

Mr. Raymond A. Scott
Deputy Director
City of Detroit
Buildings, Safety Engineering, and Environmental Department (BSEED)
2 Woodward Avenue, Suite 401
Detroit, MI 48226

April 12, 2023
NTH Project No. 23001494-01

**RE: Report on Ambient Air Quality Sampling and Analysis
FCA-Stellantis Project
Detroit, Michigan**

Dear Mr. Scott:

NTH Consultants, Ltd. (NTH) is pleased to submit this report summarizing the results of ambient air sampling and analysis conducted in the proximity of FCA-Stellantis Mack Assembly Plant in Detroit, Michigan. The City of Detroit - BSEED retained NTH to conduct weekly air sampling for contaminants related to the paint process at the assembly plant.

PROJECT BACKGROUND

Stellantis FCA US LLC Detroit Assembly Complex - Mack ("DACM") is located at 4000 St. Jean, Detroit, Wayne County, Michigan. The facility consists of an automobile and light-duty truck manufacturing plant, currently manufacturing the Jeep Grand Cherokee. Three main portions of the facility are the body shop, the paint shop, and a general assembly plant. The automobile surface coating process is located in the paint shop. The system applies coating to vehicle bodies via an electrodeposition ("E-coat") dip tank process, and then sprayed application of liquid primer ("Primer"), basecoat, and clearcoat ("Topcoat"). The E-coat, Primer, and Topcoat application processes are each followed by drying ovens. The paint shop uses a concentrator and a Regenerative Thermal Oxidizer (RTO) to control emissions from the paint booth spray zones, ambient flash zones, and heated flash zones. Cure oven emissions are ducted directly to the RTO. The paint booth observation zones are ducted to ambient air. The City of Detroit (City) and the Michigan Department of Environment, Great Lakes, and Energy (EGLE's) Air Quality Division (AOD) received odor complaints from residents of the surrounding neighborhoods.

PROJECT OBJECTIVES AND SCOPE OF SERVICES

The objective of the neighborhood sampling program was to determine the possible chemical compounds associated with the odor complaints. City would also like to receive additional or supplemental data prior to and after the installation of Stallantis' second RTO, as required by a Final Order by Consent (Consent Order).

To meet the above objective, the following key tasks were conducted:



Work Plan and Site Visit

NTH prepared a brief work plan focusing on sampling and analysis procedures. Additionally, NTH accompanied City-BSEED personnel to identify three air sample locations in the residential neighborhoods in the proximity of the plant.

Air Sampling and Analysis

NTH obtained ambient air samples from three locations (upwind and downwind from the plant) selected by the City using summa canisters. The sampling duration was 24 hours. The sampling frequency was once a week for four weeks. The samples were submitted to NTH’s subcontracted laboratory for analysis of VOCs using EPA Method TO-15.

Data Review, Evaluation and Report

The analytical data from weekly air sampling were evaluated and summarized in this report. A site plan showing the sample locations and laboratory data is appended to this report.

AIR SAMPLING AND EVALUATION OF ANALYTICAL DATA

NTH conducted ambient air sampling using Summa Canisters equipped with 24-hour regulator. The sampling canisters were placed on the exterior portions of three residential parcels as indicated on the Site Plan in Appendix A. No paint or chemical odors were noted during NTH’s sampling events.

The following table presents weather conditions on each air sampling date:

Sampling Date	Temperature Range (°F)	Weather	Wind Direction	Wind Velocity (mph)
2/28/2023	35 to 48	Cloudy	W-NW	0-17
3/7/2023	33 to 43	Cloudy	N	0-20
3/14/2023	23 to 37	Partly Cloudy	N-NW	0-16
3/21/2023	38 to 56	Partly Cloudy	S-SW	0-13

The following table presents the field data recorded during each sampling event:

Sample Location	Sample No.	Start Date	Start Time (am)	End Date	End Time (am)	Initial Pressure ("Hg)	End Pressure ("Hg)
Beniteau – 1	A-11	2/28/2023	9:05	3/1/2023	8:58	30	5
Beniteau – 1	A-12	3/7/2023	9:08	3/8/2023	9:02	30	6
Beniteau – 1	A-13	3/14/2023	9:15	3/15/2023	9:06	29	6
Beniteau – 1	A-14	3/21/2023	9:05	3/22/2023	9:02	30	6



Sample Location	Sample No.	Start Date	Start Time (am)	End Date	End Time (am)	Initial Pressure ("Hg)	End Pressure ("Hg)
Beniteau – 2	A-21	2/28/2023	9:13	3/1/2023	9:05	28	5
Beniteau – 2	A-22	3/7/2023	9:14	3/8/2023	9:08	30	6
Beniteau – 2	A-23	3/14/2023	9:17	3/15/2023	9:12	26	6
Beniteau – 2	A-24	3/21/2023	9:10	3/22/2023	9:09	27	5
Cope	A-31	2/28/2023	9:23	3/1/2023	9:13	29	5
Cope	A-32	3/7/2023	9:32	3/8/2023	9:15	30	6
Cope	A-33	3/14/2023	9:26	3/15/2023	9:20	30	4
Cope	A-34	3/21/2023	9:20	3/22/2023	9:22	29	7

The air samples were submitted to Fibertec Environmental Services (FES) laboratory for volatile organic compound (VOC) analysis by USEPA Method TO-15. Laboratory data for the air sample analysis are included in Appendix B.

CONCLUSIONS

As indicated by the laboratory data in Appendix B, no VOCs were detected above the method detection limits in the air samples collected during four weekly sampling events.

LIMITATIONS

The information presented in this report has been made to assist City in making a reasonable assessment of risk with respect to air quality concerns at the sample locations. This report is for the use and benefit of City of Detroit, and may be relied upon by the City of Detroit in accordance with the terms and conditions in place between NTH and City for this project. This report presents NTH’s opinion as of the report’s publication date, based on the results and on the information provided by the City during the course of this study. The results of the investigation may not be relied upon by parties other than those identified above without the prior knowledge and written consent of NTH. Any authorized third-party agrees by accepting this report that any use or reliance on this report shall be limited by the exceptions and limitations in this report.

Any use by or distribution of this report to any unauthorized third parties, without the express written consent of NTH is at the sole risk and expense of such third party. In the absence of a written agreement with NTH granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against NTH or its officers, employees, vendors, affiliates successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold NTH and its respective officers, employees, affiliates, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses including attorneys’ fees and costs attributable to such use. Unauthorized use of this report shall constitute acceptance of

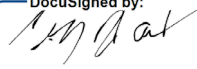


and commitment to these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted.

We appreciate the opportunity to be of assistance to you. Should you have questions concerning this report, please contact us at (248) 662-2740.

Sincerely,

NTH Consultants, Ltd.

DocuSigned by:

CC62C3695D554CC...

Cliff J. Andrews
Principal Professional

CJA/BCM/mlk

Attachments

DocuSigned by:

9A8ED1C814C943E...

Bhushan C. Modi
Project Manager



APPENDIX A

- Air Sampling Location Plan

j:\2023\23001494\reports\env\23001494-sp(1).dwg Plotted: 4/10/2023 12:49 PM by zmorarty



LEGEND



SAMPLING LOCATIONS

NOTE: LOCATIONS AND DIMENSIONS ARE APPROXIMATE. NOT A LEGAL SURVEY.

NTH Consultants, Ltd.



Infrastructure Engineering
and Environmental Services

CAD FILE NAME: 23001494-SP(1)
PLOT DATE: 4/10/23
DRAWING SCALE: 1" = 400'
INCEPTION DATE: 3/7/23

NTH PROJECT No.:	23001494-01
DESIGNED BY:	ZBM
DRAWN BY:	ZBM
CHECKED BY:	ZBM
	BCM

AIR SAMPLING LOCATION PLAN
FCA/STELLANTIS PROJECT DETROIT, MI

FIGURE:

1



APPENDIX B

- Laboratory Data



Friday, March 3, 2023

Fibertec Project Number: A13762
Project Identification: FCA/Stellantis (23001491-01) /23001491-01
Submittal Date: 03/01/2023

Mr. Bhushan Modi
NTH Consultants, Ltd. - Northville
41780 Six Mile Road
Suite 200
Northville, MI 48168-3459

Dear Mr. Modi,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Sue Ricketts at 12:48 PM, Mar 03, 2023

For Daryl P. Strandbergh
Laboratory Director

Enclosures

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T: (231) 775-8368

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584

Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: Beniteau	Chain of Custody: 212013
Client Project Name: FCA/Stellantis (23001491-01)	Sample No: A-11	Collect Date: 02/28/23
Client Project No: 23001491-01	Sample Matrix: Air	Collect Time: 09:05

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)

Method: EPA TO-15

Aliquot ID: **A13762-001** Matrix: **Air**
Description: **Beniteau**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Acetone	U		µg/m3	36	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
2. Benzene	U		µg/m3	2.9	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
3. Benzyl Chloride	U		µg/m3	0.41	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
4. Bromodichloromethane	U		µg/m3	0.80	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
5. Bromoform	U		µg/m3	15	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
6. Bromomethane	U		µg/m3	3.5	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
7. 1,3-Butadiene	U		µg/m3	0.66	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
8. 2-Butanone	U		µg/m3	8.8	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
‡ 9. Carbon Disulfide	U		µg/m3	19	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
10. Carbon Tetrachloride	U		µg/m3	0.75	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
11. Chlorobenzene	U		µg/m3	14	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
12. Chloroethane	U		µg/m3	4.0	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
13. Chloroform	U		µg/m3	0.59	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
14. Chloromethane	U		µg/m3	12	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
15. Cyclohexane	U		µg/m3	10	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
16. Dibromochloromethane	U		µg/m3	0.68	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
17. 1,2-Dichlorobenzene	U		µg/m3	9.0	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
18. 1,3-Dichlorobenzene	U		µg/m3	1.8	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
19. 1,4-Dichlorobenzene	U		µg/m3	1.8	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
20. Dichlorodifluoromethane	U		µg/m3	15	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
21. 1,1-Dichloroethane	U		µg/m3	6.1	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
22. 1,2-Dichloroethane	U		µg/m3	0.49	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
23. 1,1-Dichloroethene	U		µg/m3	5.9	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
24. cis-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
25. trans-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
26. 1,2-Dichloropropane	U		µg/m3	1.4	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
27. cis-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
28. trans-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
29. 1,4-Dioxane	U		µg/m3	5.4	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
‡ 30. Ethyl Acetate	U		µg/m3	11	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
31. Ethylbenzene	U		µg/m3	6.5	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
32. Ethylene Dibromide	U		µg/m3	0.23	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
33. n-Heptane	U		µg/m3	12	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
34. Hexachlorobutadiene	U		µg/m3	1.3	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
35. n-Hexane	U		µg/m3	11	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
‡ 36. 2-Hexanone	U		µg/m3	12	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
‡ 37. Isopropanol	U		µg/m3	15	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY

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T: (231) 775-8368

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584

Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: Beniteau	Chain of Custody: 212013
Client Project Name: FCA/Stellantis (23001491-01)	Sample No: A-11	Collect Date: 02/28/23
Client Project No: 23001491-01	Sample Matrix: Air	Collect Time: 09:05

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)

Method: EPA TO-15

Aliquot ID: **A13762-001** Matrix: **Air**
Description: **Beniteau**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
38. 4-Methyl-2-pentanone	U		µg/m3	12	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
39. Methylene Chloride	U		µg/m3	21	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
‡ 40. 2-Methylnaphthalene	U		µg/m3	35	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
41. MTBE	U		µg/m3	5.4	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
‡ 42. Naphthalene	U		µg/m3	1.6	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
43. Styrene	U		µg/m3	13	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
44. 1,1,2,2-Tetrachloroethane	U		µg/m3	0.21	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
45. Tetrachloroethene	U		µg/m3	6.1	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
‡ 46. Tetrahydrofuran	U		µg/m3	4.4	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
47. Toluene	U		µg/m3	5.7	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
48. 1,2,4-Trichlorobenzene	U		µg/m3	22	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
49. 1,1,1-Trichloroethane	U		µg/m3	8.2	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
50. 1,1,2-Trichloroethane	U		µg/m3	0.65	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
51. Trichloroethene	U		µg/m3	0.16	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
52. Trichlorofluoromethane	U		µg/m3	8.4	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
‡ 53. 1,1,2-Trichlorotrifluoroethane	U		µg/m3	23	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
54. 1,2,4-Trimethylbenzene	U		µg/m3	4.4	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
55. 1,3,5-Trimethylbenzene	U		µg/m3	4.4	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
56. Vinyl Acetate	U		µg/m3	11	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
57. Vinyl Chloride	U		µg/m3	0.77	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
58. m&p-Xylene	U		µg/m3	13	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
59. o-Xylene	U		µg/m3	13	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY
‡ 60. Xylenes	U		µg/m3	26	1.0	03/02/23	VK23C02B	03/03/23 00:20	VK23C02B	CY

Surrogate Summary

			<u>Control Limits</u>	<u>Instrument</u>	<u>Batch</u>	<u>Run Time</u>	<u>Column</u>	<u>Inst. Method</u>
4-Bromofluorobenzene(S)	100	%	80-120	VK	VK23C02B	3/3/2023 00:20	1	VK400

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Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: Beniteau	Chain of Custody: 212013
Client Project Name: FCA/Stellantis (23001491-01)	Sample No: A-21	Collect Date: 02/28/23
Client Project No: 23001491-01	Sample Matrix: Air	Collect Time: 09:13

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)

Method: EPA TO-15

Aliquot ID: **A13762-002** Matrix: **Air**
Description: **Beniteau**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Acetone	U		µg/m3	36	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
2. Benzene	U		µg/m3	2.9	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
3. Benzyl Chloride	U		µg/m3	0.41	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
4. Bromodichloromethane	U		µg/m3	0.80	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
5. Bromoform	U		µg/m3	15	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
6. Bromomethane	U		µg/m3	3.5	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
7. 1,3-Butadiene	U		µg/m3	0.66	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
8. 2-Butanone	U		µg/m3	8.8	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
‡ 9. Carbon Disulfide	U		µg/m3	19	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
10. Carbon Tetrachloride	U		µg/m3	0.75	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
11. Chlorobenzene	U		µg/m3	14	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
12. Chloroethane	U		µg/m3	4.0	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
13. Chloroform	U		µg/m3	0.59	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
14. Chloromethane	U		µg/m3	12	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
15. Cyclohexane	U		µg/m3	10	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
16. Dibromochloromethane	U		µg/m3	0.68	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
17. 1,2-Dichlorobenzene	U		µg/m3	9.0	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
18. 1,3-Dichlorobenzene	U		µg/m3	1.8	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
19. 1,4-Dichlorobenzene	U		µg/m3	1.8	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
20. Dichlorodifluoromethane	U		µg/m3	15	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
21. 1,1-Dichloroethane	U		µg/m3	6.1	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
22. 1,2-Dichloroethane	U		µg/m3	0.49	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
23. 1,1-Dichloroethene	U		µg/m3	5.9	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
24. cis-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
25. trans-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
26. 1,2-Dichloropropane	U		µg/m3	1.4	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
27. cis-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
28. trans-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
29. 1,4-Dioxane	U		µg/m3	5.4	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
‡ 30. Ethyl Acetate	U		µg/m3	11	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
31. Ethylbenzene	U		µg/m3	6.5	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
32. Ethylene Dibromide	U		µg/m3	0.23	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
33. n-Heptane	U		µg/m3	12	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
34. Hexachlorobutadiene	U		µg/m3	1.3	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
35. n-Hexane	U		µg/m3	11	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
‡ 36. 2-Hexanone	U		µg/m3	12	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
‡ 37. Isopropanol	U		µg/m3	15	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY

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F: (231) 775-8584

Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: Beniteau	Chain of Custody: 212013
Client Project Name: FCA/Stellantis (23001491-01)	Sample No: A-21	Collect Date: 02/28/23
Client Project No: 23001491-01	Sample Matrix: Air	Collect Time: 09:13

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)

Method: EPA TO-15

Aliquot ID: **A13762-002** Matrix: **Air**
Description: **Beniteau**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
38. 4-Methyl-2-pentanone	U		µg/m3	12	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
39. Methylene Chloride	U		µg/m3	21	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
‡ 40. 2-Methylnaphthalene	U		µg/m3	35	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
41. MTBE	U		µg/m3	5.4	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
‡ 42. Naphthalene	U		µg/m3	1.6	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
43. Styrene	U		µg/m3	13	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
44. 1,1,2,2-Tetrachloroethane	U		µg/m3	0.21	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
45. Tetrachloroethene	U		µg/m3	6.1	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
‡ 46. Tetrahydrofuran	U		µg/m3	4.4	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
47. Toluene	U		µg/m3	5.7	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
48. 1,2,4-Trichlorobenzene	U		µg/m3	22	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
49. 1,1,1-Trichloroethane	U		µg/m3	8.2	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
50. 1,1,2-Trichloroethane	U		µg/m3	0.65	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
51. Trichloroethene	U		µg/m3	0.16	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
52. Trichlorofluoromethane	U		µg/m3	8.4	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
‡ 53. 1,1,2-Trichlorotrifluoroethane	U		µg/m3	23	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
54. 1,2,4-Trimethylbenzene	U		µg/m3	4.4	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
55. 1,3,5-Trimethylbenzene	U		µg/m3	4.4	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
56. Vinyl Acetate	U		µg/m3	11	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
57. Vinyl Chloride	U		µg/m3	0.77	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
58. m&p-Xylene	U		µg/m3	13	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
59. o-Xylene	U		µg/m3	13	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY
‡ 60. Xylenes	U		µg/m3	26	1.0	03/02/23	VK23C02B	03/03/23 01:15	VK23C02B	CY

Surrogate Summary

			<u>Control Limits</u>	<u>Instrument</u>	<u>Batch</u>	<u>Run Time</u>	<u>Column</u>	<u>Inst. Method</u>
4-Bromofluorobenzene(S)	97	%	80-120	VK	VK23C02B	3/3/2023 01:15	1	VK400

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F: (231) 775-8584

Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: █ Cope	Chain of Custody: 212013
Client Project Name: FCA/Stellantis (23001491-01)	Sample No: A-31	Collect Date: 02/28/23
Client Project No: 23001491-01	Sample Matrix: Air	Collect Time: 09:23

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)

Method: EPA TO-15

Aliquot ID: **A13762-003** Matrix: **Air**
Description: **█ Cope**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			
						P. Date	P. Batch	A. Date	A. Batch	Init.	
‡ 1. Acetone	U		µg/m3	36	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
2. Benzene	U		µg/m3	2.9	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
3. Benzyl Chloride	U		µg/m3	0.41	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
4. Bromodichloromethane	U		µg/m3	0.80	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
5. Bromoform	U		µg/m3	15	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
6. Bromomethane	U		µg/m3	3.5	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
7. 1,3-Butadiene	U		µg/m3	0.66	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
8. 2-Butanone	U		µg/m3	8.8	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
‡ 9. Carbon Disulfide	U		µg/m3	19	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
10. Carbon Tetrachloride	U		µg/m3	0.75	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
11. Chlorobenzene	U		µg/m3	14	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
12. Chloroethane	U		µg/m3	4.0	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
13. Chloroform	U		µg/m3	0.59	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
14. Chloromethane	U		µg/m3	12	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
15. Cyclohexane	U		µg/m3	10	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
16. Dibromochloromethane	U		µg/m3	0.68	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
17. 1,2-Dichlorobenzene	U		µg/m3	9.0	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
18. 1,3-Dichlorobenzene	U		µg/m3	1.8	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
19. 1,4-Dichlorobenzene	U		µg/m3	1.8	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
20. Dichlorodifluoromethane	U		µg/m3	15	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
21. 1,1-Dichloroethane	U		µg/m3	6.1	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
22. 1,2-Dichloroethane	U		µg/m3	0.49	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
23. 1,1-Dichloroethene	U		µg/m3	5.9	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
24. cis-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
25. trans-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
26. 1,2-Dichloropropane	U		µg/m3	1.4	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
27. cis-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
28. trans-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
29. 1,4-Dioxane	U		µg/m3	5.4	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
‡ 30. Ethyl Acetate	U		µg/m3	11	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
31. Ethylbenzene	U		µg/m3	6.5	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
32. Ethylene Dibromide	U		µg/m3	0.23	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
33. n-Heptane	U		µg/m3	12	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
34. Hexachlorobutadiene	U		µg/m3	1.3	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
35. n-Hexane	U		µg/m3	11	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
‡ 36. 2-Hexanone	U		µg/m3	12	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY
‡ 37. Isopropanol	U		µg/m3	15	1.0	03/02/23	VK23C02B	03/03/23	02:09	VK23C02B	CY

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Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: █ Cope	Chain of Custody: 212013
Client Project Name: FCA/Stellantis (23001491-01)	Sample No: A-31	Collect Date: 02/28/23
Client Project No: 23001491-01	Sample Matrix: Air	Collect Time: 09:23

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)	Aliquot ID: A13762-003	Matrix: Air
Method: EPA TO-15	Description: █ Cope	

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
38. 4-Methyl-2-pentanone	U		µg/m3	12	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
39. Methylene Chloride	U		µg/m3	21	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
‡ 40. 2-Methylnaphthalene	U		µg/m3	35	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
41. MTBE	U		µg/m3	5.4	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
‡ 42. Naphthalene	U		µg/m3	1.6	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
43. Styrene	U		µg/m3	13	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
44. 1,1,2,2-Tetrachloroethane	U		µg/m3	0.21	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
45. Tetrachloroethene	U		µg/m3	6.1	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
‡ 46. Tetrahydrofuran	U		µg/m3	4.4	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
47. Toluene	U		µg/m3	5.7	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
48. 1,2,4-Trichlorobenzene	U		µg/m3	22	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
49. 1,1,1-Trichloroethane	U		µg/m3	8.2	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
50. 1,1,2-Trichloroethane	U		µg/m3	0.65	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
51. Trichloroethene	U		µg/m3	0.16	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
52. Trichlorofluoromethane	U		µg/m3	8.4	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
‡ 53. 1,1,2-Trichlorotrifluoroethane	U		µg/m3	23	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
54. 1,2,4-Trimethylbenzene	U		µg/m3	4.4	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
55. 1,3,5-Trimethylbenzene	U		µg/m3	4.4	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
56. Vinyl Acetate	U		µg/m3	11	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
57. Vinyl Chloride	U		µg/m3	0.77	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
58. m&p-Xylene	U		µg/m3	13	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
59. o-Xylene	U		µg/m3	13	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY
‡ 60. Xylenes	U		µg/m3	26	1.0	03/02/23	VK23C02B	03/03/23 02:09	VK23C02B	CY

Surrogate Summary									
4-Bromofluorobenzene(S)	97	%	<u>Control Limits</u>	<u>Instrument</u>	<u>Batch</u>	<u>Run Time</u>	<u>Column</u>	<u>Inst. Method</u>	
			80-120	VK	VK23C02B	3/3/2023 02:09	1	VK400	

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Definitions/ Qualifiers:

- A:** Spike recovery or precision unusable due to dilution.
- B:** The analyte was detected in the associated method blank.
- E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J:** The concentration is an estimated value.
- M:** Modified Method
- U:** The analyte was not detected at or above the reporting limit.
- X:** Matrix Interference has resulted in a raised reporting limit or distorted result.
- W:** Results reported on a wet-weight basis.
- ***: Value reported is outside QC limits
- D:** The sample or extract was analyzed at a DF greater than 1.

Exception Summary:

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-23-15 (TX)

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VK23C02B: Method Blank (MB)

EPA TO-15

Run Time: VK23C02B.MB 03/02/2023 14:46 [VK23C02B]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/m3		µg/m3
Acetone	U		36
Benzene	U		2.9
Benzyl Chloride	U		0.41
Bromodichloromethane	U		0.80
Bromoform	U		15
Bromomethane	U		3.5
1,3-Butadiene	U		0.66
2-Butanone	U		8.8
Carbon Disulfide	U		19
Carbon Tetrachloride	U		0.75
Chlorobenzene	U		14
Chloroethane	U		4.0
Chloroform	U		0.59
Chloromethane	U		12
Cyclohexane	U		10
Dibromochloromethane	U		0.68
1,2-Dichlorobenzene	U		9.0
1,3-Dichlorobenzene	U		1.8
1,4-Dichlorobenzene	U		1.8
Dichlorodifluoromethane	U		15
1,1-Dichloroethane	U		6.1
1,2-Dichloroethane	U		0.49
1,1-Dichloroethene	U		5.9
cis-1,2-Dichloroethene	U		5.9
trans-1,2-Dichloroethene	U		5.9
1,2-Dichloropropane	U		1.4
cis-1,3-Dichloropropene	U		1.4
trans-1,3-Dichloropropene	U		1.4
1,4-Dioxane	U		5.4
Ethyl Acetate	U		11
Ethylbenzene	U		6.5
Ethylene Dibromide	U		0.23
n-Heptane	U		12

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VK23C02B: Method Blank (MB)

EPA TO-15

Run Time: VK23C02B.MB 03/02/2023 14:46 [VK23C02B]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/m3		µg/m3
Hexachlorobutadiene	U		1.3
n-Hexane	U		11
2-Hexanone	U		12
Isopropanol	U		15
4-Methyl-2-pentanone	U		12
Methylene Chloride	U		21
2-Methylnaphthalene	U		35
MTBE	U		5.4
Naphthalene	U		1.6
Styrene	U		13
1,1,2,2-Tetrachloroethane	U		0.21
Tetrachloroethene	U		6.1
Tetrahydrofuran	U		4.4
Toluene	U		5.7
1,2,4-Trichlorobenzene	U		22
1,1,1-Trichloroethane	U		8.2
1,1,2-Trichloroethane	U		0.65
Trichloroethene	U		0.16
Trichlorofluoromethane	U		8.4
1,1,2-Trichlorotrifluoroethane	U		23
1,2,4-Trimethylbenzene	U		4.4
1,3,5-Trimethylbenzene	U		4.4
Vinyl Acetate	U		11
Vinyl Chloride	U		0.77
m&p-Xylene	U		13
o-Xylene	U		13
4-Bromofluorobenzene(S)	94		80-120

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VK23C02B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA TO-15

Run Time: VK23C02B.LCS: 03/02/2023 12:11 [VK23C02B] VK23C02B.LCSD: 03/02/2023 13:02 [VK23C02B]

Analyte	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amount				Qualifier	Spike Amount	Result	Rec.	Qualifier	%	%	Qualifier
	µg/m3	µg/m3	%	%		µg/m3	µg/m3	%		%		
Acetone	30.0	33.9	113	70-130		30.0	34.5	115		2	20	
Benzene	41.9	40.5	97	70-130		41.9	40.2	96		1	20	
Benzyl Chloride	66.0	63.0	96	70-150		66.0	62.0	94		2	20	
Bromodichloromethane	87.1	94.5	109	70-130		87.1	93.8	108		1	20	
Bromoform	134	149	111	70-138		134	147	109		2	20	
Bromomethane	50.5	53.1	105	70-133		50.5	53.1	105		0	20	
1,3-Butadiene	28.7	29.9	104	70-134		28.7	29.7	103		1	20	
2-Butanone	38.3	33.6	88	70-130		38.3	33.4	87		1	20	
Carbon Disulfide	41.2	33.6	82	70-130		41.2	33.7	82		0	20	
Carbon Tetrachloride	83.3	95.7	115	70-131		83.3	94.7	114		1	20	
Chlorobenzene	60.4	56.6	94	70-130		60.4	55.6	92		2	20	
Chloroethane	34.3	38.3	112	70-130		34.3	37.7	110		2	20	
Chloroform	63.4	68.5	108	70-130		63.4	68.8	109		1	20	
Chloromethane	27.1	29.3	108	70-130		27.1	29.3	108		0	20	
Cyclohexane	44.3	44.2	100	70-130		44.3	43.5	98		2	20	
Dibromochloromethane	110	121	110	70-135		110	118	108		2	20	
1,2-Dichlorobenzene	78.1	77.6	99	70-130		78.1	76.3	98		1	20	
1,3-Dichlorobenzene	77.4	74.3	96	70-131		77.4	73.3	95		1	20	
1,4-Dichlorobenzene	78.1	74.7	96	70-134		78.1	73.8	94		2	20	
Dichlorodifluoromethane	64.9	69.1	107	70-132		64.9	67.8	105		2	20	
1,1-Dichloroethane	52.6	49.5	94	70-130		52.6	49.4	94		0	20	
1,2-Dichloroethane	53.1	59.0	111	70-130		53.1	59.0	111		0	20	
1,1-Dichloroethene	52.0	61.7	119	70-133		52.0	61.5	118		1	20	
cis-1,2-Dichloroethene	52.0	51.1	98	70-130		52.0	50.9	98		0	20	
trans-1,2-Dichloroethene	51.0	49.7	97	70-130		51.0	49.3	97		0	20	
1,2-Dichloropropane	60.6	57.6	95	70-130		60.6	56.5	93		2	20	
cis-1,3-Dichloropropene	59.0	64.0	108	70-131		59.0	63.0	107		1	20	
trans-1,3-Dichloropropene	59.0	63.9	108	70-134		59.0	62.8	107		1	20	
1,4-Dioxane	46.8	49.4	105	70-130		46.8	49.1	105		0	20	
Ethyl Acetate	46.4	43.2	93	70-130		46.4	43.4	94		1	20	
Ethylbenzene	57.0	57.1	100	70-130		57.0	56.2	99		1	20	
Ethylene Dibromide	98.9	96.3	97	70-130		98.9	94.9	96		1	20	
n-Heptane	52.7	53.1	101	70-132		52.7	52.3	99		2	20	

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VK23C02B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA TO-15

Run Time: VK23C02B.LCS: 03/02/2023 12:11 [VK23C02B] VK23C02B.LCSD: 03/02/2023 13:02 [VK23C02B]

Analyte	LCS Spike Amount µg/m3	LCS Result µg/m3	LCS Rec. %	Rec. Limits %	LCS Qualifier	LCSD Spike Amount µg/m3	LCSD Result µg/m3	LCSD Rec. %	LCSD Qualifier	RPD %	RPD Limits %	RPD Qualifier
Hexachlorobutadiene	144	150	104	70-134		144	148	103		1	20	
n-Hexane	45.4	39.8	88	70-130		45.4	39.3	87		1	20	
2-Hexanone	52.7	56.7	108	70-139		52.7	55.2	105		3	20	
Isopropanol	32.9	44.0	134	54-144		32.9	44.8	136		1	20	
4-Methyl-2-pentanone	52.7	54.9	104	70-130		52.7	53.6	102		2	20	
Methylene Chloride	45.1	40.2	89	70-132		45.1	40.2	89		0	20	
2-Methylnaphthalene	83.6	70.5	84	70-146		83.6	72.9	87		4	20	
MTBE	46.8	49.8	106	70-130		46.8	50.0	107		1	20	
Naphthalene	74.7	79.0	106	70-148		74.7	78.3	105		1	20	
Styrene	55.4	59.0	107	70-130		55.4	57.7	104		3	20	
1,1,2,2-Tetrachloroethane	90.1	83.0	92	70-130		90.1	81.2	90		2	20	
Tetrachloroethene	88.1	88.1	100	70-130		88.1	87.3	99		1	20	
Tetrahydrofuran	38.0	35.9	94	70-138		38.0	35.5	94		0	20	
Toluene	49.4	48.9	99	70-130		49.4	48.0	97		2	20	
1,2,4-Trichlorobenzene	102	104	102	70-140		102	102	100		2	20	
1,1,1-Trichloroethane	70.9	77.4	109	70-130		70.9	76.8	108		1	20	
1,1,2-Trichloroethane	70.9	66.9	94	70-130		70.9	65.8	93		1	20	
Trichloroethene	70.5	74.3	105	70-130		70.5	73.8	105		0	20	
Trichlorofluoromethane	72.3	81.7	113	70-132		72.3	81.3	112		1	20	
1,1,2-Trichlorotrifluoroethane	101	101	100	70-130		101	100	100		0	20	
1,2,4-Trimethylbenzene	64.5	67.5	105	70-132		64.5	66.6	103		2	20	
1,3,5-Trimethylbenzene	64.5	67.8	105	70-131		64.5	66.6	103		2	20	
Vinyl Acetate	48.0	51.0	106	70-131		48.0	51.9	108		2	20	
Vinyl Chloride	33.2	37.4	113	70-131		33.2	36.8	111		2	20	
m&p-Xylene	114	117	102	70-130		114	114	100		2	20	
o-Xylene	56.4	58.6	104	70-130		56.4	57.2	101		3	20	
4-Bromofluorobenzene(S)			102	80-120				104				

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Definitions/ Qualifiers:

U: The analyte was not detected at or above the Reporting Limit (RL).
***:** Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:



By Sue Ricketts at 12:52 PM, Mar 03, 2023

Client Name: <u>NTM Consultants</u>				MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	VOCs (10-15)	PARAMETERS										Matrix Code			Deliverables		
Contact Person: <u>Bhushan Modi</u>							HOLD SAMPLE											S Soil	GW	Ground Water	<input type="checkbox"/>	Level 2
Project Name/ Number: <u>23001494-01 FCA/Stellantis</u>								A Air	SW	Surface Water	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Level 3
Email distribution list: <u>bmodie@ntmconsultants.com</u>								O Oil	WW	Waste Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Level 4
Quote# <u>1392</u>								P Wipe	X	Other: Specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EDD
Purchase Order#														Remarks:								
Date	Time	Sample #	Client Sample Descriptor																			
<u>2/28</u>	<u>↗</u>	<u>A-11</u>	<u>Beniteau</u>	<u>A</u>	<u>1</u>	<u>/</u>																
<u>2/28</u>	<u>↘</u>	<u>A-21</u>	<u>Beniteau</u>	<u>A</u>	<u>1</u>	<u>/</u>																
<u>2/28</u>	<u>↘</u>	<u>A-31</u>	<u>Cope</u>	<u>A</u>	<u>1</u>	<u>/</u>																
				IP & FP are also recorded on field cards																		
				Received By Lab																		
				MAR 01 2023																		
				Initials: <u>JJ</u>																		
Comments:																						
Sampled/Relinquished By: <u>[Signature]</u>				Date/Time	<u>3/1/23</u>	<u>11:00 am</u>	Received By:		<u>[Signature]</u>										<u>3/1/23</u>	<u>11:12</u>		
Relinquished By: <u>[Signature]</u>				Date/Time	<u>3/1/23</u>	<u>14:47</u>	Received By:		<u>[Signature]</u>													
Relinquished By: <u>[Signature]</u>				Date/Time			Received By Laboratory:		<u>[Signature]</u>													
Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY										LAB USE ONLY												
<input type="checkbox"/> 1 bus. day <input type="checkbox"/> 2 bus. days <input type="checkbox"/> 3 bus. days <input type="checkbox"/> 4 bus. days <input checked="" type="checkbox"/> 5-7 bus. days (standard) Other (specify time/date requirement): _____										Fibertec project number: <u>A13762</u> Temperature upon receipt at Lab: <u>Room Temp</u>												
Please see back for terms and conditions																						



Monday, March 13, 2023

Fibertec Project Number: A13871
Project Identification: FCA/Stellantis Project (23001494-01) /23001494-01
Submittal Date: 03/08/2023

Mr. Bhushan Modi
NTH Consultants, Ltd. - Northville
41780 Six Mile Road
Suite 200
Northville, MI 48168-3459

Dear Mr. Modi,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Jacob Sutherland at 4:22 PM, Mar 13, 2023

For Daryl P. Strandbergh
Laboratory Director

Enclosures

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Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: Beniteau	Chain of Custody: 216820
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-12	Collect Date: 03/07/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: 09:08

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)

Method: EPA TO-15

Aliquot ID: **A13871-001** Matrix: **Air**
Description: **Beniteau**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Acetone	U		µg/m3	36	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
2. Benzene	U		µg/m3	2.9	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
3. Benzyl Chloride	U		µg/m3	0.41	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
4. Bromodichloromethane	U		µg/m3	0.80	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
5. Bromoform	U		µg/m3	15	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
6. Bromomethane	U	V+ L+	µg/m3	3.5	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
7. 1,3-Butadiene	U		µg/m3	0.66	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
8. 2-Butanone	U		µg/m3	8.8	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
‡ 9. Carbon Disulfide	U		µg/m3	19	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
10. Carbon Tetrachloride	U		µg/m3	0.75	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
11. Chlorobenzene	U		µg/m3	14	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
12. Chloroethane	U	V+ L+	µg/m3	4.0	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
13. Chloroform	U		µg/m3	0.59	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
14. Chloromethane	U	V+ L+	µg/m3	12	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
15. Cyclohexane	U		µg/m3	10	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
16. Dibromochloromethane	U		µg/m3	0.68	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
17. 1,2-Dichlorobenzene	U		µg/m3	9.0	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
18. 1,3-Dichlorobenzene	U		µg/m3	1.8	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
19. 1,4-Dichlorobenzene	U		µg/m3	1.8	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
20. Dichlorodifluoromethane	U		µg/m3	15	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
21. 1,1-Dichloroethane	U		µg/m3	6.1	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
22. 1,2-Dichloroethane	U		µg/m3	0.49	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
23. 1,1-Dichloroethene	U		µg/m3	5.9	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
24. cis-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
25. trans-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
26. 1,2-Dichloropropane	U		µg/m3	1.4	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
27. cis-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
28. trans-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
29. 1,4-Dioxane	U		µg/m3	5.4	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
‡ 30. Ethyl Acetate	U		µg/m3	11	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
31. Ethylbenzene	U		µg/m3	6.5	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
32. Ethylene Dibromide	U		µg/m3	0.23	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
33. n-Heptane	U		µg/m3	12	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
34. Hexachlorobutadiene	U		µg/m3	1.3	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM
35. n-Hexane	U		µg/m3	11	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM

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Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: Beniteau	Chain of Custody: 216820
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-12	Collect Date: 03/07/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: 09:08

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			Init.
						P. Date	P. Batch	A. Date	A. Batch		
‡ 36. 2-Hexanone	U		µg/m3	12	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
‡ 37. Isopropanol	U		µg/m3	15	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
38. 4-Methyl-2-pentanone	U		µg/m3	12	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
39. Methylene Chloride	U		µg/m3	21	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
‡ 40. 2-Methylnaphthalene	U		µg/m3	35	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
41. MTBE	U		µg/m3	5.4	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
‡ 42. Naphthalene	U		µg/m3	1.6	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
43. Styrene	U		µg/m3	13	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
44. 1,1,2,2-Tetrachloroethane	U		µg/m3	0.21	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
45. Tetrachloroethene	U		µg/m3	6.1	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
‡ 46. Tetrahydrofuran	U		µg/m3	4.4	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
47. Toluene	U		µg/m3	5.7	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
48. 1,2,4-Trichlorobenzene	U		µg/m3	22	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
49. 1,1,1-Trichloroethane	U		µg/m3	8.2	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
50. 1,1,2-Trichloroethane	U		µg/m3	0.65	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
51. Trichloroethene	U		µg/m3	0.16	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
52. Trichlorofluoromethane	U		µg/m3	8.4	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
‡ 53. 1,1,2-Trichlorotrifluoroethane	U		µg/m3	23	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
54. 1,2,4-Trimethylbenzene	U		µg/m3	4.4	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
55. 1,3,5-Trimethylbenzene	U		µg/m3	4.4	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
56. Vinyl Acetate	U		µg/m3	11	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
57. Vinyl Chloride	U	V+ L+	µg/m3	0.77	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
58. m&p-Xylene	U		µg/m3	13	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
59. o-Xylene	U		µg/m3	13	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	
‡ 60. Xylenes	U		µg/m3	26	1.0	03/09/23	VN23C09A	03/09/23 23:12	VN23C09A	CM	

Surrogate Summary	Control Limits	Instrument	Batch	Run Time	Column	Inst. Method
4-Bromofluorobenzene(S)	101 %	80-120	VN	VN23C09A	3/9/2023 23:12	1 VN400

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Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: Beniteau	Chain of Custody: 216820
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-22	Collect Date: 03/07/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: 09:14

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)

Method: EPA TO-15

Aliquot ID: **A13871-002** Matrix: **Air**
Description: **Beniteau**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Acetone	U		µg/m3	36	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
2. Benzene	U		µg/m3	2.9	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
3. Benzyl Chloride	U		µg/m3	0.41	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
4. Bromodichloromethane	U		µg/m3	0.80	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
5. Bromoform	U		µg/m3	15	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
6. Bromomethane	U	V+ L+	µg/m3	3.5	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
7. 1,3-Butadiene	U		µg/m3	0.66	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
8. 2-Butanone	U		µg/m3	8.8	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
‡ 9. Carbon Disulfide	U		µg/m3	19	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
10. Carbon Tetrachloride	U		µg/m3	0.75	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
11. Chlorobenzene	U		µg/m3	14	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
12. Chloroethane	U	V+ L+	µg/m3	4.0	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
13. Chloroform	U		µg/m3	0.59	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
14. Chloromethane	U	V+ L+	µg/m3	12	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
15. Cyclohexane	U		µg/m3	10	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
16. Dibromochloromethane	U		µg/m3	0.68	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
17. 1,2-Dichlorobenzene	U		µg/m3	9.0	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
18. 1,3-Dichlorobenzene	U		µg/m3	1.8	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
19. 1,4-Dichlorobenzene	U		µg/m3	1.8	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
20. Dichlorodifluoromethane	U		µg/m3	15	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
21. 1,1-Dichloroethane	U		µg/m3	6.1	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
22. 1,2-Dichloroethane	U		µg/m3	0.49	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
23. 1,1-Dichloroethene	U		µg/m3	5.9	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
24. cis-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
25. trans-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
26. 1,2-Dichloropropane	U		µg/m3	1.4	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
27. cis-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
28. trans-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
29. 1,4-Dioxane	U		µg/m3	5.4	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
‡ 30. Ethyl Acetate	U		µg/m3	11	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
31. Ethylbenzene	U		µg/m3	6.5	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
32. Ethylene Dibromide	U		µg/m3	0.23	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
33. n-Heptane	U		µg/m3	12	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
34. Hexachlorobutadiene	U		µg/m3	1.3	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM
35. n-Hexane	U		µg/m3	11	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM

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Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: Beniteau	Chain of Custody: 216820
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-22	Collect Date: 03/07/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: 09:14

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)
Method: EPA TO-15

Aliquot ID: **A13871-002** Matrix: **Air**
Description: **Beniteau**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			Init.
						P. Date	P. Batch	A. Date	A. Batch		
‡ 36. 2-Hexanone	U		µg/m3	12	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
‡ 37. Isopropanol	U		µg/m3	15	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
38. 4-Methyl-2-pentanone	U		µg/m3	12	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
39. Methylene Chloride	U		µg/m3	21	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
‡ 40. 2-Methylnaphthalene	U		µg/m3	35	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
41. MTBE	U		µg/m3	5.4	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
‡ 42. Naphthalene	U		µg/m3	1.6	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
43. Styrene	U		µg/m3	13	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
44. 1,1,2,2-Tetrachloroethane	U		µg/m3	0.21	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
45. Tetrachloroethene	U		µg/m3	6.1	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
‡ 46. Tetrahydrofuran	U		µg/m3	4.4	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
47. Toluene	U		µg/m3	5.7	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
48. 1,2,4-Trichlorobenzene	U		µg/m3	22	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
49. 1,1,1-Trichloroethane	U		µg/m3	8.2	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
50. 1,1,2-Trichloroethane	U		µg/m3	0.65	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
51. Trichloroethene	U		µg/m3	0.16	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
52. Trichlorofluoromethane	U		µg/m3	8.4	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
‡ 53. 1,1,2-Trichlorotrifluoroethane	U		µg/m3	23	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
54. 1,2,4-Trimethylbenzene	U		µg/m3	4.4	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
55. 1,3,5-Trimethylbenzene	U		µg/m3	4.4	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
56. Vinyl Acetate	U		µg/m3	11	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
57. Vinyl Chloride	U	V+ L+	µg/m3	0.77	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
58. m&p-Xylene	U		µg/m3	13	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
59. o-Xylene	U		µg/m3	13	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	
‡ 60. Xylenes	U		µg/m3	26	1.0	03/09/23	VN23C09A	03/10/23 00:10	VN23C09A	CM	

Surrogate Summary

			Control Limits	Instrument	Batch	Run Time	Column	Inst. Method
4-Bromofluorobenzene(S)	102	%	80-120	VN	VN23C09A	3/10/2023 00:10	1	VN400

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Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: ████ Cope	Chain of Custody: 216820
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-32	Collect Date: 03/07/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: 09:23

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)

Aliquot ID: **A13871-003** Matrix: **Air**

Method: EPA TO-15

Description: **████ Cope**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Acetone	U		µg/m3	36	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
2. Benzene	U		µg/m3	2.9	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
3. Benzyl Chloride	U		µg/m3	0.41	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
4. Bromodichloromethane	U		µg/m3	0.80	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
5. Bromoform	U		µg/m3	15	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
6. Bromomethane	U	V+ L+	µg/m3	3.5	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
7. 1,3-Butadiene	U		µg/m3	0.66	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
8. 2-Butanone	U		µg/m3	8.8	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
‡ 9. Carbon Disulfide	U		µg/m3	19	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
10. Carbon Tetrachloride	U		µg/m3	0.75	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
11. Chlorobenzene	U		µg/m3	14	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
12. Chloroethane	U	V+ L+	µg/m3	4.0	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
13. Chloroform	U		µg/m3	0.59	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
14. Chloromethane	U	V+ L+	µg/m3	12	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
15. Cyclohexane	U		µg/m3	10	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
16. Dibromochloromethane	U		µg/m3	0.68	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
17. 1,2-Dichlorobenzene	U		µg/m3	9.0	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
18. 1,3-Dichlorobenzene	U		µg/m3	1.8	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
19. 1,4-Dichlorobenzene	U		µg/m3	1.8	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
20. Dichlorodifluoromethane	U		µg/m3	15	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
21. 1,1-Dichloroethane	U		µg/m3	6.1	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
22. 1,2-Dichloroethane	U		µg/m3	0.49	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
23. 1,1-Dichloroethene	U		µg/m3	5.9	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
24. cis-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
25. trans-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
26. 1,2-Dichloropropane	U		µg/m3	1.4	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
27. cis-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
28. trans-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
29. 1,4-Dioxane	U		µg/m3	5.4	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
‡ 30. Ethyl Acetate	U		µg/m3	11	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
31. Ethylbenzene	U		µg/m3	6.5	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
32. Ethylene Dibromide	U		µg/m3	0.23	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
33. n-Heptane	U		µg/m3	12	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
34. Hexachlorobutadiene	U		µg/m3	1.3	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM
35. n-Hexane	U		µg/m3	11	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM

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Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: ████ Cope	Chain of Custody: 216820
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-32	Collect Date: 03/07/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: 09:23

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa) Aliquot ID: **A13871-003** Matrix: **Air**
Method: EPA TO-15 Description: **████ Cope**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			Init.
						P. Date	P. Batch	A. Date	A. Batch		
‡ 36. 2-Hexanone	U		µg/m3	12	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
‡ 37. Isopropanol	U		µg/m3	15	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
38. 4-Methyl-2-pentanone	U		µg/m3	12	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
39. Methylene Chloride	U		µg/m3	21	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
‡ 40. 2-Methylnaphthalene	U		µg/m3	35	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
41. MTBE	U		µg/m3	5.4	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
‡ 42. Naphthalene	U		µg/m3	1.6	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
43. Styrene	U		µg/m3	13	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
44. 1,1,2,2-Tetrachloroethane	U		µg/m3	0.21	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
45. Tetrachloroethene	U		µg/m3	6.1	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
‡ 46. Tetrahydrofuran	U		µg/m3	4.4	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
47. Toluene	U		µg/m3	5.7	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
48. 1,2,4-Trichlorobenzene	U		µg/m3	22	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
49. 1,1,1-Trichloroethane	U		µg/m3	8.2	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
50. 1,1,2-Trichloroethane	U		µg/m3	0.65	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
51. Trichloroethene	U		µg/m3	0.16	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
52. Trichlorofluoromethane	U		µg/m3	8.4	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
‡ 53. 1,1,2-Trichlorotrifluoroethane	U		µg/m3	23	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
54. 1,2,4-Trimethylbenzene	U		µg/m3	4.4	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
55. 1,3,5-Trimethylbenzene	U		µg/m3	4.4	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
56. Vinyl Acetate	U		µg/m3	11	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
57. Vinyl Chloride	U	V+ L+	µg/m3	0.77	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
58. m&p-Xylene	U		µg/m3	13	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
59. o-Xylene	U		µg/m3	13	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	
‡ 60. Xylenes	U		µg/m3	26	1.0	03/09/23	VN23C09A	03/10/23 01:09	VN23C09A	CM	

Surrogate Summary	Control Limits	Instrument	Batch	Run Time	Column	Inst. Method
4-Bromofluorobenzene(S)	102 %	80-120	VN	VN23C09A	3/10/2023 01:09	1 VN400

1914 Holloway Drive
11766 E. Grand River
8660 S. Mackinaw Trail

Holt, MI 48842
Brighton, MI 48116
Cadillac, MI 49601

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T: (231) 775-8368

F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584

Definitions/ Qualifiers:

- A:** Spike recovery or precision unusable due to dilution.
- B:** The analyte was detected in the associated method blank.
- E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J:** The concentration is an estimated value.
- M:** Modified Method
- U:** The analyte was not detected at or above the reporting limit.
- X:** Matrix Interference has resulted in a raised reporting limit or distorted result.
- W:** Results reported on a wet-weight basis.
- ***: Value reported is outside QC limits
- D:** The sample or extract was analyzed at a DF greater than 1.

Exception Summary:

- L+** : Recovery in the associated laboratory sample (LCS) exceeds the upper control limit. Results may be biased high.
- V+** : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-23-15 (TX)

1914 Holloway Drive
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VN23C09A: Method Blank (MB)

EPA TO-15

Run Time: VN23C09A.MB 03/09/2023 15:17 [VN23C09A]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/m3		µg/m3
Acetone	U		36
Benzene	U		2.9
Benzyl Chloride	U		0.41
Bromodichloromethane	U		0.80
Bromoform	U		15
Bromomethane	U		3.5
1,3-Butadiene	U		0.66
2-Butanone	U		8.8
Carbon Disulfide	U		19
Carbon Tetrachloride	U		0.75
Chlorobenzene	U		14
Chloroethane	U		4.0
Chloroform	U		0.59
Chloromethane	U		12
Cyclohexane	U		10
Dibromochloromethane	U		0.68
1,2-Dichlorobenzene	U		9.0
1,3-Dichlorobenzene	U		1.8
1,4-Dichlorobenzene	U		1.8
Dichlorodifluoromethane	U		15
1,1-Dichloroethane	U		6.1
1,2-Dichloroethane	U		0.49
1,1-Dichloroethene	U		5.9
cis-1,2-Dichloroethene	U		5.9
trans-1,2-Dichloroethene	U		5.9
1,2-Dichloropropane	U		1.4
cis-1,3-Dichloropropene	U		1.4
trans-1,3-Dichloropropene	U		1.4
1,4-Dioxane	U		5.4
Ethyl Acetate	U		11
Ethylbenzene	U		6.5
Ethylene Dibromide	U		0.23
n-Heptane	U		12

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VN23C09A: Method Blank (MB)

EPA TO-15

Run Time: VN23C09A.MB 03/09/2023 15:17 [VN23C09A]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/m3		µg/m3
Hexachlorobutadiene	U		1.3
n-Hexane	U		11
2-Hexanone	U		12
Isopropanol	U		15
4-Methyl-2-pentanone	U		12
Methylene Chloride	U		21
2-Methylnaphthalene	U		35
MTBE	U		5.4
Naphthalene	U		1.6
Styrene	U		13
1,1,2,2-Tetrachloroethane	U		0.21
Tetrachloroethene	U		6.1
Tetrahydrofuran	U		4.4
Toluene	U		5.7
1,2,4-Trichlorobenzene	U		22
1,1,1-Trichloroethane	U		8.2
1,1,2-Trichloroethane	U		0.65
Trichloroethene	U		0.16
Trichlorofluoromethane	U		8.4
1,1,2-Trichlorotrifluoroethane	U		23
1,2,4-Trimethylbenzene	U		4.4
1,3,5-Trimethylbenzene	U		4.4
Vinyl Acetate	U		11
Vinyl Chloride	U		0.77
m&p-Xylene	U		13
o-Xylene	U		13
4-Bromofluorobenzene(S)	102		80-120

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VN23C09A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA TO-15

Run Time: VN23C09A.LCS: 03/09/2023 12:25 [VN23C09A] VN23C09A.LCSD: 03/09/2023 13:20 [VN23C09A]

Analyte	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amount				Qualifier	Spike Amount	Result	Rec.	Qualifier	%	%	Qualifier
	µg/m3	µg/m3	%	%		µg/m3	µg/m3	%		%	%	
Acetone	30.0	35.2	118	70-130		30.0	36.3	121		3	20	
Benzene	41.9	45.9	110	70-130		41.9	46.2	110		0	20	
Benzyl Chloride	66.0	73.4	111	70-150		66.0	73.9	112		1	20	
Bromodichloromethane	87.1	84.0	96	70-130		87.1	84.6	97		1	20	
Bromoform	134	140	104	70-138		134	139	104		0	20	
Bromomethane	50.5	68.4	136	70-133	*	50.5	70.2	139	*	2	20	
1,3-Butadiene	28.7	33.4	116	70-134		28.7	34.4	120		3	20	
2-Butanone	38.3	43.1	112	70-130		38.3	44.2	115		3	20	
Carbon Disulfide	41.2	36.1	88	70-130		41.2	36.6	89		1	20	
Carbon Tetrachloride	83.3	70.9	85	70-131		83.3	71.5	86		1	20	
Chlorobenzene	60.4	70.0	116	70-130		60.4	70.0	116		0	20	
Chloroethane	34.3	45.8	134	70-130	*	34.3	47.0	137	*	2	20	
Chloroform	63.4	64.0	101	70-130		63.4	65.0	103		2	20	
Chloromethane	27.1	34.9	129	70-130		27.1	36.5	135	*	5	20	
Cyclohexane	44.3	51.3	116	70-130		44.3	51.9	117		1	20	
Dibromochloromethane	110	117	107	70-135		110	118	108		1	20	
1,2-Dichlorobenzene	78.1	85.1	109	70-130		78.1	86.5	111		2	20	
1,3-Dichlorobenzene	77.4	89.5	116	70-131		77.4	89.9	116		0	20	
1,4-Dichlorobenzene	78.1	87.2	112	70-134		78.1	87.8	112		0	20	
Dichlorodifluoromethane	64.9	64.9	100	70-132		64.9	66.1	102		2	20	
1,1-Dichloroethane	52.6	54.9	104	70-130		52.6	56.1	107		3	20	
1,2-Dichloroethane	53.1	49.0	92	70-130		53.1	49.9	94		2	20	
1,1-Dichloroethene	52.0	51.7	99	70-133		52.0	53.3	102		3	20	
cis-1,2-Dichloroethene	52.0	54.4	105	70-130		52.0	55.4	107		2	20	
trans-1,2-Dichloroethene	51.0	51.3	101	70-130		51.0	52.5	103		2	20	
1,2-Dichloropropane	60.6	72.0	119	70-130		60.6	72.0	119		0	20	
cis-1,3-Dichloropropene	59.0	64.4	109	70-131		59.0	64.9	110		1	20	
trans-1,3-Dichloropropene	59.0	58.2	99	70-134		59.0	58.6	99		0	20	
1,4-Dioxane	46.8	54.4	116	70-130		46.8	55.2	118		2	20	
Ethyl Acetate	46.4	53.2	115	70-130		46.4	54.9	118		3	20	
Ethylbenzene	57.0	62.9	110	70-130		57.0	63.1	111		1	20	
Ethylene Dibromide	98.9	111	112	70-130		98.9	110	112		0	20	
n-Heptane	52.7	61.4	116	70-132		52.7	61.6	117		1	20	

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VN23C09A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA TO-15

Run Time: VN23C09A.LCS: 03/09/2023 12:25 [VN23C09A] VN23C09A.LCSD: 03/09/2023 13:20 [VN23C09A]

Analyte	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amount				Qualifier	Spike Amount	Result	Rec.	Qualifier	%	%	Qualifier
	µg/m3	µg/m3	%	%		µg/m3	µg/m3	%		%	%	
Hexachlorobutadiene	144	132	92	70-134		144	134	93		1	20	
n-Hexane	45.4	46.6	103	70-130		45.4	47.6	105		2	20	
2-Hexanone	52.7	67.9	129	70-139		52.7	68.2	129		0	20	
Isopropanol	32.9	40.7	124	54-144		32.9	41.6	127		2	20	
4-Methyl-2-pentanone	52.7	59.8	113	70-130		52.7	61.3	116		3	20	
Methylene Chloride	45.1	46.6	103	70-132		45.1	48.1	107		4	20	
2-Methylnaphthalene	83.6	94.6	113	70-146		83.6	95.7	115		2	20	
MTBE	46.8	46.9	100	70-130		46.8	47.8	102		2	20	
Naphthalene	74.7	93.5	125	70-148		74.7	94.6	127		2	20	
Styrene	55.4	65.0	117	70-130		55.4	65.3	118		1	20	
1,1,2,2-Tetrachloroethane	90.1	106	118	70-130		90.1	105	117		1	20	
Tetrachloroethene	88.1	107	121	70-130		88.1	107	122		1	20	
Tetrahydrofuran	38.0	48.4	128	70-138		38.0	49.4	130		2	20	
Toluene	49.4	56.9	115	70-130		49.4	56.7	115		0	20	
1,2,4-Trichlorobenzene	102	124	121	70-140		102	126	124		2	20	
1,1,1-Trichloroethane	70.9	62.5	88	70-130		70.9	63.1	89		1	20	
1,1,2-Trichloroethane	70.9	82.6	116	70-130		70.9	83.9	118		2	20	
Trichloroethene	70.5	74.2	105	70-130		70.5	75.2	107		2	20	
Trichlorofluoromethane	72.3	63.0	87	70-132		72.3	64.4	89		2	20	
1,1,2-Trichlorotrifluoroethane	101	98.6	98	70-130		101	99.9	99		1	20	
1,2,4-Trimethylbenzene	64.5	69.4	108	70-132		64.5	69.7	108		0	20	
1,3,5-Trimethylbenzene	64.5	68.3	106	70-131		64.5	68.1	106		0	20	
Vinyl Acetate	48.0	56.3	117	70-131		48.0	59.6	124		6	20	
Vinyl Chloride	33.2	46.4	140	70-131	*	33.2	48.3	145	*	4	20	
m&p-Xylene	114	133	116	70-130		114	133	117		1	20	
o-Xylene	56.4	60.2	107	70-130		56.4	60.3	107		0	20	
4-Bromofluorobenzene(S)			105	80-120				106				

Definitions/ Qualifiers:

U: The analyte was not detected at or above the Reporting Limit (RL).
***:** Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:



By Jacob Sutherland at 4:37 PM, Mar 13, 2023

1914 Holloway Drive
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Client Name: NTH Consultants		MATRIX (SEE RIGHT CORNER FOR CODE) # OF CONTAINERS VOCS (T0-15)										PARAMETERS				Matrix Code		Deliverables	
Contact Person: Bhushan Modi												S Soil		GW Ground Water		Level 2			
Project Name/ Number: 23001494-01 / FCA/stellantis Project												<input checked="" type="checkbox"/> Air		SW Surface Water		Level 3			
Email distribution list: bmodi@nthconsultants.com												O Oil		WW Waste Water		Level 4			
Quote# 1392												P Wipe		X Other: Specify		EDD			
Purchase Order#		HOLD SAMPLE Remarks: 1. Sampling start & end times are on canisters 2. IP & FP are recorded on field cards attached to canisters Received By Lab MAR 08 2023 Initials: JJ																	
Date	Time											Sample #	Client Sample Descriptor	A	I				
3/7												A-12	Beniteau	A	I				
3/7												A-22	Beniteau	A	I				
3/7												A-32	Cope	A	I				
Comments:																			
Sampled/Relinquished By: <i>[Signature]</i>												Date/ Time: 3/8/23 11:00		Received By: <i>[Signature]</i> 3/8/23 11:00					
Relinquished By: <i>[Signature]</i>												Date/ Time: 3/8/23 14:30		Received By: <i>[Signature]</i>					
Relinquished By: <i>[Signature]</i>												Date/ Time:		Received By Laboratory: <i>[Signature]</i>					
Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY <input type="checkbox"/> 1 bus. day <input type="checkbox"/> 2 bus. days <input type="checkbox"/> 3 bus. days <input type="checkbox"/> 4 bus. days <input checked="" type="checkbox"/> 5-7 bus. days (standard) Other (specify time/date requirement): _____												LAB USE ONLY Fibertec project number: A13871 Temperature upon receipt at Lab: km. Temp.							
Please see back for terms and conditions																			



Tuesday, March 21, 2023

Fibertec Project Number: A14009
Project Identification: FCA/Stellantis Project (23001494-01) /23001494-01
Submittal Date: 03/15/2023

Mr. Bhushan Modi
NTH Consultants, Ltd. - Northville
41780 Six Mile Road
Suite 200
Northville, MI 48168-3459

Dear Mr. Modi,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Jacob Sutherland at 1:31 PM, Mar 21, 2023

For Daryl P. Strandbergh
Laboratory Director

Enclosures

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Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: ██████████ Beniteau	Chain of Custody: 216846
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-13	Collect Date: 03/14/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa) Aliquot ID: **A14009-001** Matrix: **Air**
Method: EPA TO-15 Description: ██████████ **Beniteau**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Acetone	U		µg/m3	36	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
2. Benzene	U		µg/m3	2.9	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
3. Benzyl Chloride	U		µg/m3	0.41	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
4. Bromodichloromethane	U		µg/m3	0.80	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
5. Bromoform	U		µg/m3	15	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
6. Bromomethane	U		µg/m3	3.5	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
7. 1,3-Butadiene	U		µg/m3	0.66	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
8. 2-Butanone	U		µg/m3	8.8	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
‡ 9. Carbon Disulfide	U		µg/m3	19	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
10. Carbon Tetrachloride	U		µg/m3	0.75	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
11. Chlorobenzene	U		µg/m3	14	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
12. Chloroethane	U		µg/m3	4.0	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
13. Chloroform	U		µg/m3	0.59	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
14. Chloromethane	U		µg/m3	12	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
15. Cyclohexane	U		µg/m3	10	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
16. Dibromochloromethane	U		µg/m3	0.68	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
17. 1,2-Dichlorobenzene	U		µg/m3	9.0	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
18. 1,3-Dichlorobenzene	U		µg/m3	1.8	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
19. 1,4-Dichlorobenzene	U		µg/m3	1.8	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
20. Dichlorodifluoromethane	U		µg/m3	15	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
21. 1,1-Dichloroethane	U		µg/m3	6.1	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
22. 1,2-Dichloroethane	U		µg/m3	0.49	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
23. 1,1-Dichloroethene	U		µg/m3	5.9	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
24. cis-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
25. trans-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
26. 1,2-Dichloropropane	U		µg/m3	1.4	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
27. cis-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
28. trans-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
29. 1,4-Dioxane	U		µg/m3	5.4	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
‡ 30. Ethyl Acetate	U		µg/m3	11	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
31. Ethylbenzene	U		µg/m3	6.5	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
32. Ethylene Dibromide	U		µg/m3	0.23	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
33. n-Heptane	U		µg/m3	12	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
34. Hexachlorobutadiene	U		µg/m3	1.3	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
35. n-Hexane	U		µg/m3	11	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
‡ 36. 2-Hexanone	U		µg/m3	12	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY
‡ 37. Isopropanol	U		µg/m3	15	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A	CY

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Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: Beniteau	Chain of Custody: 216846
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-13	Collect Date: 03/14/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)

Method: EPA TO-15

Aliquot ID: **A14009-001** Matrix: **Air**
Description: **Beniteau**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			Init.
						P. Date	P. Batch	A. Date	A. Batch		
38. 4-Methyl-2-pentanone	U		µg/m3	12	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
39. Methylene Chloride	U		µg/m3	21	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
‡ 40. 2-Methylnaphthalene	U		µg/m3	35	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
41. MTBE	U		µg/m3	5.4	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
‡ 42. Naphthalene	U		µg/m3	1.6	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
43. Styrene	U		µg/m3	13	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
44. 1,1,2,2-Tetrachloroethane	U		µg/m3	0.21	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
45. Tetrachloroethene	U		µg/m3	6.1	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
‡ 46. Tetrahydrofuran	U		µg/m3	4.4	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
47. Toluene	U		µg/m3	5.7	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
48. 1,2,4-Trichlorobenzene	U		µg/m3	22	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
49. 1,1,1-Trichloroethane	U		µg/m3	8.2	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
50. 1,1,2-Trichloroethane	U		µg/m3	0.65	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
51. Trichloroethene	U		µg/m3	0.16	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
52. Trichlorofluoromethane	U		µg/m3	8.4	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
‡ 53. 1,1,2-Trichlorotrifluoroethane	U		µg/m3	23	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
54. 1,2,4-Trimethylbenzene	U		µg/m3	4.4	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
55. 1,3,5-Trimethylbenzene	U		µg/m3	4.4	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
56. Vinyl Acetate	U		µg/m3	11	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
57. Vinyl Chloride	U		µg/m3	0.77	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
58. m&p-Xylene	U		µg/m3	13	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
59. o-Xylene	U		µg/m3	13	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY
‡ 60. Xylenes	U		µg/m3	26	1.0	03/20/23	VN23C20A	03/20/23 15:16	VN23C20A		CY

Surrogate Summary

			<u>Control Limits</u>	<u>Instrument</u>	<u>Batch</u>	<u>Run Time</u>	<u>Column</u>	<u>Inst. Method</u>
4-Bromofluorobenzene(S)	101	%	80-120	VN	VN23C20A	3/20/2023 15:16	1	VN400

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F: (231) 775-8584

Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: ██████████ Beniteau	Chain of Custody: 216846
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-23	Collect Date: 03/14/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)

Aliquot ID: **A14009-002** Matrix: **Air**

Method: EPA TO-15

Description: ██████████ **Beniteau**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Acetone	U		µg/m3	36	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
2. Benzene	U		µg/m3	2.9	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
3. Benzyl Chloride	U		µg/m3	0.41	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
4. Bromodichloromethane	U		µg/m3	0.80	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
5. Bromoform	U		µg/m3	15	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
6. Bromomethane	U		µg/m3	3.5	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
7. 1,3-Butadiene	U		µg/m3	0.66	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
8. 2-Butanone	U		µg/m3	8.8	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
‡ 9. Carbon Disulfide	U		µg/m3	19	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
10. Carbon Tetrachloride	U		µg/m3	0.75	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
11. Chlorobenzene	U		µg/m3	14	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
12. Chloroethane	U		µg/m3	4.0	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
13. Chloroform	U		µg/m3	0.59	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
14. Chloromethane	U		µg/m3	12	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
15. Cyclohexane	U		µg/m3	10	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
16. Dibromochloromethane	U		µg/m3	0.68	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
17. 1,2-Dichlorobenzene	U		µg/m3	9.0	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
18. 1,3-Dichlorobenzene	U		µg/m3	1.8	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
19. 1,4-Dichlorobenzene	U		µg/m3	1.8	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
20. Dichlorodifluoromethane	U		µg/m3	15	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
21. 1,1-Dichloroethane	U		µg/m3	6.1	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
22. 1,2-Dichloroethane	U		µg/m3	0.49	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
23. 1,1-Dichloroethene	U		µg/m3	5.9	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
24. cis-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
25. trans-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
26. 1,2-Dichloropropane	U		µg/m3	1.4	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
27. cis-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
28. trans-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
29. 1,4-Dioxane	U		µg/m3	5.4	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
‡ 30. Ethyl Acetate	U		µg/m3	11	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
31. Ethylbenzene	U		µg/m3	6.5	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
32. Ethylene Dibromide	U		µg/m3	0.23	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
33. n-Heptane	U		µg/m3	12	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
34. Hexachlorobutadiene	U		µg/m3	1.3	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
35. n-Hexane	U		µg/m3	11	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
‡ 36. 2-Hexanone	U		µg/m3	12	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY
‡ 37. Isopropanol	U		µg/m3	15	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A	CY

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Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: ████████ Beniteau	Chain of Custody: 216846
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-23	Collect Date: 03/14/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa) Aliquot ID: **A14009-002** Matrix: **Air**
Method: EPA TO-15 Description: ████████ **Beniteau**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			Init.
						P. Date	P. Batch	A. Date	A. Batch		
38. 4-Methyl-2-pentanone	U		µg/m3	12	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
39. Methylene Chloride	U		µg/m3	21	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
‡ 40. 2-Methylnaphthalene	U		µg/m3	35	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
41. MTBE	U		µg/m3	5.4	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
‡ 42. Naphthalene	U		µg/m3	1.6	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
43. Styrene	U		µg/m3	13	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
44. 1,1,2,2-Tetrachloroethane	U		µg/m3	0.21	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
45. Tetrachloroethene	U		µg/m3	6.1	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
‡ 46. Tetrahydrofuran	U		µg/m3	4.4	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
47. Toluene	U		µg/m3	5.7	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
48. 1,2,4-Trichlorobenzene	U		µg/m3	22	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
49. 1,1,1-Trichloroethane	U		µg/m3	8.2	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
50. 1,1,2-Trichloroethane	U		µg/m3	0.65	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
51. Trichloroethene	U		µg/m3	0.16	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
52. Trichlorofluoromethane	U		µg/m3	8.4	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
‡ 53. 1,1,2-Trichlorotrifluoroethane	U		µg/m3	23	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
54. 1,2,4-Trimethylbenzene	U		µg/m3	4.4	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
55. 1,3,5-Trimethylbenzene	U		µg/m3	4.4	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
56. Vinyl Acetate	U		µg/m3	11	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
57. Vinyl Chloride	U		µg/m3	0.77	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
58. m&p-Xylene	U		µg/m3	13	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
59. o-Xylene	U		µg/m3	13	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY
‡ 60. Xylenes	U		µg/m3	26	1.0	03/20/23	VN23C20A	03/20/23 16:15	VN23C20A		CY

Surrogate Summary			<u>Control Limits</u>	<u>Instrument</u>	<u>Batch</u>	<u>Run Time</u>	<u>Column</u>	<u>Inst. Method</u>
4-Bromofluorobenzene(S)	102	%	80-120	VN	VN23C20A	3/20/2023 16:15	1	VN400

Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: ██████ Cope	Chain of Custody: 216846
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-33	Collect Date: 03/14/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa) Aliquot ID: **A14009-003** Matrix: **Air**
Method: EPA TO-15 Description: **██████ Cope**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
‡ 1. Acetone	U		µg/m3	36	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
2. Benzene	U		µg/m3	2.9	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
3. Benzyl Chloride	U		µg/m3	0.41	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
4. Bromodichloromethane	U		µg/m3	0.80	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
5. Bromoform	U		µg/m3	15	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
6. Bromomethane	U		µg/m3	3.5	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
7. 1,3-Butadiene	U		µg/m3	0.66	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
8. 2-Butanone	U		µg/m3	8.8	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
‡ 9. Carbon Disulfide	U		µg/m3	19	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
10. Carbon Tetrachloride	U		µg/m3	0.75	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
11. Chlorobenzene	U		µg/m3	14	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
12. Chloroethane	U		µg/m3	4.0	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
13. Chloroform	U		µg/m3	0.59	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
14. Chloromethane	U		µg/m3	12	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
15. Cyclohexane	U		µg/m3	10	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
16. Dibromochloromethane	U		µg/m3	0.68	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
17. 1,2-Dichlorobenzene	U		µg/m3	9.0	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
18. 1,3-Dichlorobenzene	U		µg/m3	1.8	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
19. 1,4-Dichlorobenzene	U		µg/m3	1.8	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
20. Dichlorodifluoromethane	U		µg/m3	15	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
21. 1,1-Dichloroethane	U		µg/m3	6.1	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
22. 1,2-Dichloroethane	U		µg/m3	0.49	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
23. 1,1-Dichloroethene	U		µg/m3	5.9	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
24. cis-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
25. trans-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
26. 1,2-Dichloropropane	U		µg/m3	1.4	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
27. cis-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
28. trans-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
29. 1,4-Dioxane	U		µg/m3	5.4	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
‡ 30. Ethyl Acetate	U		µg/m3	11	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
31. Ethylbenzene	U		µg/m3	6.5	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
32. Ethylene Dibromide	U		µg/m3	0.23	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
33. n-Heptane	U		µg/m3	12	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
34. Hexachlorobutadiene	U		µg/m3	1.3	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
35. n-Hexane	U		µg/m3	11	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
‡ 36. 2-Hexanone	U		µg/m3	12	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
‡ 37. Isopropanol	U		µg/m3	15	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY

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Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: ██████ Cope	Chain of Custody: 216846
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-33	Collect Date: 03/14/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: NA

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa) Aliquot ID: **A14009-003** Matrix: **Air**
Method: EPA TO-15 Description: **██████ Cope**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis		
						P. Date	P. Batch	A. Date	A. Batch	Init.
38. 4-Methyl-2-pentanone	U		µg/m3	12	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
39. Methylene Chloride	U		µg/m3	21	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
‡ 40. 2-Methylnaphthalene	U		µg/m3	35	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
41. MTBE	U		µg/m3	5.4	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
‡ 42. Naphthalene	U		µg/m3	1.6	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
43. Styrene	U		µg/m3	13	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
44. 1,1,2,2-Tetrachloroethane	U		µg/m3	0.21	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
45. Tetrachloroethene	U		µg/m3	6.1	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
‡ 46. Tetrahydrofuran	U		µg/m3	4.4	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
47. Toluene	U		µg/m3	5.7	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
48. 1,2,4-Trichlorobenzene	U		µg/m3	22	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
49. 1,1,1-Trichloroethane	U		µg/m3	8.2	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
50. 1,1,2-Trichloroethane	U		µg/m3	0.65	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
51. Trichloroethene	U		µg/m3	0.16	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
52. Trichlorofluoromethane	U		µg/m3	8.4	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
‡ 53. 1,1,2-Trichlorotrifluoroethane	U		µg/m3	23	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
54. 1,2,4-Trimethylbenzene	U		µg/m3	4.4	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
55. 1,3,5-Trimethylbenzene	U		µg/m3	4.4	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
56. Vinyl Acetate	U		µg/m3	11	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
57. Vinyl Chloride	U		µg/m3	0.77	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
58. m&p-Xylene	U		µg/m3	13	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
59. o-Xylene	U		µg/m3	13	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY
‡ 60. Xylenes	U		µg/m3	26	1.0	03/20/23	VN23C20A	03/20/23 17:14	VN23C20A	CY

Surrogate Summary			Control Limits	Instrument	Batch	Run Time	Column	Inst. Method
4-Bromofluorobenzene(S)	99	%	80-120	VN	VN23C20A	3/20/2023 17:14	1	VN400

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Definitions/ Qualifiers:

- A:** Spike recovery or precision unusable due to dilution.
- B:** The analyte was detected in the associated method blank.
- E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J:** The concentration is an estimated value.
- M:** Modified Method
- U:** The analyte was not detected at or above the reporting limit.
- X:** Matrix Interference has resulted in a raised reporting limit or distorted result.
- W:** Results reported on a wet-weight basis.
- ***: Value reported is outside QC limits
- D:** The sample or extract was analyzed at a DF greater than 1.

Exception Summary:

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-23-15 (TX)

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VN23C20A: Method Blank (MB)

EPA TO-15

Run Time: VN23C20A.MB 03/20/2023 14:17 [VN23C20A]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/m3		µg/m3
Acetone	U		36
Benzene	U		2.9
Benzyl Chloride	U		0.41
Bromodichloromethane	U		0.80
Bromoform	U		15
Bromomethane	U		3.5
1,3-Butadiene	U		0.66
2-Butanone	U		8.8
Carbon Disulfide	U		19
Carbon Tetrachloride	U		0.75
Chlorobenzene	U		14
Chloroethane	U		4.0
Chloroform	U		0.59
Chloromethane	U		12
Cyclohexane	U		10
Dibromochloromethane	U		0.68
1,2-Dichlorobenzene	U		9.0
1,3-Dichlorobenzene	U		1.8
1,4-Dichlorobenzene	U		1.8
Dichlorodifluoromethane	U		15
1,1-Dichloroethane	U		6.1
1,2-Dichloroethane	U		0.49
1,1-Dichloroethene	U		5.9
cis-1,2-Dichloroethene	U		5.9
trans-1,2-Dichloroethene	U		5.9
1,2-Dichloropropane	U		1.4
cis-1,3-Dichloropropene	U		1.4
trans-1,3-Dichloropropene	U		1.4
1,4-Dioxane	U		5.4
Ethyl Acetate	U		11
Ethylbenzene	U		6.5
Ethylene Dibromide	U		0.23
n-Heptane	U		12

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VN23C20A: Method Blank (MB)

EPA TO-15

Run Time: VN23C20A.MB 03/20/2023 14:17 [VN23C20A]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/m3		µg/m3
Hexachlorobutadiene	U		1.3
n-Hexane	U		11
2-Hexanone	U		12
Isopropanol	U		15
4-Methyl-2-pentanone	U		12
Methylene Chloride	U		21
2-Methylnaphthalene	U		35
MTBE	U		5.4
Naphthalene	U		1.6
Styrene	U		13
1,1,2,2-Tetrachloroethane	U		0.21
Tetrachloroethene	U		6.1
Tetrahydrofuran	U		4.4
Toluene	U		5.7
1,2,4-Trichlorobenzene	U		22
1,1,1-Trichloroethane	U		8.2
1,1,2-Trichloroethane	U		0.65
Trichloroethene	U		0.16
Trichlorofluoromethane	U		8.4
1,1,2-Trichlorotrifluoroethane	U		23
1,2,4-Trimethylbenzene	U		4.4
1,3,5-Trimethylbenzene	U		4.4
Vinyl Acetate	U		11
Vinyl Chloride	U		0.77
m&p-Xylene	U		13
o-Xylene	U		13
4-Bromofluorobenzene(S)	98		80-120

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VN23C20A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA TO-15

Run Time: VN23C20A.LCS: 03/20/2023 11:28 [VN23C20A] VN23C20A.LCSD: 03/20/2023 12:24 [VN23C20A]

Analyte	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amount				Qualifier	Spike Amount	Result	Rec.	Qualifier	%	%	Qualifier
	µg/m3	µg/m3	%	%		µg/m3	µg/m3	%		%		
Acetone	30.0	28.2	94	70-130		30.0	28.1	94		0	20	
Benzene	41.9	41.8	100	70-130		41.9	41.5	99		1	20	
Benzyl Chloride	66.0	68.5	104	70-150		66.0	68.0	103		1	20	
Bromodichloromethane	87.1	94.4	108	70-130		87.1	93.2	107		1	20	
Bromoform	134	147	109	70-138		134	146	109		0	20	
Bromomethane	50.5	46.5	92	70-133		50.5	46.5	92		0	20	
1,3-Butadiene	28.7	25.9	90	70-134		28.7	25.4	88		2	20	
2-Butanone	38.3	36.9	96	70-130		38.3	37.4	98		2	20	
Carbon Disulfide	41.2	35.5	86	70-130		41.2	35.8	87		1	20	
Carbon Tetrachloride	83.3	91.8	110	70-131		83.3	91.0	109		1	20	
Chlorobenzene	60.4	63.8	106	70-130		60.4	63.3	105		1	20	
Chloroethane	34.3	29.2	85	70-130		34.3	29.1	85		0	20	
Chloroform	63.4	68.5	108	70-130		63.4	68.2	108		0	20	
Chloromethane	27.1	24.4	90	70-130		27.1	23.8	88		2	20	
Cyclohexane	44.3	46.4	105	70-130		44.3	46.1	104		1	20	
Dibromochloromethane	110	123	112	70-135		110	122	111		1	20	
1,2-Dichlorobenzene	78.1	82.1	105	70-130		78.1	81.9	105		0	20	
1,3-Dichlorobenzene	77.4	85.5	111	70-131		77.4	85.4	110		1	20	
1,4-Dichlorobenzene	78.1	83.7	107	70-134		78.1	83.5	107		0	20	
Dichlorodifluoromethane	64.9	66.6	103	70-132		64.9	66.7	103		0	20	
1,1-Dichloroethane	52.6	53.7	102	70-130		52.6	54.6	104		2	20	
1,2-Dichloroethane	53.1	56.5	106	70-130		53.1	57.3	108		2	20	
1,1-Dichloroethene	52.0	54.3	104	70-133		52.0	53.9	104		0	20	
cis-1,2-Dichloroethene	52.0	54.6	105	70-130		52.0	54.8	105		0	20	
trans-1,2-Dichloroethene	51.0	53.9	106	70-130		51.0	54.6	107		1	20	
1,2-Dichloropropane	60.6	66.4	109	70-130		60.6	65.7	108		1	20	
cis-1,3-Dichloropropene	59.0	65.0	110	70-131		59.0	63.9	108		2	20	
trans-1,3-Dichloropropene	59.0	62.7	106	70-134		59.0	62.1	105		1	20	
1,4-Dioxane	46.8	50.1	107	70-130		46.8	49.1	105		2	20	
Ethyl Acetate	46.4	49.6	107	70-130		46.4	51.3	111		4	20	
Ethylbenzene	57.0	58.9	103	70-130		57.0	58.5	103		0	20	
Ethylene Dibromide	98.9	107	108	70-130		98.9	105	106		2	20	
n-Heptane	52.7	53.4	101	70-132		52.7	52.8	100		1	20	

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VN23C20A: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA TO-15

Run Time: VN23C20A.LCS: 03/20/2023 11:28 [VN23C20A] VN23C20A.LCSD: 03/20/2023 12:24 [VN23C20A]

Analyte	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amount				Qualifier	Spike Amount	Result	Rec.	Qualifier	%	%	Qualifier
	µg/m3	µg/m3	%	%		µg/m3	µg/m3	%		%		
Hexachlorobutadiene	144	152	105	70-134		144	152	106		1	20	
n-Hexane	45.4	40.0	88	70-130		45.4	40.0	88		0	20	
2-Hexanone	52.7	59.0	112	70-139		52.7	58.6	111		1	20	
Isopropanol	32.9	33.2	101	54-144		32.9	33.2	101		0	20	
4-Methyl-2-pentanone	52.7	57.5	109	70-130		52.7	57.0	108		1	20	
Methylene Chloride	45.1	39.8	88	70-132		45.1	39.6	88		0	20	
2-Methylnaphthalene	83.6	113	136	70-146		83.6	113	136		0	20	
MTBE	46.8	47.6	102	70-130		46.8	47.8	102		0	20	
Naphthalene	74.7	87.4	117	70-148		74.7	87.0	117		0	20	
Styrene	55.4	57.5	104	70-130		55.4	56.9	103		1	20	
1,1,2,2-Tetrachloroethane	90.1	93.8	104	70-130		90.1	93.0	103		1	20	
Tetrachloroethene	88.1	96.1	109	70-130		88.1	94.9	108		1	20	
Tetrahydrofuran	38.0	37.3	98	70-138		38.0	37.5	99		1	20	
Toluene	49.4	51.8	105	70-130		49.4	50.9	103		2	20	
1,2,4-Trichlorobenzene	102	129	127	70-140		102	129	127		0	20	
1,1,1-Trichloroethane	70.9	78.5	111	70-130		70.9	78.1	110		1	20	
1,1,2-Trichloroethane	70.9	75.0	106	70-130		70.9	75.0	106		0	20	
Trichloroethene	70.5	71.5	101	70-130		70.5	70.4	100		1	20	
Trichlorofluoromethane	72.3	76.8	106	70-132		72.3	77.3	107		1	20	
1,1,2-Trichlorotrifluoroethane	101	104	103	70-130		101	104	103		0	20	
1,2,4-Trimethylbenzene	64.5	66.5	103	70-132		64.5	66.0	102		1	20	
1,3,5-Trimethylbenzene	64.5	66.5	103	70-131		64.5	65.7	102		1	20	
Vinyl Acetate	48.0	54.3	113	70-131		48.0	54.2	113		0	20	
Vinyl Chloride	33.2	31.0	93	70-131		33.2	30.9	93		0	20	
m&p-Xylene	114	118	103	70-130		114	118	103		0	20	
o-Xylene	56.4	58.7	104	70-130		56.4	58.2	103		1	20	
4-Bromofluorobenzene(S)			107	80-120				105				

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F: (517) 699-0388
F: (810) 220-3311
F: (231) 775-8584

Definitions/ Qualifiers:

U: The analyte was not detected at or above the Reporting Limit (RL).
***:** Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:






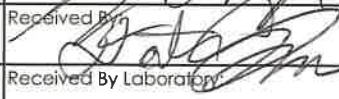
By Jacob Sutherland at 1:35 PM, Mar 21, 2023

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Client Name: NTH Consultants				MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	VOCs (10-15)	PARAMETERS										Matrix Code			Deliverables		
Contact Person: Bhushan Modi							HOLD SAMPLE											S Soil	GW	Ground Water	Level 2 Level 3 Level 4 EDD	
Project Name/ Number: 23001494-01 / FCA - Stellantis Project								X Air											SW	Surface Water		
Email distribution list: bmodi@nthconsultants.com								O Oil											WW	Waste Water		
Quote# 1392								P Wipe											X	Other: Specify		
Purchase Order#														Remarks:								
Date	Time	Sample #	Client Sample Descriptor																			
3/14	/	A-13	Beniteau	A	1	/											1. Sampling times are on the canisters 2. IP & FP are recorded on field cards affixed to the canisters.					
3/14	/	A-23	Beniteau	A	1	/																
3/14	/	A-33	Cope	A	1	/																
Comments:														Received By Lab								
														MAR 15 2023								
														Initials: <u>PG</u>								
Sampled/Relinquished By: 				Date/ Time	3/15/23 10:30					Received By:						3-15-23 11:50						
Relinquished By: 				Date/ Time	3-15-23 14:00					Received By:												
Relinquished By:				Date/ Time						Received By Laboratory:												
Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY										LAB USE ONLY												
<input type="checkbox"/> 1 bus. day <input type="checkbox"/> 2 bus. days <input type="checkbox"/> 3 bus. days <input type="checkbox"/> 4 bus. days <input checked="" type="checkbox"/> 5-7 bus. days (standard) Other (specify time/date requirement): _____										Fibertec project number: A14009 Temperature upon receipt at Lab: Room Temp												
Please see back for terms and conditions																						



Tuesday, March 28, 2023

Fibertec Project Number: A14152
Project Identification: FCA/Stellantis Project (23001494-01) /23001494-01
Submittal Date: 03/22/2023

Mr. Bhushan Modi
NTH Consultants, Ltd. - Northville
41780 Six Mile Road
Suite 200
Northville, MI 48168-3459

Dear Mr. Modi,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,

By Jacob Sutherland at 11:42 AM, Mar 28, 2023

For Daryl P. Strandbergh
Laboratory Director

Enclosures

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Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: XXXXXXXXXX Beniteau	Chain of Custody: 215770
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-14	Collect Date: 03/21/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: 09:02

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)
Method: EPA TO-15

Aliquot ID: **A14152-001** Matrix: **Air**
Description: XXXXXXXXXX **Beniteau**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			Init.
						P. Date	P. Batch	A. Date	A. Batch		
‡ 1. Acetone	U		µg/m3	36	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
2. Benzene	U		µg/m3	2.9	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
3. Benzyl Chloride	U		µg/m3	0.41	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
4. Bromodichloromethane	U		µg/m3	0.80	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
5. Bromoform	U		µg/m3	15	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
6. Bromomethane	U		µg/m3	3.5	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
7. 1,3-Butadiene	U		µg/m3	0.66	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
8. Butanone	U		µg/m3	8.8	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
‡ 9. Carbon Disulfide	U		µg/m3	19	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
10. Carbon Tetrachloride	U		µg/m3	0.75	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
11. Chlorobenzene	U		µg/m3	14	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
12. Chloroethane	U		µg/m3	4.0	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
13. Chloroform	U		µg/m3	0.59	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
14. Chloromethane	U		µg/m3	12	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
15. Cyclohexane	U		µg/m3	10	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
16. Dibromochloromethane	U		µg/m3	0.68	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
17. 1,2-Dichlorobenzene	U		µg/m3	9.0	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
18. 1,3-Dichlorobenzene	U		µg/m3	1.8	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
19. 1,4-Dichlorobenzene	U		µg/m3	1.8	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
20. Dichlorodifluoromethane	U		µg/m3	15	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
21. 1,1-Dichloroethane	U		µg/m3	6.1	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
22. 1,2-Dichloroethane	U		µg/m3	0.49	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
23. 1,1-Dichloroethene	U		µg/m3	5.9	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
24. cis-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
25. trans-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
26. 1,2-Dichloropropane	U		µg/m3	1.4	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
27. cis-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
28. trans-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
29. 1,4-Dioxane	U		µg/m3	5.4	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
‡ 30. Ethyl Acetate	U		µg/m3	11	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
31. Ethylbenzene	U		µg/m3	6.5	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
32. Ethylene Dibromide	U		µg/m3	0.23	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
33. n-Heptane	U		µg/m3	12	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
34. Hexachlorobutadiene	U		µg/m3	1.3	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
35. n-Hexane	U		µg/m3	11	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
‡ 36. 2-Hexanone	U		µg/m3	12	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	
‡ 37. Isopropanol	U		µg/m3	15	1.0	03/23/23	VN23C23B	03/24/23 11:04	VN23C23B	CY	

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Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: Beniteau	Chain of Custody: 215770
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-14	Collect Date: 03/21/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: 09:02

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa) Aliquot ID: **A14152-001** Matrix: **Air**
Method: EPA TO-15 Description: **Beniteau**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			
						P. Date	P. Batch	A. Date	A. Batch	Init.	
38. 4-Methyl-2-pentanone	U		µg/m3	12	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
39. Methylene Chloride	U		µg/m3	21	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
‡ 40. 2-Methylnaphthalene	U		µg/m3	35	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
41. MTBE	U		µg/m3	5.4	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
‡ 42. Naphthalene	U		µg/m3	1.6	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
43. Styrene	U		µg/m3	13	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
44. 1,1,2,2-Tetrachloroethane	U		µg/m3	0.21	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
45. Tetrachloroethene	U		µg/m3	6.1	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
‡ 46. Tetrahydrofuran	U		µg/m3	4.4	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
47. Toluene	U		µg/m3	5.7	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
48. 1,2,4-Trichlorobenzene	U		µg/m3	22	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
49. 1,1,1-Trichloroethane	U		µg/m3	8.2	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
50. 1,1,2-Trichloroethane	U		µg/m3	0.65	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
51. Trichloroethene	U		µg/m3	0.16	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
52. Trichlorofluoromethane	U		µg/m3	8.4	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
‡ 53. 1,1,2-Trichlorotrifluoroethane	U		µg/m3	23	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
54. 1,2,4-Trimethylbenzene	U		µg/m3	4.4	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
55. 1,3,5-Trimethylbenzene	U		µg/m3	4.4	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
56. Vinyl Acetate	U		µg/m3	11	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
57. Vinyl Chloride	U		µg/m3	0.77	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
58. m&p-Xylene	U		µg/m3	13	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
59. o-Xylene	U		µg/m3	13	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY
‡ 60. Xylenes	U		µg/m3	26	1.0	03/23/23	VN23C23B	03/24/23	11:04	VN23C23B	CY

Surrogate Summary			Control Limits	Instrument	Batch	Run Time	Column	Inst. Method
4-Bromofluorobenzene(S)	97	%	80-120	VN	VN23C23B	3/24/2023 11:04	1	VN400

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Analytical Laboratory Report
Laboratory Project Number: A14152
Laboratory Sample Number: A14152-002

Order: A14152
 Date: 03/28/23

Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: XXXXXXXXXX Beniteau	Chain of Custody: 215770
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-24	Collect Date: 03/21/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: 09:09

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)
Method: EPA TO-15

Aliquot ID: A14152-002 **Matrix: Air**
Description: XXXXXXXXXX Beniteau

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			Init.
						P. Date	P. Batch	A. Date	A. Batch		
‡ 1. Acetone	U		µg/m3	36	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
2. Benzene	U		µg/m3	2.9	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
3. Benzyl Chloride	U		µg/m3	0.41	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
4. Bromodichloromethane	U		µg/m3	0.80	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
5. Bromoform	U		µg/m3	15	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
6. Bromomethane	U		µg/m3	3.5	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
7. 1,3-Butadiene	U		µg/m3	0.66	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
8. 2-Butanone	U		µg/m3	8.8	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
‡ 9. Carbon Disulfide	U		µg/m3	19	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
10. Carbon Tetrachloride	U		µg/m3	0.75	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
11. Chlorobenzene	U		µg/m3	14	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
12. Chloroethane	U		µg/m3	4.0	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
13. Chloroform	U		µg/m3	0.59	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
14. Chloromethane	U		µg/m3	12	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
15. Cyclohexane	U		µg/m3	10	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
16. Dibromochloromethane	U		µg/m3	0.68	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
17. 1,2-Dichlorobenzene	U		µg/m3	9.0	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
18. 1,3-Dichlorobenzene	U		µg/m3	1.8	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
19. 1,4-Dichlorobenzene	U		µg/m3	1.8	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
20. Dichlorodifluoromethane	U		µg/m3	15	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
21. 1,1-Dichloroethane	U		µg/m3	6.1	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
22. 1,2-Dichloroethane	U		µg/m3	0.49	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
23. 1,1-Dichloroethene	U		µg/m3	5.9	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
24. cis-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
25. trans-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
26. 1,2-Dichloropropane	U		µg/m3	1.4	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
27. cis-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
28. trans-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
29. 1,4-Dioxane	U		µg/m3	5.4	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
‡ 30. Ethyl Acetate	U		µg/m3	11	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
31. Ethylbenzene	U		µg/m3	6.5	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
32. Ethylene Dibromide	U		µg/m3	0.23	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
33. n-Heptane	U		µg/m3	12	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
34. Hexachlorobutadiene	U		µg/m3	1.3	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
35. n-Hexane	U		µg/m3	11	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
‡ 36. 2-Hexanone	U		µg/m3	12	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
‡ 37. Isopropanol	U		µg/m3	15	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY

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Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: Beniteau	Chain of Custody: 215770
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-24	Collect Date: 03/21/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: 09:09

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)

Method: EPA TO-15

Aliquot ID: **A14152-002** Matrix: **Air**
Description: **Beniteau**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			
						P. Date	P. Batch	A. Date	A. Batch	Init.	
38. 4-Methyl-2-pentanone	U		µg/m3	12	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
39. Methylene Chloride	U		µg/m3	21	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
‡ 40. 2-Methylnaphthalene	U		µg/m3	35	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
41. MTBE	U		µg/m3	5.4	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
‡ 42. Naphthalene	U		µg/m3	1.6	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
43. Styrene	U		µg/m3	13	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
44. 1,1,2,2-Tetrachloroethane	U		µg/m3	0.21	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
45. Tetrachloroethene	U		µg/m3	6.1	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
‡ 46. Tetrahydrofuran	U		µg/m3	4.4	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
47. Toluene	U		µg/m3	5.7	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
48. 1,2,4-Trichlorobenzene	U		µg/m3	22	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
49. 1,1,1-Trichloroethane	U		µg/m3	8.2	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
50. 1,1,2-Trichloroethane	U		µg/m3	0.65	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
51. Trichloroethene	U		µg/m3	0.16	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
52. Trichlorofluoromethane	U		µg/m3	8.4	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
‡ 53. 1,1,2-Trichlorotrifluoroethane	U		µg/m3	23	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
54. 1,2,4-Trimethylbenzene	U		µg/m3	4.4	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
55. 1,3,5-Trimethylbenzene	U		µg/m3	4.4	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
56. Vinyl Acetate	U		µg/m3	11	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
57. Vinyl Chloride	U		µg/m3	0.77	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
58. m&p-Xylene	U		µg/m3	13	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
59. o-Xylene	U		µg/m3	13	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY
‡ 60. Xylenes	U		µg/m3	26	1.0	03/23/23	VN23C23B	03/24/23	12:02	VN23C23B	CY

Surrogate Summary

			<u>Control Limits</u>	<u>Instrument</u>	<u>Batch</u>	<u>Run Time</u>	<u>Column</u>	<u>Inst. Method</u>
4-Bromofluorobenzene(S)	100	%	80-120	VN	VN23C23B	3/24/2023 12:02	1	VN400

Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: █ Cope	Chain of Custody: 215770
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-34	Collect Date: 03/21/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: 09:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)

Method: EPA TO-15

Aliquot ID: **A14152-003** Matrix: **Air**
Description: **█ Cope**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			
						P. Date	P. Batch	A. Date	A. Batch	Init.	
‡ 1. Acetone	U		µg/m3	36	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
2. Benzene	U		µg/m3	2.9	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
3. Benzyl Chloride	U		µg/m3	0.41	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
4. Bromodichloromethane	U		µg/m3	0.80	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
5. Bromoform	U		µg/m3	15	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
6. Bromomethane	U		µg/m3	3.5	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
7. 1,3-Butadiene	U		µg/m3	0.66	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
8. 2-Butanone	U		µg/m3	8.8	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
‡ 9. Carbon Disulfide	U		µg/m3	19	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
10. Carbon Tetrachloride	U		µg/m3	0.75	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
11. Chlorobenzene	U		µg/m3	14	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
12. Chloroethane	U		µg/m3	4.0	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
13. Chloroform	U		µg/m3	0.59	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
14. Chloromethane	U		µg/m3	12	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
15. Cyclohexane	U		µg/m3	10	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
16. Dibromochloromethane	U		µg/m3	0.68	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
17. 1,2-Dichlorobenzene	U		µg/m3	9.0	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
18. 1,3-Dichlorobenzene	U		µg/m3	1.8	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
19. 1,4-Dichlorobenzene	U		µg/m3	1.8	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
20. Dichlorodifluoromethane	U		µg/m3	15	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
21. 1,1-Dichloroethane	U		µg/m3	6.1	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
22. 1,2-Dichloroethane	U		µg/m3	0.49	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
23. 1,1-Dichloroethene	U		µg/m3	5.9	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
24. cis-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
25. trans-1,2-Dichloroethene	U		µg/m3	5.9	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
26. 1,2-Dichloropropane	U		µg/m3	1.4	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
27. cis-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
28. trans-1,3-Dichloropropene	U		µg/m3	1.4	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
29. 1,4-Dioxane	U		µg/m3	5.4	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
‡ 30. Ethyl Acetate	U		µg/m3	11	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
31. Ethylbenzene	U		µg/m3	6.5	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
32. Ethylene Dibromide	U		µg/m3	0.23	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
33. n-Heptane	U		µg/m3	12	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
34. Hexachlorobutadiene	U		µg/m3	1.3	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
35. n-Hexane	U		µg/m3	11	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
‡ 36. 2-Hexanone	U		µg/m3	12	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
‡ 37. Isopropanol	U		µg/m3	15	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY

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Client Identification: NTH Consultants, Ltd. - Northville	Sample Description: █ Cope	Chain of Custody: 215770
Client Project Name: FCA/Stellantis Project (23001494-01)	Sample No: A-34	Collect Date: 03/21/23
Client Project No: 23001494-01	Sample Matrix: Air	Collect Time: 09:20

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

TO-15 (Summa)

Method: EPA TO-15

Aliquot ID: **A14152-003** Matrix: **Air**
Description: **█ Cope**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation		Analysis			
						P. Date	P. Batch	A. Date	A. Batch	Init.	
38. 4-Methyl-2-pentanone	U		µg/m3	12	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
39. Methylene Chloride	U		µg/m3	21	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
‡ 40. 2-Methylnaphthalene	U		µg/m3	35	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
41. MTBE	U		µg/m3	5.4	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
‡ 42. Naphthalene	U		µg/m3	1.6	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
43. Styrene	U		µg/m3	13	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
44. 1,1,2,2-Tetrachloroethane	U		µg/m3	0.21	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
45. Tetrachloroethene	U		µg/m3	6.1	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
‡ 46. Tetrahydrofuran	U		µg/m3	4.4	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
47. Toluene	U		µg/m3	5.7	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
48. 1,2,4-Trichlorobenzene	U		µg/m3	22	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
49. 1,1,1-Trichloroethane	U		µg/m3	8.2	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
50. 1,1,2-Trichloroethane	U		µg/m3	0.65	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
51. Trichloroethene	U		µg/m3	0.16	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
52. Trichlorofluoromethane	U		µg/m3	8.4	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
‡ 53. 1,1,2-Trichlorotrifluoroethane	U		µg/m3	23	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
54. 1,2,4-Trimethylbenzene	U		µg/m3	4.4	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
55. 1,3,5-Trimethylbenzene	U		µg/m3	4.4	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
56. Vinyl Acetate	U		µg/m3	11	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
57. Vinyl Chloride	U		µg/m3	0.77	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
58. m&p-Xylene	U		µg/m3	13	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
59. o-Xylene	U		µg/m3	13	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY
‡ 60. Xylenes	U		µg/m3	26	1.0	03/23/23	VN23C23B	03/24/23	13:00	VN23C23B	CY

Surrogate Summary

			<u>Control Limits</u>	<u>Instrument</u>	<u>Batch</u>	<u>Run Time</u>	<u>Column</u>	<u>Inst. Method</u>
4-Bromofluorobenzene(S)	99	%	80-120	VN	VN23C23B	3/24/2023 13:00	1	VN400

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Definitions/ Qualifiers:

- A:** Spike recovery or precision unusable due to dilution.
- B:** The analyte was detected in the associated method blank.
- E:** The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
- J:** The concentration is an estimated value.
- M:** Modified Method
- U:** The analyte was not detected at or above the reporting limit.
- X:** Matrix Interference has resulted in a raised reporting limit or distorted result.
- W:** Results reported on a wet-weight basis.
- ***: Value reported is outside QC limits
- D:** The sample or extract was analyzed at a DF greater than 1.

Exception Summary:

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-23-15 (TX)

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VN23C23B: Method Blank (MB)

EPA TO-15

Run Time: VN23C23B.MB 03/23/2023 17:57 [VN23C23B]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/m3		µg/m3
Acetone	U		36
Benzene	U		2.9
Benzyl Chloride	U		0.41
Bromodichloromethane	U		0.80
Bromoform	U		15
Bromomethane	U		3.5
1,3-Butadiene	U		0.66
2-Butanone	U		8.8
Carbon Disulfide	U		19
Carbon Tetrachloride	U		0.75
Chlorobenzene	U		14
Chloroethane	U		4.0
Chloroform	U		0.59
Chloromethane	U		12
Cyclohexane	U		10
Dibromochloromethane	U		0.68
1,2-Dichlorobenzene	U		9.0
1,3-Dichlorobenzene	U		1.8
1,4-Dichlorobenzene	U		1.8
Dichlorodifluoromethane	U		15
1,1-Dichloroethane	U		6.1
1,2-Dichloroethane	U		0.49
1,1-Dichloroethene	U		5.9
cis-1,2-Dichloroethene	U		5.9
trans-1,2-Dichloroethene	U		5.9
1,2-Dichloropropane	U		1.4
cis-1,3-Dichloropropene	U		1.4
trans-1,3-Dichloropropene	U		1.4
1,4-Dioxane	U		5.4
Ethyl Acetate	U		11
Ethylbenzene	U		6.5
Ethylene Dibromide	U		0.23
n-Heptane	U		12

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VN23C23B: Method Blank (MB)

EPA TO-15

Run Time: VN23C23B.MB 03/23/2023 17:57 [VN23C23B]

Analyte	MB Result	MB Qualifier	MB RDL
	µg/m3		µg/m3
Hexachlorobutadiene	U		1.3
n-Hexane	U		11
2-Hexanone	U		12
Isopropanol	U		15
4-Methyl-2-pentanone	U		12
Methylene Chloride	U		21
2-Methylnaphthalene	U		35
MTBE	U		5.4
Naphthalene	U		1.6
Styrene	U		13
1,1,2,2-Tetrachloroethane	U		0.21
Tetrachloroethene	U		6.1
Tetrahydrofuran	U		4.4
Toluene	U		5.7
1,2,4-Trichlorobenzene	U		22
1,1,1-Trichloroethane	U		8.2
1,1,2-Trichloroethane	U		0.65
Trichloroethene	U		0.16
Trichlorofluoromethane	U		8.4
1,1,2-Trichlorotrifluoroethane	U		23
1,2,4-Trimethylbenzene	U		4.4
1,3,5-Trimethylbenzene	U		4.4
Vinyl Acetate	U		11
Vinyl Chloride	U		0.77
m&p-Xylene	U		13
o-Xylene	U		13
4-Bromofluorobenzene(S)	102		80-120

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VN23C23B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA TO-15

Run Time: VN23C23B.LCS: 03/23/2023 15:10 [VN23C23B] VN23C23B.LCSD: 03/23/2023 16:05 [VN23C23B]

Analyte	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amount				Qualifier	Spike Amount	Result	Rec.	Qualifier	%	%	Qualifier
	µg/m3	µg/m3	%	%		µg/m3	µg/m3	%		%		
Acetone	30.0	26.0	87	70-130		30.0	26.5	88		1	20	
Benzene	41.9	39.0	93	70-130		41.9	38.8	93		0	20	
Benzyl Chloride	66.0	64.9	98	70-150		66.0	65.9	100		2	20	
Bromodichloromethane	87.1	88.2	101	70-130		87.1	88.6	102		1	20	
Bromoform	134	138	103	70-138		134	140	104		1	20	
Bromomethane	50.5	49.6	98	70-133		50.5	50.1	99		1	20	
1,3-Butadiene	28.7	26.3	91	70-134		28.7	26.8	93		2	20	
2-Butanone	38.3	33.5	87	70-130		38.3	33.7	88		1	20	
Carbon Disulfide	41.2	33.4	81	70-130		41.2	33.7	82		1	20	
Carbon Tetrachloride	83.3	88.7	106	70-131		83.3	88.6	106		0	20	
Chlorobenzene	60.4	59.5	99	70-130		60.4	60.5	100		1	20	
Chloroethane	34.3	30.4	89	70-130		34.3	31.3	91		2	20	
Chloroform	63.4	65.2	103	70-130		63.4	66.1	104		1	20	
Chloromethane	27.1	24.7	91	70-130		27.1	24.8	92		1	20	
Cyclohexane	44.3	42.9	97	70-130		44.3	42.3	96		1	20	
Dibromochloromethane	110	115	105	70-135		110	117	107		2	20	
1,2-Dichlorobenzene	78.1	79.6	102	70-130		78.1	81.4	104		2	20	
1,3-Dichlorobenzene	77.4	82.5	107	70-131		77.4	83.4	108		1	20	
1,4-Dichlorobenzene	78.1	80.4	103	70-134		78.1	82.2	105		2	20	
Dichlorodifluoromethane	64.9	67.7	104	70-132		64.9	68.9	106		2	20	
1,1-Dichloroethane	52.6	50.4	96	70-130		52.6	50.6	96		0	20	
1,2-Dichloroethane	53.1	54.8	103	70-130		53.1	54.7	103		0	20	
1,1-Dichloroethene	52.0	51.3	99	70-133		52.0	52.1	100		1	20	
cis-1,2-Dichloroethene	52.0	52.0	100	70-130		52.0	52.4	101		1	20	
trans-1,2-Dichloroethene	51.0	51.6	101	70-130		51.0	51.8	102		1	20	
1,2-Dichloropropane	60.6	60.7	100	70-130		60.6	60.3	99		1	20	
cis-1,3-Dichloropropene	59.0	59.9	101	70-131		59.0	59.7	101		0	20	
trans-1,3-Dichloropropene	59.0	58.1	98	70-134		59.0	58.0	98		0	20	
1,4-Dioxane	46.8	45.9	98	70-130		46.8	45.2	96		2	20	
Ethyl Acetate	46.4	46.5	100	70-130		46.4	47.5	103		3	20	
Ethylbenzene	57.0	54.2	95	70-130		57.0	55.3	97		2	20	
Ethylene Dibromide	98.9	96.6	98	70-130		98.9	98.9	100		2	20	
n-Heptane	52.7	48.5	92	70-132		52.7	48.8	93		1	20	

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VN23C23B: Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD)

EPA TO-15

Run Time: VN23C23B.LCS: 03/23/2023 15:10 [VN23C23B] VN23C23B.LCSD: 03/23/2023 16:05 [VN23C23B]

Analyte	LCS	LCS Result	LCS Rec.	Rec. Limits	LCS	LCSD	LCSD	LCSD	LCSD	RPD	RPD Limits	RPD
	Spike Amount				Qualifier	Spike Amount	Result	Rec.	Qualifier	%	%	Qualifier
	µg/m3	µg/m3	%	%		µg/m3	µg/m3	%		%		
Hexachlorobutadiene	144	149	104	70-134		144	154	107		3	20	
n-Hexane	45.4	37.4	83	70-130		45.4	37.2	82		1	20	
2-Hexanone	52.7	52.2	99	70-139		52.7	53.3	101		2	20	
Isopropanol	32.9	30.3	92	54-144		32.9	30.6	93		1	20	
4-Methyl-2-pentanone	52.7	52.3	99	70-130		52.7	52.6	100		1	20	
Methylene Chloride	45.1	37.6	83	70-132		45.1	38.3	85		2	20	
2-Methylnaphthalene	83.6	109	130	70-146		83.6	112	134		3	20	
MTBE	46.8	44.3	95	70-130		46.8	45.1	96		1	20	
Naphthalene	74.7	86.1	115	70-148		74.7	87.9	118		3	20	
Styrene	55.4	53.2	96	70-130		55.4	54.4	98		2	20	
1,1,2,2-Tetrachloroethane	90.1	85.4	95	70-130		90.1	87.0	97		2	20	
Tetrachloroethene	88.1	92.0	104	70-130		88.1	92.7	105		1	20	
Tetrahydrofuran	38.0	33.6	89	70-138		38.0	33.9	89		0	20	
Toluene	49.4	47.9	97	70-130		49.4	48.6	98		1	20	
1,2,4-Trichlorobenzene	102	126	123	70-140		102	128	125		2	20	
1,1,1-Trichloroethane	70.9	76.1	107	70-130		70.9	75.3	106		1	20	
1,1,2-Trichloroethane	70.9	69.3	98	70-130		70.9	69.8	98		0	20	
Trichloroethene	70.5	68.0	96	70-130		70.5	67.4	96		0	20	
Trichlorofluoromethane	72.3	75.2	104	70-132		72.3	76.1	105		1	20	
1,1,2-Trichlorotrifluoroethane	101	98.8	98	70-130		101	99.8	99		1	20	
1,2,4-Trimethylbenzene	64.5	63.7	99	70-132		64.5	65.3	101		2	20	
1,3,5-Trimethylbenzene	64.5	63.6	99	70-131		64.5	65.1	101		2	20	
Vinyl Acetate	48.0	49.2	103	70-131		48.0	51.5	107		4	20	
Vinyl Chloride	33.2	30.9	93	70-131		33.2	31.7	95		2	20	
m&p-Xylene	114	110	96	70-130		114	112	98		2	20	
o-Xylene	56.4	54.7	97	70-130		56.4	55.8	99		2	20	
4-Bromofluorobenzene(S)			104	80-120				105				

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Definitions/ Qualifiers:

U: The analyte was not detected at or above the Reporting Limit (RL).
***:** Value reported is outside QC limits

Exception Summary:

Exceptions have been properly noted on reported results or affected samples have been scheduled for reanalysis when appropriate.

Report Generated By:



By Jacob Sutherland at 11:56 AM, Mar 28, 2023

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 11766 E. Grand River Rd. Brighton, MI 48116
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Chain of Custody #
215770
 PAGE 1 of 1

Client Name: NTH Consultants				MATRIX (SEE RIGHT CORNER FOR CODE) # OF CONTAINERS Vials (70-15)												PARAMETERS												Matrix Code				Deliverables	
Contact Person: Bhushan Modi																HOLD SAMPLE												S Soil		GW Ground Water		Level 2	
Project Name/ Number: 23001494-01 FCA/Stellantis																												A Air		SW Surface Water		Level 3	
Email distribution list: bmodi@nthconsultants.com																												O Oil		WW Waste Water		Level 4	
Quote# 1392																												P Wipe		X Other: Specify		EDD	
Purchase Order#																Remarks:																	
Date	Time	Sample #	Client Sample Descriptor													Sampling Times are on the Canisters																	
3/21		A-14	Beniteau													IP + EP are on the Canisters																	
3/21		A-24	Beniteau																														
3/21		A-34	Cope																														
																Received By Lab																	
																MAR 22 2023																	
				Initials: <u>TM</u>																													
Comments:																																	
Sampled/Relinquished By: <i>[Signature]</i>				Date/Time: 3/22/23 10:30				Received By: <i>[Signature]</i>				Date/Time: 3-22-23 11:30																					
Relinquished By: <i>[Signature]</i>				Date/Time: 3-22-23 1400				Received By: <i>[Signature]</i>																									
Relinquished By:				Date/Time:				Received By Laboratory:																									
Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY <input type="checkbox"/> 1 bus. day <input type="checkbox"/> 2 bus. days <input type="checkbox"/> 3 bus. days <input type="checkbox"/> 4 bus. days <input checked="" type="checkbox"/> 5-7 bus. days (standard) Other (specify time/date requirement): _____												LAB USE ONLY Fibertec project number: A14152 Temperature upon receipt at Lab: Room Temp																					
Please see back for terms and conditions																																	