

CASE NARRATIVE

Tetra Tech, EMI

Project Name: R36719

Project # N/A

Chemtech Project # P5294

Test Name: TO-15

A. Number of Samples and Date of Receipt:

3 Air samples were received on 12/13/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: TO-15. This data package contains results for TO-15.

C. Analytical Techniques:

The analysis performed on instrument MSVOA_L were done using GC column RTX-1, which is 60 meters, 0.32 mm id, 1.0 um df, Restek Cat. #10157. The Trap was supplied by Entech, glass bead and Tenax , Entech 7100A Preconcentrator. The analysis of TO-15 was based on method TO-15.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD for {P5293-01DUP} with File ID: VL041798.D met criteria except for Hexane[33.3%], m/p-Xylene[200%] due to difference in results of Original and DUP.

The Blank Spike met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

The Tuning criteria met requirements.

E. Additional Comments:

The Sample #C0AB6, C0AB7, C0AB8 have the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

The not QT review data is reported in the Miscellaneous.

The Manual Integrations are performed for the followings.

Manual Integration Report			
Sequence	VL121624	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
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VSTDICCC010	VL041752.D	m/p-Xylene	SAM	12/20/2024 4:34:05 AM	MMDadoda	12/20/2024 4:37:21 AM	Peak Integrated by Software incorrectly
VSTDICCC002	VL041753.D	1,4-Dioxane	SAM	12/20/2024 4:34:06 AM	MMDadoda	12/20/2024 4:37:23 AM	Peak Integrated by Software incorrectly
VSTDICCC002	VL041753.D	cis-1,3-Dichloropropene	SAM	12/20/2024 4:34:06 AM	MMDadoda	12/20/2024 4:37:23 AM	Peak Integrated by Software incorrectly
VSTDICCC002	VL041753.D	m/p-Xylene	SAM	12/20/2024 4:34:06 AM	MMDadoda	12/20/2024 4:37:23 AM	Peak Integrated by Software incorrectly
VSTDICCC001	VL041754.D	1,1,2-Trichloroethane	SAM	12/20/2024 4:34:08 AM	MMDadoda	12/20/2024 4:37:25 AM	Peak Integrated by Software incorrectly
VSTDICCC001	VL041754.D	Carbon Tetrachloride	SAM	12/20/2024 4:34:08 AM	MMDadoda	12/20/2024 4:37:25 AM	Peak Integrated by Software incorrectly
VSTDICCC001	VL041754.D	cis-1,3-Dichloropropene	SAM	12/20/2024 4:34:08 AM	MMDadoda	12/20/2024 4:37:25 AM	Peak Integrated by Software incorrectly
VSTDICCC001	VL041754.D	Ethanol	SAM	12/20/2024 4:34:08 AM	MMDadoda	12/20/2024 4:37:25 AM	Peak Integrated

				AM		AM	d by Software incorrectl y
VSTDICC001	VL041754.D	m/p-Xylene	SAM	12/20/2024 4:34:08 AM	MMDadoda	12/20/2024 4:37:25 AM	Peak Integrated by Software incorrectl y
VSTDICC001	VL041754.D	Methyl Methacrylate	SAM	12/20/2024 4:34:08 AM	MMDadoda	12/20/2024 4:37:25 AM	Peak Integrated by Software incorrectl y
VSTDICC001	VL041754.D	Tetrachloroethene	SAM	12/20/2024 4:34:08 AM	MMDadoda	12/20/2024 4:37:25 AM	Peak Integrated by Software incorrectl y
VSTDICC001	VL041754.D	Trichloroethene	SAM	12/20/2024 4:34:08 AM	MMDadoda	12/20/2024 4:37:25 AM	Peak Integrated by Software incorrectl y
VSTDICC0.5	VL041755.D	1,1,1,2-Tetrachloroethane	SAM	12/20/2024 4:34:10 AM	MMDadoda	12/20/2024 4:37:27 AM	Peak Integrated by Software incorrectl y
VSTDICC0.5	VL041755.D	1,1,2-Trichloroethane	SAM	12/20/2024 4:34:10 AM	MMDadoda	12/20/2024 4:37:27 AM	Peak Integrated by Software incorrectl y
VSTDICC0.5	VL041755.D	1,2-Dibromoethane	SAM	12/20/2024 4:34:10 AM	MMDadoda	12/20/2024 4:37:27 AM	Peak Integrated by Software incorrectl y
VSTDICC0.5	VL041755.D	1,2-Dichloropropane	SAM	12/20/2024 4:34:10 AM	MMDadoda	12/20/2024 4:37:27 AM	Peak Integrated by Software incorrectl y
VSTDICC0.5	VL041755.D	1,4-Dioxane	SAM	12/20/2024 4:34:10 AM	MMDadoda	12/20/2024 4:37:27 AM	Peak Integrated by Software

							incorrectl y
VSTDICC0.5	VL041755. D	2,2,4- Trimethylpentane	SA M	12/20/202 4 4:34:10 AM	MMDadod a	12/20/202 4 4:37:27 AM	Peak Integrate d by Software incorrectl y
VSTDICC0.5	VL041755. D	4-Methyl-2- Pentanone	SA M	12/20/202 4 4:34:10 AM	MMDadod a	12/20/202 4 4:37:27 AM	Peak Integrate d by Software incorrectl y
VSTDICC0.5	VL041755. D	Benzyl Chloride	SA M	12/20/202 4 4:34:10 AM	MMDadod a	12/20/202 4 4:37:27 AM	Peak Integrate d by Software incorrectl y
VSTDICC0.5	VL041755. D	Bromodichlorometha ne	SA M	12/20/202 4 4:34:10 AM	MMDadod a	12/20/202 4 4:37:27 AM	Peak Integrate d by Software incorrectl y
VSTDICC0.5	VL041755. D	Bromoform	SA M	12/20/202 4 4:34:10 AM	MMDadod a	12/20/202 4 4:37:27 AM	Peak Integrate d by Software incorrectl y
VSTDICC0.5	VL041755. D	Chlorobenzene	SA M	12/20/202 4 4:34:10 AM	MMDadod a	12/20/202 4 4:37:27 AM	Peak Integrate d by Software incorrectl y
VSTDICC0.5	VL041755. D	cis-1,3- Dichloropropene	SA M	12/20/202 4 4:34:10 AM	MMDadod a	12/20/202 4 4:37:27 AM	Peak Integrate d by Software incorrectl y
VSTDICC0.5	VL041755. D	Ethanol	SA M	12/20/202 4 4:34:10 AM	MMDadod a	12/20/202 4 4:37:27 AM	Peak Integrate d by Software incorrectl y
VSTDICC0.5	VL041755. D	Heptane	SA M	12/20/202 4 4:34:10 AM	MMDadod a	12/20/202 4 4:37:27 AM	Peak Integrate d by Software incorrectl y

VSTDIC0.5	VL041755.D	m/p-Xylene	SAM	12/20/2024 4:34:10 AM	MMDadoda	12/20/2024 4:37:27 AM	Peak Integrated by Software incorrectly
VSTDIC0.5	VL041755.D	t-1,3-Dichloropropene	SAM	12/20/2024 4:34:10 AM	MMDadoda	12/20/2024 4:37:27 AM	Peak Integrated by Software incorrectly
VSTDIC0.5	VL041755.D	Trichloroethene	SAM	12/20/2024 4:34:10 AM	MMDadoda	12/20/2024 4:37:27 AM	Peak Integrated by Software incorrectly
VSTDIC0.1	VL041756.D	1,1,2,2-Tetrachloroethane	SAM	12/20/2024 4:34:11 AM	MMDadoda	12/20/2024 4:37:28 AM	Peak Integrated by Software incorrectly
VSTDIC0.1	VL041756.D	1,2-Dibromoethane	SAM	12/20/2024 4:34:11 AM	MMDadoda	12/20/2024 4:37:28 AM	Peak Integrated by Software incorrectly
VSTDIC0.1	VL041756.D	Tetrachloroethene	SAM	12/20/2024 4:34:11 AM	MMDadoda	12/20/2024 4:37:28 AM	Peak Integrated by Software incorrectly
VSTDIC0.1	VL041756.D	Trichloroethene	SAM	12/20/2024 4:34:11 AM	MMDadoda	12/20/2024 4:37:28 AM	Peak Integrated by Software incorrectly
VSTDIC0.03	VL041757.D	1,1,1-Trichloroethane	SAM	12/20/2024 4:34:12 AM	MMDadoda	12/20/2024 4:37:30 AM	Peak Integrated by Software incorrectly
VSTDIC0.03	VL041757.D	Carbon Tetrachloride	SAM	12/20/2024 4:34:12 AM	MMDadoda	12/20/2024 4:37:30 AM	Peak Integrated by Software incorrectly
STDIC0.03	VL041757.D	Tetrachloroethene	SAM	12/20/2024 4:34:12	MMDadoda	12/20/2024 4:37:30	Peak Integrate

				AM		AM	d by Software incorrectl y
VSTDICC0.03	VL041757.D	Trichloroethene	SAM	12/20/2024 4:34:12 AM	MMDadoda	12/20/2024 4:37:30 AM	Peak Integrated by Software incorrectl y
VSTDICC015	VL041758.D	m/p-Xylene	SAM	12/20/2024 4:34:14 AM	MMDadoda	12/20/2024 4:37:32 AM	Peak Integrated by Software incorrectl y
VSTDICV010	VL041759.D	1,1,2-Trichloroethane	SAM	12/20/2024 4:34:16 AM	MMDadoda	12/20/2024 4:37:35 AM	Peak Integrated by Software incorrectl y
VSTDICV010	VL041759.D	Ethanol	SAM	12/20/2024 4:34:16 AM	MMDadoda	12/20/2024 4:37:35 AM	Peak Integrated by Software incorrectl y
VSTDICV010	VL041759.D	m/p-Xylene	SAM	12/20/2024 4:34:16 AM	MMDadoda	12/20/2024 4:37:35 AM	Peak Integrated by Software incorrectl y

Manual Integration Report

Sequence	vl121824	Instrument	MSVOA_I
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
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VSTDCCC010	VL041788.D	cis-1,3-Dichloropropene	SAM	12/19/2024 12:18:09 PM	MMDadoda	12/19/2024 2:45:22 PM	Peak Integrated by Software incorrectl y
VSTDCCC010	VL041788.D	Ethanol	SAM	12/19/2024 12:18:09 PM	MMDadoda	12/19/2024 2:45:22 PM	Peak Integrated by Software incorrectl y

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VSTDCCC010	VL041788.D	m/p-Xylene	SAM	12/19/2024 12:18:09 PM	MMDadoda	12/19/2024 2:45:22 PM	Peak Integrated by Software incorrectly
VL1218ABS01	VL041795.D	m/p-Xylene	SAM	12/19/2024 12:19:16 PM	MMDadoda	12/19/2024 2:45:27 PM	Peak Integrated by Software incorrectly
P5294-01	VL041802.D	2,2,4-Trimethylpentane	SAM	12/19/2024 12:19:34 PM	MMDadoda	12/19/2024 2:45:38 PM	Peak Integrated by Software incorrectly
P5294-01	VL041802.D	4-Methyl-2-Pentanone	SAM	12/19/2024 12:19:34 PM	MMDadoda	12/19/2024 2:45:38 PM	Peak Integrated by Software incorrectly
P5294-01	VL041802.D	Carbon Tetrachloride	SAM	12/19/2024 12:19:34 PM	MMDadoda	12/19/2024 2:45:38 PM	Peak Integrated by Software incorrectly
P5294-01	VL041802.D	Chlorobenzene	SAM	12/19/2024 12:19:34 PM	MMDadoda	12/19/2024 2:45:38 PM	Peak Integrated by Software incorrectly
P5294-01	VL041802.D	Chlorodifluoromethane	SAM	12/19/2024 12:19:34 PM	MMDadoda	12/19/2024 2:45:38 PM	Peak Integrated by Software incorrectly
P5294-01	VL041802.D	Cyclohexane	SAM	12/19/2024 12:19:34 PM	MMDadoda	12/19/2024 2:45:38 PM	Peak Integrated by Software incorrectly
P5294-01	VL041802.D	Heptane	SAM	12/19/2024 12:19:34 PM	MMDadoda	12/19/2024 2:45:38 PM	Peak Integrated by Software incorrectly
P5294-01	VL041802.D	m/p-Xylene	SA	12/19/2024	MMDadoda	12/19/2024	Peak

	D		M	4 12:19:34 PM	a	4 2:45:38 PM	Integrate d by Software incorrectl y
P5294-01	VL041802. D	Propene	SA M	12/19/202 4 12:19:34 PM	MMDadod a	12/19/202 4 2:45:38 PM	Peak Integrate d by Software incorrectl y
P5294-02	VL041803. D	2,2,4- Trimethylpentane	SA M	12/19/202 4 12:18:36 PM	MMDadod a	12/19/202 4 2:45:39 PM	Peak Integrate d by Software incorrectl y
P5294-02	VL041803. D	Benzene	SA M	12/19/202 4 12:18:36 PM	MMDadod a	12/19/202 4 2:45:39 PM	Peak Integrate d by Software incorrectl y
P5294-02	VL041803. D	Carbon Tetrachloride	SA M	12/19/202 4 12:18:36 PM	MMDadod a	12/19/202 4 2:45:39 PM	Peak Integrate d by Software incorrectl y
P5294-02	VL041803. D	Chlorodifluorometha ne	SA M	12/19/202 4 12:18:36 PM	MMDadod a	12/19/202 4 2:45:39 PM	Peak Integrate d by Software incorrectl y
P5294-02	VL041803. D	Cyclohexane	SA M	12/19/202 4 12:18:36 PM	MMDadod a	12/19/202 4 2:45:39 PM	Peak Integrate d by Software incorrectl y
P5294-02	VL041803. D	Ethyl Acetate	SA M	12/19/202 4 12:18:36 PM	MMDadod a	12/19/202 4 2:45:39 PM	Peak Integrate d by Software incorrectl y
P5294-02	VL041803. D	Heptane	SA M	12/19/202 4 12:18:36 PM	MMDadod a	12/19/202 4 2:45:39 PM	Peak Integrate d by Software incorrectl y
P5294-02	VL041803. D	m/p-Xylene	SA M	12/19/202 4 12:18:36	MMDadod a	12/19/202 4 2:45:39 PM	Peak Integrate d by

				PM			Software incorrectl y
P5294-02	VL041803. D	Propene	SA M	12/19/202 4 12:18:36 PM	MMDadod a	12/19/202 4 2:45:39 PM	Peak Integrate d by Software incorrectl y
P5294-03	VL041811. D	2,2,4- Trimethylpentane	SA M	12/23/202 4 5:30:45 AM	MMDadod a	12/23/202 4 5:32:43 AM	Peak Integrate d by Software incorrectl y
P5294-03	VL041811. D	Carbon Tetrachloride	SA M	12/23/202 4 5:30:45 AM	MMDadod a	12/23/202 4 5:32:43 AM	Peak Integrate d by Software incorrectl y
P5294-03	VL041811. D	Chlorodifluorometha ne	SA M	12/23/202 4 5:30:45 AM	MMDadod a	12/23/202 4 5:32:43 AM	Peak Integrate d by Software incorrectl y
P5294-03	VL041811. D	m/p-Xylene	SA M	12/23/202 4 5:30:45 AM	MMDadod a	12/23/202 4 5:32:43 AM	Peak Integrate d by Software incorrectl y
P5294-03	VL041811. D	o-Xylene	SA M	12/23/202 4 5:30:45 AM	MMDadod a	12/23/202 4 5:32:43 AM	Peak Integrate d by Software incorrectl y
P5294-03	VL041811. D	Propene	SA M	12/23/202 4 5:30:45 AM	MMDadod a	12/23/202 4 5:32:43 AM	Peak Integrate d by Software incorrectl y

F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed



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above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____