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CASE NARRATIVE

Woodard & Curran

Project Name: US EPA Riverside Industrial Park Superfund Site

Project # N/A

Chemtech Project # Q1668

Test Name: TO-15

A. Number of Samples and Date of Receipt:

4 Air samples were received on 03/27/2025.

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 7100 A 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 {Q1668-01DUP} with File ID: VL042362.D met criteria except for Tetrachloroethene[22.2%] 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 Tuning criteria met requirements.

Samples IA-B1-4-3252025, IA-B1-3-3252025 were diluted due to high concentrations.

E. Additional Comments:

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 Sample # IA-B1-4-3252025DL and IA-B1-3-3252025DL have the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

The Manual Integrations are performed for the followings.

Manual Integration Report							
Sequence	VL041725	Instrument			MSVOA_I		

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICCC010	VL042349.D	m/p-Xylene	SAM	4/18/2025 4:19:07 PM	MMDadoda	4/18/2025 10:45:20 PM	Peak Integrated by Software incorrectly
VSTDICCC002	VL042350.D	1,4-Dioxane	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software incorrectly
VSTDICCC002	VL042350.D	cis-1,3-Dichloropropene	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software incorrectly
VSTDICCC002	VL042350.D	Ethanol	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software incorrectly
VSTDICCC002	VL042350.D	Heptane	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software incorrectly
VSTDICCC002	VL042350.D	m/p-Xylene	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software incorrectly
VSTDICCC002	VL042350.D	Trichloroethene	SAM	4/18/2025	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated

				4:19:12 PM			d by Software incorrectl y
VSTDICC001	VL042351.D	1,1,2-Trichloroethane	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectl y
VSTDICC001	VL042351.D	1,3-Butadiene	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectl y
VSTDICC001	VL042351.D	1,4-Dioxane	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectl y
VSTDICC001	VL042351.D	2,2,4-Trimethylpentane	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectl y
VSTDICC001	VL042351.D	cis-1,3-Dichloropropene	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectl y
VSTDICC001	VL042351.D	Cyclohexane	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectl y
VSTDICC001	VL042351.D	Ethanol	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectl y
VSTDICC001	VL042351.D	Heptane	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectl y
VSTDICC001	VL042351.D	m/p-Xylene	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software

							incorrectly
VSTDIC001	VL042351.D	Methyl Methacrylate	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectly
VSTDIC001	VL042351.D	t-1,3-Dichloropropene	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectly
VSTDIC0.5	VL042352.D	1,1,2-Trichloroethane	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDIC0.5	VL042352.D	1,2-Dichloropropane	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDIC0.5	VL042352.D	1,4-Dioxane	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDIC0.5	VL042352.D	4-Methyl-2-Pentanone	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDIC0.5	VL042352.D	Chlorobenzene	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDIC0.5	VL042352.D	cis-1,3-Dichloropropene	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDIC0.5	VL042352.D	Ethanol	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly

VSTDICC0.5	VL042352.D	Heptane	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042352.D	m/p-Xylene	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042352.D	Methyl Methacrylate	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042352.D	t-1,3-Dichloropropene	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042352.D	Tetrahydrofuran	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042353.D	1,1,1-Trichloroethane	SAM	4/18/2025 4:20:37 PM	MMDadoda	4/18/2025 10:45:04 PM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042353.D	1,1,2,2-Tetrachloroethane	SAM	4/18/2025 4:20:37 PM	MMDadoda	4/18/2025 10:45:04 PM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042353.D	1,2-Dibromoethane	SAM	4/18/2025 4:20:37 PM	MMDadoda	4/18/2025 10:45:04 PM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042353.D	Tetrachloroethane	SAM	4/18/2025 4:20:37 PM	MMDadoda	4/18/2025 10:45:04 PM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042353.D	Trichloroethene	SAM	4/18/2025	MMDadoda	4/18/2025 10:45:04 PM	Peak Integrated

				4:20:37 PM			d by Software incorrectl y
VSTDICC0.03	VL042354.D	1,1,1-Trichloroethane	SAM	4/18/2025 4:19:24 PM	MMDadoda	4/18/2025 10:45:02 PM	Peak Integrated by Software incorrectl y
VSTDICC0.03	VL042354.D	1,1,2,2-Tetrachloroethane	SAM	4/18/2025 4:19:24 PM	MMDadoda	4/18/2025 10:45:02 PM	Peak Integrated by Software incorrectl y
VSTDICC0.03	VL042354.D	Carbon Tetrachloride	SAM	4/18/2025 4:19:24 PM	MMDadoda	4/18/2025 10:45:02 PM	Peak Integrated by Software incorrectl y
VSTDICC0.03	VL042354.D	Tetrachloroethane	SAM	4/18/2025 4:19:24 PM	MMDadoda	4/18/2025 10:45:02 PM	Peak Integrated by Software incorrectl y
VSTDICC0.03	VL042354.D	Trichloroethene	SAM	4/18/2025 4:19:24 PM	MMDadoda	4/18/2025 10:45:02 PM	Peak Integrated by Software incorrectl y
VSTDICC015	VL042355.D	m/p-Xylene	SAM	4/18/2025 4:21:35 PM	MMDadoda	4/18/2025 10:44:59 PM	Peak Integrated by Software incorrectly
VSTDICV010	VL042356.D	m/p-Xylene	SAM	4/18/2025 4:20:42 PM	MMDadoda	4/18/2025 10:44:57 PM	Peak Integrated by Software incorrectly

VL0417ABS01	VL042358.D	m/p-Xylene	SAM	4/18/2025 4:21:39 PM	MMDadoda	4/18/2025 10:44:55 PM	Peak Integrated by Software incorrectl y
Q1668-01	VL042361.D	Carbon Tetrachloride	SAM	4/18/2025 4:19:29 PM	MMDadoda	4/18/2025 10:44:40 PM	Peak Integrated by Software incorrectl y

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Q1668-01	VL042361.D	Chlorodifluoromethane	SAM	4/18/2025 4:19:29 PM	MMDadoda	4/18/2025 10:44:40 PM	Peak Integrated by Software incorrectly
Q1668-01	VL042361.D	Tetrachloroethene	SAM	4/18/2025 4:19:29 PM	MMDadoda	4/18/2025 10:44:40 PM	Peak Integrated by Software incorrectly
Q1668-01DUP	VL042362.D	2,2,4-Trimethylpentane	SAM	4/18/2025 4:22:32 PM	MMDadoda	4/18/2025 10:44:37 PM	Peak Integrated by Software incorrectly
Q1668-01DUP	VL042362.D	Carbon Tetrachloride	SAM	4/18/2025 4:22:32 PM	MMDadoda	4/18/2025 10:44:37 PM	Peak Integrated by Software incorrectly
Q1668-01DUP	VL042362.D	Chlorodifluoromethane	SAM	4/18/2025 4:22:32 PM	MMDadoda	4/18/2025 10:44:37 PM	Peak Integrated by Software incorrectly
Q1668-01DUP	VL042362.D	Naphthalene,2-methyl-	SAM	4/18/2025 4:22:32 PM	MMDadoda	4/18/2025 10:44:37 PM	Peak Integrated by Software incorrectly
Q1668-01DUP	VL042362.D	Tetrachloroethene	SAM	4/18/2025 4:22:32 PM	MMDadoda	4/18/2025 10:44:37 PM	Peak Integrated by Software incorrectly
Q1668-03	VL042363.D	2,2,4-Trimethylpentane	SAM	4/18/2025 4:20:55 PM	MMDadoda	4/18/2025 10:44:34 PM	Peak Integrated by Software incorrectly
Q1668-03	VL042363.D	Carbon Tetrachloride	SAM	4/18/2025 4:20:55 PM	MMDadoda	4/18/2025 10:44:34 PM	Peak Integrated by Software incorrectly
Q1668-03	VL042363.D	Chlorodifluoromethane	SA	4/18/2025	MMDadoda	4/18/2025	Peak

	D	e	M	5 4:20:55 PM	a	5 10:44:34 PM	Integrated by Software incorrectly
Q1668-03	VL042363.D	Cyclohexane	SAM	4/18/2025 4:20:55 PM	MMDadoda	4/18/2025 10:44:34 PM	Peak Integrated by Software incorrectly
Q1668-03	VL042363.D	n-Butylbenzene	SAM	4/18/2025 4:20:55 PM	MMDadoda	4/18/2025 10:44:34 PM	Peak Integrated by Software incorrectly
Q1668-03	VL042363.D	n-propylbenzene	SAM	4/18/2025 4:20:55 PM	MMDadoda	4/18/2025 10:44:34 PM	Peak Integrated by Software incorrectly
Q1668-03	VL042363.D	Naphthalene,2-methyl-	SAM	4/18/2025 4:20:55 PM	MMDadoda	4/18/2025 10:44:34 PM	Peak Integrated by Software incorrectly
Q1668-03	VL042363.D	Tetrachloroethene	SAM	4/18/2025 4:20:55 PM	MMDadoda	4/18/2025 10:44:34 PM	Peak Integrated by Software incorrectly
Q1668-03	VL042363.D	Trichloroethene	SAM	4/18/2025 4:20:55 PM	MMDadoda	4/18/2025 10:44:34 PM	Peak Integrated by Software incorrectly
Q1668-04	VL042364.D	2,2,4-Trimethylpentane	SAM	4/18/2025 4:21:00 PM	MMDadoda	4/18/2025 10:45:48 PM	Peak Integrated by Software incorrectly
Q1668-04	VL042364.D	Carbon Tetrachloride	SAM	4/18/2025 4:21:00 PM	MMDadoda	4/18/2025 10:45:48 PM	Peak Integrated by Software incorrectly
Q1668-04	VL042364.D	Chlorodifluoromethane	SAM	4/18/2025 4:21:00 PM	MMDadoda	4/18/2025 10:45:48 PM	Peak Integrated by

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Q1668-04	VL042364. D	n-Butylbenzene	SA M	4/18/202 5 4:21:00 PM	MMDadod a	4/18/202 5 10:45:48 PM	Peak Integrate d by Software incorrectl y
Q1668-04	VL042364. D	Propene	SA M	4/18/202 5 4:21:00 PM	MMDadod a	4/18/202 5 10:45:48 PM	Peak Integrate d by Software incorrectl y
Q1668-04	VL042364. D	Tetrachloroethene	SA M	4/18/202 5 4:21:00 PM	MMDadod a	4/18/202 5 10:45:48 PM	Peak Integrate d by Software incorrectl y
Q1668-02	VL042365. D	2,2,4- Trimethylpentane	SA M	4/18/202 5 4:20:14 PM	MMDadod a	4/18/202 5 10:44:31 PM	Peak Integrate d by Software incorrectl y
Q1668-02	VL042365. D	Benzene	SA M	4/18/202 5 4:20:14 PM	MMDadod a	4/18/202 5 10:44:31 PM	Peak Integrate d by Software incorrectl y
Q1668-02	VL042365. D	Carbon Tetrachloride	SA M	4/18/202 5 4:20:14 PM	MMDadod a	4/18/202 5 10:44:31 PM	Peak Integrate d by Software incorrectl y
Q1668-02	VL042365. D	Chlorodifluoromethan e	SA M	4/18/202 5 4:20:14 PM	MMDadod a	4/18/202 5 10:44:31 PM	Peak Integrate d by Software incorrectl y
Q1668-02	VL042365. D	Heptane	SA M	4/18/202 5 4:20:14 PM	MMDadod a	4/18/202 5 10:44:31 PM	Peak Integrate d by Software incorrectl y
Q1668-02	VL042365. D	n-Butylbenzene	SA M	4/18/202 5 4:20:14 PM	MMDadod a	4/18/202 5 10:44:31 PM	Peak Integrate d by Software incorrectl

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Q1668-02	VL042365.D	Naphthalene,2-methyl-	SAM	4/18/2025 4:20:14 PM	MMDadoda	4/18/2025 10:44:31 PM	Peak Integrated by Software incorrectly
Q1668-02	VL042365.D	Tetrachloroethene	SAM	4/18/2025 4:20:14 PM	MMDadoda	4/18/2025 10:44:31 PM	Peak Integrated by Software incorrectly
Q1668-02	VL042365.D	Trichlorofluoromethane	SAM	4/18/2025 4:20:14 PM	MMDadoda	4/18/2025 10:44:31 PM	Peak Integrated by Software incorrectly
Q1668-01DL	VL042374.D	2-Butanone	SAM	4/18/2025 4:22:06 PM	MMDadoda	4/18/2025 10:43:55 PM	Peak Integrated by Software incorrectly
Q1668-01DL	VL042374.D	Benzene	SAM	4/18/2025 4:22:06 PM	MMDadoda	4/18/2025 10:43:55 PM	Peak Integrated by Software incorrectly
Q1668-01DL	VL042374.D	Carbon Tetrachloride	SAM	4/18/2025 4:22:06 PM	MMDadoda	4/18/2025 10:43:55 PM	Peak Integrated by Software incorrectly
Q1668-01DL	VL042374.D	Heptane	SAM	4/18/2025 4:22:06 PM	MMDadoda	4/18/2025 10:43:55 PM	Peak Integrated by Software incorrectly
Q1668-01DL	VL042374.D	n-Butylbenzene	SAM	4/18/2025 4:22:06 PM	MMDadoda	4/18/2025 10:43:55 PM	Peak Integrated by Software incorrectly
Q1668-01DL	VL042374.D	Toluene	SAM	4/18/2025 4:22:06 PM	MMDadoda	4/18/2025 10:43:55 PM	Peak Integrated by Software incorrectly
Q1668-03DL	VL042375.	Benzene	SA	4/18/2025	MMDadoda	4/18/2025	Peak

	D		M	5 4:22:02 PM	a	5 10:43:51 PM	Integrated by Software incorrectly
Q1668-03DL	VL042375.D	n-Butylbenzene	SAM	4/18/2025 4:22:02 PM	MMDadoda	4/18/2025 10:43:51 PM	Peak Integrated by Software incorrectly
Q1668-03DL	VL042375.D	Styrene	SAM	4/18/2025 4:22:02 PM	MMDadoda	4/18/2025 10:43:51 PM	Peak Integrated by Software incorrectly
Q1668-03DL	VL042375.D	Toluene	SAM	4/18/2025 4:22:02 PM	MMDadoda	4/18/2025 10:43:51 PM	Peak Integrated by Software incorrectly

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 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 _____