



March 14, 2023

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R5_EastPalestine@epa.gov

Josh Peters
On-Scene Coordinator
U.S. Environmental Protection Agency, Region 5
Superfund and Emergency Management Division
2565 Plymouth Road
Ann Arbor, MI 48105

**Subject: Data Validation Reports
E Palestine Site - ER
EPA Contract No.: 68HE0519D0005
Task Order/Task Order Line Item No.: 68HE0520F0032/0001EB201
Document Tracking No. 1685**

Dear Mr. Peters:

Tetra Tech, Inc. (Tetra Tech) is submitting these data validation reports for thirteen air samples, including one field duplicate sample, collected at the E Palestine Site. The samples were collected on February 26 – March 1, 2023 and were analyzed for volatile organic compounds by ALS Environmental. The final laboratory data package was received on March 3, 2023.

Analytical data were evaluated in general accordance with the Tetra Tech *Quality Assurance Project Plan, Superfund Technical Assessment and Response Team (START V), EPA Region 5, Revision 4* (August 2022), and the *National Functional Guidelines (NFG) for Organic Superfund Methods Data Review* (November 2020).

No rejection of results was required for these data packages. The results may be used as qualified based on the findings of this validation effort.

If you have any questions regarding this data validation report, please call me at (509) 688-5957.

Sincerely,

A handwritten signature in blue ink that appears to read "Debbie Kutsal".

Deb Kutsal
Senior Chemist

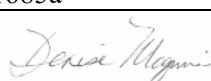
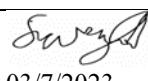
Enclosure

cc: Karl Schultz, Tetra Tech Program Manager
Dustin Grams, Tetra Tech Project Manager
Mayra Arroyo Ortiz, Tetra Tech Project Document Control Coordinator
TO-TOLIN File

ATTACHMENT

**DATA VALIDATION REPORTS
ALS ENVIRONMENTAL REPORT NOS. P2300872, P2300873,
P2300903, AND P2300940**

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

Site Name	E Palestine Site - ER		TO/TOLIN No.	68HE0520F0032/0001EB201
Document Tracking No.	1685a			
Data Reviewer (signature and date)	  March 5, 2023		Technical Reviewer (signature and date)	 3/8/2023
Laboratory Report No.	P2300872		Laboratory	ALS Environmental, Simi Valley, CA
Analyses	Volatile organic compounds (VOCs) by EPA Method TO-15 in scan and selected ion monitoring (SIM) modes			
Samples and Matrix	Three air samples, including one field duplicate pair			
Collection Date(s)	02/27/2023			
Field Duplicate Pairs	EPD-WA-01-022723/ EPD-WA-02-022723			
Field QC Blanks	NA			

INTRODUCTION

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (January 2009). Analytical data were evaluated in general accordance with the Tetra Tech *Quality Assurance Project Plan, Superfund Technical Assessment and Response Team (START V), EPA Region 5, Revision 4* (August 2022), and the EPA *National Functional Guidelines (NFG) for Organic Superfund Methods Data Review* (November 2020).

OVERALL EVALUATION

No rejection of results was required for this data package. The results may be used as qualified based on the findings of this validation effort.

Data completeness:

Within Criteria	Exceedance/Notes
N	TO-15 SIM results are reported in units of $\mu\text{g}/\text{m}^3$ and ppbV in the analytical data package, however, these results are only reported in units of $\mu\text{g}/\text{m}^3$ in the EDD. No qualifications are required.

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
Y	

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

Method blanks:

Within Criteria	Exceedance/Notes
N	TO-15 SIM (P230228-MB): Dichlorodifluoromethane, trichlorofluoromethane, and methylene chloride were detected in the method blank at levels between the method detection limit and reporting limit. No qualifications were required because all associated results were greater than ten times the blank values.

Field blanks:

Within Criteria	Exceedance/Notes
NA	

Surrogates and labeled compounds:

Within Criteria	Exceedance/Notes
Y	

MS/MSDs:

Within Criteria	Exceedance/Notes
NA	

Laboratory duplicates:

Within Criteria	Exceedance/Notes
NA	

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

Field duplicates:

Within Criteria	Exceedance/Notes
N	EPD-WA-01-022723 and EPD-WA-02-022723: The relative percent difference for the naphthalene results exceeds the 50% acceptance criteria. The naphthalene result for both samples was qualified as estimated (flagged J).

LCSs/LCSDs:

Within Criteria	Exceedance/Notes
N	TO-15 SIM (P230228-DLCS): Low LCSD recoveries of 1,4-dioxane and trans-1,3-dichloropropene. Trans-1,3-dichloropropene was qualified as estimated with possible low bias (flagged UJ) in all three samples. No qualifications were required for 1,4-dioxane results because the average of the LCS and LCSD recoveries was within acceptance criteria.

Sample dilutions:

Within Criteria	Exceedance/Notes
Y	Canister dilution factor for EPD-WA-01-022723 is 1.34. Canister dilution factor for EPD-WA-02-022723 is 1.33. Canister dilution factor for EPD-A-01-022723 is 1.38.

Re-extraction and reanalysis:

Within Criteria	Exceedance/Notes
NA	

MDLs/RLs:

Within Criteria	Exceedance/Notes
Y	Detections between the method detection limit (MDL) and reporting limit (RL) were reported and were qualified as estimated (flagged J) by the laboratory.

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

Tentatively identified compounds:

Within Criteria	Exceedance/Notes
Y	Several tentatively identified compounds (TICs) were detected in all three samples. The known TICs were qualified as tentatively identified (flagged NJ). 2-Butoxyethanol and 2-ethylhexyl acrylate in all three samples and butyl ester-2-propenoic acid in EPD-A-01-022723 were reported as not detected and qualified as manually searched for, but not found in the sample (flagged U, NF).

Other [None]:

Within Criteria	Exceedance/Notes
NA	

Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NF	The tentatively identified compound was manually searched for but was not found in the sample.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
ALS ENVIRONMENTAL REPORT NO. P2300872

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	Val_Result	Val_Qual
EPD-A-01-022723	TO-15	2-Butoxyethanol		0 U,NF			UG/M3	0 U,NF	
EPD-A-01-022723	TO-15	2-Ethylhexyl Acrylate		0 U,NF			UG/M3	0 U,NF	
EPD-A-01-022723	TO-15	2-Methylbutane		7.0 T			UG/M3	7.0 NJ	
EPD-A-01-022723	TO-15	BUTYL ESTER-2-PROPENOIC ACID		0 U,NF			UG/M3	0 U,NF	
EPD-A-01-022723	TO-15	Ethyl Acetate		5.2 T			UG/M3	5.2 NJ	
EPD-A-01-022723	TO-15	n-Butane		3.4 T			UG/M3	3.4 NJ	
EPD-A-01-022723	TO-15	n-Pentane		2.9 T			UG/M3	2.9 NJ	
EPD-A-01-022723	TO-15	Propane		6.0 T			UG/M3	6.0 NJ	
EPD-A-01-022723	TO-15 SIM	1,1,1-Trichloroethane	0.035 U		0.012	0.035	UG/M3	0.035 U	
EPD-A-01-022723	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.035 U		0.012	0.035	UG/M3	0.035 U	
EPD-A-01-022723	TO-15 SIM	1,1,2-Trichloroethane	0.14 U		0.0081	0.14	UG/M3	0.14 U	
EPD-A-01-022723	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.44		0.011	0.035	UG/M3	0.44	
EPD-A-01-022723	TO-15 SIM	1,1-Dichloroethane	0.035 U		0.011	0.035	UG/M3	0.035 U	
EPD-A-01-022723	TO-15 SIM	1,1-Dichloroethene	0.035 U		0.012	0.035	UG/M3	0.035 U	
EPD-A-01-022723	TO-15 SIM	1,2,4-Trichlorobenzene	0.069 U		0.028	0.069	UG/M3	0.069 U	
EPD-A-01-022723	TO-15 SIM	1,2,4-Trimethylbenzene	0.29		0.022	0.14	UG/M3	0.29	
EPD-A-01-022723	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.14 U		0.019	0.14	UG/M3	0.14 U	
EPD-A-01-022723	TO-15 SIM	1,2-Dibromoethane	0.035 U		0.0092	0.035	UG/M3	0.035 U	
EPD-A-01-022723	TO-15 SIM	1,2-Dichlorobenzene	0.035 U		0.025	0.035	UG/M3	0.035 U	
EPD-A-01-022723	TO-15 SIM	1,2-Dichloroethane	0.054		0.011	0.035	UG/M3	0.054	
EPD-A-01-022723	TO-15 SIM	1,2-Dichloropropane	0.013 J		0.0084	0.035	UG/M3	0.013 J	
EPD-A-01-022723	TO-15 SIM	1,3,5-Trimethylbenzene	0.080 J		0.019	0.14	UG/M3	0.080 J	
EPD-A-01-022723	TO-15 SIM	1,3-Butadiene	0.17		0.011	0.069	UG/M3	0.17	
EPD-A-01-022723	TO-15 SIM	1,3-Dichlorobenzene	0.035 U		0.023	0.035	UG/M3	0.035 U	
EPD-A-01-022723	TO-15 SIM	1,4-Dichlorobenzene	0.034 J		0.028	0.035	UG/M3	0.034 J	
EPD-A-01-022723	TO-15 SIM	1,4-Dioxane	0.14 U		0.012	0.14	UG/M3	0.14 U	
EPD-A-01-022723	TO-15 SIM	Acetone	4.0		0.32	3.5	UG/M3	4.0	
EPD-A-01-022723	TO-15 SIM	Acrolein	0.26 J		0.048	0.28	UG/M3	0.26 J	
EPD-A-01-022723	TO-15 SIM	Benzene	1.4		0.021	0.1	UG/M3	1.4	
EPD-A-01-022723	TO-15 SIM	Bromodichloromethane	0.035 U		0.008	0.035	UG/M3	0.035 U	
EPD-A-01-022723	TO-15 SIM	Bromomethane	0.021 J		0.0092	0.035	UG/M3	0.021 J	
EPD-A-01-022723	TO-15 SIM	Carbon Tetrachloride	0.40		0.0098	0.035	UG/M3	0.40	
EPD-A-01-022723	TO-15 SIM	Chlorobenzene	0.14 U		0.013	0.14	UG/M3	0.14 U	

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
ALS ENVIRONMENTAL REPORT NO. P2300872

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	Val_Result	Val_Qual
EPD-A-01-022723	TO-15 SIM	Chloroethane	0.035 U		0.011	0.035	UG/M3	0.035	U
EPD-A-01-022723	TO-15 SIM	Chloroform	0.069 J		0.011	0.14	UG/M3	0.069	J
EPD-A-01-022723	TO-15 SIM	Chloromethane	0.21		0.036	0.069	UG/M3	0.21	
EPD-A-01-022723	TO-15 SIM	cis-1,2-Dichloroethene	0.035 U		0.0099	0.035	UG/M3	0.035	U
EPD-A-01-022723	TO-15 SIM	cis-1,3-Dichloropropene	0.069 U		0.0098	0.069	UG/M3	0.069	U
EPD-A-01-022723	TO-15 SIM	Dibromochloromethane	0.035 U		0.0088	0.035	UG/M3	0.035	U
EPD-A-01-022723	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	2.2 B		0.012	0.069	UG/M3	2.2	
EPD-A-01-022723	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.27 B		0.011	0.14	UG/M3	0.27	
EPD-A-01-022723	TO-15 SIM	Ethylbenzene	0.24		0.017	0.14	UG/M3	0.24	
EPD-A-01-022723	TO-15 SIM	Hexachlorobutadiene	0.14 U		0.018	0.14	UG/M3	0.14	U
EPD-A-01-022723	TO-15 SIM	m,p-Xylenes	1.0		0.033	0.14	UG/M3	1.0	
EPD-A-01-022723	TO-15 SIM	Methyl tert-Butyl Ether	0.035 U		0.017	0.035	UG/M3	0.035	U
EPD-A-01-022723	TO-15 SIM	Naphthalene	0.094 J		0.03	0.14	UG/M3	0.094	J
EPD-A-01-022723	TO-15 SIM	o-Xylene	0.34		0.018	0.14	UG/M3	0.34	
EPD-A-01-022723	TO-15 SIM	Styrene	0.097 J		0.017	0.14	UG/M3	0.097	J
EPD-A-01-022723	TO-15 SIM	Tetrachloroethene	0.20		0.012	0.035	UG/M3	0.20	
EPD-A-01-022723	TO-15 SIM	Toluene	2.0		0.017	0.14	UG/M3	2.0	
EPD-A-01-022723	TO-15 SIM	trans-1,2-Dichloroethene	0.035 U		0.015	0.035	UG/M3	0.035	U
EPD-A-01-022723	TO-15 SIM	trans-1,3-Dichloropropene	0.069 U		0.0066	0.069	UG/M3	0.069	UJ
EPD-A-01-022723	TO-15 SIM	Trichloroethene	0.035 U		0.011	0.035	UG/M3	0.035	U
EPD-A-01-022723	TO-15 SIM	Trichlorofluoromethane	1.1 B		0.011	0.069	UG/M3	1.1	
EPD-A-01-022723	TO-15 SIM	Vinyl Chloride	0.088		0.017	0.035	UG/M3	0.088	
EPD-WA-01-022723	TO-15	2-Butoxyethanol	0 U,NF				UG/M3	0 U,NF	
EPD-WA-01-022723	TO-15	2-Ethylhexyl Acrylate	0 U,NF				UG/M3	0 U,NF	
EPD-WA-01-022723	TO-15	2-Methylbutane	11 T				UG/M3	11 NJ	
EPD-WA-01-022723	TO-15	2-Methylpropane	6.2 T				UG/M3	6.2 NJ	
EPD-WA-01-022723	TO-15	BUTYL ESTER-2-PROPENOIC ACID	2.5 T				UG/M3	2.5 NJ	
EPD-WA-01-022723	TO-15	n-Butane	13 T				UG/M3	13 NJ	
EPD-WA-01-022723	TO-15	n-Pentane	3.3 T				UG/M3	3.3 NJ	
EPD-WA-01-022723	TO-15	Propane	4.4 T				UG/M3	4.4 NJ	
EPD-WA-01-022723	TO-15 SIM	1,1,1-Trichloroethane	0.034 U		0.012	0.034	UG/M3	0.034	U
EPD-WA-01-022723	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.034 U		0.012	0.034	UG/M3	0.034	U
EPD-WA-01-022723	TO-15 SIM	1,1,2-Trichloroethane	0.13 U		0.0079	0.13	UG/M3	0.13	U

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY

ALS ENVIRONMENTAL REPORT NO. P2300872

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	Val_Result	Val_Qual
EPD-WA-01-022723	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.45		0.011	0.034	UG/M3	0.45	
EPD-WA-01-022723	TO-15 SIM	1,1-Dichloroethane	0.034	U	0.011	0.034	UG/M3	0.034	U
EPD-WA-01-022723	TO-15 SIM	1,1-Dichloroethene	0.034	U	0.012	0.034	UG/M3	0.034	U
EPD-WA-01-022723	TO-15 SIM	1,2,4-Trichlorobenzene	0.067	U	0.027	0.067	UG/M3	0.067	U
EPD-WA-01-022723	TO-15 SIM	1,2,4-Trimethylbenzene	0.38		0.021	0.13	UG/M3	0.38	
EPD-WA-01-022723	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.13	U	0.019	0.13	UG/M3	0.13	U
EPD-WA-01-022723	TO-15 SIM	1,2-Dibromoethane	0.034	U	0.009	0.034	UG/M3	0.034	U
EPD-WA-01-022723	TO-15 SIM	1,2-Dichlorobenzene	0.034	U	0.024	0.034	UG/M3	0.034	U
EPD-WA-01-022723	TO-15 SIM	1,2-Dichloroethane	0.055		0.011	0.034	UG/M3	0.055	
EPD-WA-01-022723	TO-15 SIM	1,2-Dichloropropane	0.014	J	0.0082	0.034	UG/M3	0.014	J
EPD-WA-01-022723	TO-15 SIM	1,3,5-Trimethylbenzene	0.11	J	0.019	0.13	UG/M3	0.11	J
EPD-WA-01-022723	TO-15 SIM	1,3-Butadiene	0.18		0.011	0.067	UG/M3	0.18	
EPD-WA-01-022723	TO-15 SIM	1,3-Dichlorobenzene	0.034	U	0.023	0.034	UG/M3	0.034	U
EPD-WA-01-022723	TO-15 SIM	1,4-Dichlorobenzene	0.19		0.027	0.034	UG/M3	0.19	
EPD-WA-01-022723	TO-15 SIM	1,4-Dioxane	0.13	U	0.012	0.13	UG/M3	0.13	U
EPD-WA-01-022723	TO-15 SIM	Acetone	3.8		0.31	3.4	UG/M3	3.8	
EPD-WA-01-022723	TO-15 SIM	Acrolein	0.23	J	0.047	0.27	UG/M3	0.23	J
EPD-WA-01-022723	TO-15 SIM	Benzene	1.4		0.02	0.1	UG/M3	1.4	
EPD-WA-01-022723	TO-15 SIM	Bromodichloromethane	0.034	U	0.0078	0.034	UG/M3	0.034	U
EPD-WA-01-022723	TO-15 SIM	Bromomethane	0.021	J	0.009	0.034	UG/M3	0.021	J
EPD-WA-01-022723	TO-15 SIM	Carbon Tetrachloride	0.40		0.0095	0.034	UG/M3	0.40	
EPD-WA-01-022723	TO-15 SIM	Chlorobenzene	0.13	U	0.013	0.13	UG/M3	0.13	U
EPD-WA-01-022723	TO-15 SIM	Chloroethane	0.015	J	0.01	0.034	UG/M3	0.015	J
EPD-WA-01-022723	TO-15 SIM	Chloroform	0.064	J	0.011	0.13	UG/M3	0.064	J
EPD-WA-01-022723	TO-15 SIM	Chloromethane	0.23		0.035	0.067	UG/M3	0.23	
EPD-WA-01-022723	TO-15 SIM	cis-1,2-Dichloroethene	0.034	U	0.0096	0.034	UG/M3	0.034	U
EPD-WA-01-022723	TO-15 SIM	cis-1,3-Dichloropropene	0.067	U	0.0095	0.067	UG/M3	0.067	U
EPD-WA-01-022723	TO-15 SIM	Dibromochloromethane	0.034	U	0.0086	0.034	UG/M3	0.034	U
EPD-WA-01-022723	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	2.2	B	0.011	0.067	UG/M3	2.2	
EPD-WA-01-022723	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.27	B	0.01	0.13	UG/M3	0.27	
EPD-WA-01-022723	TO-15 SIM	Ethylbenzene	0.28		0.016	0.13	UG/M3	0.28	
EPD-WA-01-022723	TO-15 SIM	Hexachlorobutadiene	0.13	U	0.017	0.13	UG/M3	0.13	U
EPD-WA-01-022723	TO-15 SIM	m,p-Xylenes	1.3		0.032	0.13	UG/M3	1.3	

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY

ALS ENVIRONMENTAL REPORT NO. P2300872

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	Val_Result	Val_Qual
EPD-WA-01-022723	TO-15 SIM	Methyl tert-Butyl Ether	0.034 U	0.016	0.034	UG/M3	0.034	U	
EPD-WA-01-022723	TO-15 SIM	Naphthalene	0.092 J	0.029	0.13	UG/M3	0.092	J	
EPD-WA-01-022723	TO-15 SIM	o-Xylene	0.45	0.017	0.13	UG/M3	0.45		
EPD-WA-01-022723	TO-15 SIM	Styrene	0.10 J	0.016	0.13	UG/M3	0.10	J	
EPD-WA-01-022723	TO-15 SIM	Tetrachloroethene	0.17	0.012	0.034	UG/M3	0.17		
EPD-WA-01-022723	TO-15 SIM	Toluene	2.1	0.016	0.13	UG/M3	2.1		
EPD-WA-01-022723	TO-15 SIM	trans-1,2-Dichloroethene	0.034 U	0.015	0.034	UG/M3	0.034	U	
EPD-WA-01-022723	TO-15 SIM	trans-1,3-Dichloropropene	0.067 U	0.0064	0.067	UG/M3	0.067	UJ	
EPD-WA-01-022723	TO-15 SIM	Trichloroethene	0.034 U	0.01	0.034	UG/M3	0.034	U	
EPD-WA-01-022723	TO-15 SIM	Trichlorofluoromethane	1.1 B	0.011	0.067	UG/M3	1.1		
EPD-WA-01-022723	TO-15 SIM	Vinyl Chloride	1.2	0.016	0.034	UG/M3	1.2		
EPD-WA-02-022723	TO-15	2-Butoxyethanol	0 U,NF			UG/M3	0 U,NF		
EPD-WA-02-022723	TO-15	2-Ethylhexyl Acrylate	0 U,NF			UG/M3	0 U,NF		
EPD-WA-02-022723	TO-15	2-Methylbutane	11 T			UG/M3	11 NJ		
EPD-WA-02-022723	TO-15	2-Methylpropane	5.9 T			UG/M3	5.9 NJ		
EPD-WA-02-022723	TO-15	BUTYL ESTER-2-PROPENOIC ACID	3.8 T			UG/M3	3.8 NJ		
EPD-WA-02-022723	TO-15	Caprylic Aldehyde	8.5 T			UG/M3	8.5 NJ		
EPD-WA-02-022723	TO-15	Ethyl Acetate	3.6 T			UG/M3	3.6 NJ		
EPD-WA-02-022723	TO-15	n-Butane	14 T			UG/M3	14 NJ		
EPD-WA-02-022723	TO-15	n-Nonaldehyde	13 T			UG/M3	13 NJ		
EPD-WA-02-022723	TO-15	n-Pentane	3.5 T			UG/M3	3.5 NJ		
EPD-WA-02-022723	TO-15	Propane	3.9 T			UG/M3	3.9 NJ		
EPD-WA-02-022723	TO-15 SIM	1,1,1-Trichloroethane	0.033 U	0.012	0.033	UG/M3	0.033	U	
EPD-WA-02-022723	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.033 U	0.012	0.033	UG/M3	0.033	U	
EPD-WA-02-022723	TO-15 SIM	1,1,2-Trichloroethane	0.13 U	0.0078	0.13	UG/M3	0.13	U	
EPD-WA-02-022723	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.47	0.011	0.033	UG/M3	0.47		
EPD-WA-02-022723	TO-15 SIM	1,1-Dichloroethane	0.033 U	0.011	0.033	UG/M3	0.033	U	
EPD-WA-02-022723	TO-15 SIM	1,1-Dichloroethene	0.033 U	0.012	0.033	UG/M3	0.033	U	
EPD-WA-02-022723	TO-15 SIM	1,2,4-Trichlorobenzene	0.067 U	0.027	0.067	UG/M3	0.067	U	
EPD-WA-02-022723	TO-15 SIM	1,2,4-Trimethylbenzene	0.48	0.021	0.13	UG/M3	0.48		
EPD-WA-02-022723	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.13 U	0.019	0.13	UG/M3	0.13	U	
EPD-WA-02-022723	TO-15 SIM	1,2-Dibromoethane	0.033 U	0.0089	0.033	UG/M3	0.033	U	
EPD-WA-02-022723	TO-15 SIM	1,2-Dichlorobenzene	0.033 U	0.024	0.033	UG/M3	0.033	U	

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY

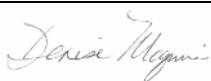
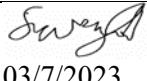
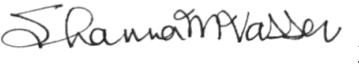
ALS ENVIRONMENTAL REPORT NO. P2300872

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	Val_Result	Val_Qual
EPD-WA-02-022723	TO-15 SIM	1,2-Dichloroethane	0.059		0.011	0.033	UG/M3	0.059	
EPD-WA-02-022723	TO-15 SIM	1,2-Dichloropropane	0.015 J		0.0081	0.033	UG/M3	0.015 J	
EPD-WA-02-022723	TO-15 SIM	1,3,5-Trimethylbenzene	0.13 J		0.019	0.13	UG/M3	0.13 J	
EPD-WA-02-022723	TO-15 SIM	1,3-Butadiene	0.19		0.011	0.067	UG/M3	0.19	
EPD-WA-02-022723	TO-15 SIM	1,3-Dichlorobenzene	0.033 U		0.023	0.033	UG/M3	0.033 U	
EPD-WA-02-022723	TO-15 SIM	1,4-Dichlorobenzene	0.21		0.027	0.033	UG/M3	0.21	
EPD-WA-02-022723	TO-15 SIM	1,4-Dioxane	0.13 U		0.012	0.13	UG/M3	0.13 U	
EPD-WA-02-022723	TO-15 SIM	Acetone	4.2		0.31	3.3	UG/M3	4.2	
EPD-WA-02-022723	TO-15 SIM	Acrolein	0.24 J		0.047	0.27	UG/M3	0.24 J	
EPD-WA-02-022723	TO-15 SIM	Benzene	1.5		0.02	0.1	UG/M3	1.5	
EPD-WA-02-022723	TO-15 SIM	Bromodichloromethane	0.033 U		0.0077	0.033	UG/M3	0.033 U	
EPD-WA-02-022723	TO-15 SIM	Bromomethane	0.027 J		0.0089	0.033	UG/M3	0.027 J	
EPD-WA-02-022723	TO-15 SIM	Carbon Tetrachloride	0.43		0.0094	0.033	UG/M3	0.43	
EPD-WA-02-022723	TO-15 SIM	Chlorobenzene	0.13 U		0.013	0.13	UG/M3	0.13 U	
EPD-WA-02-022723	TO-15 SIM	Chloroethane	0.019 J		0.01	0.033	UG/M3	0.019 J	
EPD-WA-02-022723	TO-15 SIM	Chloroform	0.068 J		0.011	0.13	UG/M3	0.068 J	
EPD-WA-02-022723	TO-15 SIM	Chloromethane	0.23		0.035	0.067	UG/M3	0.23	
EPD-WA-02-022723	TO-15 SIM	cis-1,2-Dichloroethene	0.033 U		0.0096	0.033	UG/M3	0.033 U	
EPD-WA-02-022723	TO-15 SIM	cis-1,3-Dichloropropene	0.067 U		0.0094	0.067	UG/M3	0.067 U	
EPD-WA-02-022723	TO-15 SIM	Dibromochloromethane	0.033 U		0.0085	0.033	UG/M3	0.033 U	
EPD-WA-02-022723	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	2.4 B		0.011	0.067	UG/M3	2.4	
EPD-WA-02-022723	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.29 B		0.01	0.13	UG/M3	0.29	
EPD-WA-02-022723	TO-15 SIM	Ethylbenzene	0.37		0.016	0.13	UG/M3	0.37	
EPD-WA-02-022723	TO-15 SIM	Hexachlorobutadiene	0.13 U		0.017	0.13	UG/M3	0.13 U	
EPD-WA-02-022723	TO-15 SIM	m,p-Xylenes	1.9		0.032	0.13	UG/M3	1.9	
EPD-WA-02-022723	TO-15 SIM	Methyl tert-Butyl Ether	0.033 U		0.016	0.033	UG/M3	0.033 U	
EPD-WA-02-022723	TO-15 SIM	Naphthalene	0.22		0.029	0.13	UG/M3	0.22 J	
EPD-WA-02-022723	TO-15 SIM	o-Xylene	0.67		0.017	0.13	UG/M3	0.67	
EPD-WA-02-022723	TO-15 SIM	Styrene	0.14		0.016	0.13	UG/M3	0.14	
EPD-WA-02-022723	TO-15 SIM	Tetrachloroethene	0.15		0.011	0.033	UG/M3	0.15	
EPD-WA-02-022723	TO-15 SIM	Toluene	2.0		0.016	0.13	UG/M3	2.0	
EPD-WA-02-022723	TO-15 SIM	trans-1,2-Dichloroethene	0.033 U		0.015	0.033	UG/M3	0.033 U	
EPD-WA-02-022723	TO-15 SIM	trans-1,3-Dichloropropene	0.067 U		0.0064	0.067	UG/M3	0.067 UJ	

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Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	Val_Result	Val_Qual
EPD-WA-02-022723	TO-15 SIM	Trichloroethene	0.033	U	0.01	0.033	UG/M3	0.033	U
EPD-WA-02-022723	TO-15 SIM	Trichlorofluoromethane	1.2	B	0.011	0.067	UG/M3	1.2	
EPD-WA-02-022723	TO-15 SIM	Vinyl Chloride	1.4		0.016	0.033	UG/M3	1.4	

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

Site Name	E Palestine Site - ER		TO/TOLIN No.	68HE0520F0032/0001EB201
Document Tracking No.	1685b			
Data Reviewer (signature and date)	  March 5, 2023		Technical Reviewer (signature and date)	 3/12/2023
Laboratory Report No.	P2300873		Laboratory	ALS Environmental, Simi Valley, CA
Analyses	Volatile organic compounds (VOCs) by EPA Method TO-15 in scan and selected ion monitoring (SIM) modes			
Samples and Matrix	Two air samples			
Collection Date(s)	02/26/2023			
Field Duplicate Pairs	NA			
Field QC Blanks	NA			

INTRODUCTION

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (January 2009). Analytical data were evaluated in general accordance with the Tetra Tech *Quality Assurance Project Plan, Superfund Technical Assessment and Response Team (START V), EPA Region 5, Revision 4* (August 2022), and the EPA *National Functional Guidelines (NFG) for Organic Superfund Methods Data Review* (November 2020).

OVERALL EVALUATION

No rejection of results was required for this data package. The results may be used as qualified based on the findings of this validation effort..

Data completeness:

Within Criteria	Exceedance/Notes
N	TO-15 SIM results are reported in units of $\mu\text{g}/\text{m}^3$ and ppbV in the analytical data package, however, these results are only reported in units of $\mu\text{g}/\text{m}^3$ in the EDD. No qualifications are required.

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
N	The ending field-measured canister pressure listed on the chain-of-custody (COC) form for EPD-WA-01-022623 is (-5" Hg), while the canister pressure measured by the laboratory upon receipt is -0.98 psig (-1.96" Hg) for EPD-WA-01-022623. This pressure discrepancy suggests that either one or more of the pressure gauges used were inaccurate or there is the possibility of a canister leak. Typically, the field gauges tend to be less accurate than lab gauges. If it is assumed that the field gauge was less accurate than the laboratory gauge, then the pressure data collected by the laboratory upon canister receipt suggests that the canister may have filled more quickly than intended and may have filled up before the end of the intended sampling period. Because it cannot be known when during the sampling period the canister filled completely, the sample may not be representative of the matrix conditions over the entire sampling period, and the analytical results for the sample should be used with this in mind. If both gauges were measuring pressure accurately, the data suggests the possibility that the canister had a leak that allowed it to fill up to atmospheric pressure between the end of the sampling event and the time the canister arrived at the lab. Such a leak could have contaminated, or in the least, diluted the sample with air unintended for sampling. Under either of these circumstances, these sample results should be used with caution because the results may not be representative of sampling conditions over the intended sampling period.

Method blanks:

Within Criteria	Exceedance/Notes
N	TO-15 SIM (P230228-MB): Dichlorodifluoromethane, trichlorofluoromethane, and methylene chloride were detected in the method blank at levels between the method detection limit and reporting limit. No qualifications were required because all associated results were greater than ten times the blank values.

Field blanks:

Within Criteria	Exceedance/Notes
NA	

Surrogates and labeled compounds:

Within Criteria	Exceedance/Notes
Y	

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

MS/MSDs:

Within Criteria	Exceedance/Notes
NA	

Laboratory duplicates:

Within Criteria	Exceedance/Notes
NA	

Field duplicates:

Within Criteria	Exceedance/Notes
NA	

LCSs/LCSDs:

Within Criteria	Exceedance/Notes
N	TO-15 SIM (P230228-DLCS): Low LCSD recoveries of 1,4-dioxane and trans-1,3-dichloropropene. Trans-1,3-dichloropropene was qualified as estimated with possible low bias (flagged UJ) in both samples. No qualification was required for 1,4-dioxane results because the average of the LCS and LCSD recoveries was within acceptance criteria.

Sample dilutions:

Within Criteria	Exceedance/Notes
Y	Canister dilution factor for EPD-A-01-022623 is 1.26. Canister dilution factor for EPD-WA-01-022623 is 1.35.

Re-extraction and reanalysis:

Within Criteria	Exceedance/Notes
NA	

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

MDLs/RLs:

Within Criteria	Exceedance/Notes
Y	Detections between the method detection limit (MDL) and reporting limit (RL) were reported and were qualified as estimated (flagged J) by the laboratory.

Tentatively identified compounds:

Within Criteria	Exceedance/Notes
Y	Several tentatively identified compounds (TICs) were detected in both samples. The known TICs were qualified as tentatively identified (flagged NJ). 2-Butoxyethanol, 2-ethylhexyl acrylate, and butyl ester-2-propenoic acid in both samples were reported as not detected and qualified as manually searched for, but not found in the sample (flagged U, NF).

Other [None]:

Within Criteria	Exceedance/Notes
NA	

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NF	The tentatively identified compound was manually searched for but was not found in the sample.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.
NF	The tentatively identified compound was manually searched for but was not found in the sample.

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Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	Val_Result	Val_Qual
EPD-A-01-022623	TO-15	2-Butoxyethanol		0 U,NF			UG/M3	0 U,NF	
EPD-A-01-022623	TO-15	2-Ethylhexyl Acrylate		0 U,NF			UG/M3	0 U,NF	
EPD-A-01-022623	TO-15	2-Methylbutane		8.1 T			UG/M3	8.1 NJ	
EPD-A-01-022623	TO-15	Ethyl Acetate		17 T			UG/M3	17 NJ	
EPD-A-01-022623	TO-15	n-Butane		2.8 T			UG/M3	2.8 NJ	
EPD-A-01-022623	TO-15	n-Butyl Acrylate		0 U,NF			UG/M3	0 U,NF	
EPD-A-01-022623	TO-15	n-Pentane		11 T			UG/M3	11 NJ	
EPD-A-01-022623	TO-15	Propane		4.9 T			UG/M3	4.9 NJ	
EPD-A-01-022623	TO-15	P-Xylene		3.3 T			UG/M3	3.3 NJ	
EPD-A-01-022623	TO-15 SIM	1,1,1-Trichloroethane	0.032 U	0.011	0.032		UG/M3	0.032 U	
EPD-A-01-022623	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.032 U	0.011	0.032		UG/M3	0.032 U	
EPD-A-01-022623	TO-15 SIM	1,1,2-Trichloroethane	0.13 U	0.0074	0.13		UG/M3	0.13 U	
EPD-A-01-022623	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.45	0.01	0.032		UG/M3	0.45	
EPD-A-01-022623	TO-15 SIM	1,1-Dichloroethane	0.032 U	0.01	0.032		UG/M3	0.032 U	
EPD-A-01-022623	TO-15 SIM	1,1-Dichloroethene	0.032 U	0.011	0.032		UG/M3	0.032 U	
EPD-A-01-022623	TO-15 SIM	1,2,4-Trichlorobenzene	0.063 U	0.025	0.063		UG/M3	0.063 U	
EPD-A-01-022623	TO-15 SIM	1,2,4-Trimethylbenzene	0.2	0.02	0.13		UG/M3	0.20	
EPD-A-01-022623	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.13 U	0.018	0.13		UG/M3	0.13 U	
EPD-A-01-022623	TO-15 SIM	1,2-Dibromoethane	0.032 U	0.0084	0.032		UG/M3	0.032 U	
EPD-A-01-022623	TO-15 SIM	1,2-Dichlorobenzene	0.032 U	0.023	0.032		UG/M3	0.032 U	
EPD-A-01-022623	TO-15 SIM	1,2-Dichloroethane	0.055	0.01	0.032		UG/M3	0.055	
EPD-A-01-022623	TO-15 SIM	1,2-Dichloropropane	0.015 J	0.0077	0.032		UG/M3	0.015 J	
EPD-A-01-022623	TO-15 SIM	1,3,5-Trimethylbenzene	0.048 J	0.018	0.13		UG/M3	0.048 J	
EPD-A-01-022623	TO-15 SIM	1,3-Butadiene	0.16	0.01	0.063		UG/M3	0.16	
EPD-A-01-022623	TO-15 SIM	1,3-Dichlorobenzene	0.032 U	0.021	0.032		UG/M3	0.032 U	
EPD-A-01-022623	TO-15 SIM	1,4-Dichlorobenzene	0.140	0.025	0.032		UG/M3	0.14	
EPD-A-01-022623	TO-15 SIM	1,4-Dioxane	0.13 U	0.011	0.13		UG/M3	0.13 U	
EPD-A-01-022623	TO-15 SIM	Acetone	4.8	0.29	3.2		UG/M3	4.8	
EPD-A-01-022623	TO-15 SIM	Acrolein	0.35	0.044	0.25		UG/M3	0.35	
EPD-A-01-022623	TO-15 SIM	Benzene	1.4	0.019	0.095		UG/M3	1.4	
EPD-A-01-022623	TO-15 SIM	Bromodichloromethane	0.032 U	0.0073	0.032		UG/M3	0.032 U	
EPD-A-01-022623	TO-15 SIM	Bromomethane	0.024 J	0.0084	0.032		UG/M3	0.024 J	
EPD-A-01-022623	TO-15 SIM	Carbon Tetrachloride	0.41	0.0089	0.032		UG/M3	0.41	
EPD-A-01-022623	TO-15 SIM	Chlorobenzene	0.13 U	0.012	0.13		UG/M3	0.13 U	
EPD-A-01-022623	TO-15 SIM	Chloroethane	0.011 J	0.0098	0.032		UG/M3	0.011 J	
EPD-A-01-022623	TO-15 SIM	Chloroform	0.086 J	0.01	0.13		UG/M3	0.086 J	
EPD-A-01-022623	TO-15 SIM	Chloromethane	0.30	0.033	0.063		UG/M3	0.30	
EPD-A-01-022623	TO-15 SIM	cis-1,2-Dichloroethene	0.032 U	0.0091	0.032		UG/M3	0.032 U	
EPD-A-01-022623	TO-15 SIM	cis-1,3-Dichloropropene	0.063 U	0.0089	0.063		UG/M3	0.063 U	
EPD-A-01-022623	TO-15 SIM	Dibromochloromethane	0.032 U	0.0081	0.032		UG/M3	0.032 U	
EPD-A-01-022623	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	2.3 B	0.011	0.063		UG/M3	2.3	
EPD-A-01-022623	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.28 B	0.0098	0.13		UG/M3	0.28	
EPD-A-01-022623	TO-15 SIM	Ethylbenzene	0.85	0.015	0.13		UG/M3	0.85	
EPD-A-01-022623	TO-15 SIM	Hexachlorobutadiene	0.13 U	0.016	0.13		UG/M3	0.13 U	
EPD-A-01-022623	TO-15 SIM	m,p-Xylenes	4.9	0.03	0.13		UG/M3	4.9	
EPD-A-01-022623	TO-15 SIM	Methyl tert-Butyl Ether	0.032 U	0.015	0.032		UG/M3	0.032 U	
EPD-A-01-022623	TO-15 SIM	Naphthalene	0.068 J	0.028	0.13		UG/M3	0.068 J	
EPD-A-01-022623	TO-15 SIM	o-Xylene	1.4	0.016	0.13		UG/M3	1.4	
EPD-A-01-022623	TO-15 SIM	Styrene	0.16	0.015	0.13		UG/M3	0.16	
EPD-A-01-022623	TO-15 SIM	Tetrachloroethene	0.097	0.011	0.032		UG/M3	0.097	
EPD-A-01-022623	TO-15 SIM	Toluene	1.7	0.015	0.13		UG/M3	1.7	
EPD-A-01-022623	TO-15 SIM	trans-1,2-Dichloroethene	0.032 U	0.014	0.032		UG/M3	0.032 U	
EPD-A-01-022623	TO-15 SIM	trans-1,3-Dichloropropene	0.063 U	0.006	0.063		UG/M3	0.063 UJ	
EPD-A-01-022623	TO-15 SIM	Trichloroethene	0.013 J	0.0097	0.032		UG/M3	0.013 J	
EPD-A-01-022623	TO-15 SIM	Trichlorofluoromethane	1.1 B	0.01	0.063		UG/M3	1.1	
EPD-A-01-022623	TO-15 SIM	Vinyl Chloride	0.032 U	0.015	0.032		UG/M3	0.032 U	
EPD-WA-01-022623	TO-15	2-Butoxyethanol	0 U,NF				UG/M3	0 U,NF	
EPD-WA-01-022623	TO-15	2-Ethylhexyl Acrylate	0 U,NF				UG/M3	0 U,NF	
EPD-WA-01-022623	TO-15	2-Methylbutane	15 T				UG/M3	15 NJ	
EPD-WA-01-022623	TO-15	2-Methylpropane	5.4 T				UG/M3	5.4 NJ	
EPD-WA-01-022623	TO-15	Ethyl Acetate	15 T				UG/M3	15 NJ	
EPD-WA-01-022623	TO-15	n-Butane	14 T				UG/M3	14 NJ	

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Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	Val_Result	Val_Qual
EPD-WA-01-022623	TO-15	n-Butyl Acrylate		0 U,NF			UG/M3	0 U,NF	
EPD-WA-01-022623	TO-15	n-Pentane		15 T			UG/M3	15 NJ	
EPD-WA-01-022623	TO-15	Propane		5.5 T			UG/M3	5.5 NJ	
EPD-WA-01-022623	TO-15	P-Xylene		3.7 T			UG/M3	3.7 NJ	
EPD-WA-01-022623	TO-15 SIM	1,1,1-Trichloroethane	0.034 U		0.012	0.034	UG/M3	0.034 U	
EPD-WA-01-022623	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.034 U		0.012	0.034	UG/M3	0.034 U	
EPD-WA-01-022623	TO-15 SIM	1,1,2-Trichloroethane		0.14 U	0.008	0.14	UG/M3	0.14 U	
EPD-WA-01-022623	TO-15 SIM	1,1,2-Trichlorotrifluoroethane		0.47	0.011	0.034	UG/M3	0.47	
EPD-WA-01-022623	TO-15 SIM	1,1-Dichloroethane		0.034 U	0.011	0.034	UG/M3	0.034 U	
EPD-WA-01-022623	TO-15 SIM	1,1-Dichloroethene		0.034 U	0.012	0.034	UG/M3	0.034 U	
EPD-WA-01-022623	TO-15 SIM	1,2,4-Trichlorobenzene		0.068 U	0.027	0.068	UG/M3	0.068 U	
EPD-WA-01-022623	TO-15 SIM	1,2,4-Trimethylbenzene		0.38	0.022	0.14	UG/M3	0.38	
EPD-WA-01-022623	TO-15 SIM	1,2-Dibromo 3-Chloropropane		0.14 U	0.019	0.14	UG/M3	0.14 U	
EPD-WA-01-022623	TO-15 SIM	1,2-Dibromoethane		0.034 U	0.009	0.034	UG/M3	0.034 U	
EPD-WA-01-022623	TO-15 SIM	1,2-Dichlorobenzene		0.034 U	0.024	0.034	UG/M3	0.034 U	
EPD-WA-01-022623	TO-15 SIM	1,2-Dichloroethane		0.059	0.011	0.034	UG/M3	0.059	
EPD-WA-01-022623	TO-15 SIM	1,2-Dichloropropane		0.015 J	0.0082	0.034	UG/M3	0.015 J	
EPD-WA-01-022623	TO-15 SIM	1,3,5-Trimethylbenzene		0.10 J	0.019	0.14	UG/M3	0.10 J	
EPD-WA-01-022623	TO-15 SIM	1,3-Butadiene		0.21	0.011	0.068	UG/M3	0.21	
EPD-WA-01-022623	TO-15 SIM	1,3-Dichlorobenzene		0.034 U	0.023	0.034	UG/M3	0.034 U	
EPD-WA-01-022623	TO-15 SIM	1,4-Dichlorobenzene		0.11	0.027	0.034	UG/M3	0.11	
EPD-WA-01-022623	TO-15 SIM	1,4-Dioxane		0.14 U	0.012	0.14	UG/M3	0.14 U	
EPD-WA-01-022623	TO-15 SIM	Acetone		5.4	0.31	3.4	UG/M3	5.4	
EPD-WA-01-022623	TO-15 SIM	Acrolein		0.28	0.047	0.27	UG/M3	0.28	
EPD-WA-01-022623	TO-15 SIM	Benzene		1.9	0.02	0.1	UG/M3	1.9	
EPD-WA-01-022623	TO-15 SIM	Bromodichloromethane		0.034 U	0.0078	0.034	UG/M3	0.034 U	
EPD-WA-01-022623	TO-15 SIM	Bromomethane		0.025 J	0.009	0.034	UG/M3	0.025 J	
EPD-WA-01-022623	TO-15 SIM	Carbon Tetrachloride		0.43	0.0096	0.034	UG/M3	0.43	
EPD-WA-01-022623	TO-15 SIM	Chlorobenzene		0.14 U	0.013	0.14	UG/M3	0.14 U	
EPD-WA-01-022623	TO-15 SIM	Chloroethane		0.015 J	0.011	0.034	UG/M3	0.015 J	
EPD-WA-01-022623	TO-15 SIM	Chloroform		0.089 J	0.011	0.14	UG/M3	0.089 J	
EPD-WA-01-022623	TO-15 SIM	Chloromethane		0.28	0.035	0.068	UG/M3	0.28	
EPD-WA-01-022623	TO-15 SIM	cis-1,2-Dichloroethene		0.034 U	0.0097	0.034	UG/M3	0.034 U	
EPD-WA-01-022623	TO-15 SIM	cis-1,3-Dichloropropene		0.068 U	0.0096	0.068	UG/M3	0.068 U	
EPD-WA-01-022623	TO-15 SIM	Dibromochloromethane		0.034 U	0.0086	0.034	UG/M3	0.034 U	
EPD-WA-01-022623	TO-15 SIM	Dichlorodifluoromethane (CFC 12)		2.4 B	0.011	0.068	UG/M3	2.4	
EPD-WA-01-022623	TO-15 SIM	Dichloromethane (Methylene Chloride)		0.30 B	0.011	0.14	UG/M3	0.30	
EPD-WA-01-022623	TO-15 SIM	Ethylbenzene		1.0	0.016	0.14	UG/M3	1.0	
EPD-WA-01-022623	TO-15 SIM	Hexachlorobutadiene		0.14 U	0.018	0.14	UG/M3	0.14 U	
EPD-WA-01-022623	TO-15 SIM	m,p-Xylenes		5.6	0.032	0.14	UG/M3	5.6	
EPD-WA-01-022623	TO-15 SIM	Methyl tert-Butyl Ether		0.034 U	0.016	0.034	UG/M3	0.034 U	
EPD-WA-01-022623	TO-15 SIM	Naphthalene		0.20	0.03	0.14	UG/M3	0.20	
EPD-WA-01-022623	TO-15 SIM	o-Xylene		1.6	0.018	0.14	UG/M3	1.6	
EPD-WA-01-022623	TO-15 SIM	Styrene		0.16	0.016	0.14	UG/M3	0.16	
EPD-WA-01-022623	TO-15 SIM	Tetrachloroethene		0.086	0.012	0.034	UG/M3	0.086	
EPD-WA-01-022623	TO-15 SIM	Toluene		2.2	0.016	0.14	UG/M3	2.2	
EPD-WA-01-022623	TO-15 SIM	trans-1,2-Dichloroethene		0.034 U	0.015	0.034	UG/M3	0.034 U	
EPD-WA-01-022623	TO-15 SIM	trans-1,3-Dichloropropene		0.068 U	0.0065	0.068	UG/M3	0.068 UJ	
EPD-WA-01-022623	TO-15 SIM	Trichloroethene		0.015 J	0.01	0.034	UG/M3	0.015 J	
EPD-WA-01-022623	TO-15 SIM	Trichlorofluoromethane		1.2 B	0.011	0.068	UG/M3	1.2	
EPD-WA-01-022623	TO-15 SIM	Vinyl Chloride		2.0	0.016	0.034	UG/M3	2.0	

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

Site Name	E Palestine Site - ER	
Document Tracking No.	1685c	
Data Reviewer (signature and date)	Dense Migni March 5, 2023	Sawyer 03/7/2023
Laboratory Report No.	P2300903	
Analyses	Volatile organic compounds (VOCs) by EPA Method TO-15 in scan and selected ion monitoring (SIM) modes	
Samples and Matrix	Four air samples	
Collection Date(s)	02/28/2023	
Field Duplicate Pairs	NA	
Field QC Blanks	NA	
TO/TOLIN No.	68HE0520F0032/0001EB201	
Technical Reviewer (signature and date)	Hany N. Ellis III 14 March 2023	
Laboratory	ALS Environmental, Simi Valley, CA	

INTRODUCTION

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (January 2009). Analytical data were evaluated in general accordance with the Tetra Tech *Quality Assurance Project Plan, Superfund Technical Assessment and Response Team (START V), EPA Region 5, Revision 4* (August 2022), and the EPA *National Functional Guidelines (NFG) for Organic Superfund Methods Data Review* (November 2020).

OVERALL EVALUATION

No rejection of results was required for this data package. The results may be used as qualified based on the findings of this validation effort.

Data completeness:

Within Criteria	Exceedance/Notes
N	TO-15 SIM results are reported in units of $\mu\text{g}/\text{m}^3$ and ppbV in analytical data package; however, these results are only reported in units of $\mu\text{g}/\text{m}^3$ in the EDD. No qualifications are required.

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
Y	

Method blanks:

Within Criteria	Exceedance/Notes
Y	

Field blanks:

Within Criteria	Exceedance/Notes
NA	

Surrogates and labeled compounds:

Within Criteria	Exceedance/Notes
Y	

MS/MSDs:

Within Criteria	Exceedance/Notes
NA	

Laboratory duplicates:

Within Criteria	Exceedance/Notes
NA	

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

Field duplicates:

Within Criteria	Exceedance/Notes
NA	

LCSs/LCSDs:

Within Criteria	Exceedance/Notes
Y	

Sample dilutions:

Within Criteria	Exceedance/Notes
Y	Canister dilution factor for sample EPD-WA-01-022823 is 1.52. Canister dilution factor for sample EPD-DW-01-022823) is 1.48. Canister dilution factor for sample EPD-WA-03-022823 is 1.57. Canister dilution factor for sample EPD-WA-02-022823 is 1.36.

Re-extraction and reanalysis:

Within Criteria	Exceedance/Notes
N	The laboratory Case Narrative states “Sample EPD-WA-03-022823 (P2300903-003) was re-pressurized because of an instrument issue, such that the sample had to be re-run. The canister dilution factor has been calculated accordingly.” No qualifications were applied.

MDLs/RLs:

Within Criteria	Exceedance/Notes
Y	Detections between the method detection limit (MDL) and reporting limit (RL) were reported and were qualified as estimated (flagged J) by the laboratory.

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

Tentatively identified compounds:

Within Criteria	Exceedance/Notes
Y	Several tentatively identified compounds (TICs) were detected in all four samples. The known TICs were qualified as tentatively (flagged NJ). n-Butyl acrylate, 2-ethylhexyl acrylate, and 2-butoxyethanol in all four samples were reported as not detected and qualified as manually searched for, but not found in the sample (flagged U,NF).

Other [None]:

Within Criteria	Exceedance/Notes
NA	

Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.
NF	The tentatively identified compound was manually searched for but was not found in the sample.

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
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Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-DW-01-022823	TO-15	2-Butoxyethanol		0 U,NF			UG/M3	0 U,NF	
EPD-DW-01-022823	TO-15	2-Ethylhexyl Acrylate		0 U,NF			UG/M3	0 U,NF	
EPD-DW-01-022823	TO-15	2-Methylbutane		10 T			UG/M3	10 NJ	
EPD-DW-01-022823	TO-15	2-Methylpropane		6.5 T			UG/M3	6.5 NJ	
EPD-DW-01-022823	TO-15	Ethanol		4.4 T			UG/M3	4.4 NJ	
EPD-DW-01-022823	TO-15	Ethyl Acetate		21 T			UG/M3	21 NJ	
EPD-DW-01-022823	TO-15	n-Butane		7.9 T			UG/M3	7.9 NJ	
EPD-DW-01-022823	TO-15	n-Butyl Acrylate		0 U,NF			UG/M3	0 U,NF	
EPD-DW-01-022823	TO-15	n-Pentane		4.2 T			UG/M3	4.2 NJ	
EPD-DW-01-022823	TO-15	Propane		5.9 T			UG/M3	5.9 NJ	
EPD-DW-01-022823	TO-15	Unknown Siloxane		3.2 T			UG/M3	3.2 NJ	
EPD-DW-01-022823	TO-15 SIM	1,1,1-Trichloroethane	0.037 U		0.013	0.037	UG/M3	0.037 U	
EPD-DW-01-022823	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.037 U		0.013	0.037	UG/M3	0.037 U	
EPD-DW-01-022823	TO-15 SIM	1,1,2-Trichloroethane	0.15 U		0.0087	0.15	UG/M3	0.15 U	
EPD-DW-01-022823	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.48		0.012	0.037	UG/M3	0.48	
EPD-DW-01-022823	TO-15 SIM	1,1-Dichloroethane	0.037 U		0.012	0.037	UG/M3	0.037 U	
EPD-DW-01-022823	TO-15 SIM	1,1-Dichloroethene	0.037 U		0.013	0.037	UG/M3	0.037 U	
EPD-DW-01-022823	TO-15 SIM	1,2,4-Trichlorobenzene	0.074 U		0.03	0.074	UG/M3	0.074 U	
EPD-DW-01-022823	TO-15 SIM	1,2,4-Trimethylbenzene	0.11 J		0.024	0.15	UG/M3	0.11 J	
EPD-DW-01-022823	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.15 U		0.021	0.15	UG/M3	0.15 U	
EPD-DW-01-022823	TO-15 SIM	1,2-Dibromoethane	0.037 U		0.0099	0.037	UG/M3	0.037 U	
EPD-DW-01-022823	TO-15 SIM	1,2-Dichlorobenzene	0.037 U		0.027	0.037	UG/M3	0.037 U	
EPD-DW-01-022823	TO-15 SIM	1,2-Dichloroethane	0.065		0.012	0.037	UG/M3	0.065	
EPD-DW-01-022823	TO-15 SIM	1,2-Dichloropropane	0.014 J		0.009	0.037	UG/M3	0.014 J	
EPD-DW-01-022823	TO-15 SIM	1,3,5-Trimethylbenzene	0.028 J		0.021	0.15	UG/M3	0.028 J	
EPD-DW-01-022823	TO-15 SIM	1,3-Butadiene	0.028 J		0.012	0.074	UG/M3	0.028 J	
EPD-DW-01-022823	TO-15 SIM	1,3-Dichlorobenzene	0.037 U		0.025	0.037	UG/M3	0.037 U	
EPD-DW-01-022823	TO-15 SIM	1,4-Dichlorobenzene	0.037 U		0.03	0.037	UG/M3	0.037 U	
EPD-DW-01-022823	TO-15 SIM	1,4-Dioxane	0.15 U		0.013	0.15	UG/M3	0.15 U	
EPD-DW-01-022823	TO-15 SIM	Acetone	6.3		0.34	3.7	UG/M3	6.3	
EPD-DW-01-022823	TO-15 SIM	Acrolein	0.18 J		0.052	0.3	UG/M3	0.18 J	
EPD-DW-01-022823	TO-15 SIM	Benzene	0.67		0.022	0.11	UG/M3	0.67	
EPD-DW-01-022823	TO-15 SIM	Bromodichloromethane	0.037 U		0.0086	0.037	UG/M3	0.037 U	

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
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Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-DW-01-022823	TO-15 SIM	Bromomethane	0.028 J		0.0099	0.037	UG/M3	0.028 J	
EPD-DW-01-022823	TO-15 SIM	Carbon Tetrachloride	0.42		0.011	0.037	UG/M3	0.42	
EPD-DW-01-022823	TO-15 SIM	Chlorobenzene	0.15 U		0.014	0.15	UG/M3	0.15 U	
EPD-DW-01-022823	TO-15 SIM	Chloroethane	0.013 J		0.012	0.037	UG/M3	0.013 J	
EPD-DW-01-022823	TO-15 SIM	Chloroform	0.07 J		0.012	0.15	UG/M3	0.07 J	
EPD-DW-01-022823	TO-15 SIM	Chloromethane	0.25		0.038	0.074	UG/M3	0.25	
EPD-DW-01-022823	TO-15 SIM	cis-1,2-Dichloroethene	0.049		0.011	0.037	UG/M3	0.049	
EPD-DW-01-022823	TO-15 SIM	cis-1,3-Dichloropropene	0.074 U		0.011	0.074	UG/M3	0.074 U	
EPD-DW-01-022823	TO-15 SIM	Dibromochloromethane	0.037 U		0.0095	0.037	UG/M3	0.037 U	
EPD-DW-01-022823	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	2.5		0.013	0.074	UG/M3	2.5	
EPD-DW-01-022823	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.33		0.012	0.15	UG/M3	0.33	
EPD-DW-01-022823	TO-15 SIM	Ethylbenzene	0.09 J		0.018	0.15	UG/M3	0.09 J	
EPD-DW-01-022823	TO-15 SIM	Hexachlorobutadiene	0.15 U		0.019	0.15	UG/M3	0.15 U	
EPD-DW-01-022823	TO-15 SIM	m,p-Xylenes	0.3		0.036	0.15	UG/M3	0.3	
EPD-DW-01-022823	TO-15 SIM	Methyl tert-Butyl Ether	0.037 U		0.018	0.037	UG/M3	0.037 U	
EPD-DW-01-022823	TO-15 SIM	Naphthalene	0.08 J		0.033	0.15	UG/M3	0.08 J	
EPD-DW-01-022823	TO-15 SIM	o-Xylene	0.12 J		0.019	0.15	UG/M3	0.12 J	
EPD-DW-01-022823	TO-15 SIM	Styrene	0.045 J		0.018	0.15	UG/M3	0.045 J	
EPD-DW-01-022823	TO-15 SIM	Tetrachloroethene	3		0.013	0.037	UG/M3	3	
EPD-DW-01-022823	TO-15 SIM	Toluene	1.2		0.018	0.15	UG/M3	1.2	
EPD-DW-01-022823	TO-15 SIM	trans-1,2-Dichloroethene	0.037 U		0.016	0.037	UG/M3	0.037 U	
EPD-DW-01-022823	TO-15 SIM	trans-1,3-Dichloropropene	0.074 U		0.0071	0.074	UG/M3	0.074 U	
EPD-DW-01-022823	TO-15 SIM	Trichloroethene	0.1		0.011	0.037	UG/M3	0.1	
EPD-DW-01-022823	TO-15 SIM	Trichlorofluoromethane	1.2		0.012	0.074	UG/M3	1.2	
EPD-DW-01-022823	TO-15 SIM	Vinyl Chloride	0.037 U		0.018	0.037	UG/M3	0.037 U	
EPD-WA-01-022823	TO-15	1-Methylnaphthalene	5.8 T				UG/M3	5.8 NJ	
EPD-WA-01-022823	TO-15	2-Butoxyethanol	0 U,NF				UG/M3	0 U,NF	
EPD-WA-01-022823	TO-15	2-Ethylhexyl Acrylate	0 U,NF				UG/M3	0 U,NF	
EPD-WA-01-022823	TO-15	2-ETHYLHEXYLACETATE	3 T				UG/M3	3 NJ	
EPD-WA-01-022823	TO-15	2-Methylbutane	15 T				UG/M3	15 NJ	
EPD-WA-01-022823	TO-15	2-Methylpropane	10 T				UG/M3	10 NJ	
EPD-WA-01-022823	TO-15	Ethanol	4.4 T				UG/M3	4.4 NJ	
EPD-WA-01-022823	TO-15	Ethyl Acetate	130 T				UG/M3	130 NJ	

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
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Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-WA-01-022823	TO-15	Hexamethylcyclotrisiloxane		8 T			UG/M3	8 NJ	
EPD-WA-01-022823	TO-15	Naphthalene		13 T			UG/M3	13 NJ	
EPD-WA-01-022823	TO-15	n-Butane		4.8 T			UG/M3	4.8 NJ	
EPD-WA-01-022823	TO-15	n-Butyl Acrylate		0 U,NF			UG/M3	0 U,NF	
EPD-WA-01-022823	TO-15	n-Pentane		31 T			UG/M3	31 NJ	
EPD-WA-01-022823	TO-15	Propane		3.4 T			UG/M3	3.4 NJ	
EPD-WA-01-022823	TO-15	Toluene		4.1 T			UG/M3	4.1 NJ	
EPD-WA-01-022823	TO-15	Unknown Siloxane		6.9 T			UG/M3	6.9 NJ	
EPD-WA-01-022823	TO-15 SIM	1,1,1-Trichloroethane	0.038	U	0.014	0.038	UG/M3	0.038	U
EPD-WA-01-022823	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.038	U	0.013	0.038	UG/M3	0.038	U
EPD-WA-01-022823	TO-15 SIM	1,1,2-Trichloroethane	0.15	U	0.009	0.15	UG/M3	0.15	U
EPD-WA-01-022823	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.44		0.012	0.038	UG/M3	0.44	
EPD-WA-01-022823	TO-15 SIM	1,1-Dichloroethane	0.038	U	0.012	0.038	UG/M3	0.038	U
EPD-WA-01-022823	TO-15 SIM	1,1-Dichloroethene	0.038	U	0.013	0.038	UG/M3	0.038	U
EPD-WA-01-022823	TO-15 SIM	1,2,4-Trichlorobenzene	0.076	U	0.03	0.076	UG/M3	0.076	U
EPD-WA-01-022823	TO-15 SIM	1,2,4-Trimethylbenzene	0.37		0.024	0.15	UG/M3	0.37	
EPD-WA-01-022823	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.15	U	0.021	0.15	UG/M3	0.15	U
EPD-WA-01-022823	TO-15 SIM	1,2-Dibromoethane	0.038	U	0.01	0.038	UG/M3	0.038	U
EPD-WA-01-022823	TO-15 SIM	1,2-Dichlorobenzene	0.038	U	0.027	0.038	UG/M3	0.038	U
EPD-WA-01-022823	TO-15 SIM	1,2-Dichloroethane	0.063		0.013	0.038	UG/M3	0.063	
EPD-WA-01-022823	TO-15 SIM	1,2-Dichloropropane	0.017	J	0.0093	0.038	UG/M3	0.017	J
EPD-WA-01-022823	TO-15 SIM	1,3,5-Trimethylbenzene	0.078	J	0.021	0.15	UG/M3	0.078	J
EPD-WA-01-022823	TO-15 SIM	1,3-Butadiene	0.05	J	0.012	0.076	UG/M3	0.05	J
EPD-WA-01-022823	TO-15 SIM	1,3-Dichlorobenzene	0.038	U	0.026	0.038	UG/M3	0.038	U
EPD-WA-01-022823	TO-15 SIM	1,4-Dichlorobenzene	0.61		0.03	0.038	UG/M3	0.61	
EPD-WA-01-022823	TO-15 SIM	1,4-Dioxane	0.28		0.013	0.15	UG/M3	0.28	
EPD-WA-01-022823	TO-15 SIM	Acetone	9.2		0.35	3.8	UG/M3	9.2	
EPD-WA-01-022823	TO-15 SIM	Acrolein	0.49		0.053	0.3	UG/M3	0.49	
EPD-WA-01-022823	TO-15 SIM	Benzene	1.6		0.023	0.11	UG/M3	1.6	
EPD-WA-01-022823	TO-15 SIM	Bromodichloromethane	0.038	U	0.0088	0.038	UG/M3	0.038	U
EPD-WA-01-022823	TO-15 SIM	Bromomethane	0.028	J	0.01	0.038	UG/M3	0.028	J
EPD-WA-01-022823	TO-15 SIM	Carbon Tetrachloride	0.41		0.011	0.038	UG/M3	0.41	
EPD-WA-01-022823	TO-15 SIM	Chlorobenzene	0.15	U	0.015	0.15	UG/M3	0.15	U

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY

ALS ENVIRONMENTAL REPORT NO. P2300903

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-WA-01-022823	TO-15 SIM	Chloroethane	0.035 J		0.012	0.038	UG/M3	0.035 J	
EPD-WA-01-022823	TO-15 SIM	Chloroform	0.13 J		0.012	0.15	UG/M3	0.13 J	
EPD-WA-01-022823	TO-15 SIM	Chloromethane	0.072 J		0.04	0.076	UG/M3	0.072 J	
EPD-WA-01-022823	TO-15 SIM	cis-1,2-Dichloroethene	0.011 J		0.011	0.038	UG/M3	0.011 J	
EPD-WA-01-022823	TO-15 SIM	cis-1,3-Dichloropropene	0.076 U		0.011	0.076	UG/M3	0.076 U	
EPD-WA-01-022823	TO-15 SIM	Dibromochloromethane	0.038 U		0.0097	0.038	UG/M3	0.038 U	
EPD-WA-01-022823	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	2.1		0.013	0.076	UG/M3	2.1	
EPD-WA-01-022823	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.34		0.012	0.15	UG/M3	0.34	
EPD-WA-01-022823	TO-15 SIM	Ethylbenzene	0.28		0.018	0.15	UG/M3	0.28	
EPD-WA-01-022823	TO-15 SIM	Hexachlorobutadiene	0.15 U		0.02	0.15	UG/M3	0.15 U	
EPD-WA-01-022823	TO-15 SIM	m,p-Xylenes	1.2		0.036	0.15	UG/M3	1.2	
EPD-WA-01-022823	TO-15 SIM	Methyl tert-Butyl Ether	0.038 U		0.018	0.038	UG/M3	0.038 U	
EPD-WA-01-022823	TO-15 SIM	Naphthalene	24		0.033	0.15	UG/M3	24	
EPD-WA-01-022823	TO-15 SIM	o-Xylene	0.45		0.02	0.15	UG/M3	0.45	
EPD-WA-01-022823	TO-15 SIM	Styrene	0.36		0.018	0.15	UG/M3	0.36	
EPD-WA-01-022823	TO-15 SIM	Tetrachloroethene	0.78		0.013	0.038	UG/M3	0.78	
EPD-WA-01-022823	TO-15 SIM	Toluene	5.8		0.018	0.15	UG/M3	5.8	
EPD-WA-01-022823	TO-15 SIM	trans-1,2-Dichloroethene	0.038 U		0.017	0.038	UG/M3	0.038 U	
EPD-WA-01-022823	TO-15 SIM	trans-1,3-Dichloropropene	0.076 U		0.0073	0.076	UG/M3	0.076 U	
EPD-WA-01-022823	TO-15 SIM	Trichloroethene	0.028 J		0.012	0.038	UG/M3	0.028 J	
EPD-WA-01-022823	TO-15 SIM	Trichlorofluoromethane	1.2		0.012	0.076	UG/M3	1.2	
EPD-WA-01-022823	TO-15 SIM	Vinyl Chloride	0.11		0.018	0.038	UG/M3	0.11	
EPD-WA-02-022823	TO-15	2-Butoxyethanol	0 U,NF				UG/M3	0 U,NF	
EPD-WA-02-022823	TO-15	2-Ethylhexyl Acrylate	0 U,NF				UG/M3	0 U,NF	
EPD-WA-02-022823	TO-15	2-Methylbutane	9.7 T				UG/M3	9.7 NJ	
EPD-WA-02-022823	TO-15	2-Methylpropane	5 T				UG/M3	5 NJ	
EPD-WA-02-022823	TO-15	Ethanol	2.9 T				UG/M3	2.9 NJ	
EPD-WA-02-022823	TO-15	Ethyl Acetate	130 T				UG/M3	130 NJ	
EPD-WA-02-022823	TO-15	n-Butane	3.8 T				UG/M3	3.8 NJ	
EPD-WA-02-022823	TO-15	n-Butyl Acrylate	0 U,NF				UG/M3	0 U,NF	
EPD-WA-02-022823	TO-15	n-Pentane	24 T				UG/M3	24 NJ	
EPD-WA-02-022823	TO-15	Propane	3.5 T				UG/M3	3.5 NJ	
EPD-WA-02-022823	TO-15	Toluene	3.3 T				UG/M3	3.3 NJ	

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY

ALS ENVIRONMENTAL REPORT NO. P2300903

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-WA-02-022823	TO-15 SIM	1,1,1-Trichloroethane	0.034	U	0.012	0.034	UG/M3	0.034	U
EPD-WA-02-022823	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.034	U	0.012	0.034	UG/M3	0.034	U
EPD-WA-02-022823	TO-15 SIM	1,1,2-Trichloroethane	0.14	U	0.008	0.14	UG/M3	0.14	U
EPD-WA-02-022823	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.46		0.011	0.034	UG/M3	0.46	
EPD-WA-02-022823	TO-15 SIM	1,1-Dichloroethane	0.034	U	0.011	0.034	UG/M3	0.034	U
EPD-WA-02-022823	TO-15 SIM	1,1-Dichloroethene	0.034	U	0.012	0.034	UG/M3	0.034	U
EPD-WA-02-022823	TO-15 SIM	1,2,4-Trichlorobenzene	0.068	U	0.027	0.068	UG/M3	0.068	U
EPD-WA-02-022823	TO-15 SIM	1,2,4-Trimethylbenzene	0.18		0.022	0.14	UG/M3	0.18	
EPD-WA-02-022823	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.14	U	0.019	0.14	UG/M3	0.14	U
EPD-WA-02-022823	TO-15 SIM	1,2-Dibromoethane	0.034	U	0.0091	0.034	UG/M3	0.034	U
EPD-WA-02-022823	TO-15 SIM	1,2-Dichlorobenzene	0.034	U	0.024	0.034	UG/M3	0.034	U
EPD-WA-02-022823	TO-15 SIM	1,2-Dichloroethane	0.077		0.011	0.034	UG/M3	0.077	
EPD-WA-02-022823	TO-15 SIM	1,2-Dichloropropane	0.016	J	0.0083	0.034	UG/M3	0.016	J
EPD-WA-02-022823	TO-15 SIM	1,3,5-Trimethylbenzene	0.042	J	0.019	0.14	UG/M3	0.042	J
EPD-WA-02-022823	TO-15 SIM	1,3-Butadiene	0.045	J	0.011	0.068	UG/M3	0.045	J
EPD-WA-02-022823	TO-15 SIM	1,3-Dichlorobenzene	0.034	U	0.023	0.034	UG/M3	0.034	U
EPD-WA-02-022823	TO-15 SIM	1,4-Dichlorobenzene	0.03	J	0.027	0.034	UG/M3	0.03	J
EPD-WA-02-022823	TO-15 SIM	1,4-Dioxane	0.019	J	0.012	0.14	UG/M3	0.019	J
EPD-WA-02-022823	TO-15 SIM	Acetone	5.2		0.31	3.4	UG/M3	5.2	
EPD-WA-02-022823	TO-15 SIM	Acrolein	0.5		0.048	0.27	UG/M3	0.5	
EPD-WA-02-022823	TO-15 SIM	Benzene	1.2		0.02	0.1	UG/M3	1.2	
EPD-WA-02-022823	TO-15 SIM	Bromodichloromethane	0.034	U	0.0079	0.034	UG/M3	0.034	U
EPD-WA-02-022823	TO-15 SIM	Bromomethane	0.028	J	0.0091	0.034	UG/M3	0.028	J
EPD-WA-02-022823	TO-15 SIM	Carbon Tetrachloride	0.41		0.0097	0.034	UG/M3	0.41	
EPD-WA-02-022823	TO-15 SIM	Chlorobenzene	0.14	U	0.013	0.14	UG/M3	0.14	U
EPD-WA-02-022823	TO-15 SIM	Chloroethane	0.016	J	0.011	0.034	UG/M3	0.016	J
EPD-WA-02-022823	TO-15 SIM	Chloroform	0.077	J	0.011	0.14	UG/M3	0.077	J
EPD-WA-02-022823	TO-15 SIM	Chloromethane	0.22		0.035	0.068	UG/M3	0.22	
EPD-WA-02-022823	TO-15 SIM	cis-1,2-Dichloroethene	0.034	U	0.0098	0.034	UG/M3	0.034	U
EPD-WA-02-022823	TO-15 SIM	cis-1,3-Dichloropropene	0.068	U	0.0097	0.068	UG/M3	0.068	U
EPD-WA-02-022823	TO-15 SIM	Dibromochloromethane	0.034	U	0.0087	0.034	UG/M3	0.034	U
EPD-WA-02-022823	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	2.3		0.012	0.068	UG/M3	2.3	
EPD-WA-02-022823	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.35		0.011	0.14	UG/M3	0.35	

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
ALS ENVIRONMENTAL REPORT NO. P2300903

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-WA-02-022823	TO-15 SIM	Ethylbenzene	0.14		0.016	0.14	UG/M3	0.14	
EPD-WA-02-022823	TO-15 SIM	Hexachlorobutadiene	0.14	U	0.018	0.14	UG/M3	0.14	U
EPD-WA-02-022823	TO-15 SIM	m,p-Xylenes	0.46		0.033	0.14	UG/M3	0.46	
EPD-WA-02-022823	TO-15 SIM	Methyl tert-Butyl Ether	0.034	U	0.016	0.034	UG/M3	0.034	U
EPD-WA-02-022823	TO-15 SIM	Naphthalene	0.13	J	0.03	0.14	UG/M3	0.13	J
EPD-WA-02-022823	TO-15 SIM	o-Xylene	0.18		0.018	0.14	UG/M3	0.18	
EPD-WA-02-022823	TO-15 SIM	Styrene	0.12	J	0.016	0.14	UG/M3	0.12	J
EPD-WA-02-022823	TO-15 SIM	Tetrachloroethene	0.49		0.012	0.034	UG/M3	0.49	
EPD-WA-02-022823	TO-15 SIM	Toluene	4.4		0.016	0.14	UG/M3	4.4	
EPD-WA-02-022823	TO-15 SIM	trans-1,2-Dichloroethene	0.034	U	0.015	0.034	UG/M3	0.034	U
EPD-WA-02-022823	TO-15 SIM	trans-1,3-Dichloropropene	0.068	U	0.0065	0.068	UG/M3	0.068	U
EPD-WA-02-022823	TO-15 SIM	Trichloroethene	0.017	J	0.01	0.034	UG/M3	0.017	J
EPD-WA-02-022823	TO-15 SIM	Trichlorofluoromethane	1.2		0.011	0.068	UG/M3	1.2	
EPD-WA-02-022823	TO-15 SIM	Vinyl Chloride	0.19		0.016	0.034	UG/M3	0.19	
EPD-WA-03-022823	TO-15	2-Butoxyethanol	0	U,NF			UG/M3	0	U,NF
EPD-WA-03-022823	TO-15	2-Ethylhexyl Acrylate	0	U,NF			UG/M3	0	U,NF
EPD-WA-03-022823	TO-15	2-Methylbutane	4.9	T			UG/M3	4.9	NJ
EPD-WA-03-022823	TO-15	Ethyl Acetate	6.3	T			UG/M3	6.3	NJ
EPD-WA-03-022823	TO-15	n-Butane	3	T			UG/M3	3	NJ
EPD-WA-03-022823	TO-15	n-Butyl Acrylate	0	U,NF			UG/M3	0	U,NF
EPD-WA-03-022823	TO-15	Propane	3.6	T			UG/M3	3.6	NJ
EPD-WA-03-022823	TO-15 SIM	1,1,1-Trichloroethane	0.039	U	0.014	0.039	UG/M3	0.039	U
EPD-WA-03-022823	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.039	U	0.014	0.039	UG/M3	0.039	U
EPD-WA-03-022823	TO-15 SIM	1,1,2-Trichloroethane	0.16	U	0.0093	0.16	UG/M3	0.16	U
EPD-WA-03-022823	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.46		0.013	0.039	UG/M3	0.46	
EPD-WA-03-022823	TO-15 SIM	1,1-Dichloroethane	0.039	U	0.013	0.039	UG/M3	0.039	U
EPD-WA-03-022823	TO-15 SIM	1,1-Dichloroethene	0.039	U	0.014	0.039	UG/M3	0.039	U
EPD-WA-03-022823	TO-15 SIM	1,2,4-Trichlorobenzene	0.079	U	0.031	0.079	UG/M3	0.079	U
EPD-WA-03-022823	TO-15 SIM	1,2,4-Trimethylbenzene	0.079	J	0.025	0.16	UG/M3	0.079	J
EPD-WA-03-022823	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.16	U	0.022	0.16	UG/M3	0.16	U
EPD-WA-03-022823	TO-15 SIM	1,2-Dibromoethane	0.039	U	0.011	0.039	UG/M3	0.039	U
EPD-WA-03-022823	TO-15 SIM	1,2-Dichlorobenzene	0.039	U	0.028	0.039	UG/M3	0.039	U
EPD-WA-03-022823	TO-15 SIM	1,2-Dichloroethane	0.054		0.013	0.039	UG/M3	0.054	

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY

ALS ENVIRONMENTAL REPORT NO. P2300903

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-WA-03-022823	TO-15 SIM	1,2-Dichloropropane	0.015 J		0.0096	0.039	UG/M3	0.015 J	
EPD-WA-03-022823	TO-15 SIM	1,3,5-Trimethylbenzene	0.16 U		0.022	0.16	UG/M3	0.16 U	
EPD-WA-03-022823	TO-15 SIM	1,3-Butadiene	0.026 J		0.012	0.079	UG/M3	0.026 J	
EPD-WA-03-022823	TO-15 SIM	1,3-Dichlorobenzene	0.039 U		0.027	0.039	UG/M3	0.039 U	
EPD-WA-03-022823	TO-15 SIM	1,4-Dichlorobenzene	0.039 U		0.031	0.039	UG/M3	0.039 U	
EPD-WA-03-022823	TO-15 SIM	1,4-Dioxane	0.035 J		0.014	0.16	UG/M3	0.035 J	
EPD-WA-03-022823	TO-15 SIM	Acetone	3.3 J		0.36	3.9	UG/M3	3.3 J	
EPD-WA-03-022823	TO-15 SIM	Acrolein	0.12 J		0.055	0.31	UG/M3	0.12 J	
EPD-WA-03-022823	TO-15 SIM	Benzene	0.57		0.024	0.12	UG/M3	0.57	
EPD-WA-03-022823	TO-15 SIM	Bromodichloromethane	0.039 U		0.0091	0.039	UG/M3	0.039 U	
EPD-WA-03-022823	TO-15 SIM	Bromomethane	0.024 J		0.011	0.039	UG/M3	0.024 J	
EPD-WA-03-022823	TO-15 SIM	Carbon Tetrachloride	0.4		0.011	0.039	UG/M3	0.4	
EPD-WA-03-022823	TO-15 SIM	Chlorobenzene	0.16 U		0.015	0.16	UG/M3	0.16 U	
EPD-WA-03-022823	TO-15 SIM	Chloroethane	0.013 J		0.012	0.039	UG/M3	0.013 J	
EPD-WA-03-022823	TO-15 SIM	Chloroform	0.065 J		0.013	0.16	UG/M3	0.065 J	
EPD-WA-03-022823	TO-15 SIM	Chloromethane	0.21		0.041	0.079	UG/M3	0.21	
EPD-WA-03-022823	TO-15 SIM	cis-1,2-Dichloroethene	0.039 U		0.011	0.039	UG/M3	0.039 U	
EPD-WA-03-022823	TO-15 SIM	cis-1,3-Dichloropropene	0.079 U		0.011	0.079	UG/M3	0.079 U	
EPD-WA-03-022823	TO-15 SIM	Dibromochloromethane	0.039 U		0.01	0.039	UG/M3	0.039 U	
EPD-WA-03-022823	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	2.4		0.013	0.079	UG/M3	2.4	
EPD-WA-03-022823	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.28		0.012	0.16	UG/M3	0.28	
EPD-WA-03-022823	TO-15 SIM	Ethylbenzene	0.06 J		0.019	0.16	UG/M3	0.06 J	
EPD-WA-03-022823	TO-15 SIM	Hexachlorobutadiene	0.16 U		0.02	0.16	UG/M3	0.16 U	
EPD-WA-03-022823	TO-15 SIM	m,p-Xylenes	0.2		0.038	0.16	UG/M3	0.2	
EPD-WA-03-022823	TO-15 SIM	Methyl tert-Butyl Ether	0.039 U		0.019	0.039	UG/M3	0.039 U	
EPD-WA-03-022823	TO-15 SIM	Naphthalene	0.096 J		0.035	0.16	UG/M3	0.096 J	
EPD-WA-03-022823	TO-15 SIM	o-Xylene	0.084 J		0.02	0.16	UG/M3	0.084 J	
EPD-WA-03-022823	TO-15 SIM	Styrene	0.033 J		0.019	0.16	UG/M3	0.033 J	
EPD-WA-03-022823	TO-15 SIM	Tetrachloroethene	0.1		0.014	0.039	UG/M3	0.1	
EPD-WA-03-022823	TO-15 SIM	Toluene	0.7		0.019	0.16	UG/M3	0.7	
EPD-WA-03-022823	TO-15 SIM	trans-1,2-Dichloroethene	0.039 U		0.017	0.039	UG/M3	0.039 U	
EPD-WA-03-022823	TO-15 SIM	trans-1,3-Dichloropropene	0.079 U		0.0075	0.079	UG/M3	0.079 U	
EPD-WA-03-022823	TO-15 SIM	Trichloroethene	0.039 U		0.012	0.039	UG/M3	0.039 U	

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
ALS ENVIRONMENTAL REPORT NO. P2300903

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-WA-03-022823	TO-15 SIM	Trichlorofluoromethane	1.2		0.013	0.079	UG/M3	1.2	
EPD-WA-03-022823	TO-15 SIM	Vinyl Chloride	0.74		0.019	0.039	UG/M3	0.74	

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

Site Name	E Palestine Site - ER	
Document Tracking No.	1685d	
Data Reviewer (signature and date)	Dense Mogni March 5, 2023	Sawyer 03/7/2023
Laboratory Report No.	P2300940	
Analyses	Volatile organic compounds (VOCs) by EPA Method TO-15 in scan and selected ion monitoring (SIM) modes	
Samples and Matrix	Four air samples	
Collection Date(s)	03/01/2023	
Field Duplicate Pairs	NA	
Field QC Blanks	NA	

INTRODUCTION

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (January 2009). Analytical data were evaluated in general accordance with the Tetra Tech *Quality Assurance Project Plan, Superfund Technical Assessment and Response Team (START V), EPA Region 5, Revision 4* (August 2022), and the EPA *National Functional Guidelines (NFG) for Organic Superfund Methods Data Review* (November 2020).

OVERALL EVALUATION

No rejection of results was required for this data package. The results may be used as qualified based on the findings of this validation effort.

Data completeness:

Within Criteria	Exceedance/Notes
N	TO-15 SIM results were reported in units of $\mu\text{g}/\text{m}^3$ and ppbV in the analytical data package; however, these results are only reported in units of $\mu\text{g}/\text{m}^3$ in the EDD. No qualifications are required.

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
Y	

Method blanks:

Within Criteria	Exceedance/Notes
Y	

Field blanks:

Within Criteria	Exceedance/Notes
NA	

Surrogates and labeled compounds:

Within Criteria	Exceedance/Notes
Y	

MS/MSDs:

Within Criteria	Exceedance/Notes
NA	

Laboratory duplicates:

Within Criteria	Exceedance/Notes
NA	

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

Field duplicates:

Within Criteria	Exceedance/Notes
NA	

LCSs/LCSDs:

Within Criteria	Exceedance/Notes
Y	

Sample dilutions:

Within Criteria	Exceedance/Notes
Y	Canister dilution factor for sample EPD-WA-01-030123 is 1.39. Sample dilution factor for sample EPD-WA-02-030123 is 1.46. Sample dilution factor for sample EPD-WA-03-03012 is 1.30. Sample dilution factor for sample EPD-DW-030123 is 1.44.

Re-extraction and reanalysis:

Within Criteria	Exceedance/Notes
NA	

MDLs/RRLs:

Within Criteria	Exceedance/Notes
Y	Detections between the method detection limit (MDL) and reporting limit (RL) were reported and were qualified as estimated (flagged J) by the laboratory.

DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT

Tentatively identified compounds:

Within Criteria	Exceedance/Notes
Y	Several tentatively identified compounds (TICs) were identified in all four samples. The known TICs were qualified as tentatively identified (flagged NJ). n-Butyl acrylate, 2-ethylhexyl acrylate, and 2-butoxyethanol were searched for, but not found, in the samples (flagged U, NF).

Other [none]:

Within Criteria	Exceedance/Notes
NA	

Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.
NF	The tentatively identified compound was manually searched for but was not found in the sample.

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
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Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-DW-030123	TO-15	2-Butoxyethanol		0 U,NF			UG/M3	0 U,NF	
EPD-DW-030123	TO-15	2-Ethylhexyl Acrylate		0 U,NF			UG/M3	0 U,NF	
EPD-DW-030123	TO-15	2-Methylbutane		7.4 T			UG/M3	7.4 NJ	
EPD-DW-030123	TO-15	Ethyl Acetate		7.4 T			UG/M3	7.4 NJ	
EPD-DW-030123	TO-15	n-Butane		2.7 T			UG/M3	2.7 NJ	
EPD-DW-030123	TO-15	n-Butyl Acrylate		0 U,NF			UG/M3	0 U,NF	
EPD-DW-030123	TO-15	n-Pentane		16 T			UG/M3	16 NJ	
EPD-DW-030123	TO-15	Propane		4.8 T			UG/M3	4.8 NJ	
EPD-DW-030123	TO-15 SIM	1,1,1-Trichloroethane	0.036 U		0.013	0.036	UG/M3	0.036 U	
EPD-DW-030123	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.036 U		0.013	0.036	UG/M3	0.036 U	
EPD-DW-030123	TO-15 SIM	1,1,2-Trichloroethane		0.14 U	0.0085	0.14	UG/M3	0.14 U	
EPD-DW-030123	TO-15 SIM	1,1,2-Trichlorotrifluoroethane		0.48	0.012	0.036	UG/M3	0.48	
EPD-DW-030123	TO-15 SIM	1,1-Dichloroethane		0.036 U	0.012	0.036	UG/M3	0.036 U	
EPD-DW-030123	TO-15 SIM	1,1-Dichloroethene		0.036 U	0.013	0.036	UG/M3	0.036 U	
EPD-DW-030123	TO-15 SIM	1,2,4-Trichlorobenzene		0.072 U	0.029	0.072	UG/M3	0.072 U	
EPD-DW-030123	TO-15 SIM	1,2,4-Trimethylbenzene		0.13 J	0.023	0.14	UG/M3	0.13 J	
EPD-DW-030123	TO-15 SIM	1,2-Dibromo 3-Chloropropane		0.14 U	0.02	0.14	UG/M3	0.14 U	
EPD-DW-030123	TO-15 SIM	1,2-Dibromoethane		0.036 U	0.0096	0.036	UG/M3	0.036 U	
EPD-DW-030123	TO-15 SIM	1,2-Dichlorobenzene		0.036 U	0.026	0.036	UG/M3	0.036 U	
EPD-DW-030123	TO-15 SIM	1,2-Dichloroethane		0.062	0.012	0.036	UG/M3	0.062	
EPD-DW-030123	TO-15 SIM	1,2-Dichloropropane		0.021 J	0.0088	0.036	UG/M3	0.021 J	
EPD-DW-030123	TO-15 SIM	1,3,5-Trimethylbenzene		0.034 J	0.02	0.14	UG/M3	0.034 J	
EPD-DW-030123	TO-15 SIM	1,3-Butadiene		0.072	0.011	0.072	UG/M3	0.072	
EPD-DW-030123	TO-15 SIM	1,3-Dichlorobenzene		0.036 U	0.024	0.036	UG/M3	0.036 U	
EPD-DW-030123	TO-15 SIM	1,4-Dichlorobenzene		0.036 U	0.029	0.036	UG/M3	0.036 U	
EPD-DW-030123	TO-15 SIM	1,4-Dioxane		0.043 J	0.013	0.14	UG/M3	0.043 J	
EPD-DW-030123	TO-15 SIM	Acetone		3.1 J	0.33	3.6	UG/M3	3.1 J	
EPD-DW-030123	TO-15 SIM	Acrolein		0.11 J	0.05	0.29	UG/M3	0.11 J	
EPD-DW-030123	TO-15 SIM	Benzene		0.86	0.022	0.11	UG/M3	0.86	
EPD-DW-030123	TO-15 SIM	Bromodichloromethane		0.036 U	0.0084	0.036	UG/M3	0.036 U	
EPD-DW-030123	TO-15 SIM	Bromomethane		0.032 J	0.0096	0.036	UG/M3	0.032 J	
EPD-DW-030123	TO-15 SIM	Carbon Tetrachloride		0.43	0.01	0.036	UG/M3	0.43	
EPD-DW-030123	TO-15 SIM	Chlorobenzene		0.14 U	0.014	0.14	UG/M3	0.14 U	
EPD-DW-030123	TO-15 SIM	Chloroethane		0.013 J	0.011	0.036	UG/M3	0.013 J	
EPD-DW-030123	TO-15 SIM	Chloroform		0.073 J	0.012	0.14	UG/M3	0.073 J	
EPD-DW-030123	TO-15 SIM	Chloromethane		0.22	0.037	0.072	UG/M3	0.22	
EPD-DW-030123	TO-15 SIM	cis-1,2-Dichloroethene		0.058	0.01	0.036	UG/M3	0.058	
EPD-DW-030123	TO-15 SIM	cis-1,3-Dichloropropene		0.072 U	0.01	0.072	UG/M3	0.072 U	
EPD-DW-030123	TO-15 SIM	Dibromochloromethane		0.036 U	0.0092	0.036	UG/M3	0.036 U	
EPD-DW-030123	TO-15 SIM	Dichlorodifluoromethane (CFC 12)		2.4	0.012	0.072	UG/M3	2.4	
EPD-DW-030123	TO-15 SIM	Dichloromethane (Methylene Chloride)		0.35	0.011	0.14	UG/M3	0.35	
EPD-DW-030123	TO-15 SIM	Ethylbenzene		0.12 J	0.017	0.14	UG/M3	0.12 J	
EPD-DW-030123	TO-15 SIM	Hexachlorobutadiene		0.14 U	0.019	0.14	UG/M3	0.14 U	
EPD-DW-030123	TO-15 SIM	m,p-Xylenes		0.42	0.035	0.14	UG/M3	0.42	
EPD-DW-030123	TO-15 SIM	Methyl tert-Butyl Ether		0.036 U	0.017	0.036	UG/M3	0.036 U	
EPD-DW-030123	TO-15 SIM	Naphthalene		0.14 U	0.032	0.14	UG/M3	0.14 U	
EPD-DW-030123	TO-15 SIM	o-Xylene		0.15	0.019	0.14	UG/M3	0.15	
EPD-DW-030123	TO-15 SIM	Styrene		0.047 J	0.017	0.14	UG/M3	0.047 J	

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Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-DW-030123	TO-15 SIM	Tetrachloroethene	0.16		0.012	0.036	UG/M3	0.16	
EPD-DW-030123	TO-15 SIM	Toluene	1.3		0.017	0.14	UG/M3	1.3	
EPD-DW-030123	TO-15 SIM	trans-1,2-Dichloroethene	0.036 U		0.016	0.036	UG/M3	0.036 U	
EPD-DW-030123	TO-15 SIM	trans-1,3-Dichloropropene	0.072 U		0.0069	0.072	UG/M3	0.072 U	
EPD-DW-030123	TO-15 SIM	Trichloroethene	0.095		0.011	0.036	UG/M3	0.095	
EPD-DW-030123	TO-15 SIM	Trichlorofluoromethane	1.2		0.012	0.072	UG/M3	1.2	
EPD-DW-030123	TO-15 SIM	Vinyl Chloride	0.036		0.017	0.036	UG/M3	0.036	
EPD-WA-01-030123	TO-15	2-Butoxyethanol	0 U,NF				UG/M3	0 U,NF	
EPD-WA-01-030123	TO-15	2-Ethylhexyl Acrylate	0 U,NF				UG/M3	0 U,NF	
EPD-WA-01-030123	TO-15	2-Methylbutane	12 T				UG/M3	12 NJ	
EPD-WA-01-030123	TO-15	2-Methylpropane	4.4 T				UG/M3	4.4 NJ	
EPD-WA-01-030123	TO-15	Ethyl Acetate	10 T				UG/M3	10 NJ	
EPD-WA-01-030123	TO-15	n-Butane	8.9 T				UG/M3	8.9 NJ	
EPD-WA-01-030123	TO-15	n-Butyl Acrylate	0 U,NF				UG/M3	0 U,NF	
EPD-WA-01-030123	TO-15	n-Pentane	11 T				UG/M3	11 NJ	
EPD-WA-01-030123	TO-15	Propane	4 T				UG/M3	4 NJ	
EPD-WA-01-030123	TO-15 SIM	1,1,1-Trichloroethane	0.035 U		0.013	0.035	UG/M3	0.035 U	
EPD-WA-01-030123	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.035 U		0.012	0.035	UG/M3	0.035 U	
EPD-WA-01-030123	TO-15 SIM	1,1,2-Trichloroethane	0.14 U		0.0082	0.14	UG/M3	0.14 U	
EPD-WA-01-030123	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.53		0.011	0.035	UG/M3	0.53	
EPD-WA-01-030123	TO-15 SIM	1,1-Dichloroethane	0.035 U		0.011	0.035	UG/M3	0.035 U	
EPD-WA-01-030123	TO-15 SIM	1,1-Dichloroethene	0.035 U		0.012	0.035	UG/M3	0.035 U	
EPD-WA-01-030123	TO-15 SIM	1,2,4-Trichlorobenzene	0.07 U		0.028	0.07	UG/M3	0.07 U	
EPD-WA-01-030123	TO-15 SIM	1,2,4-Trimethylbenzene	0.25		0.022	0.14	UG/M3	0.25	
EPD-WA-01-030123	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.14 U		0.019	0.14	UG/M3	0.14 U	
EPD-WA-01-030123	TO-15 SIM	1,2-Dibromoethane	0.035 U		0.0093	0.035	UG/M3	0.035 U	
EPD-WA-01-030123	TO-15 SIM	1,2-Dichlorobenzene	0.035 U		0.025	0.035	UG/M3	0.035 U	
EPD-WA-01-030123	TO-15 SIM	1,2-Dichloroethane	0.069		0.012	0.035	UG/M3	0.069	
EPD-WA-01-030123	TO-15 SIM	1,2-Dichloropropane	0.018 J		0.0085	0.035	UG/M3	0.018 J	
EPD-WA-01-030123	TO-15 SIM	1,3,5-Trimethylbenzene	0.07 J		0.019	0.14	UG/M3	0.07 J	
EPD-WA-01-030123	TO-15 SIM	1,3-Butadiene	0.049 J		0.011	0.07	UG/M3	0.049 J	
EPD-WA-01-030123	TO-15 SIM	1,3-Dichlorobenzene	0.035 U		0.024	0.035	UG/M3	0.035 U	
EPD-WA-01-030123	TO-15 SIM	1,4-Dichlorobenzene	0.035 U		0.028	0.035	UG/M3	0.035 U	
EPD-WA-01-030123	TO-15 SIM	1,4-Dioxane	0.14 U		0.012	0.14	UG/M3	0.14 U	
EPD-WA-01-030123	TO-15 SIM	Acetone	3.2 J		0.32	3.5	UG/M3	3.2 J	
EPD-WA-01-030123	TO-15 SIM	Acrolein	0.17 J		0.049	0.28	UG/M3	0.17 J	
EPD-WA-01-030123	TO-15 SIM	Benzene	0.97		0.021	0.1	UG/M3	0.97	
EPD-WA-01-030123	TO-15 SIM	Bromodichloromethane	0.035 U		0.0081	0.035	UG/M3	0.035 U	
EPD-WA-01-030123	TO-15 SIM	Bromomethane	0.032 J		0.0093	0.035	UG/M3	0.032 J	
EPD-WA-01-030123	TO-15 SIM	Carbon Tetrachloride	0.48		0.0099	0.035	UG/M3	0.48	
EPD-WA-01-030123	TO-15 SIM	Chlorobenzene	0.14 U		0.013	0.14	UG/M3	0.14 U	
EPD-WA-01-030123	TO-15 SIM	Chloroethane	0.015 J		0.011	0.035	UG/M3	0.015 J	
EPD-WA-01-030123	TO-15 SIM	Chloroform	0.072 J		0.011	0.14	UG/M3	0.072 J	
EPD-WA-01-030123	TO-15 SIM	Chloromethane	0.44		0.036	0.07	UG/M3	0.44	
EPD-WA-01-030123	TO-15 SIM	cis-1,2-Dichloroethene	0.035 U		0.01	0.035	UG/M3	0.035 U	
EPD-WA-01-030123	TO-15 SIM	cis-1,3-Dichloropropene	0.07 U		0.0099	0.07	UG/M3	0.07 U	
EPD-WA-01-030123	TO-15 SIM	Dibromochloromethane	0.035 U		0.0089	0.035	UG/M3	0.035 U	
EPD-WA-01-030123	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	2.6		0.012	0.07	UG/M3	2.6	

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Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-WA-01-030123	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.35		0.011	0.14	UG/M3	0.35	
EPD-WA-01-030123	TO-15 SIM	Ethylbenzene	0.19		0.017	0.14	UG/M3	0.19	
EPD-WA-01-030123	TO-15 SIM	Hexachlorobutadiene	0.14 U		0.018	0.14	UG/M3	0.14 U	
EPD-WA-01-030123	TO-15 SIM	m,p-Xylenes	0.86		0.033	0.14	UG/M3	0.86	
EPD-WA-01-030123	TO-15 SIM	Methyl tert-Butyl Ether	0.035 U		0.017	0.035	UG/M3	0.035 U	
EPD-WA-01-030123	TO-15 SIM	Naphthalene	0.07 J		0.031	0.14	UG/M3	0.07 J	
EPD-WA-01-030123	TO-15 SIM	o-Xylene	0.3		0.018	0.14	UG/M3	0.3	
EPD-WA-01-030123	TO-15 SIM	Styrene	0.069 J		0.017	0.14	UG/M3	0.069 J	
EPD-WA-01-030123	TO-15 SIM	Tetrachloroethene	1.6		0.012	0.035	UG/M3	1.6	
EPD-WA-01-030123	TO-15 SIM	Toluene	2.3		0.017	0.14	UG/M3	2.3	
EPD-WA-01-030123	TO-15 SIM	trans-1,2-Dichloroethene	0.035 U		0.015	0.035	UG/M3	0.035 U	
EPD-WA-01-030123	TO-15 SIM	trans-1,3-Dichloropropene	0.07 U		0.0067	0.07	UG/M3	0.07 U	
EPD-WA-01-030123	TO-15 SIM	Trichloroethene	0.013 J		0.011	0.035	UG/M3	0.013 J	
EPD-WA-01-030123	TO-15 SIM	Trichlorofluoromethane	1.3		0.011	0.07	UG/M3	1.3	
EPD-WA-01-030123	TO-15 SIM	Vinyl Chloride	0.39		0.017	0.035	UG/M3	0.39	
EPD-WA-02-030123	TO-15	2-Butoxyethanol	0 U,NF				UG/M3	0 U,NF	
EPD-WA-02-030123	TO-15	2-Ethylhexyl Acrylate	0 U,NF				UG/M3	0 U,NF	
EPD-WA-02-030123	TO-15	2-Methylbutane	8.3 T				UG/M3	8.3 NJ	
EPD-WA-02-030123	TO-15	Ethyl Acetate	11 T				UG/M3	11 NJ	
EPD-WA-02-030123	TO-15	Hexamethylcyclotrisiloxane	9.8 T				UG/M3	9.8 NJ	
EPD-WA-02-030123	TO-15	n-Butane	4.5 T				UG/M3	4.5 NJ	
EPD-WA-02-030123	TO-15	n-Butyl Acrylate	0 U,NF				UG/M3	0 U,NF	
EPD-WA-02-030123	TO-15	n-Pentane	18 T				UG/M3	18 NJ	
EPD-WA-02-030123	TO-15	Propane	4.6 T				UG/M3	4.6 NJ	
EPD-WA-02-030123	TO-15 SIM	1,1,1-Trichloroethane	0.037 U		0.013	0.037	UG/M3	0.037 U	
EPD-WA-02-030123	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.037 U		0.013	0.037	UG/M3	0.037 U	
EPD-WA-02-030123	TO-15 SIM	1,1,2-Trichloroethane	0.15 U		0.0086	0.15	UG/M3	0.15 U	
EPD-WA-02-030123	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.53		0.012	0.037	UG/M3	0.53	
EPD-WA-02-030123	TO-15 SIM	1,1-Dichloroethane	0.037 U		0.012	0.037	UG/M3	0.037 U	
EPD-WA-02-030123	TO-15 SIM	1,1-Dichloroethene	0.037 U		0.013	0.037	UG/M3	0.037 U	
EPD-WA-02-030123	TO-15 SIM	1,2,4-Trichlorobenzene	0.073 U		0.029	0.073	UG/M3	0.073 U	
EPD-WA-02-030123	TO-15 SIM	1,2,4-Trimethylbenzene	0.29		0.023	0.15	UG/M3	0.29	
EPD-WA-02-030123	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.15 U		0.02	0.15	UG/M3	0.15 U	
EPD-WA-02-030123	TO-15 SIM	1,2-Dibromoethane	0.037 U		0.0098	0.037	UG/M3	0.037 U	
EPD-WA-02-030123	TO-15 SIM	1,2-Dichlorobenzene	0.037 U		0.026	0.037	UG/M3	0.037 U	
EPD-WA-02-030123	TO-15 SIM	1,2-Dichloroethane	0.069		0.012	0.037	UG/M3	0.069	
EPD-WA-02-030123	TO-15 SIM	1,2-Dichloropropane	0.023 J		0.0089	0.037	UG/M3	0.023 J	
EPD-WA-02-030123	TO-15 SIM	1,3,5-Trimethylbenzene	0.065 J		0.02	0.15	UG/M3	0.065 J	
EPD-WA-02-030123	TO-15 SIM	1,3-Butadiene	0.088		0.012	0.073	UG/M3	0.088	
EPD-WA-02-030123	TO-15 SIM	1,3-Dichlorobenzene	0.037 U		0.025	0.037	UG/M3	0.037 U	
EPD-WA-02-030123	TO-15 SIM	1,4-Dichlorobenzene	0.037 U		0.029	0.037	UG/M3	0.037 U	
EPD-WA-02-030123	TO-15 SIM	1,4-Dioxane	0.15 U		0.013	0.15	UG/M3	0.15 U	
EPD-WA-02-030123	TO-15 SIM	Acetone	2.6 J		0.34	3.7	UG/M3	2.6 J	
EPD-WA-02-030123	TO-15 SIM	Acrolein	0.16 J		0.051	0.29	UG/M3	0.16 J	
EPD-WA-02-030123	TO-15 SIM	Benzene	1		0.022	0.11	UG/M3	1	
EPD-WA-02-030123	TO-15 SIM	Bromodichloromethane	0.037 U		0.0085	0.037	UG/M3	0.037 U	
EPD-WA-02-030123	TO-15 SIM	Bromomethane	0.029 J		0.0098	0.037	UG/M3	0.029 J	
EPD-WA-02-030123	TO-15 SIM	Carbon Tetrachloride	0.49		0.01	0.037	UG/M3	0.49	

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Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-WA-02-030123	TO-15 SIM	Chlorobenzene	0.15 U		0.014	0.15	UG/M3	0.15 U	
EPD-WA-02-030123	TO-15 SIM	Chloroethane		0.012 J	0.011	0.037	UG/M3	0.012 J	
EPD-WA-02-030123	TO-15 SIM	Chloroform		0.081 J	0.012	0.15	UG/M3	0.081 J	
EPD-WA-02-030123	TO-15 SIM	Chloromethane		0.42	0.038	0.073	UG/M3	0.42	
EPD-WA-02-030123	TO-15 SIM	cis-1,2-Dichloroethene		0.037 U	0.011	0.037	UG/M3	0.037 U	
EPD-WA-02-030123	TO-15 SIM	cis-1,3-Dichloropropene		0.073 U	0.01	0.073	UG/M3	0.073 U	
EPD-WA-02-030123	TO-15 SIM	Dibromochloromethane		0.037 U	0.0093	0.037	UG/M3	0.037 U	
EPD-WA-02-030123	TO-15 SIM	Dichlorodifluoromethane (CFC 12)		2.6	0.012	0.073	UG/M3	2.6	
EPD-WA-02-030123	TO-15 SIM	Dichloromethane (Methylene Chloride)		0.41	0.011	0.15	UG/M3	0.41	
EPD-WA-02-030123	TO-15 SIM	Ethylbenzene		0.2	0.018	0.15	UG/M3	0.2	
EPD-WA-02-030123	TO-15 SIM	Hexachlorobutadiene		0.15 U	0.019	0.15	UG/M3	0.15 U	
EPD-WA-02-030123	TO-15 SIM	m,p-Xylenes		0.72	0.035	0.15	UG/M3	0.72	
EPD-WA-02-030123	TO-15 SIM	Methyl tert-Butyl Ether		0.037 U	0.018	0.037	UG/M3	0.037 U	
EPD-WA-02-030123	TO-15 SIM	Naphthalene		0.086 J	0.032	0.15	UG/M3	0.086 J	
EPD-WA-02-030123	TO-15 SIM	o-Xylene		0.26	0.019	0.15	UG/M3	0.26	
EPD-WA-02-030123	TO-15 SIM	Styrene		0.11 J	0.018	0.15	UG/M3	0.11 J	
EPD-WA-02-030123	TO-15 SIM	Tetrachloroethene		0.34	0.013	0.037	UG/M3	0.34	
EPD-WA-02-030123	TO-15 SIM	Toluene		1.8	0.018	0.15	UG/M3	1.8	
EPD-WA-02-030123	TO-15 SIM	trans-1,2-Dichloroethene		0.037 U	0.016	0.037	UG/M3	0.037 U	
EPD-WA-02-030123	TO-15 SIM	trans-1,3-Dichloropropene		0.073 U	0.007	0.073	UG/M3	0.073 U	
EPD-WA-02-030123	TO-15 SIM	Trichloroethene		0.013 J	0.011	0.037	UG/M3	0.013 J	
EPD-WA-02-030123	TO-15 SIM	Trichlorofluoromethane		1.3	0.012	0.073	UG/M3	1.3	
EPD-WA-02-030123	TO-15 SIM	Vinyl Chloride		0.56	0.018	0.037	UG/M3	0.56	
EPD-WA-03-030123	TO-15	2-Butoxyethanol		0 U,NF			UG/M3	0 U,NF	
EPD-WA-03-030123	TO-15	2-Ethylhexyl Acrylate		0 U,NF			UG/M3	0 U,NF	
EPD-WA-03-030123	TO-15	2-Methylbutane		4.6 T			UG/M3	4.6 NJ	
EPD-WA-03-030123	TO-15	Ethyl Acetate		9.5 T			UG/M3	9.5 NJ	
EPD-WA-03-030123	TO-15	n-Butyl Acrylate		0 U,NF			UG/M3	0 U,NF	
EPD-WA-03-030123	TO-15	n-Pentane		3.9 T			UG/M3	3.9 NJ	
EPD-WA-03-030123	TO-15	Propane		4.2 T			UG/M3	4.2 NJ	
EPD-WA-03-030123	TO-15 SIM	1,1,1-Trichloroethane		0.033 U	0.012	0.033	UG/M3	0.033 U	
EPD-WA-03-030123	TO-15 SIM	1,1,2,2-Tetrachloroethane		0.033 U	0.011	0.033	UG/M3	0.033 U	
EPD-WA-03-030123	TO-15 SIM	1,1,2-Trichloroethane		0.13 U	0.0077	0.13	UG/M3	0.13 U	
EPD-WA-03-030123	TO-15 SIM	1,1,2-Trichlorotrifluoroethane		0.48	0.011	0.033	UG/M3	0.48	
EPD-WA-03-030123	TO-15 SIM	1,1-Dichloroethane		0.033 U	0.011	0.033	UG/M3	0.033 U	
EPD-WA-03-030123	TO-15 SIM	1,1-Dichloroethene		0.033 U	0.011	0.033	UG/M3	0.033 U	
EPD-WA-03-030123	TO-15 SIM	1,2,4-Trichlorobenzene		0.065 U	0.026	0.065	UG/M3	0.065 U	
EPD-WA-03-030123	TO-15 SIM	1,2,4-Trimethylbenzene		0.1 J	0.021	0.13	UG/M3	0.1 J	
EPD-WA-03-030123	TO-15 SIM	1,2-Dibromo 3-Chloropropane		0.13 U	0.018	0.13	UG/M3	0.13 U	
EPD-WA-03-030123	TO-15 SIM	1,2-Dibromoethane		0.033 U	0.0087	0.033	UG/M3	0.033 U	
EPD-WA-03-030123	TO-15 SIM	1,2-Dichlorobenzene		0.033 U	0.023	0.033	UG/M3	0.033 U	
EPD-WA-03-030123	TO-15 SIM	1,2-Dichloroethane		0.061	0.011	0.033	UG/M3	0.061	
EPD-WA-03-030123	TO-15 SIM	1,2-Dichloropropane		0.015 J	0.0079	0.033	UG/M3	0.015 J	
EPD-WA-03-030123	TO-15 SIM	1,3,5-Trimethylbenzene		0.025 J	0.018	0.13	UG/M3	0.025 J	
EPD-WA-03-030123	TO-15 SIM	1,3-Butadiene		0.05 J	0.01	0.065	UG/M3	0.05 J	
EPD-WA-03-030123	TO-15 SIM	1,3-Dichlorobenzene		0.033 U	0.022	0.033	UG/M3	0.033 U	
EPD-WA-03-030123	TO-15 SIM	1,4-Dichlorobenzene		0.033 U	0.026	0.033	UG/M3	0.033 U	
EPD-WA-03-030123	TO-15 SIM	1,4-Dioxane		0.13 U	0.011	0.13	UG/M3	0.13 U	

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
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Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-WA-03-030123	TO-15 SIM	Acetone	2.7 J		0.3	3.3	UG/M3	2.7 J	
EPD-WA-03-030123	TO-15 SIM	Acrolein		0.11 J	0.046	0.26	UG/M3	0.11 J	
EPD-WA-03-030123	TO-15 SIM	Benzene		0.74		0.02	0.098	UG/M3	0.74
EPD-WA-03-030123	TO-15 SIM	Bromodichloromethane		0.033 U	0.0075	0.033	UG/M3	0.033 U	
EPD-WA-03-030123	TO-15 SIM	Bromomethane		0.026 J	0.0087	0.033	UG/M3	0.026 J	
EPD-WA-03-030123	TO-15 SIM	Carbon Tetrachloride		0.43	0.0092	0.033	UG/M3	0.43	
EPD-WA-03-030123	TO-15 SIM	Chlorobenzene		0.13 U	0.013	0.13	UG/M3	0.13 U	
EPD-WA-03-030123	TO-15 SIM	Chloroethane		0.014 J	0.01	0.033	UG/M3	0.014 J	
EPD-WA-03-030123	TO-15 SIM	Chloroform		0.069 J	0.01	0.13	UG/M3	0.069 J	
EPD-WA-03-030123	TO-15 SIM	Chloromethane		0.2	0.034	0.065	UG/M3	0.2	
EPD-WA-03-030123	TO-15 SIM	cis-1,2-Dichloroethene		0.033 U	0.0094	0.033	UG/M3	0.033 U	
EPD-WA-03-030123	TO-15 SIM	cis-1,3-Dichloropropene		0.065 U	0.0092	0.065	UG/M3	0.065 U	
EPD-WA-03-030123	TO-15 SIM	Dibromochloromethane		0.033 U	0.0083	0.033	UG/M3	0.033 U	
EPD-WA-03-030123	TO-15 SIM	Dichlorodifluoromethane (CFC 12)		2.4	0.011	0.065	UG/M3	2.4	
EPD-WA-03-030123	TO-15 SIM	Dichloromethane (Methylene Chloride)		0.32	0.01	0.13	UG/M3	0.32	
EPD-WA-03-030123	TO-15 SIM	Ethylbenzene		0.096 J	0.016	0.13	UG/M3	0.096 J	
EPD-WA-03-030123	TO-15 SIM	Hexachlorobutadiene		0.13 U	0.017	0.13	UG/M3	0.13 U	
EPD-WA-03-030123	TO-15 SIM	m,p-Xylenes		0.32	0.031	0.13	UG/M3	0.32	
EPD-WA-03-030123	TO-15 SIM	Methyl tert-Butyl Ether		0.033 U	0.016	0.033	UG/M3	0.033 U	
EPD-WA-03-030123	TO-15 SIM	Naphthalene		0.13 U	0.029	0.13	UG/M3	0.13 U	
EPD-WA-03-030123	TO-15 SIM	o-Xylene		0.12 J	0.017	0.13	UG/M3	0.12 J	
EPD-WA-03-030123	TO-15 SIM	Styrene		0.058 J	0.016	0.13	UG/M3	0.058 J	
EPD-WA-03-030123	TO-15 SIM	Tetrachloroethene		0.11	0.011	0.033	UG/M3	0.11	
EPD-WA-03-030123	TO-15 SIM	Toluene		1.1	0.016	0.13	UG/M3	1.1	
EPD-WA-03-030123	TO-15 SIM	trans-1,2-Dichloroethene		0.033 U	0.014	0.033	UG/M3	0.033 U	
EPD-WA-03-030123	TO-15 SIM	trans-1,3-Dichloropropene		0.065 U	0.0062	0.065	UG/M3	0.065 U	
EPD-WA-03-030123	TO-15 SIM	Trichloroethene		0.011 J		0.01	0.033	UG/M3	0.011 J
EPD-WA-03-030123	TO-15 SIM	Trichlorofluoromethane		1.2	0.011	0.065	UG/M3	1.2	
EPD-WA-03-030123	TO-15 SIM	Vinyl Chloride		1.1	0.016	0.033	UG/M3	1.1	