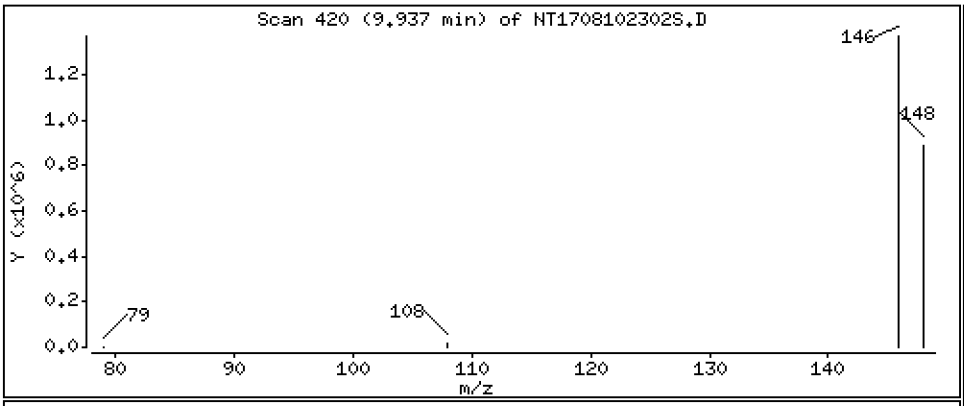
Operator: JGR

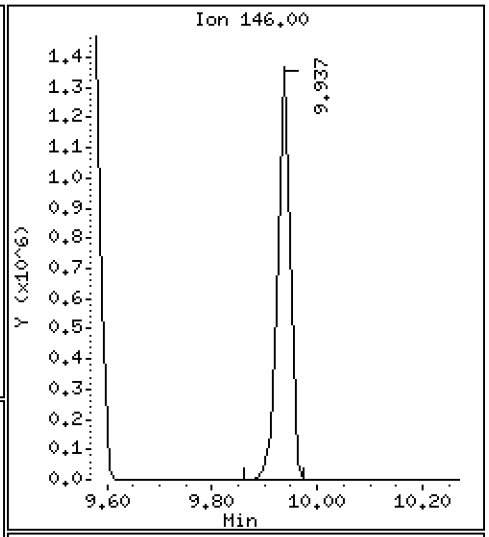
Column phase: ZB-5msi

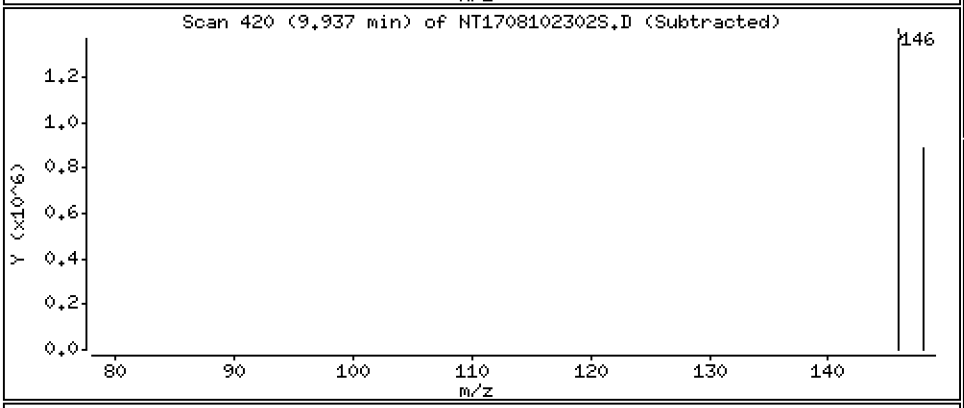
Column diameter: 0.25

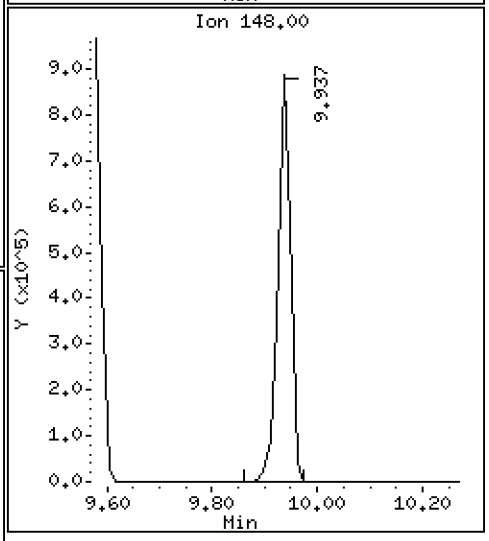
12 1,2-Dichlorobenzene

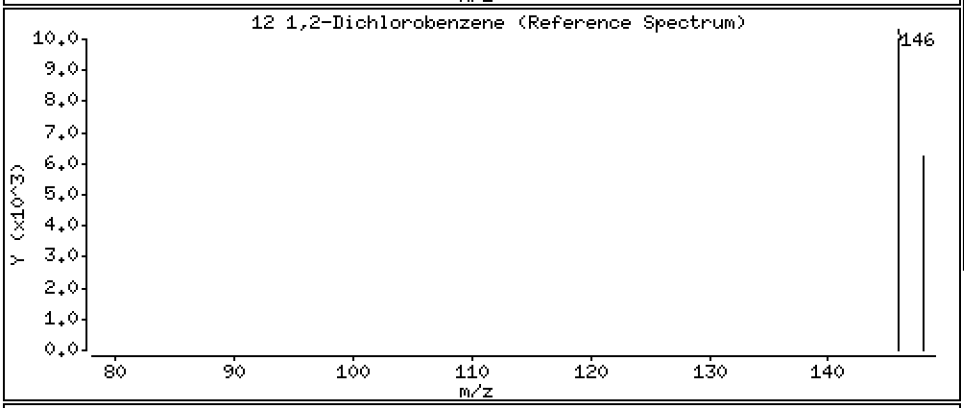
Concentration: 20.47 ug/mL

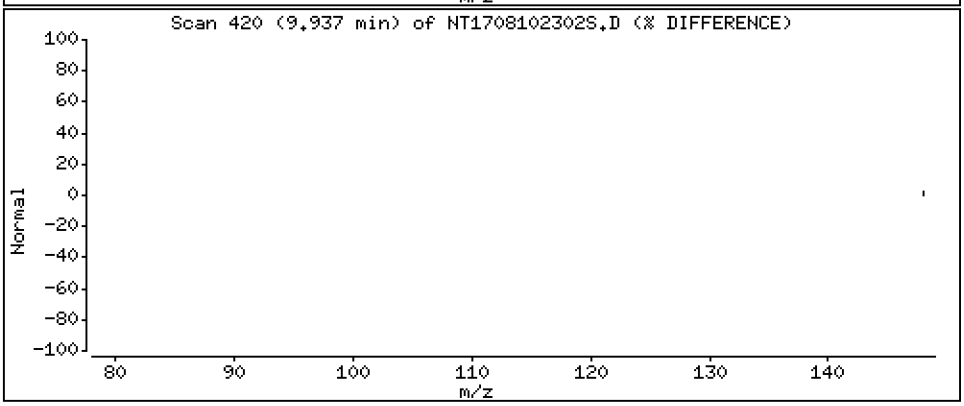












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

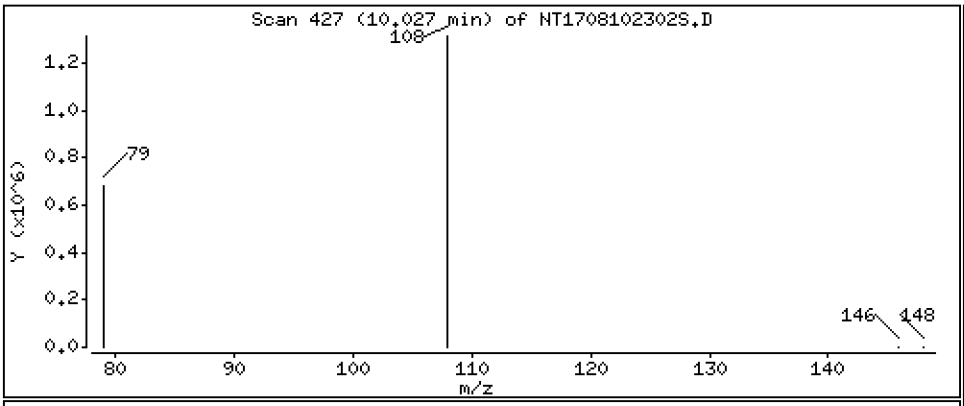
Operator: JGR

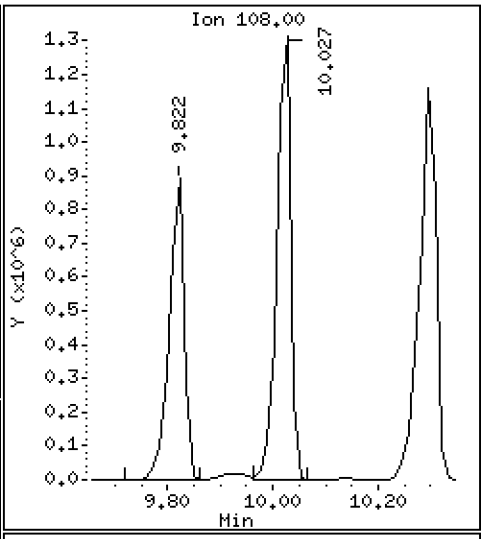
Column phase: ZB-5msi

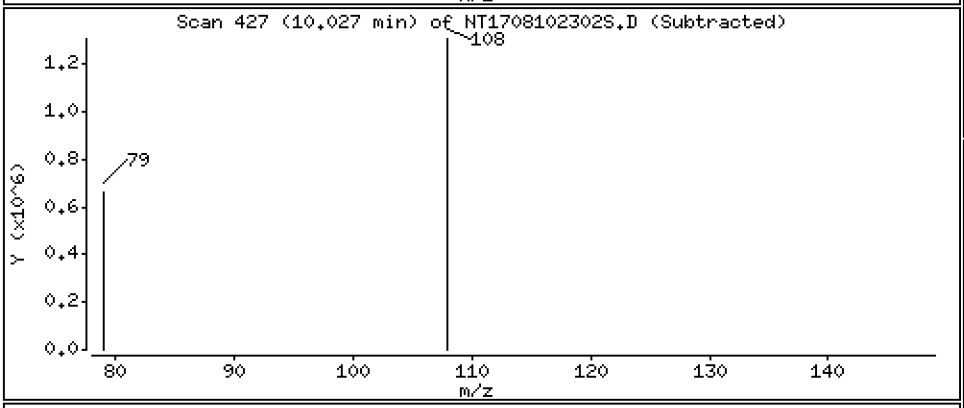
Column diameter: 0.25

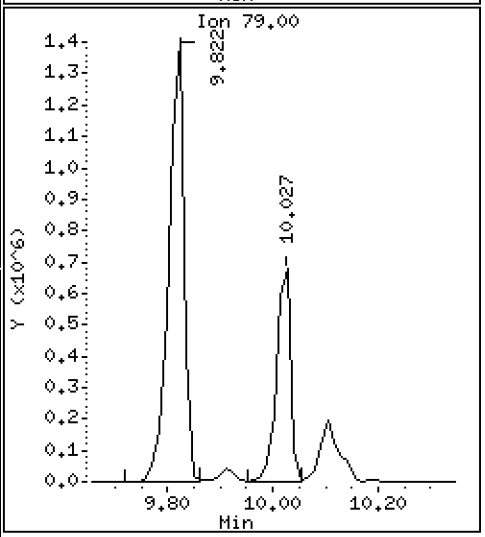
13 2-Methylphenol

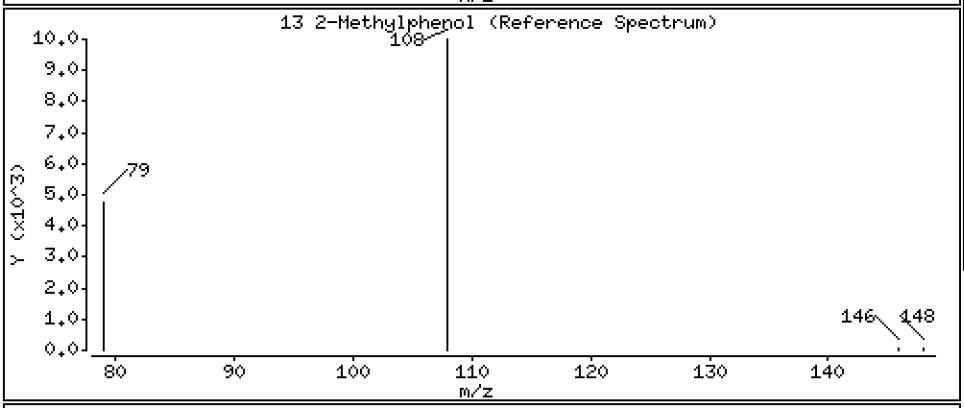
Concentration: 22.73 ug/mL

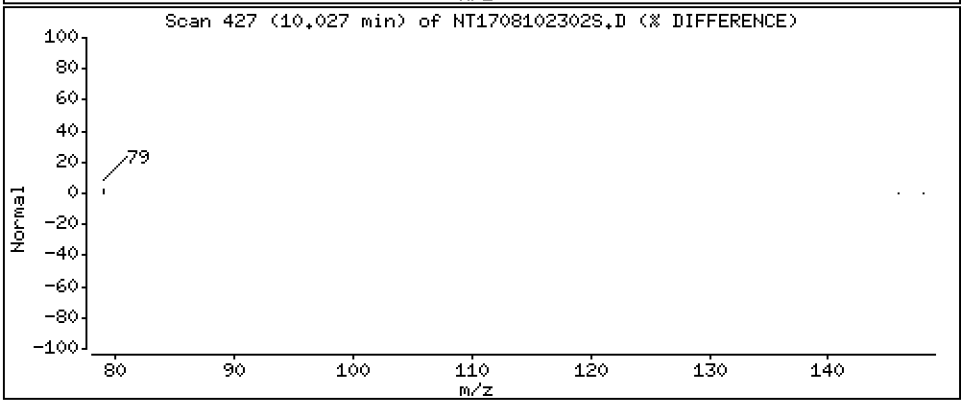












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

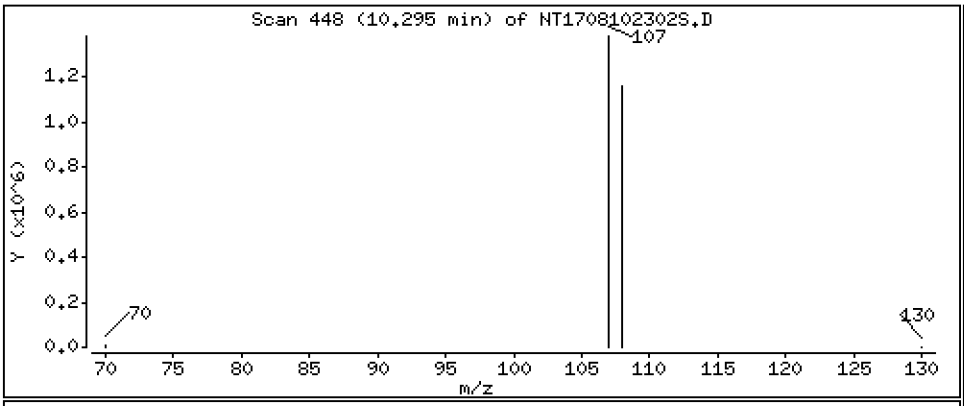
Operator: JGR

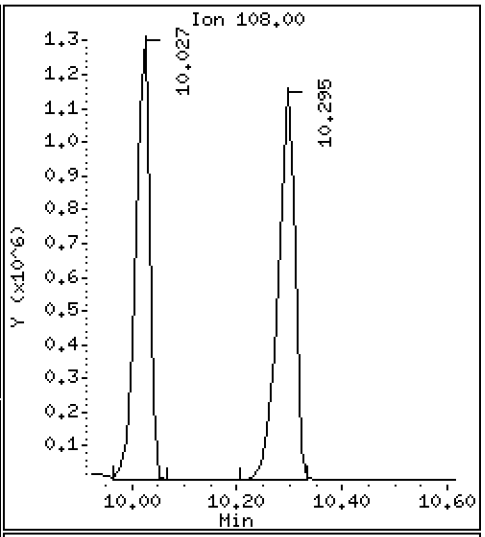
Column phase: ZB-5msi

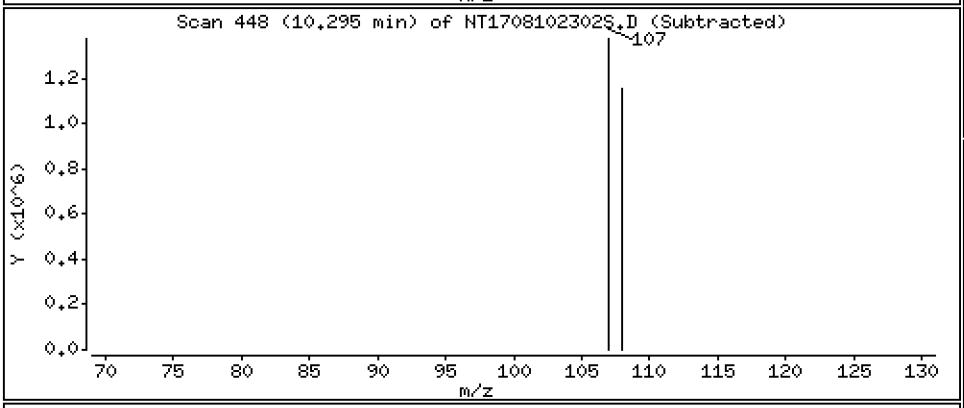
Column diameter: 0.25

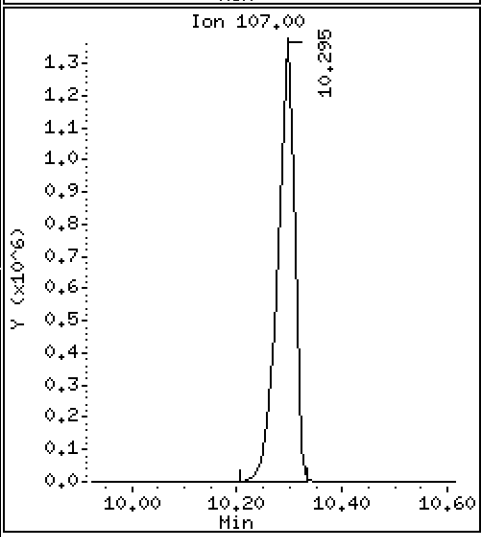
15 4-Methylphenol

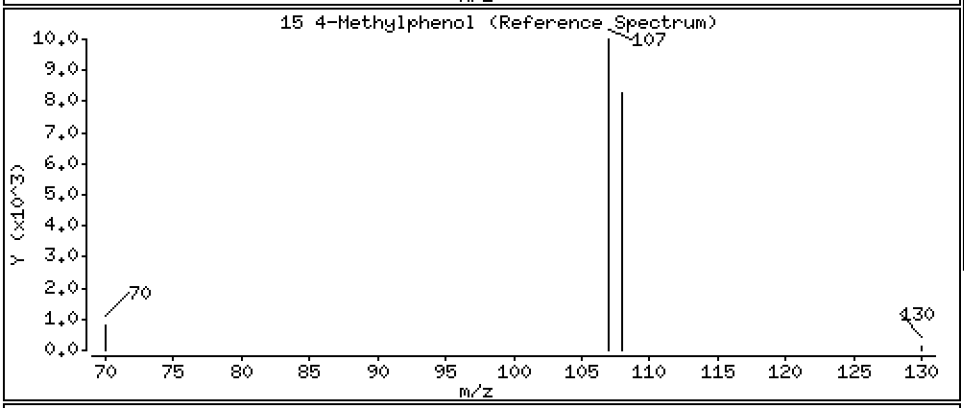
Concentration: 23.16 ug/mL

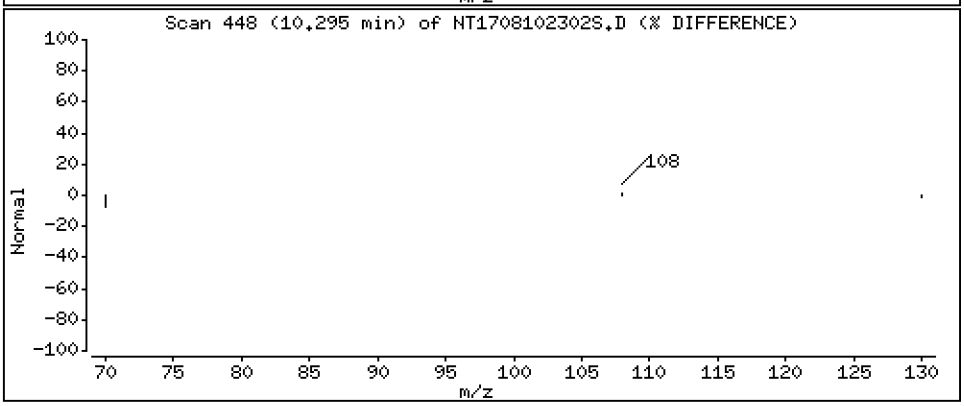












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

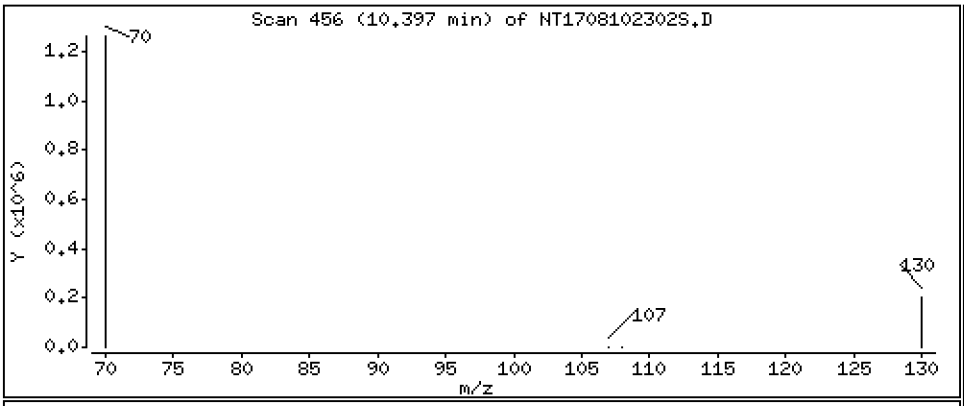
Operator: JGR

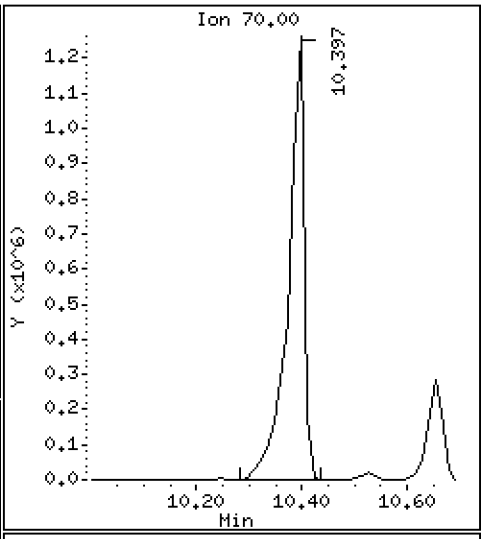
Column phase: ZB-5msi

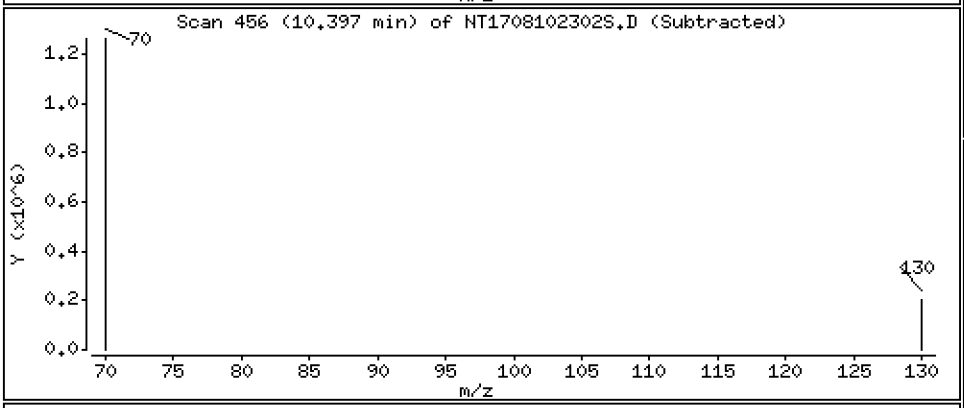
Column diameter: 0.25

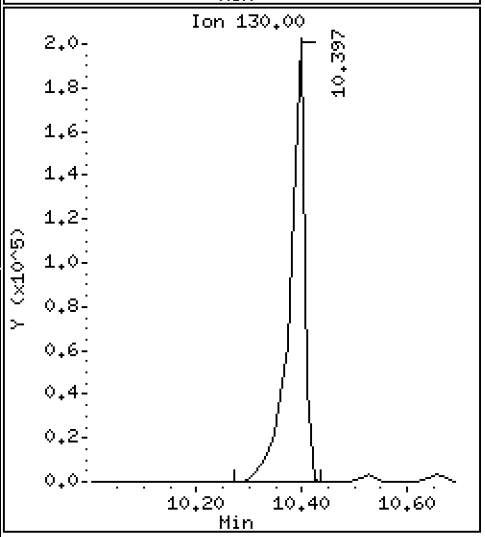
16 N-Nitroso-di-n-propylamine

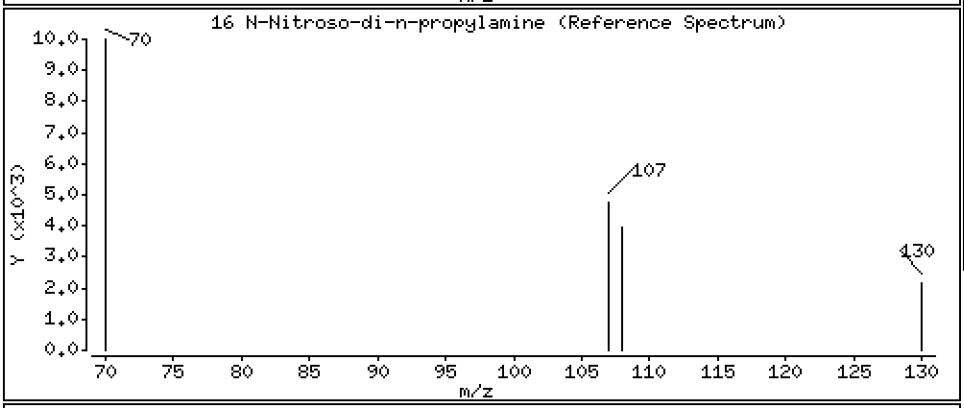
Concentration: 22.99 ug/mL

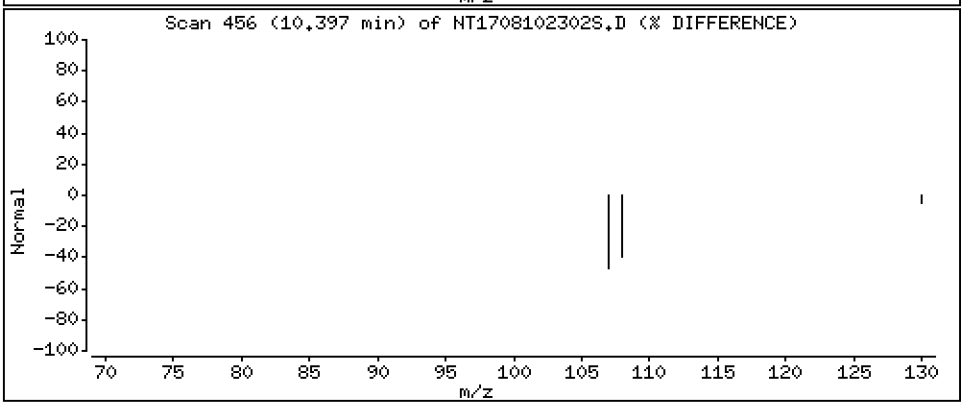












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

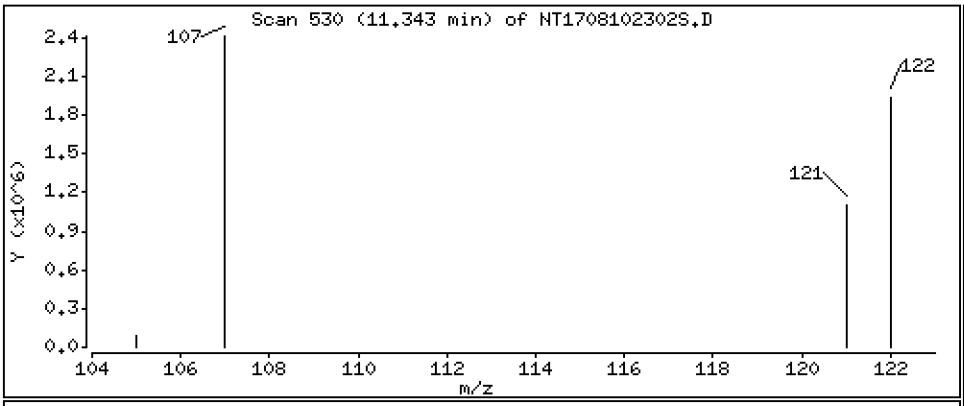
Operator: JGR

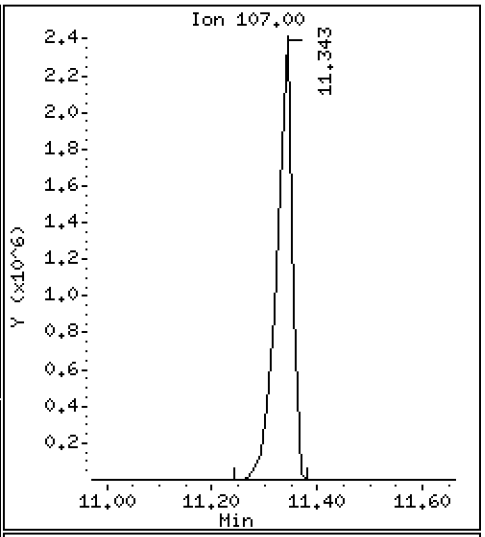
Column phase: ZB-5msi

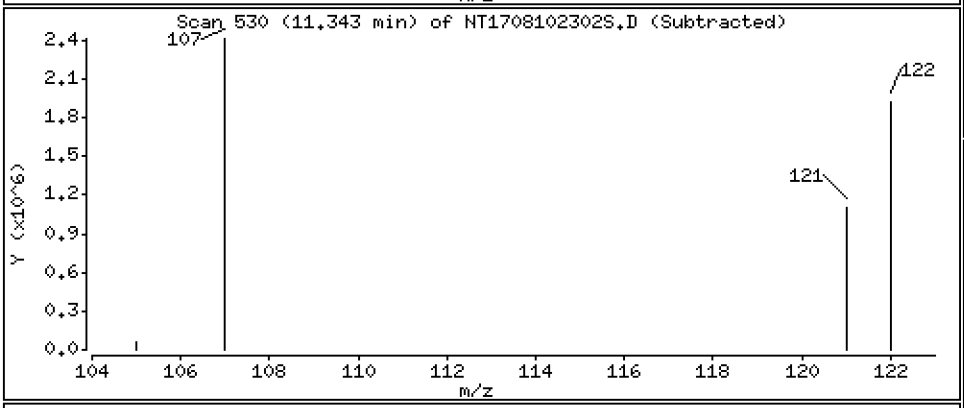
Column diameter: 0.25

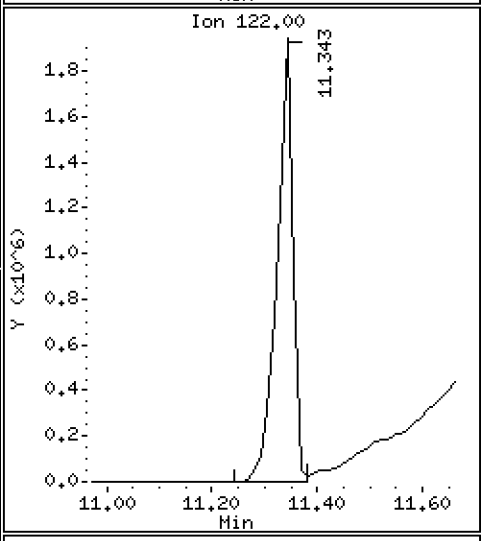
22 2,4-Dimethylphenol

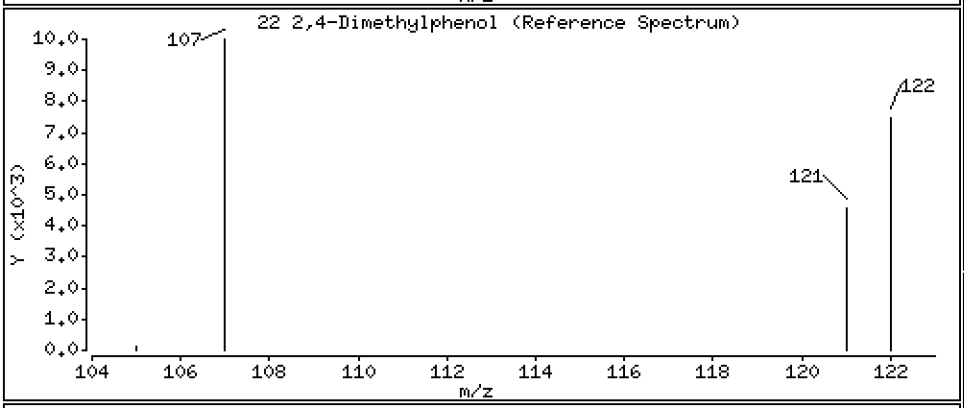
Concentration: 43.28 ug/mL

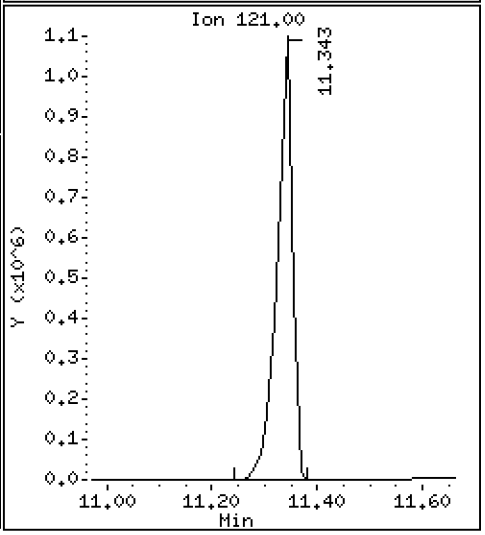


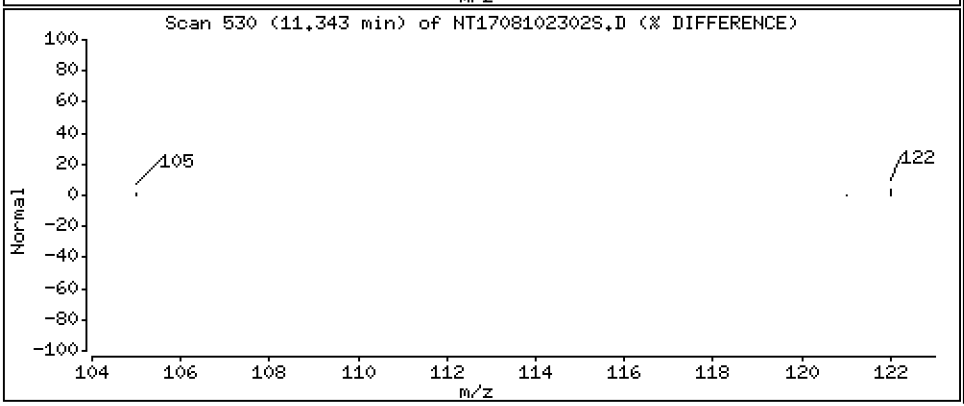












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

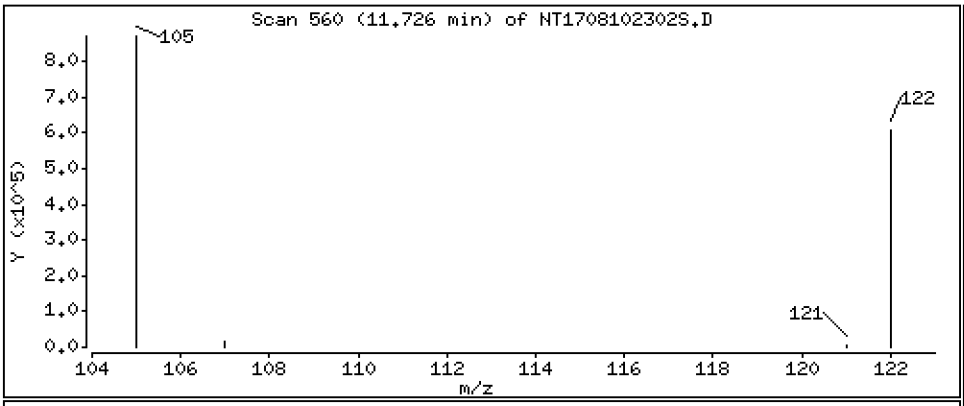
Operator: JGR

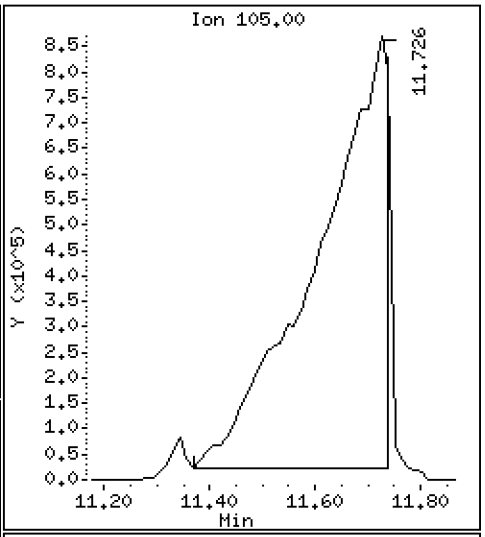
Column phase: ZB-5msi

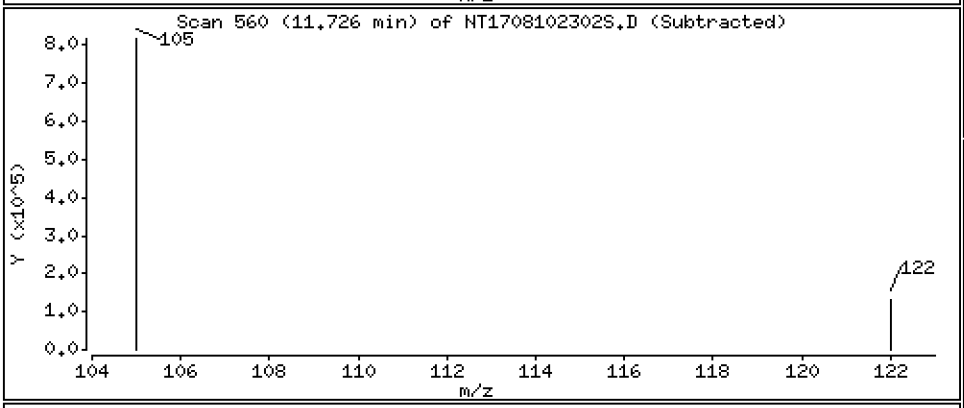
Column diameter: 0.25

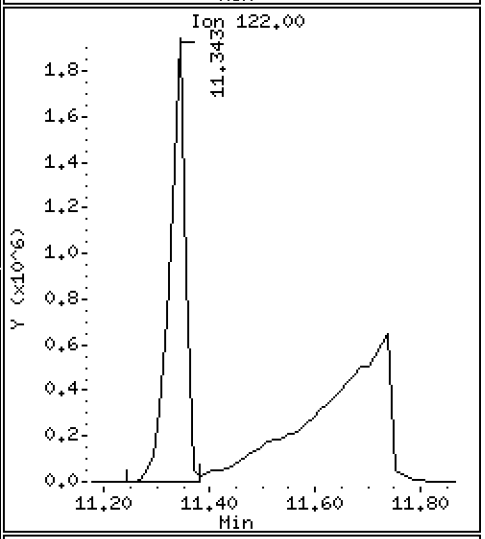
24 Benzoic acid

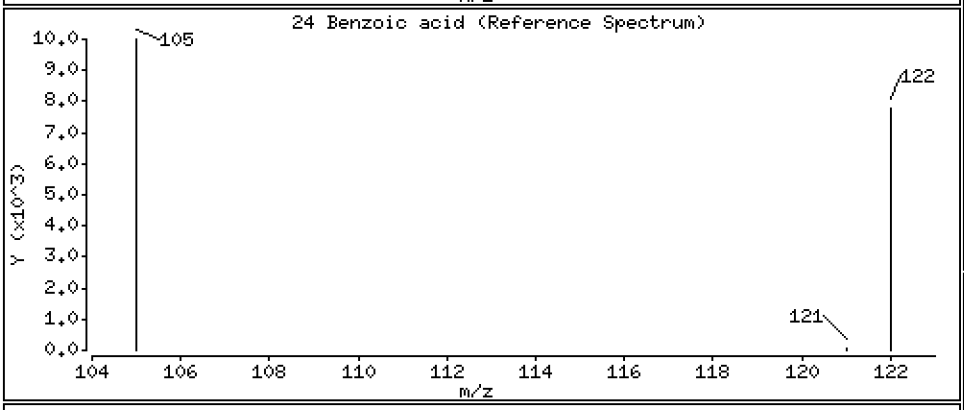
Concentration: 57.01 ug/mL

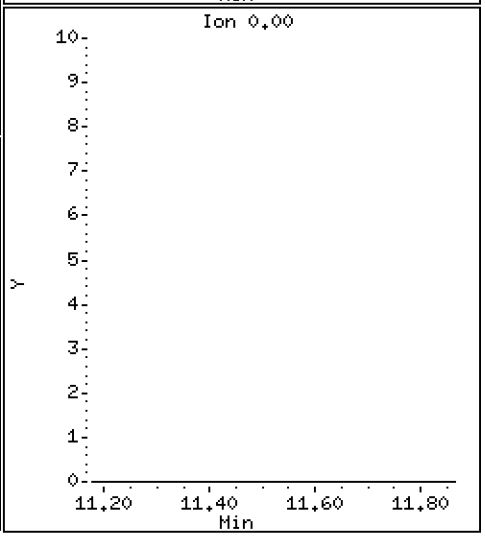


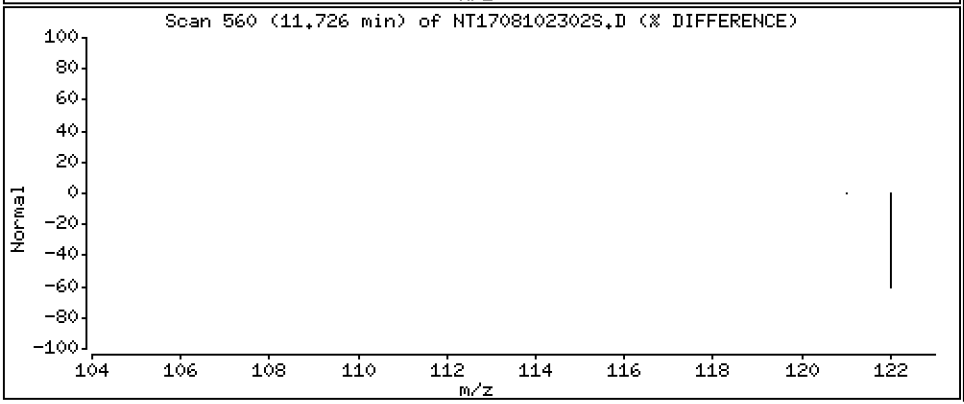












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

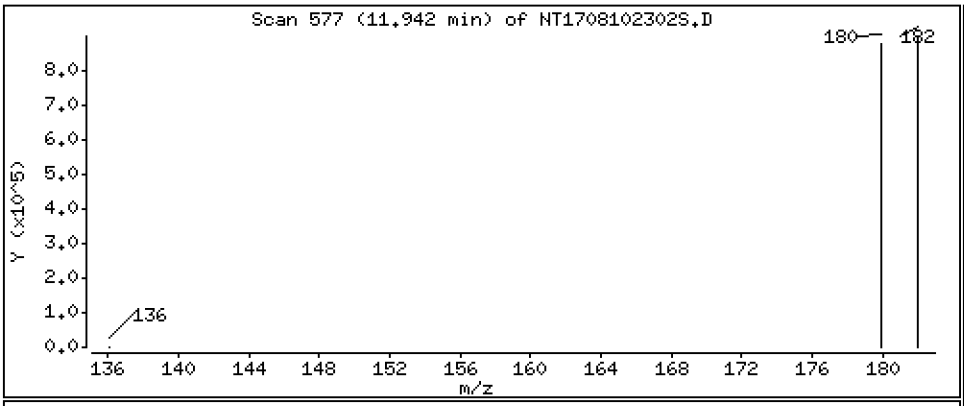
Operator: JGR

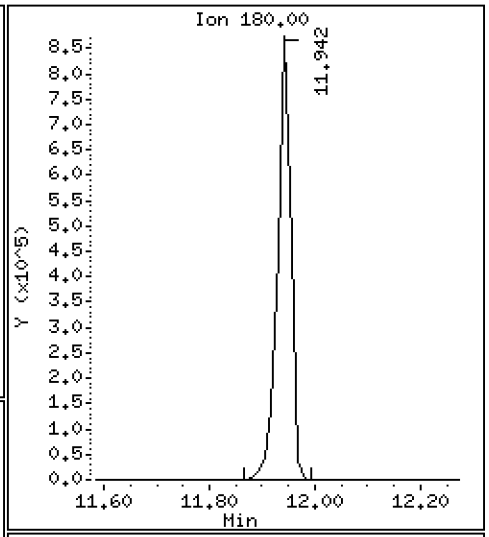
Column phase: ZB-5msi

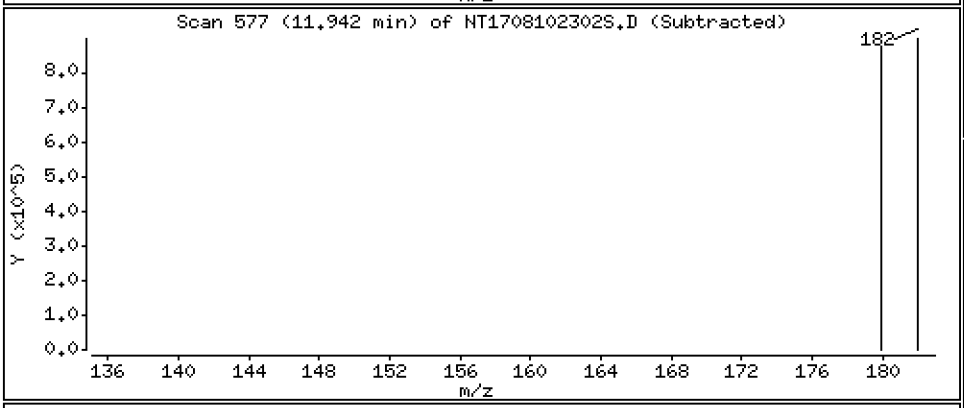
Column diameter: 0.25

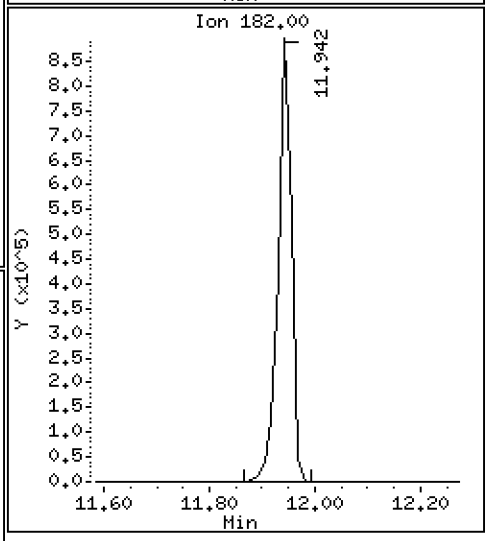
26 1,2,4-Trichlorobenzene

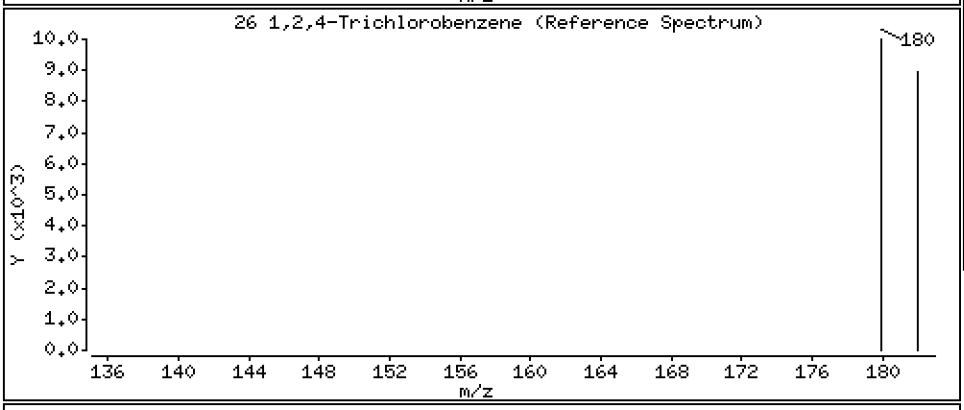
Concentration: 19.65 ug/mL

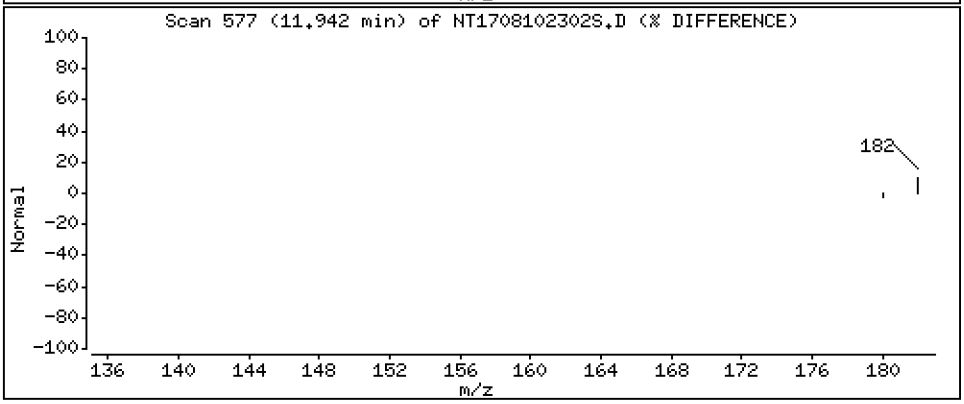












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

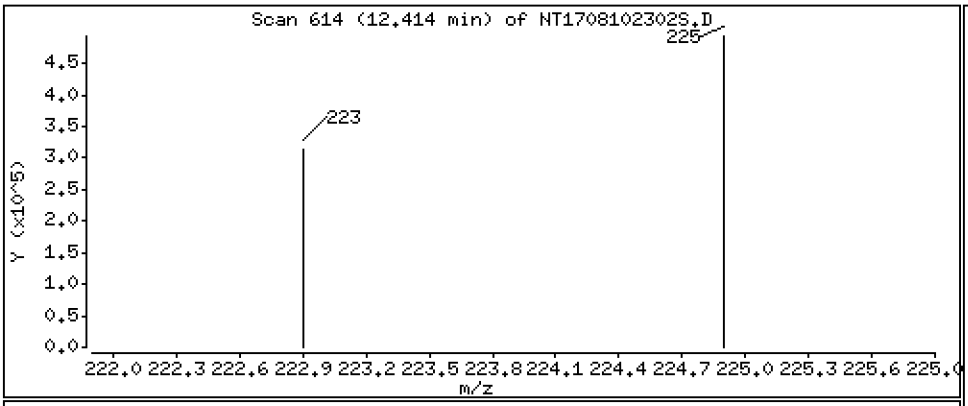
Operator: JGR

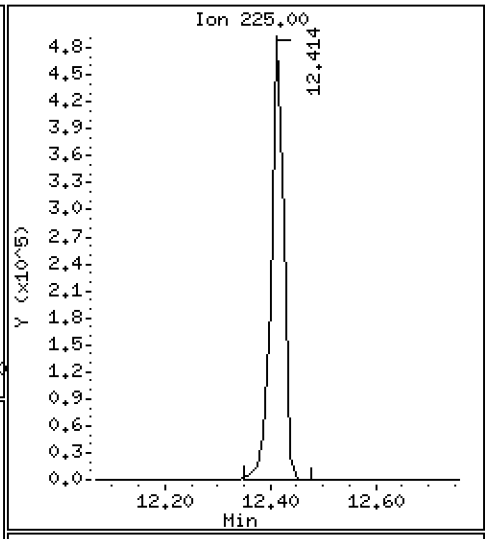
Column phase: ZB-5msi

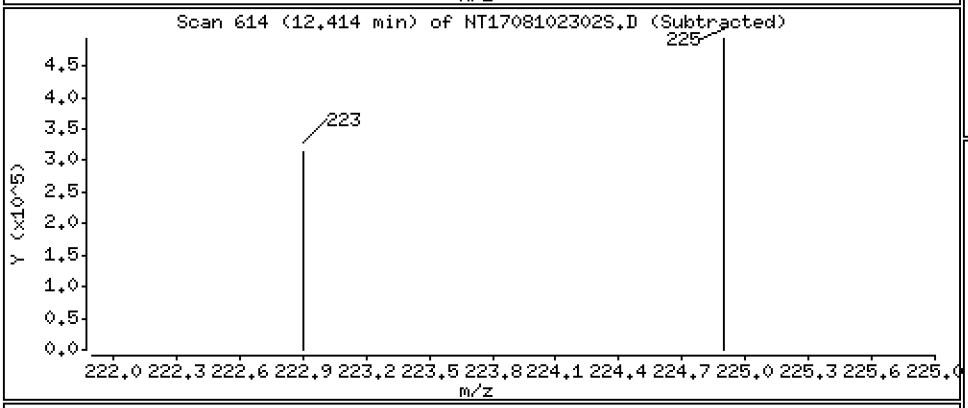
Column diameter: 0.25

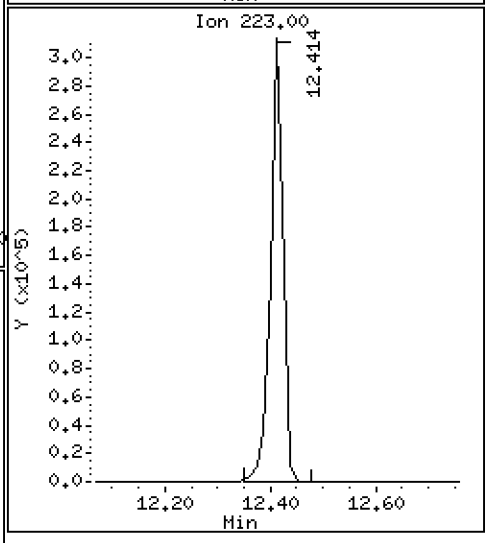
30 Hexachlorobutadiene

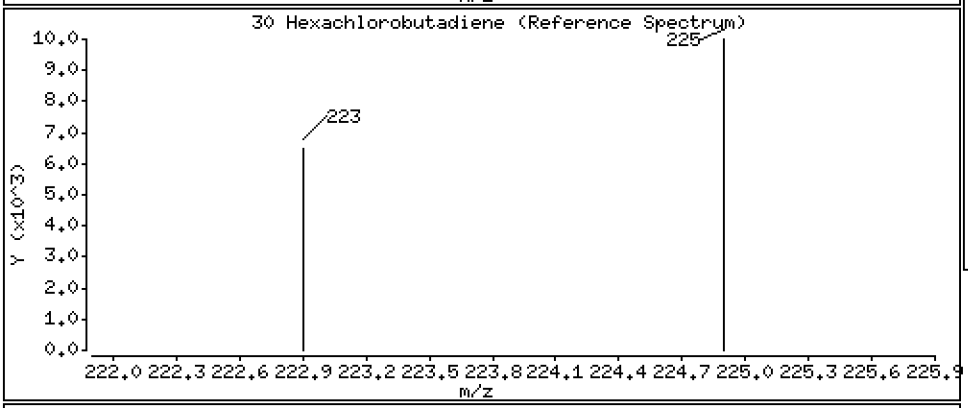
Concentration: 22.28 ug/mL

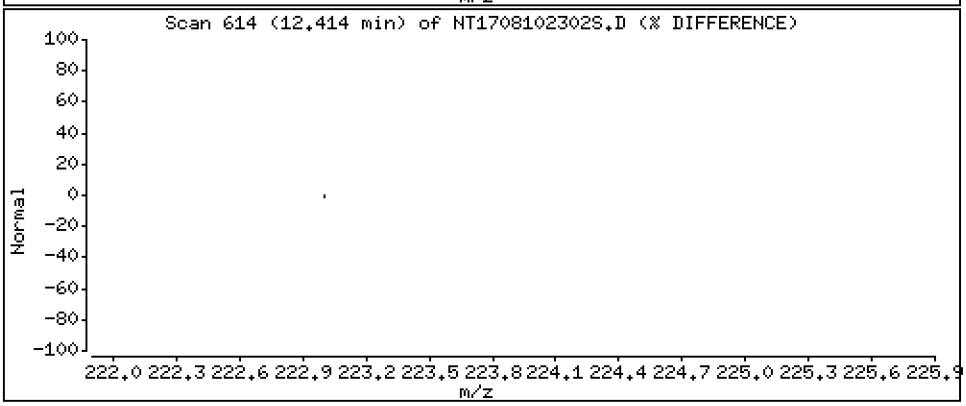












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

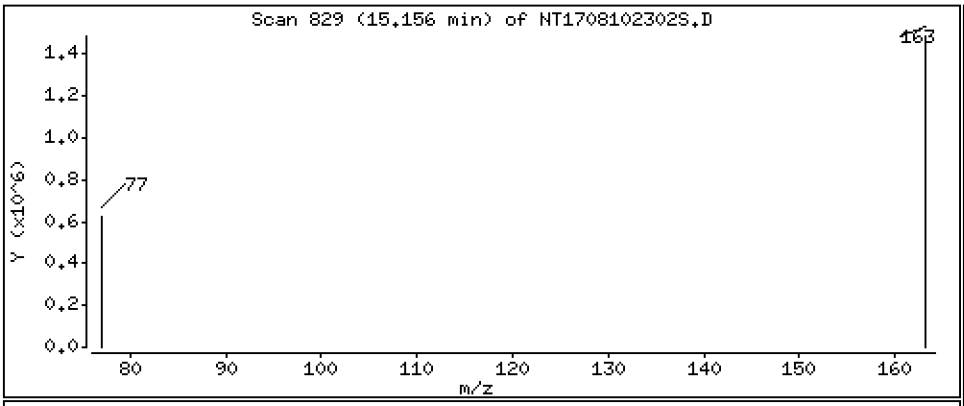
Operator: JGR

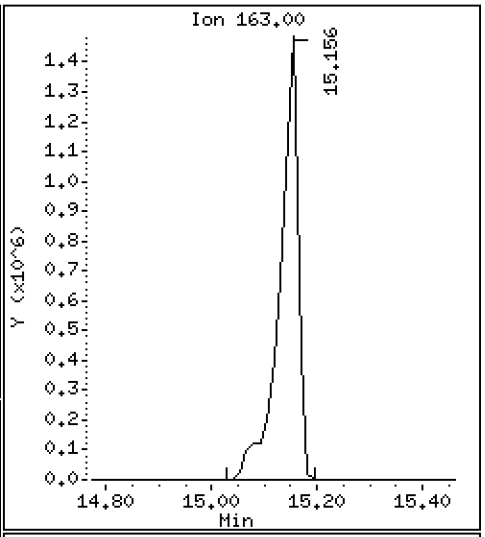
Column phase: ZB-5msi

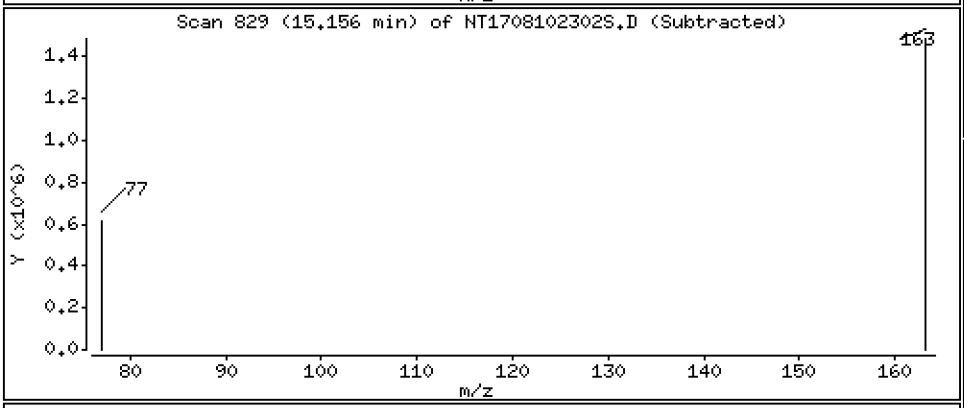
Column diameter: 0.25

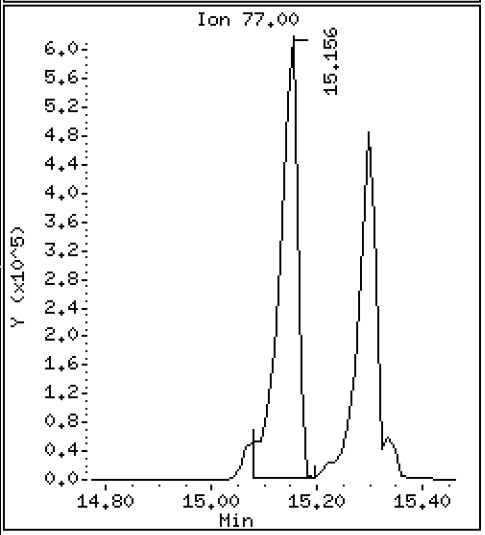
39 Dimethylphthalate

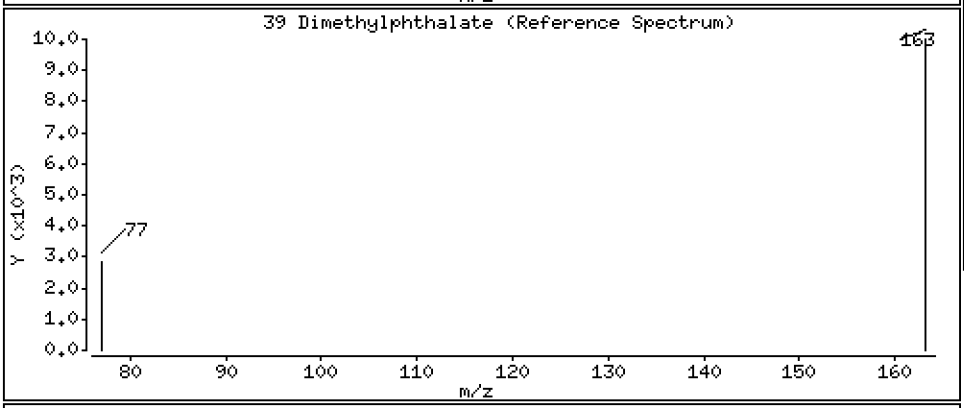
Concentration: 21.19 ug/mL

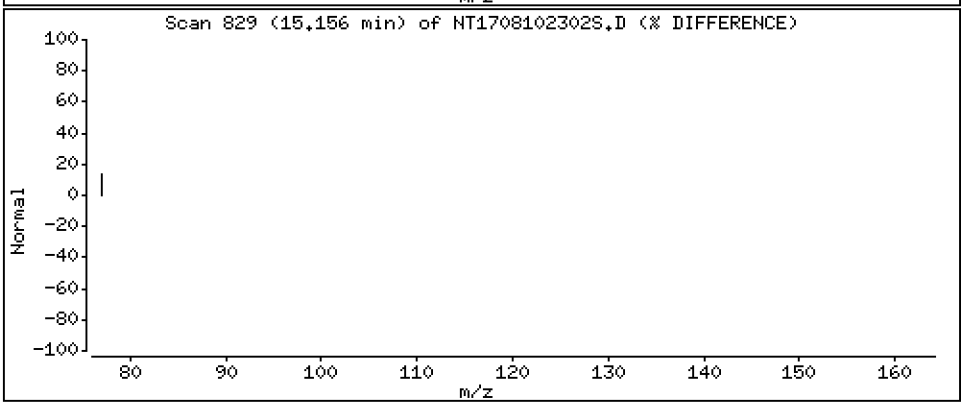












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

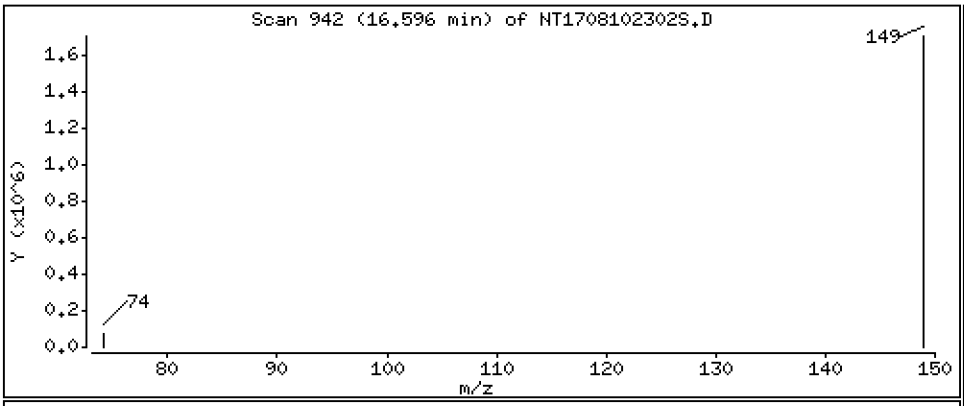
Operator: JGR

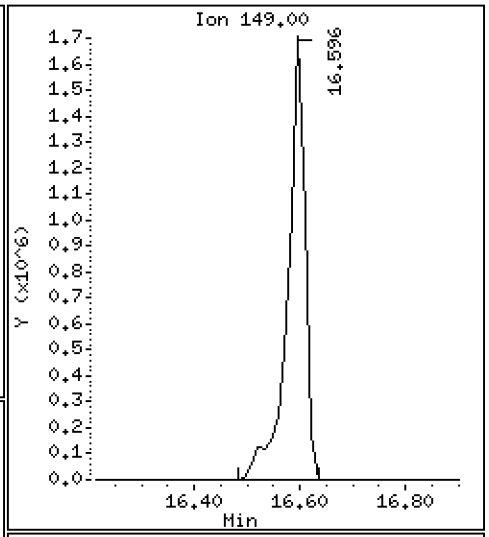
Column phase: ZB-5msi

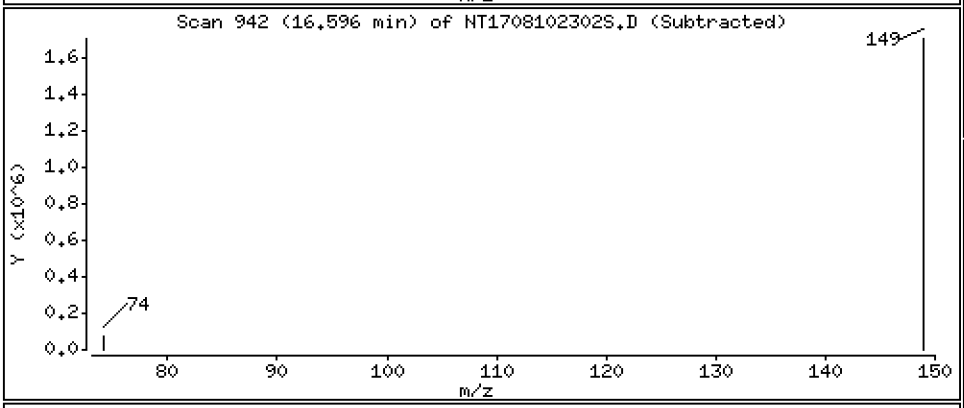
Column diameter: 0.25

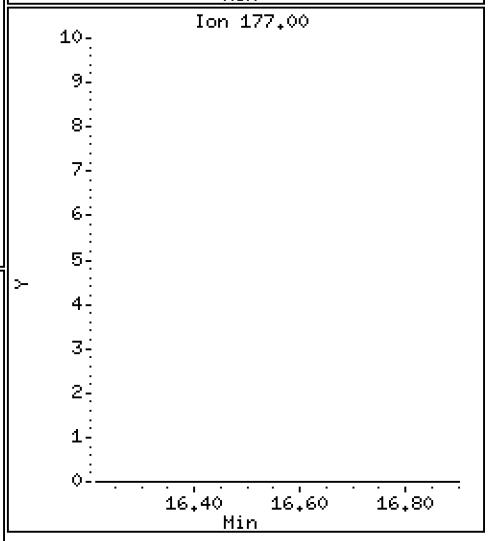
50 Diethylphthalate

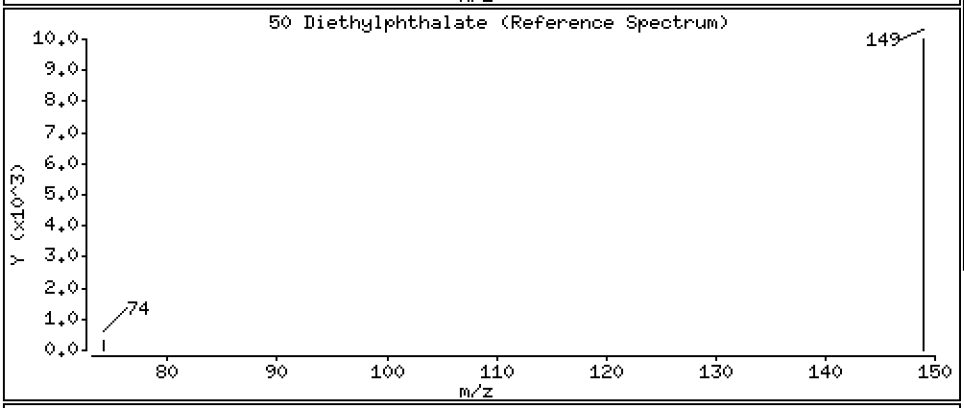
Concentration: 22.25 ug/mL

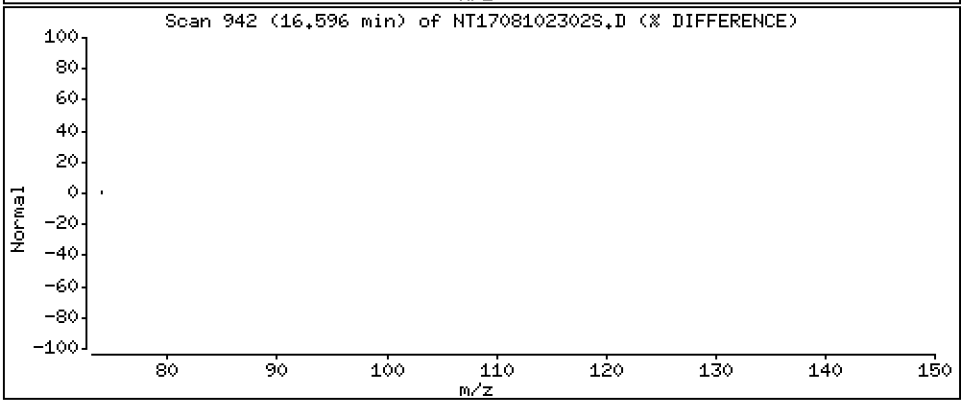












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

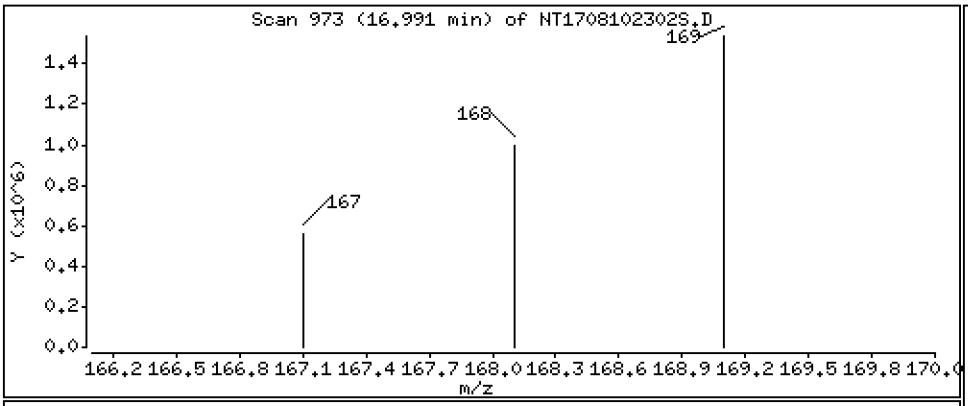
Operator: JGR

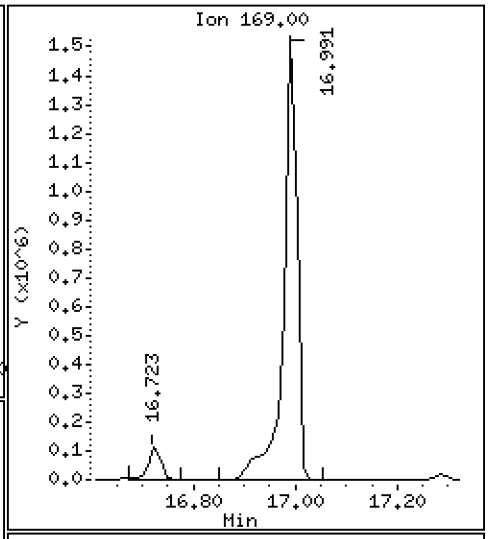
Column phase: ZB-5msi

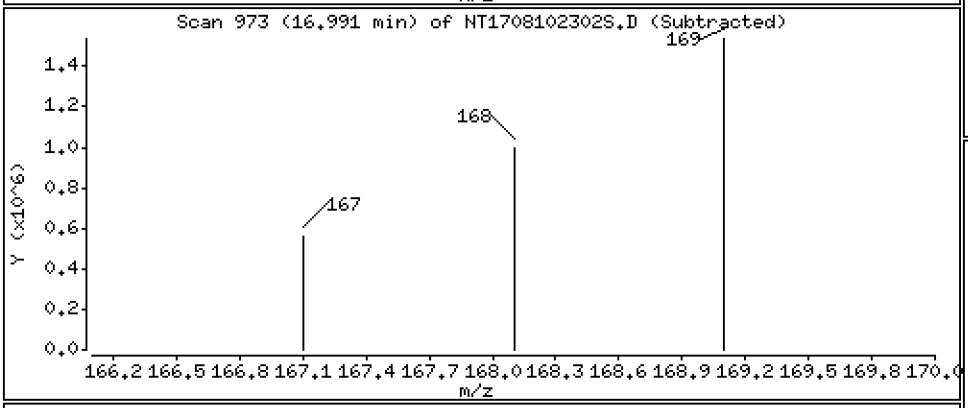
Column diameter: 0.25

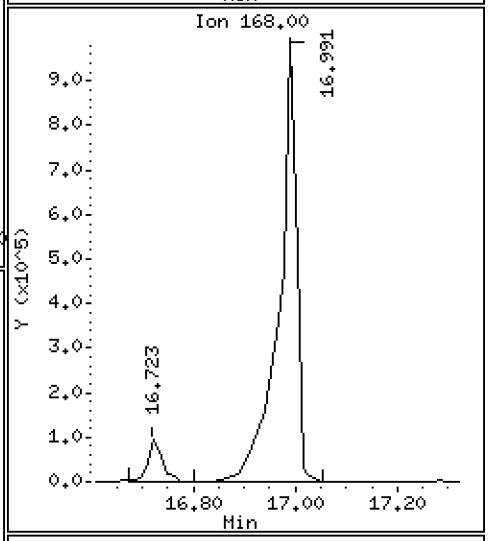
54 N-Nitrosodiphenylamine

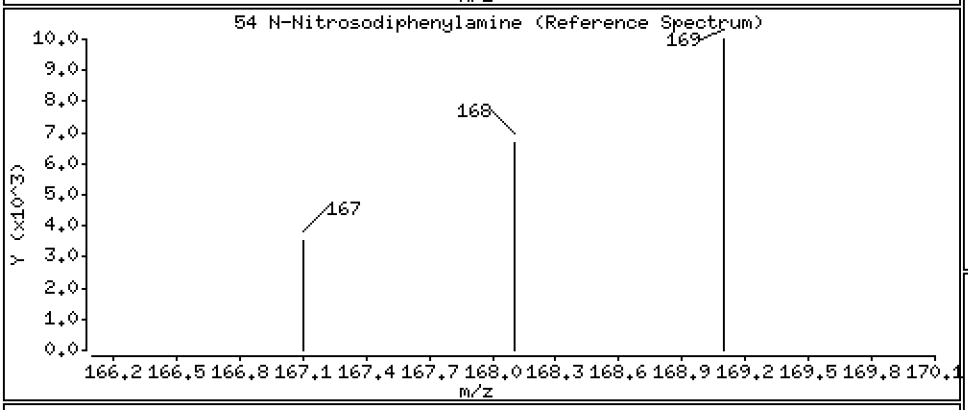
Concentration: 23.60 ug/mL

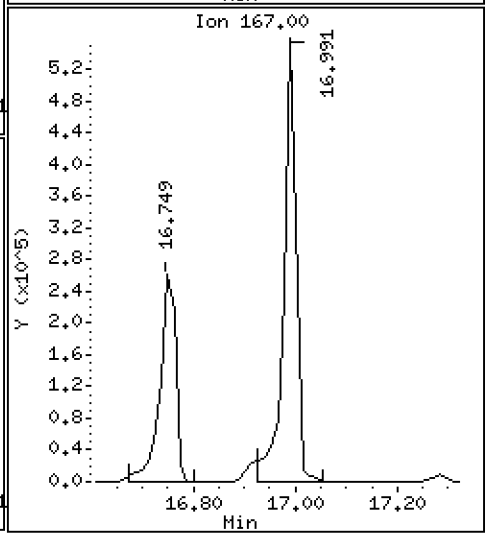


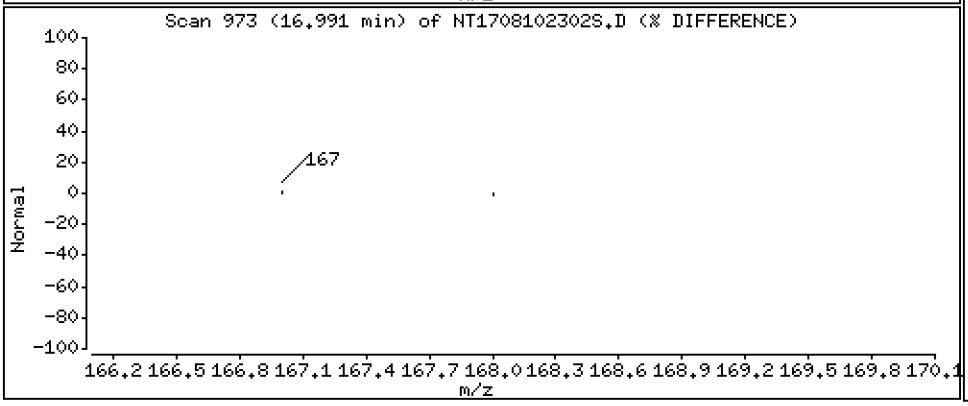












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

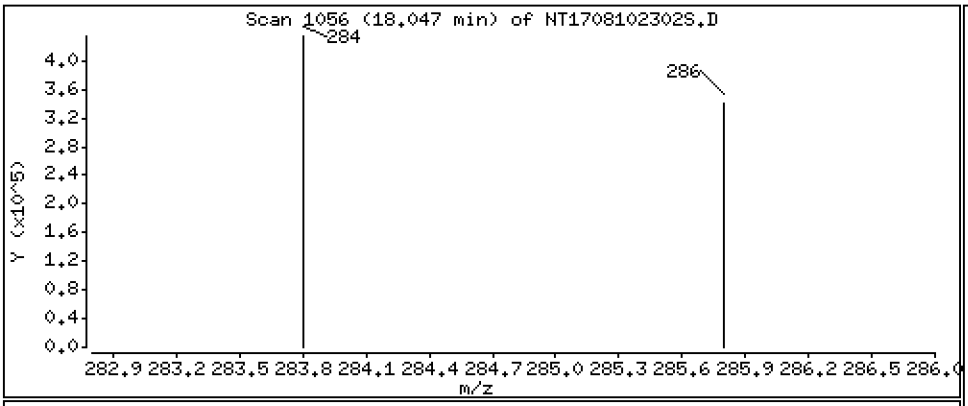
Operator: JGR

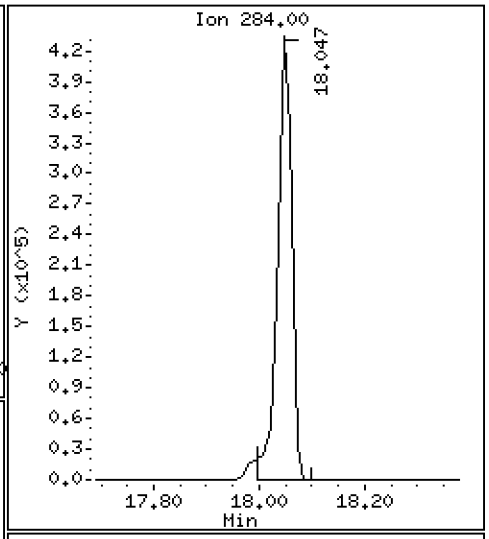
Column phase: ZB-5msi

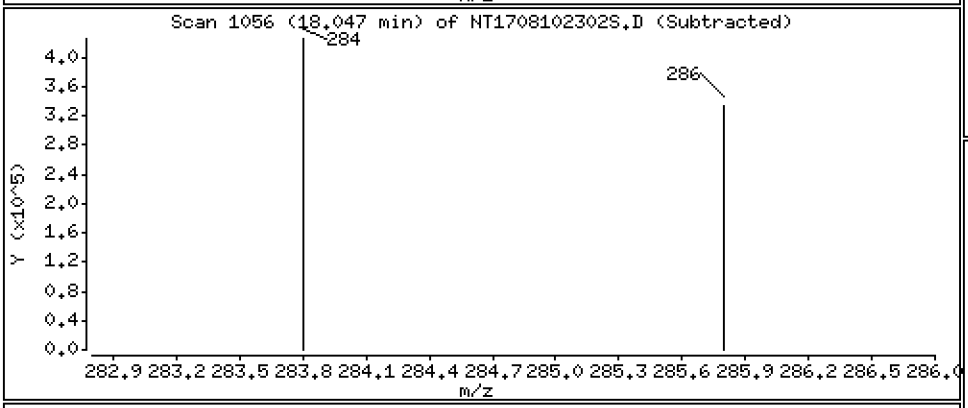
Column diameter: 0.25

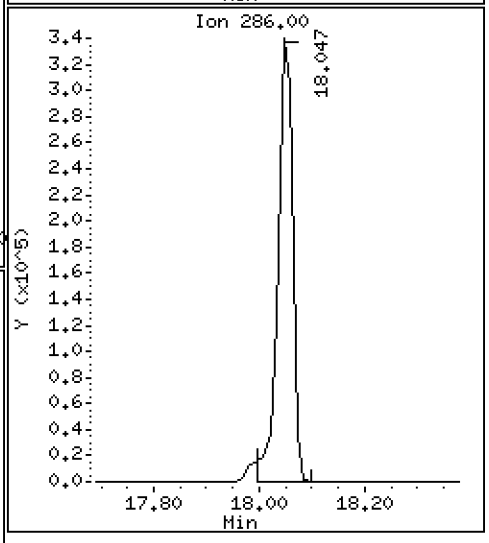
57 Hexachlorobenzene

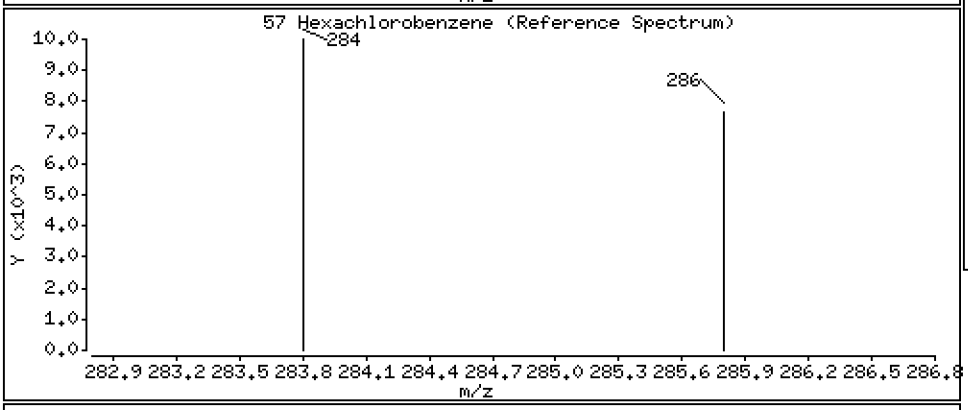
Concentration: 21.10 ug/mL

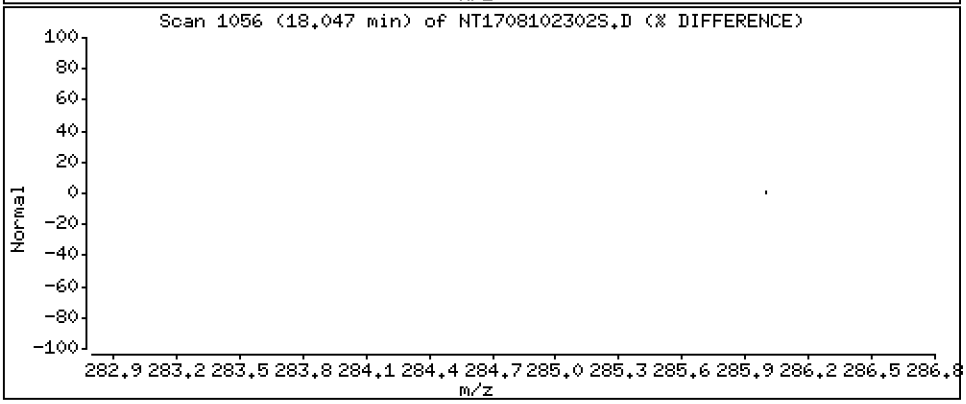












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

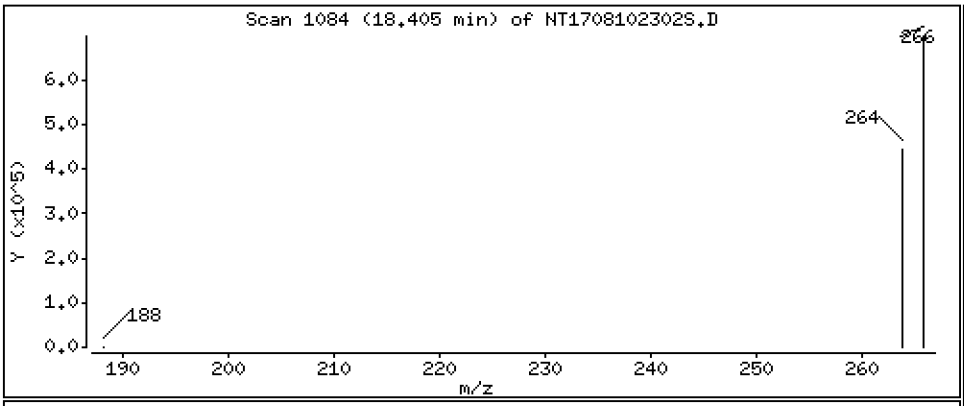
Operator: JGR

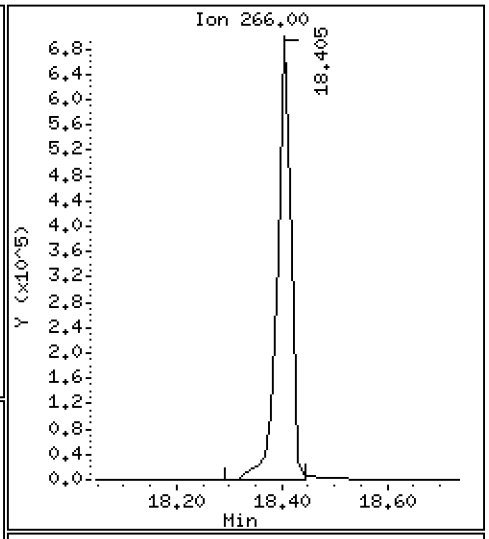
Column phase: ZB-5msi

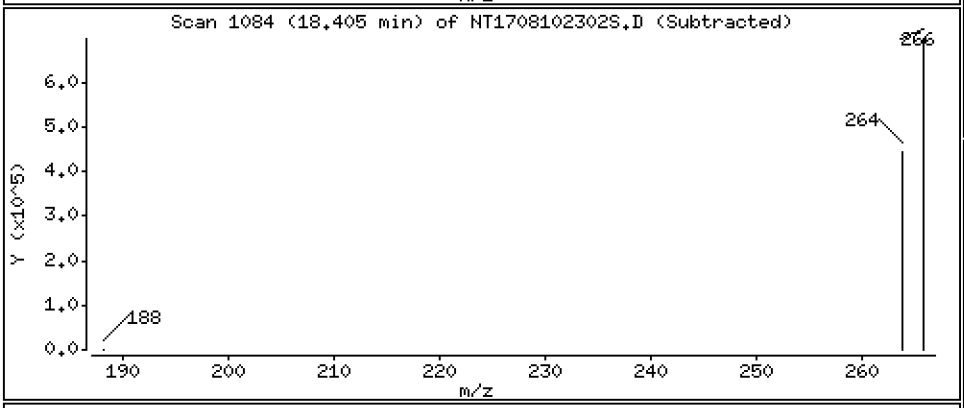
Column diameter: 0.25

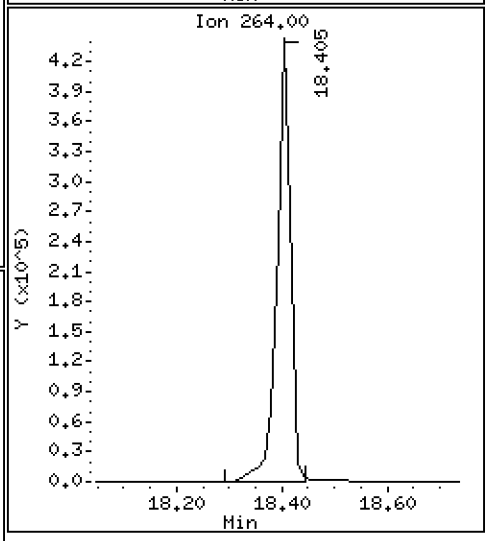
58 Pentachlorophenol

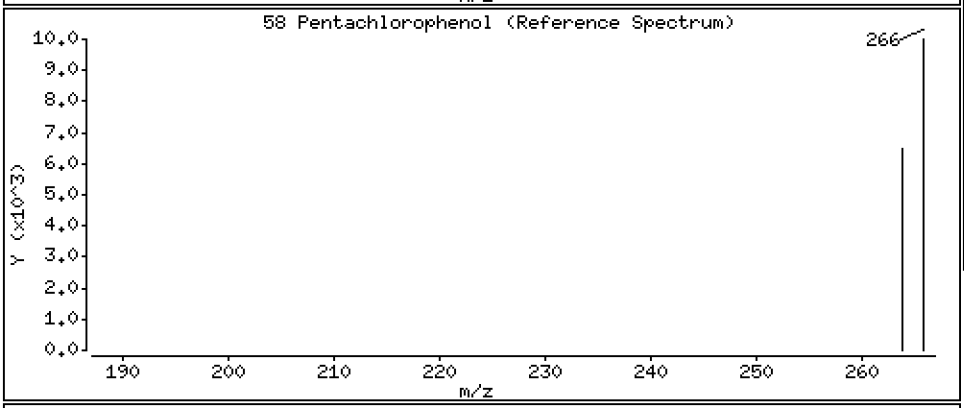
Concentration: 47.47 ug/mL

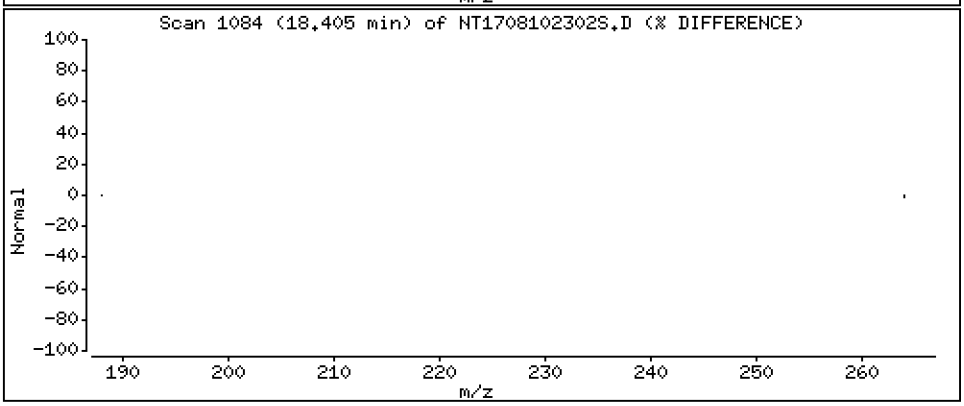












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

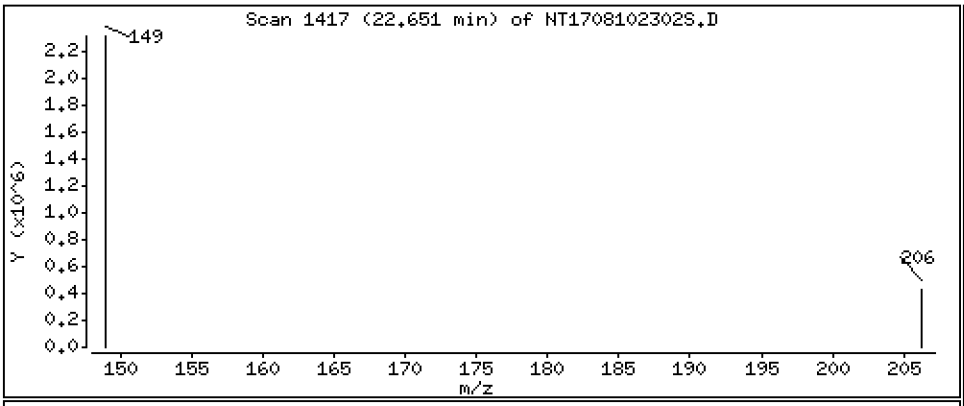
Operator: JGR

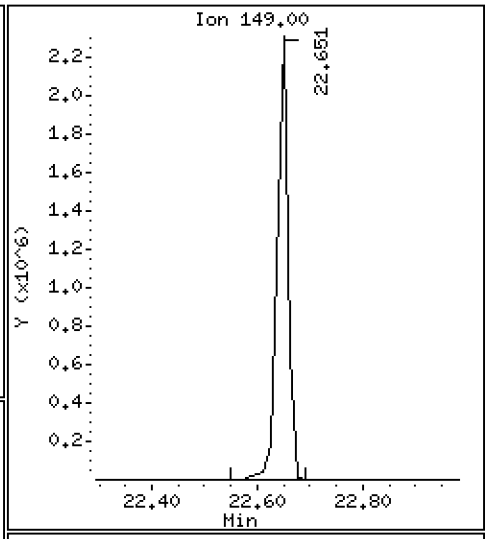
Column phase: ZB-5msi

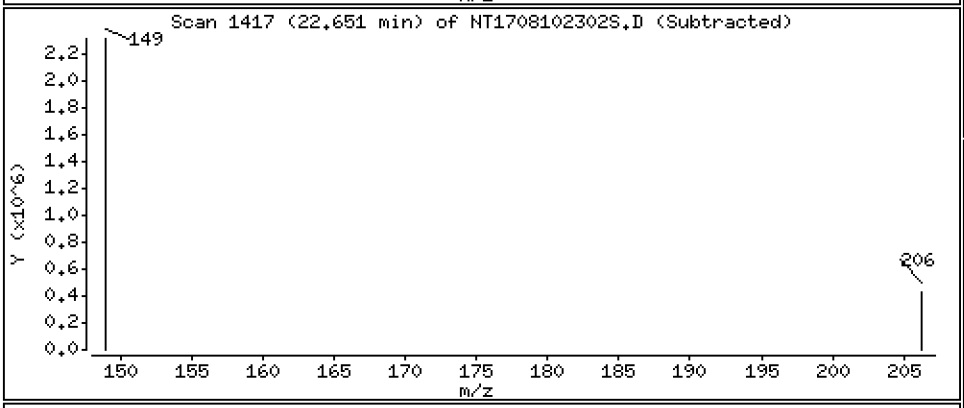
Column diameter: 0.25

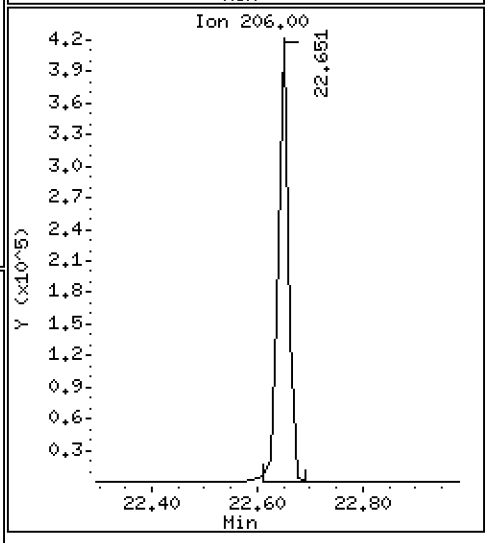
67 Butylbenzylphthalate

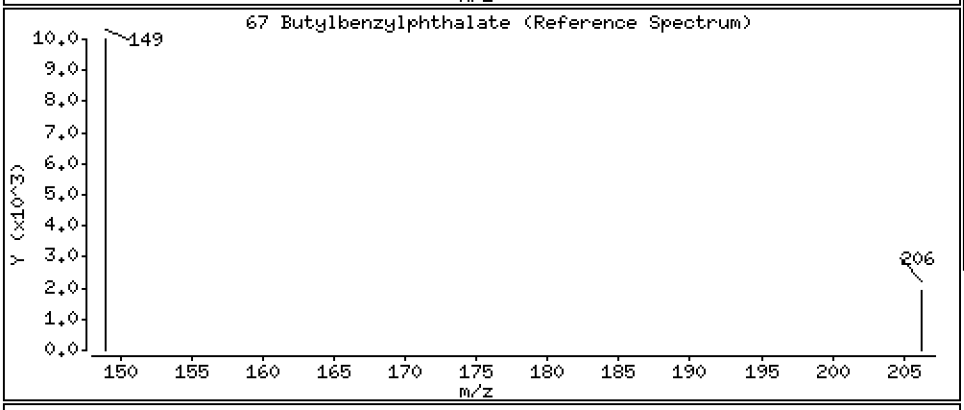
Concentration: 19.44 ug/mL

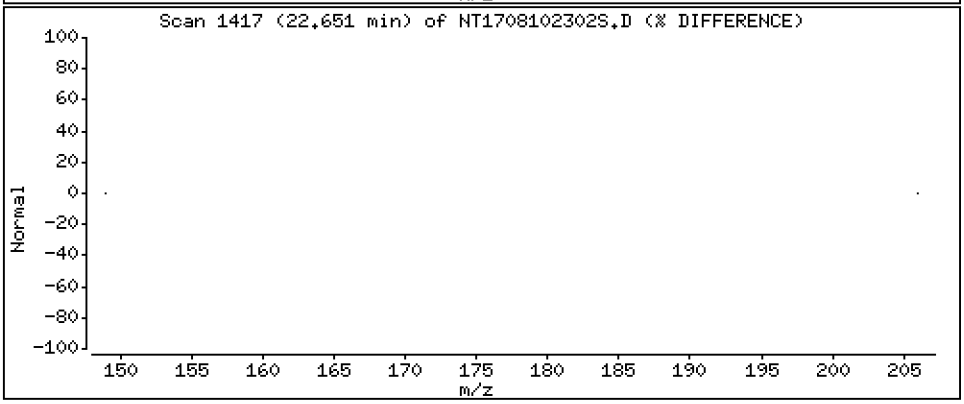












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

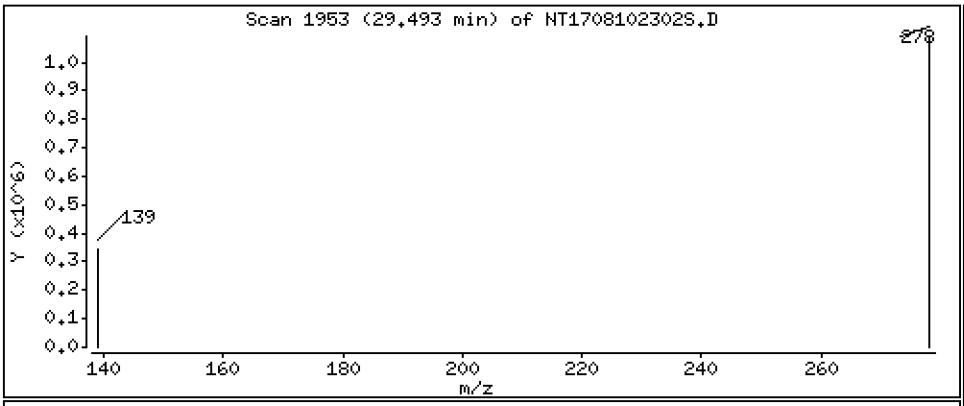
Operator: JGR

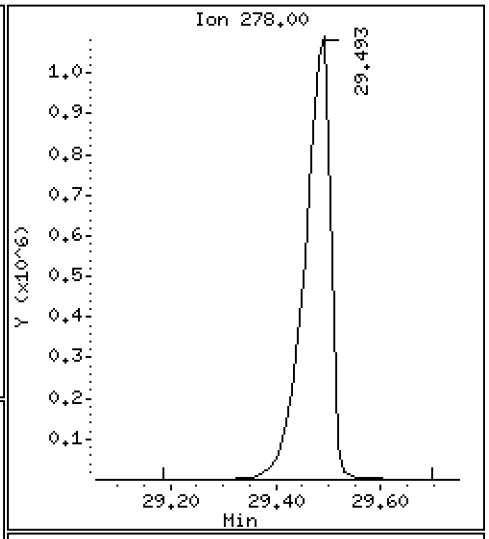
Column phase: ZB-5msi

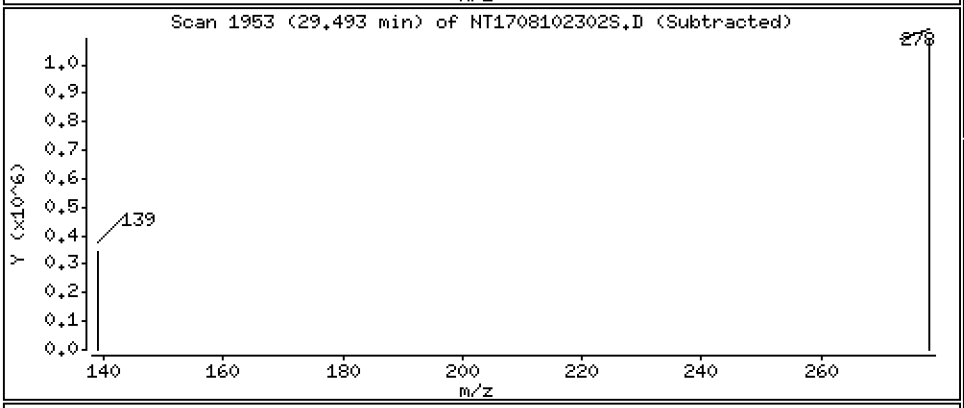
Column diameter: 0.25

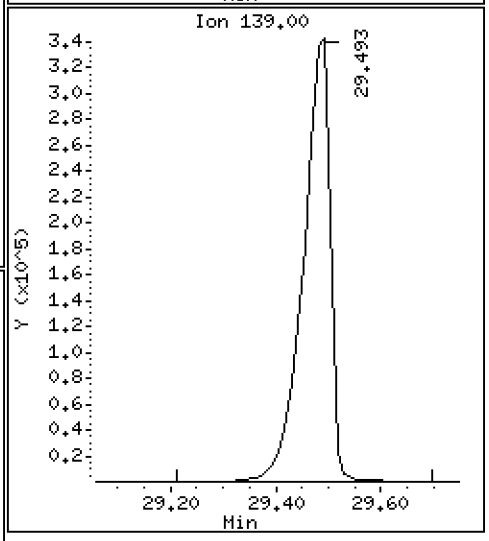
79 Dibenzo(a,h)anthracene

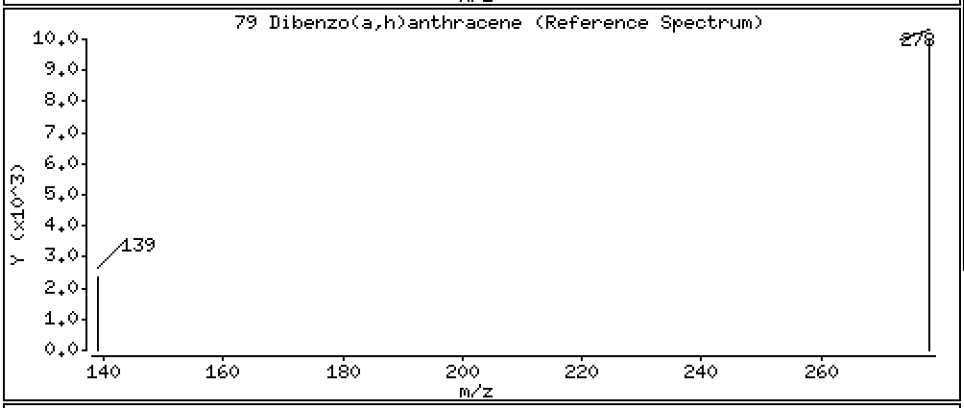
Concentration: 21.59 ug/mL

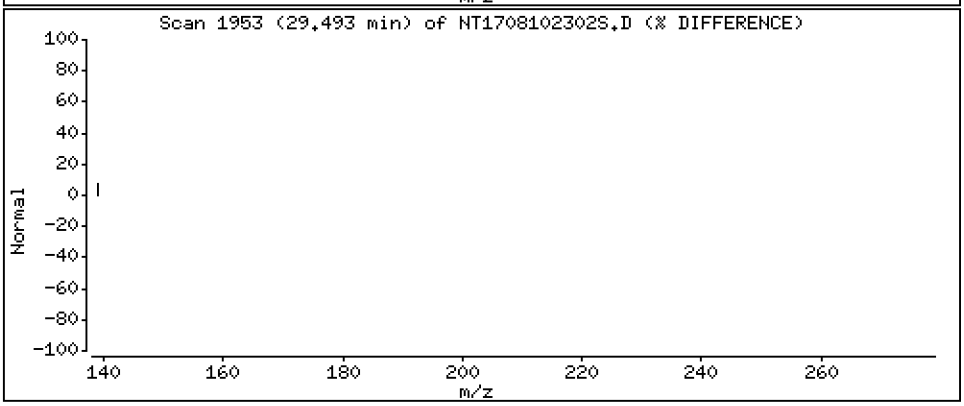












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Date : 10-AUG-2023 12:32

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CAL7

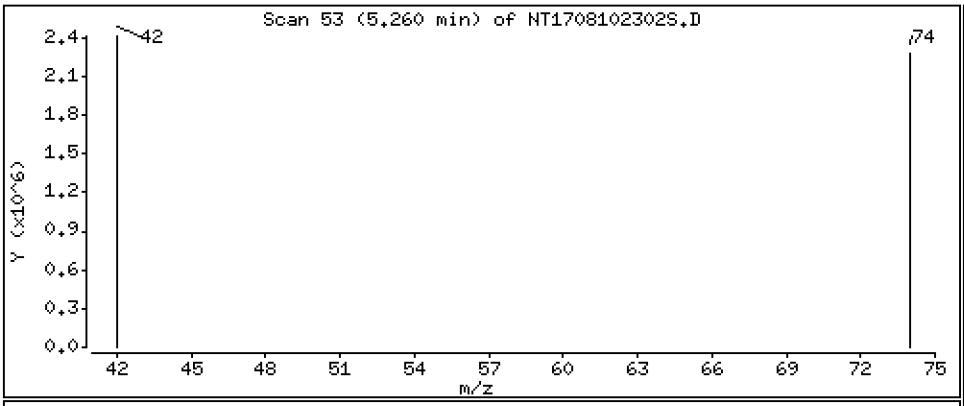
Operator: JGR

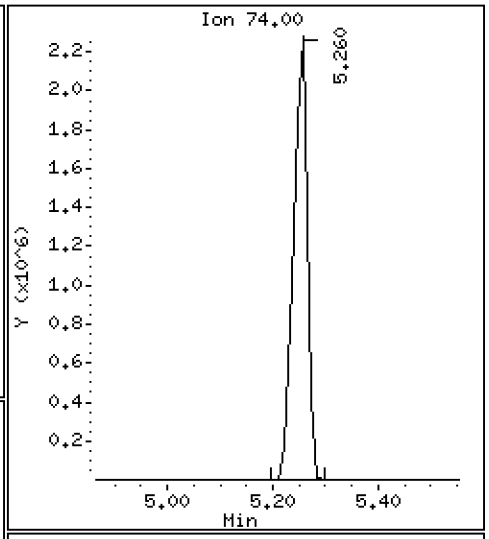
Column phase: ZB-5msi

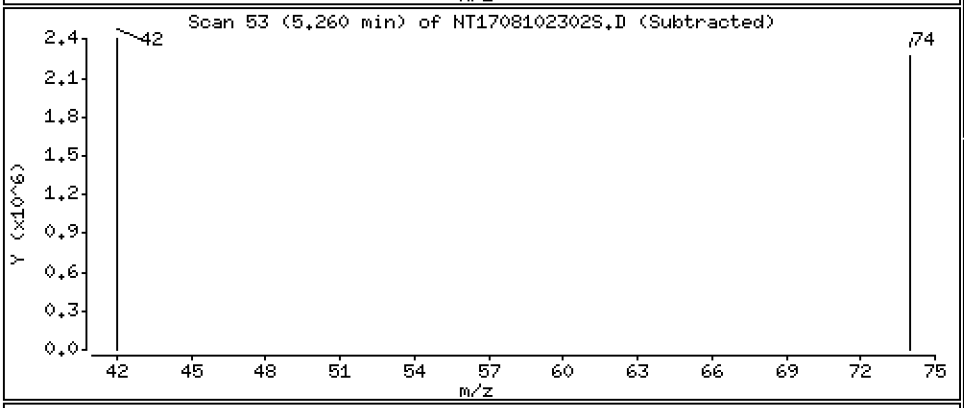
Column diameter: 0.25

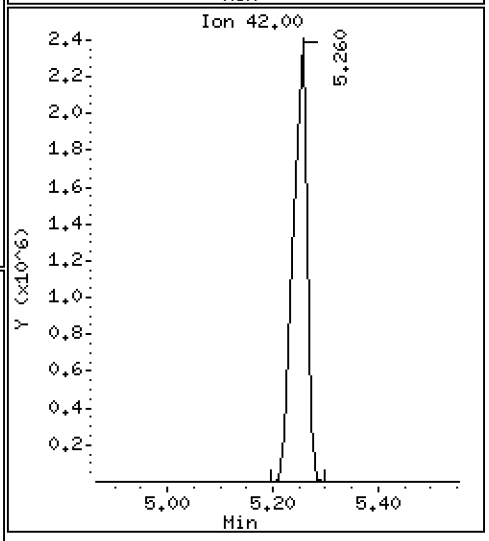
90 N-Nitrosodimethylamine

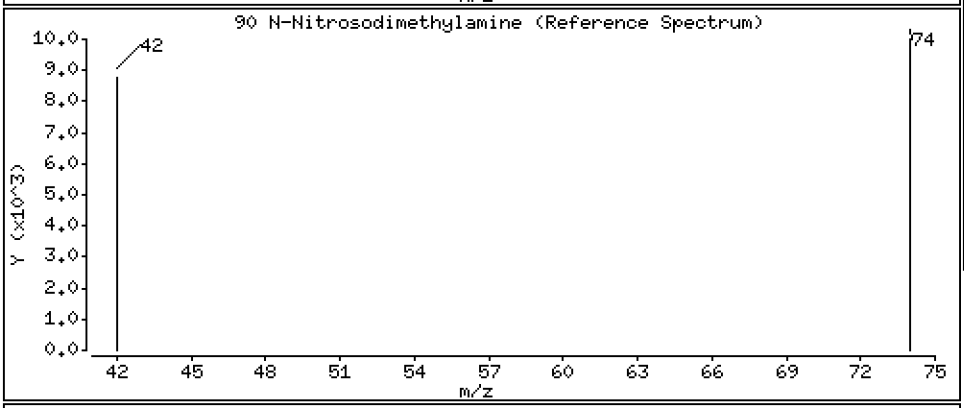
Concentration: 37.21 ug/mL

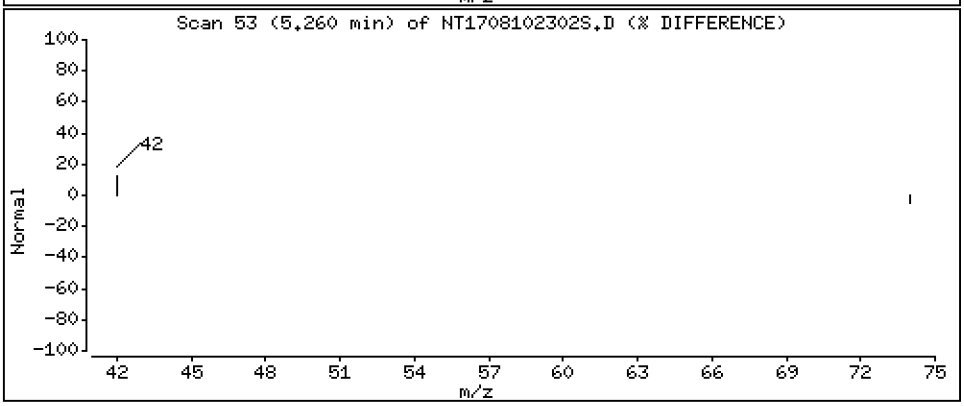












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102302S.D
Lab Smp Id: SEQ-CAL7
Inj Date : 10-AUG-2023 12:32
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-CAL7
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Meth Date : 11-Aug-2023 08:13 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1 2-Fluorophenol	112	7.311	7.298	(0.765)	3625315	31.3355	31.34(R)
	3 Phenol	94	8.916	8.891	(0.933)	3605741	20.4450	20.44
	7 1,3-Dichlorobenzene	146	9.490	9.477	(0.993)	2405219	20.1619	20.16
*	8 1,4-Dichlorobenzene-d4	152	9.554	9.541	(1.000)	278630	4.00000	
	9 1,4-Dichlorobenzene	146	9.579	9.566	(1.003)	2318346	20.0808	20.08
	11 Benzyl alcohol	79	9.822	9.796	(1.028)	2835149	23.2261	23.23
	12 1,2-Dichlorobenzene	146	9.937	9.924	(1.040)	2292042	20.4663	20.47
	13 2-Methylphenol	108	10.026	10.001	(1.049)	2430205	22.7254	22.73
	15 4-Methylphenol	108	10.295	10.269	(1.078)	2588095	23.1557	23.16
	16 N-Nitroso-di-n-propylamine	70	10.397	10.346	(1.088)	2627398	22.9876	22.99
	22 2,4-Dimethylphenol	107	11.342	11.316	(0.943)	4976859	43.2764	43.28
	24 Benzoic acid	105	11.725	11.521	(0.975)	7869809	57.0091	57.01
	26 1,2,4-Trichlorobenzene	180	11.942	11.929	(0.993)	1543972	19.6495	19.65
*	27 Naphthalene-d8	136	12.031	12.018	(1.000)	1146177	4.00000	
	30 Hexachlorobutadiene	225	12.413	12.413	(1.032)	820020	22.2846	22.28
	39 Dimethylphthalate	163	15.155	15.117	(0.968)	3599968	21.1925	21.19
*	42 Acenaphthene-d10	162	15.652	15.627	(1.000)	522646	4.00000	
	50 Diethylphthalate	149	16.596	16.557	(1.060)	3930319	22.2520	22.25
	54 N-Nitrosodiphenylamine	169	16.990	16.965	(0.910)	2820235	23.5970	23.60
	57 Hexachlorobenzene	284	18.047	18.034	(0.967)	826381	21.1040	21.10
	58 Pentachlorophenol	266	18.404	18.392	(0.986)	1261542	47.4750	47.47
*	59 Phenanthrene-d10	188	18.672	18.672	(1.000)	831334	4.00000	
$	66 Terphenyl-d14	244	21.758	21.745	(0.920)	2142676	23.8244	23.82(R)
	67 Butylbenzylphthalate	149	22.651	22.639	(0.957)	3352648	19.4406	19.44
*	69 Chrysene-d12	240	23.659	23.646	(1.000)	649912	4.00000	
*	77 Perylene-d12	264	26.465	26.452	(1.000)	597549	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.493	29.404	(1.114)	3810663	21.5907	21.59
	90 N-Nitrosodimethylamine	74	5.260	5.209	(0.551)	4380801	37.2128	37.21

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 15-Aug-2023 16:33

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708102302S.D
Lab Smp Id: SEQ-CAL7
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Misc Info:

Calibration Date: 10-AUG-2023
Calibration Time: 15:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	319389	159695	638778	278630	-12.76
27 Naphthalene-d8	1274686	637343	2549372	1146177	-10.08
42 Acenaphthene-d10	569885	284943	1139770	522646	-8.29
59 Phenanthrene-d10	915829	457915	1831658	831334	-9.23
69 Chrysene-d12	653460	326730	1306920	649912	-0.54
77 Perylene-d12	654887	327444	1309774	597549	-8.76

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.54	9.04	10.04	9.55	0.13
27 Naphthalene-d8	12.02	11.52	12.52	12.03	0.11
42 Acenaphthene-d10	15.64	15.14	16.14	15.65	0.08
59 Phenanthrene-d10	18.67	18.17	19.17	18.67	0.00
69 Chrysene-d12	23.65	23.15	24.15	23.66	0.05
77 Perylene-d12	26.45	25.95	26.95	26.47	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708102302S.D

Lab ID: SEQ-CAL7
nt17.i, 20230810.b\SIM.B\SIMABN2.m,   10-AUG-2023 12:32

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.975	0.959	0.0160	Benzoic acid

RRT check based on Ccal File: SIM.B/NT1708102309S.D

On Column LOD for nt17.i, SIM.B\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102303S.D

Date : 10-AUG-2023 13:09

Client ID:

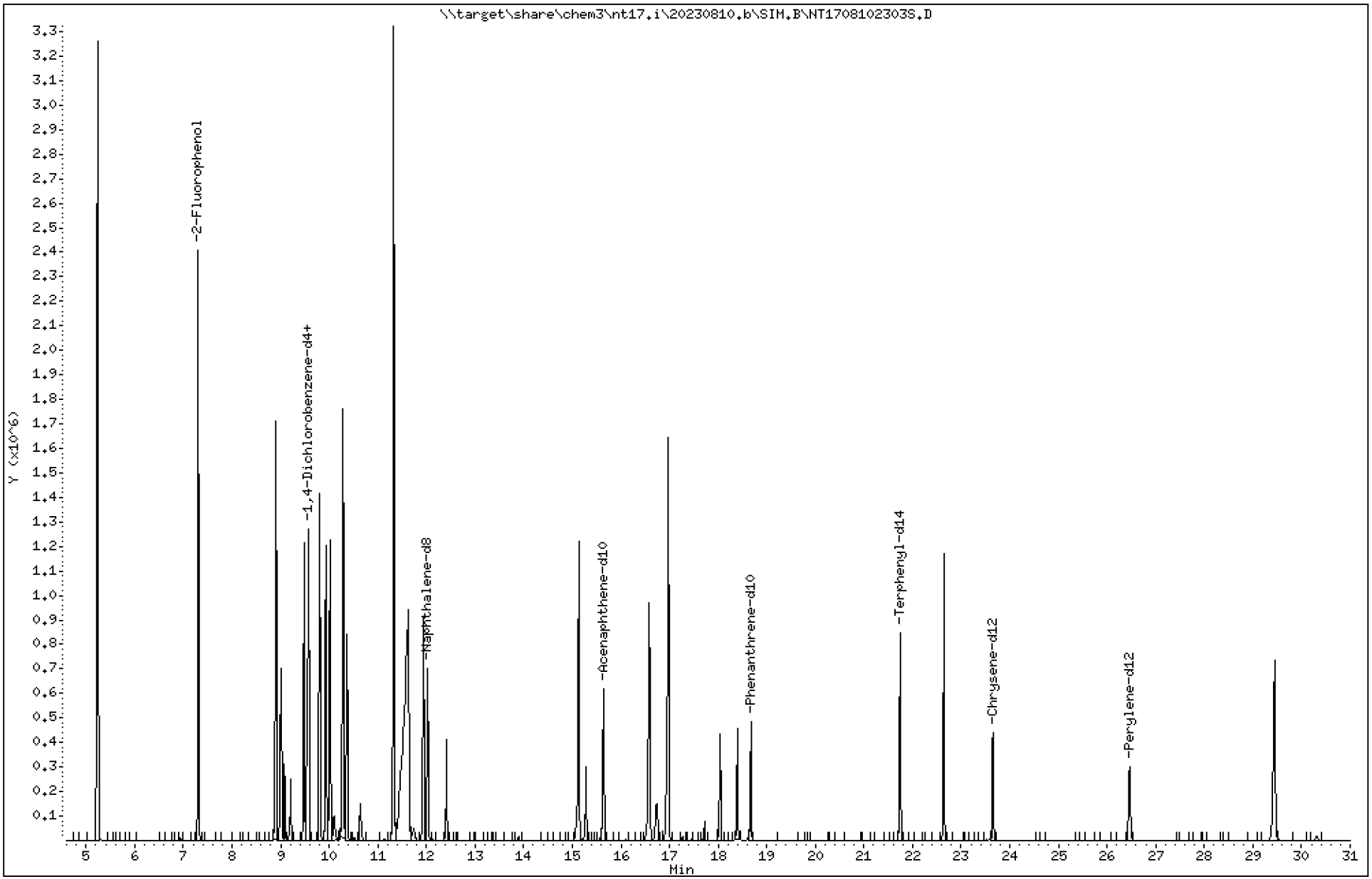
Sample Info: SEQ-CAL6

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102303S.D
Lab Smp Id: SEQ-CAL6
Inj Date : 10-AUG-2023 13:09
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-CAL6
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Meth Date : 11-Aug-2023 08:13 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	7.311	7.298	(0.766)	1893849	15.0000	15.56
	3	Phenol	94	8.903	8.891	(0.933)	1882351	10.0000	10.15
	7	1,3-Dichlorobenzene	146	9.477	9.477	(0.993)	1217453	10.0000	9.703
*	8	1,4-Dichlorobenzene-d4	152	9.541	9.541	(1.000)	293046	4.00000	
	9	1,4-Dichlorobenzene	146	9.579	9.566	(1.004)	1186783	10.0000	9.774
	11	Benzyl alcohol	79	9.809	9.796	(1.028)	1471874	10.0000	11.46
	12	1,2-Dichlorobenzene	146	9.937	9.924	(1.042)	1159045	10.0000	9.840
	13	2-Methylphenol	108	10.013	10.001	(1.050)	1252520	10.0000	11.14
	15	4-Methylphenol	108	10.282	10.269	(1.078)	1336558	10.0000	11.37
	16	N-Nitroso-di-n-propylamine	70	10.371	10.346	(1.087)	1359463	10.0000	11.31
	22	2,4-Dimethylphenol	107	11.329	11.316	(0.942)	2542508	20.0000	21.49
	24	Benzoic acid	105	11.636	11.521	(0.967)	3965055	40.0000	39.86
	26	1,2,4-Trichlorobenzene	180	11.942	11.929	(0.993)	786741	10.0000	9.732
*	27	Naphthalene-d8	136	12.031	12.018	(1.000)	1179258	4.00000	
	30	Hexachlorobutadiene	225	12.413	12.413	(1.032)	397662	10.0000	10.50
	39	Dimethylphthalate	163	15.130	15.117	(0.967)	1809531	10.0000	10.60
*	42	Acenaphthene-d10	162	15.640	15.627	(1.000)	525393	4.00000	
	50	Diethylphthalate	149	16.583	16.557	(1.060)	1992967	10.0000	11.22
	54	N-Nitrosodiphenylamine	169	16.977	16.965	(0.909)	1294707	10.0000	10.79
	57	Hexachlorobenzene	284	18.047	18.034	(0.967)	404787	10.0000	10.29
	58	Pentachlorophenol	266	18.391	18.392	(0.985)	548910	20.0000	20.57
*	59	Phenanthrene-d10	188	18.672	18.672	(1.000)	834837	4.00000	
$	66	Terphenyl-d14	244	21.745	21.745	(0.919)	943607	10.0000	11.10
	67	Butylbenzylphthalate	149	22.651	22.639	(0.957)	1656382	10.0000	10.16
*	69	Chrysene-d12	240	23.659	23.646	(1.000)	614128	4.00000	
*	77	Perylene-d12	264	26.465	26.452	(1.000)	603700	4.00000	
	79	Dibenzo(a,h)anthracene	278	29.441	29.404	(1.112)	1802136	10.0000	10.11
	90	N-Nitrosodimethylamine	74	5.234	5.209	(0.549)	2393309	20.0000	19.33

Report Date: 15-Aug-2023 16:33

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708102303S.D
Lab Smp Id: SEQ-CAL6
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Misc Info:

Calibration Date: 10-AUG-2023
Calibration Time: 15:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	319389	159695	638778	293046	-8.25
27 Naphthalene-d8	1274686	637343	2549372	1179258	-7.49
42 Acenaphthene-d10	569885	284943	1139770	525393	-7.81
59 Phenanthrene-d10	915829	457915	1831658	834837	-8.84
69 Chrysene-d12	653460	326730	1306920	614128	-6.02
77 Perylene-d12	654887	327444	1309774	603700	-7.82

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.54	9.04	10.04	9.54	-0.00
27 Naphthalene-d8	12.02	11.52	12.52	12.03	0.11
42 Acenaphthene-d10	15.64	15.14	16.14	15.64	-0.00
59 Phenanthrene-d10	18.67	18.17	19.17	18.67	-0.00
69 Chrysene-d12	23.65	23.15	24.15	23.66	0.05
77 Perylene-d12	26.45	25.95	26.95	26.47	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708102303S.D

Lab ID: SEQ-CAL6
nt17.i, 20230810.b\SIM.B\SIMABN2.m,   10-AUG-2023 13:09

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.967	0.959	0.0085	Benzoic acid

RRT check based on Ccal File: SIM.B/NT1708102309S.D

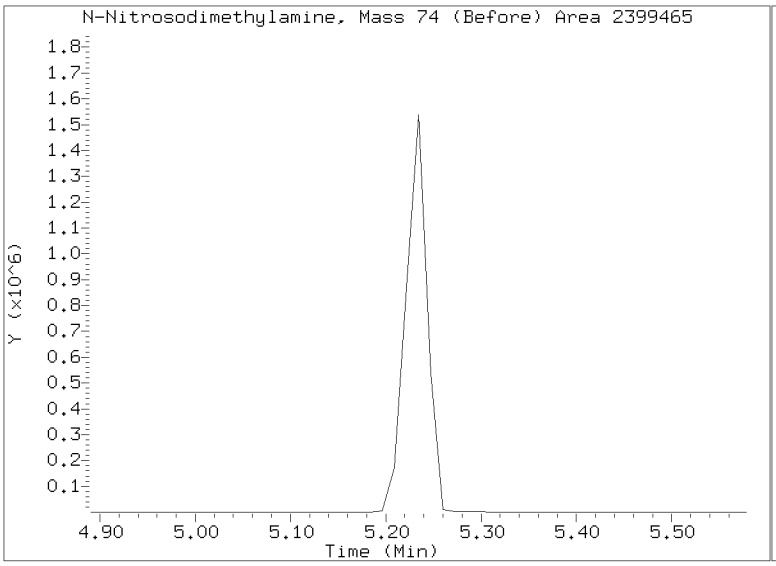
On Column LOD for nt17.i, SIM.B\SIMABN2.m, PSDDA.sub = 0.0000

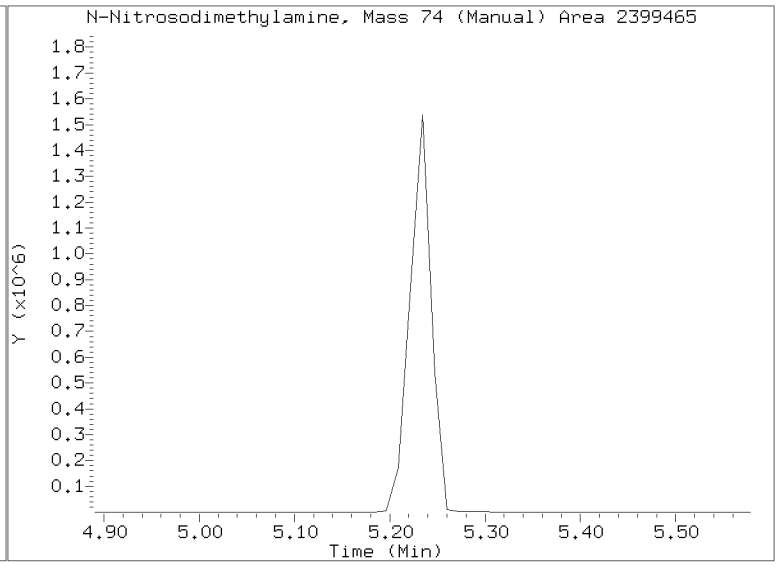
Exception: 1,2,4-Trichlorobenzene 0.0010

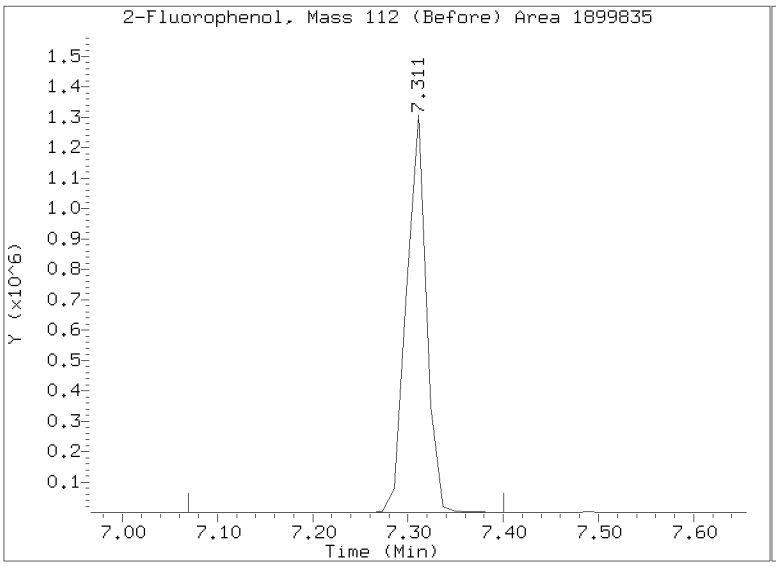
* Only compounds listed in the work order have been verified by the analyst *

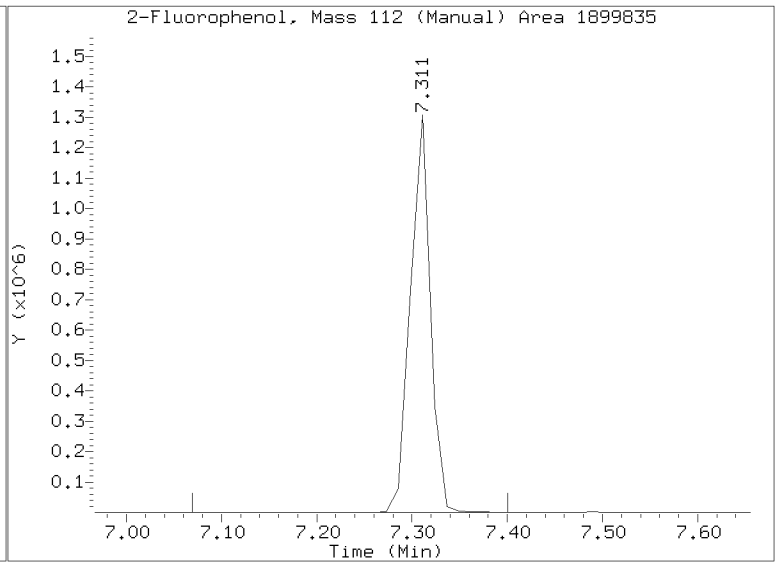
Quant Ion Manual Peak Adjustment Report

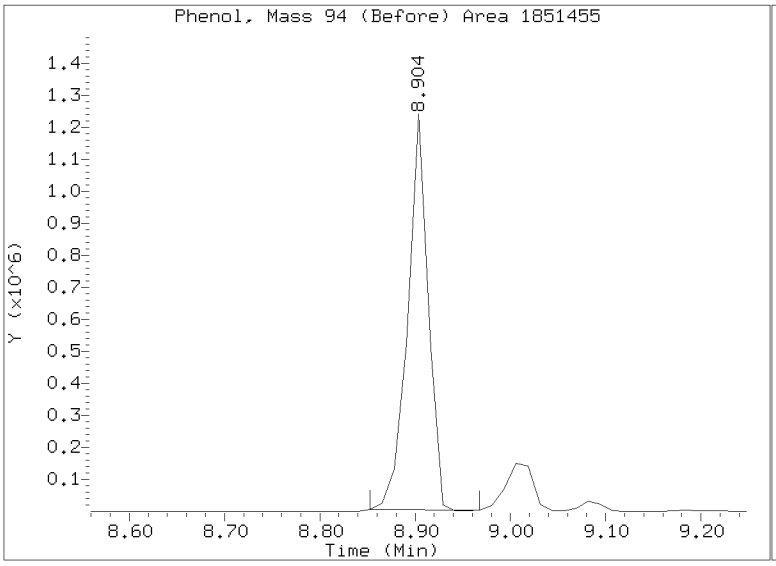
Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102303S.D
Injection Date: 10-AUG-2023 13:09
Lab ID: Client ID:
Report Date: 08/11/2023 07:04

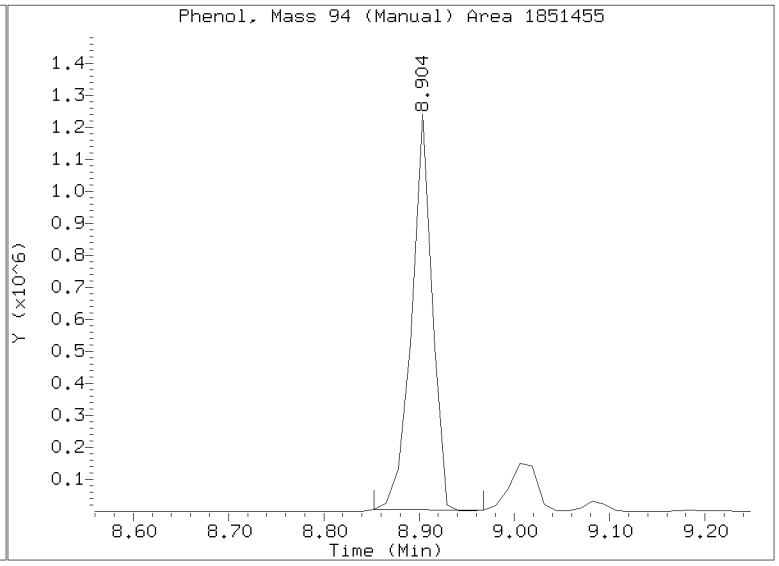






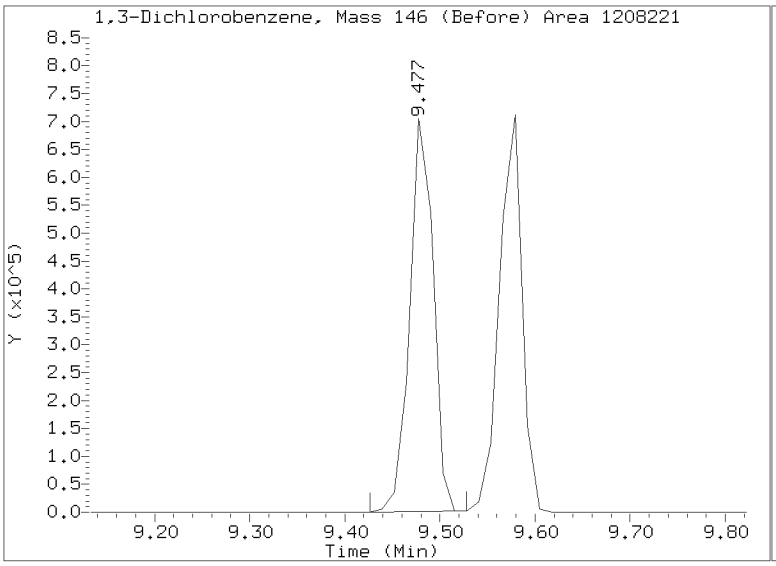


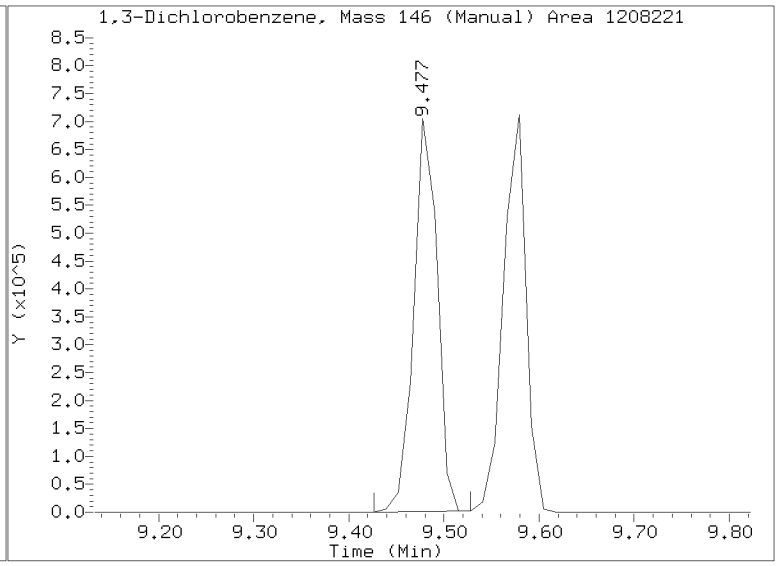


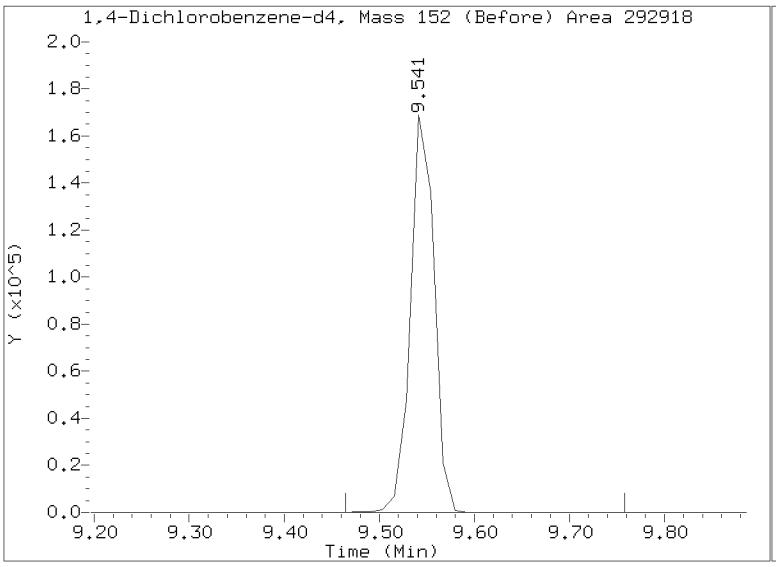


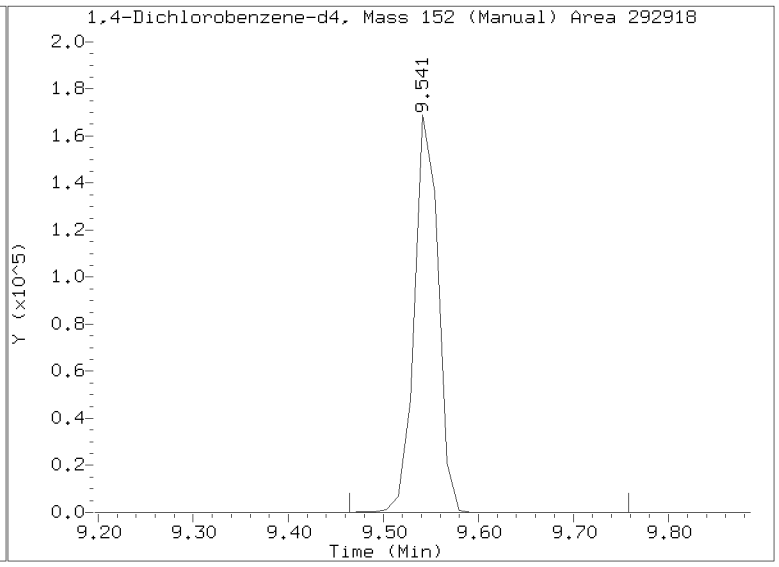
Quant Ion Manual Peak Adjustment Report

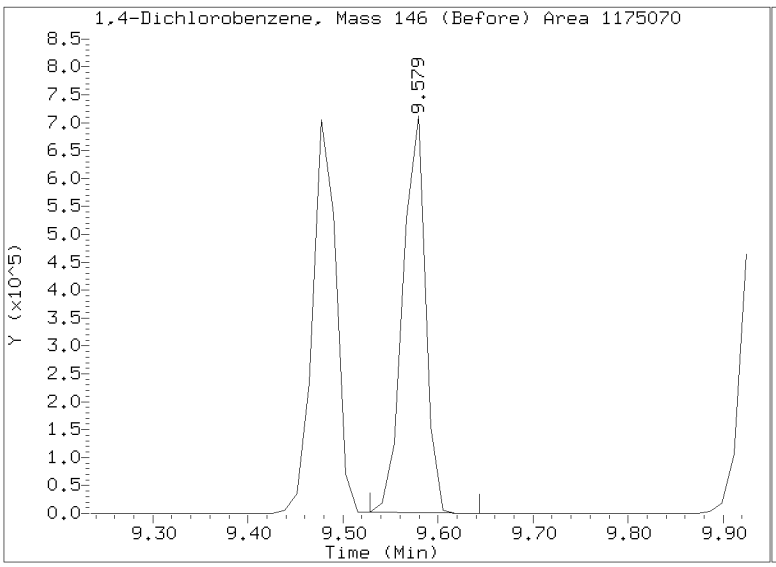
Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102303S.D
Injection Date: 10-AUG-2023 13:09
Lab ID: Client ID:
Report Date: 08/11/2023 07:04

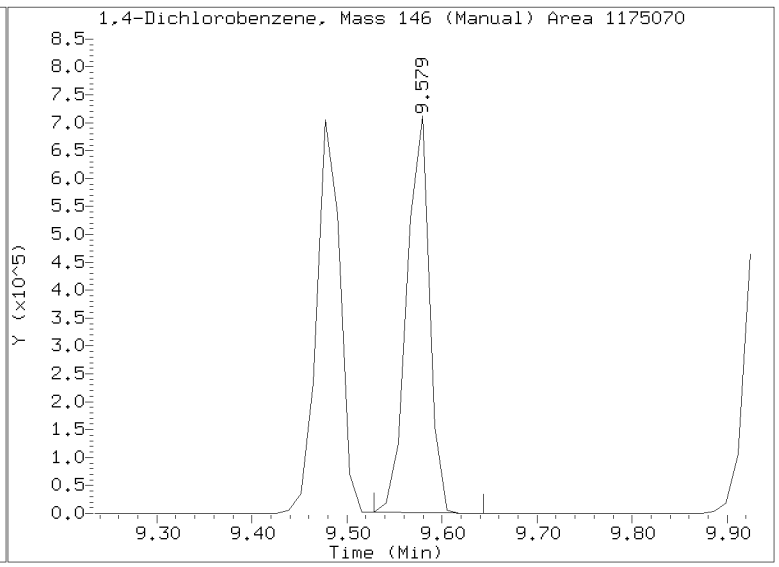






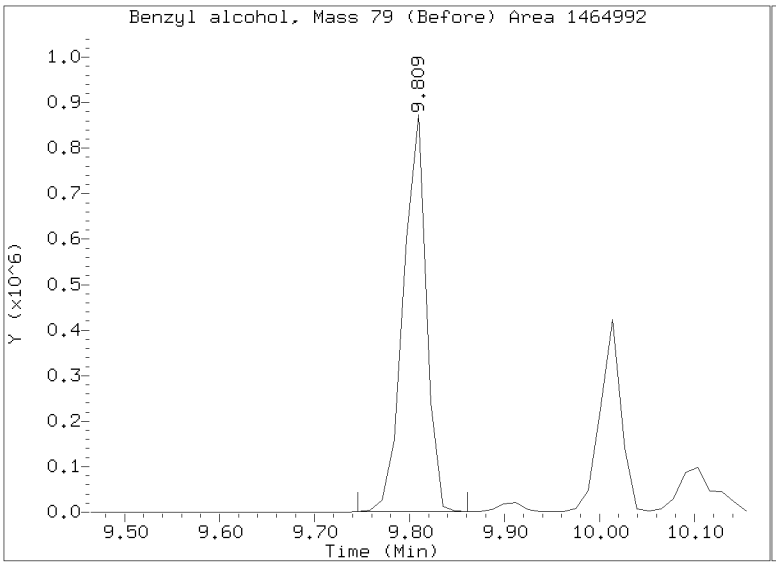


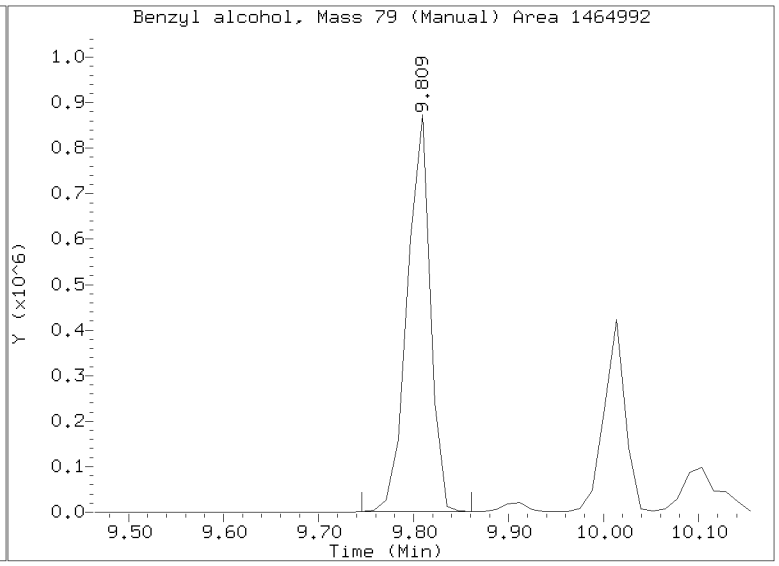


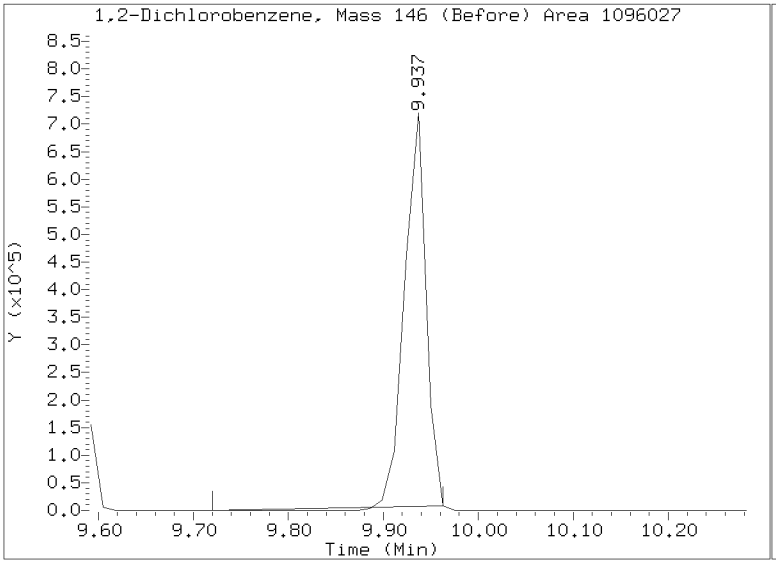


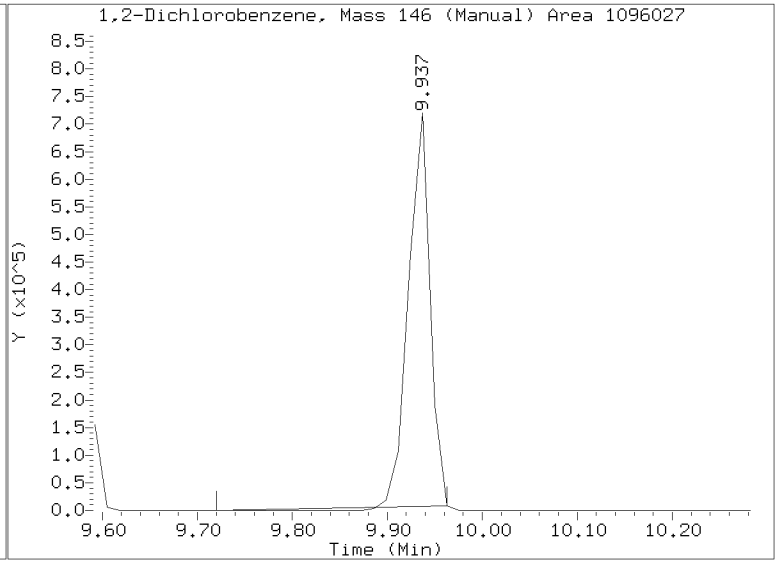
Quant Ion Manual Peak Adjustment Report

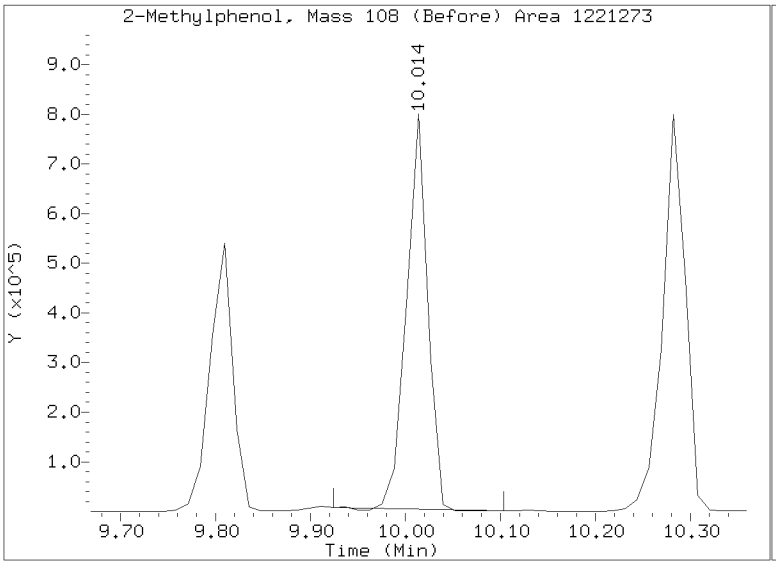
Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102303S.D
Injection Date: 10-AUG-2023 13:09
Lab ID: Client ID:
Report Date: 08/11/2023 07:04

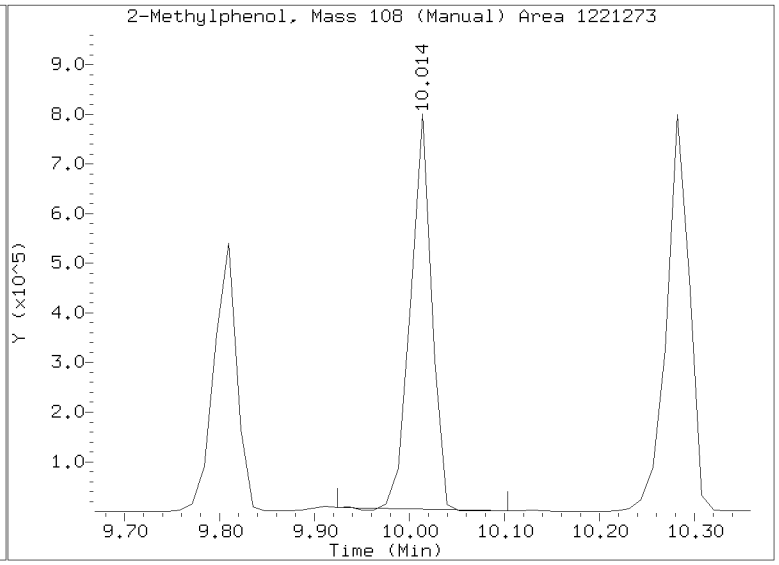






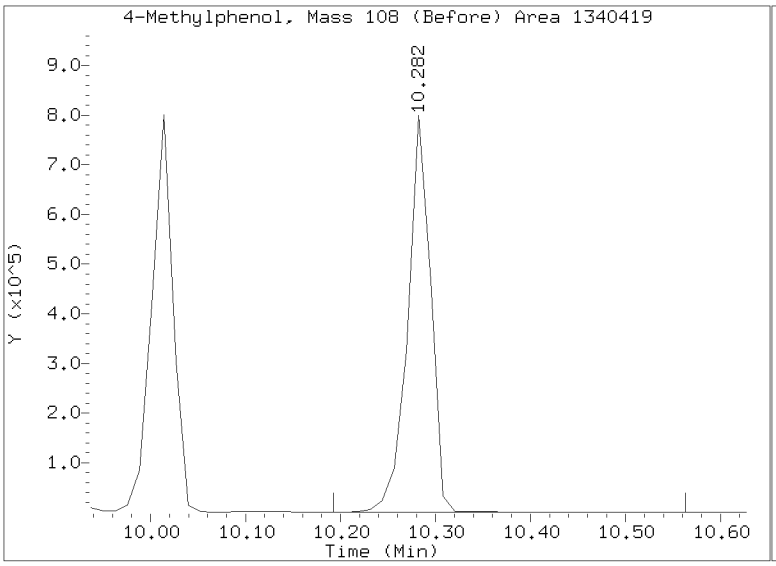


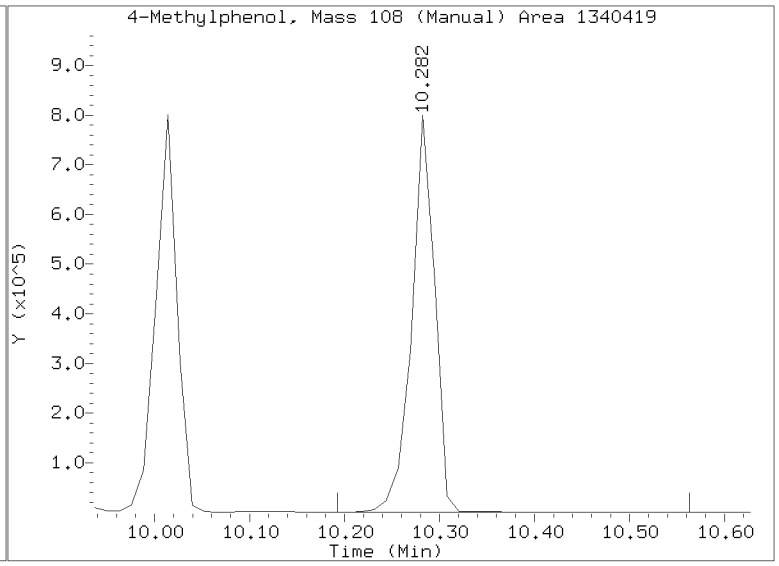


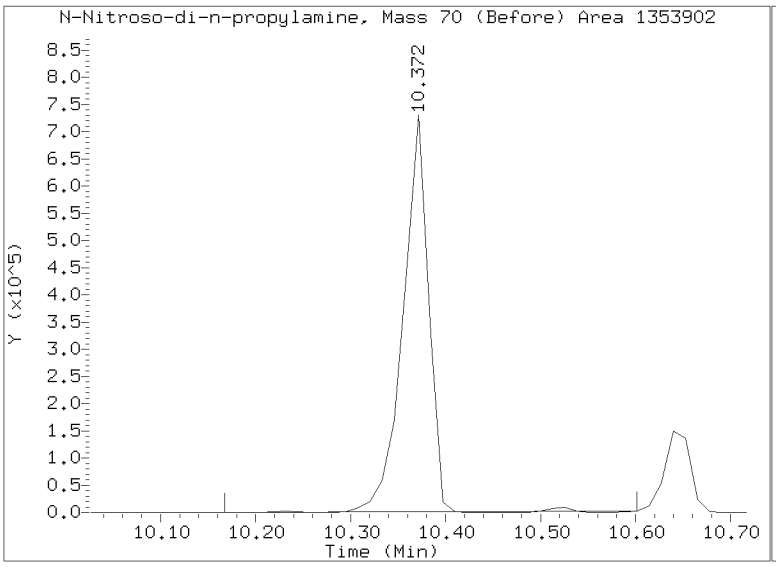


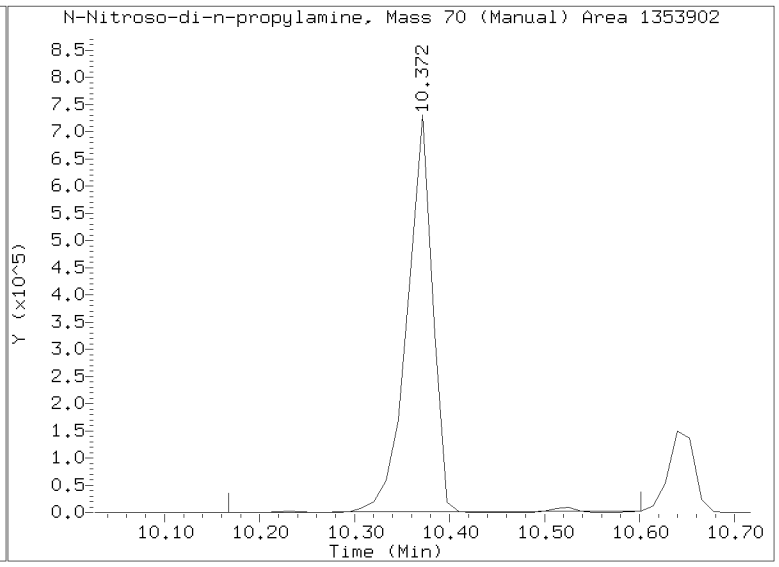
Quant Ion Manual Peak Adjustment Report

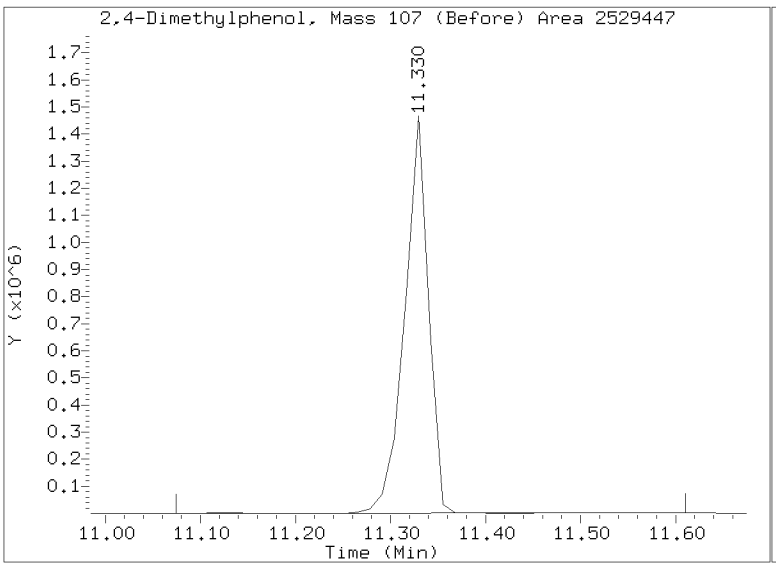
Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102303S.D
Injection Date: 10-AUG-2023 13:09
Lab ID: Client ID:
Report Date: 08/11/2023 07:04

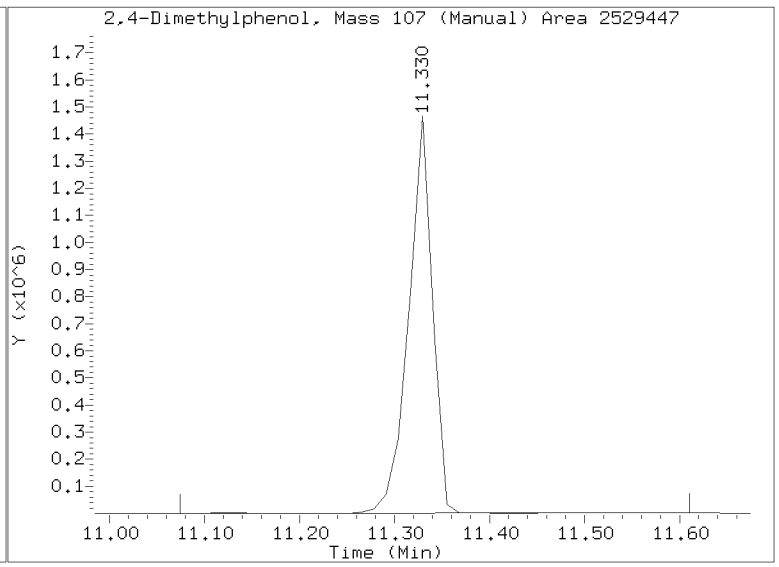






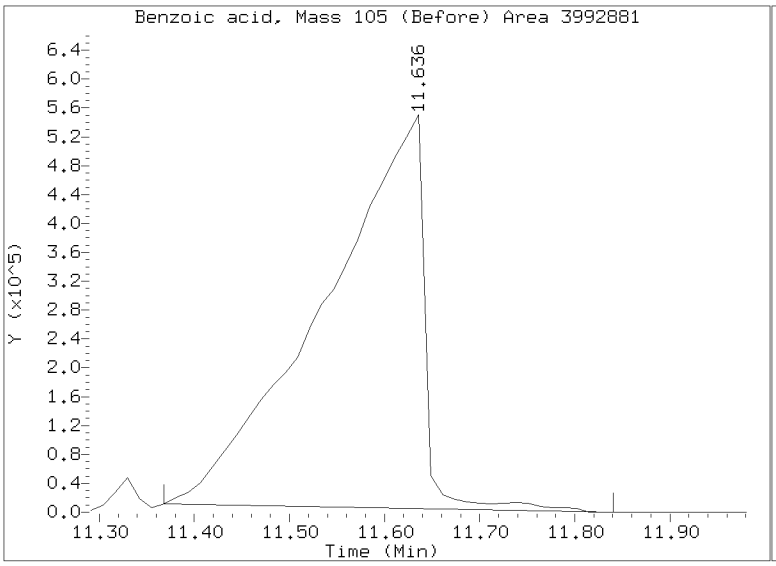


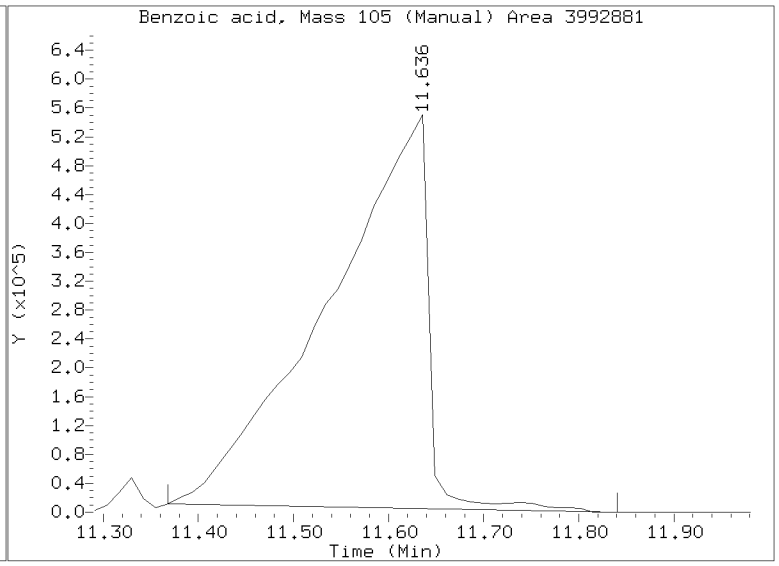


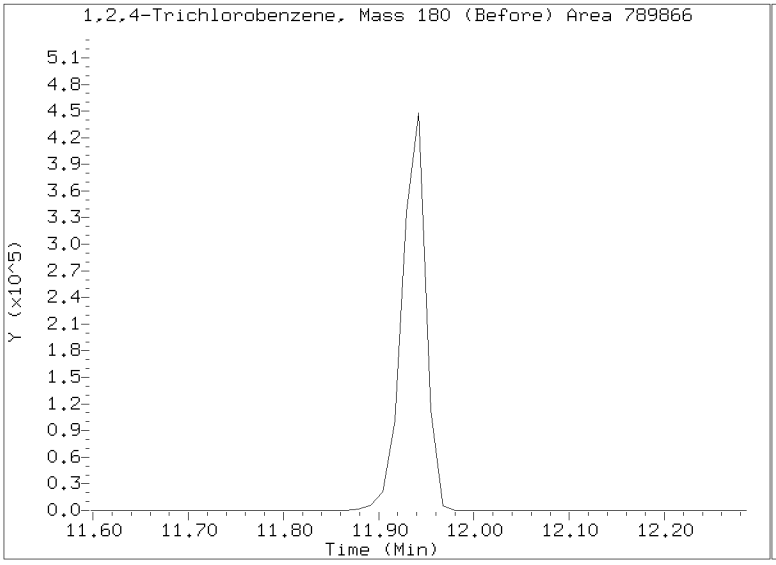


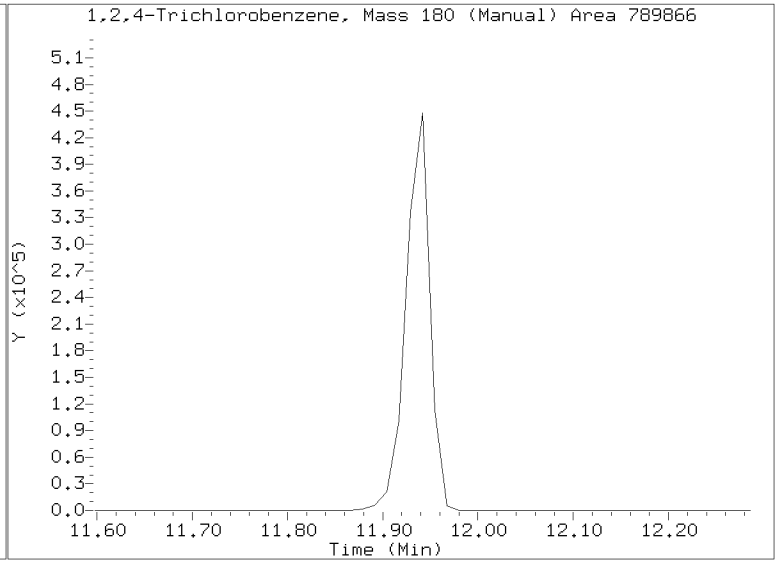
Quant Ion Manual Peak Adjustment Report

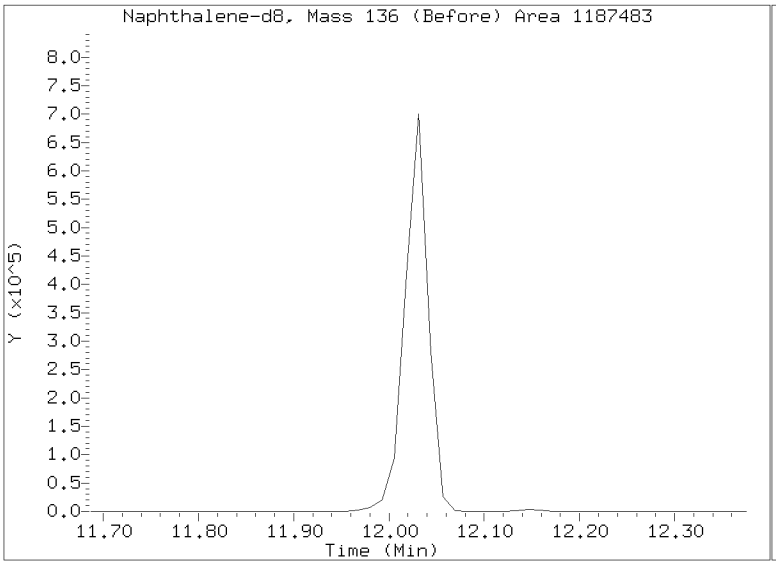
Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102303S.D
Injection Date: 10-AUG-2023 13:09
Lab ID: Client ID:
Report Date: 08/11/2023 07:04

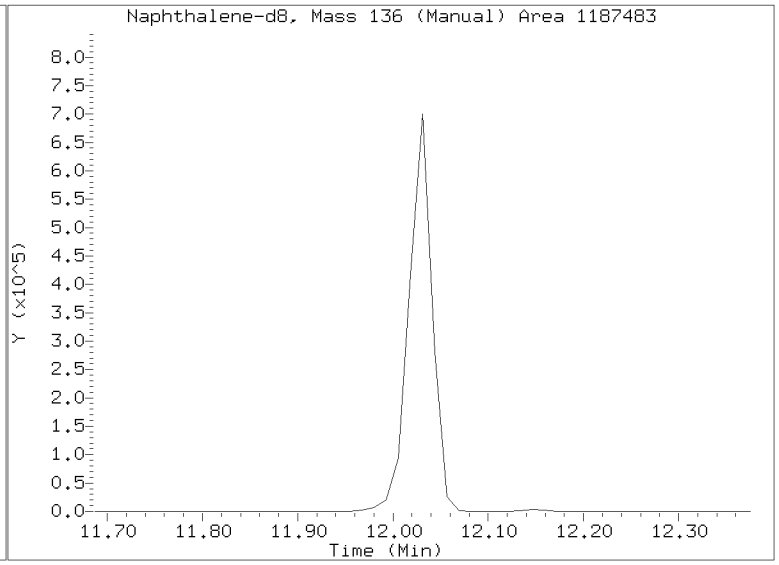






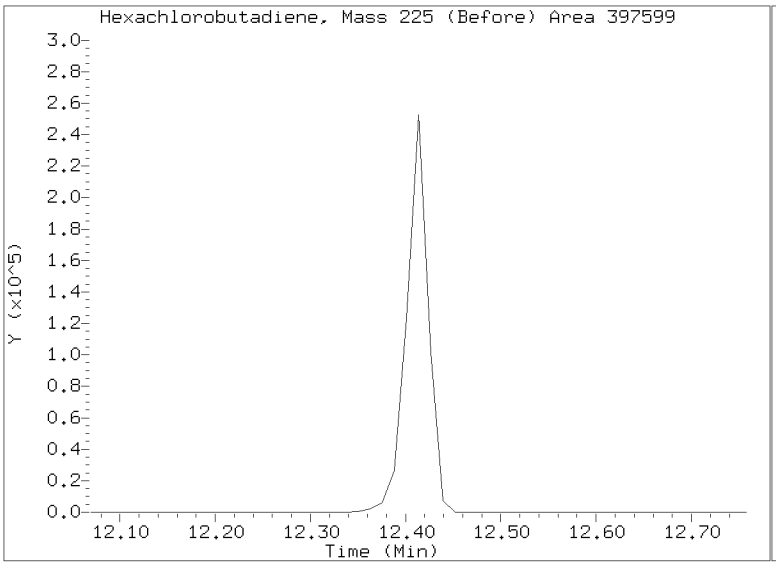


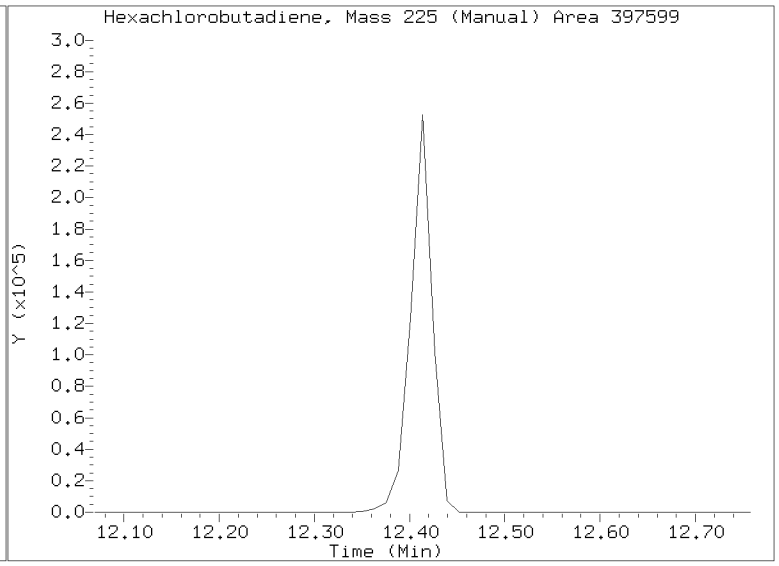


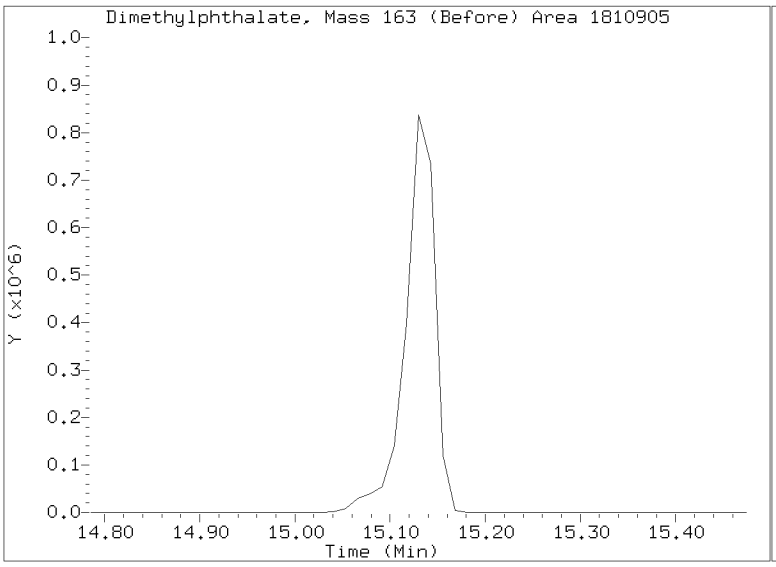


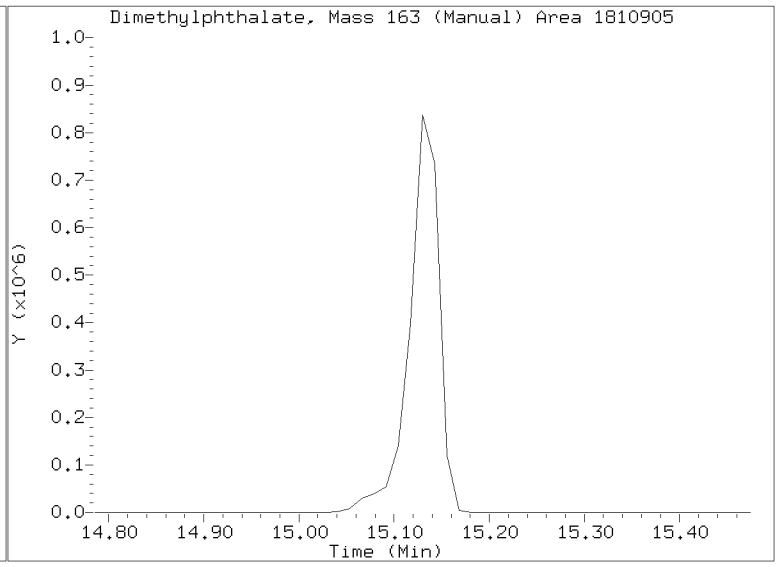
Quant Ion Manual Peak Adjustment Report

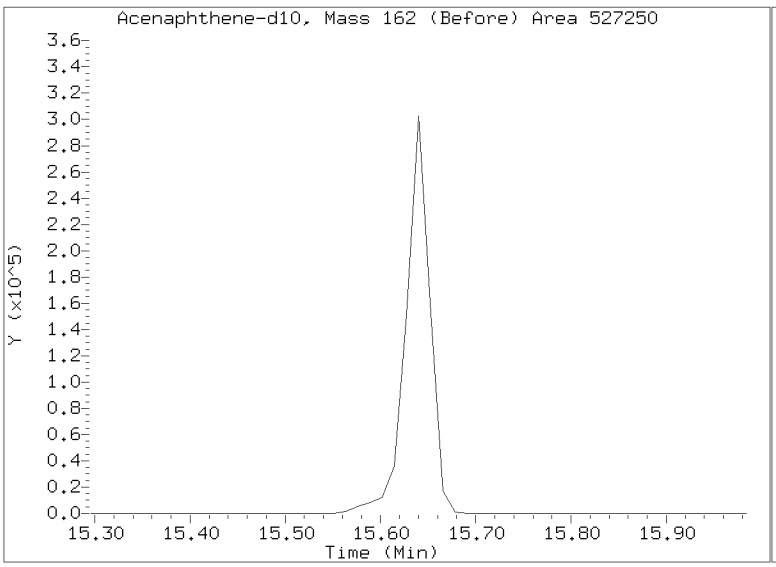
Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102303S.D
Injection Date: 10-AUG-2023 13:09
Lab ID: Client ID:
Report Date: 08/11/2023 07:04

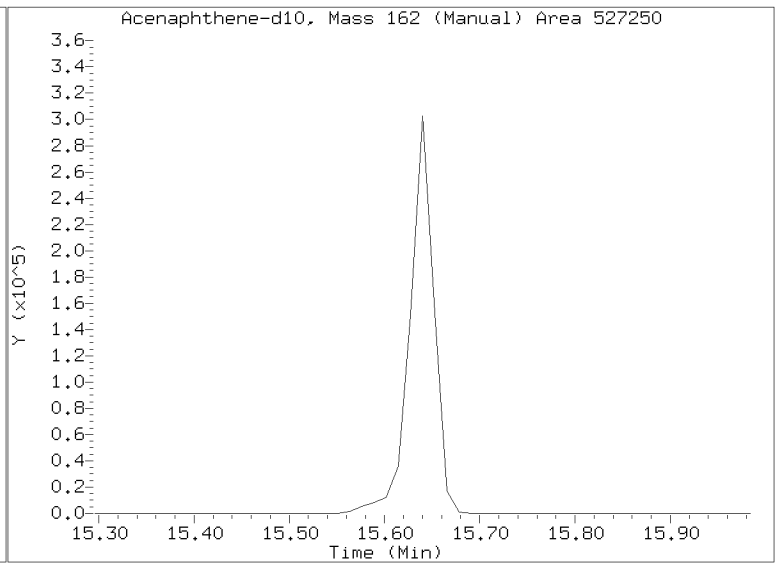






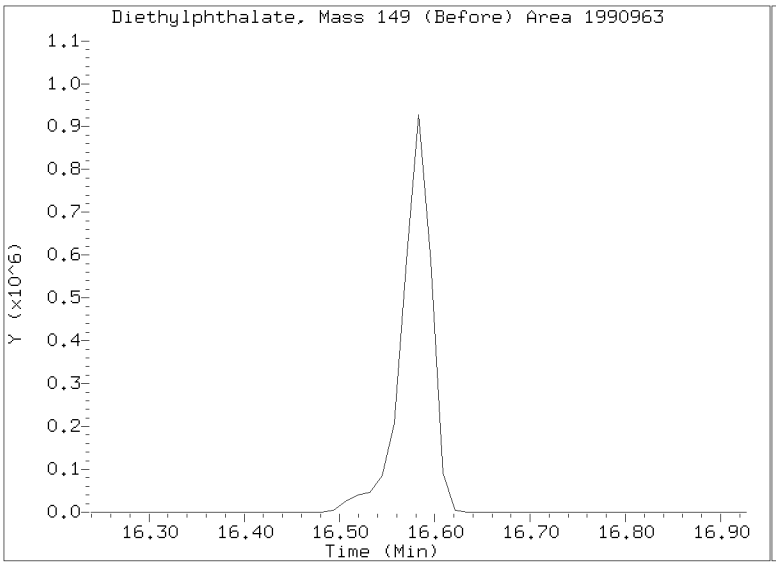


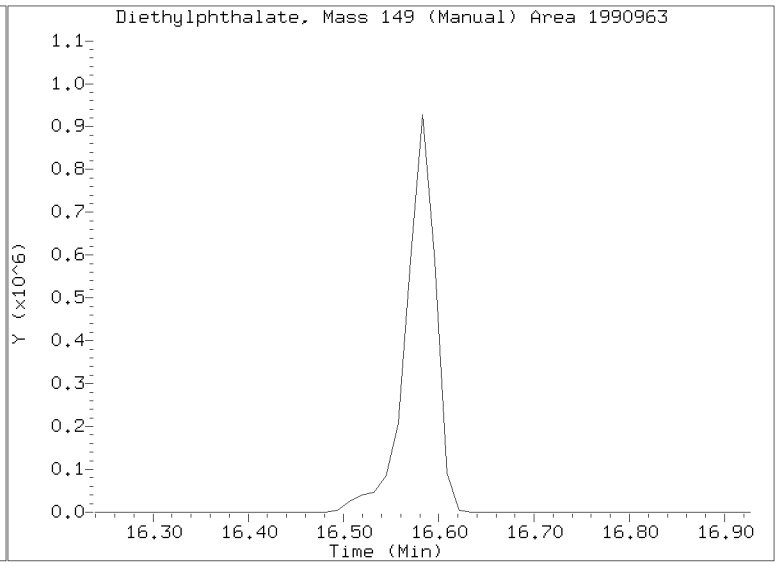


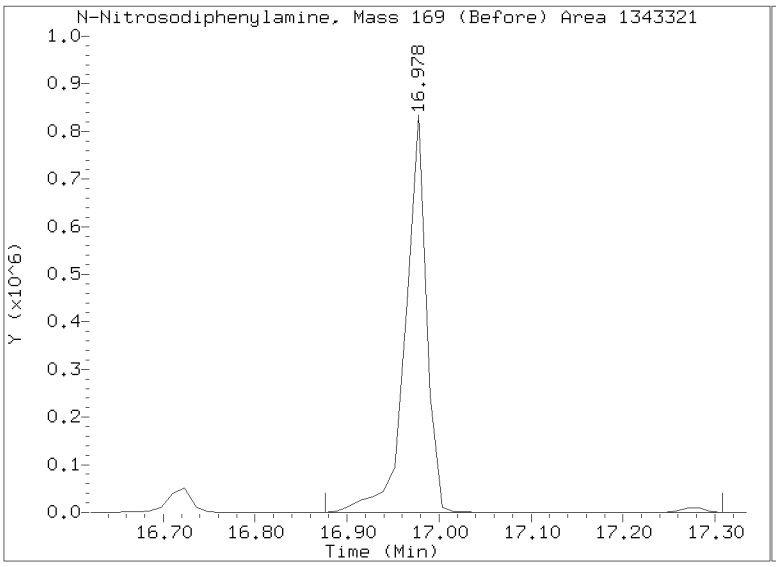


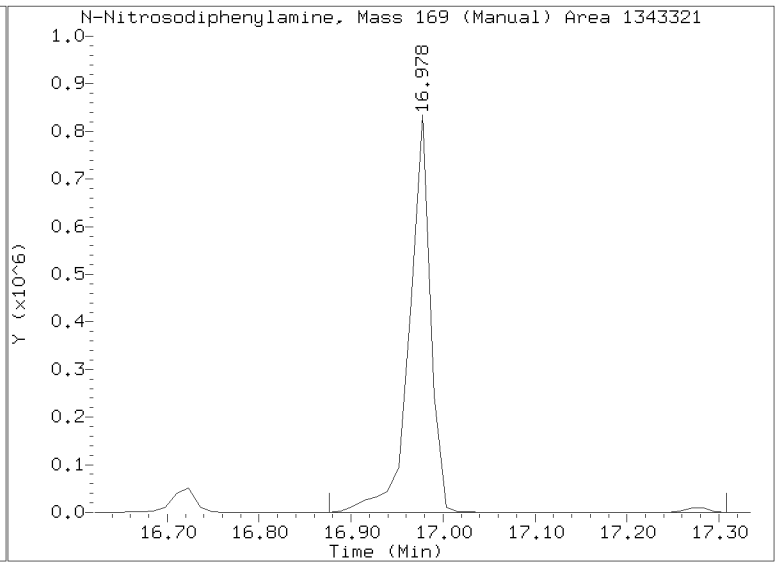
Quant Ion Manual Peak Adjustment Report

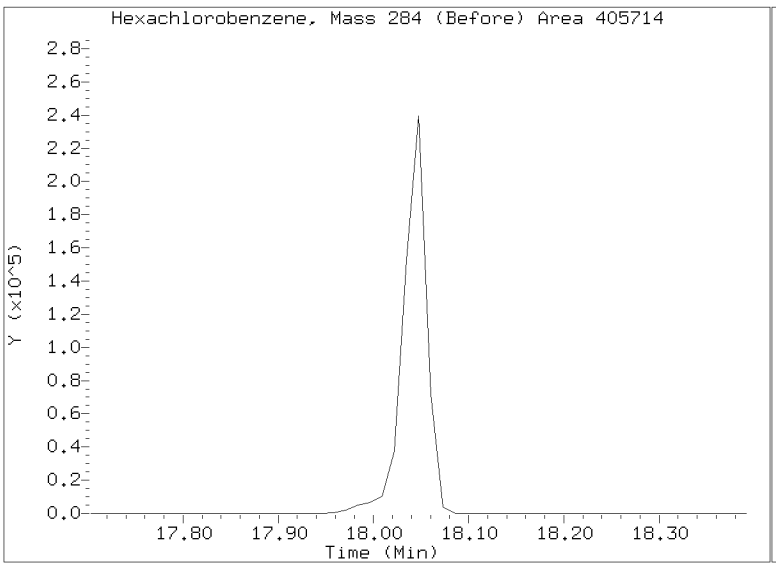
Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102303S.D
Injection Date: 10-AUG-2023 13:09
Lab ID: Client ID:
Report Date: 08/11/2023 07:04

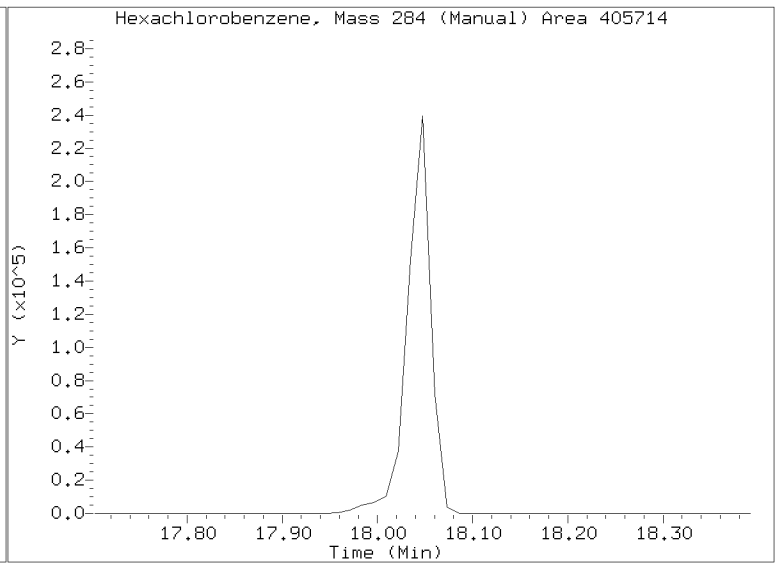






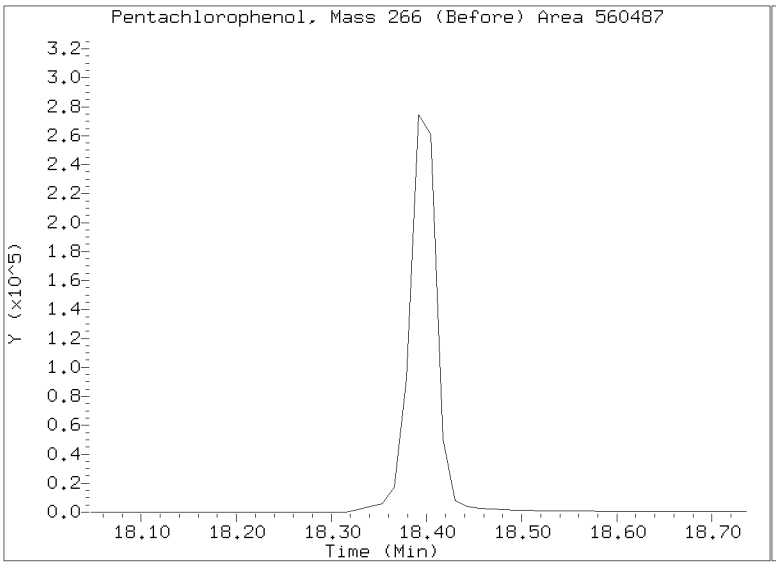


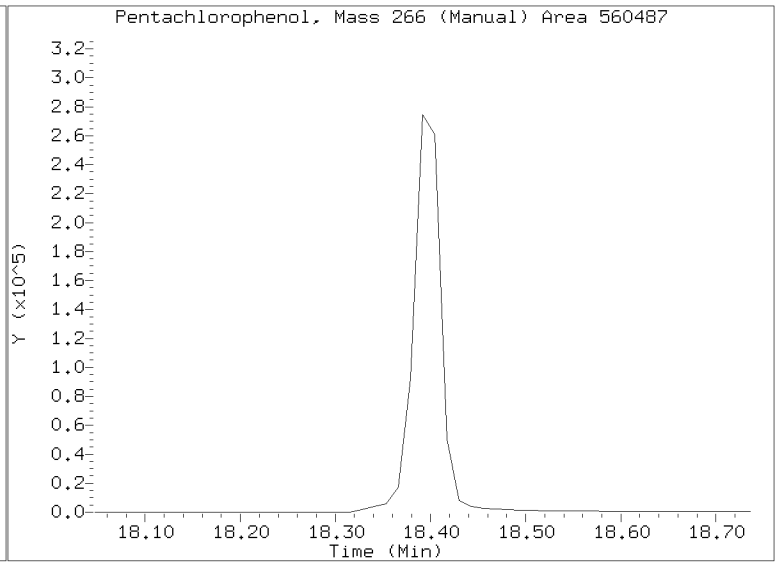


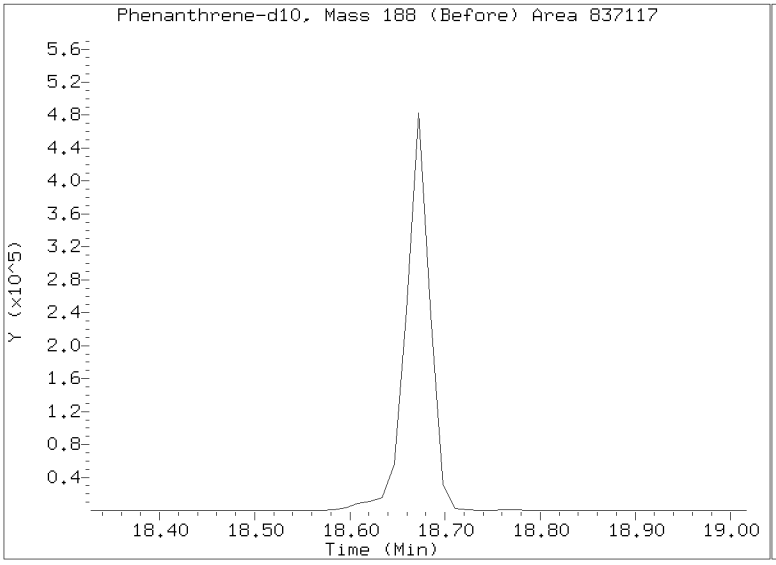


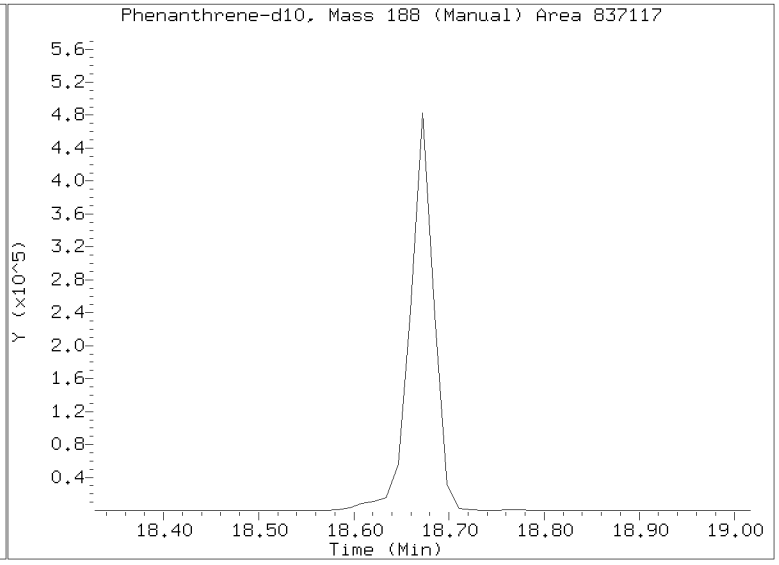
Quant Ion Manual Peak Adjustment Report

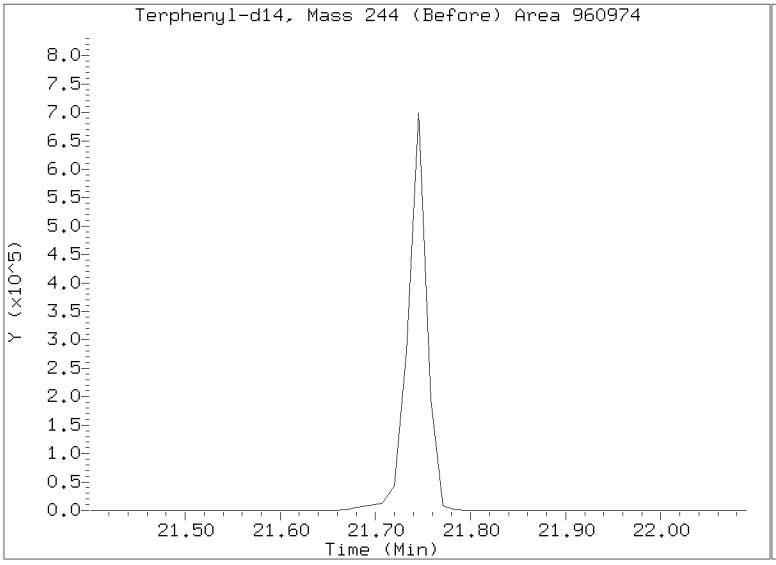
Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102303S.D
Injection Date: 10-AUG-2023 13:09
Lab ID: Client ID:
Report Date: 08/11/2023 07:04

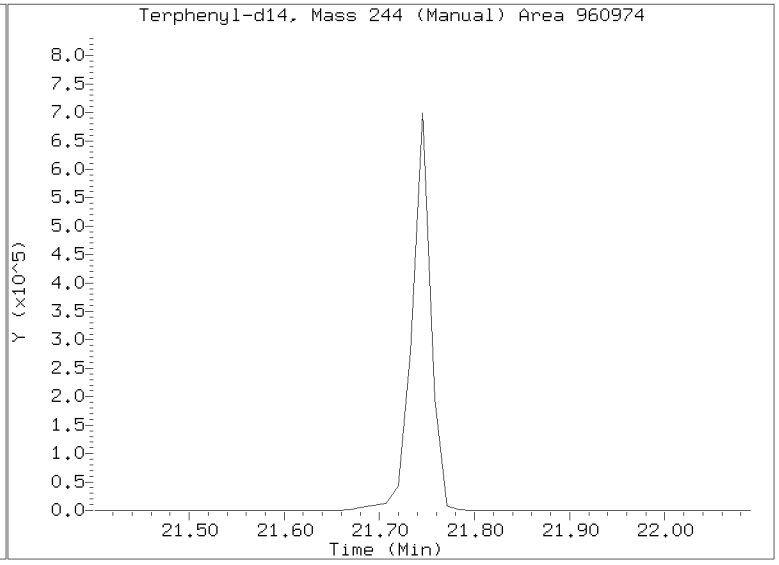






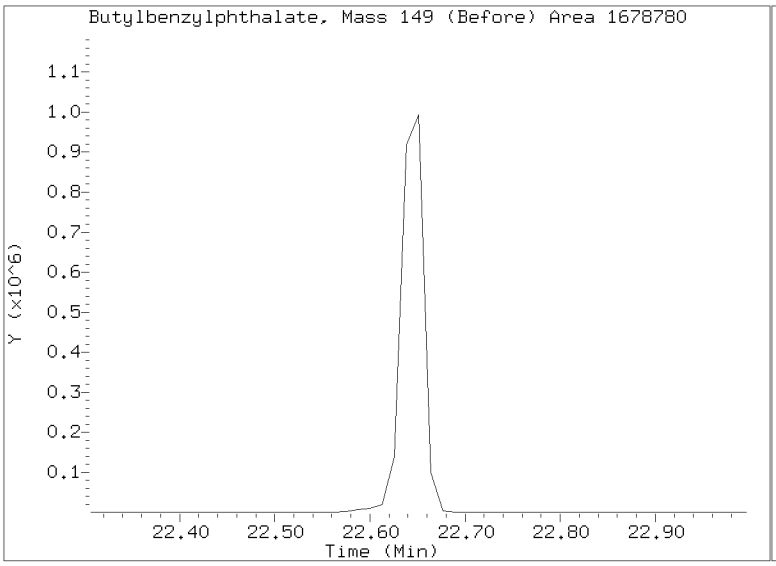


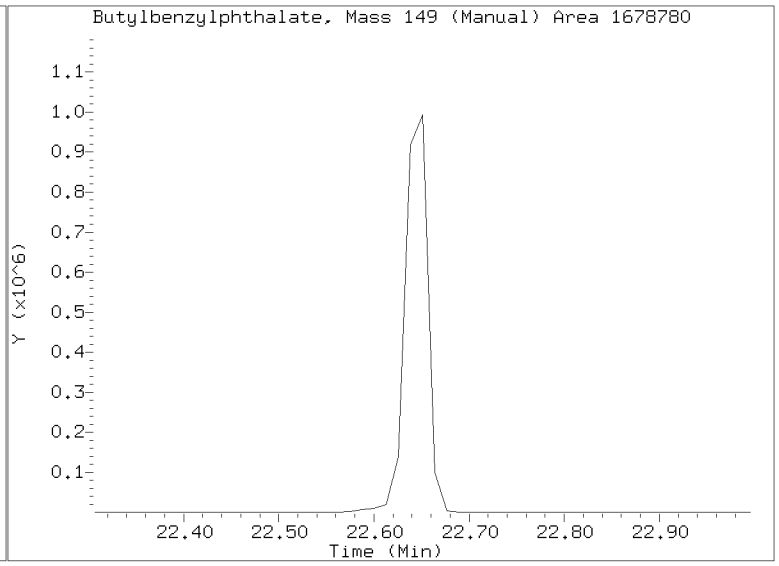


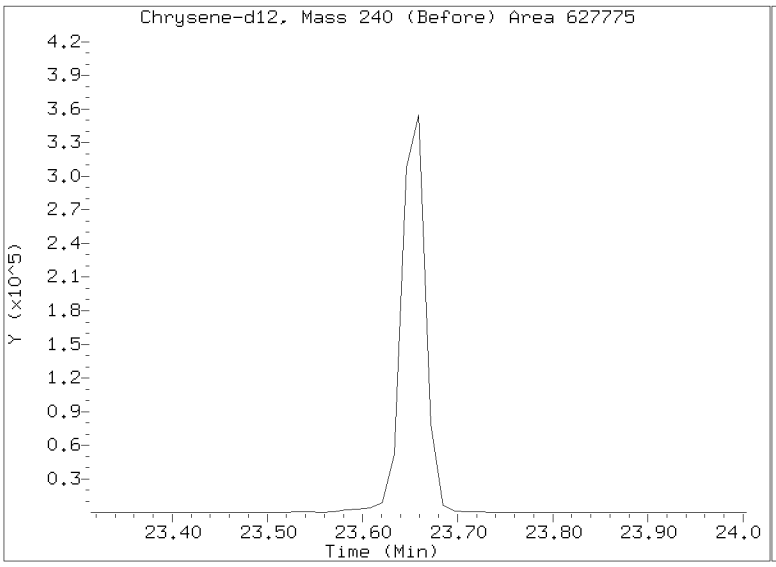


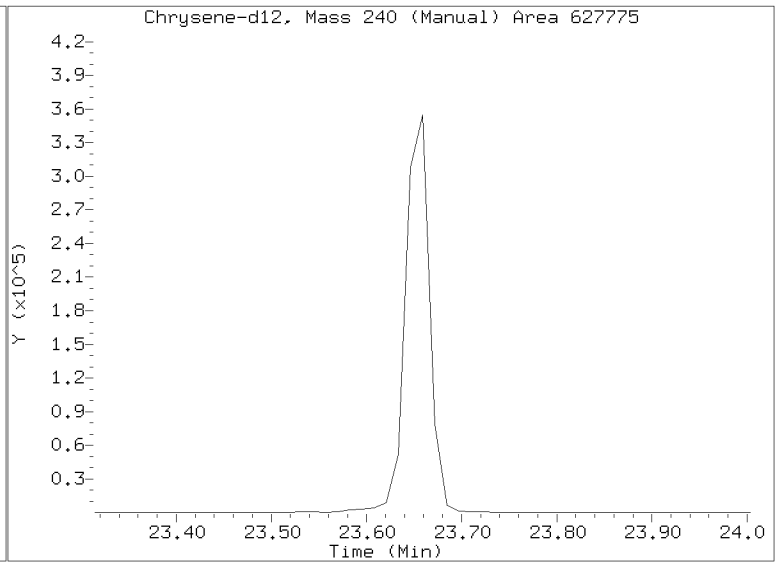
Quant Ion Manual Peak Adjustment Report

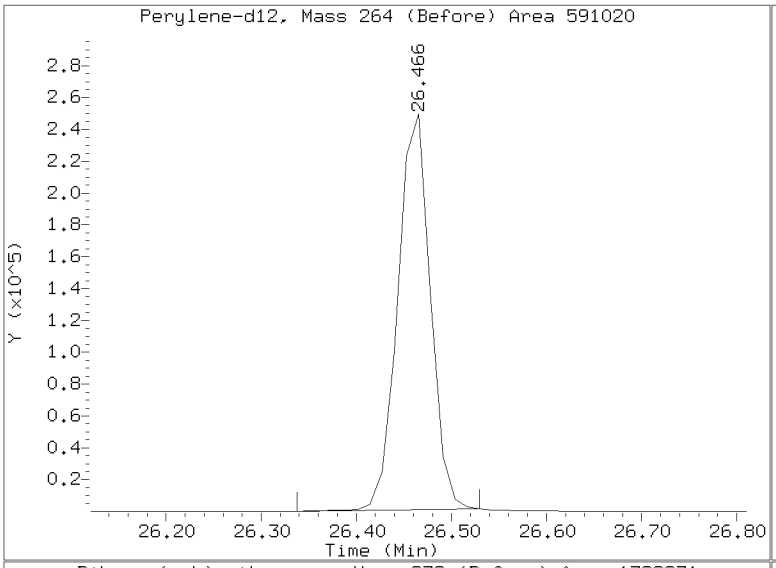
Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102303S.D
Injection Date: 10-AUG-2023 13:09
Lab ID: Client ID:
Report Date: 08/11/2023 07:04

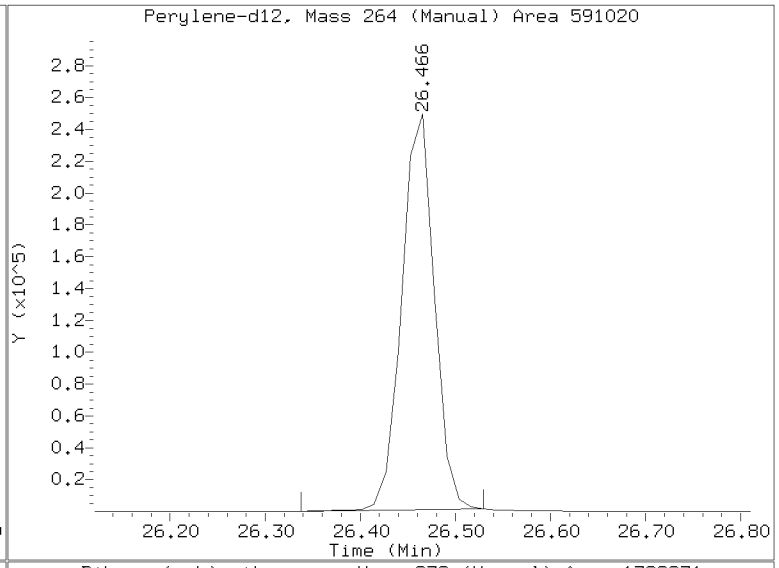


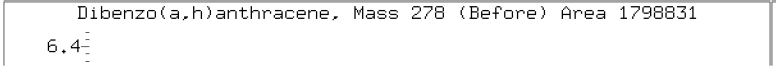


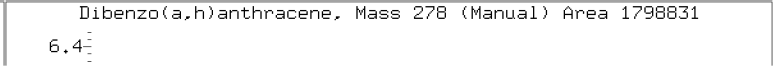












Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102304S.D

Date : 10-AUG-2023 13:47

Client ID:

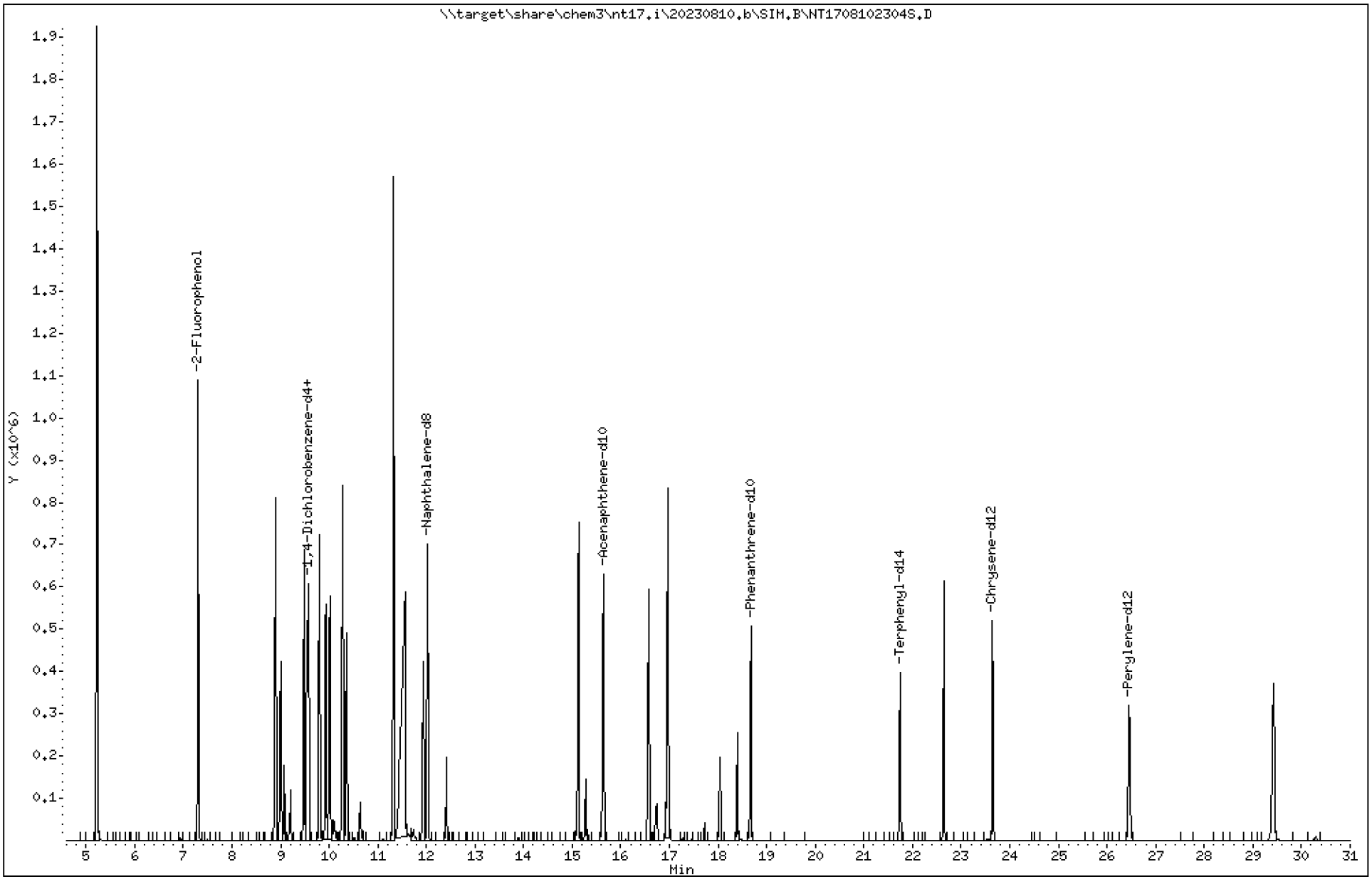
Sample Info: SEQ-CAL5

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102304S.D
Lab Smp Id: SEQ-CAL5
Inj Date : 10-AUG-2023 13:47
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-CAL5
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Meth Date : 11-Aug-2023 08:13 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	7.311	7.298	(0.766)	996023	7.50000	7.833
	3	Phenol	94	8.891	8.891	(0.932)	994667	5.00000	5.132
	7	1,3-Dichlorobenzene	146	9.477	9.477	(0.993)	636993	5.00000	4.858
*	8	1,4-Dichlorobenzene-d4	152	9.541	9.541	(1.000)	306231	4.00000	
	9	1,4-Dichlorobenzene	146	9.566	9.566	(1.003)	624538	5.00000	4.922
	11	Benzyl alcohol	79	9.796	9.796	(1.027)	750260	5.00000	5.592
	12	1,2-Dichlorobenzene	146	9.937	9.924	(1.042)	611148	5.00000	4.965
	13	2-Methylphenol	108	10.014	10.001	(1.050)	650956	5.00000	5.539
	15	4-Methylphenol	108	10.282	10.269	(1.078)	697394	5.00000	5.677
	16	N-Nitroso-di-n-propylamine	70	10.359	10.346	(1.086)	693787	5.00000	5.523
	22	2,4-Dimethylphenol	107	11.329	11.316	(0.942)	1326171	10.0000	10.76
	24	Benzoic acid	105	11.559	11.521	(0.961)	1865065	20.0000	20.84
	26	1,2,4-Trichlorobenzene	180	11.929	11.929	(0.992)	413973	5.00000	4.917
*	27	Naphthalene-d8	136	12.031	12.018	(1.000)	1228156	4.00000	
	30	Hexachlorobutadiene	225	12.413	12.413	(1.032)	200132	5.00000	5.076
	39	Dimethylphthalate	163	15.130	15.117	(0.967)	966654	5.00000	5.490
*	42	Acenaphthene-d10	162	15.640	15.627	(1.000)	541749	4.00000	
	50	Diethylphthalate	149	16.570	16.557	(1.059)	1041416	5.00000	5.688
	54	N-Nitrosodiphenylamine	169	16.965	16.965	(0.909)	657939	5.00000	5.246
	57	Hexachlorobenzene	284	18.047	18.034	(0.967)	207782	5.00000	5.057
	58	Pentachlorophenol	266	18.391	18.392	(0.985)	259110	10.0000	9.292
*	59	Phenanthrene-d10	188	18.672	18.672	(1.000)	872352	4.00000	
$	66	Terphenyl-d14	244	21.745	21.745	(0.920)	478133	5.00000	5.428
	67	Butylbenzylphthalate	149	22.638	22.639	(0.957)	820420	5.00000	4.857
*	69	Chrysene-d12	240	23.646	23.646	(1.000)	636591	4.00000	
*	77	Perylene-d12	264	26.452	26.452	(1.000)	626672	4.00000	
	79	Dibenzo(a,h)anthracene	278	29.416	29.404	(1.112)	905428	5.00000	4.892
	90	N-Nitrosodimethylamine	74	5.221	5.209	(0.547)	1294495	10.0000	10.01

Report Date: 15-Aug-2023 16:33

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708102304S.D
Lab Smp Id: SEQ-CAL5
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Misc Info:

Calibration Date: 10-AUG-2023
Calibration Time: 15:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	319389	159695	638778	306231	-4.12
27 Naphthalene-d8	1274686	637343	2549372	1228156	-3.65
42 Acenaphthene-d10	569885	284943	1139770	541749	-4.94
59 Phenanthrene-d10	915829	457915	1831658	872352	-4.75
69 Chrysene-d12	653460	326730	1306920	636591	-2.58
77 Perylene-d12	654887	327444	1309774	626672	-4.31

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.54	9.04	10.04	9.54	0.00
27 Naphthalene-d8	12.02	11.52	12.52	12.03	0.11
42 Acenaphthene-d10	15.64	15.14	16.14	15.64	0.00
59 Phenanthrene-d10	18.67	18.17	19.17	18.67	0.00
69 Chrysene-d12	23.65	23.15	24.15	23.65	0.00
77 Perylene-d12	26.45	25.95	26.95	26.45	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708102304S.D

Lab ID: SEQ-CAL5
nt17.i, 20230810.b\SIM.B\SIMABN2.m,   10-AUG-2023 13:47

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.B/NT1708102309S.D

On Column LOD for nt17.i, SIM.B\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102305S.D

Date : 10-AUG-2023 14:24

Client ID:

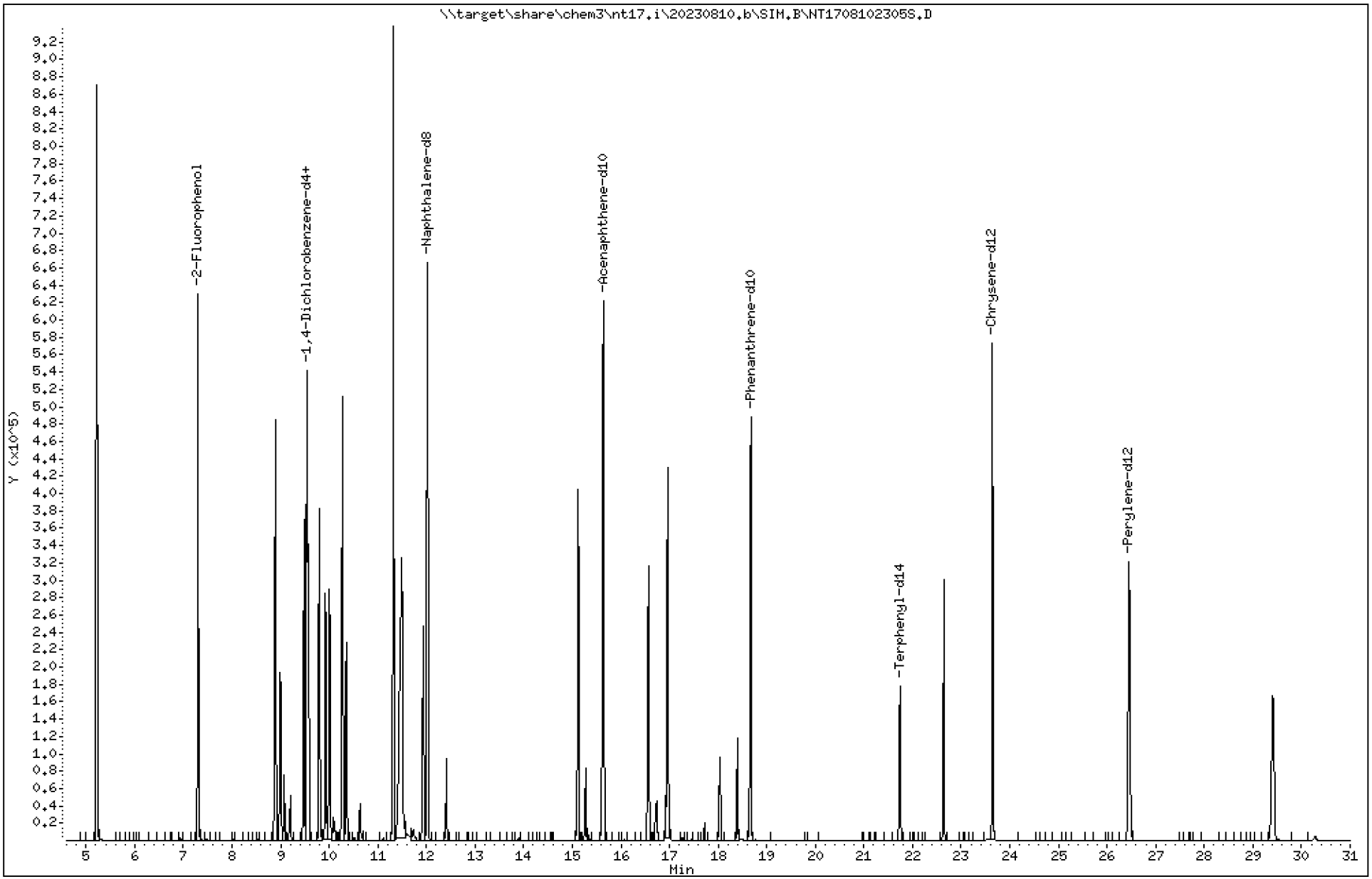
Sample Info: SEQ-CAL4

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102305S.D
Lab Smp Id: SEQ-CAL4
Inj Date : 10-AUG-2023 14:24
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-CAL4
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Meth Date : 11-Aug-2023 08:13 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	7.298	7.298	(0.765)	511630	3.75000	3.944
	3	Phenol	94	8.891	8.891	(0.932)	507440	2.50000	2.566
	7	1,3-Dichlorobenzene	146	9.477	9.477	(0.993)	323355	2.50000	2.417
*	8	1,4-Dichlorobenzene-d4	152	9.541	9.541	(1.000)	312430	4.00000	
	9	1,4-Dichlorobenzene	146	9.566	9.566	(1.003)	314173	2.50000	2.427
	11	Benzyl alcohol	79	9.796	9.796	(1.027)	358810	2.50000	2.621
	12	1,2-Dichlorobenzene	146	9.924	9.924	(1.040)	307425	2.50000	2.448
	13	2-Methylphenol	108	10.001	10.001	(1.048)	320254	2.50000	2.671
	15	4-Methylphenol	108	10.269	10.269	(1.076)	340806	2.50000	2.719
	16	N-Nitroso-di-n-propylamine	70	10.358	10.346	(1.086)	342723	2.50000	2.674
	22	2,4-Dimethylphenol	107	11.316	11.316	(0.941)	675497	5.00000	5.368
	24	Benzoic acid	105	11.495	11.521	(0.955)	785060	10.0000	9.157
	26	1,2,4-Trichlorobenzene	180	11.929	11.929	(0.992)	208980	2.50000	2.430
*	27	Naphthalene-d8	136	12.031	12.018	(1.000)	1254264	4.00000	
	30	Hexachlorobutadiene	225	12.413	12.413	(1.032)	99738	2.50000	2.477
	39	Dimethylphthalate	163	15.117	15.117	(0.967)	474003	2.50000	2.621
*	42	Acenaphthene-d10	162	15.640	15.627	(1.000)	556439	4.00000	
	50	Diethylphthalate	149	16.570	16.557	(1.059)	515116	2.50000	2.739
	54	N-Nitrosodiphenylamine	169	16.965	16.965	(0.909)	339826	2.50000	2.633
	57	Hexachlorobenzene	284	18.034	18.034	(0.966)	102670	2.50000	2.428
	58	Pentachlorophenol	266	18.391	18.392	(0.985)	115250	5.00000	4.016
*	59	Phenanthrene-d10	188	18.672	18.672	(1.000)	897852	4.00000	
$	66	Terphenyl-d14	244	21.745	21.745	(0.920)	236133	2.50000	2.601
	67	Butylbenzylphthalate	149	22.638	22.639	(0.957)	376310	2.50000	2.162
*	69	Chrysene-d12	240	23.646	23.646	(1.000)	655938	4.00000	
*	77	Perylene-d12	264	26.452	26.452	(1.000)	640298	4.00000	
	79	Dibenzo(a,h)anthracene	278	29.403	29.404	(1.112)	438775	2.50000	2.320
	90	N-Nitrosodimethylamine	74	5.221	5.209	(0.547)	670436	5.00000	5.079

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708102305S.D
Lab Smp Id: SEQ-CAL4
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Misc Info:

Calibration Date: 10-AUG-2023
Calibration Time: 15:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	319389	159695	638778	312430	-2.18
27 Naphthalene-d8	1274686	637343	2549372	1254264	-1.60
42 Acenaphthene-d10	569885	284943	1139770	556439	-2.36
59 Phenanthrene-d10	915829	457915	1831658	897852	-1.96
69 Chrysene-d12	653460	326730	1306920	655938	0.38
77 Perylene-d12	654887	327444	1309774	640298	-2.23

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.54	9.04	10.04	9.54	0.00
27 Naphthalene-d8	12.02	11.52	12.52	12.03	0.11
42 Acenaphthene-d10	15.64	15.14	16.14	15.64	-0.00
59 Phenanthrene-d10	18.67	18.17	19.17	18.67	-0.00
69 Chrysene-d12	23.65	23.15	24.15	23.65	-0.00
77 Perylene-d12	26.45	25.95	26.95	26.45	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708102305S.D

Lab ID: SEQ-CAL4
nt17.i, 20230810.b\SIM.B\SIMABN2.m,   10-AUG-2023 14:24

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.B/NT1708102309S.D

On Column LOD for nt17.i, SIM.B\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023065.D

Date : 10-AUG-2023 15:01

Client ID:

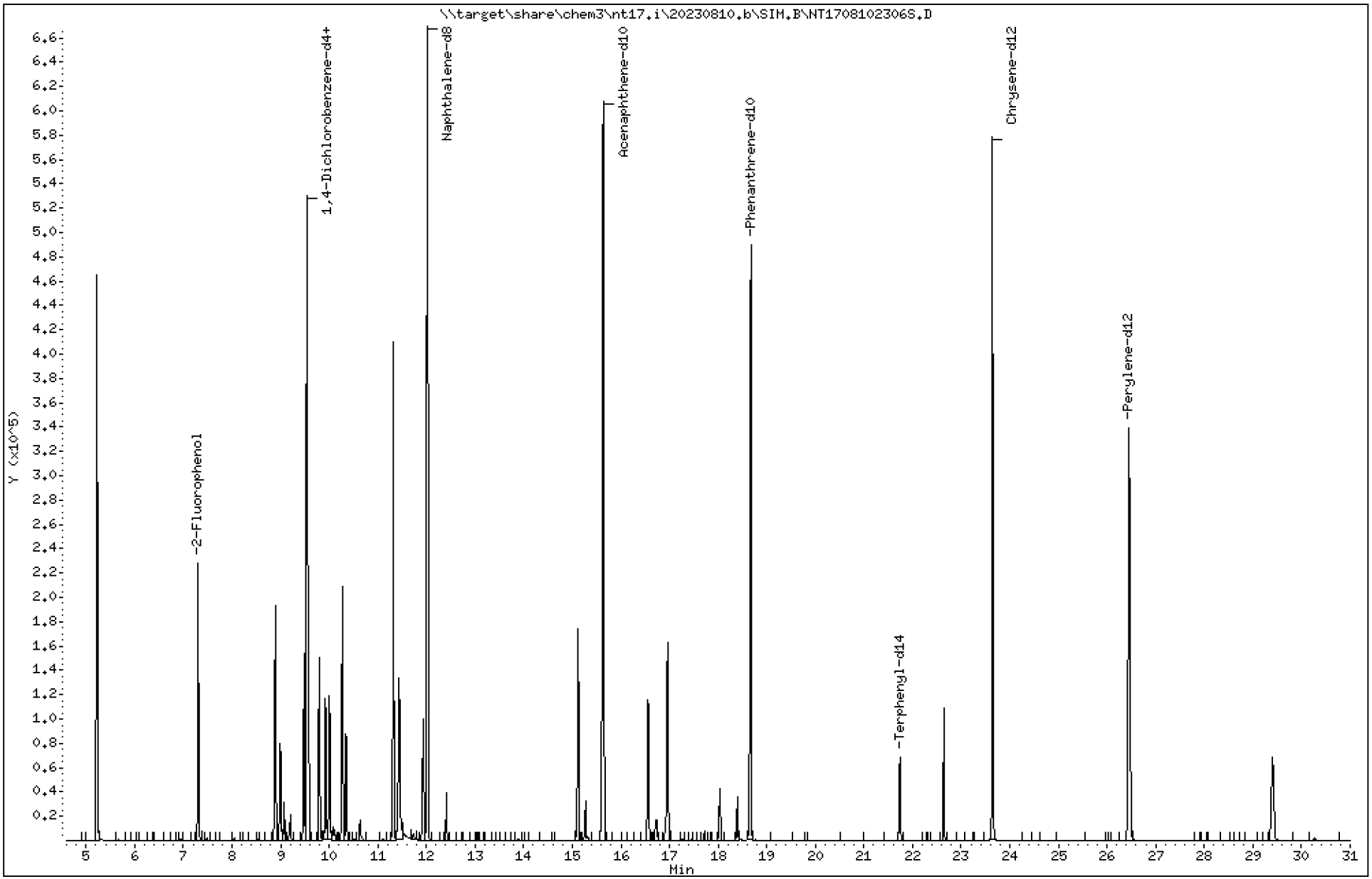
Sample Info: SEQ-CAL3

Instrument: nt17.i

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102306S.D
Lab Smp Id: SEQ-CAL3
Inj Date : 10-AUG-2023 15:01
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-CAL3
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Meth Date : 11-Aug-2023 08:13 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	7.311	7.298	(0.766)	213237	1.50000	1.608
	3	Phenol	94	8.891	8.891	(0.932)	209914	1.00000	1.038
	7	1,3-Dichlorobenzene	146	9.477	9.477	(0.993)	135538	1.00000	0.9912
*	8	1,4-Dichlorobenzene-d4	152	9.541	9.541	(1.000)	319389	4.00000	
	9	1,4-Dichlorobenzene	146	9.566	9.566	(1.003)	130420	1.00000	0.9855
	11	Benzyl alcohol	79	9.796	9.796	(1.027)	140348	1.00000	1.003
	12	1,2-Dichlorobenzene	146	9.924	9.924	(1.040)	128190	1.00000	0.9986
	13	2-Methylphenol	108	10.001	10.001	(1.048)	128876	1.00000	1.051
	15	4-Methylphenol	108	10.269	10.269	(1.076)	133863	1.00000	1.045
	16	N-Nitroso-di-n-propylamine	70	10.346	10.346	(1.084)	139780	1.00000	1.067
	22	2,4-Dimethylphenol	107	11.316	11.316	(0.942)	277485	2.00000	2.170
	24	Benzoic acid	105	11.444	11.521	(0.952)	238483	4.00000	2.820
	26	1,2,4-Trichlorobenzene	180	11.929	11.929	(0.993)	86448	1.00000	0.9893
*	27	Naphthalene-d8	136	12.018	12.018	(1.000)	1274686	4.00000	
	30	Hexachlorobutadiene	225	12.413	12.413	(1.033)	40587	1.00000	0.9918
	39	Dimethylphthalate	163	15.117	15.117	(0.967)	195025	1.00000	1.053
*	42	Acenaphthene-d10	162	15.640	15.627	(1.000)	569885	4.00000	
	50	Diethylphthalate	149	16.557	16.557	(1.059)	209459	1.00000	1.088
	54	N-Nitrosodiphenylamine	169	16.965	16.965	(0.909)	143681	1.00000	1.091
	57	Hexachlorobenzene	284	18.034	18.034	(0.966)	43266	1.00000	1.003
	58	Pentachlorophenol	266	18.391	18.392	(0.985)	38046	2.00000	1.300
*	59	Phenanthrene-d10	188	18.672	18.672	(1.000)	915829	4.00000	
$	66	Terphenyl-d14	244	21.745	21.745	(0.920)	96099	1.00000	1.063
	67	Butylbenzylphthalate	149	22.638	22.639	(0.957)	135239	1.00000	0.7799
*	69	Chrysene-d12	240	23.646	23.646	(1.000)	653460	4.00000	
*	77	Perylene-d12	264	26.452	26.452	(1.000)	654887	4.00000	
	79	Dibenzo(a,h)anthracene	278	29.403	29.404	(1.112)	175811	1.00000	0.9089
	90	N-Nitrosodimethylamine	74	5.221	5.209	(0.547)	283616	2.00000	2.102

Report Date: 15-Aug-2023 16:33

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708102306S.D
Lab Smp Id: SEQ-CAL3
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Misc Info:

Calibration Date: 10-AUG-2023
Calibration Time: 15:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	319389	159695	638778	319389	0.00
27 Naphthalene-d8	1274686	637343	2549372	1274686	0.00
42 Acenaphthene-d10	569885	284943	1139770	569885	0.00
59 Phenanthrene-d10	915829	457915	1831658	915829	0.00
69 Chrysene-d12	653460	326730	1306920	653460	0.00
77 Perylene-d12	654887	327444	1309774	654887	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.54	9.04	10.04	9.54	0.00
27 Naphthalene-d8	12.02	11.52	12.52	12.02	0.00
42 Acenaphthene-d10	15.64	15.14	16.14	15.64	0.00
59 Phenanthrene-d10	18.67	18.17	19.17	18.67	0.00
69 Chrysene-d12	23.65	23.15	24.15	23.65	0.00
77 Perylene-d12	26.45	25.95	26.95	26.45	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708102306S.D

Lab ID: SEQ-CAL3
nt17.i, 20230810.b\SIM.B\SIMABN2.m,   10-AUG-2023 15:01

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.959	-0.0064	Benzoic acid

RRT check based on Ccal File: SIM.B/NT1708102309S.D

On Column LOD for nt17.i, SIM.B\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102307S.D

Date : 10-AUG-2023 15:38

Client ID:

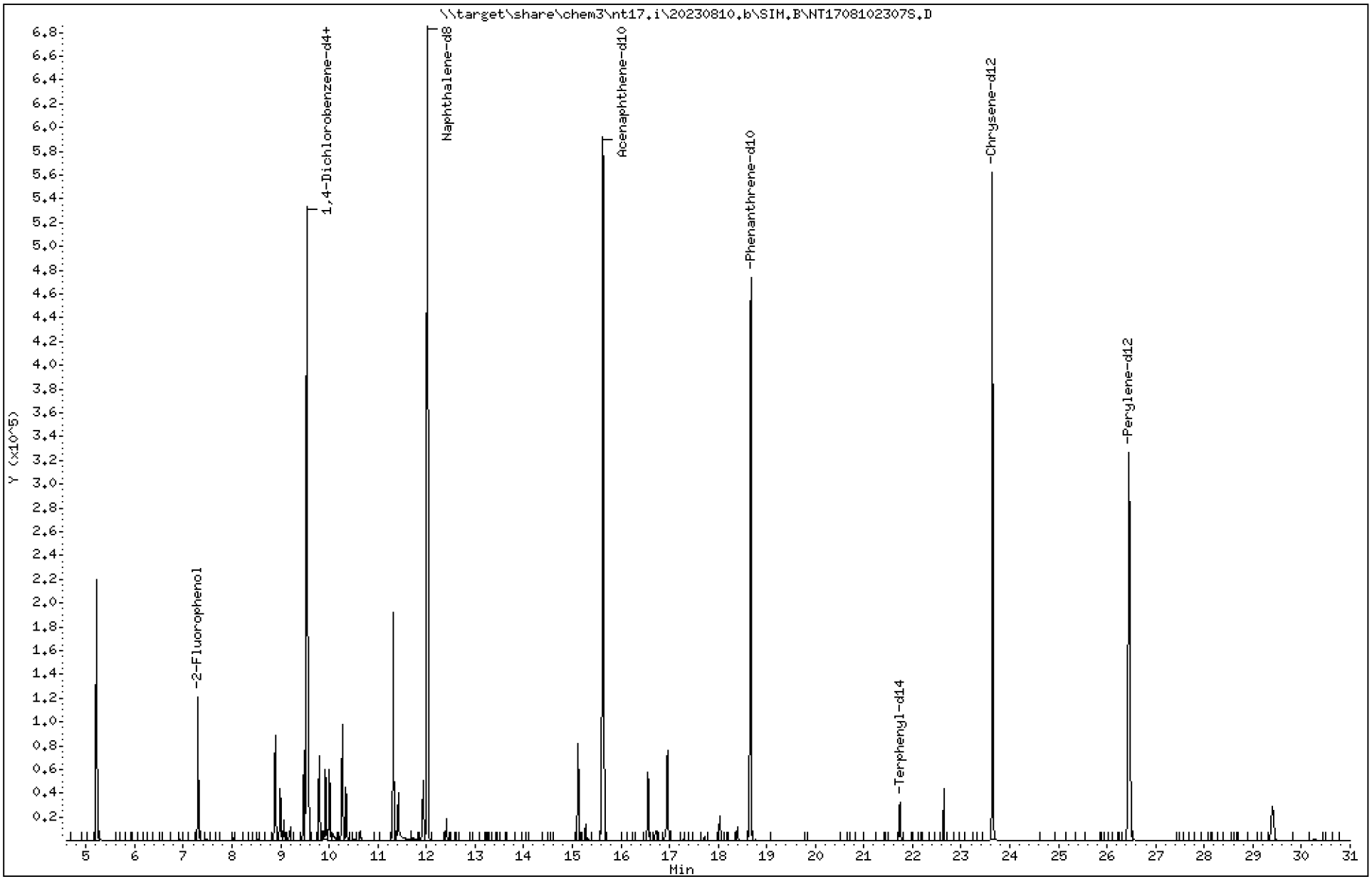
Sample Info: SEQ-CAL2

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102307S.D
Lab Smp Id: SEQ-CAL2
Inj Date : 10-AUG-2023 15:38
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-CAL2
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Meth Date : 11-Aug-2023 08:13 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

								AMOUNTS	
		QUANT SIG						CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/mL)
$	1 2-Fluorophenol	112	7.298	7.298	(0.765)	100201		0.75000	0.7502(M)
	3 Phenol	94	8.891	8.891	(0.932)	100883		0.50000	0.4955
	7 1,3-Dichlorobenzene	146	9.477	9.477	(0.993)	66951		0.50000	0.4861
*	8 1,4-Dichlorobenzene-d4	152	9.541	9.541	(1.000)	321688		4.00000	
	9 1,4-Dichlorobenzene	146	9.566	9.566	(1.003)	64245		0.50000	0.4820
	11 Benzyl alcohol	79	9.796	9.796	(1.027)	65633		0.50000	0.4657
	12 1,2-Dichlorobenzene	146	9.924	9.924	(1.040)	62833		0.50000	0.4860
	13 2-Methylphenol	108	10.001	10.001	(1.048)	60109		0.50000	0.4869
	15 4-Methylphenol	108	10.269	10.269	(1.076)	61889		0.50000	0.4796
	16 N-Nitroso-di-n-propylamine	70	10.346	10.346	(1.084)	65249		0.50000	0.4945
	22 2,4-Dimethylphenol	107	11.316	11.316	(0.942)	129063		1.00000	1.015
	24 Benzoic acid	105	11.419	11.521	(0.950)	59987		2.00000	0.7200(H)
	26 1,2,4-Trichlorobenzene	180	11.929	11.929	(0.993)	42243		0.50000	0.4861
*	27 Naphthalene-d8	136	12.018	12.018	(1.000)	1267731		4.00000	
	30 Hexachlorobutadiene	225	12.413	12.413	(1.033)	19459		0.50000	0.4781
	39 Dimethylphthalate	163	15.117	15.117	(0.967)	90720		0.50000	0.5011
*	42 Acenaphthene-d10	162	15.627	15.627	(1.000)	557007		4.00000	
	50 Diethylphthalate	149	16.557	16.557	(1.060)	96291		0.50000	0.5115
	54 N-Nitrosodiphenylamine	169	16.965	16.965	(0.909)	68080		0.50000	0.5241
	57 Hexachlorobenzene	284	18.034	18.034	(0.966)	20977		0.50000	0.4929
	58 Pentachlorophenol	266	18.391	18.392	(0.985)	13784		1.00000	0.4773
*	59 Phenanthrene-d10	188	18.672	18.672	(1.000)	903496		4.00000	
$	66 Terphenyl-d14	244	21.745	21.745	(0.920)	45419		0.50000	0.5026
	67 Butylbenzylphthalate	149	22.638	22.639	(0.957)	52682		0.50000	0.3041
*	69 Chrysene-d12	240	23.646	23.646	(1.000)	652968		4.00000	
*	77 Perylene-d12	264	26.452	26.452	(1.000)	651319		4.00000	
	79 Dibenzo(a,h)anthracene	278	29.403	29.404	(1.112)	78464		0.50000	0.4079
	90 N-Nitrosodimethylamine	74	5.209	5.209	(0.546)	136328		1.00000	1.003(M)

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708102307S.D
Lab Smp Id: SEQ-CAL2
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Misc Info:

Calibration Date: 10-AUG-2023
Calibration Time: 15:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	319389	159695	638778	321688	0.72
27 Naphthalene-d8	1274686	637343	2549372	1267731	-0.55
42 Acenaphthene-d10	569885	284943	1139770	557007	-2.26
59 Phenanthrene-d10	915829	457915	1831658	903496	-1.35
69 Chrysene-d12	653460	326730	1306920	652968	-0.08
77 Perylene-d12	654887	327444	1309774	651319	-0.54

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.54	9.04	10.04	9.54	0.00
27 Naphthalene-d8	12.02	11.52	12.52	12.02	-0.00
42 Acenaphthene-d10	15.64	15.14	16.14	15.63	-0.08
59 Phenanthrene-d10	18.67	18.17	19.17	18.67	-0.00
69 Chrysene-d12	23.65	23.15	24.15	23.65	-0.00
77 Perylene-d12	26.45	25.95	26.95	26.45	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708102307S.D

Lab ID: SEQ-CAL2
nt17.i, 20230810.b\SIM.B\SIMABN2.m,   10-AUG-2023 15:38

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.950	0.959	-0.0085	Benzoic acid

RRT check based on Ccal File: SIM.B/NT1708102309S.D

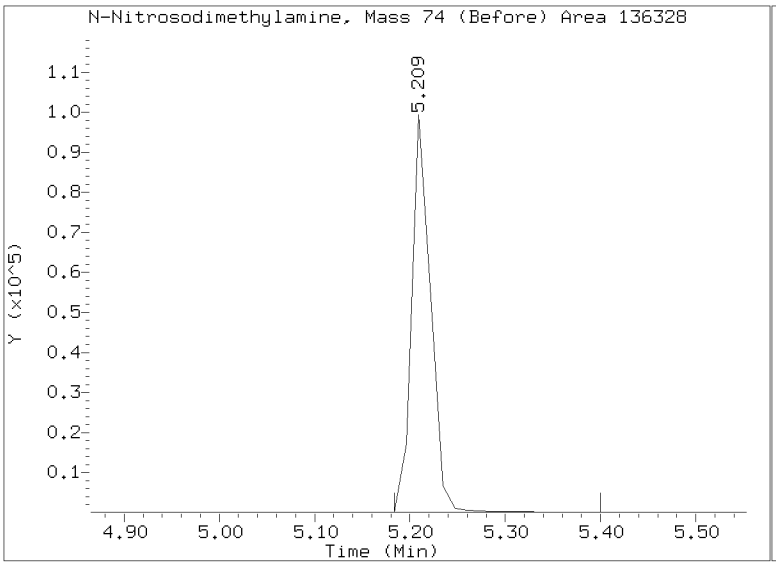
On Column LOD for nt17.i, SIM.B\SIMABN2.m, PSDDA.sub = 0.0000

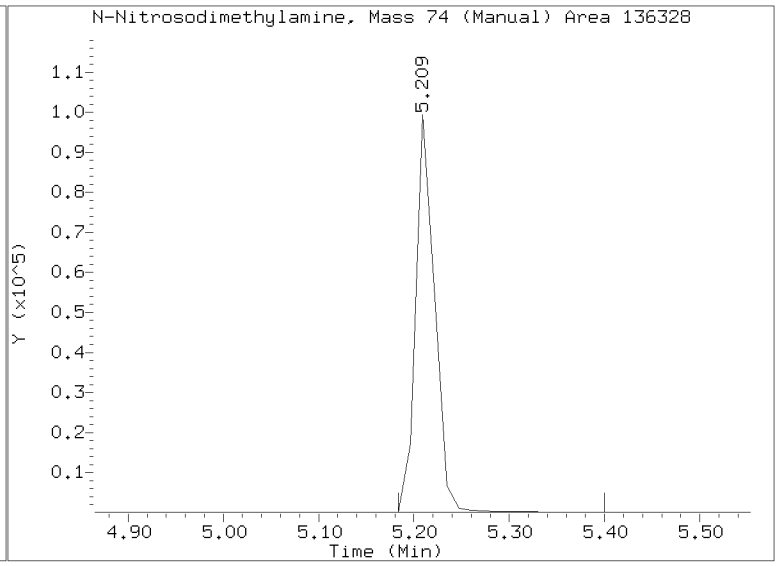
Exception: 1,2,4-Trichlorobenzene 0.0010

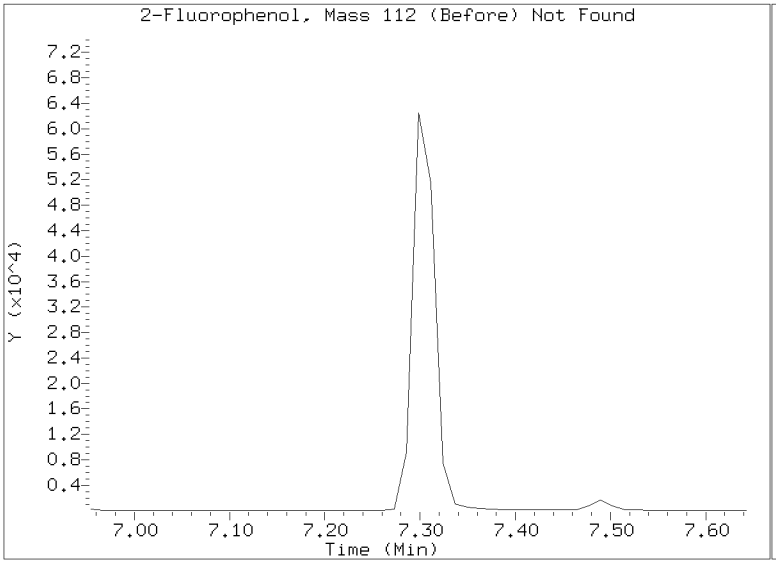
* Only compounds listed in the work order have been verified by the analyst *

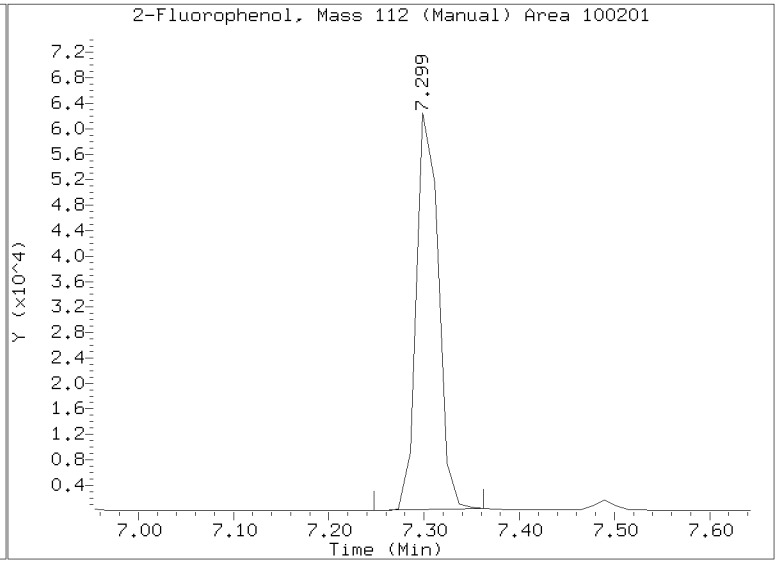
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102307S.D
Injection Date: 10-AUG-2023 15:38
Lab ID:SEQ-CAL2 Client ID:
Report Date: 08/15/2023 16:33









Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102308S.D

Date : 10-AUG-2023 16:16

Client ID:

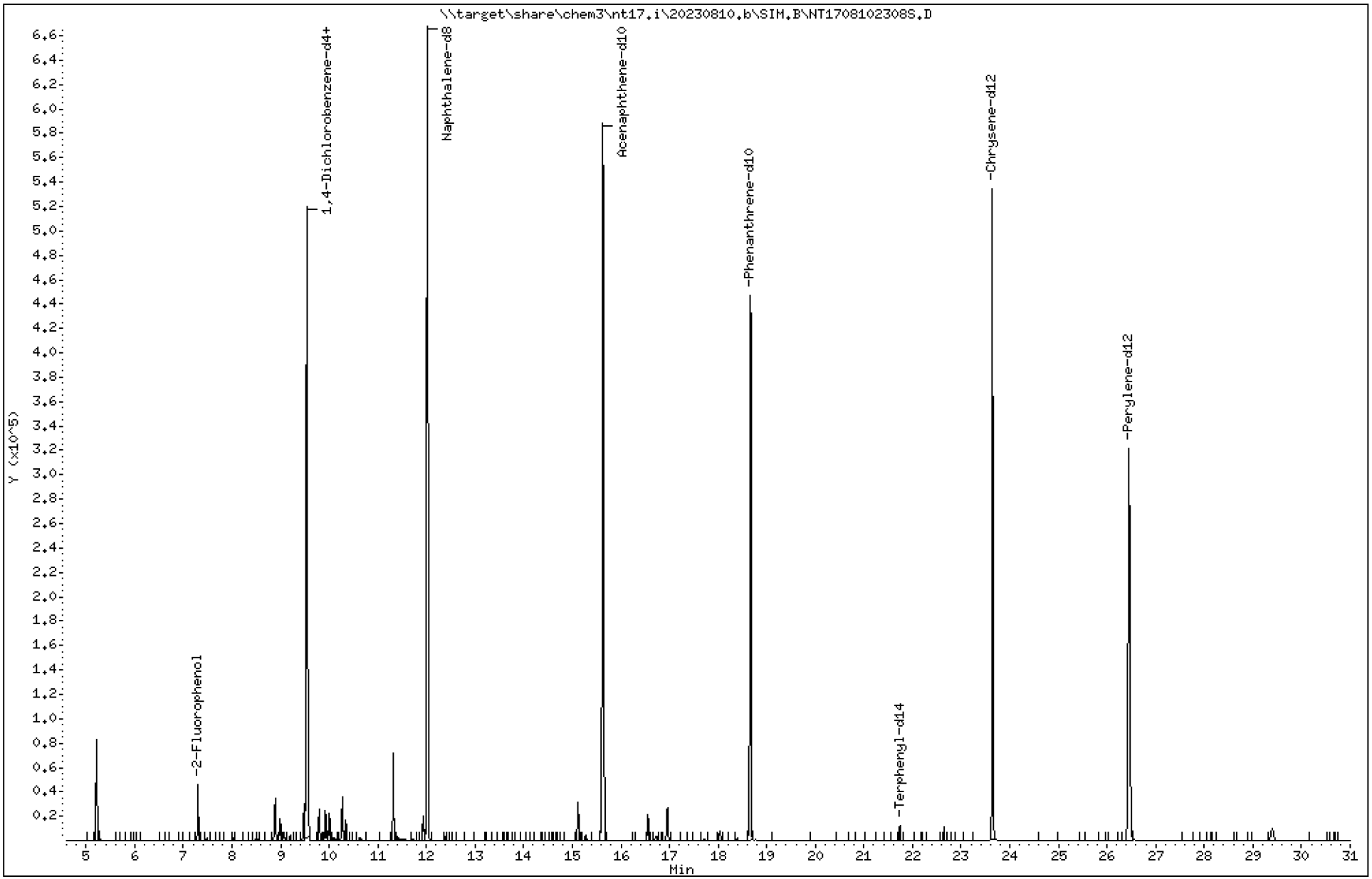
Sample Info: SEQ-CAL1

Instrument: nt17.i

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102308S.D
Lab Smp Id: SEQ-CAL1
Inj Date : 10-AUG-2023 16:16
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-CAL1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Meth Date : 11-Aug-2023 08:13 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

								AMOUNTS	
		QUANT SIG						CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/mL)
$	1 2-Fluorophenol	112	7.298	7.298	(0.765)	38724		0.30000	0.2931(M)
	3 Phenol	94	8.890	8.891	(0.932)	40258		0.20000	0.1999
	7 1,3-Dichlorobenzene	146	9.477	9.477	(0.993)	27666		0.20000	0.2030
*	8 1,4-Dichlorobenzene-d4	152	9.541	9.541	(1.000)	318238		4.00000	
	9 1,4-Dichlorobenzene	146	9.566	9.566	(1.003)	26713		0.20000	0.2026
	11 Benzyl alcohol	79	9.796	9.796	(1.027)	24896		0.20000	0.1786
	12 1,2-Dichlorobenzene	146	9.924	9.924	(1.040)	25726		0.20000	0.2011
	13 2-Methylphenol	108	10.001	10.001	(1.048)	22969		0.20000	0.1881
	15 4-Methylphenol	108	10.269	10.269	(1.076)	23242		0.20000	0.1821
	16 N-Nitroso-di-n-propylamine	70	10.346	10.346	(1.084)	24192		0.20000	0.1853
	22 2,4-Dimethylphenol	107	11.316	11.316	(0.942)	47911		0.40000	0.3845
	24 Benzoic acid	105	11.406	11.521	(0.949)	5997		0.80000	0.07368(H)
	26 1,2,4-Trichlorobenzene	180	11.929	11.929	(0.993)	17170		0.20000	0.2016
*	27 Naphthalene-d8	136	12.018	12.018	(1.000)	1242051		4.00000	
	30 Hexachlorobutadiene	225	12.413	12.413	(1.033)	7827		0.20000	0.1963
	39 Dimethylphthalate	163	15.117	15.117	(0.967)	33726		0.20000	0.1925
*	42 Acenaphthene-d10	162	15.627	15.627	(1.000)	539106		4.00000	
	50 Diethylphthalate	149	16.557	16.557	(1.060)	34115		0.20000	0.1872
	54 N-Nitrosodiphenylamine	169	16.965	16.965	(0.909)	24789		0.20000	0.2000
	57 Hexachlorobenzene	284	18.034	18.034	(0.967)	8156		0.20000	0.2008
	58 Pentachlorophenol	266	18.391	18.392	(0.986)	3438		0.40000	0.1247
*	59 Phenanthrene-d10	188	18.659	18.672	(1.000)	862235		4.00000	
$	66 Terphenyl-d14	244	21.745	21.745	(0.920)	16666		0.20000	0.1931
	67 Butylbenzylphthalate	149	22.638	22.639	(0.957)	14439		0.20000	0.08725
*	69 Chrysene-d12	240	23.646	23.646	(1.000)	623693		4.00000	
*	77 Perylene-d12	264	26.452	26.452	(1.000)	627138		4.00000	
	79 Dibenzo(a,h)anthracene	278	29.403	29.404	(1.112)	28334		0.20000	0.1530
	90 N-Nitrosodimethylamine	74	5.209	5.209	(0.546)	54544		0.40000	0.4057(M)

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708102308S.D
Lab Smp Id: SEQ-CAL1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Misc Info:

Calibration Date: 10-AUG-2023
Calibration Time: 15:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	319389	159695	638778	318238	-0.36
27 Naphthalene-d8	1274686	637343	2549372	1242051	-2.56
42 Acenaphthene-d10	569885	284943	1139770	539106	-5.40
59 Phenanthrene-d10	915829	457915	1831658	862235	-5.85
69 Chrysene-d12	653460	326730	1306920	623693	-4.56
77 Perylene-d12	654887	327444	1309774	627138	-4.24

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.54	9.04	10.04	9.54	-0.00
27 Naphthalene-d8	12.02	11.52	12.52	12.02	-0.00
42 Acenaphthene-d10	15.64	15.14	16.14	15.63	-0.08
59 Phenanthrene-d10	18.67	18.17	19.17	18.66	-0.07
69 Chrysene-d12	23.65	23.15	24.15	23.65	-0.00
77 Perylene-d12	26.45	25.95	26.95	26.45	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708102308S.D

Lab ID: SEQ-CAL1
nt17.i, 20230810.b\SIM.B\SIMABN2.m,   10-AUG-2023 16:16

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.949	0.959	-0.0096	Benzoic acid

RRT check based on Ccal File: SIM.B/NT1708102309S.D

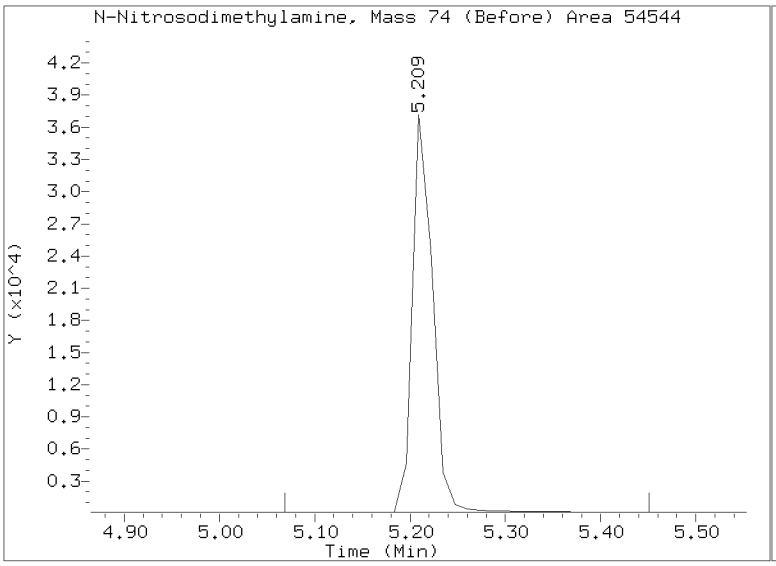
On Column LOD for nt17.i, SIM.B\SIMABN2.m, PSDDA.sub = 0.0000

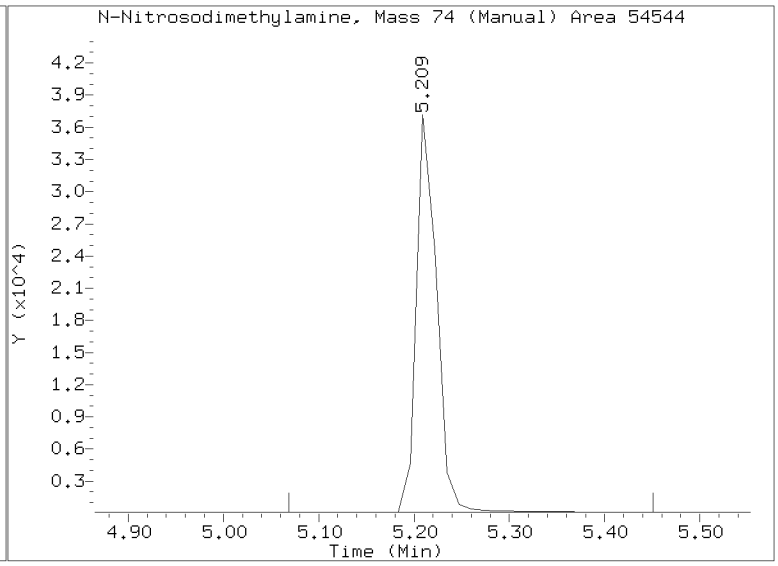
Exception: 1,2,4-Trichlorobenzene 0.0010

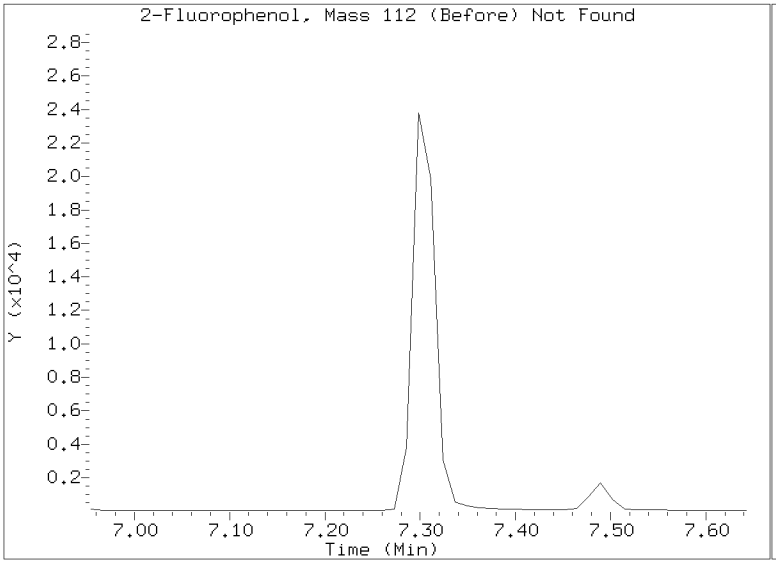
* Only compounds listed in the work order have been verified by the analyst *

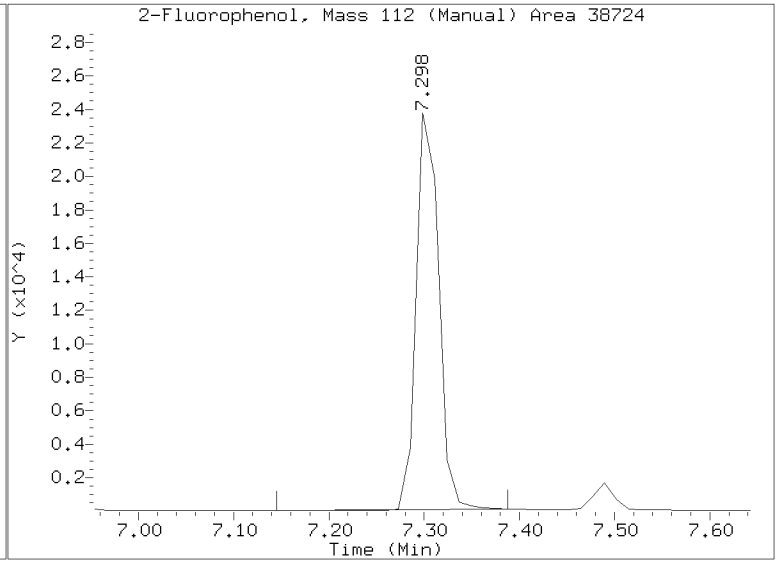
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102308S.D
Injection Date: 10-AUG-2023 16:16
Lab ID:SEQ-CAL1 Client ID:
Report Date: 08/15/2023 16:33









Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023095.D

Date : 10-AUG-2023 16:53

Client ID:

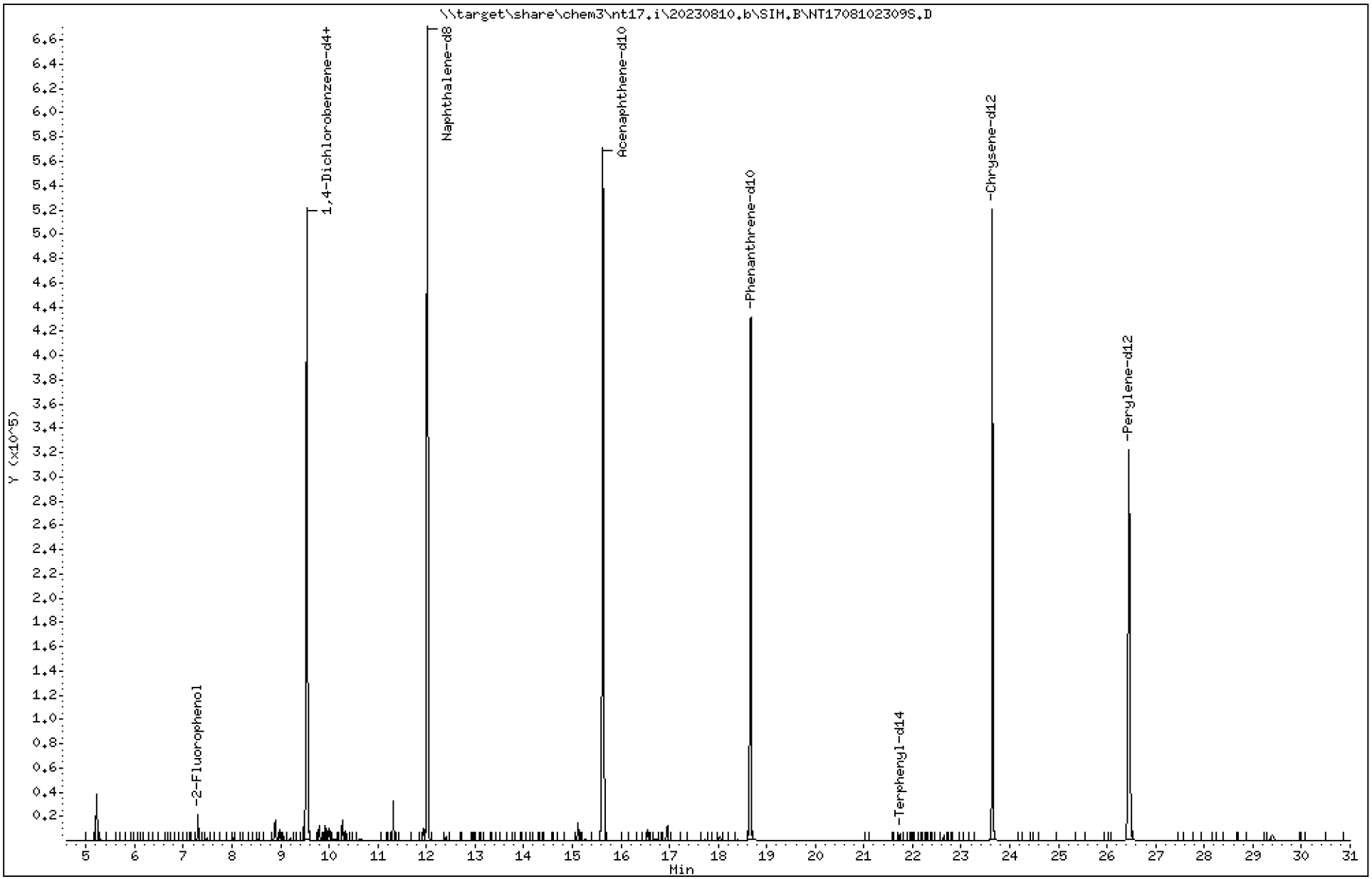
Sample Info: SEQ-SIM2

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102309S.D
Lab Smp Id: SEQ-SIM2
Inj Date : 10-AUG-2023 16:53
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-SIM2
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Meth Date : 11-Aug-2023 08:13 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	7.298	7.298	(0.765)	18535	0.15000	0.1385(M)
3	Phenol	94	8.891	8.891	(0.932)	19772	0.10000	0.09695
7	1,3-Dichlorobenzene	146	9.477	9.477	(0.993)	14402	0.10000	0.1044
* 8	1,4-Dichlorobenzene-d4	152	9.541	9.541	(1.000)	322199	4.00000	
9	1,4-Dichlorobenzene	146	9.566	9.566	(1.003)	13875	0.10000	0.1039
11	Benzyl alcohol	79	9.796	9.796	(1.027)	12128	0.10000	0.08592
12	1,2-Dichlorobenzene	146	9.924	9.924	(1.040)	13296	0.10000	0.1027
13	2-Methylphenol	108	10.001	10.001	(1.048)	10880	0.10000	0.08798
15	4-Methylphenol	108	10.269	10.269	(1.076)	11305	0.10000	0.08747
16	N-Nitroso-di-n-propylamine	70	10.346	10.346	(1.084)	11534	0.10000	0.08727
22	2,4-Dimethylphenol	107	11.316	11.316	(0.942)	22434	0.20000	0.1800
24	Benzoic acid	105	11.521	11.521	(0.959)	620	0.40000	0.007620(M)
26	1,2,4-Trichlorobenzene	180	11.929	11.929	(0.993)	8884	0.10000	0.1043
* 27	Naphthalene-d8	136	12.018	12.018	(1.000)	1242007	4.00000	
30	Hexachlorobutadiene	225	12.413	12.413	(1.033)	3993	0.10000	0.1001
39	Dimethylphthalate	163	15.117	15.117	(0.967)	15901	0.10000	0.09162
* 42	Acenaphthene-d10	162	15.627	15.627	(1.000)	533992	4.00000	
50	Diethylphthalate	149	16.557	16.557	(1.060)	15209	0.10000	0.08428
54	N-Nitrosodiphenylamine	169	16.965	16.965	(0.909)	11331	0.10000	0.09172
57	Hexachlorobenzene	284	18.034	18.034	(0.966)	4038	0.10000	0.09976(M)
58	Pentachlorophenol	266	18.391	18.392	(0.985)	1335	0.20000	0.04860(M)
* 59	Phenanthrene-d10	188	18.672	18.672	(1.000)	859320	4.00000	
$ 66	Terphenyl-d14	244	21.745	21.745	(0.920)	7822	0.10000	0.08900
67	Butylbenzylphthalate	149	22.638	22.639	(0.957)	5890	0.10000	0.03495
* 69	Chrysene-d12	240	23.646	23.646	(1.000)	635124	4.00000	
* 77	Perylene-d12	264	26.452	26.452	(1.000)	630896	4.00000	
79	Dibenzo(a,h)anthracene	278	29.403	29.404	(1.112)	13315	0.10000	0.07145
90	N-Nitrosodimethylamine	74	5.209	5.209	(0.546)	27025	0.20000	0.1985(M)

QC Flag Legend

M - Compound response manually integrated.

Report Date: 15-Aug-2023 16:33

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708102309S.D
Lab Smp Id: SEQ-SIM2
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Misc Info:

Calibration Date: 10-AUG-2023
Calibration Time: 15:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	319389	159695	638778	322199	0.88
27 Naphthalene-d8	1274686	637343	2549372	1242007	-2.56
42 Acenaphthene-d10	569885	284943	1139770	533992	-6.30
59 Phenanthrene-d10	915829	457915	1831658	859320	-6.17
69 Chrysene-d12	653460	326730	1306920	635124	-2.81
77 Perylene-d12	654887	327444	1309774	630896	-3.66

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.54	9.04	10.04	9.54	0.00
27 Naphthalene-d8	12.02	11.52	12.52	12.02	-0.00
42 Acenaphthene-d10	15.64	15.14	16.14	15.63	-0.08
59 Phenanthrene-d10	18.67	18.17	19.17	18.67	-0.00
69 Chrysene-d12	23.65	23.15	24.15	23.65	-0.00
77 Perylene-d12	26.45	25.95	26.95	26.45	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708102309S.D

Lab ID: SEQ-SIM2
nt17.i, 20230810.b\SIM.B\SIMABN2.m,   10-AUG-2023 16:53

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.B/NT1708102309S.D

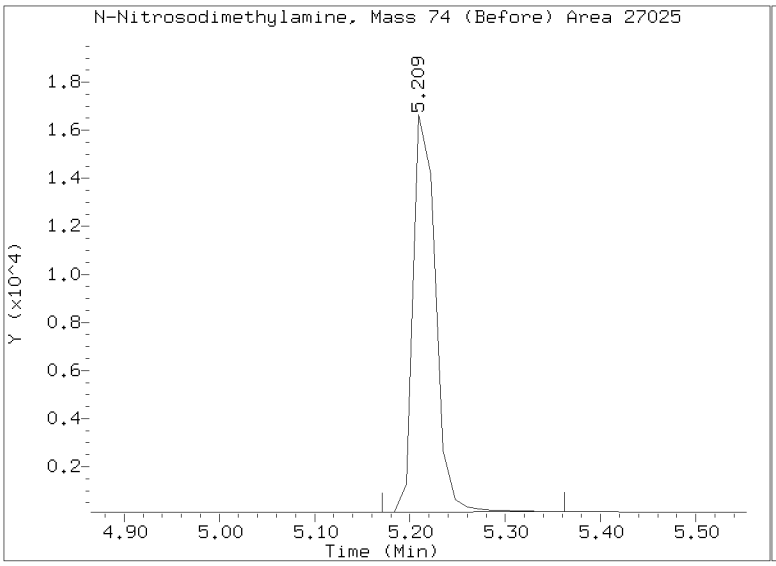
On Column LOD for nt17.i, SIM.B\SIMABN2.m, PSDDA.sub = 0.0000

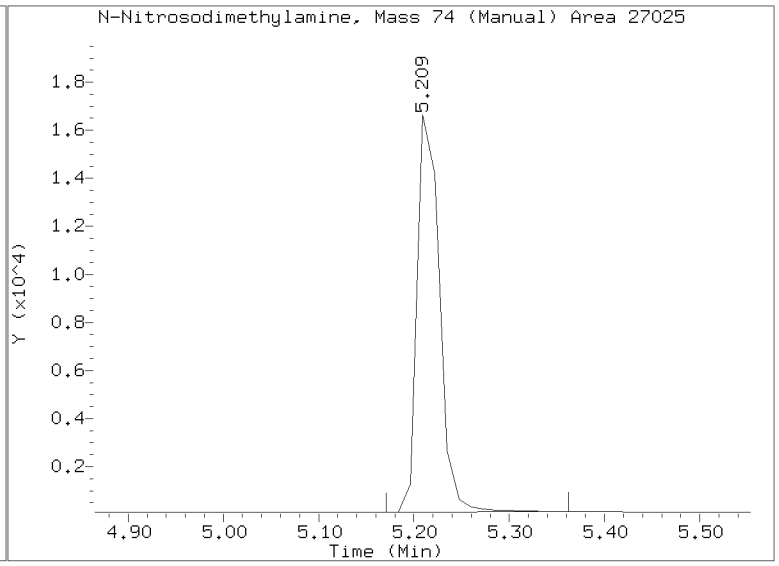
Exception: 1,2,4-Trichlorobenzene 0.0010

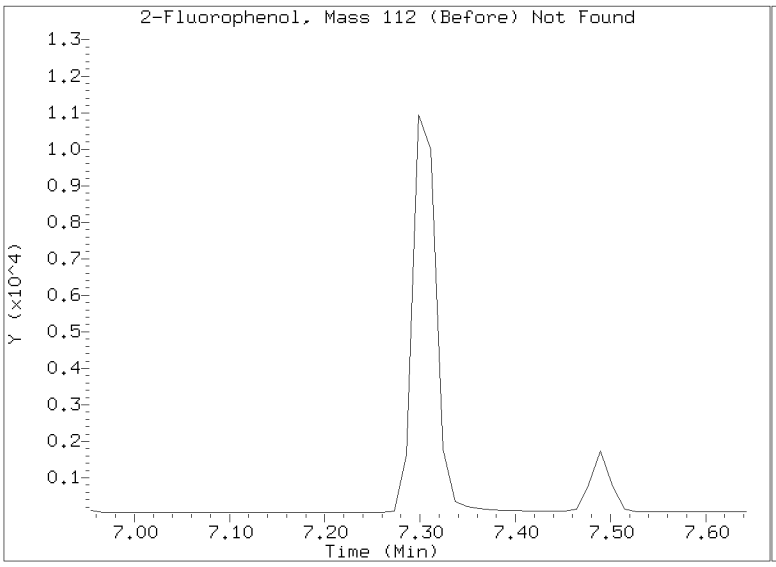
* Only compounds listed in the work order have been verified by the analyst *

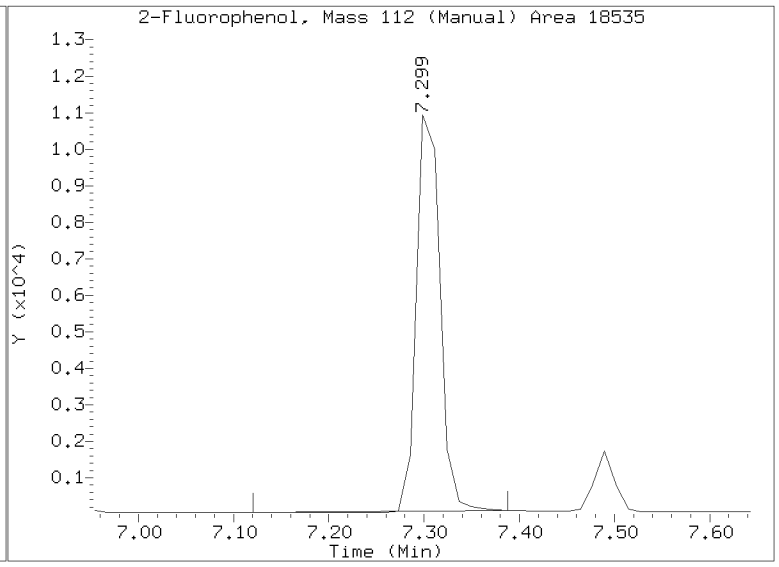
Quant Ion Manual Peak Adjustment Report

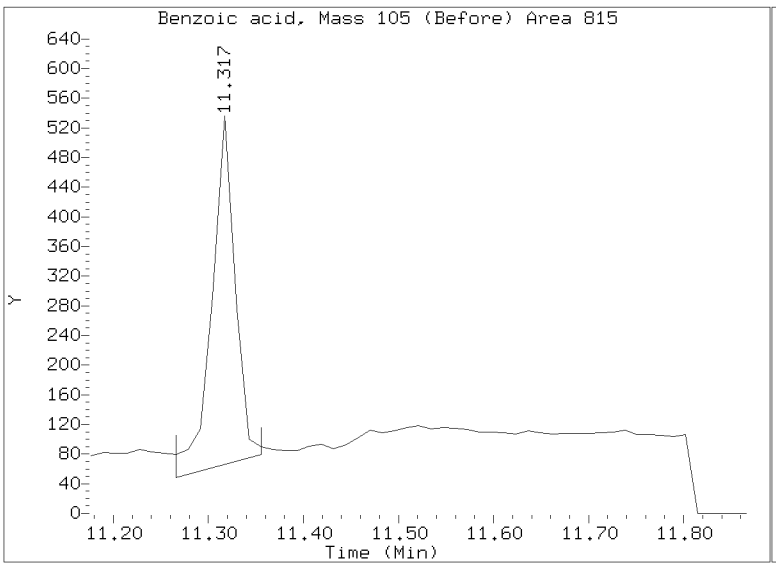
Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102309S.D
Injection Date: 10-AUG-2023 16:53
Lab ID:SEQ-SIM2 Client ID:
Report Date: 08/15/2023 16:33

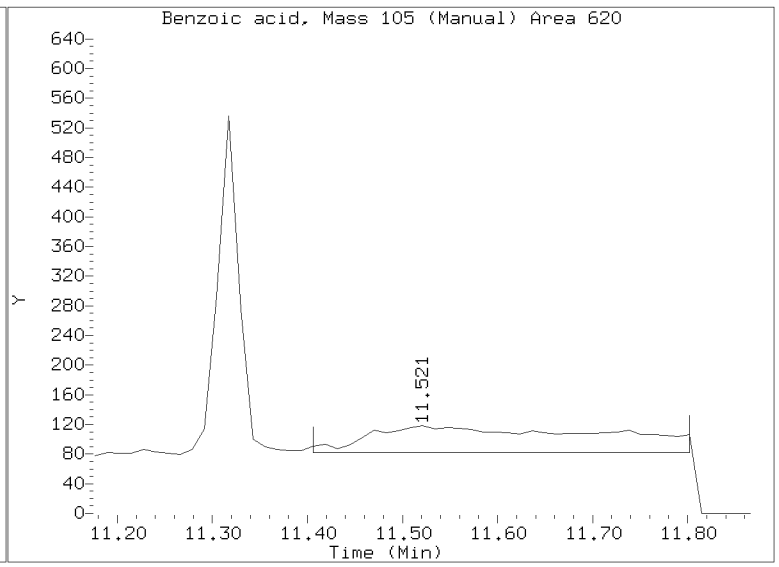






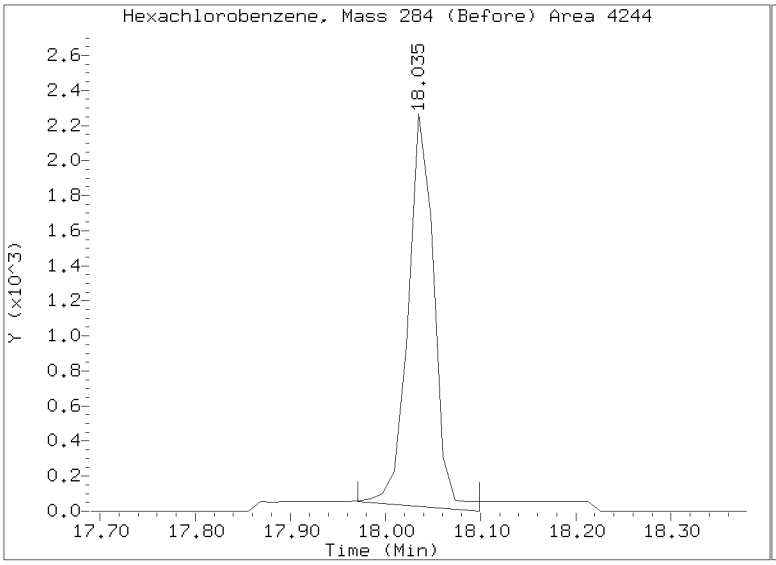


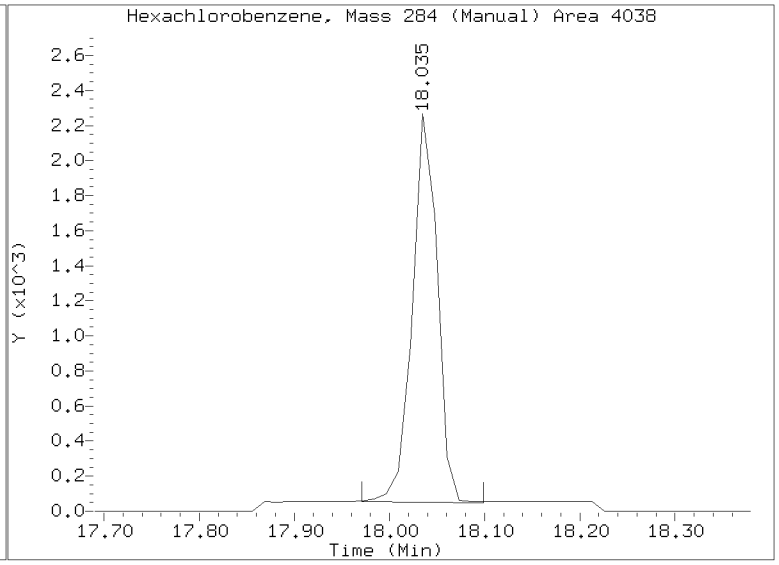


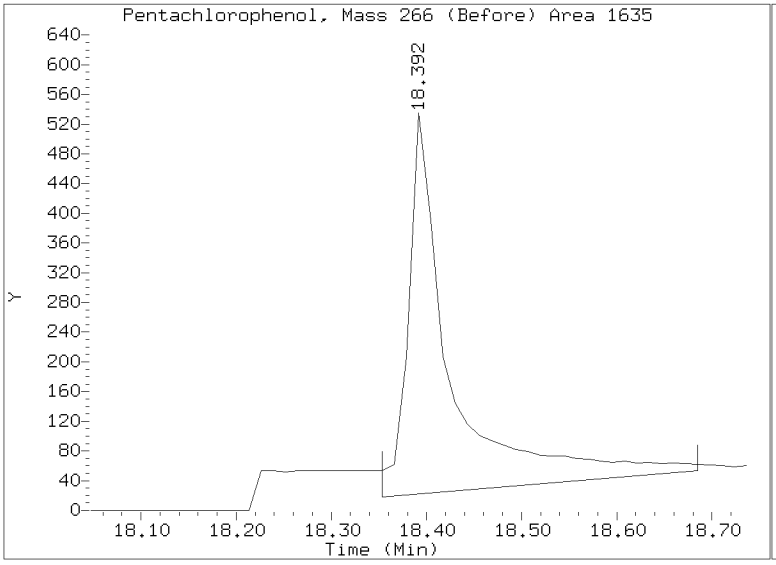


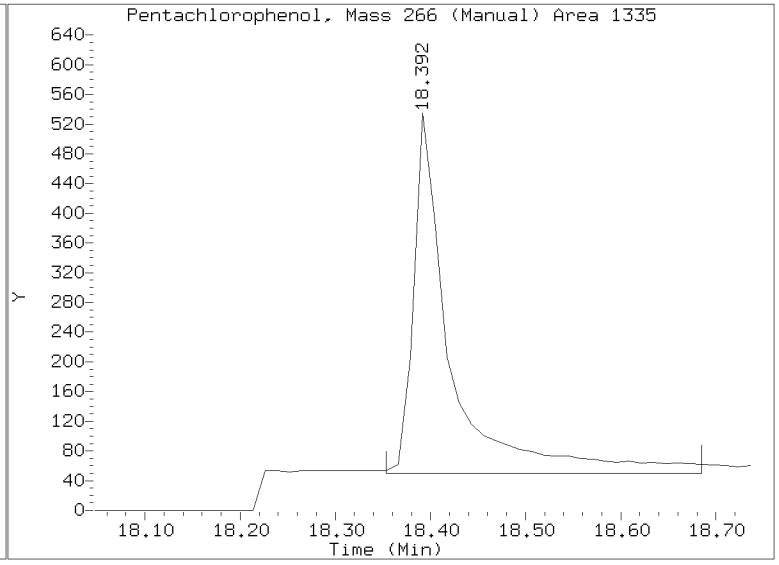
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102309S.D
Injection Date: 10-AUG-2023 16:53
Lab ID:SEQ-SIM2 Client ID:
Report Date: 08/15/2023 16:33









Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102310S.D

Date : 10-AUG-2023 17:30

Client ID:

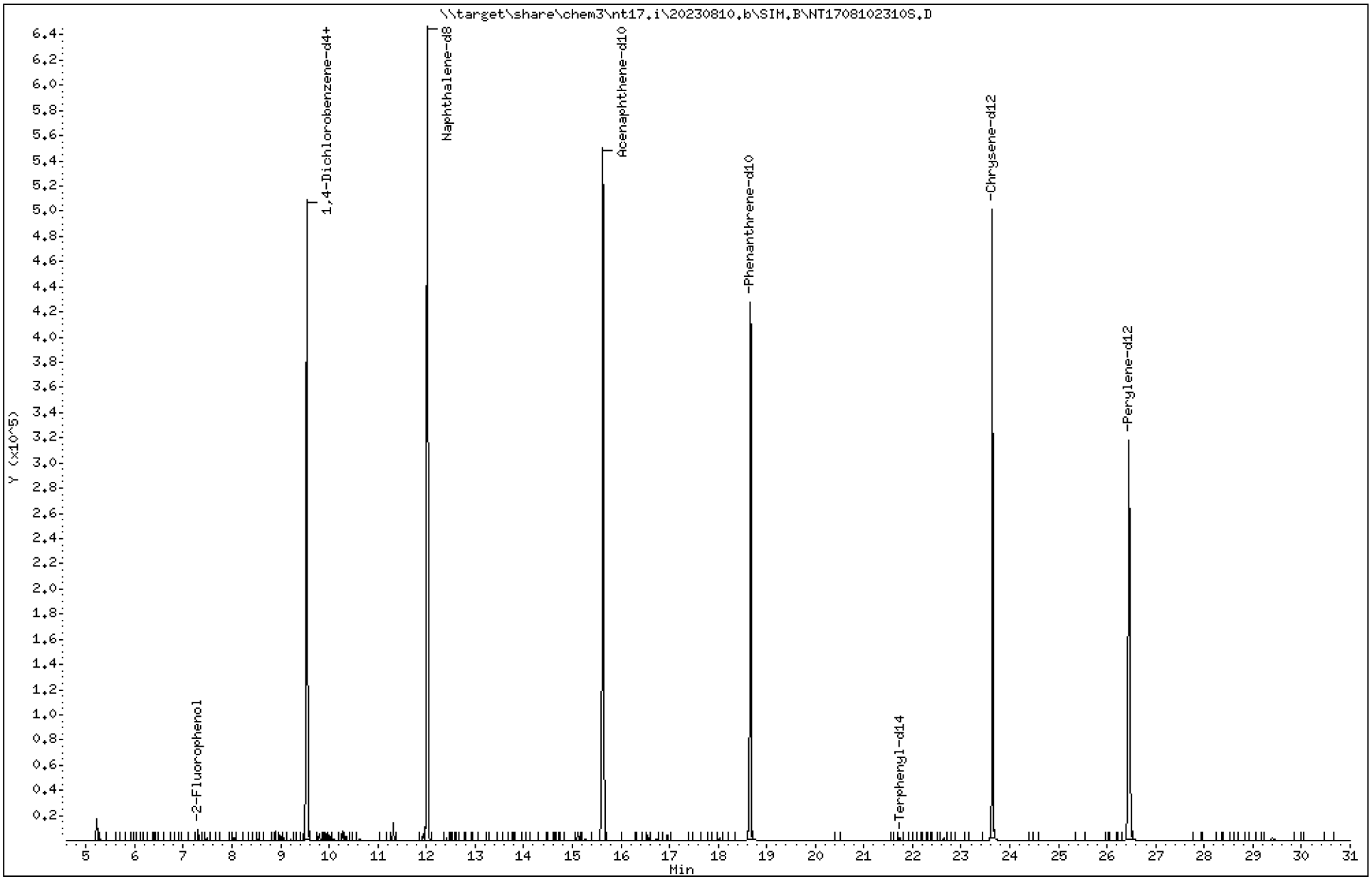
Sample Info: SEQ-SIM1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102310S.D
Lab Smp Id: SEQ-SIM1
Inj Date : 10-AUG-2023 17:30
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-SIM1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Meth Date : 11-Aug-2023 08:13 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 10 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	7.311	7.298	(0.766)	8738	0.07500	0.06702(M)
	3	Phenol	94	8.890	8.891	(0.932)	9286	0.05000	0.04672
	7	1,3-Dichlorobenzene	146	9.477	9.477	(0.993)	7182	0.05000	0.05342
*	8	1,4-Dichlorobenzene-d4	152	9.541	9.541	(1.000)	313990	4.00000	
	9	1,4-Dichlorobenzene	146	9.566	9.566	(1.003)	6933	0.05000	0.05329
	11	Benzyl alcohol	79	9.796	9.796	(1.027)	6174	0.05000	0.04488
	12	1,2-Dichlorobenzene	146	9.924	9.924	(1.040)	6568	0.05000	0.05204
	13	2-Methylphenol	108	10.001	10.001	(1.048)	5213	0.05000	0.04326
	15	4-Methylphenol	108	10.269	10.269	(1.076)	5358	0.05000	0.04254
	16	N-Nitroso-di-n-propylamine	70	10.346	10.346	(1.084)	5408	0.05000	0.04199
	22	2,4-Dimethylphenol	107	11.316	11.316	(0.942)	9934	0.10000	0.08151
	24	Benzoic acid	105	Compound Not Detected.					
	26	1,2,4-Trichlorobenzene	180	11.929	11.929	(0.993)	4406	0.05000	0.05291
*	27	Naphthalene-d8	136	12.018	12.018	(1.000)	1214624	4.00000	
	30	Hexachlorobutadiene	225	12.413	12.413	(1.033)	1975	0.05000	0.05065
	39	Dimethylphthalate	163	15.117	15.117	(0.967)	7285	0.05000	0.04301
*	42	Acenaphthene-d10	162	15.627	15.627	(1.000)	521105	4.00000	
	50	Diethylphthalate	149	16.557	16.557	(1.060)	6644	0.05000	0.03773
	54	N-Nitrosodiphenylamine	169	16.965	16.965	(0.909)	4546	0.05000	0.03812
	57	Hexachlorobenzene	284	18.034	18.034	(0.967)	1949	0.05000	0.04988
	58	Pentachlorophenol	266	18.391	18.392	(0.986)	471	0.10000	0.01776(M)
*	59	Phenanthrene-d10	188	18.659	18.672	(1.000)	829562	4.00000	
$	66	Terphenyl-d14	244	21.745	21.745	(0.920)	3543	0.05000	0.04200
	67	Butylbenzylphthalate	149	22.638	22.639	(0.957)	2383	0.05000	0.01473
*	69	Chrysene-d12	240	23.646	23.646	(1.000)	609538	4.00000	
*	77	Perylene-d12	264	26.452	26.452	(1.000)	612761	4.00000	
	79	Dibenzo(a,h)anthracene	278	29.403	29.404	(1.112)	5853	0.05000	0.03234
	90	N-Nitrosodimethylamine	74	5.221	5.209	(0.547)	12690	0.10000	0.09566(M)

QC Flag Legend

M - Compound response manually integrated.

Report Date: 15-Aug-2023 16:33

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708102310S.D
Lab Smp Id: SEQ-SIM1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Misc Info:

Calibration Date: 10-AUG-2023
Calibration Time: 15:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	319389	159695	638778	313990	-1.69
27 Naphthalene-d8	1274686	637343	2549372	1214624	-4.71
42 Acenaphthene-d10	569885	284943	1139770	521105	-8.56
59 Phenanthrene-d10	915829	457915	1831658	829562	-9.42
69 Chrysene-d12	653460	326730	1306920	609538	-6.72
77 Perylene-d12	654887	327444	1309774	612761	-6.43

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.54	9.04	10.04	9.54	-0.00
27 Naphthalene-d8	12.02	11.52	12.52	12.02	-0.00
42 Acenaphthene-d10	15.64	15.14	16.14	15.63	-0.08
59 Phenanthrene-d10	18.67	18.17	19.17	18.66	-0.07
69 Chrysene-d12	23.65	23.15	24.15	23.65	-0.00
77 Perylene-d12	26.45	25.95	26.95	26.45	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708102310S.D

Lab ID: SEQ-SIM1
nt17.i, 20230810.b\SIM.B\SIMABN2.m,   10-AUG-2023 17:30

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.B/NT1708102309S.D

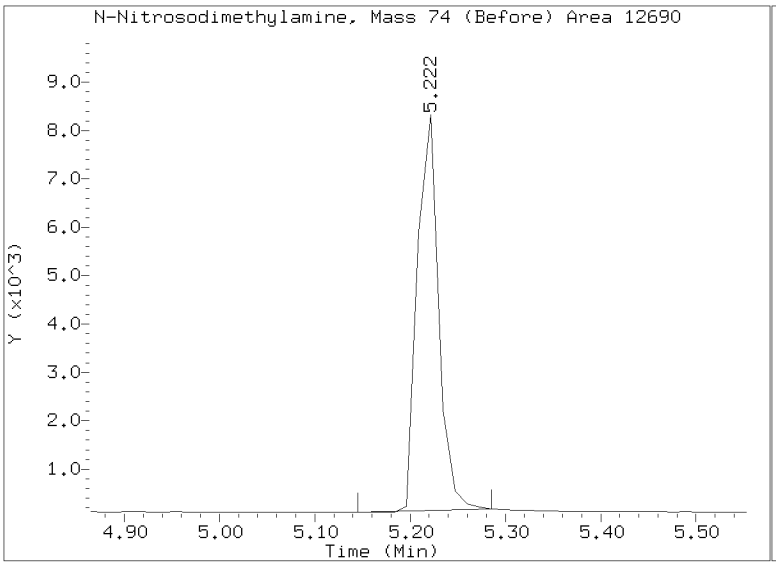
On Column LOD for nt17.i, SIM.B\SIMABN2.m, PSDDA.sub = 0.0000

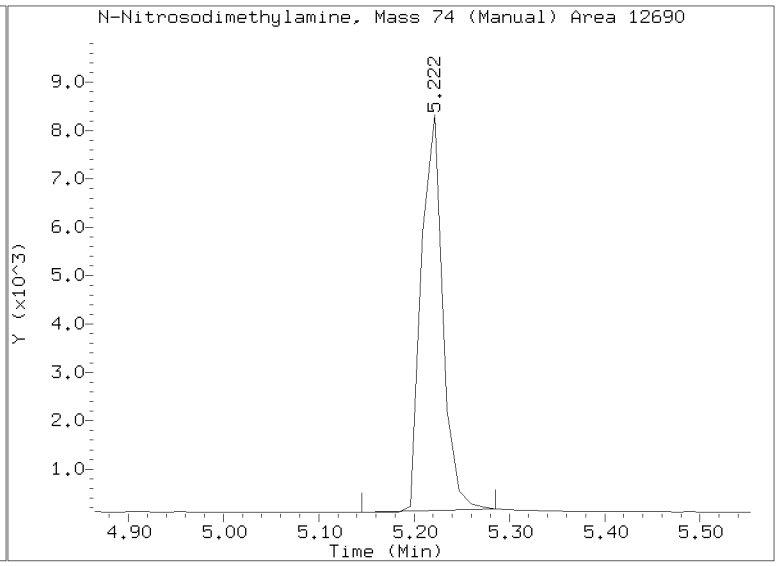
Exception: 1,2,4-Trichlorobenzene 0.0010

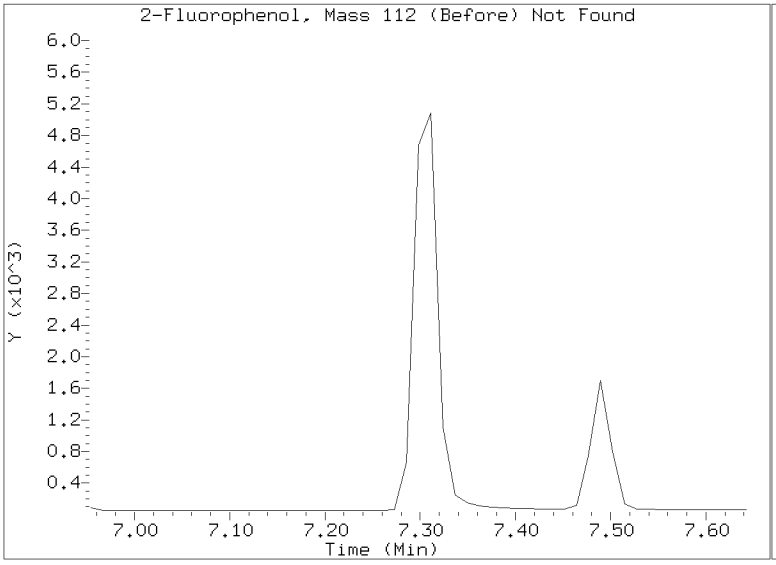
* Only compounds listed in the work order have been verified by the analyst *

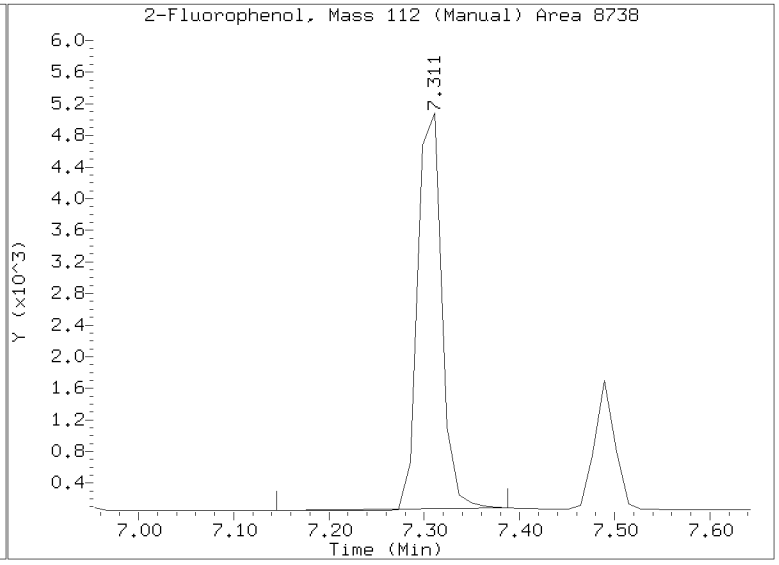
Quant Ion Manual Peak Adjustment Report

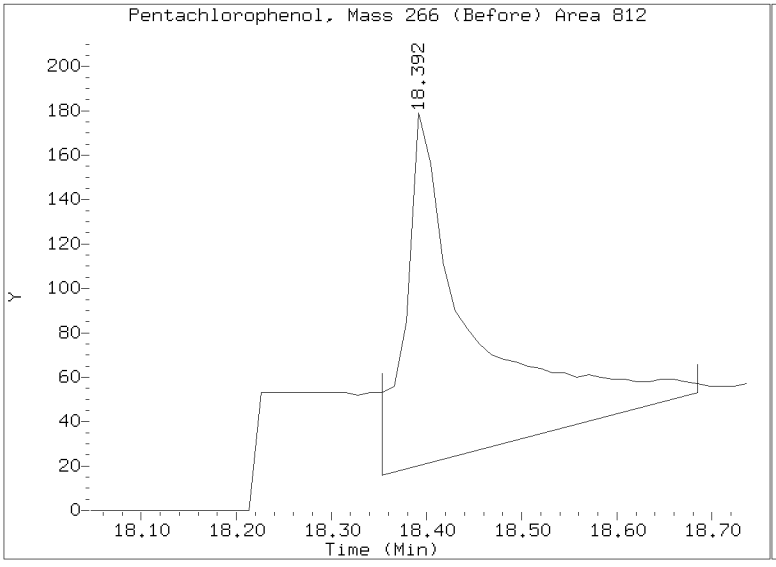
Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102310S.D
Injection Date: 10-AUG-2023 17:30
Lab ID:SEQ-SIM1 Client ID:
Report Date: 08/15/2023 16:33

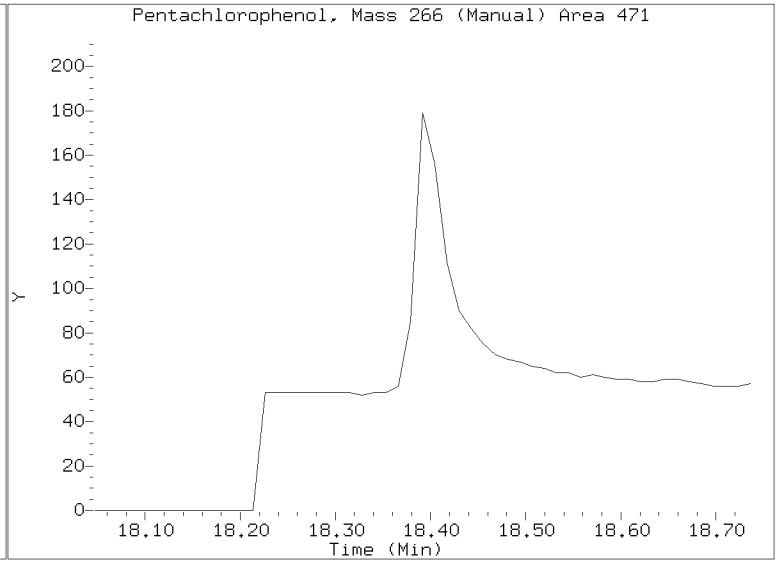












Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102311S.D

Date : 10-AUG-2023 18:08

Client ID:

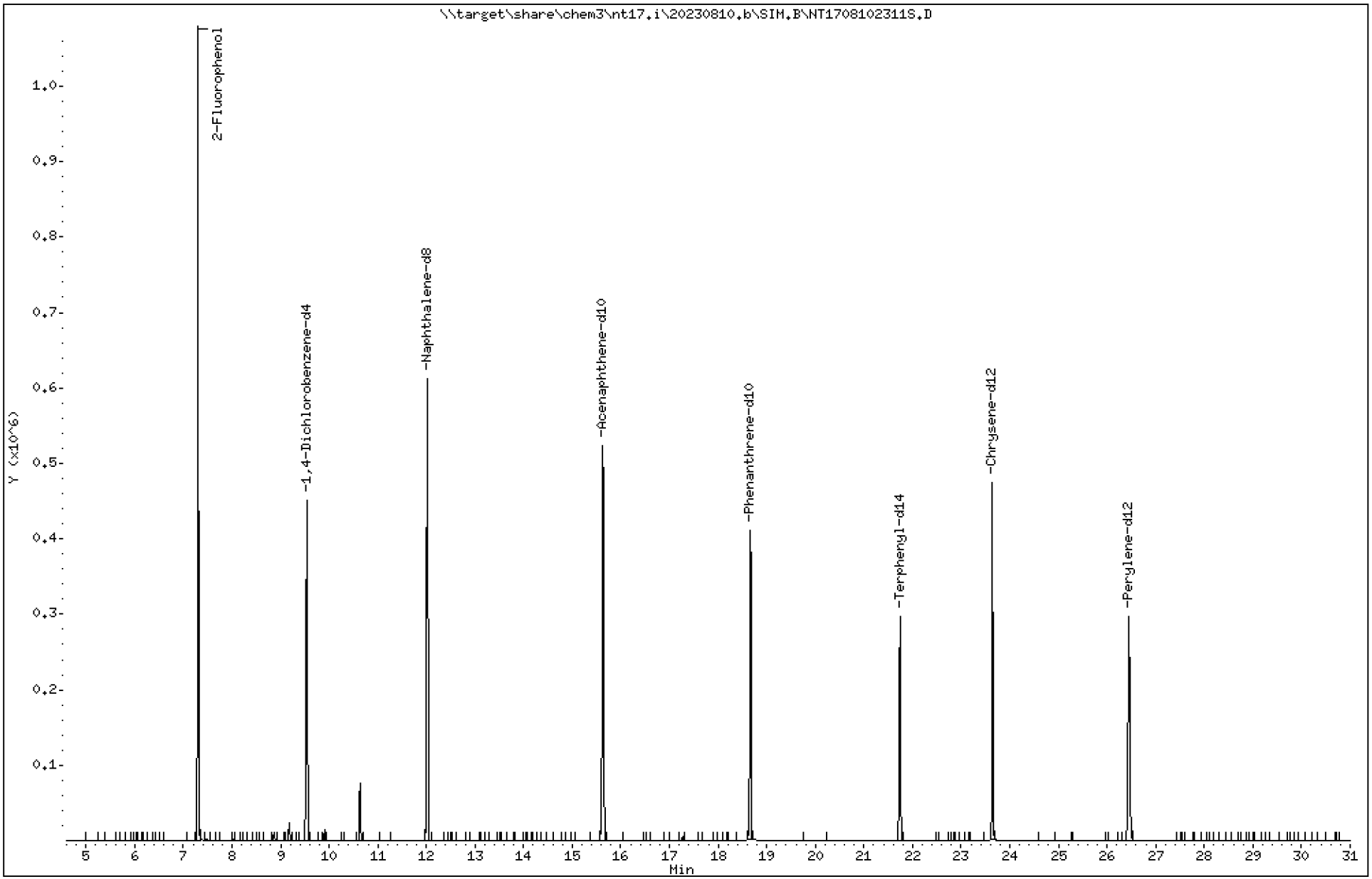
Instrument: nt17.i

Sample Info: SEQ-ICB1

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102311S.D
Lab Smp Id: SEQ-ICB1
Inj Date : 10-AUG-2023 18:08
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-ICB1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Meth Date : 11-Aug-2023 08:13 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)	
$	1	2-Fluorophenol	112	7.298	7.298	(0.765)	884648	7.54548	7.545	(RM)
	3	Phenol	94	Compound Not Detected.						
	7	1,3-Dichlorobenzene	146	Compound Not Detected.						
*	8	1,4-Dichlorobenzene-d4	152	9.541	9.541	(1.000)	282360	4.00000		(H)
	9	1,4-Dichlorobenzene	146	Compound Not Detected.						
	11	Benzyl alcohol	79	Compound Not Detected.						
	12	1,2-Dichlorobenzene	146	Compound Not Detected.						
	13	2-Methylphenol	108	Compound Not Detected.						
	15	4-Methylphenol	108	Compound Not Detected.						
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.						
	22	2,4-Dimethylphenol	107	Compound Not Detected.						
	24	Benzoic acid	105	Compound Not Detected.						
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	27	Naphthalene-d8	136	12.018	12.018	(1.000)	1137473	4.00000		
	30	Hexachlorobutadiene	225	Compound Not Detected.						
	39	Dimethylphthalate	163	Compound Not Detected.						
*	42	Acenaphthene-d10	162	15.627	15.627	(1.000)	492085	4.00000		
	50	Diethylphthalate	149	Compound Not Detected.						
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57	Hexachlorobenzene	284	Compound Not Detected.						
	58	Pentachlorophenol	266	Compound Not Detected.						
*	59	Phenanthrene-d10	188	18.659	18.672	(1.000)	785136	4.00000		
$	66	Terphenyl-d14	244	21.745	21.745	(0.920)	405354	5.16253	5.163	(R)
	67	Butylbenzylphthalate	149	Compound Not Detected.						
*	69	Chrysene-d12	240	23.646	23.646	(1.000)	567403	4.00000		
*	77	Perylene-d12	264	26.452	26.452	(1.000)	571894	4.00000		
	79	Dibenzo(a,h)anthracene	278	Compound Not Detected.						
	90	N-Nitrosodimethylamine	74	Compound Not Detected.						

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

Report Date: 15-Aug-2023 16:33

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708102311S.D
Lab Smp Id: SEQ-ICB1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Misc Info:

Calibration Date: 10-AUG-2023
Calibration Time: 15:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	319389	159695	638778	282360	-11.59
27 Naphthalene-d8	1274686	637343	2549372	1137473	-10.76
42 Acenaphthene-d10	569885	284943	1139770	492085	-13.65
59 Phenanthrene-d10	915829	457915	1831658	785136	-14.27
69 Chrysene-d12	653460	326730	1306920	567403	-13.17
77 Perylene-d12	654887	327444	1309774	571894	-12.67

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.54	9.04	10.04	9.54	0.00
27 Naphthalene-d8	12.02	11.52	12.52	12.02	0.00
42 Acenaphthene-d10	15.64	15.14	16.14	15.63	-0.08
59 Phenanthrene-d10	18.67	18.17	19.17	18.66	-0.07
69 Chrysene-d12	23.65	23.15	24.15	23.65	0.00
77 Perylene-d12	26.45	25.95	26.95	26.45	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708102311S.D

Lab ID: SEQ-ICB1
nt17.i, 20230810.b\SIM.B\SIMABN2.m,   10-AUG-2023 18:08

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.B/NT1708102309S.D

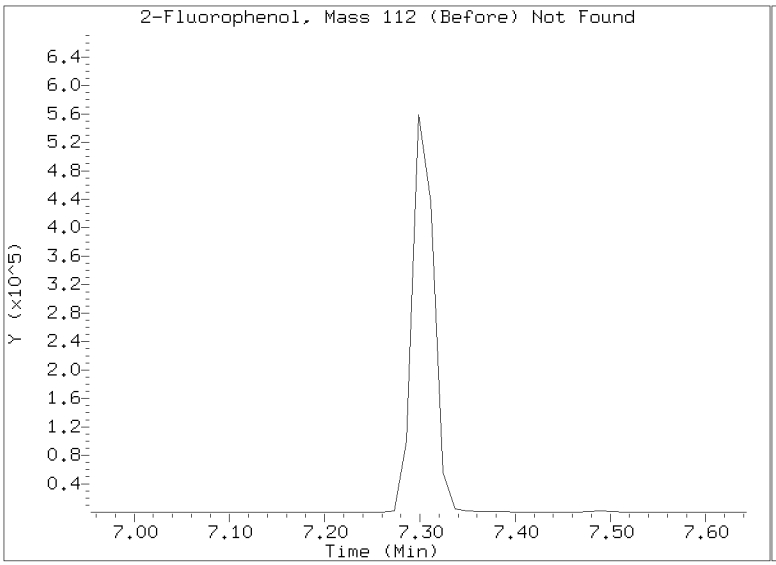
On Column LOD for nt17.i, SIM.B\SIMABN2.m, PSDDA.sub = 0.0000

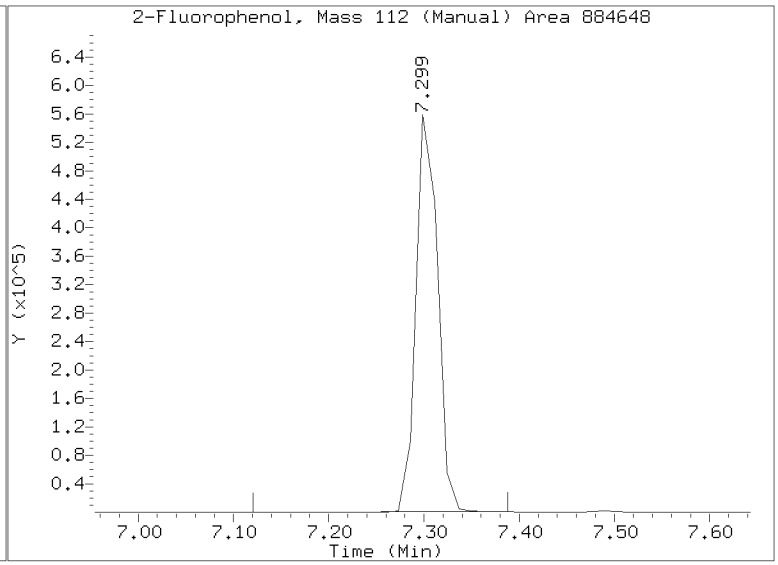
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102311S.D
Injection Date: 10-AUG-2023 18:08
Lab ID:SEQ-ICB1 Client ID:
Report Date: 08/15/2023 16:33





Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023125.D

Date : 10-AUG-2023 18:45

Client ID:

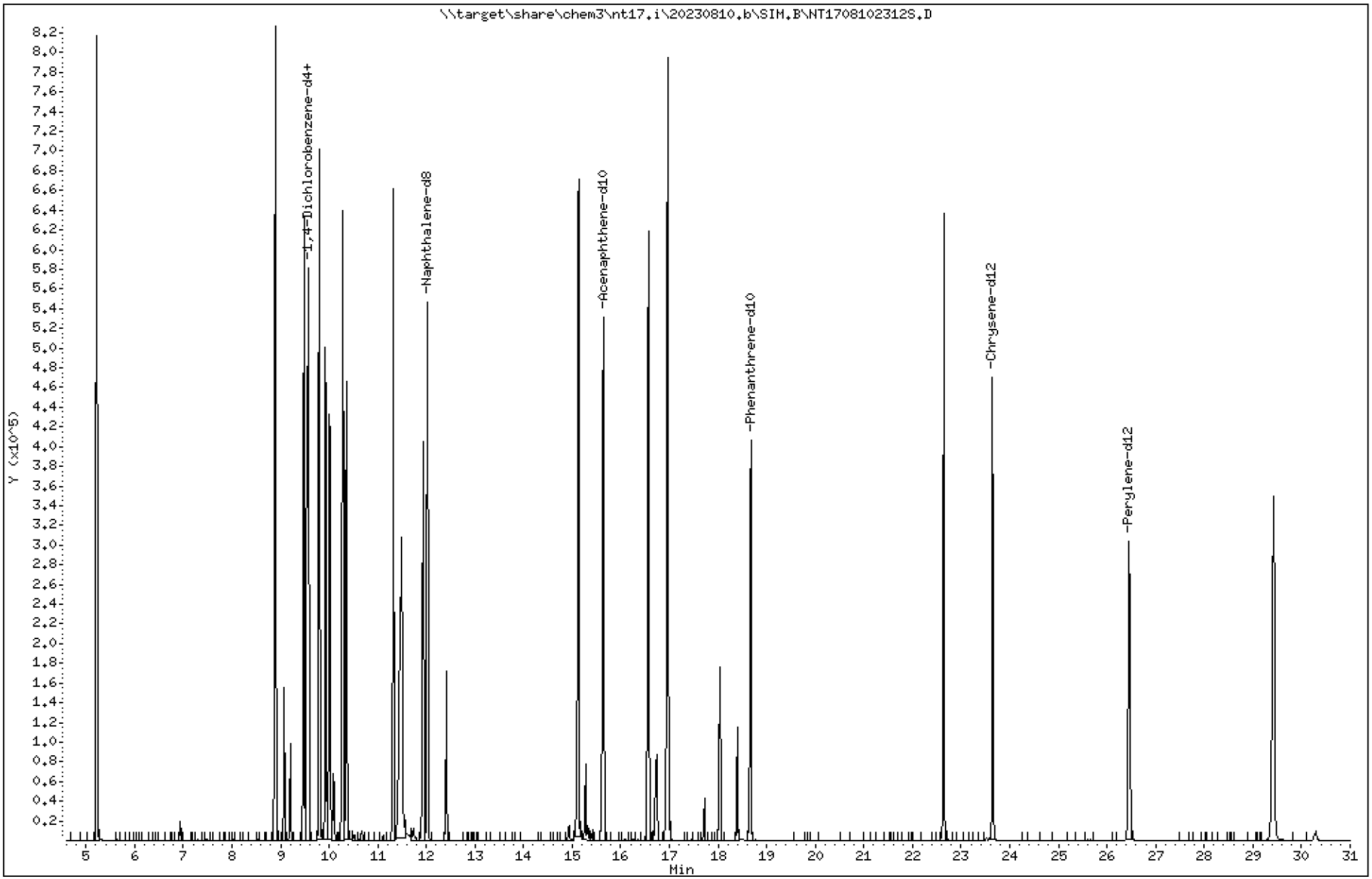
Sample Info: SEQ-SCV1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023125.D

Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

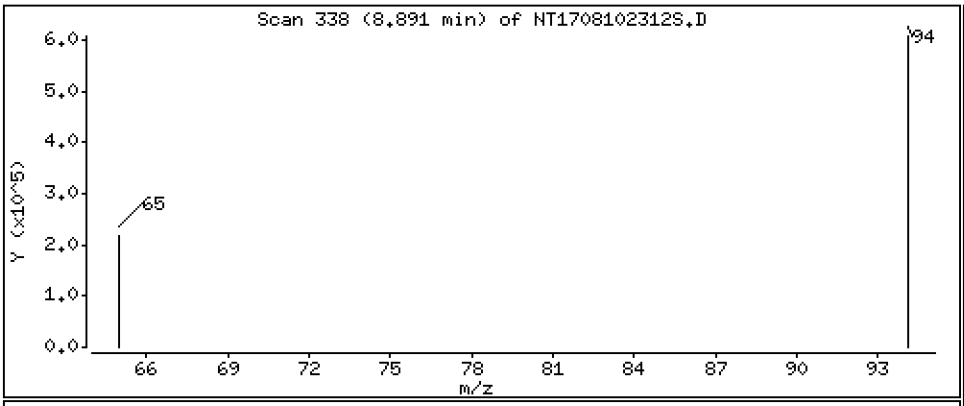
Operator: JGR

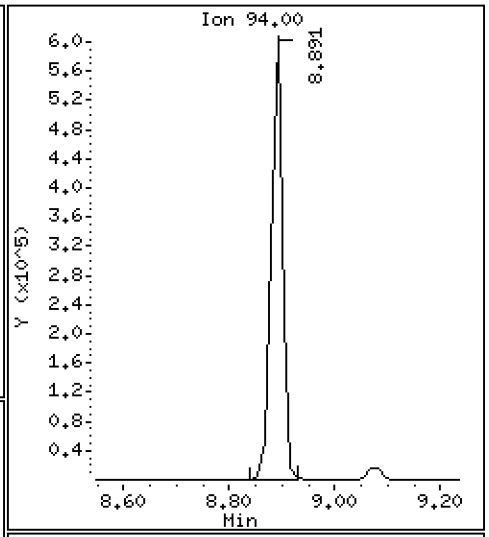
Column phase: ZB-5msi

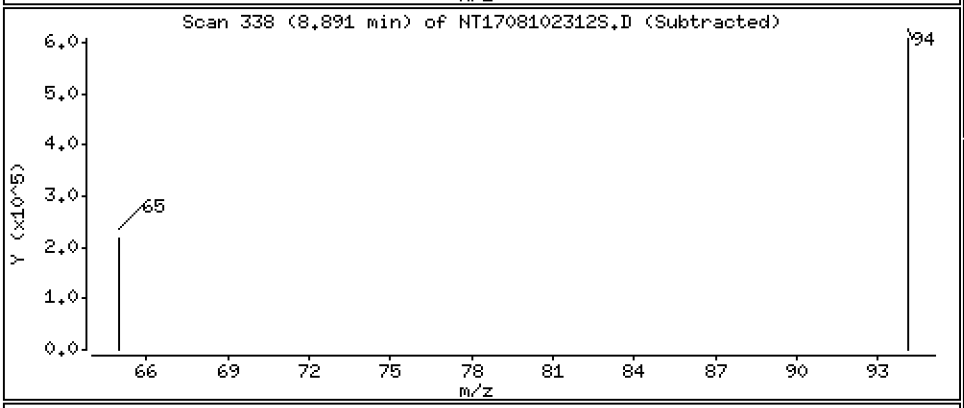
Column diameter: 0.25

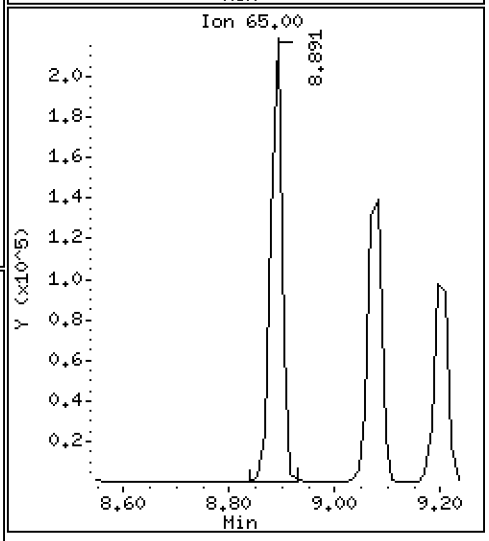
3 Phenol

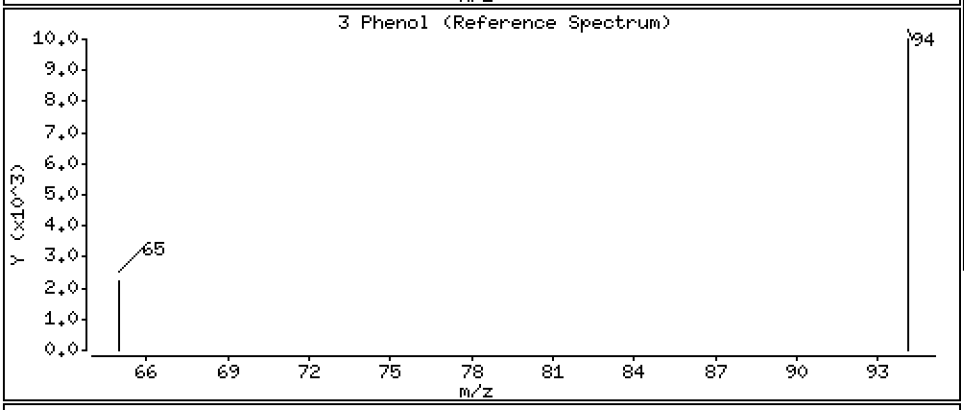
Concentration: 5.502 ug/mL

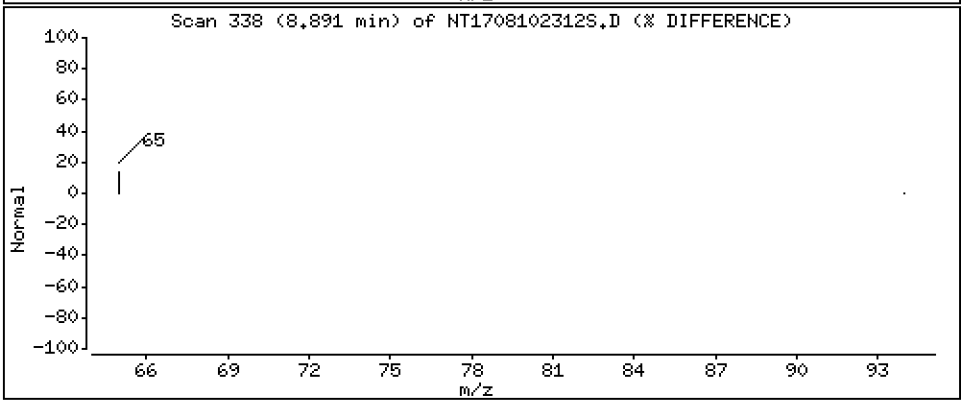












Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023125.D

Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

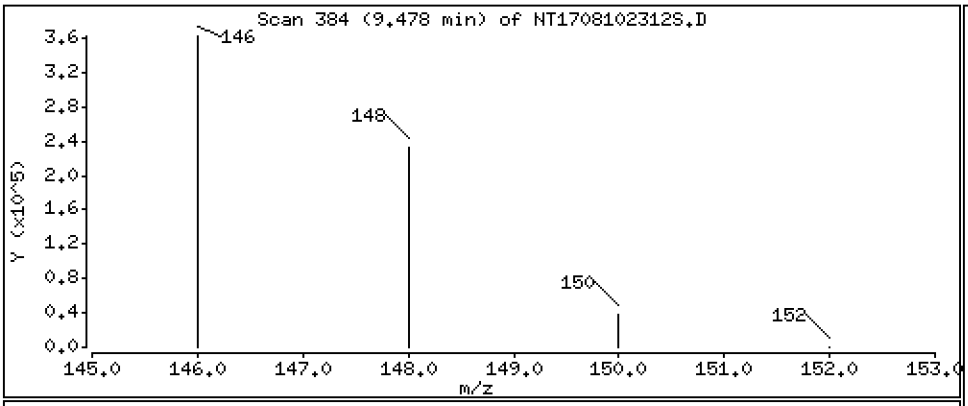
Operator: JGR

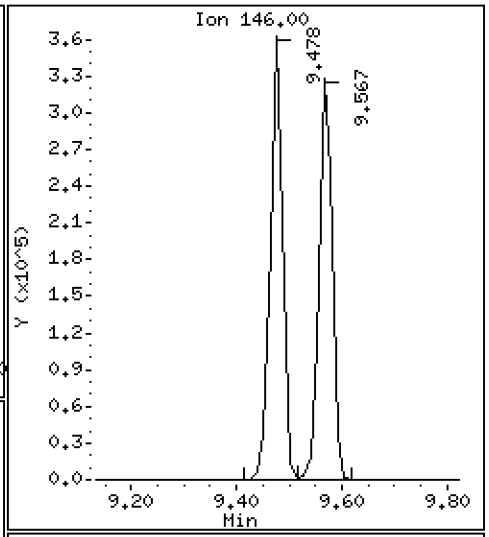
Column phase: ZB-5msi

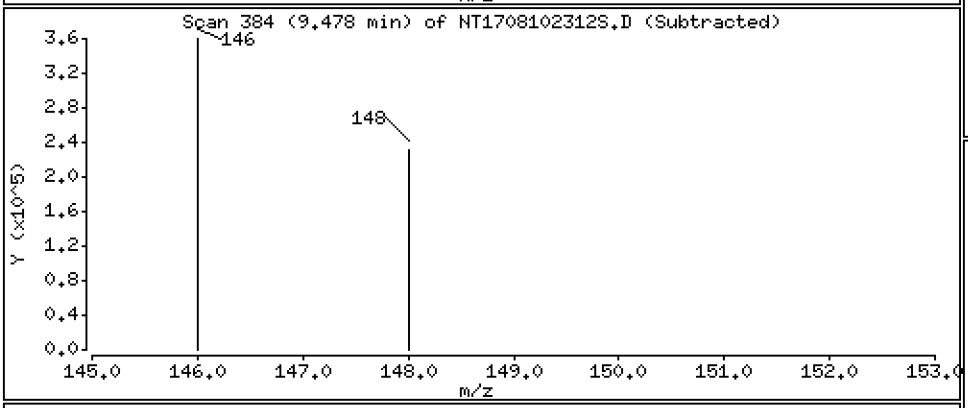
Column diameter: 0.25

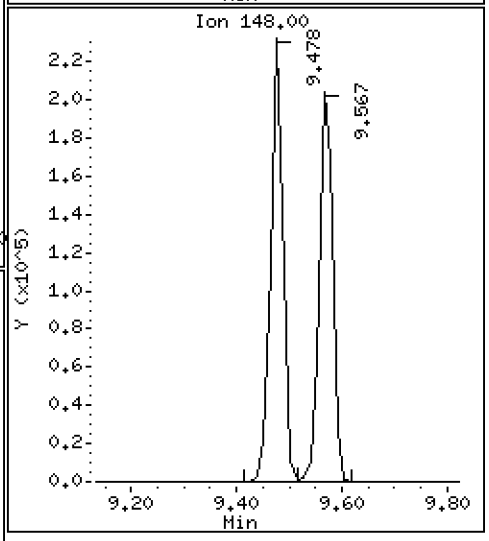
7 1,3-Dichlorobenzene

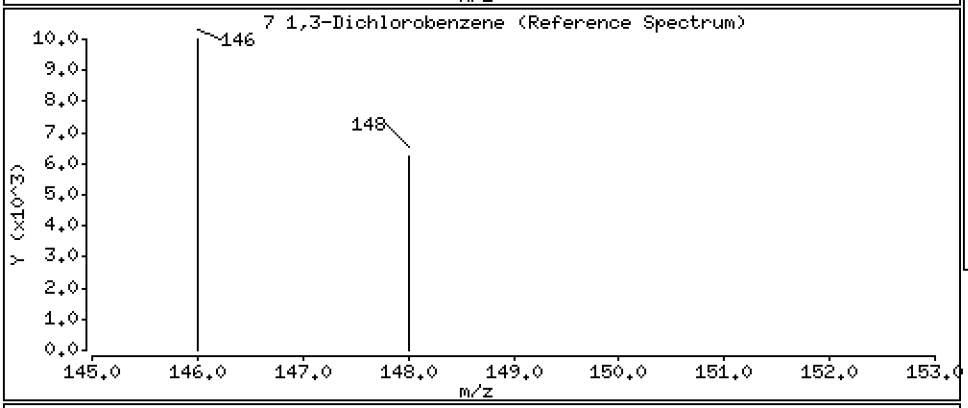
Concentration: 5.156 ug/mL

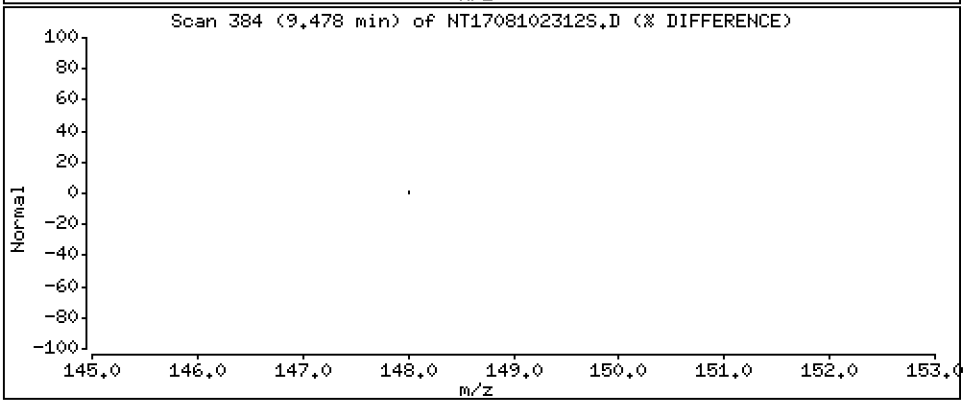












Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023125.D

Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

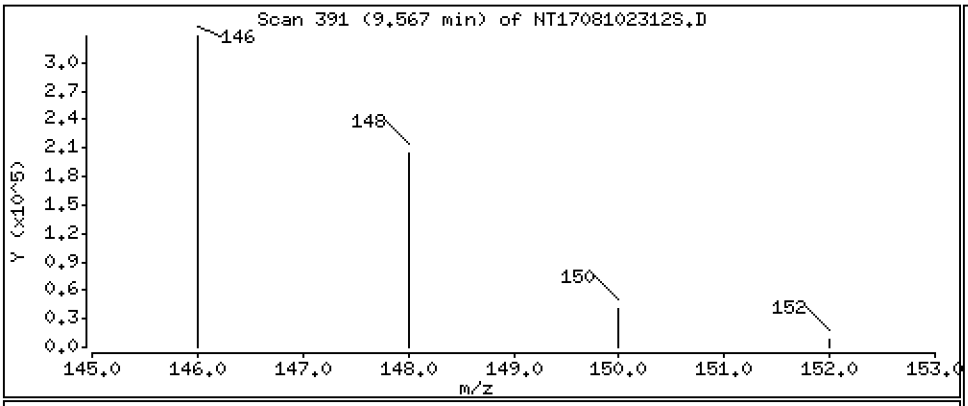
Operator: JGR

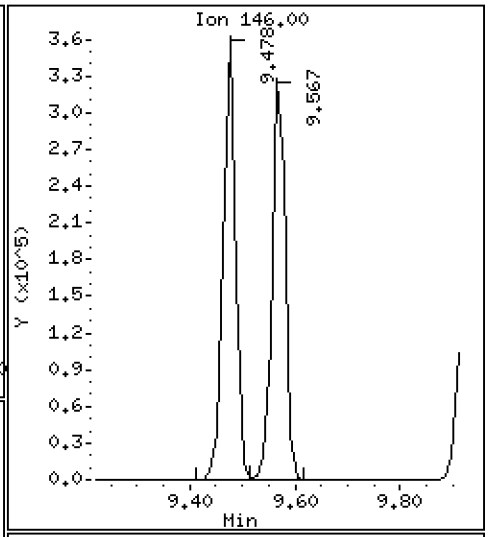
Column phase: ZB-5msi

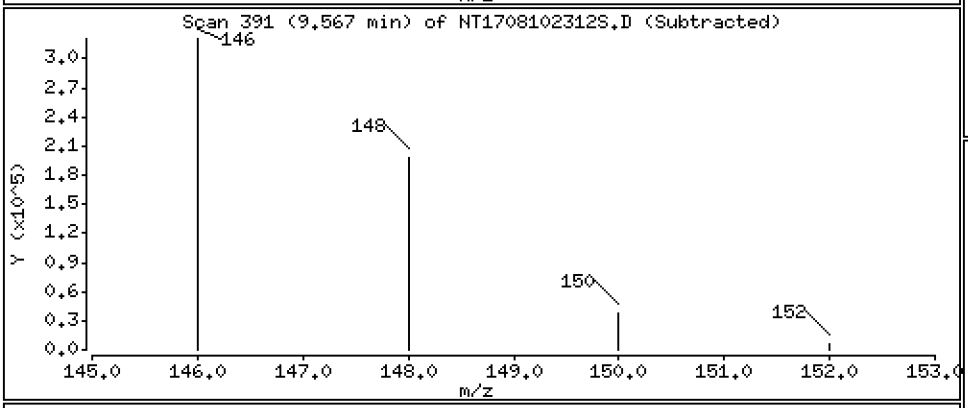
Column diameter: 0.25

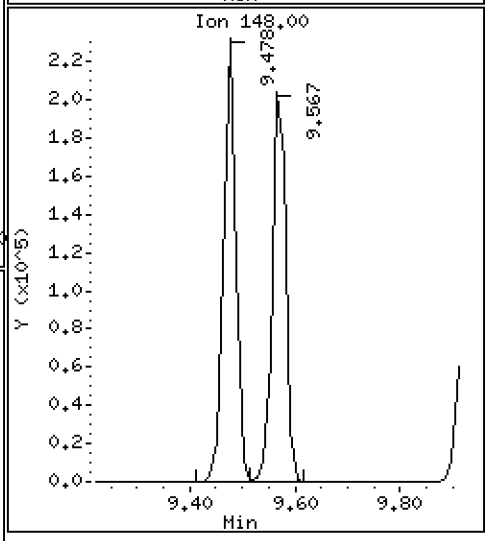
9 1,4-Dichlorobenzene

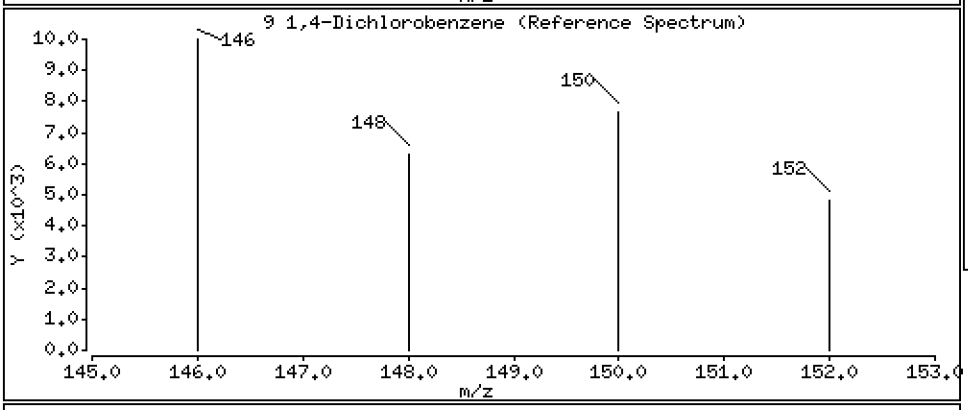
Concentration: 5.169 ug/mL

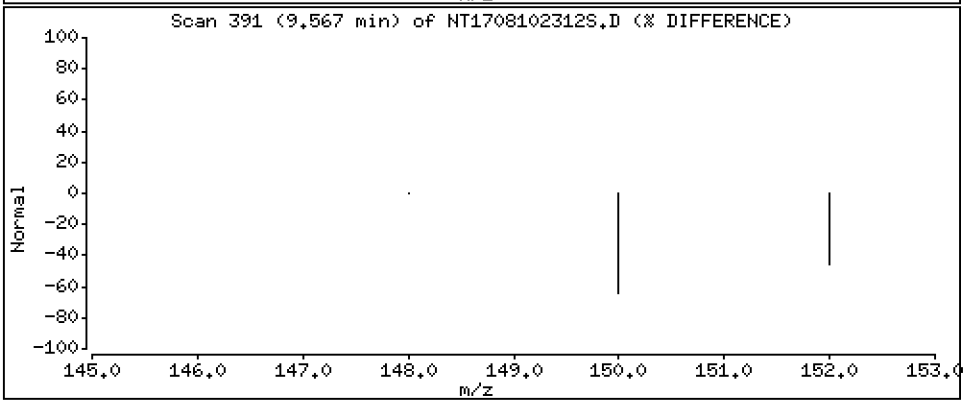












Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023125.D

Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

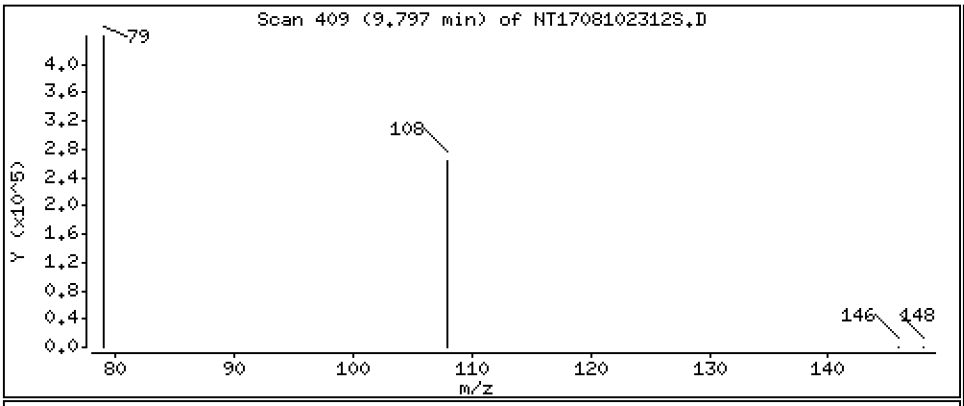
Operator: JGR

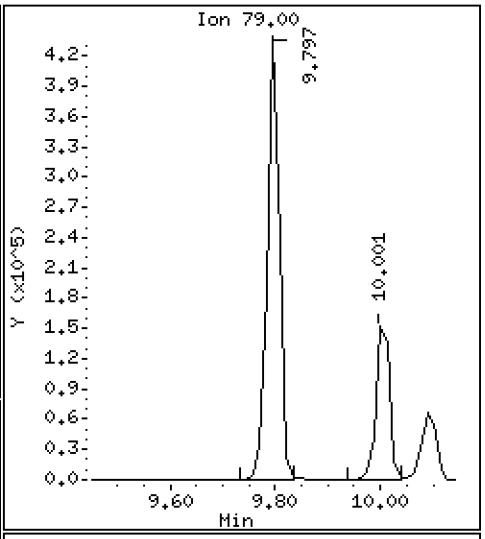
Column phase: ZB-5msi

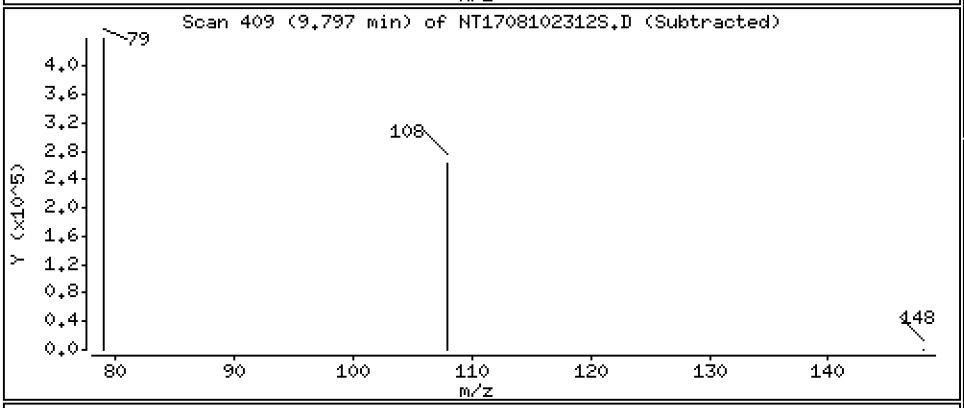
Column diameter: 0.25

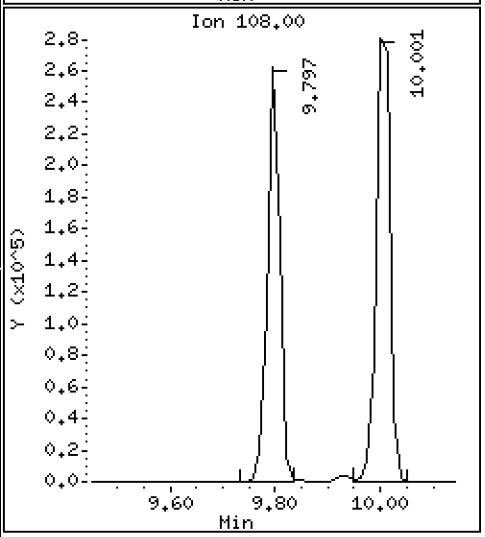
11 Benzyl alcohol

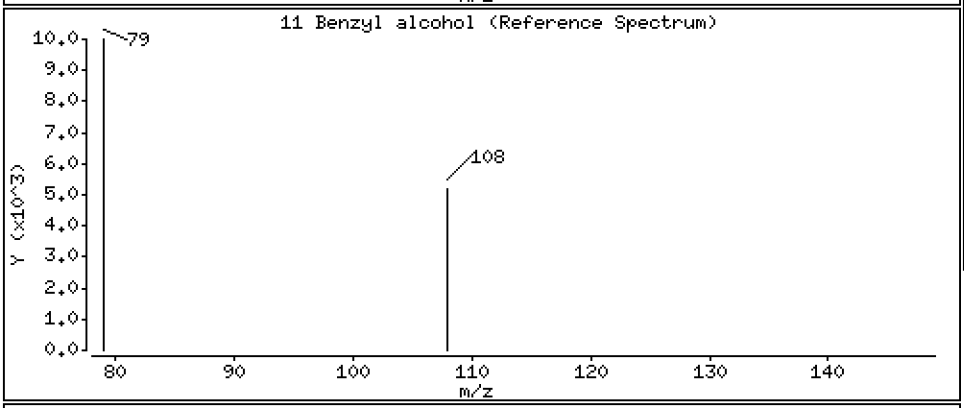
Concentration: 6.052 ug/mL

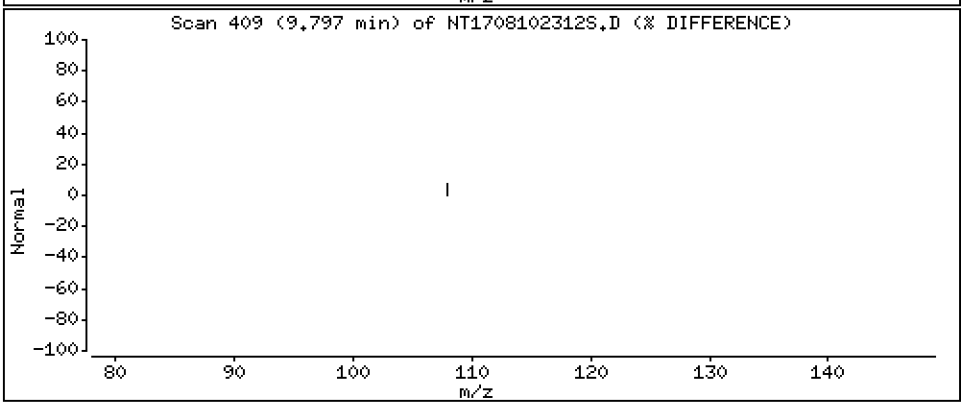












Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023125.D

Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

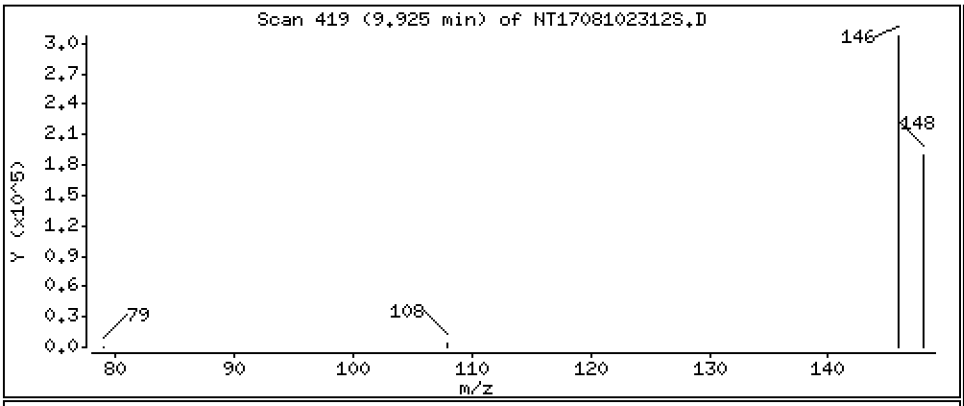
Operator: JGR

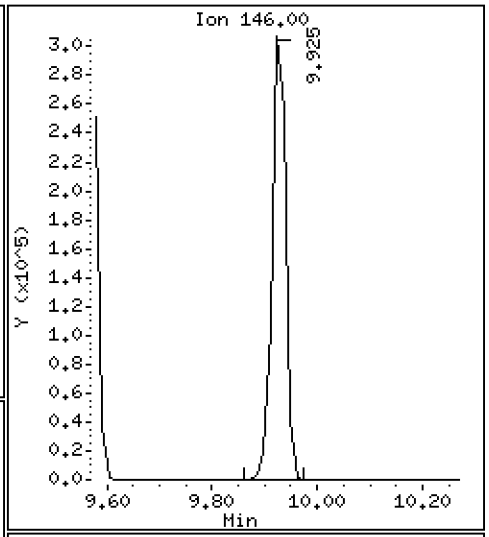
Column phase: ZB-5msi

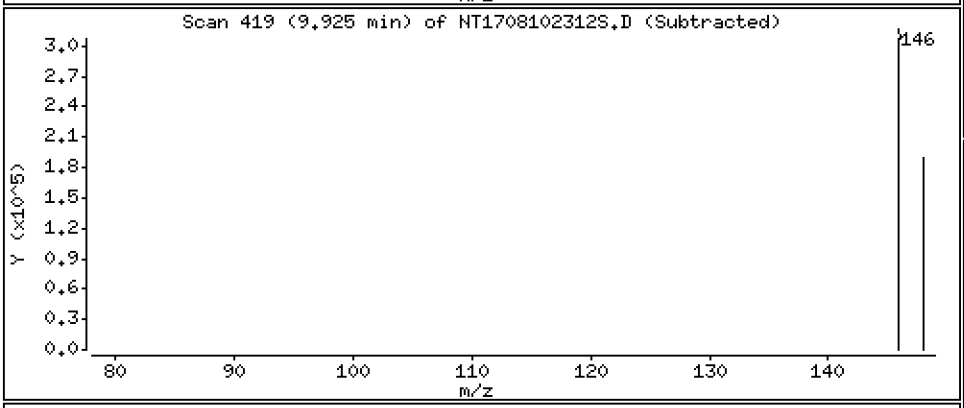
Column diameter: 0.25

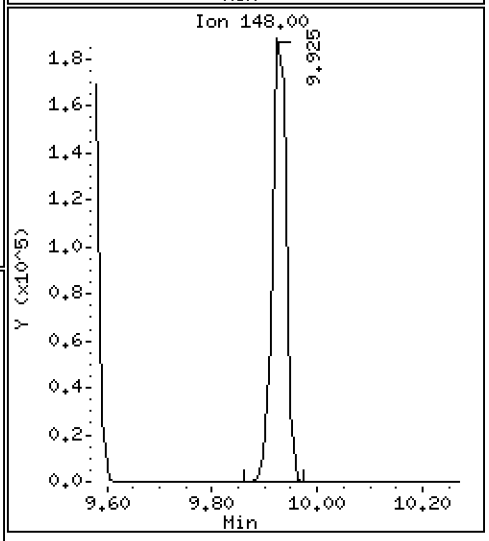
12 1,2-Dichlorobenzene

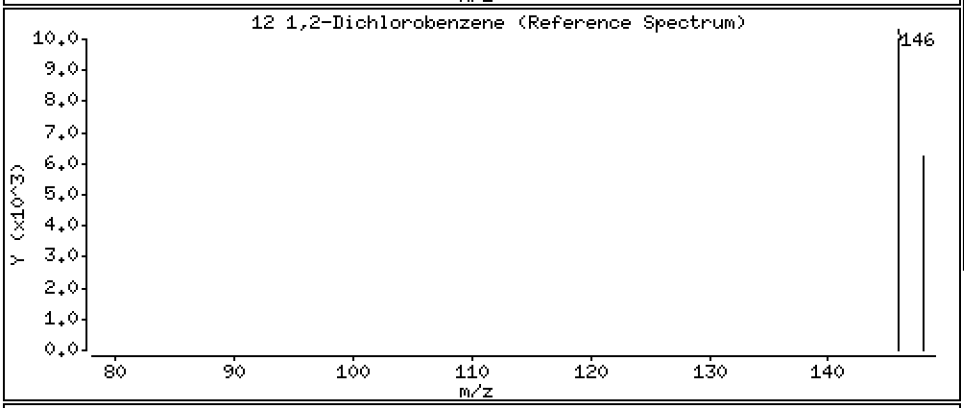
Concentration: 5.216 ug/mL

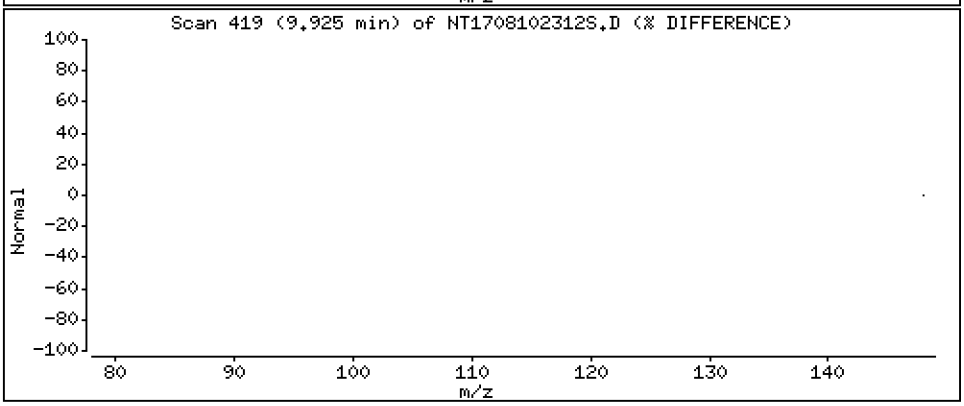












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

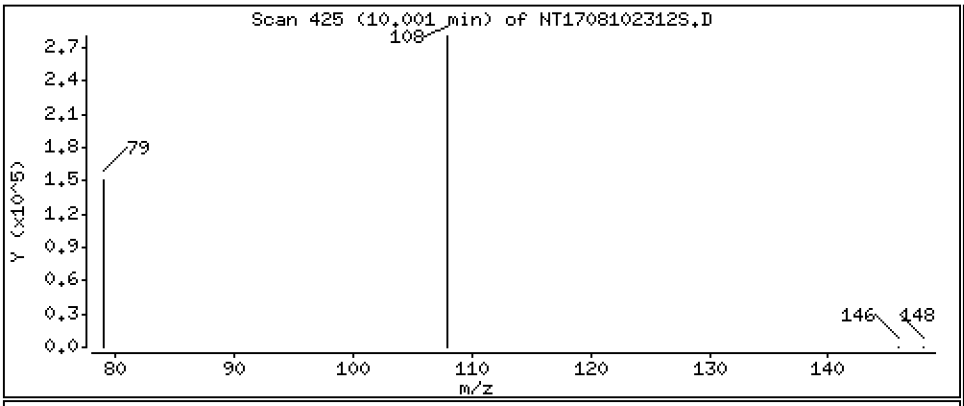
Operator: JGR

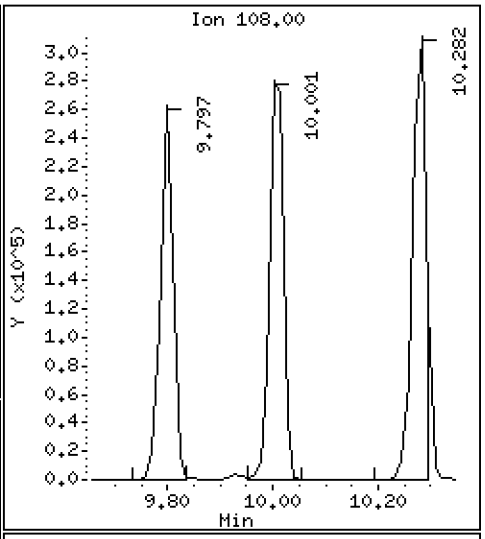
Column phase: ZB-5msi

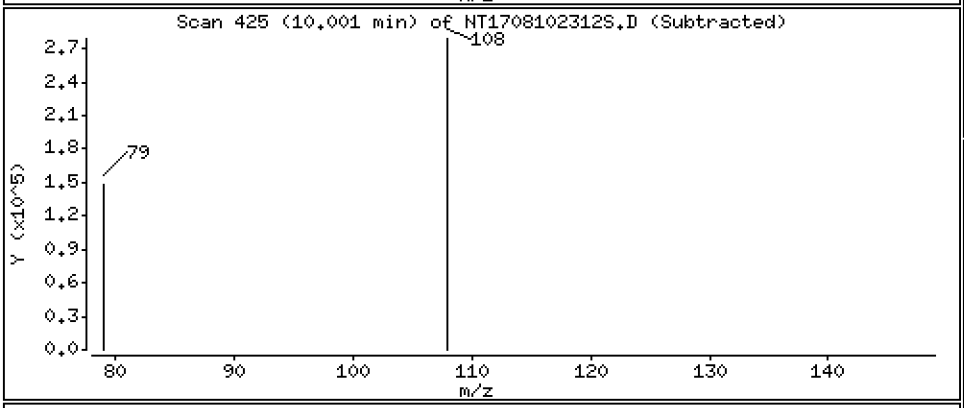
Column diameter: 0.25

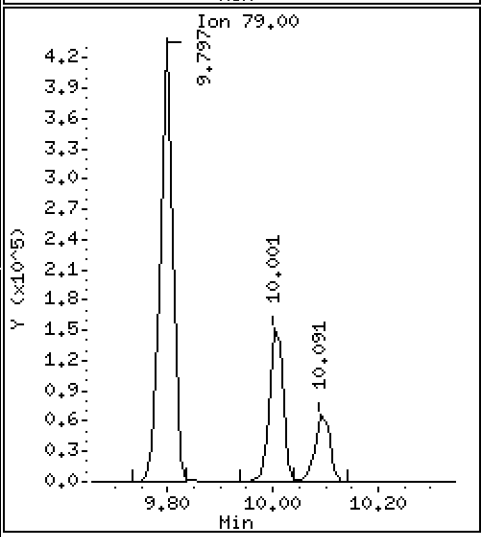
13 2-Methylphenol

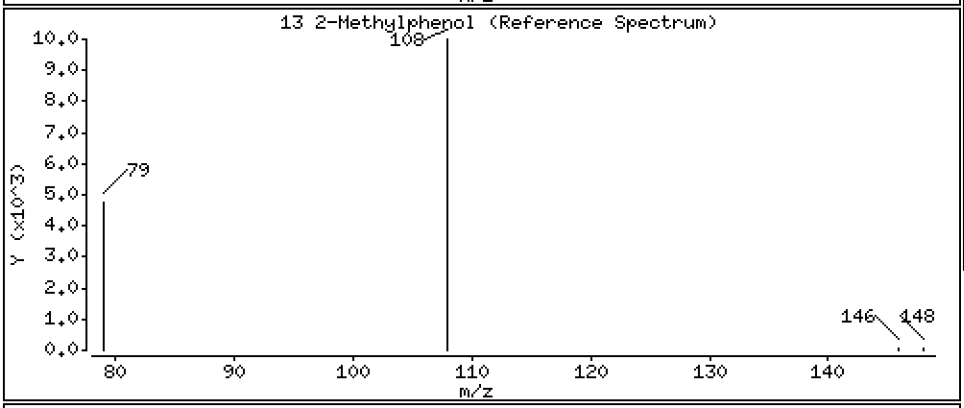
Concentration: 5.112 ug/mL

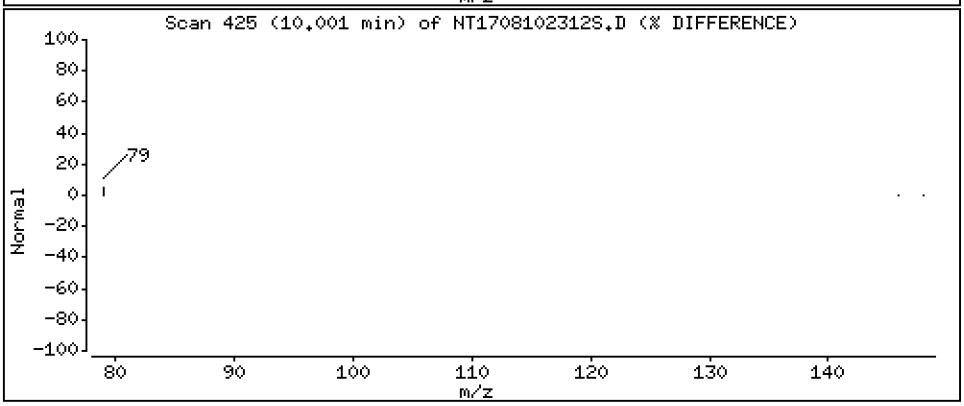












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

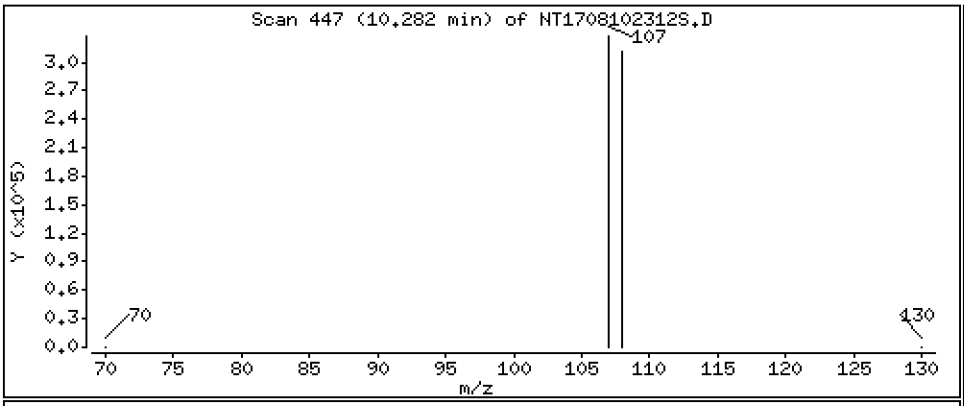
Operator: JGR

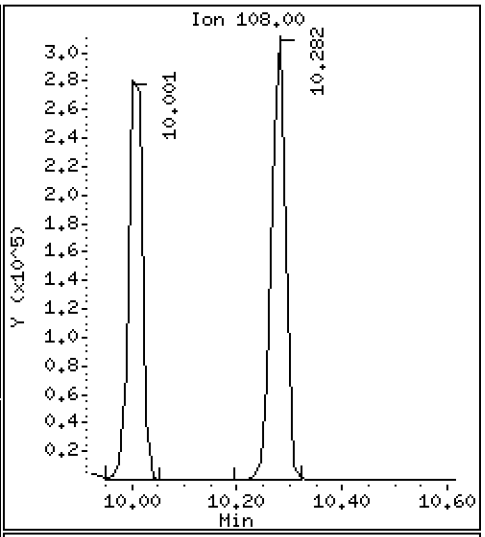
Column phase: ZB-5msi

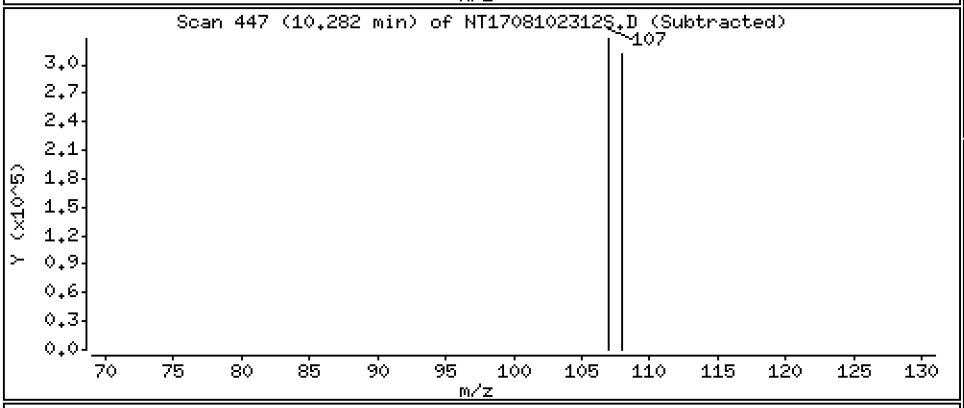
Column diameter: 0.25

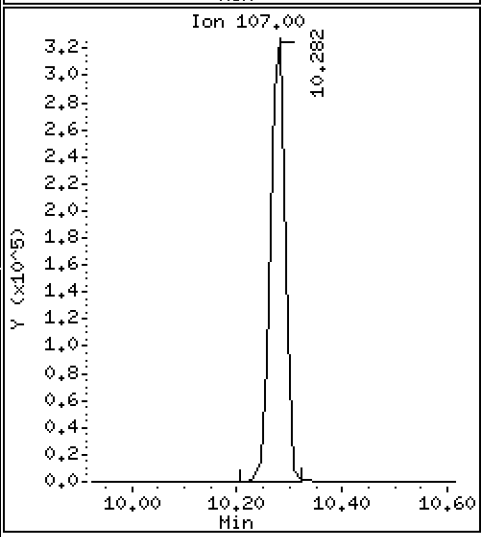
15 4-Methylphenol

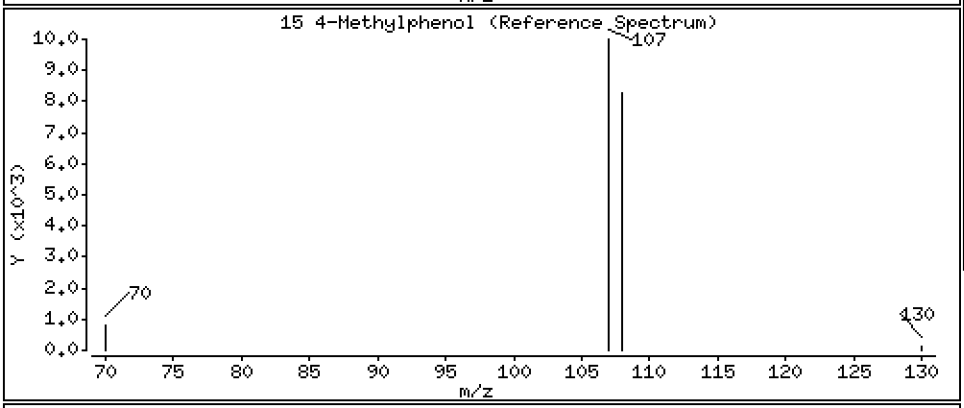
Concentration: 5.491 ug/mL

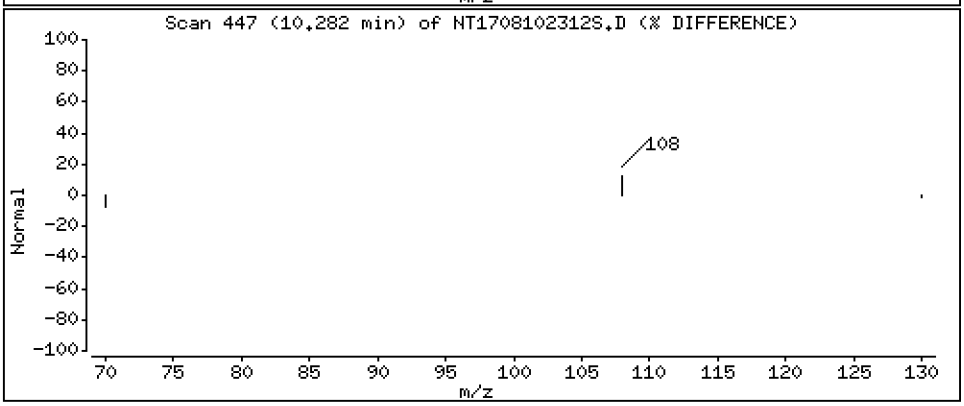












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

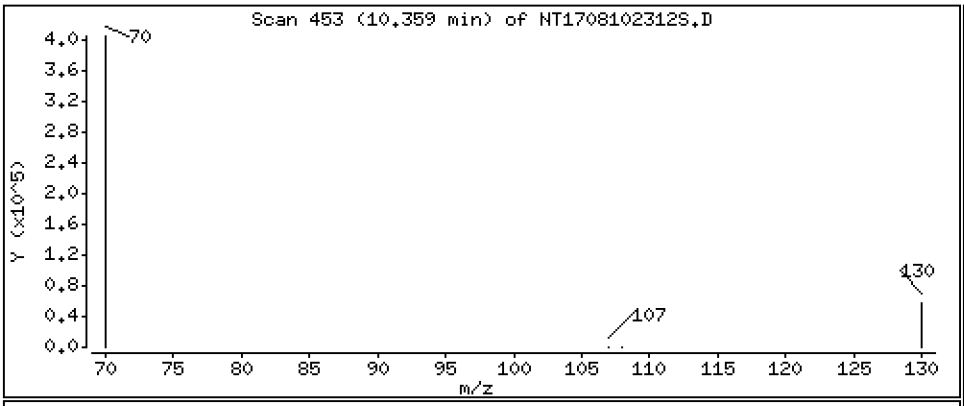
Operator: JGR

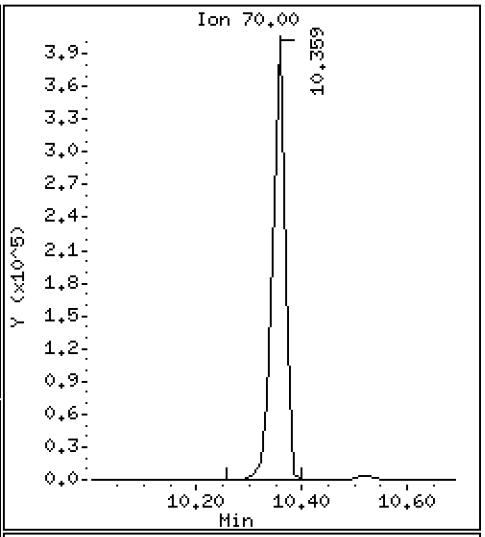
Column phase: ZB-5msi

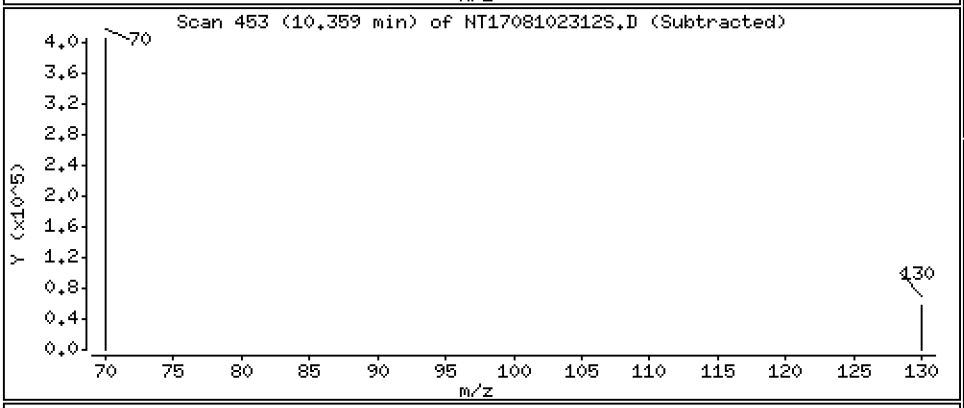
Column diameter: 0.25

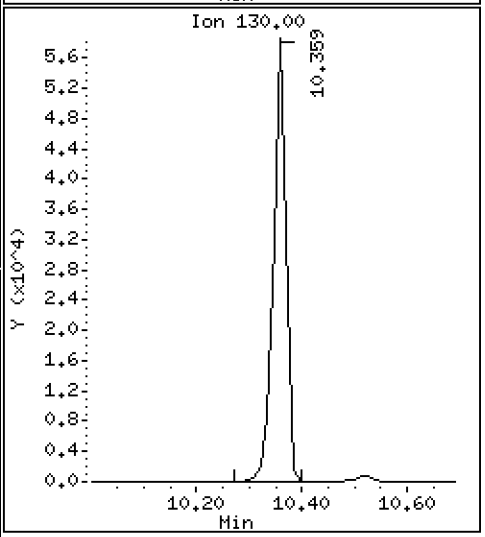
16 N-Nitroso-di-n-propylamine

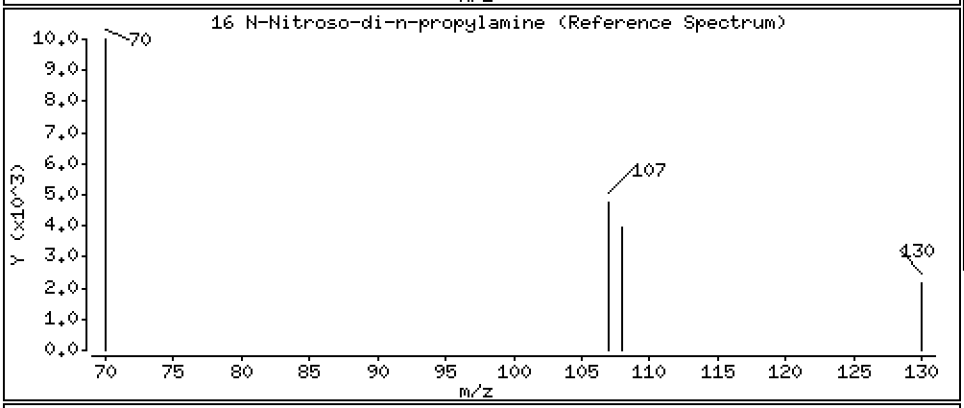
Concentration: 6.171 ug/mL

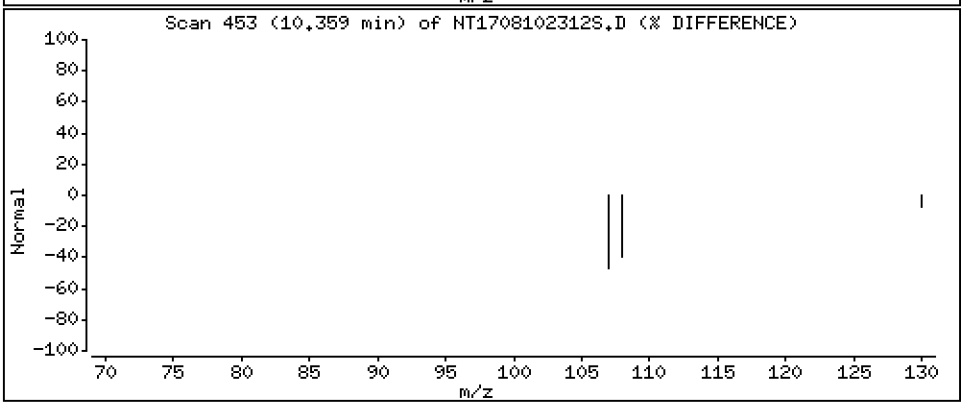












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

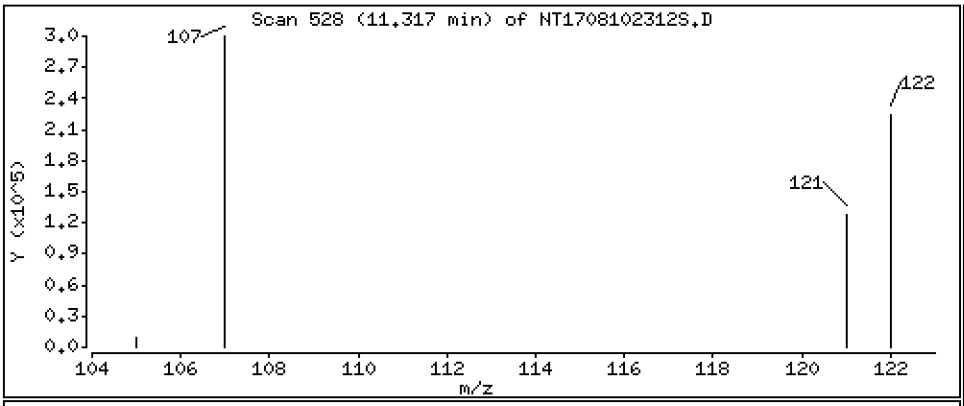
Operator: JGR

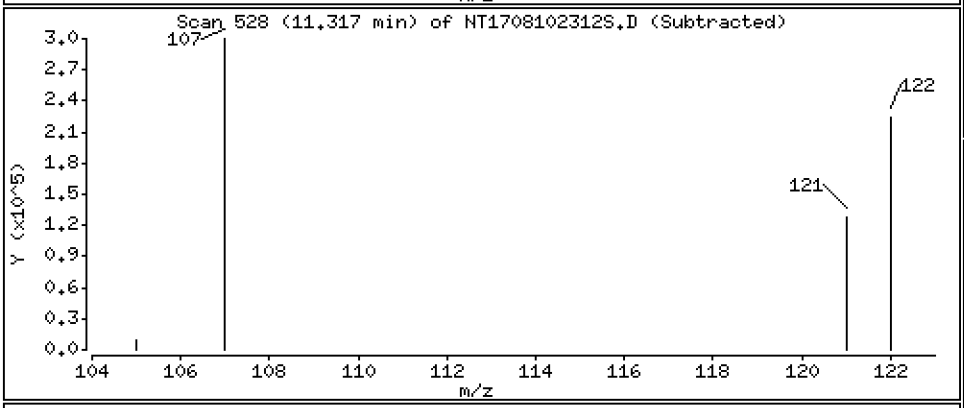
Column phase: ZB-5msi

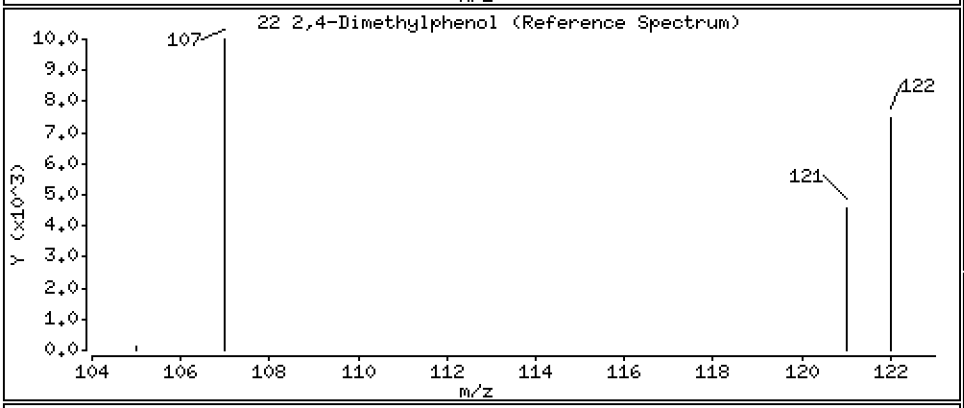
Column diameter: 0.25

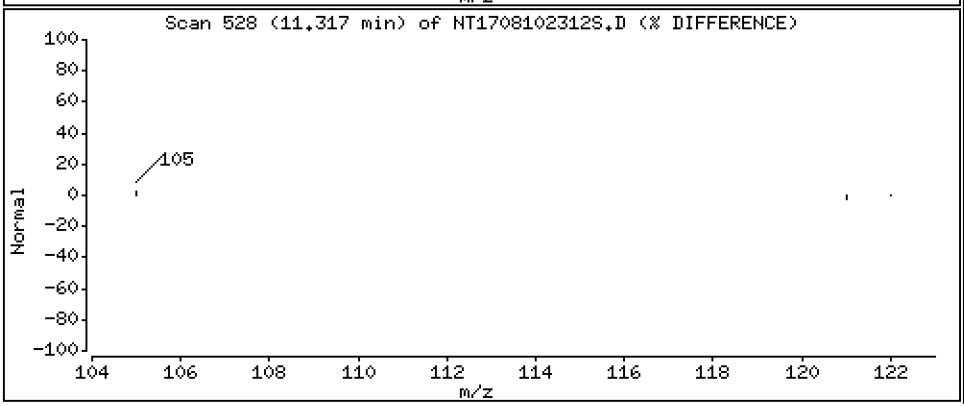
22 2,4-Dimethylphenol

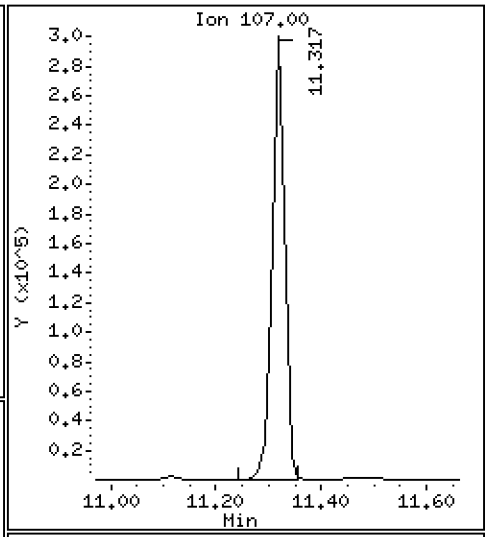
Concentration: 4.520 ug/mL

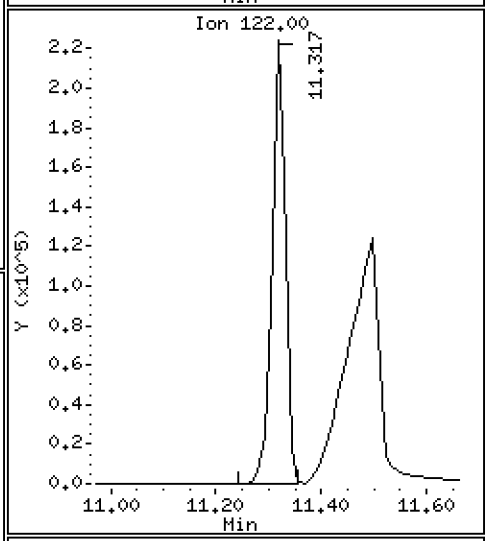


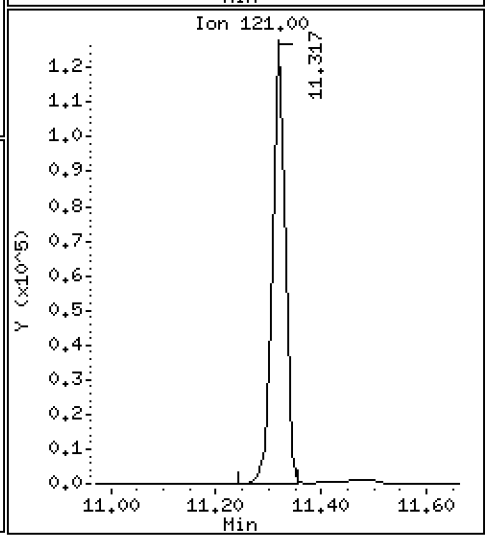












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

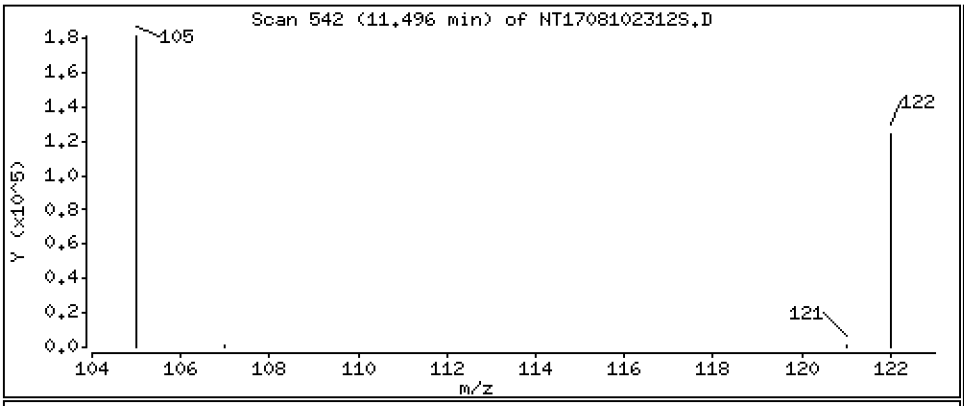
Operator: JGR

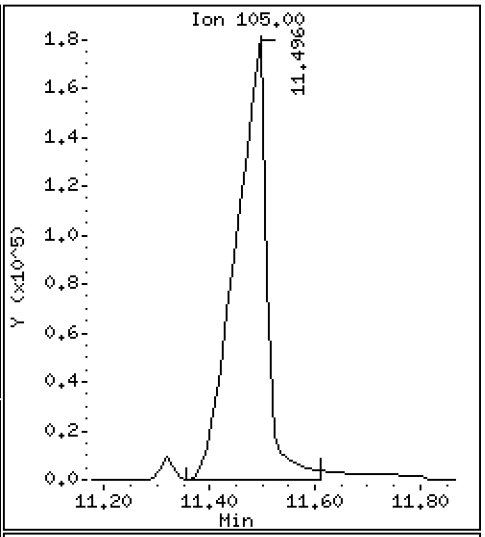
Column phase: ZB-5msi

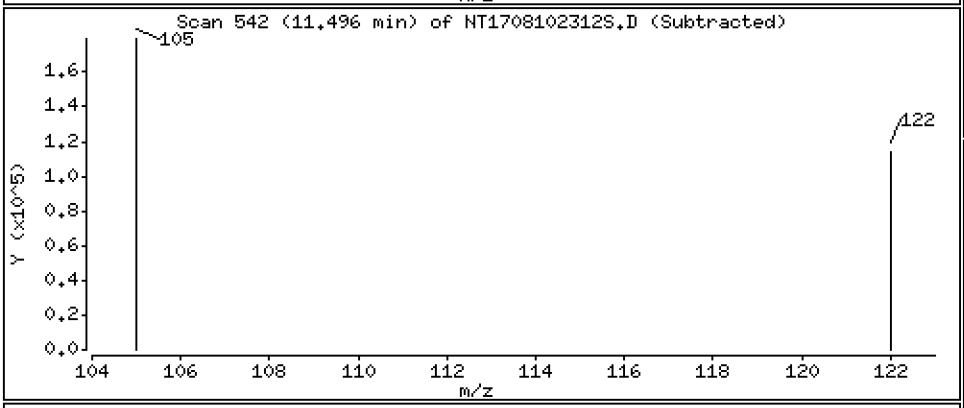
Column diameter: 0.25

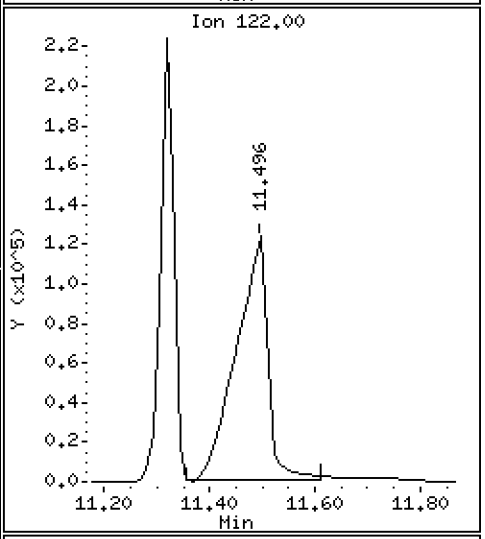
24 Benzoic acid

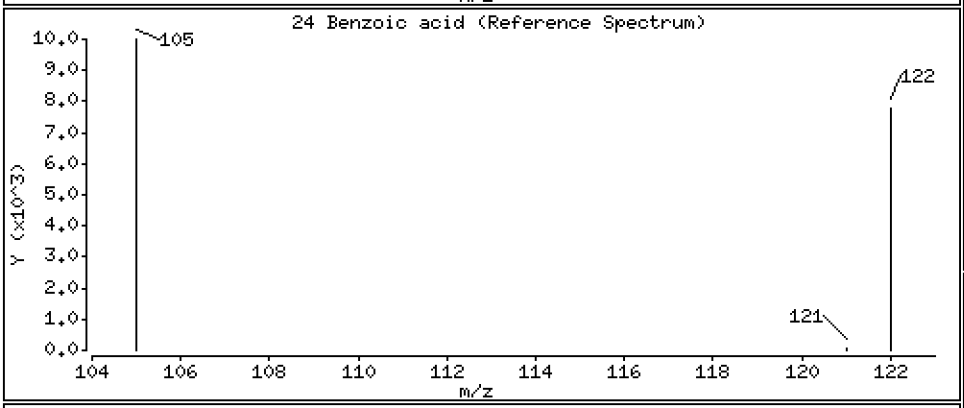
Concentration: 9.959 ug/mL

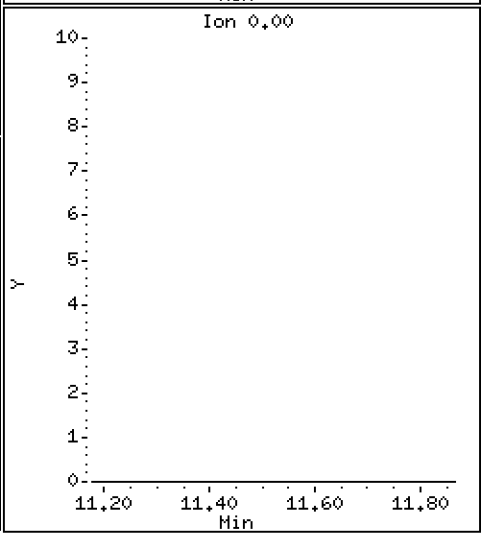


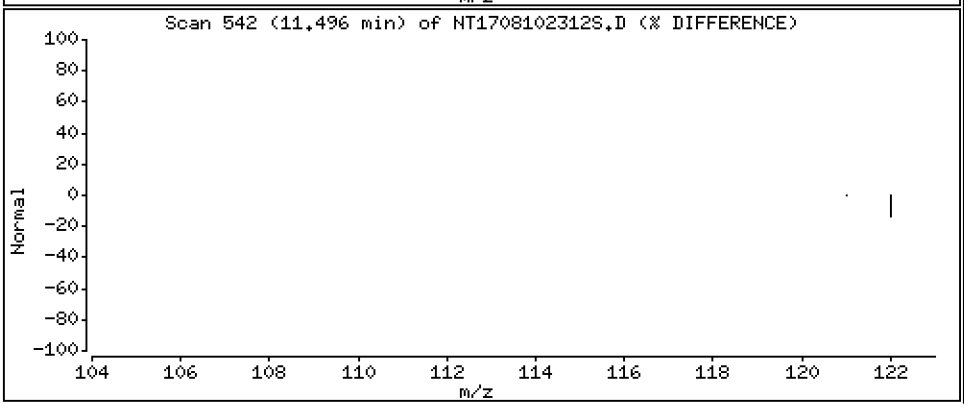












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

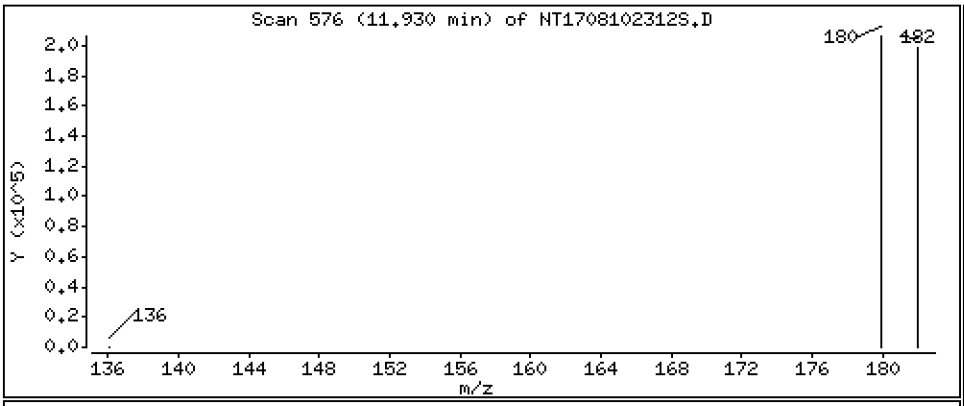
Operator: JGR

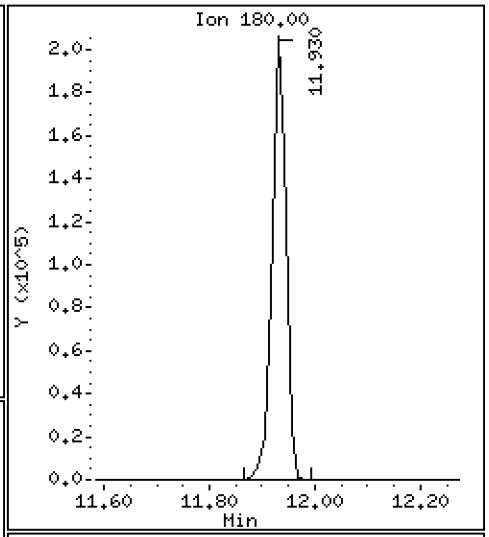
Column phase: ZB-5msi

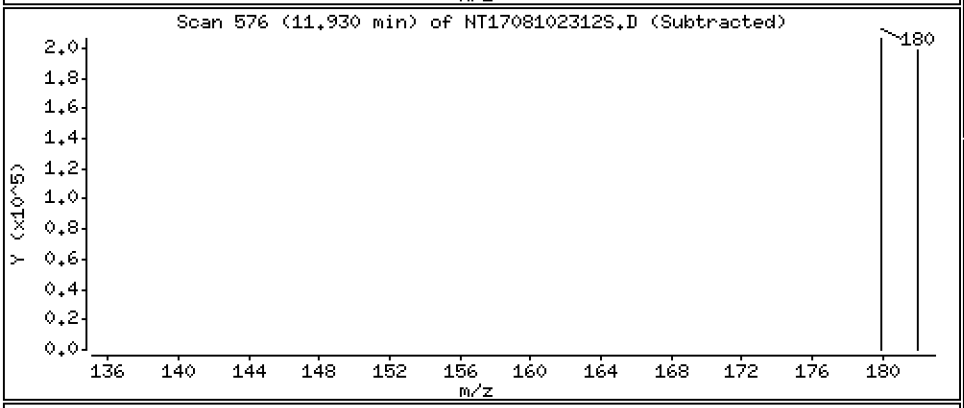
Column diameter: 0.25

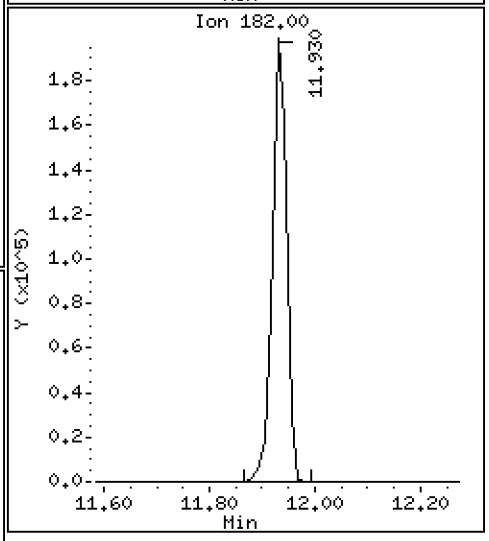
26 1,2,4-Trichlorobenzene

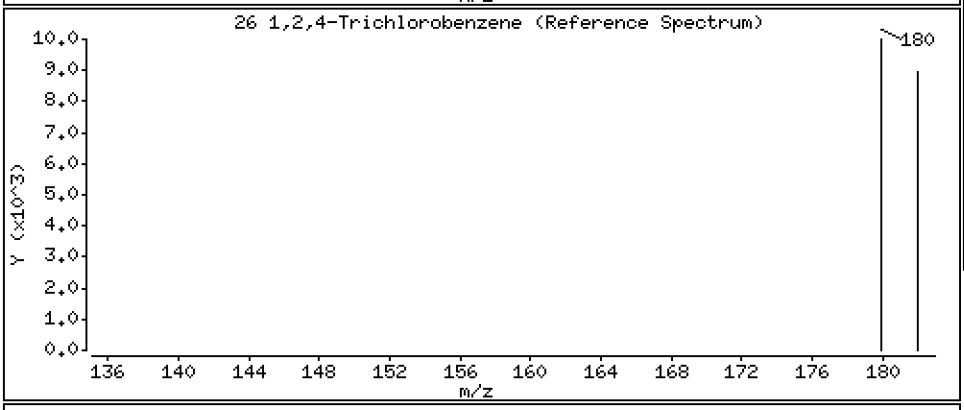
Concentration: 5.028 ug/mL

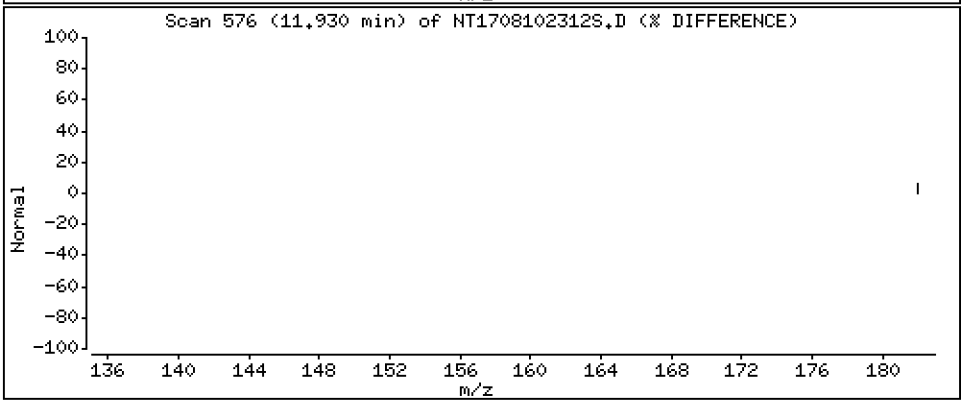












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

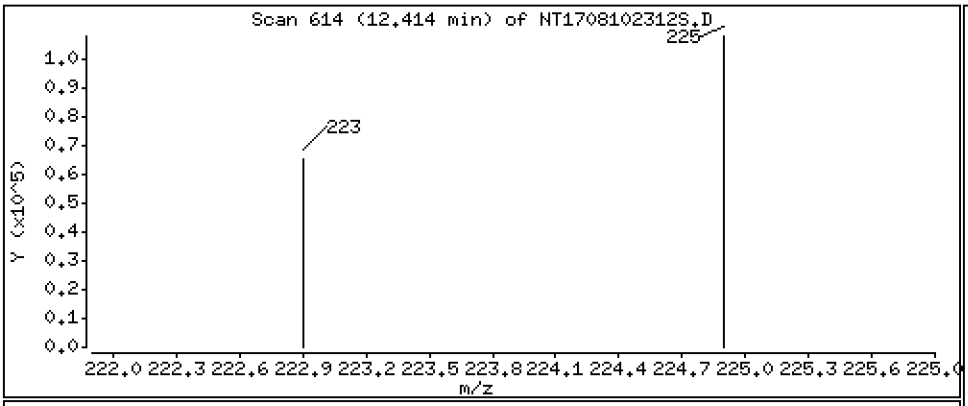
Operator: JGR

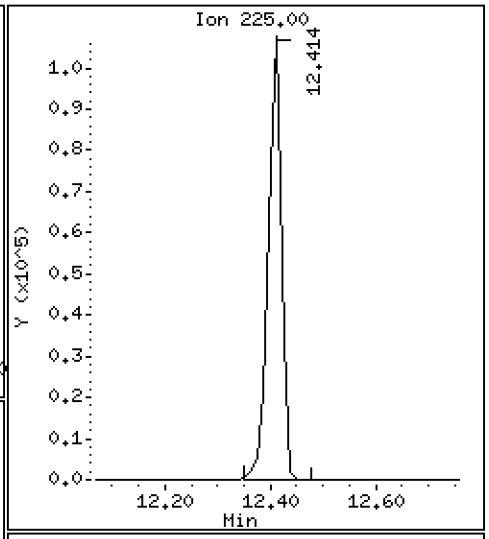
Column phase: ZB-5msi

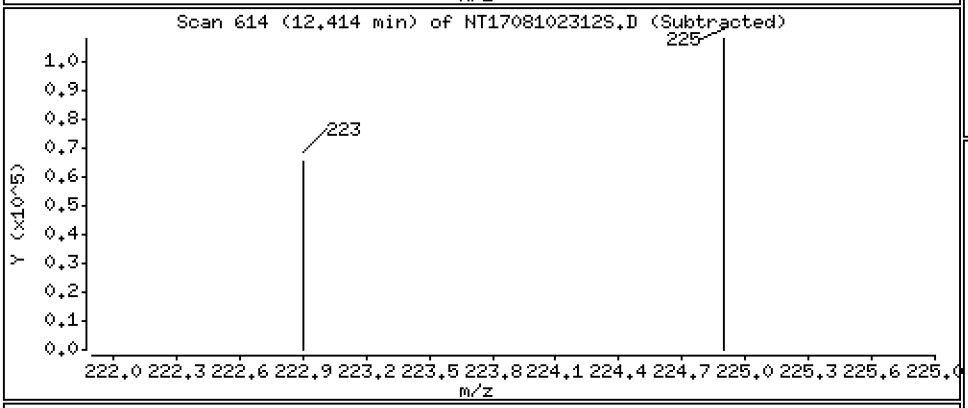
Column diameter: 0.25

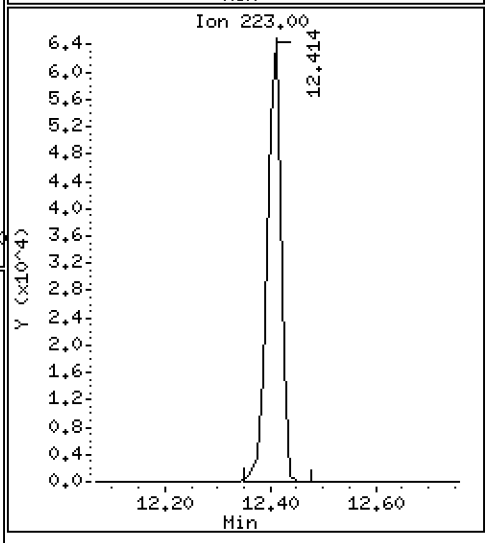
30 Hexachlorobutadiene

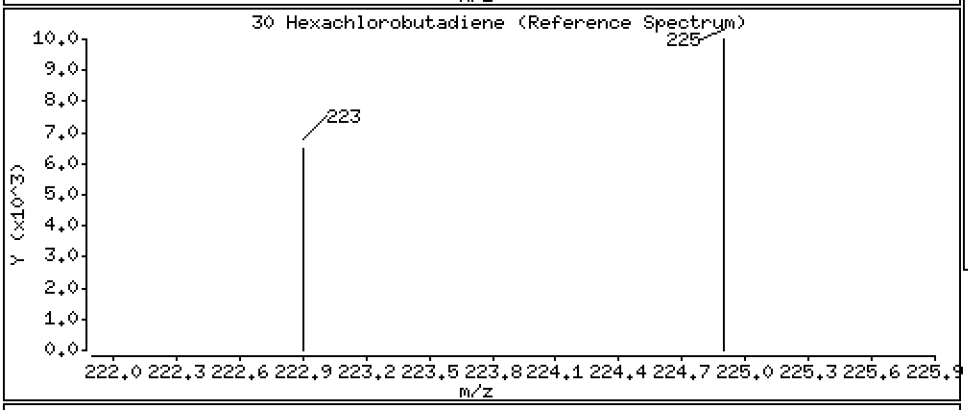
Concentration: 5.378 ug/mL

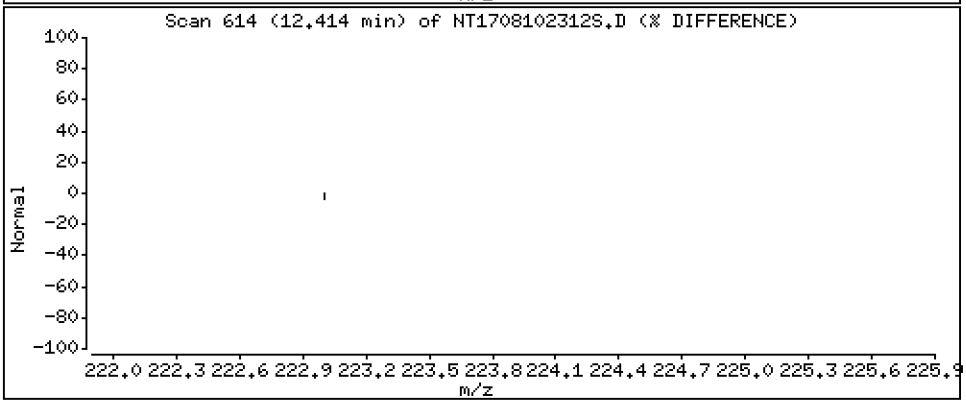












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

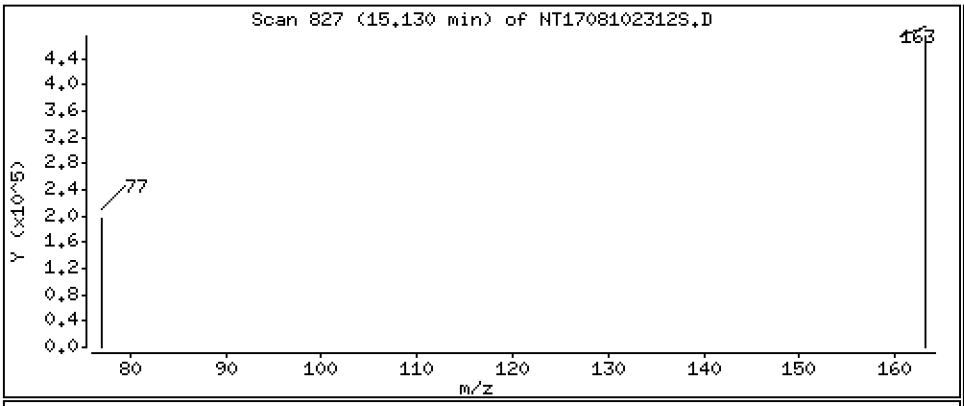
Operator: JGR

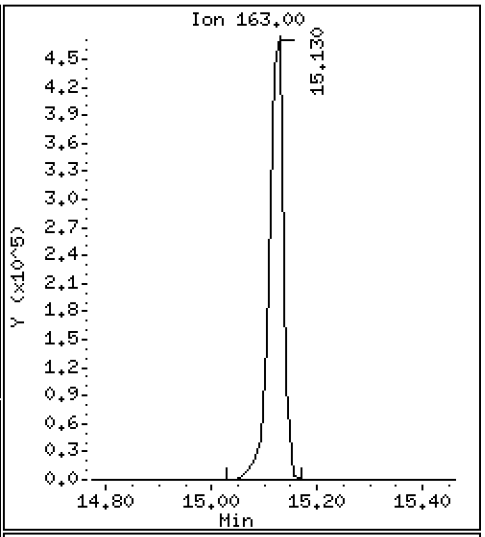
Column phase: ZB-5msi

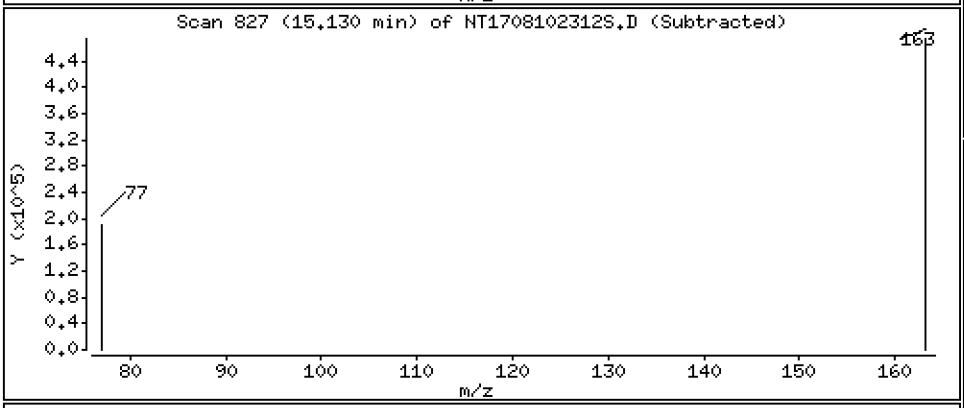
Column diameter: 0.25

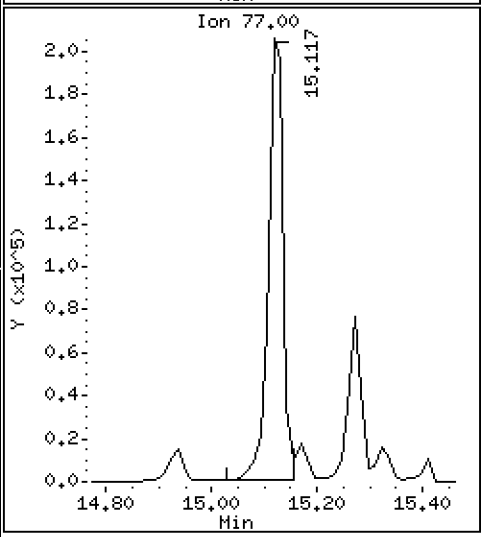
39 Dimethylphthalate

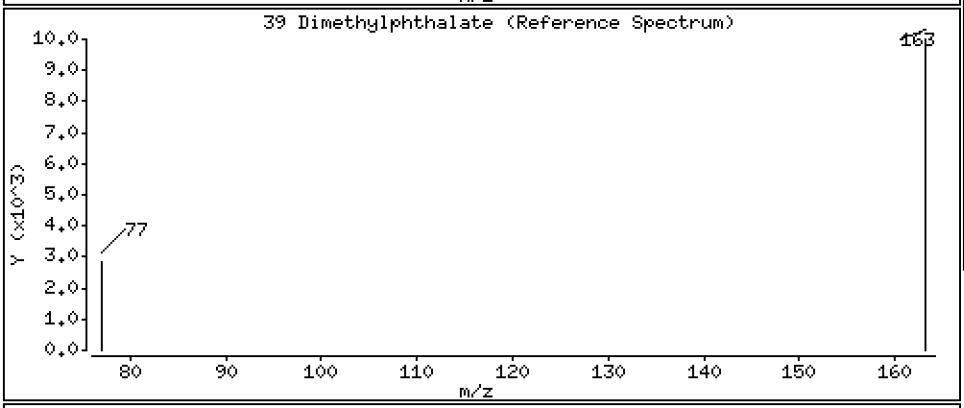
Concentration: 5.868 ug/mL

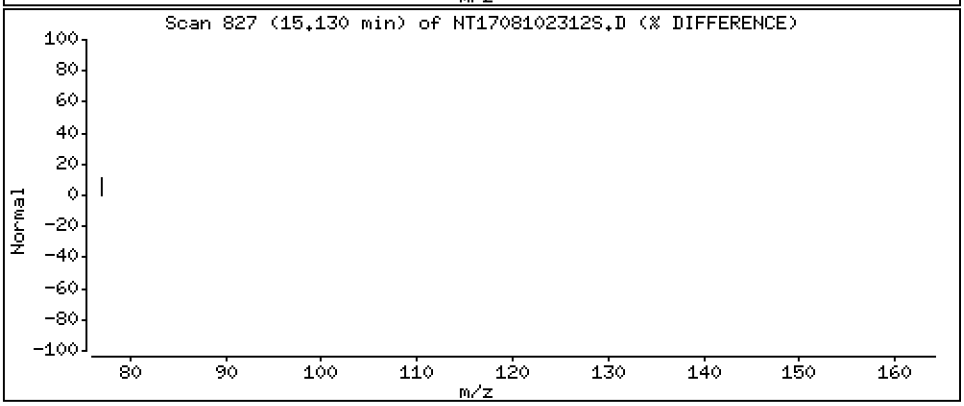












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

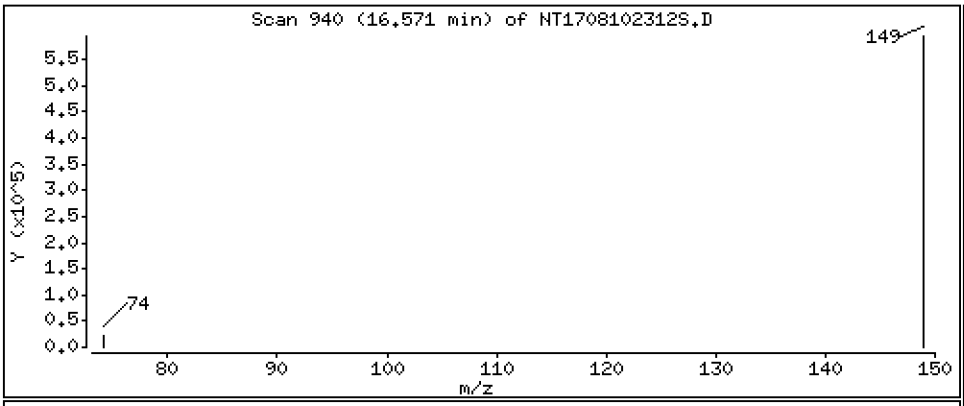
Operator: JGR

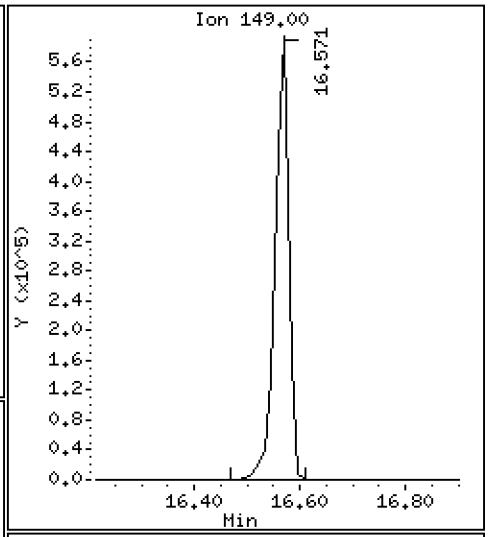
Column phase: ZB-5msi

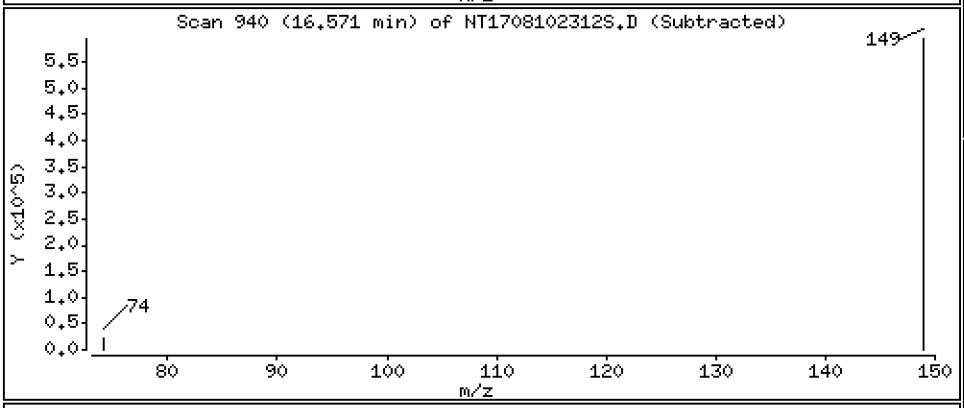
Column diameter: 0.25

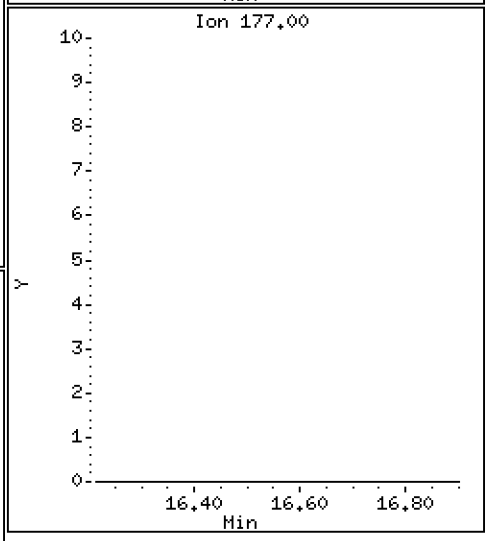
50 Diethylphthalate

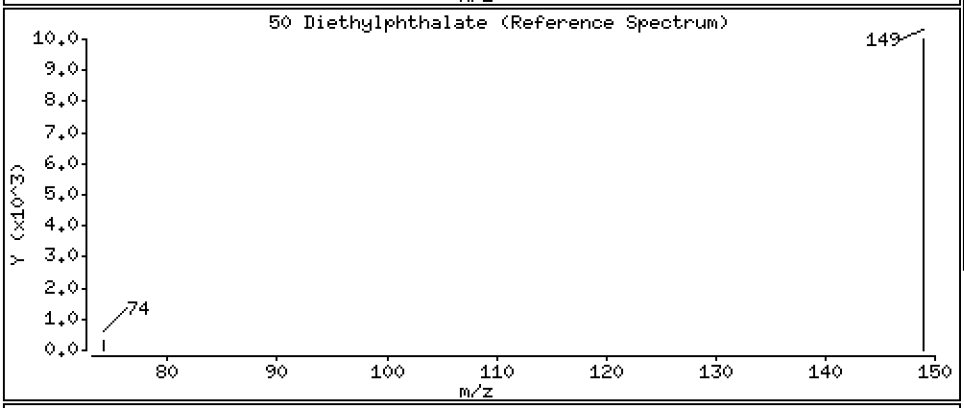
Concentration: 6.387 ug/mL

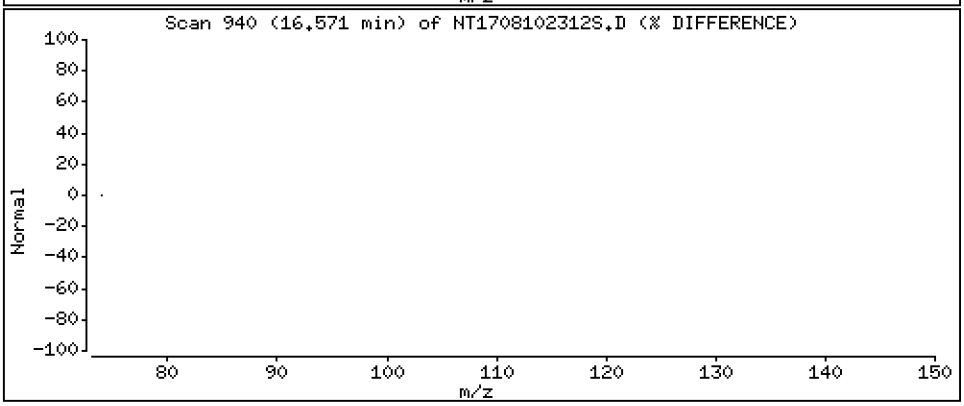












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

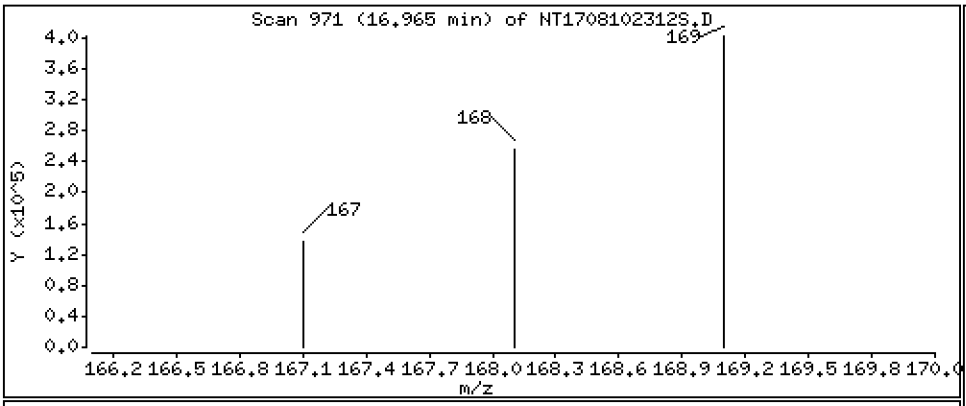
Operator: JGR

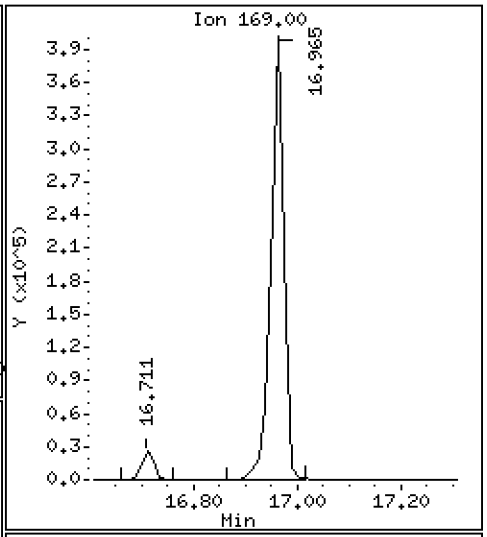
Column phase: ZB-5msi

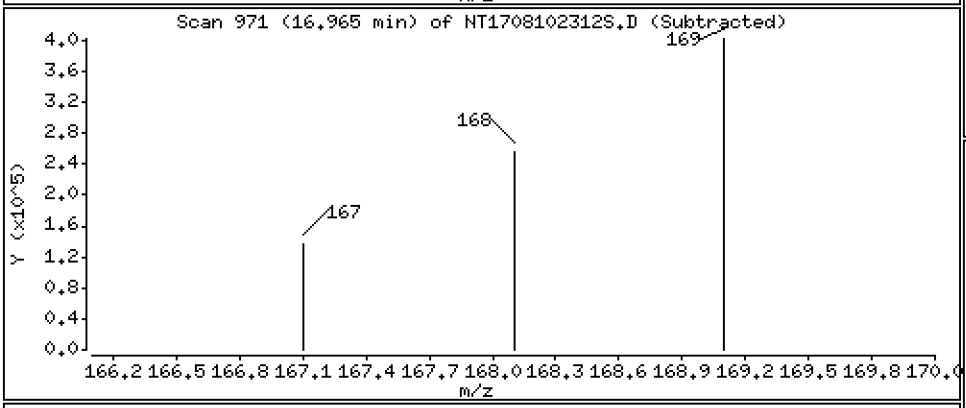
Column diameter: 0.25

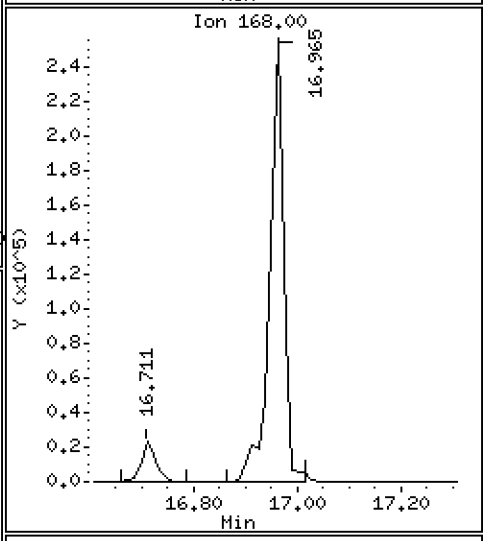
54 N-Nitrosodiphenylamine

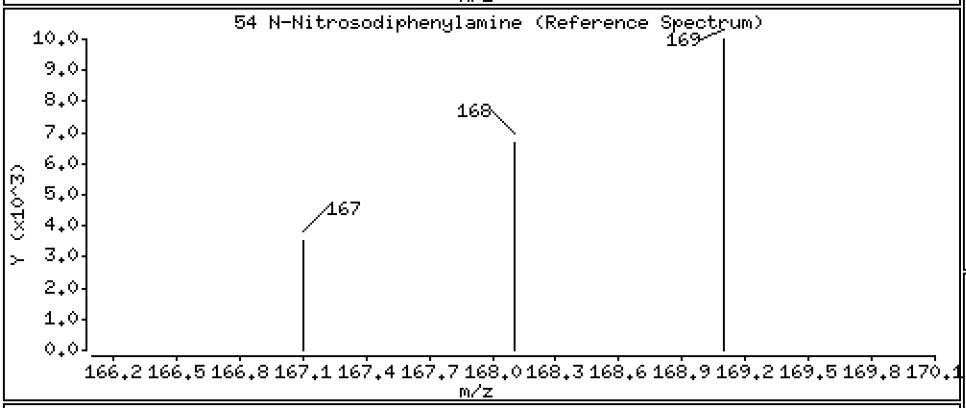
Concentration: 5.881 ug/mL

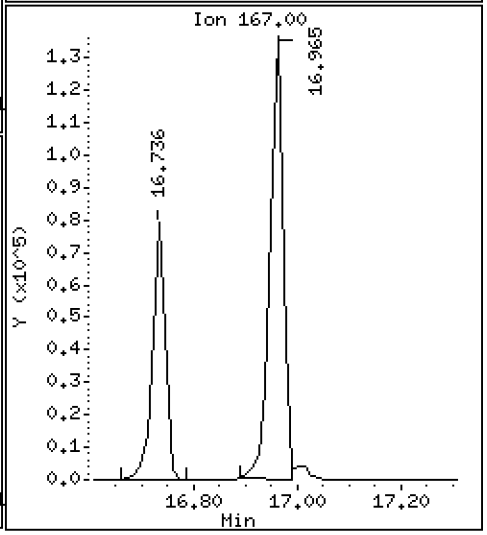


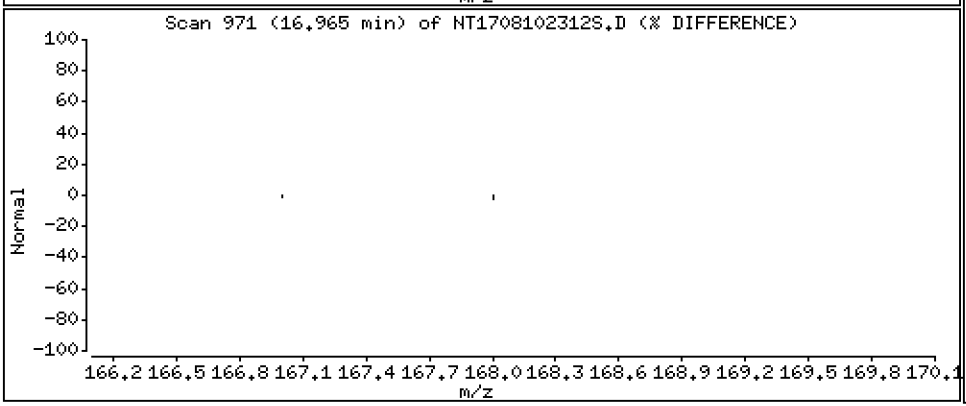












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

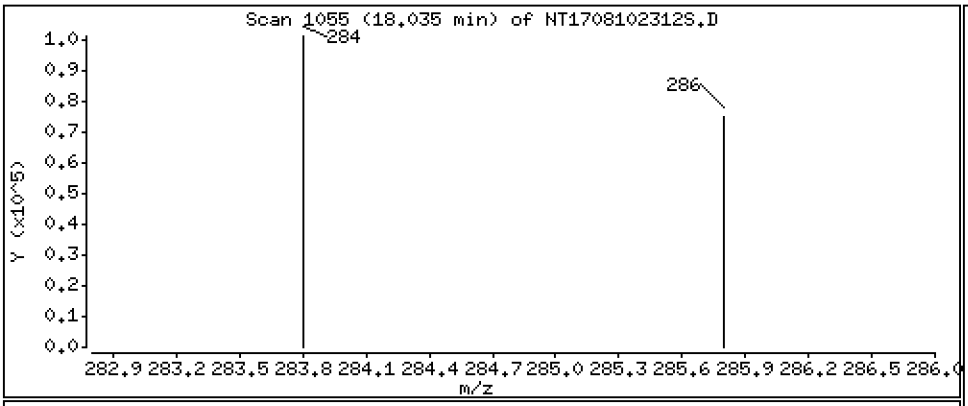
Operator: JGR

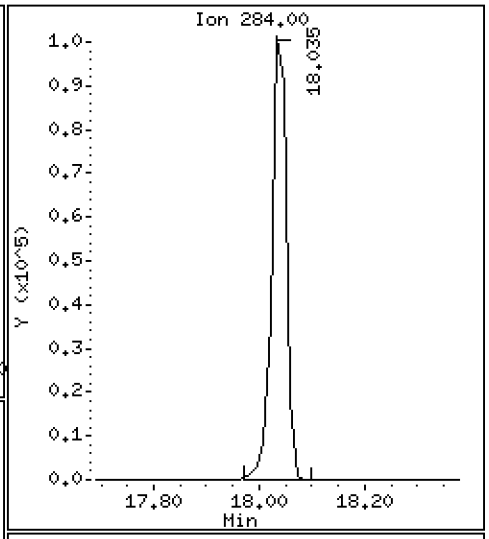
Column phase: ZB-5msi

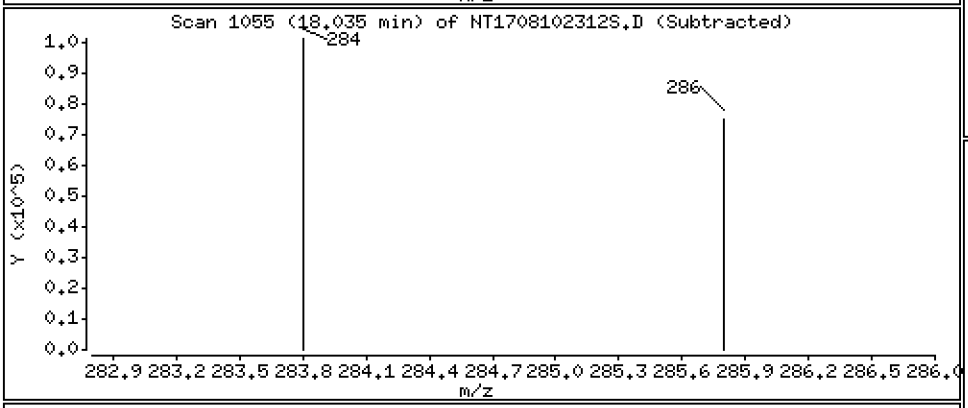
Column diameter: 0.25

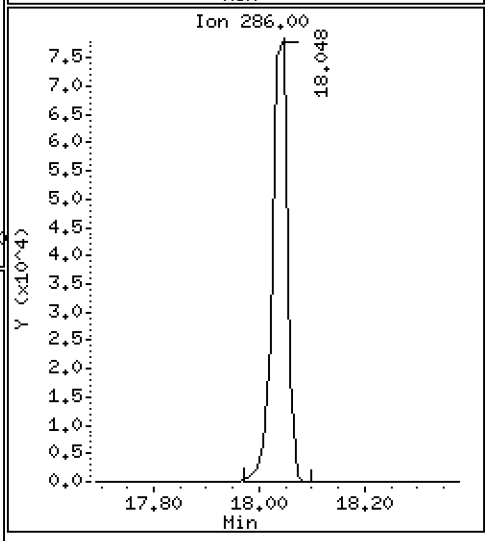
57 Hexachlorobenzene

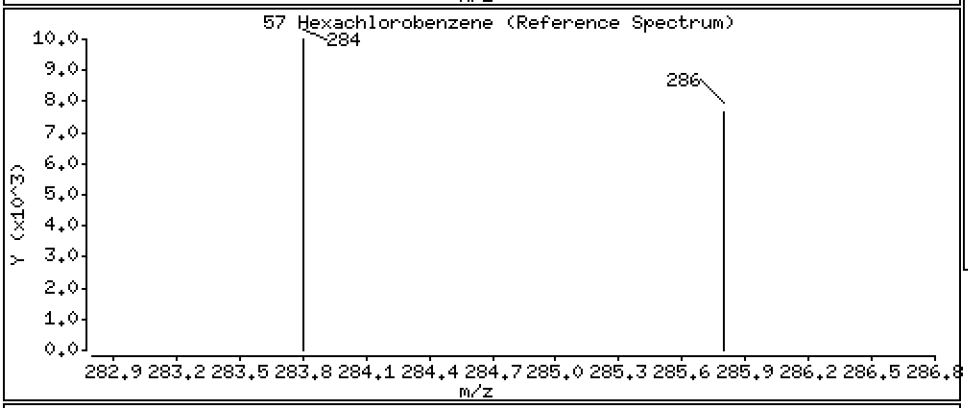
Concentration: 5.215 ug/mL

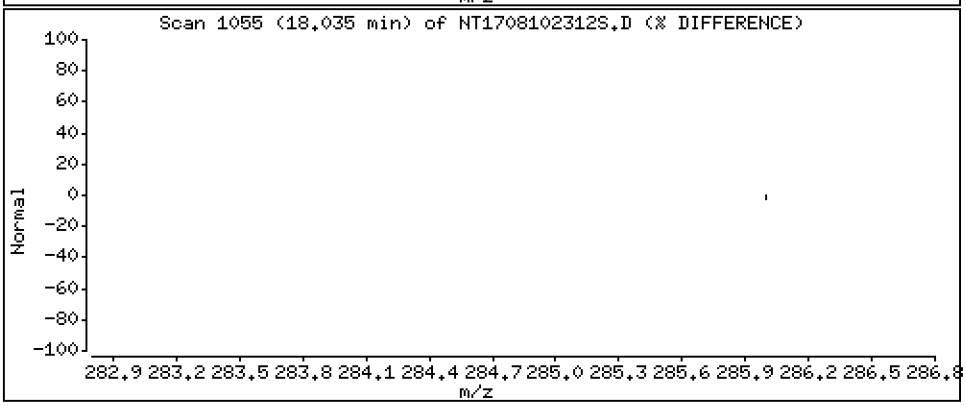












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

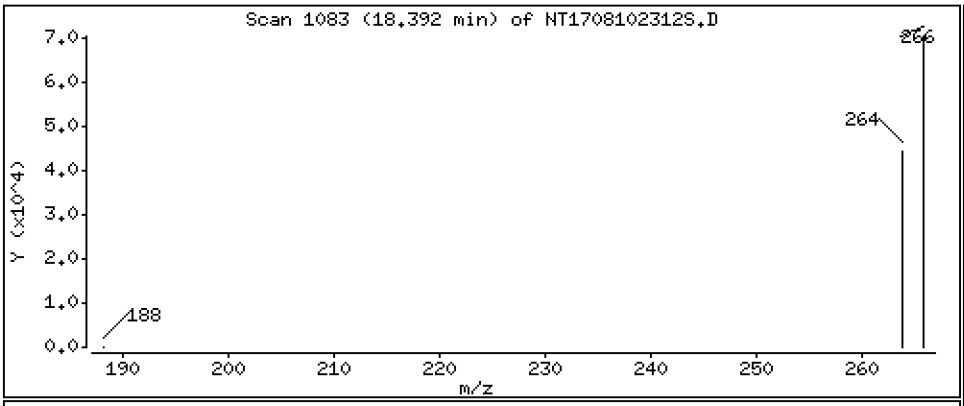
Operator: JGR

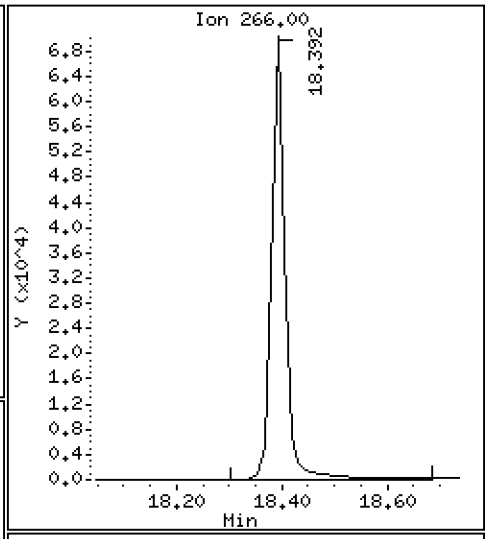
Column phase: ZB-5msi

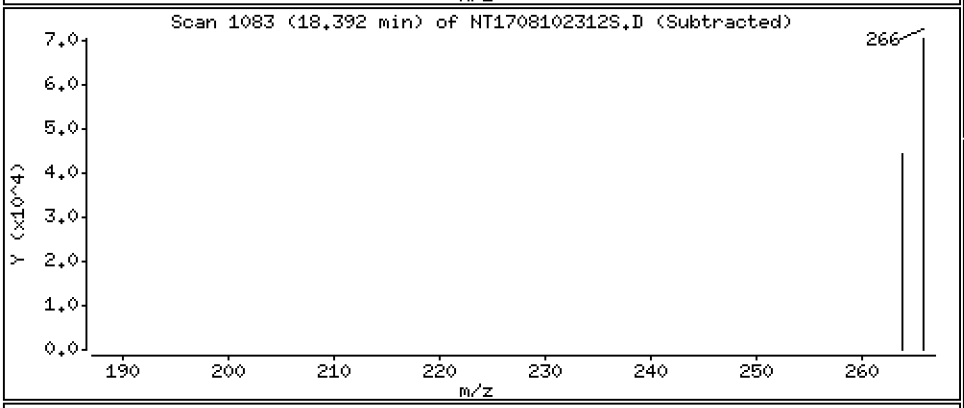
Column diameter: 0.25

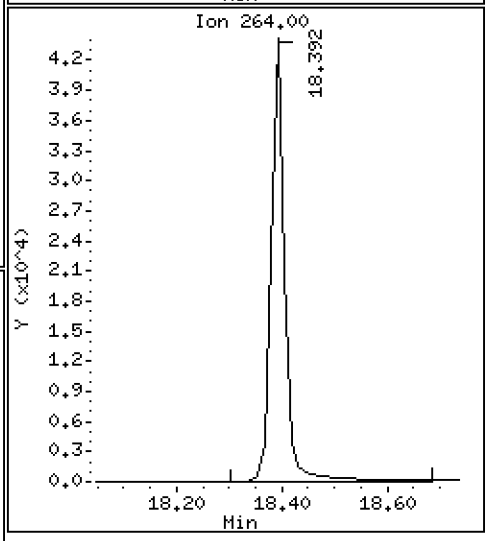
58 Pentachlorophenol

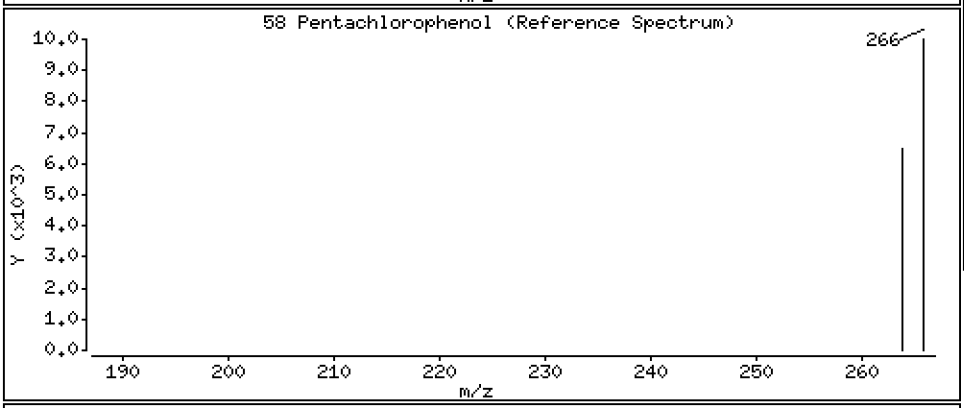
Concentration: 4.844 ug/mL

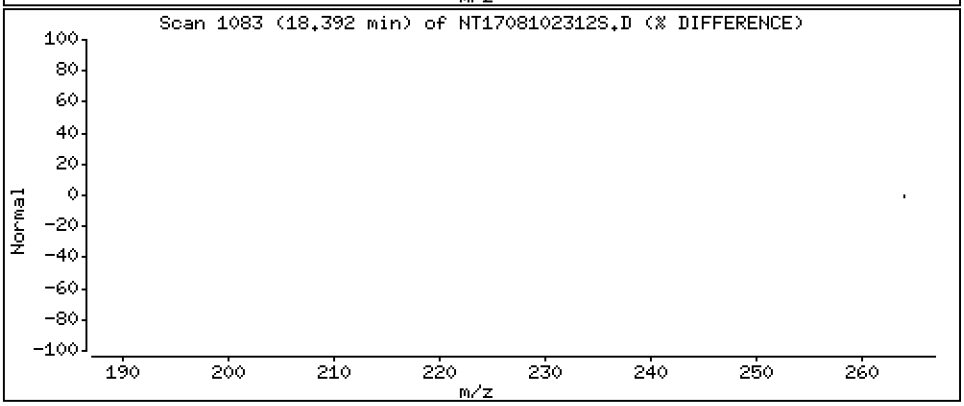












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

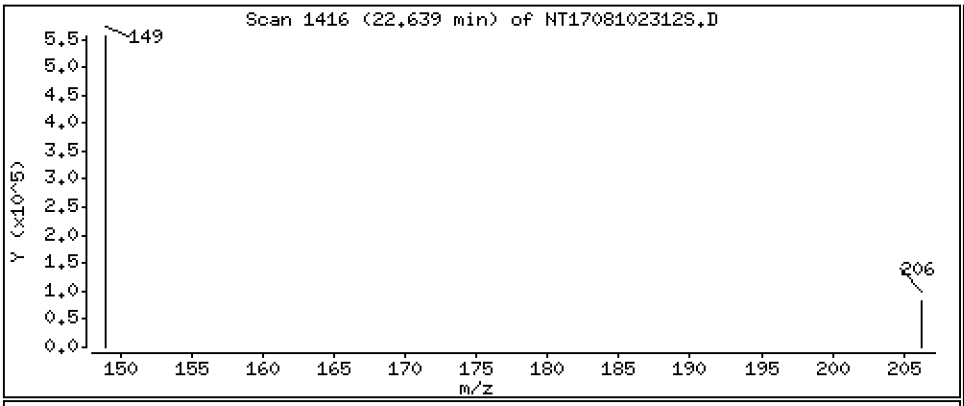
Operator: JGR

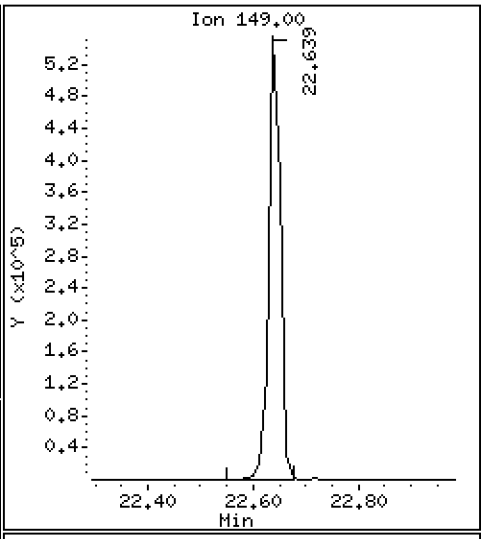
Column phase: ZB-5msi

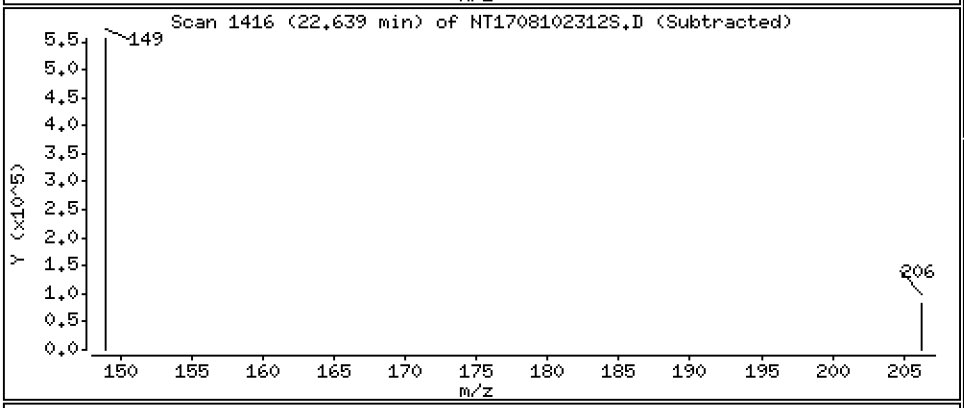
Column diameter: 0.25

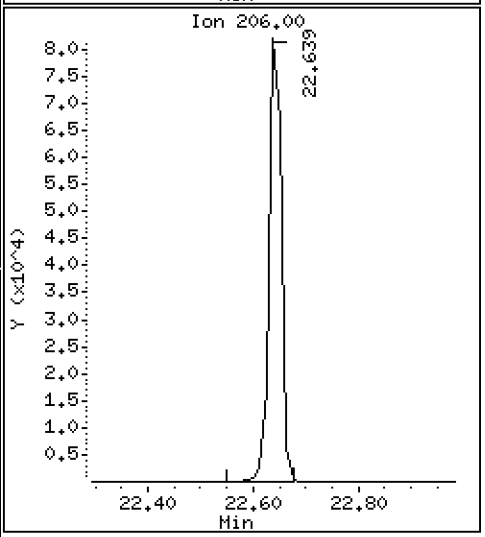
67 Butylbenzylphthalate

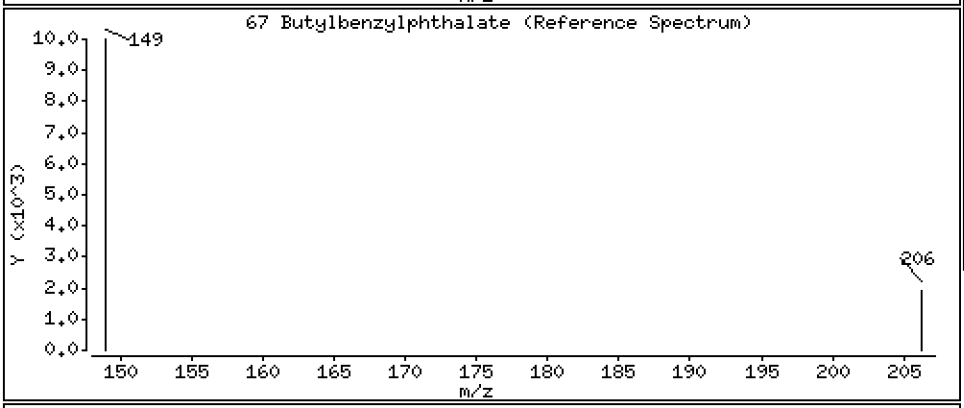
Concentration: 5.503 ug/mL

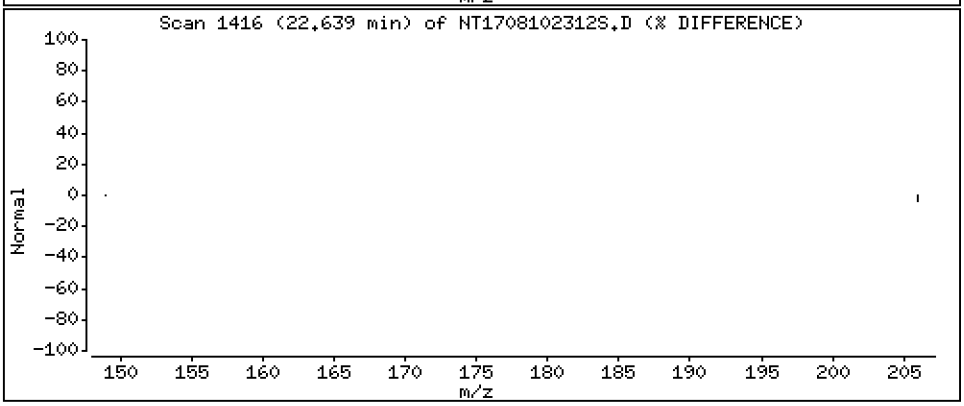












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

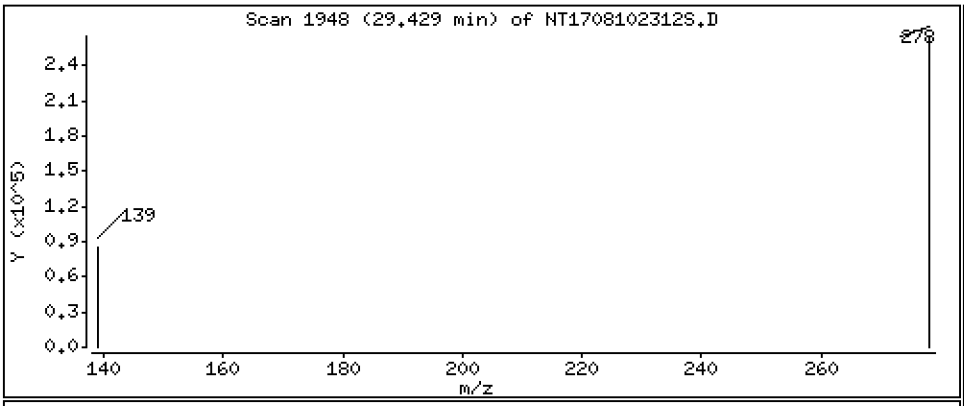
Operator: JGR

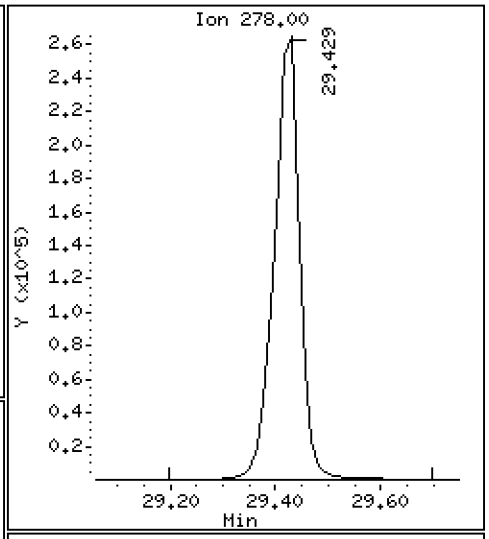
Column phase: ZB-5msi

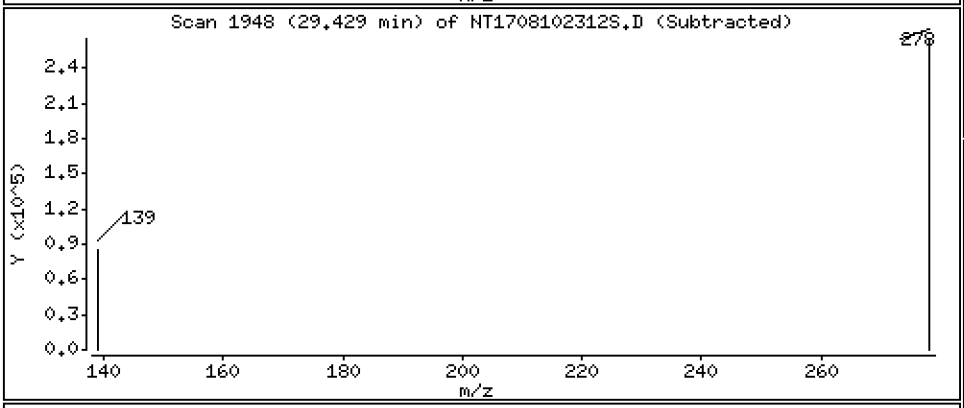
Column diameter: 0.25

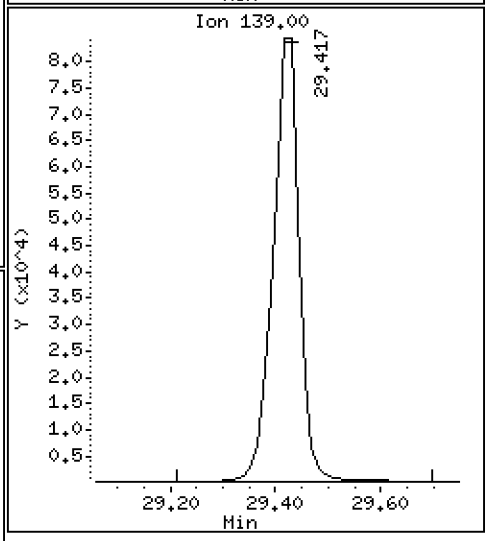
79 Dibenzo(a,h)anthracene

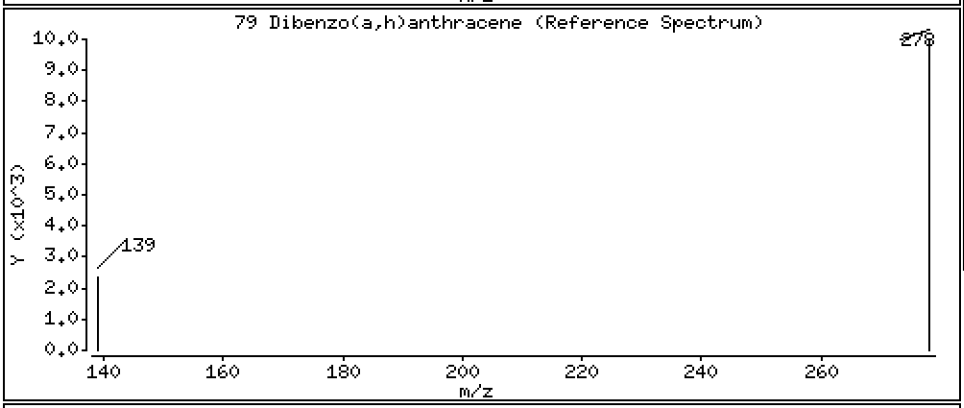
Concentration: 5.066 ug/mL

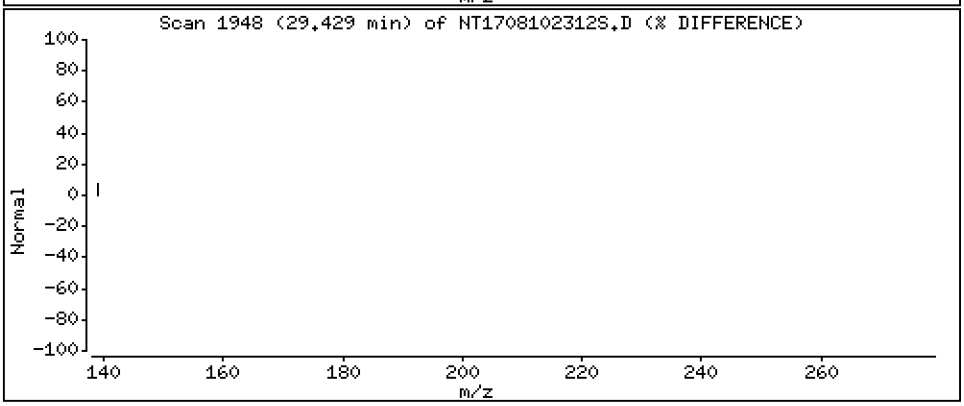












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

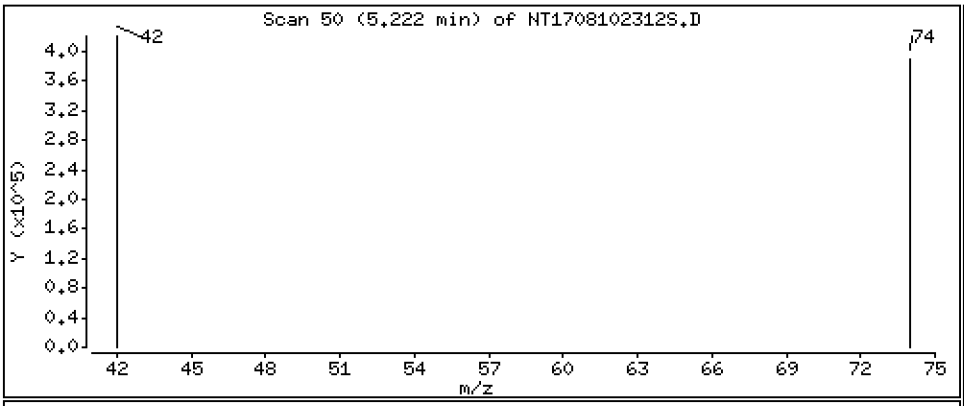
Operator: JGR

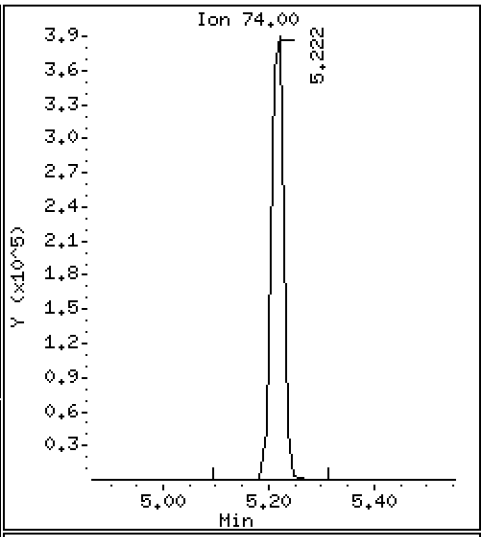
Column phase: ZB-5msi

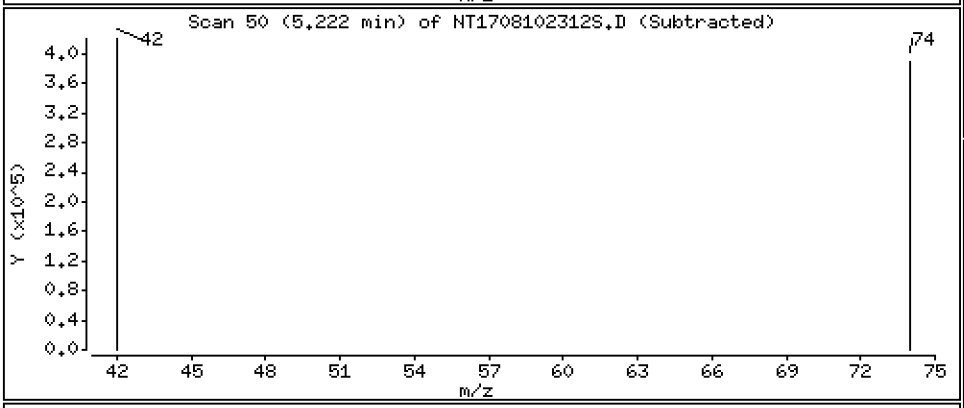
Column diameter: 0.25

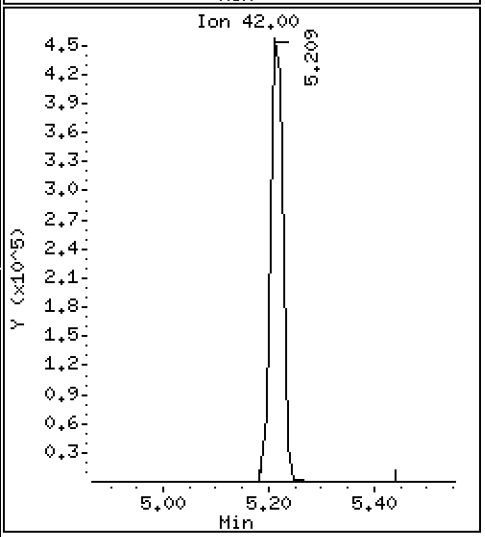
90 N-Nitrosodimethylamine

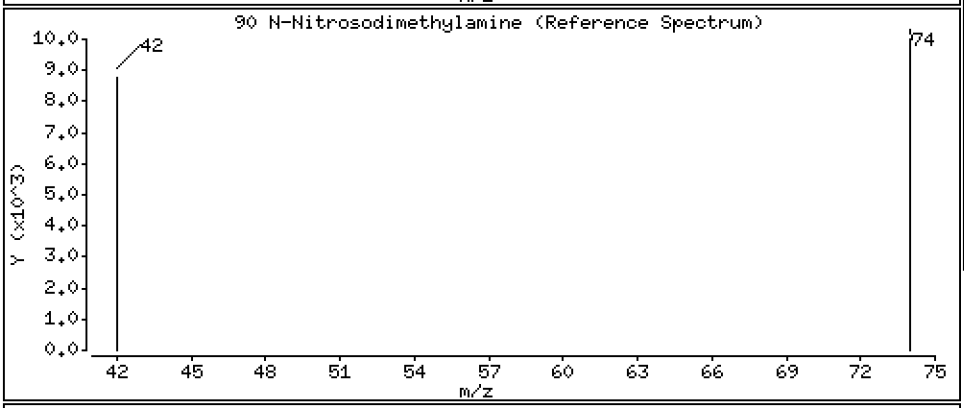
Concentration: 5.656 ug/mL

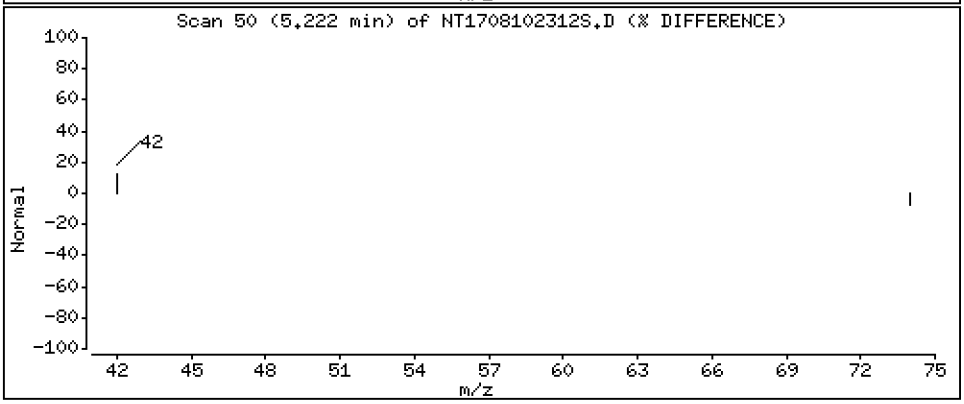












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102312S.D
Lab Smp Id: SEQ-SCV1
Inj Date : 10-AUG-2023 18:45
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Meth Date : 11-Aug-2023 08:13 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

			QUANT SIG						CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1	2-Fluorophenol	112	Compound Not Detected.						
	3	Phenol	94	8.891	8.891	(0.932)	932540		5.50239	5.502
	7	1,3-Dichlorobenzene	146	9.477	9.477	(0.993)	591053		5.15578	5.156
*	8	1,4-Dichlorobenzene-d4	152	9.541	9.541	(1.000)	267754		4.00000	
	9	1,4-Dichlorobenzene	146	9.566	9.566	(1.003)	573424		5.16858	5.169
	11	Benzyl alcohol	79	9.796	9.796	(1.027)	709897		6.05184	6.052
	12	1,2-Dichlorobenzene	146	9.924	9.924	(1.040)	561360		5.21616	5.216
	13	2-Methylphenol	108	10.001	10.001	(1.048)	525371		5.11241	5.112
	15	4-Methylphenol	108	10.282	10.269	(1.078)	589793		5.49122	5.491
	16	N-Nitroso-di-n-propylamine	70	10.359	10.346	(1.086)	677820		6.17127	6.171
	22	2,4-Dimethylphenol	107	11.317	11.316	(0.941)	497084		4.51954	4.520
	24	Benzoic acid	105	11.495	11.521	(0.955)	749206		9.95900	9.959
	26	1,2,4-Trichlorobenzene	180	11.929	11.929	(0.992)	377826		5.02775	5.028
*	27	Naphthalene-d8	136	12.031	12.018	(1.000)	1096182		4.00000	
	30	Hexachlorobutadiene	225	12.413	12.413	(1.032)	189282		5.37846	5.378
	39	Dimethylphthalate	163	15.130	15.117	(0.967)	949831		5.86824	5.868
*	42	Acenaphthene-d10	162	15.640	15.627	(1.000)	498001		4.00000	
	50	Diethylphthalate	149	16.570	16.557	(1.059)	1074870		6.38666	6.387
	54	N-Nitrosodiphenylamine	169	16.965	16.965	(0.909)	685167		5.88111	5.881
	57	Hexachlorobenzene	284	18.034	18.034	(0.966)	199043		5.21462	5.215
	58	Pentachlorophenol	266	18.391	18.392	(0.985)	125476		4.84413	4.844
*	59	Phenanthrene-d10	188	18.672	18.672	(1.000)	810370		4.00000	
$	66	Terphenyl-d14	244	Compound Not Detected.						
	67	Butylbenzylphthalate	149	22.638	22.639	(0.957)	857851		5.50335	5.503
*	69	Chrysene-d12	240	23.646	23.646	(1.000)	587436		4.00000	
*	77	Perylene-d12	264	26.452	26.452	(1.000)	595930		4.00000	
	79	Dibenzo(a,h)anthracene	278	29.429	29.404	(1.113)	891713		5.06606	5.066
	90	N-Nitrosodimethylamine	74	5.221	5.209	(0.547)	639879		5.65625	5.656(M)

QC Flag Legend

M - Compound response manually integrated.

Report Date: 15-Aug-2023 16:33

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708102312S.D
Lab Smp Id: SEQ-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Misc Info:

Calibration Date: 10-AUG-2023
Calibration Time: 15:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	319389	159695	638778	267754	-16.17
27 Naphthalene-d8	1274686	637343	2549372	1096182	-14.00
42 Acenaphthene-d10	569885	284943	1139770	498001	-12.61
59 Phenanthrene-d10	915829	457915	1831658	810370	-11.52
69 Chrysene-d12	653460	326730	1306920	587436	-10.10
77 Perylene-d12	654887	327444	1309774	595930	-9.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.54	9.04	10.04	9.54	0.00
27 Naphthalene-d8	12.02	11.52	12.52	12.03	0.11
42 Acenaphthene-d10	15.64	15.14	16.14	15.64	0.00
59 Phenanthrene-d10	18.67	18.17	19.17	18.67	0.00
69 Chrysene-d12	23.65	23.15	24.15	23.65	0.00
77 Perylene-d12	26.45	25.95	26.95	26.45	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708102312S.D

Lab ID: SEQ-SCV1
nt17.i, 20230810.b\SIM.B\SIMABN2.m,   10-AUG-2023 18:45

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.B/NT1708102309S.D

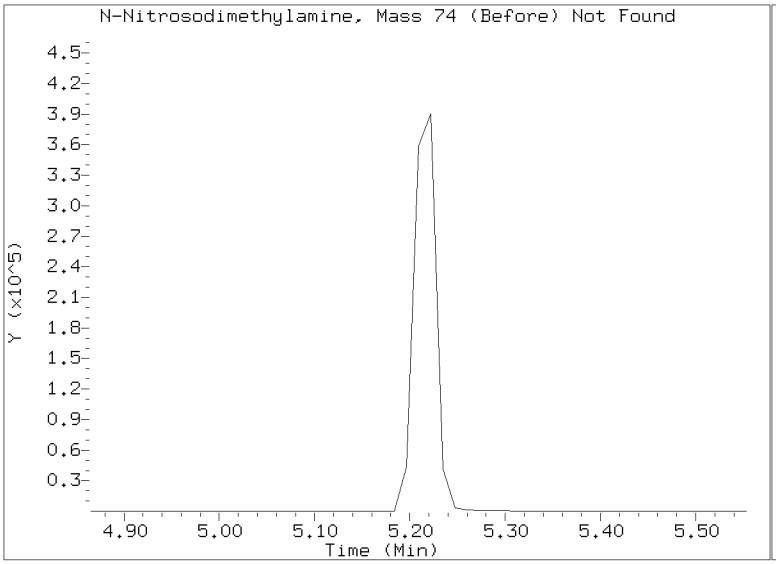
On Column LOD for nt17.i, SIM.B\SIMABN2.m, PSDDA.sub = 0.0000

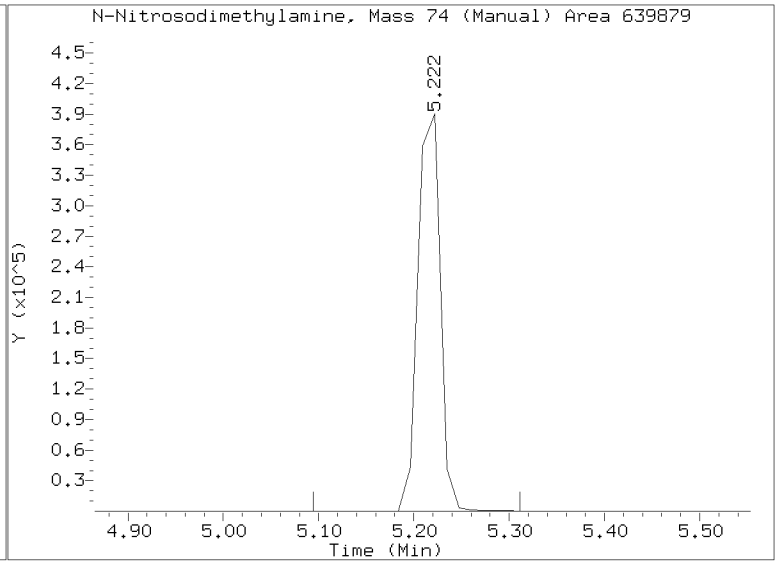
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102312S.D
Injection Date: 10-AUG-2023 18:45
Lab ID:SEQ-SCV1 Client ID:
Report Date: 08/15/2023 16:33





Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23H0579
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GH00045
Laboratory ID: SLH0217-SCV1
Sequence: SLH0217
Sequence Name: SCV 5.0
Standard ID: L006700

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
1,4-Dichlorobenzene	5.0000	5.2	3.4	20.00
1,2-Dichlorobenzene	5.0000	5.2	4.3	20.00
Benzyl Alcohol	5.0000	6.1	21.0 *	20.00
Benzoic acid	10.000	10.0	-0.4	20.00
2,4-Dimethylphenol	5.0000	4.5	-9.6	20.00
1,2,4-Trichlorobenzene	5.0000	5.0	0.6	20.00
N-Nitrosodiphenylamine	5.0000	5.9	17.6	20.00
Pentachlorophenol	5.0000	4.8	-3.1	20.00
2-Fluorophenol	7.5000	0.00		
p-Terphenyl-d14	5.0000	0.00		

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023125.D

Date : 10-AUG-2023 18:45

Client ID:

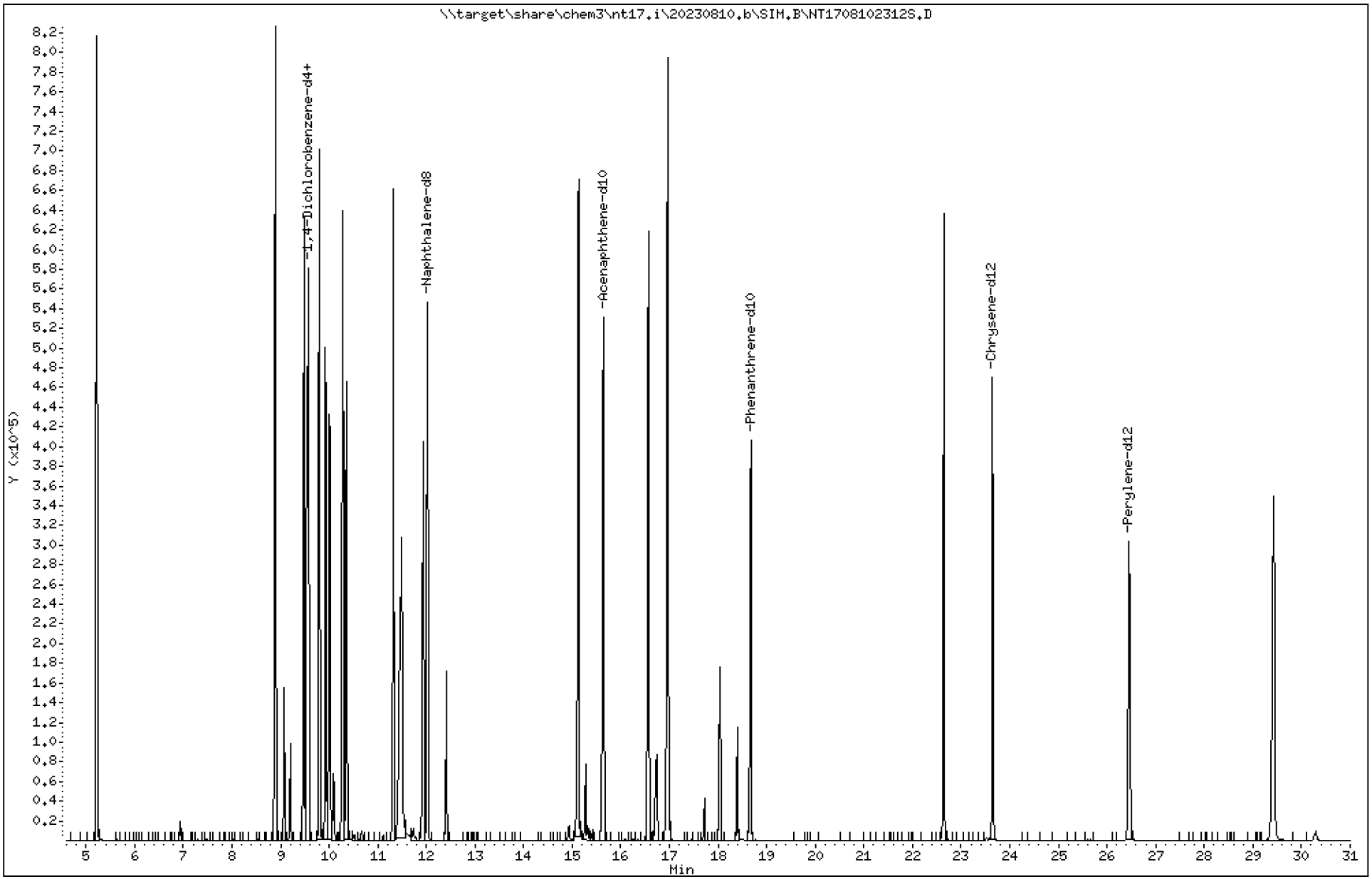
Sample Info: SEQ-SCV1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

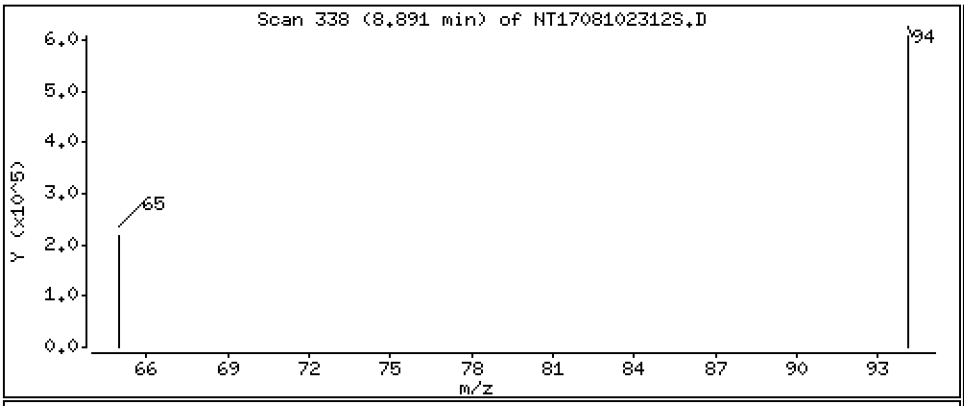
Operator: JGR

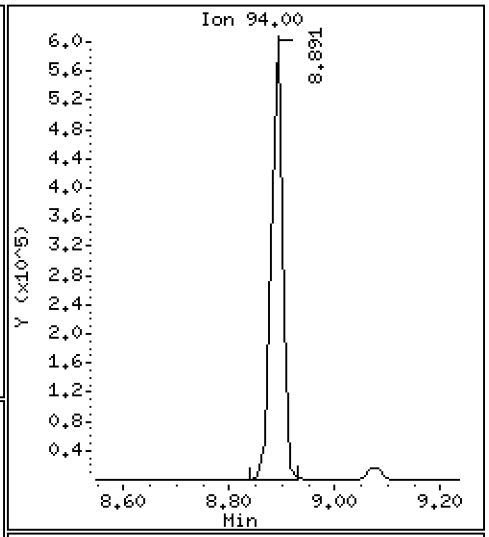
Column phase: ZB-5msi

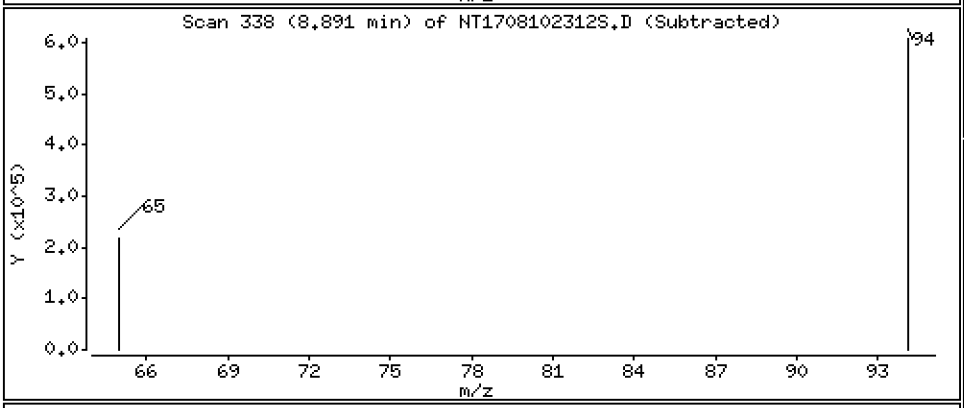
Column diameter: 0.25

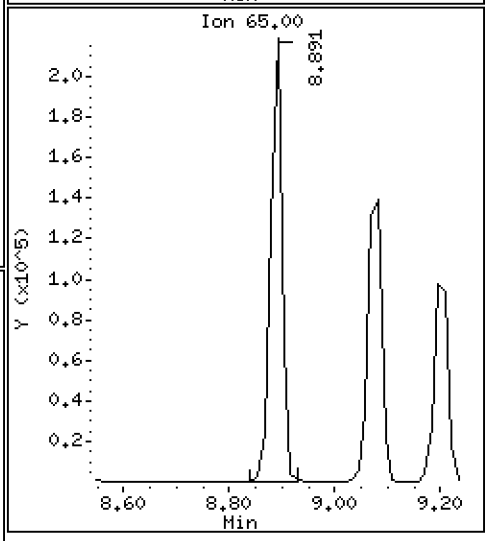
3 Phenol

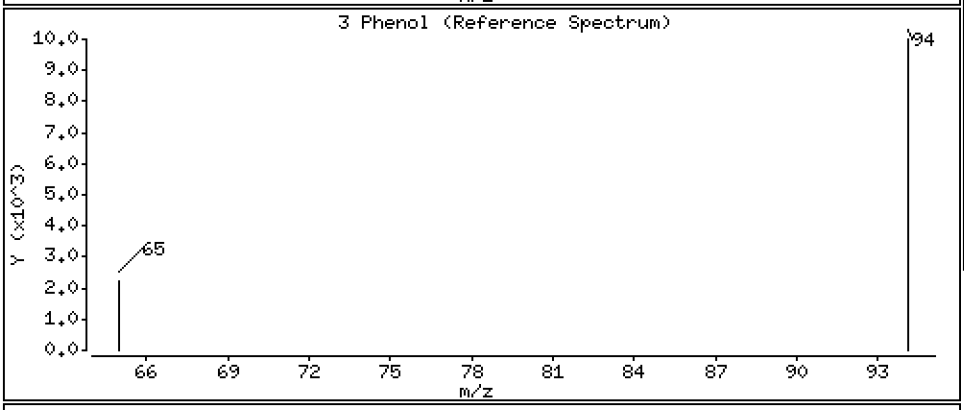
Concentration: 5.502 ug/mL

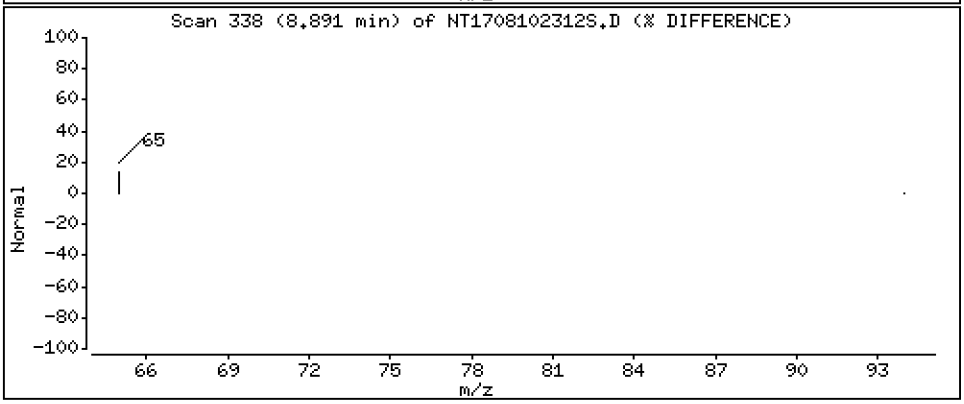












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

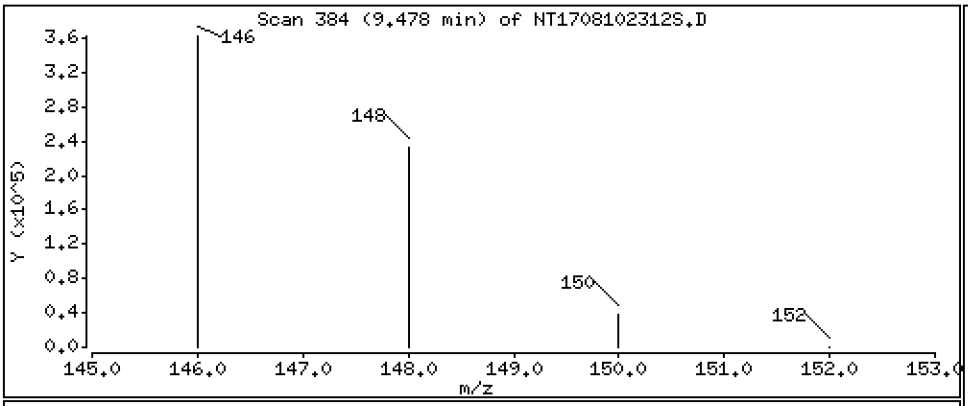
Operator: JGR

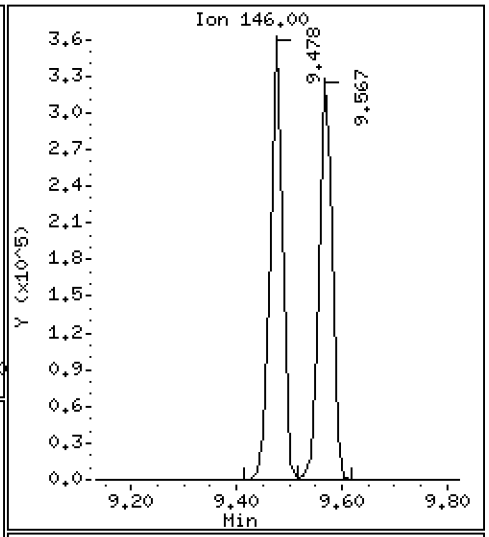
Column phase: ZB-5msi

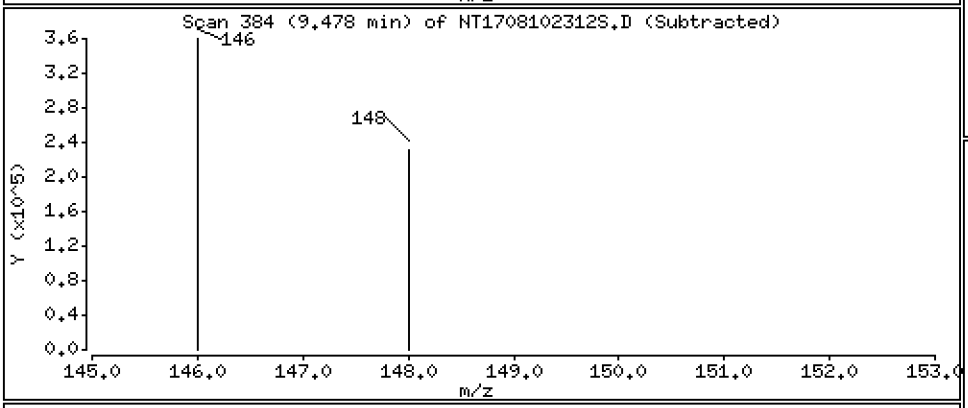
Column diameter: 0.25

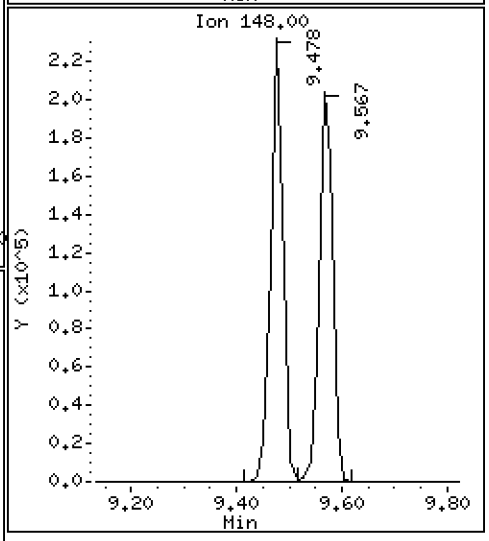
7 1,3-Dichlorobenzene

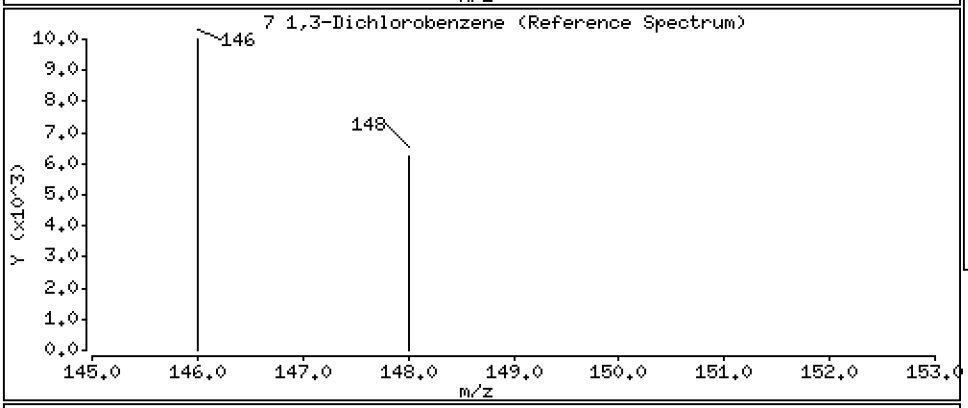
Concentration: 5.156 ug/mL

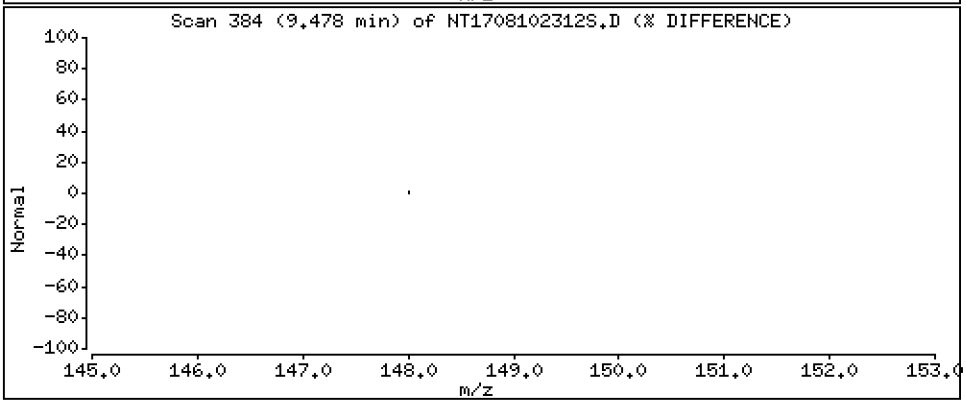












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

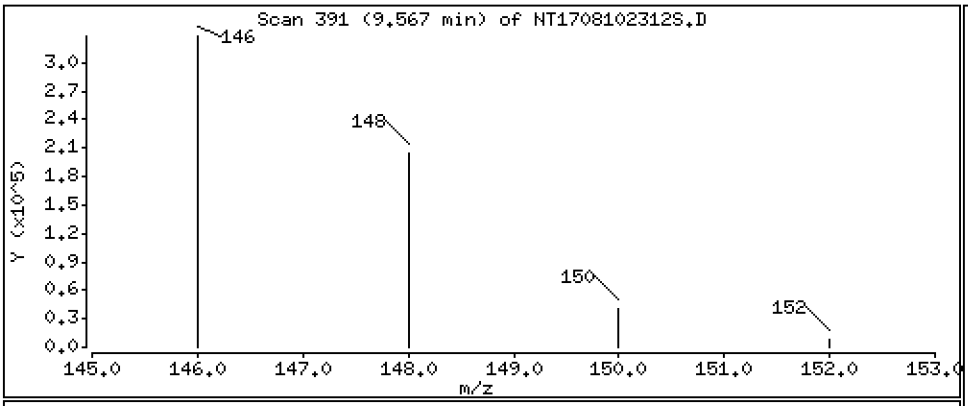
Operator: JGR

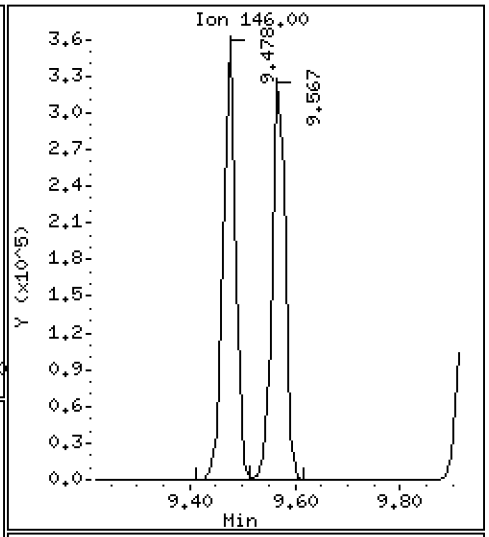
Column phase: ZB-5msi

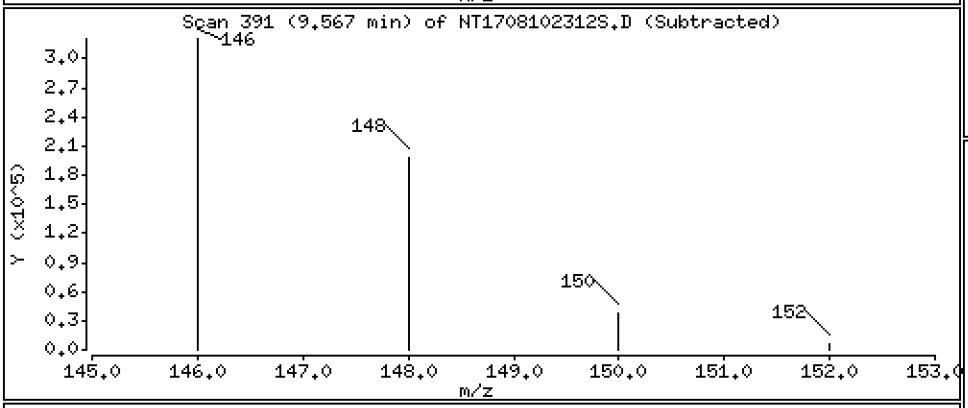
Column diameter: 0.25

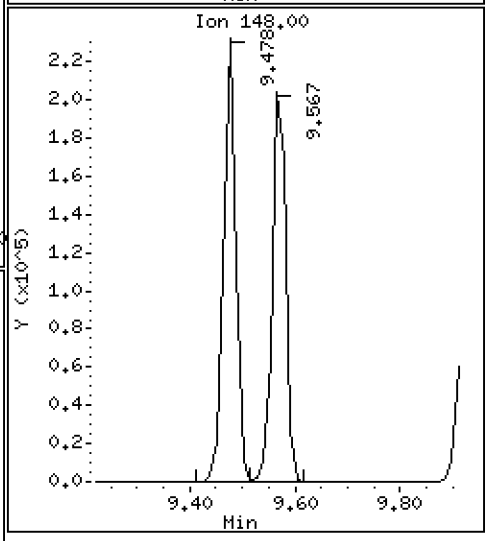
9 1,4-Dichlorobenzene

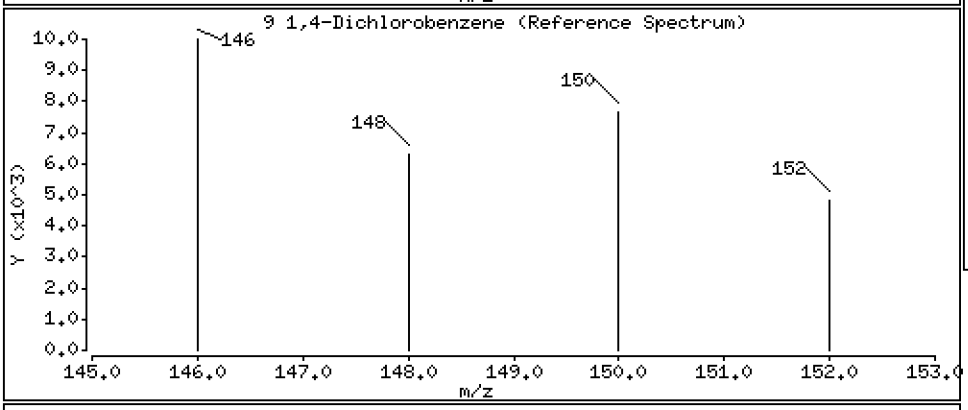
Concentration: 5.169 ug/mL

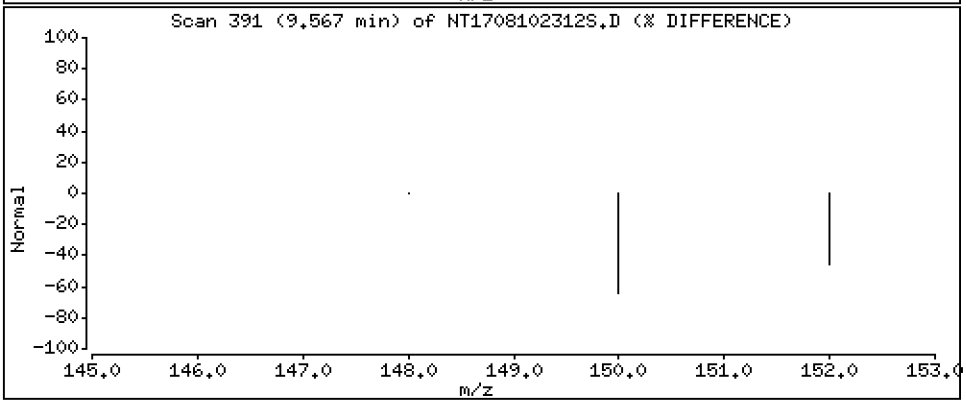












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

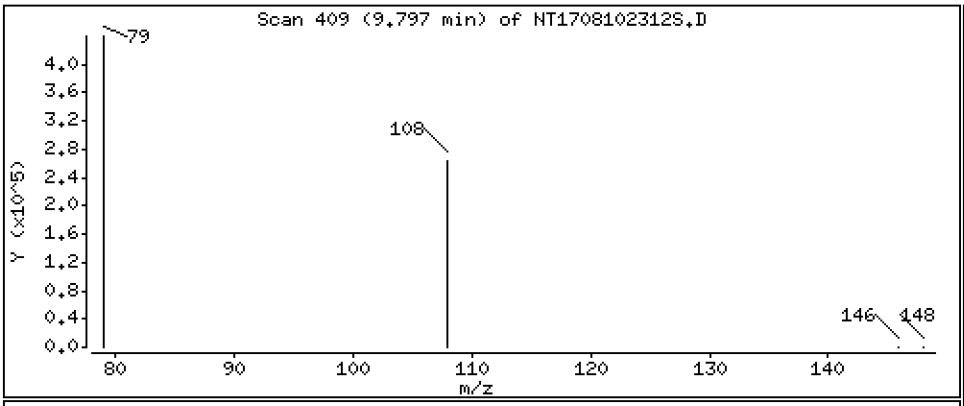
Operator: JGR

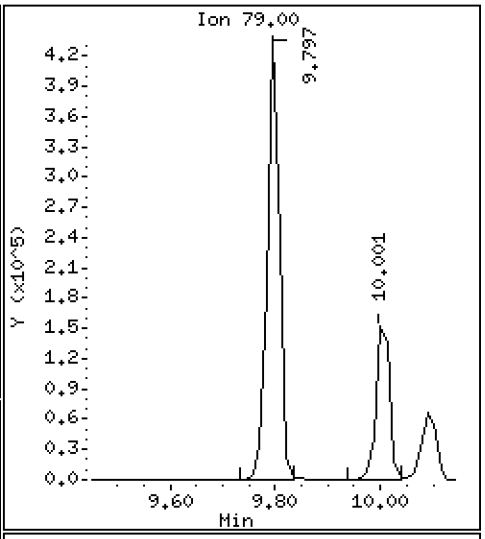
Column phase: ZB-5msi

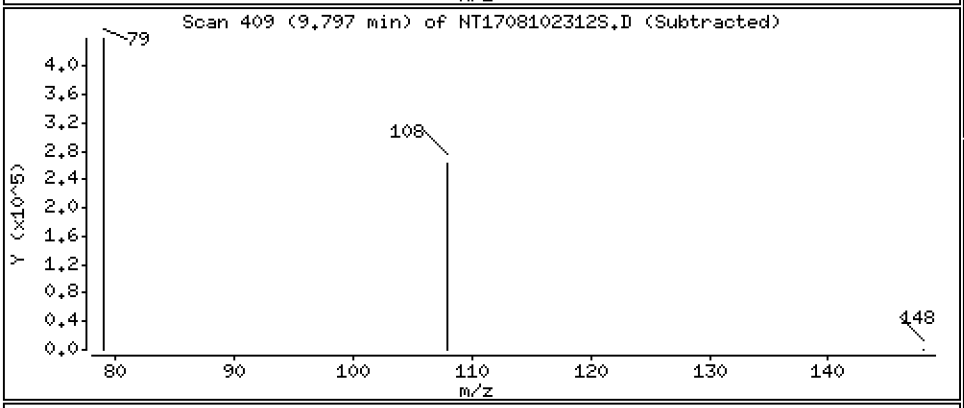
Column diameter: 0.25

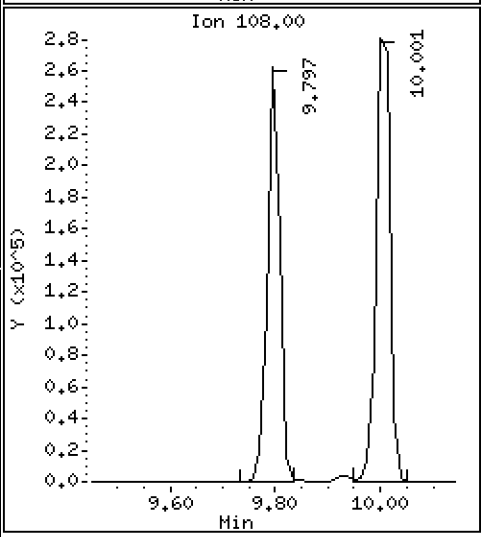
11 Benzyl alcohol

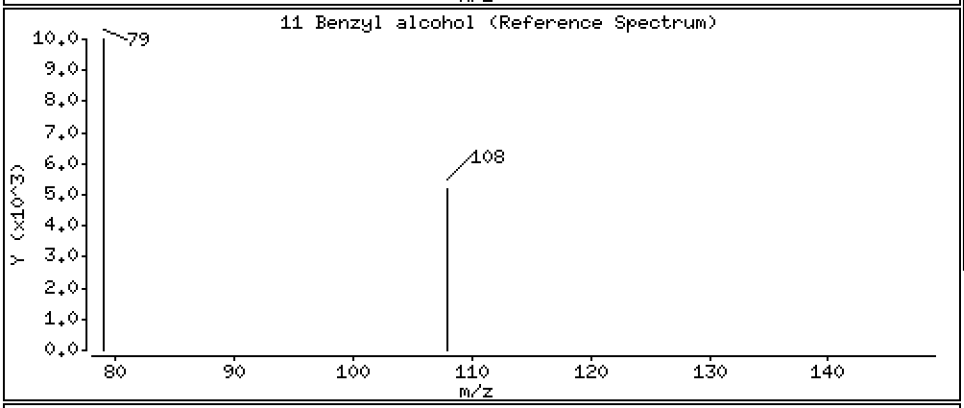
Concentration: 6.052 ug/mL

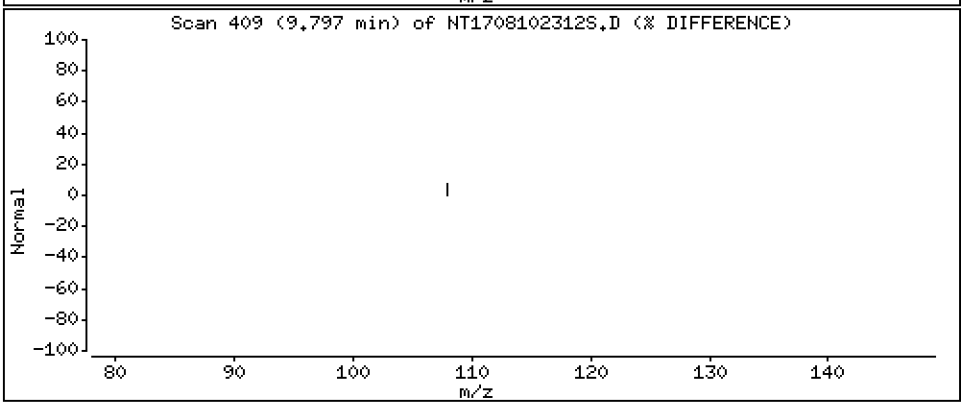












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

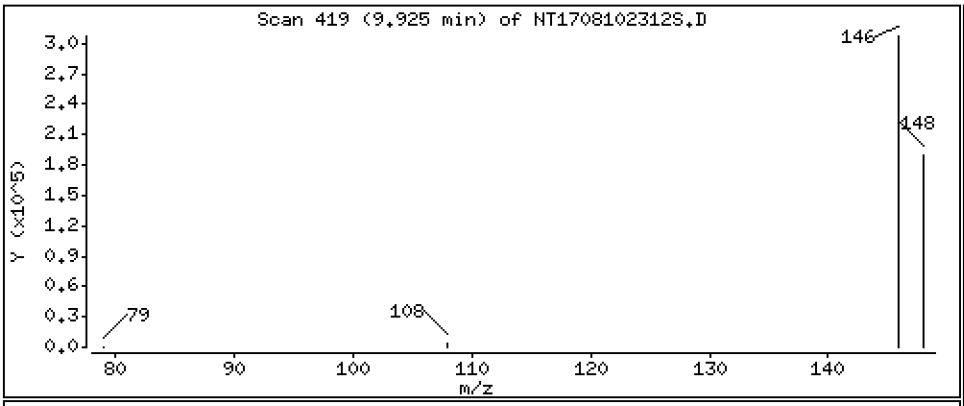
Operator: JGR

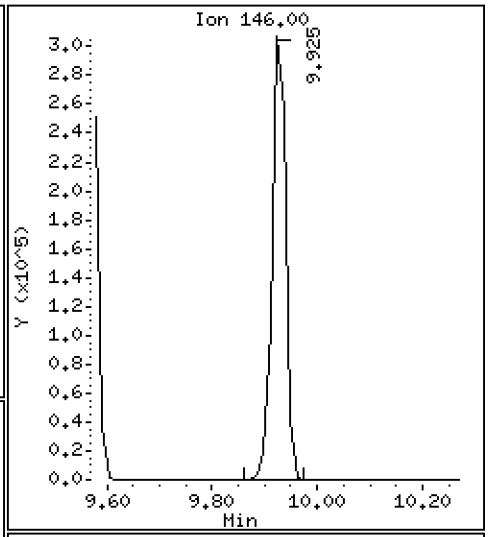
Column phase: ZB-5msi

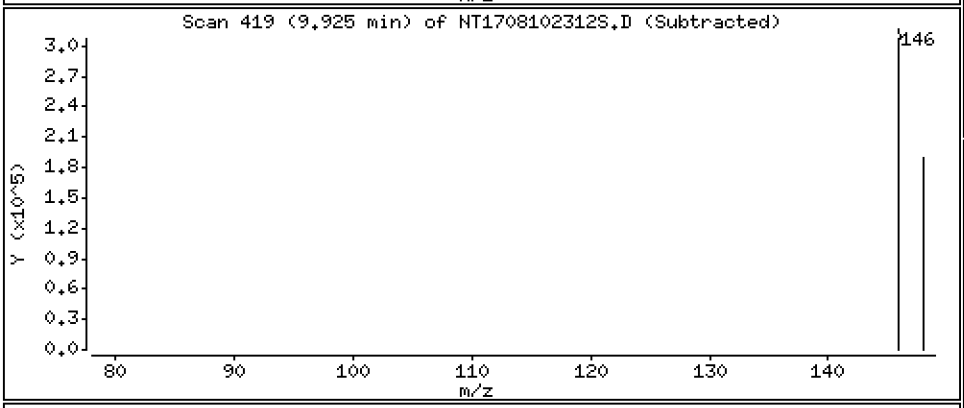
Column diameter: 0.25

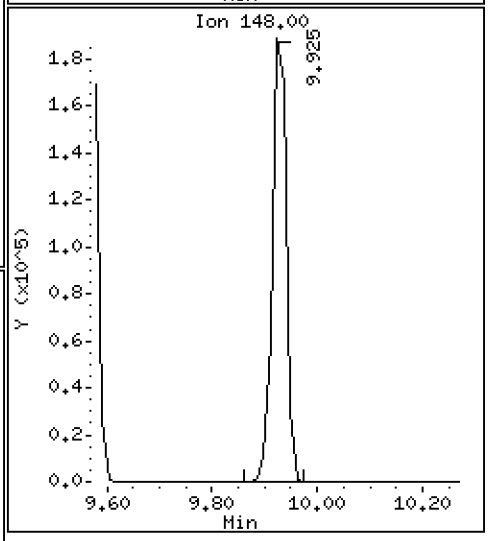
12 1,2-Dichlorobenzene

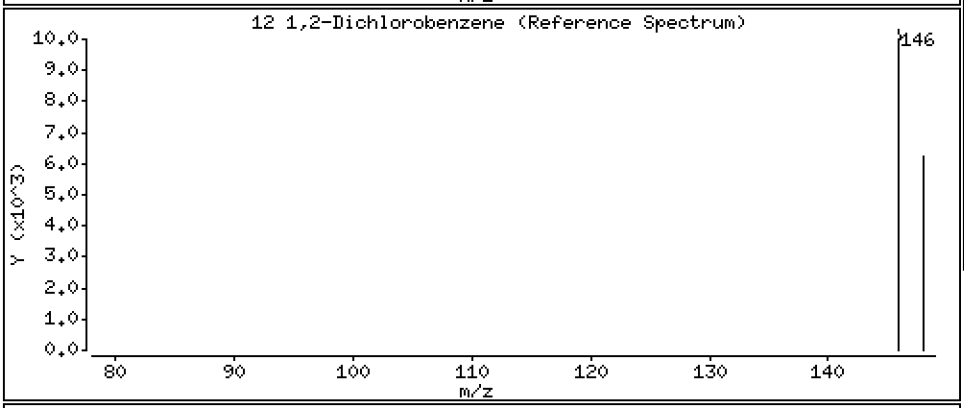
Concentration: 5.216 ug/mL

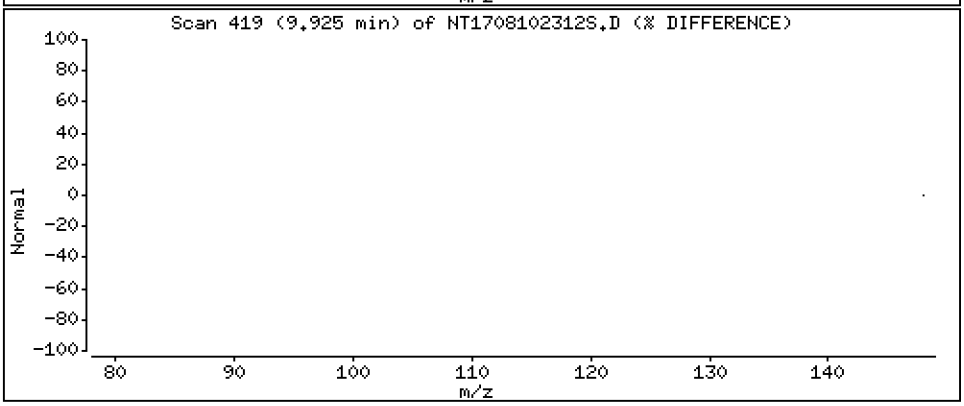












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

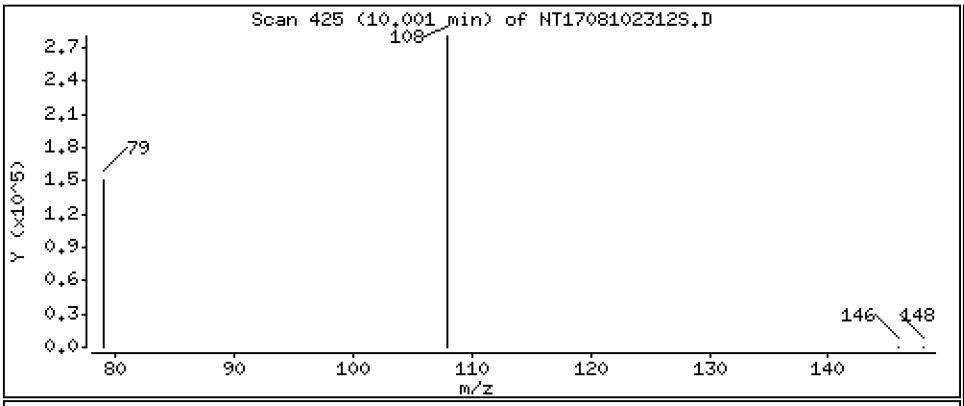
Operator: JGR

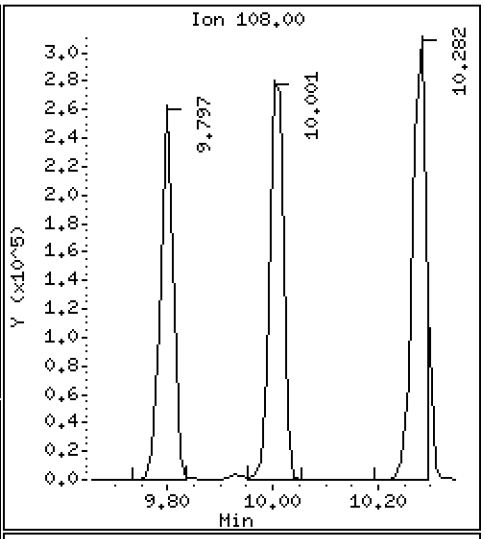
Column phase: ZB-5msi

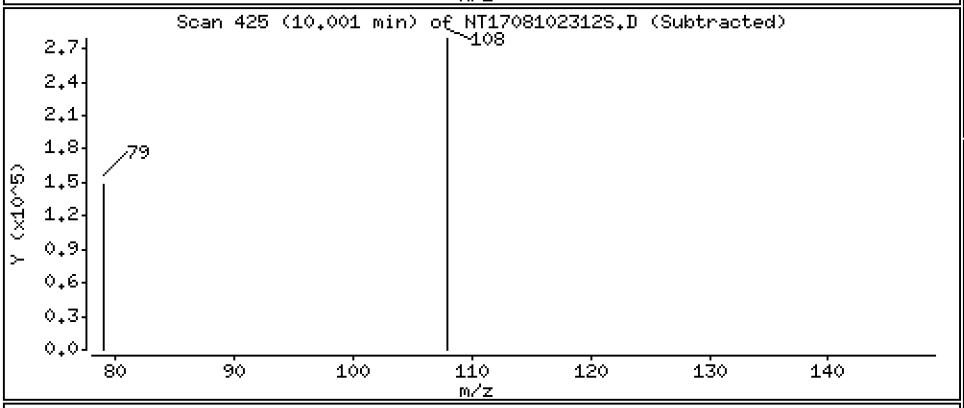
Column diameter: 0.25

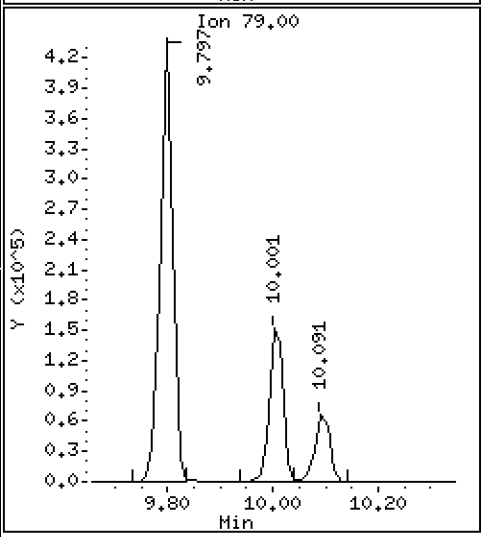
13 2-Methylphenol

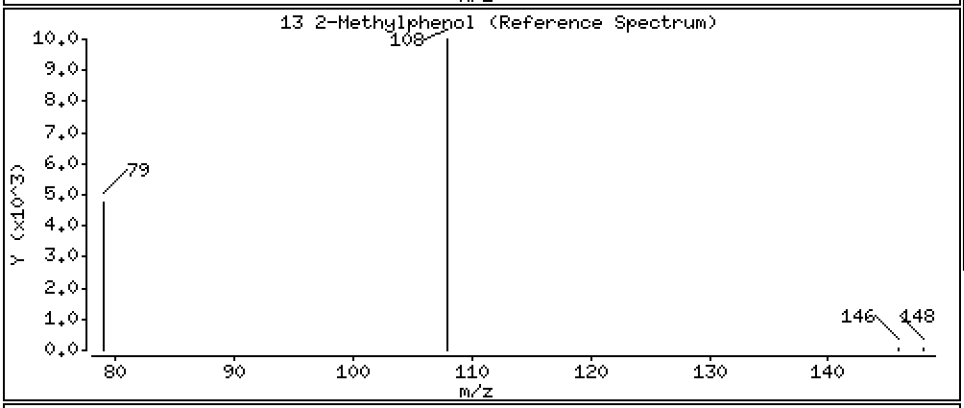
Concentration: 5.112 ug/mL

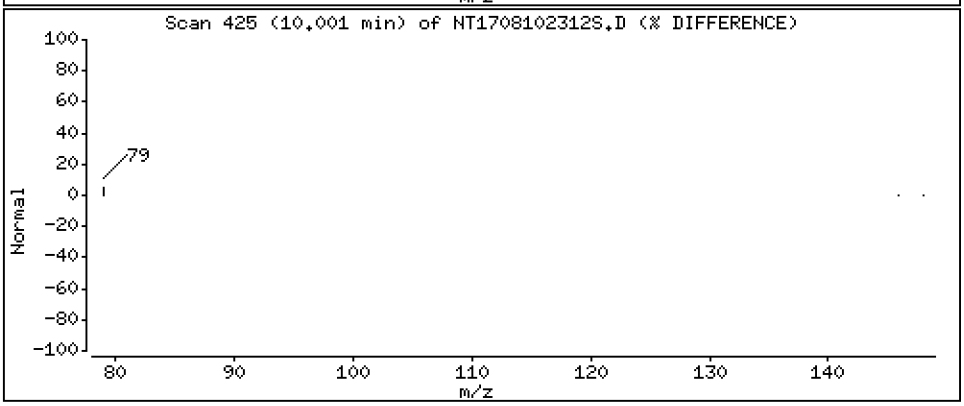












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

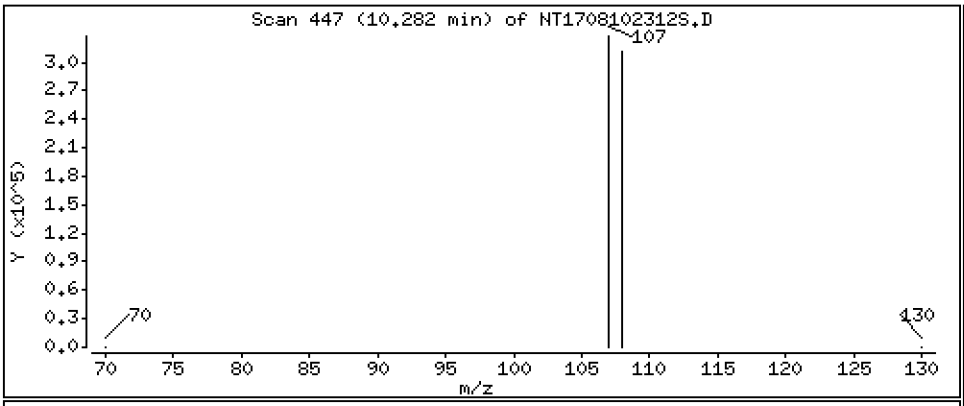
Operator: JGR

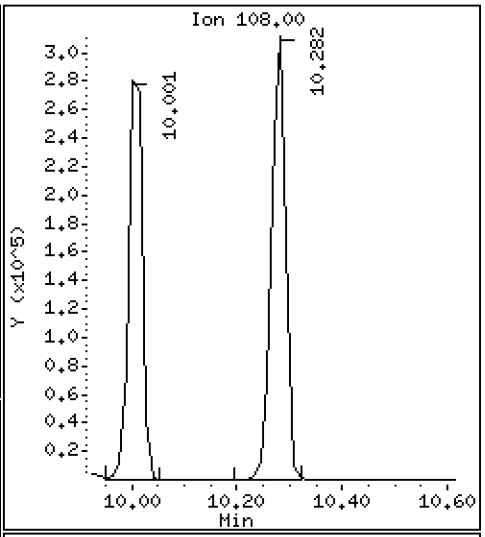
Column phase: ZB-5msi

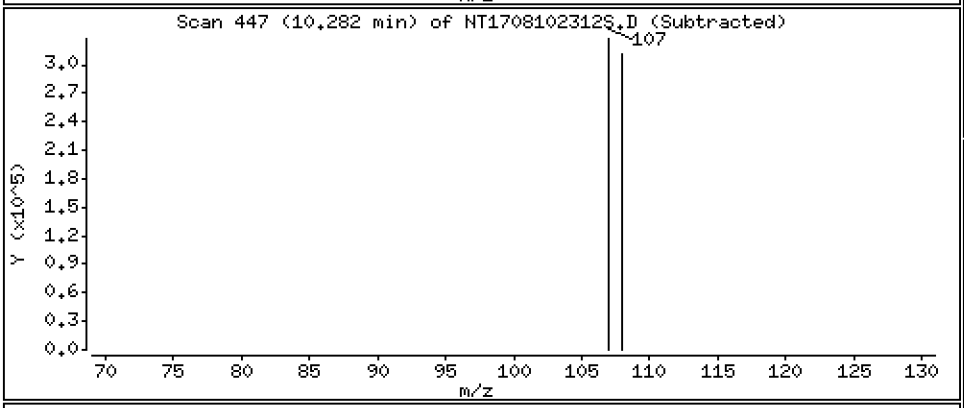
Column diameter: 0.25

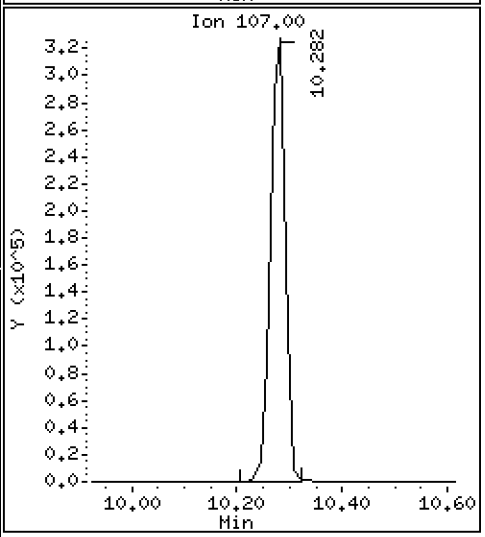
15 4-Methylphenol

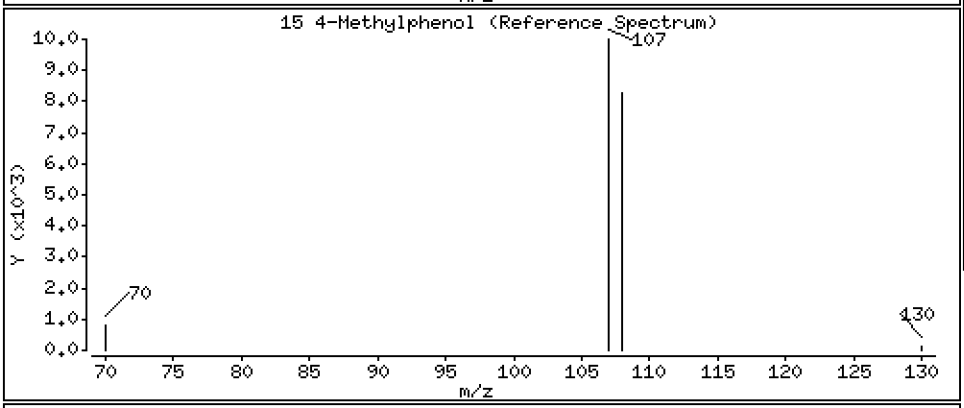
Concentration: 5.491 ug/mL

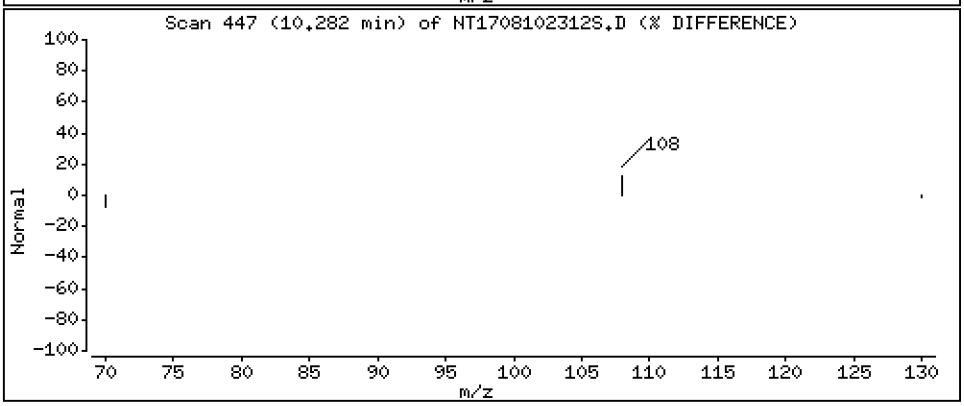












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

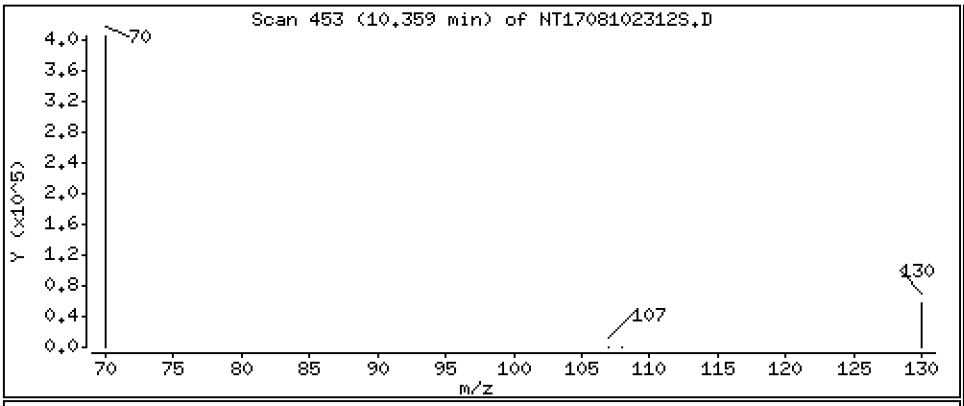
Operator: JGR

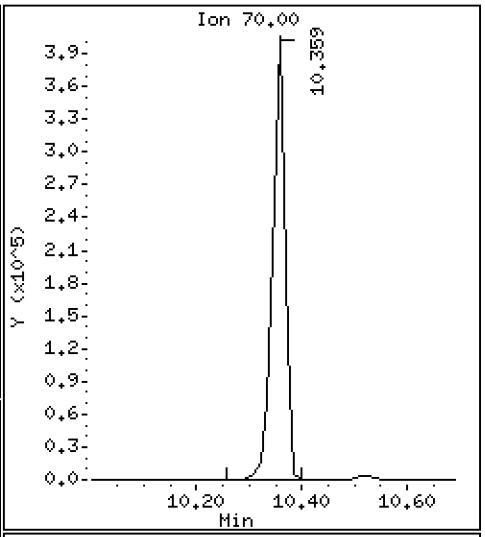
Column phase: ZB-5msi

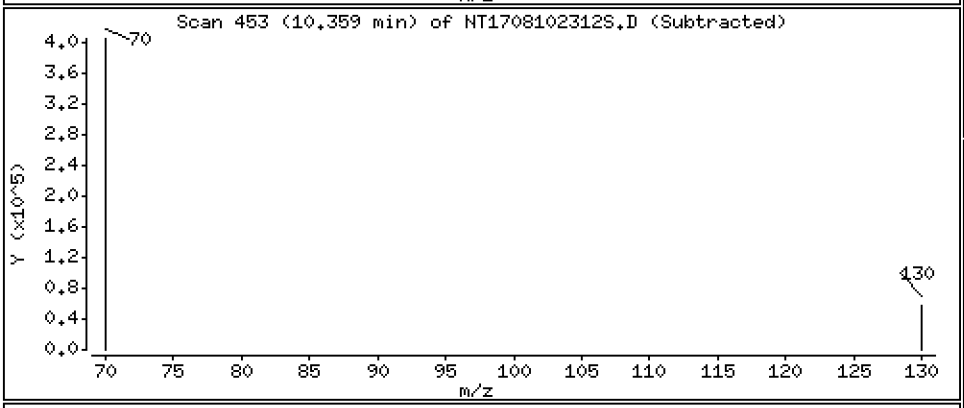
Column diameter: 0.25

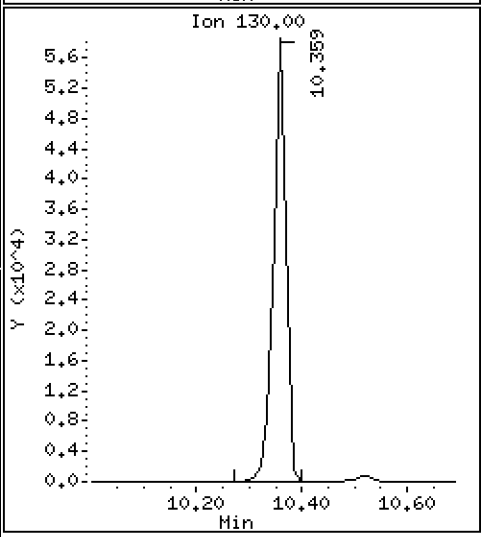
16 N-Nitroso-di-n-propylamine

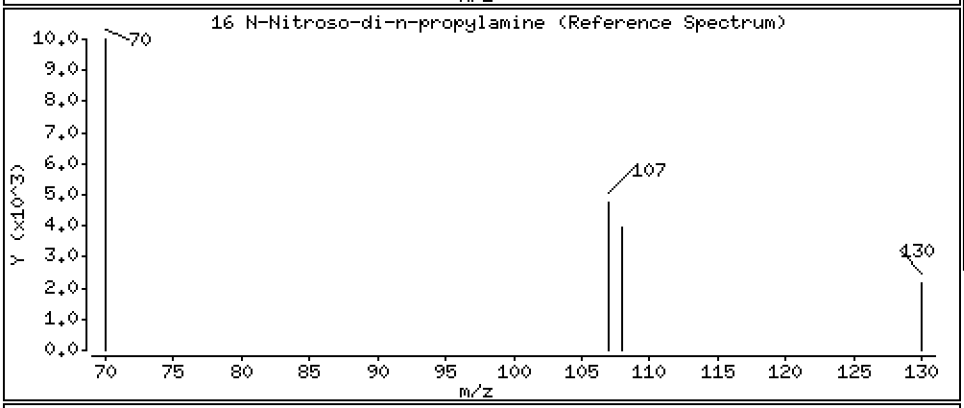
Concentration: 6.171 ug/mL

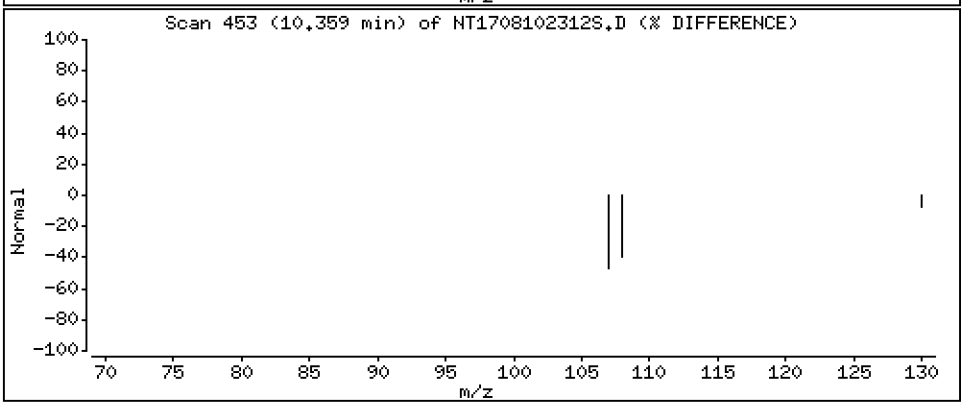












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

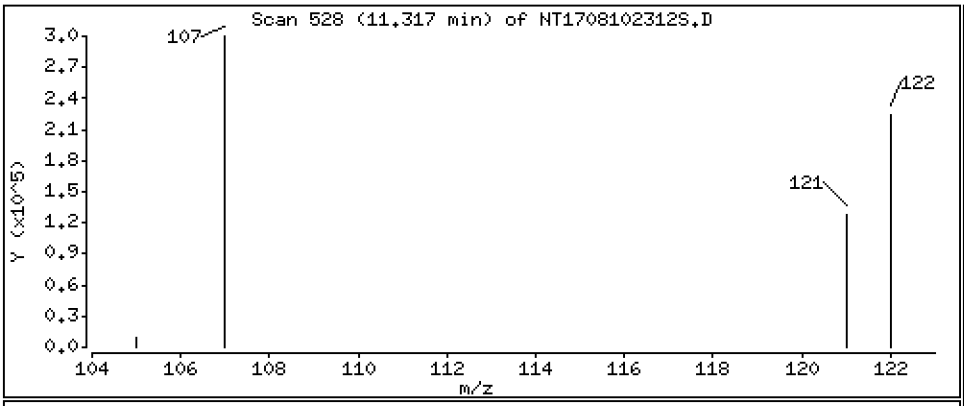
Operator: JGR

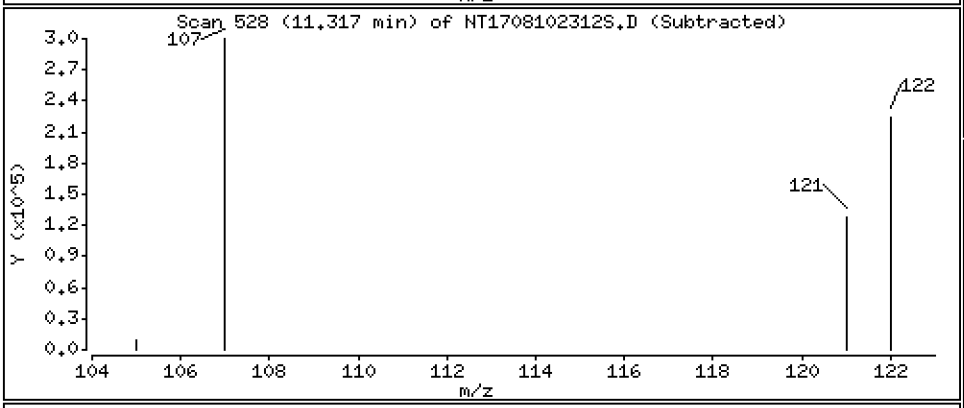
Column phase: ZB-5msi

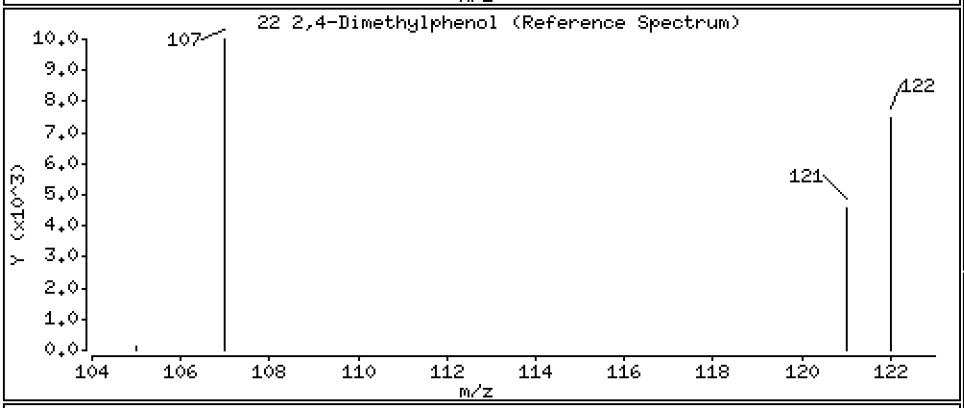
Column diameter: 0.25

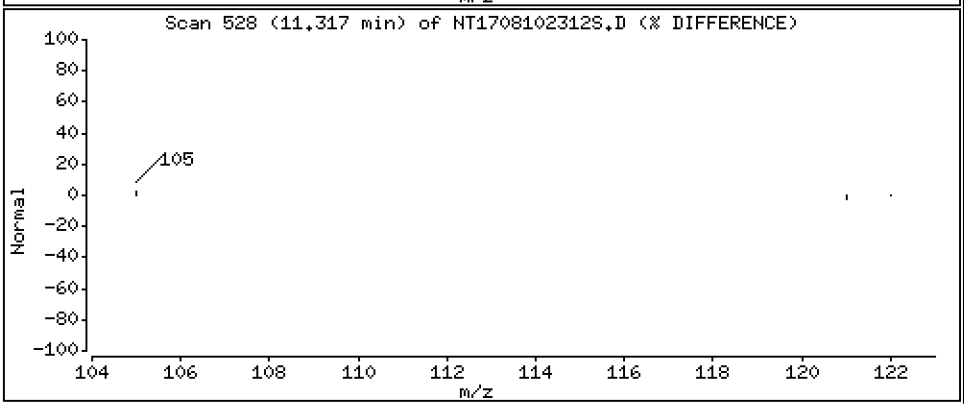
22 2,4-Dimethylphenol

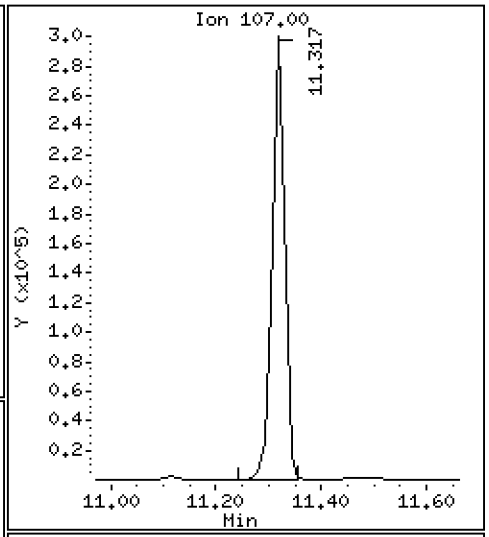
Concentration: 4.520 ug/mL

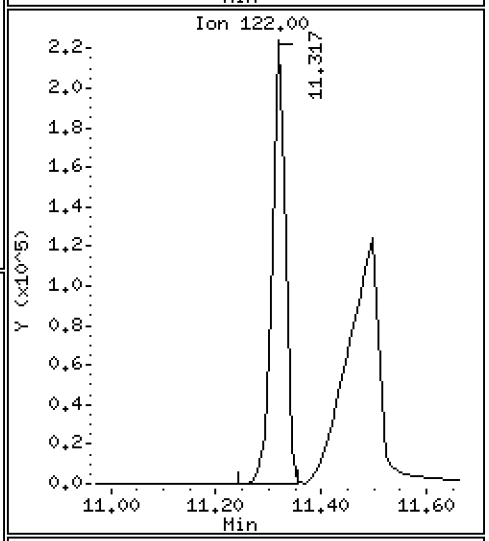


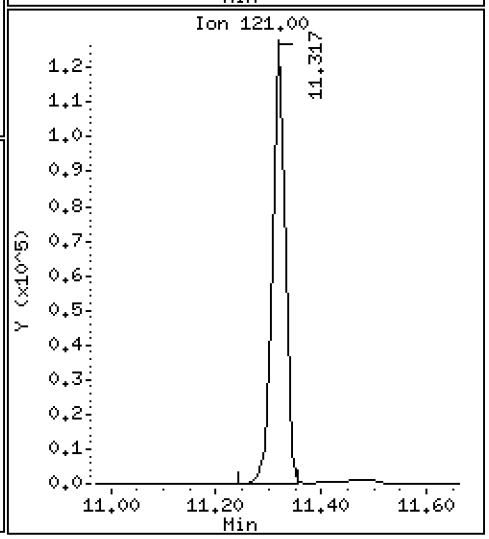












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

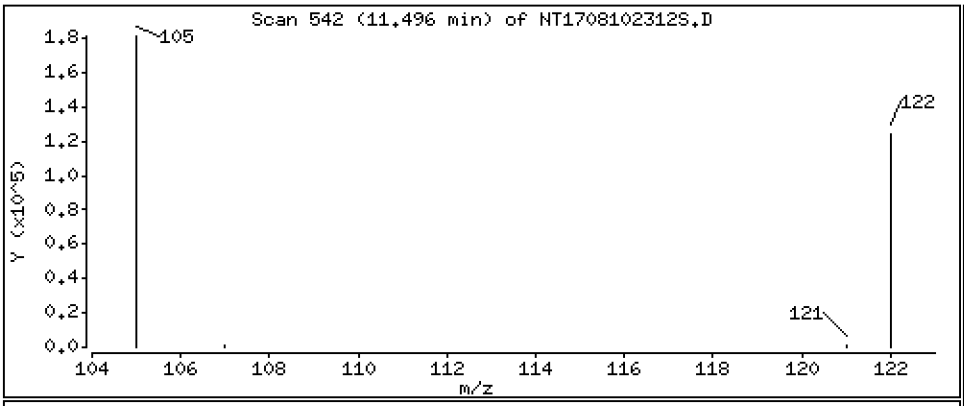
Operator: JGR

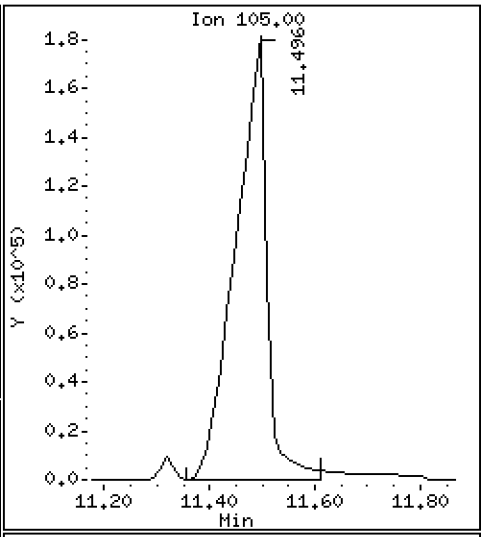
Column phase: ZB-5msi

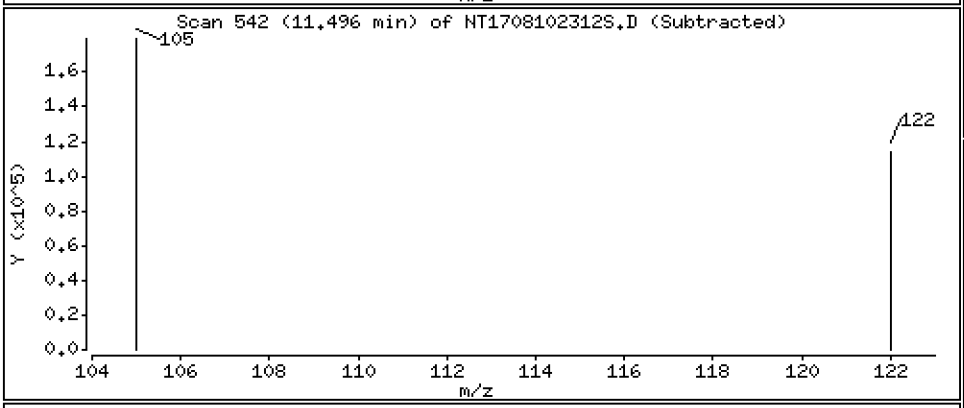
Column diameter: 0.25

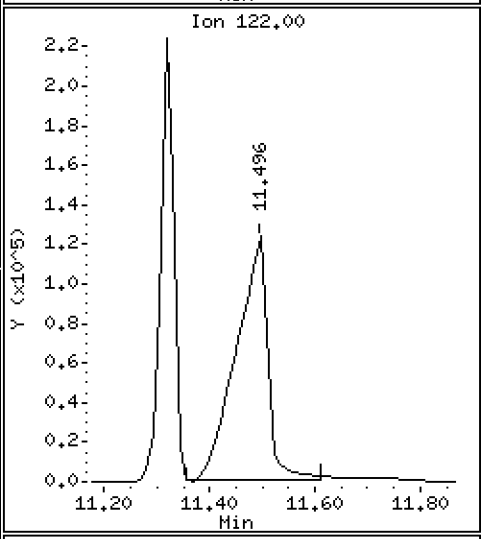
24 Benzoic acid

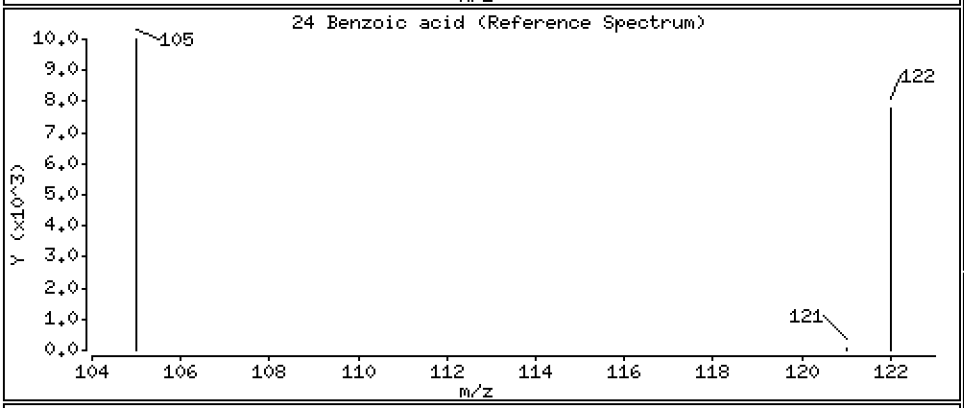
Concentration: 9.959 ug/mL

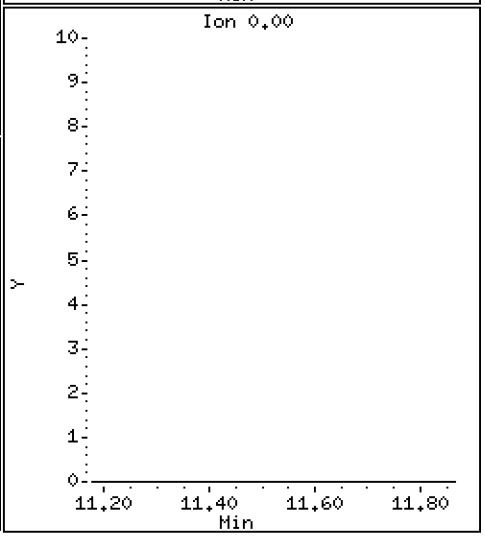


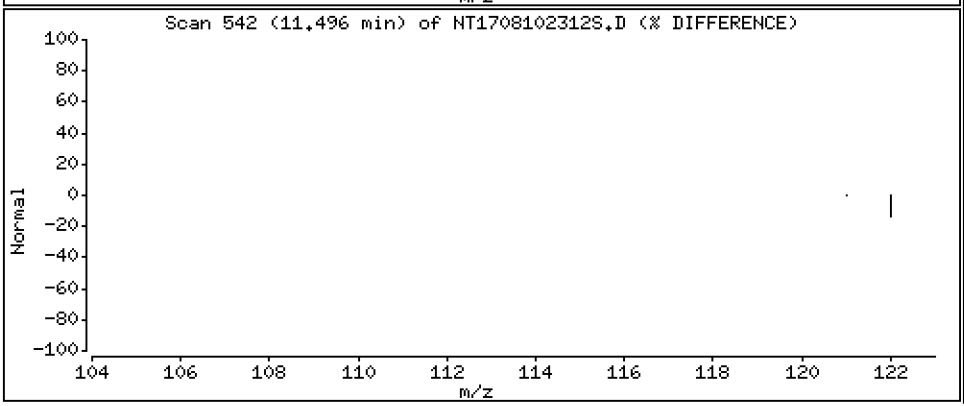












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

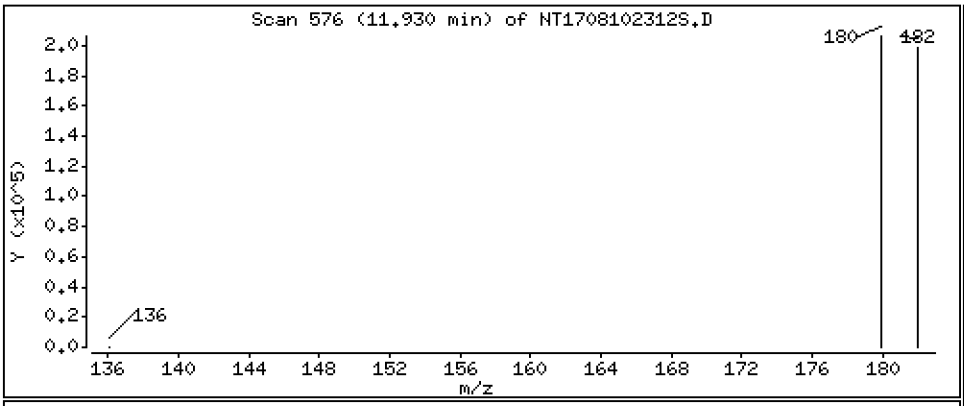
Operator: JGR

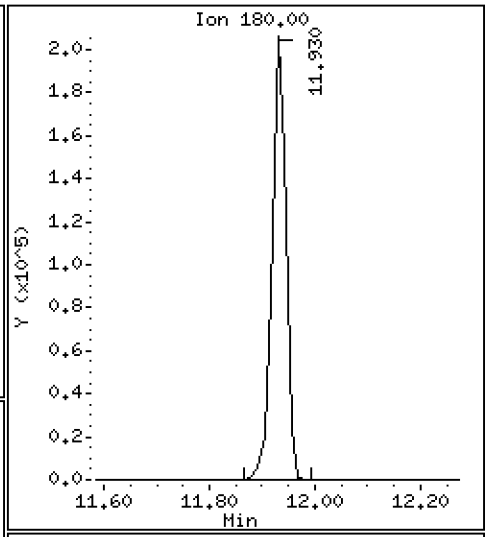
Column phase: ZB-5msi

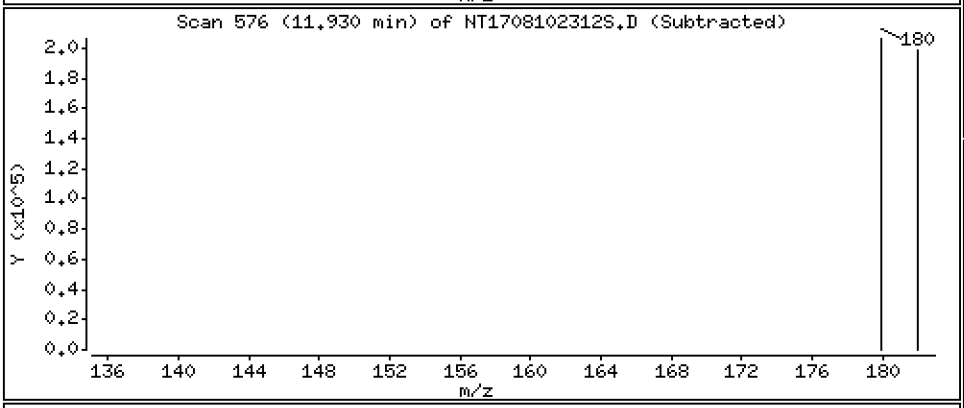
Column diameter: 0.25

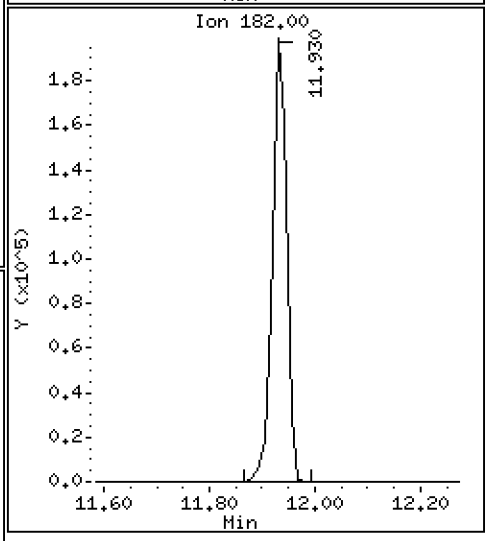
26 1,2,4-Trichlorobenzene

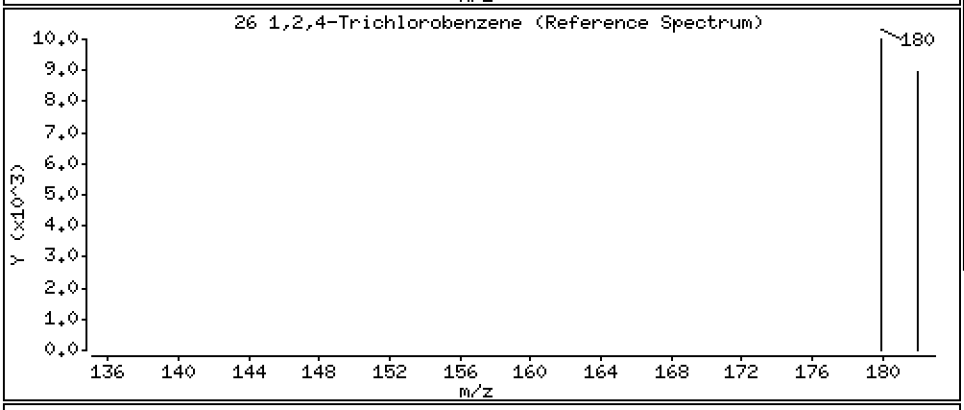
Concentration: 5.028 ug/mL

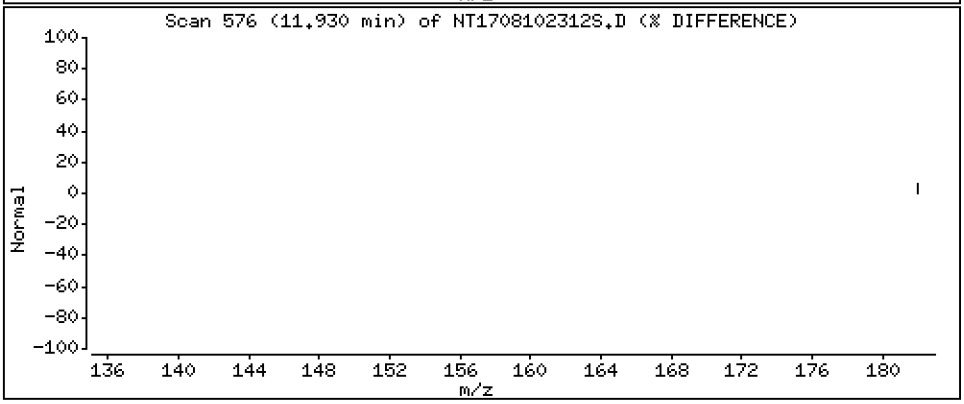












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

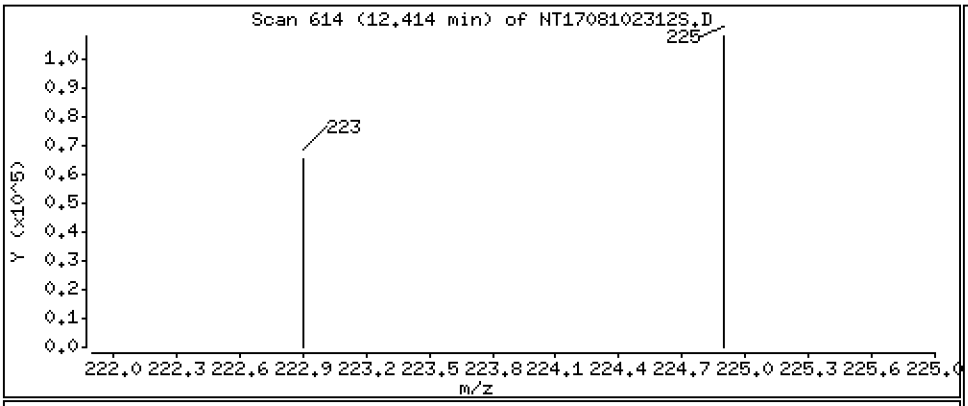
Operator: JGR

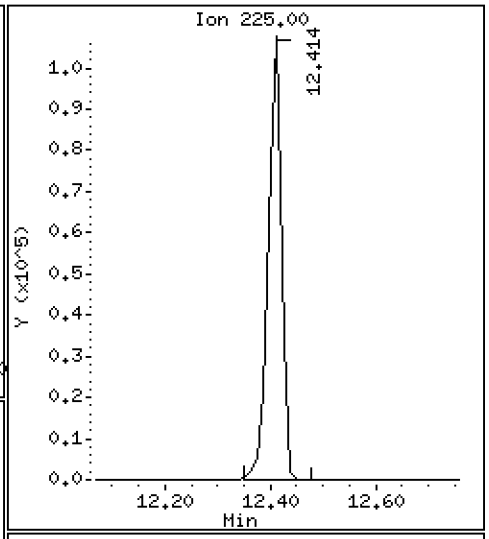
Column phase: ZB-5msi

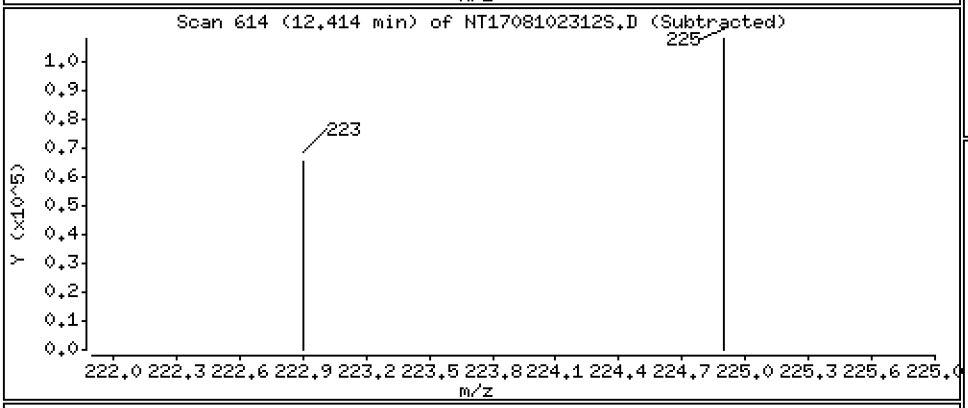
Column diameter: 0.25

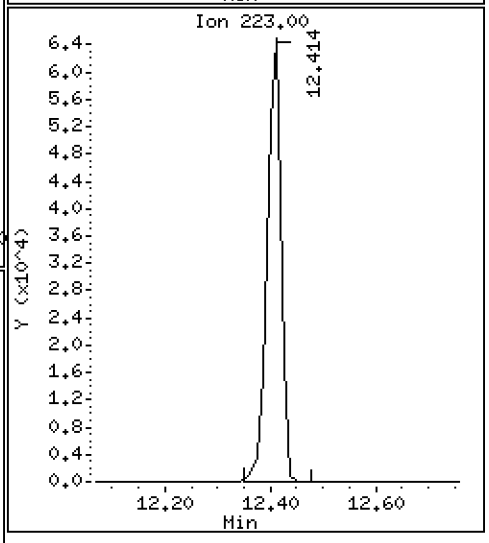
30 Hexachlorobutadiene

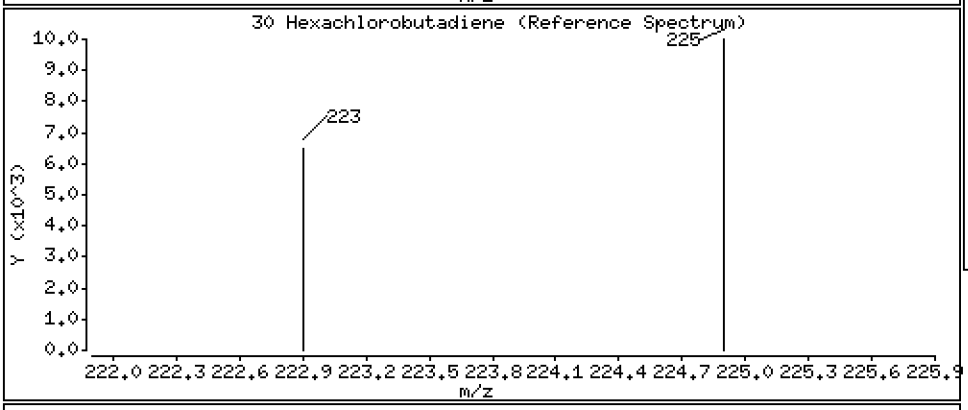
Concentration: 5.378 ug/mL

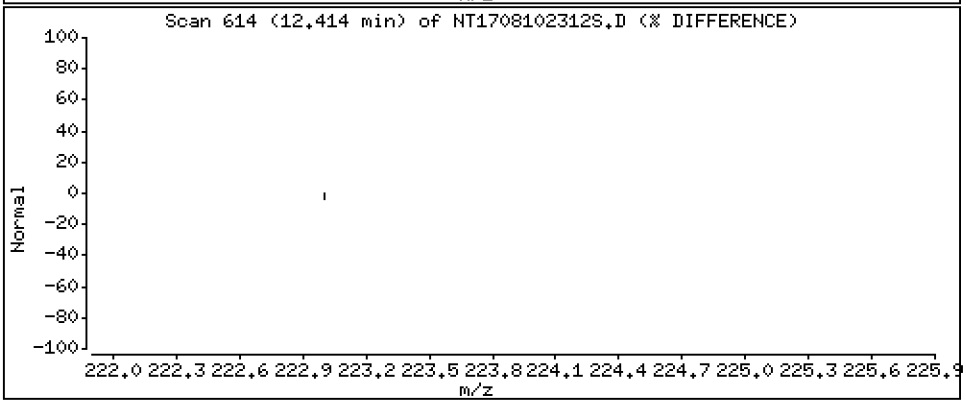












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

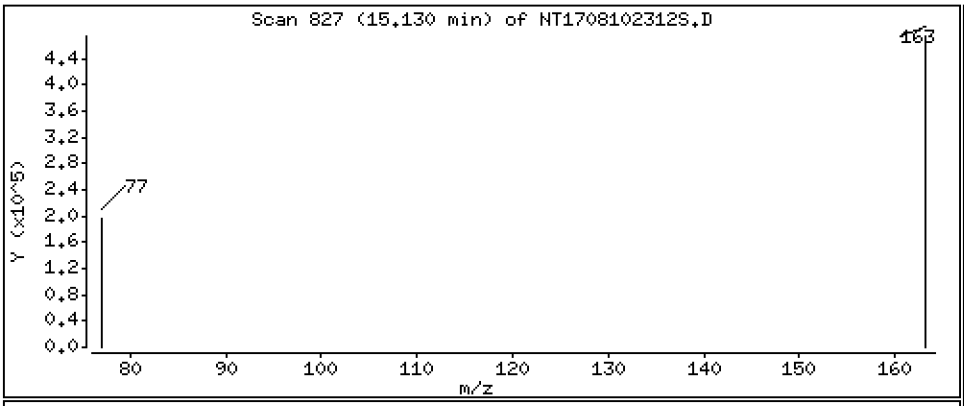
Operator: JGR

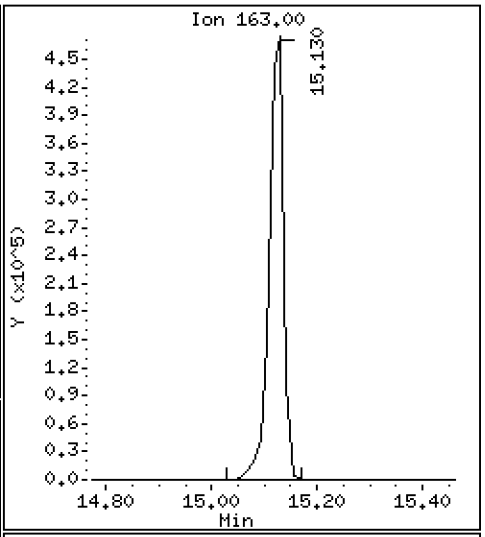
Column phase: ZB-5msi

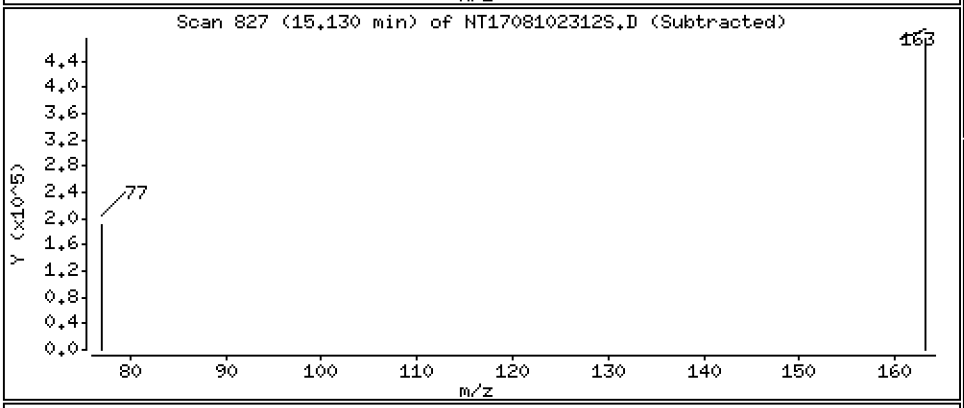
Column diameter: 0.25

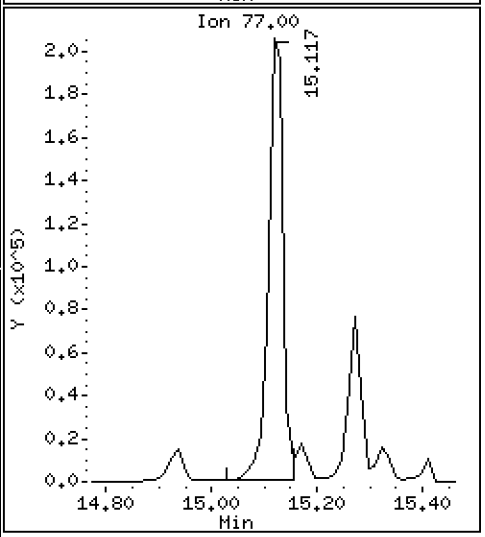
39 Dimethylphthalate

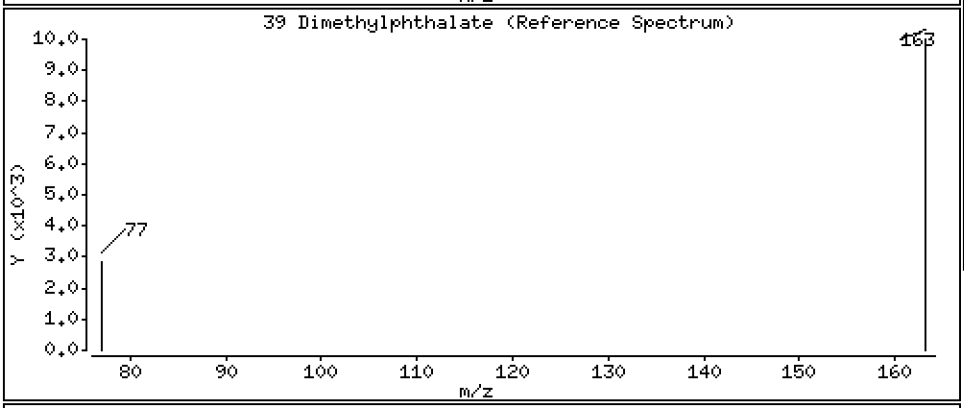
Concentration: 5.868 ug/mL

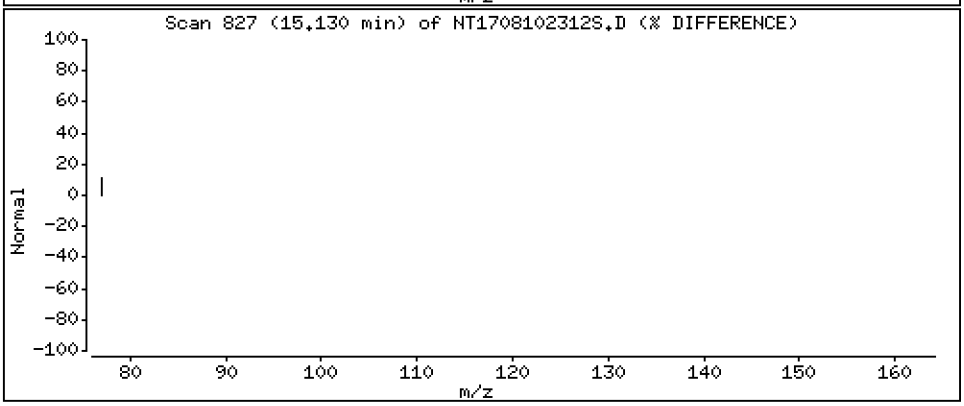












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

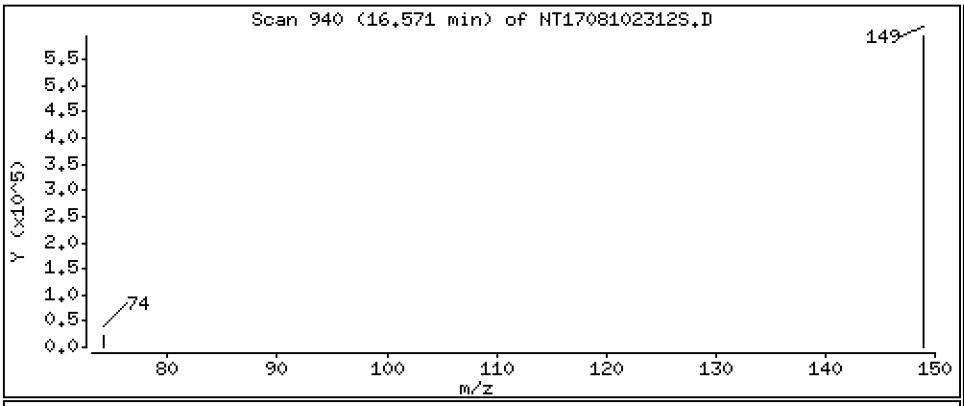
Operator: JGR

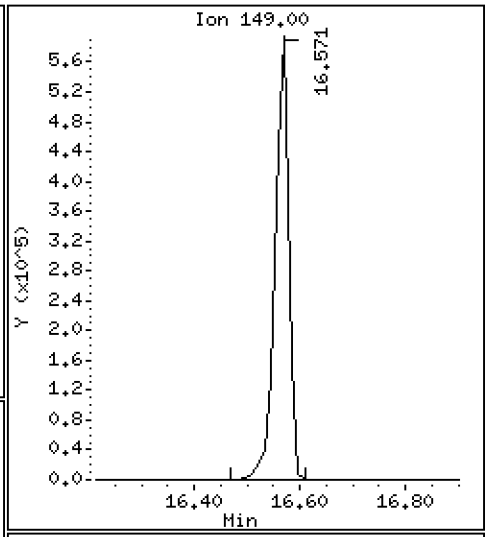
Column phase: ZB-5msi

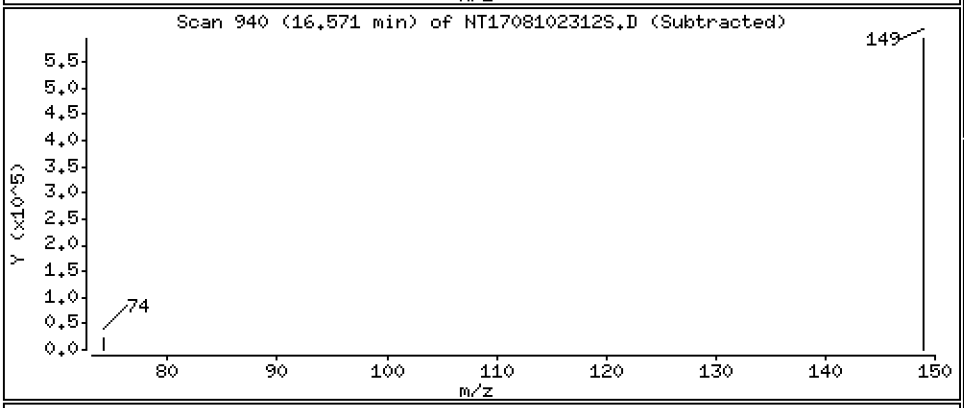
Column diameter: 0.25

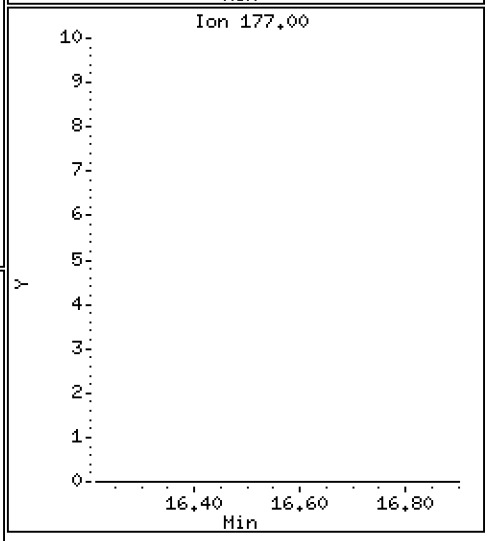
50 Diethylphthalate

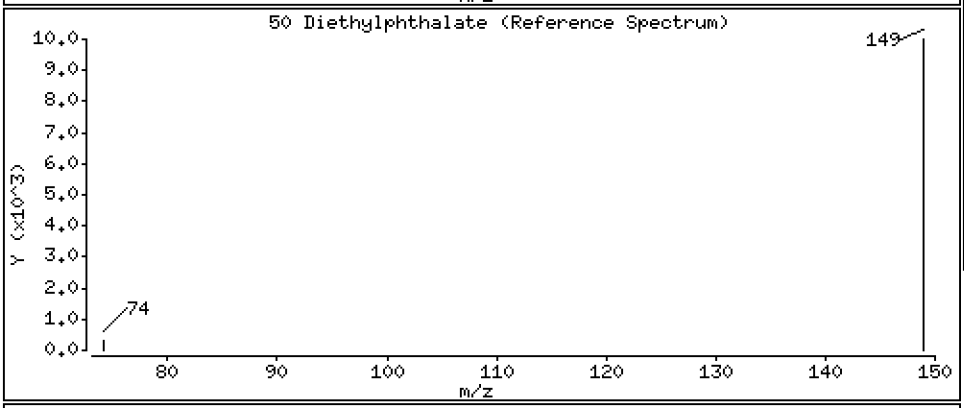
Concentration: 6.387 ug/mL

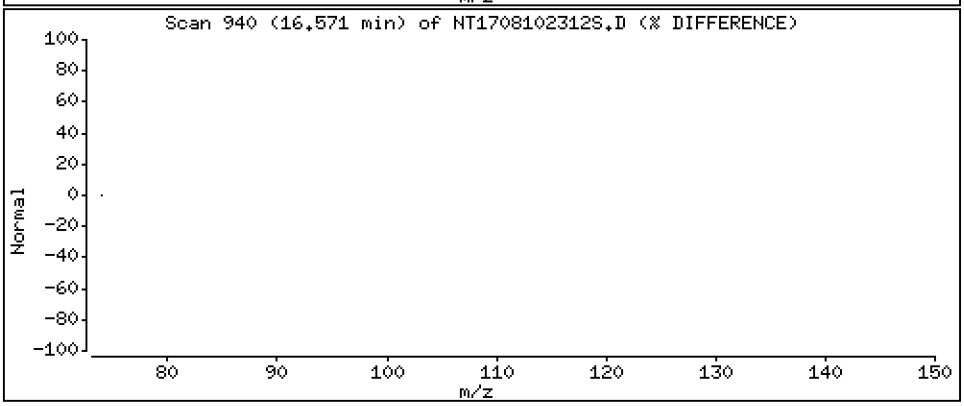












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

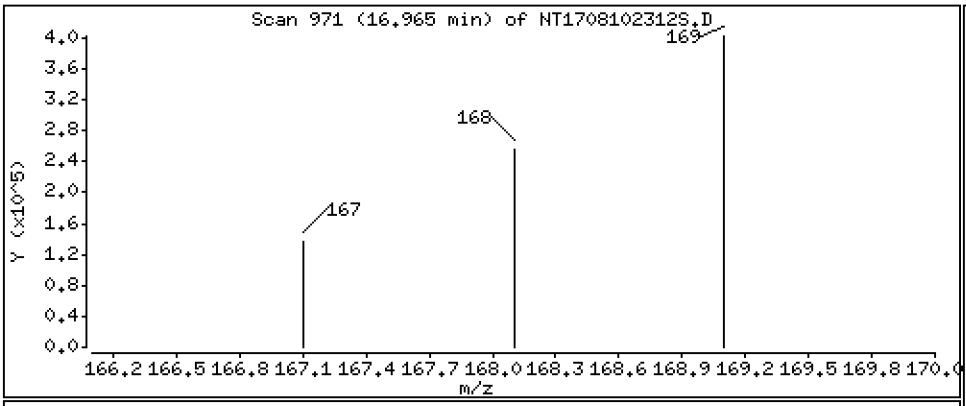
Operator: JGR

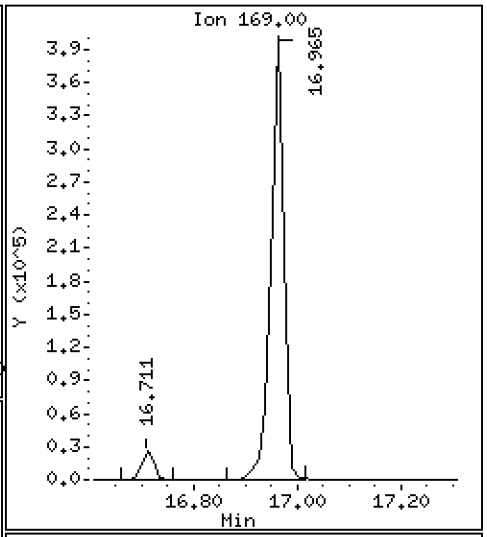
Column phase: ZB-5msi

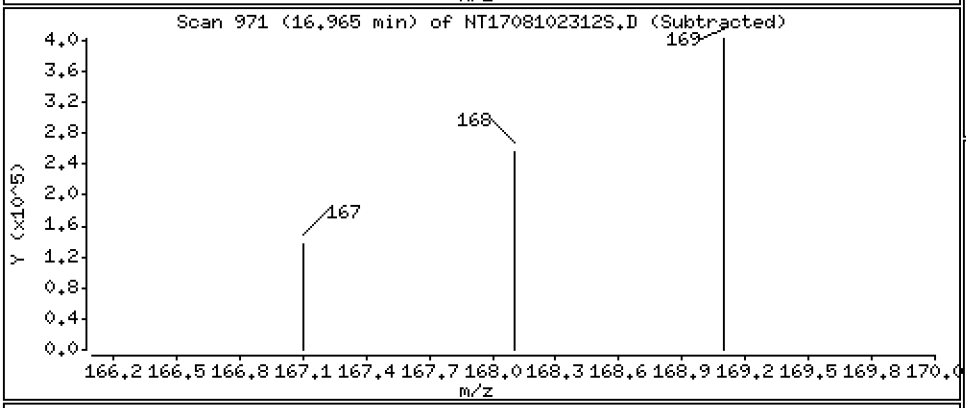
Column diameter: 0.25

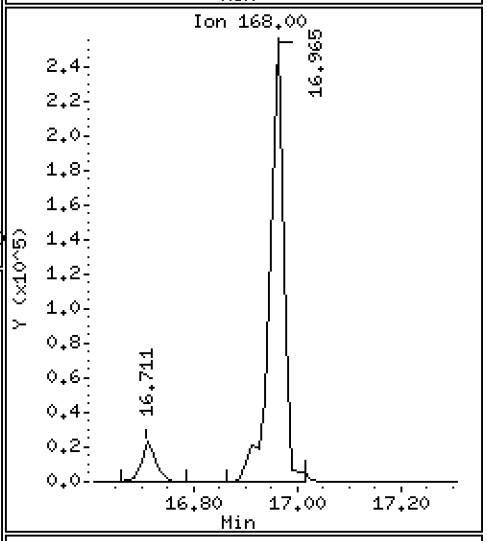
54 N-Nitrosodiphenylamine

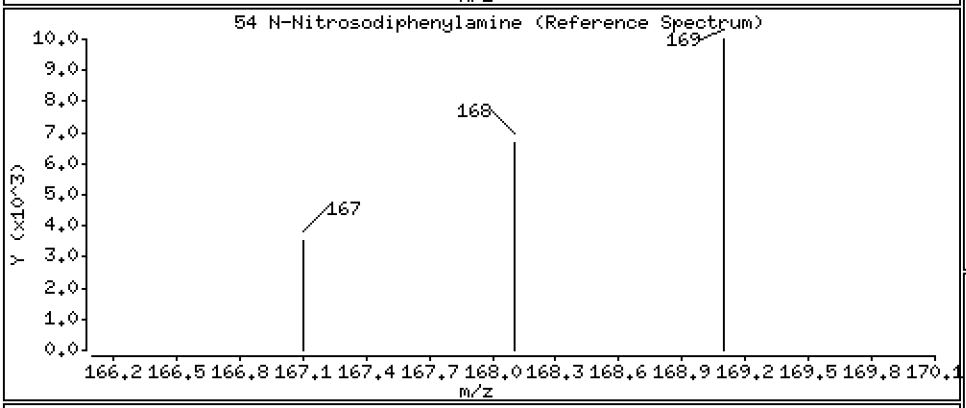
Concentration: 5.881 ug/mL

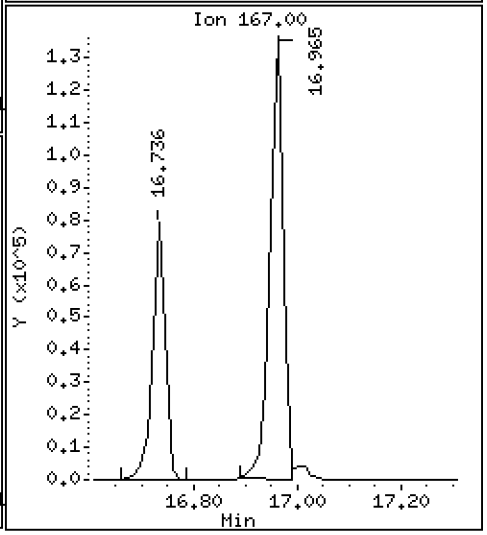


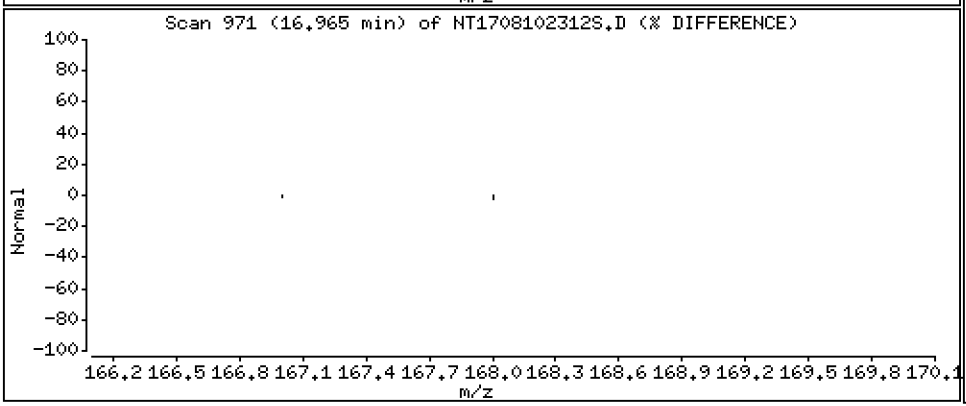












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

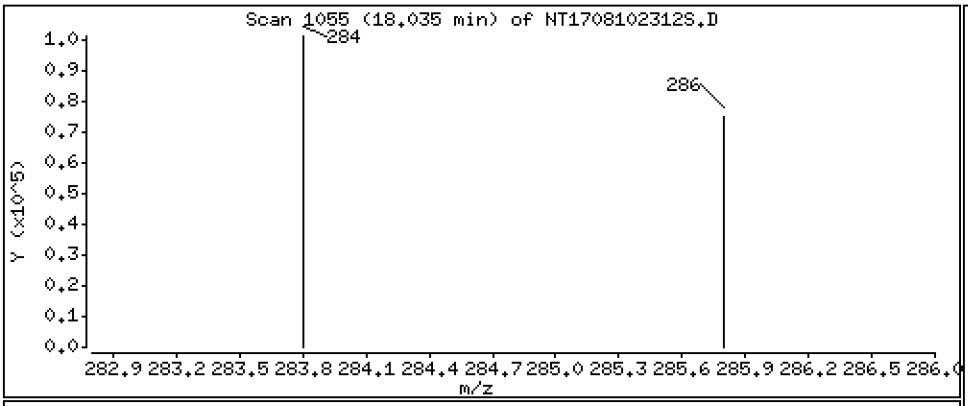
Operator: JGR

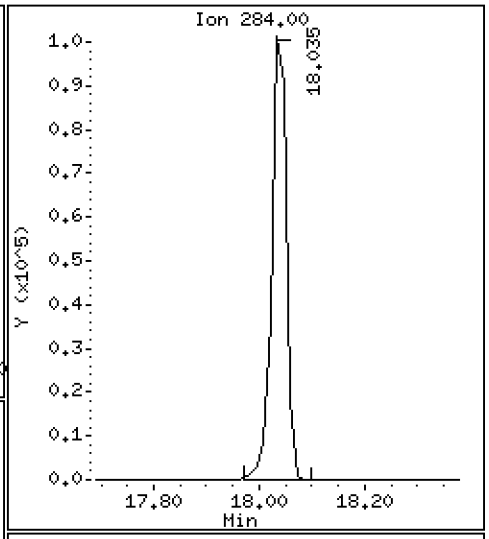
Column phase: ZB-5msi

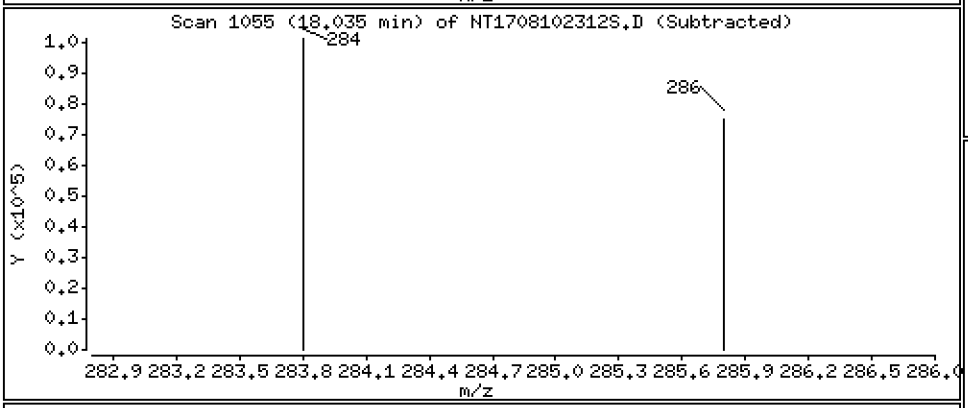
Column diameter: 0.25

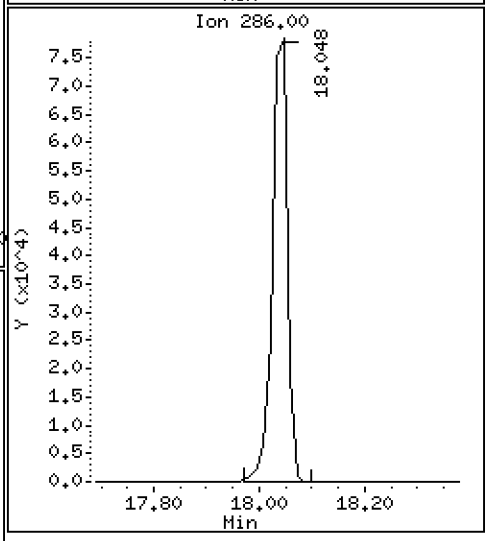
57 Hexachlorobenzene

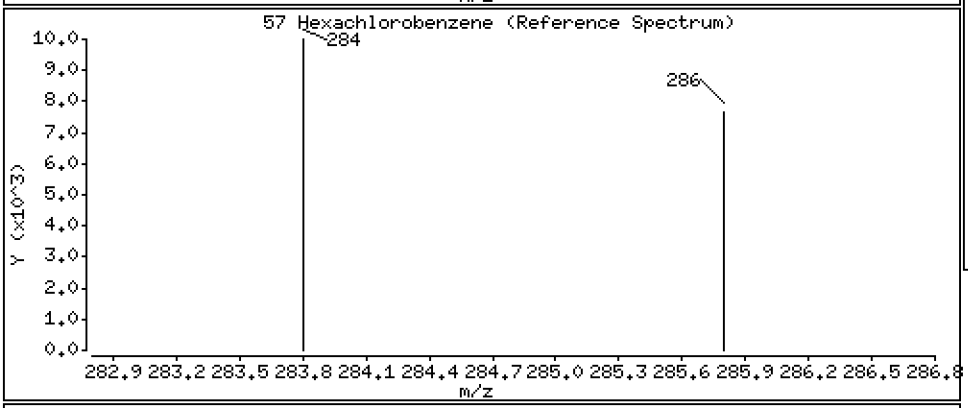
Concentration: 5.215 ug/mL

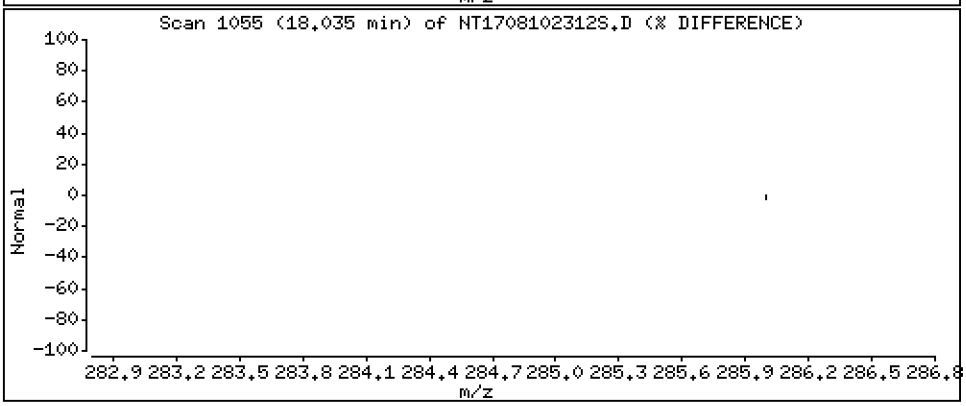












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

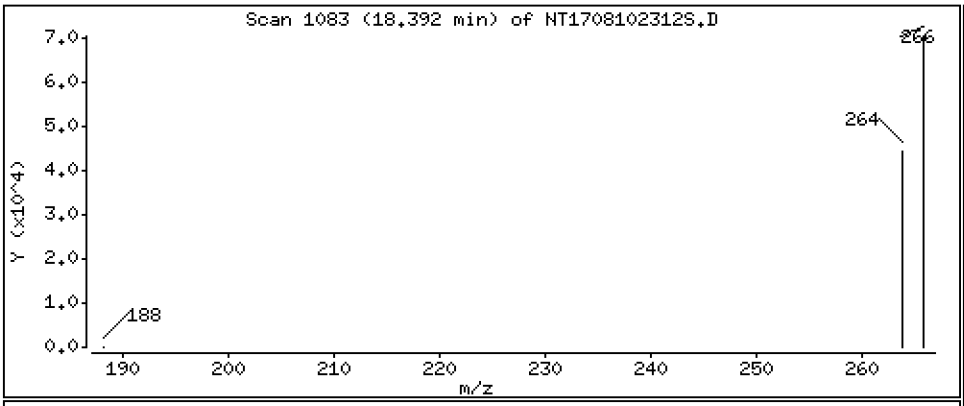
Operator: JGR

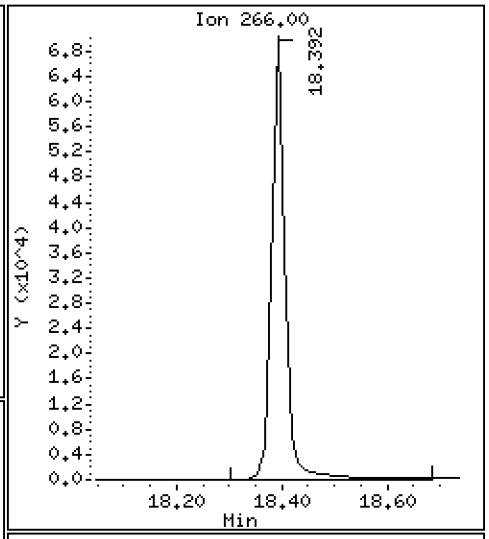
Column phase: ZB-5msi

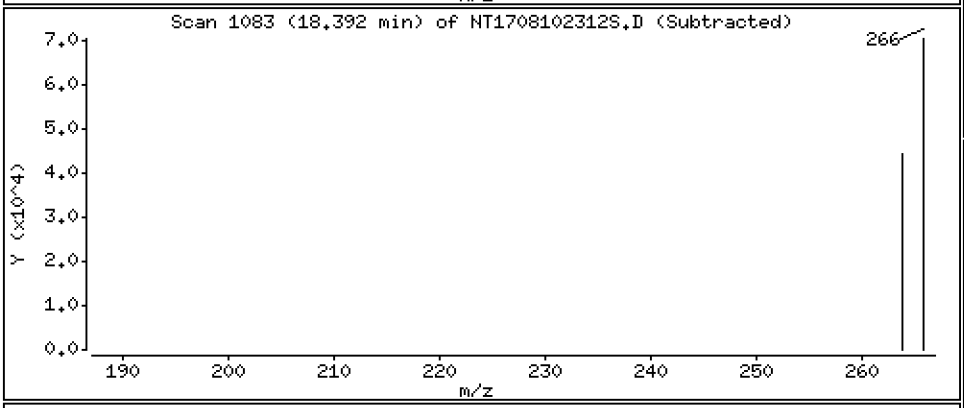
Column diameter: 0.25

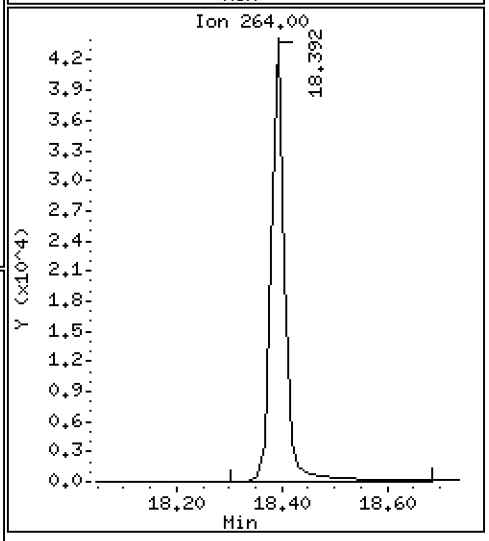
58 Pentachlorophenol

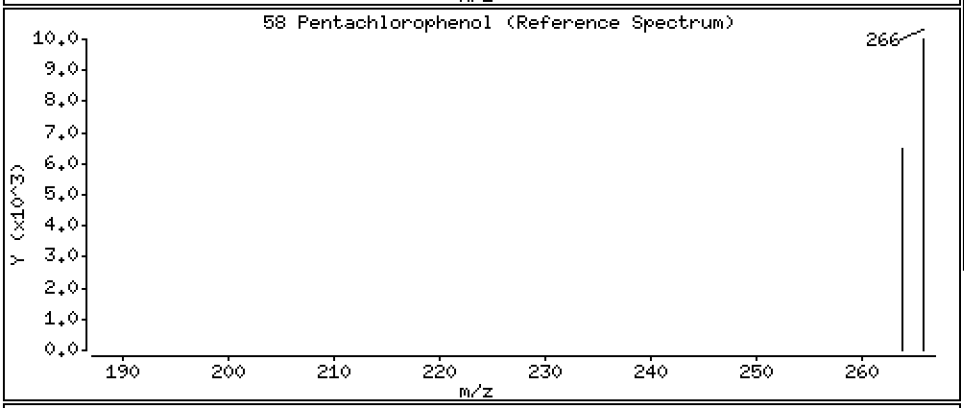
Concentration: 4.844 ug/mL

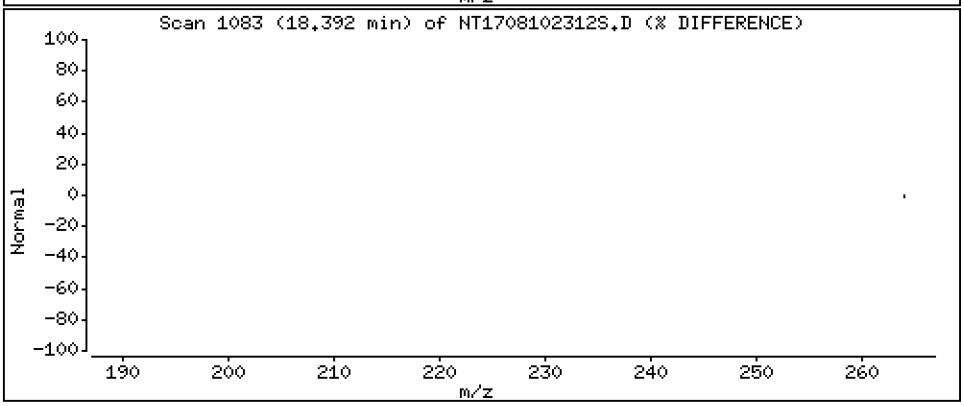












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

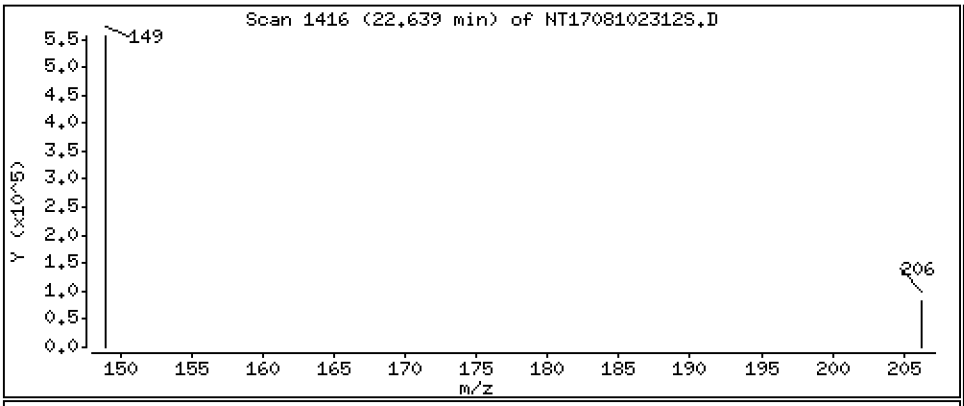
Operator: JGR

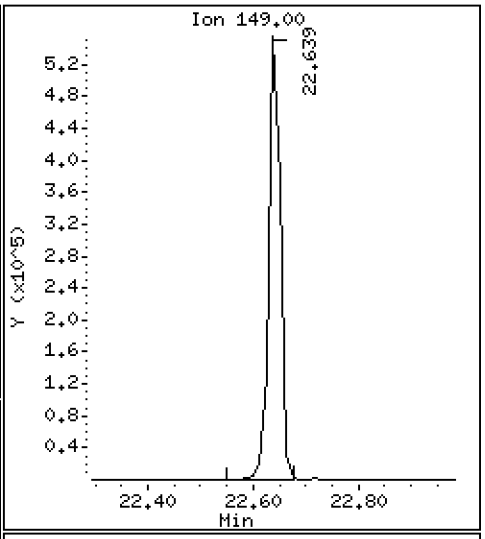
Column phase: ZB-5msi

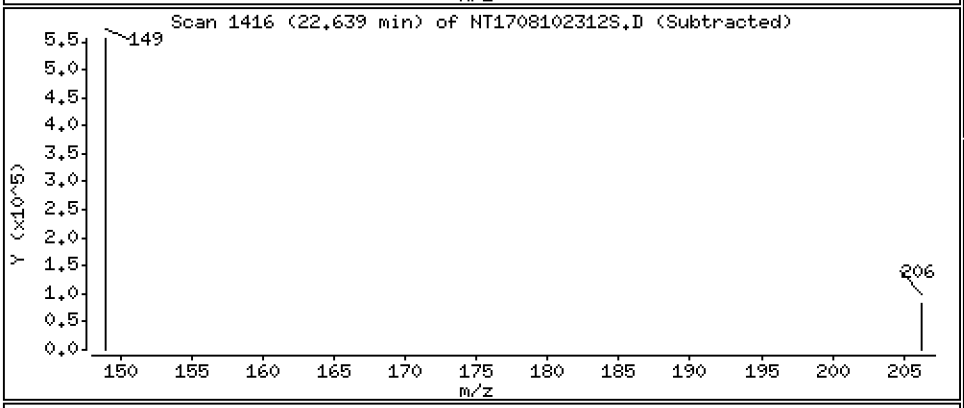
Column diameter: 0.25

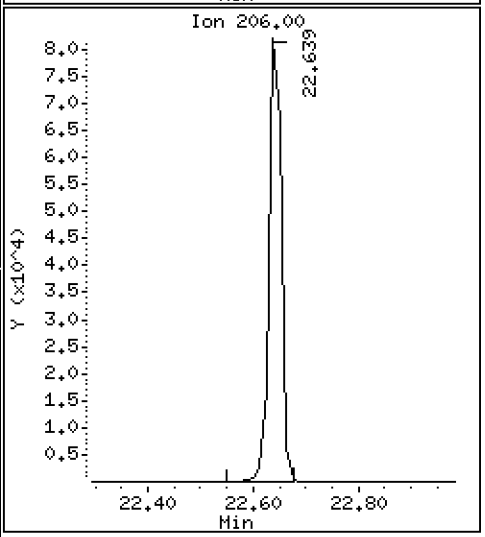
67 Butylbenzylphthalate

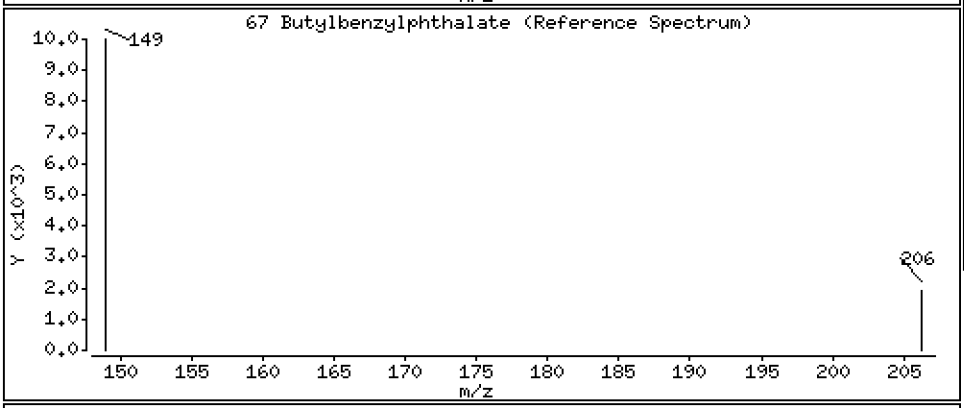
Concentration: 5.503 ug/mL

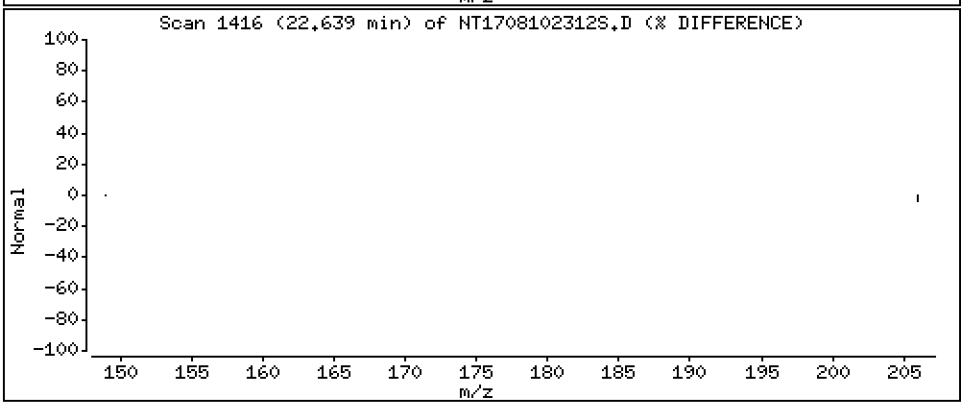












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

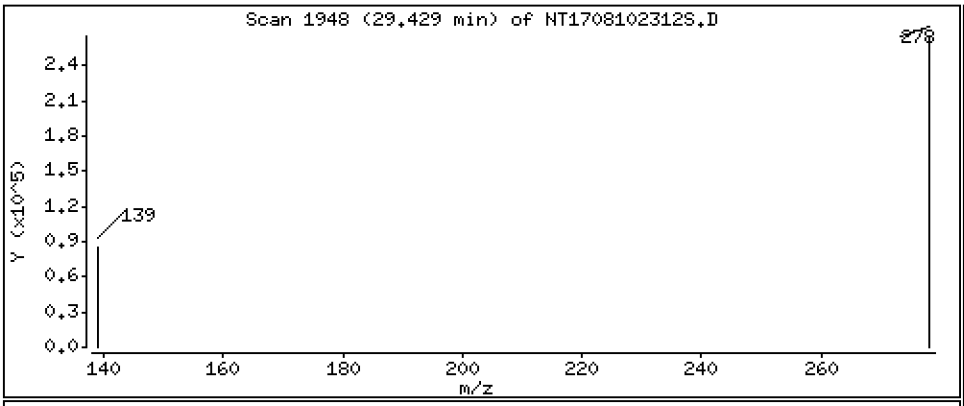
Operator: JGR

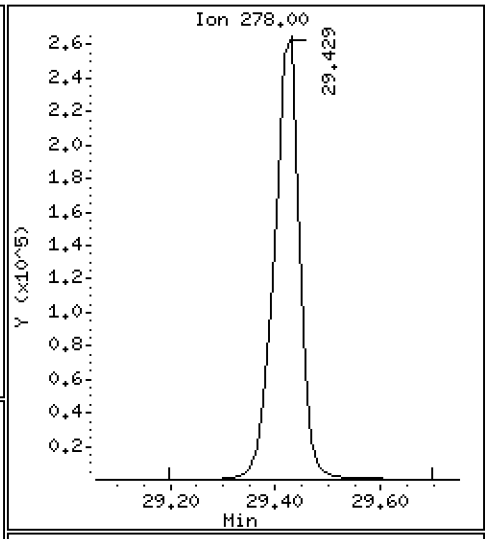
Column phase: ZB-5msi

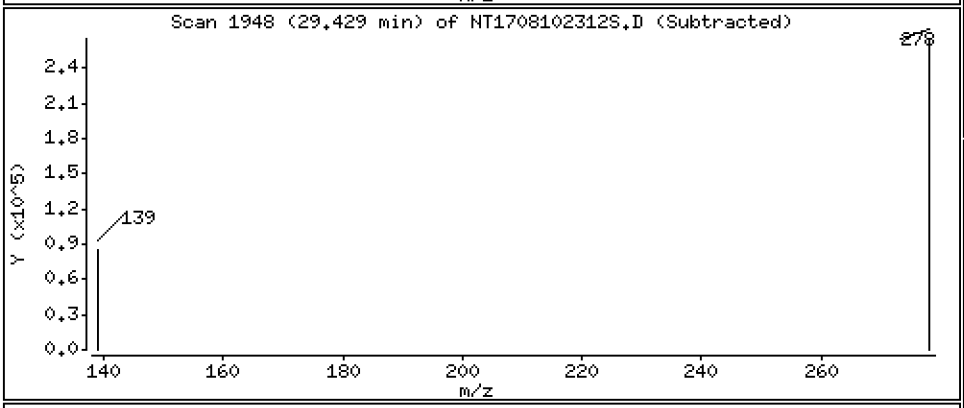
Column diameter: 0.25

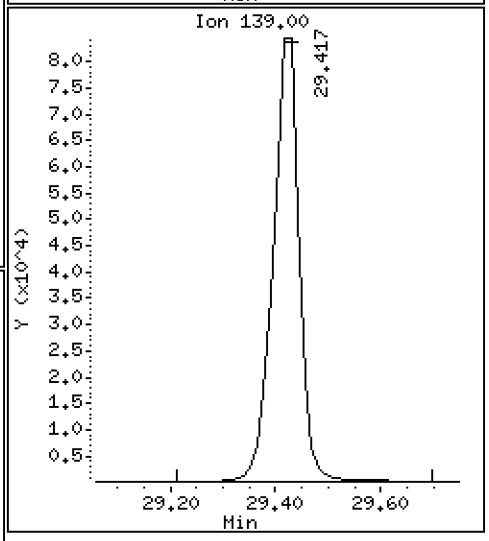
79 Dibenzo(a,h)anthracene

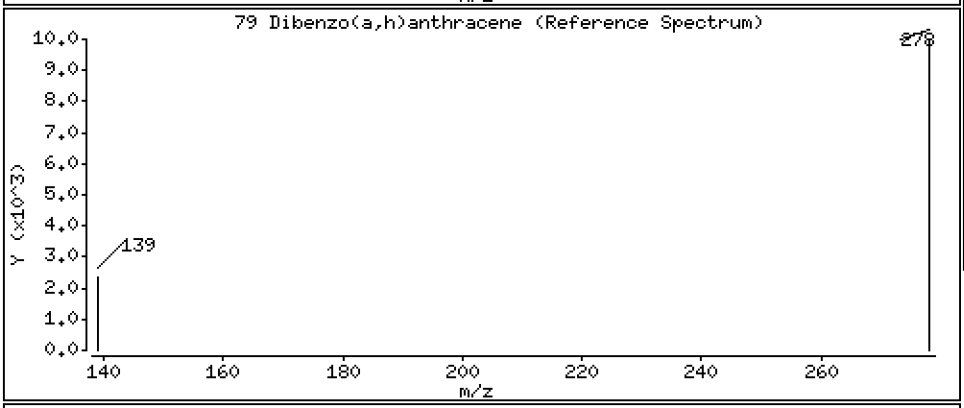
Concentration: 5.066 ug/mL

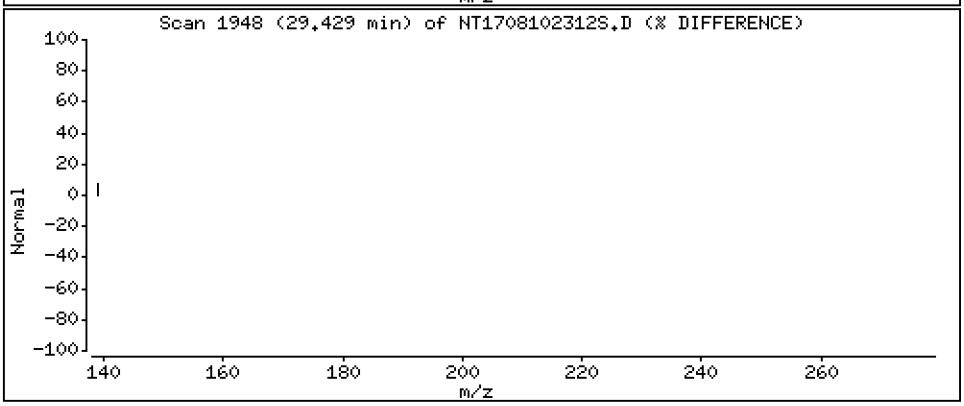












Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023125.D

Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

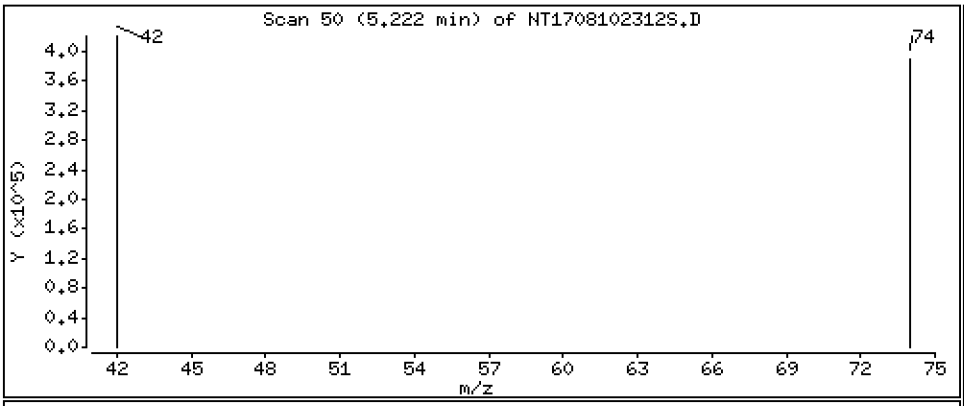
Operator: JGR

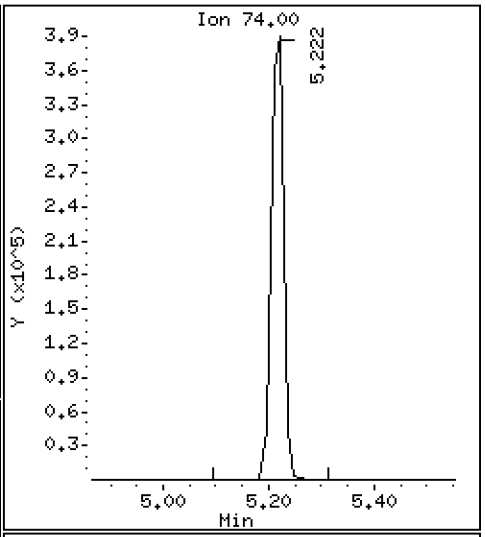
Column phase: ZB-5msi

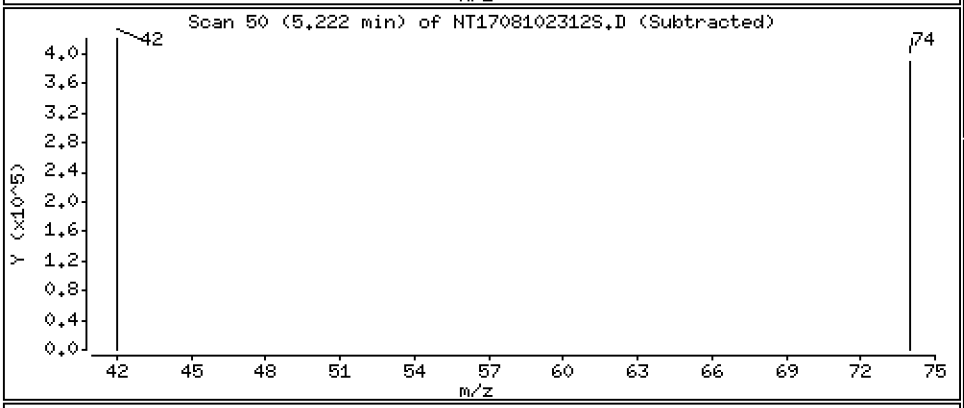
Column diameter: 0.25

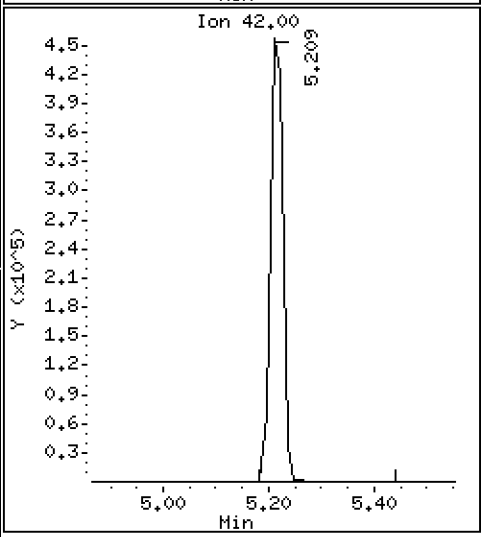
90 N-Nitrosodimethylamine

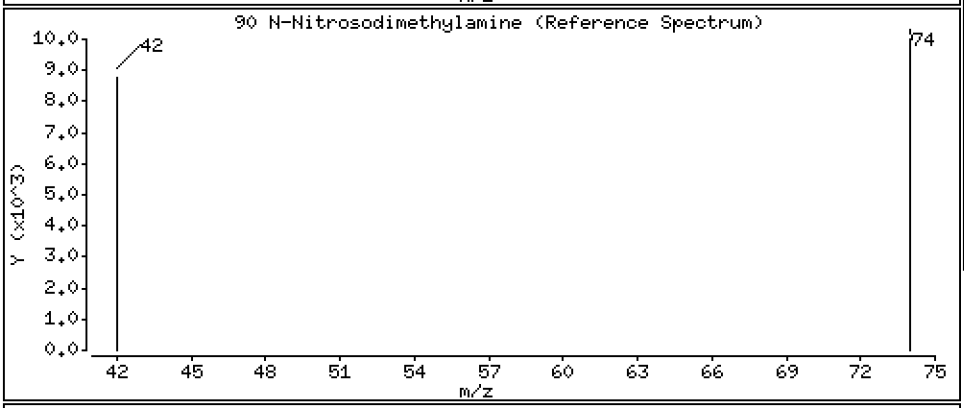
Concentration: 5.656 ug/mL

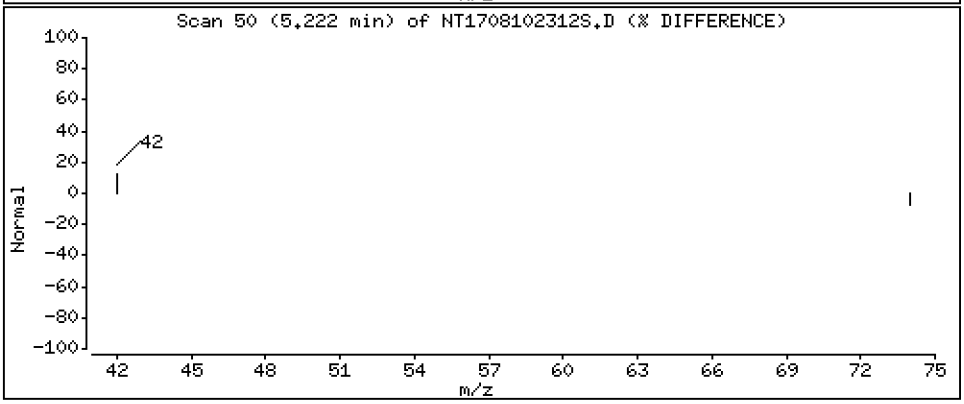












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102312S.D
Lab Smp Id: SEQ-SCV1
Inj Date : 10-AUG-2023 18:45
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Meth Date : 11-Aug-2023 08:13 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

			QUANT SIG						CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1	2-Fluorophenol	112	Compound Not Detected.						
	3	Phenol	94	8.891	8.891	(0.932)	932540		5.50239	5.502
	7	1,3-Dichlorobenzene	146	9.477	9.477	(0.993)	591053		5.15578	5.156
*	8	1,4-Dichlorobenzene-d4	152	9.541	9.541	(1.000)	267754		4.00000	
	9	1,4-Dichlorobenzene	146	9.566	9.566	(1.003)	573424		5.16858	5.169
	11	Benzyl alcohol	79	9.796	9.796	(1.027)	709897		6.05184	6.052
	12	1,2-Dichlorobenzene	146	9.924	9.924	(1.040)	561360		5.21616	5.216
	13	2-Methylphenol	108	10.001	10.001	(1.048)	525371		5.11241	5.112
	15	4-Methylphenol	108	10.282	10.269	(1.078)	589793		5.49122	5.491
	16	N-Nitroso-di-n-propylamine	70	10.359	10.346	(1.086)	677820		6.17127	6.171
	22	2,4-Dimethylphenol	107	11.317	11.316	(0.941)	497084		4.51954	4.520
	24	Benzoic acid	105	11.495	11.521	(0.955)	749206		9.95900	9.959
	26	1,2,4-Trichlorobenzene	180	11.929	11.929	(0.992)	377826		5.02775	5.028
*	27	Naphthalene-d8	136	12.031	12.018	(1.000)	1096182		4.00000	
	30	Hexachlorobutadiene	225	12.413	12.413	(1.032)	189282		5.37846	5.378
	39	Dimethylphthalate	163	15.130	15.117	(0.967)	949831		5.86824	5.868
*	42	Acenaphthene-d10	162	15.640	15.627	(1.000)	498001		4.00000	
	50	Diethylphthalate	149	16.570	16.557	(1.059)	1074870		6.38666	6.387
	54	N-Nitrosodiphenylamine	169	16.965	16.965	(0.909)	685167		5.88111	5.881
	57	Hexachlorobenzene	284	18.034	18.034	(0.966)	199043		5.21462	5.215
	58	Pentachlorophenol	266	18.391	18.392	(0.985)	125476		4.84413	4.844
*	59	Phenanthrene-d10	188	18.672	18.672	(1.000)	810370		4.00000	
$	66	Terphenyl-d14	244	Compound Not Detected.						
	67	Butylbenzylphthalate	149	22.638	22.639	(0.957)	857851		5.50335	5.503
*	69	Chrysene-d12	240	23.646	23.646	(1.000)	587436		4.00000	
*	77	Perylene-d12	264	26.452	26.452	(1.000)	595930		4.00000	
	79	Dibenzo(a,h)anthracene	278	29.429	29.404	(1.113)	891713		5.06606	5.066
	90	N-Nitrosodimethylamine	74	5.221	5.209	(0.547)	639879		5.65625	5.656(M)

QC Flag Legend

M - Compound response manually integrated.

Report Date: 15-Aug-2023 16:33

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708102312S.D
Lab Smp Id: SEQ-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Misc Info:

Calibration Date: 10-AUG-2023
Calibration Time: 15:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	319389	159695	638778	267754	-16.17
27 Naphthalene-d8	1274686	637343	2549372	1096182	-14.00
42 Acenaphthene-d10	569885	284943	1139770	498001	-12.61
59 Phenanthrene-d10	915829	457915	1831658	810370	-11.52
69 Chrysene-d12	653460	326730	1306920	587436	-10.10
77 Perylene-d12	654887	327444	1309774	595930	-9.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.54	9.04	10.04	9.54	0.00
27 Naphthalene-d8	12.02	11.52	12.52	12.03	0.11
42 Acenaphthene-d10	15.64	15.14	16.14	15.64	0.00
59 Phenanthrene-d10	18.67	18.17	19.17	18.67	0.00
69 Chrysene-d12	23.65	23.15	24.15	23.65	0.00
77 Perylene-d12	26.45	25.95	26.95	26.45	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708102312S.D

Lab ID: SEQ-SCV1
nt17.i, 20230810.b\SIM.B\SIMABN2.m,   10-AUG-2023 18:45

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.B/NT1708102309S.D

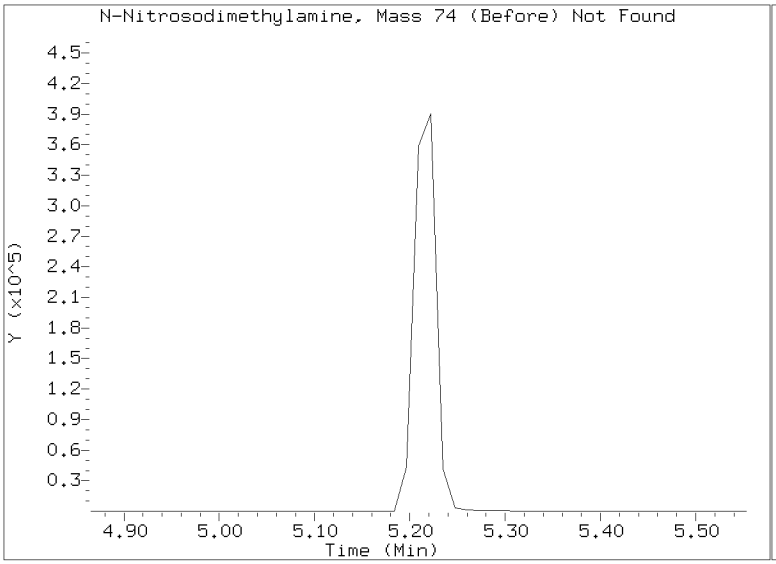
On Column LOD for nt17.i, SIM.B\SIMABN2.m, PSDDA.sub = 0.0000

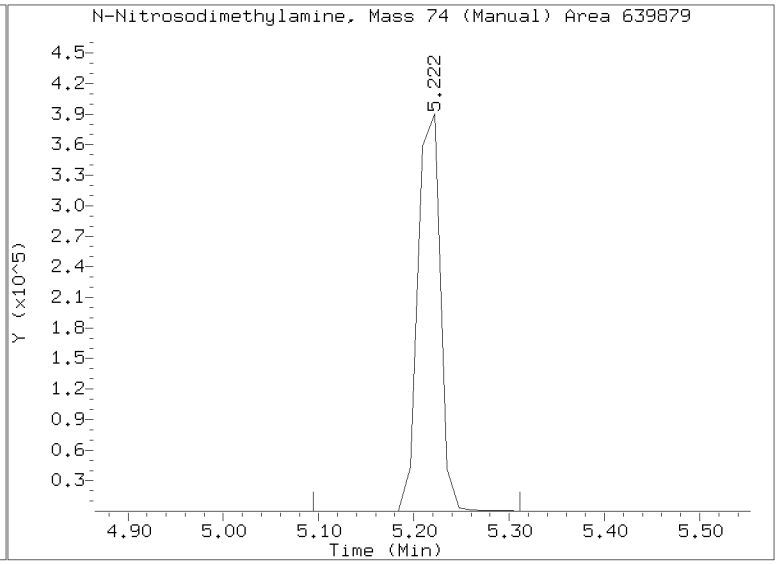
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102312S.D
Injection Date: 10-AUG-2023 18:45
Lab ID:SEQ-SCV1 Client ID:
Report Date: 08/15/2023 16:33





Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23H0579
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GH00045
Laboratory ID: SLH0217-SCV1
Sequence: SLH0217
Standard ID: L006700

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
1,4-Dichlorobenzene	5.0000	5.2	3.4	20.00
1,2-Dichlorobenzene	5.0000	5.2	4.3	20.00
Benzyl Alcohol	5.0000	6.1	21.0 *	20.00
Benzoic acid	10.000	10.0	-0.4	20.00
2,4-Dimethylphenol	5.0000	4.5	-9.6	20.00
1,2,4-Trichlorobenzene	5.0000	5.0	0.6	20.00
N-Nitrosodiphenylamine	5.0000	5.9	17.6	20.00
Pentachlorophenol	5.0000	4.8	-3.1	20.00
2-Fluorophenol	7.5000	0.00		
p-Terphenyl-d14	5.0000	0.00		

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023125.D

Date : 10-AUG-2023 18:45

Client ID:

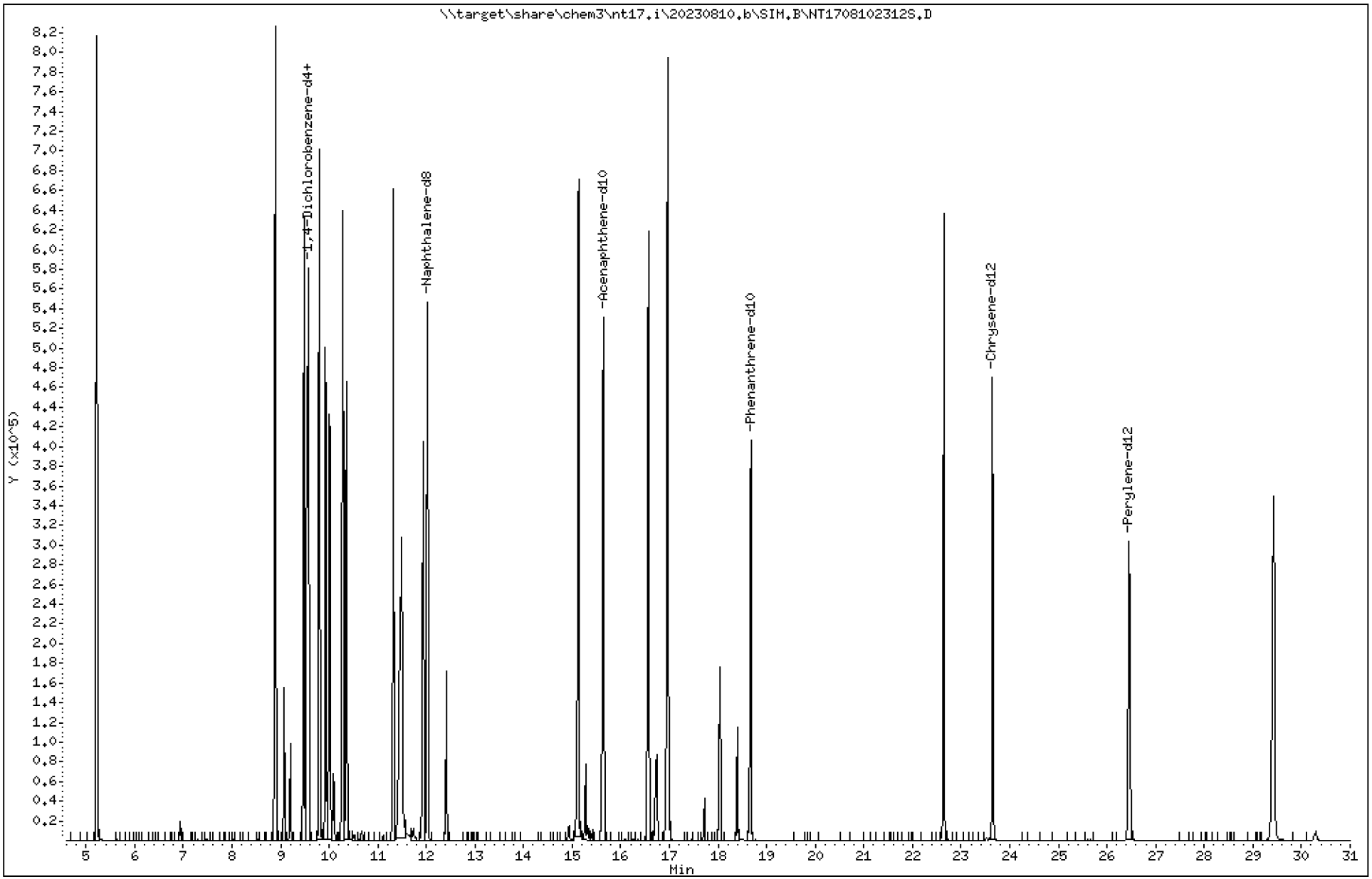
Sample Info: SEQ-SCV1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023125.D

Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

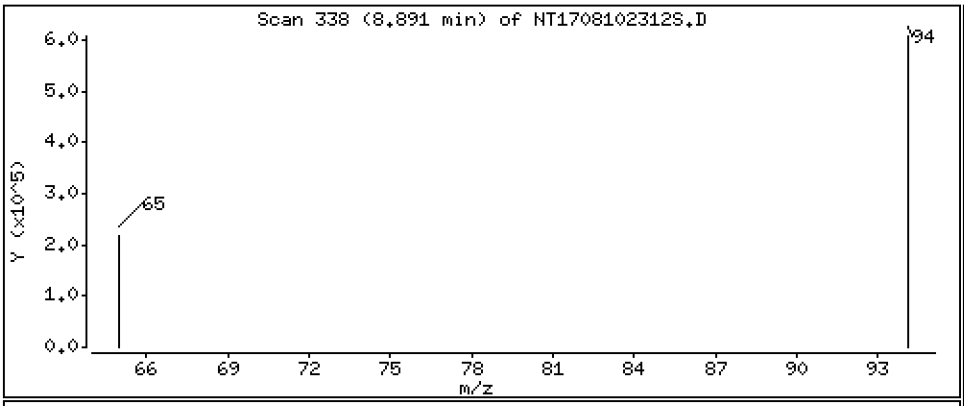
Operator: JGR

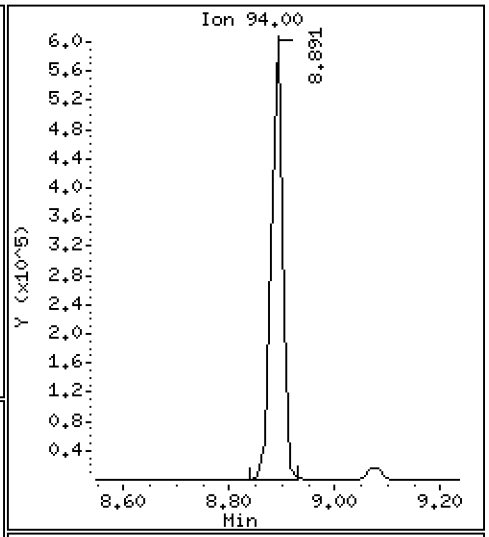
Column phase: ZB-5msi

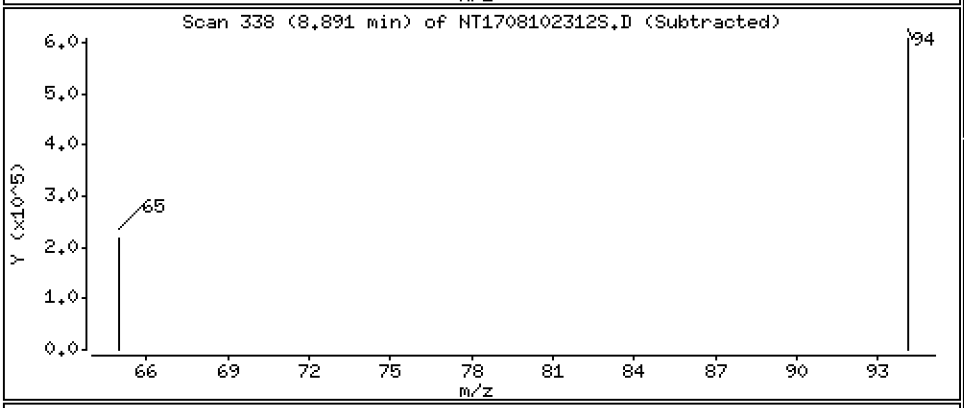
Column diameter: 0.25

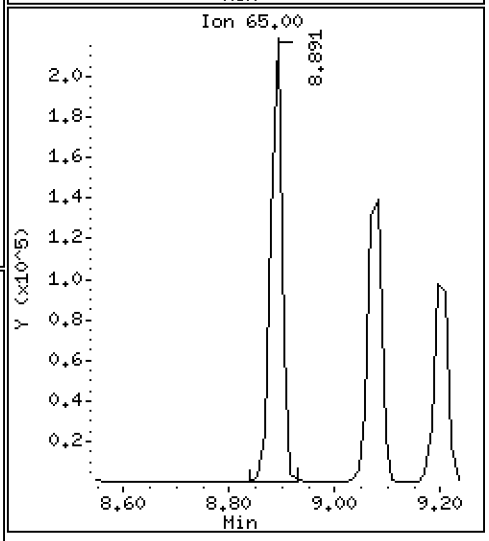
3 Phenol

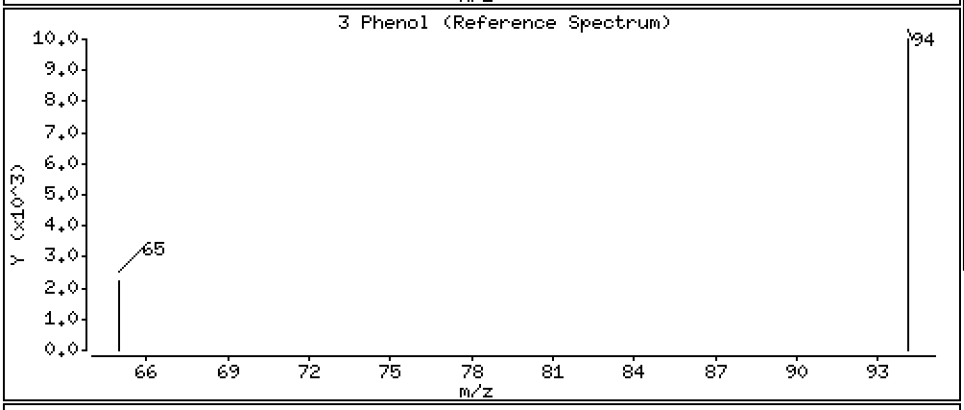
Concentration: 5.502 ug/mL

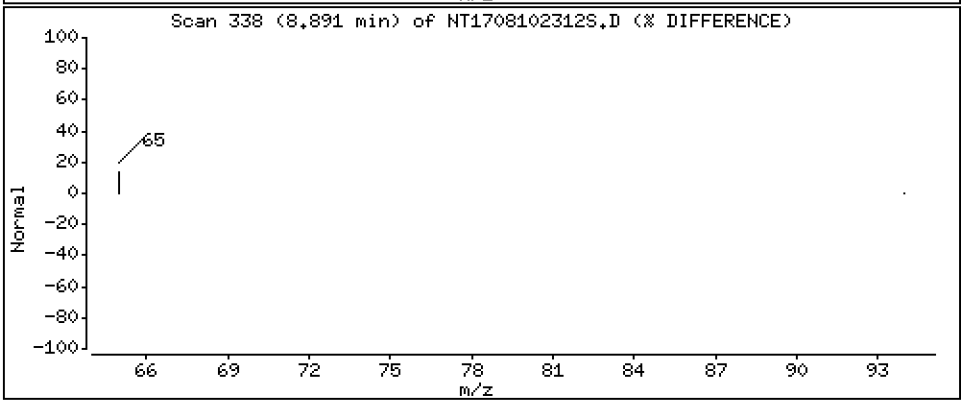












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

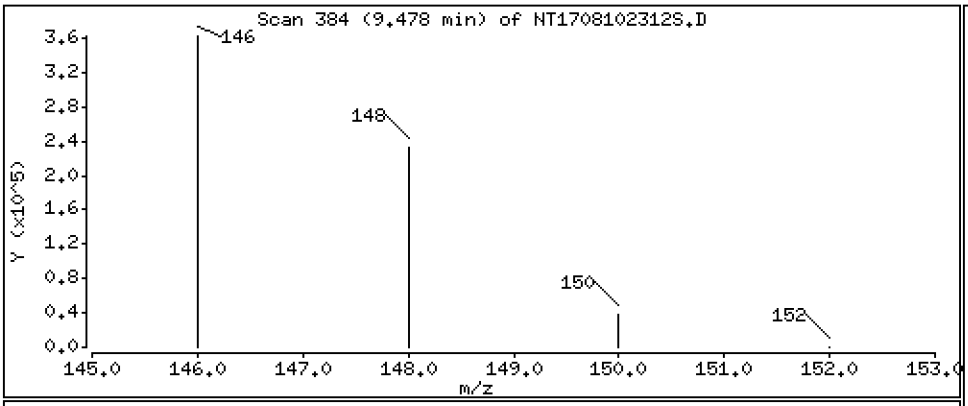
Operator: JGR

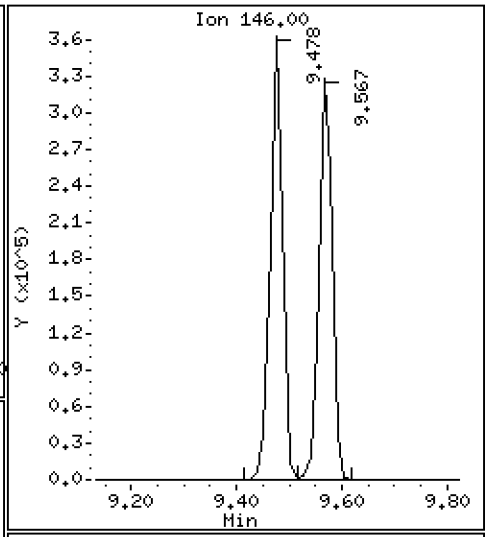
Column phase: ZB-5msi

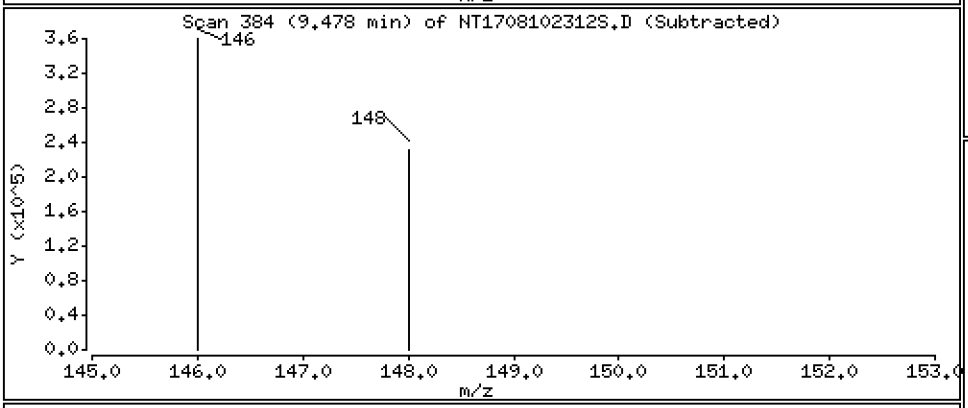
Column diameter: 0.25

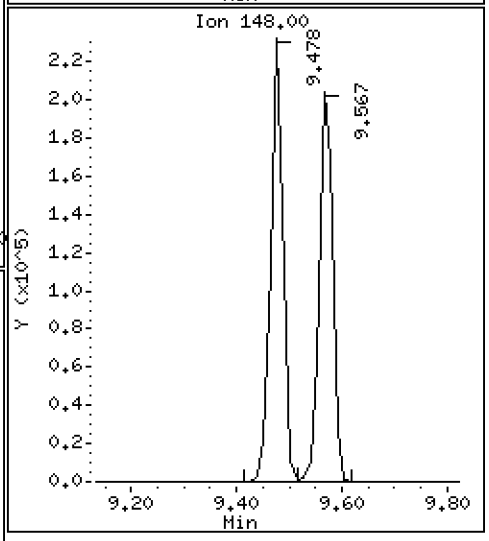
7 1,3-Dichlorobenzene

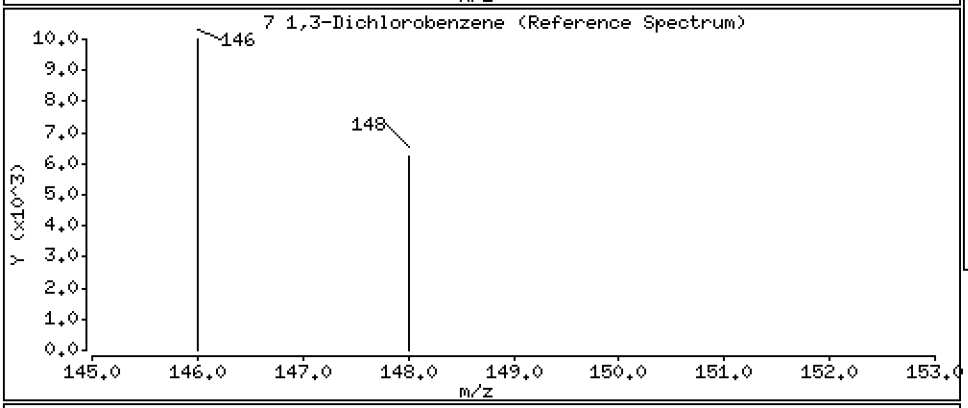
Concentration: 5.156 ug/mL

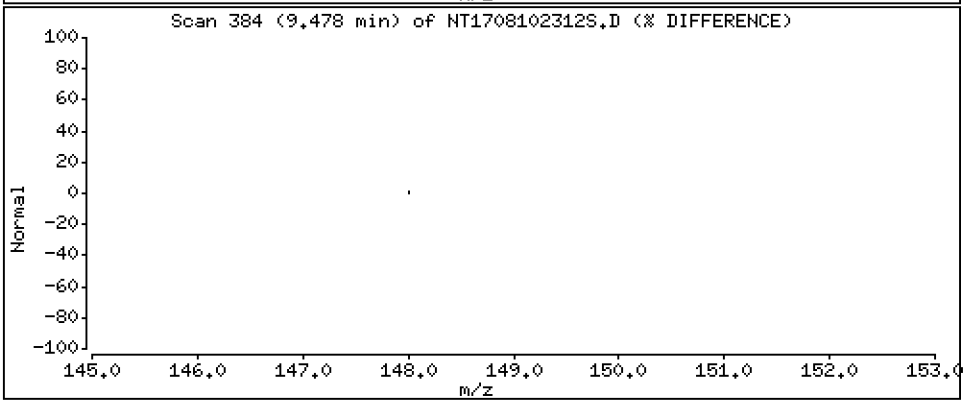












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

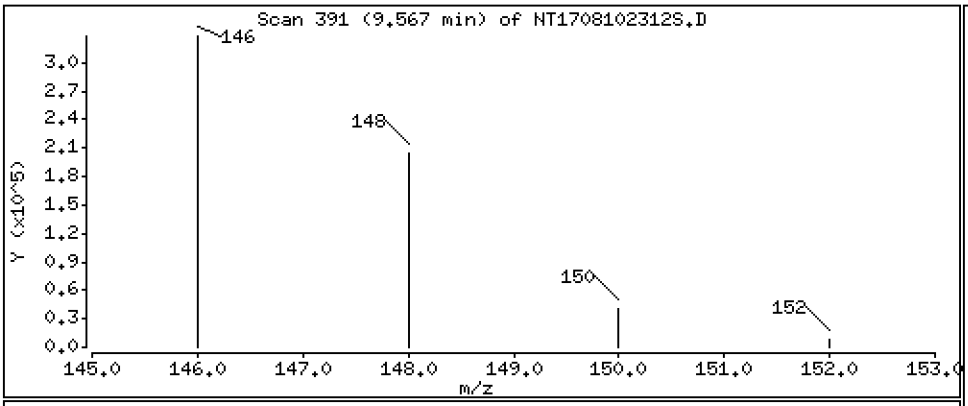
Operator: JGR

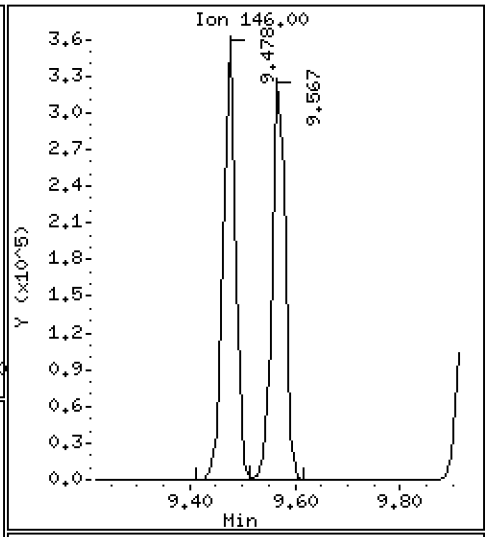
Column phase: ZB-5msi

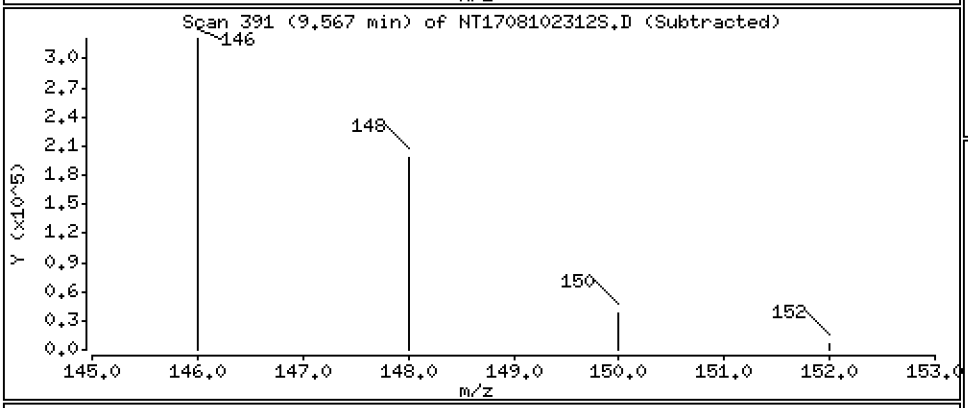
Column diameter: 0.25

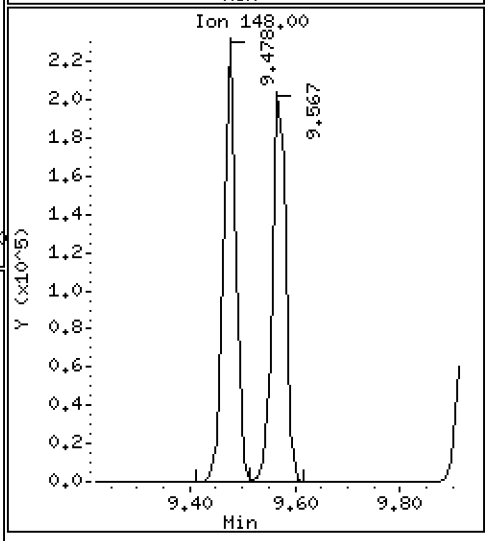
9 1,4-Dichlorobenzene

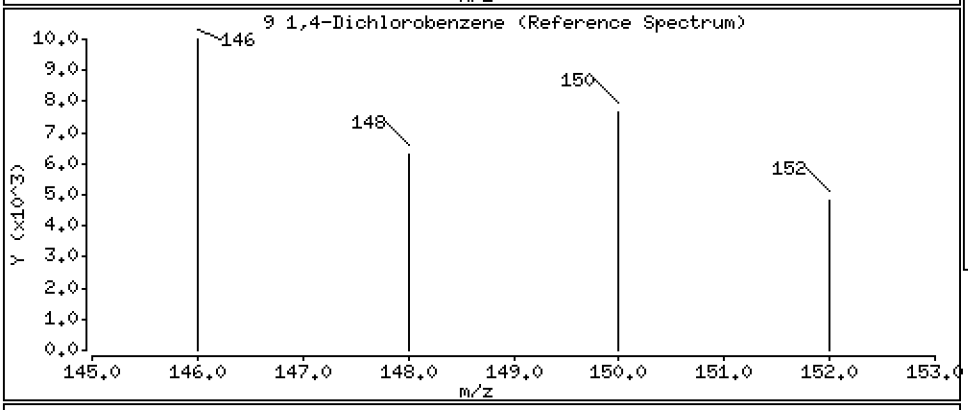
Concentration: 5.169 ug/mL

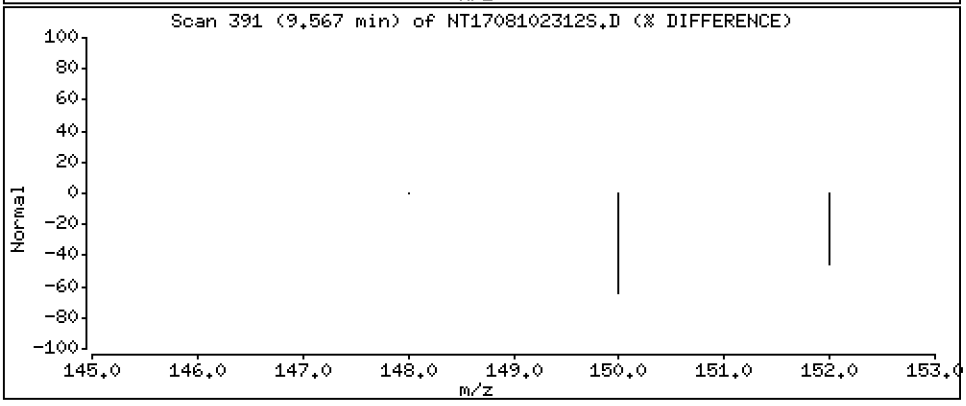












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Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

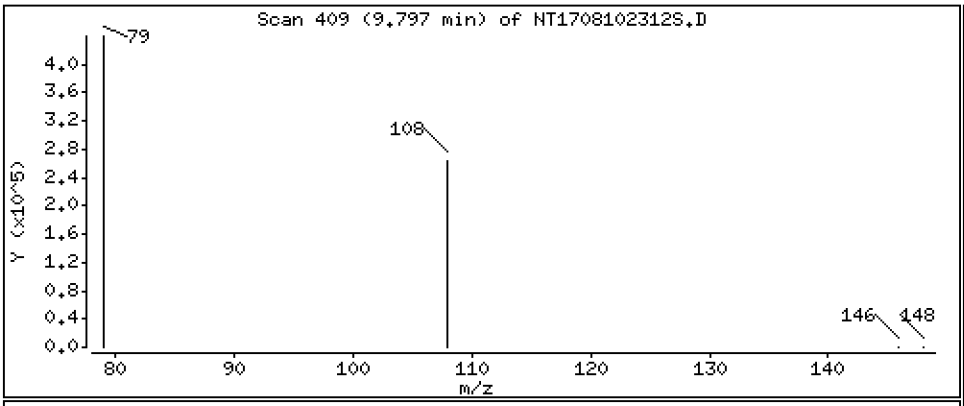
Operator: JGR

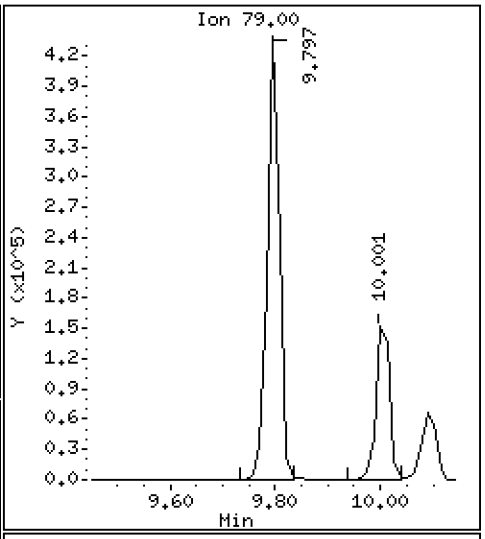
Column phase: ZB-5msi

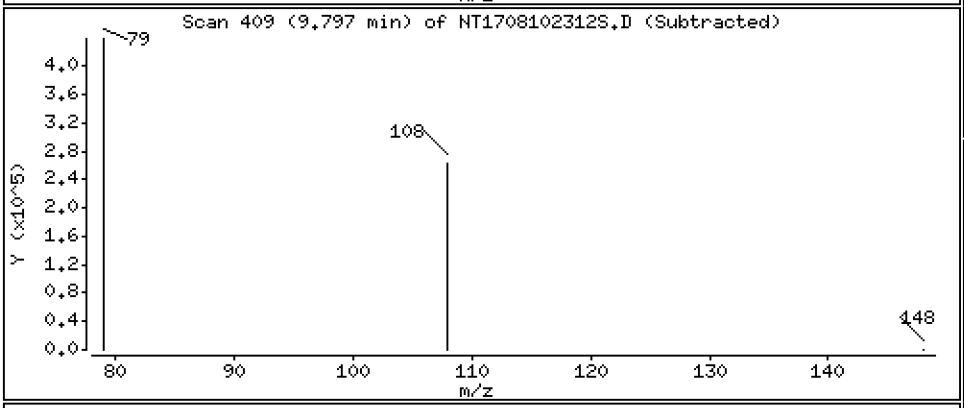
Column diameter: 0.25

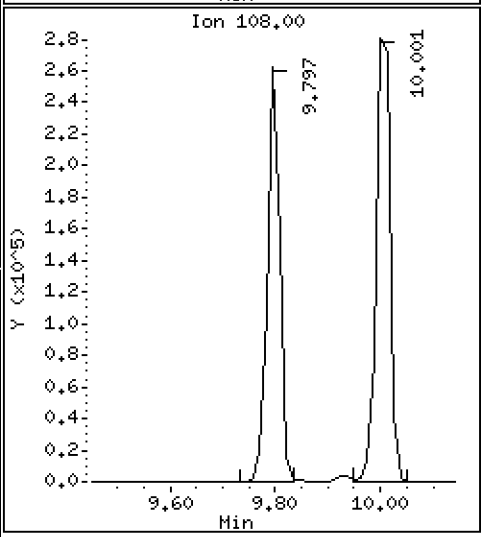
11 Benzyl alcohol

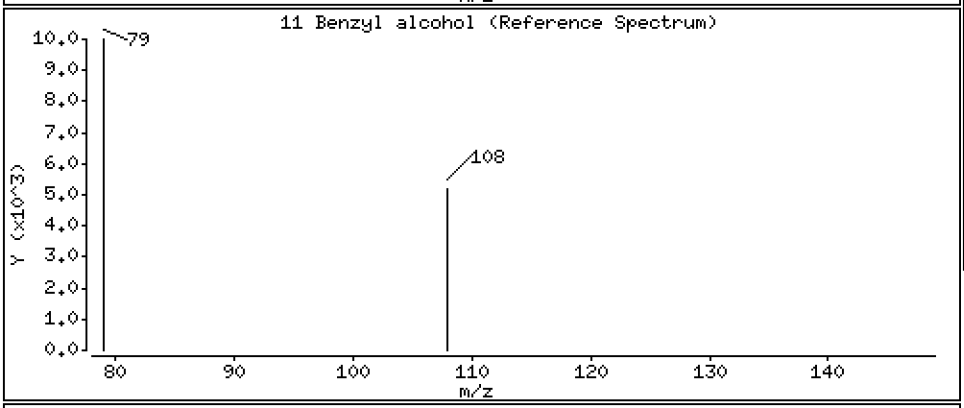
Concentration: 6.052 ug/mL

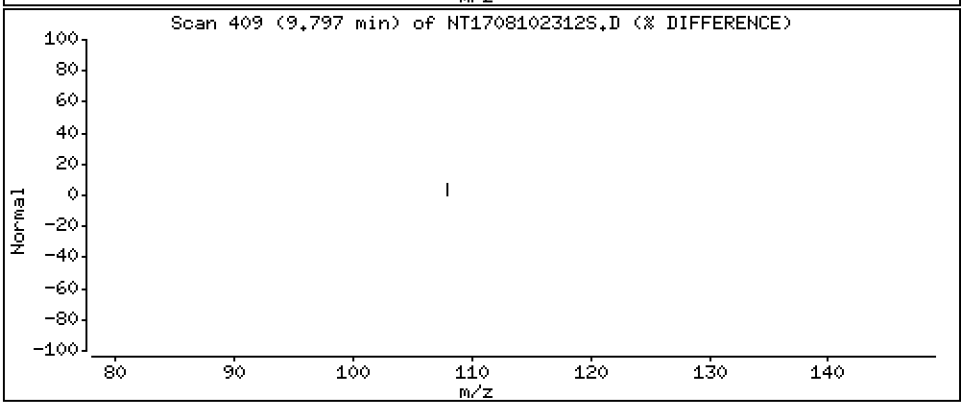












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

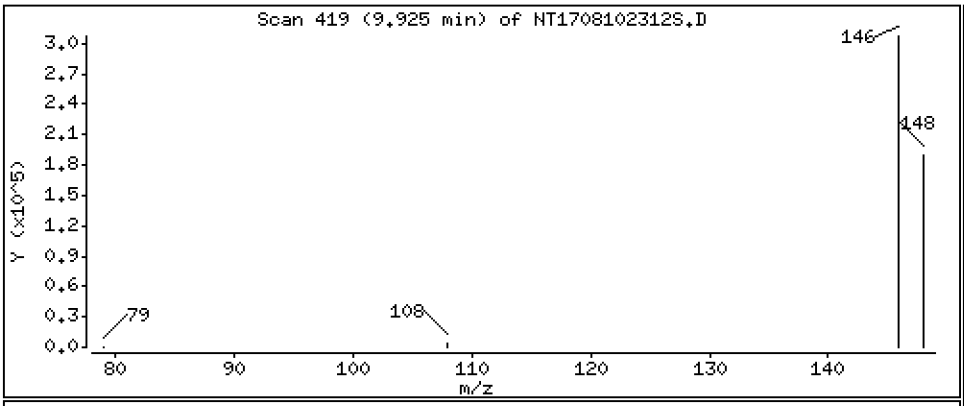
Operator: JGR

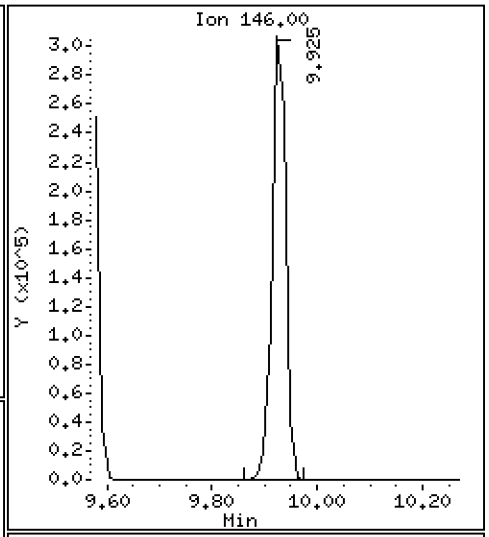
Column phase: ZB-5msi

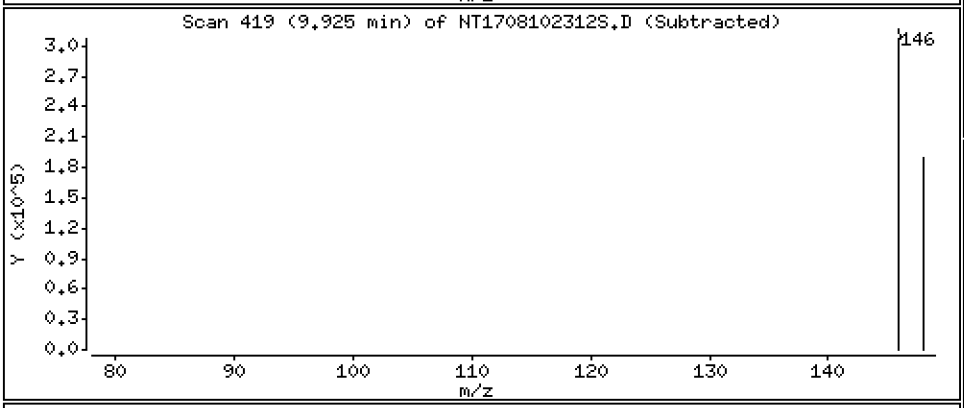
Column diameter: 0.25

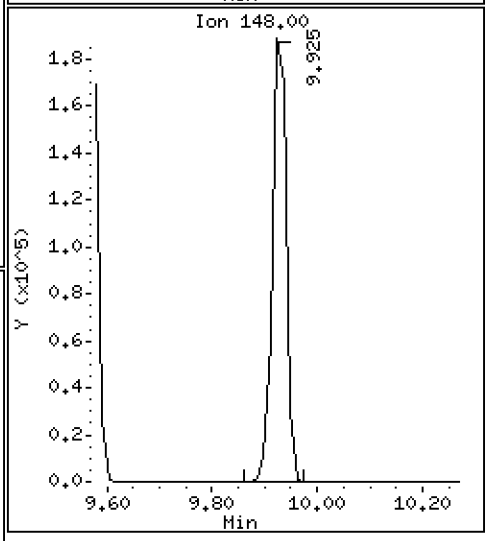
12 1,2-Dichlorobenzene

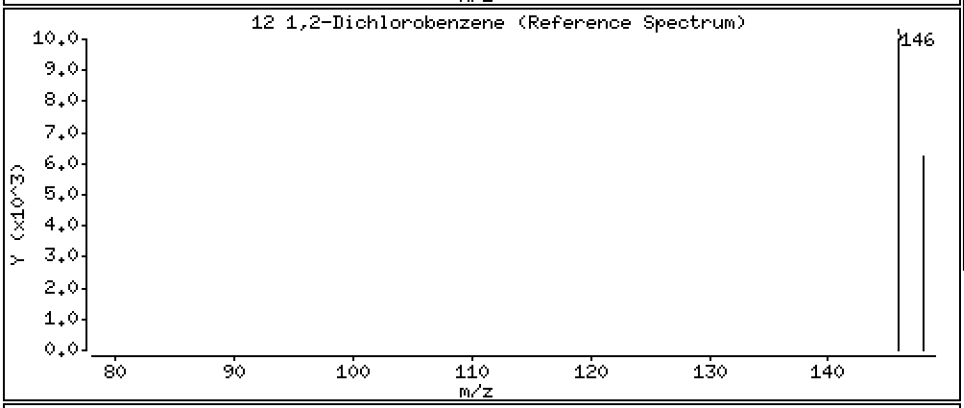
Concentration: 5.216 ug/mL

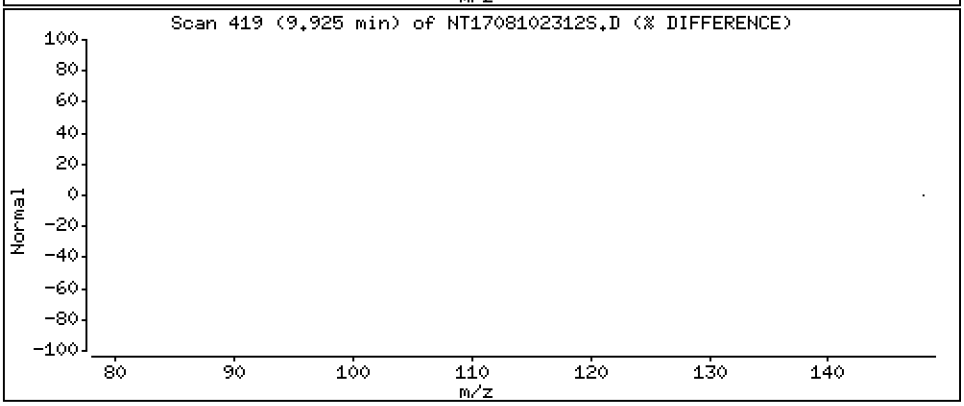












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

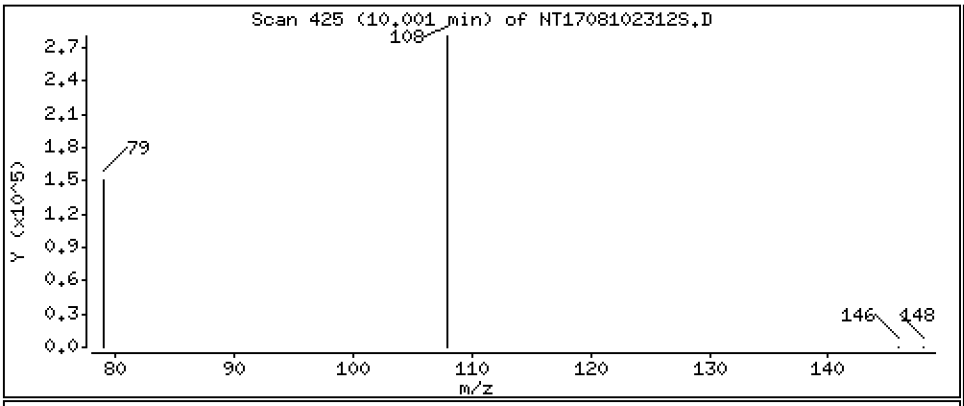
Operator: JGR

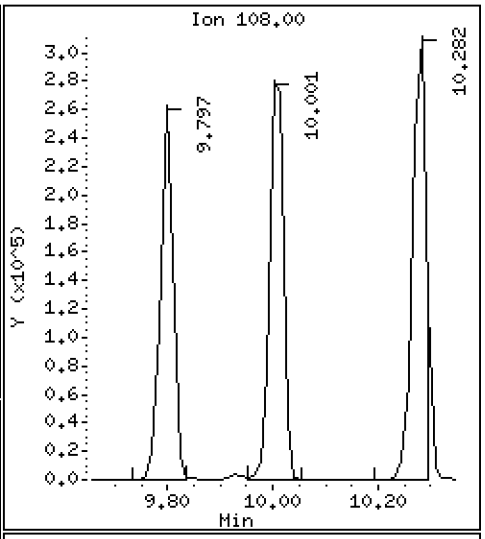
Column phase: ZB-5msi

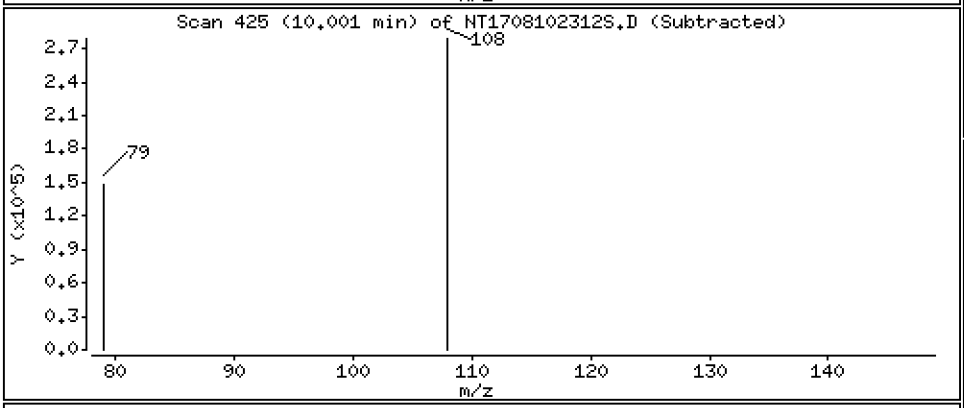
Column diameter: 0.25

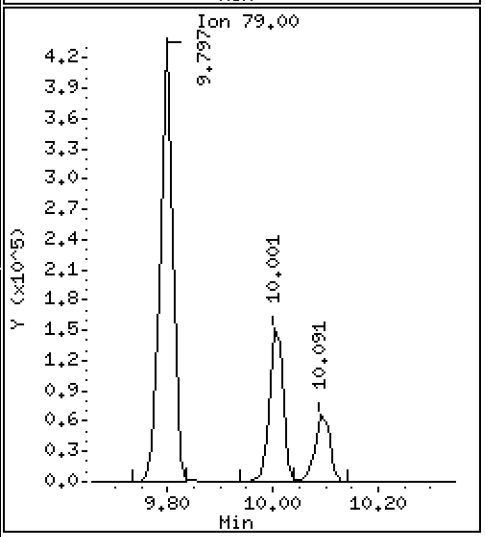
13 2-Methylphenol

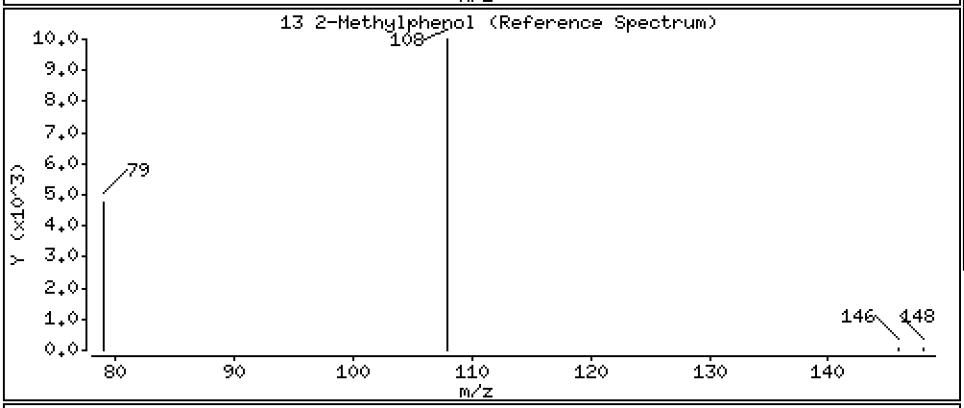
Concentration: 5.112 ug/mL

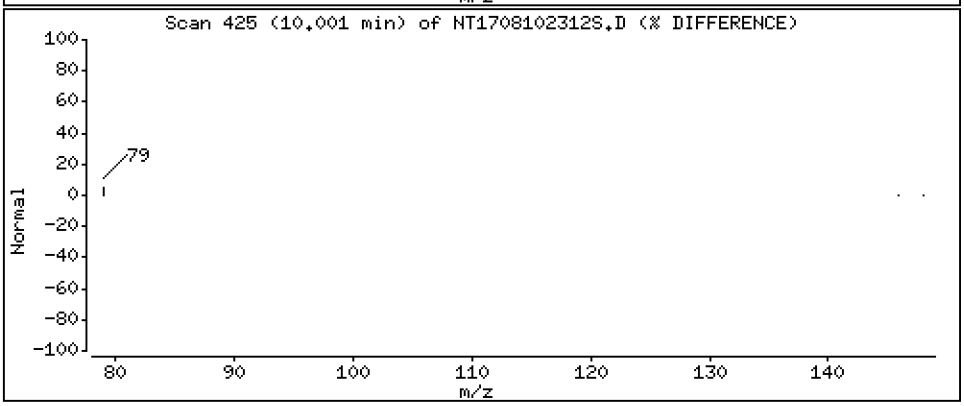












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Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

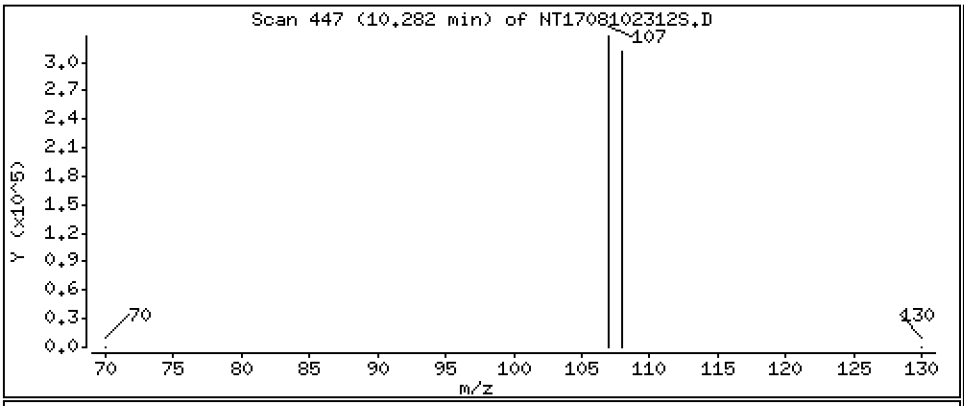
Operator: JGR

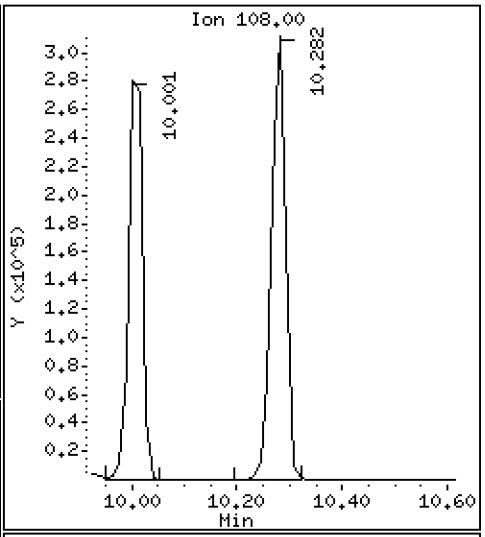
Column phase: ZB-5msi

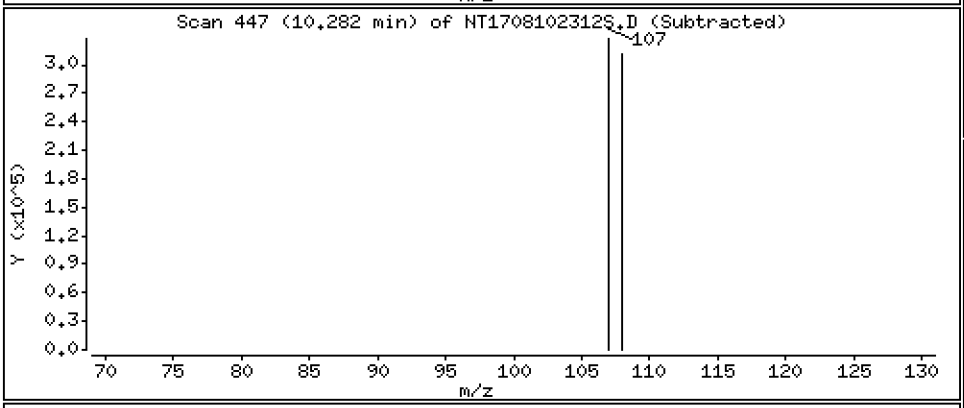
Column diameter: 0.25

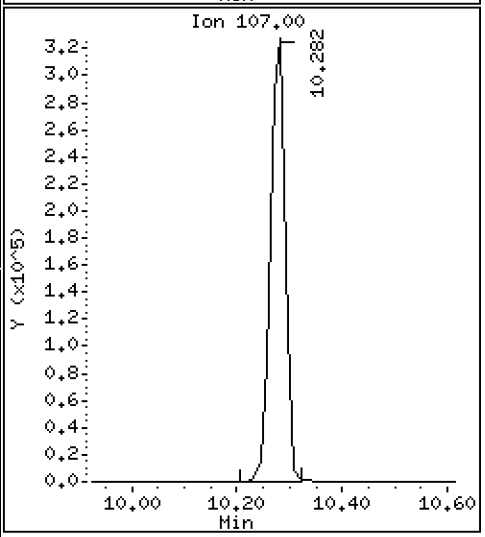
15 4-Methylphenol

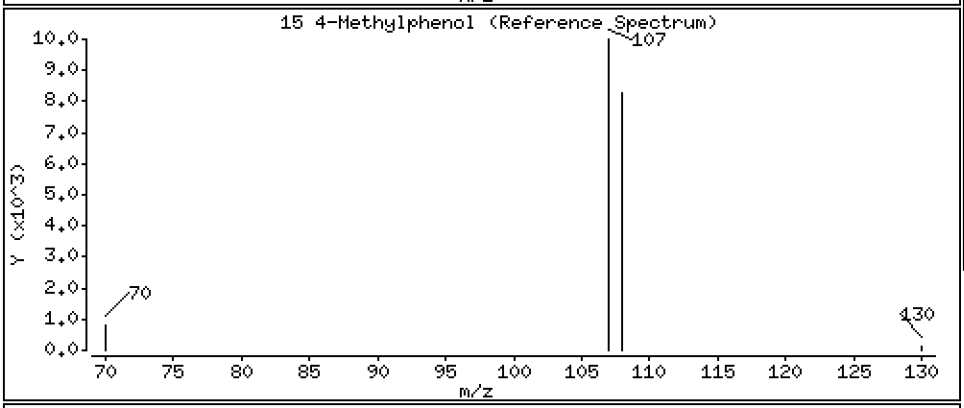
Concentration: 5.491 ug/mL

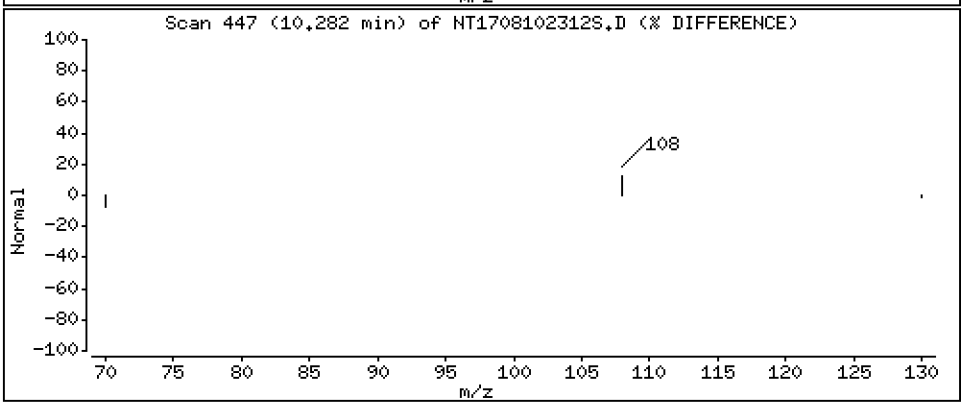












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Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

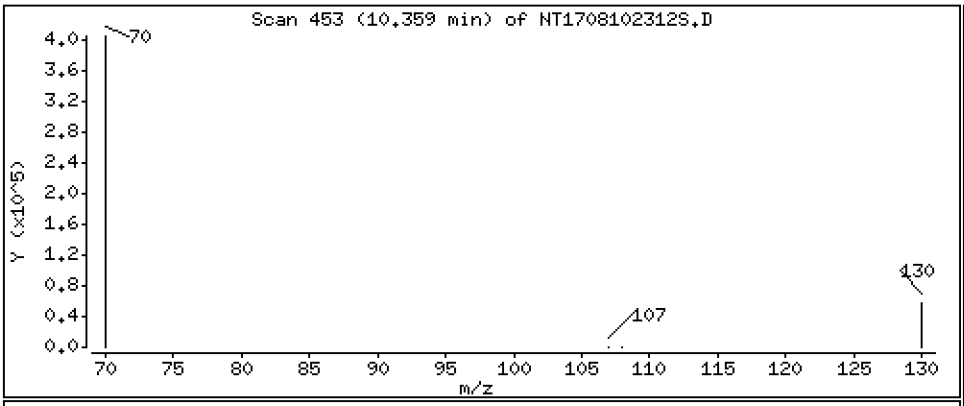
Operator: JGR

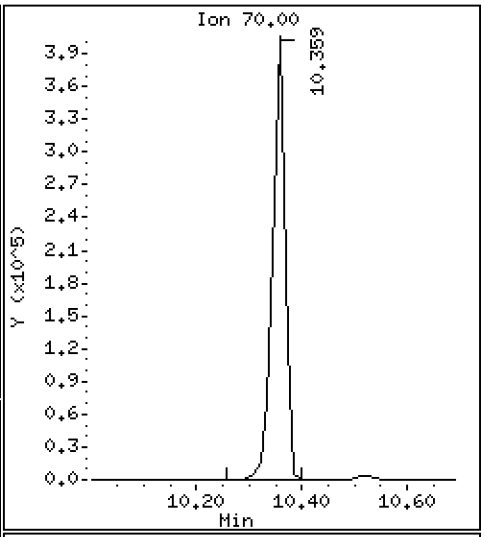
Column phase: ZB-5msi

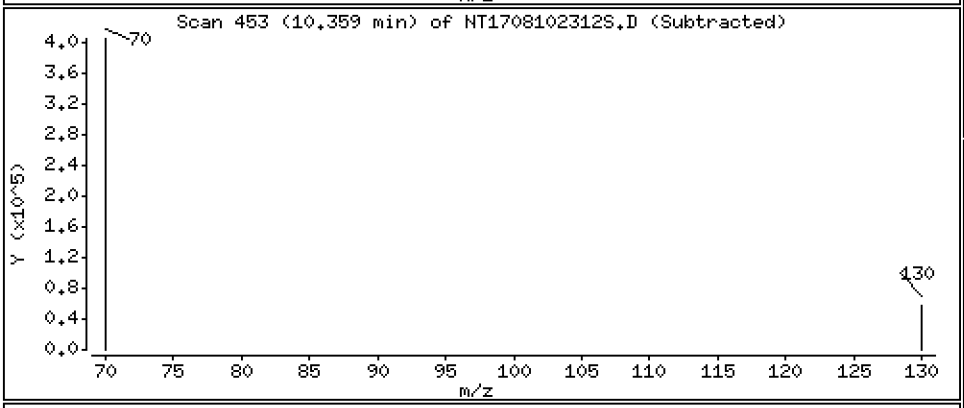
Column diameter: 0.25

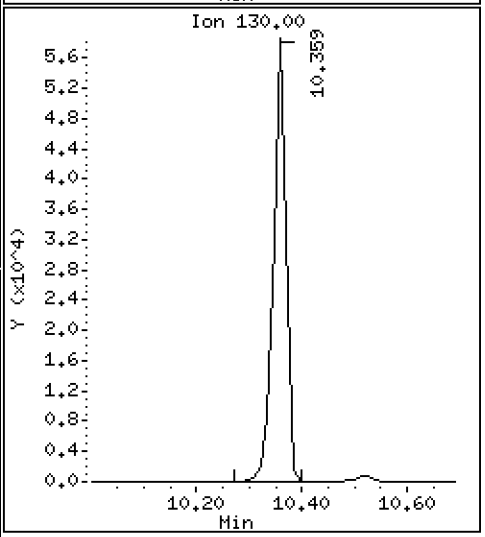
16 N-Nitroso-di-n-propylamine

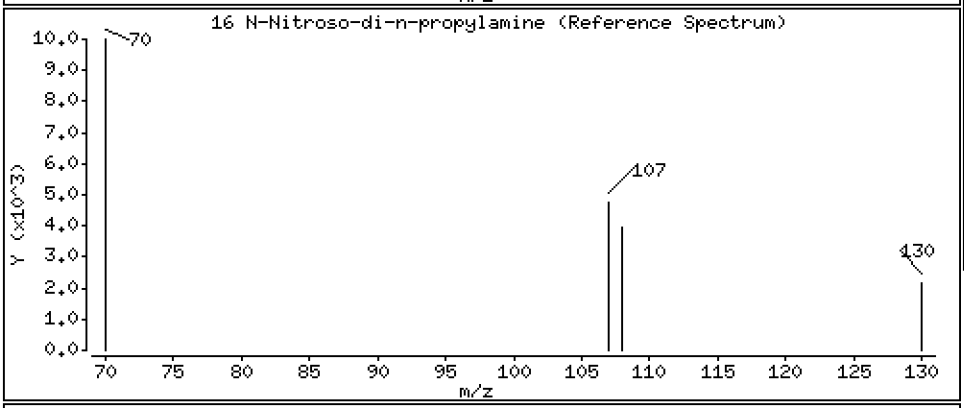
Concentration: 6.171 ug/mL

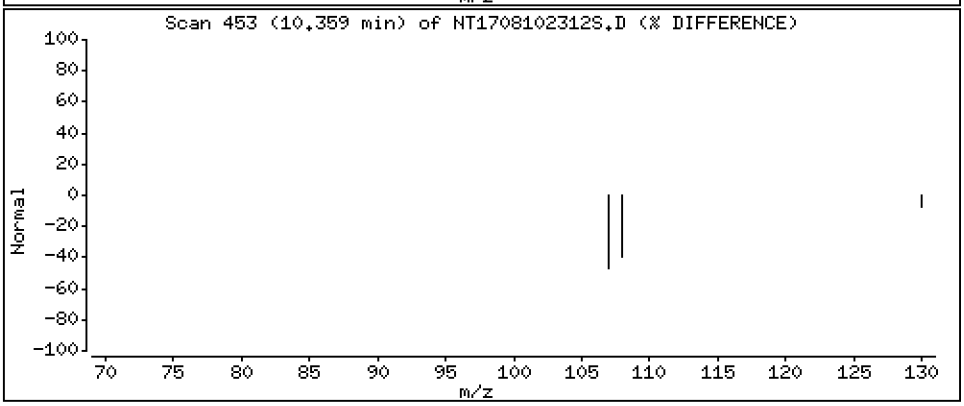












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Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

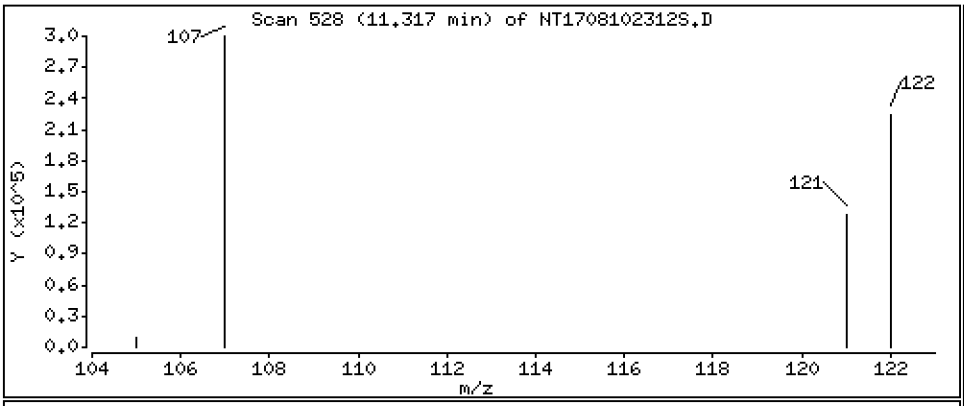
Operator: JGR

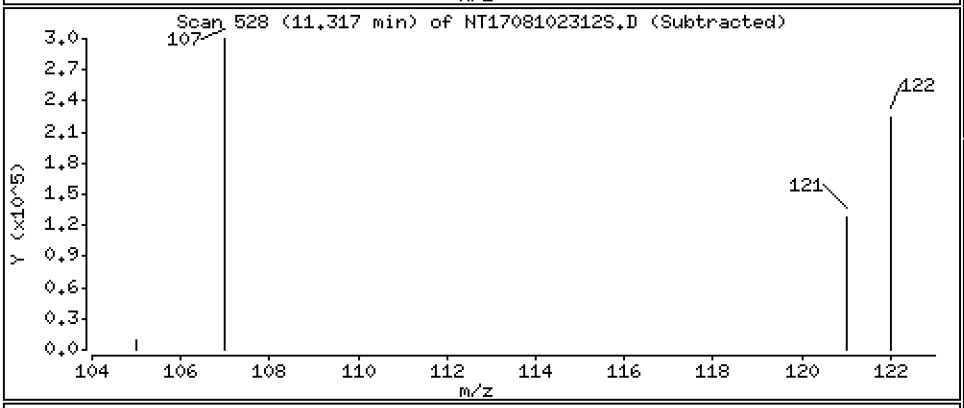
Column phase: ZB-5msi

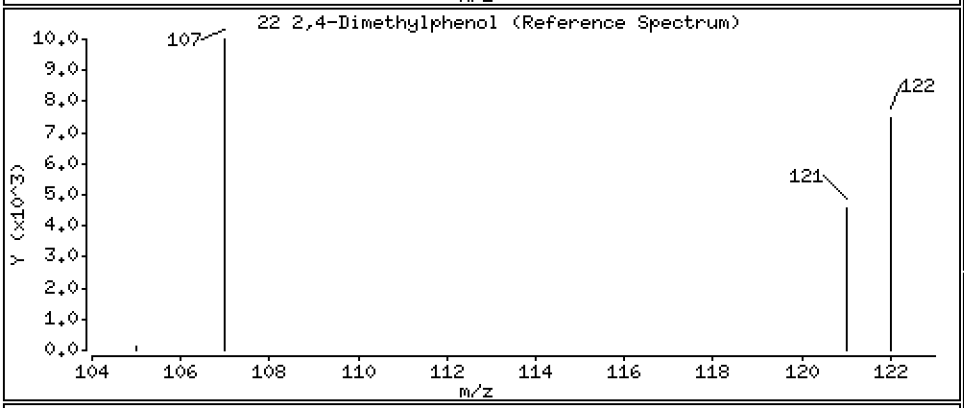
Column diameter: 0.25

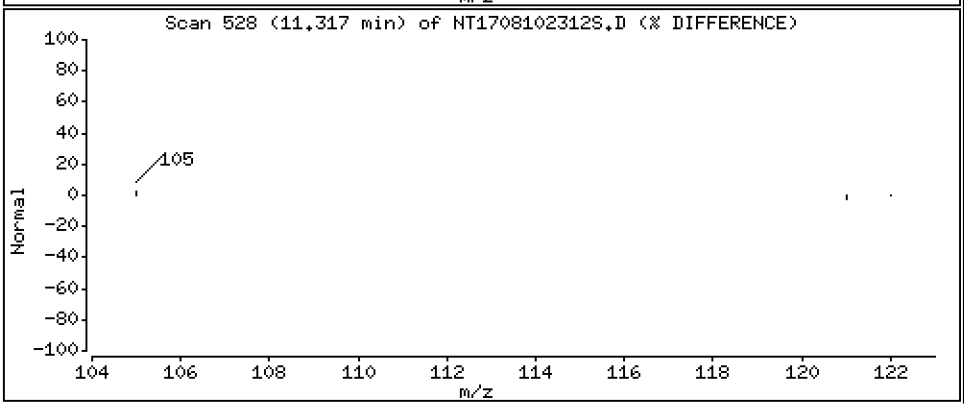
22 2,4-Dimethylphenol

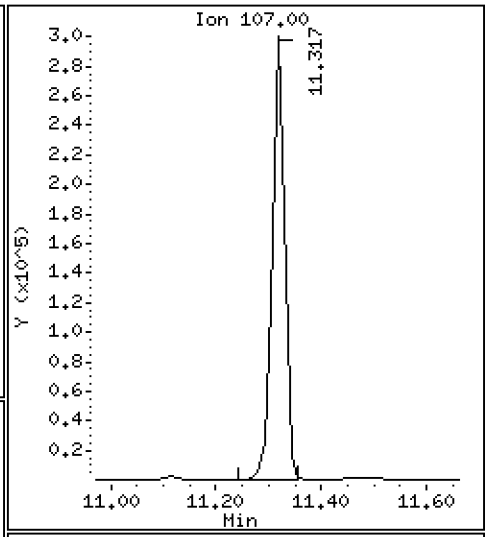
Concentration: 4.520 ug/mL

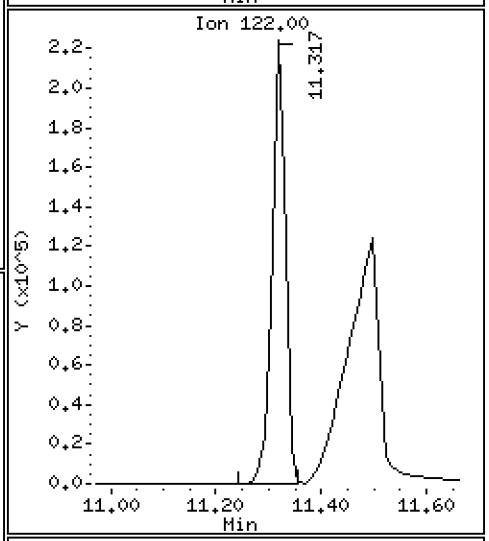


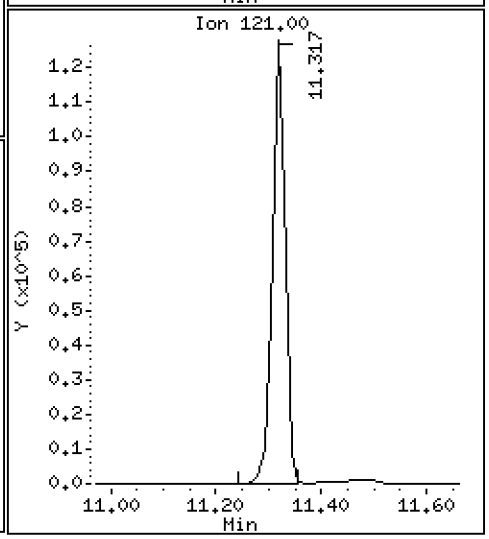












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

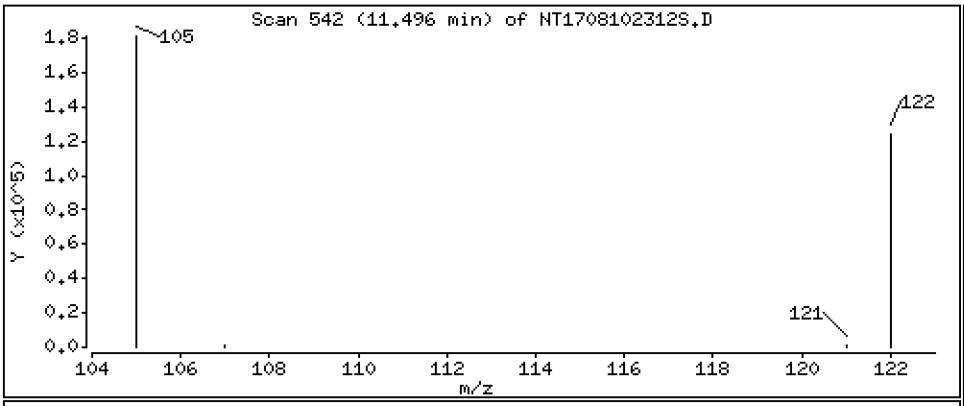
Operator: JGR

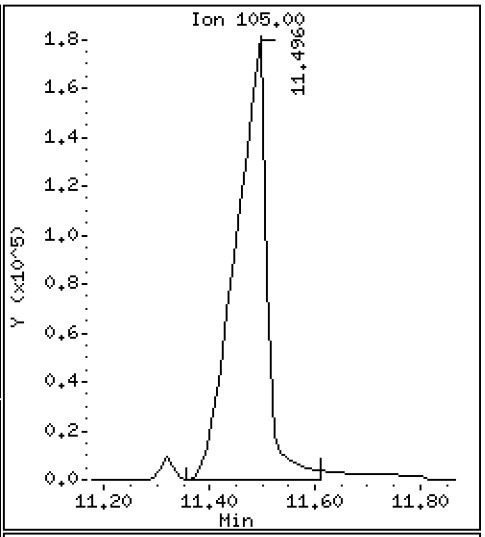
Column phase: ZB-5msi

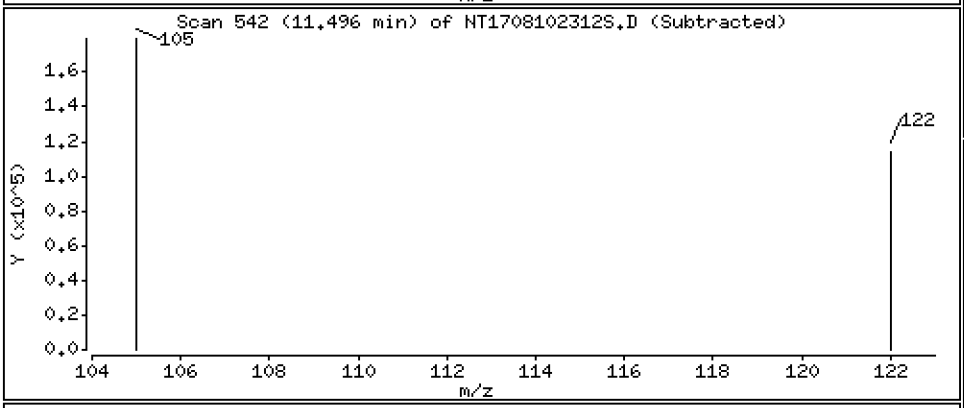
Column diameter: 0.25

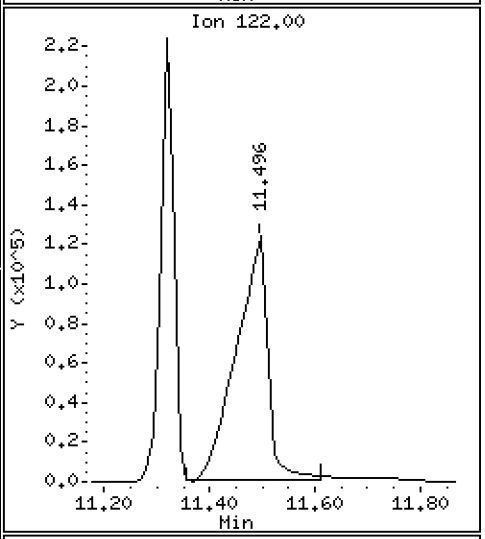
24 Benzoic acid

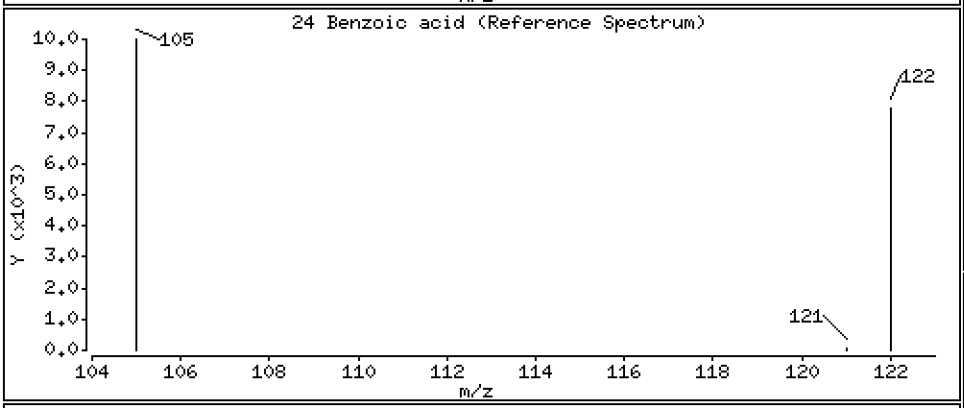
Concentration: 9.959 ug/mL

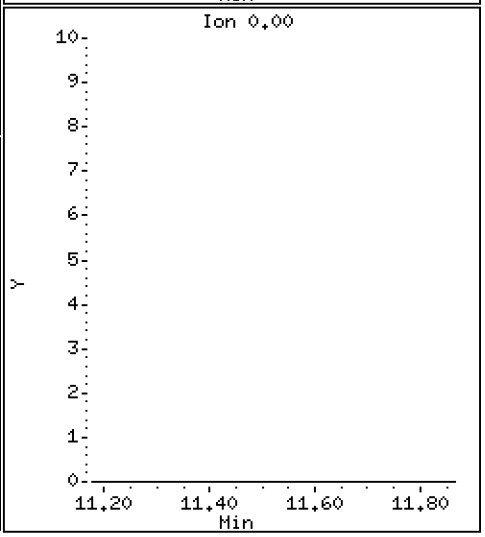


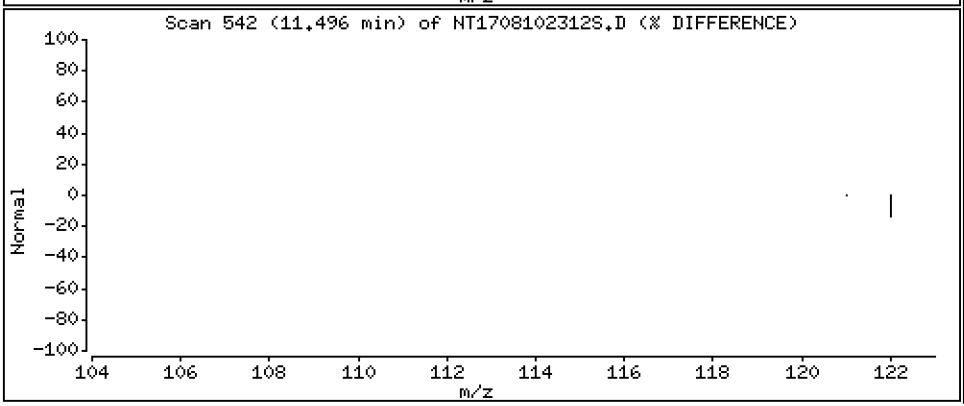












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

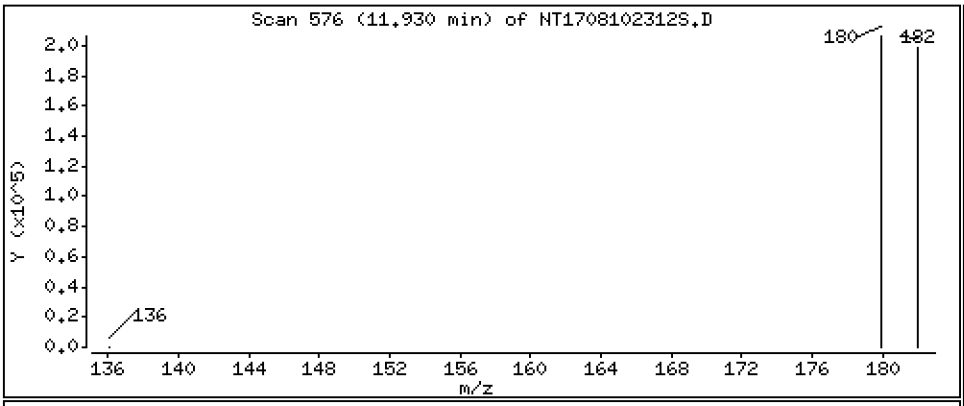
Operator: JGR

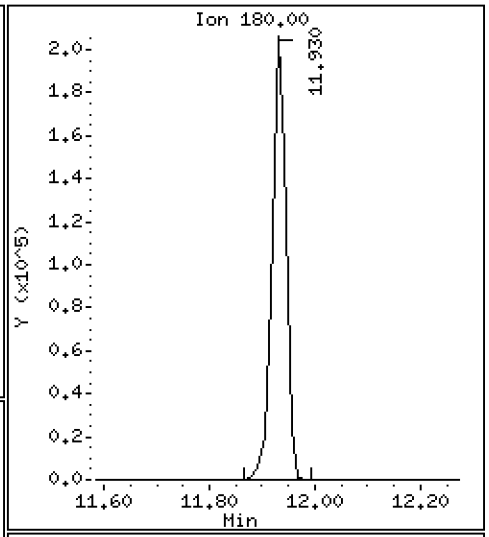
Column phase: ZB-5msi

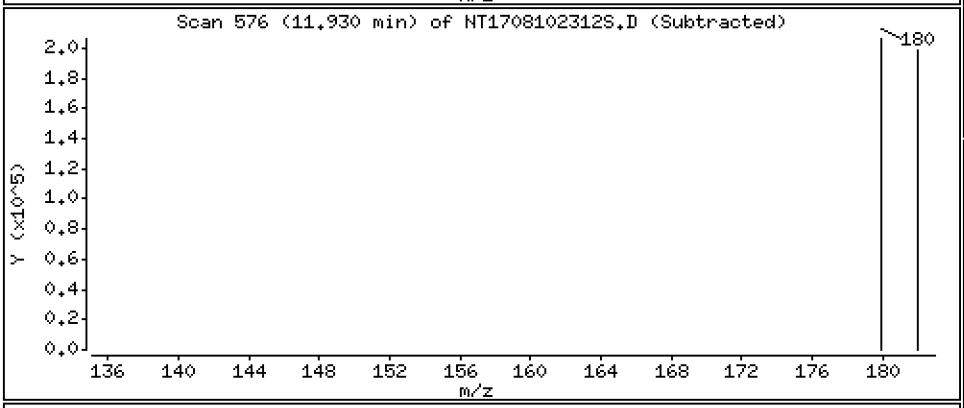
Column diameter: 0.25

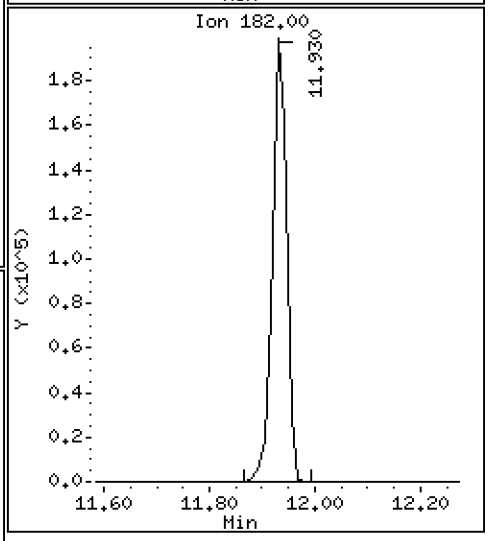
26 1,2,4-Trichlorobenzene

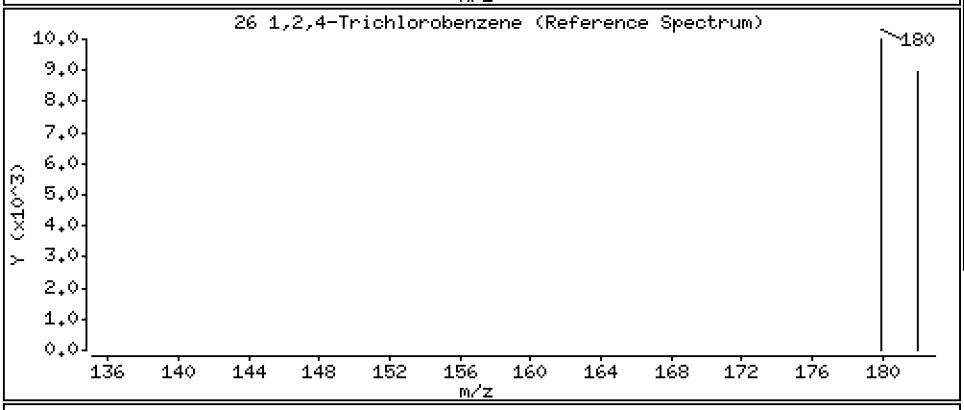
Concentration: 5.028 ug/mL

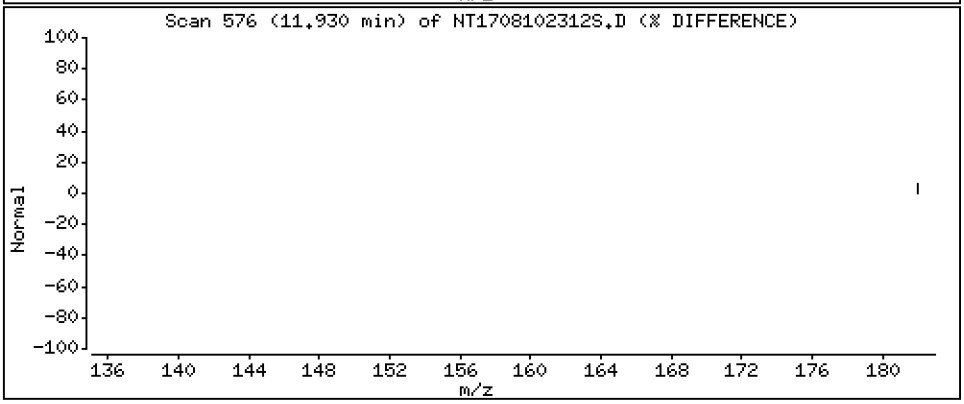












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

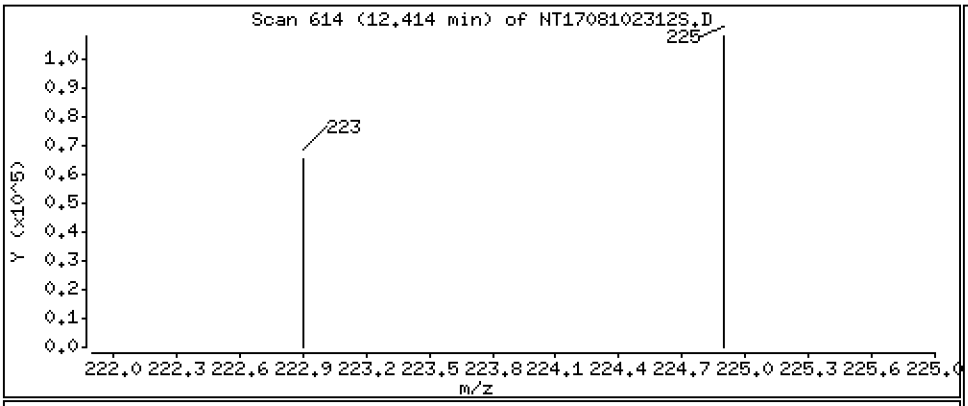
Operator: JGR

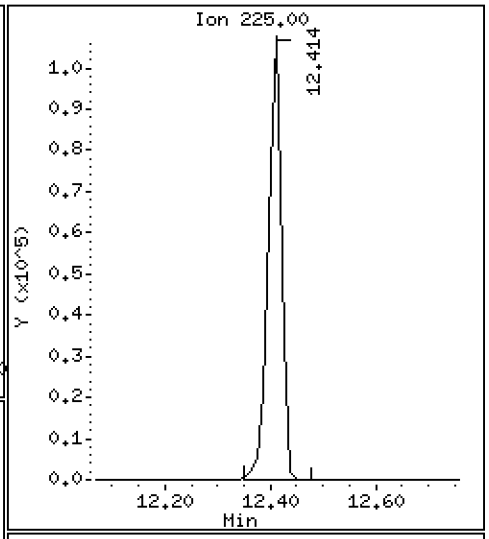
Column phase: ZB-5msi

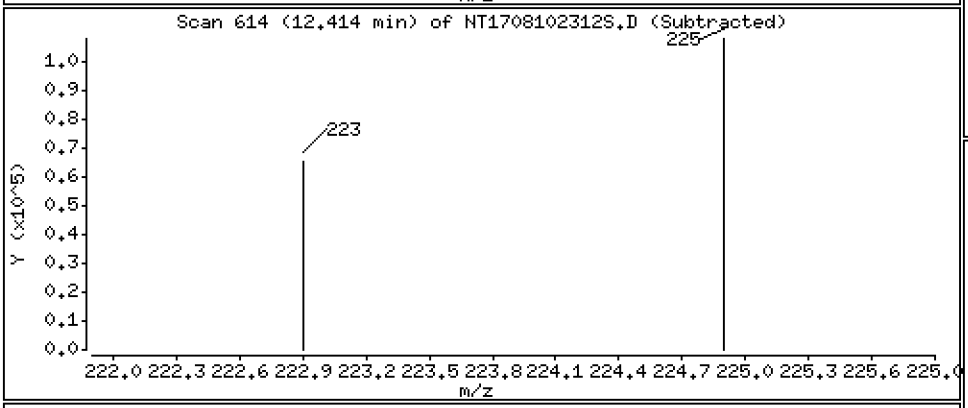
Column diameter: 0.25

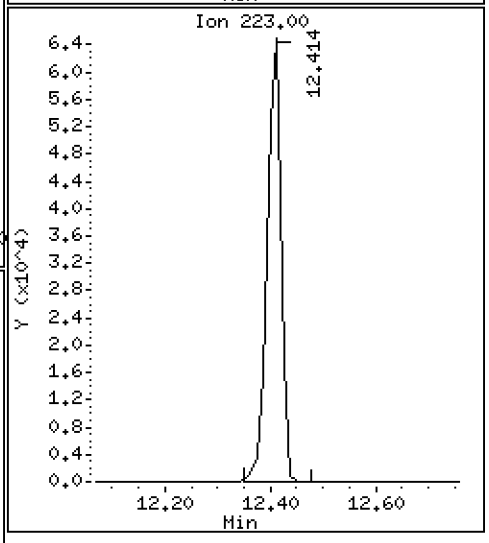
30 Hexachlorobutadiene

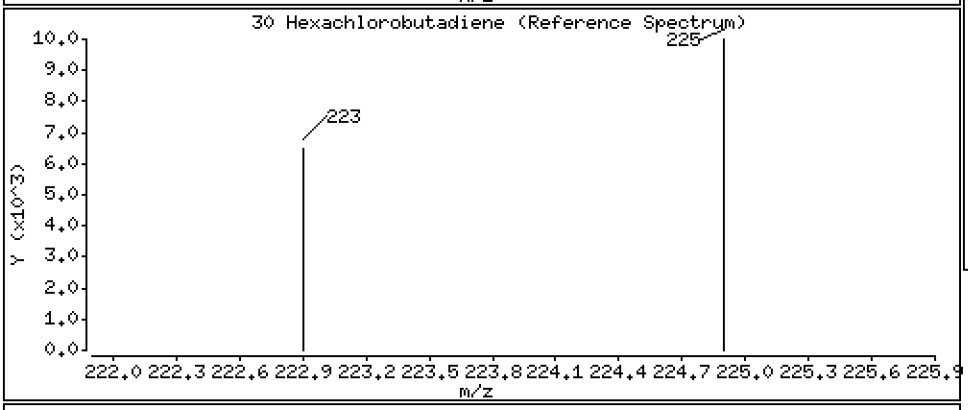
Concentration: 5.378 ug/mL

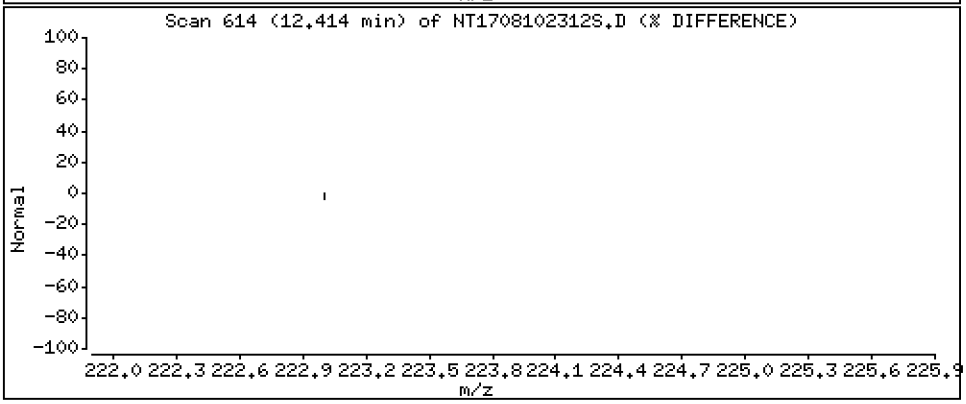












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

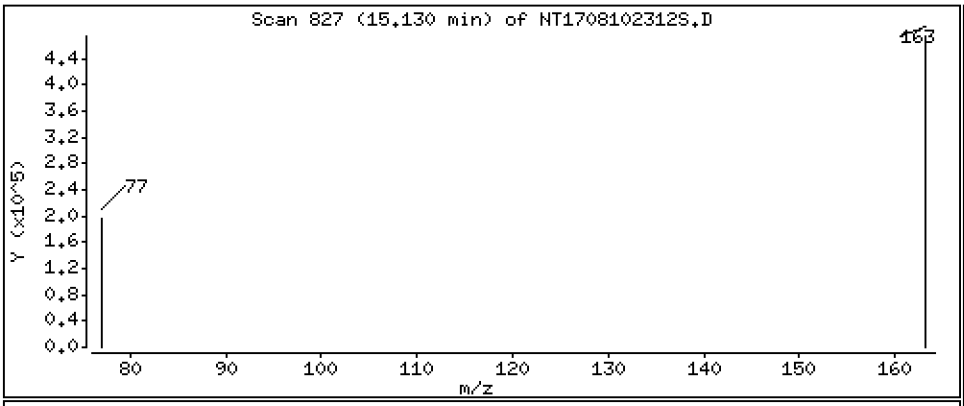
Operator: JGR

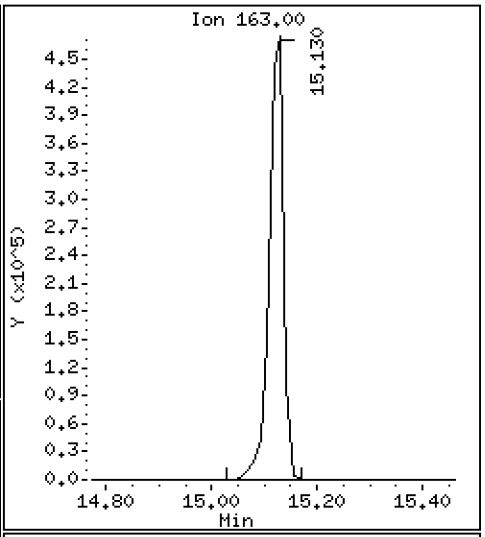
Column phase: ZB-5msi

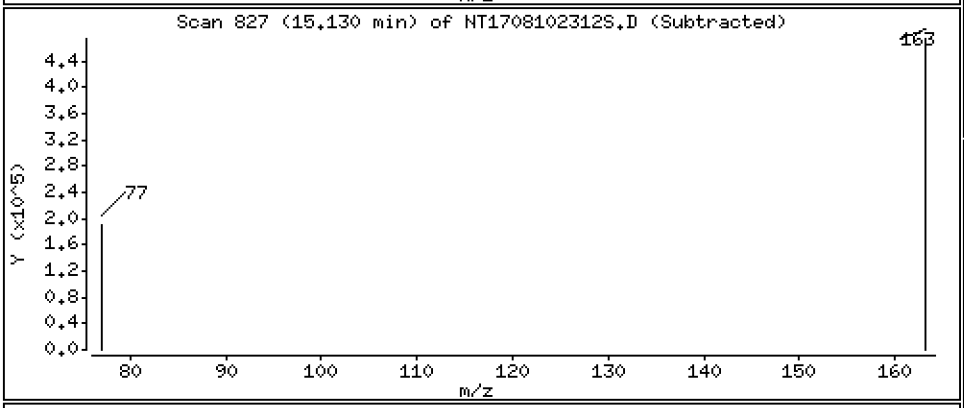
Column diameter: 0.25

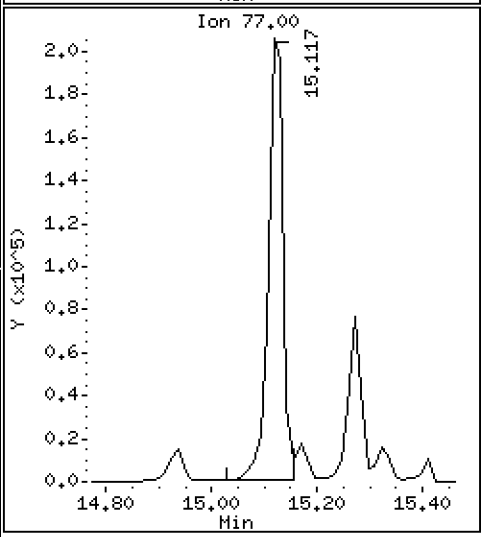
39 Dimethylphthalate

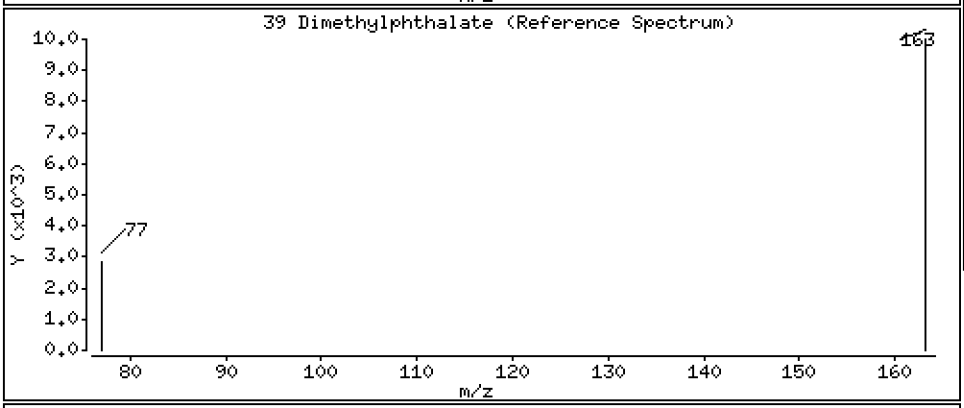
Concentration: 5.868 ug/mL

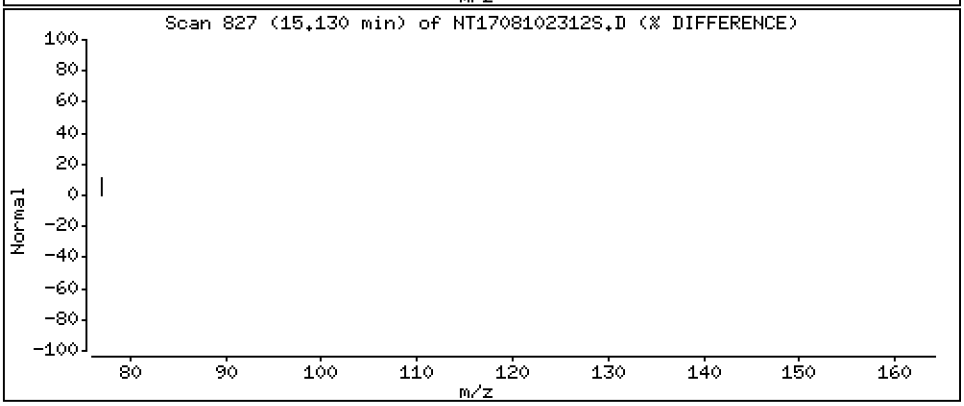












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

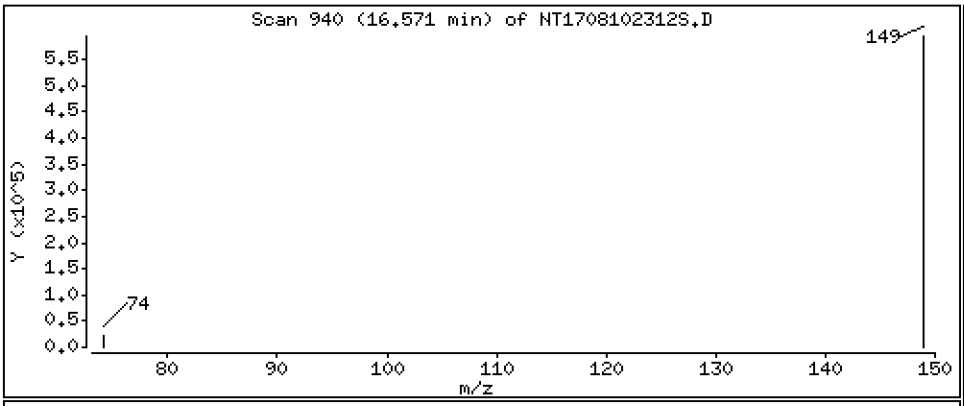
Operator: JGR

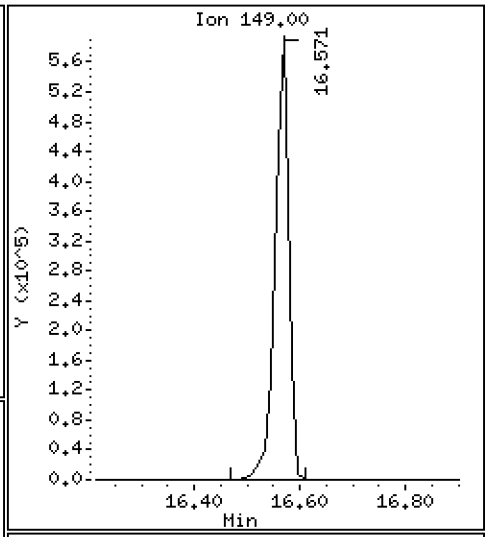
Column phase: ZB-5msi

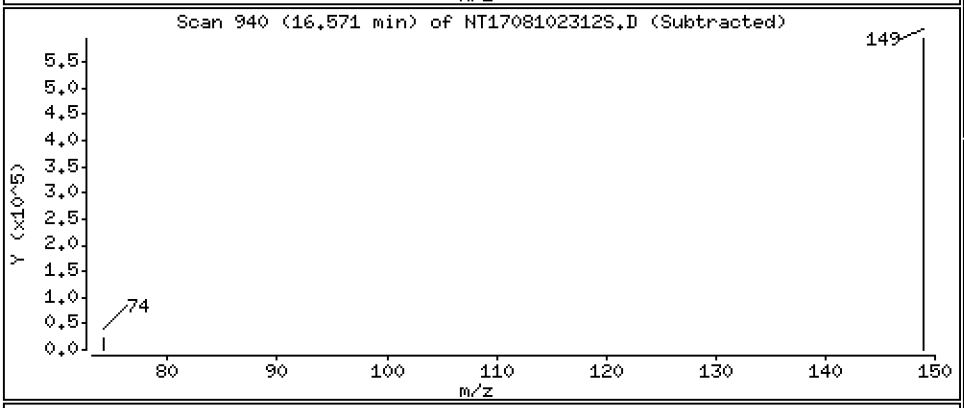
Column diameter: 0.25

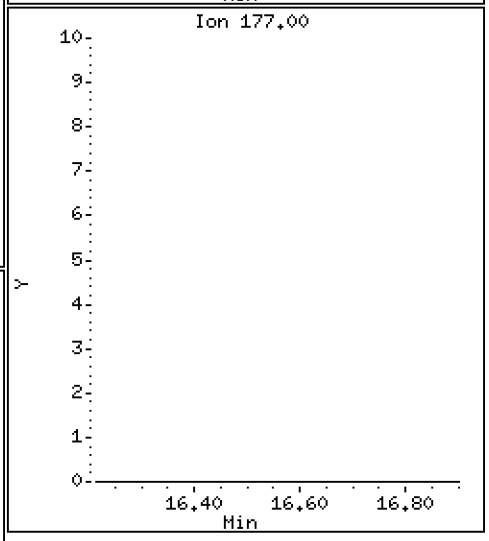
50 Diethylphthalate

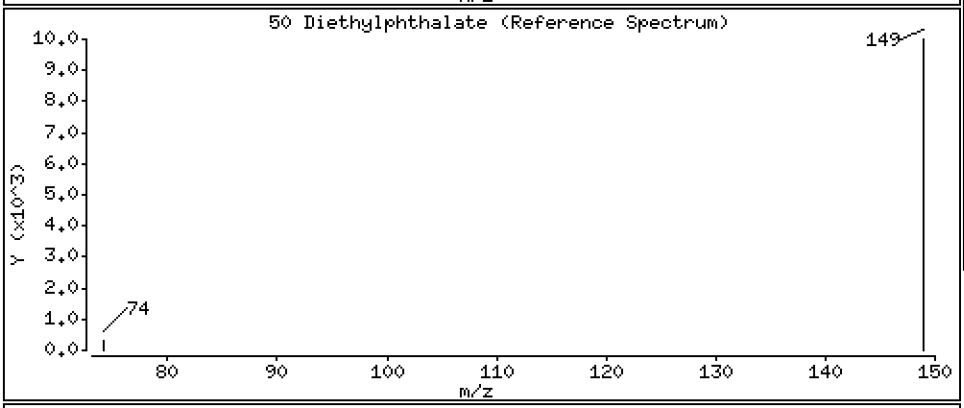
Concentration: 6.387 ug/mL

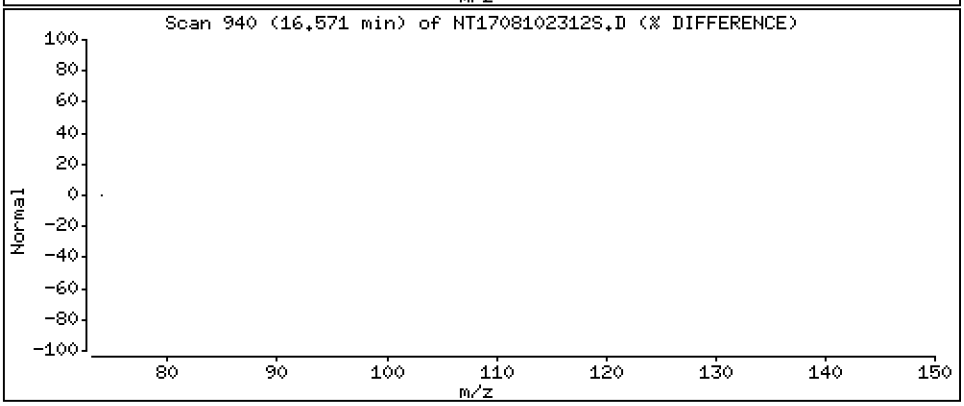












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

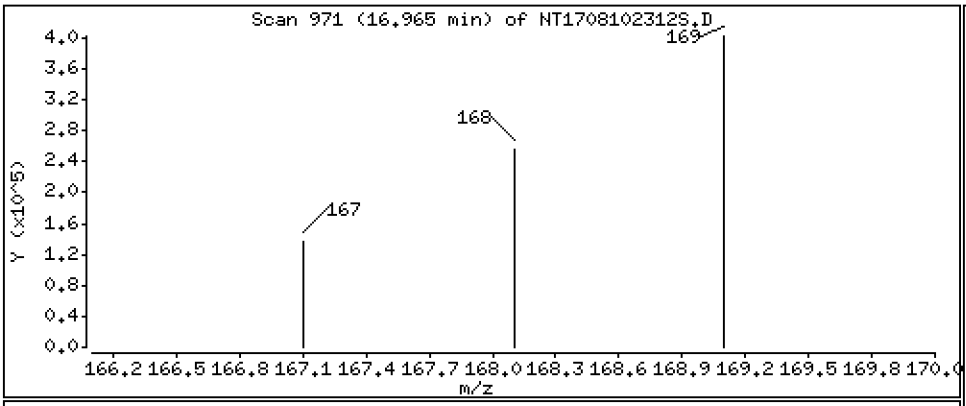
Operator: JGR

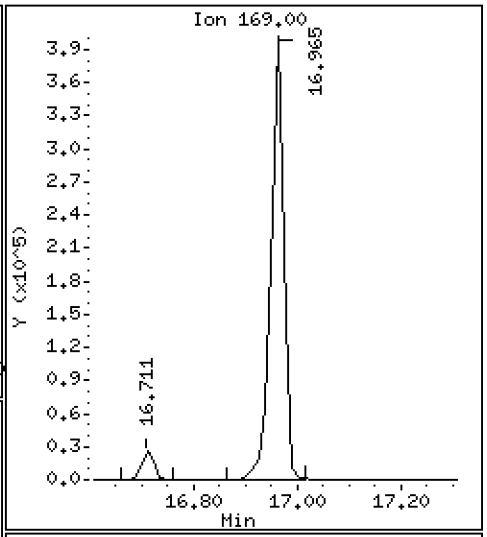
Column phase: ZB-5msi

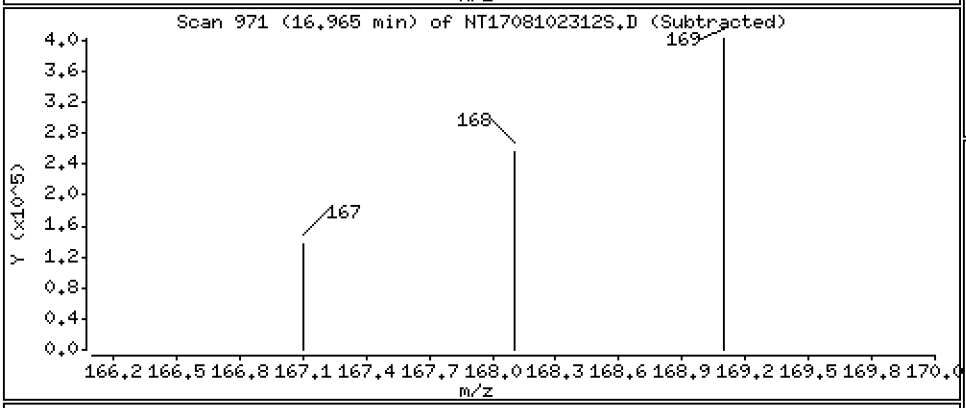
Column diameter: 0.25

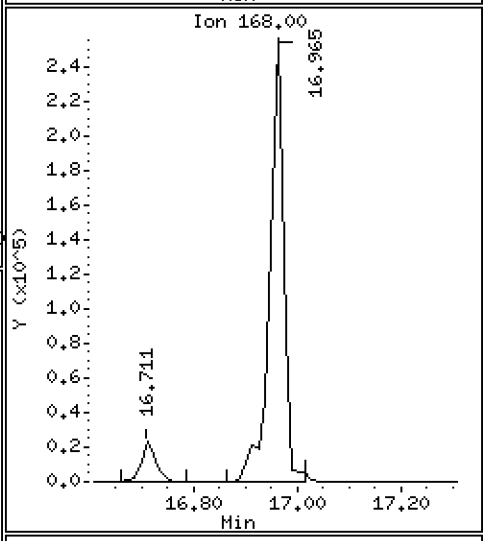
54 N-Nitrosodiphenylamine

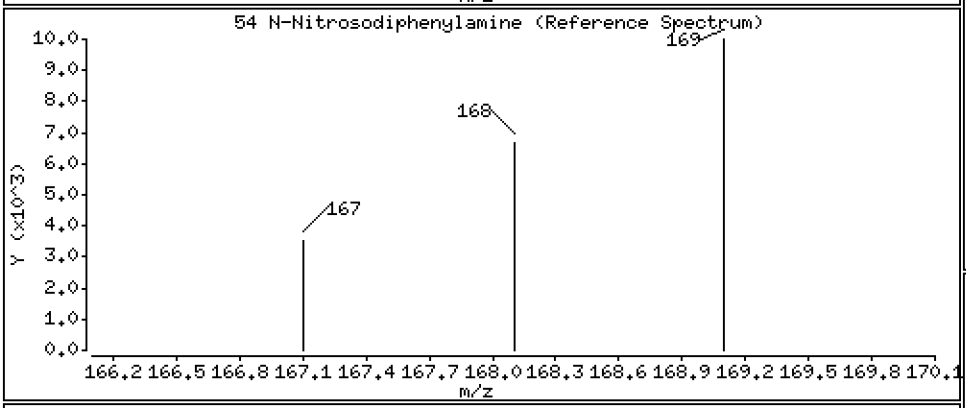
Concentration: 5.881 ug/mL

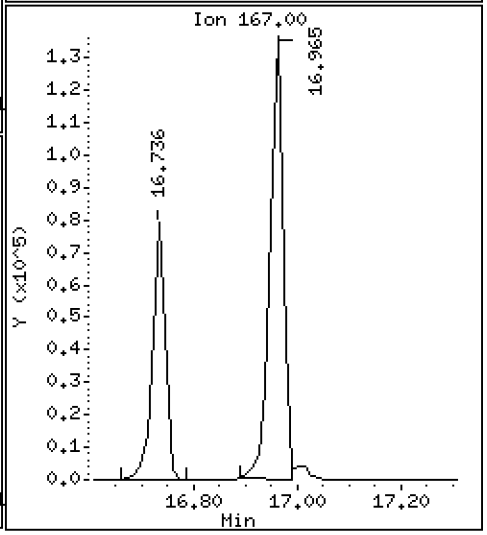


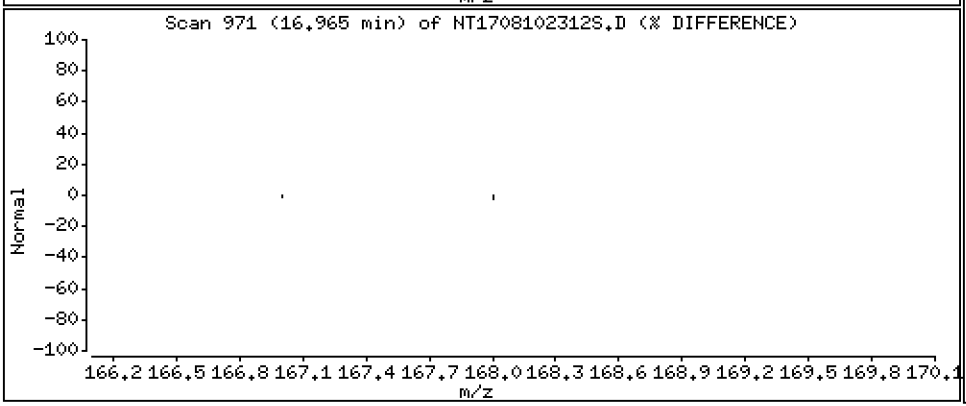












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

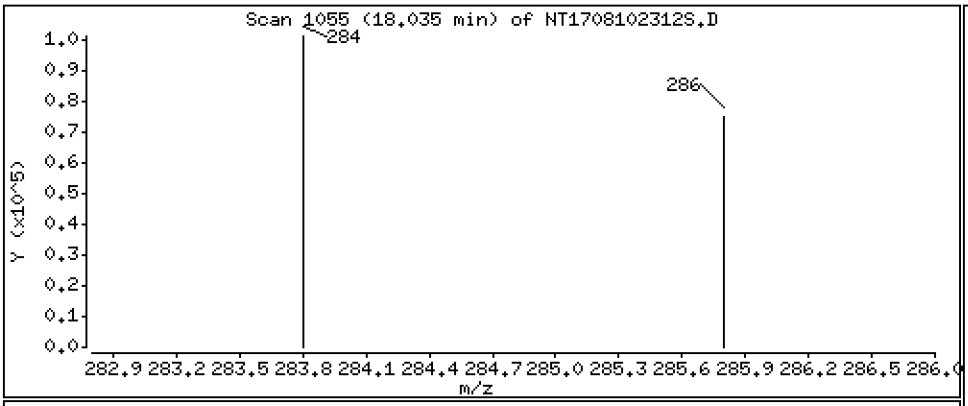
Operator: JGR

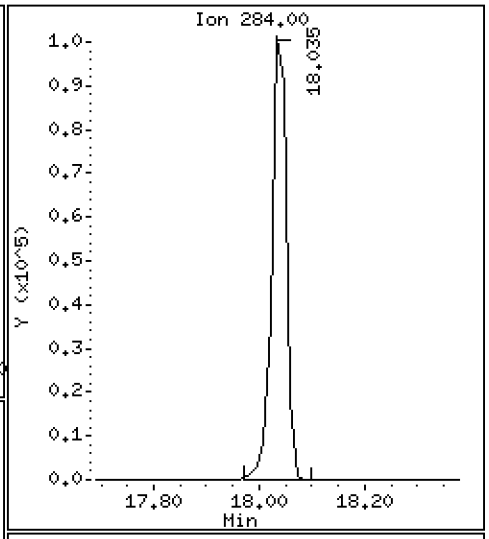
Column phase: ZB-5msi

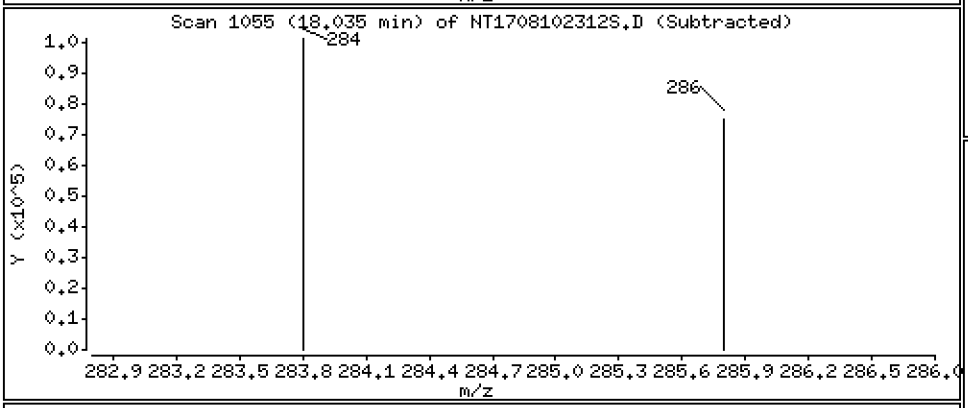
Column diameter: 0.25

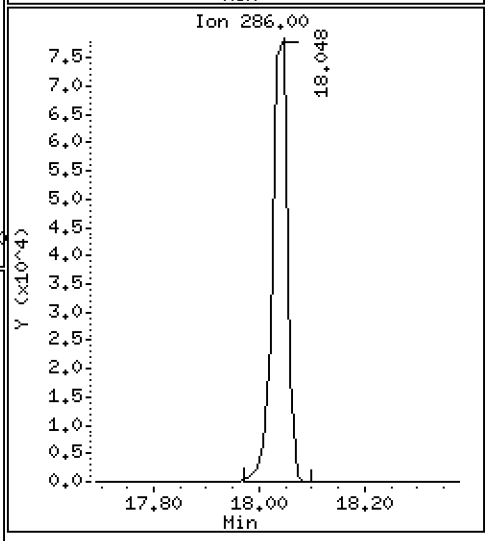
57 Hexachlorobenzene

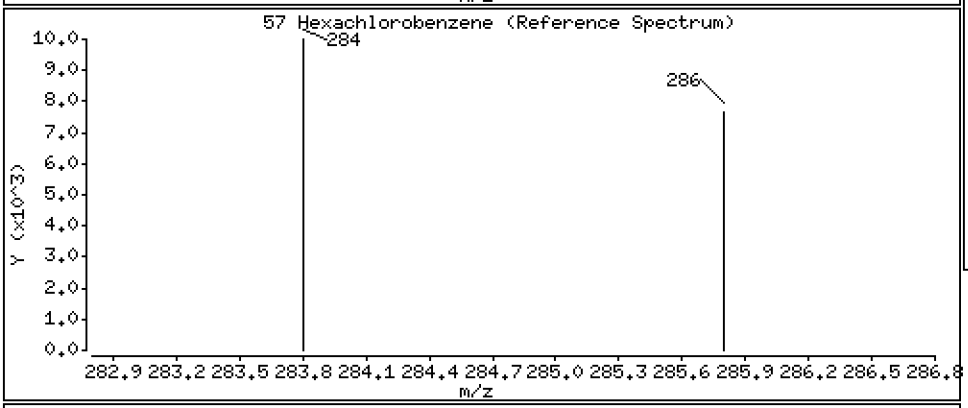
Concentration: 5.215 ug/mL

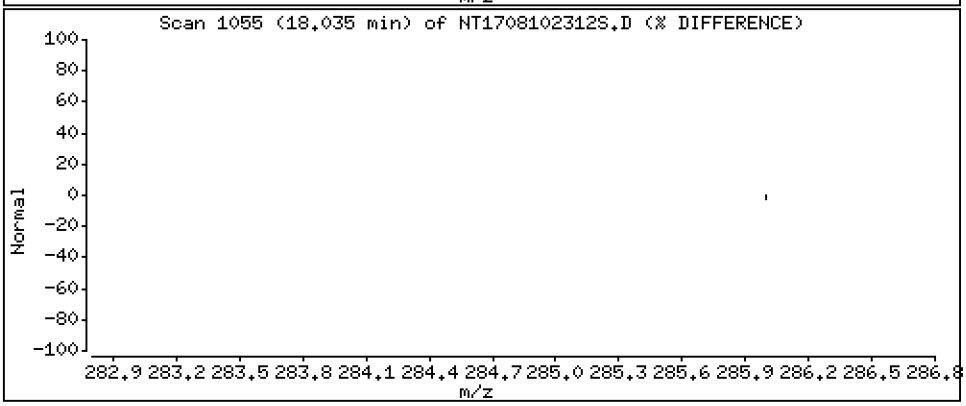












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

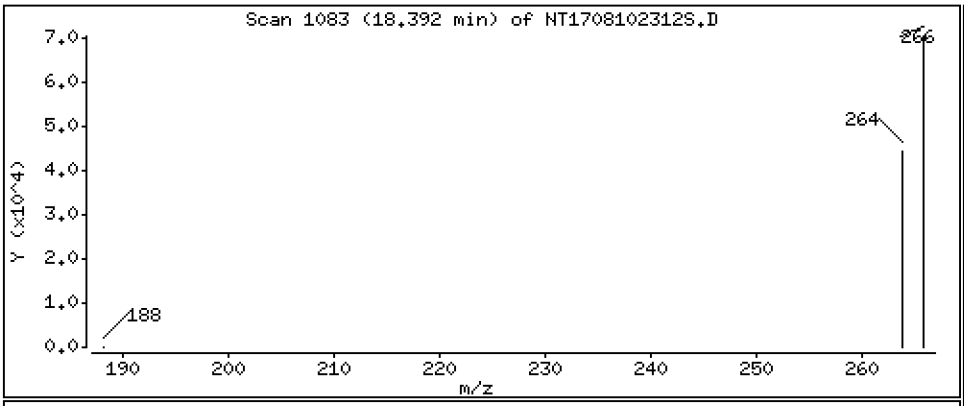
Operator: JGR

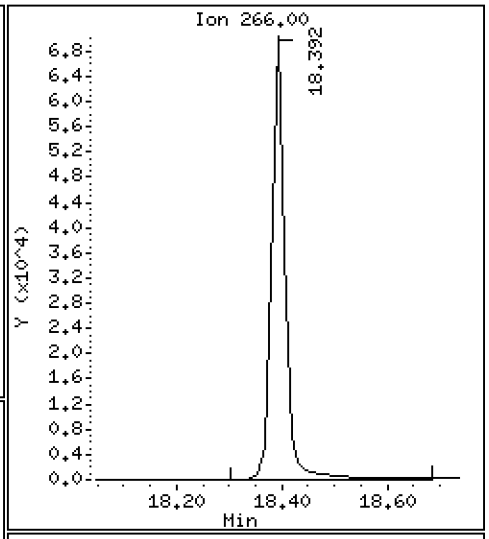
Column phase: ZB-5msi

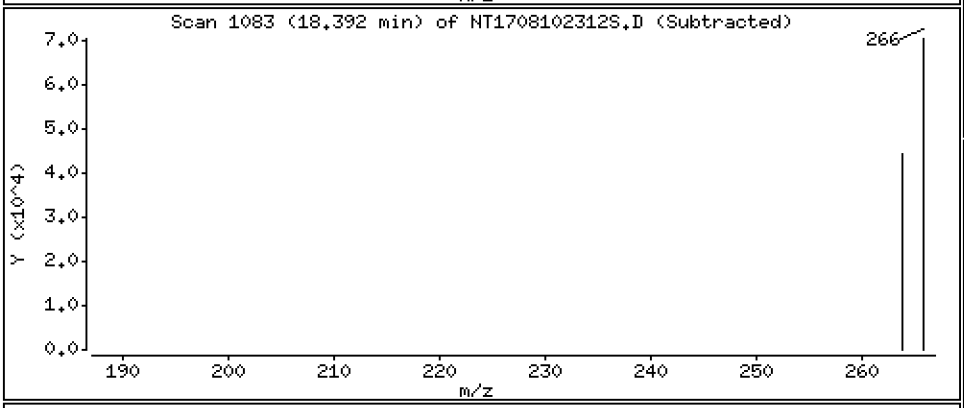
Column diameter: 0.25

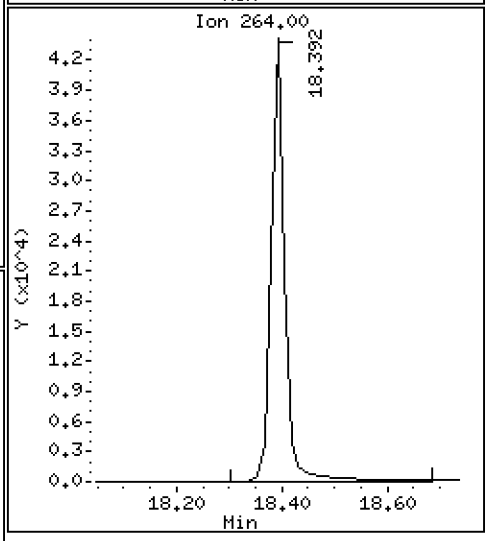
58 Pentachlorophenol

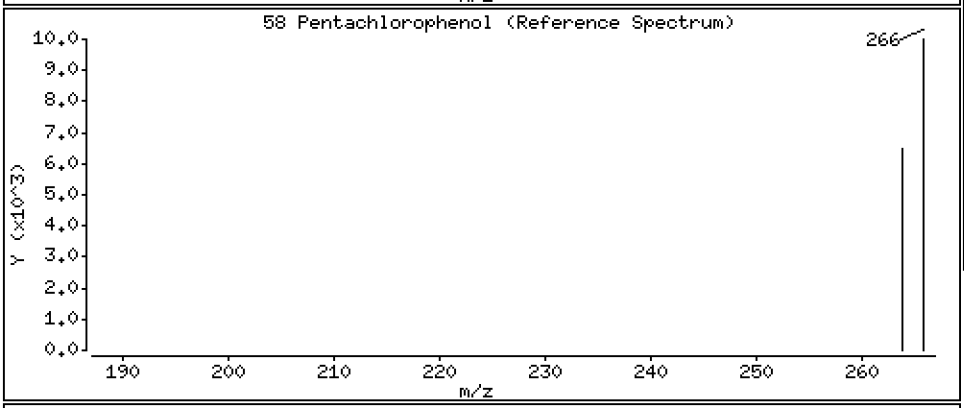
Concentration: 4.844 ug/mL

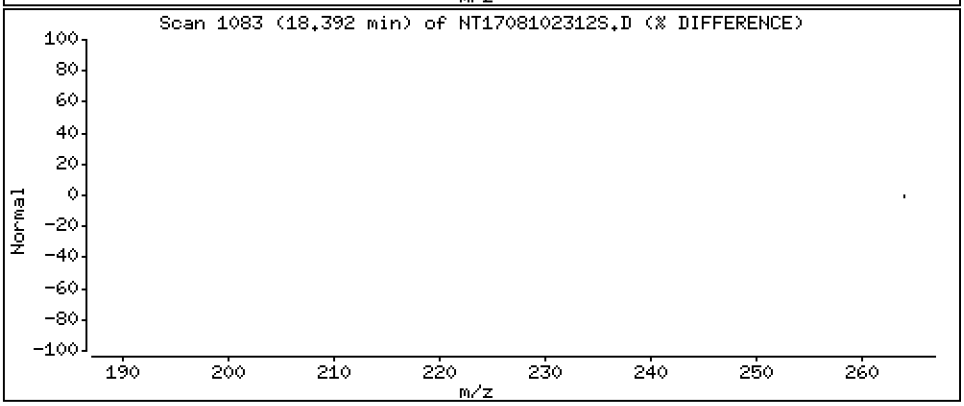












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

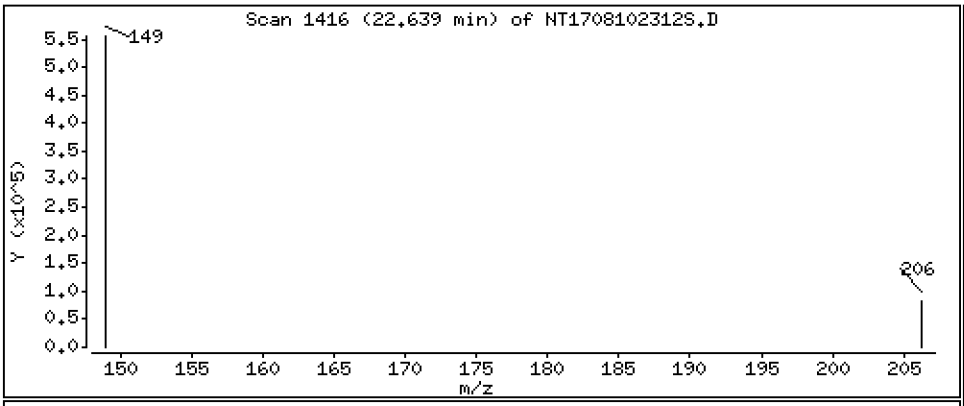
Operator: JGR

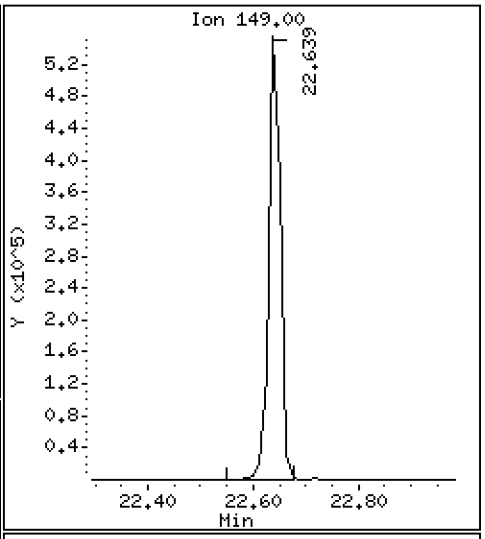
Column phase: ZB-5msi

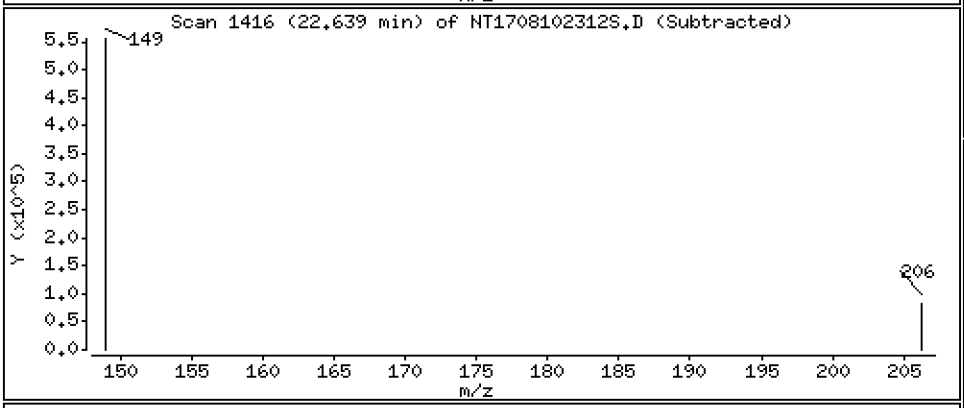
Column diameter: 0.25

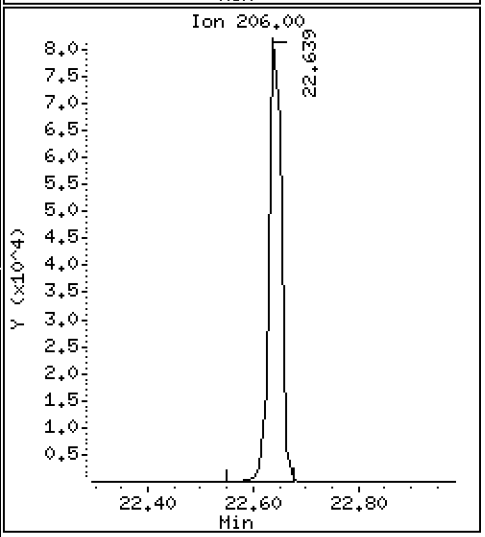
67 Butylbenzylphthalate

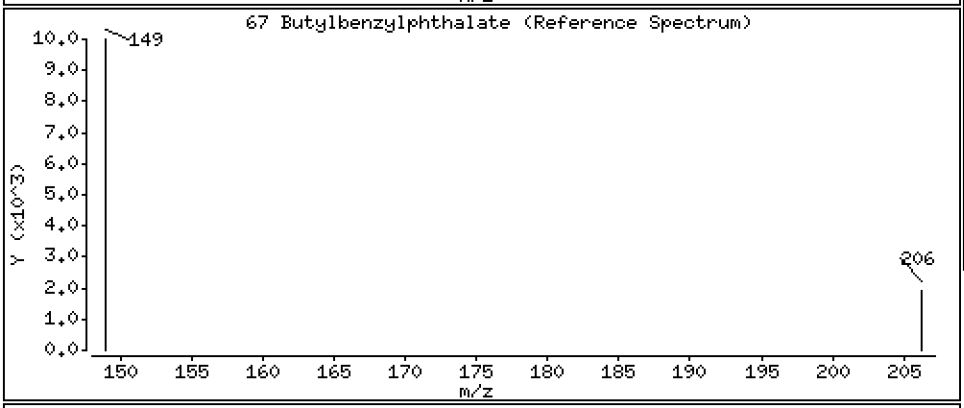
Concentration: 5.503 ug/mL

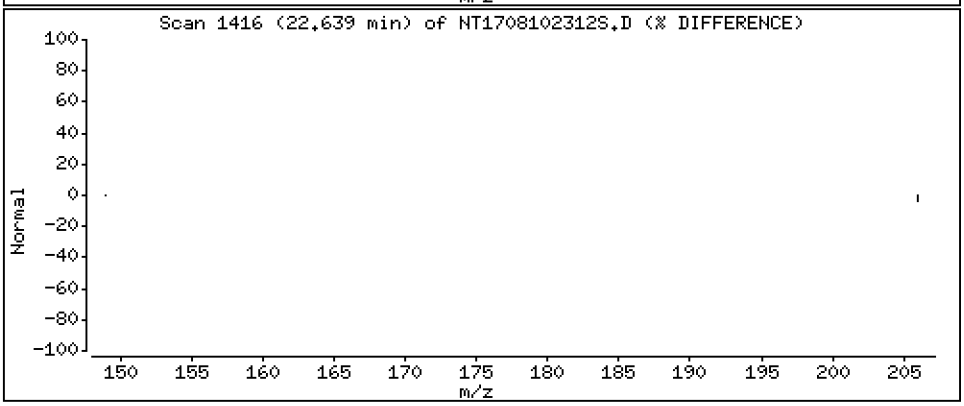












Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023125.D

Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

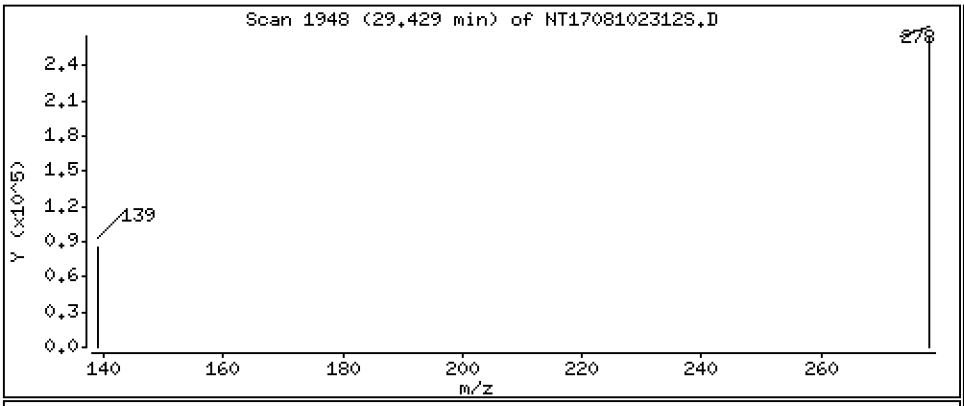
Operator: JGR

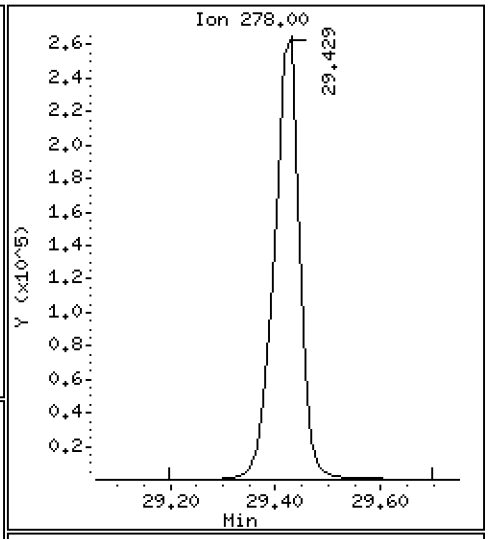
Column phase: ZB-5msi

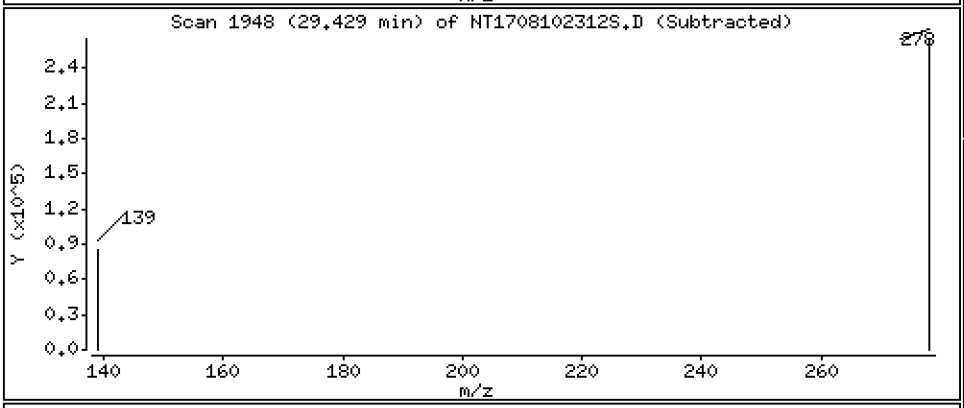
Column diameter: 0.25

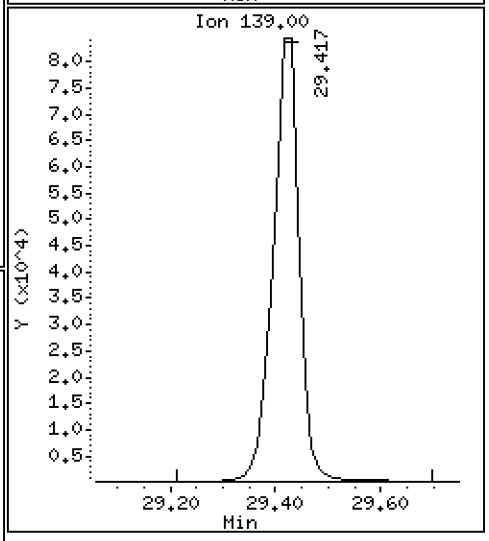
79 Dibenzo(a,h)anthracene

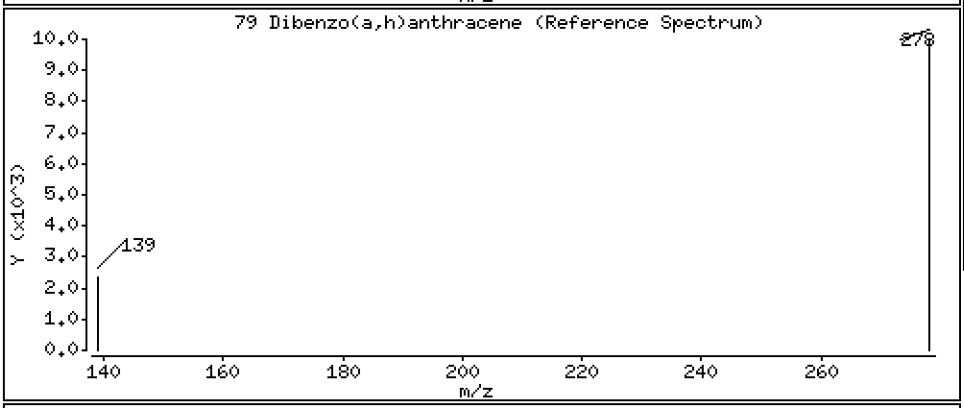
Concentration: 5.066 ug/mL

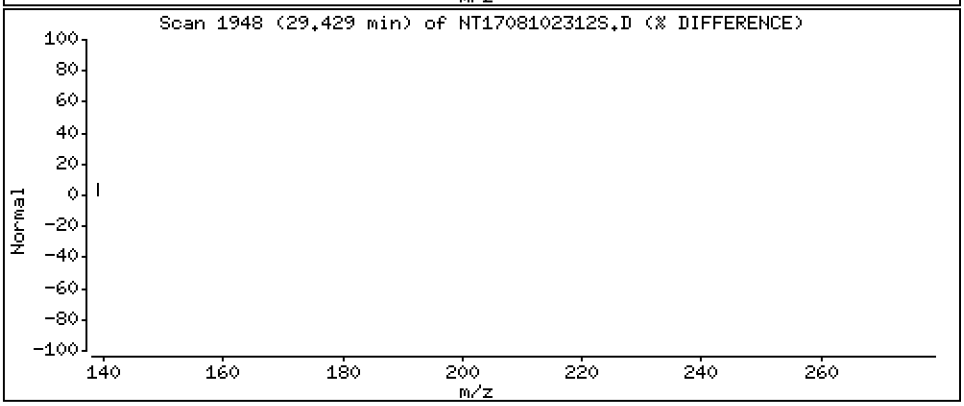












Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023125.D

Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

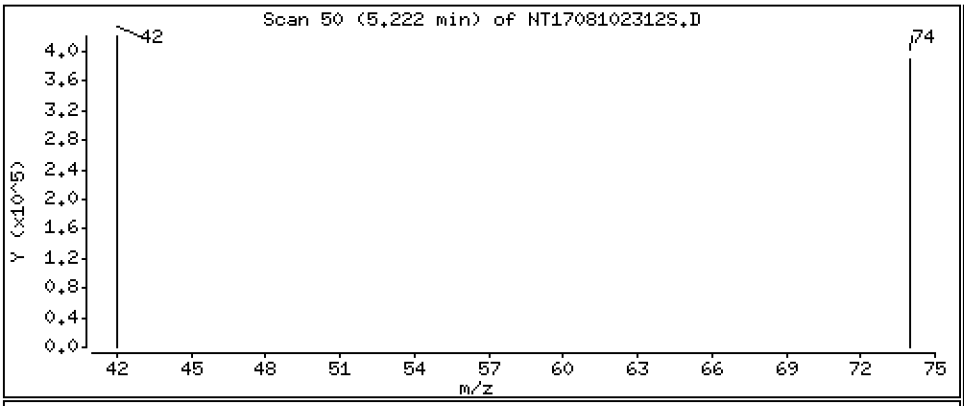
Operator: JGR

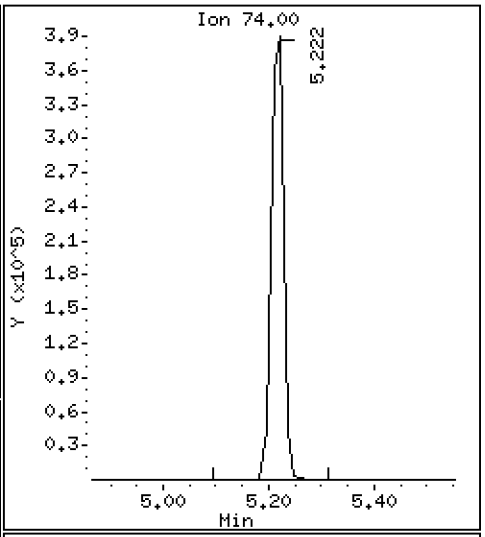
Column phase: ZB-5msi

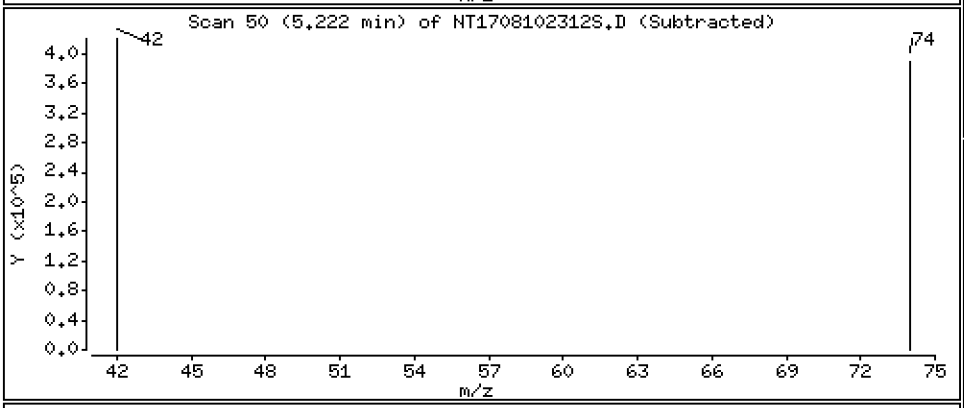
Column diameter: 0.25

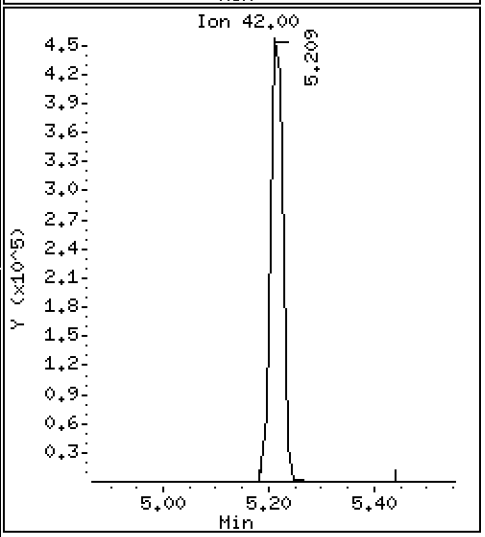
90 N-Nitrosodimethylamine

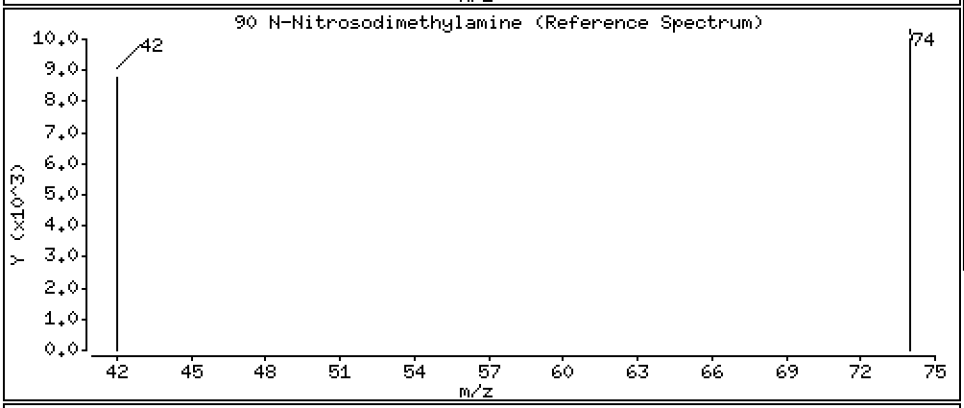
Concentration: 5.656 ug/mL

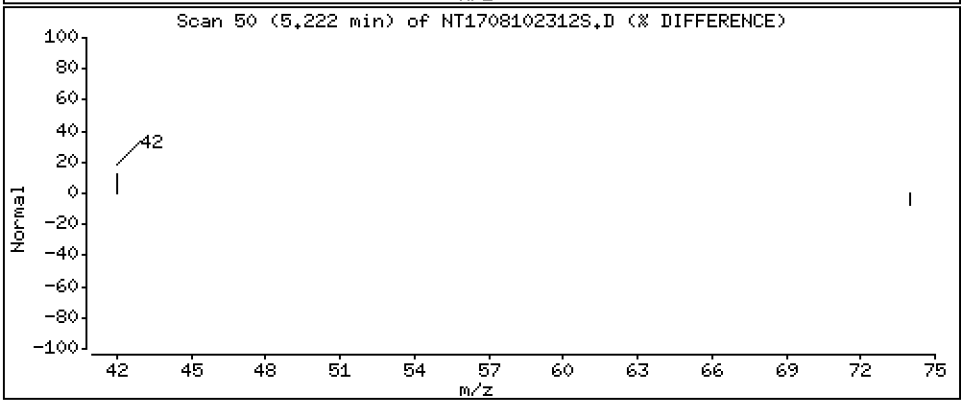












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102312S.D
Lab Smp Id: SEQ-SCV1
Inj Date : 10-AUG-2023 18:45
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Meth Date : 11-Aug-2023 08:13 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

			QUANT SIG						CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1	2-Fluorophenol	112	Compound Not Detected.						
	3	Phenol	94	8.891	8.891	(0.932)	932540		5.50239	5.502
	7	1,3-Dichlorobenzene	146	9.477	9.477	(0.993)	591053		5.15578	5.156
*	8	1,4-Dichlorobenzene-d4	152	9.541	9.541	(1.000)	267754		4.00000	
	9	1,4-Dichlorobenzene	146	9.566	9.566	(1.003)	573424		5.16858	5.169
	11	Benzyl alcohol	79	9.796	9.796	(1.027)	709897		6.05184	6.052
	12	1,2-Dichlorobenzene	146	9.924	9.924	(1.040)	561360		5.21616	5.216
	13	2-Methylphenol	108	10.001	10.001	(1.048)	525371		5.11241	5.112
	15	4-Methylphenol	108	10.282	10.269	(1.078)	589793		5.49122	5.491
	16	N-Nitroso-di-n-propylamine	70	10.359	10.346	(1.086)	677820		6.17127	6.171
	22	2,4-Dimethylphenol	107	11.317	11.316	(0.941)	497084		4.51954	4.520
	24	Benzoic acid	105	11.495	11.521	(0.955)	749206		9.95900	9.959
	26	1,2,4-Trichlorobenzene	180	11.929	11.929	(0.992)	377826		5.02775	5.028
*	27	Naphthalene-d8	136	12.031	12.018	(1.000)	1096182		4.00000	
	30	Hexachlorobutadiene	225	12.413	12.413	(1.032)	189282		5.37846	5.378
	39	Dimethylphthalate	163	15.130	15.117	(0.967)	949831		5.86824	5.868
*	42	Acenaphthene-d10	162	15.640	15.627	(1.000)	498001		4.00000	
	50	Diethylphthalate	149	16.570	16.557	(1.059)	1074870		6.38666	6.387
	54	N-Nitrosodiphenylamine	169	16.965	16.965	(0.909)	685167		5.88111	5.881
	57	Hexachlorobenzene	284	18.034	18.034	(0.966)	199043		5.21462	5.215
	58	Pentachlorophenol	266	18.391	18.392	(0.985)	125476		4.84413	4.844
*	59	Phenanthrene-d10	188	18.672	18.672	(1.000)	810370		4.00000	
$	66	Terphenyl-d14	244	Compound Not Detected.						
	67	Butylbenzylphthalate	149	22.638	22.639	(0.957)	857851		5.50335	5.503
*	69	Chrysene-d12	240	23.646	23.646	(1.000)	587436		4.00000	
*	77	Perylene-d12	264	26.452	26.452	(1.000)	595930		4.00000	
	79	Dibenzo(a,h)anthracene	278	29.429	29.404	(1.113)	891713		5.06606	5.066
	90	N-Nitrosodimethylamine	74	5.221	5.209	(0.547)	639879		5.65625	5.656(M)

QC Flag Legend

M - Compound response manually integrated.

Report Date: 15-Aug-2023 16:33

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708102312S.D
Lab Smp Id: SEQ-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Misc Info:

Calibration Date: 10-AUG-2023
Calibration Time: 15:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	319389	159695	638778	267754	-16.17
27 Naphthalene-d8	1274686	637343	2549372	1096182	-14.00
42 Acenaphthene-d10	569885	284943	1139770	498001	-12.61
59 Phenanthrene-d10	915829	457915	1831658	810370	-11.52
69 Chrysene-d12	653460	326730	1306920	587436	-10.10
77 Perylene-d12	654887	327444	1309774	595930	-9.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.54	9.04	10.04	9.54	0.00
27 Naphthalene-d8	12.02	11.52	12.52	12.03	0.11
42 Acenaphthene-d10	15.64	15.14	16.14	15.64	0.00
59 Phenanthrene-d10	18.67	18.17	19.17	18.67	0.00
69 Chrysene-d12	23.65	23.15	24.15	23.65	0.00
77 Perylene-d12	26.45	25.95	26.95	26.45	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708102312S.D

Lab ID: SEQ-SCV1
nt17.i, 20230810.b\SIM.B\SIMABN2.m,   10-AUG-2023 18:45

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.B/NT1708102309S.D

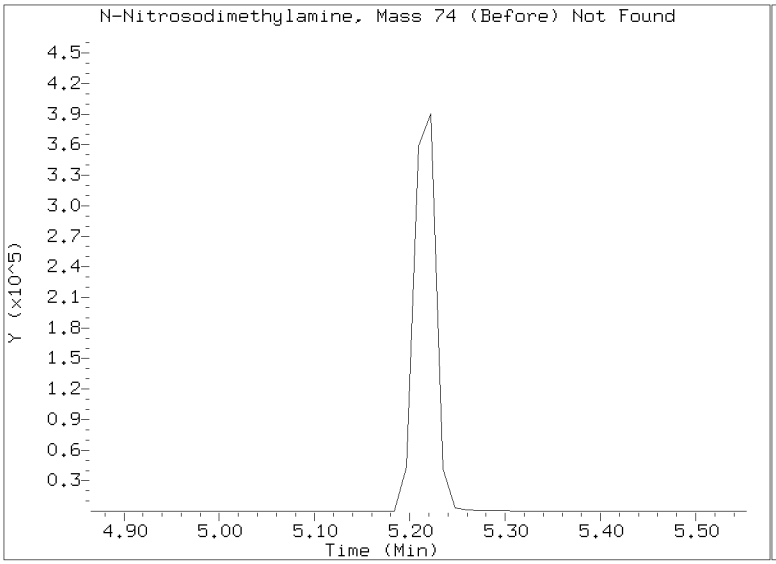
On Column LOD for nt17.i, SIM.B\SIMABN2.m, PSDDA.sub = 0.0000

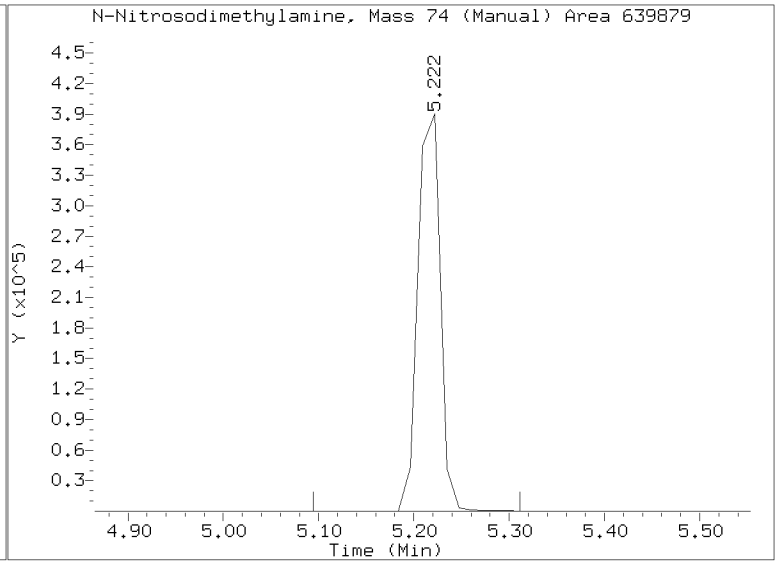
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102312S.D
Injection Date: 10-AUG-2023 18:45
Lab ID:SEQ-SCV1 Client ID:
Report Date: 08/15/2023 16:33





Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GH00045
Lab File ID:	NT1708292304.D	Calibration Date:	08/10/2023
Sequence:	SLH0447	Injection Date:	08/29/23
Lab Sample ID:	SLH0447-ICV1	Injection Time:	12:37
Sequence Name:	Initial Cal Check		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
1,4-Dichlorobenzene	A	1.0000	0.9	1.6574040	1.5687330		-5.4	+/-20	
1,2-Dichlorobenzene	A	1.0000	0.9	1.6077360	1.5086700		-6.2	+/-20	
Benzyl Alcohol	A	1.0000	1.0	1.7523940	1.7419870		-0.6	+/-20	
Benzoic acid	A	4.0000	4.0	0.1715968	0.2672610		0.2	+/-20	
2,4-Dimethylphenol	A	2.0000	2.4	0.4013400	0.4785420		19.3	+/-20	
1,2,4-Trichlorobenzene	A	1.0000	1.0	0.2742178	0.2623079		-4.3	+/-20	
N-Nitrosodiphenylamine	A	1.0000	1.0	0.5750605	0.5960137		3.6	+/-20	
Pentachlorophenol	A	2.0000	1.2	0.0738457	0.0775794		-39.3	+/-20	
2-Fluorophenol	A	1.5000	1.77	1.6608890	1.9611570		18.1	+/-20	
p-Terphenyl-d14	A	1.0000	1.23	0.5535288	0.6826255		23.3	+/-20	*
1,4-Dichlorobenzene-d4	A	4.0000	4.0	78350.3400	1.0000		0.0		
Naphthalene-d8	A	4.0000	4.0	309461.8000	1.0000		0.0		
Acenaphthene-d10	A	4.0000	4.0	135771.1000	1.0000		0.0		
Phenanthrene-d10	A	4.0000	4.0	217983.8000	1.0000		0.0		
Chrysene-d12	A	4.0000	4.0	158795.0000	1.0000		0.0		
Perylene-d12	A	4.0000	4.0	157739.7000	1.0000		0.0		

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292304.D

Date : 29-AUG-2023 12:37

Client ID:

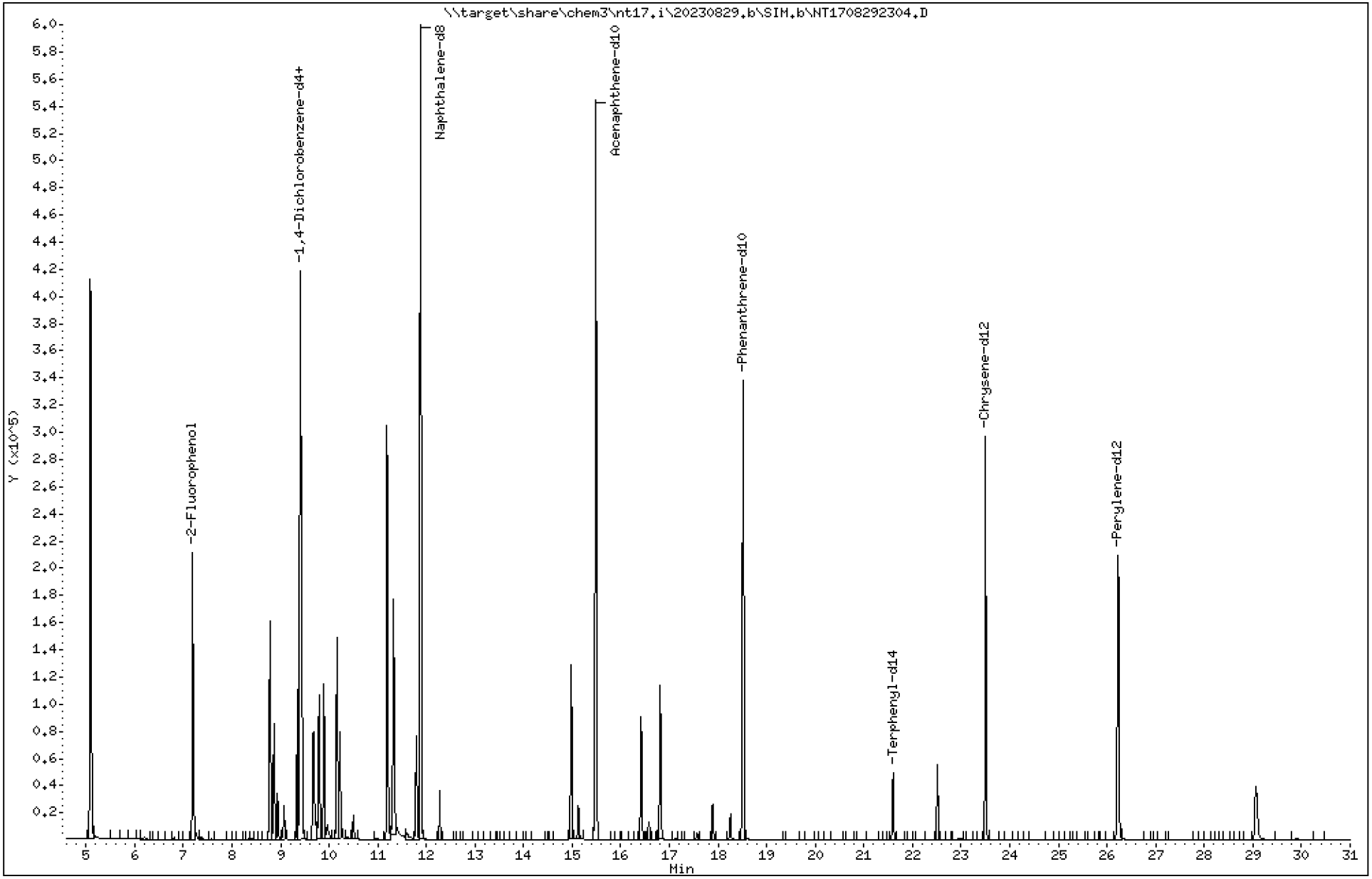
Sample Info: SEQ-ICV1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292304.D
Lab Smp Id: SEQ-ICV1
Inj Date : 29-AUG-2023 12:37
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-ICV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 09:25 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

							AMOUNTS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.196	7.196	(0.764)	218048	1.50000	1.771
	3 Phenol	94	8.776	8.776	(0.932)	193349	1.00000	1.030(H)
	7 1,3-Dichlorobenzene	146	9.349	9.349	(0.993)	120114	1.00000	0.9462(H)
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	296489	4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	116278	1.00000	0.9465
	11 Benzyl alcohol	79	9.669	9.669	(1.027)	129120	1.00000	0.9941(H)
	12 1,2-Dichlorobenzene	146	9.797	9.797	(1.041)	111826	1.00000	0.9384
	13 2-Methylphenol	108	9.886	9.886	(1.050)	115744	1.00000	1.017
	15 4-Methylphenol	108	10.154	10.154	(1.079)	122022	1.00000	1.026
	16 N-Nitroso-di-n-propylamine	70	10.218	10.218	(1.086)	120475	1.00000	0.9906
	22 2,4-Dimethylphenol	107	11.189	11.189	(0.942)	262933	2.00000	2.385
	24 Benzoic acid	105	11.329	11.329	(0.954)	293691	4.00000	4.007
	26 1,2,4-Trichlorobenzene	180	11.789	11.789	(0.992)	72062	1.00000	0.9566
*	27 Naphthalene-d8	136	11.878	11.878	(1.000)	1098892	4.00000	
	30 Hexachlorobutadiene	225	12.273	12.273	(1.033)	36712	1.00000	1.041
	39 Dimethylphthalate	163	14.977	14.977	(0.967)	138072	1.00000	0.9588
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	443071	4.00000	
	50 Diethylphthalate	149	16.417	16.417	(1.060)	149956	1.00000	1.001
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	93536	1.00000	1.036
	57 Hexachlorobenzene	284	17.894	17.894	(0.967)	28612	1.00000	0.9677
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	24350	2.00000	1.214
*	59 Phenanthrene-d10	188	18.506	18.506	(1.000)	627744	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	68966	1.00000	1.233
	67 Butylbenzylphthalate	149	22.511	22.511	(0.958)	78419	1.00000	0.7313
*	69 Chrysene-d12	240	23.506	23.506	(1.000)	404122	4.00000	
*	77 Perylene-d12	264	26.223	26.223	(1.000)	417323	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.071	29.071	(1.109)	115232	1.00000	0.9348(M)
	90 N-Nitrosodimethylamine	74	5.094	5.094	(0.541)	307021	2.00000	2.451

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Report Date: 30-Aug-2023 09:25

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292304.D
Lab Smp Id: SEQ-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 10-AUG-2023
Calibration Time: 15:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	296489	148245	592978	296489	0.00
27 Naphthalene-d8	1098892	549446	2197784	1098892	0.00
42 Acenaphthene-d10	443071	221536	886142	443071	0.00
59 Phenanthrene-d10	627744	313872	1255488	627744	0.00
69 Chrysene-d12	404122	202061	808244	404122	0.00
77 Perylene-d12	417323	208662	834646	417323	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	0.00
27 Naphthalene-d8	11.88	11.38	12.38	11.88	0.00
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	0.00
59 Phenanthrene-d10	18.51	18.01	19.01	18.51	0.00
69 Chrysene-d12	23.51	23.01	24.01	23.51	0.00
77 Perylene-d12	26.22	25.72	26.72	26.22	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292304.D

Lab ID: SEQ-ICV1
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   29-AUG-2023 12:37

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

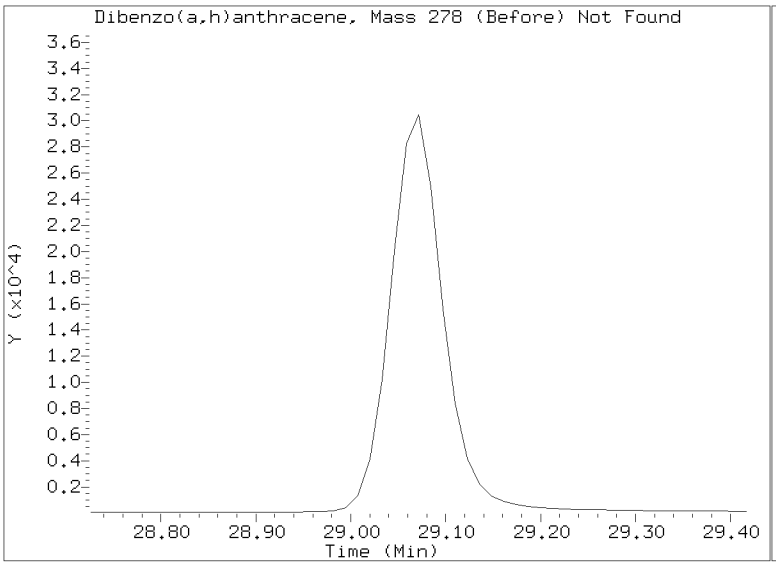
On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

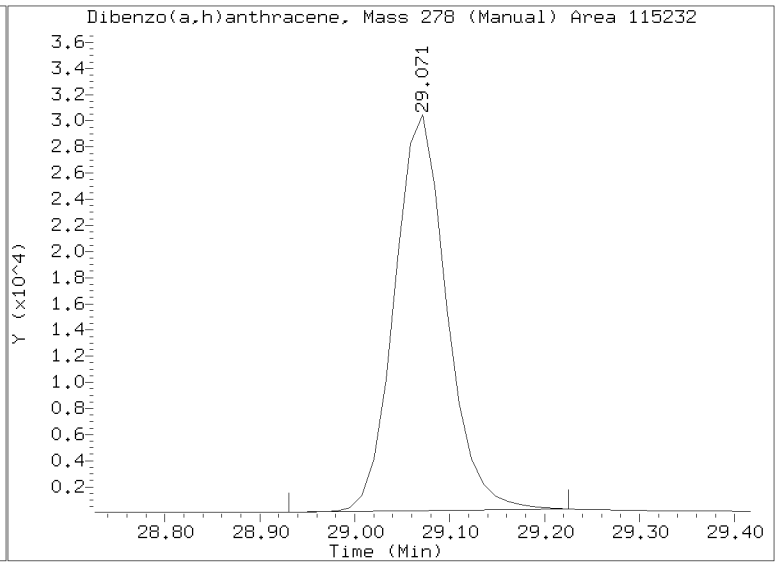
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230829.b/SIM.b/NT1708292304.D
Injection Date: 29-AUG-2023 12:37
Lab ID:SEQ-ICV1 Client ID:
Report Date: 08/30/2023 09:25





Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230829.b\SIM.b

Instrument: nt17.i Date: 29-AUG-2023 Method: SIM.b\SIMABN2.m

INITIAL CAL: 10-JUL-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1708292304.D 29-AUG-2023 12:37

Compound	%D
N-Nitrosodimethylamine	22.5
Pentachlorophenol	-39.3
Butylbenzylphthalate	-26.9
Terphenyl-d14	23.3

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GH00045
Lab File ID:	NT1708292319B.D	Calibration Date:	08/10/2023
Sequence:	SLH0447	Injection Date:	08/29/23
Lab Sample ID:	SLH0447-ICV2	Injection Time:	22:47
Sequence Name:	ABN 1		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
1,4-Dichlorobenzene	A	1.0000	0.9	1.6574040	1.5608060		-5.8	+/-20	
1,2-Dichlorobenzene	A	1.0000	0.9	1.6077360	1.5030520		-6.5	+/-20	
Benzyl Alcohol	A	1.0000	1.0	1.7523940	1.7822480		1.7	+/-20	
Benzoic acid	A	4.0000	4.1	0.1715968	0.2744552		2.8	+/-20	
2,4-Dimethylphenol	A	2.0000	2.4	0.4013400	0.4843295		20.7	+/-20	*
1,2,4-Trichlorobenzene	A	1.0000	1.0	0.2742178	0.2662500		-2.9	+/-20	
N-Nitrosodiphenylamine	A	1.0000	1.1	0.5750605	0.6424628		11.7	+/-20	
Pentachlorophenol	A	2.0000	1.3	0.0738457	0.0806339		-37.0	+/-20	
2-Fluorophenol	A	1.5000	1.86	1.6608890	2.0598890		24.0	+/-20	*
p-Terphenyl-d14	A	1.0000	1.37	0.5535288	0.7599664		37.3	+/-20	*
1,4-Dichlorobenzene-d4	A	4.0000	4.0	78350.3400	1.0000		0.0		
Naphthalene-d8	A	4.0000	4.0	309461.8000	1.0000		0.0		
Acenaphthene-d10	A	4.0000	4.0	135771.1000	1.0000		0.0		
Phenanthrene-d10	A	4.0000	4.0	217983.8000	1.0000		0.0		
Chrysene-d12	A	4.0000	4.0	158795.0000	1.0000		0.0		
Perylene-d12	A	4.0000	4.0	157739.7000	1.0000		0.0		

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292319B.D

Date : 29-AUG-2023 22:47

Client ID:

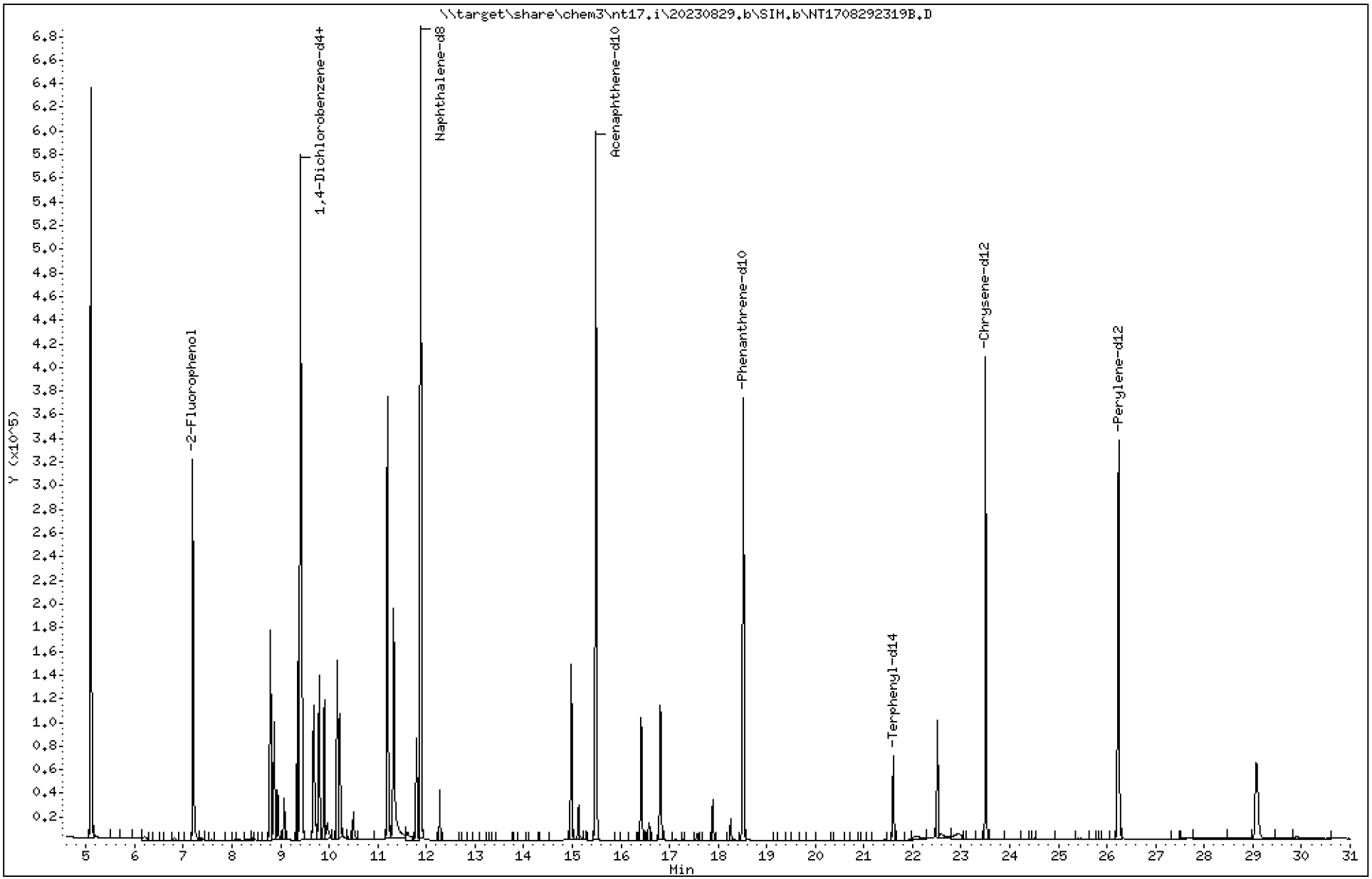
Sample Info: SEQ-CCV1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292319B.D
Lab Smp Id: SEQ-CCV1
Inj Date : 29-AUG-2023 22:47
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-CCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 10:26 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	7.196	7.196	(0.764)	276805	1.50000	1.860
	3	Phenol	94	8.788	8.788	(0.934)	227493	1.00000	1.003
	7	1,3-Dichlorobenzene	146	9.349	9.349	(0.993)	147429	1.00000	0.9609
*	8	1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	358343	4.00000	
	9	1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	139826	1.00000	0.9417
	11	Benzyl alcohol	79	9.681	9.681	(1.028)	159664	1.00000	1.017
	12	1,2-Dichlorobenzene	146	9.796	9.796	(1.041)	134652	1.00000	0.9349
	13	2-Methylphenol	108	9.899	9.899	(1.052)	140667	1.00000	1.023
	15	4-Methylphenol	108	10.167	10.167	(1.080)	142755	1.00000	0.9931
	16	N-Nitroso-di-n-propylamine	70	10.218	10.218	(1.086)	153574	1.00000	1.045
	22	2,4-Dimethylphenol	107	11.202	11.202	(0.942)	300981	2.00000	2.414
	24	Benzoic acid	105	11.329	11.329	(0.953)	341114	4.00000	4.113
	26	1,2,4-Trichlorobenzene	180	11.801	11.801	(0.993)	82729	1.00000	0.9709
*	27	Naphthalene-d8	136	11.891	11.891	(1.000)	1242877	4.00000	
	30	Hexachlorobutadiene	225	12.273	12.273	(1.032)	43312	1.00000	1.085
	39	Dimethylphthalate	163	14.976	14.976	(0.967)	158470	1.00000	1.050
*	42	Acenaphthene-d10	162	15.487	15.487	(1.000)	464388	4.00000	
	50	Diethylphthalate	149	16.417	16.417	(1.060)	176572	1.00000	1.125
	54	N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	106153	1.00000	1.117
	57	Hexachlorobenzene	284	17.894	17.894	(0.966)	33235	1.00000	1.068
	58	Pentachlorophenol	266	18.251	18.251	(0.986)	26646	2.00000	1.261
*	59	Phenanthrene-d10	188	18.519	18.519	(1.000)	660913	4.00000	
$	66	Terphenyl-d14	244	21.605	21.605	(0.919)	90808	1.00000	1.373
	67	Butylbenzylphthalate	149	22.510	22.510	(0.958)	137097	1.00000	1.081
*	69	Chrysene-d12	240	23.505	23.505	(1.000)	477958	4.00000	
*	77	Perylene-d12	264	26.235	26.235	(1.000)	659026	4.00000	
	79	Dibenzo(a,h)anthracene	278	29.084	29.084	(1.109)	200279	1.00000	1.029
	90	N-Nitrosodimethylamine	74	5.094	5.094	(0.541)	360764	2.00000	2.383

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708292319B.D
Lab Smp Id: SEQ-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 29-AUG-2023
Calibration Time: 12:37
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	358343	179172	716686	358343	0.00
27 Naphthalene-d8	1242877	621439	2485754	1242877	0.00
42 Acenaphthene-d10	464388	232194	928776	464388	0.00
59 Phenanthrene-d10	660913	330457	1321826	660913	0.00
69 Chrysene-d12	477958	238979	955916	477958	0.00
77 Perylene-d12	659026	329513	1318052	659026	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	0.00
27 Naphthalene-d8	11.89	11.39	12.39	11.89	0.00
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	0.00
59 Phenanthrene-d10	18.52	18.02	19.02	18.52	0.00
69 Chrysene-d12	23.51	23.01	24.01	23.51	0.00
77 Perylene-d12	26.24	25.74	26.74	26.24	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292319B.D

Lab ID: SEQ-CCV1
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   29-AUG-2023 22:47

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230829.b\SIM.b

Instrument: nt17.i Date: 29-AUG-2023 Method: SIM.b\SIMABN2.m

INITIAL CAL: 10-JUL-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1708292319B.D 29-AUG-2023 22:47

Compound	%D
2,4-Dimethylphenol	20.7
Pentachlorophenol	-36.9
Terphenyl-d14	37.3
2-Fluorophenol	24.0

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GH00045
Lab File ID:	NT1708102312S.D	Calibration Date:	08/10/2023
Sequence:	SLH0217	Injection Date:	08/10/23
Lab Sample ID:	SLH0217-SCV1	Injection Time:	18:45
Sequence Name:	SCV 5.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
1,4-Dichlorobenzene	A	5.0000	5.2	1.6574040	1.7132860		3.4	+/-20	
1,2-Dichlorobenzene	A	5.0000	5.2	1.6077360	1.6772410		4.3	+/-20	
Benzyl Alcohol	A	5.0000	6.1	1.7523940	2.1210420		21.0	+/-20	*
Benzoic acid	A	10.000	10.0	0.1715968	0.2733874		-0.4	+/-20	
2,4-Dimethylphenol	A	5.0000	4.5	0.4013400	0.3627748		-9.6	+/-20	
1,2,4-Trichlorobenzene	A	5.0000	5.0	0.2742178	0.2757396		0.6	+/-20	
N-Nitrosodiphenylamine	A	5.0000	5.9	0.5750605	0.6763992		17.6	+/-20	
Pentachlorophenol	A	5.0000	4.8	0.0738457	0.1238703		-3.1	+/-20	
2-Fluorophenol	A	7.5000	0.00	1.6608890					
p-Terphenyl-d14	A	5.0000	0.00	0.5535288					

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023125.D

Date : 10-AUG-2023 18:45

Client ID:

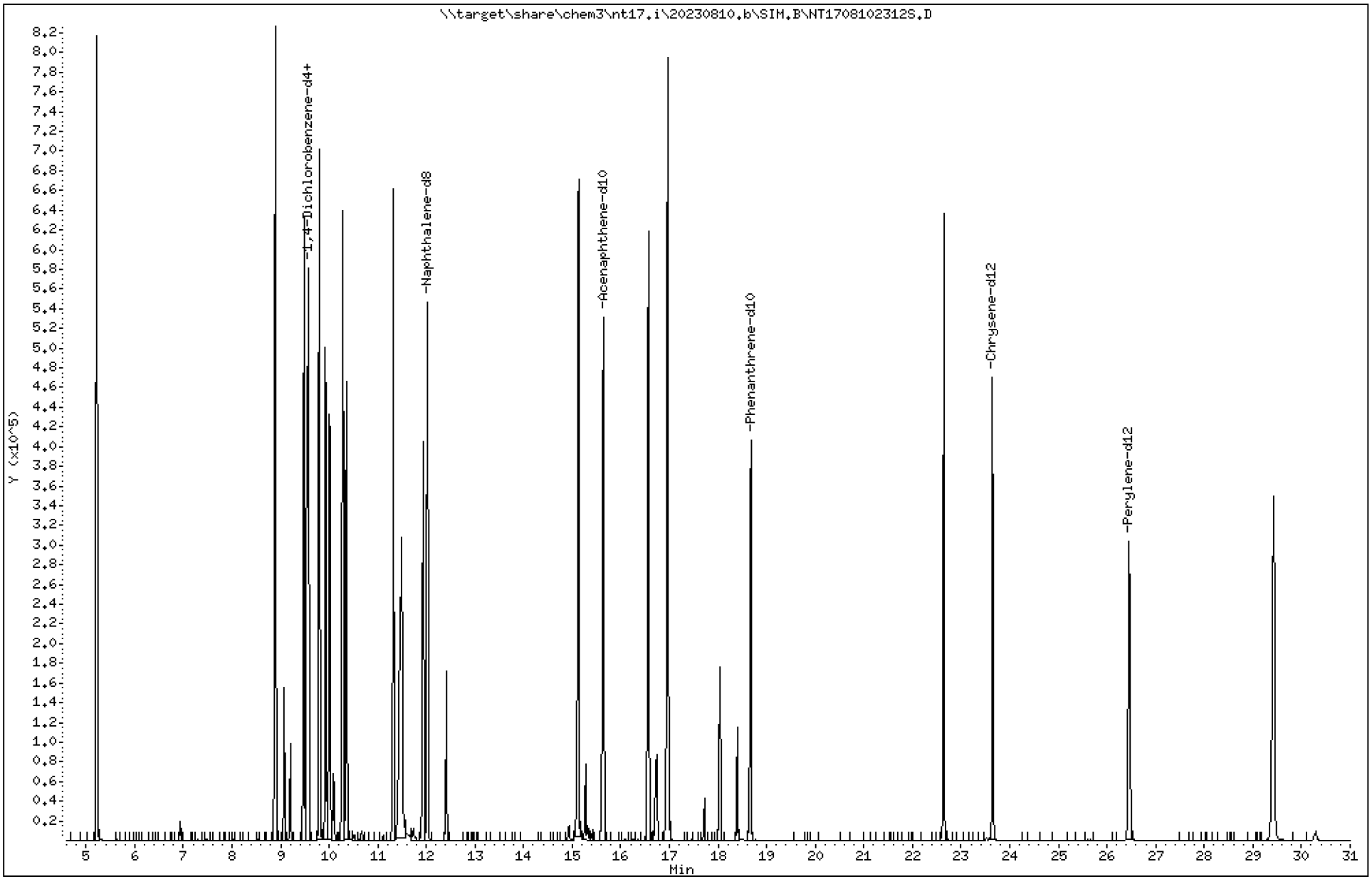
Sample Info: SEQ-SCV1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

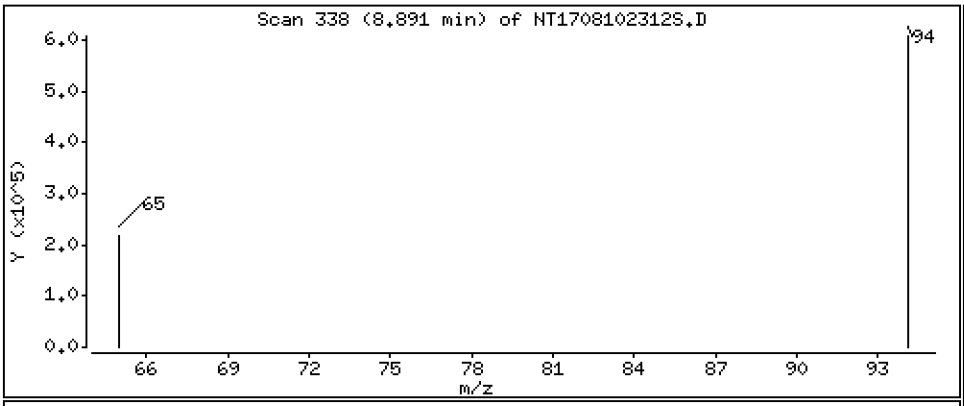
Operator: JGR

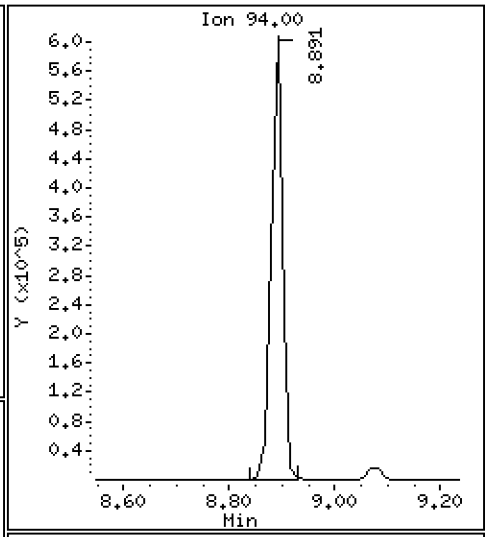
Column phase: ZB-5msi

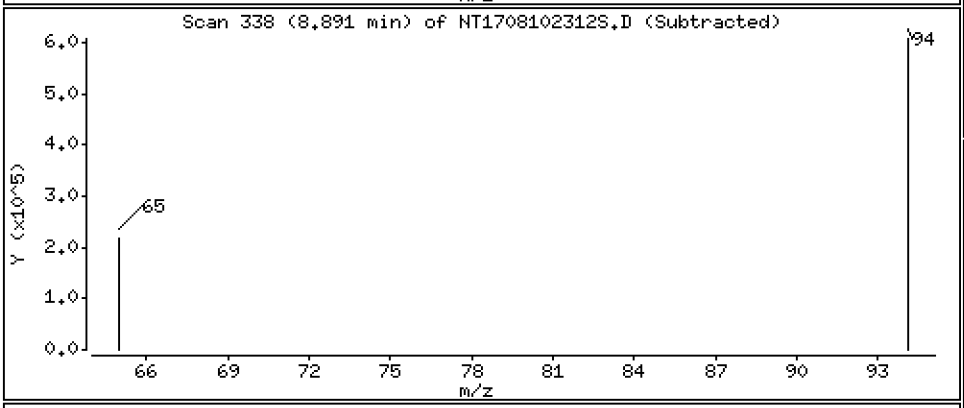
Column diameter: 0.25

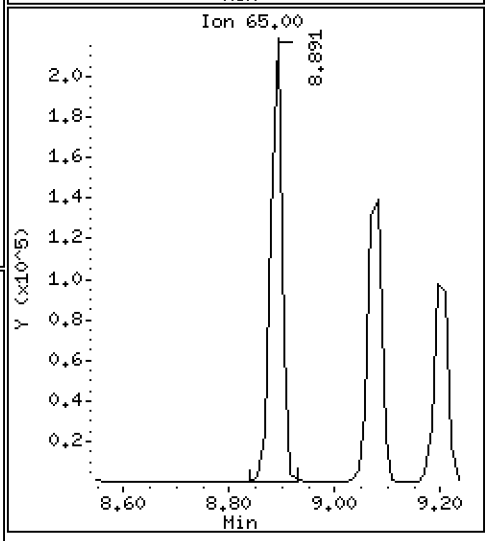
3 Phenol

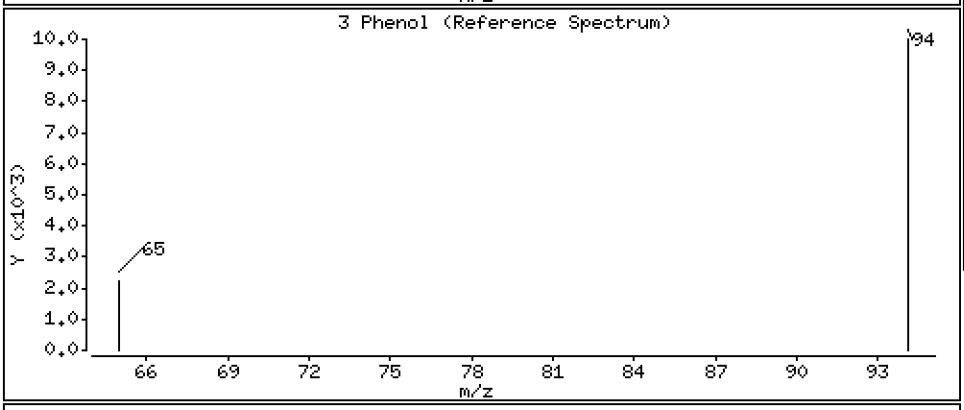
Concentration: 5.502 ug/mL

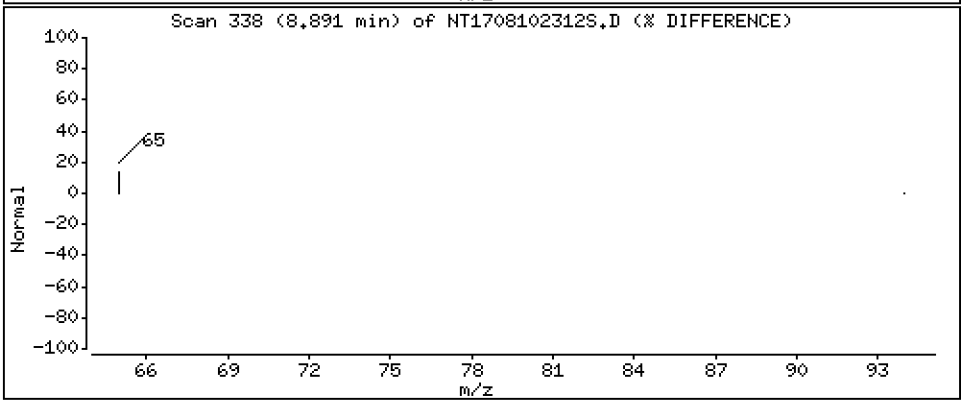












Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023125.D

Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

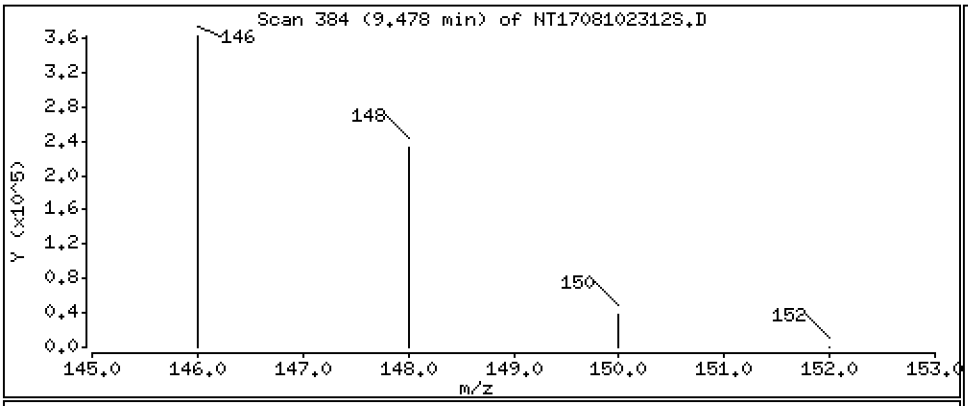
Operator: JGR

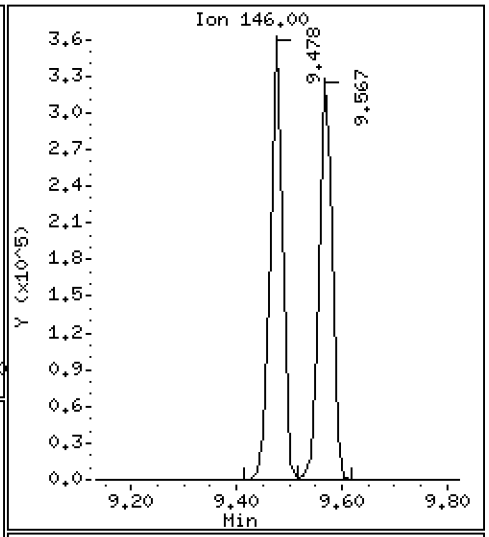
Column phase: ZB-5msi

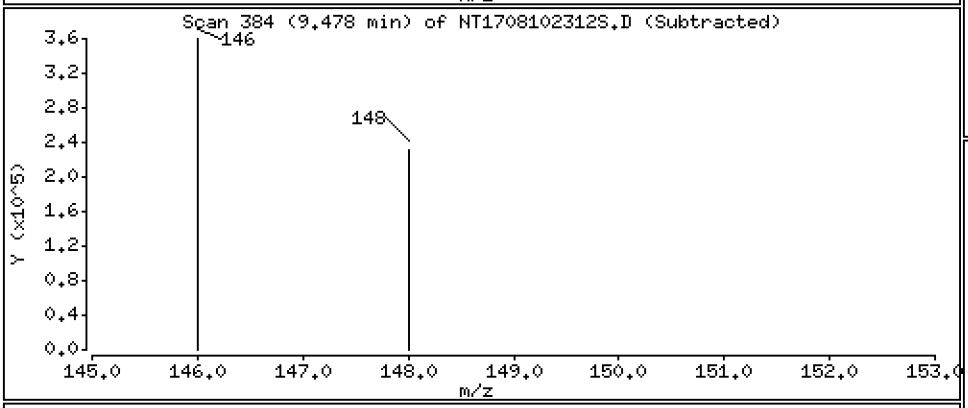
Column diameter: 0.25

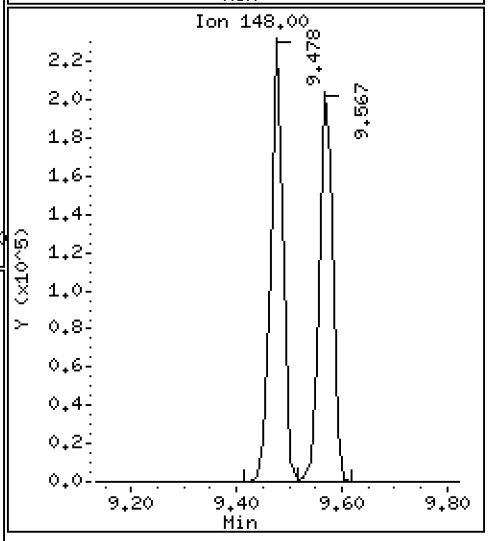
7 1,3-Dichlorobenzene

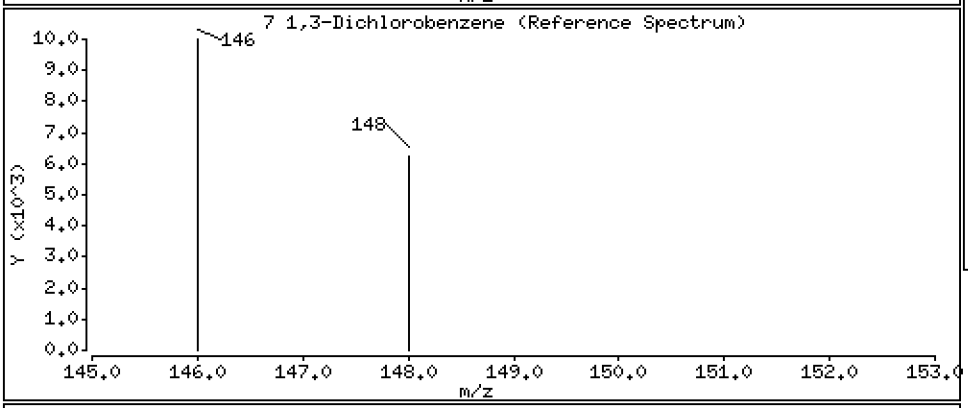
Concentration: 5.156 ug/mL

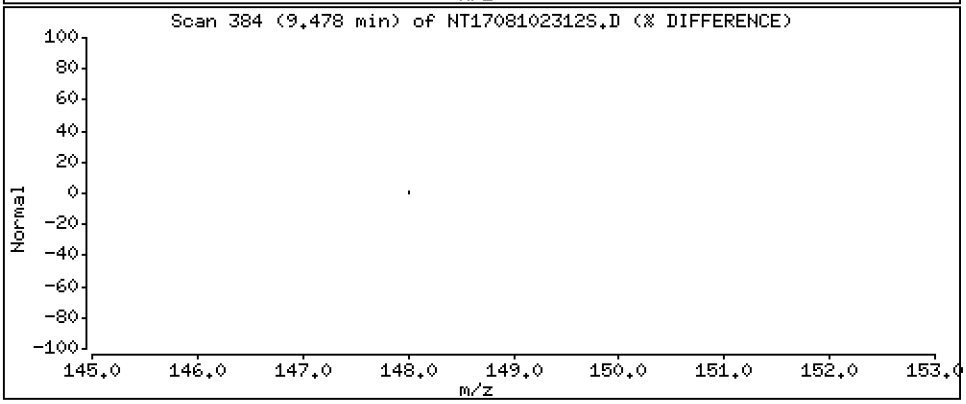












Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023125.D

Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

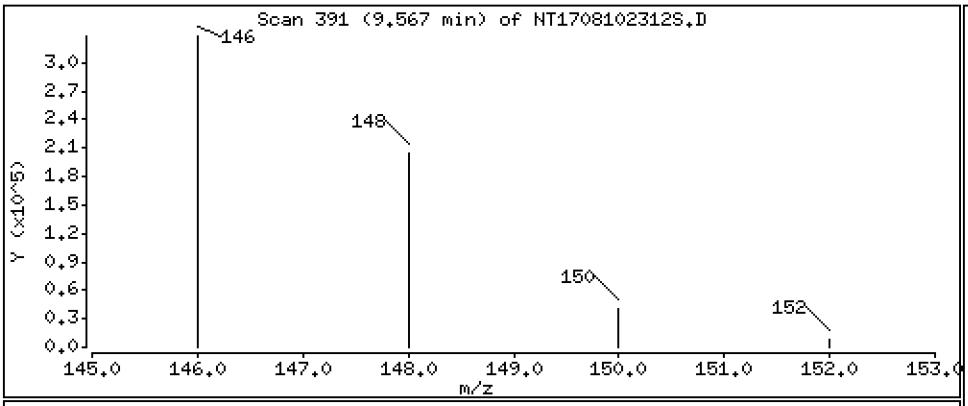
Operator: JGR

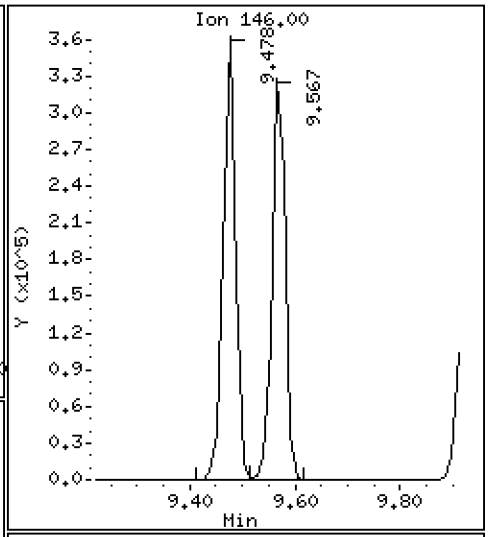
Column phase: ZB-5msi

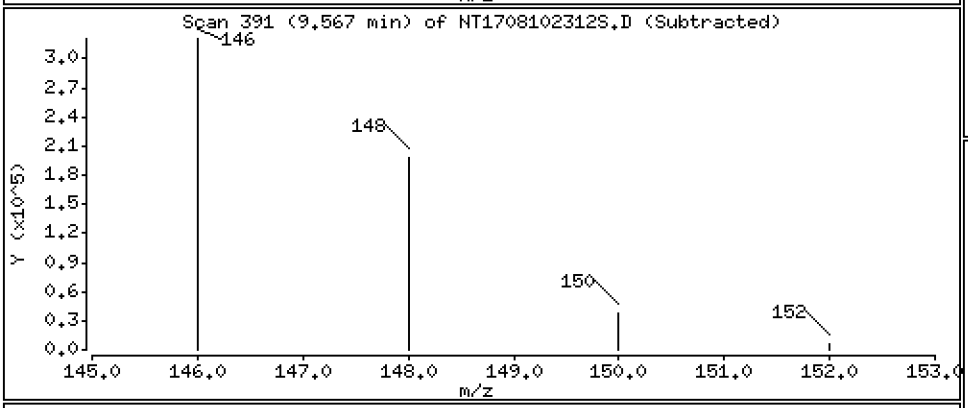
Column diameter: 0.25

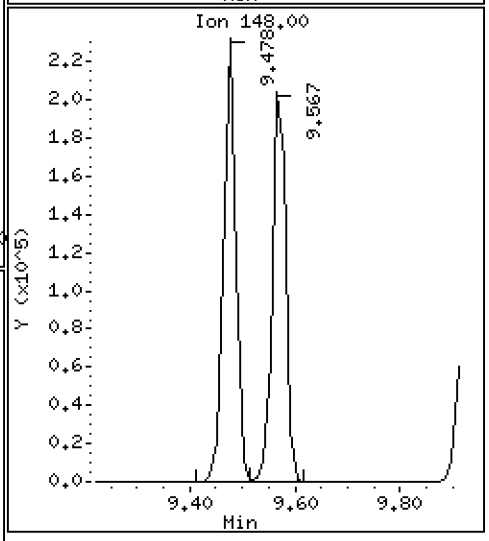
9 1,4-Dichlorobenzene

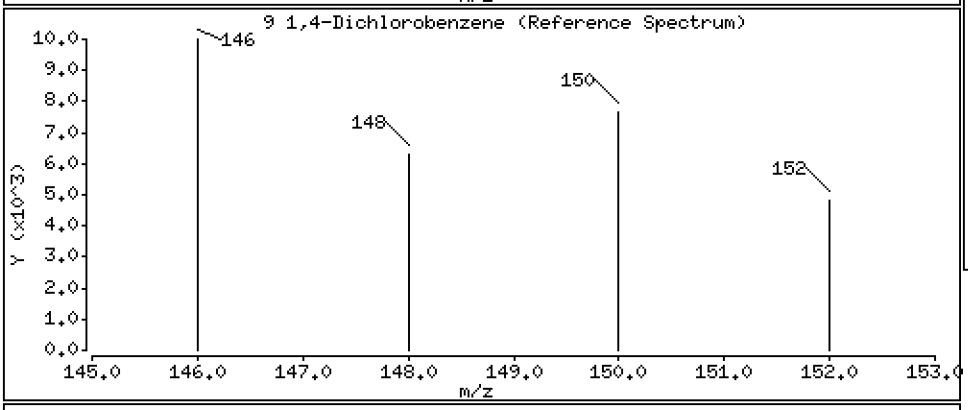
Concentration: 5.169 ug/mL

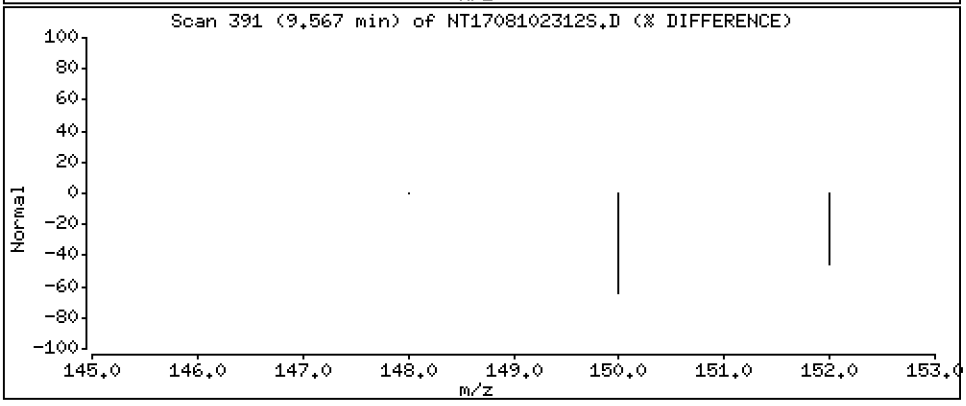












Data File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT17081023125.D

Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

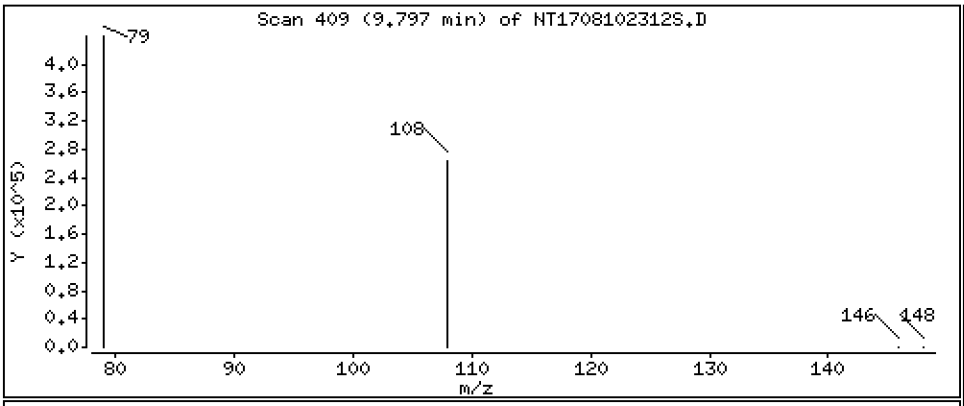
Operator: JGR

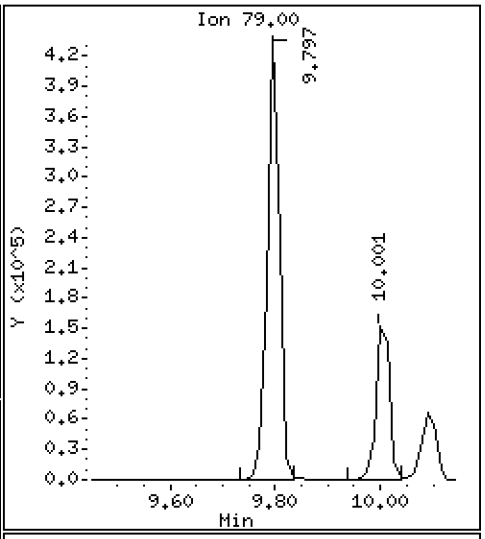
Column phase: ZB-5msi

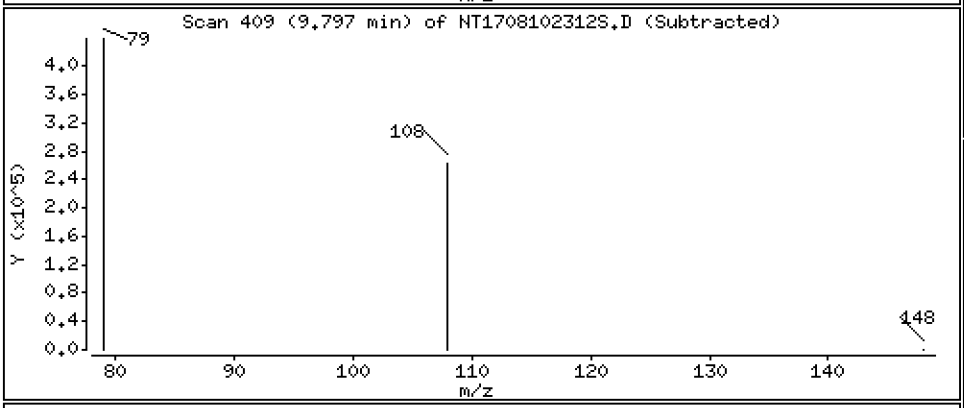
Column diameter: 0.25

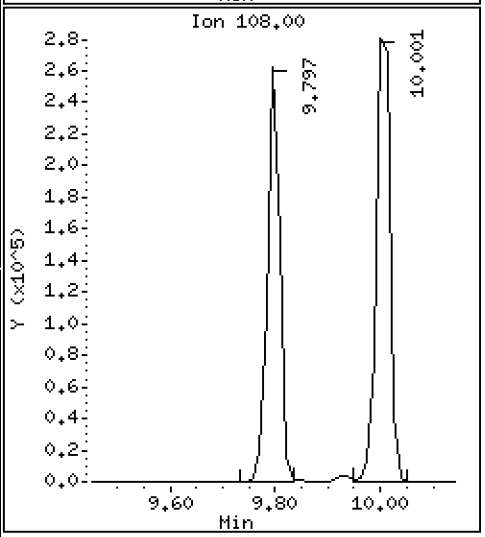
11 Benzyl alcohol

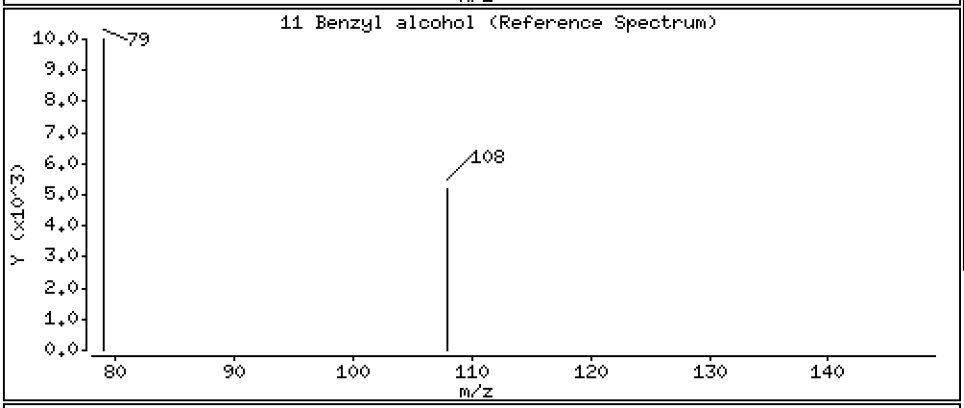
Concentration: 6.052 ug/mL

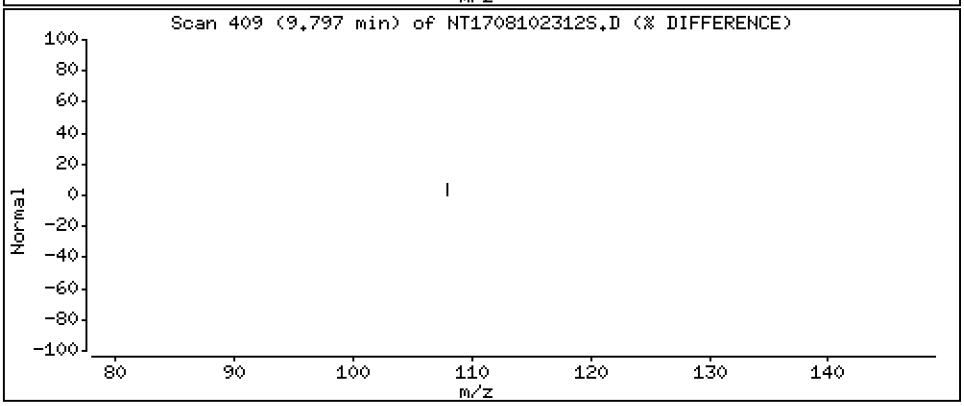












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

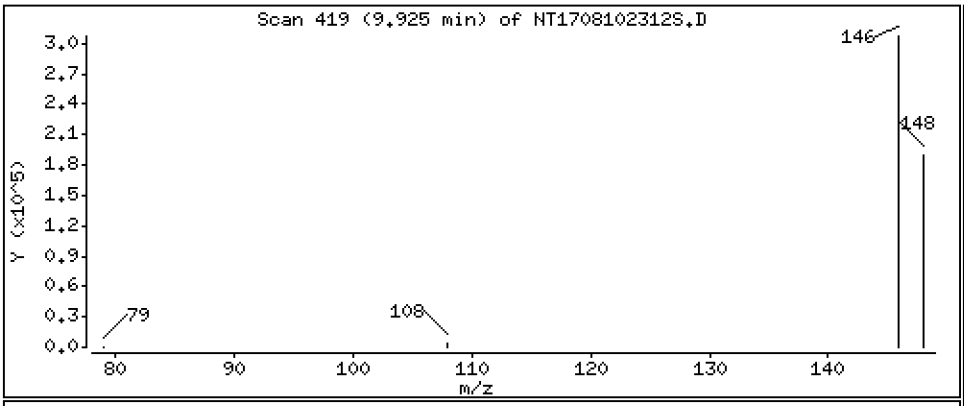
Operator: JGR

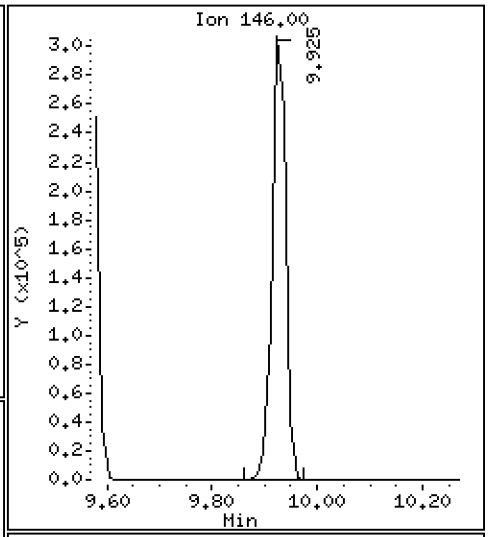
Column phase: ZB-5msi

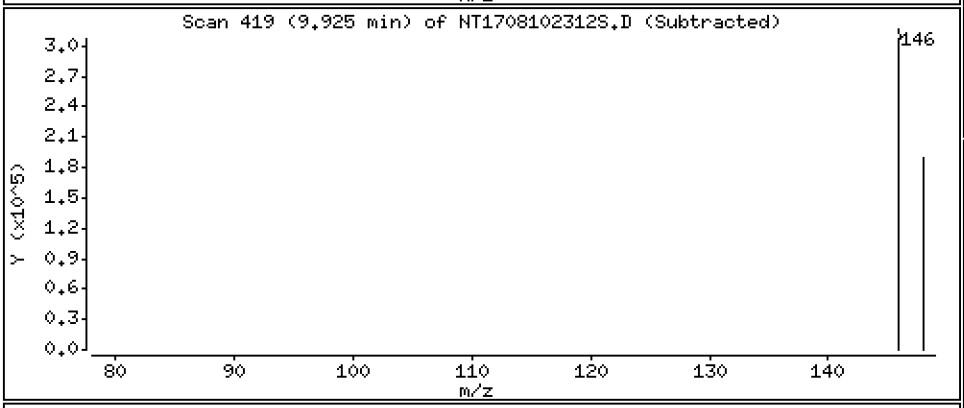
Column diameter: 0.25

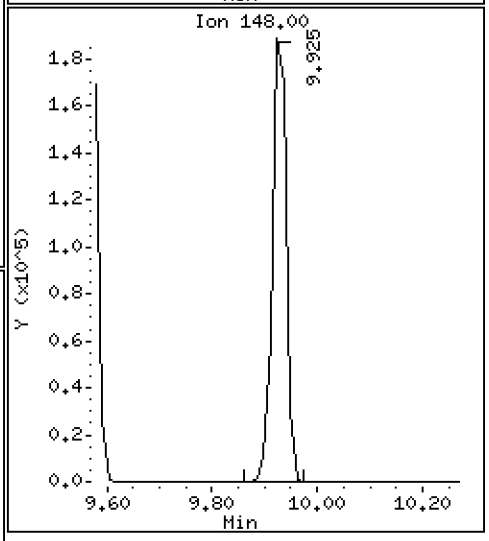
12 1,2-Dichlorobenzene

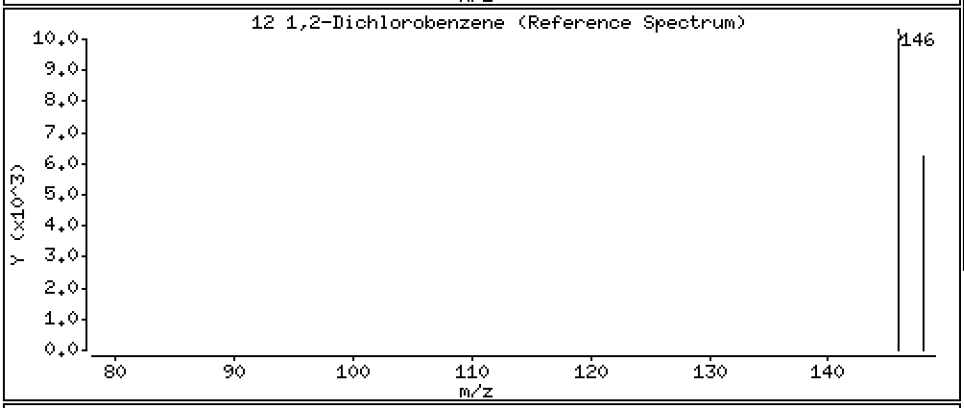
Concentration: 5.216 ug/mL

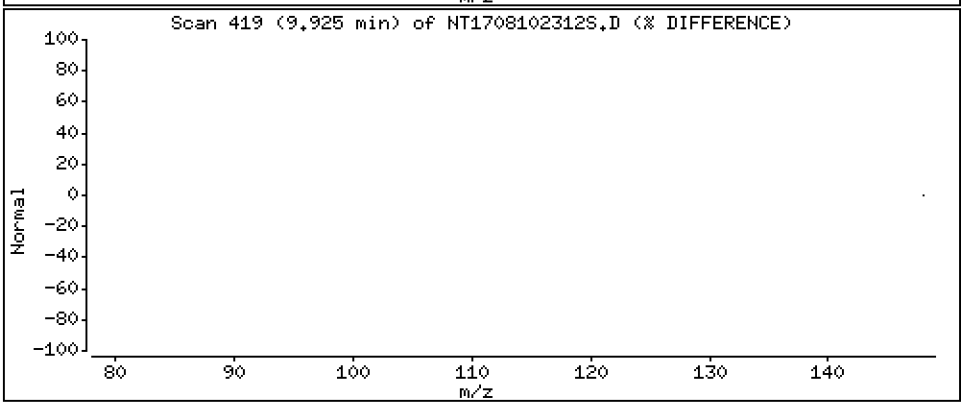












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

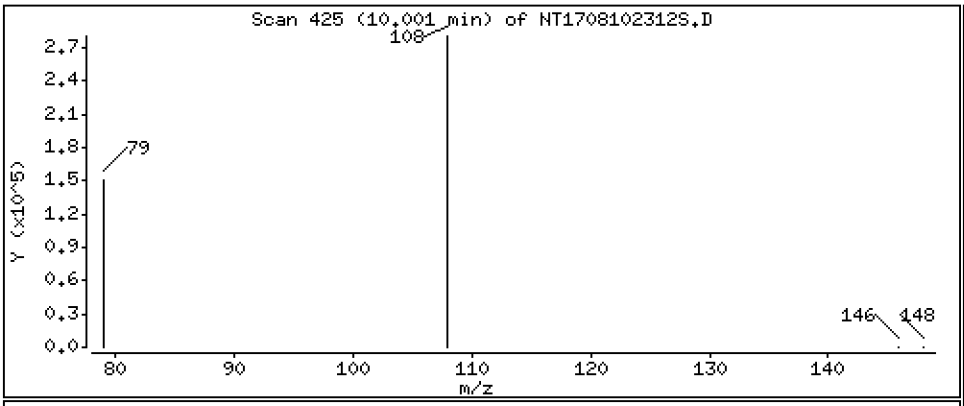
Operator: JGR

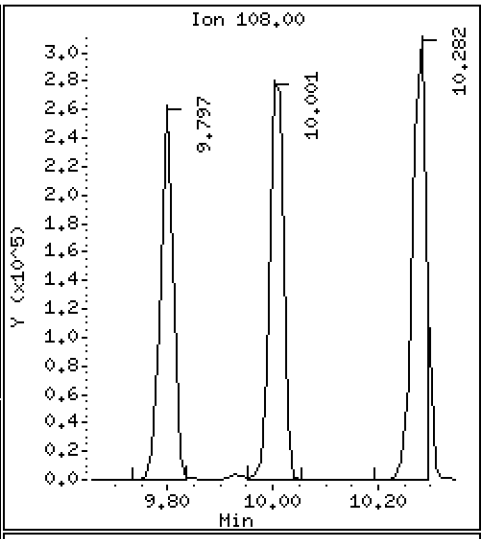
Column phase: ZB-5msi

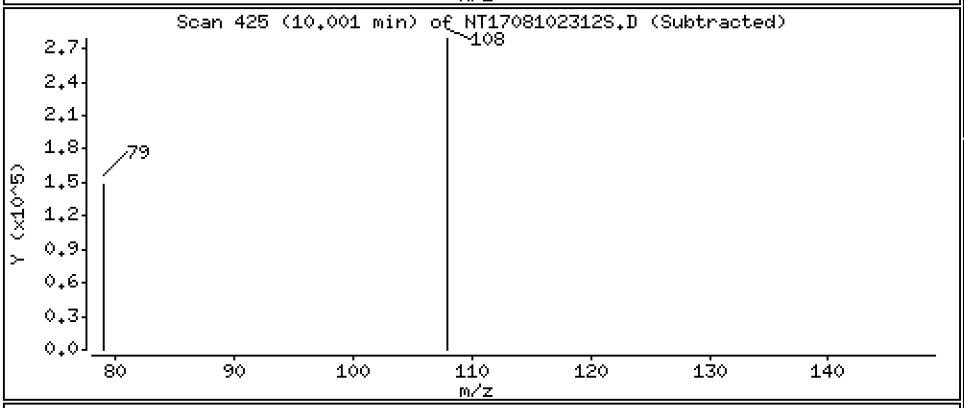
Column diameter: 0.25

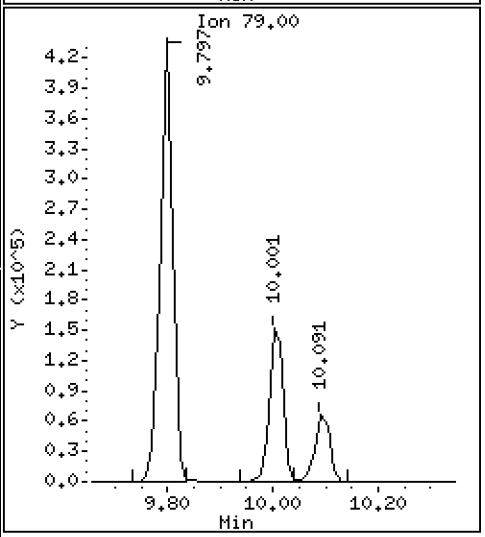
13 2-Methylphenol

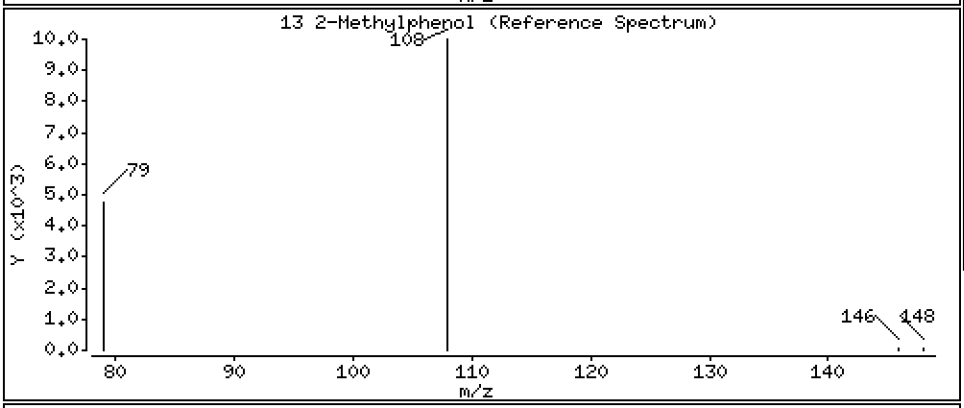
Concentration: 5.112 ug/mL

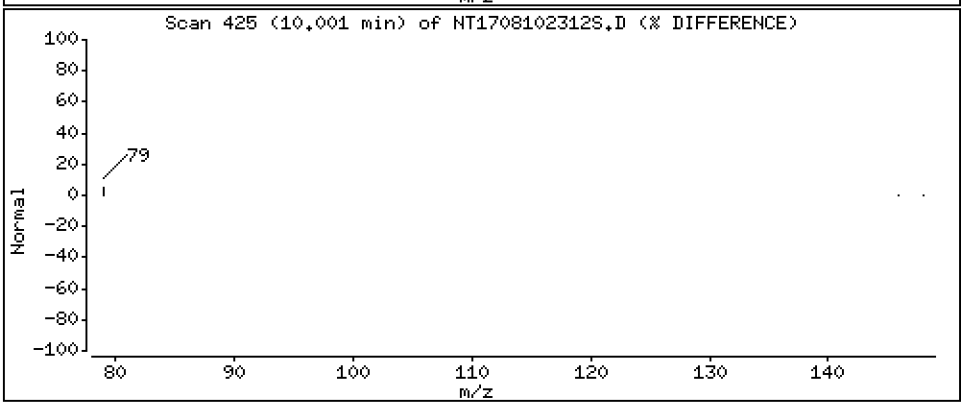












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

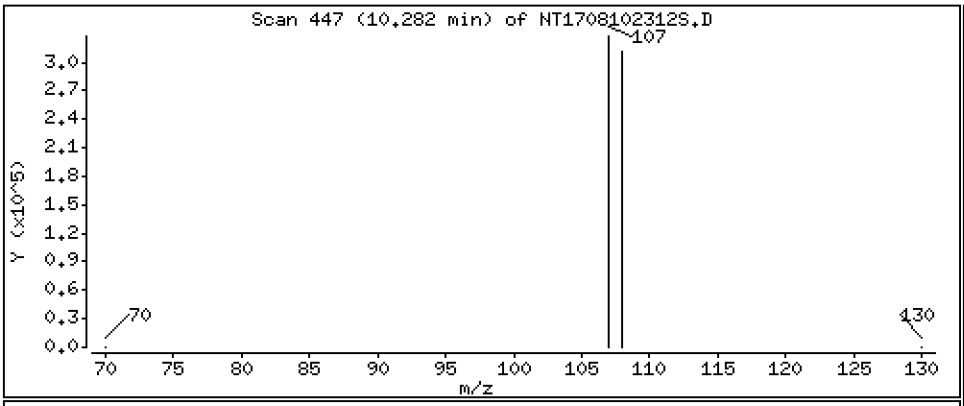
Operator: JGR

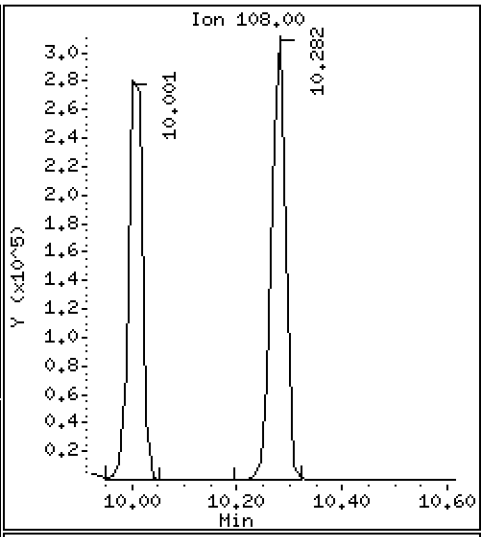
Column phase: ZB-5msi

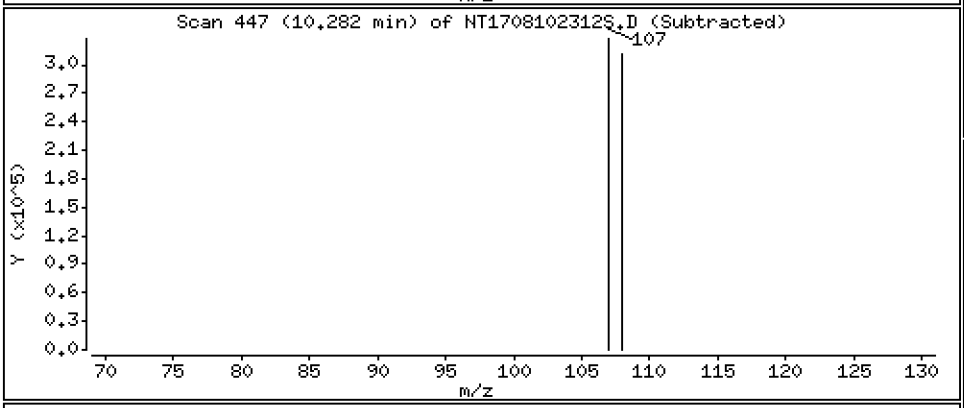
Column diameter: 0.25

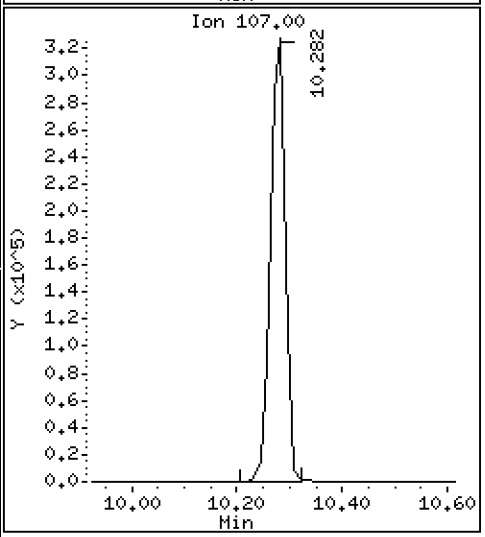
15 4-Methylphenol

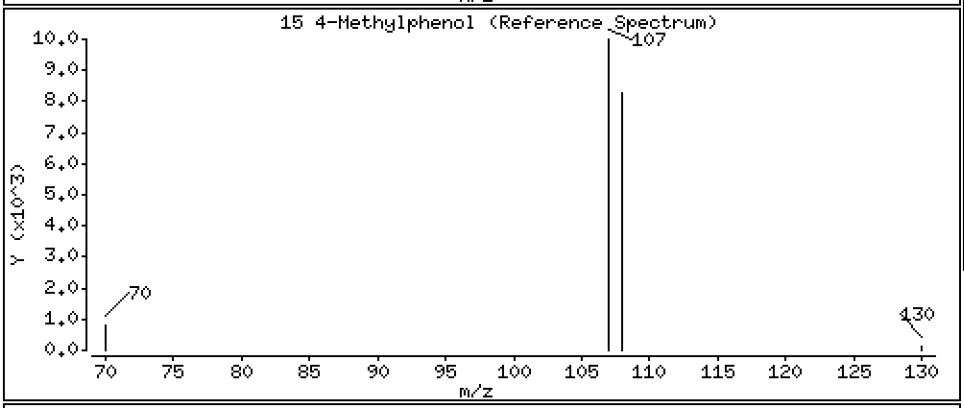
Concentration: 5.491 ug/mL

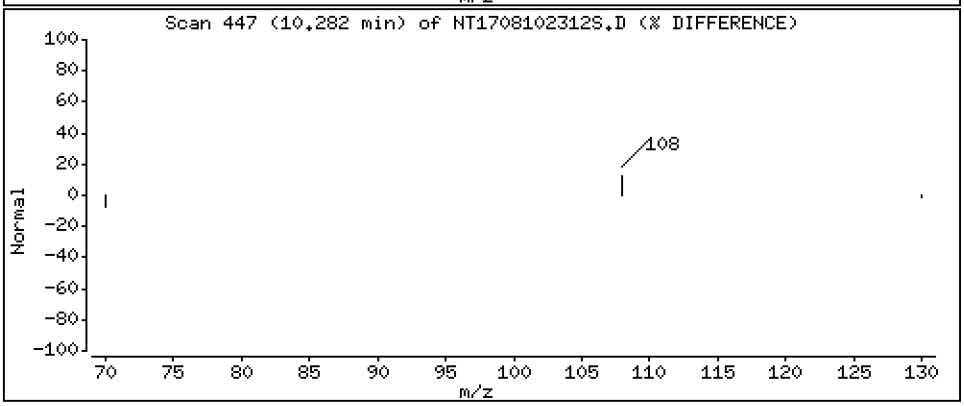












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

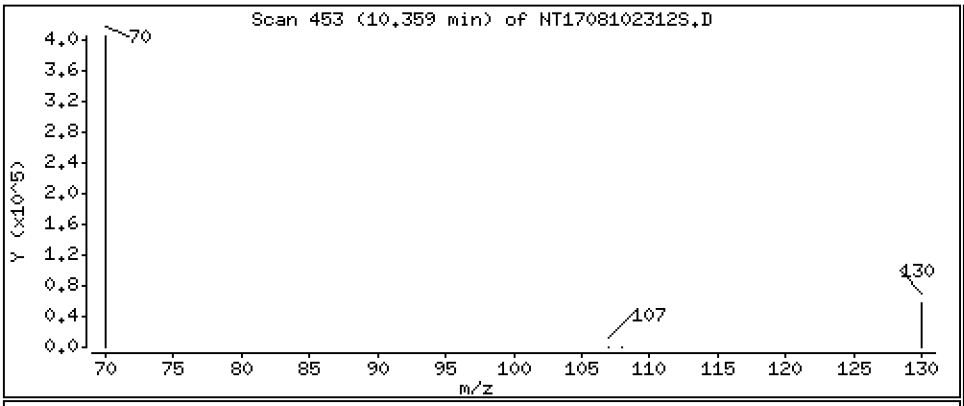
Operator: JGR

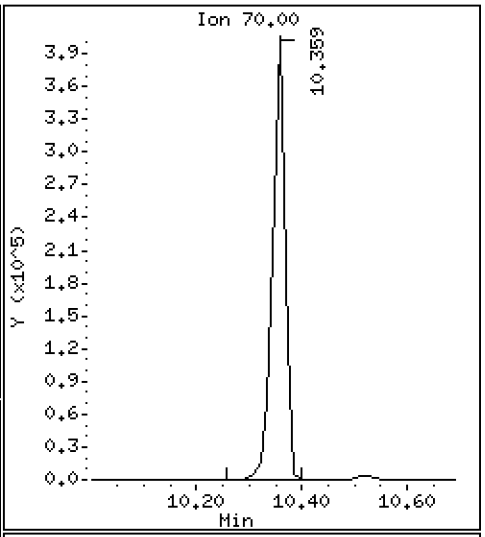
Column phase: ZB-5msi

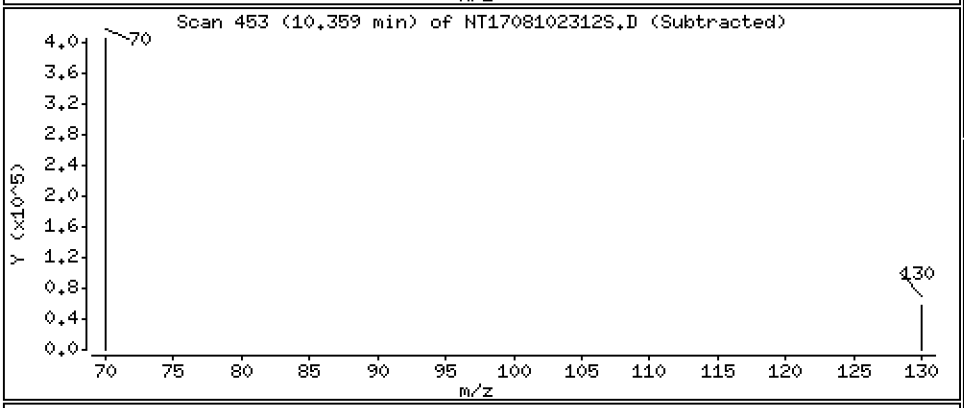
Column diameter: 0.25

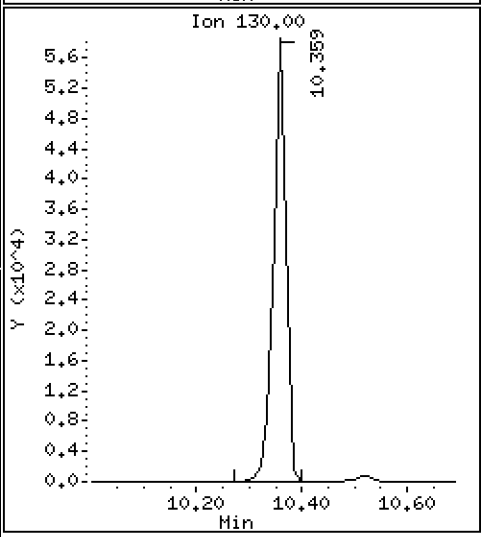
16 N-Nitroso-di-n-propylamine

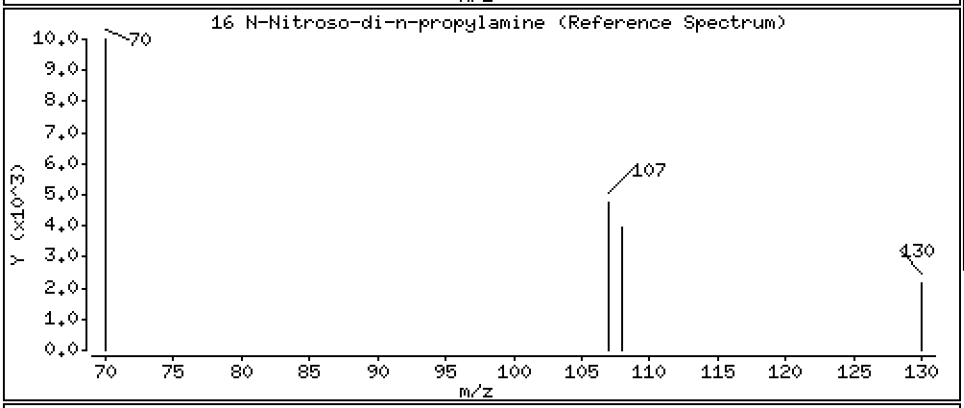
Concentration: 6.171 ug/mL

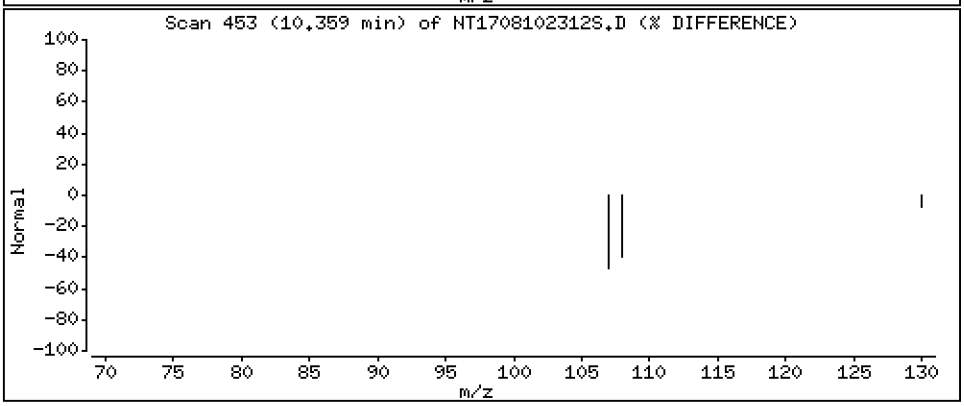












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

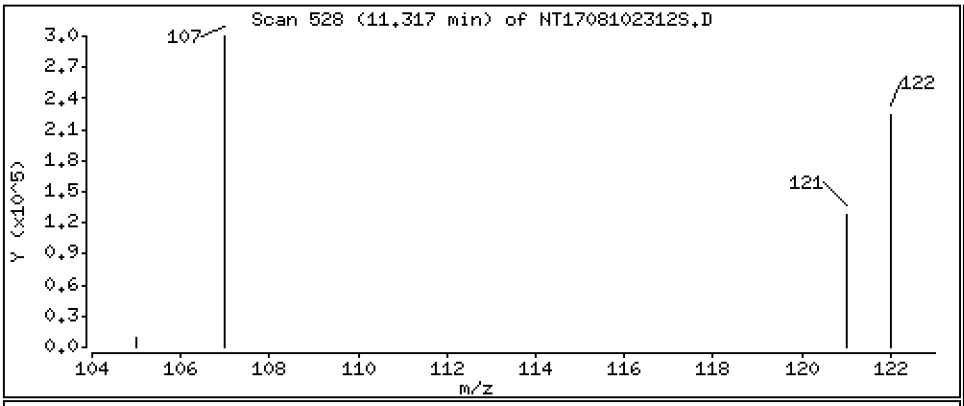
Operator: JGR

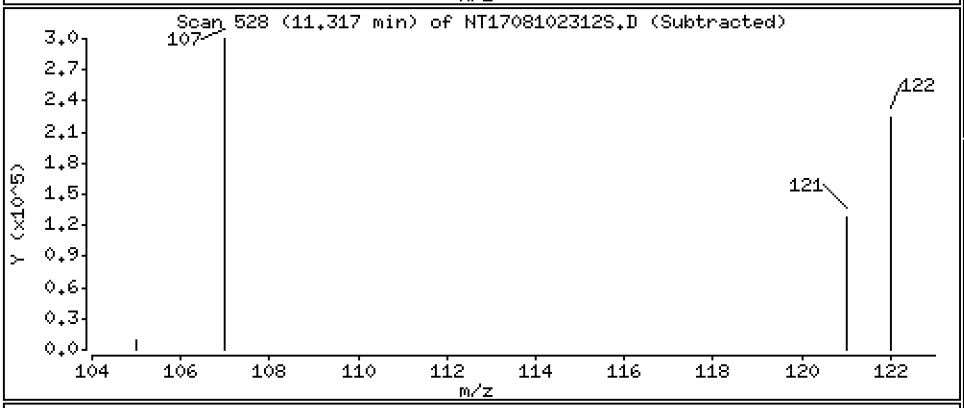
Column phase: ZB-5msi

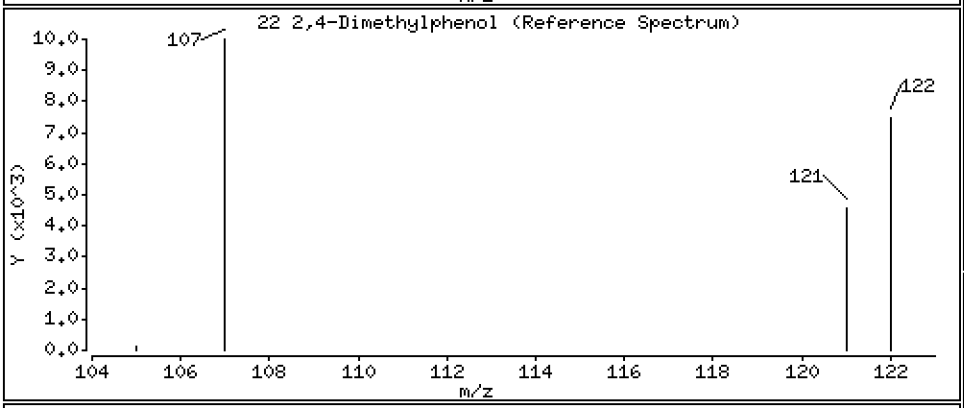
Column diameter: 0.25

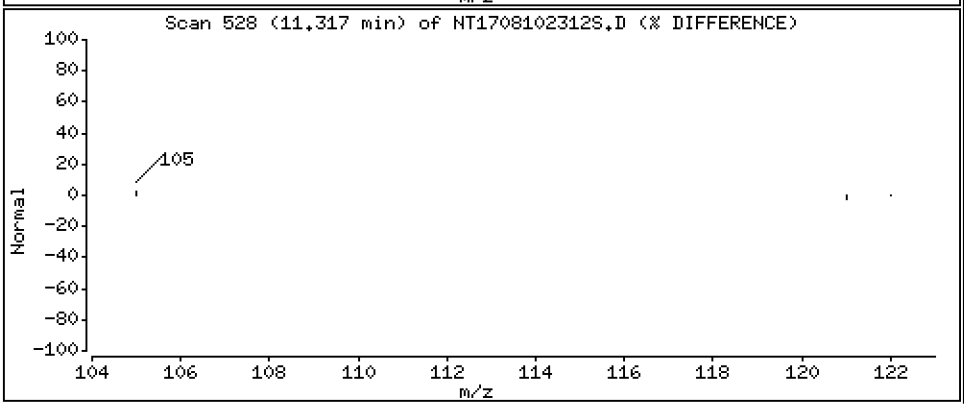
22 2,4-Dimethylphenol

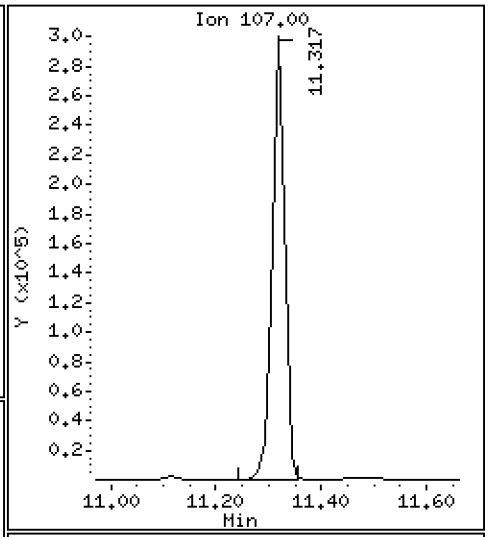
Concentration: 4.520 ug/mL

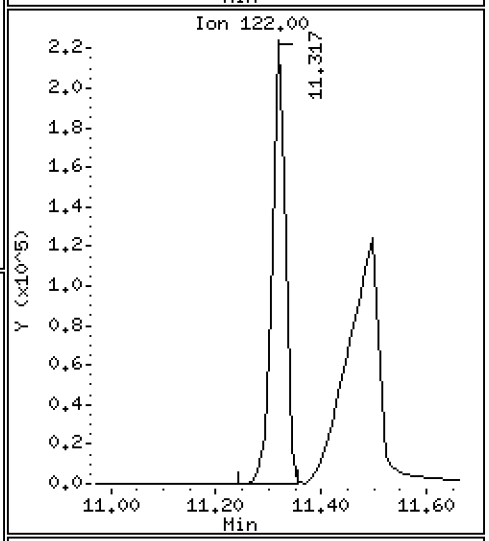


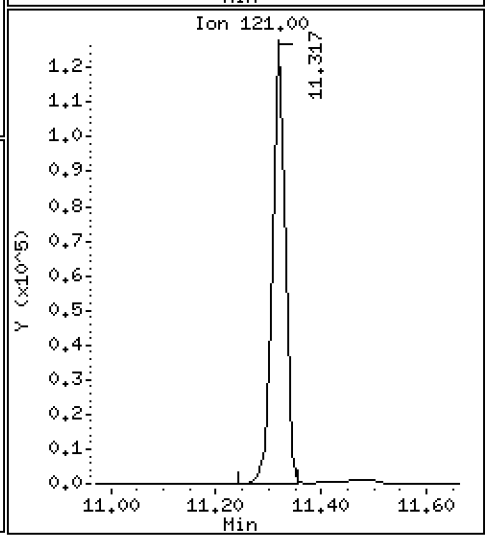












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

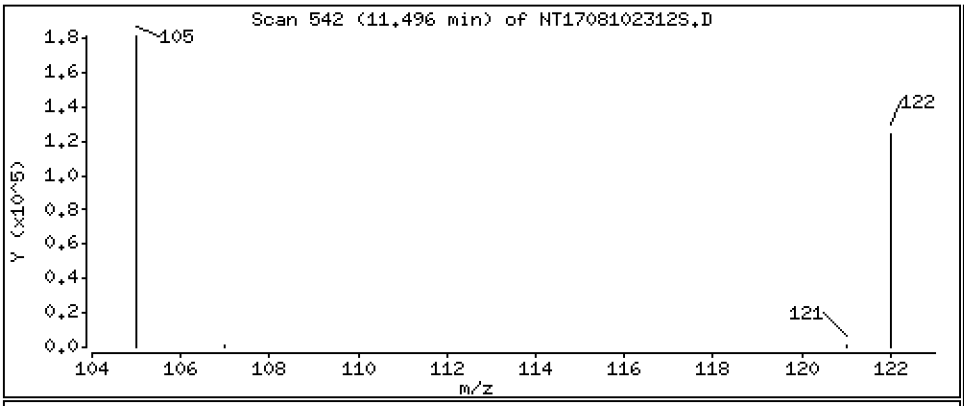
Operator: JGR

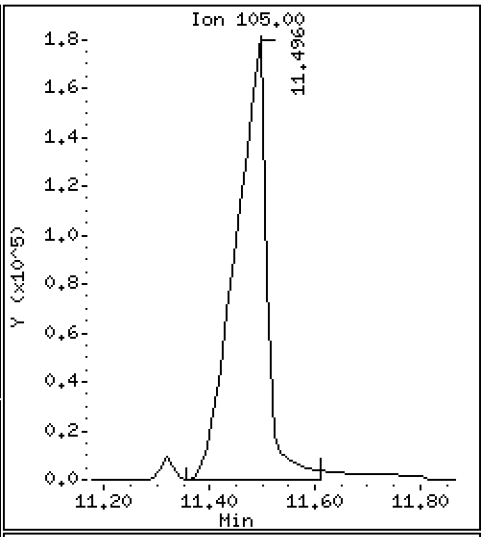
Column phase: ZB-5msi

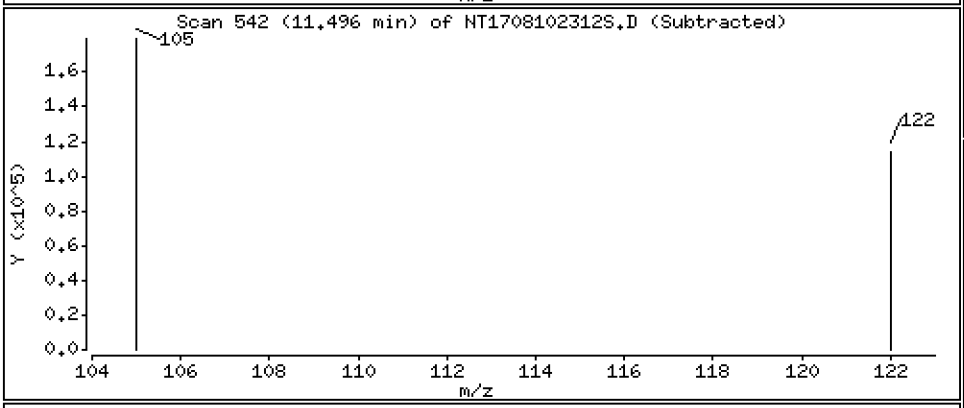
Column diameter: 0.25

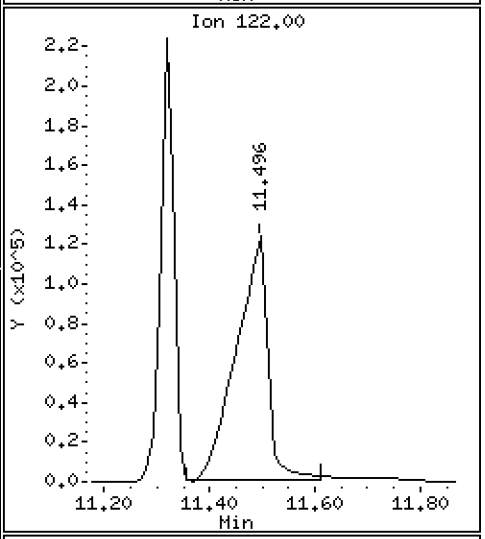
24 Benzoic acid

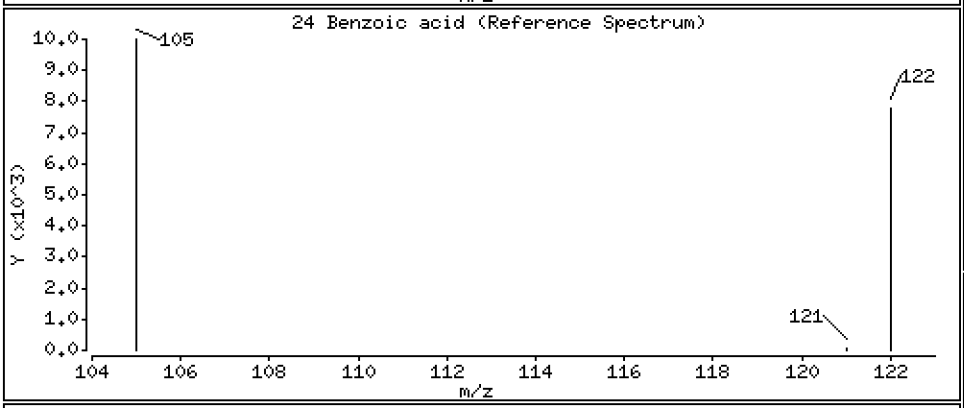
Concentration: 9.959 ug/mL

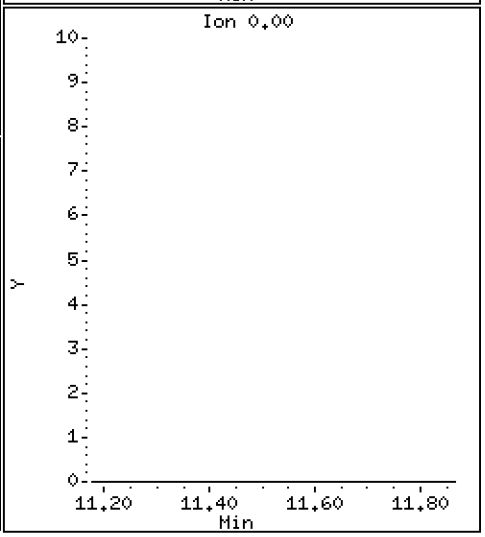


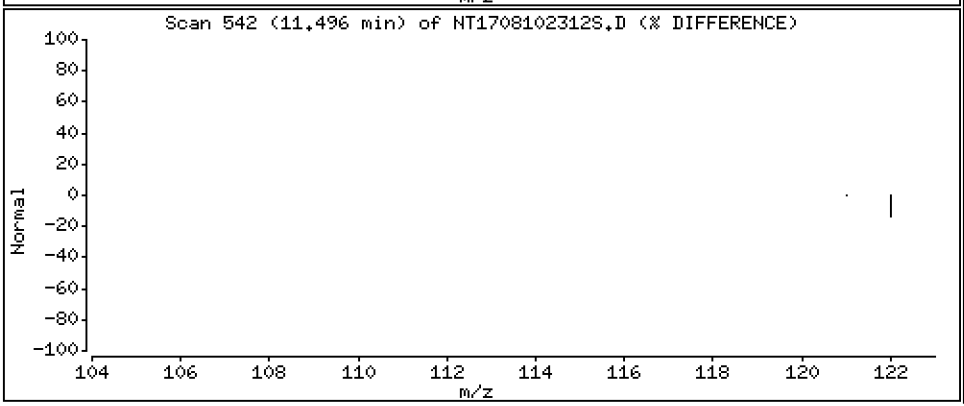












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

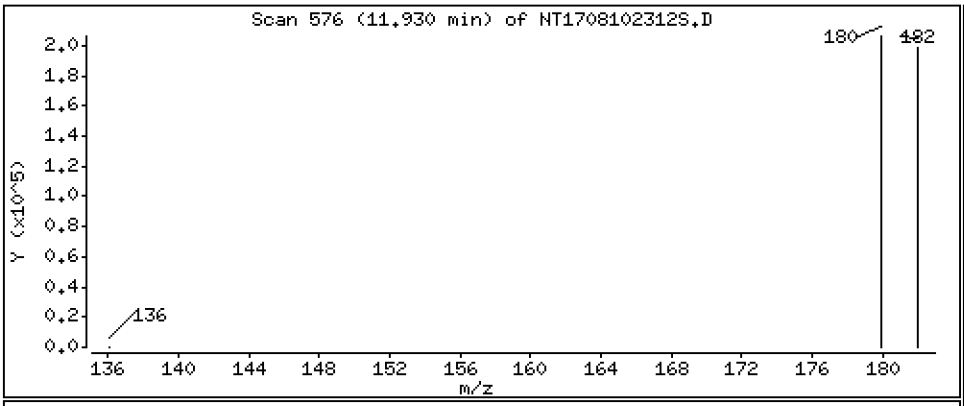
Operator: JGR

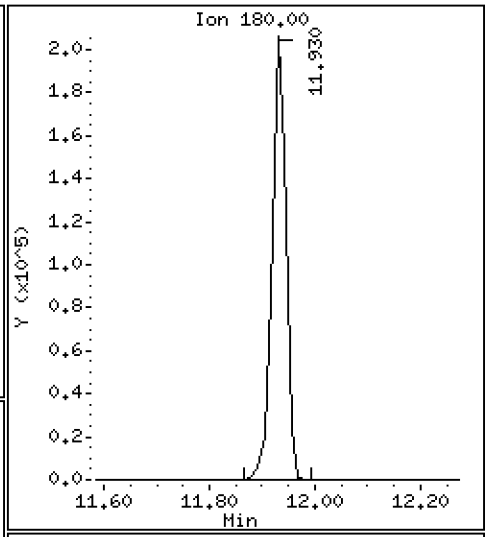
Column phase: ZB-5msi

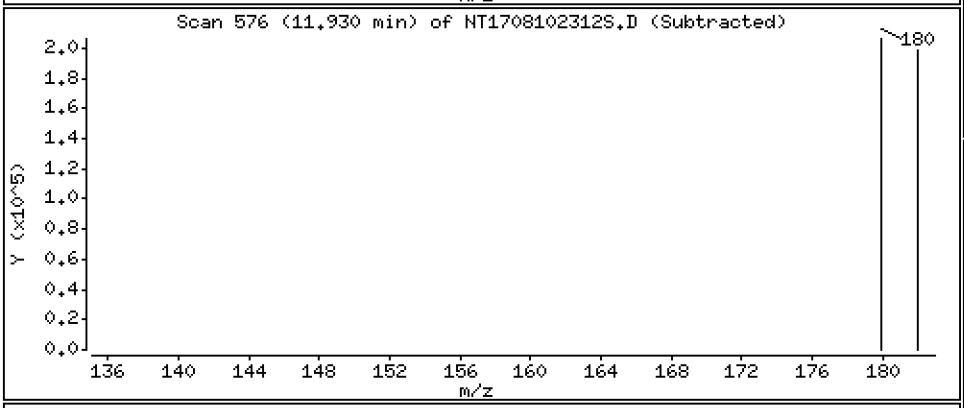
Column diameter: 0.25

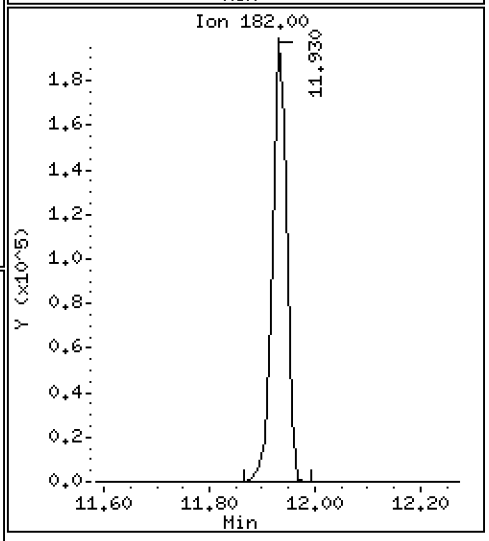
26 1,2,4-Trichlorobenzene

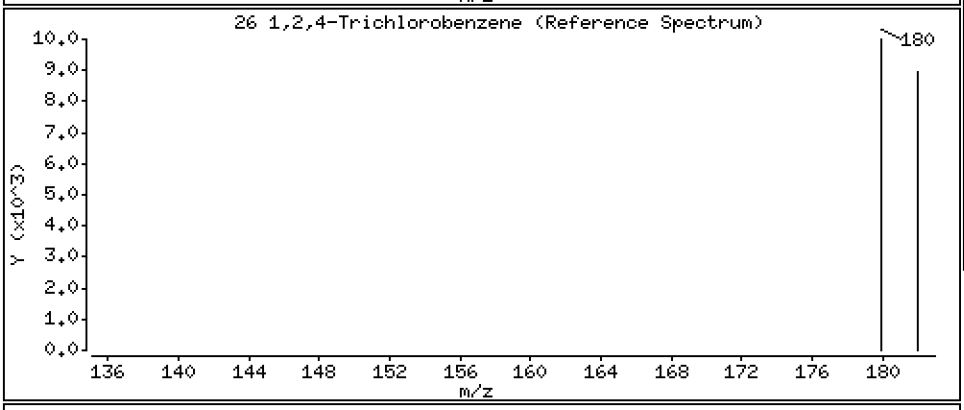
Concentration: 5.028 ug/mL

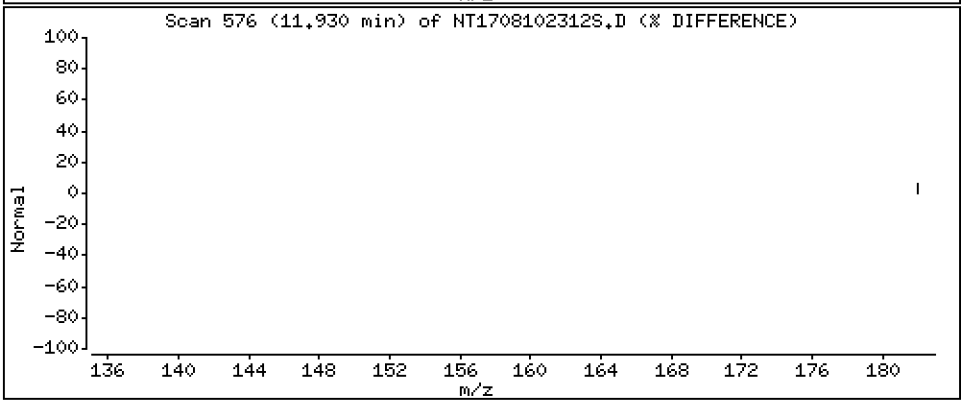












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

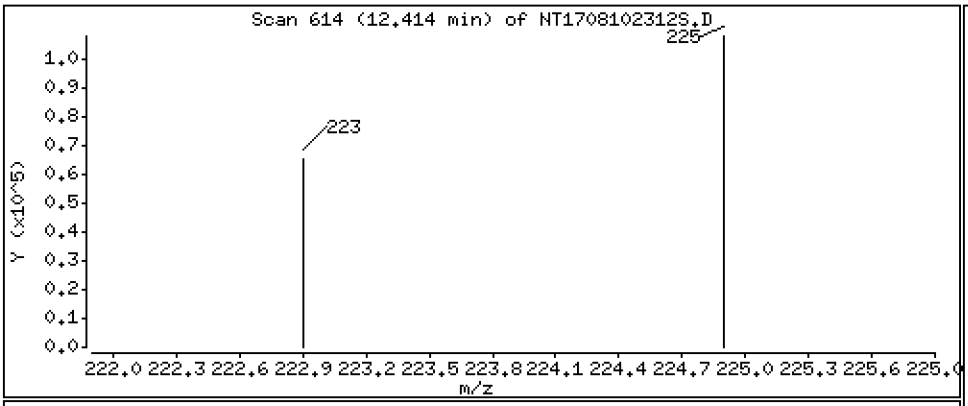
Operator: JGR

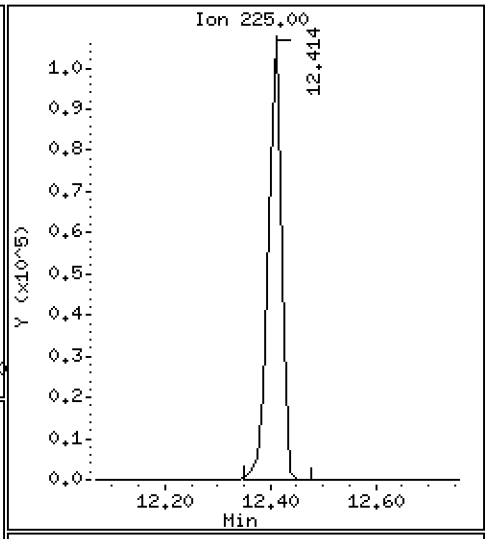
Column phase: ZB-5msi

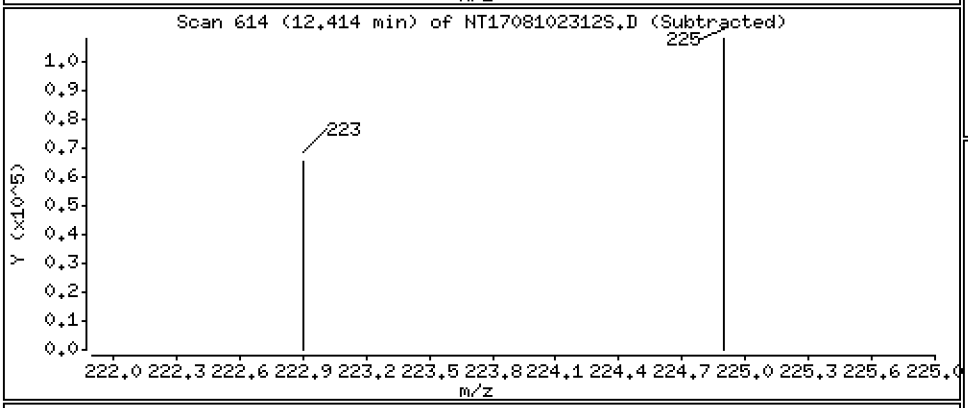
Column diameter: 0.25

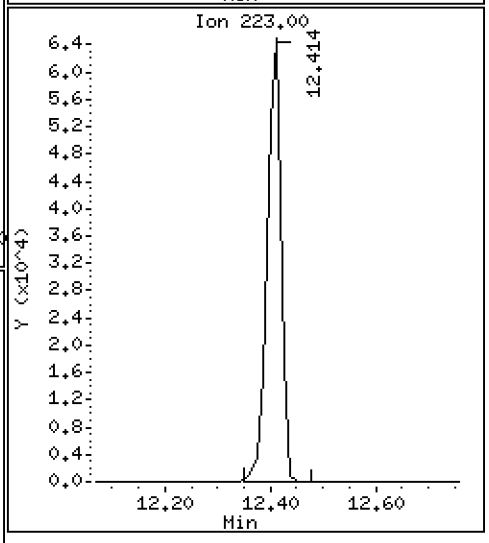
30 Hexachlorobutadiene

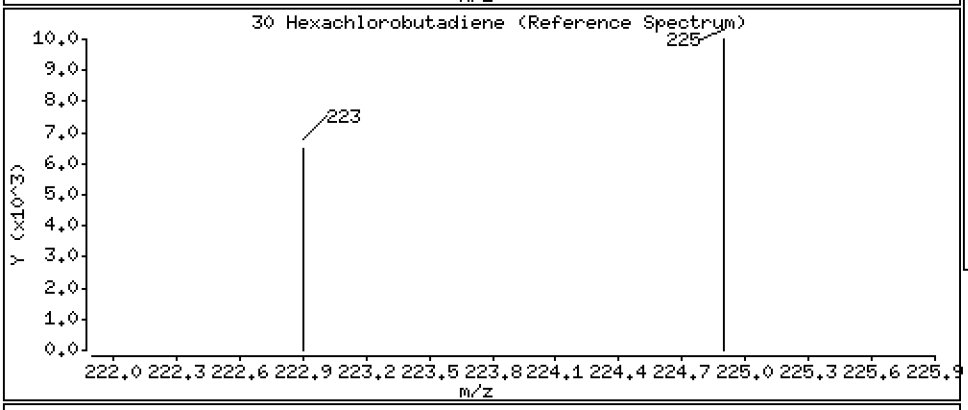
Concentration: 5.378 ug/mL

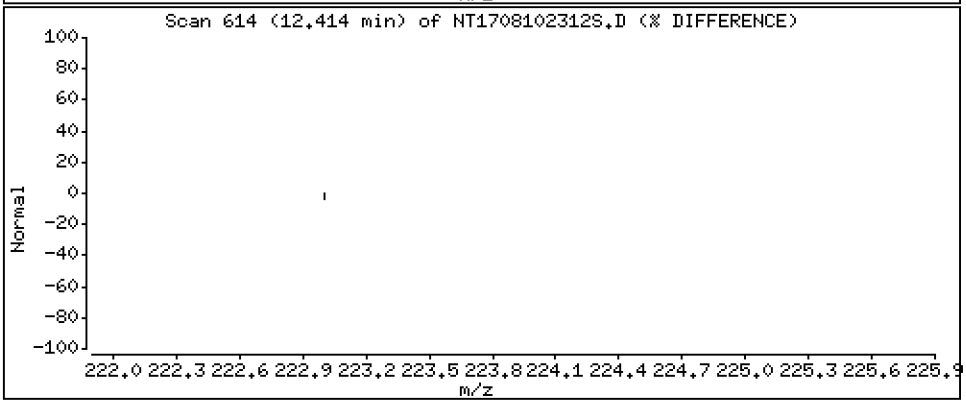












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

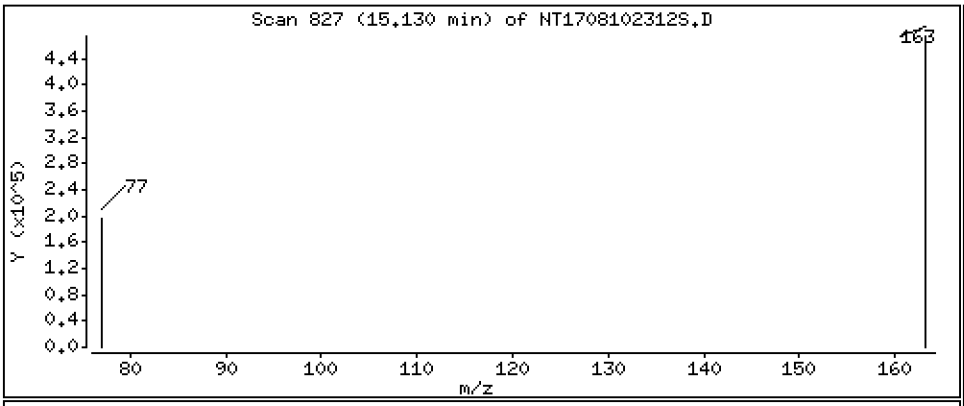
Operator: JGR

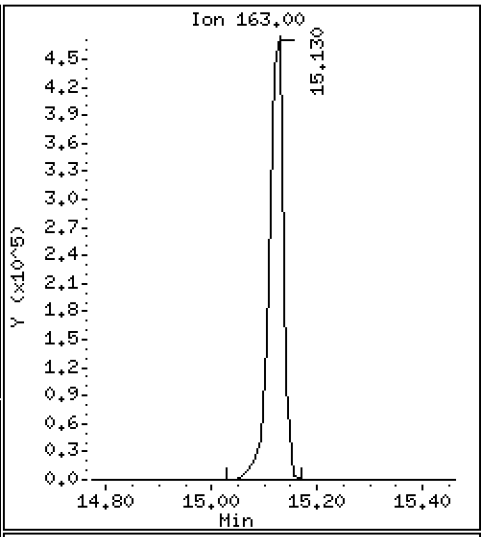
Column phase: ZB-5msi

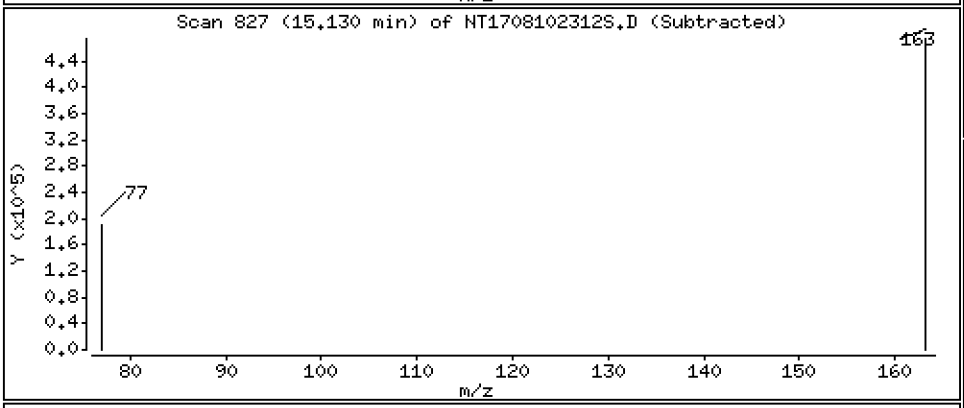
Column diameter: 0.25

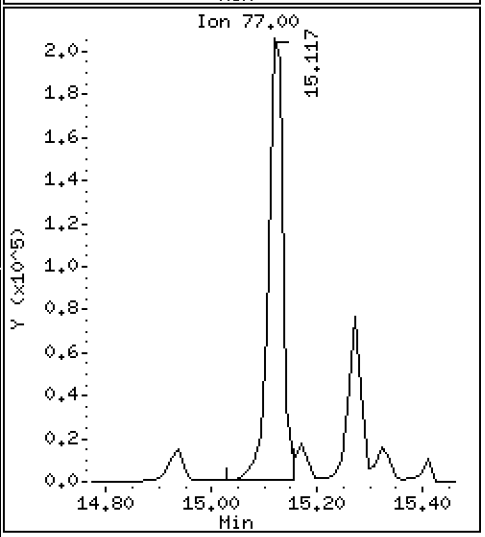
39 Dimethylphthalate

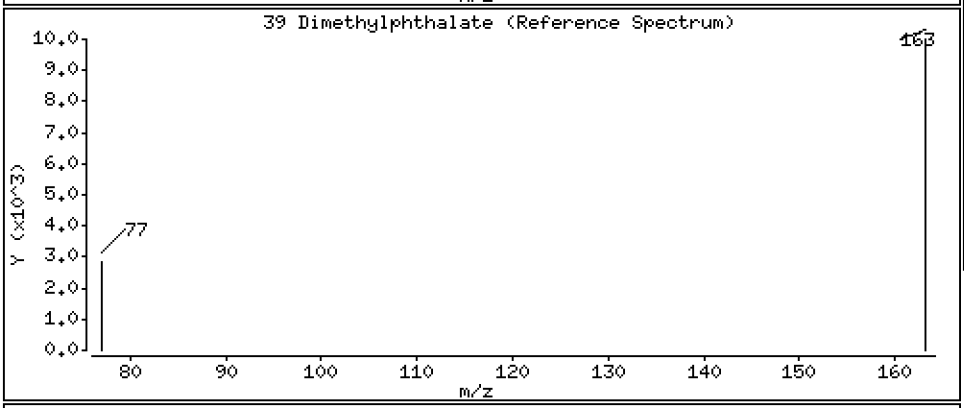
Concentration: 5.868 ug/mL

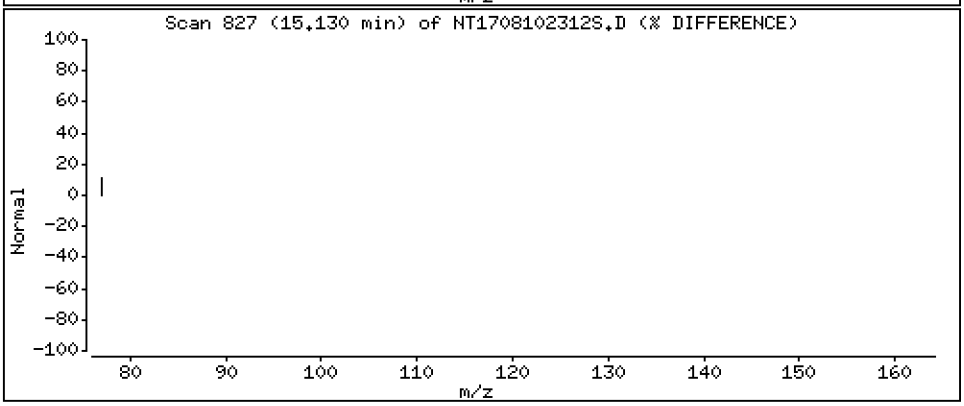












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

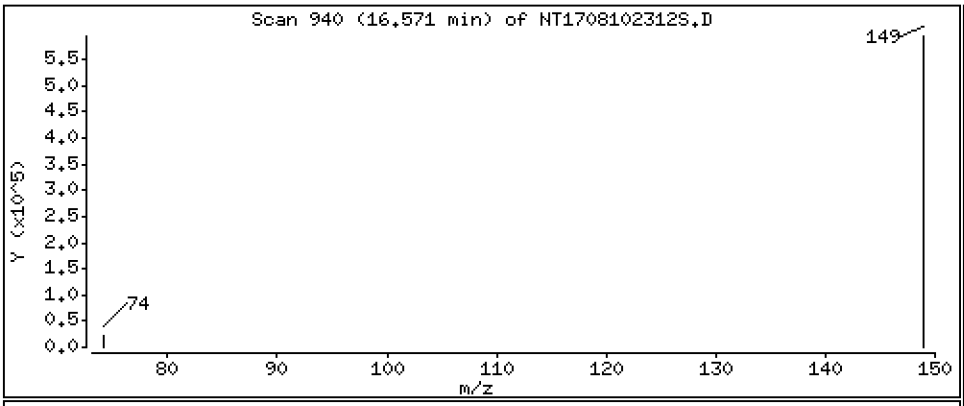
Operator: JGR

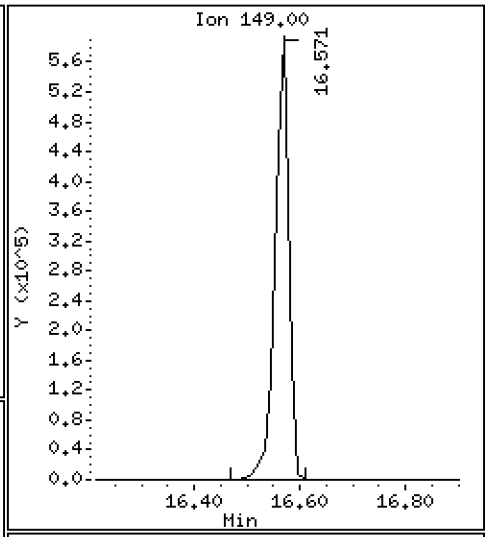
Column phase: ZB-5msi

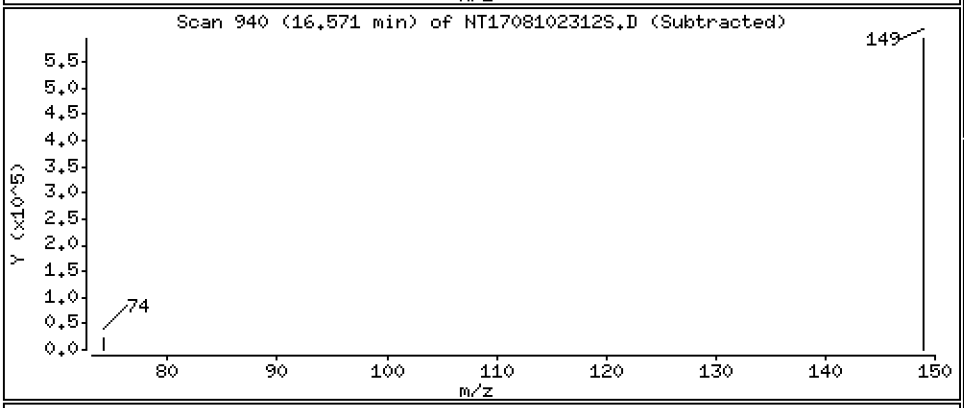
Column diameter: 0.25

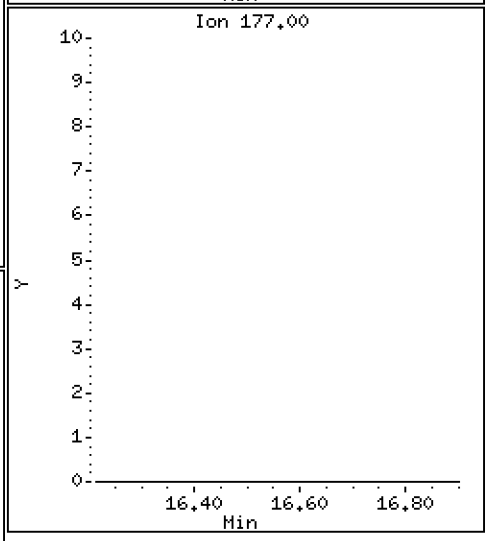
50 Diethylphthalate

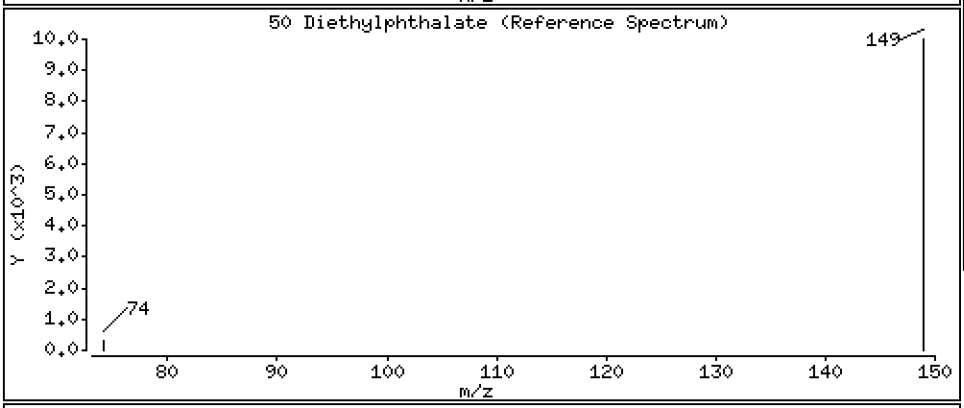
Concentration: 6.387 ug/mL

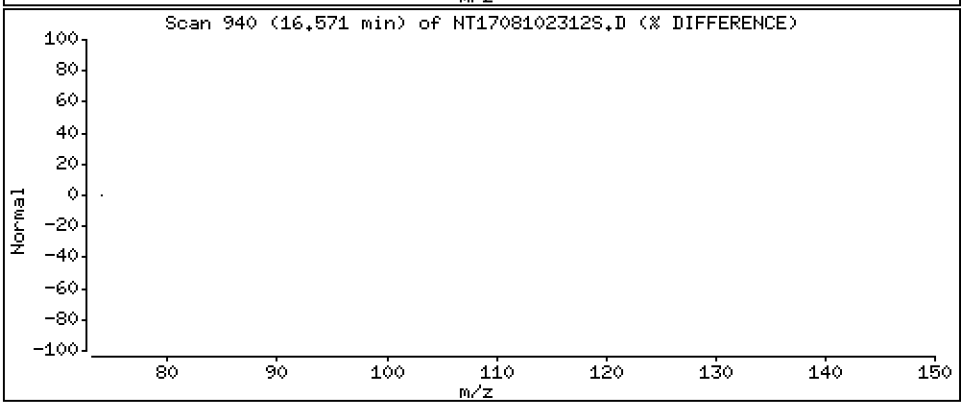












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

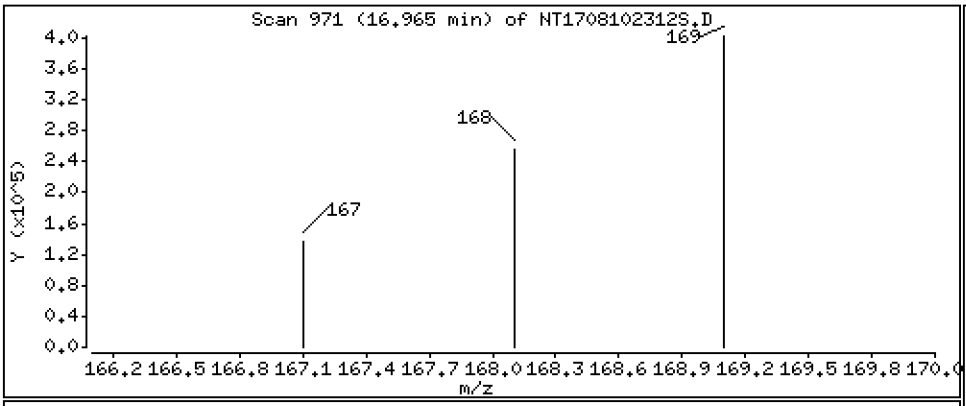
Operator: JGR

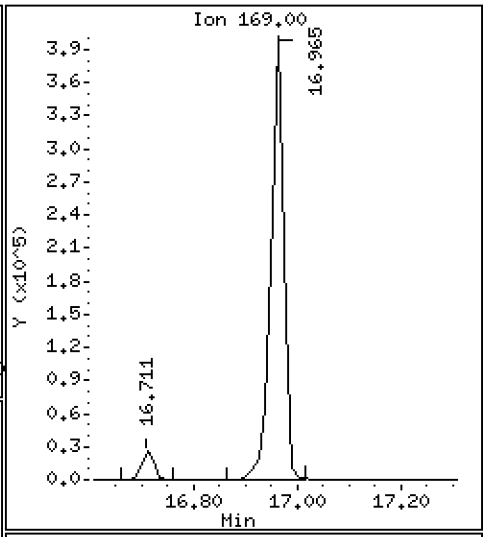
Column phase: ZB-5msi

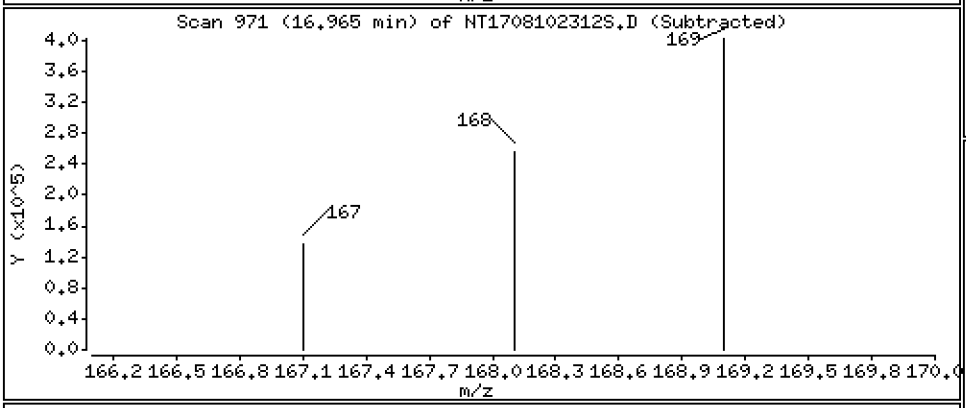
Column diameter: 0.25

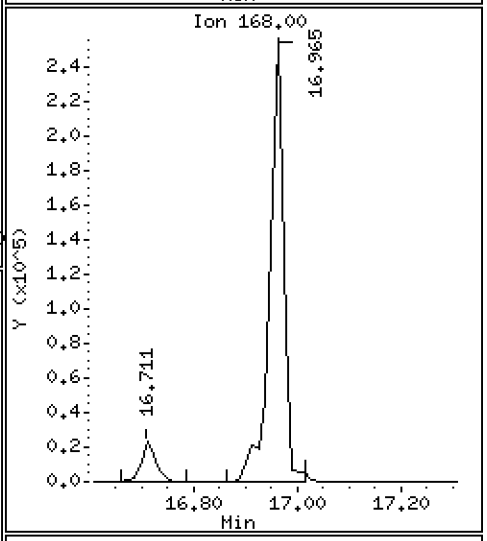
54 N-Nitrosodiphenylamine

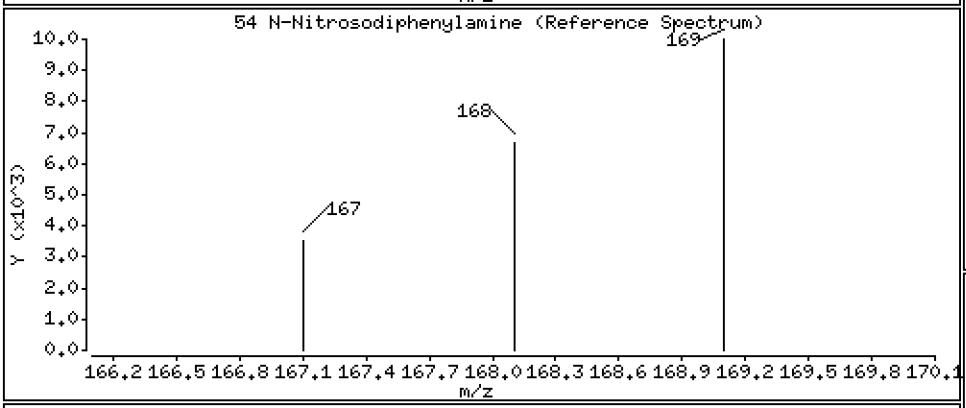
Concentration: 5.881 ug/mL

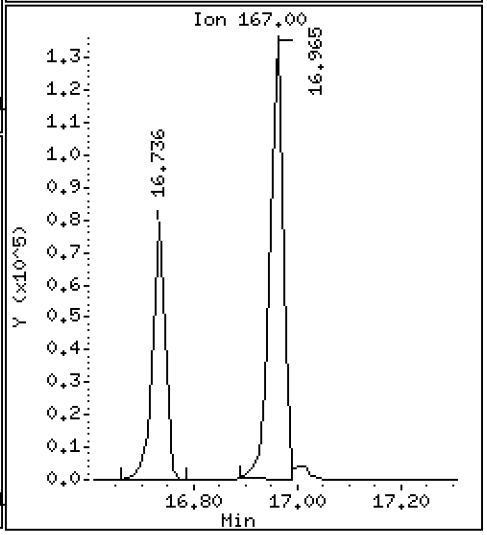


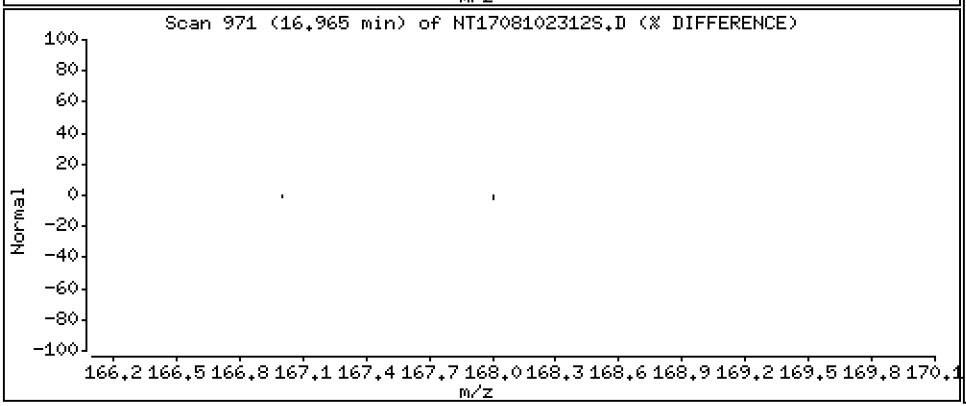












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

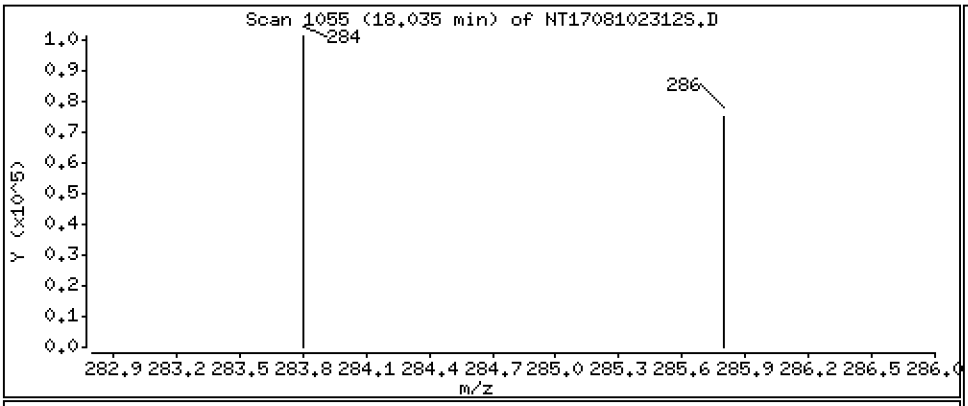
Operator: JGR

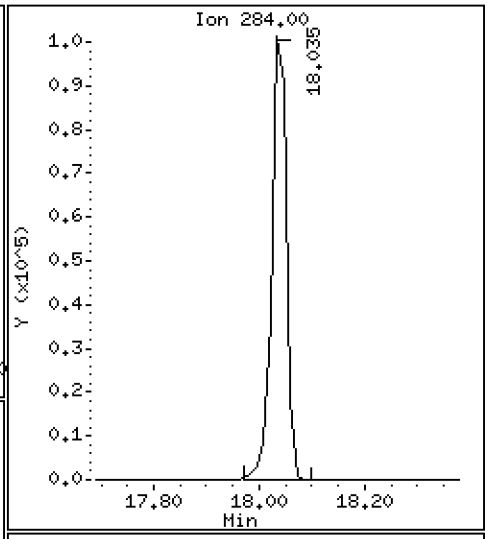
Column phase: ZB-5msi

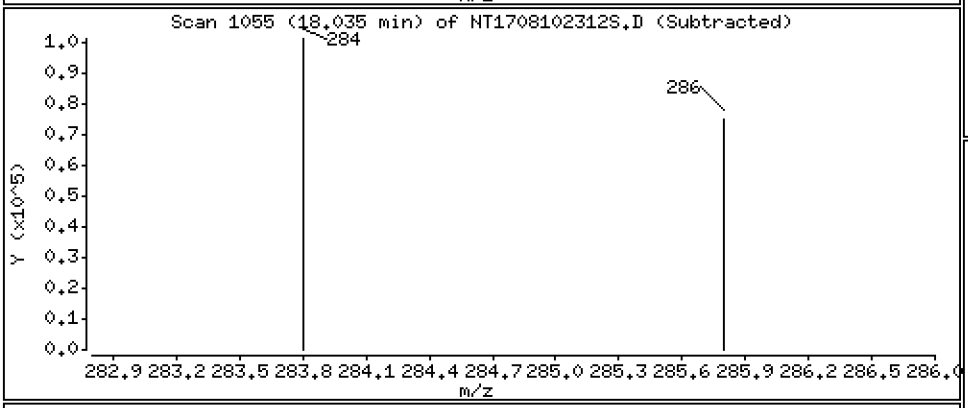
Column diameter: 0.25

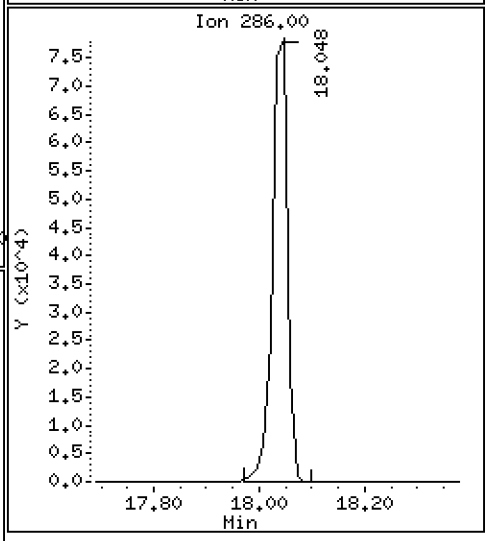
57 Hexachlorobenzene

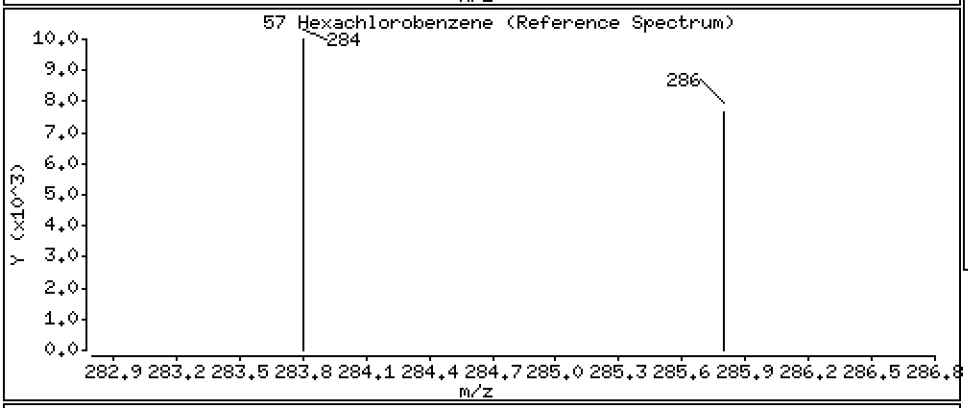
Concentration: 5.215 ug/mL

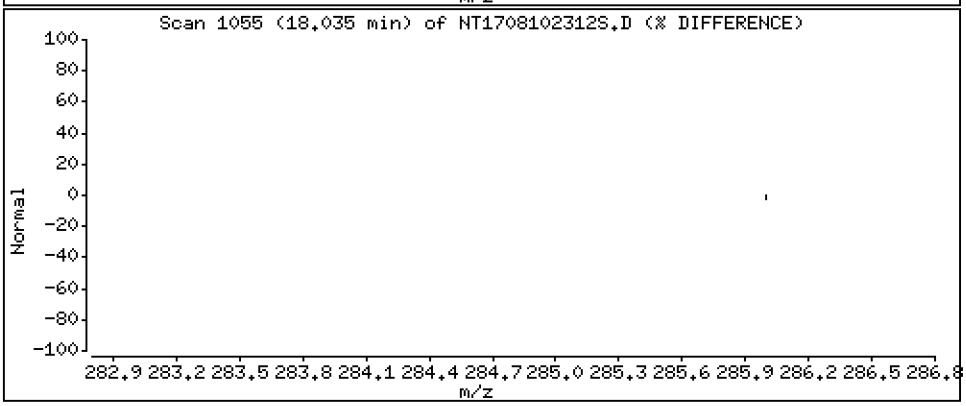












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

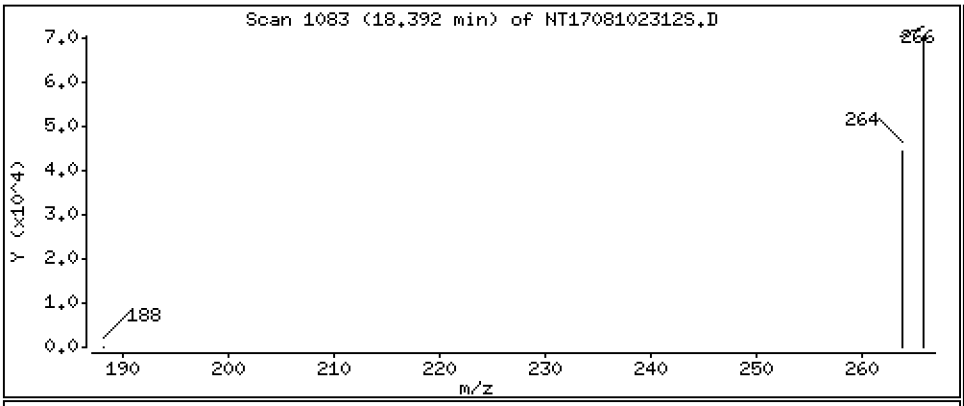
Operator: JGR

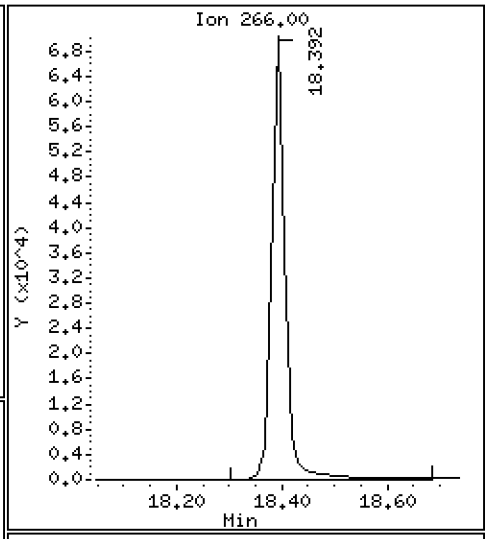
Column phase: ZB-5msi

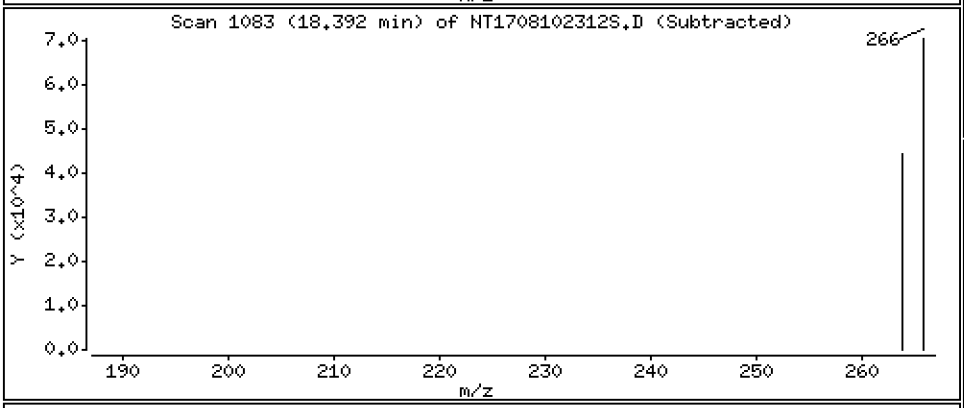
Column diameter: 0.25

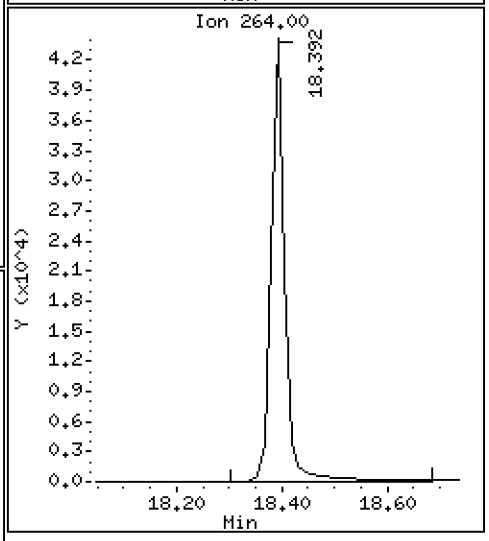
58 Pentachlorophenol

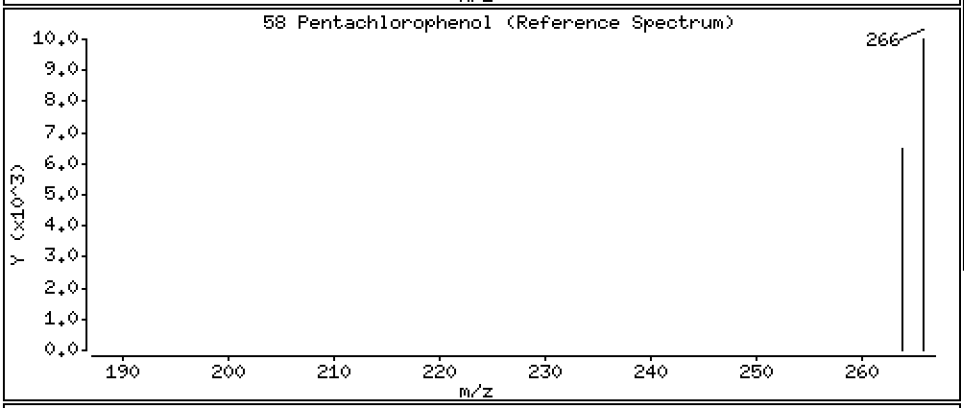
Concentration: 4.844 ug/mL

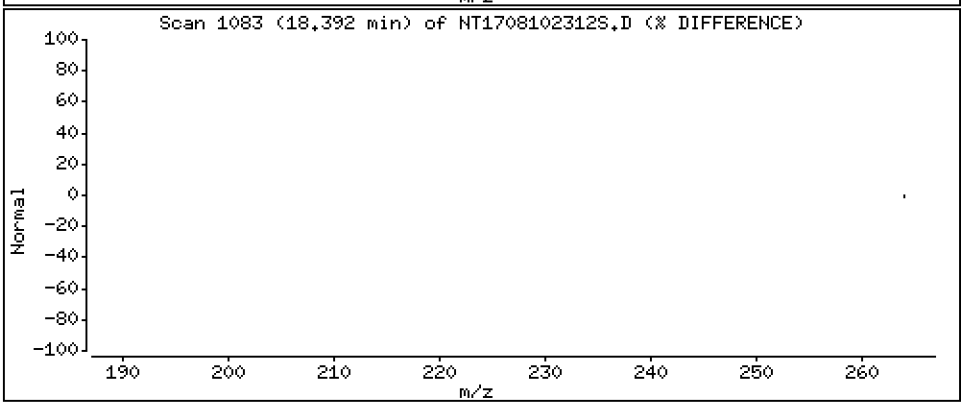












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

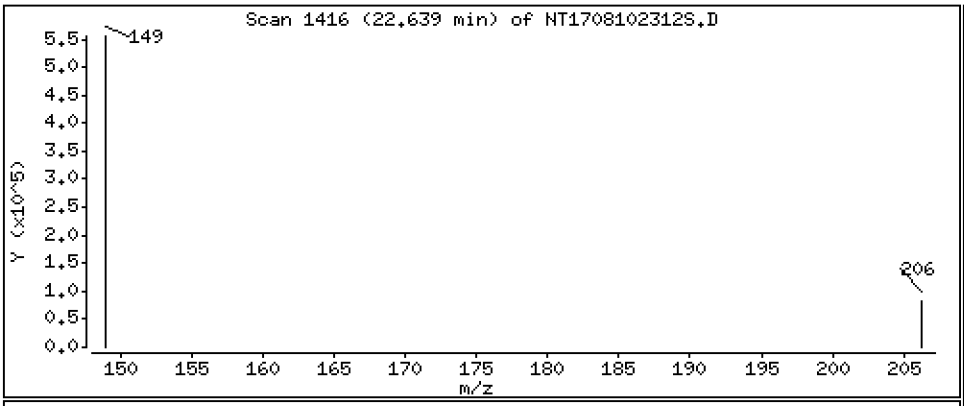
Operator: JGR

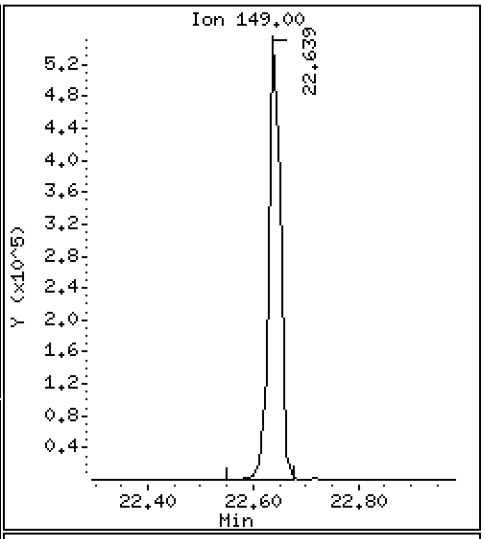
Column phase: ZB-5msi

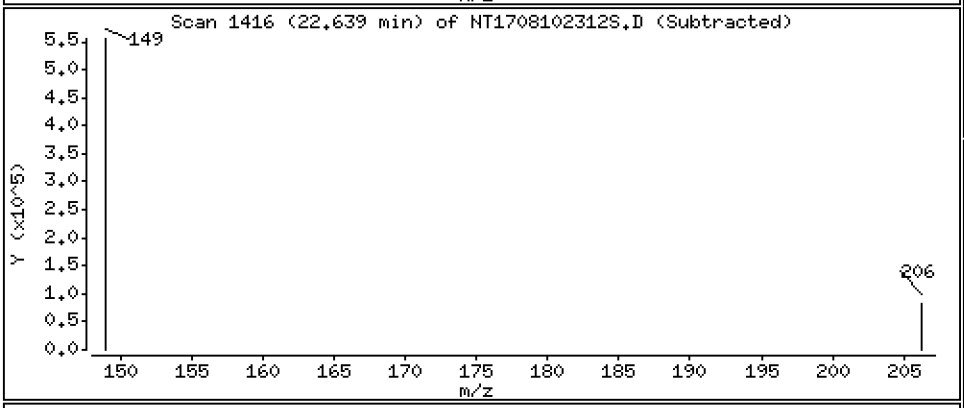
Column diameter: 0.25

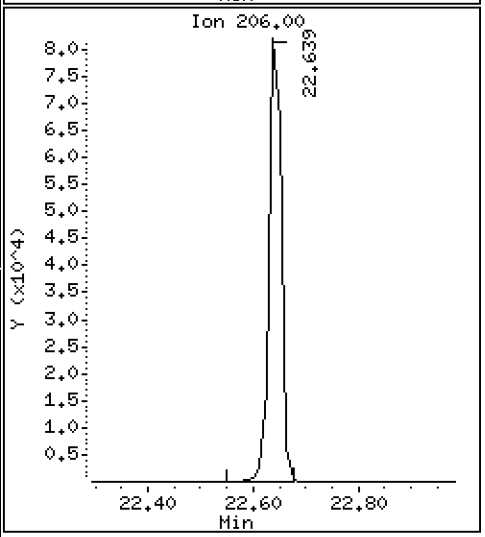
67 Butylbenzylphthalate

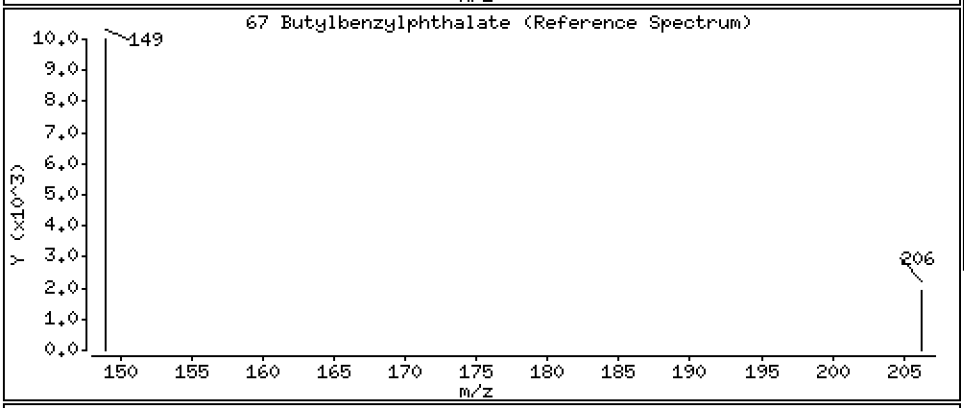
Concentration: 5.503 ug/mL

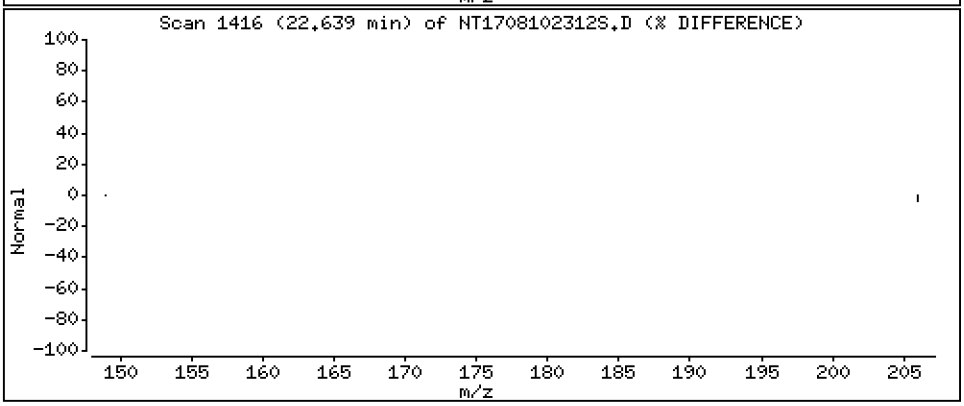












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

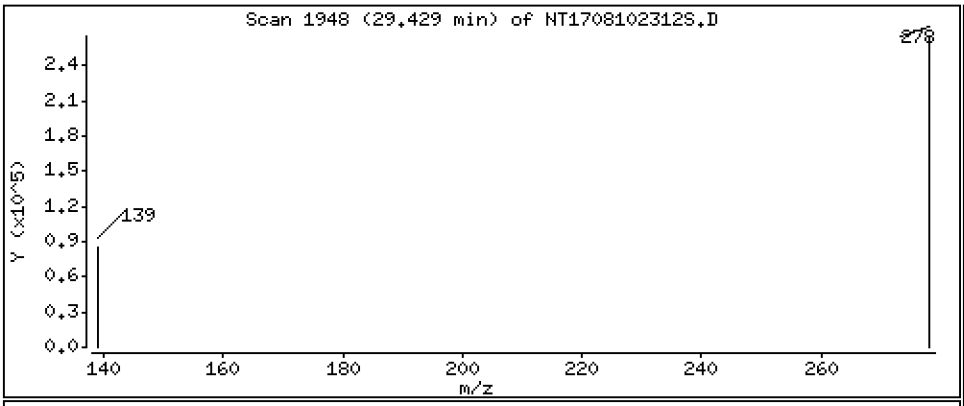
Operator: JGR

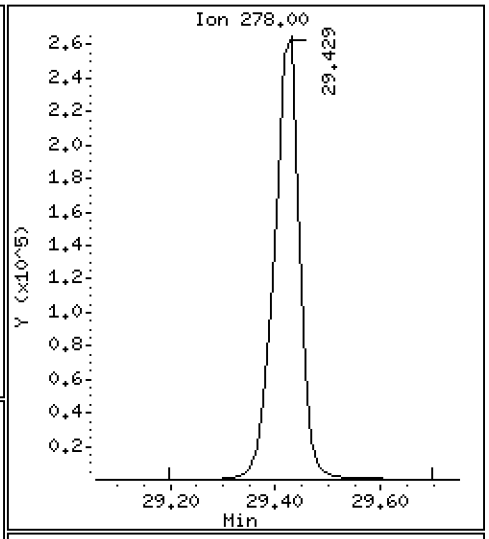
Column phase: ZB-5msi

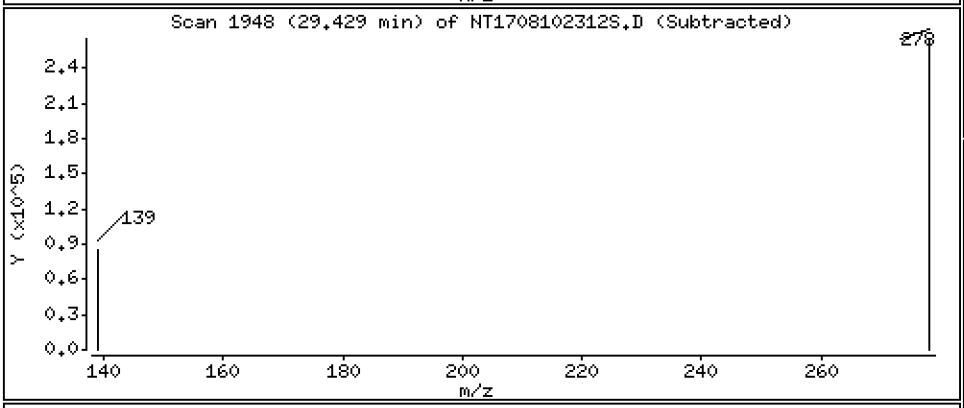
Column diameter: 0.25

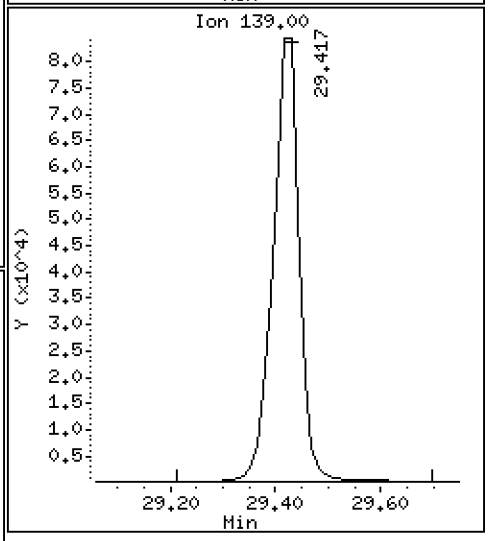
79 Dibenzo(a,h)anthracene

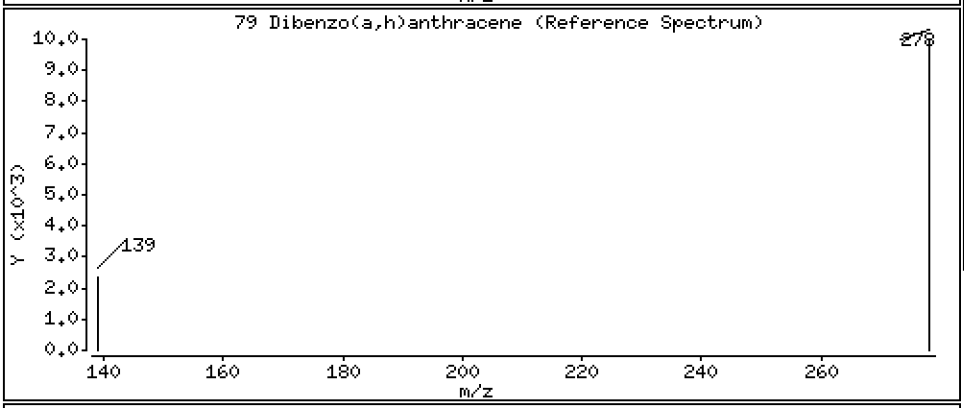
Concentration: 5.066 ug/mL

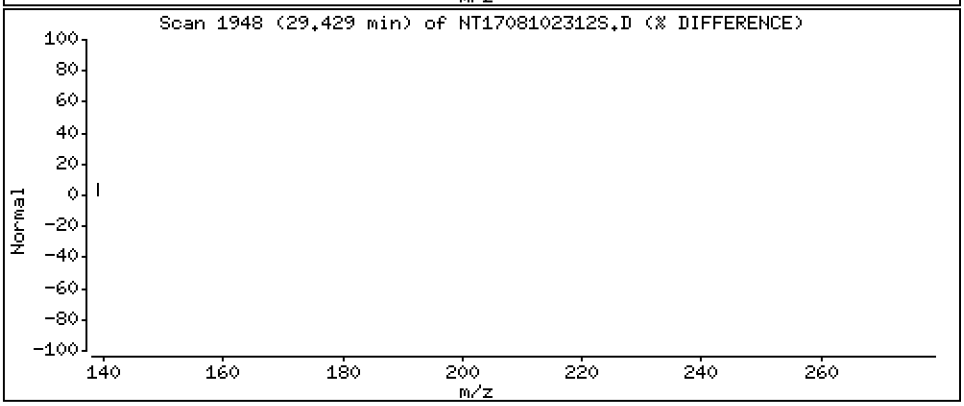












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Date : 10-AUG-2023 18:45

Client ID:

Instrument: nt17.i

Sample Info: SEQ-SCV1

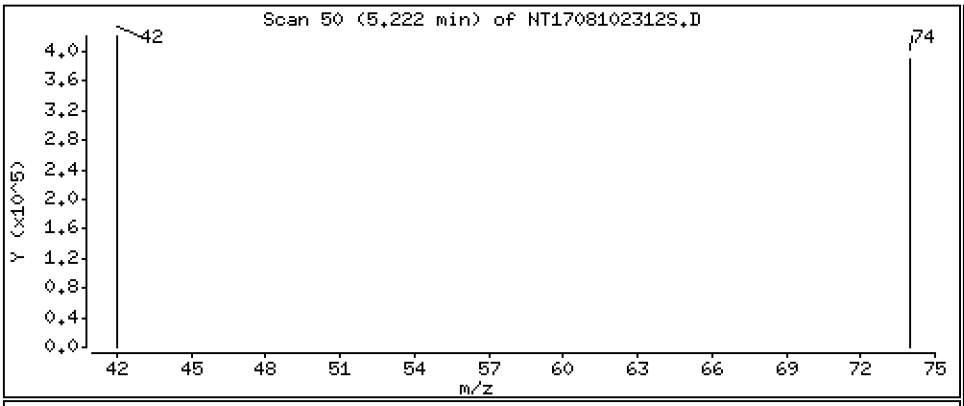
Operator: JGR

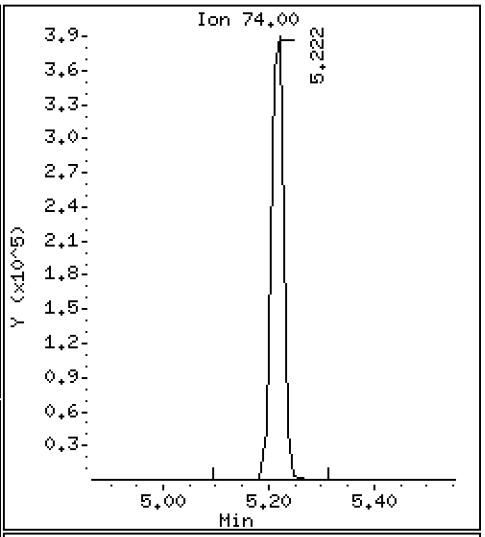
Column phase: ZB-5msi

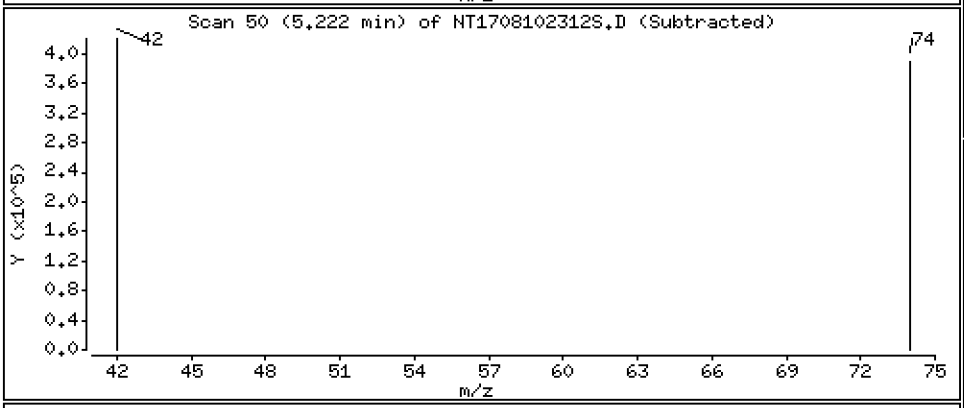
Column diameter: 0.25

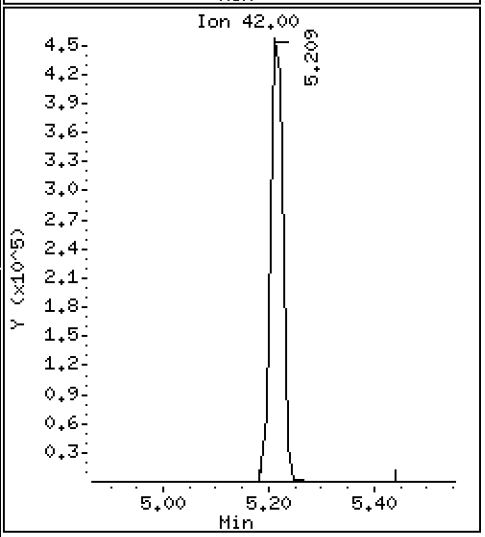
90 N-Nitrosodimethylamine

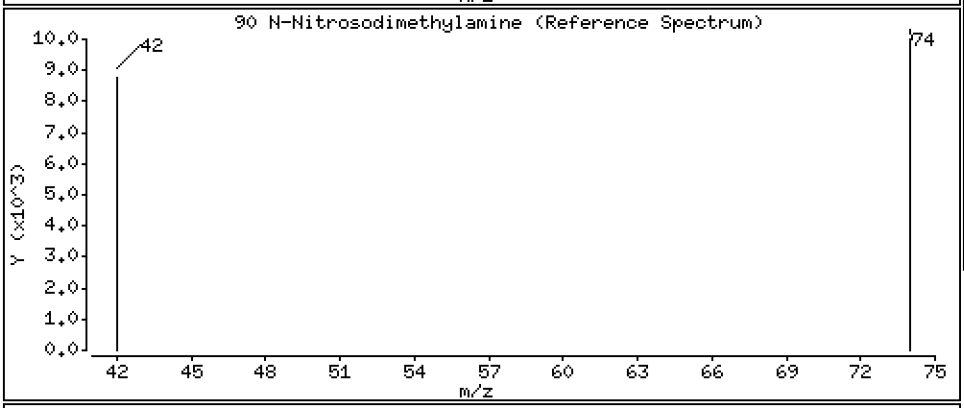
Concentration: 5.656 ug/mL

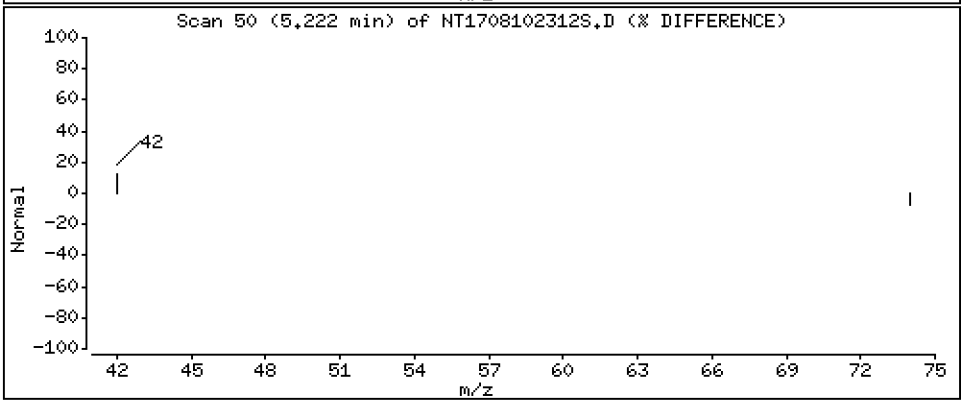












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230810.b\SIM.B\NT1708102312S.D
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Inj Date : 10-AUG-2023 18:45
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Meth Date : 11-Aug-2023 08:13 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

			QUANT SIG						CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1	2-Fluorophenol	112	Compound Not Detected.						
	3	Phenol	94	8.891	8.891	(0.932)	932540		5.50239	5.502
	7	1,3-Dichlorobenzene	146	9.477	9.477	(0.993)	591053		5.15578	5.156
*	8	1,4-Dichlorobenzene-d4	152	9.541	9.541	(1.000)	267754		4.00000	
	9	1,4-Dichlorobenzene	146	9.566	9.566	(1.003)	573424		5.16858	5.169
	11	Benzyl alcohol	79	9.796	9.796	(1.027)	709897		6.05184	6.052
	12	1,2-Dichlorobenzene	146	9.924	9.924	(1.040)	561360		5.21616	5.216
	13	2-Methylphenol	108	10.001	10.001	(1.048)	525371		5.11241	5.112
	15	4-Methylphenol	108	10.282	10.269	(1.078)	589793		5.49122	5.491
	16	N-Nitroso-di-n-propylamine	70	10.359	10.346	(1.086)	677820		6.17127	6.171
	22	2,4-Dimethylphenol	107	11.317	11.316	(0.941)	497084		4.51954	4.520
	24	Benzoic acid	105	11.495	11.521	(0.955)	749206		9.95900	9.959
	26	1,2,4-Trichlorobenzene	180	11.929	11.929	(0.992)	377826		5.02775	5.028
*	27	Naphthalene-d8	136	12.031	12.018	(1.000)	1096182		4.00000	
	30	Hexachlorobutadiene	225	12.413	12.413	(1.032)	189282		5.37846	5.378
	39	Dimethylphthalate	163	15.130	15.117	(0.967)	949831		5.86824	5.868
*	42	Acenaphthene-d10	162	15.640	15.627	(1.000)	498001		4.00000	
	50	Diethylphthalate	149	16.570	16.557	(1.059)	1074870		6.38666	6.387
	54	N-Nitrosodiphenylamine	169	16.965	16.965	(0.909)	685167		5.88111	5.881
	57	Hexachlorobenzene	284	18.034	18.034	(0.966)	199043		5.21462	5.215
	58	Pentachlorophenol	266	18.391	18.392	(0.985)	125476		4.84413	4.844
*	59	Phenanthrene-d10	188	18.672	18.672	(1.000)	810370		4.00000	
$	66	Terphenyl-d14	244	Compound Not Detected.						
	67	Butylbenzylphthalate	149	22.638	22.639	(0.957)	857851		5.50335	5.503
*	69	Chrysene-d12	240	23.646	23.646	(1.000)	587436		4.00000	
*	77	Perylene-d12	264	26.452	26.452	(1.000)	595930		4.00000	
	79	Dibenzo(a,h)anthracene	278	29.429	29.404	(1.113)	891713		5.06606	5.066
	90	N-Nitrosodimethylamine	74	5.221	5.209	(0.547)	639879		5.65625	5.656(M)

QC Flag Legend

M - Compound response manually integrated.

Report Date: 15-Aug-2023 16:33

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1708102312S.D
Lab Smp Id: SEQ-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230810.b\SIM.B\SIMABN2.m
Misc Info:

Calibration Date: 10-AUG-2023
Calibration Time: 15:01
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	319389	159695	638778	267754	-16.17
27 Naphthalene-d8	1274686	637343	2549372	1096182	-14.00
42 Acenaphthene-d10	569885	284943	1139770	498001	-12.61
59 Phenanthrene-d10	915829	457915	1831658	810370	-11.52
69 Chrysene-d12	653460	326730	1306920	587436	-10.10
77 Perylene-d12	654887	327444	1309774	595930	-9.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.54	9.04	10.04	9.54	0.00
27 Naphthalene-d8	12.02	11.52	12.52	12.03	0.11
42 Acenaphthene-d10	15.64	15.14	16.14	15.64	0.00
59 Phenanthrene-d10	18.67	18.17	19.17	18.67	0.00
69 Chrysene-d12	23.65	23.15	24.15	23.65	0.00
77 Perylene-d12	26.45	25.95	26.95	26.45	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708102312S.D

Lab ID: SEQ-SCV1
nt17.i, 20230810.b\SIM.B\SIMABN2.m,   10-AUG-2023 18:45

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

** FIRST SURROGATE NOT FOUND. ICAL Check not performed **

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.B/NT1708102309S.D

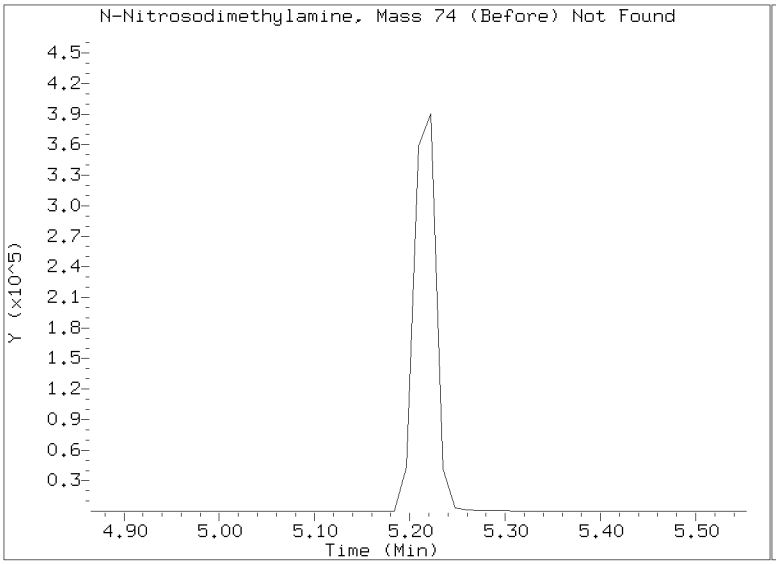
On Column LOD for nt17.i, SIM.B\SIMABN2.m, PSDDA.sub = 0.0000

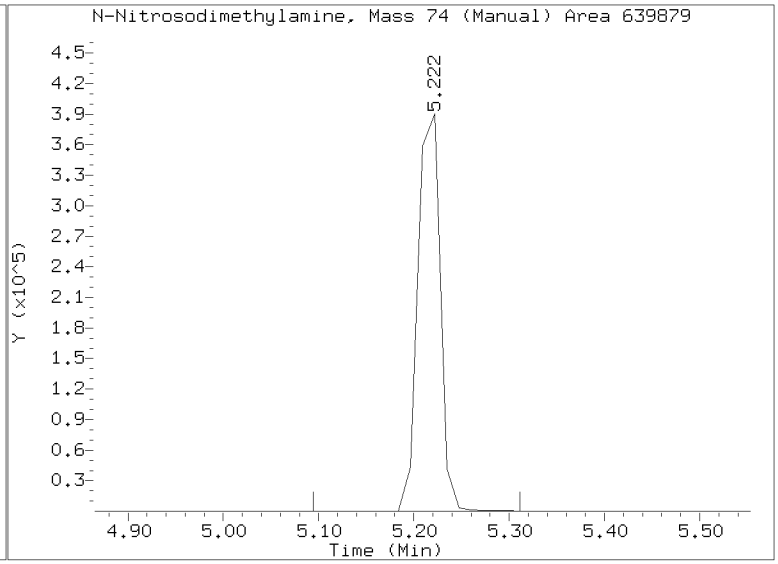
Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230810.b/SIM.B/NT1708102312S.D
Injection Date: 10-AUG-2023 18:45
Lab ID:SEQ-SCV1 Client ID:
Report Date: 08/15/2023 16:33





Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GH00045
Lab File ID:	NT1708292319.D	Calibration Date:	08/10/2023
Sequence:	SLH0447	Injection Date:	08/29/23
Lab Sample ID:	SLH0447-CCV1	Injection Time:	22:47
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	1.0000	0.9	1.6574040	1.5608060		-5.8	+/-50
1,2-Dichlorobenzene	A	1.0000	0.9	1.6077360	1.5030520		-6.5	+/-50
Benzyl Alcohol	A	1.0000	1.0	1.7523940	1.7822480		1.7	+/-50
Benzoic acid	A	4.0000	4.1	0.1715968	0.2744552		2.8	+/-50
2,4-Dimethylphenol	A	2.0000	2.4	0.4013400	0.4843295		20.7	+/-50
1,2,4-Trichlorobenzene	A	1.0000	1.0	0.2742178	0.2662500		-2.9	+/-50
N-Nitrosodiphenylamine	A	1.0000	1.1	0.5750605	0.6424628		11.7	+/-50
Pentachlorophenol	A	2.0000	1.3	0.0738457	0.0806339		-36.9	+/-50
2-Fluorophenol	A	1.5000	1.86	1.6608890	2.0598890		24.0	+/-50
p-Terphenyl-d14	A	1.0000	1.37	0.5535288	0.7599664		37.3	+/-50

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292319.D

Date : 29-AUG-2023 22:47

Client ID:

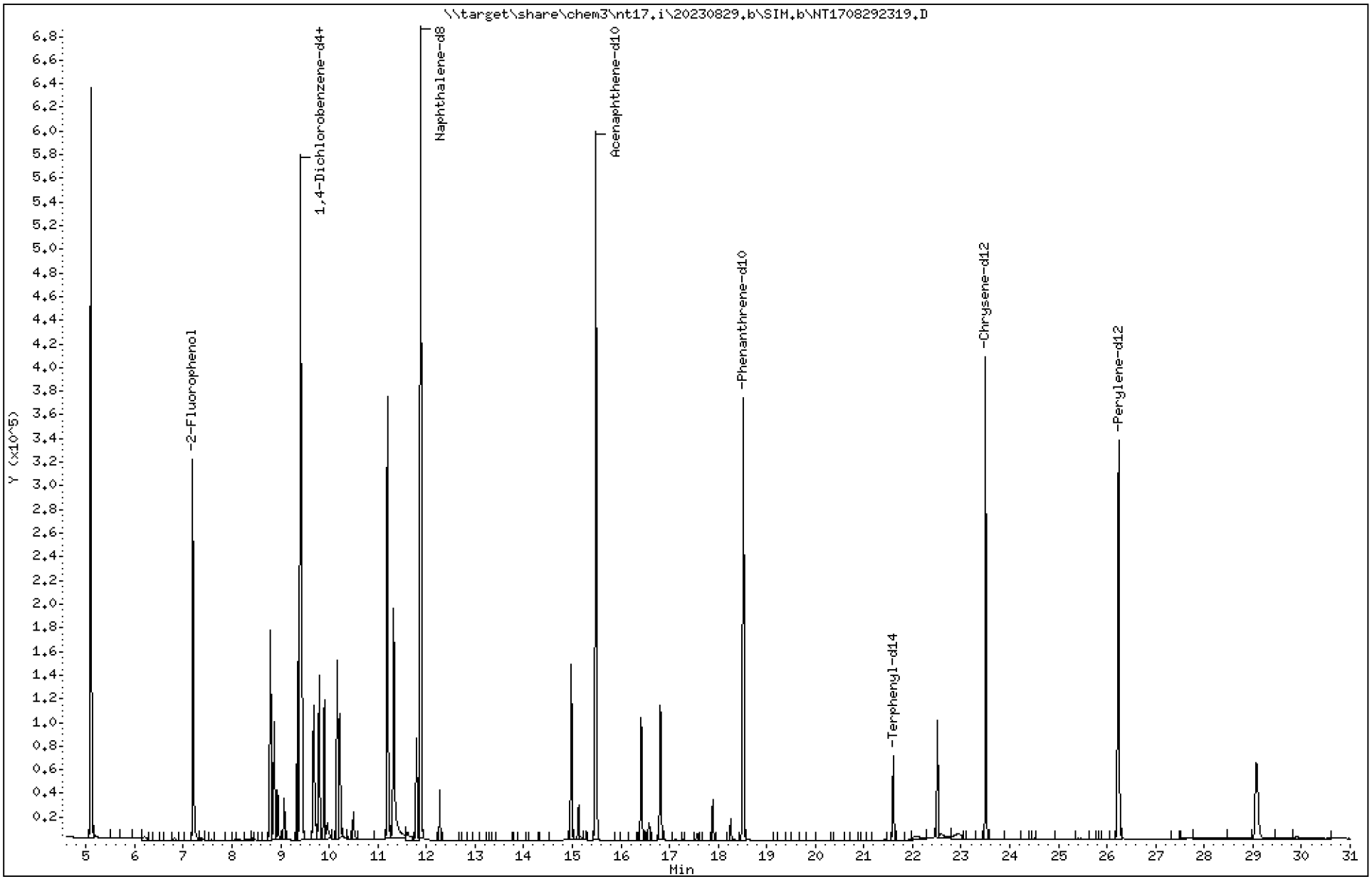
Sample Info: SEQ-CCV1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

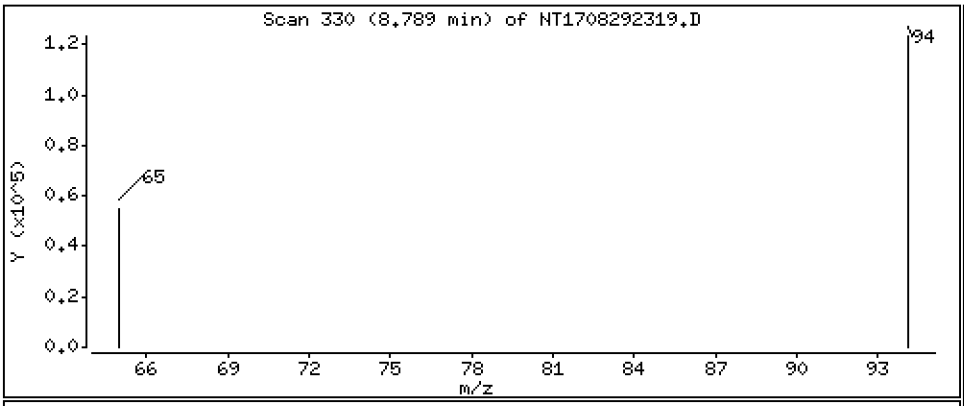
Operator: JGR

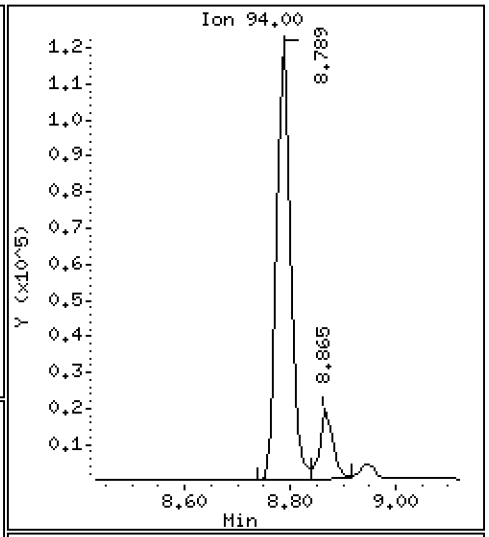
Column phase: ZB-5msi

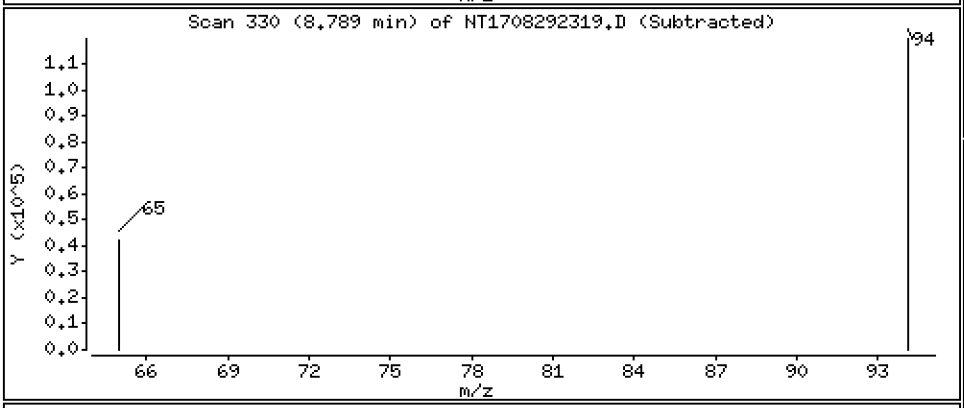
Column diameter: 0.25

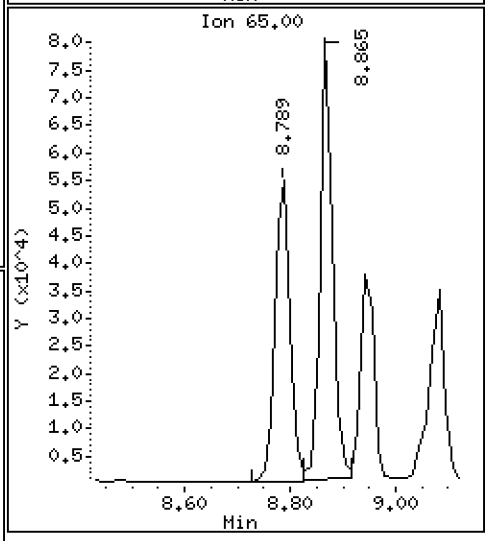
3 Phenol

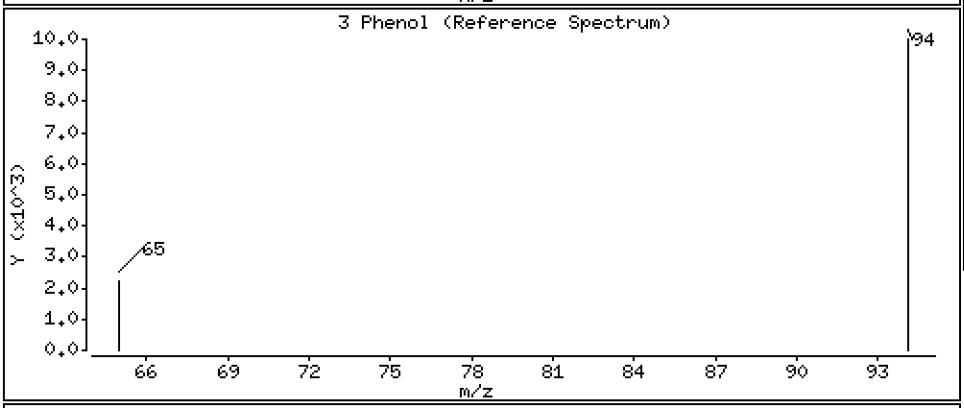
Concentration: 1.003 ug/mL

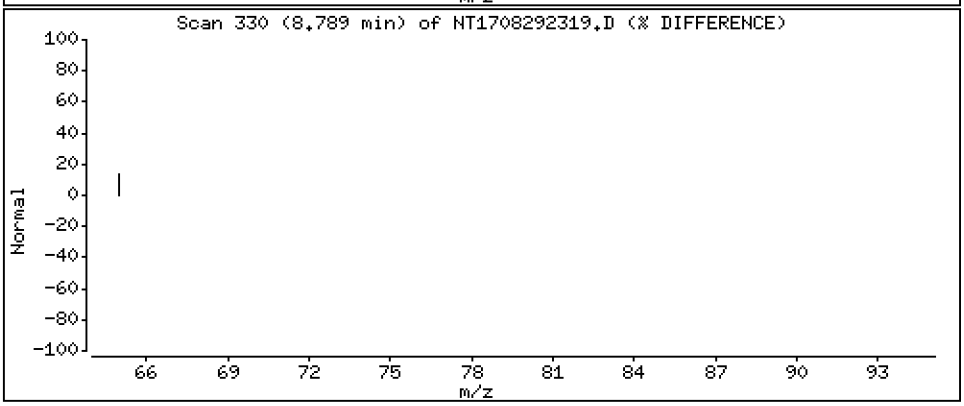












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Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

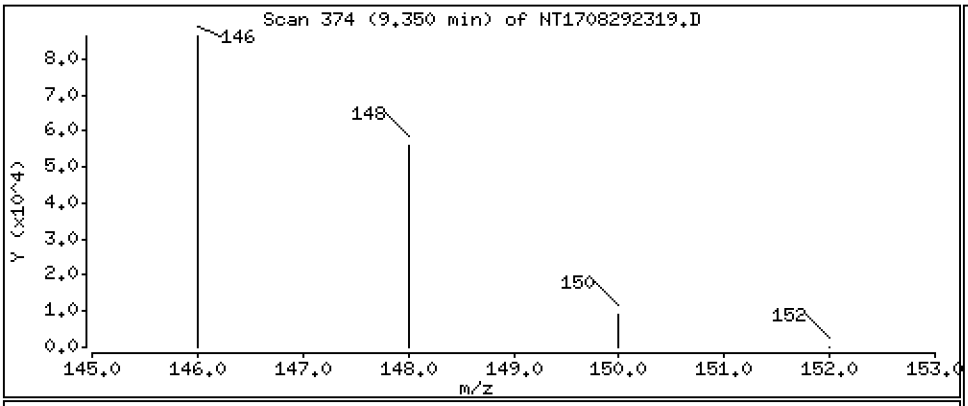
Operator: JGR

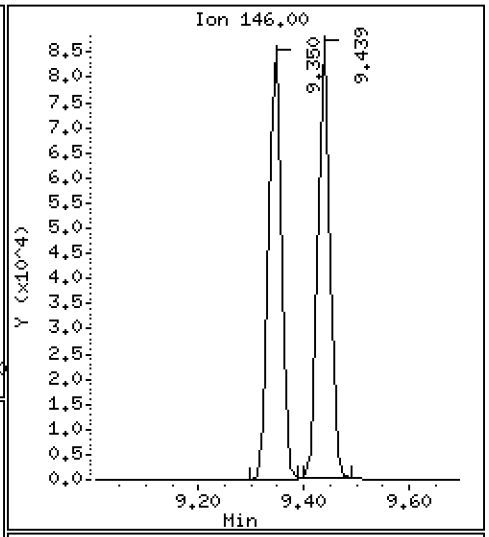
Column phase: ZB-5msi

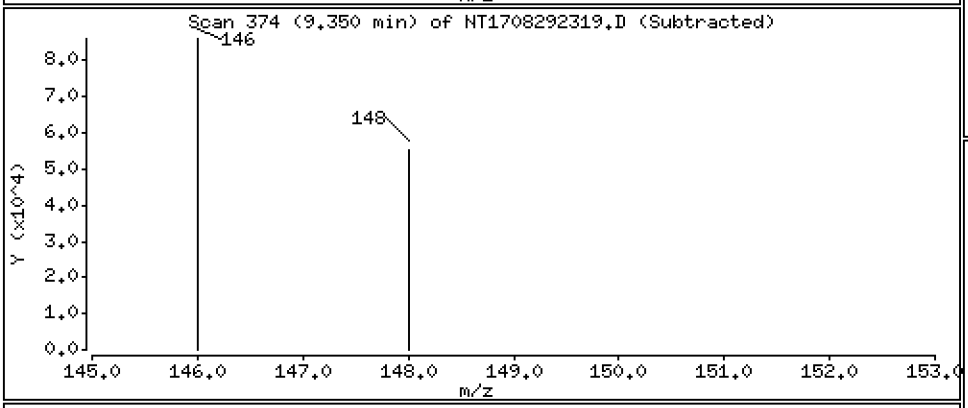
Column diameter: 0.25

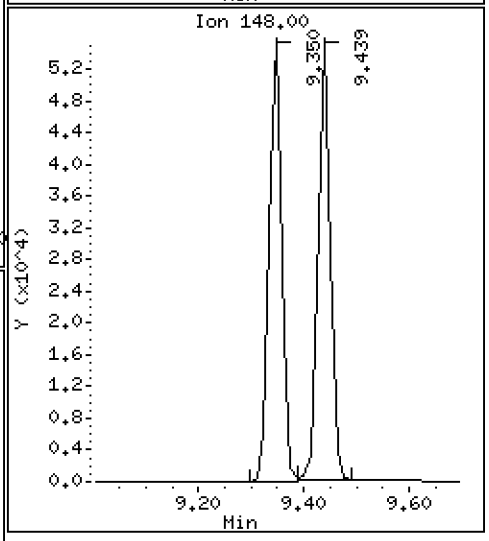
7 1,3-Dichlorobenzene

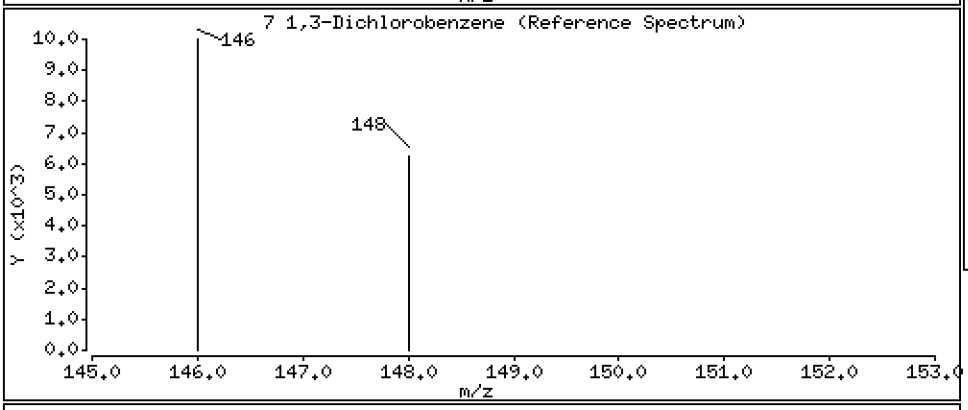
Concentration: 0.9609 ug/mL

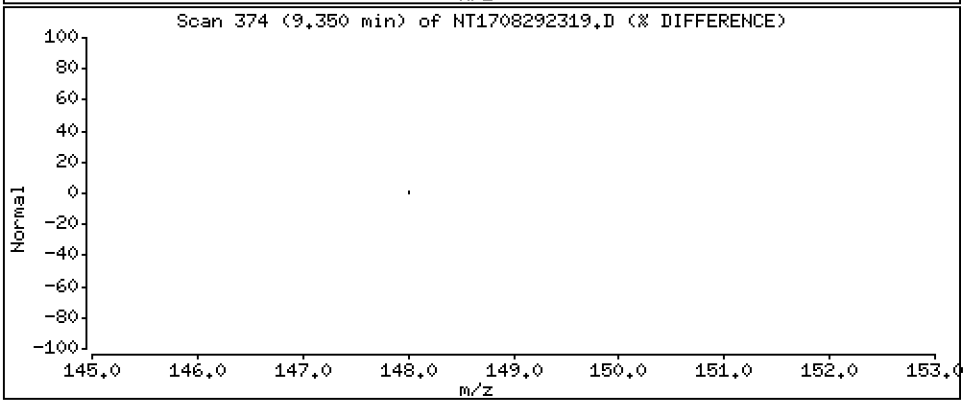












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Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

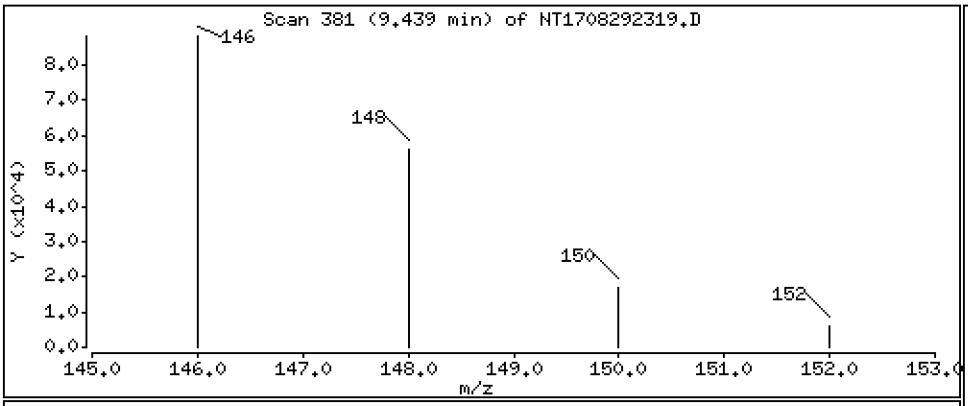
Operator: JGR

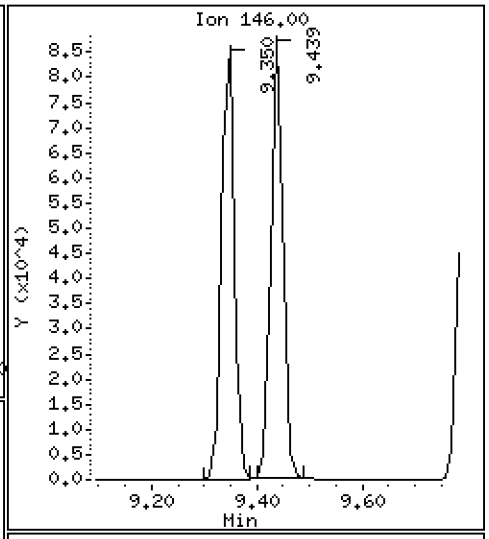
Column phase: ZB-5msi

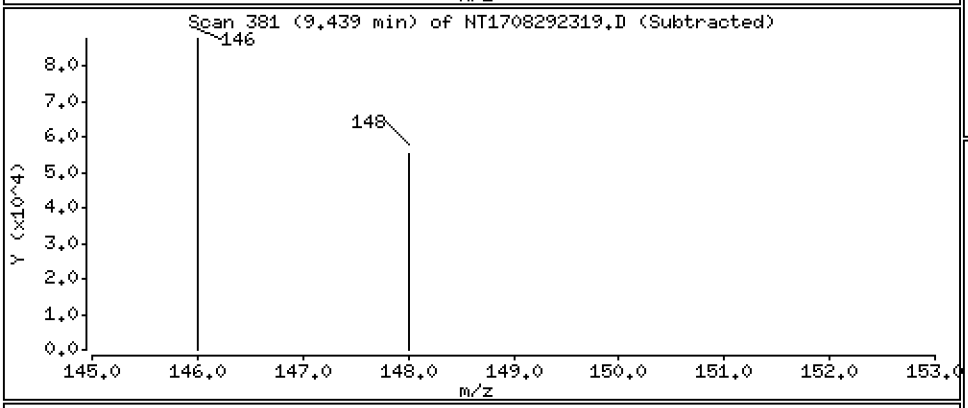
Column diameter: 0.25

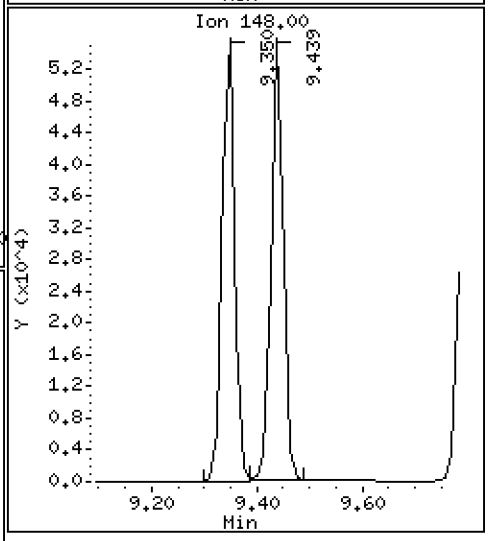
9 1,4-Dichlorobenzene

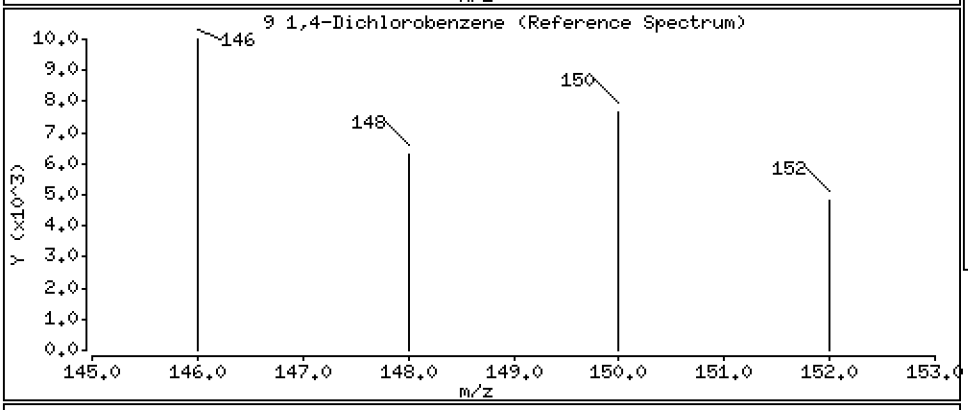
Concentration: 0.9417 ug/mL

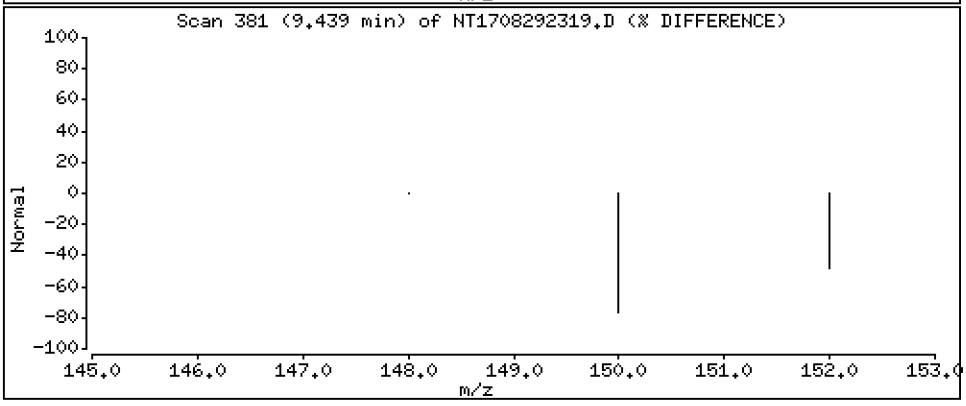












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Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

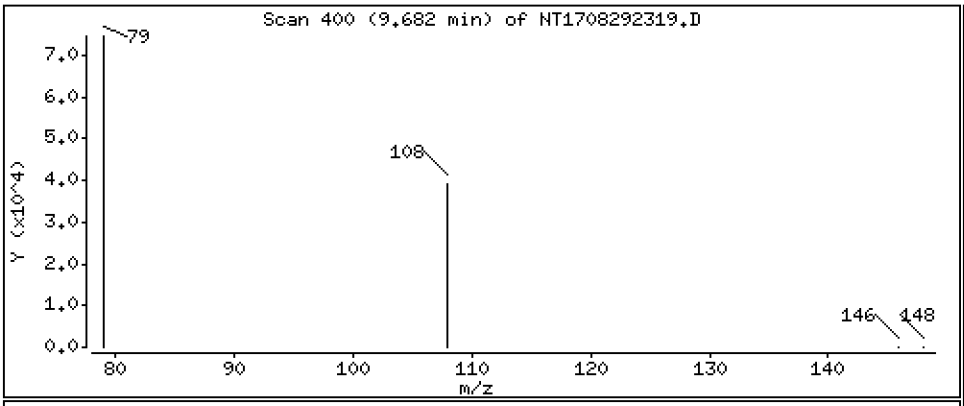
Operator: JGR

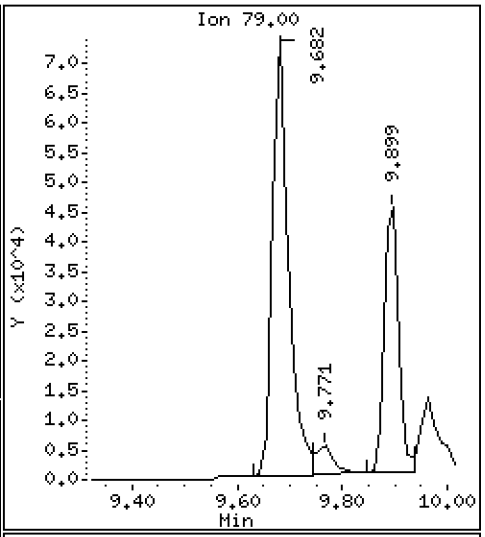
Column phase: ZB-5msi

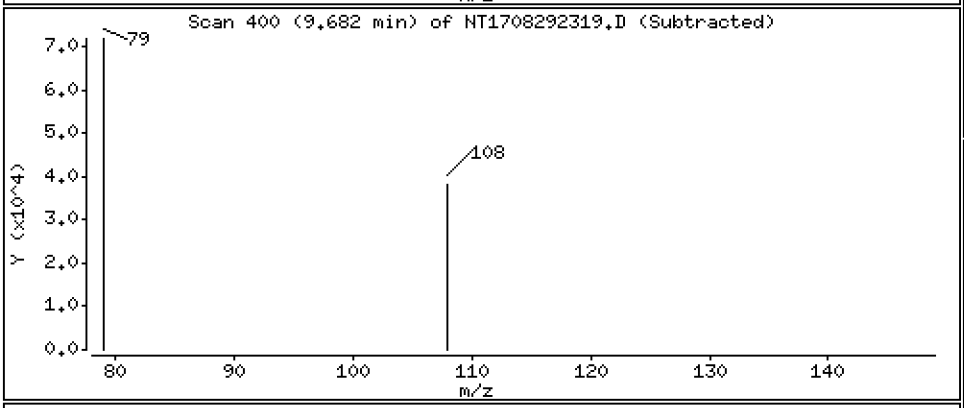
Column diameter: 0.25

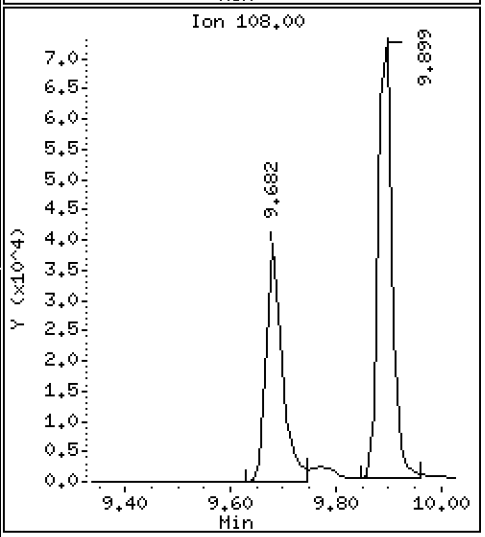
11 Benzyl alcohol

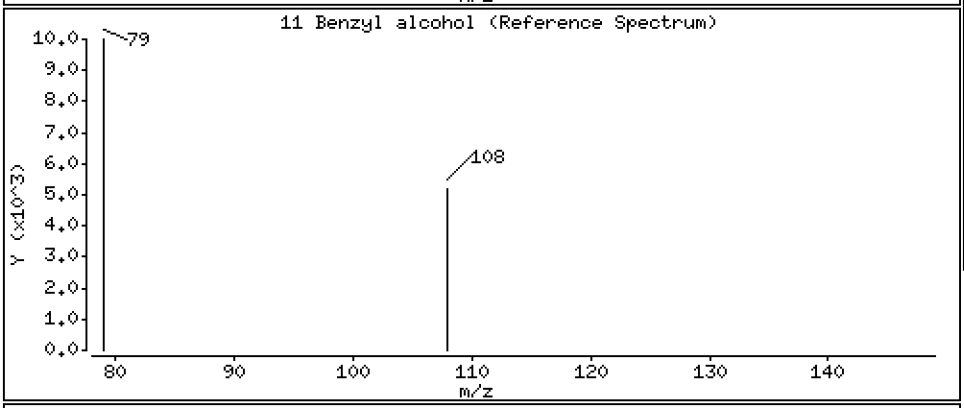
Concentration: 1.017 ug/mL

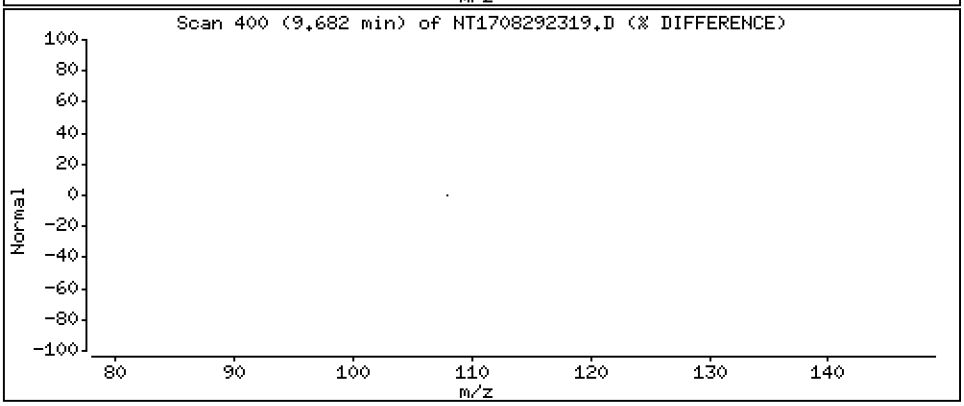












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Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

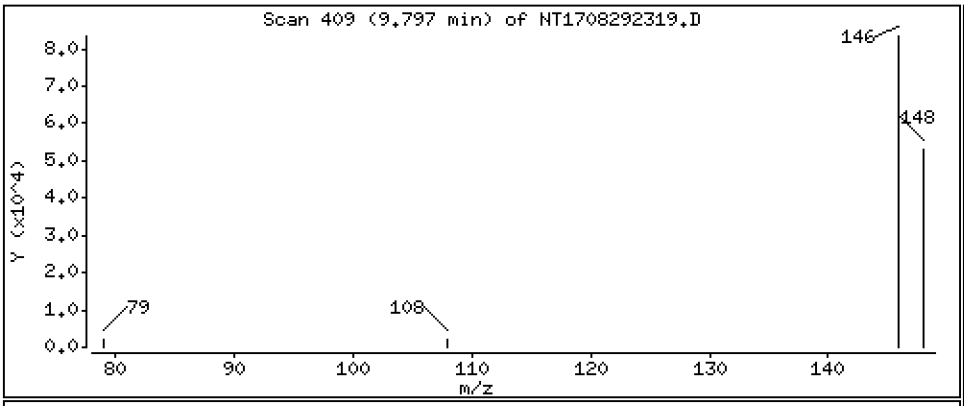
Operator: JGR

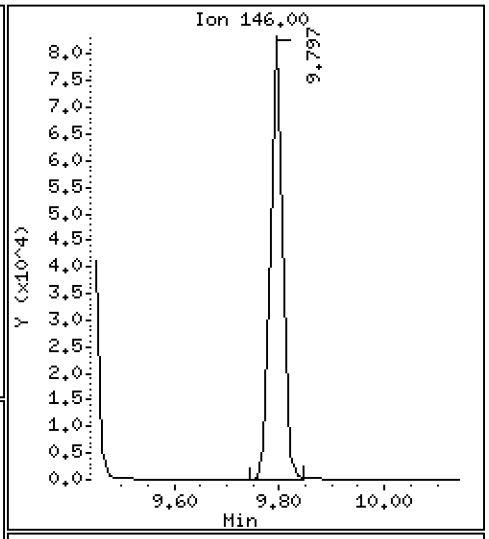
Column phase: ZB-5msi

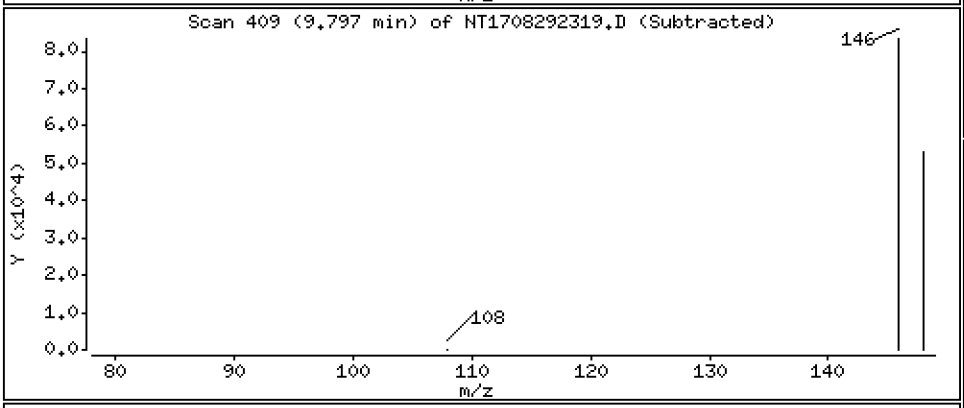
Column diameter: 0.25

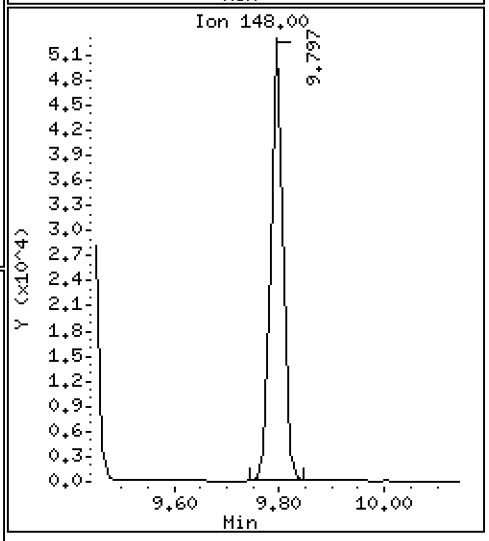
12 1,2-Dichlorobenzene

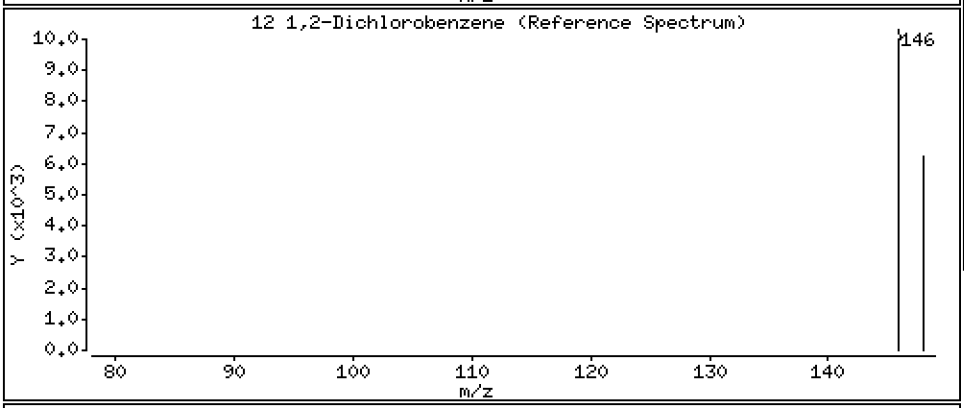
Concentration: 0.9349 ug/mL

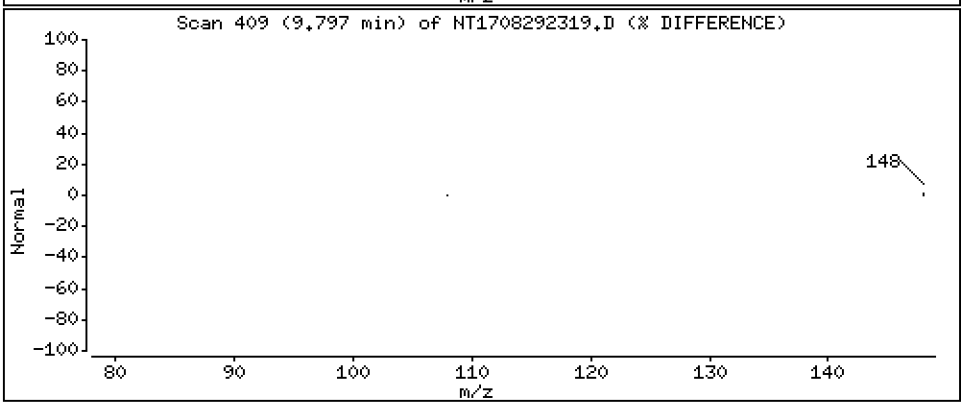












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Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

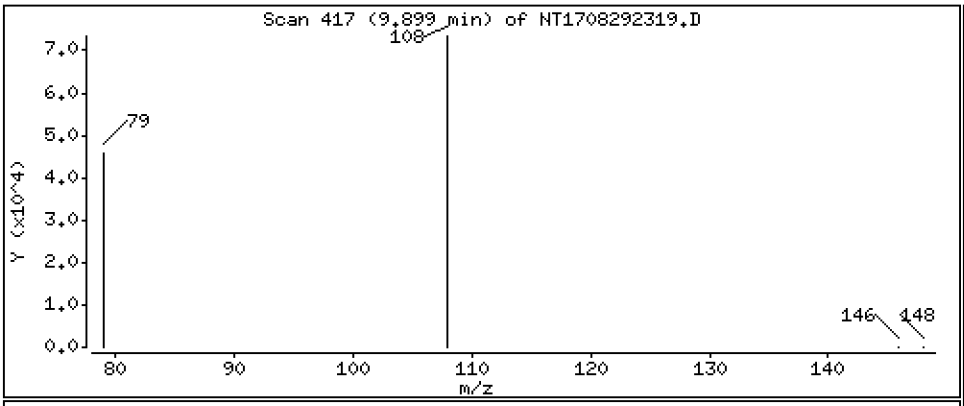
Operator: JGR

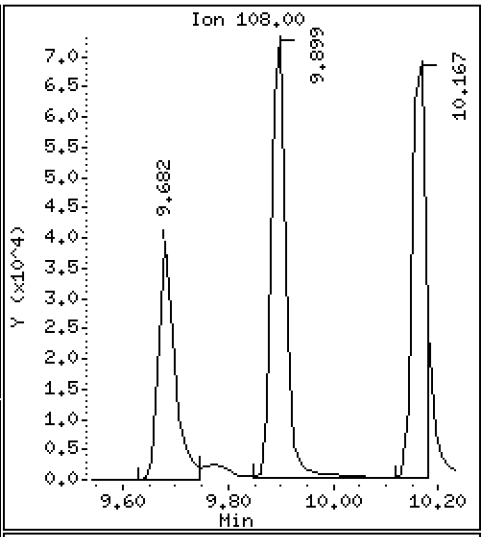
Column phase: ZB-5msi

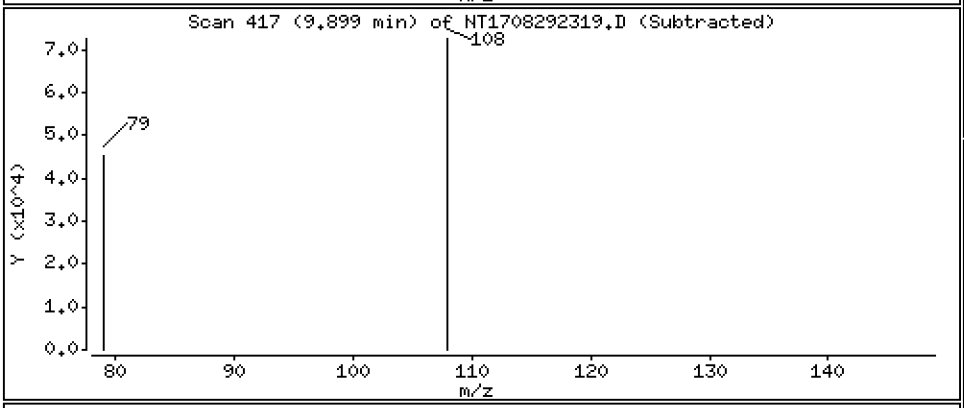
Column diameter: 0.25

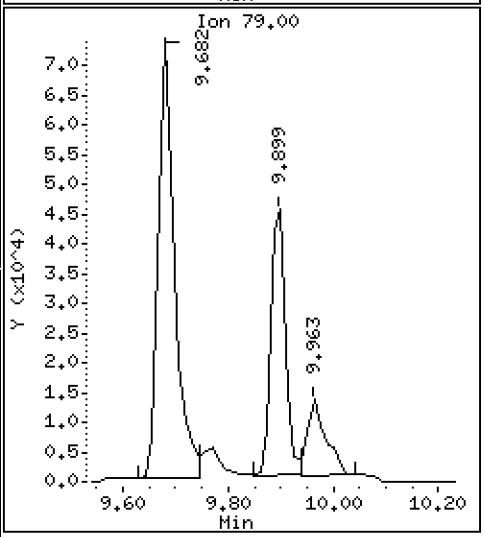
13 2-Methylphenol

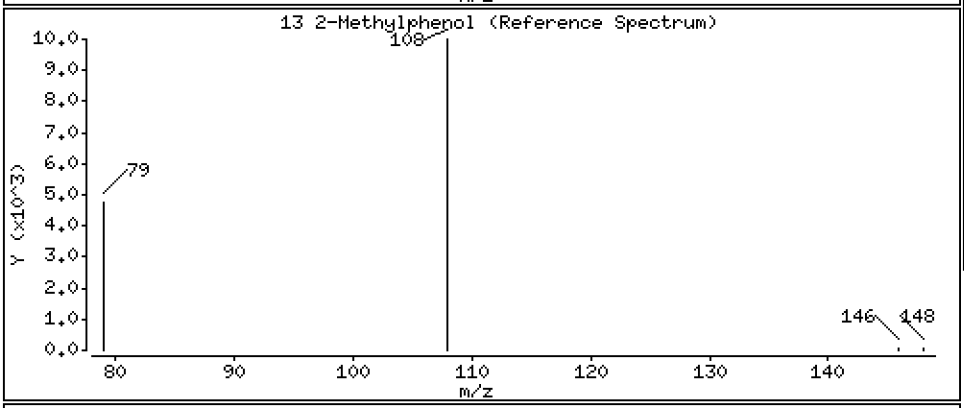
Concentration: 1.023 ug/mL

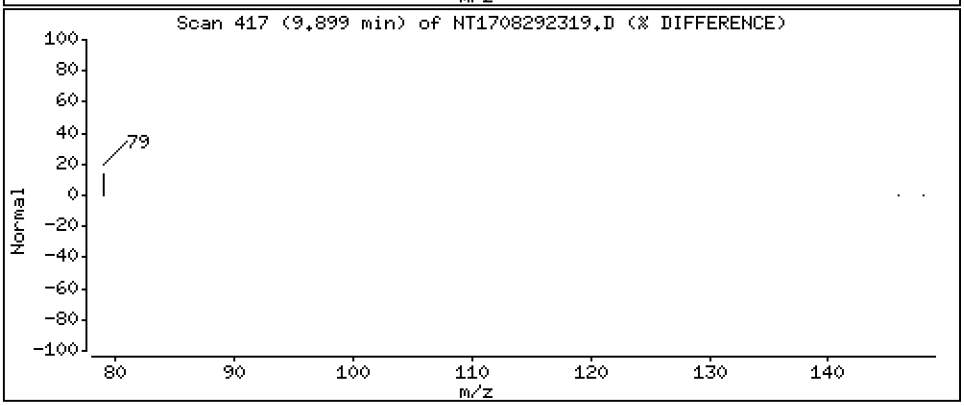












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Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

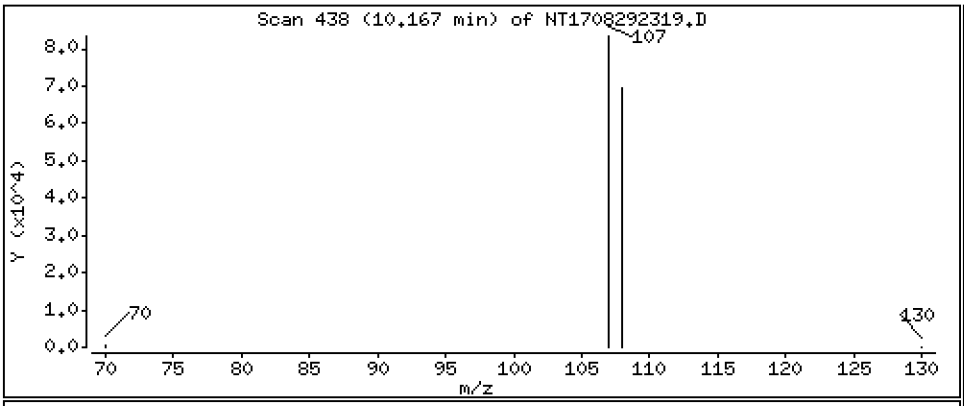
Operator: JGR

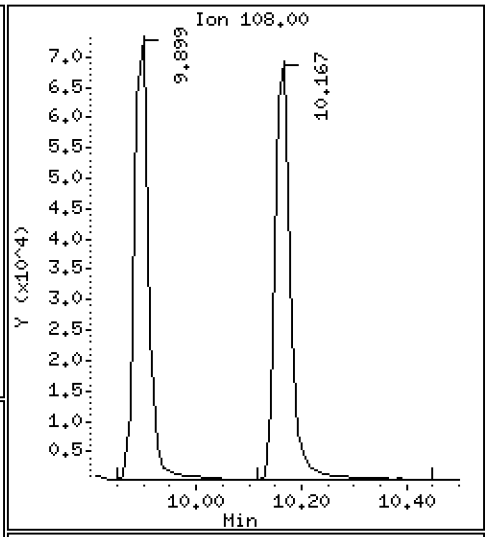
Column phase: ZB-5msi

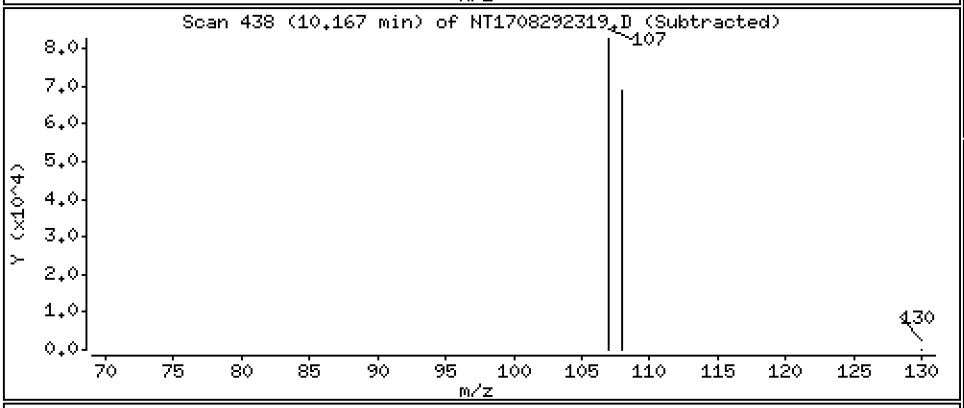
Column diameter: 0.25

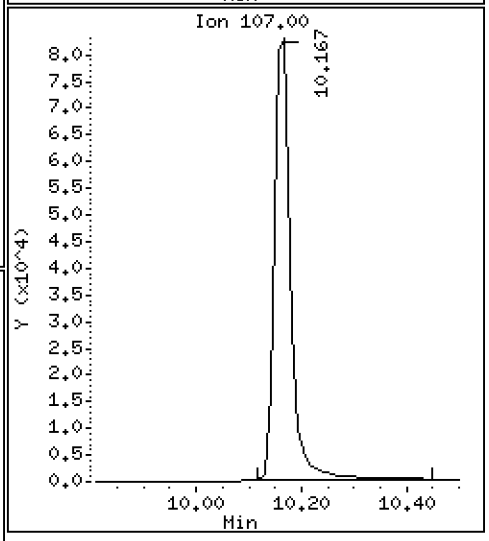
15 4-Methylphenol

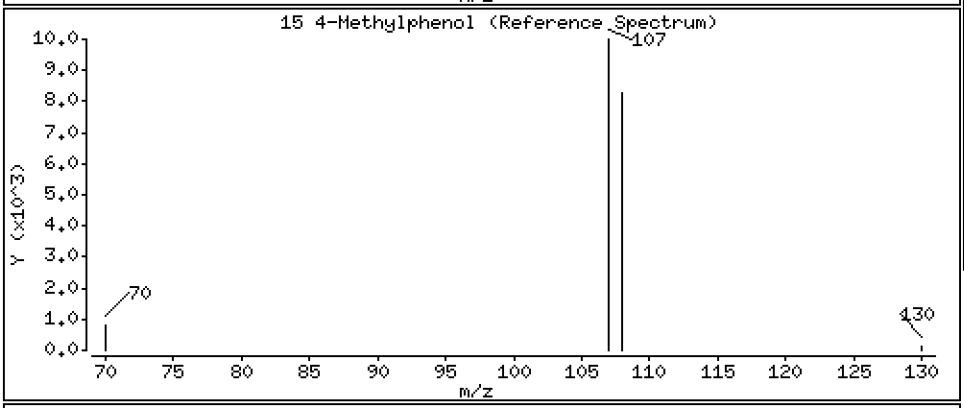
Concentration: 0.9931 ug/mL

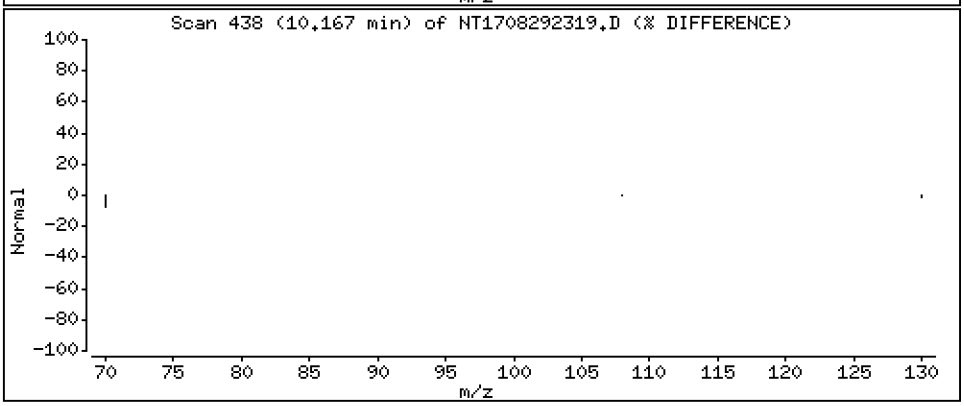












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Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

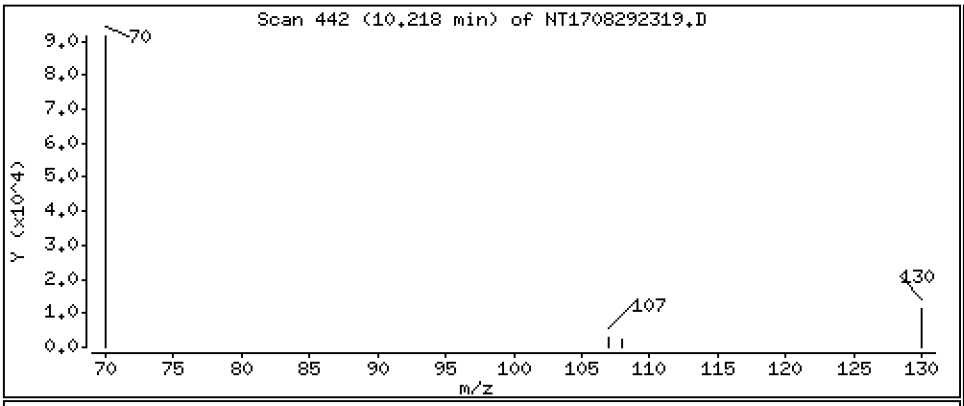
Operator: JGR

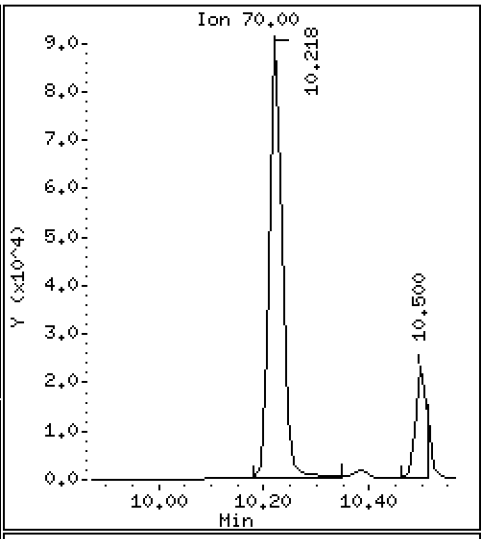
Column phase: ZB-5msi

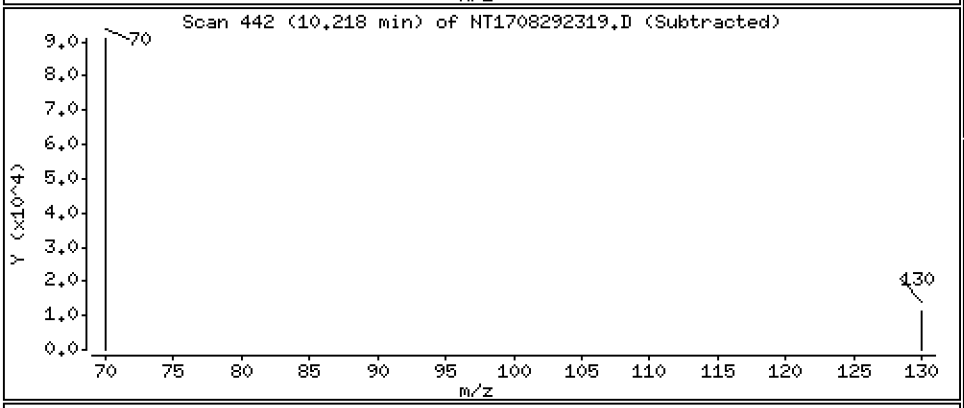
Column diameter: 0.25

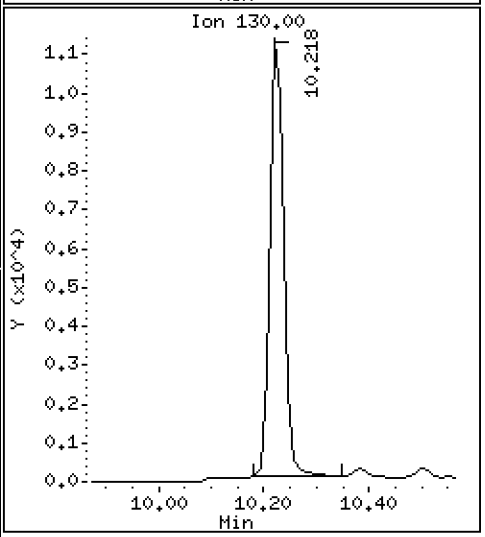
16 N-Nitroso-di-n-propylamine

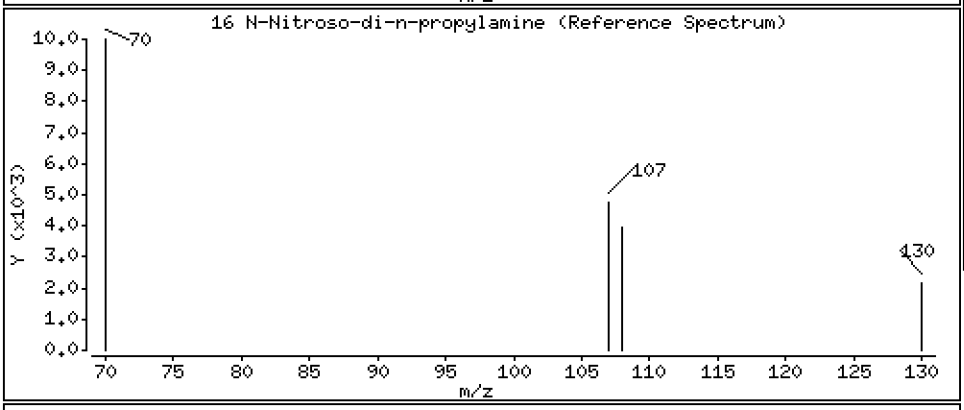
Concentration: 1.045 ug/mL

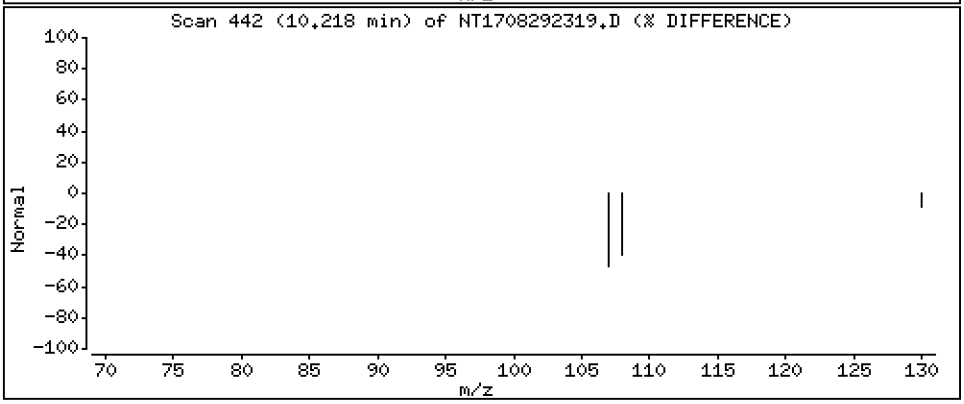












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Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

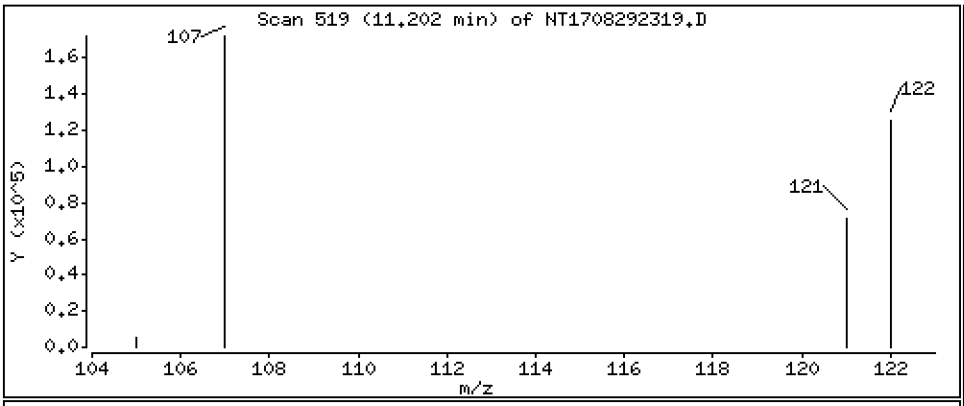
Operator: JGR

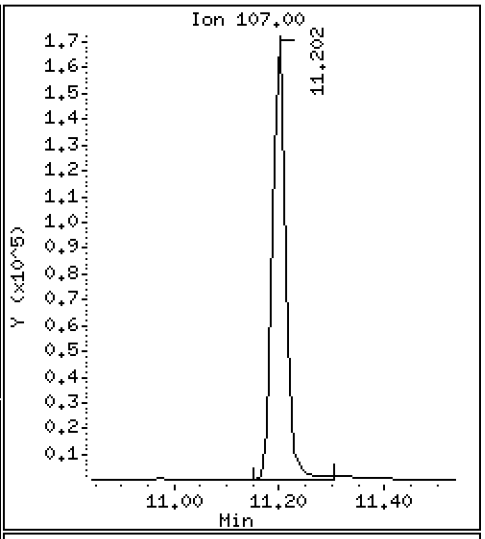
Column phase: ZB-5msi

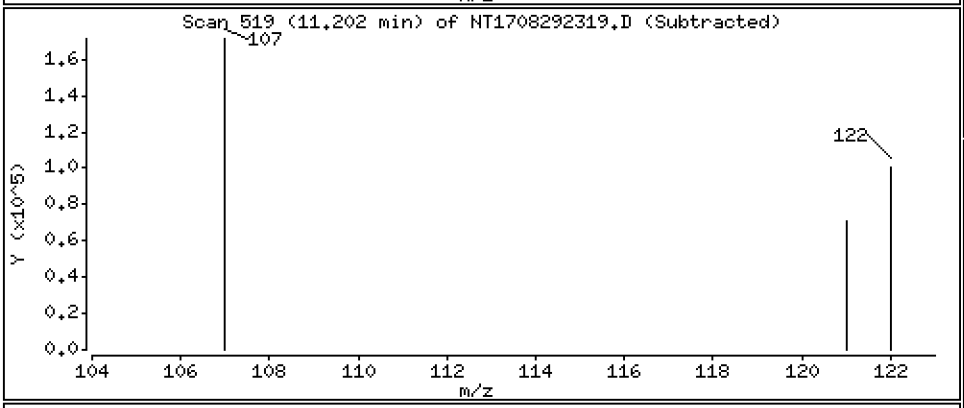
Column diameter: 0.25

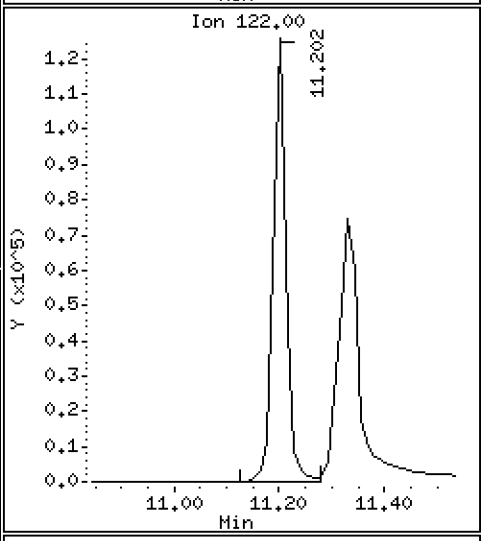
22 2,4-Dimethylphenol

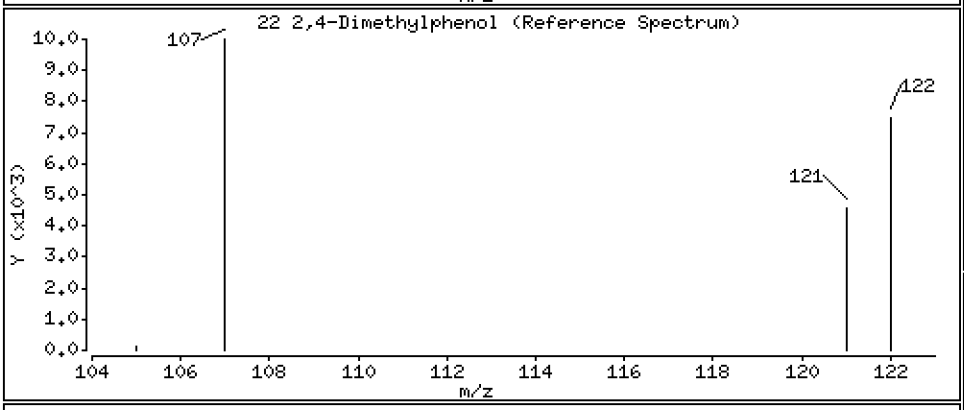
Concentration: 2.414 ug/mL

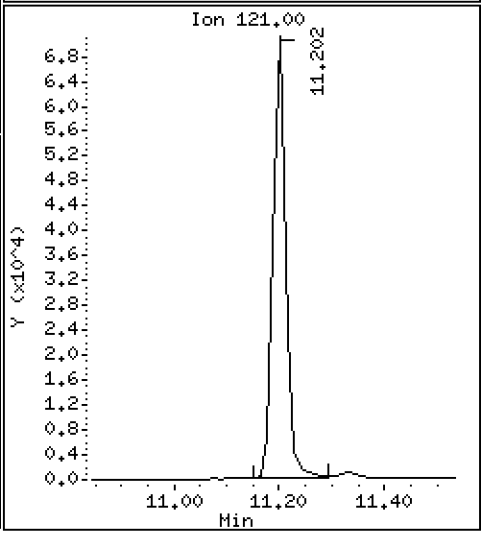


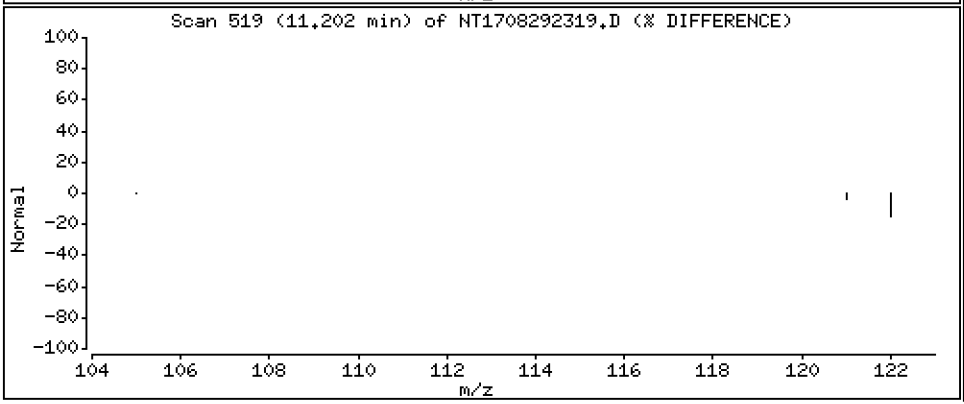












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Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

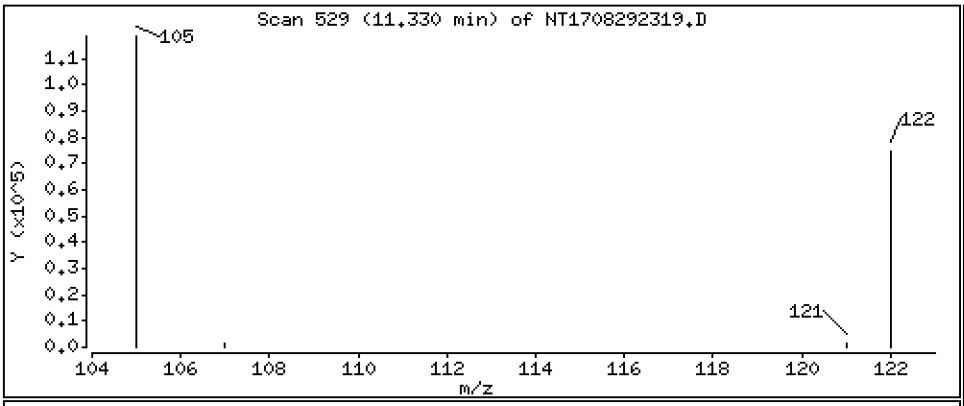
Operator: JGR

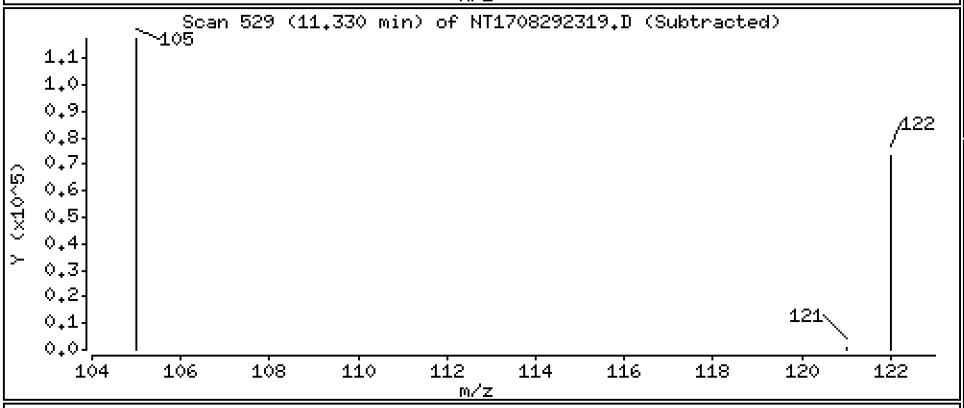
Column phase: ZB-5msi

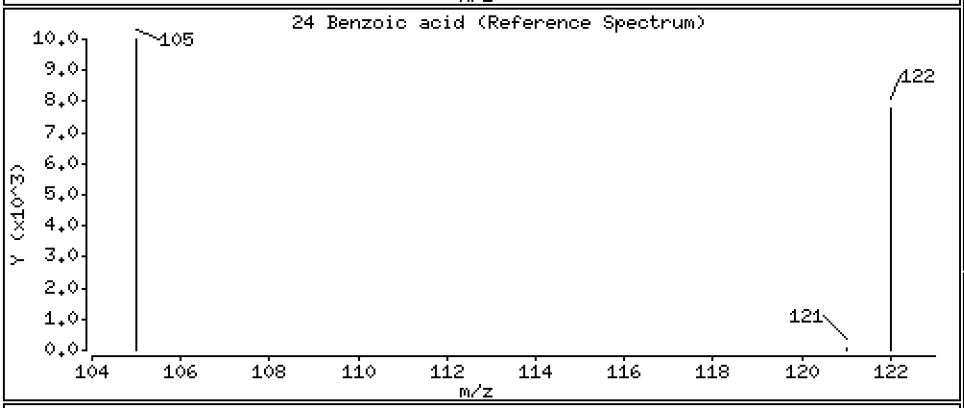
Column diameter: 0.25

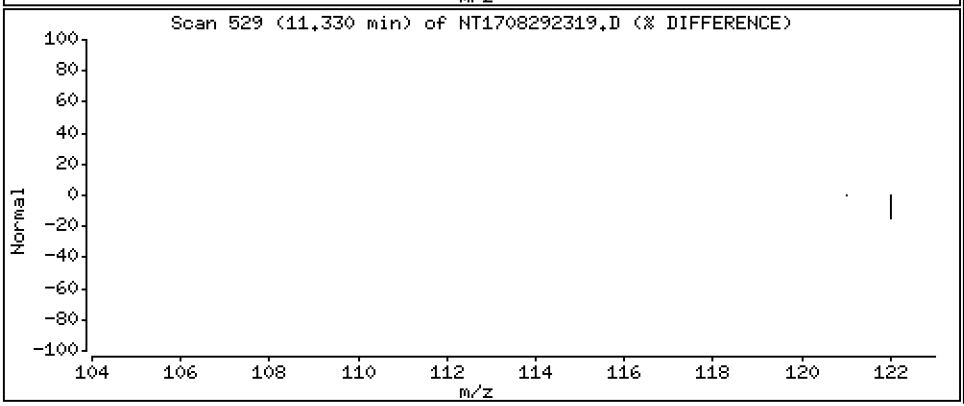
24 Benzoic acid

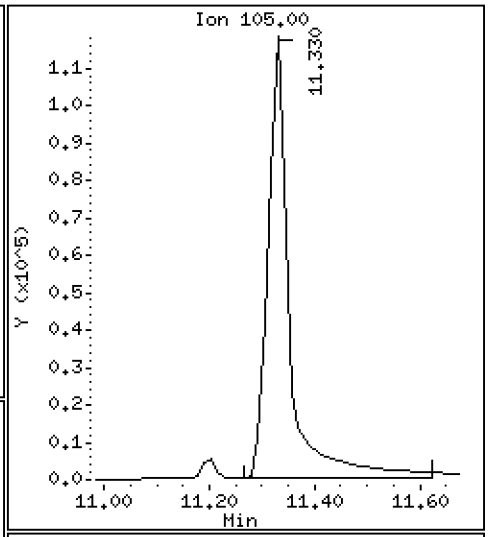
Concentration: 4.113 ug/mL

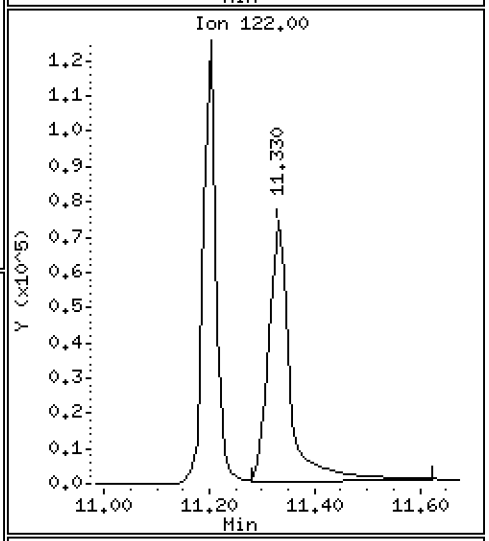


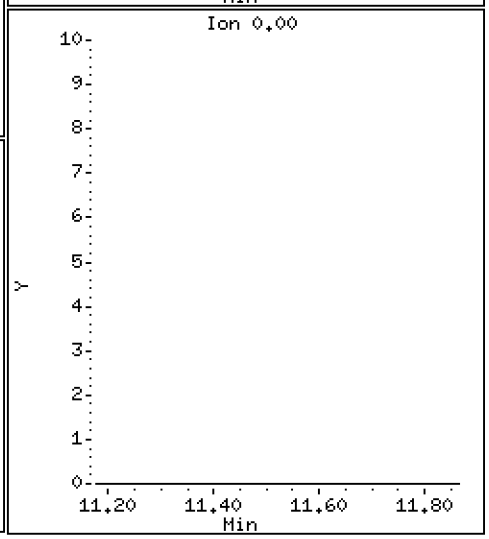












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Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

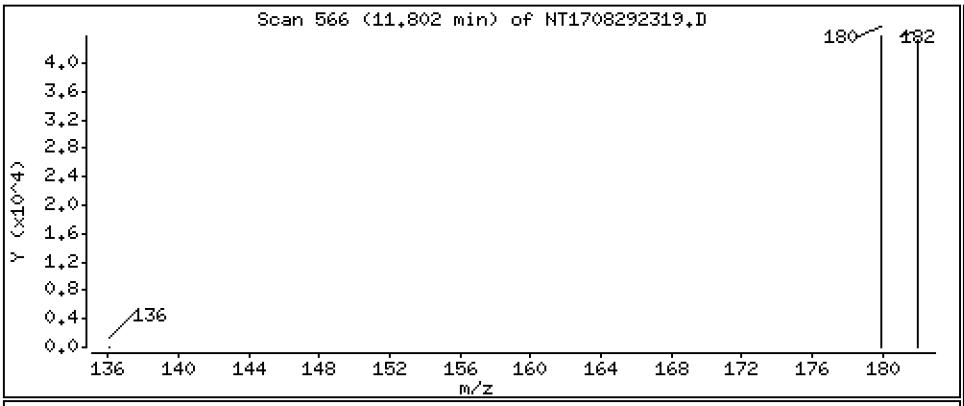
Operator: JGR

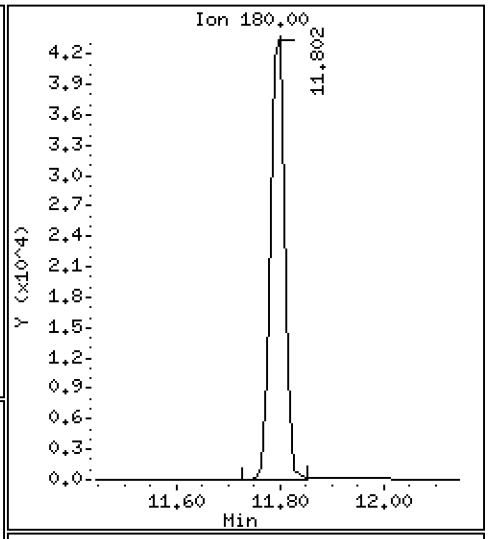
Column phase: ZB-5msi

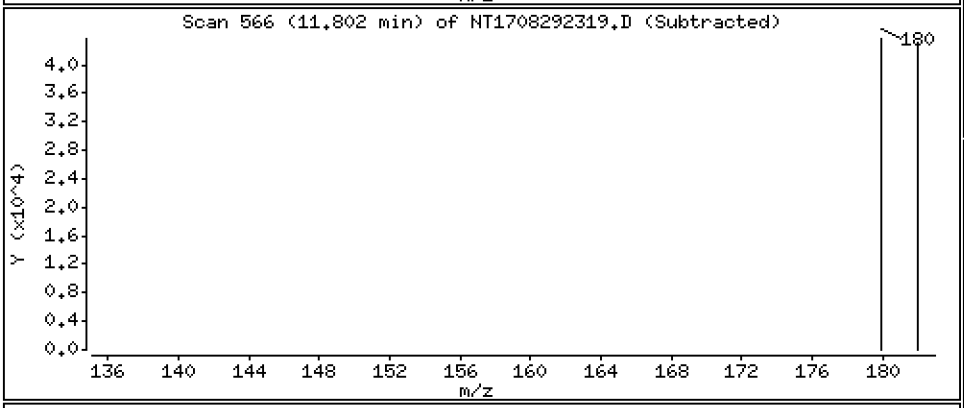
Column diameter: 0.25

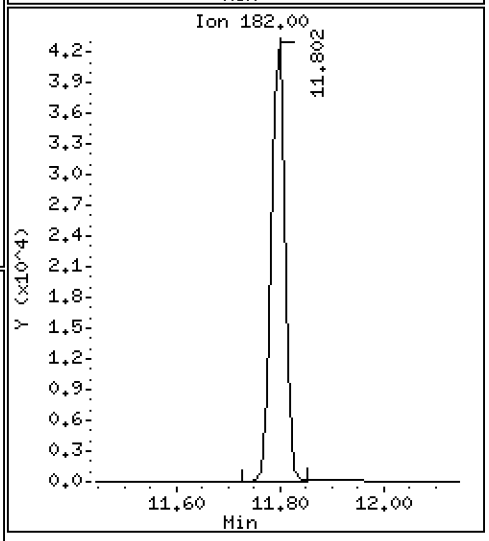
26 1,2,4-Trichlorobenzene

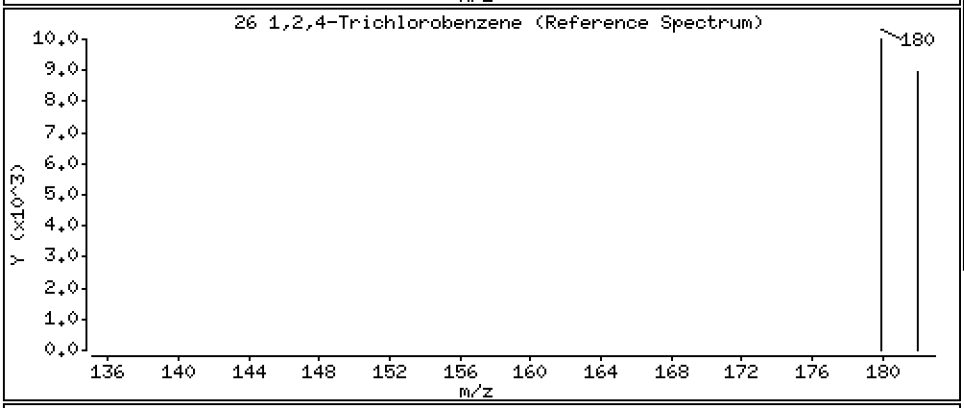
Concentration: 0.9709 ug/mL

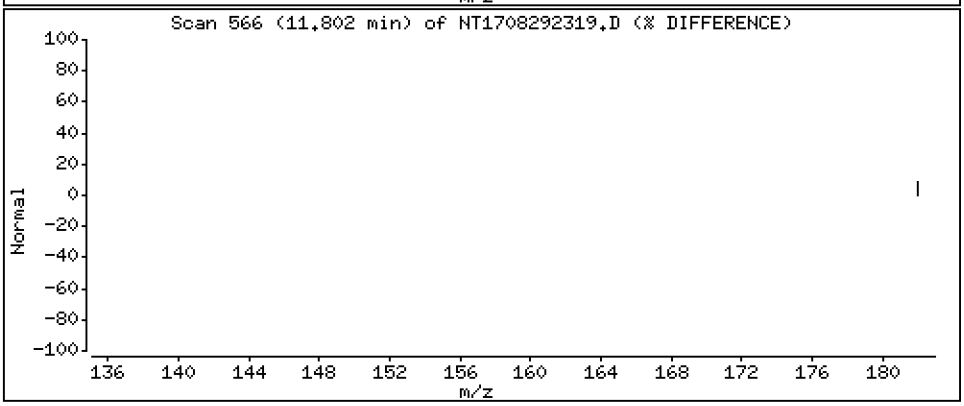












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Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

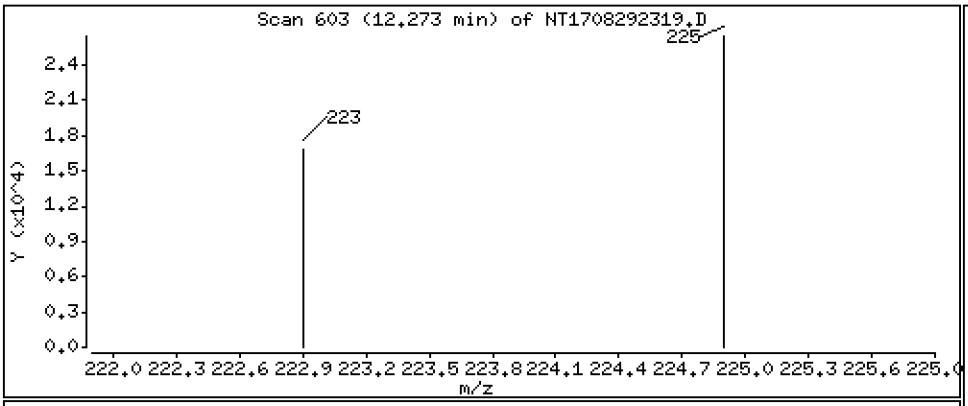
Operator: JGR

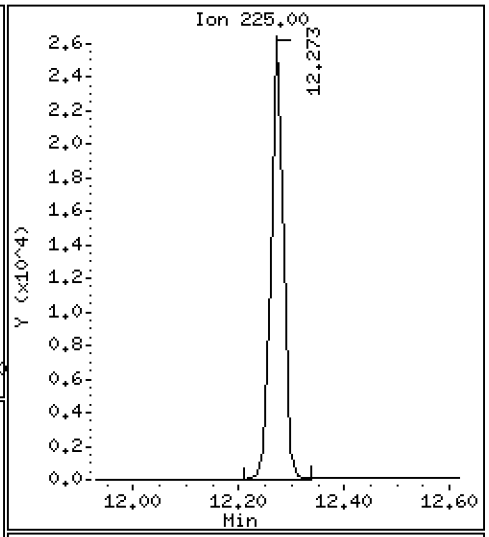
Column phase: ZB-5msi

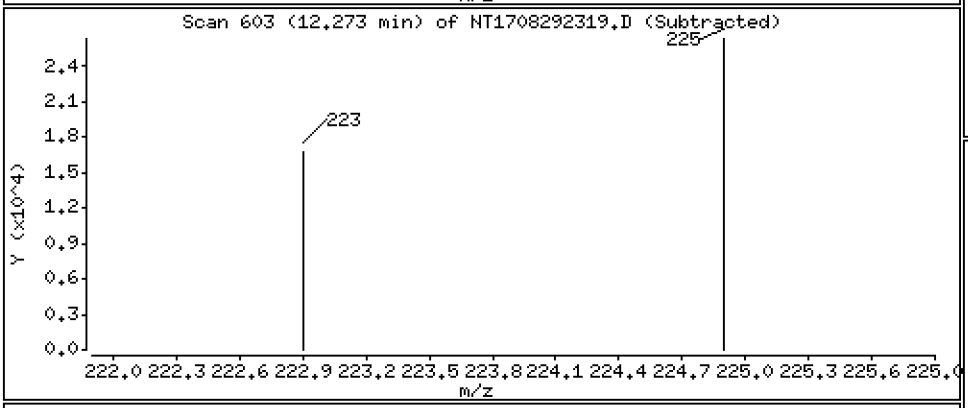
Column diameter: 0.25

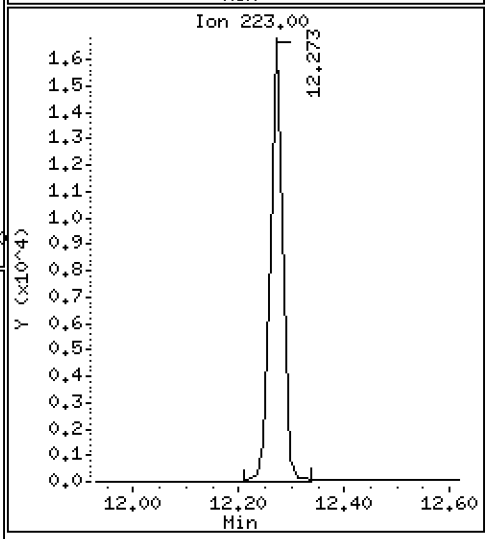
30 Hexachlorobutadiene

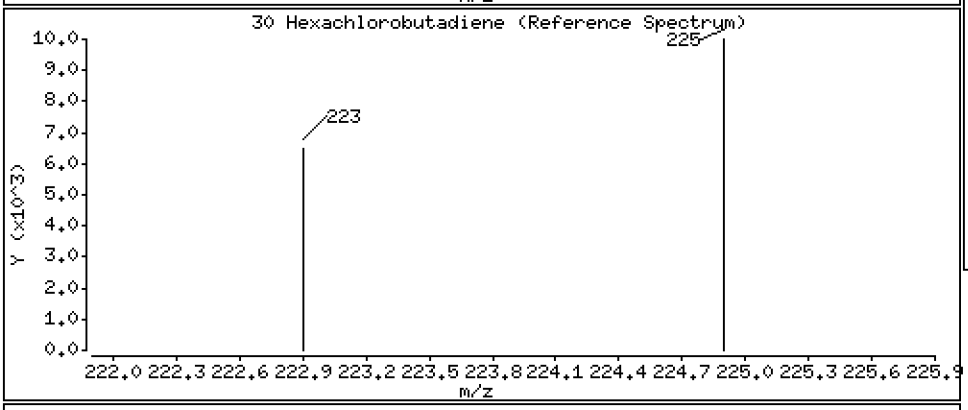
Concentration: 1.085 ug/mL

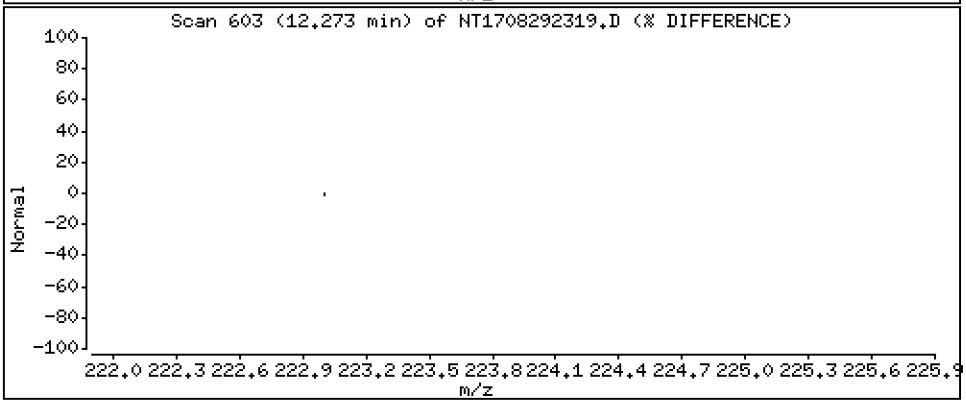












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Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

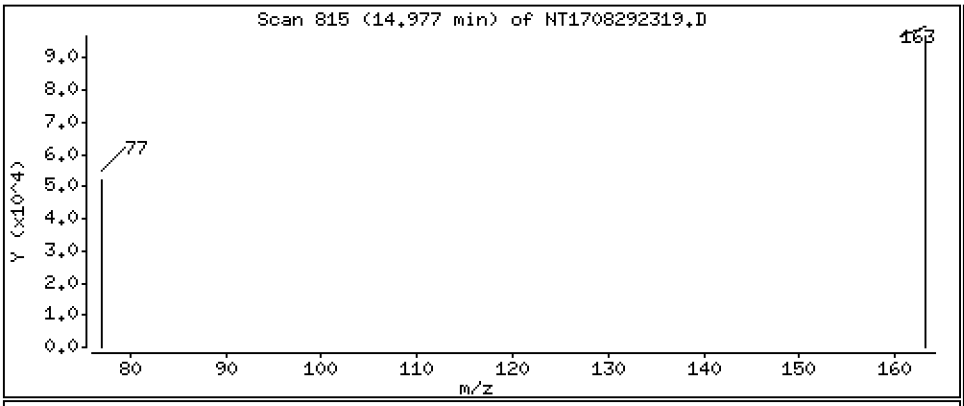
Operator: JGR

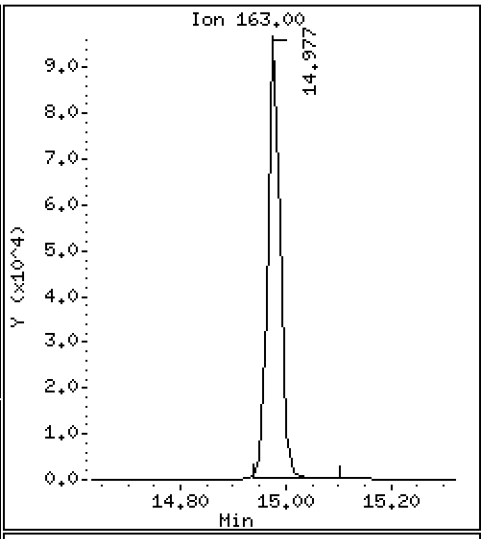
Column phase: ZB-5msi

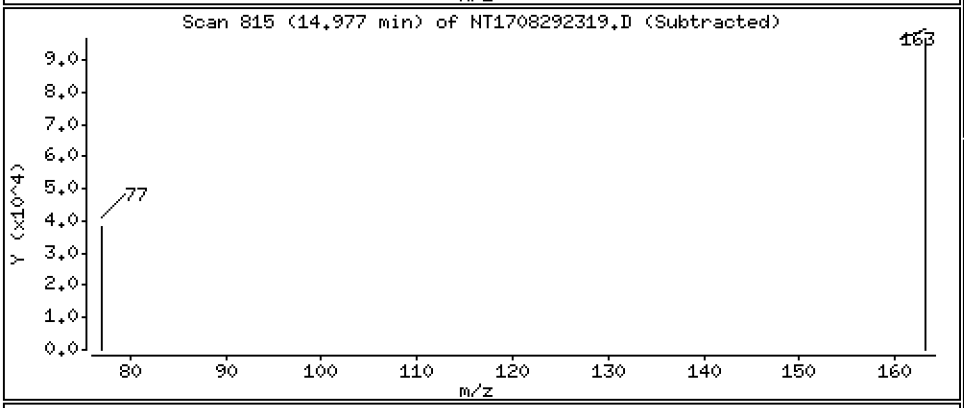
Column diameter: 0.25

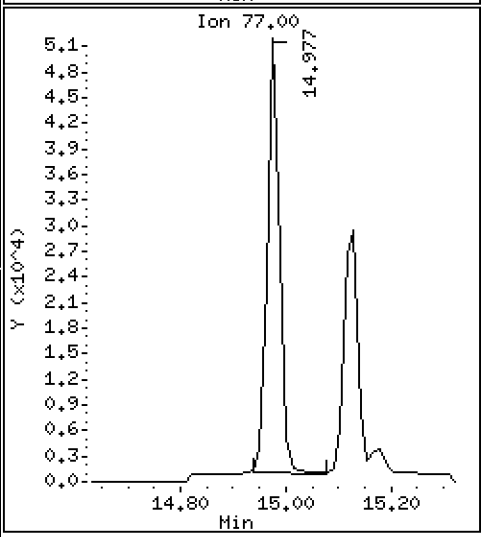
39 Dimethylphthalate

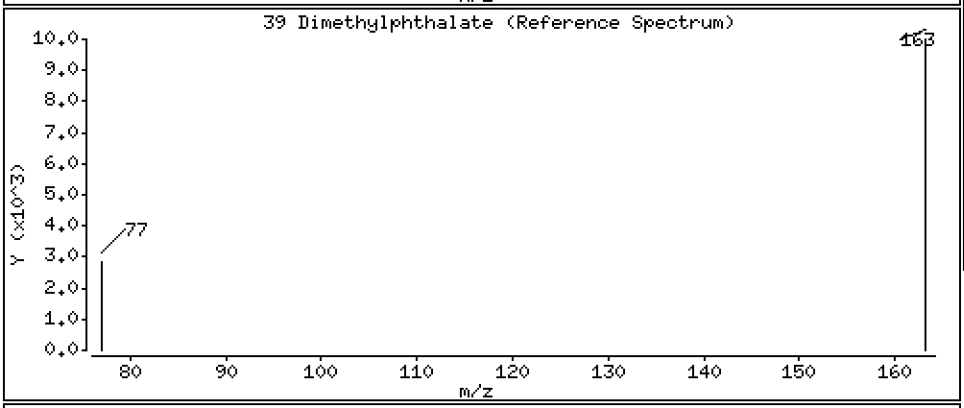
Concentration: 1.050 ug/mL

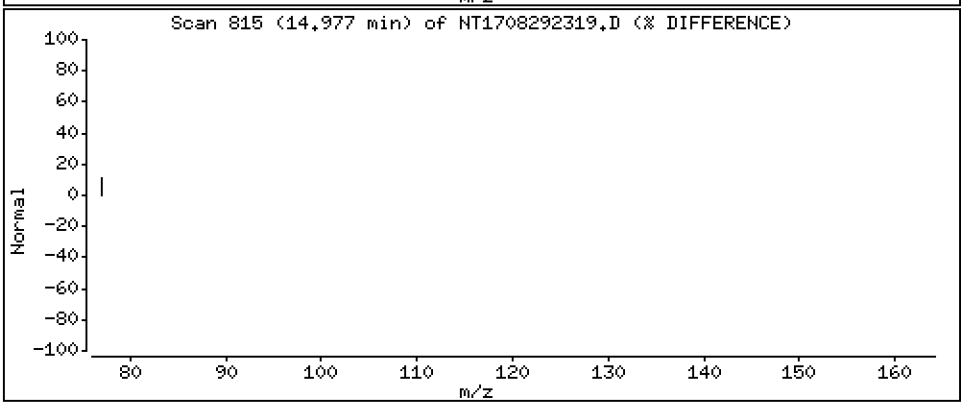












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Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

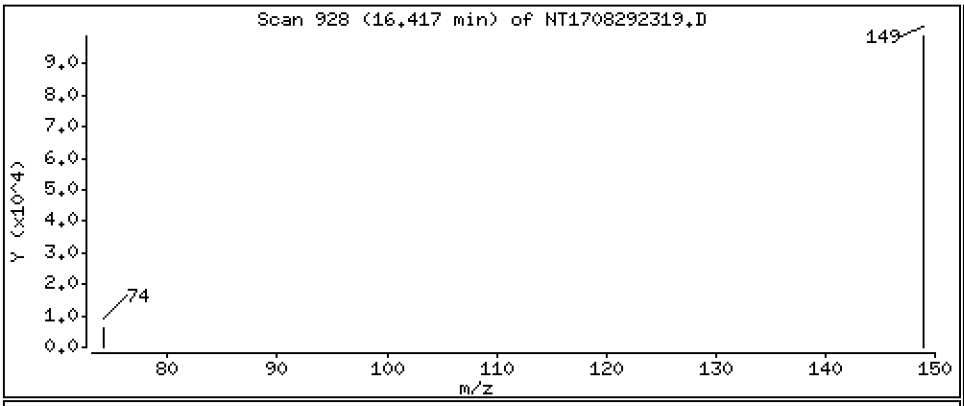
Operator: JGR

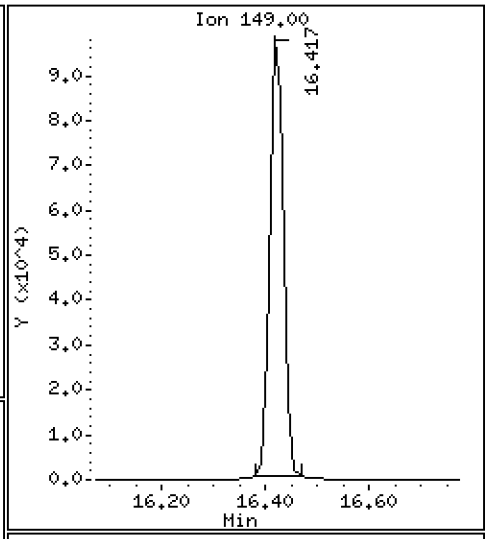
Column phase: ZB-5msi

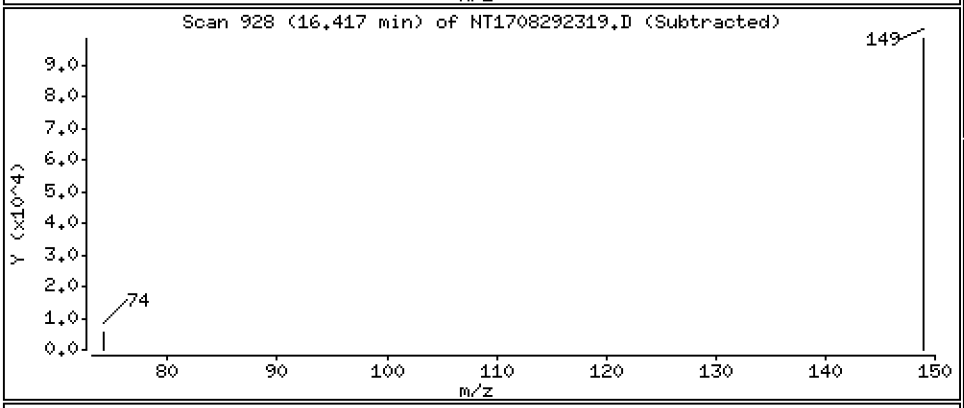
Column diameter: 0.25

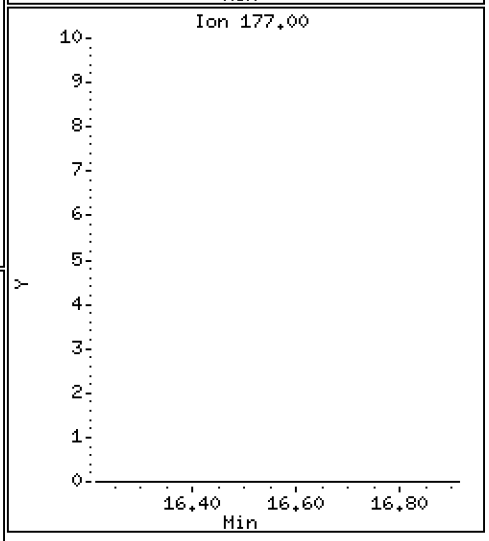
50 Diethylphthalate

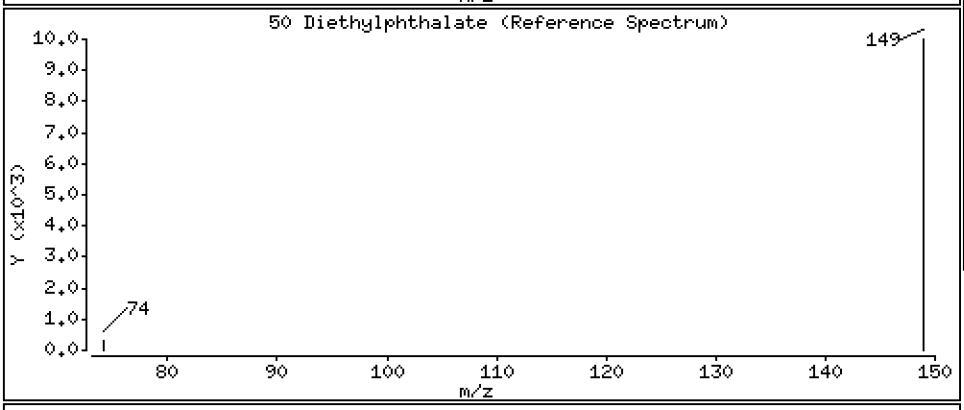
Concentration: 1.125 ug/mL

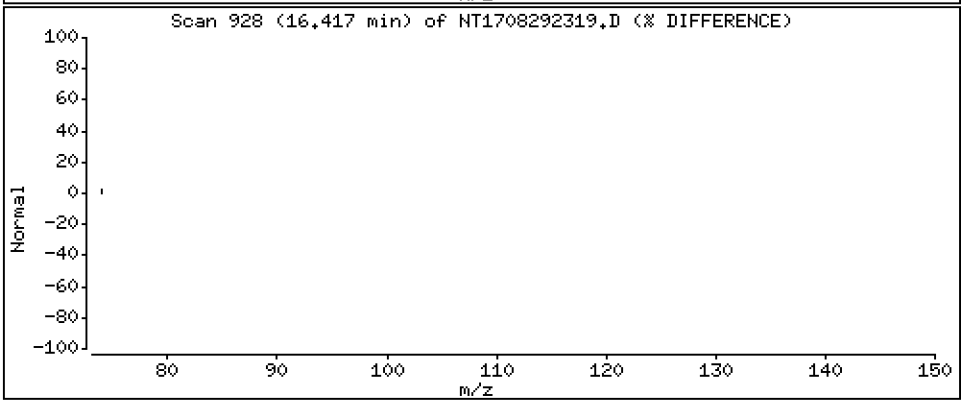












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292319.D

Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

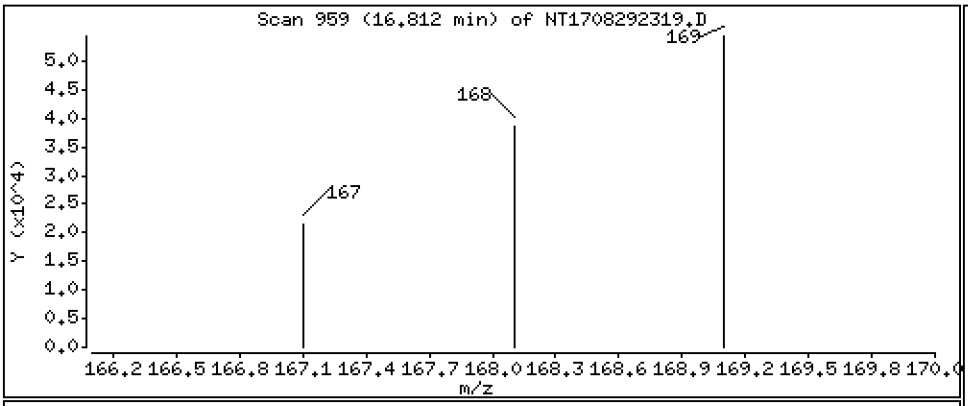
Operator: JGR

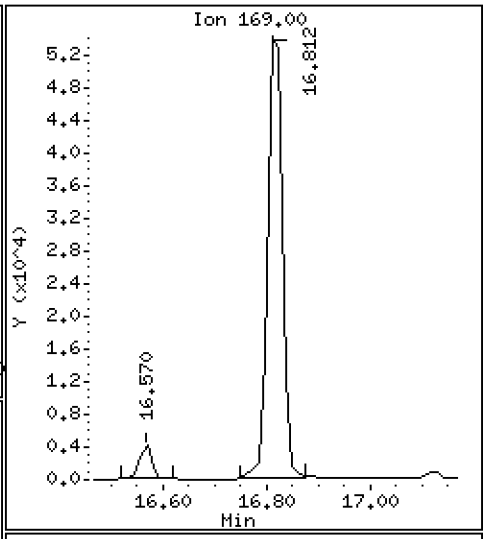
Column phase: ZB-5msi

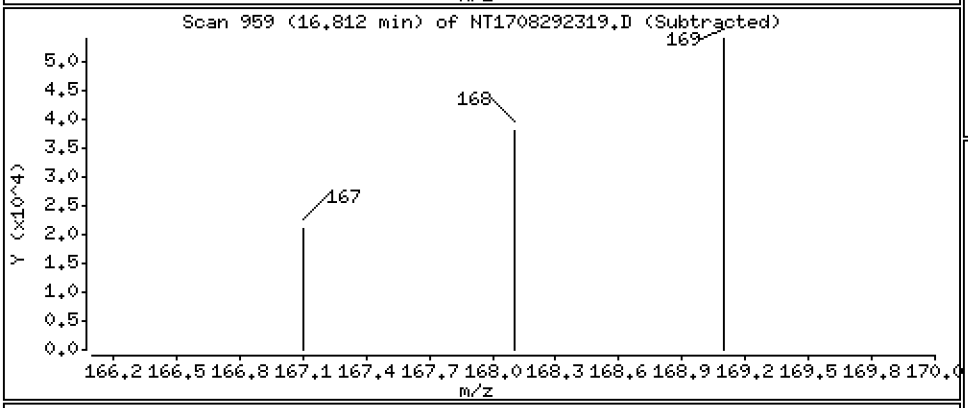
Column diameter: 0.25

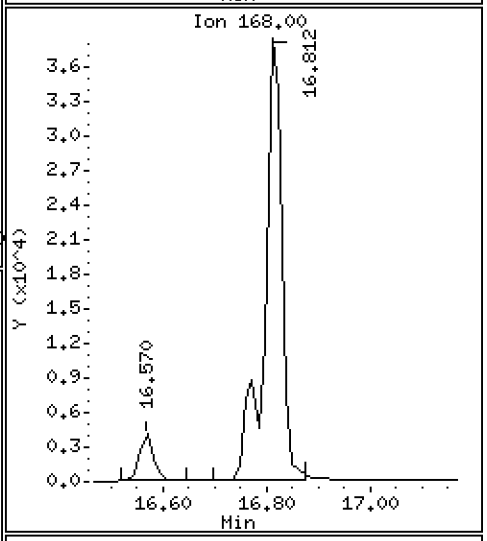
54 N-Nitrosodiphenylamine

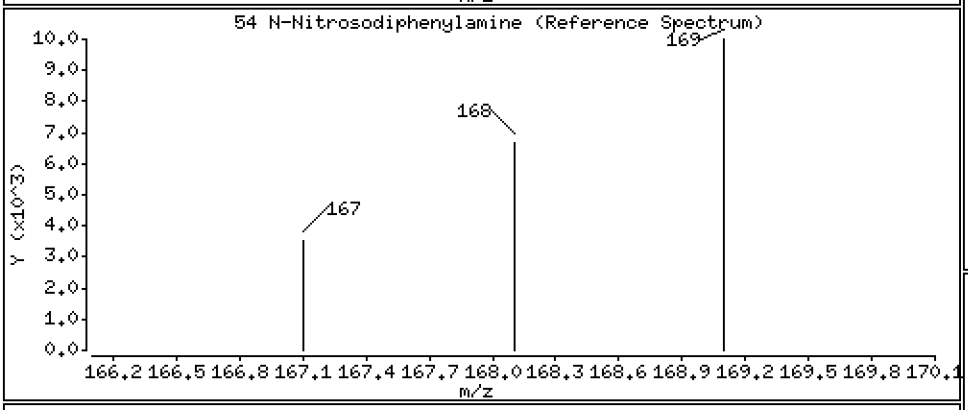
Concentration: 1.117 ug/mL

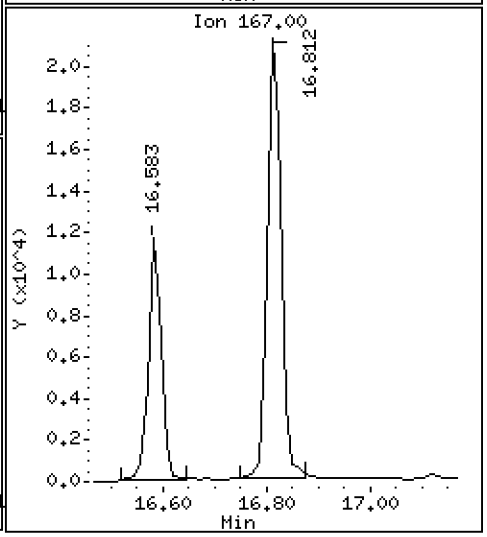


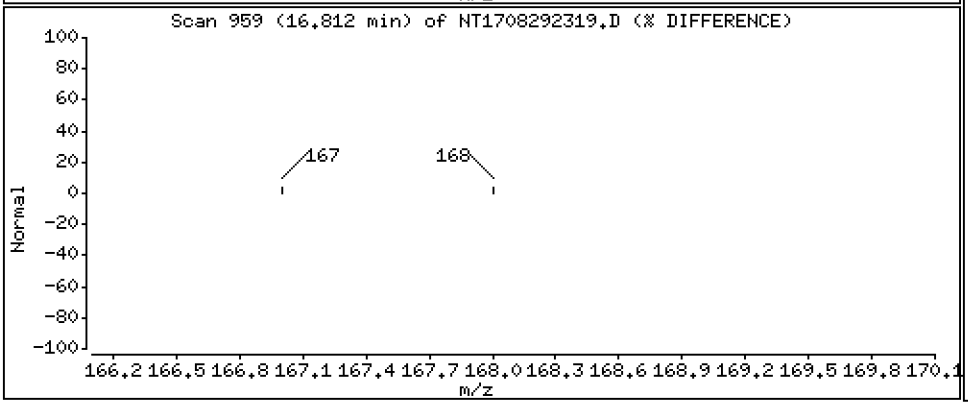












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292319.D

Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

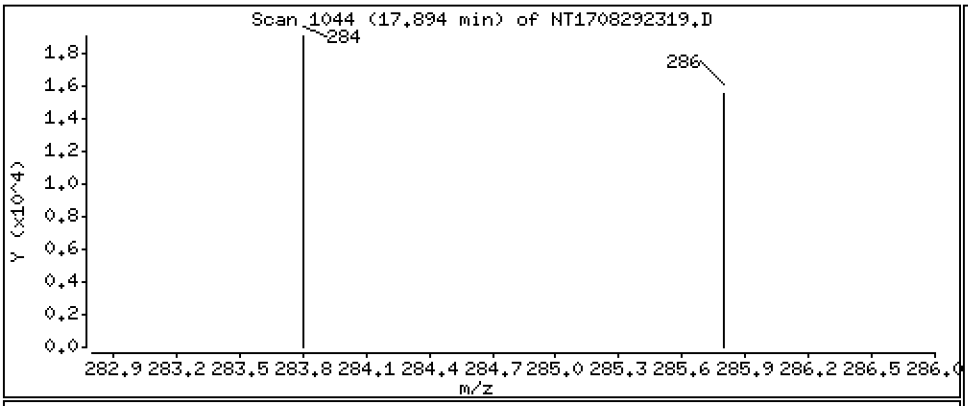
Operator: JGR

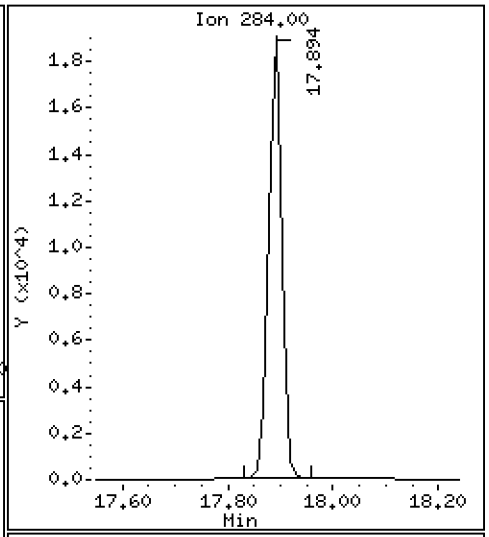
Column phase: ZB-5msi

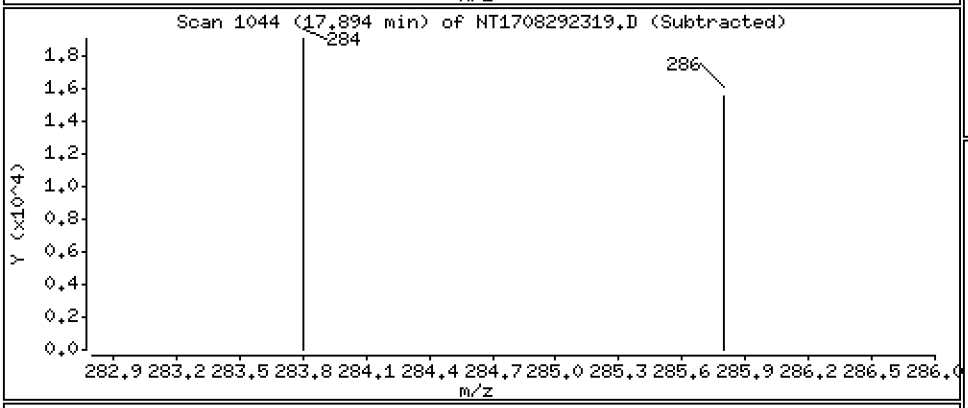
Column diameter: 0.25

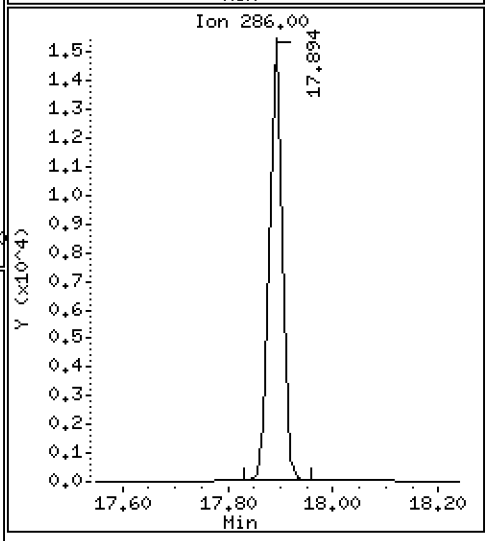
57 Hexachlorobenzene

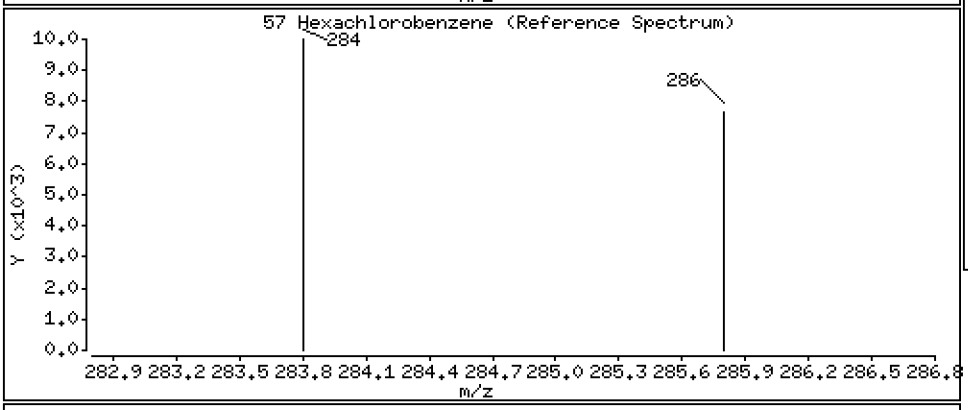
Concentration: 1.068 ug/mL

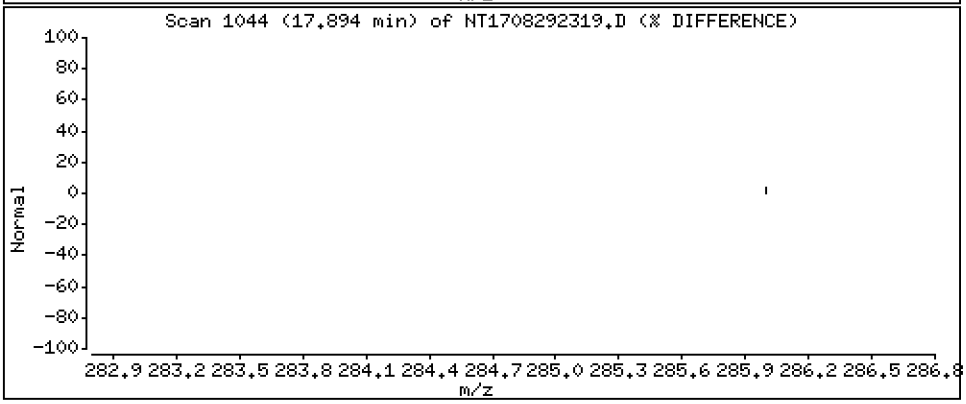












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292319.D

Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

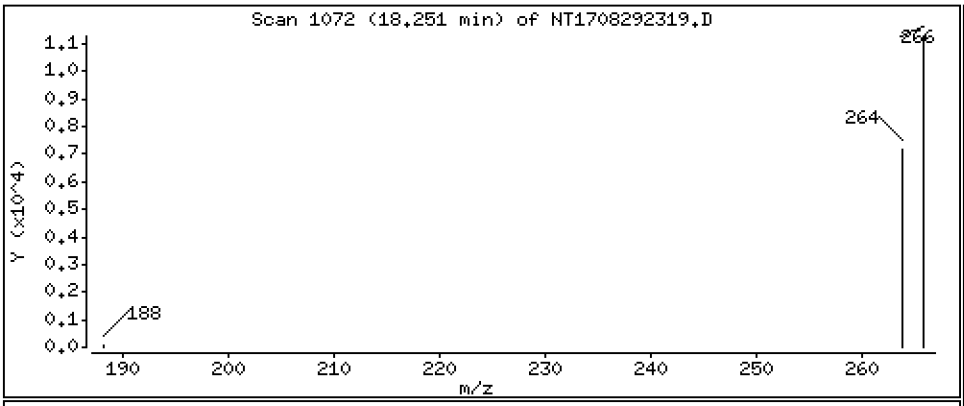
Operator: JGR

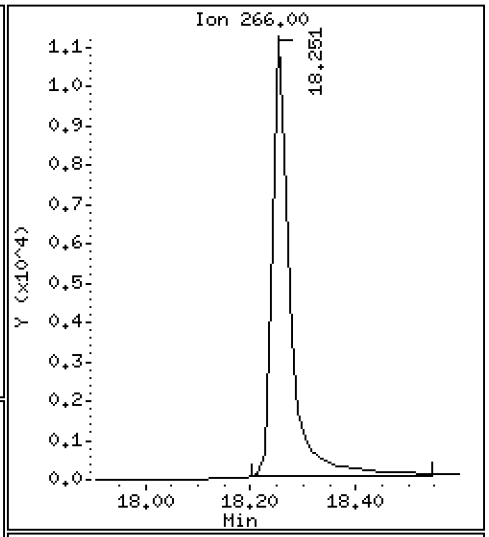
Column phase: ZB-5msi

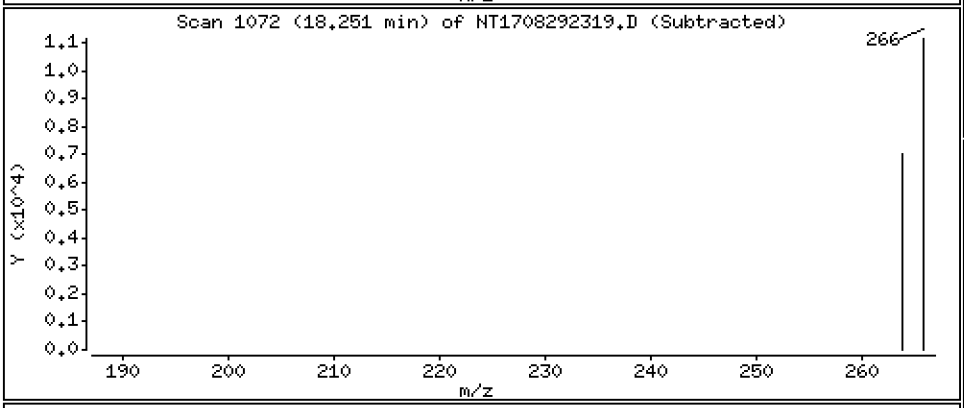
Column diameter: 0.25

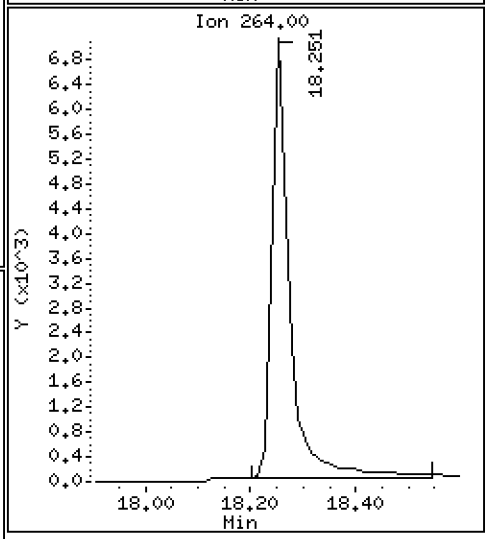
58 Pentachlorophenol

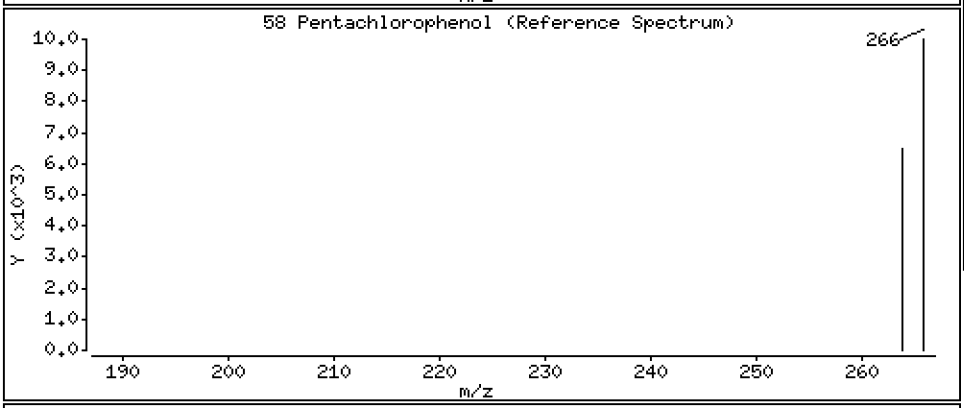
Concentration: 1.261 ug/mL

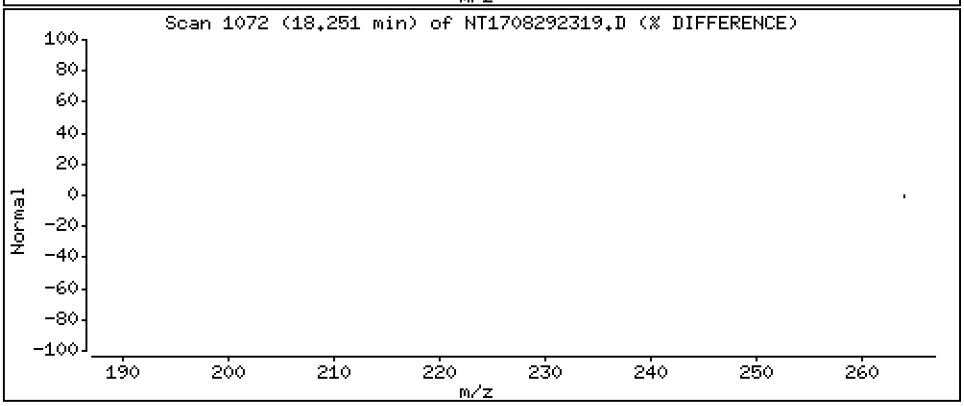












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292319.D

Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

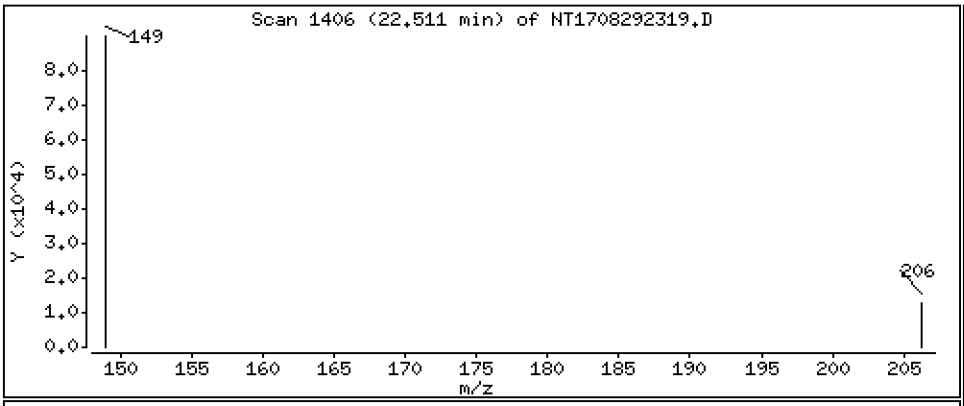
Operator: JGR

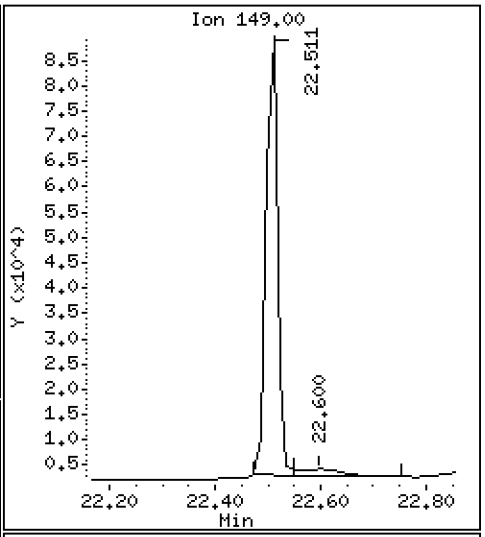
Column phase: ZB-5msi

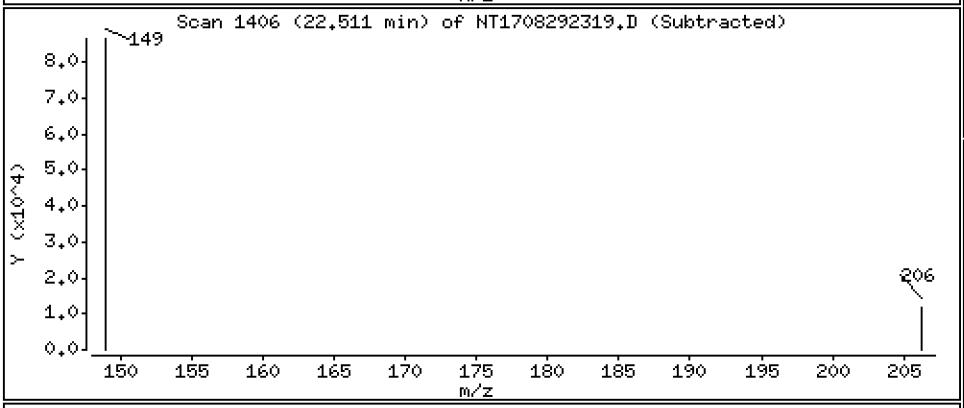
Column diameter: 0.25

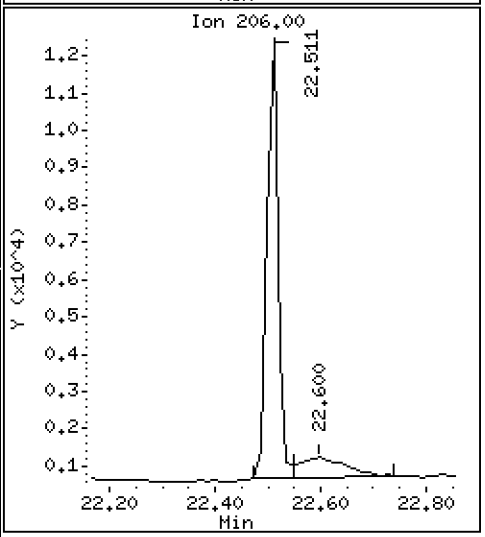
67 Butylbenzylphthalate

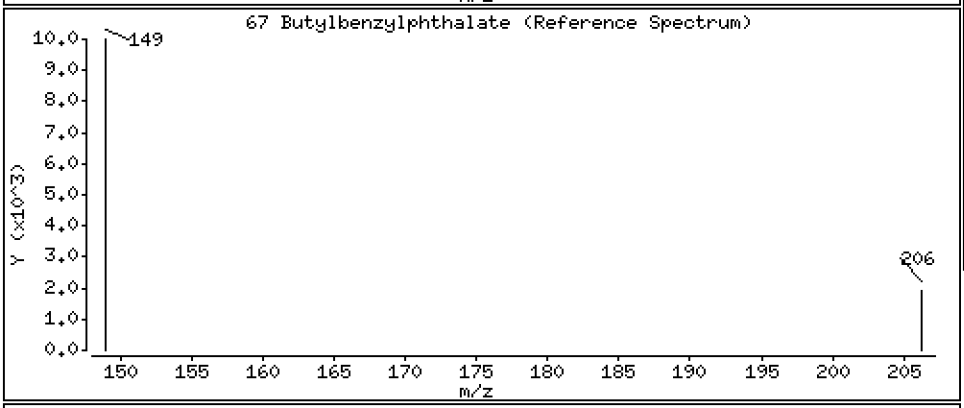
Concentration: 1.081 ug/mL

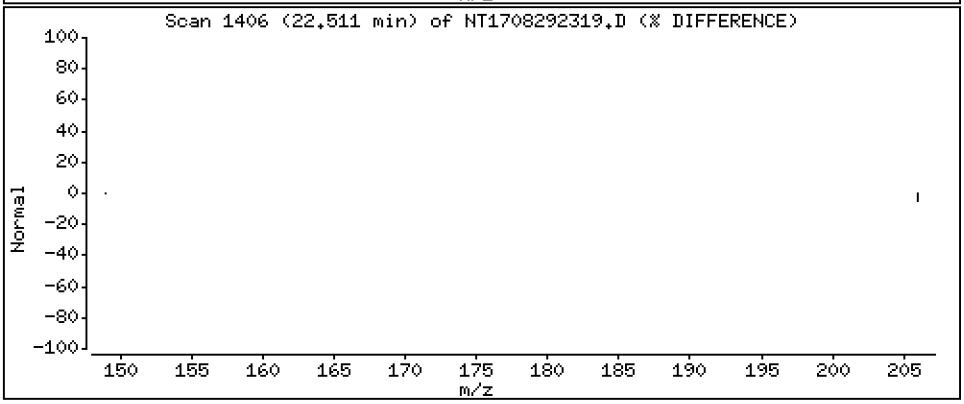












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292319.D

Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

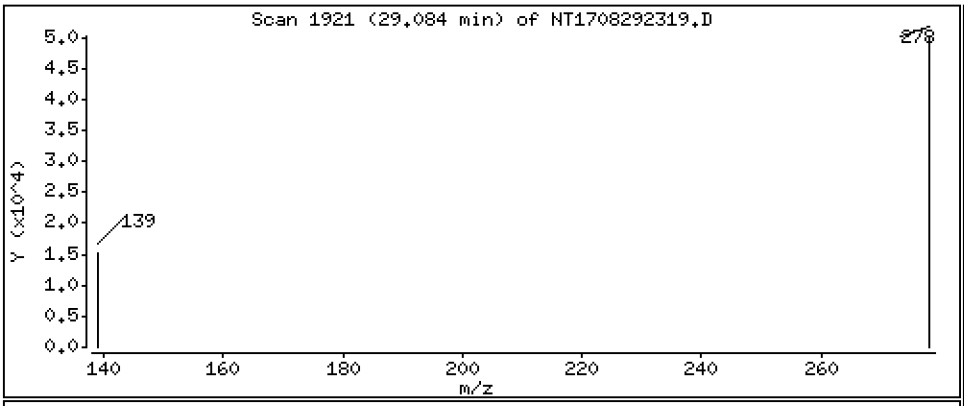
Operator: JGR

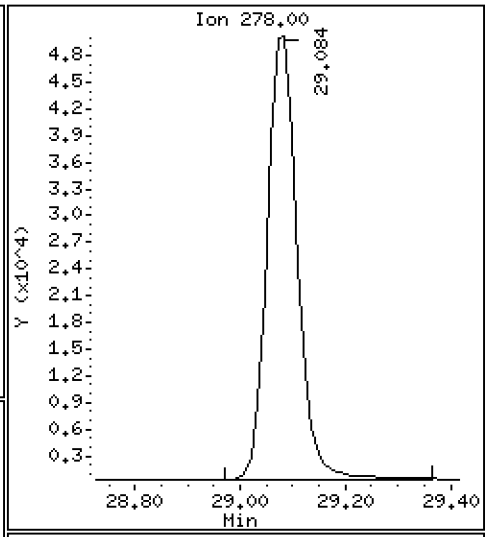
Column phase: ZB-5msi

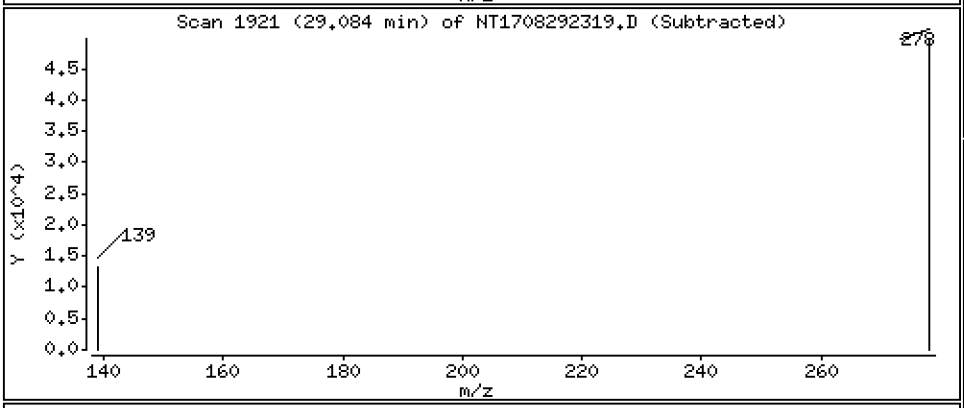
Column diameter: 0.25

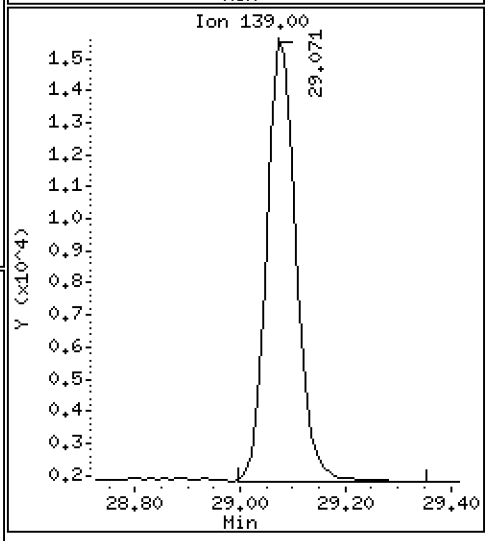
79 Dibenzo(a,h)anthracene

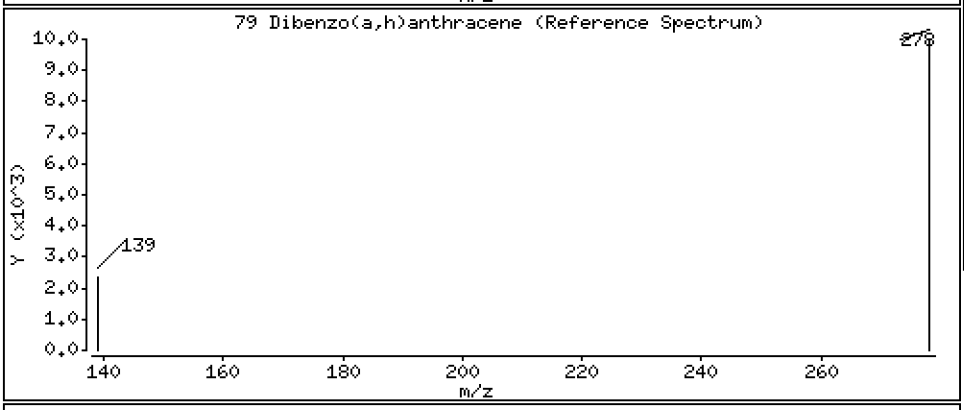
Concentration: 1.029 ug/mL

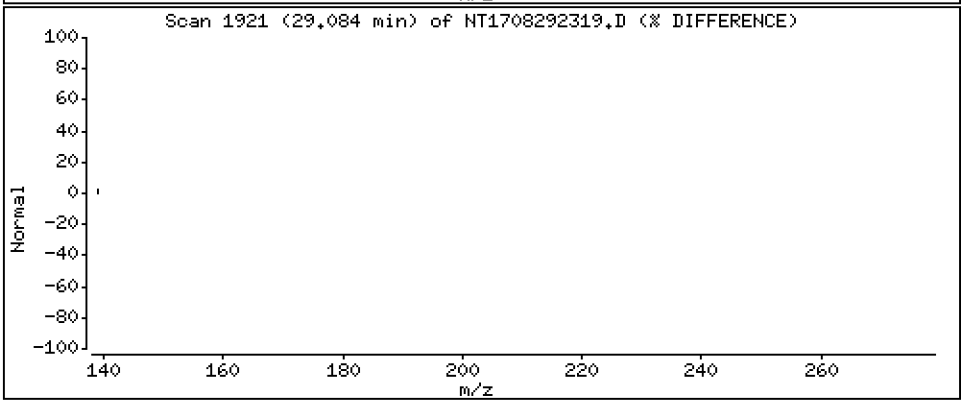












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Date : 29-AUG-2023 22:47

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV1

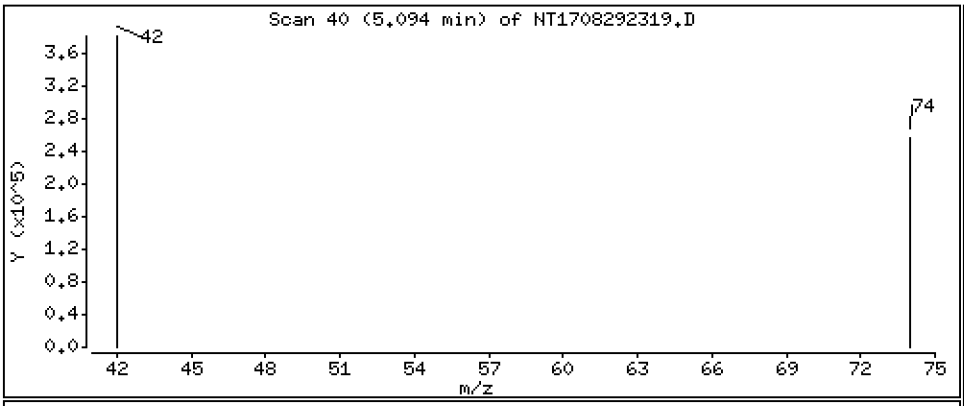
Operator: JGR

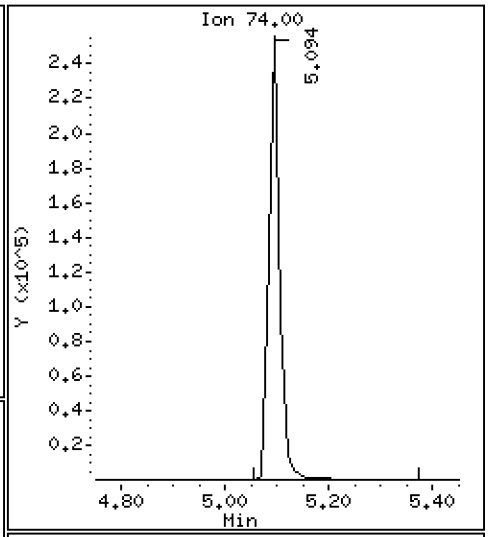
Column phase: ZB-5msi

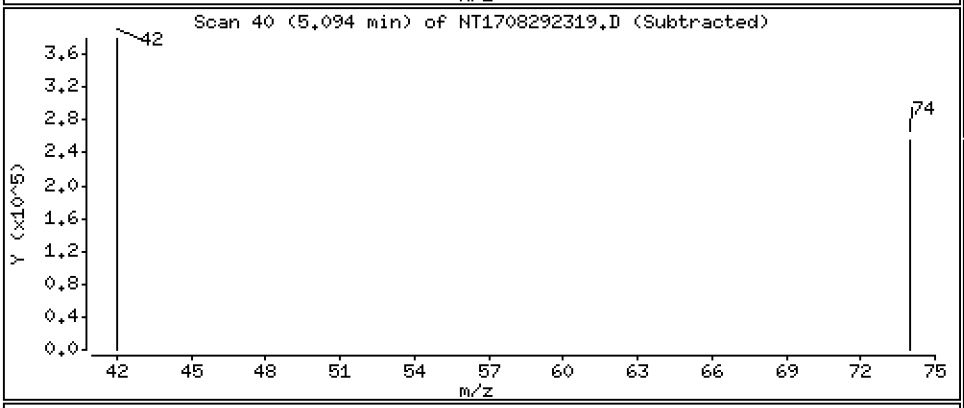
Column diameter: 0.25

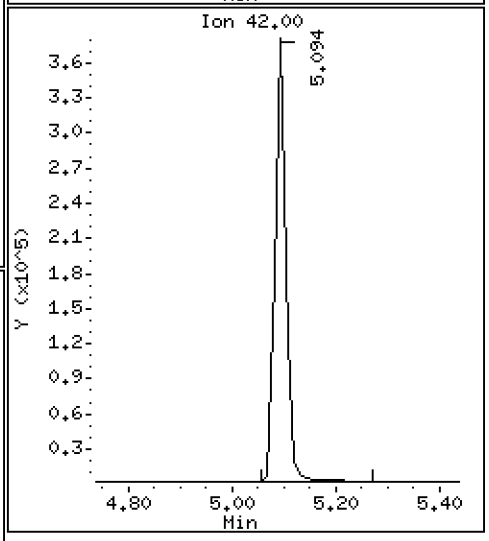
90 N-Nitrosodimethylamine

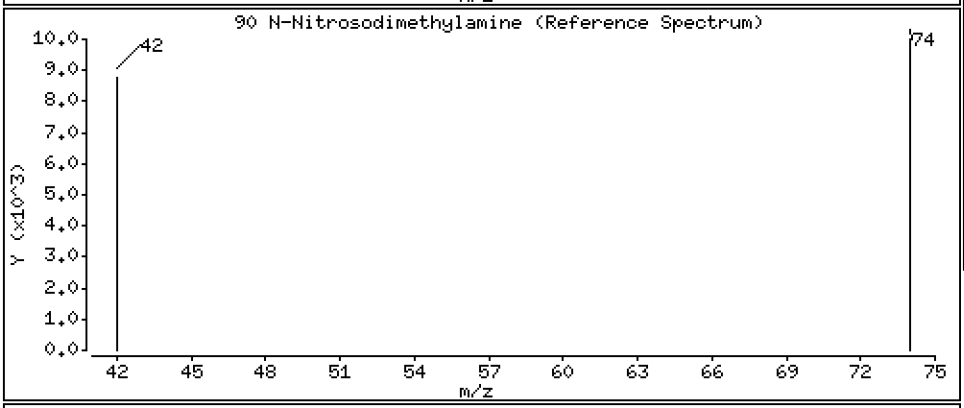
Concentration: 2.383 ug/mL

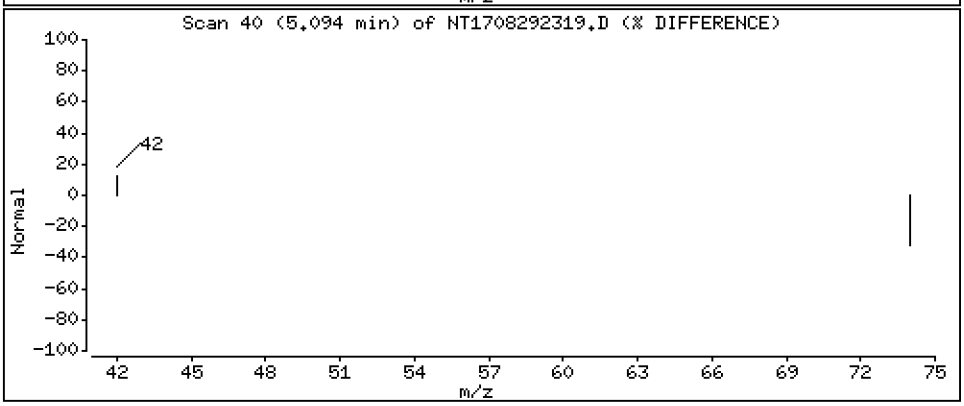












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292319.D
Lab Smp Id: SEQ-CCV1
Inj Date : 29-AUG-2023 22:47
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-CCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 09:25 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.196	7.196	(0.764)	276805	1.86035	1.860(R)
	3 Phenol	94	8.788	8.776	(0.934)	227493	1.00297	1.003
	7 1,3-Dichlorobenzene	146	9.349	9.349	(0.993)	147429	0.96092	0.9609
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	358343	4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	139826	0.94172	0.9417
	11 Benzyl alcohol	79	9.681	9.669	(1.028)	159664	1.01704	1.017
	12 1,2-Dichlorobenzene	146	9.796	9.797	(1.041)	134652	0.93489	0.9349
	13 2-Methylphenol	108	9.899	9.886	(1.052)	140667	1.02280	1.023
	15 4-Methylphenol	108	10.167	10.154	(1.080)	142755	0.99311	0.9931
	16 N-Nitroso-di-n-propylamine	70	10.218	10.218	(1.086)	153574	1.04476	1.045
	22 2,4-Dimethylphenol	107	11.202	11.189	(0.942)	300981	2.41356	2.414
	24 Benzoic acid	105	11.329	11.329	(0.953)	341114	4.11297	4.113
	26 1,2,4-Trichlorobenzene	180	11.801	11.789	(0.993)	82729	0.97094	0.9709
*	27 Naphthalene-d8	136	11.891	11.878	(1.000)	1242877	4.00000	
	30 Hexachlorobutadiene	225	12.273	12.273	(1.032)	43312	1.08545	1.085
	39 Dimethylphthalate	163	14.976	14.977	(0.967)	158470	1.04992	1.050
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	464388	4.00000	
	50 Diethylphthalate	149	16.417	16.417	(1.060)	176572	1.12509	1.125
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	106153	1.11721	1.117
	57 Hexachlorobenzene	284	17.894	17.894	(0.966)	33235	1.06761	1.068
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	26646	1.26132	1.261
*	59 Phenanthrene-d10	188	18.519	18.506	(1.000)	660913	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	90808	1.37295	1.373(R)
	67 Butylbenzylphthalate	149	22.510	22.511	(0.958)	137097	1.08097	1.081
*	69 Chrysene-d12	240	23.505	23.506	(1.000)	477958	4.00000	
*	77 Perylene-d12	264	26.235	26.223	(1.000)	659026	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.084	29.071	(1.109)	200279	1.02890	1.029
	90 N-Nitrosodimethylamine	74	5.094	5.094	(0.541)	360764	2.38282	2.383

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i Calibration Date: 29-AUG-2023
Lab File ID: NT1708292319.D Calibration Time: 12:37
Lab Smp Id: SEQ-CCV1
Analysis Type: SV Level:
Quant Type: ISTD Sample Type:
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	296489	148245	592978	358343	20.86
27 Naphthalene-d8	1098892	549446	2197784	1242877	13.10
42 Acenaphthene-d10	443071	221536	886142	464388	4.81
59 Phenanthrene-d10	627744	313872	1255488	660913	5.28
69 Chrysene-d12	404122	202061	808244	477958	18.27
77 Perylene-d12	417323	208662	834646	659026	57.92

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	-0.00
27 Naphthalene-d8	11.88	11.38	12.38	11.89	0.11
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	-0.00
59 Phenanthrene-d10	18.51	18.01	19.01	18.52	0.07
69 Chrysene-d12	23.51	23.01	24.01	23.51	-0.00
77 Perylene-d12	26.22	25.72	26.72	26.24	0.05

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292319.D

Lab ID: SEQ-CCV1
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   29-AUG-2023 22:47

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1708292304.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GH00045
Lab File ID:	NT1708292326.D	Calibration Date:	08/10/2023
Sequence:	SLH0447	Injection Date:	08/30/23
Lab Sample ID:	SLH0447-CCV2	Injection Time:	03:06
Sequence Name:	Calibration Check		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
1,4-Dichlorobenzene	A	1.0000	0.9	1.6574040	1.5628160		-5.7	+/-50
1,2-Dichlorobenzene	A	1.0000	0.9	1.6077360	1.5009370		-6.6	+/-50
Benzyl Alcohol	A	1.0000	1.0	1.7523940	1.8084450		3.2	+/-50
Benzoic acid	A	4.0000	4.2	0.1715968	0.2775087		3.9	+/-50
2,4-Dimethylphenol	A	2.0000	2.4	0.4013400	0.4768170		18.8	+/-50
1,2,4-Trichlorobenzene	A	1.0000	1.0	0.2742178	0.2627008		-4.2	+/-50
N-Nitrosodiphenylamine	A	1.0000	1.1	0.5750605	0.6484185		12.8	+/-50
Pentachlorophenol	A	2.0000	1.2	0.0738457	0.0784423		-38.6	+/-50
2-Fluorophenol	A	1.5000	1.84	1.6608890	2.0396510		22.8	+/-50
p-Terphenyl-d14	A	1.0000	1.29	0.5535288	0.7141859		29.0	+/-50

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292326.D

Date : 30-AUG-2023 03:06

Client ID:

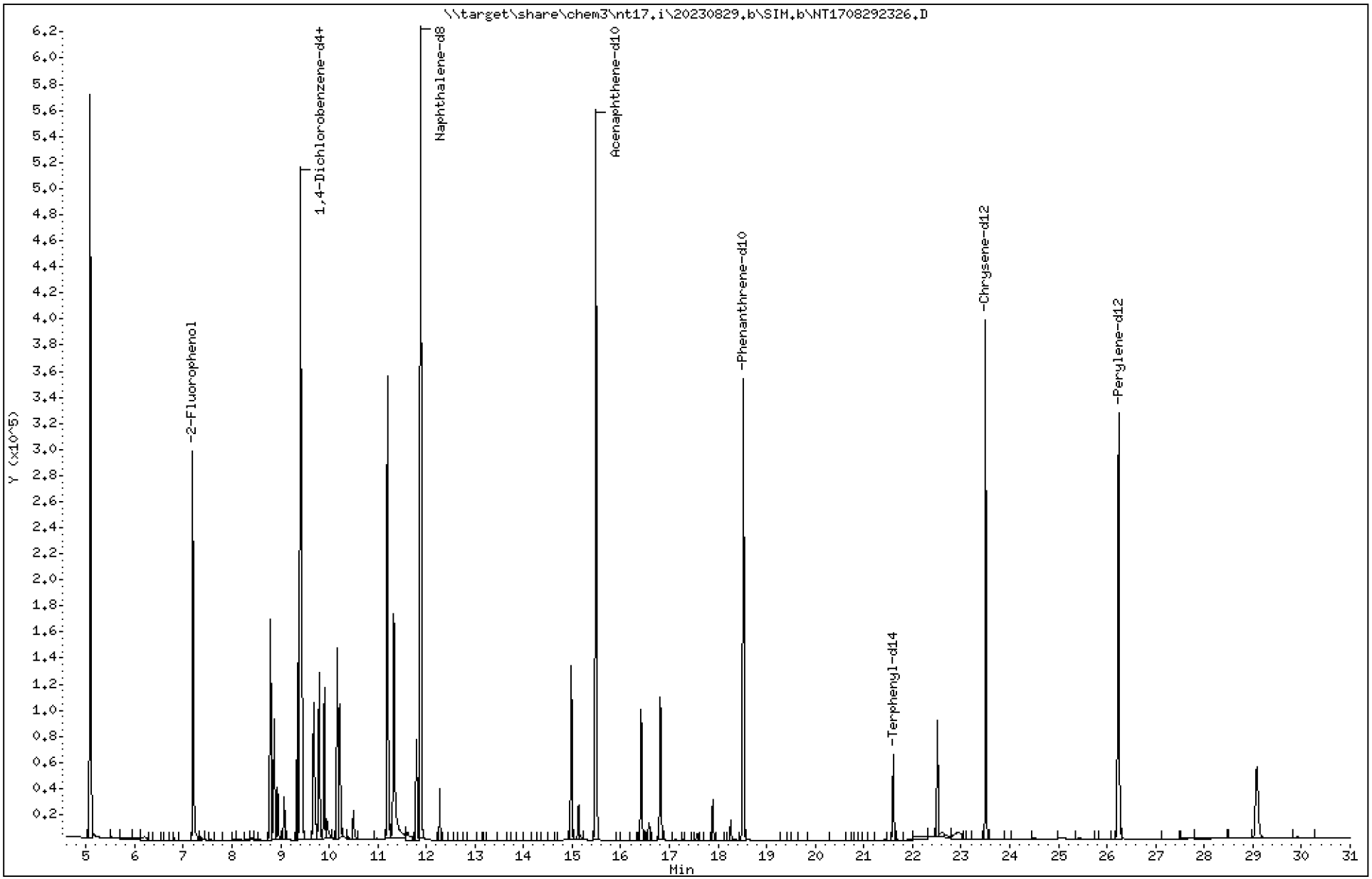
Sample Info: SEQ-CCV2

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

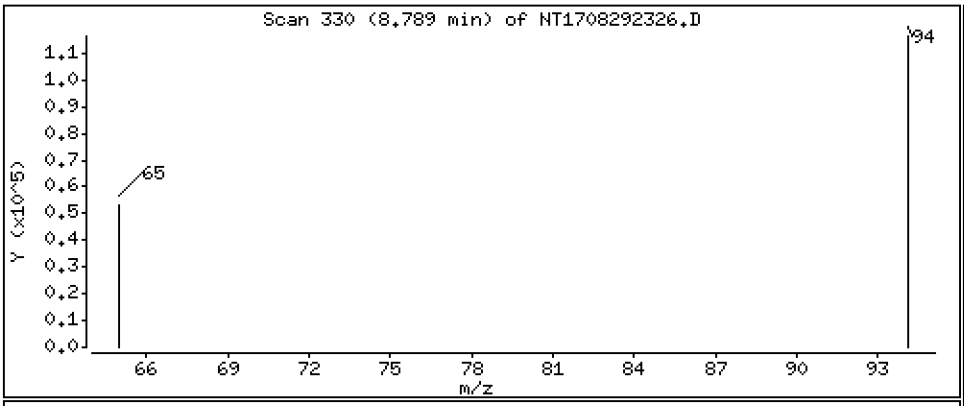
Operator: JGR

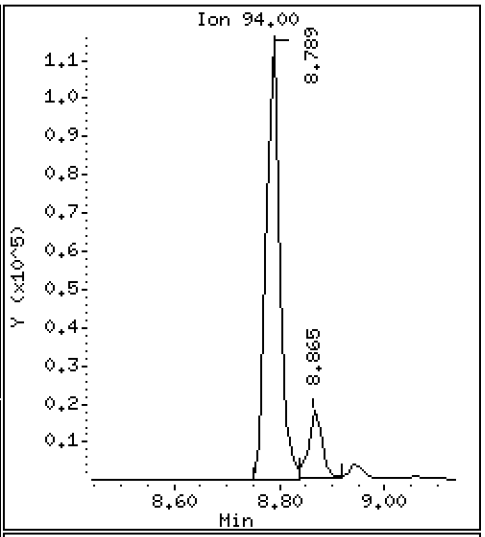
Column phase: ZB-5msi

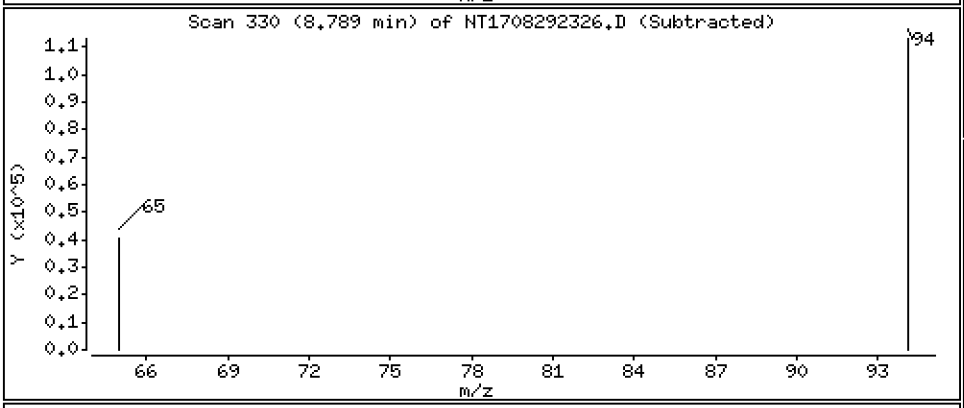
Column diameter: 0.25

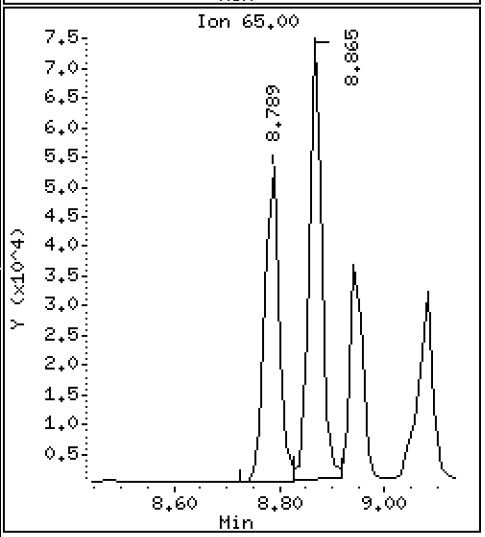
3 Phenol

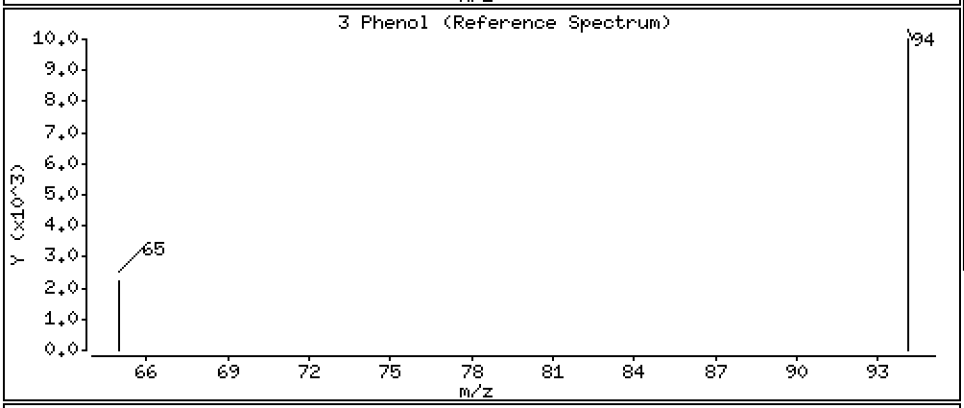
Concentration: 0.9921 ug/mL

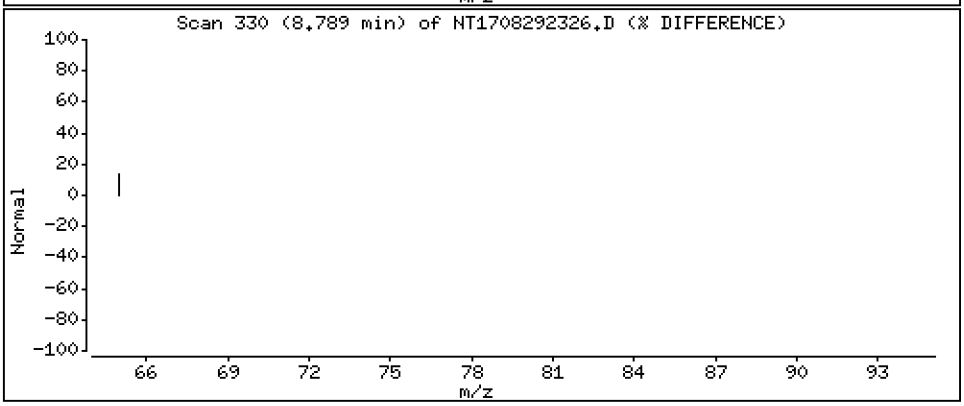












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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

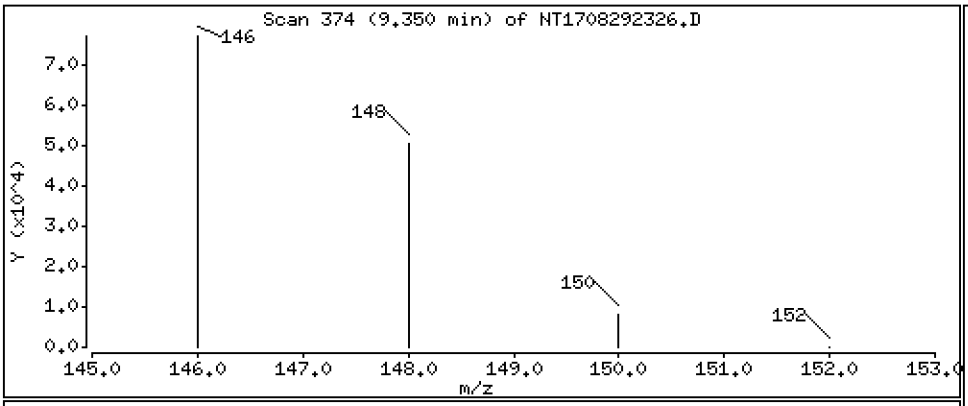
Operator: JGR

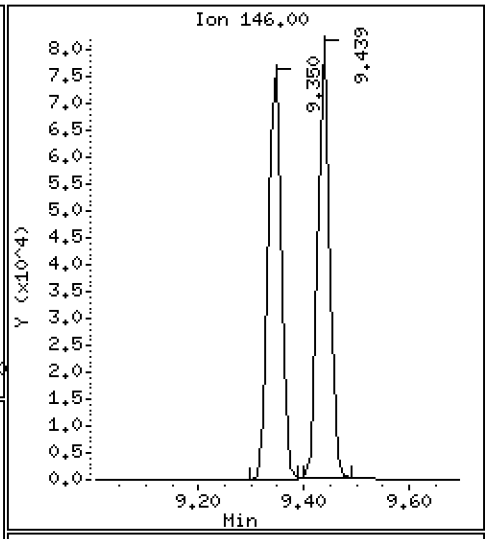
Column phase: ZB-5msi

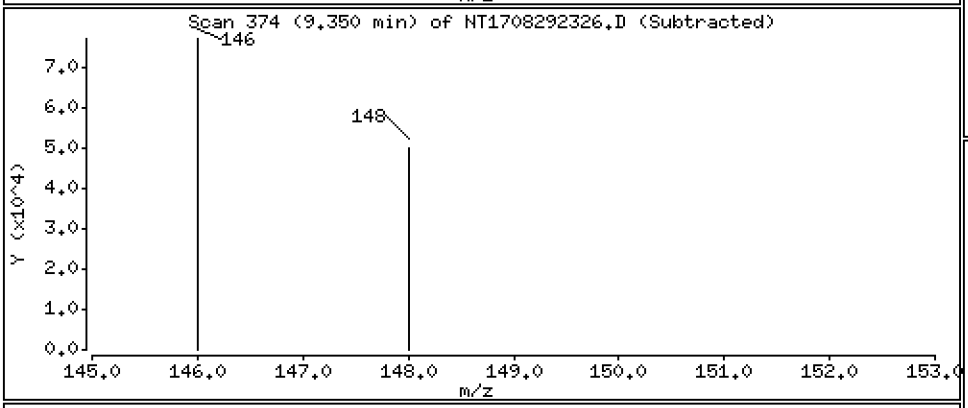
Column diameter: 0.25

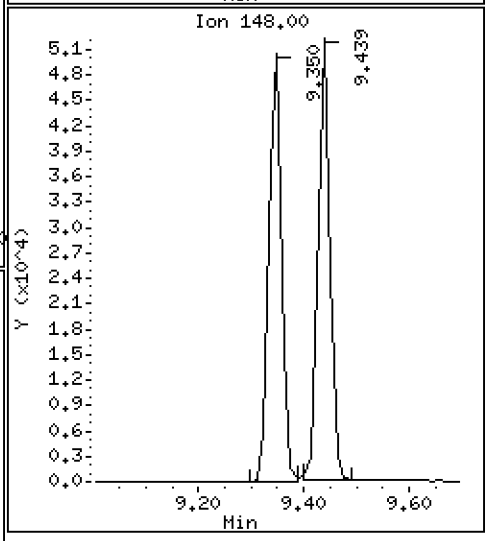
7 1,3-Dichlorobenzene

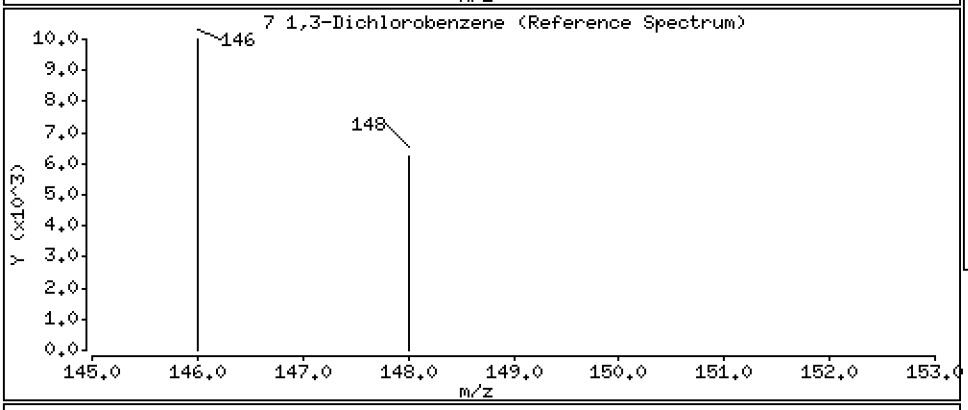
Concentration: 0.9571 ug/mL

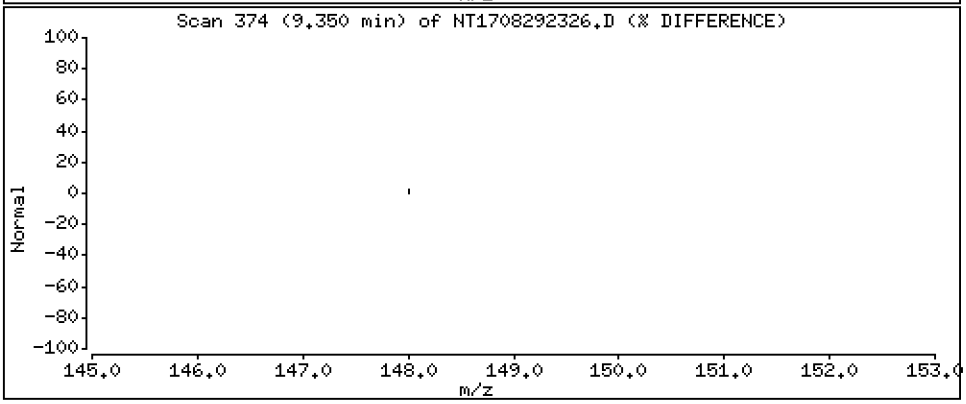












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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

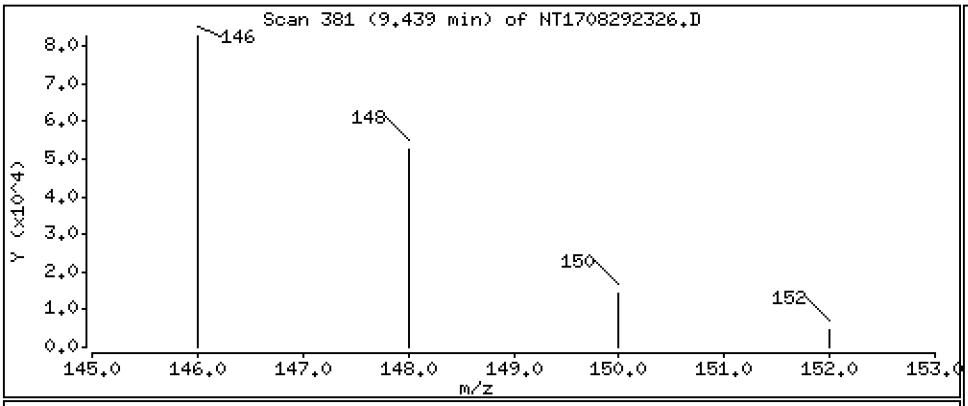
Operator: JGR

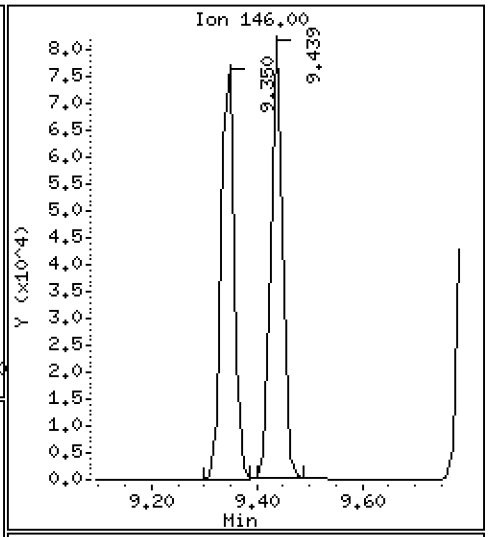
Column phase: ZB-5msi

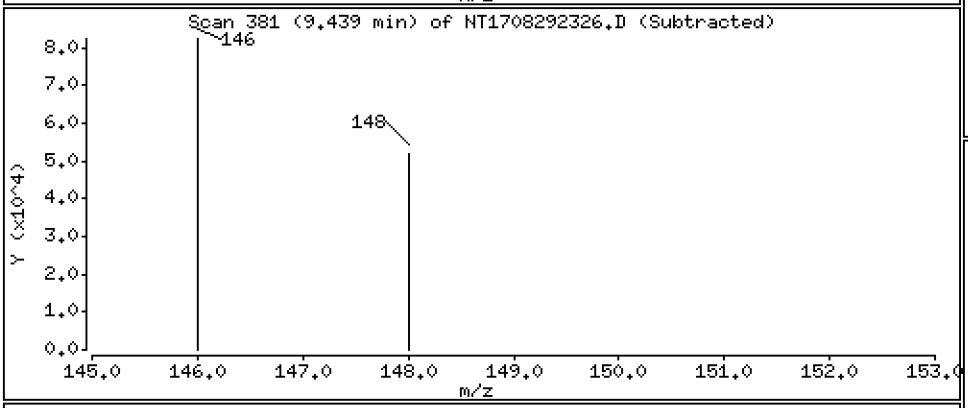
Column diameter: 0.25

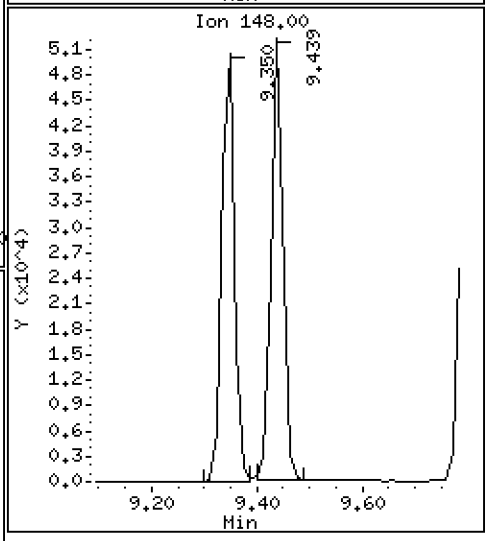
9 1,4-Dichlorobenzene

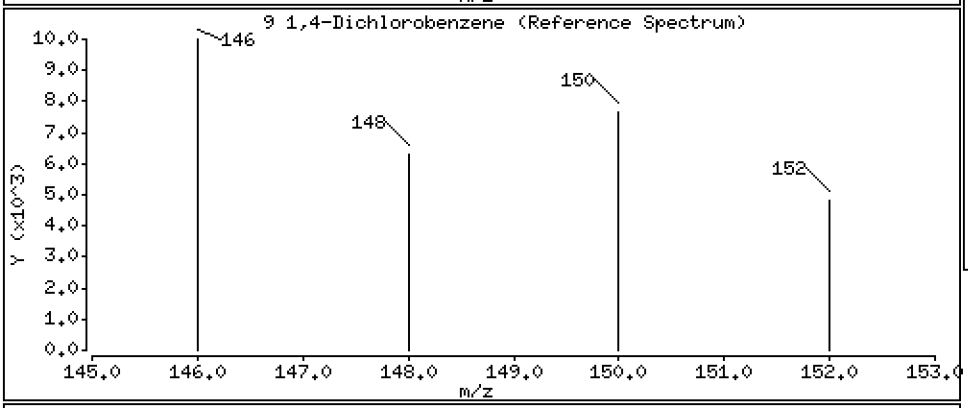
Concentration: 0.9429 ug/mL

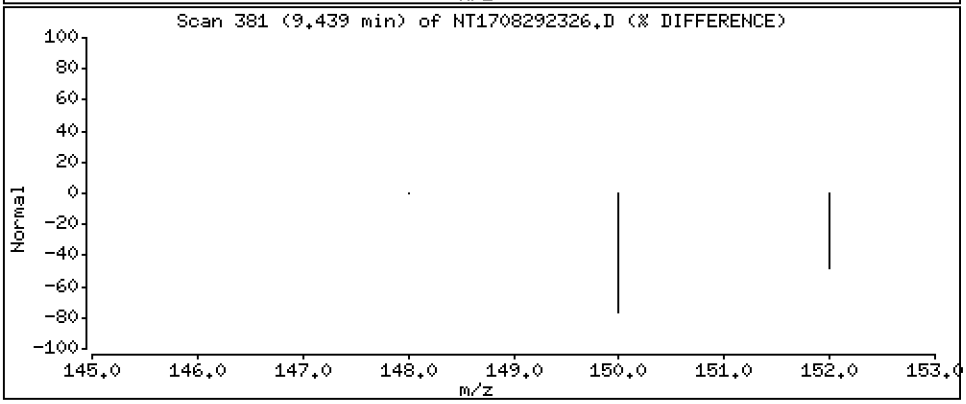












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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

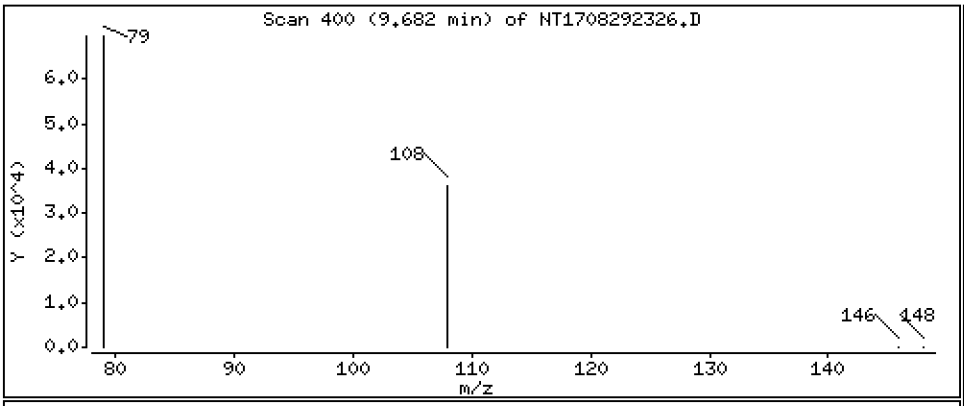
Operator: JGR

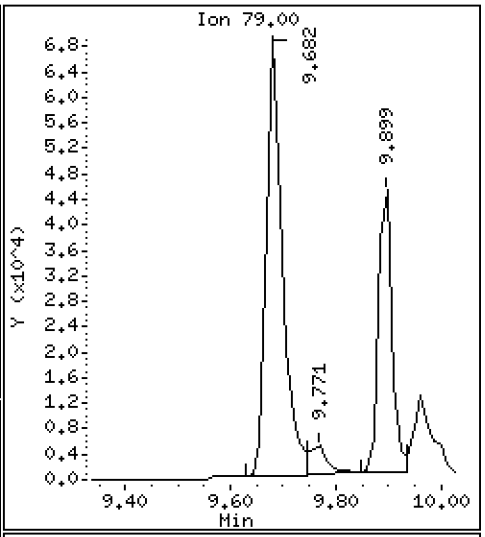
Column phase: ZB-5msi

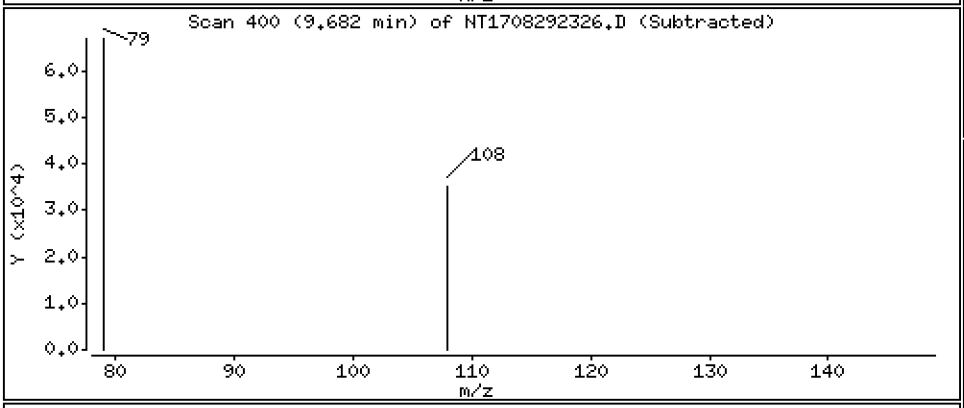
Column diameter: 0.25

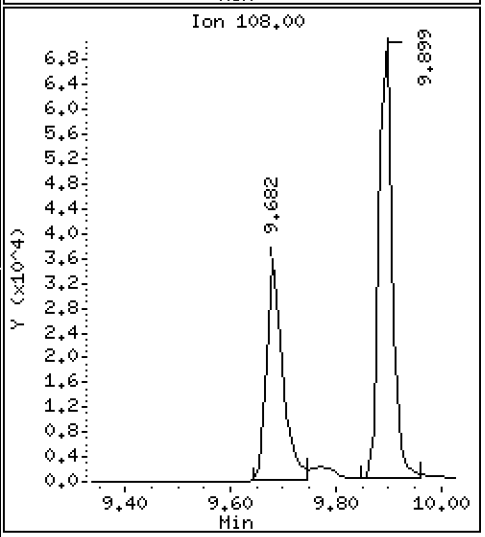
11 Benzyl alcohol

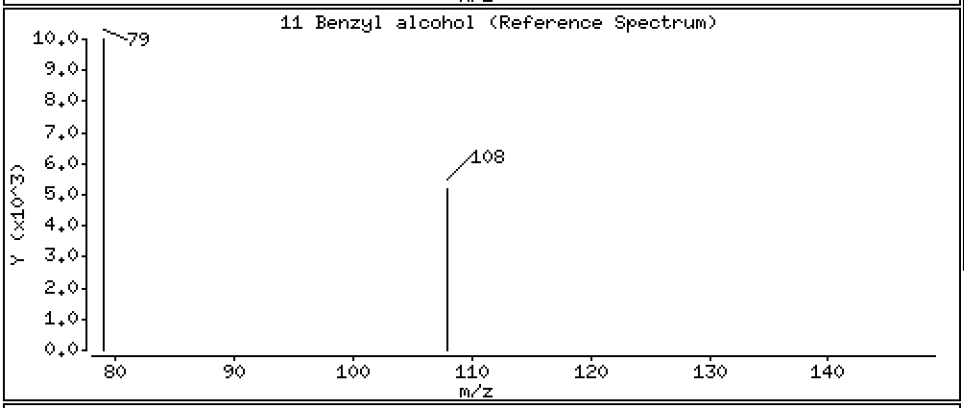
Concentration: 1.032 ug/mL

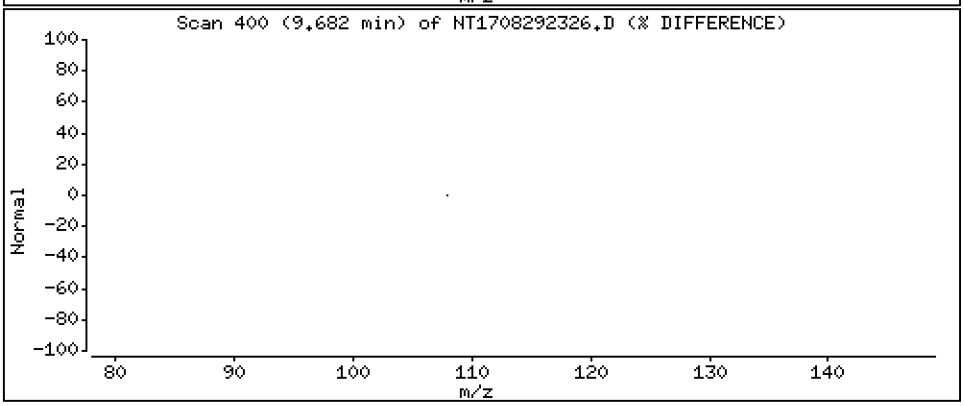












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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

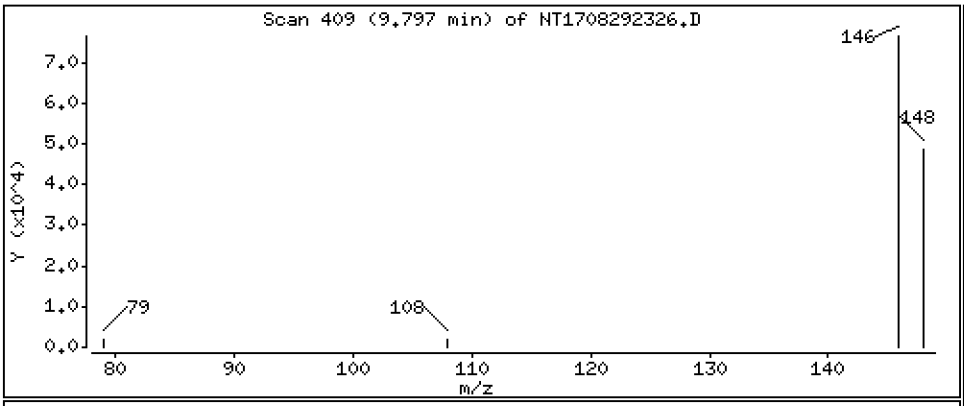
Operator: JGR

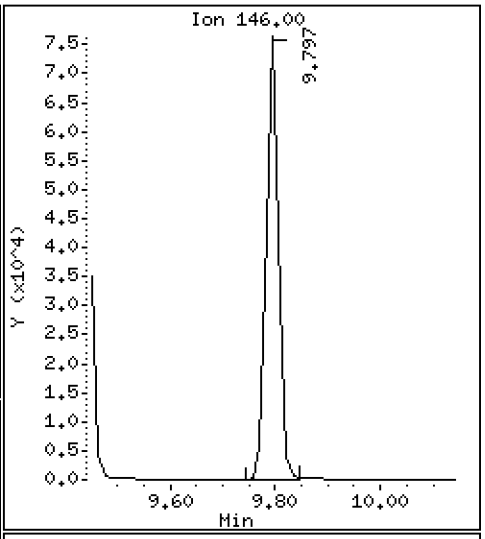
Column phase: ZB-5msi

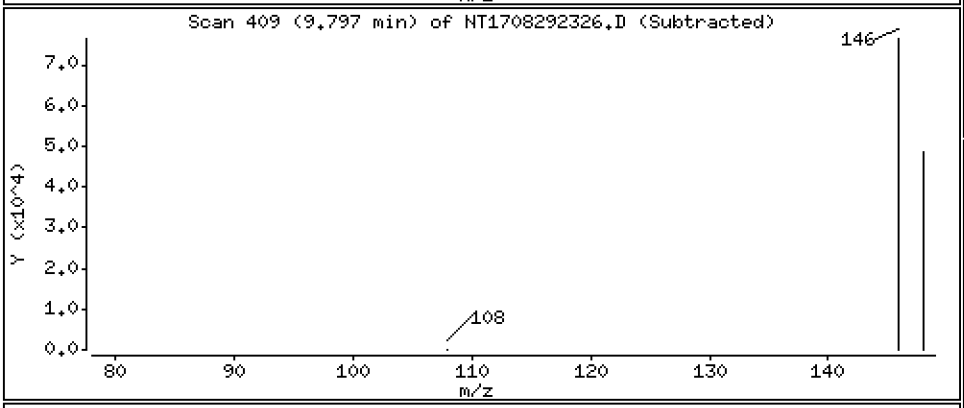
Column diameter: 0.25

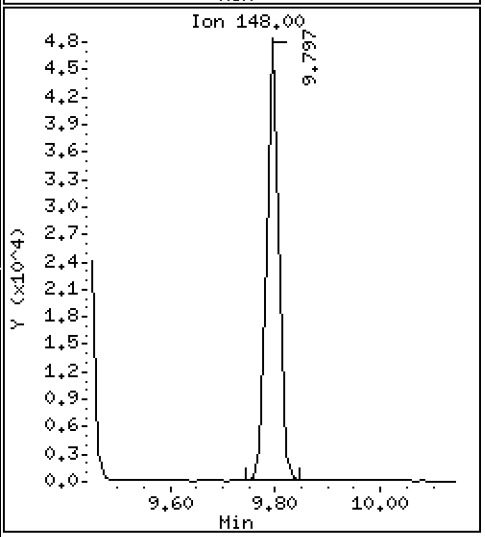
12 1,2-Dichlorobenzene

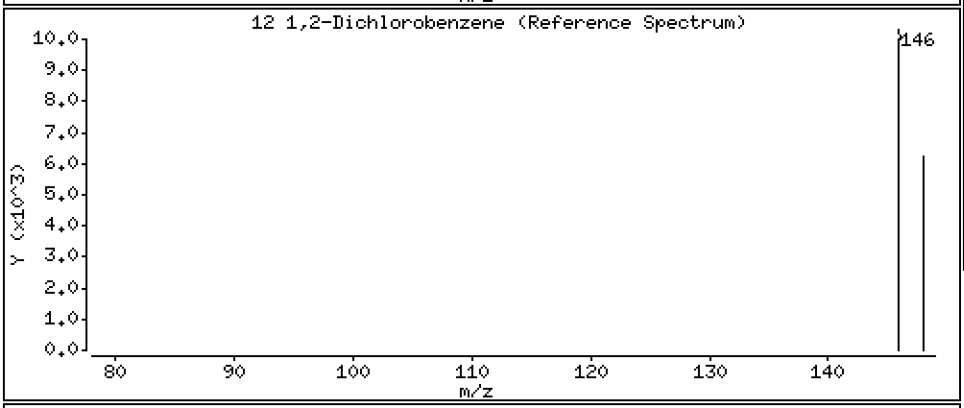
Concentration: 0.9336 ug/mL

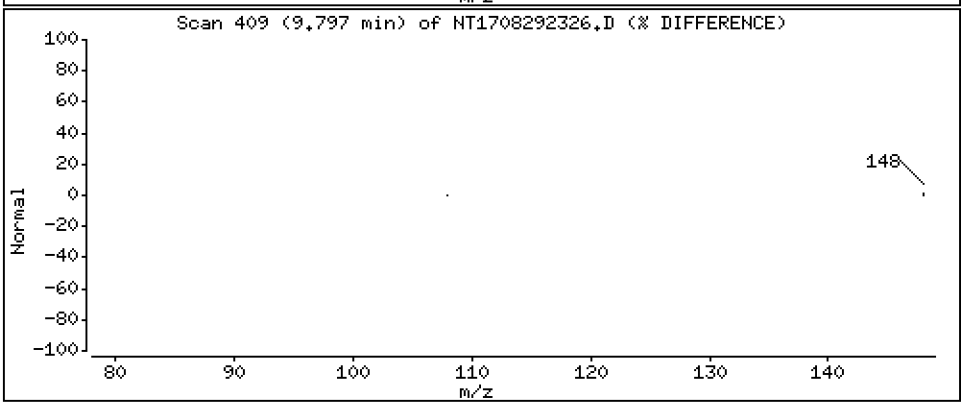












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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

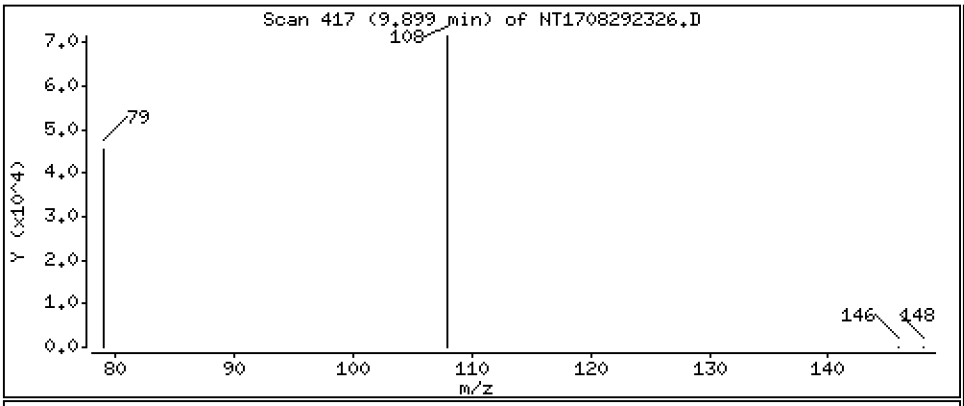
Operator: JGR

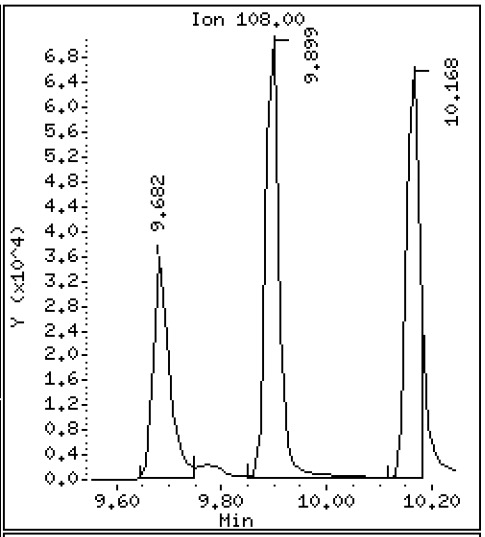
Column phase: ZB-5msi

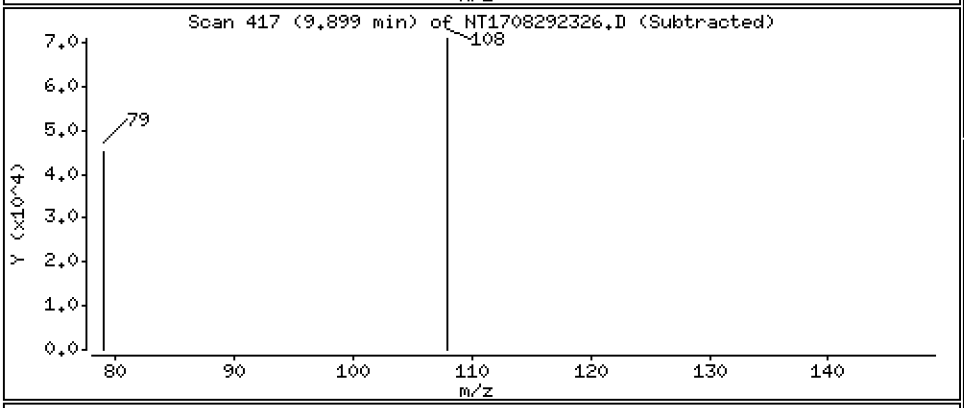
Column diameter: 0.25

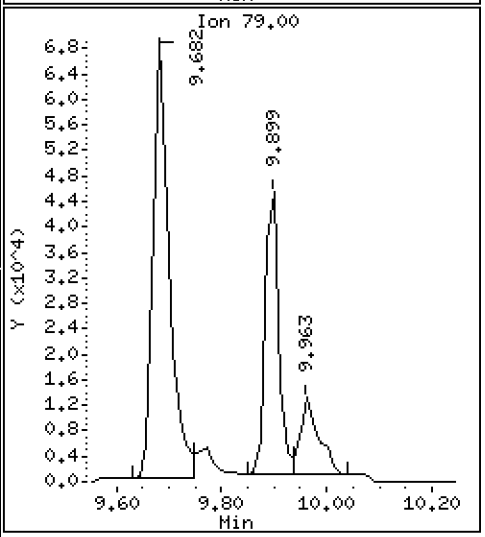
13 2-Methylphenol

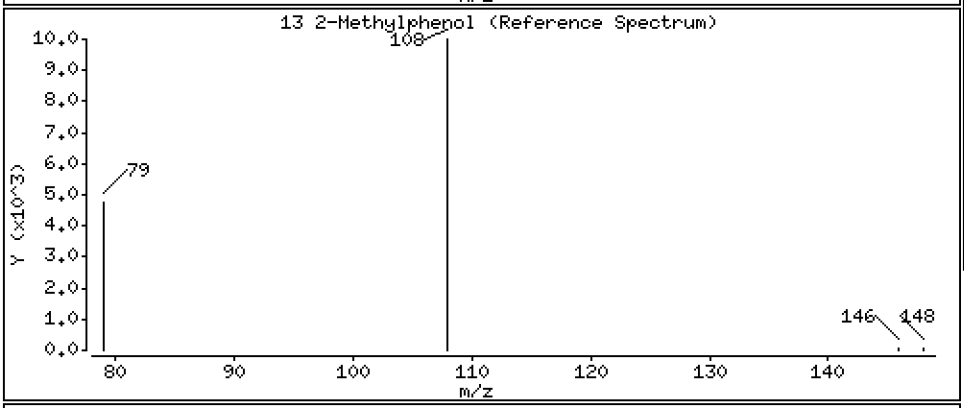
Concentration: 1.038 ug/mL

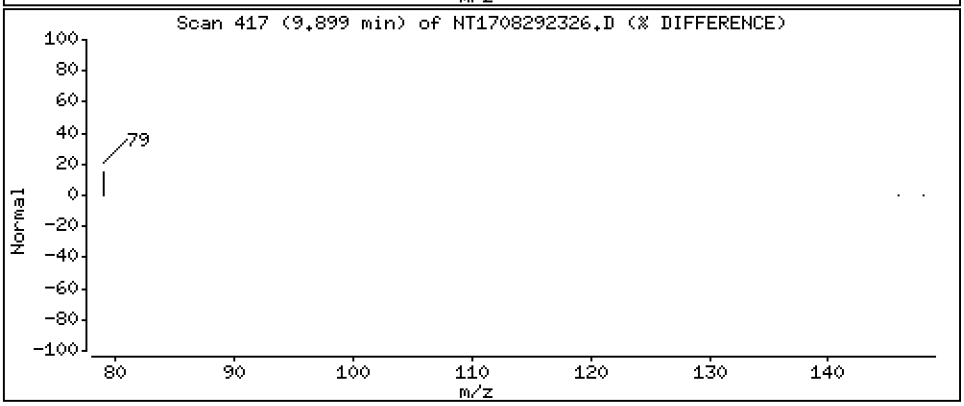












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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

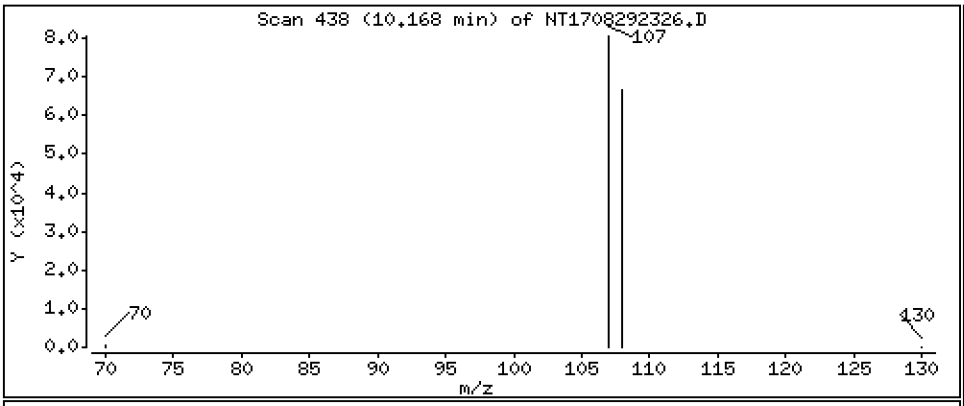
Operator: JGR

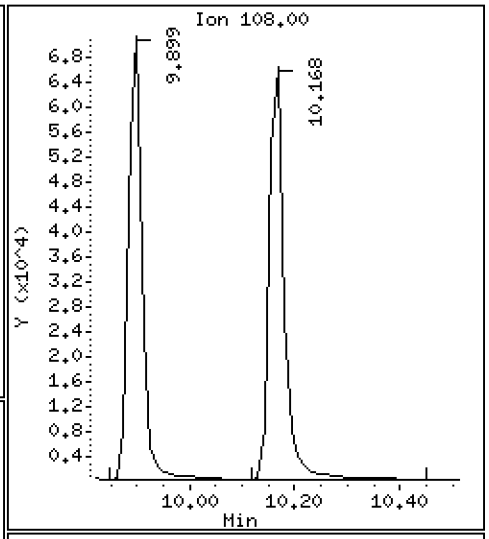
Column phase: ZB-5msi

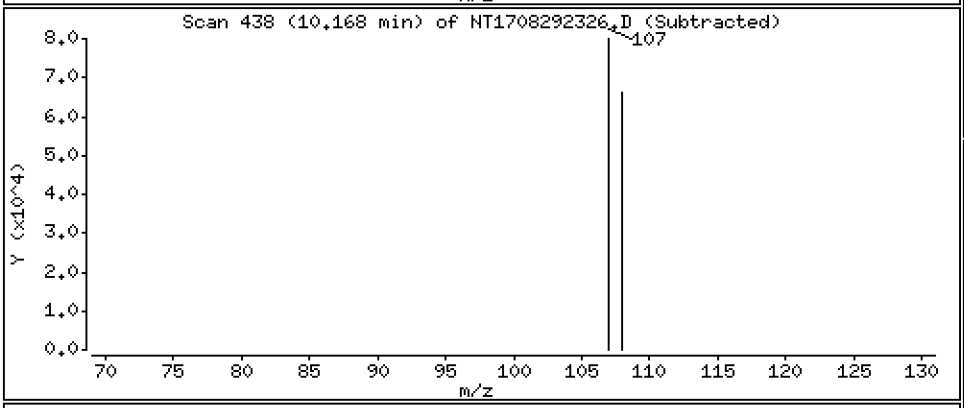
Column diameter: 0.25

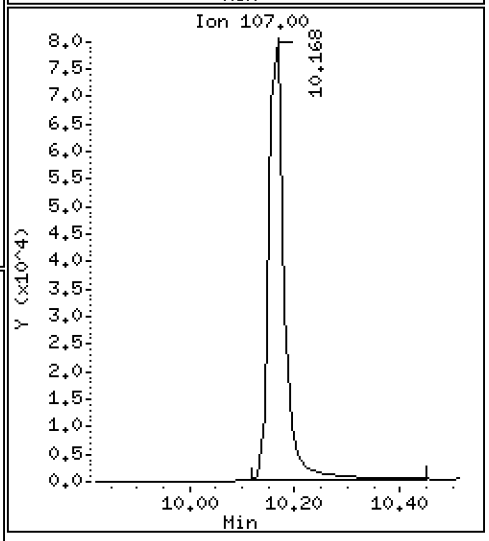
15 4-Methylphenol

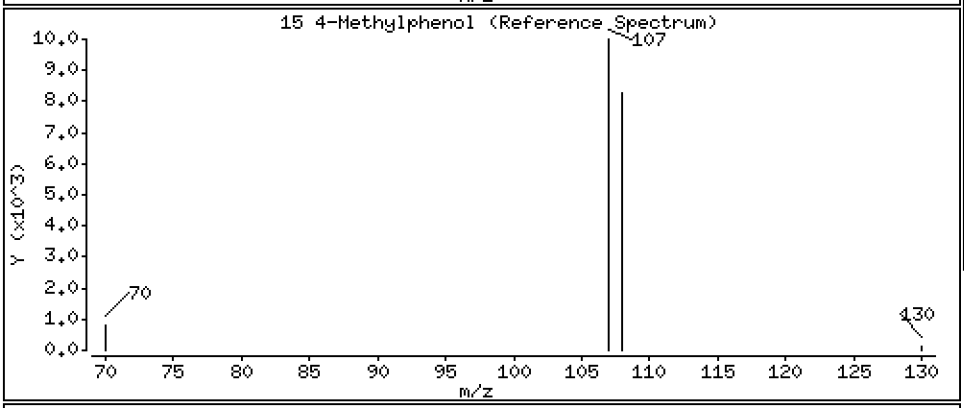
Concentration: 1.015 ug/mL

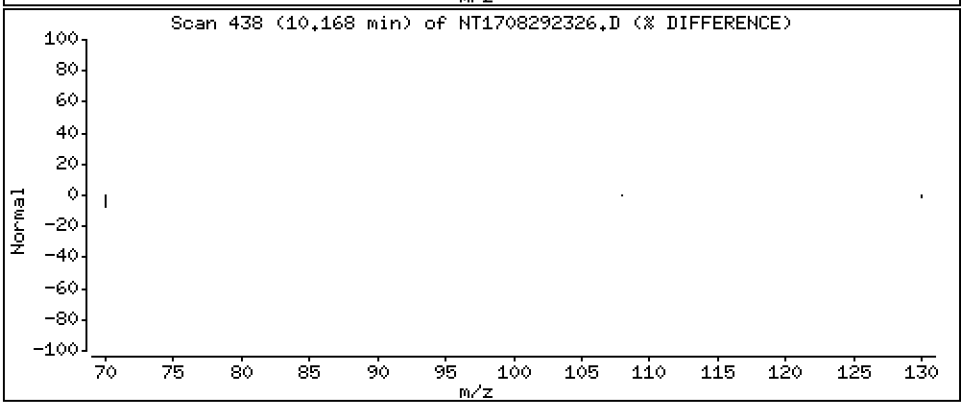












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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

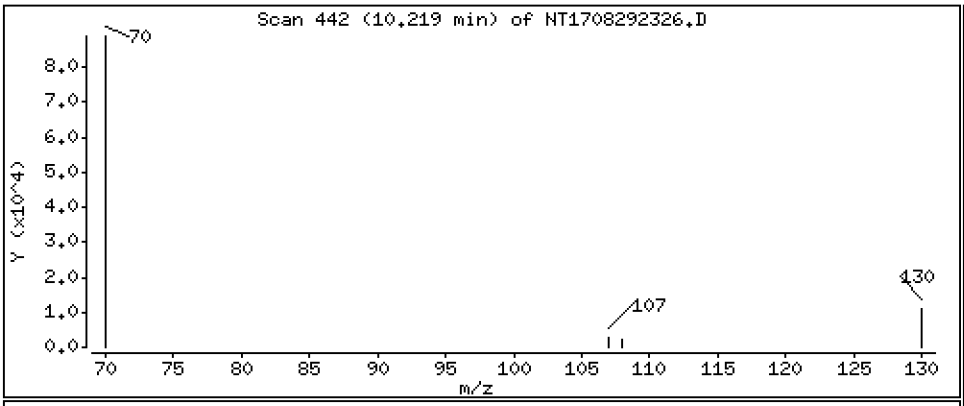
Operator: JGR

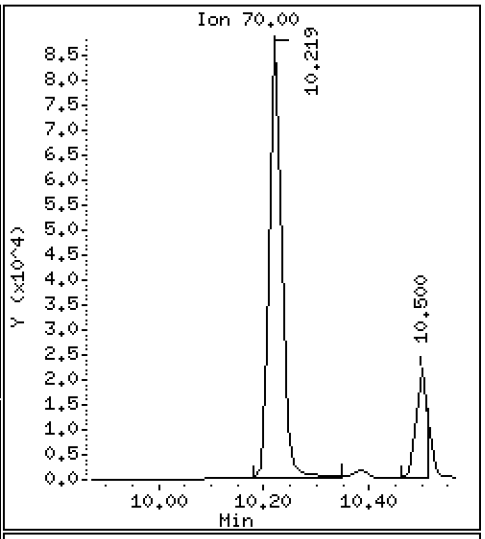
Column phase: ZB-5msi

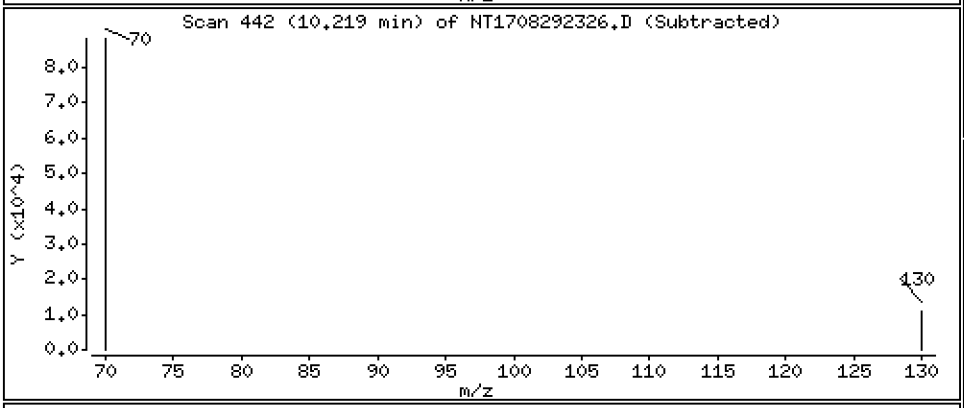
Column diameter: 0.25

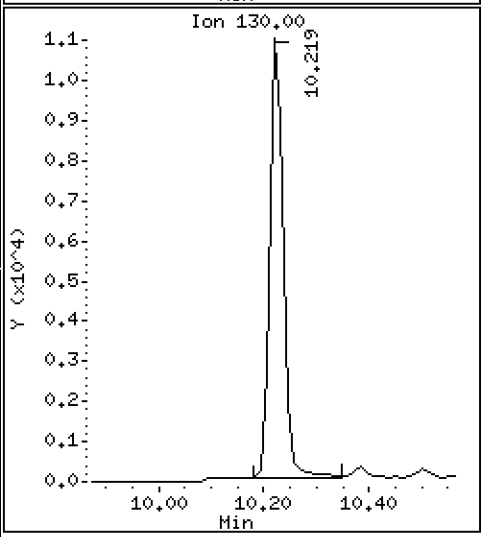
16 N-Nitroso-di-n-propylamine

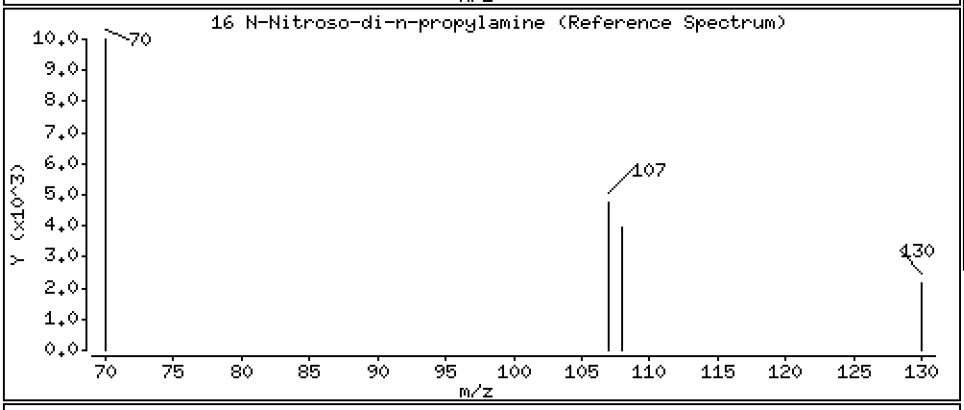
Concentration: 1.082 ug/mL

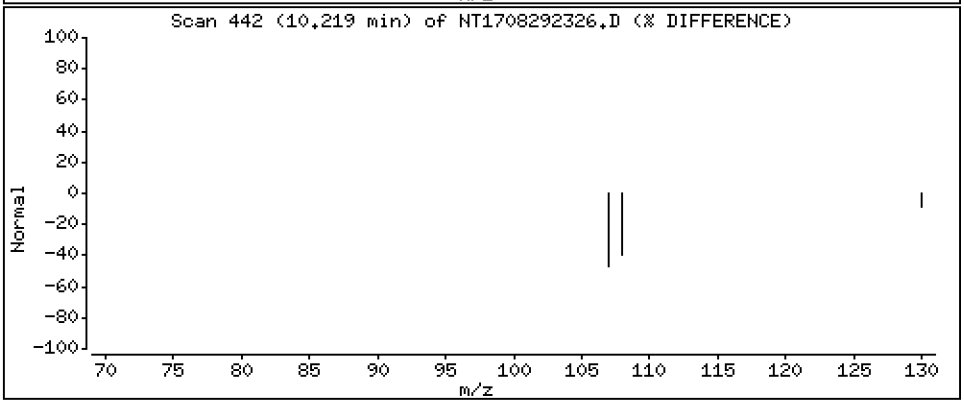












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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

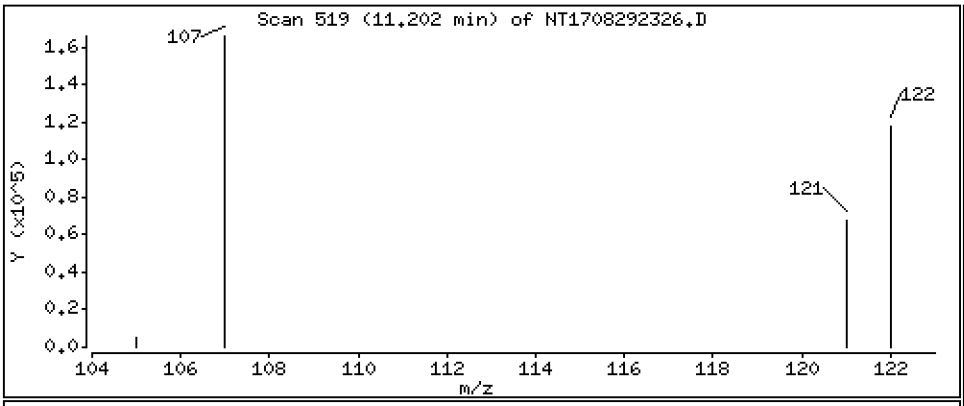
Operator: JGR

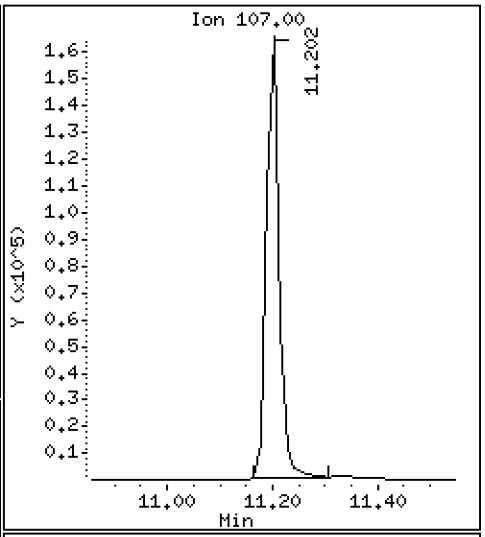
Column phase: ZB-5msi

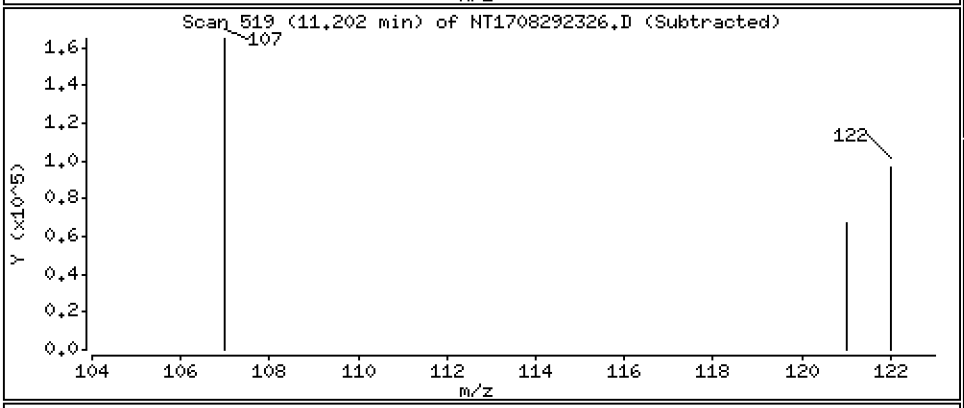
Column diameter: 0.25

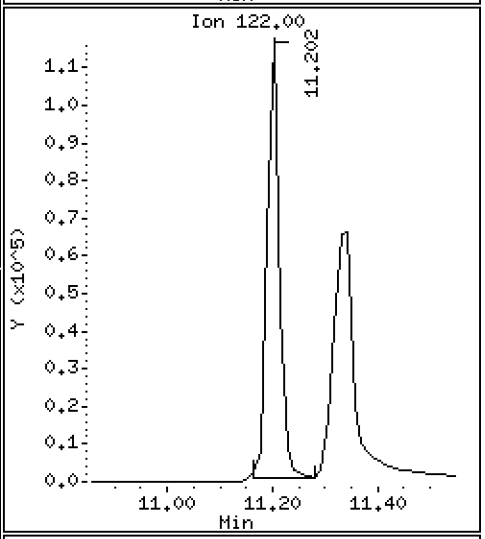
22 2,4-Dimethylphenol

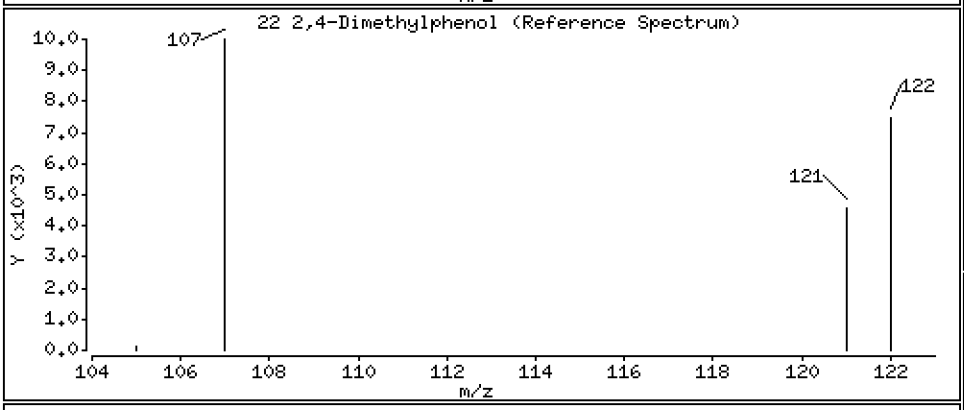
Concentration: 2.376 ug/mL

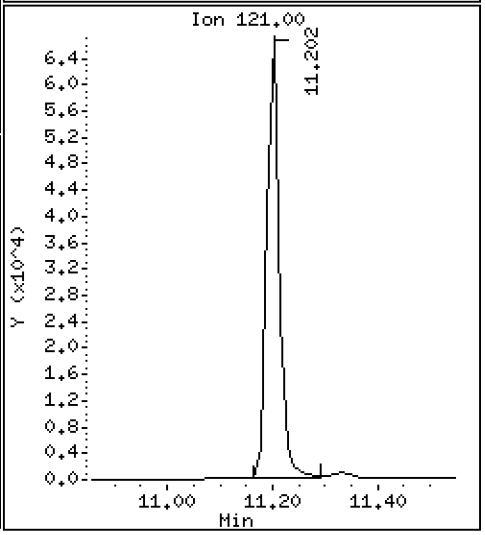


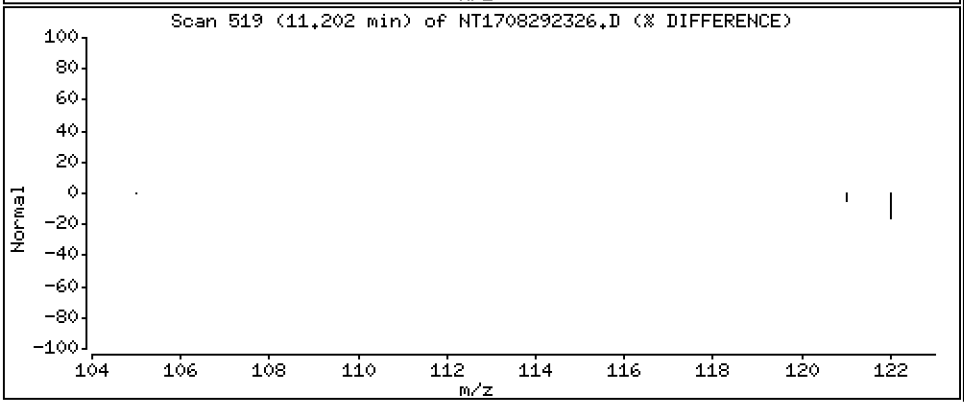












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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

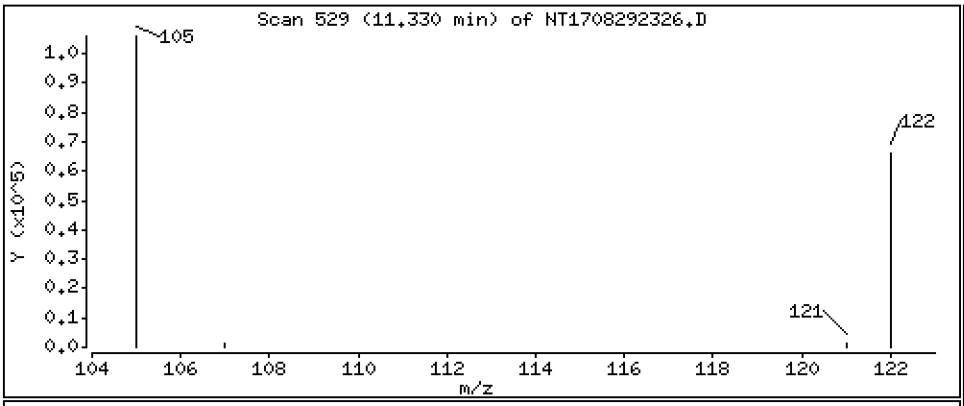
Operator: JGR

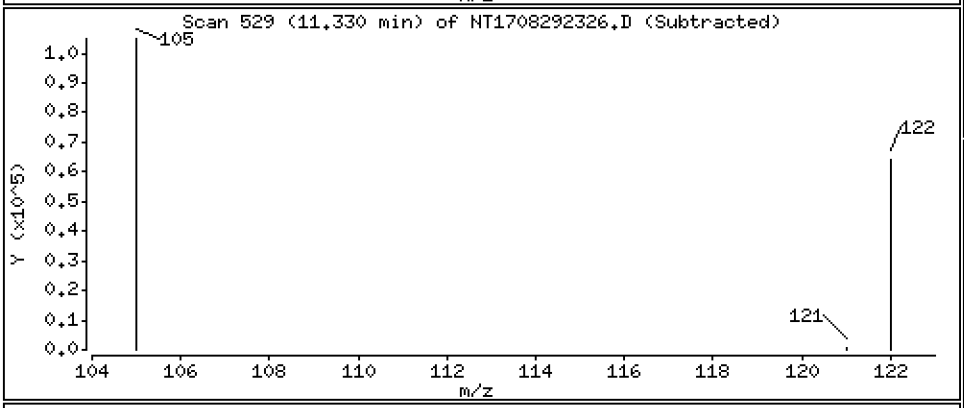
Column phase: ZB-5msi

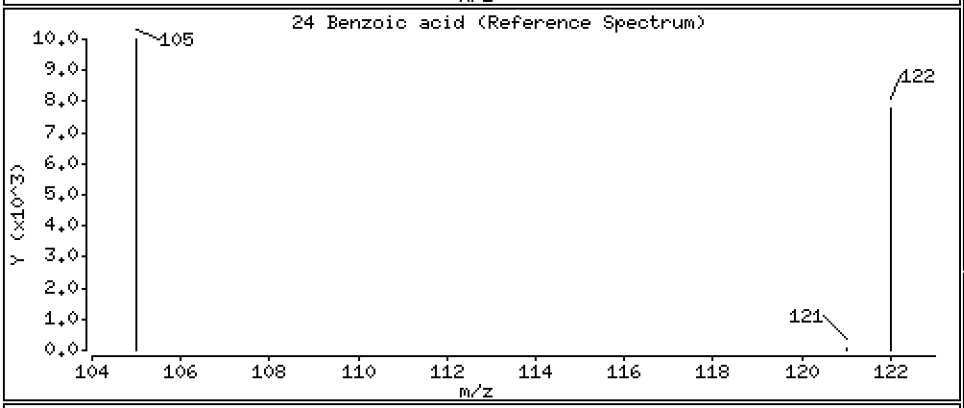
Column diameter: 0.25

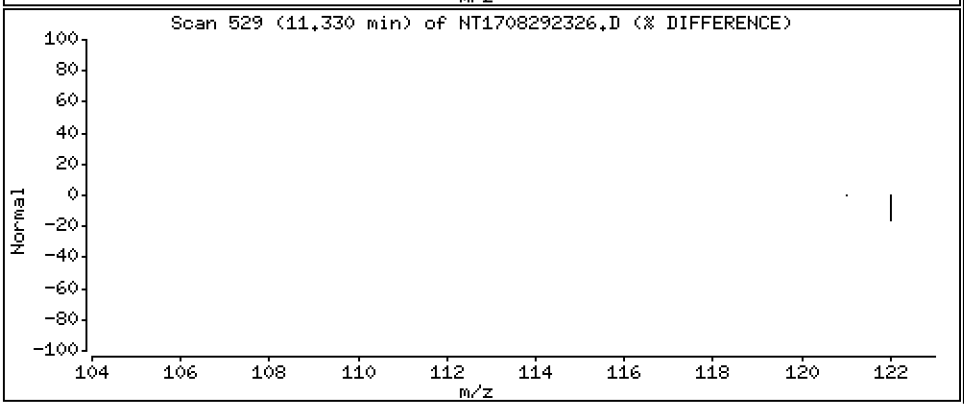
24 Benzoic acid

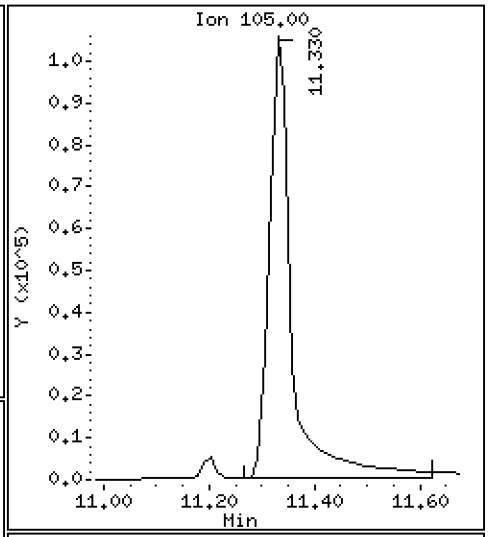
Concentration: 4.158 ug/mL

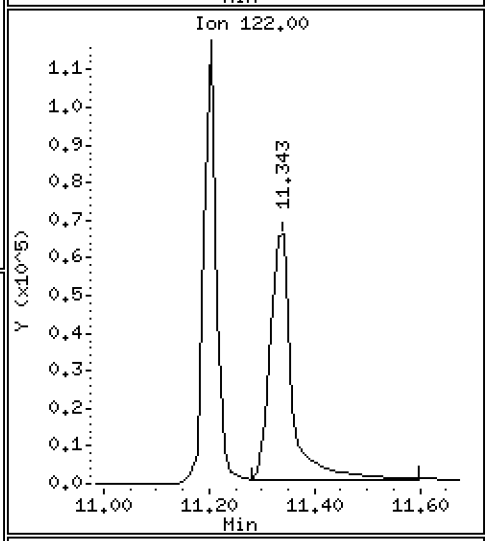


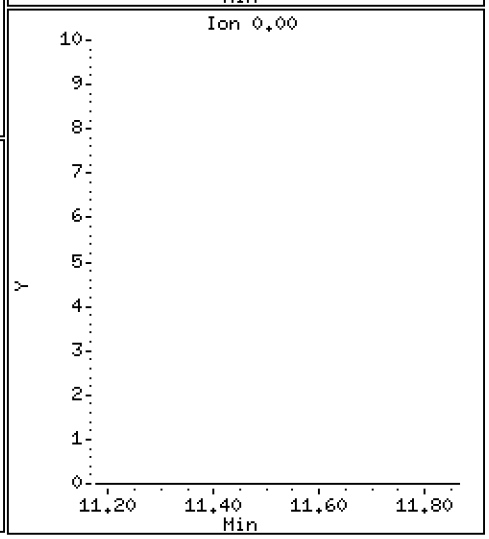












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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

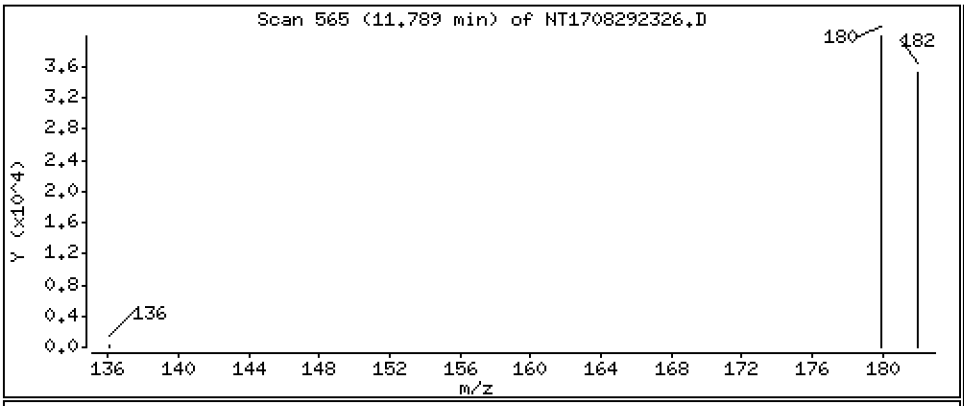
Operator: JGR

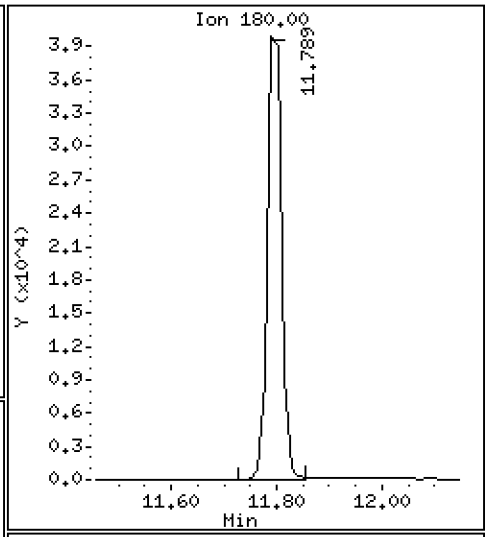
Column phase: ZB-5msi

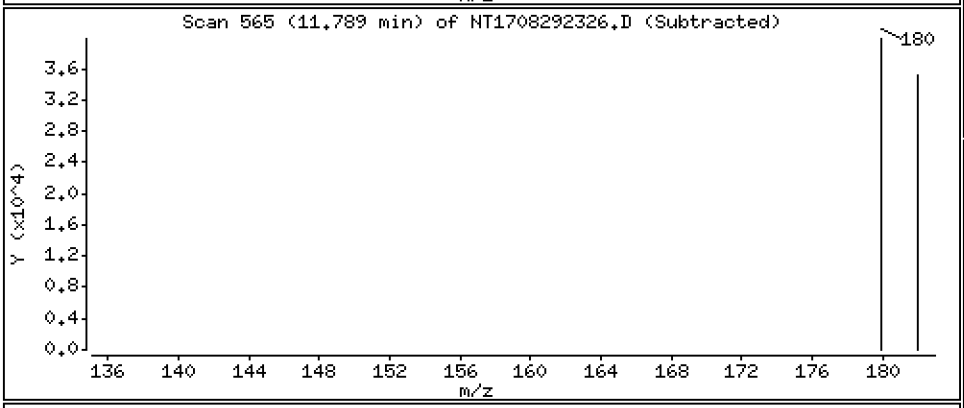
Column diameter: 0.25

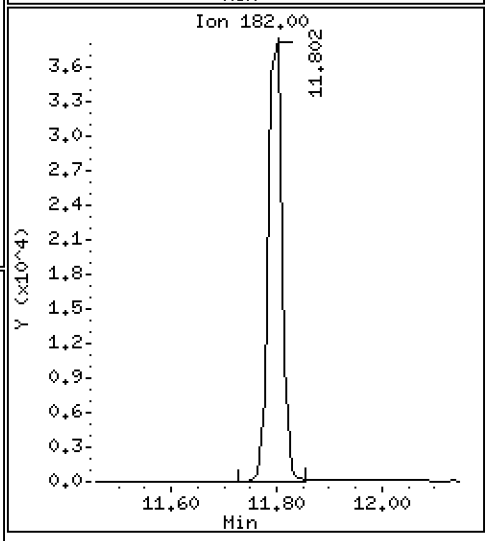
26 1,2,4-Trichlorobenzene

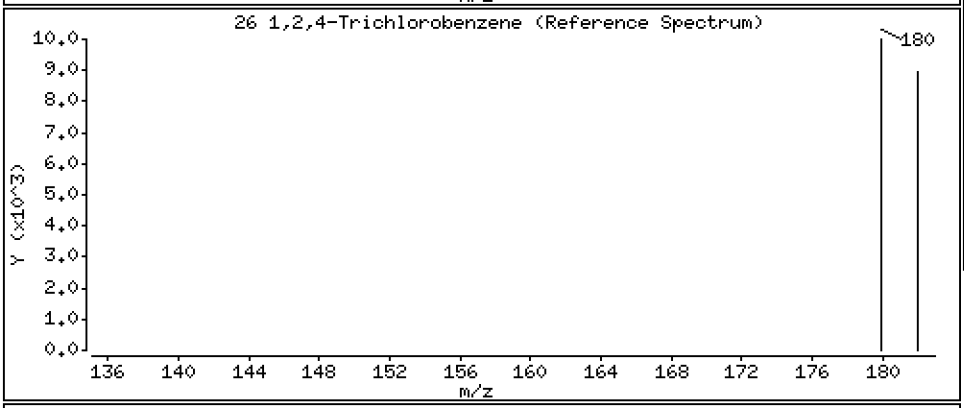
Concentration: 0.9580 ug/mL

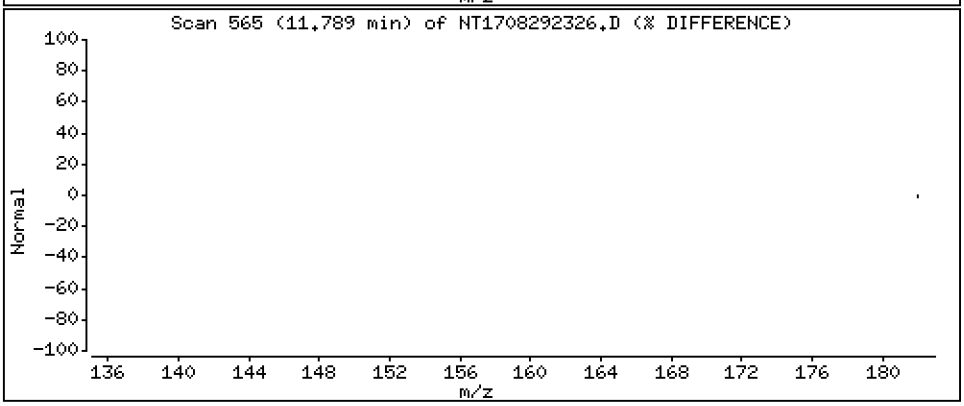












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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

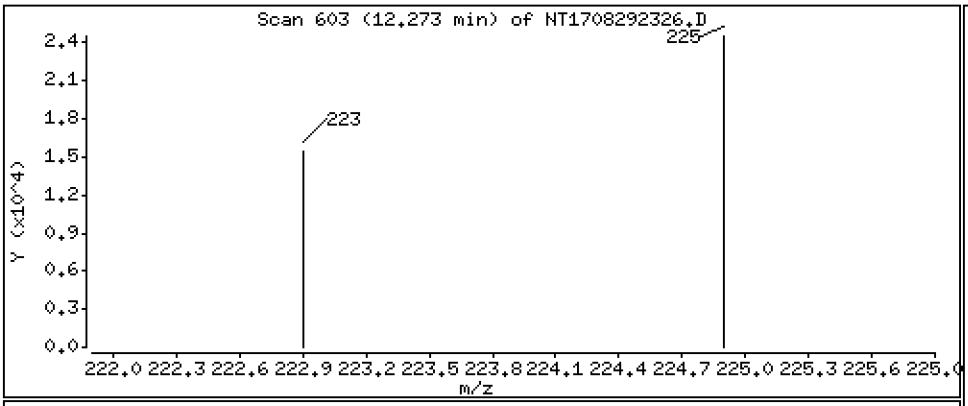
Operator: JGR

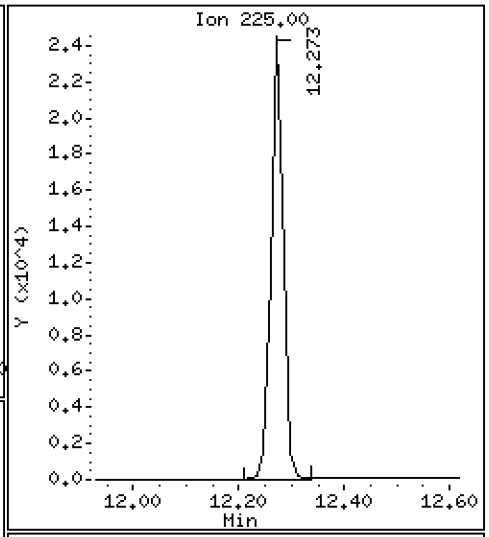
Column phase: ZB-5msi

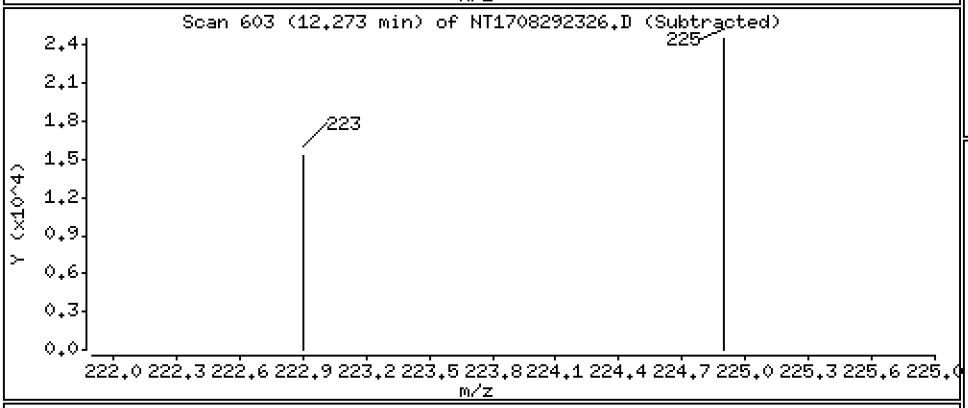
Column diameter: 0.25

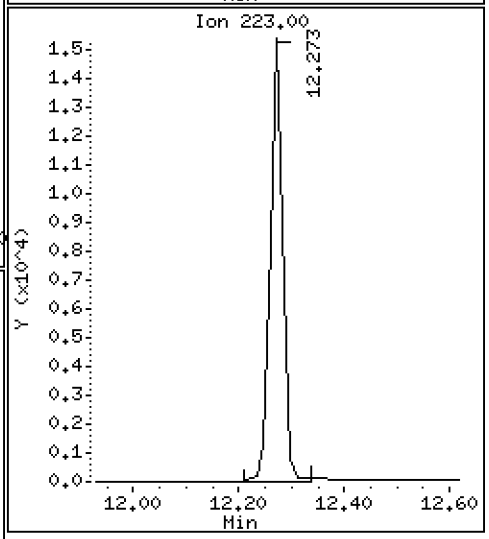
30 Hexachlorobutadiene

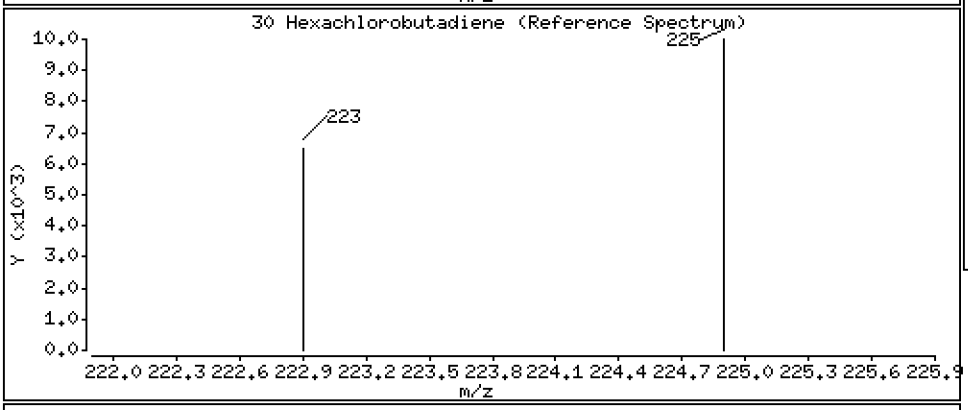
Concentration: 1.071 ug/mL

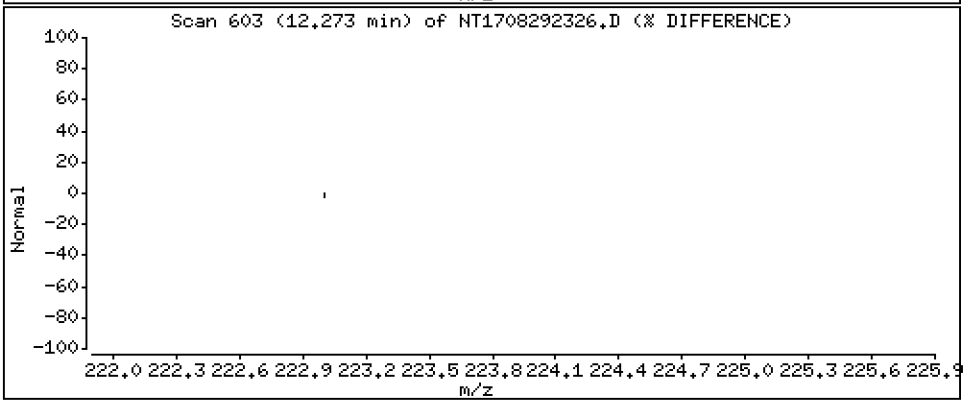












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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

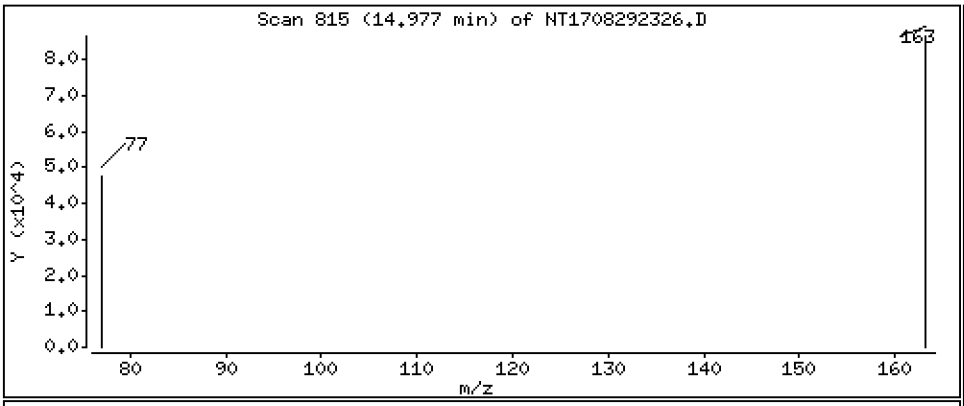
Operator: JGR

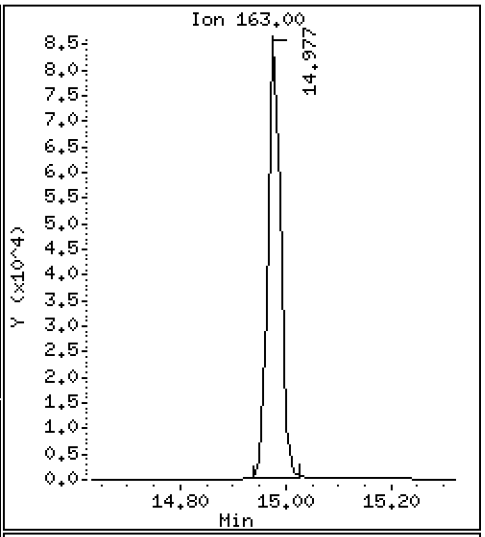
Column phase: ZB-5msi

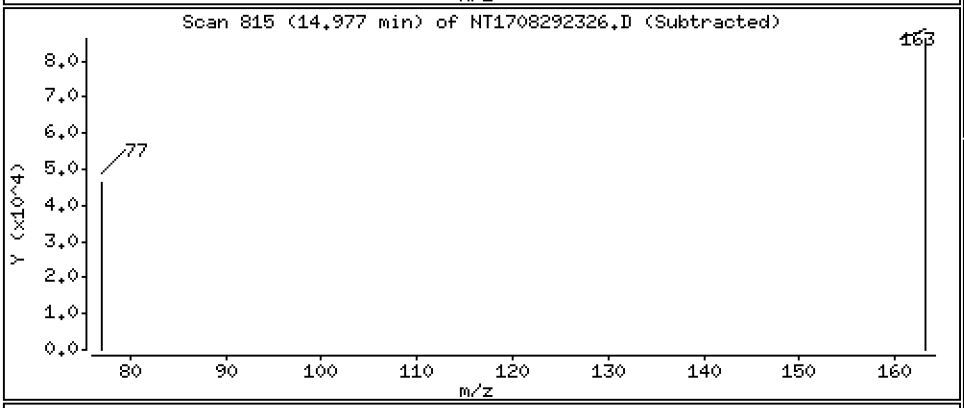
Column diameter: 0.25

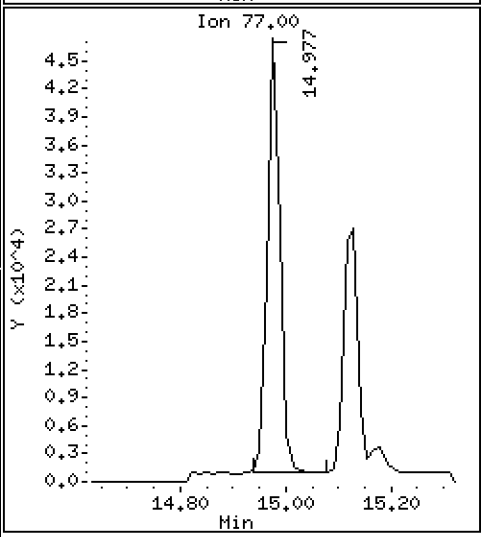
39 Dimethylphthalate

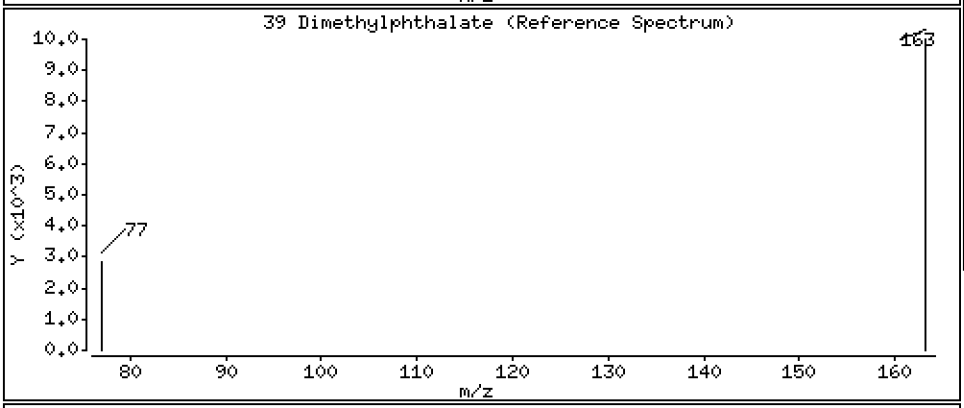
Concentration: 1.031 ug/mL

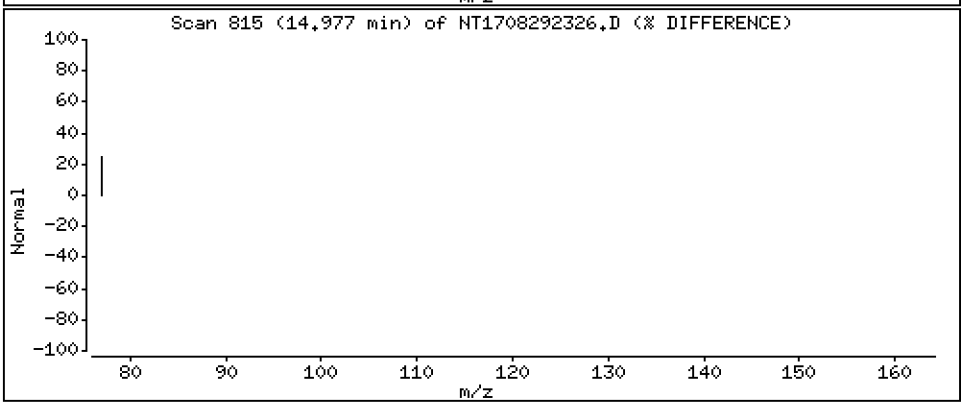












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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

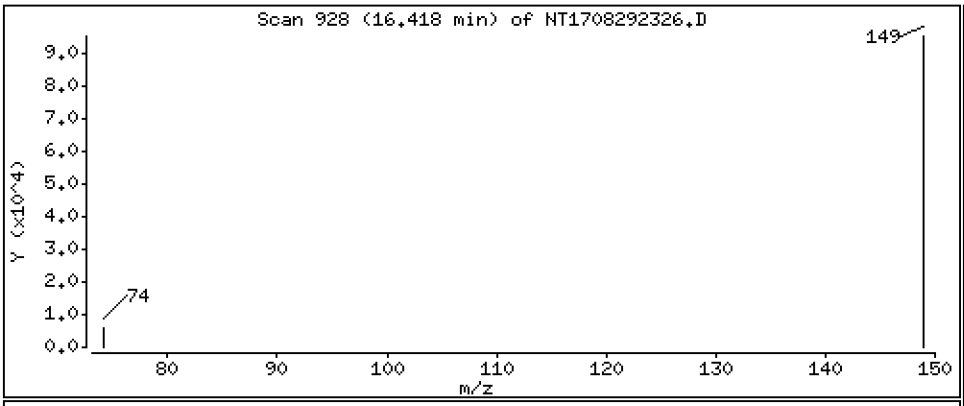
Operator: JGR

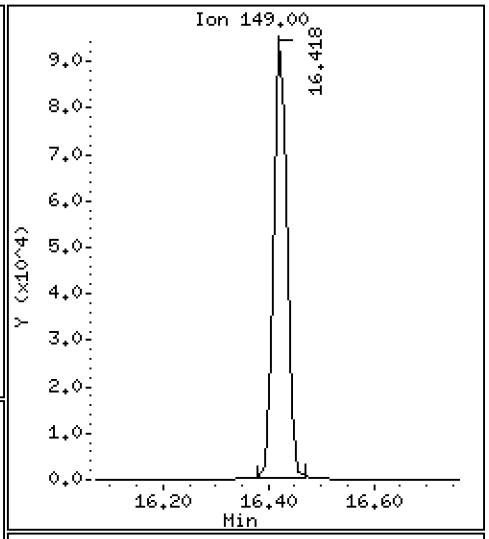
Column phase: ZB-5msi

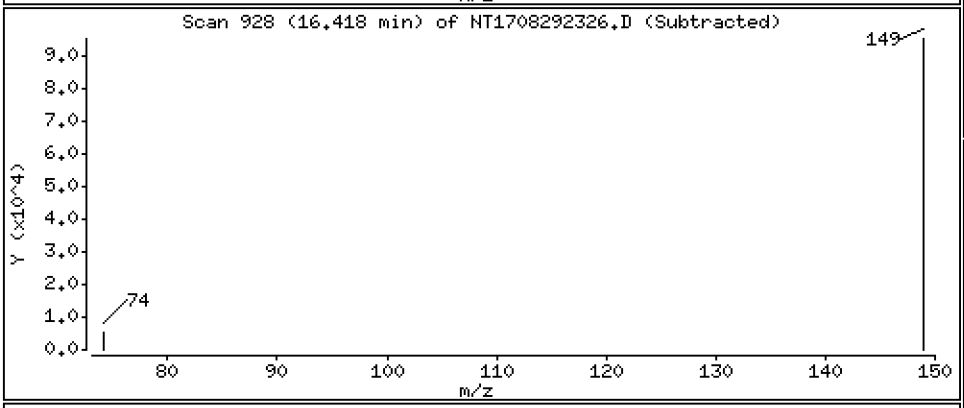
Column diameter: 0.25

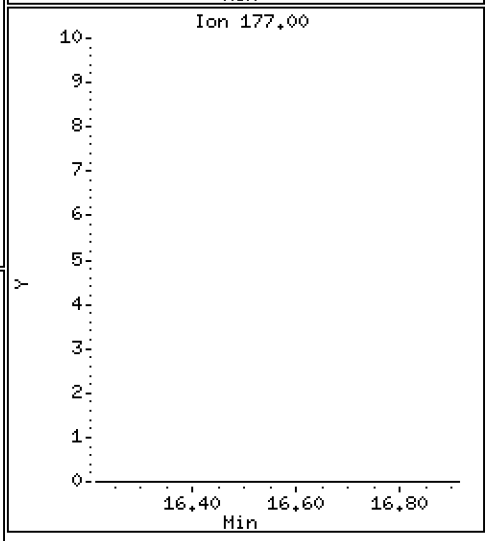
50 Diethylphthalate

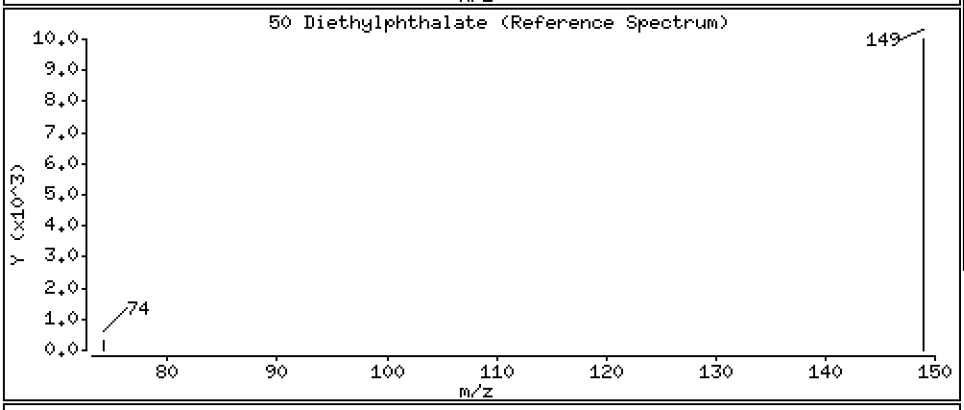
Concentration: 1.141 ug/mL

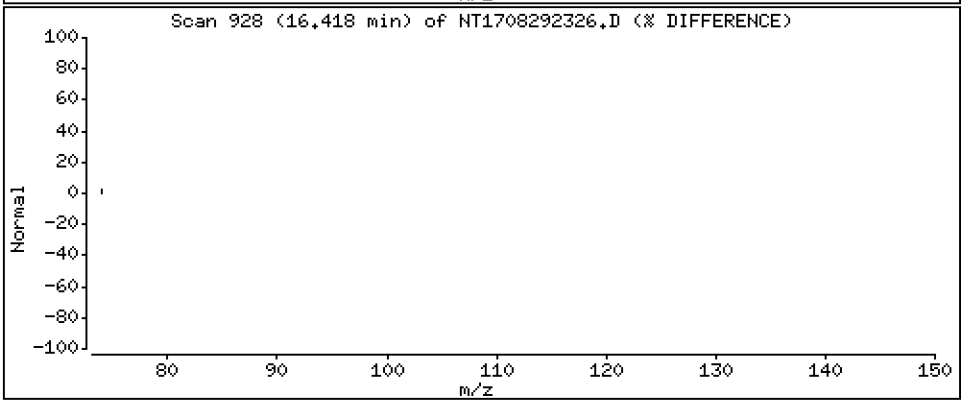












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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

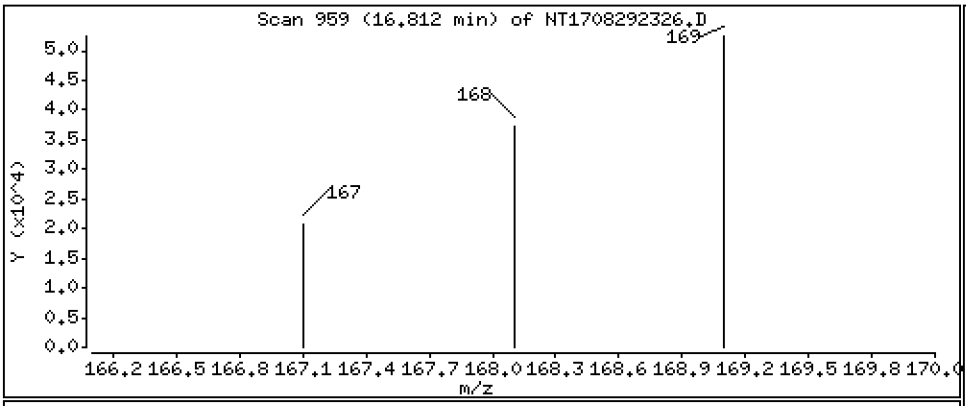
Operator: JGR

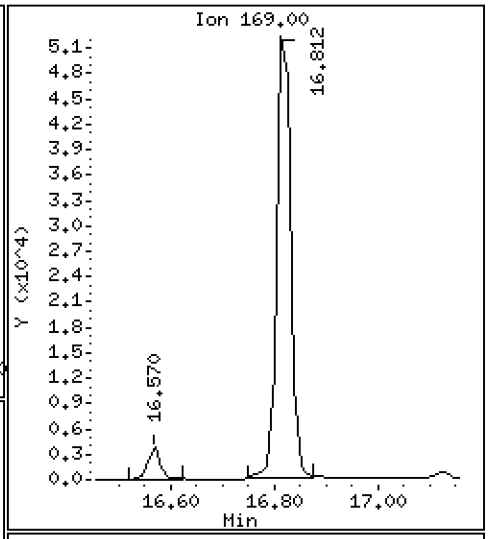
Column phase: ZB-5msi

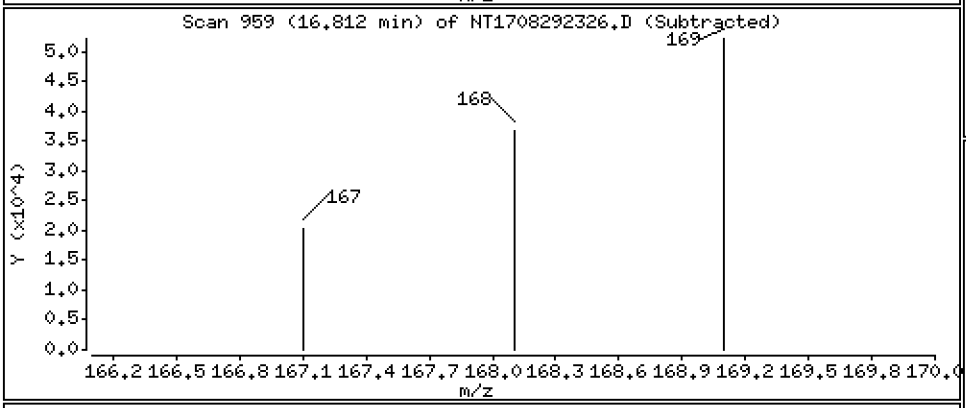
Column diameter: 0.25

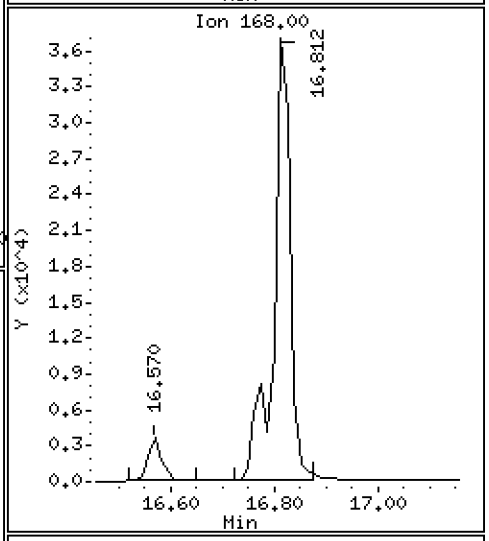
54 N-Nitrosodiphenylamine

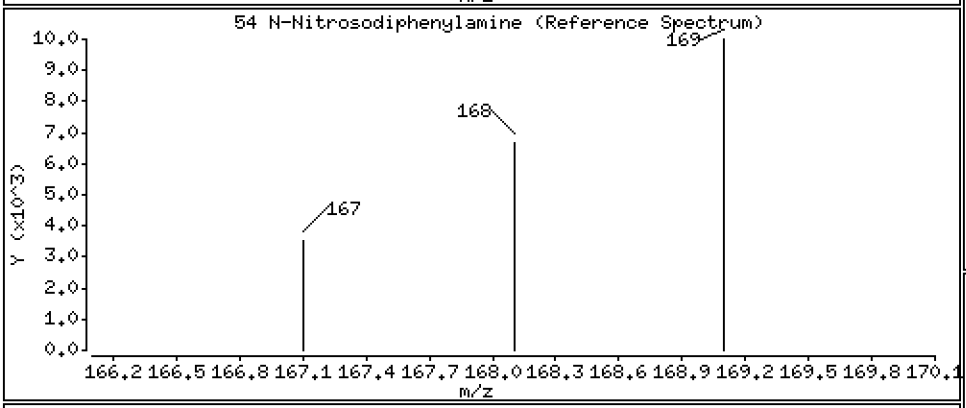
Concentration: 1.128 ug/mL

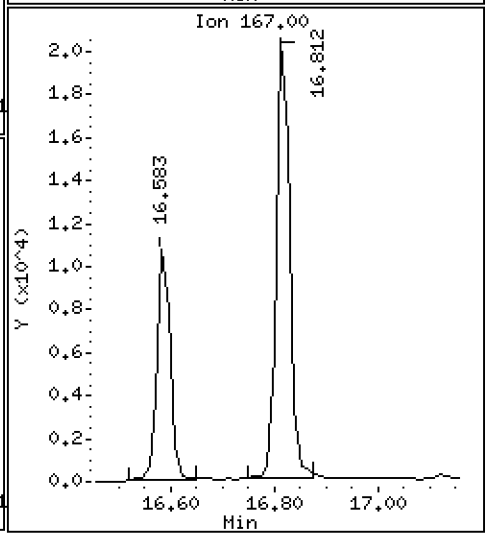


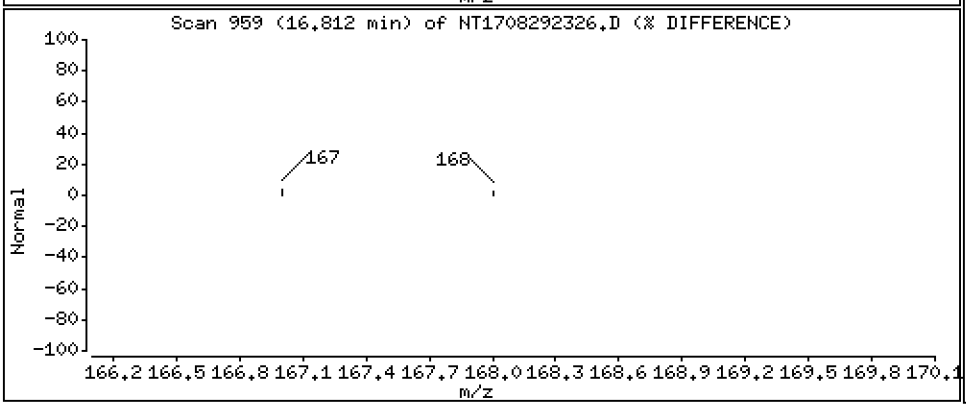












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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

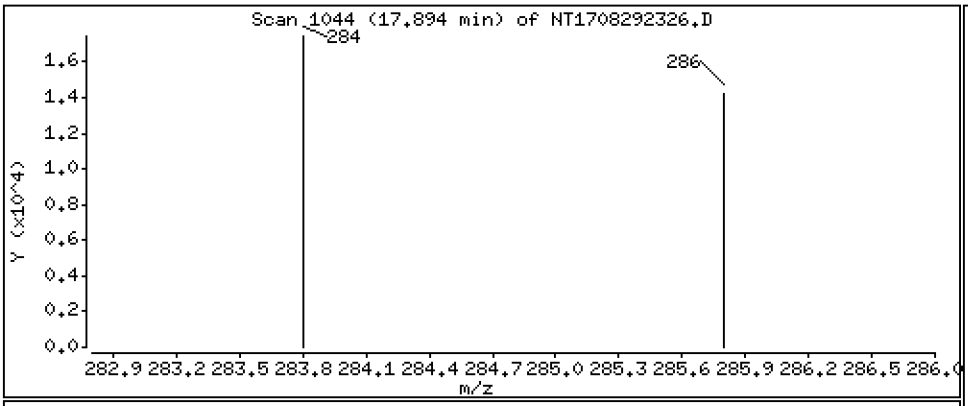
Operator: JGR

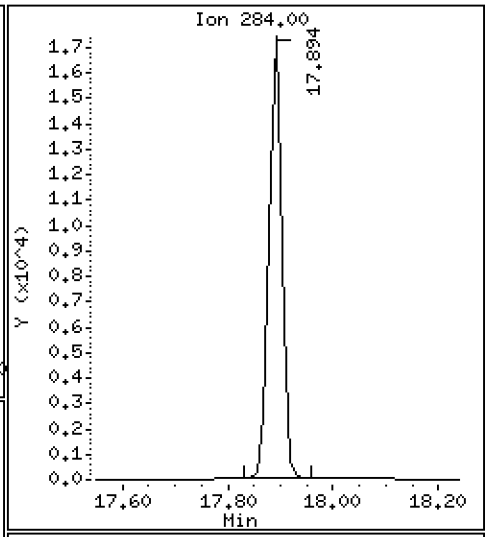
Column phase: ZB-5msi

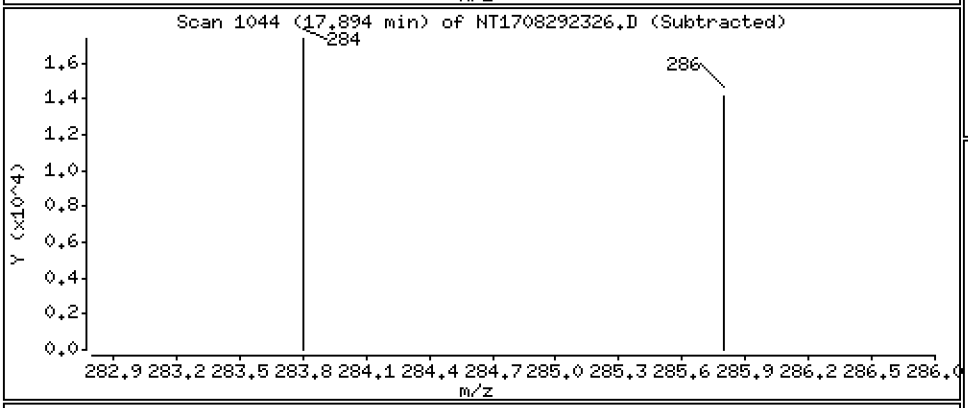
Column diameter: 0.25

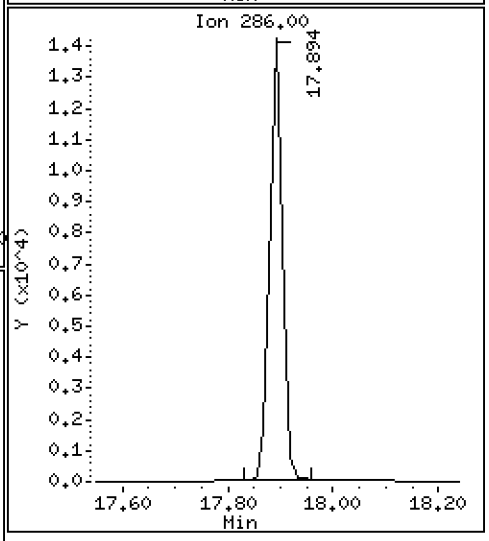
57 Hexachlorobenzene

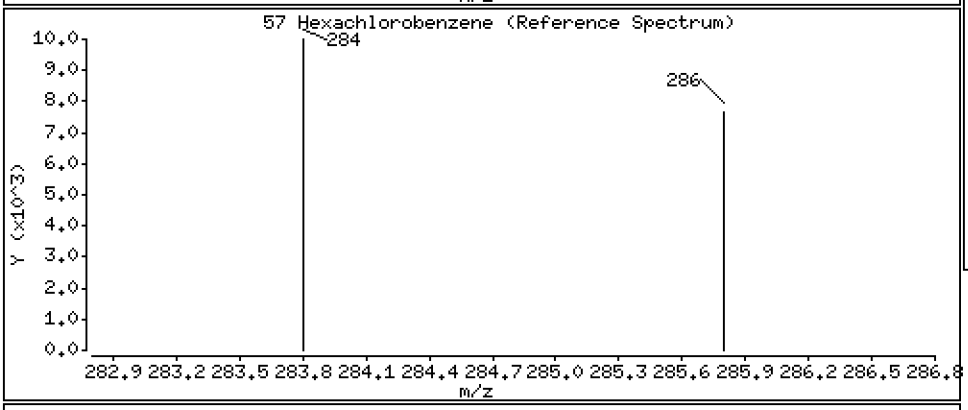
Concentration: 1.053 ug/mL

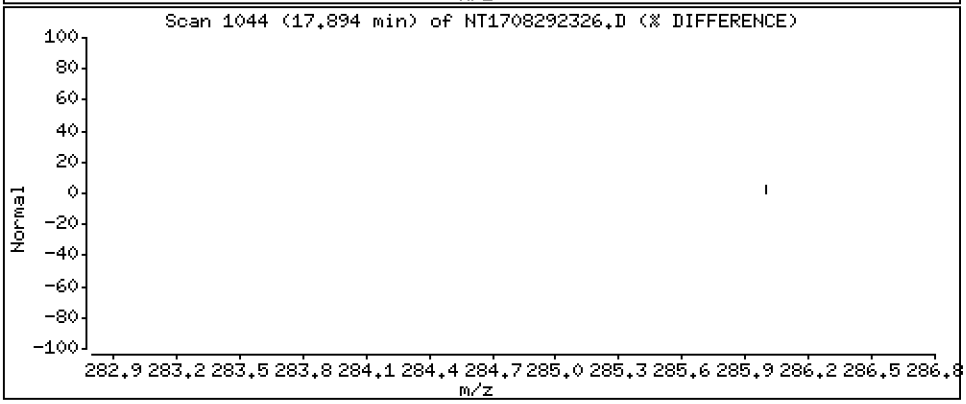












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Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

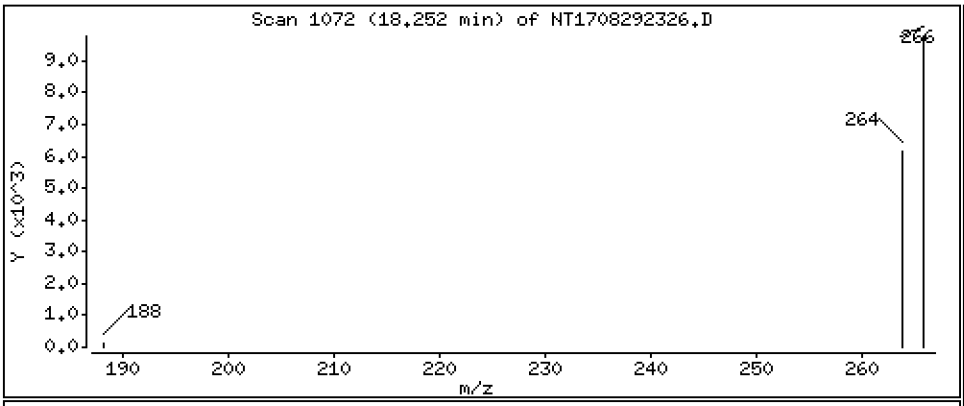
Operator: JGR

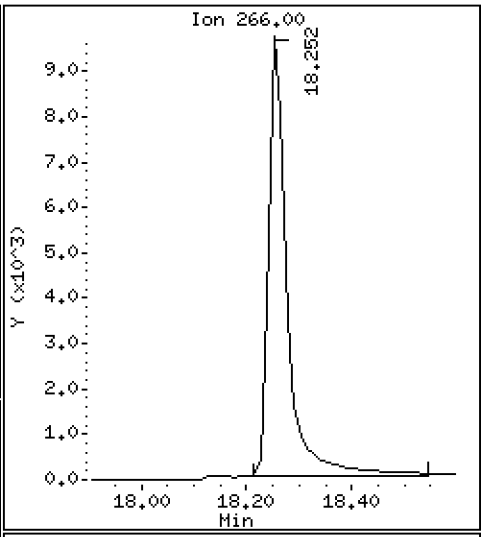
Column phase: ZB-5msi

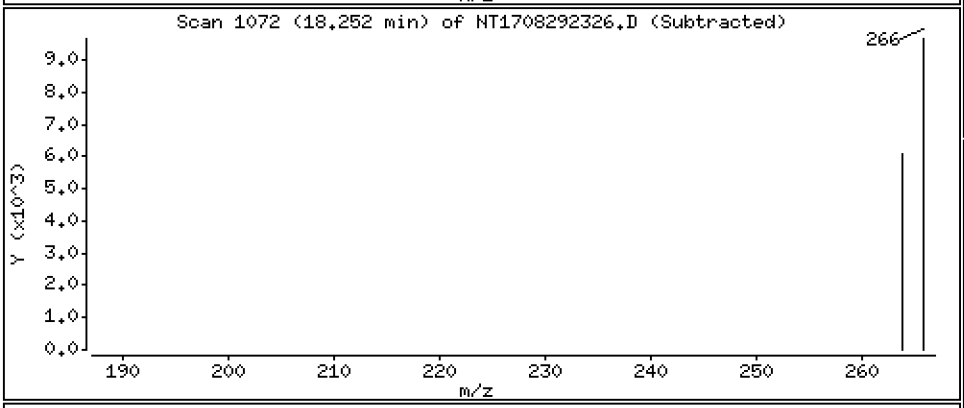
Column diameter: 0.25

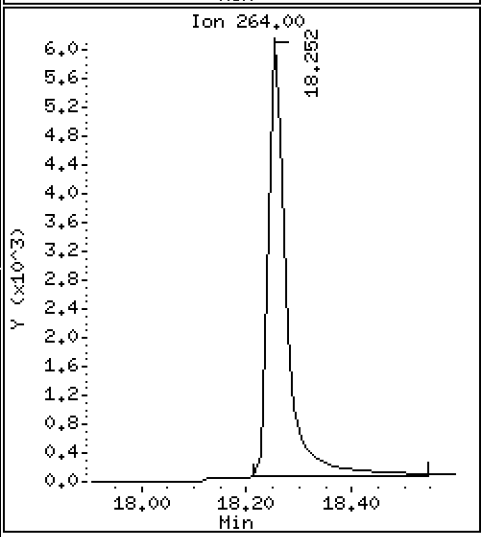
58 Pentachlorophenol

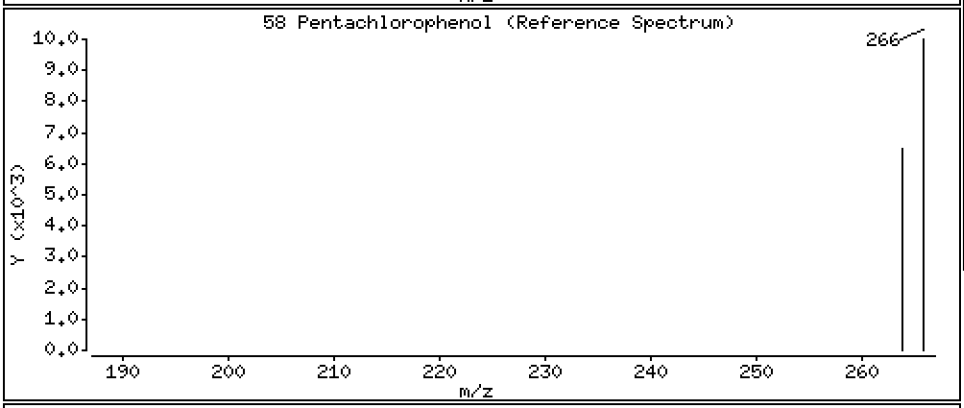
Concentration: 1.227 ug/mL

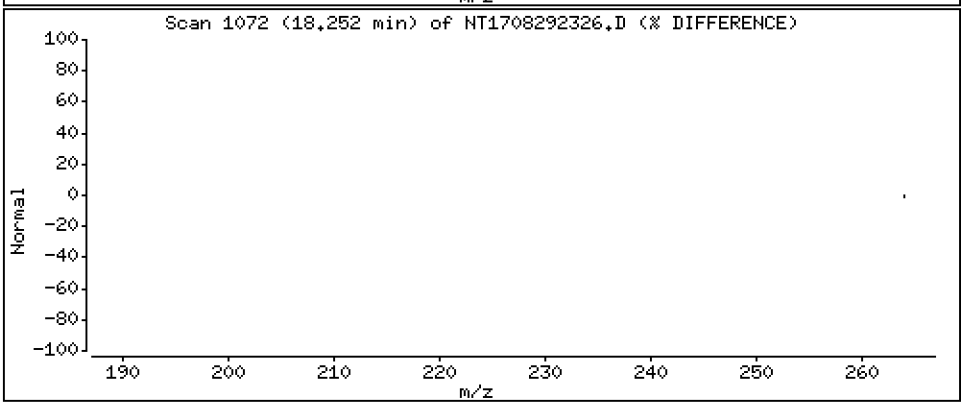












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292326.D

Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

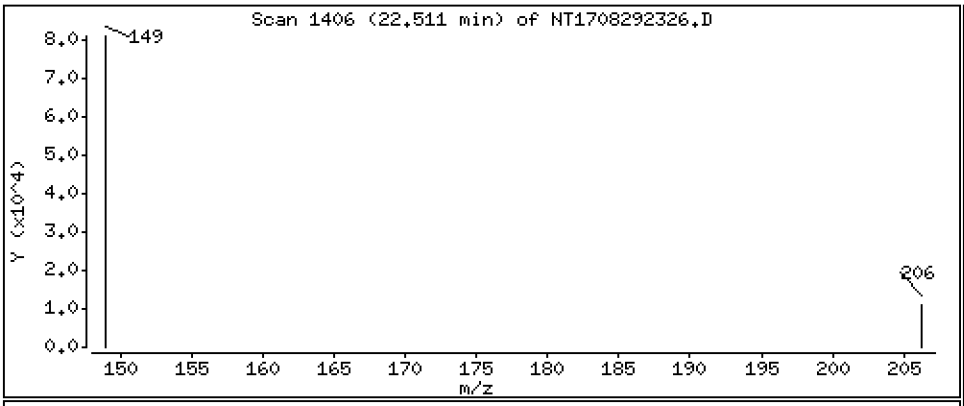
Operator: JGR

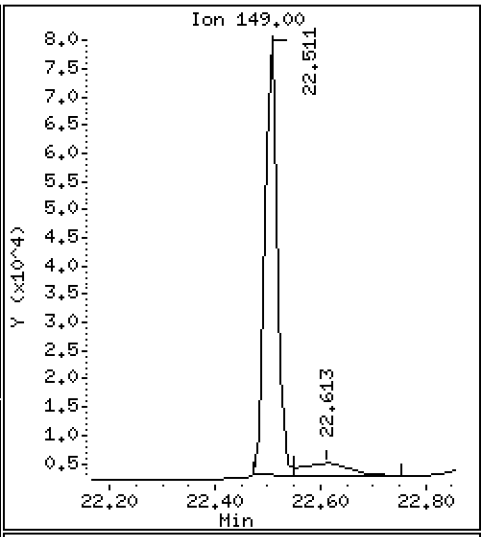
Column phase: ZB-5msi

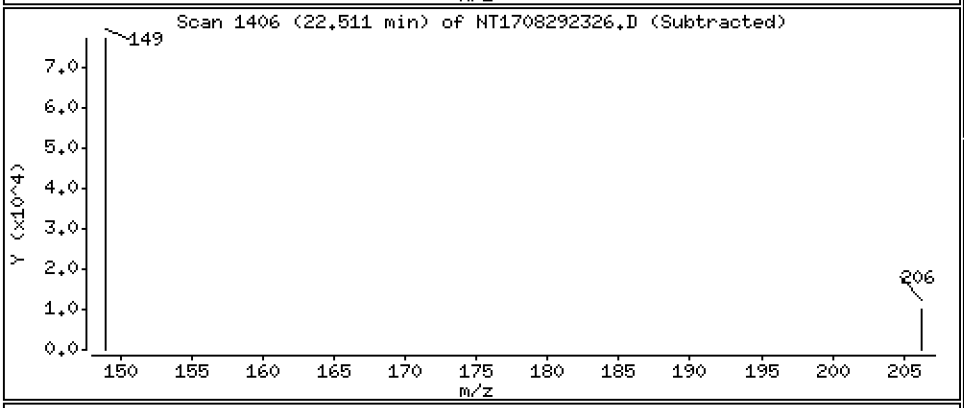
Column diameter: 0.25

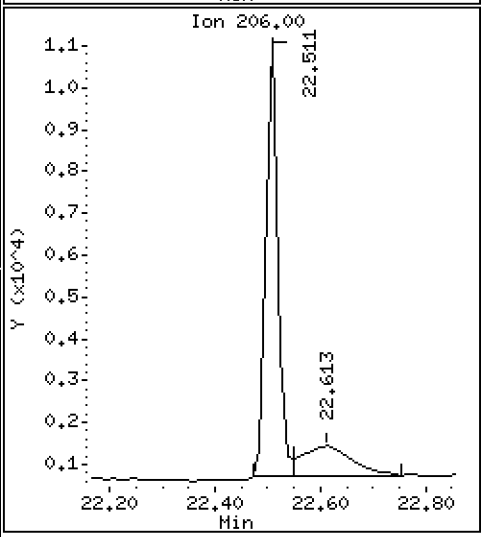
67 Butylbenzylphthalate

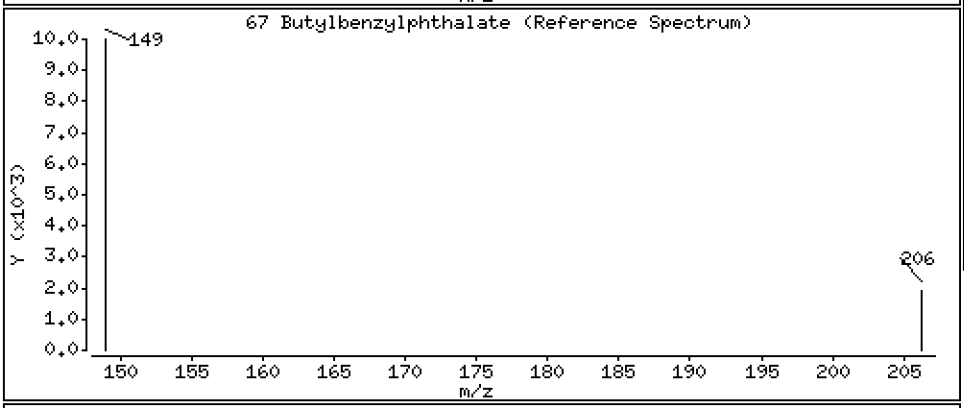
Concentration: 1.023 ug/mL

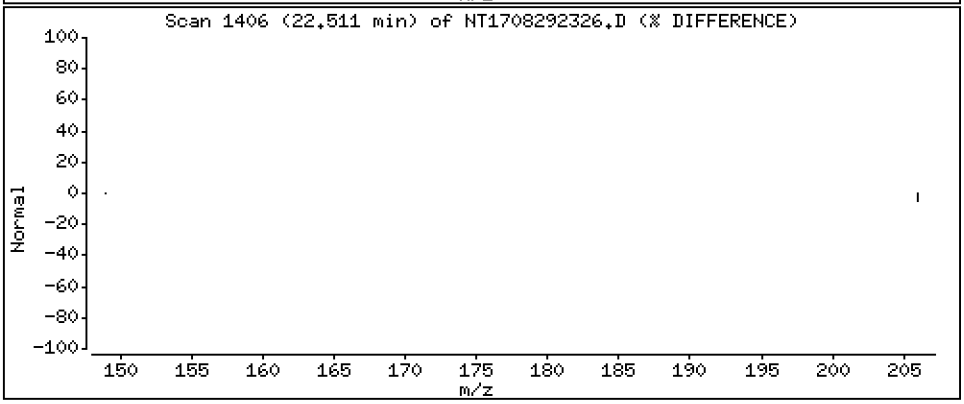












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292326.D

Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

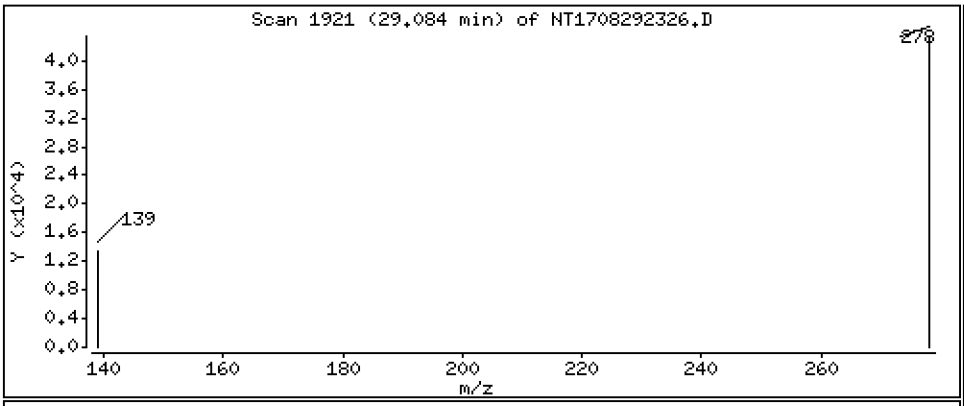
Operator: JGR

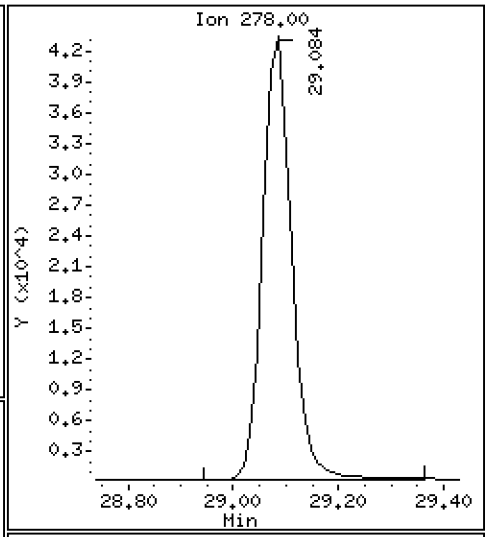
Column phase: ZB-5msi

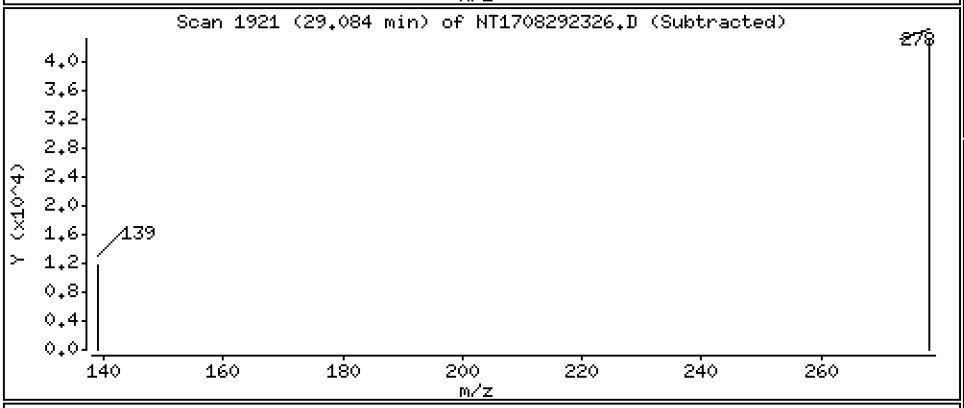
Column diameter: 0.25

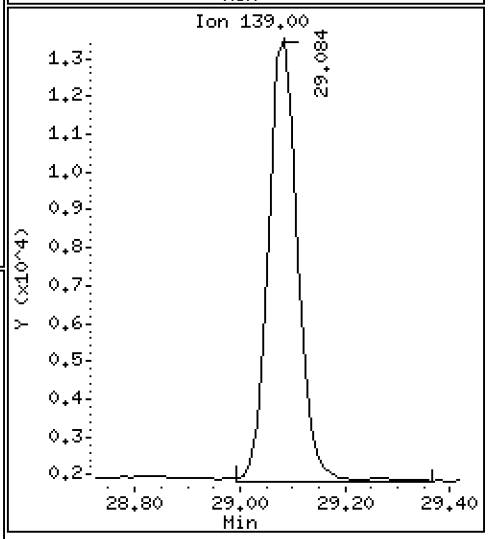
79 Dibenzo(a,h)anthracene

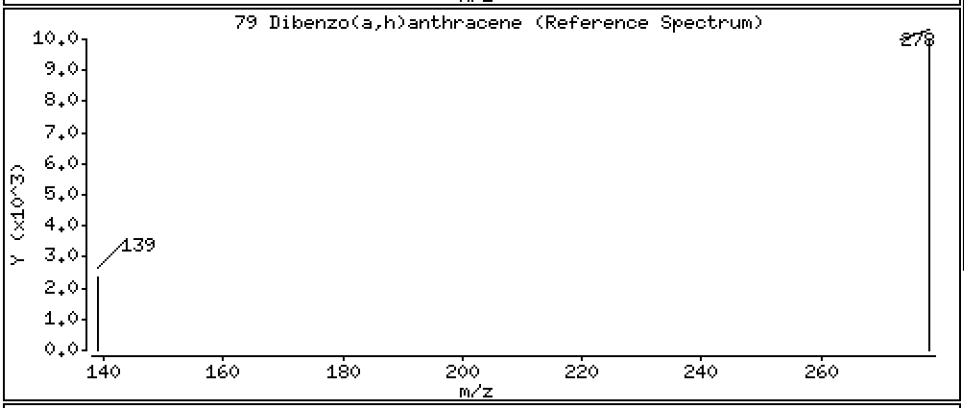
Concentration: 0.8752 ug/mL

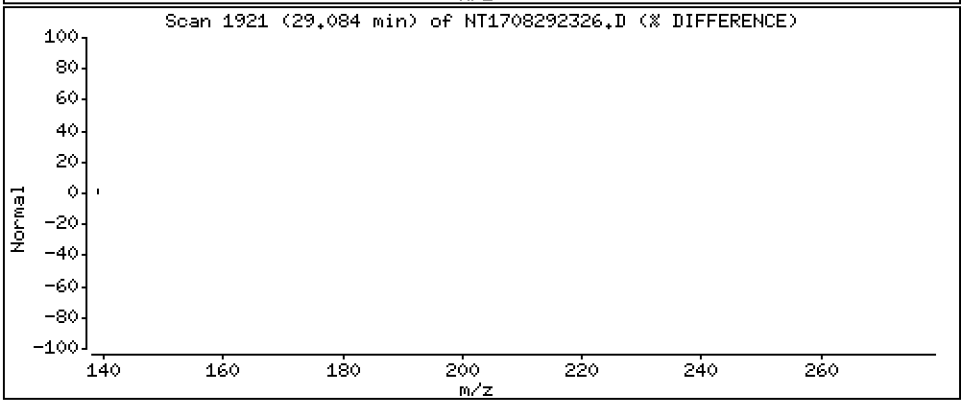












Data File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292326.D

Date : 30-AUG-2023 03:06

Client ID:

Instrument: nt17.i

Sample Info: SEQ-CCV2

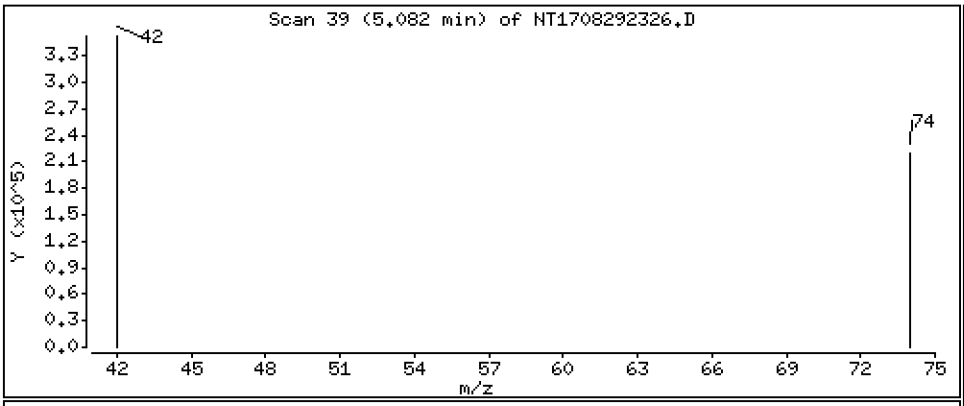
Operator: JGR

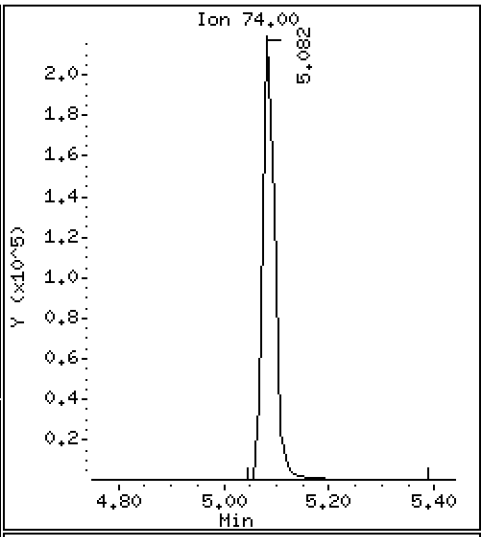
Column phase: ZB-5msi

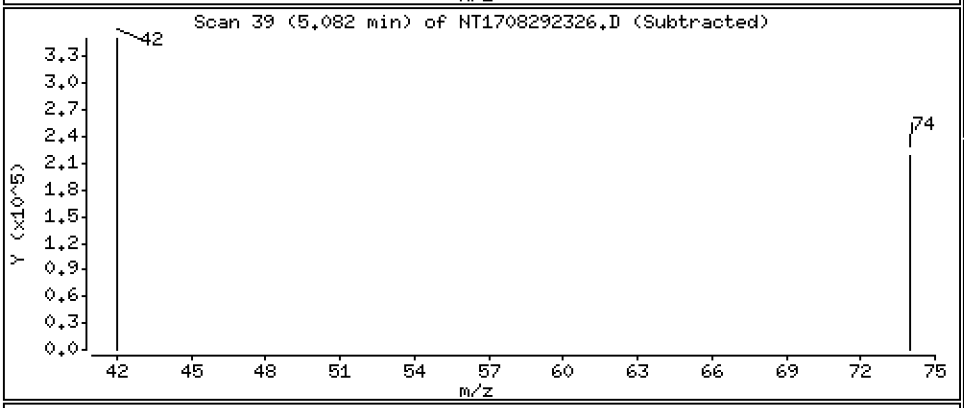
Column diameter: 0.25

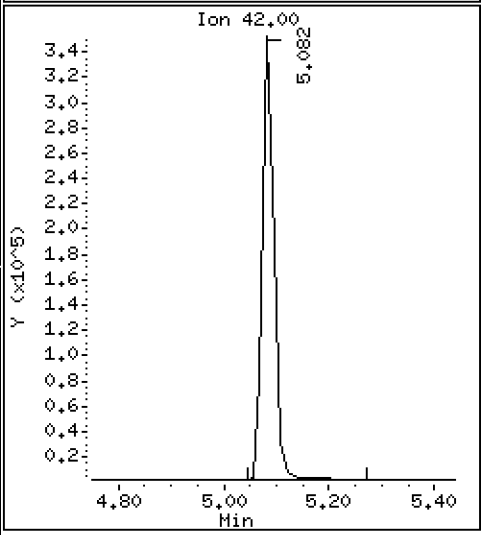
90 N-Nitrosodimethylamine

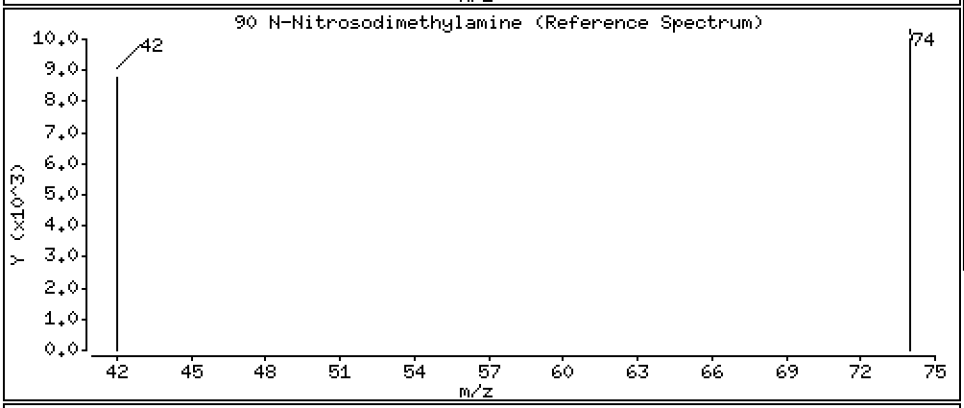
Concentration: 2.381 ug/mL

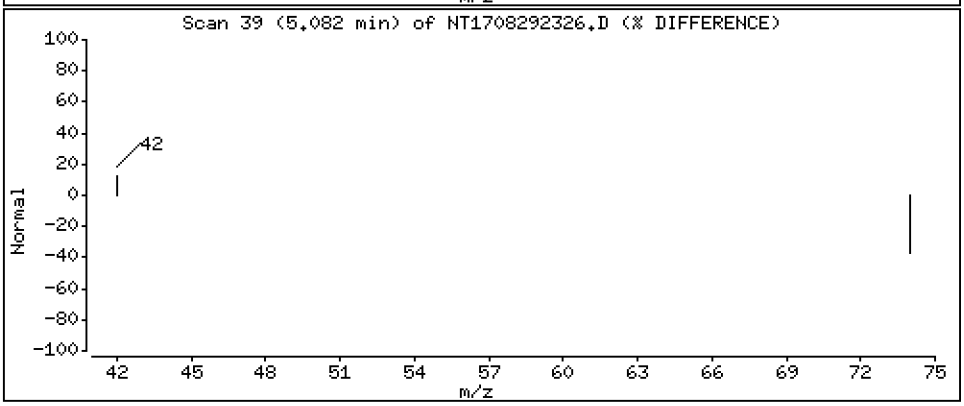












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230829.b\SIM.b\NT1708292326.D
Lab Smp Id: SEQ-CCV2
Inj Date : 30-AUG-2023 03:06
Operator : JGR Inst ID: nt17.i
Smp Info : SEQ-CCV2
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Meth Date : 30-Aug-2023 10:26 jrains Quant Type: ISTD
Cal Date : 10-AUG-2023 16:53 Cal File: NT1708102309S.D
Als bottle: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: JOSHR-201909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.196	7.196	(0.764)	251069	1.84207	1.842(R)
	3 Phenol	94	8.789	8.788	(0.934)	206124	0.99207	0.9921
	7 1,3-Dichlorobenzene	146	9.349	9.349	(0.993)	134506	0.95706	0.9571
*	8 1,4-Dichlorobenzene-d4	152	9.413	9.413	(1.000)	328251	4.00000	
	9 1,4-Dichlorobenzene	146	9.439	9.439	(1.003)	128249	0.94293	0.9429
	11 Benzyl alcohol	79	9.681	9.681	(1.028)	148406	1.03199	1.032
	12 1,2-Dichlorobenzene	146	9.796	9.796	(1.041)	123171	0.93357	0.9336
	13 2-Methylphenol	108	9.899	9.899	(1.052)	130733	1.03771	1.038
	15 4-Methylphenol	108	10.167	10.167	(1.080)	133663	1.01510	1.015
	16 N-Nitroso-di-n-propylamine	70	10.218	10.218	(1.086)	145668	1.08182	1.082
	22 2,4-Dimethylphenol	107	11.202	11.202	(0.942)	274571	2.37612	2.376
	24 Benzoic acid	105	11.329	11.329	(0.953)	319602	4.15787	4.158
	26 1,2,4-Trichlorobenzene	180	11.789	11.801	(0.991)	75637	0.95800	0.9580
*	27 Naphthalene-d8	136	11.891	11.891	(1.000)	1151683	4.00000	
	30 Hexachlorobutadiene	225	12.273	12.273	(1.032)	39592	1.07079	1.071
	39 Dimethylphthalate	163	14.977	14.976	(0.967)	143995	1.03102	1.031
*	42 Acenaphthene-d10	162	15.487	15.487	(1.000)	429708	4.00000	
	50 Diethylphthalate	149	16.417	16.417	(1.060)	165739	1.14130	1.141
	54 N-Nitrosodiphenylamine	169	16.812	16.812	(0.908)	97450	1.12757	1.128
	57 Hexachlorobenzene	284	17.894	17.894	(0.966)	29824	1.05327	1.053
	58 Pentachlorophenol	266	18.251	18.251	(0.986)	23578	1.22704	1.227
*	59 Phenanthrene-d10	188	18.519	18.519	(1.000)	601155	4.00000	
$	66 Terphenyl-d14	244	21.605	21.605	(0.919)	82534	1.29024	1.290(R)
	67 Butylbenzylphthalate	149	22.510	22.510	(0.958)	125446	1.02271	1.023
*	69 Chrysene-d12	240	23.506	23.505	(1.000)	462255	4.00000	
*	77 Perylene-d12	264	26.236	26.235	(1.000)	628348	4.00000	
	79 Dibenzo(a,h)anthracene	278	29.084	29.084	(1.109)	162439	0.87525	0.8752
	90 N-Nitrosodimethylamine	74	5.081	5.094	(0.540)	330207	2.38093	2.381

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i Calibration Date: 29-AUG-2023
Lab File ID: NT1708292326.D Calibration Time: 22:47
Lab Smp Id: SEQ-CCV2
Analysis Type: SV Level:
Quant Type: ISTD Sample Type:
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230829.b\SIM.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	358343	179172	716686	328251	-8.40
27 Naphthalene-d8	1242877	621439	2485754	1151683	-7.34
42 Acenaphthene-d10	464388	232194	928776	429708	-7.47
59 Phenanthrene-d10	660913	330457	1321826	601155	-9.04
69 Chrysene-d12	477958	238979	955916	462255	-3.29
77 Perylene-d12	659026	329513	1318052	628348	-4.66

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.41	8.91	9.91	9.41	0.00
27 Naphthalene-d8	11.89	11.39	12.39	11.89	0.00
42 Acenaphthene-d10	15.49	14.99	15.99	15.49	0.00
59 Phenanthrene-d10	18.52	18.02	19.02	18.52	0.00
69 Chrysene-d12	23.51	23.01	24.01	23.51	0.00
77 Perylene-d12	26.24	25.74	26.74	26.24	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

REVIEW SUMMARY FOR FILE - NT1708292326.D

Lab ID: SEQ-CCV2
nt17.i, 20230829.b\SIM.b\SIMABN2.m,   30-AUG-2023 03:06

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1708292319B.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

* Only compounds listed in the work order have been verified by the analyst *

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLH0217	Instrument:	NT17
		Calibration:	GH00045

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLH0217-TUN1	NT1708102301S.D	NA	08/10/23 12:15
CAL 10.0	SLH0217-CAL8	NT1708102303S.D	NA	08/10/23 13:09
CAL 5.0	SLH0217-CAL7	NT1708102304S.D	NA	08/10/23 13:47
CAL 2.5	SLH0217-CAL6	NT1708102305S.D	NA	08/10/23 14:24
CAL 1.0	SLH0217-CAL5	NT1708102306S.D	NA	08/10/23 15:01
CAL 0.50	SLH0217-CAL4	NT1708102307S.D	NA	08/10/23 15:38
CAL 0.20	SLH0217-CAL3	NT1708102308S.D	NA	08/10/23 16:16
CAL 0.10	SLH0217-CAL2	NT1708102309S.D	NA	08/10/23 16:53
CAL 0.05	SLH0217-CAL1	NT1708102310S.D	NA	08/10/23 17:30
Initial Cal Blank	SLH0217-ICB1	NT1708102311S.D	NA	08/10/23 18:08
SCV 5.0	SLH0217-SCV1	NT1708102312S.D	NA	08/10/23 18:45

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLH0217

Instrument: NT17
Calibration ID: GH00045

Printed: 8/16/2023 2:03:57PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLH0217-TUN1	QC		1		L005045			
SLH0217-CAL8	QC		2		L009088	L006982		
SLH0217-CAL7	QC		3		L009089	L006982		
SLH0217-CAL6	QC		4		L009090	L006982		
SLH0217-CAL5	QC		5		L009091	L006982		
SLH0217-CAL4	QC		6		L009092	L006982		
SLH0217-CAL3	QC		7		L009093	L006982		
SLH0217-CAL2	QC		8		L009094	L006982		
SLH0217-CAL1	QC		9		L009095	L006982		
SLH0217-ICB1	QC		10		L006701	L006982		
SLH0217-SCV1	QC		11		L006700	L006982		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230810.b\SIM.B

	Inject Date/Time	Filename	DF	LabID	ClientID
1	10-AUG-2023 12:32	NT1708102302S.D	1	SEQ-CAL7	
2	10-AUG-2023 13:09	NT1708102303S.D	1	SEQ-CAL6	
3	10-AUG-2023 13:47	NT1708102304S.D	1	SEQ-CAL5	
4	10-AUG-2023 14:24	NT1708102305S.D	1	SEQ-CAL4	
5	10-AUG-2023 15:01	NT1708102306S.D	1	SEQ-CAL3	
6	10-AUG-2023 15:38	NT1708102307S.D	1	SEQ-CAL2	
7	10-AUG-2023 16:16	NT1708102308S.D	1	SEQ-CAL1	
8	10-AUG-2023 16:53	NT1708102309S.D	1	SEQ-SIM2	
9	10-AUG-2023 17:30	NT1708102310S.D	1	SEQ-SIM1	
10	10-AUG-2023 18:08	NT1708102311S.D	1	SEQ-ICB1	
11	10-AUG-2023 18:45	NT1708102312S.D	1	SEQ-SCV1	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230810.b\SIM.B

ARI Job No.: SEQ- Method: SIM.B\SIMABN2.m Instrument: nt17.i Date: 10-AUG-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1232	NT1708102302S.D	SEQ-CAL7		1	NO MANUAL INTEGRATION
1309	NT1708102303S.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
1347	NT1708102304S.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
1424	NT1708102305S.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
1501	NT1708102306S.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
1538	NT1708102307S.D	SEQ-CAL2		1	N-Nitrosodimethylamine, 2-Fluorophenol,
1616	NT1708102308S.D	SEQ-CAL1		1	N-Nitrosodimethylamine, 2-Fluorophenol,
1653	NT1708102309S.D	SEQ-SIM2		1	Benzoic acid, N-Nitrosodimethylamine, Hexachlorobenzene, Pentachlorophenol, 2-Fluorophenol,
1730	NT1708102310S.D	SEQ-SIM1		1	N-Nitrosodimethylamine, Pentachlorophenol, 2-Fluorophenol,
1808	NT1708102311S.D	SEQ-ICB1		1	2-Fluorophenol,
1845	NT1708102312S.D	SEQ-SCV1		1	N-Nitrosodimethylamine,

Security Status Report

Date: 16-Aug-2023 15:17

NT1708102302S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102303S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102304S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102305S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102306S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102307S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102308S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102309S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102310S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102311S.D	Data Locked	jrains, 16-Aug-2023 15:17
NT1708102312S.D	Data Locked	jrains, 16-Aug-2023 15:17

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLH0447	Instrument:	NT17
		Calibration:	GH00045

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLH0447-TUN1	NT1708292303.D	NA	08/29/23 12:20
Initial Cal Check	SLH0447-ICV1	NT1708292304.D	NA	08/29/23 12:37
Blank	BLH0669-BLK1	NT1708292306.D	Solid	08/29/23 14:43
LCS	BLH0669-BS1	NT1708292307.D	Solid	08/29/23 15:21
LCS Dup	BLH0669-BSD1	NT1708292308.D	Solid	08/29/23 15:58
LDW23-SC1038A	BLH0669-MS1	NT1708292309.D	Solid	08/29/23 16:35
LDW23-SC1038A	BLH0669-MSD1	NT1708292310.D	Solid	08/29/23 17:13
Reference	BLH0669-SRM1	NT1708292311.D	Solid	08/29/23 17:50
LDW23-SC1156A	23H0579-01	NT1708292312.D	Solid	08/29/23 18:27
LDW23-SC1226A	23H0579-02	NT1708292313.D	Solid	08/29/23 19:04
LDW23-SS1269	23H0579-03	NT1708292314.D	Solid	08/29/23 19:42
LDW23-SS1275	23H0579-04	NT1708292315.D	Solid	08/29/23 20:19
LDW23-SC1221A	23H0579-05	NT1708292316.D	Solid	08/29/23 20:56
LDW23-SC1038A	23H0579-06	NT1708292317.D	Solid	08/29/23 21:33
LDW23-SC1023A	23H0579-07	NT1708292318.D	Solid	08/29/23 22:10
Calibration Check	SLH0447-CCV1	NT1708292319.D	NA	08/29/23 22:47
ABN 1	SLH0447-ICV2	NT1708292319B.D	NA	08/29/23 22:47
LDW23-SC1017A	23H0579-08	NT1708292321.D	Solid	08/30/23 00:01
LDW23-SC1012A	23H0579-09	NT1708292322.D	Solid	08/30/23 00:38
LDW23-SC1169A	23H0579-10	NT1708292323.D	Solid	08/30/23 01:15
LDW23-SC1169B	23H0579-11	NT1708292324.D	Solid	08/30/23 01:52
LDW23-SC1162A	23H0579-12	NT1708292325.D	Solid	08/30/23 02:29
Calibration Check	SLH0447-CCV2	NT1708292326.D	NA	08/30/23 03:06

Analytical Resources, LLC
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ANALYSIS SEQUENCE

SLH0447

Instrument: NT17
Calibration ID: GH00045

Printed: 8/30/2023 11:56:14AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLH0447-TUN1	QC		1		L005045			
SLH0447-ICV1	QC		2		L009091	L006982		
BLH0669-BLK1	QC		3			L006982		
BLH0669-BS1	QC		4			L006982		
BLH0669-BSD1	QC		5			L006982		
BLH0669-SRM1	QC		6			L006982		
BLH0669-MS1	QC		7			L006982		
BLH0669-MSD1	QC		8			L006982		
23H0579-01	8270E-SIM Dual Scan SVOC	A 01	9			L006982	Anchor QEA, LLC	
23H0579-02	8270E-SIM Dual Scan SVOC	A 01	10			L006982	Anchor QEA, LLC	
23H0579-03	8270E-SIM Dual Scan SVOC	A 01	11			L006982	Anchor QEA, LLC	
23H0579-04	8270E-SIM Dual Scan SVOC	A 01	12			L006982	Anchor QEA, LLC	
23H0579-05	8270E-SIM Dual Scan SVOC	A 01	13			L006982	Anchor QEA, LLC	
23H0579-06	8270E-SIM Dual Scan SVOC	A 01	14			L006982	Anchor QEA, LLC	
23H0579-07	8270E-SIM Dual Scan SVOC	A 01	15			L006982	Anchor QEA, LLC	
SLH0447-CCV1	QC		16		L009091	L006982		
SLH0447-ICV2	QC		17		L009091	L006982		
23H0579-08	8270E-SIM Dual Scan SVOC	A 01	18			L006982	Anchor QEA, LLC	
23H0579-09	8270E-SIM Dual Scan SVOC	A 01	19			L006982	Anchor QEA, LLC	
23H0579-10	8270E-SIM Dual Scan SVOC	A 01	20			L006982	Anchor QEA, LLC	
23H0579-11	8270E-SIM Dual Scan SVOC	A 01	21			L006982	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLH0447

Instrument: NT17
Calibration ID: GH00045

Printed: 8/30/2023 11:56:14AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
23H0579-12	8270E-SIM Dual Scan SVOC	A 01	22			L006982	Anchor QEA, LLC	
SLH0447-CCV2	QC		23		L009091	L006982		

Samples Loaded By Date

Data Processed By Date

Analytical Resources, LLC
Analytical Chemists and Consultants

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLH0217	Instrument:	NT17
Calibration:	GH00045	Calibration Date:	08/10/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLH0217-ICB1 (Solid)			Lab File ID: NT1708102311S.D			Analyzed: 08/10/23 18:08		
2-Fluorophenol	7.5000	101	27 - 120	7.298	7.3045	-0.0065	N/A	
p-Terphenyl-d14	5.0000	103	37 - 120	21.745	21.745	0.0000	N/A	
SLH0217-SCV1 (Solid)			Lab File ID: NT1708102312S.D			Analyzed: 08/10/23 18:45		
2-Fluorophenol	7.5000		0 - 200		7.3045	-7.3045	N/A	
p-Terphenyl-d14	5.0000		0 - 200		21.745	-21.7450	N/A	

Analytical Resources, LLC
Analytical Chemists and Consultants

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLH0447	Instrument:	NT17
Calibration:	GH00045	Calibration Date:	08/10/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLH0447-ICV1 (Solid)			Lab File ID: NT1708292304.D			Analyzed: 08/29/23 12:37		
2-Fluorophenol	1.5000	118	80 - 120	7.196	7.3045	-0.1085	N/A	
p-Terphenyl-d14	1.0000	123	80 - 120	21.605	21.745	-0.1400	N/A	*
BLH0669-BLK1 (Solid)			Lab File ID: NT1708292306.D			Analyzed: 08/29/23 14:43		
2-Fluorophenol	750.00	72.3	27 - 120	7.209	7.3045	-0.0955	N/A	
p-Terphenyl-d14	500.00	115	37 - 120	21.605	21.745	-0.1400	N/A	
BLH0669-BS1 (Solid)			Lab File ID: NT1708292307.D			Analyzed: 08/29/23 15:21		
2-Fluorophenol	750.00	88.6	27 - 120	7.209	7.3045	-0.0955	N/A	
p-Terphenyl-d14	500.00	122	37 - 120	21.605	21.745	-0.1400	N/A	*
BLH0669-BSD1 (Solid)			Lab File ID: NT1708292308.D			Analyzed: 08/29/23 15:58		
2-Fluorophenol	750.00	90.2	27 - 120	7.209	7.3045	-0.0955	N/A	
p-Terphenyl-d14	500.00	133	37 - 120	21.605	21.745	-0.1400	N/A	*
BLH0669-MS1 (Solid)			Lab File ID: NT1708292309.D			Analyzed: 08/29/23 16:35		
2-Fluorophenol	750.24	78.1	27 - 120	7.209	7.3045	-0.0955	N/A	
p-Terphenyl-d14	500.16	83.7	37 - 120	21.605	21.745	-0.1400	N/A	
BLH0669-MSD1 (Solid)			Lab File ID: NT1708292310.D			Analyzed: 08/29/23 17:13		
2-Fluorophenol	750.24	81.0	27 - 120	7.209	7.3045	-0.0955	N/A	
p-Terphenyl-d14	500.16	87.5	37 - 120	21.605	21.745	-0.1400	N/A	
BLH0669-SRM1 (Solid)			Lab File ID: NT1708292311.D			Analyzed: 08/29/23 17:50		
2-Fluorophenol	7500.0	78.6	27 - 120	7.209	7.3045	-0.0955	N/A	
p-Terphenyl-d14	5000.0	112	37 - 120	21.605	21.745	-0.1400	N/A	
23H0579-01 (Solid)			Lab File ID: NT1708292312.D			Analyzed: 08/29/23 18:27		
2-Fluorophenol	748.83	78.3	27 - 120	7.209	7.3045	-0.0955	N/A	
p-Terphenyl-d14	499.22	78.3	37 - 120	21.605	21.745	-0.1400	N/A	
23H0579-02 (Solid)			Lab File ID: NT1708292313.D			Analyzed: 08/29/23 19:04		
2-Fluorophenol	749.41	74.2	27 - 120	7.209	7.3045	-0.0955	N/A	
p-Terphenyl-d14	499.61	105	37 - 120	21.605	21.745	-0.1400	N/A	

Analytical Resources, LLC
Analytical Chemists and Consultants

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLH0447	Instrument:	NT17
Calibration:	GH00045	Calibration Date:	08/10/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23H0579-03 (Solid)			Lab File ID: NT1708292314.D			Analyzed: 08/29/23 19:42		
2-Fluorophenol	750.06	75.1	27 - 120	7.221	7.3045	-0.0835	N/A	
p-Terphenyl-d14	500.04	103	37 - 120	21.605	21.745	-0.1400	N/A	
23H0579-04 (Solid)			Lab File ID: NT1708292315.D			Analyzed: 08/29/23 20:19		
2-Fluorophenol	748.13	72.6	27 - 120	7.222	7.3045	-0.0825	N/A	
p-Terphenyl-d14	498.75	97.8	37 - 120	21.605	21.745	-0.1400	N/A	
23H0579-05 (Solid)			Lab File ID: NT1708292316.D			Analyzed: 08/29/23 20:56		
2-Fluorophenol	747.80	69.9	27 - 120	7.209	7.3045	-0.0955	N/A	
p-Terphenyl-d14	498.53	87.5	37 - 120	21.605	21.745	-0.1400	N/A	
23H0579-06 (Solid)			Lab File ID: NT1708292317.D			Analyzed: 08/29/23 21:33		
2-Fluorophenol	750.24	79.4	27 - 120	7.209	7.3045	-0.0955	N/A	
p-Terphenyl-d14	500.16	93.3	37 - 120	21.605	21.745	-0.1400	N/A	
23H0579-07 (Solid)			Lab File ID: NT1708292318.D			Analyzed: 08/29/23 22:10		
2-Fluorophenol	747.99	69.3	27 - 120	7.209	7.3045	-0.0955	N/A	
p-Terphenyl-d14	498.66	91.7	37 - 120	21.605	21.745	-0.1400	N/A	
SLH0447-CCV1 (Solid)			Lab File ID: NT1708292319.D			Analyzed: 08/29/23 22:47		
2-Fluorophenol	1.5000	124	50 - 150	7.196	7.3045	-0.1085	N/A	
p-Terphenyl-d14	1.0000	137	50 - 150	21.605	21.745	-0.1400	N/A	
SLH0447-ICV2 (Solid)			Lab File ID: NT1708292319B.D			Analyzed: 08/29/23 22:47		
2-Fluorophenol	1.5000	124	80 - 120	7.196	7.3045	-0.1085	N/A	*
p-Terphenyl-d14	1.0000	137	80 - 120	21.605	21.745	-0.1400	N/A	*
23H0579-08 (Solid)			Lab File ID: NT1708292321.D			Analyzed: 08/30/23 00:01		
2-Fluorophenol	749.86	69.8	27 - 120	7.209	7.3045	-0.0955	N/A	
p-Terphenyl-d14	499.91	79.3	37 - 120	21.605	21.745	-0.1400	N/A	
23H0579-09 (Solid)			Lab File ID: NT1708292322.D			Analyzed: 08/30/23 00:38		
2-Fluorophenol	745.58	67.7	27 - 120	7.209	7.3045	-0.0955	N/A	
p-Terphenyl-d14	497.05	82.3	37 - 120	21.605	21.745	-0.1400	N/A	
23H0579-10 (Solid)			Lab File ID: NT1708292323.D			Analyzed: 08/30/23 01:15		
2-Fluorophenol	747.23	72.4	27 - 120	7.221	7.3045	-0.0835	N/A	
p-Terphenyl-d14	498.15	85.8	37 - 120	21.605	21.745	-0.1400	N/A	

Analytical Resources, LLC
Analytical Chemists and Consultants

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLH0447	Instrument:	NT17
Calibration:	GH00045	Calibration Date:	08/10/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23H0579-11 (Solid)			Lab File ID: NT1708292324.D			Analyzed: 08/30/23 01:52		
2-Fluorophenol	747.53	68.5	27 - 120	7.209	7.3045	-0.0955	N/A	
p-Terphenyl-d14	498.35	77.7	37 - 120	21.605	21.745	-0.1400	N/A	
23H0579-12 (Solid)			Lab File ID: NT1708292325.D			Analyzed: 08/30/23 02:29		
2-Fluorophenol	747.33	73.7	27 - 120	7.209	7.3045	-0.0955	N/A	
p-Terphenyl-d14	498.22	92.5	37 - 120	21.605	21.745	-0.1400	N/A	
SLH0447-CCV2 (Solid)			Lab File ID: NT1708292326.D			Analyzed: 08/30/23 03:06		
2-Fluorophenol	1.5000	123	50 - 150	7.196	7.3045	-0.1085	N/A	
p-Terphenyl-d14	1.0000	129	50 - 150	21.605	21.745	-0.1400	N/A	

Analytical Resources, LLC
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INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLH0217	Instrument:	NT17
		Calibration:	GH00045

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Blank (SLH0217-ICB1)		(Solid)	Lab File ID: NT1708102311S.D					Analyzed: 08/10/23 18:08	
1,4-Dichlorobenzene-d4	282360	9.541	319389	9.541	88	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1137473	12.018	1274686	12.018	89	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	492085	15.627	569885	15.64	86	50 - 200	-0.013	+/-0.50	
Phenanthrene-d10	785136	18.659	915829	18.672	86	50 - 200	-0.013	+/-0.50	
Chrysene-d12	567403	23.646	653460	23.646	87	50 - 200	0.000	+/-0.50	
Perylene-d12	571894	26.452	654887	26.452	87	50 - 200	0.000	+/-0.50	
Secondary Cal Check (SLH0217-SCV1)		(Solid)	Lab File ID: NT1708102312S.D					Analyzed: 08/10/23 18:45	
1,4-Dichlorobenzene-d4	267754	9.541	319389	9.541	84	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1096182	12.031	1274686	12.018	86	50 - 200	0.013	+/-0.50	
Acenaphthene-d10	498001	15.64	569885	15.64	87	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	810370	18.672	915829	18.672	88	50 - 200	0.000	+/-0.50	
Chrysene-d12	587436	23.646	653460	23.646	90	50 - 200	0.000	+/-0.50	
Perylene-d12	595930	26.452	654887	26.452	91	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23H0579
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLH0447
Instrument: NT17
Calibration: GH00045

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLH0447-ICV1)		(Solid)	Lab File ID: NT1708292304.D				Analyzed: 08/29/23 12:37		
1,4-Dichlorobenzene-d4	296489	9.413	296489	9.413	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1098892	11.878	1098892	11.878	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	443071	15.487	443071	15.487	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	627744	18.506	627744	18.506	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	404122	23.506	404122	23.506	100	50 - 200	0.000	+/-0.50	
Perylene-d12	417323	26.223	417323	26.223	100	50 - 200	0.000	+/-0.50	
Blank (BLH0669-BLK1)		(Solid)	Lab File ID: NT1708292306.D				Analyzed: 08/29/23 14:43		
1,4-Dichlorobenzene-d4	288440	9.4	296489	9.413	97	50 - 200	-0.013	+/-0.50	
Naphthalene-d8	1091361	11.878	1098892	11.878	99	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	440875	15.487	443071	15.487	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	637565	18.506	627744	18.506	102	50 - 200	0.000	+/-0.50	
Chrysene-d12	374668	23.506	404122	23.506	93	50 - 200	0.000	+/-0.50	
Perylene-d12	342493	26.223	417323	26.223	82	50 - 200	0.000	+/-0.50	
LCS (BLH0669-BS1)		(Solid)	Lab File ID: NT1708292307.D				Analyzed: 08/29/23 15:21		
1,4-Dichlorobenzene-d4	350751	9.413	296489	9.413	118	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1351036	11.878	1098892	11.878	123	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	552016	15.487	443071	15.487	125	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	800338	18.519	627744	18.506	127	50 - 200	0.013	+/-0.50	
Chrysene-d12	563458	23.506	404122	23.506	139	50 - 200	0.000	+/-0.50	
Perylene-d12	454454	26.223	417323	26.223	109	50 - 200	0.000	+/-0.50	
LCS Dup (BLH0669-BSD1)		(Solid)	Lab File ID: NT1708292308.D				Analyzed: 08/29/23 15:58		
1,4-Dichlorobenzene-d4	352030	9.4	296489	9.413	119	50 - 200	-0.013	+/-0.50	
Naphthalene-d8	1302547	11.878	1098892	11.878	119	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	518082	15.487	443071	15.487	117	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	732439	18.506	627744	18.506	117	50 - 200	0.000	+/-0.50	
Chrysene-d12	502427	23.506	404122	23.506	124	50 - 200	0.000	+/-0.50	
Perylene-d12	441994	26.223	417323	26.223	106	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLH0447	Instrument:	NT17
		Calibration:	GH00045

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Matrix Spike (BLH0669-MS1)		(Solid)	Lab File ID: NT1708292309.D				Analyzed: 08/29/23 16:35		
1,4-Dichlorobenzene-d4	314786	9.413	296489	9.413	106	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1131741	11.878	1098892	11.878	103	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	433189	15.487	443071	15.487	98	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	591563	18.519	627744	18.506	94	50 - 200	0.013	+/-0.50	
Chrysene-d12	485180	23.505	404122	23.506	120	50 - 200	-0.001	+/-0.50	
Perylene-d12	626739	26.235	417323	26.223	150	50 - 200	0.012	+/-0.50	
Matrix Spike Dup (BLH0669-MSD1)		(Solid)	Lab File ID: NT1708292310.D				Analyzed: 08/29/23 17:13		
1,4-Dichlorobenzene-d4	351132	9.413	296489	9.413	118	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1254538	11.878	1098892	11.878	114	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	477043	15.487	443071	15.487	108	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	683245	18.519	627744	18.506	109	50 - 200	0.013	+/-0.50	
Chrysene-d12	541722	23.505	404122	23.506	134	50 - 200	-0.001	+/-0.50	
Perylene-d12	664414	26.235	417323	26.223	159	50 - 200	0.012	+/-0.50	
Reference (BLH0669-SRM1)		(Solid)	Lab File ID: NT1708292311.D				Analyzed: 08/29/23 17:50		
1,4-Dichlorobenzene-d4	386860	9.413	296489	9.413	130	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1391531	11.878	1098892	11.878	127	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	535164	15.487	443071	15.487	121	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	761697	18.519	627744	18.506	121	50 - 200	0.013	+/-0.50	
Chrysene-d12	533469	23.505	404122	23.506	132	50 - 200	-0.001	+/-0.50	
Perylene-d12	565075	26.223	417323	26.223	135	50 - 200	0.000	+/-0.50	
LDW23-SC1156A (23H0579-01)		(Solid)	Lab File ID: NT1708292312.D				Analyzed: 08/29/23 18:27		
1,4-Dichlorobenzene-d4	357888	9.413	296489	9.413	121	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1238156	11.878	1098892	11.878	113	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	442643	15.487	443071	15.487	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	572113	18.519	627744	18.506	91	50 - 200	0.013	+/-0.50	
Chrysene-d12	579135	23.506	404122	23.506	143	50 - 200	0.000	+/-0.50	
Perylene-d12	1103482	26.248	417323	26.223	264	50 - 200	0.025	+/-0.50	*

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLH0447	Instrument:	NT17
		Calibration:	GH00045

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1226A (23H0579-02)		(Solid)		Lab File ID: NT1708292313.D				Analyzed: 08/29/23 19:04	
1,4-Dichlorobenzene-d4	390871	9.413	296489	9.413	132	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1415559	11.878	1098892	11.878	129	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	548181	15.487	443071	15.487	124	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	761131	18.519	627744	18.506	121	50 - 200	0.013	+/-0.50	
Chrysene-d12	505742	23.506	404122	23.506	125	50 - 200	0.000	+/-0.50	
Perylene-d12	734507	26.236	417323	26.223	176	50 - 200	0.013	+/-0.50	
LDW23-SS1269 (23H0579-03)		(Solid)		Lab File ID: NT1708292314.D				Analyzed: 08/29/23 19:42	
1,4-Dichlorobenzene-d4	427545	9.413	296489	9.413	144	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1547544	11.878	1098892	11.878	141	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	577551	15.487	443071	15.487	130	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	789736	18.519	627744	18.506	126	50 - 200	0.013	+/-0.50	
Chrysene-d12	520922	23.506	404122	23.506	129	50 - 200	0.000	+/-0.50	
Perylene-d12	779150	26.236	417323	26.223	187	50 - 200	0.013	+/-0.50	
LDW23-SS1275 (23H0579-04)		(Solid)		Lab File ID: NT1708292315.D				Analyzed: 08/29/23 20:19	
1,4-Dichlorobenzene-d4	387366	9.413	296489	9.413	131	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1403162	11.878	1098892	11.878	128	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	525861	15.487	443071	15.487	119	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	730142	18.519	627744	18.506	116	50 - 200	0.013	+/-0.50	
Chrysene-d12	508226	23.506	404122	23.506	126	50 - 200	0.000	+/-0.50	
Perylene-d12	676972	26.236	417323	26.223	162	50 - 200	0.013	+/-0.50	
LDW23-SC1221A (23H0579-05)		(Solid)		Lab File ID: NT1708292316.D				Analyzed: 08/29/23 20:56	
1,4-Dichlorobenzene-d4	388539	9.413	296489	9.413	131	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1410367	11.878	1098892	11.878	128	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	521028	15.487	443071	15.487	118	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	707968	18.519	627744	18.506	113	50 - 200	0.013	+/-0.50	
Chrysene-d12	495588	23.506	404122	23.506	123	50 - 200	0.000	+/-0.50	
Perylene-d12	727498	26.236	417323	26.223	174	50 - 200	0.013	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLH0447	Instrument:	NT17
		Calibration:	GH00045

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1038A (23H0579-06)		(Solid)		Lab File ID: NT1708292317.D				Analyzed: 08/29/23 21:33	
1,4-Dichlorobenzene-d4	368553	9.413	296489	9.413	124	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1344656	11.878	1098892	11.878	122	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	479393	15.487	443071	15.487	108	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	685047	18.519	627744	18.506	109	50 - 200	0.013	+/-0.50	
Chrysene-d12	440712	23.506	404122	23.506	109	50 - 200	0.000	+/-0.50	
Perylene-d12	675829	26.236	417323	26.223	162	50 - 200	0.013	+/-0.50	
LDW23-SC1023A (23H0579-07)		(Solid)		Lab File ID: NT1708292318.D				Analyzed: 08/29/23 22:10	
1,4-Dichlorobenzene-d4	428884	9.413	296489	9.413	145	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1583230	11.878	1098892	11.878	144	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	578162	15.487	443071	15.487	130	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	767219	18.519	627744	18.506	122	50 - 200	0.013	+/-0.50	
Chrysene-d12	453486	23.505	404122	23.506	112	50 - 200	-0.001	+/-0.50	
Perylene-d12	720109	26.235	417323	26.223	173	50 - 200	0.012	+/-0.50	
Calibration Check (SLH0447-CCV1)		(Solid)		Lab File ID: NT1708292319.D				Analyzed: 08/29/23 22:47	
1,4-Dichlorobenzene-d4	358343	9.413	358343	9.413	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1242877	11.891	1242877	11.891	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	464388	15.487	464388	15.487	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	660913	18.519	660913	18.519	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	477958	23.505	477958	23.505	100	50 - 200	0.000	+/-0.50	
Perylene-d12	659026	26.235	659026	26.235	100	50 - 200	0.000	+/-0.50	
Initial Cal Check (SLH0447-ICV2)		(Solid)		Lab File ID: NT1708292319B.D				Analyzed: 08/29/23 22:47	
1,4-Dichlorobenzene-d4	358343	9.413	358343	9.413	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1242877	11.891	1242877	11.891	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	464388	15.487	464388	15.487	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	660913	18.519	660913	18.519	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	477958	23.505	477958	23.505	100	50 - 200	0.000	+/-0.50	
Perylene-d12	659026	26.235	659026	26.235	100	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLH0447	Instrument:	NT17
		Calibration:	GH00045

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1017A (23H0579-08)		(Solid)		Lab File ID: NT1708292321.D				Analyzed: 08/30/23 00:01	
1,4-Dichlorobenzene-d4	348423	9.413	358343	9.413	97	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1238784	11.878	1242877	11.891	100	50 - 200	-0.013	+/-0.50	
Acenaphthene-d10	429846	15.487	464388	15.487	93	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	556898	18.519	660913	18.519	84	50 - 200	0.000	+/-0.50	
Chrysene-d12	415079	23.506	477958	23.505	87	50 - 200	0.001	+/-0.50	
Perylene-d12	705516	26.236	659026	26.235	107	50 - 200	0.001	+/-0.50	
LDW23-SC1012A (23H0579-09)		(Solid)		Lab File ID: NT1708292322.D				Analyzed: 08/30/23 00:38	
1,4-Dichlorobenzene-d4	333882	9.413	358343	9.413	93	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1158476	11.878	1242877	11.891	93	50 - 200	-0.013	+/-0.50	
Acenaphthene-d10	409849	15.487	464388	15.487	88	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	563788	18.519	660913	18.519	85	50 - 200	0.000	+/-0.50	
Chrysene-d12	427830	23.506	477958	23.505	90	50 - 200	0.001	+/-0.50	
Perylene-d12	687649	26.236	659026	26.235	104	50 - 200	0.001	+/-0.50	
LDW23-SC1169A (23H0579-10)		(Solid)		Lab File ID: NT1708292323.D				Analyzed: 08/30/23 01:15	
1,4-Dichlorobenzene-d4	396887	9.413	358343	9.413	111	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1463604	11.878	1242877	11.891	118	50 - 200	-0.013	+/-0.50	
Acenaphthene-d10	534724	15.487	464388	15.487	115	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	753603	18.519	660913	18.519	114	50 - 200	0.000	+/-0.50	
Chrysene-d12	474184	23.506	477958	23.505	99	50 - 200	0.001	+/-0.50	
Perylene-d12	731033	26.248	659026	26.235	111	50 - 200	0.013	+/-0.50	
LDW23-SC1169B (23H0579-11)		(Solid)		Lab File ID: NT1708292324.D				Analyzed: 08/30/23 01:52	
1,4-Dichlorobenzene-d4	351919	9.413	358343	9.413	98	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1272724	11.878	1242877	11.891	102	50 - 200	-0.013	+/-0.50	
Acenaphthene-d10	466488	15.487	464388	15.487	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	640962	18.519	660913	18.519	97	50 - 200	0.000	+/-0.50	
Chrysene-d12	506500	23.506	477958	23.505	106	50 - 200	0.001	+/-0.50	
Perylene-d12	757022	26.248	659026	26.235	115	50 - 200	0.013	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23H0579
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLH0447	Instrument:	NT17
		Calibration:	GH00045

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SC1162A (23H0579-12)		(Solid)		Lab File ID: NT1708292325.D				Analyzed: 08/30/23 02:29	
1,4-Dichlorobenzene-d4	365024	9.413	358343	9.413	102	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1336535	11.878	1242877	11.891	108	50 - 200	-0.013	+/-0.50	
Acenaphthene-d10	490287	15.487	464388	15.487	106	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	675059	18.519	660913	18.519	102	50 - 200	0.000	+/-0.50	
Chrysene-d12	433965	23.505	477958	23.505	91	50 - 200	0.000	+/-0.50	
Perylene-d12	669794	26.235	659026	26.235	102	50 - 200	0.000	+/-0.50	
Calibration Check (SLH0447-CCV2)		(Solid)		Lab File ID: NT1708292326.D				Analyzed: 08/30/23 03:06	
1,4-Dichlorobenzene-d4	328251	9.413	358343	9.413	92	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1151683	11.891	1242877	11.891	93	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	429708	15.487	464388	15.487	93	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	601155	18.519	660913	18.519	91	50 - 200	0.000	+/-0.50	
Chrysene-d12	462255	23.506	477958	23.505	97	50 - 200	0.001	+/-0.50	
Perylene-d12	628348	26.236	659026	26.235	95	50 - 200	0.001	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

HOLDING TIME SUMMARY

Analysis: EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23H0579
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SC1156A 23H0579-01	12/14/22 10:44	08/23/23 16:10	08/25/23 12:39	254	365	08/29/23 18:27	4	40	
LDW23-SC1226A 23H0579-02	01/03/23 12:35	08/23/23 16:10	08/25/23 12:39	234	365	08/29/23 19:04	4	40	
LDW23-SS1269 23H0579-03	01/04/23 08:55	08/23/23 16:10	08/25/23 12:39	233	365	08/29/23 19:42	4	40	
LDW23-SS1275 23H0579-04	01/04/23 09:10	08/23/23 16:10	08/25/23 12:39	233	365	08/29/23 20:19	4	40	
LDW23-SC1221A 23H0579-05	01/04/23 13:38	08/23/23 16:10	08/25/23 12:39	232	365	08/29/23 20:56	4	40	
LDW23-SC1038A 23H0579-06	01/13/23 09:46	08/23/23 16:10	08/25/23 12:39	224	365	08/29/23 21:33	4	40	
LDW23-SC1023A 23H0579-07	01/13/23 10:35	08/23/23 16:10	08/25/23 12:39	224	365	08/29/23 22:10	4	40	
LDW23-SC1017A 23H0579-08	01/13/23 12:47	08/23/23 16:10	08/25/23 12:39	223	365	08/30/23 00:01	4	40	
LDW23-SC1012A 23H0579-09	01/16/23 13:13	08/23/23 16:10	08/25/23 12:39	220	365	08/30/23 00:38	4	40	
LDW23-SC1169A 23H0579-10	01/17/23 11:08	08/23/23 16:10	08/25/23 12:39	220	365	08/30/23 01:15	5	40	
LDW23-SC1169B 23H0579-11	01/17/23 11:08	08/23/23 16:10	08/25/23 12:39	220	365	08/30/23 01:52	5	40	
LDW23-SC1162A 23H0579-12	01/17/23 14:37	08/23/23 16:10	08/25/23 12:39	219	365	08/30/23 02:29	5	40	
Matrix Spike BLH0669-MS1	01/13/23 09:46	08/23/23 16:10	08/25/23 12:39	224	365	08/29/23 16:35	4	40	
Matrix Spike Dup BLH0669-MSD1	01/13/23 09:46	08/23/23 16:10	08/25/23 12:39	224	365	08/29/23 17:13	4	40	

* Indicates hold time exceedance.

Analytical Resources, LLC
Analytical Chemists and Consultants

METHOD DETECTION AND REPORTING LIMITS

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23H0579
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: NT17

Analyte	MDL	RL	Units
1,4-Dichlorobenzene	0.6	5.0	ug/kg
1,2-Dichlorobenzene	0.7	5.0	ug/kg
Benzyl Alcohol	2.5	20.0	ug/kg
Benzoic acid	13.4	100	ug/kg
2,4-Dimethylphenol	2.2	20.0	ug/kg
1,2,4-Trichlorobenzene	2.7	5.0	ug/kg
N-Nitrosodiphenylamine	1.3	5.0	ug/kg
Pentachlorophenol	2.1	20.0	ug/kg

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001941

Printed: 9/25/2013 1:45:31PM

Description:	SVOC 2,4-Dinitrophenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 13:45 by JZ
Vendor:	SIGMA	Lot #:	65H5021
Vendor Catalog #:			

Comments

Neat, Purity @ 90-95%. (ARI#: 0466)

Analyte	CAS Number	Concentration	Units
2,4-Dinitrophenol	51-28-5	1000000	ug/mL

B001941
SVOA 2,4-Dinitrophenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: ____________

Chemical: 2,4-Dinitrophenol

Manufacturer: Sigma

Product #: ____________

Lot #: 65H 5021

Purity: 90~95%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001945

Printed: 9/25/2013 3:23:22PM

Description:	SVOC Benzoic Acid	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:23 by JZ
Vendor:	ACROS Organics	Lot #:	A0224339
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Benzoic acid	65-85-0	1000000	ug/mL

B001945
SVOC Benzoic Acid
Expires 12/31/2029
Prepared By Jianqing Zhou 12/31/2012

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzoic Acid

Manufacturer: Acros Organics

Product #: _____

Lot #: A0224339

Purity: 98%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001948

Printed: 9/25/2013 3:37:51PM

Description:	SVOC 4,6-Dinitro-2-Methylphenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:37 by JZ
Vendor:	Chem Service	Lot #:	179-31A
Vendor Catalog #:			

Comments

Neat, Purity @ 99%. (ARI#: 009A)

Analyte	CAS Number	Concentration	Units
4,6-Dinitro-2-methylphenol	534-52-1	1000000	ug/mL

B001948
SVOA 4,6-Dinitro-2-Methylphenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,6-Dinitro-2-Methylphenol

Manufacturer: Chem Service

Product #: _____

Lot #: 179-31A

Purity: 99%

Analyst: KB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002054

Printed: 10/4/2013 6:32:21PM

Description:	SVOA 1-Methylnaphthalene	Expires:	02-Apr-14
Standard Type:	Analyte Spike	Prepared:	13-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	04-Oct-13 18:32 by JZ
Vendor:	Chem Service	Lot #:	62-5B
Vendor Catalog #:			

Comments

Neat, Purity @ 99%

Analyte	CAS Number	Concentration	Units
1-Methylnaphthalene	90-12-0	1000000	ug/mL

B002054
SVOA 1-Methylnaphthalene
Solvent / Lot: NA
Prep: 12/13/2012 by JZ
Exp: 12/31/2029
Location:

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 1-Methyl naphthalene

Manufacturer: Chem Service

Product #: 0787

Lot #: 67-53

Purity: 99%

Analyst: AZ

H000691

Data File: \\target\share\chem2\fid4a.i\20230317.b\423C1703.D
Date : 17-MAR-2023 10:46
Client ID:
Sample Info: K007226

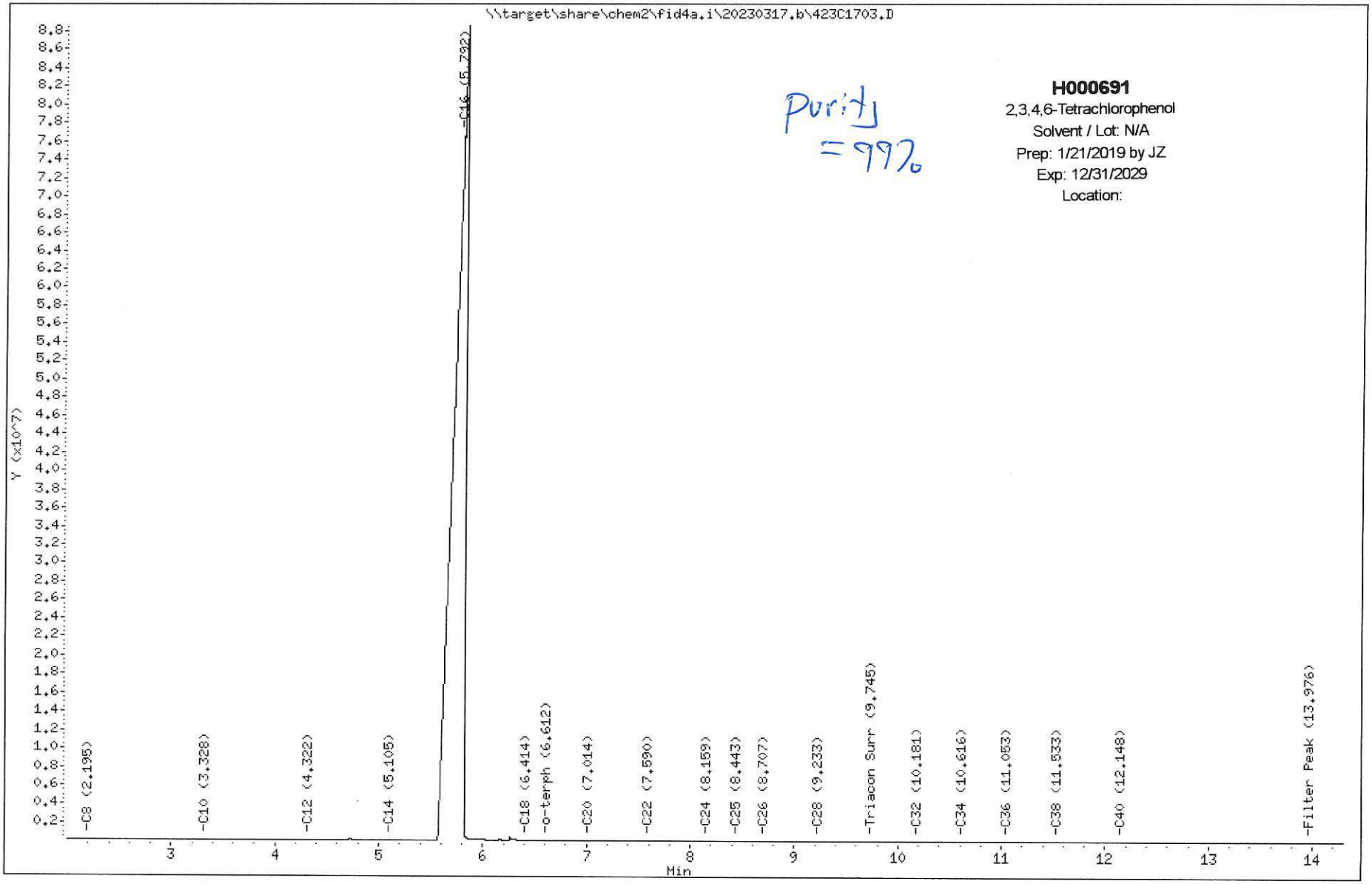
Instrument: fid4a.i
Operator: AA
Column diameter: 0.25

Column phase: RTX-1

\\target\share\chem2\fid4a.i\20230317.b\423C1703.D

Purity
=99%

H000691
2,3,4,6-Tetrachlorophenol
Solvent / Lot: N/A
Prep: 1/21/2019 by JZ
Exp: 12/31/2029
Location:



ARI Labs, Inc.

Data file : \\target\share\chem2\fid4a.i\20230317.b\423C1703.D
Lab Smp Id: K007226
Inj Date : 17-MAR-2023 10:46
Operator : AA Inst ID: fid4a.i
Smp Info : K007226
Misc Info :
Comment   :
Method   : \\target\share\chem2\fid4a.i\20230317.b\FID4TPH.m
Meth Date : 17-Mar-2023 16:58 alfonso Quant Type: AREA%
Cal Date : 18-AUG-2022 11:51 Cal File: 422H1803.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: tph.sub
Target Version: 4.14
Processing Host: ALFONSO-201901

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.043	81395	55677	0.684	0.012	1 Toluene
2.074	68503	39991	0.584	0.010	
2.104	85451	37158	0.435	0.012	
2.146	59381	25207	0.424	0.008	
2.181	11414	22862	2.003	0.001	
2.195	34939	23199	0.664	0.005	2 C8
2.218	8679	21808	2.513	0.001	
2.224	21070	21832	1.036	0.003	
2.243	45086	20191	0.448	0.006	
2.286	3130	15677	5.009	0.000	
2.291	12615	15880	1.259	0.001	
2.313	20979	15888	0.757	0.003	
2.333	7621	15373	2.017	0.001	
2.348	31874	17112	0.537	0.004	
2.373	4619	13267	2.872	0.000	
2.380	12003	13446	1.120	0.001	
2.393	10327	13347	1.292	0.001	
2.408	9963	12697	1.274	0.001	
2.446	24366	11882	0.488	0.003	
2.498	24898	10214	0.410	0.003	
2.557	1592	6395	4.017	0.000	
2.570	4427	6384	1.442	0.000	
2.583	4275	6215	1.454	0.000	
2.595	1208	6068	5.024	0.000	
2.602	3076	6230	2.025	0.000	
2.607	1560	6270	4.019	0.000	
2.631	17195	8933	0.520	0.002	
2.654	17386	7637	0.439	0.002	
2.703	4531	5468	1.207	0.000	
2.717	9156	5741	0.627	0.001	
2.740	3955	5045	1.275	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.768	1029	4134	4.017	0.000	
2.771	830	4189	5.050	0.000	
2.778	1924	4438	2.307	0.000	
2.784	5498	4564	0.830	0.000	
2.846	25970	8400	0.323	0.003	
2.880	939	3165	3.370	0.000	
2.884	1885	3183	1.688	0.000	
2.901	4805	3504	0.729	0.000	
2.938	581	1990	3.423	0.000	
2.944	1450	2016	1.390	0.000	
2.955	449	1816	4.043	0.000	
2.967	1234	2009	1.629	0.000	
2.982	712	2087	2.931	0.000	
2.988	1000	2338	2.337	0.000	
3.001	3475	3541	1.019	0.000	
3.018	3528	3705	1.050	0.000	
3.033	983	2521	2.564	0.000	
3.038	1297	2686	2.070	0.000	
3.044	2547	2541	0.997	0.000	
3.069	389	1330	3.418	0.000	
3.078	728	1545	2.123	0.000	
3.085	1244	1637	1.316	0.000	
3.098	1115	1624	1.457	0.000	
3.108	926	1475	1.593	0.000	
3.119	239	1202	5.036	0.000	
3.125	540	1251	2.315	0.000	
3.133	409	1219	2.978	0.000	
3.144	2600	1886	0.725	0.000	
3.165	620	1604	2.588	0.000	
3.173	554	1647	2.972	0.000	
3.192	2423	2273	0.938	0.000	
3.197	582	2418	4.158	0.000	
3.204	1161	2723	2.346	0.000	
3.208	825	2777	3.364	0.000	
3.228	4472	3391	0.758	0.000	
3.246	1586	2676	1.688	0.000	
3.279	1194	2070	1.734	0.000	
3.293	854	1951	2.285	0.000	
3.298	595	2029	3.408	0.000	
3.315	2640	2597	0.984	0.000	
3.320	1015	2542	2.504	0.000	
3.328	1549	2593	1.674	0.000	3 C10
3.338	1314	2533	1.928	0.000	
3.350	523	2159	4.130	0.000	
3.358	1776	2105	1.185	0.000	
3.371	356	1797	5.043	0.000	
3.378	914	1880	2.057	0.000	
3.383	380	1927	5.068	0.000	
3.387	595	2023	3.399	0.000	
3.395	1390	2270	1.633	0.000	
3.405	1490	1994	1.338	0.000	
3.423	690	1601	2.321	0.000	
3.435	821	1554	1.894	0.000	
3.441	387	1583	4.087	0.000	
3.444	401	1625	4.051	0.000	
3.448	403	1636	4.060	0.000	
3.455	1216	1700	1.398	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
3.478	235	1185	5.047	0.000	
3.482	412	1229	2.986	0.000	
3.488	695	1177	1.694	0.000	
3.501	239	969	4.063	0.000	
3.509	914	1149	1.258	0.000	
3.520	1078	1069	0.992	0.000	
3.540	301	927	3.079	0.000	
3.556	406	849	2.089	0.000	
3.567	370	873	2.359	0.000	
3.572	178	939	5.270	0.000	
3.578	591	1171	1.981	0.000	
3.591	869	1353	1.556	0.000	
3.596	741	1352	1.826	0.000	
3.606	471	1401	2.976	0.000	
3.613	548	1411	2.577	0.000	
3.618	433	1521	3.511	0.000	
3.625	710	1635	2.303	0.000	
3.630	910	1667	1.832	0.000	
3.652	661	1562	2.362	0.000	
3.670	462	1214	2.627	0.000	
3.686	1036	1453	1.403	0.000	
3.690	829	1374	1.658	0.000	
3.702	531	1191	2.241	0.000	
3.712	452	1355	3.001	0.000	
3.716	820	1423	1.736	0.000	
3.736	2685	2093	0.780	0.000	
3.752	689	2030	2.946	0.000	
3.760	4109	2349	0.572	0.000	
3.805	3183	2036	0.640	0.000	
3.823	496	1686	3.401	0.000	
3.835	1641	2314	1.410	0.000	
3.859	9243	4616	0.499	0.001	
3.897	851	1745	2.051	0.000	
3.904	503	1721	3.419	0.000	
3.927	3866	3293	0.852	0.000	
3.941	5520	3558	0.645	0.000	
3.980	573	1715	2.991	0.000	
3.992	1027	1794	1.748	0.000	
3.995	1494	1860	1.245	0.000	
4.010	887	1639	1.847	0.000	
4.021	663	1724	2.602	0.000	
4.026	1380	1776	1.287	0.000	
4.045	306	1546	5.059	0.000	
4.053	1001	1758	1.757	0.000	
4.061	1137	1804	1.586	0.000	
4.072	779	1773	2.275	0.000	
4.080	989	1896	1.917	0.000	
4.087	561	1905	3.396	0.000	
4.098	1956	2156	1.103	0.000	
4.106	1168	2044	1.750	0.000	
4.127	1049	1627	1.551	0.000	
4.142	587	1545	2.633	0.000	
4.148	1155	1572	1.361	0.000	
4.173	3682	2398	0.651	0.000	
4.189	1023	1738	1.700	0.000	
4.204	549	1627	2.961	0.000	
4.213	628	1658	2.641	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
4.221	1039	1830	1.761	0.000	
4.227	447	1814	4.058	0.000	
4.248	2703	2638	0.976	0.000	
4.256	1387	2945	2.123	0.000	
4.260	743	2988	4.022	0.000	
4.265	912	3081	3.378	0.000	
4.268	779	3140	4.031	0.000	
4.275	1736	3217	1.853	0.000	
4.289	2688	3495	1.300	0.000	
4.295	3466	3448	0.995	0.000	
4.322	1054	2680	2.543	0.000	4 C12
4.330	1686	2627	1.558	0.000	
4.358	1066	1974	1.852	0.000	
4.378	434	1758	4.054	0.000	
4.384	1324	1879	1.419	0.000	
4.403	860	1608	1.869	0.000	
4.414	457	1567	3.431	0.000	
4.421	1117	1675	1.499	0.000	
4.433	910	1538	1.690	0.000	
4.439	865	1534	1.774	0.000	
4.449	764	1302	1.705	0.000	
4.471	433	1123	2.593	0.000	
4.476	734	1135	1.546	0.000	
4.490	385	1005	2.610	0.000	
4.498	555	1186	2.137	0.000	
4.502	695	1166	1.677	0.000	
4.518	587	949	1.618	0.000	
4.526	316	925	2.924	0.000	
4.533	560	989	1.765	0.000	
4.543	469	1001	2.135	0.000	
4.548	222	916	4.130	0.000	
4.553	188	980	5.207	0.000	
4.558	255	1038	4.076	0.000	
4.568	652	1157	1.775	0.000	
4.573	338	1151	3.409	0.000	
4.580	487	1283	2.636	0.000	
4.596	3801	1950	0.513	0.000	
4.631	531	1429	2.692	0.000	
4.663	4548	3737	0.822	0.000	
4.667	2815	3822	1.358	0.000	
4.679	2199	3760	1.710	0.000	
4.688	1068	3585	3.356	0.000	
4.694	2166	3742	1.727	0.000	
4.723	372603	172476	0.463	0.055	
4.894	47034	21828	0.464	0.006	
4.956	80510	28154	0.350	0.011	
4.999	54273	16950	0.312	0.008	
5.068	1137	5713	5.027	0.000	
5.072	8415	5792	0.688	0.001	
5.105	4203	4316	1.027	0.000	5 C14
5.146	660	2685	4.070	0.000	
5.153	2524	2649	1.050	0.000	
5.170	1076	2437	2.265	0.000	
5.174	2371	2438	1.028	0.000	
5.201	1013	2011	1.986	0.000	
5.210	2064	2332	1.130	0.000	
5.224	1083	2304	2.127	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
5.228	2027	2354	1.162	0.000	
5.276	4673	2682	0.574	0.000	
5.322	195	844	4.328	0.000	
5.331	977	1203	1.231	0.000	
5.356	490	993	2.027	0.000	
5.361	814	1044	1.283	0.000	
5.382	115	387	3.351	0.000	
5.399	619	960	1.551	0.000	
5.406	402	1035	2.576	0.000	
5.410	378	1122	2.968	0.000	
5.423	1663	1555	0.935	0.000	
5.452	5951	5020	0.844	0.000	
5.501	290	797	2.753	0.000	
5.523	2317	2472	1.067	0.000	
5.538	5946	6823	1.147	0.000	
5.792	501855376	76456669	0.152	74.449	6 C16
5.807	79757019	82319946	1.032	11.775	
5.823	77929961	88539160	1.136	11.505	
5.962	75333	84828	1.126	0.011	
5.986	474748	124326	0.262	0.070	
6.070	17103	57180	3.343	0.002	
6.074	120761	57565	0.477	0.017	
6.113	90233	47140	0.522	0.013	
6.165	407438	218439	0.536	0.060	
6.263	944101	374166	0.396	0.139	
6.414	114839	39498	0.344	0.016	7 C18
6.464	53190	31177	0.586	0.007	
6.523	31509	25870	0.821	0.004	
6.551	4785	23963	5.008	0.000	
6.559	51194	25409	0.496	0.007	
6.590	21354	21666	1.015	0.003	
6.612	35061	21127	0.603	0.005	$ 8 o-terph
6.638	17712	19934	1.125	0.002	
6.672	22159	19651	0.887	0.003	
6.683	26846	19268	0.718	0.003	
6.708	5413	18142	3.351	0.000	
6.713	24941	18247	0.732	0.003	
6.747	50657	18478	0.365	0.007	
6.795	23973	17444	0.728	0.003	
6.814	28457	17895	0.629	0.004	
6.837	10746	15445	1.437	0.001	
6.871	29974	21406	0.714	0.004	
6.874	4287	21471	5.009	0.000	
6.882	20520	21675	1.056	0.003	
6.944	32864	17445	0.531	0.004	
6.978	9138	15347	1.679	0.001	
7.014	4130	13830	3.348	0.000	9 C20
7.025	12567	14083	1.121	0.001	
7.038	4952	14274	2.882	0.000	
7.044	6508	14578	2.240	0.000	
7.050	25344	14736	0.581	0.003	
7.099	5531	12365	2.236	0.000	
7.108	16440	12371	0.752	0.002	
7.129	9415	11275	1.198	0.001	
7.175	3589	10327	2.878	0.000	
7.182	7285	10474	1.438	0.001	
7.212	11252	10002	0.889	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.227	5193	9506	1.830	0.000	
7.237	5172	9476	1.832	0.000	
7.247	4652	9357	2.011	0.000	
7.254	3258	9369	2.875	0.000	
7.259	7003	9455	1.350	0.001	
7.272	5540	9252	1.670	0.000	
7.283	4511	9087	2.014	0.000	
7.296	5828	9031	1.550	0.000	
7.308	4850	8866	1.828	0.000	
7.318	3111	9014	2.897	0.000	
7.324	3191	9168	2.873	0.000	
7.328	2775	9325	3.360	0.000	
7.339	6190	9713	1.569	0.000	
7.344	2920	9761	3.343	0.000	
7.350	17091	9874	0.578	0.002	
7.379	7217	8616	1.194	0.001	
7.395	5430	8408	1.548	0.000	
7.404	2492	8342	3.348	0.000	
7.409	1666	8354	5.014	0.000	
7.415	2955	8500	2.877	0.000	
7.423	3887	8782	2.259	0.000	
7.465	28160	14253	0.506	0.004	
7.471	6466	14499	2.242	0.000	
7.480	6649	15111	2.273	0.000	
7.484	26595	15197	0.571	0.003	
7.514	13964	13621	0.975	0.002	
7.539	8118	12614	1.554	0.001	
7.553	10540	12495	1.185	0.001	
7.584	2820	11307	4.010	0.000	
7.590	4522	11429	2.527	0.000	10 C22
7.620	16634	10435	0.627	0.002	
7.653	6793	9783	1.440	0.001	
7.663	8606	9666	1.123	0.001	
7.675	2827	9464	3.347	0.000	
7.683	9373	9620	1.026	0.001	
7.699	3657	9205	2.517	0.000	
7.708	5071	9290	1.832	0.000	
7.713	10483	9274	0.885	0.001	
7.735	10686	9257	0.866	0.001	
7.752	4732	8664	1.831	0.000	
7.765	5624	8765	1.558	0.000	
7.773	5614	8686	1.547	0.000	
7.784	3375	8506	2.520	0.000	
7.793	2118	8517	4.021	0.000	
7.799	10086	8544	0.847	0.001	
7.817	7761	8325	1.073	0.001	
7.833	2415	8088	3.350	0.000	
7.838	2838	8160	2.875	0.000	
7.844	3649	8173	2.240	0.000	
7.858	2009	8069	4.017	0.000	
7.864	4482	8197	1.829	0.000	
7.871	3688	8223	2.230	0.000	
7.879	4875	8269	1.696	0.000	
7.889	2009	8061	4.013	0.000	
7.897	4080	8308	2.036	0.000	
7.916	17828	10103	0.567	0.002	
7.935	4052	9086	2.242	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.940	2229	8948	4.015	0.000	
7.945	5765	8973	1.556	0.000	
7.954	6458	8765	1.357	0.000	
7.976	2099	8428	4.016	0.000	
7.984	10213	8807	0.862	0.001	
7.999	4897	8282	1.691	0.000	
8.013	8782	8112	0.924	0.001	
8.028	5860	7858	1.341	0.000	
8.040	3929	7871	2.003	0.000	
8.054	9161	8146	0.889	0.001	
8.067	2701	7766	2.876	0.000	
8.074	3069	7702	2.510	0.000	
8.081	2694	7742	2.874	0.000	
8.088	2705	7793	2.881	0.000	
8.095	5842	7832	1.341	0.000	
8.104	5419	7841	1.447	0.000	
8.119	5740	7735	1.348	0.000	
8.134	4986	7768	1.558	0.000	
8.141	5893	8009	1.359	0.000	
8.159	9098	8027	0.882	0.001	11 C24
8.174	3156	7971	2.526	0.000	
8.185	2376	7967	3.353	0.000	
8.190	4739	7937	1.675	0.000	
8.202	5181	8028	1.549	0.000	
8.212	1994	8027	4.025	0.000	
8.223	6137	8270	1.348	0.000	
8.236	6864	8171	1.190	0.001	
8.248	2383	7986	3.351	0.000	
8.253	2405	8059	3.351	0.000	
8.259	5294	8207	1.550	0.000	
8.268	2866	8235	2.874	0.000	
8.280	6583	8312	1.263	0.000	
8.289	4538	8296	1.828	0.000	
8.295	2060	8300	4.029	0.000	
8.300	2063	8291	4.020	0.000	
8.313	7062	8400	1.189	0.001	
8.318	1667	8375	5.023	0.000	
8.332	11362	9100	0.801	0.001	
8.343	4357	8741	2.006	0.000	
8.358	1267	8458	6.676	0.000	
8.363	2991	8621	2.882	0.000	
8.371	3980	8983	2.257	0.000	
8.379	6330	9083	1.435	0.000	
8.385	3111	8963	2.881	0.000	
8.393	6706	9050	1.349	0.000	
8.404	4903	8943	1.824	0.000	
8.417	8437	8972	1.063	0.001	
8.438	7166	9103	1.270	0.001	
8.443	3211	9227	2.873	0.000	12 C25
8.450	3688	9295	2.521	0.000	
8.455	2313	9276	4.010	0.000	
8.475	30054	13714	0.456	0.004	
8.504	5760	9733	1.690	0.000	
8.519	2799	9376	3.350	0.000	
8.529	4766	9710	2.037	0.000	
8.537	4875	9815	2.013	0.000	
8.543	8411	9973	1.186	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
8.555	2969	9916	3.340	0.000	
8.560	3974	9987	2.513	0.000	
8.568	2483	9997	4.026	0.000	
8.572	5007	10043	2.006	0.000	
8.591	14074	10725	0.762	0.002	
8.602	2648	10665	4.028	0.000	
8.606	2159	10862	5.032	0.000	
8.609	2183	10952	5.017	0.000	
8.633	7361	10561	1.435	0.001	
8.647	6774	10495	1.549	0.001	
8.658	2596	10420	4.014	0.000	
8.663	4723	10573	2.239	0.000	
8.669	3156	10589	3.355	0.000	
8.687	15405	11334	0.736	0.002	
8.699	6103	11158	1.828	0.000	
8.707	2223	11136	5.009	0.000	13 C26
8.730	28697	12536	0.437	0.004	
8.754	8658	11553	1.334	0.001	
8.763	2896	11612	4.010	0.000	
8.780	15029	12352	0.822	0.002	
8.788	1833	12243	6.680	0.000	
8.798	11854	12679	1.070	0.001	
8.806	1873	12509	6.677	0.000	
8.809	3133	12565	4.011	0.000	
8.813	2506	12550	5.008	0.000	
8.819	7588	12757	1.681	0.001	
8.829	4418	12679	2.870	0.000	
8.835	6988	12762	1.826	0.001	
8.848	13711	13258	0.967	0.002	
8.872	26625	13656	0.513	0.003	
8.894	4575	13127	2.869	0.000	
8.898	2631	13188	5.013	0.000	
8.902	5918	13262	2.241	0.000	
8.914	8577	13313	1.552	0.001	
8.922	4011	13433	3.349	0.000	
8.926	4724	13546	2.867	0.000	
8.933	6787	13651	2.011	0.001	
8.946	9614	13923	1.448	0.001	
8.951	6274	14004	2.232	0.000	
8.960	5592	14036	2.510	0.000	
8.966	3513	14090	4.011	0.000	
8.969	2829	14171	5.009	0.000	
8.973	4976	14233	2.860	0.000	
8.980	4289	14365	3.350	0.000	
8.996	27708	16441	0.593	0.004	
9.013	8129	14847	1.827	0.001	
9.025	8129	14840	1.826	0.001	
9.036	7503	15229	2.030	0.001	
9.040	4559	15225	3.340	0.000	
9.057	14920	16251	1.089	0.002	
9.067	9915	16831	1.698	0.001	
9.076	8535	17331	2.031	0.001	
9.081	5250	17596	3.352	0.000	
9.084	10558	17675	1.674	0.001	
9.095	4386	17601	4.013	0.000	
9.111	30564	19262	0.630	0.004	
9.128	8346	18722	2.243	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.139	15095	18986	1.258	0.002	
9.149	6655	19050	2.862	0.000	
9.158	23240	19719	0.848	0.003	
9.171	1903	19042	10.005	0.000	
9.175	4773	19156	4.013	0.000	
9.187	23630	19927	0.843	0.003	
9.199	4925	19763	4.013	0.000	
9.208	14115	20394	1.445	0.002	
9.219	12303	20691	1.682	0.001	
9.226	7266	20831	2.867	0.001	
9.233	15622	21000	1.344	0.002	14 C28
9.247	9280	20714	2.232	0.001	
9.262	45057	27849	0.618	0.006	
9.281	22651	23200	1.024	0.003	
9.304	13489	22820	1.692	0.001	
9.307	18038	22862	1.267	0.002	
9.328	8656	21778	2.516	0.001	
9.334	8635	21650	2.507	0.001	
9.343	16240	21738	1.339	0.002	
9.354	5409	21709	4.013	0.000	
9.367	16481	22234	1.349	0.002	
9.370	6683	22346	3.344	0.000	
9.382	14775	23166	1.568	0.002	
9.390	11679	23531	2.015	0.001	
9.394	12888	23584	1.830	0.001	
9.408	18752	23645	1.261	0.002	
9.416	4675	23396	5.004	0.000	
9.428	25138	24392	0.970	0.003	
9.438	20233	24095	1.191	0.002	
9.468	67429	26696	0.396	0.009	
9.496	8413	24122	2.867	0.001	
9.507	12049	24259	2.013	0.001	
9.527	36362	25771	0.709	0.005	
9.538	12891	25911	2.010	0.001	
9.543	6452	25853	4.007	0.000	
9.551	10420	26202	2.515	0.001	
9.557	29750	26593	0.894	0.004	
9.574	6252	25071	4.010	0.000	
9.593	29143	27655	0.949	0.004	
9.599	40783	27905	0.684	0.006	
9.620	13159	26364	2.004	0.001	
9.632	17259	26799	1.553	0.002	
9.640	13210	26592	2.013	0.001	
9.664	35362	28170	0.797	0.005	
9.672	27890	28134	1.009	0.004	
9.696	26737	28634	1.071	0.003	
9.711	53475	30848	0.577	0.007	
9.745	33266	29504	0.887	0.004	$ 15 Triacon Surr
9.752	7348	29501	4.015	0.001	
9.756	20542	29565	1.439	0.003	
9.768	7255	29059	4.005	0.001	
9.773	7275	29173	4.010	0.001	
9.785	31543	30611	0.970	0.004	
9.803	46804	32832	0.701	0.006	
9.821	10456	30060	2.875	0.001	
9.833	30772	31156	1.012	0.004	
9.860	77784	33514	0.431	0.011	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.881	12779	32069	2.510	0.001	
9.892	14531	32668	2.248	0.002	
9.896	8201	32902	4.012	0.001	
9.908	23357	33882	1.451	0.003	
9.912	27050	34095	1.260	0.003	
9.939	14585	32570	2.233	0.002	
9.951	23032	33095	1.437	0.003	
9.956	11596	33292	2.871	0.001	
9.966	16544	33271	2.011	0.002	
9.971	11660	33391	2.864	0.001	
9.975	10051	33617	3.345	0.001	
9.983	15209	33983	2.234	0.002	
9.988	15177	33830	2.229	0.002	
9.996	10128	33907	3.348	0.001	
10.018	43348	35629	0.822	0.006	
10.021	7133	35693	5.004	0.001	
10.025	8960	35988	4.016	0.001	
10.034	42064	36944	0.878	0.006	
10.063	65447	38699	0.591	0.009	
10.077	7375	36906	5.004	0.001	
10.083	16743	37428	2.235	0.002	
10.095	34467	38665	1.122	0.005	
10.118	90921	40621	0.447	0.013	
10.151	37738	38047	1.008	0.005	
10.158	11383	38037	3.342	0.001	
10.168	36074	38274	1.061	0.005	
10.181	15072	37809	2.509	0.002	16 C32
10.185	5655	37746	6.675	0.000	
10.198	43905	38471	0.876	0.006	
10.208	24771	38177	1.541	0.003	
10.218	19031	38113	2.003	0.002	
10.228	13353	38279	2.867	0.001	
10.237	21225	38826	1.829	0.003	
10.243	30946	38929	1.258	0.004	
10.266	43064	39733	0.923	0.006	
10.275	11912	39784	3.340	0.001	
10.278	19932	39886	2.001	0.002	
10.293	46366	40725	0.878	0.006	
10.318	46465	41024	0.883	0.006	
10.328	24720	41353	1.673	0.003	
10.334	10308	41278	4.005	0.001	
10.343	29100	41866	1.439	0.004	
10.354	22822	41695	1.827	0.003	
10.360	16568	41490	2.504	0.002	
10.376	31388	42321	1.348	0.004	
10.384	36478	43119	1.182	0.005	
10.393	21427	43144	2.014	0.003	
10.416	82339	44731	0.543	0.012	
10.434	23173	42257	1.824	0.003	
10.455	42801	43684	1.021	0.006	
10.459	19648	44004	2.240	0.002	
10.469	19632	43883	2.235	0.002	
10.492	56113	45807	0.816	0.008	
10.497	20626	45915	2.226	0.003	
10.503	27439	45837	1.671	0.004	
10.513	31833	45842	1.440	0.004	
10.523	6773	45190	6.672	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
10.529	22697	45513	2.005	0.003	
10.543	39087	46432	1.188	0.005	
10.552	16284	46719	2.869	0.002	
10.558	18796	47158	2.509	0.002	
10.576	69878	48769	0.698	0.010	
10.586	12085	48384	4.004	0.001	
10.592	21757	48469	2.228	0.003	
10.609	46960	50482	1.075	0.006	
10.616	40486	50812	1.255	0.005	17 C34
10.628	52392	50284	0.960	0.007	
10.665	99744	52644	0.528	0.014	
10.680	20832	52264	2.509	0.003	
10.699	126137	55939	0.443	0.018	
10.723	18258	52316	2.865	0.002	
10.733	65550	52928	0.807	0.009	
10.751	49102	51903	1.057	0.007	
10.765	10288	51490	5.005	0.001	
10.777	73220	52877	0.722	0.010	
10.791	15621	52150	3.338	0.002	
10.799	46819	52190	1.115	0.006	
10.817	52000	52328	1.006	0.007	
10.828	13014	52167	4.008	0.001	
10.833	18275	52280	2.861	0.002	
10.838	67284	52271	0.777	0.009	
10.860	15395	51401	3.339	0.002	
10.867	15366	51252	3.335	0.002	
10.874	25712	51608	2.007	0.003	
10.885	59363	52064	0.877	0.008	
10.901	33199	51247	1.544	0.004	
10.911	35859	51446	1.435	0.005	
10.925	15150	50526	3.335	0.002	
10.936	27761	50508	1.819	0.004	
10.954	40634	51235	1.261	0.005	
10.958	17973	51428	2.861	0.002	
10.982	101216	54997	0.543	0.014	
10.999	80380	54264	0.675	0.011	
11.022	15822	52869	3.342	0.002	
11.029	23878	53171	2.227	0.003	
11.032	23908	53219	2.226	0.003	
11.044	39793	53228	1.338	0.005	
11.053	13218	52959	4.007	0.001	19 C36
11.057	26491	53088	2.004	0.003	
11.069	47933	53454	1.115	0.007	
11.079	78088	52997	0.679	0.011	
11.132	4853	48537	10.002	0.000	
11.138	21933	48845	2.227	0.003	
11.148	46678	49317	1.057	0.006	
11.158	12248	49060	4.006	0.001	
11.164	14711	49102	3.338	0.002	
11.179	64473	49939	0.775	0.009	
11.192	19751	49439	2.503	0.002	
11.197	14848	49541	3.337	0.002	
11.202	17336	49566	2.859	0.002	
11.206	12400	49639	4.003	0.001	
11.212	56808	49881	0.878	0.008	
11.230	26830	48794	1.819	0.003	
11.263	19014	47590	2.503	0.002	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
11.267	11927	47790	4.007	0.001	
11.285	66432	50042	0.753	0.009	
11.308	17214	49235	2.860	0.002	
11.312	19684	49285	2.504	0.002	
11.322	19740	49570	2.511	0.002	
11.331	27467	50208	1.828	0.004	
11.334	12565	50301	4.003	0.001	
11.338	17617	50367	2.859	0.002	
11.356	50450	50688	1.005	0.007	
11.383	31641	48774	1.541	0.004	
11.392	14562	48589	3.337	0.002	
11.398	14566	48593	3.336	0.002	
11.405	21947	48858	2.226	0.003	
11.418	36961	49602	1.342	0.005	
11.428	52174	49838	0.955	0.007	
11.438	46900	49605	1.058	0.006	
11.456	66003	49218	0.746	0.009	
11.481	84312	48818	0.579	0.012	
11.518	39837	46996	1.180	0.005	
11.533	55836	46822	0.839	0.008	20 C38
11.560	30101	46465	1.544	0.004	
11.568	20916	46512	2.224	0.003	
11.573	11637	46596	4.004	0.001	
11.579	23274	46598	2.002	0.003	
11.586	13953	46531	3.335	0.002	
11.591	9318	46631	5.004	0.001	
11.623	97892	48831	0.499	0.014	
11.631	17107	48984	2.863	0.002	
11.638	22090	49260	2.230	0.003	
11.642	32050	49351	1.540	0.004	
11.669	95446	50981	0.534	0.014	
11.685	95822	49865	0.520	0.014	
11.788	8918	44609	5.002	0.001	
11.791	35704	44768	1.254	0.005	
11.804	11082	44350	4.002	0.001	
11.813	22172	44403	2.003	0.003	
11.823	19993	44543	2.228	0.002	
11.829	13395	44754	3.341	0.001	
11.837	20184	44981	2.228	0.002	
11.852	26933	44942	1.669	0.003	
11.866	36041	45224	1.255	0.005	
11.877	15835	45355	2.864	0.002	
11.883	18222	45726	2.509	0.002	
11.889	15985	45741	2.861	0.002	
11.896	20679	46117	2.230	0.003	
11.905	23259	46896	2.016	0.003	
11.929	70146	49826	0.710	0.010	
11.936	52288	50085	0.958	0.007	
11.951	14787	49369	3.339	0.002	
11.957	17313	49595	2.865	0.002	
11.961	32199	49647	1.542	0.004	
11.971	19578	49063	2.506	0.002	
11.980	34244	49065	1.433	0.005	
12.019	96987	51133	0.527	0.014	
12.025	48685	51499	1.058	0.007	
12.053	38386	51386	1.339	0.005	
12.062	38575	51549	1.336	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
12.070	17923	51300	2.862	0.002	
12.078	45780	51141	1.117	0.006	
12.105	31495	48817	1.550	0.004	
12.118	85510	48295	0.565	0.012	
12.148	55474	46657	0.841	0.008	21 C40
12.172	34299	45899	1.338	0.005	
12.181	18286	45754	2.502	0.002	
12.188	20565	45727	2.223	0.003	
12.198	29701	45787	1.542	0.004	
12.212	11377	45530	4.002	0.001	
12.218	29576	45566	1.541	0.004	
12.237	41054	45750	1.114	0.006	
12.243	13695	45701	3.337	0.002	
12.253	27528	46122	1.675	0.004	
12.260	16149	46201	2.861	0.002	
12.272	32473	46571	1.434	0.004	
12.347	231342	54259	0.235	0.034	
12.355	96470	54322	0.563	0.014	
12.383	13155	52687	4.005	0.001	
12.389	52817	52930	1.002	0.007	
12.434	117936	55204	0.468	0.017	
12.440	19323	55283	2.861	0.002	
12.448	22049	55156	2.502	0.003	
12.460	127044	56114	0.442	0.018	
12.500	63536	55700	0.877	0.009	
12.519	44746	56237	1.257	0.006	
12.523	16928	56556	3.341	0.002	
12.528	14154	56666	4.003	0.002	
12.532	14154	56644	4.002	0.002	
12.538	25607	57089	2.229	0.003	
12.543	31284	57010	1.822	0.004	
12.560	76588	57084	0.745	0.011	
12.574	22463	56167	2.500	0.003	
12.583	192414	56305	0.293	0.028	
12.668	201456	54098	0.269	0.029	
12.722	63529	49368	0.777	0.009	
12.744	14574	48683	3.340	0.002	
12.757	68233	49046	0.719	0.010	
12.777	29106	48653	1.672	0.004	
12.802	69072	49884	0.722	0.010	
12.805	19947	49915	2.502	0.002	
12.813	12457	49907	4.006	0.001	
12.826	42860	50672	1.182	0.006	
12.830	15192	50711	3.338	0.002	
12.835	63121	50727	0.804	0.009	
12.856	30109	50299	1.671	0.004	
12.871	12459	49875	4.003	0.001	
12.876	24950	49913	2.001	0.003	
12.883	12458	49860	4.002	0.001	
12.892	24999	50091	2.004	0.003	
12.904	37682	50442	1.339	0.005	
12.918	60965	51059	0.838	0.009	
12.929	15268	50972	3.338	0.002	
12.950	101236	52476	0.518	0.014	
12.991	32619	50285	1.542	0.004	
13.030	23826	47690	2.002	0.003	
13.047	49429	47410	0.959	0.007	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.072	11668	46709	4.003	0.001	
13.077	14056	46964	3.341	0.002	
13.083	21201	47214	2.227	0.003	
13.092	45034	47490	1.055	0.006	
13.103	33139	47401	1.430	0.004	
13.119	58622	47300	0.807	0.008	
13.136	61979	46406	0.749	0.009	
13.163	36232	45399	1.253	0.005	
13.172	13552	45219	3.337	0.002	
13.178	13550	45211	3.337	0.002	
13.183	13581	45318	3.337	0.002	
13.188	15867	45365	2.859	0.002	
13.193	11350	45433	4.003	0.001	
13.206	54879	45909	0.837	0.008	
13.233	74220	46899	0.632	0.010	
13.246	18724	46923	2.506	0.002	
13.250	14089	47028	3.338	0.002	
13.254	9392	46999	5.004	0.001	
13.261	35241	47103	1.337	0.005	
13.270	21093	46884	2.223	0.003	
13.278	16404	46889	2.858	0.002	
13.284	28108	46937	1.670	0.004	
13.309	27777	46575	1.677	0.004	
13.313	11643	46617	4.004	0.001	
13.323	30391	46938	1.544	0.004	
13.337	49696	47554	0.957	0.007	
13.345	11906	47686	4.005	0.001	
13.352	21499	47921	2.229	0.003	
13.358	14416	48133	3.339	0.002	
13.366	24163	48487	2.007	0.003	
13.391	108474	49842	0.459	0.016	
13.411	39818	49922	1.254	0.005	
13.421	140245	49882	0.356	0.020	
13.468	75433	46221	0.613	0.011	
13.519	59701	44435	0.744	0.008	
13.538	26345	44021	1.671	0.003	
13.553	17475	43727	2.502	0.002	
13.559	19699	43828	2.225	0.002	
13.566	15324	43832	2.860	0.002	
13.574	28519	43956	1.541	0.004	
13.585	21950	43943	2.002	0.003	
13.595	26497	44341	1.673	0.003	
13.603	22230	44574	2.005	0.003	
13.608	11135	44585	4.004	0.001	
13.633	100703	46371	0.460	0.014	
13.650	25255	45974	1.820	0.003	
13.663	20511	45675	2.227	0.003	
13.670	15945	45584	2.859	0.002	
13.677	40973	45642	1.114	0.006	
13.688	4544	45448	10.002	0.000	
13.693	29520	45508	1.542	0.004	
13.718	24720	44995	1.820	0.003	
13.727	11216	44890	4.002	0.001	
13.735	29185	45025	1.543	0.004	
13.752	17874	44782	2.505	0.002	
13.767	35874	45020	1.255	0.005	
13.775	36036	45104	1.252	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.785	11226	44939	4.003	0.001	
13.790	47016	44953	0.956	0.006	
13.813	11118	44516	4.004	0.001	
13.818	37641	44507	1.182	0.005	
13.832	15424	44192	2.865	0.002	
13.838	17564	43967	2.503	0.002	
13.844	26339	43892	1.666	0.003	
13.855	30567	43821	1.434	0.004	
13.865	23854	43526	1.825	0.003	
13.882	28266	43639	1.544	0.004	
13.886	30418	43629	1.434	0.004	
13.901	34702	43472	1.253	0.005	
13.920	48162	44005	0.914	0.007	
13.928	17577	43956	2.501	0.002	
13.941	15410	44084	2.861	0.002	
13.946	11045	44251	4.006	0.001	
13.949	24369	44341	1.820	0.003	
13.959	22103	44264	2.003	0.003	
13.967	22088	44195	2.001	0.003	
13.976	33207	44336	1.335	0.004	18 Filter Peak
13.998	24195	44018	1.819	0.003	
14.007	15335	43888	2.862	0.002	
14.014	17519	43863	2.504	0.002	
14.019	54335	43870	0.807	0.008	
14.046	10722	42915	4.003	0.001	
14.052	19305	42955	2.225	0.002	
14.058	8568	42864	5.003	0.001	
14.067	38739	43159	1.114	0.005	
14.077	15012	42931	2.860	0.002	
14.083	25753	42977	1.669	0.003	
14.102	25682	42913	1.671	0.003	
14.108	19267	42865	2.225	0.002	
14.116	12834	42815	3.336	0.001	
14.126	25874	43369	1.676	0.003	
14.133	56339	43595	0.774	0.008	
14.161	32503	43582	1.341	0.004	
14.165	10909	43696	4.006	0.001	
14.170	15313	43822	2.862	0.002	
14.175	10960	43911	4.007	0.001	
14.178	13176	43945	3.335	0.001	
14.183	19785	43976	2.223	0.002	
14.191	8796	44018	5.005	0.001	
14.197	17636	44177	2.505	0.002	
14.208	28815	44459	1.543	0.004	
14.219	8873	44379	5.002	0.001	
14.223	13318	44445	3.337	0.001	
14.229	28860	44456	1.540	0.004	
14.247	15436	44194	2.863	0.002	
14.260	37147	43758	1.178	0.005	
14.274	45685	43705	0.957	0.006	
	677340272	268782821		100.000	

Total unknown % area = 25.478

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17662
Certification Date: December 2, 2021
Expiration Date: November 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 0.211%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.305%

K3236

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Certified Values

Analyte	*Units*	*Certified Value* [1,4]
1,2,4-Trichlorobenzene	µg/Kg	1477 ± 181
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	1625 ± 292
1-Chloronaphthalene	µg/Kg	2809 ± 84
2,3-Dimethylphenol	µg/Kg	4552 ± 137
2,4,5-Trichlorophenol	µg/Kg	3438 ± 245
2,4,6-Trichlorophenol	µg/Kg	2194 ± 251
2,4-Dichlorophenol	µg/Kg	6991 ± 394
2,4-Dimethylphenol	µg/Kg	6357 ± 879
2,4-Dinitrophenol	µg/Kg	2922 ± 523
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	3318 ± 442
2,6-Dichlorophenol	µg/Kg	4578 ± 874
2,6-Dimethylphenol	µg/Kg	7582 ± 228
2-Chloronaphthalene	µg/Kg	2223 ± 168
2-Chlorophenol	µg/Kg	1678 ± 202
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	5148 ± 685
2-Methylphenol (o-Cresol)	µg/Kg	6004 ± 573
2-Nitrophenol	µg/Kg	6456 ± 383
3,4-Dimethylphenol	µg/Kg	7185 ± 216
3+4-Methylphenol (m+p-Cresol)	µg/Kg	8033 ± 1613
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	7169 ± 310
4-Chloro-3-methylphenol	µg/Kg	2071 ± 110
4-Chlorophenyl phenylether	µg/Kg	2052 ± 113
4-Methylphenol (p-Cresol)	µg/Kg	6617 ± 1371
4-Nitrophenol	µg/Kg	6812 ± 595
Acenaphthene	µg/Kg	5489 ± 380

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Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Acenaphthylene	µg/Kg	1948 ± 240
Anthracene	µg/Kg	2866 ± 237
Benzo(a)anthracene	µg/Kg	5751 ± 552
Benzo(a)pyrene	µg/Kg	5902 ± 612
Benzo(b)fluoranthene	µg/Kg	3010 ± 409
Benzo(b+k)fluoranthene	µg/Kg	6534 ± 196
Benzo(g,h,i)perylene	µg/Kg	1380 ± 136
Benzo(k)fluoranthene	µg/Kg	2215 ± 237
Butyl benzyl phthalate	µg/Kg	3511 ± 384
Carbazole	µg/Kg	5412 ± 407
Chrysene	µg/Kg	1477 ± 72
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	2905 ± 321
Dibenzo(a,h)anthracene	µg/Kg	3420 ± 302
Dibenzofuran	µg/Kg	6130 ± 253
Dimethyl phthalate	µg/Kg	4537 ± 250
Di-n-butyl phthalate	µg/Kg	1721 ± 154
Di-n-octyl phthalate	µg/Kg	2744 ± 288
Fluoranthene	µg/Kg	2497 ± 222
Fluorene	µg/Kg	3724 ± 222
Hexachlorobutadiene	µg/Kg	1877 ± 245
Indeno(1,2,3-cd) pyrene	µg/Kg	3914 ± 409
Isophorone	µg/Kg	1615 ± 170
Naphthalene	µg/Kg	4458 ± 480
Nitrobenzene	µg/Kg	3539 ± 266
n-Nitrosodimethylamine	µg/Kg	1580 ± 402
n-Nitrosodiphenylamine	µg/Kg	2854 ± 379
Pentachlorophenol	µg/Kg	3411 ± 358
Phenanthrene	µg/Kg	5052 ± 385
Phenol	µg/Kg	2660 ± 184
Pyrene	µg/Kg	2964 ± 256
Pyridine	µg/Kg	1008 ± 30

Informational Values

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Analyte	*Units*	*Suggested Acceptance Windows*	*Standard Deviation*
1,2,4-Trichlorobenzene	µg/Kg	148 to 2853	459
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	163 to 3440	605
1-Chloronaphthalene	µg/Kg	1123 to 4494	562
2,3-Dimethylphenol	µg/Kg	1821 to 7284	910
2,4,5-Trichlorophenol	µg/Kg	1003 to 5872	811
2,4,6-Trichlorophenol	µg/Kg	640 to 3748	518
2,4-Dichlorophenol	µg/Kg	2391 to 11591	1533
2,4-Dimethylphenol	µg/Kg	0.00 to 13959	2534
2,4-Dinitrophenol	µg/Kg	1169 to 4675	584
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	1248 to 5388	690
2,6-Dichlorophenol	µg/Kg	1831 to 7324	916
2,6-Dimethylphenol	µg/Kg	3033 to 12132	1516
2-Chloronaphthalene	µg/Kg	748 to 3699	492
2-Chlorophenol	µg/Kg	415 to 2942	421
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	0.00 to 10347	1733
2-Methylphenol (o-Cresol)	µg/Kg	1306 to 10702	1566
2-Nitrophenol	µg/Kg	1534 to 11379	1641
3,4-Dimethylphenol	µg/Kg	2874 to 11495	1437
3+4-Methylphenol (m+p-Cresol)	µg/Kg	4054 to 16218	2027
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	2901 to 11437	1423
4-Chloro-3-methylphenol	µg/Kg	677 to 3464	464
4-Chlorophenyl phenylether	µg/Kg	756 to 3348	432
4-Methylphenol (p-Cresol)	µg/Kg	2647 to 10587	1323
4-Nitrophenol	µg/Kg	681 to 14762	2650
Acenaphthene	µg/Kg	2243 to 8736	1082
Acenaphthylene	µg/Kg	712 to 3183	412
Anthracene	µg/Kg	1218 to 4515	550
Benzo(a)anthracene	µg/Kg	2806 to 8696	982
Benzo(a)pyrene	µg/Kg	2512 to 9292	1130
Benzo(b)fluoranthene	µg/Kg	1197 to 4822	604
Benzo(b+k)fluoranthene	µg/Kg	2614 to 10454	1307

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Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Benzo(g,h,i)perylene	µg/Kg	489 to 2271	297
Benzo(k)fluoranthene	µg/Kg	892 to 3537	441
Butyl benzyl phthalate	µg/Kg	1255 to 5766	752
Carbazole	µg/Kg	2032 to 8792	1127
Chrysene	µg/Kg	669 to 2284	269
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	765 to 5045	713
Dibenzo(a,h)anthracene	µg/Kg	1257 to 5583	721
Dibenzofuran	µg/Kg	2766 to 9493	1121
Dimethyl phthalate	µg/Kg	1842 to 7231	898
Di-n-butyl phthalate	µg/Kg	495 to 2947	409
Di-n-octyl phthalate	µg/Kg	690 to 4798	685
Fluoranthene	µg/Kg	984 to 4009	504
Fluorene	µg/Kg	1638 to 5810	695
Hexachlorobutadiene	µg/Kg	425 to 3329	484
Indeno(1,2,3-cd) pyrene	µg/Kg	870 to 6957	1015
Isophorone	µg/Kg	437 to 2792	392
Naphthalene	µg/Kg	1131 to 7784	1109
Nitrobenzene	µg/Kg	1024 to 6054	838
n-Nitrosodimethylamine	µg/Kg	632 to 2528	316
n-Nitrosodiphenylamine	µg/Kg	1142 to 4567	571
Pentachlorophenol	µg/Kg	341 to 7037	1209
Phenanthrene	µg/Kg	2307 to 7798	915
Phenol	µg/Kg	681 to 4639	660
Pyrene	µg/Kg	1118 to 4810	615
Pyridine	µg/Kg	403 to 1613	202

Additional Information:

DESCRIPTION

The organic sample is a soil containing extractable BNAs for analysis by 8100, 8270, 8310 or equivalent methods.

This product consist of a 5 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested how homogeneity. Only one vial is need for test the remaining vials are to be used for multiple methods or routine testing.

The soil has been sterilized to minimize degradation of the sample.

The sample has been sized to 100 mesh.

Required storage condition is 4ºC.

The sample has been intentionally prepared with an apparent headspace.

STORAGE

The sample should be stored at 4ºC. It has been determined to be stable for the duration of the expiration date.

After sub-sampling replace cap securely and store remaining sample at 4ºC.

The shelf life of the product was determined by historic stability of similar CRM's. The expiration date may be extended based on stock and popularity upon successful stability testing by a 17025 accredited laboratory.

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID	CRM143-50G
Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

Stability and shelf life after opening must be determined by the user, taking into account sampling frequency/volume and all local conditions.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Assume a 10g sample size for all calculations.

Note: Sample extracts and calibration solutions should be in the same solvent.

Report all results on a wet weight basis, do not correct for moisture.

NOTE: For method 8100 and using a packed column gas chromatographic method or cannot adequately resolve the following may coelute in four pairs of compounds: anthracene and phenanthrene; chrysene and benzo(a)anthracene; benzo(b)fluoranthene and benzo(k)fluoranthene; and dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

SCOPE AND APPLICATION

The BNAs in Soil Certified Reference Material (CRM) consists of 5 10mL VOA vials, with a Teflon lined closures containing approximately 10 grams of soil, fortified with BNAs. Being a natural matrix waste sample the analyst is challenged by the same preparation problems, analytical interferences, etc. as is typical for similar matrices received by the laboratory for analysis.

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Description

Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

1 **Metrological traceability:** Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. K=2 unless specified. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

***k*:** Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were preformed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH **ISO/IEC 17025:2017 (ANAB Cert AT-1467)** and **ISO 17034:2016 (ANAB Cert AR-1470).**

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certification Date	January 05, 2021
Version	0-152021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Reference Materials Producer
Cert #2495.01

Certificate of Analysis

Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics**® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

Certificate of Reference Material

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021 Certifying Officer: Shannon Mora

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory , please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5 µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i, where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Phone: 1-732-549-7144 • Fax 1-732-603-9647

Accredited to 17025 & Guide 34 ISO Certified to 9001

ACCREDITED
Reference Materials Producer
Cert #2495.01

ECS

Certificate of Analysis

ilac-MRA ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

K004542

Certificate of Reference Material

Catalog Number: ECS-A-030

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Lot No. AA210126005

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021

Certifying Officer: Shannon Nave

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
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- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

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Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0181243

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2025 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

05/11/22

K004545
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO175316
Prep: 5/11/2022 by JZ
Exp: 10/20/2025
Location:

Elution Order	Compound	Gr (weig					
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBJ2508) **Purity** 99%	1,50		+/- 53.3632	µg/mL	Stressed	
2	Phenol-d6 **CAS #** 13127-88-3 (Lot PR-31262) **Purity** 99%	1,506.0	µg/mL	+/- 8.9452 +/- 43.9882 +/- 53.3632	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,510.0	µg/mL	+/- 8.9689 +/- 44.1050 +/- 53.5049	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot PR-32542/022621DB1 **Purity** 99%	1,004.0	µg/mL	+/- 5.9635 +/- 29.3255 +/- 35.5754	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940A) **Purity** 99%	1,008.0	µg/mL	+/- 5.9872 +/- 29.4423 +/- 35.7172	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 19169) **Purity** 99%	1,006.0	µg/mL	+/- 5.9753 +/- 29.3839 +/- 35.6463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot MKCJ7664) **Purity** 99%	1,506.0	µg/mL	+/- 8.9452 +/- 43.9882 +/- 53.3632	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed	

Certificate of Analysis

phenova Certified Reference Materials | A Phenomenex Company

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.:	AL0-101246	**Lot Number:**	CL17953
Description:	Benzoic Acid	**Certification Date:**	January 31, 2022
Storage:	4 °C	**Expiration Date:**	January 31, 2032
Provided As:	1 mL in 2 mL Ampoule in Methylene Chloride		

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 2.714%

K004603
Benzoic Acid @2000ug/ml
Solvent / Lot: N/A
Prep: 5/13/2022 by JZ
Exp: 1/31/2032
Location: GC

5/13/22

Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17662
Certification Date: December 2, 2021
Expiration Date: November 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 0.211%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.305%

K004604
Benzidines std @2000ug/ml
Solvent / Lot: MeCl2
Prep: 5/13/2022 by JZ
Exp: 11/30/2031
Location: GC

5/13/22

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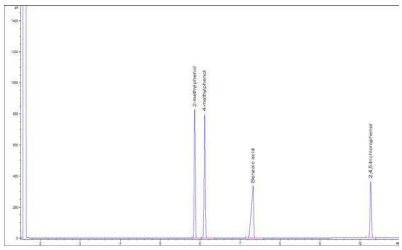
Certificate of Analysis - Certified Reference Material

EPA TCL Hazardous Substances Mix 1

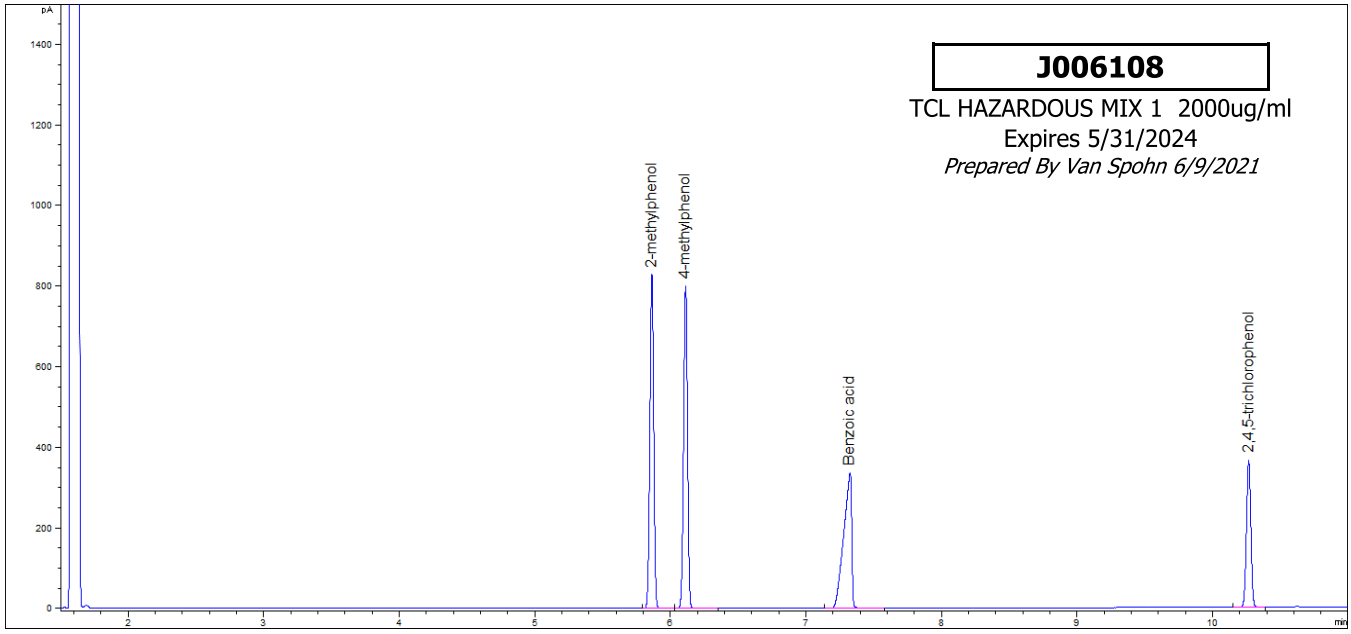
Product no.: 48907
Lot no.: LRAC9610
Expiry Date: May 2024
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAC9610.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Elution order*	*Raw Material Lot*
2-METHYLPHENOL CAS# 95-48-7	2004 ± 9	µg/mL	99.0	1	G1735A
4-METHYLPHENOL CAS# 106-44-5	2004 ± 13	µg/mL	98.9	2	06921MG
BENZOIC ACID CAS# 65-85-0	2012 ± 6	µg/mL	99.9	3	LC16514
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	2003 ± 6	µg/mL	99.9	4	JS00008

Informational Values:



Additional Information:
Analytical Method Parameters:
Column: Equity-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #98)
Carrier Gas: H2, Flow: 4.5 mL/min
Inlet Temperature: 170 °C, Injection Volume: 1 µL
Injection Mode: Split, Split Ratio: 20:1

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Temperature Program: 80 °C @ 10 °C/min to 190 °C (Hold 5 min)
Detector: FID
Detector Temperature: 310 °C

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 20-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom}\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9610.01	20-May-2021	Original Release Date

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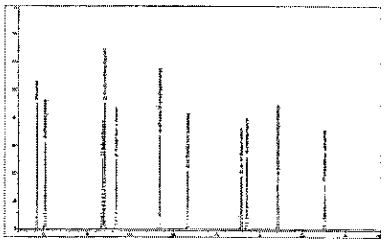
Certificate of Analysis - Certified Reference Material

EPA TCL Phenols Mix

Product no.: 48904
Lot no.: LRAD0139
Expiry Date: July 2024
Manufacturing Date: July 2021
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0139.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2-CHLOROPHENOL CAS# 95-57-8	2001 ± 25	µg/mL	99.9	STBG3033V
2-NITROPHENOL CAS# 88-75-5	1999 ± 18	µg/mL	99.3	15905BB
2,4-DIMETHYLPHENOL CAS# 105-67-9	2000 ± 14	µg/mL	99.2	05421CO
2,4-DICHLOROPHENOL CAS# 120-83-2	2000 ± 17	µg/mL	99.5	03221TN
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	2000 ± 5	µg/mL	99.9	JS00013
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	2002 ± 5	µg/mL	99.5	04212PS
2,4-DINITROPHENOL CAS# 51-28-5	2000 ± 28	µg/mL	66.9	STBJ5751
4-NITROPHENOL CAS# 100-02-7	2000 ± 33	µg/mL	99.0	04628LT
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	2000 ± 27	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	1999 ± 25	µg/mL	97.9	MKCD2150

ASSAY Method

J013597
TCL Phenols Mix 2000ug/ml
Solvent / Lot: LRAD0139
Prep: 12/30/2021 by VS
Exp: 7/31/2024
Location:

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
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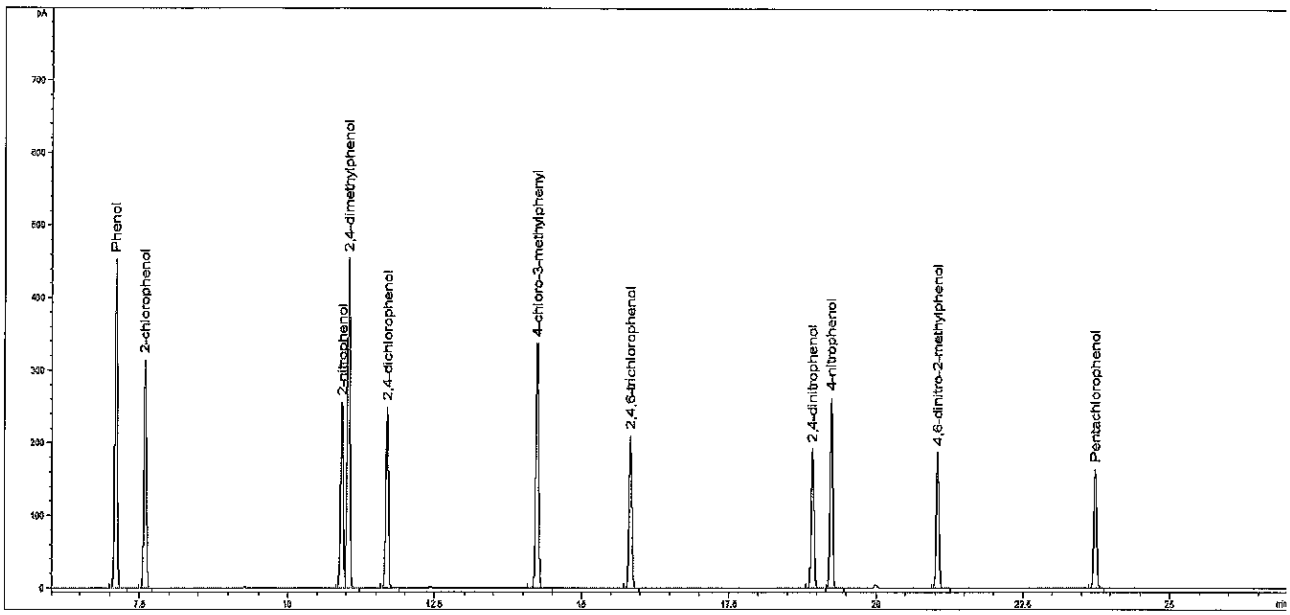

METHOD: GC (Bellefonte Method)

Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.5 mL/min
Inlet Temperature: 200 °C Injection Volume: 1.0 µL
Injection Mode: 25:1
Temperature Program: 80 °C (Hold 2 min) @ 6 °C/min to 260 °C (Hold 5 min)
Detector: FID Temperature: 310 °C

Elution details:

EO	RT(MIN)	ANALYTE
1	7.095	Phenol
2	7.585	2-chlorophenol
3	10.925	2-nitrophenol
4	11.037	2,4-dimethylphenol
5	11.696	2,4-dichlorphenol
6	14.242	4-chloro-3-m3thylphenol
7	15.842	2,4,6-trichlorophenol
8	18.93	2,4-dinitrophenol
9	19.25	4-nitrophenol
10	21.05	4,6-dinitro-2-methylphenol
11	23.752	Pentachlorophenol

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 12-Jul-2021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{hom\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0139.01	12-Jul-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.

Certificate of Analysis

Produced by Phenova
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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18355
Certification Date: July 25, 2022
Expiration Date: August 31, 2023

K007995
SVOA-8270 LCS MIX 1000ug/ml
Solvent / Lot: N/A
Prep: 8/29/2022 by JZ
Exp: 8/31/2023
Location: FREEZER 44

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 0.300%
Acenaphthylene	208-96-8	1000	± 0.225%
Anthracene	120-12-7	1000	± 6.858%
Azobenzene	103-33-3	1000	± 0.224%
Benzo(a)anthracene	56-55-3	1000	± 0.247%
Benzo(a)pyrene	50-32-8	1000	± 0.270%
Benzo(b)fluoranthene	205-99-2	1000	± 0.635%
Benzo(k)fluoranthene	207-08-9	1000	± 0.682%
Benzo(g,h,i)perylene	191-24-2	1000	± 0.272%
Benzyl alcohol	100-51-6	1000	± 0.231%
Benzyl butyl phthalate	85-68-7	1000	± 0.480%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 0.479%
bis(2-Chloroethyl) ether	111-44-4	1000	± 0.479%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 0.550%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 0.479%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 0.479%
4-Bromophenyl phenyl ether	101-55-3	1000	± 0.479%
Carbazole	86-74-8	1000	± 0.146%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 0.300%
4-Chloro-3-methylphenol	59-50-7	1000	± 0.545%
2-Chloronaphthalene	91-58-7	1000	± 0.224%
2-Chlorophenol	95-57-8	1000	± 0.507%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 0.479%
Chrysene	218-01-9	1000	± 0.145%
Dibenz(a,h)anthracene	53-70-3	1000	± 1.058%
Dibenzofuran	132-64-9	1000	± 0.302%
Di-n-butyl phthalate	84-74-2	1000	± 0.518%
1,2-Dichlorobenzene	95-50-1	1000	± 0.247%
1,3-Dichlorobenzene	541-73-1	1000	± 0.225%
1,4-Dichlorobenzene	106-46-7	1000	± 0.224%
2,4-Dichlorophenol	120-83-2	1000	± 0.545%
Diethyl phthalate	84-66-2	1000	± 0.518%
2,4-Dimethylphenol	105-67-9	1000	± 0.507%
Dimethyl phthalate	131-11-3	1000	± 0.518%
1,2-Dinitrobenzene	528-29-0	1000	± 0.361%
1,3-Dinitrobenzene	99-65-0	1000	± 0.300%
1,4-Dinitrobenzene	100-25-4	1000	± 0.242%
2,4-Dinitrophenol	51-28-5	1000	± 0.545%
2,4-Dinitrotoluene	121-14-2	1000	± 1.128%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 0.224%
Di-n-octyl phthalate	117-84-0	1000	± 0.486%
Fluoranthene	206-44-0	1000	± 0.224%
Fluorene	86-73-7	1000	± 0.224%
Hexachlorobenzene	118-74-1	1000	± 0.152%
Hexachlorobutadiene	87-68-3	1000	± 0.746%
Hexachlorocyclopentadiene	77-47-4	1000	± 0.153%
Hexachloroethane	67-72-1	1000	± 0.300%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 0.883%
Isophorone	78-59-1	1000	± 0.145%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 0.508%
1-Methylnaphthalene	90-12-0	1000	± 0.479%
2-Methylnaphthalene	91-57-6	1000	± 0.487%
2-Methylphenol	95-48-7	1000	± 0.545%
3-Methylphenol	108-39-4	500	± 0.279%
4-Methylphenol	106-44-5	500	± 0.399%
Naphthalene	91-20-3	1000	± 0.226%
2-Nitroaniline	88-74-4	1000	± 0.224%
3-Nitroaniline	99-09-2	1000	± 0.235%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 0.300%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 0.514%
4-Nitrophenol	100-02-7	1000	± 0.519%
N-Nitrosodimethylamine	62-75-9	1000	± 0.503%
N-Nitrosodiphenylamine	86-30-6	1000	± 0.476%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.461%
Pentachlorophenol	87-86-5	1000	± 0.202%
Phenanthrene	85-01-8	1000	± 0.145%
Phenol	108-95-2	1000	± 0.545%
Pyrene	129-00-0	1000	± 0.147%
Pyridine	110-86-1	1000	± 0.503%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 0.247%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 0.247%
1,2,4-Trichlorobenzene	120-82-1	1000	± 0.224%
2,4,5-Trichlorophenol	95-95-4	1000	± 0.507%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.509%

Notes: The proper chemical name for Bis(2-Chloroiospropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Supelco®

www.sigmaaldrich.com

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAD2751
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2751.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at:* www.sigma-aldrich.com *for the most current version.)*

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE, 100MG, NEAT CAS# 91-94-1	799	µg/mL	99.8	LRAD2376
2,4-DINITROTOLUENE CAS# 121-14-2	801	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	800	µg/mL	99.2	11231AN
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	800	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	800	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	200	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	800	µg/mL	99.9	LA41596
4-CHLOROANILINE CAS# 106-47-8	800	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	799	µg/mL	99.9	07411KN
3-NITROANILINE CAS# 99-09-2	800	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	800	µg/mL	99.9	15609AA
PYRIDINE (LOW WATER) CAS# 110-86-1	800	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

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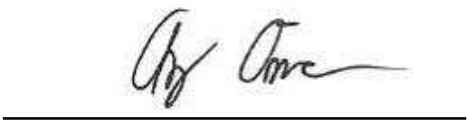
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 03 JUN 2022



Andy Ommen - QC Manager

Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2751.01	03 JUN 2022	Original Release Date

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Certificate of Composition - Analytical Standard

ACID STOCK

Product no.: 22523046
Lot no.: LRAD2750
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2750.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2,4-DIMETHYLPHENOL CAS# 105-67-9	800	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	800	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	801	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1799	µg/mL	66.9	STBJ5751
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	800	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	800	µg/mL	100.0	BCCD4461
4-NITROPHENOL CAS# 100-02-7	800	µg/mL	100.0	MKCN1089
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1800	µg/mL	100.0	BCBX5762
PENTACHLOROPHENOL CAS# 87-86-5	800	µg/mL	99.0	23614-01
BENZOIC ACID CAS# 65-85-0	1800	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

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Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
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Certificate issue date: 03 JUN 2022

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2750.01	03 JUN 2022	Original Release Date

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Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL18939
Certification Date: September 7, 2022
Expiration Date: August 31, 2032

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 3.812%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.419%

L001288
Benzidines std @2000ug/ml
Solvent / Lot: CL18939
Prep: 2/7/2023 by VS
Exp: 8/31/2032
Location: GC

Certificate of Analysis

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Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.:	AL0-101291	**Lot Number:**	CL11000
Description:	GC/MS Tuning Mix	**Certification Date:**	May 9, 2014
Storage:	4 °C	**Expiration Date:**	December 31, 2023
Provided As:	1 mL in 2 mL Ampoule in Methylene chloride	**Revision Date:**	August 5, 2015

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
Benzidine	92-87-5	1000	± 0.208%
Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 0.057%
4,4'-DDT	50-29-3	1000	± 0.056%
Pentachlorophenol	87-86-5	1000	± 0.061%

LOO 1648

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

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Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

IL111110613_US

Certificate of Analysis

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Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101291
Description: GC/MS Tuning Mix
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene chloride

Lot Number: CL11000
Certification Date: May 9, 2014
Expiration Date: December 31, 2023
Revision Date: August 5, 2015

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
Benzidine	92-87-5	1000	± 0.208%
Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 0.057%
4,4'-DDT	50-29-3	1000	± 0.056%
Pentachlorophenol	87-86-5	1000	± 0.061%

LOO1648

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

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Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Chemical Testing Laboratory
Certificate No. 2427.03

IL111106I3_us

Certificate of Analysis

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO Guide 34[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.

4. Instruction: Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC Guide 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC Guide 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC Guide 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.

12. Period of Validity: The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
[3] ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC Guide 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

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Certified Reference Materials

Manufactured by Phenova, Inc.
Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

IL-111106-13_us

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: PAH Standard

Product Number: US-106N-1

Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006666382

Lot Issue Date: 22-Apr-2022

Expiration Date: 31-May-2025

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
acenaphthene	2002 ±	10 µg/mL	000083-32-9	RM10879
acenaphthylene	2003 ±	10 µg/mL	000208-96-8	RM10891
anthracene	2002 ±	10 µg/mL	000120-12-7	RM14212
benz[a]anthracene	2003 ±	10 µg/mL	000056-55-3	RM19299
benzo[b]fluoranthene	2004 ±	10 µg/mL	000205-99-2	RM19754
benzo[k]fluoranthene	2010 ±	10 µg/mL	000207-08-9	RM19818
benzo[ghi]perylene	2004 ±	10 µg/mL	000191-24-2	RM19159
benzo[a]pyrene	1993 ±	10 µg/mL	000050-32-8	RM17573
chrysene	2000 ±	10 µg/mL	000218-01-9	RM18695
dibenz[a,h]anthracene	2008 ±	10 µg/mL	000053-70-3	RM06786
fluoranthene	2007 ±	10 µg/mL	000206-44-0	RM12277
fluorene	2003 ±	10 µg/mL	000086-73-7	RM13733
indeno[1,2,3-cd]pyrene	2001 ±	10 µg/mL	000193-39-5	RM19421
naphthalene	2002 ±	10 µg/mL	000091-20-3	RM10445
phenanthrene	2008 ±	10 µg/mL	000085-01-8	RM10495
pyrene	2001 ±	10 µg/mL	000129-00-0	RM16126

L007064

Matrix: methylene chloride/benzene (1:1)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:
The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

Agilent

Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Toxic Substances Standard

Product Number: US-104N-1

Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006698499

Lot Issue Date: 10-Aug-2022

Expiration Date: 30-Sep-2025

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
aniline	2006 ±	10 µg/mL	000062-53-3	RM16773
benzyl alcohol	2004 ±	10 µg/mL	000100-51-6	RM16537
4-chloroaniline	2005 ±	10 µg/mL	000106-47-8	RM01886
dibenzofuran	2008 ±	10 µg/mL	000132-64-9	RM02077
2-methylnaphthalene	2009 ±	10 µg/mL	000091-57-6	RM01258
2-nitroaniline	2007 ±	10 µg/mL	000088-74-4	RM02402
3-nitroaniline	2008 ±	10 µg/mL	000099-09-2	RM00427
4-nitroaniline	2004 ±	10 µg/mL	000100-01-6	RM02425

L007065

Matrix: methylene chloride (dichloromethane)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Agilent

Trusted Answers

Intended Use:
This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

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Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3

Lot Number: CL19475
Certification Date: January 10, 2023
Expiration Date: March 31, 2024

Aaron Dukes, Certified Reference Materials Manager

L008214
SVOA-8270 LCS MIX 1000ug/ml
Solvent / Lot: N/A
Prep: 7/26/2023 by JZ
Exp: 3/31/2024
Location: FREEZER 44

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 0.752%
Acenaphthylene	208-96-8	1000	± 0.725%
Anthracene	120-12-7	1000	± 0.725%
Azobenzene	103-33-3	1000	± 0.725%
Benzo(a)anthracene	56-55-3	1000	± 0.259%
Benzo(a)pyrene	50-32-8	1000	± 0.281%
Benzo(b)fluoranthene	205-99-2	1000	± 0.164%
Benzo(k)fluoranthene	207-08-9	1000	± 0.166%
Benzo(g,h,i)perylene	191-24-2	1000	± 1.169%
Benzyl alcohol	100-51-6	1000	± 0.727%
Benzyl butyl phthalate	85-68-7	1000	± 0.393%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 0.392%
bis(2-Chloroethyl) ether	111-44-4	1000	± 0.439%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 0.167%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 4.027%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 0.395%
4-Bromophenyl phenyl ether	101-55-3	1000	± 0.391%
Carbazole	86-74-8	1000	± 0.259%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL19475
Description: 8270 Calibration Standard
Certification Date: January 10, 2023
Storage: -18 °C
Expiration Date: March 31, 2024
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 0.750%
Di-n-octyl phthalate	117-84-0	1000	± 0.400%
Fluoranthene	206-44-0	1000	± 0.714%
Fluorene	86-73-7	1000	± 3.417%
Hexachlorobenzene	118-74-1	1000	± 0.526%
Hexachlorobutadiene	87-68-3	1000	± 0.969%
Hexachlorocyclopentadiene	77-47-4	1000	± 0.172%
Hexachloroethane	67-72-1	1000	± 2.107%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 3.554%
Isophorone	78-59-1	1000	± 0.164%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 0.483%
1-Methylnaphthalene	90-12-0	1000	± 0.392%
2-Methylnaphthalene	91-57-6	1000	± 0.401%
2-Methylphenol	95-48-7	1000	± 0.451%
3-Methylphenol	108-39-4	500	± 0.622%
4-Methylphenol	106-44-5	500	± 0.684%
Naphthalene	91-20-3	1000	± 0.726%
2-Nitroaniline	88-74-4	1000	± 0.721%
3-Nitroaniline	99-09-2	1000	± 0.749%
4-Nitroaniline	100-01-6	1000	± 0.748%
Nitrobenzene	98-95-3	1000	± 0.752%

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Packing List

Date	Order #
07/24/2023	310522

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www.phenova.com

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Analytical Resources Inc.
ATTN:
4611 South 134th
Tukwila, WA 981683240
USA

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
300121JR	Net 30	WMQ4684	1502697	FedEx Priority	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
6	6	0	AL0-101444	8270 Calibration Standard 1000 µg/mL MeCL2/MeOH		CL19475

Hazardous Communication Guide

Match the icons on your ampoule tag to this key.

Danger: May Cause Drowsiness or Dizziness.
Store in a well-ventilated place. Keep cool.

Danger: Harmful or Toxic to Aquatic Life with Long-Lasting Effects.
Avoid release to the environment.

Danger: Highly or Extremely Flammable Liquid and Vapor.
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.

Danger: Causes Serious Eye and Skin Irritation.
Wear protective gloves/protective clothing/eye protection/face protection.
If in contact, wash with plenty of soap or water where appropriate.

Danger: Causes Damage to Organs. May Cause Cancer.
Do not eat, drink, or smoke when using this product. Use only in a well-ventilated area.

Danger: Fatal or Toxic if Swallowed, Inhaled, or in Contact with Skin.
Suspected of damaging fertility or the unborn child. IF EXPOSED: Immediately call a POISON CENTER or doctor/physician. Do not breathe dust/fume/gas/mist/vapors/spray.

Warning: Suspected of Causing Cancer.
Wear protective gloves/protective clothing/eye protection/face protection.
If in contact, wash with plenty of soap or water where appropriate.

Material Safety Data Sheet available for all products
Please call us at **866-942-2978** or
Email us at **info@phenova.com**.

FL32630515_us

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These products are manufactured by Phenova, Inc., a Phenomenex Company, which is accredited to

ISO Guide 34 | ISO/IEC 17025 | ISO/IEC 17043 | TNI EL-V3-2009

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Phenova Quality
ISO Guide 34 •
ISO/IEC 17025 •
ISO/IEC 17043 •
TNI EL-V3-2009 •

Important Documents and Information for Order 310522

Thank you for choosing Phenova! Please check your items for any damage that may have occurred during transit. If you need replacement standards for damaged items or have any questions, we are here to assist! Please call us at +1-303-940-0033 or email us at info@phenova.com.

Sincerely,

The Phenova Team

6390 Joyce Drive, Suite 100
Golden, CO 80403 USA

Tel: 1-303-940-0033
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Email: info@phenova.com
www.phenova.com

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101443
Description: Aniline
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL18741
Certification Date: July 21, 2022
Expiration Date: July 31, 2030

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aniline	62-53-3	1000	± 1.719%

L008217
Aniline-1000ug/mL
Solvent / Lot: N/A
Prep: 7/26/2023 by JZ
Exp: 7/31/2030
Location: GC