

CASE NARRATIVE

Woodard & Curran

Project Name: US EPA Riverside Industrial Park Superfund Site

Project # N/A

Chemtech Project # Q1728

Test Name: TO-15

A. Number of Samples and Date of Receipt:

12 Air samples were received on 04/03/2025.

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 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 met criteria .

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.

Due to potential high concentration of target analytes, Samples SSSG-B14-2-04012025, SSSG-B1-5-04012025, SSSG-B2-2-04022025, SSSG-B2-7-04022025, SSSG-B2-6-04022025, SSSG-B2-5-04022025, SSSG-B1-1-04012025, SSSG-B2-4-04022025, SSSG-B2-1-04022025, SSSG-B14-4-04022025, SSSG-B1-4-04012025 and SSSG-B1-3-04012025 were initially diluted.

Samples SSSG-B14-2-04012025, SSSG-B2-7-04022025, SSSG-B2-6-04022025, SSSG-B2-5-04022025 and SSSG-B2-4-04022025 were diluted due to high concentrations.

E. Additional Comments:

The not QT review data is reported in the Miscellaneous.

The Samples # SSSG-B14-2-04012025, SSSG-B14-2-04012025DL, SSSG-B1-5-04012025, SSSG-B2-7-04022025, SSSG-B2-6-04022025, SSSG-B2-5-04022025DL, SSSG-B1-1-04012025, SSSG-B14-4-04022025, SSSG-B1-4-04012025, SSSG-B1-3-04012025 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 Manual Integrations are performed for the followings.

Manual Integration Report			
Sequence	VL032725	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICCC010	VL042172.D	m/p-Xylene	SAM	3/31/2025 11:24:55 AM	MMDado da	4/3/2025 8:05:09 AM	Peak Integrated by Software incorrectly
VSTDICCC002	VL042173.D	1,4-Dioxane	SAM	3/31/2025 11:25:00 AM	MMDado da	4/3/2025 8:05:13 AM	Peak Integrated by Software incorrectly
VSTDICCC002	VL042173.D	Ethanol	SAM	3/31/2025 11:25:00 AM	MMDado da	4/3/2025 8:05:13 AM	Peak Integrated by Software incorrectly
VSTDICCC002	VL042173.D	m/p-Xylene	SAM	3/31/2025 11:25:00 AM	MMDado da	4/3/2025 8:05:13 AM	Peak Integrated by Software incorrectly
VSTDICCC001	VL042174.D	1,4-Dioxane	SAM	3/31/2025	MMDado da	4/3/2025	Peak Integrated

				11:26:28 AM		8:05:22 AM	ed by Software incorrectly
VSTDIC001	VL042174.D	4-Methyl-2-Pentanone	SAM	3/31/2025 11:26:28 AM	MMDado da	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDIC001	VL042174.D	Ethanol	SAM	3/31/2025 11:26:28 AM	MMDado da	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDIC001	VL042174.D	m/p-Xylene	SAM	3/31/2025 11:26:28 AM	MMDado da	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDIC001	VL042174.D	Methyl Methacrylate	SAM	3/31/2025 11:26:28 AM	MMDado da	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDIC001	VL042174.D	Propene	SAM	3/31/2025 11:26:28 AM	MMDado da	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDIC001	VL042174.D	t-1,3-Dichloropropene	SAM	3/31/2025 11:26:28 AM	MMDado da	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDIC001	VL042174.D	trans-1,2-	SAM	3/31/2025	MMDado da	4/3/2025	Peak

1	.D	Dichloroethene		25 11:26:28 AM	da	5 8:05:22 AM	Integrat ed by Softwar e incorrec tly
VSTDIC00 1	VL042174 .D	Vinyl Acetate	SAM	3/31/20 25 11:26:28 AM	MMDado da	4/3/202 5 8:05:22 AM	Peak Integrat ed by Softwar e incorrec tly
VSTDIC0. 5	VL042175 .D	1,1,2- Trichloroethan e	SAM	3/31/20 25 11:26:33 AM	MMDado da	4/3/202 5 8:05:37 AM	Peak Integrat ed by Softwar e incorrec tly
VSTDIC0. 5	VL042175 .D	1,4-Dioxane	SAM	3/31/20 25 11:26:33 AM	MMDado da	4/3/202 5 8:05:37 AM	Peak Integrat ed by Softwar e incorrec tly
VSTDIC0. 5	VL042175 .D	cis-1,3- Dichloropropen e	SAM	3/31/20 25 11:26:33 AM	MMDado da	4/3/202 5 8:05:37 AM	Peak Integrat ed by Softwar e incorrec tly
VSTDIC0. 5	VL042175 .D	Cyclohexane	SAM	3/31/20 25 11:26:33 AM	MMDado da	4/3/202 5 8:05:37 AM	Peak Integrat ed by Softwar e incorrec tly
VSTDIC0. 5	VL042175 .D	m/p-Xylene	SAM	3/31/20 25 11:26:33 AM	MMDado da	4/3/202 5 8:05:37 AM	Peak Integrat ed by Softwar e incorrec tly

VSTDICCO.5	VL042175.D	Methyl Methacrylate	SAM	3/31/2025 11:26:33 AM	MMDado da	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICCO.5	VL042175.D	Propene	SAM	3/31/2025 11:26:33 AM	MMDado da	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICCO.5	VL042175.D	Tetrahydrofuran	SAM	3/31/2025 11:26:33 AM	MMDado da	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICCO.5	VL042175.D	Trichloroethene	SAM	3/31/2025 11:26:33 AM	MMDado da	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICCO.1	VL042176.D	1,1,1-Trichloroethane	SAM	3/31/2025 11:25:04 AM	MMDado da	4/3/2025 8:05:45 AM	Peak Integrated by Software incorrectly
VSTDICCO.1	VL042176.D	1,1,2,2-Tetrachloroethane	SAM	3/31/2025 11:25:04 AM	MMDado da	4/3/2025 8:05:45 AM	Peak Integrated by Software incorrectly
VSTDICCO.1	VL042176.D	1,2-Dibromoethane	SAM	3/31/2025 11:25:04 AM	MMDado da	4/3/2025 8:05:45 AM	Peak Integrated by Software incorrectly

VSTDICCO.1	VL042176.D	Carbon Tetrachloride	SAM	3/31/2025 11:25:04 AM	MMDado da	4/3/2025 8:05:45 AM	Peak Integrated by Software incorrectly
VSTDICCO.1	VL042176.D	Trichloroethene	SAM	3/31/2025 11:25:04 AM	MMDado da	4/3/2025 8:05:45 AM	Peak Integrated by Software incorrectly
VSTDICCO.03	VL042177.D	1,1,1-Trichloroethane	SAM	3/31/2025 11:26:39 AM	MMDado da	4/3/2025 8:05:59 AM	Peak Integrated by Software incorrectly
VSTDICCO.03	VL042177.D	1,1,2,2-Tetrachloroethane	SAM	3/31/2025 11:26:39 AM	MMDado da	4/3/2025 8:05:59 AM	Peak Integrated by Software incorrectly
VSTDICCO.03	VL042177.D	Carbon Tetrachloride	SAM	3/31/2025 11:26:39 AM	MMDado da	4/3/2025 8:05:59 AM	Peak Integrated by Software incorrectly
VSTDICCO.03	VL042177.D	Tetrachloroethene	SAM	3/31/2025 11:26:39 AM	MMDado da	4/3/2025 8:05:59 AM	Peak Integrated by Software incorrectly
VSTDICCO.03	VL042177.D	Trichloroethene	SAM	3/31/2025 11:26:39 AM	MMDado da	4/3/2025 8:05:59 AM	Peak Integrated by Software incorrectly

VSTDICC03	VL042177.D	Vinyl Chloride	SAM	3/31/2025 11:26:39 AM	MMDado da	4/3/2025 8:05:59 AM	Peak Integrated by Software incorrectly
VSTDICC015	VL042178.D	m/p-Xylene	SAM	3/31/2025 11:25:14 AM	MMDado da	4/3/2025 8:06:09 AM	Peak Integrated by Software incorrectly
VSTDICV010	VL042179.D	m/p-Xylene	SAM	3/31/2025 11:28:50 AM	MMDado da	4/3/2025 8:06:14 AM	Peak Integrated by Software incorrectly

Manual Integration Report

Sequence	vl040825	Instrument	MSVOA_I
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC010	VL042253.D	m/p-Xylene	SAM	4/9/2025 11:25:40 AM	MMDado da	4/9/2025 11:41:57 AM	Peak Integrated by Software incorrectly
VL0408ABS01	VL042255.D	m/p-Xylene	SAM	4/9/2025 11:25:44 AM	MMDado da	4/9/2025 11:41:59 AM	Peak Integrated by Software incorrectly
Q1728-06DL	VL042261.D	Cyclohexane	MMDado da	4/9/2025 3:24:01 PM	SAM	4/10/2025 11:29:58 AM	Peak Integrated by Software

							incorrectly
Q1728-06DL	VL04226 1.D	Heptane	MMDadoda	4/9/2025 3:24:01 PM	SAM	4/10/2025 11:29:58 AM	Peak Integrated by Software incorrectly
Q1728-06DL	VL04226 1.D	Hexane	MMDadoda	4/9/2025 3:24:01 PM	SAM	4/10/2025 11:29:58 AM	Peak Integrated by Software incorrectly
Q1728-06DL	VL04226 1.D	m/p-Xylene	MMDadoda	4/9/2025 3:24:01 PM	SAM	4/10/2025 11:29:58 AM	Peak Integrated by Software incorrectly
Q1728-08	VL04226 3.D	2,2,4-Trimethylpentane	MMDadoda	4/9/2025 3:24:46 PM	SAM	4/10/2025 11:30:05 AM	Peak Integrated by Software incorrectly
Q1728-08	VL04226 3.D	Heptane	MMDadoda	4/9/2025 3:24:46 PM	SAM	4/10/2025 11:30:05 AM	Peak Integrated by Software incorrectly
Q1728-08	VL04226 3.D	Trichloroethene	MMDadoda	4/9/2025 3:24:46 PM	SAM	4/10/2025 11:30:05 AM	Peak Integrated by Software incorrectly
Q1728-09	VL04226 6.D	Ethanol	MMDadoda	4/9/2025 3:25:09 PM	SAM	4/10/2025 11:30:17 AM	Peak Integrated by Software

							e incorec tly
Q1728-09	VL04226 6.D	m/p-Xylene	MMDad oda	4/9/20 25 3:25:0 9 PM	SAM	4/10/20 25 11:30:1 7 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-09	VL04226 6.D	Toluene	MMDad oda	4/9/20 25 3:25:0 9 PM	SAM	4/10/20 25 11:30:1 7 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728- 01DL	VL04226 7.D	Ethanol	MMDad oda	4/9/20 25 3:25:1 3 PM	SAM	4/10/20 25 11:30:1 9 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728- 01DL	VL04226 7.D	Propene	MMDad oda	4/9/20 25 3:25:1 3 PM	SAM	4/10/20 25 11:30:1 9 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728- 01DL	VL04226 7.D	Toluene	MMDad oda	4/9/20 25 3:25:1 3 PM	SAM	4/10/20 25 11:30:1 9 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-07	VL04227 2.D	2-Butanone	MMDad oda	4/9/20 25 3:27:1 9 PM	SAM	4/10/20 25 11:30:2 8 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-07	VL04227 2.D	Chlorodifluoromet hane	MMDad oda	4/9/20 25 3:27:1	SAM	4/10/20 25 11:30:2	Peak Integrat ed by

				9 PM		8 AM	Software incorrectly
Q1728-07	VL04227 2.D	Ethanol	MMDadoda	4/9/2025 3:27:19 PM	SAM	4/10/2025 11:30:28 AM	Peak Integrated by Software incorrectly
Q1728-07	VL04227 2.D	o-Xylene	MMDadoda	4/9/2025 3:27:19 PM	SAM	4/10/2025 11:30:28 AM	Peak Integrated by Software incorrectly
Q1728-08DL	VL04227 3.D	Ethyl Benzene	MMDadoda	4/9/2025 3:26:27 PM	SAM	4/10/2025 11:30:30 AM	Peak Integrated by Software incorrectly
Q1728-08DL	VL04227 3.D	m/p-Xylene	MMDadoda	4/9/2025 3:26:27 PM	SAM	4/10/2025 11:30:30 AM	Peak Integrated by Software incorrectly
Q1728-11	VL04227 4.D	4-Methyl-2-Pentanone	MMDadoda	4/9/2025 3:26:32 PM	SAM	4/10/2025 11:30:33 AM	Peak Integrated by Software incorrectly
Q1728-11	VL04227 4.D	Carbon Tetrachloride	MMDadoda	4/9/2025 3:26:32 PM	SAM	4/10/2025 11:30:33 AM	Peak Integrated by Software incorrectly
Q1728-11	VL04227 4.D	Chlorodifluoromethane	MMDadoda	4/9/2025	SAM	4/10/2025	Peak Integrated

				3:26:32 PM		11:30:33 AM	ed by Software incorrectly
Q1728-11	VL04227 4.D	Styrene	MMDadoda	4/9/2025 3:26:32 PM	SAM	4/10/2025 11:30:33 AM	Peak Integrated by Software incorrectly
Q1728-11	VL04227 4.D	Tetrachloroethene	MMDadoda	4/9/2025 3:26:32 PM	SAM	4/10/2025 11:30:33 AM	Peak Integrated by Software incorrectly
Q1728-11	VL04227 4.D	Trichloroethene	MMDadoda	4/9/2025 3:26:32 PM	SAM	4/10/2025 11:30:33 AM	Peak Integrated by Software incorrectly
Q1728-11	VL04227 4.D	Trichlorofluoromethane	MMDadoda	4/9/2025 3:26:32 PM	SAM	4/10/2025 11:30:33 AM	Peak Integrated by Software incorrectly
Q1728-12	VL04227 5.D	Benzene	MMDadoda	4/9/2025 3:26:36 PM	SAM	4/10/2025 11:30:34 AM	Peak Integrated by Software incorrectly
Q1728-12	VL04227 5.D	Carbon Tetrachloride	MMDadoda	4/9/2025 3:26:36 PM	SAM	4/10/2025 11:30:34 AM	Peak Integrated by Software incorrectly
Q1728-12	VL04227	Chlorodifluoromet	MMDad	4/9/20	SAM	4/10/20	Peak

	5.D	hane	oda	25 3:26:3 6 PM		25 11:30:3 4 AM	Integrat ed by Softwar e incorrec tly
Q1728-12	VL04227 5.D	m/p-Xylene	MMDad oda	4/9/20 25 3:26:3 6 PM	SAM	4/10/20 25 11:30:3 4 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-12	VL04227 5.D	Tetrachloroethen e	MMDad oda	4/9/20 25 3:26:3 6 PM	SAM	4/10/20 25 11:30:3 4 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-12	VL04227 5.D	Toluene	MMDad oda	4/9/20 25 3:26:3 6 PM	SAM	4/10/20 25 11:30:3 4 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-12	VL04227 5.D	Trichloroethene	MMDad oda	4/9/20 25 3:26:3 6 PM	SAM	4/10/20 25 11:30:3 4 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728- 09DUP	VL04227 6.D	Ethanol	MMDad oda	4/9/20 25 3:48:2 3 PM	SAM	4/10/20 25 11:30:3 7 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728- 09DUP	VL04227 6.D	n-propylbenzene	MMDad oda	4/9/20 25 3:48:2 3 PM	SAM	4/10/20 25 11:30:3 7 AM	Peak Integrat ed by Softwar e incorrec tly

Q1728-09DUP	VL04227 6.D	Tetrachloroethene	MMDadoda	4/9/20 25 3:48:23 PM	SAM	4/10/20 25 11:30:37 AM	Peak Integrated by Software incorrectly
Q1728-01	VL04227 7.D	Carbon Tetrachloride	MMDadoda	4/9/20 25 3:26:45 PM	SAM	4/10/20 25 11:30:39 AM	Peak Integrated by Software incorrectly
Q1728-01	VL04227 7.D	Chlorodifluoromethane	MMDadoda	4/9/20 25 3:26:45 PM	SAM	4/10/20 25 11:30:39 AM	Peak Integrated by Software incorrectly
Q1728-01	VL04227 7.D	Heptane	MMDadoda	4/9/20 25 3:26:45 PM	SAM	4/10/20 25 11:30:39 AM	Peak Integrated by Software incorrectly
Q1728-01	VL04227 7.D	Propene	MMDadoda	4/9/20 25 3:26:45 PM	SAM	4/10/20 25 11:30:39 AM	Peak Integrated by Software incorrectly
Q1728-01	VL04227 7.D	Tetrachloroethene	MMDadoda	4/9/20 25 3:26:45 PM	SAM	4/10/20 25 11:30:39 AM	Peak Integrated by Software incorrectly
Q1728-02	VL04227 8.D	Carbon Tetrachloride	MMDadoda	4/9/20 25 3:26:50 PM	SAM	4/10/20 25 11:30:41 AM	Peak Integrated by Software incorrectly

Q1728-02	VL04227 8.D	Chlorodifluoromet hane	MMDad oda	4/9/20 25 3:26:5 0 PM	SAM	4/10/20 25 11:30:4 1 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-02	VL04227 8.D	m/p-Xylene	MMDad oda	4/9/20 25 3:26:5 0 PM	SAM	4/10/20 25 11:30:4 1 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-02	VL04227 8.D	Trichloroethene	MMDad oda	4/9/20 25 3:26:5 0 PM	SAM	4/10/20 25 11:30:4 1 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-04	VL04227 9.D	4-Methyl-2- Pentanone	MMDad oda	4/9/20 25 3:26:5 4 PM	SAM	4/10/20 25 11:31:1 6 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-04	VL04227 9.D	Tetrachloroethen e	MMDad oda	4/9/20 25 3:26:5 4 PM	SAM	4/10/20 25 11:31:1 6 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728- 04DL	VL04228 0.D	Benzene	MMDad oda	4/9/20 25 3:26:5 8 PM	SAM	4/10/20 25 11:31:1 7 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728- 04DL	VL04228 0.D	Toluene	MMDad oda	4/9/20 25 3:26:5 8 PM	SAM	4/10/20 25 11:31:1 7 AM	Peak Integrat ed by Softwar e incorrec tly

Q1728-05	VL04228 1.D	4-Methyl-2-Pentanone	MMDad oda	4/9/20 25 3:27:0 2 PM	SAM	4/10/20 25 11:31:4 1 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-05	VL04228 1.D	Trichloroethene	MMDad oda	4/9/20 25 3:27:0 2 PM	SAM	4/10/20 25 11:31:4 1 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-10	VL04228 3.D	Carbon Tetrachloride	MMDad oda	4/9/20 25 3:27:0 6 PM	SAM	4/10/20 25 11:31:4 7 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-10	VL04228 3.D	Chlorodifluoromet hane	MMDad oda	4/9/20 25 3:27:0 6 PM	SAM	4/10/20 25 11:31:4 7 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-10	VL04228 3.D	Propene	MMDad oda	4/9/20 25 3:27:0 6 PM	SAM	4/10/20 25 11:31:4 7 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-10	VL04228 3.D	Styrene	MMDad oda	4/9/20 25 3:27:0 6 PM	SAM	4/10/20 25 11:31:4 7 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-10	VL04228 3.D	Trichloroethene	MMDad oda	4/9/20 25 3:27:0 6 PM	SAM	4/10/20 25 11:31:4 7 AM	Peak Integrat ed by Softwar e incorrec tly

Q1728-10	VL04228 3.D	Trichlorofluorome thane	MMDad oda	4/9/20 25 3:27:0 6 PM	SAM	4/10/20 25 11:31:4 7 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-03	VL04228 4.D	Cyclohexane	MMDad oda	4/9/20 25 3:27:1 0 PM	SAM	4/10/20 25 11:31:4 9 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-03	VL04228 4.D	Ethanol	MMDad oda	4/9/20 25 3:27:1 0 PM	SAM	4/10/20 25 11:31:4 9 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-03	VL04228 4.D	Heptane	MMDad oda	4/9/20 25 3:27:1 0 PM	SAM	4/10/20 25 11:31:4 9 AM	Peak Integrat ed by Softwar e incorrec tly
Q1728-03	VL04228 4.D	m/p-Xylene	MMDad oda	4/9/20 25 3:27:1 0 PM	SAM	4/10/20 25 11:31:4 9 AM	Peak Integrat ed by Softwar e incorrec tly

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_____