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R5_EastPalestine@epa.gov

March 15, 2023

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. 1695**

Dear Mr. Peters:

Tetra Tech, Inc. (Tetra Tech) is submitting these data validation reports for twenty-five air samples, including one field duplicate sample, collected at the E Palestine site. The samples were collected on March 3 – March 7, 2023 and were analyzed for volatile organic compounds (VOCs) by Eurofins Air Toxics, LLC and ALS Environmental. The final laboratory data package was received on March 11, 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 3* (January 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 reads '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
EUROFINS AIR TOXICS, LLC REPORT NOS. 2303078 AND
2303113, AND ALS ENVIRONMENTAL REPORT NOS. P2301023,
AND P2301064**

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

Site Name	E Palestine Site - ER		TO/TOLIN No.	68HE0520F0032/0001EB201
Document Tracking No.	1695a		Technical Reviewer (signature and date)	<i>Harry N. Ellis III</i> 14 March 2023
Data Reviewer (signature and date)	<i>Denise Maguire</i> March 11, 2023	<i>Erin [unclear]</i> 03/13/2023	Laboratory	Eurofins Air Toxics, LLC, Folsom CA
Laboratory Report No.	2303078			
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)	03/03/2023			
Field Duplicate Pairs	None			
Field QC Blanks	None			

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	The laboratory report narrative states that a revised COC form was provided by Tetra Tech on 3/4/2023. Although the COC form requests TO-15 SIM analysis for target analytes, some target analyte results were reported from TO-15 scan.

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

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
N	The laboratory report narrative states that the work order was reissued on 3/7/2023 with revised sample IDs in accordance with an email request from Tetra Tech.

Method blanks:

Within Criteria	Exceedance/Notes
N	<p>TO-15 Scan: The method blank contained carbon disulfide contamination. This resulted in all carbon disulfide sample results being qualified as nondetect at the reporting limit (RL).</p> <p>TO-15 SIM: The method blank contained 1,1,2,2-tetrachloroethane and ethyl benzene. This resulted in the ethyl benzene result for samples EPD-DW-01-030323 and EPD-WA-03-030323 being qualified as nondetect at the RL. 1,1,2,2-Tetrachloroethane was not found in the project samples, so no further qualifications were required.</p>

Field blanks:

Within Criteria	Exceedance/Notes
NA	

Surrogates and labeled compounds:

Within Criteria	Exceedance/Notes
Y	

MS/MSDs:

Within Criteria	Exceedance/Notes
NA	

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

Laboratory duplicates:

Within Criteria	Exceedance/Notes
NA	

Field duplicates:

Within Criteria	Exceedance/Notes
NA	

LCSs/LCSDs:

Within Criteria	Exceedance/Notes
N	LCS and LCSD recoveries were reported and are acceptable; however, no RPDs were provided. No qualifications were applied.

Sample dilutions:

Within Criteria	Exceedance/Notes
Y	Canister dilution factor was 1.39 for samples EPD-WA-01-030323 and EPD-DW-01-030323, 1.31 for sample EPD-WA-02-030323 and 1.42 for sample EPD-WA-03-030323.

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 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	Tentatively identified compounds (TICs) were detected in all project samples. In some cases, the mass spectra were not adequate to identify the TIC, so the laboratory called these “Unknown TIC.” All named TICs were qualified as tentatively identified (flagged NJ) and the unknown TICs were qualified as estimated (flagged J).

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
EUROFINS AIR TOXICS, LLC REPORT NO. 2303078

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-DW-01-030323	TO-15	1,2,4-TRICHLOROBENZENE	5.2	U		0.68	5.2 UG/M3	5.2	U
EPD-DW-01-030323	TO-15	1,2,4-TRIMETHYLBENZENE	0.68	U		0.16	0.68 UG/M3	0.68	U
EPD-DW-01-030323	TO-15	1,2-DICHLOROBENZENE	0.84	U		0.18	0.84 UG/M3	0.84	U
EPD-DW-01-030323	TO-15	1,2-DICHLOROPROPANE	0.64	U		0.22	0.64 UG/M3	0.64	U
EPD-DW-01-030323	TO-15	1,3,5-TRIMETHYLBENZENE	0.68	U		0.21	0.68 UG/M3	0.68	U
EPD-DW-01-030323	TO-15	1,3-BUTADIENE	0.31	U		0.13	0.31 UG/M3	0.31	U
EPD-DW-01-030323	TO-15	1,3-DICHLOROBENZENE	0.84	U		0.17	0.84 UG/M3	0.84	U
EPD-DW-01-030323	TO-15	1,4-DIOXANE	0.5	U		0.27	0.5 UG/M3	0.5	U
EPD-DW-01-030323	TO-15	2,2,4-TRIMETHYLPENTANE	3.2	U		0.46	3.2 UG/M3	3.2	U
EPD-DW-01-030323	TO-15	2-BUTANONE (METHYL ETHYL KETONE)	0.64	J		0.46	2 UG/M3	0.64	J
EPD-DW-01-030323	TO-15	2-HEXANONE	2.8	U		0.58	2.8 UG/M3	2.8	U
EPD-DW-01-030323	TO-15	2-PROPANOL	0.54	J		0.37	6.8 UG/M3	0.54	J
EPD-DW-01-030323	TO-15	3-CHLOROPROPENE	2.2	U		0.47	2.2 UG/M3	2.2	U
EPD-DW-01-030323	TO-15	4-ETHYLTOLUENE	0.68	U		0.16	0.68 UG/M3	0.68	U
EPD-DW-01-030323	TO-15	4-METHYL-2-PENTANONE	0.57	U		0.12	0.57 UG/M3	0.57	U
EPD-DW-01-030323	TO-15	ACETONE	5.2	J		0.93	6.6 UG/M3	5.2	J
EPD-DW-01-030323	TO-15	ALPHA-CHLOROTOLUENE	0.72	U		0.38	0.72 UG/M3	0.72	U
EPD-DW-01-030323	TO-15	BROMODICHLOROMETHANE	0.93	U		0.2	0.93 UG/M3	0.93	U
EPD-DW-01-030323	TO-15	BROMOFORM	1.4	U		0.33	1.4 UG/M3	1.4	U
EPD-DW-01-030323	TO-15	BROMOMETHANE	27	U		2.1	27 UG/M3	27	U
EPD-DW-01-030323	TO-15	BUTANE	1.4	NJ			UG/M3	1.4	NJ
EPD-DW-01-030323	TO-15	BUTANE, 2-METHYL-	1.2	NJ			UG/M3	1.2	NJ
EPD-DW-01-030323	TO-15	CARBON DISULFIDE	0.56	J		0.28	2.2 UG/M3	2.2	U
EPD-DW-01-030323	TO-15	CHLOROBENZENE	0.64	U		0.18	0.64 UG/M3	2.2	U
EPD-DW-01-030323	TO-15	CIS-1,3-DICHLOROPROPENE	0.63	U		0.19	0.63 UG/M3	2	U
EPD-DW-01-030323	TO-15	CUMENE	0.68	U		0.1	0.68 UG/M3	2.2	U
EPD-DW-01-030323	TO-15	CYCLOHEXANE	2.4	U		0.25	2.4 UG/M3	2.4	U
EPD-DW-01-030323	TO-15	DIBROMOCHLOROMETHANE	1.2	U		0.24	1.2 UG/M3	1.2	U
EPD-DW-01-030323	TO-15	ETHANOL	1.6	J		1.4	5.2 UG/M3	1.6	J
EPD-DW-01-030323	TO-15	FREON 11	1.1			0.12	0.78 UG/M3	1.1	
EPD-DW-01-030323	TO-15	FREON 113	0.44	J		0.13	1.1 UG/M3	0.44	J
EPD-DW-01-030323	TO-15	HEPTANE	2.8	U		0.58	2.8 UG/M3	2.8	U
EPD-DW-01-030323	TO-15	HEXACHLOROBUTADIENE	7.4	U		0.62	7.4 UG/M3	7.4	U
EPD-DW-01-030323	TO-15	HEXANE	2.4	U		0.41	2.4 UG/M3	2.4	U
EPD-DW-01-030323	TO-15	METHYLENE CHLORIDE	0.96	U		0.36	0.96 UG/M3	0.96	U
EPD-DW-01-030323	TO-15	PROPYLBENZENE	0.68	U		0.25	0.68 UG/M3	0.68	U
EPD-DW-01-030323	TO-15	STYRENE	0.59	U		0.11	0.59 UG/M3	0.59	U
EPD-DW-01-030323	TO-15	TETRAHYDROFURAN	2	U		1.3	2 UG/M3	2	U
EPD-DW-01-030323	TO-15	TRANS-1,3-DICHLOROPROPENE	0.63	U		0.17	0.63 UG/M3	0.63	U
EPD-DW-01-030323	TO-15	UNKNOWN TIC	0.93	J			UG/M3	0.93	J
EPD-DW-01-030323	TO-15	UNKNOWN TIC	1.4	J			UG/M3	1.4	J
EPD-DW-01-030323	TO-15	UNKNOWN TIC	0.76	J			UG/M3	0.76	J
EPD-DW-01-030323	TO-15 SIM	1,1,1-TRICHLOROETHANE	0.15	U		0.02	0.15 UG/M3	0.15	U
EPD-DW-01-030323	TO-15 SIM	1,1,2,2-TETRACHLOROETHANE	0.19	U		0.032	0.19 UG/M3	0.19	U
EPD-DW-01-030323	TO-15 SIM	1,1,2-TRICHLOROETHANE	0.15	U		0.03	0.15 UG/M3	0.15	U
EPD-DW-01-030323	TO-15 SIM	1,1-DICHLOROETHANE	0.11	U		0.014	0.11 UG/M3	0.11	U
EPD-DW-01-030323	TO-15 SIM	1,1-DICHLOROETHENE	0.055	U		0.028	0.055 UG/M3	0.055	U
EPD-DW-01-030323	TO-15 SIM	1,2-DIBROMOETHANE (EDB)	0.21	U		0.048	0.21 UG/M3	0.21	U
EPD-DW-01-030323	TO-15 SIM	1,2-DICHLOROETHANE	0.051	J		0.022	0.11 UG/M3	0.051	J
EPD-DW-01-030323	TO-15 SIM	1,4-DICHLOROBENZENE	0.17	U		0.091	0.17 UG/M3	0.17	U
EPD-DW-01-030323	TO-15 SIM	BENZENE	0.6			0.043	0.22 UG/M3	0.6	
EPD-DW-01-030323	TO-15 SIM	CARBON TETRACHLORIDE	0.36			0.032	0.17 UG/M3	0.36	
EPD-DW-01-030323	TO-15 SIM	CHLOROETHANE	0.18	U		0.11	0.18 UG/M3	0.18	U
EPD-DW-01-030323	TO-15 SIM	CHLOROFORM	0.063	J		0.022	0.14 UG/M3	0.063	J
EPD-DW-01-030323	TO-15 SIM	CHLOROMETHANE	0.78	J		0.14	1.4 UG/M3	0.78	J
EPD-DW-01-030323	TO-15 SIM	CIS-1,2-DICHLOROETHENE	0.11	U		0.024	0.11 UG/M3	0.11	U
EPD-DW-01-030323	TO-15 SIM	ETHYL BENZENE	0.12			0.0086	0.12 UG/M3	0.12	U
EPD-DW-01-030323	TO-15 SIM	FREON 114	0.093	J		0.028	0.19 UG/M3	0.093	J
EPD-DW-01-030323	TO-15 SIM	FREON 12	1.8			0.02	0.34 UG/M3	1.8	
EPD-DW-01-030323	TO-15 SIM	M,P-XYLENE	0.34			0.018	0.24 UG/M3	0.34	
EPD-DW-01-030323	TO-15 SIM	METHYL TERT-BUTYL ETHER	0.5	U		0.018	0.5 UG/M3	0.5	U
EPD-DW-01-030323	TO-15 SIM	NAPHTHALENE	0.36	U		0.068	0.36 UG/M3	0.36	U
EPD-DW-01-030323	TO-15 SIM	O-XYLENE	0.13			0.015	0.12 UG/M3	0.13	

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
EUROFINS AIR TOXICS, LLC REPORT NO. 2303078

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-DW-01-030323	TO-15 SIM	TETRACHLOROETHENE	0.072	J		0.0073	0.19 UG/M3	0.072	J
EPD-DW-01-030323	TO-15 SIM	TOLUENE	0.7			0.017	0.26 UG/M3	0.7	
EPD-DW-01-030323	TO-15 SIM	TRANS-1,2-DICHLOROETHENE	1.6			0.017	0.55 UG/M3	1.6	
EPD-DW-01-030323	TO-15 SIM	TRICHLOROETHENE	0.024	J		0.013	0.15 UG/M3	0.024	J
EPD-DW-01-030323	TO-15 SIM	VINYL CHLORIDE	0.11			0.026	0.036 UG/M3	0.11	
EPD-WA-01-030323	TO-15	1,2,4-TRICHLOROBENZENE	5.2	U		0.68	5.2 UG/M3	5.2	U
EPD-WA-01-030323	TO-15	1,2,4-TRIMETHYLBENZENE	0.68	U		0.16	0.68 UG/M3	0.68	U
EPD-WA-01-030323	TO-15	1,2-DICHLOROBENZENE	0.84	U		0.18	0.84 UG/M3	0.84	U
EPD-WA-01-030323	TO-15	1,2-DICHLOROPROPANE	0.64	U		0.22	0.64 UG/M3	0.64	U
EPD-WA-01-030323	TO-15	1,3,5-TRIMETHYLBENZENE	0.68	U		0.21	0.68 UG/M3	0.68	U
EPD-WA-01-030323	TO-15	1,3-BUTADIENE	0.31	U		0.13	0.31 UG/M3	0.31	U
EPD-WA-01-030323	TO-15	1,3-DICHLOROBENZENE	0.84	U		0.17	0.84 UG/M3	0.84	U
EPD-WA-01-030323	TO-15	1,4-DIOXANE	0.5	U		0.27	0.5 UG/M3	0.5	U
EPD-WA-01-030323	TO-15	2,2,4-TRIMETHYLPENTANE	3.2	U		0.46	3.2 UG/M3	3.2	U
EPD-WA-01-030323	TO-15	2-BUTANONE (METHYL ETHYL KETONE)	2	U		0.46	2 UG/M3	2	U
EPD-WA-01-030323	TO-15	2-HEXANONE	2.8	U		0.58	2.8 UG/M3	2.8	U
EPD-WA-01-030323	TO-15	2-PROPANOL	6.8	U		0.37	6.8 UG/M3	6.8	U
EPD-WA-01-030323	TO-15	3-CHLOROPROPENE	2.2	U		0.47	2.2 UG/M3	2.2	U
EPD-WA-01-030323	TO-15	4-ETHYLTOLUENE	0.68	U		0.16	0.68 UG/M3	0.68	U
EPD-WA-01-030323	TO-15	4-METHYL-2-PENTANONE	0.57	U		0.12	0.57 UG/M3	0.57	U
EPD-WA-01-030323	TO-15	ACETONE	3.2	J		0.93	6.6 UG/M3	3.2	J
EPD-WA-01-030323	TO-15	ALPHA-CHLOROTOLUENE	0.72	U		0.38	0.72 UG/M3	0.72	U
EPD-WA-01-030323	TO-15	BROMODICHLOROMETHANE	0.93	U		0.2	0.93 UG/M3	0.93	U
EPD-WA-01-030323	TO-15	BROMOFORM	1.4	U		0.33	1.4 UG/M3	1.4	U
EPD-WA-01-030323	TO-15	BROMOMETHANE	27	U		2.1	27 UG/M3	27	U
EPD-WA-01-030323	TO-15	BUTANE	1.9	NJ			UG/M3	1.9	NJ
EPD-WA-01-030323	TO-15	BUTANE, 2-METHYL-	1.4	NJ			UG/M3	1.4	NJ
EPD-WA-01-030323	TO-15	CARBON DISULFIDE	0.59	J		0.28	2.2 UG/M3	2.2	U
EPD-WA-01-030323	TO-15	CHLOROBENZENE	0.64	U		0.18	0.64 UG/M3	0.64	U
EPD-WA-01-030323	TO-15	CIS-1,3-DICHLOROPROPENE	0.63	U		0.19	0.63 UG/M3	0.63	U
EPD-WA-01-030323	TO-15	CUMENE	0.68	U		0.1	0.68 UG/M3	0.68	U
EPD-WA-01-030323	TO-15	CYCLOHEXANE	2.4	U		0.25	2.4 UG/M3	2.4	U
EPD-WA-01-030323	TO-15	DIBROMOCHLOROMETHANE	1.2	U		0.24	1.2 UG/M3	1.2	U
EPD-WA-01-030323	TO-15	ETHANOL	5.2	U		1.4	5.2 UG/M3	5.2	U
EPD-WA-01-030323	TO-15	FREON 11	1.1			0.12	0.78 UG/M3	1.1	
EPD-WA-01-030323	TO-15	FREON 113	0.4	J		0.13	1.1 UG/M3	0.4	J
EPD-WA-01-030323	TO-15	HEPTANE	2.8	U		0.58	2.8 UG/M3	2.8	U
EPD-WA-01-030323	TO-15	HEXACHLOROBUTADIENE	7.4	U		0.62	7.4 UG/M3	7.4	U
EPD-WA-01-030323	TO-15	HEXANE	0.42	J		0.41	2.4 UG/M3	0.42	J
EPD-WA-01-030323	TO-15	METHYLENE CHLORIDE	0.96	U		0.36	0.96 UG/M3	0.96	U
EPD-WA-01-030323	TO-15	PENTANE	0.79	NJ			UG/M3	0.79	NJ
EPD-WA-01-030323	TO-15	PENTANE, 2-METHYL-	0.71	NJ			UG/M3	0.71	NJ
EPD-WA-01-030323	TO-15	PROPYLBENZENE	0.68	U		0.25	0.68 UG/M3	0.68	U
EPD-WA-01-030323	TO-15	STYRENE	0.59	U		0.11	0.59 UG/M3	0.59	U
EPD-WA-01-030323	TO-15	TETRAHYDROFURAN	2	U		1.3	2 UG/M3	2	U
EPD-WA-01-030323	TO-15	TRANS-1,3-DICHLOROPROPENE	0.63	U		0.17	0.63 UG/M3	0.63	U
EPD-WA-01-030323	TO-15	UNKNOWN TIC	0.77	J			UG/M3	0.77	J
EPD-WA-01-030323	TO-15	UNKNOWN TIC	1.3	J			UG/M3	1.3	J
EPD-WA-01-030323	TO-15 SIM	1,1,1-TRICHLOROETHANE	0.15	U		0.02	0.15 UG/M3	0.15	U
EPD-WA-01-030323	TO-15 SIM	1,1,2,2-TETRACHLOROETHANE	0.19	U		0.032	0.19 UG/M3	0.19	U
EPD-WA-01-030323	TO-15 SIM	1,1,2-TRICHLOROETHANE	0.15	U		0.03	0.15 UG/M3	0.15	U
EPD-WA-01-030323	TO-15 SIM	1,1-DICHLOROETHANE	0.11	U		0.014	0.11 UG/M3	0.11	U
EPD-WA-01-030323	TO-15 SIM	1,1-DICHLOROETHENE	0.055	U		0.028	0.055 UG/M3	0.055	U
EPD-WA-01-030323	TO-15 SIM	1,2-DIBROMOETHANE (EDB)	0.21	U		0.048	0.21 UG/M3	0.21	U
EPD-WA-01-030323	TO-15 SIM	1,2-DICHLOROETHANE	0.054	J		0.022	0.11 UG/M3	0.054	J
EPD-WA-01-030323	TO-15 SIM	1,4-DICHLOROBENZENE	0.17	U		0.091	0.17 UG/M3	0.17	U
EPD-WA-01-030323	TO-15 SIM	BENZENE	0.68			0.043	0.22 UG/M3	0.68	
EPD-WA-01-030323	TO-15 SIM	CARBON TETRACHLORIDE	0.35			0.032	0.17 UG/M3	0.35	
EPD-WA-01-030323	TO-15 SIM	CHLOROETHANE	0.18	U		0.11	0.18 UG/M3	0.18	U
EPD-WA-01-030323	TO-15 SIM	CHLOROFORM	0.063	J		0.022	0.14 UG/M3	0.063	J
EPD-WA-01-030323	TO-15 SIM	CHLOROMETHANE	0.73	J		0.14	1.4 UG/M3	0.73	J
EPD-WA-01-030323	TO-15 SIM	CIS-1,2-DICHLOROETHENE	0.11	U		0.024	0.11 UG/M3	0.11	U
EPD-WA-01-030323	TO-15 SIM	ETHYL BENZENE	0.16			0.0086	0.12 UG/M3	0.16	

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
EUROFINS AIR TOXICS, LLC REPORT NO. 2303078

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-WA-01-030323	TO-15 SIM	FREON 114	0.094	J		0.028	0.19 UG/M3	0.094	J
EPD-WA-01-030323	TO-15 SIM	FREON 12	1.8			0.02	0.34 UG/M3	1.8	
EPD-WA-01-030323	TO-15 SIM	M,P-XYLENE	0.51			0.018	0.24 UG/M3	0.51	
EPD-WA-01-030323	TO-15 SIM	METHYL TERT-BUTYL ETHER	0.5	U		0.018	0.5 UG/M3	0.5	U
EPD-WA-01-030323	TO-15 SIM	NAPHTHALENE	0.079	J		0.068	0.36 UG/M3	0.079	J
EPD-WA-01-030323	TO-15 SIM	O-XYLENE	0.2			0.015	0.12 UG/M3	0.2	
EPD-WA-01-030323	TO-15 SIM	TETRACHLOROETHENE	0.17	J		0.0073	0.19 UG/M3	0.17	J
EPD-WA-01-030323	TO-15 SIM	TOLUENE	1			0.017	0.26 UG/M3	1	
EPD-WA-01-030323	TO-15 SIM	TRANS-1,2-DICHLOROETHENE	0.55	U		0.017	0.55 UG/M3	0.55	U
EPD-WA-01-030323	TO-15 SIM	TRICHLOROETHENE	0.015	J		0.013	0.15 UG/M3	0.015	J
EPD-WA-01-030323	TO-15 SIM	VINYL CHLORIDE	0.22			0.026	0.036 UG/M3	0.22	
EPD-WA-02-030323	TO-15	1,2,4-TRICHLOROBENZENE	4.9	U		0.64	4.9 UG/M3	4.9	U
EPD-WA-02-030323	TO-15	1,2,4-TRIMETHYLBENZENE	0.64	U		0.16	0.64 UG/M3	0.64	U
EPD-WA-02-030323	TO-15	1,2-DICHLOROBENZENE	0.79	U		0.17	0.79 UG/M3	0.79	U
EPD-WA-02-030323	TO-15	1,2-DICHLOROPROPANE	0.6	U		0.21	0.6 UG/M3	0.6	U
EPD-WA-02-030323	TO-15	1,3,5-TRIMETHYLBENZENE	0.64	U		0.2	0.64 UG/M3	0.64	U
EPD-WA-02-030323	TO-15	1,3-BUTADIENE	0.29	U		0.12	0.29 UG/M3	0.29	U
EPD-WA-02-030323	TO-15	1,3-DICHLOROBENZENE	0.79	U		0.16	0.79 UG/M3	0.79	U
EPD-WA-02-030323	TO-15	1,4-DIOXANE	0.47	U		0.26	0.47 UG/M3	0.47	U
EPD-WA-02-030323	TO-15	2,2,4-TRIMETHYLPENTANE	3	U		0.43	3 UG/M3	3	U
EPD-WA-02-030323	TO-15	2-BUTANONE (METHYL ETHYL KETONE)	0.45	J		0.43	1.9 UG/M3	0.45	J
EPD-WA-02-030323	TO-15	2-HEXANONE	2.7	U		0.54	2.7 UG/M3	2.7	U
EPD-WA-02-030323	TO-15	2-PROPANOL	6.4	U		0.35	6.4 UG/M3	6.4	U
EPD-WA-02-030323	TO-15	2-PROPENOIC ACID, BUTYL ESTER	1	NJ			UG/M3	1	NJ
EPD-WA-02-030323	TO-15	3-CHLOROPROPENE	2	U		0.45	2 UG/M3	2	U
EPD-WA-02-030323	TO-15	4-ETHYLTOLUENE	0.64	U		0.15	0.64 UG/M3	0.64	U
EPD-WA-02-030323	TO-15	4-METHYL-2-PENTANONE	0.54	U		0.11	0.54 UG/M3	0.54	U
EPD-WA-02-030323	TO-15	ACETONE	2.9	J		0.88	6.2 UG/M3	2.9	J
EPD-WA-02-030323	TO-15	ALPHA-CHLOROTOLUENE	0.68	U		0.36	0.68 UG/M3	0.68	U
EPD-WA-02-030323	TO-15	BROMODICHLOROMETHANE	0.88	U		0.19	0.88 UG/M3	0.88	U
EPD-WA-02-030323	TO-15	BROMOFORM	1.4	U		0.31	1.4 UG/M3	1.4	U
EPD-WA-02-030323	TO-15	BROMOMETHANE	25	U		2	25 UG/M3	25	U
EPD-WA-02-030323	TO-15	BUTANE	2	NJ			UG/M3	2	NJ
EPD-WA-02-030323	TO-15	BUTANE, 2-METHYL-	1.3	NJ			UG/M3	1.3	NJ
EPD-WA-02-030323	TO-15	CARBON DISULFIDE	0.49	J		0.27	2 UG/M3	2	U
EPD-WA-02-030323	TO-15	CHLOROBENZENE	0.6	U		0.17	0.6 UG/M3	0.6	U
EPD-WA-02-030323	TO-15	CIS-1,3-DICHLOROPROPENE	0.59	U		0.18	0.59 UG/M3	0.59	U
EPD-WA-02-030323	TO-15	CUMENE	0.64	U		0.097	0.64 UG/M3	0.64	U
EPD-WA-02-030323	TO-15	CYCLOHEXANE	2.2	U		0.24	2.2 UG/M3	2.2	U
EPD-WA-02-030323	TO-15	DIBROMOCHLOROMETHANE	1.1	U		0.23	1.1 UG/M3	1.1	U
EPD-WA-02-030323	TO-15	ETHANOL	4.9	U		1.3	4.9 UG/M3	4.9	U
EPD-WA-02-030323	TO-15	FREON 11	1.1			0.11	0.74 UG/M3	1.1	
EPD-WA-02-030323	TO-15	FREON 113	0.42	J		0.12	1 UG/M3	0.42	J
EPD-WA-02-030323	TO-15	HEPTANE	2.7	U		0.54	2.7 UG/M3	2.7	U
EPD-WA-02-030323	TO-15	HEXACHLOROBUTADIENE	7	U		0.58	7 UG/M3	7	U
EPD-WA-02-030323	TO-15	HEXANE	2.3	U		0.38	2.3 UG/M3	2.3	U
EPD-WA-02-030323	TO-15	METHYLENE CHLORIDE	0.91	U		0.34	0.91 UG/M3	0.91	U
EPD-WA-02-030323	TO-15	PENTANE	0.78	NJ			UG/M3	0.78	NJ
EPD-WA-02-030323	TO-15	PROPYLBENZENE	0.64	U		0.24	0.64 UG/M3	0.64	U
EPD-WA-02-030323	TO-15	STYRENE	0.56	U		0.1	0.56 UG/M3	0.56	U
EPD-WA-02-030323	TO-15	TETRAHYDROFURAN	1.9	U		1.2	1.9 UG/M3	1.9	U
EPD-WA-02-030323	TO-15	TRANS-1,3-DICHLOROPROPENE	0.59	U		0.16	0.59 UG/M3	0.59	U
EPD-WA-02-030323	TO-15	UNKNOWN TIC	0.79	J			UG/M3	0.79	J
EPD-WA-02-030323	TO-15	UNKNOWN TIC	1.2	J			UG/M3	1.2	J
EPD-WA-02-030323	TO-15	UNKNOWN TIC	0.91	J			UG/M3	0.91	J
EPD-WA-02-030323	TO-15 SIM	1,1,1-TRICHLOROETHANE	0.14	U		0.019	0.14 UG/M3	0.14	U
EPD-WA-02-030323	TO-15 SIM	1,1,2,2-TETRACHLOROETHANE	0.18	U		0.03	0.18 UG/M3	0.18	U
EPD-WA-02-030323	TO-15 SIM	1,1,2-TRICHLOROETHANE	0.14	U		0.028	0.14 UG/M3	0.14	U
EPD-WA-02-030323	TO-15 SIM	1,1-DICHLOROETHANE	0.11	U		0.013	0.11 UG/M3	0.11	U
EPD-WA-02-030323	TO-15 SIM	1,1-DICHLOROETHENE	0.052	U		0.026	0.052 UG/M3	0.052	U
EPD-WA-02-030323	TO-15 SIM	1,2-DIBROMOETHANE (EDB)	0.2	U		0.045	0.2 UG/M3	0.2	U
EPD-WA-02-030323	TO-15 SIM	1,2-DICHLOROETHANE	0.054	J		0.021	0.11 UG/M3	0.054	J
EPD-WA-02-030323	TO-15 SIM	1,4-DICHLOROBENZENE	0.16	U		0.086	0.16 UG/M3	0.16	U

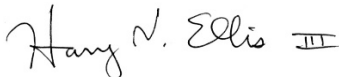


E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
EUROFINS AIR TOXICS, LLC REPORT NO. 2303078

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-WA-02-030323	TO-15 SIM	BENZENE	0.61			0.04	0.21 UG/M3	0.61	
EPD-WA-02-030323	TO-15 SIM	CARBON TETRACHLORIDE	0.37		0.031		0.16 UG/M3	0.37	
EPD-WA-02-030323	TO-15 SIM	CHLOROETHANE	0.17 U			0.1	0.17 UG/M3	0.17 U	
EPD-WA-02-030323	TO-15 SIM	CHLOROFORM	0.061 J			0.02	0.13 UG/M3	0.061 J	
EPD-WA-02-030323	TO-15 SIM	CHLOROMETHANE	0.74 J			0.13	1.4 UG/M3	0.74 J	
EPD-WA-02-030323	TO-15 SIM	CIS-1,2-DICHLOROETHENE	0.1 U		0.022		0.1 UG/M3	0.1 U	
EPD-WA-02-030323	TO-15 SIM	ETHYL BENZENE	0.14		0.0081		0.11 UG/M3	0.14	
EPD-WA-02-030323	TO-15 SIM	FREON 114	0.097 J			0.026	0.18 UG/M3	0.097 J	
EPD-WA-02-030323	TO-15 SIM	FREON 12	1.8			0.018	0.32 UG/M3	1.8	
EPD-WA-02-030323	TO-15 SIM	M,P-XYLENE	0.44		0.016		0.23 UG/M3	0.44	
EPD-WA-02-030323	TO-15 SIM	METHYL TERT-BUTYL ETHER	0.47 U		0.018		0.47 UG/M3	0.47 U	
EPD-WA-02-030323	TO-15 SIM	NAPHTHALENE	0.097 J		0.064		0.34 UG/M3	0.097 J	
EPD-WA-02-030323	TO-15 SIM	O-XYLENE	0.17		0.014		0.11 UG/M3	0.17	
EPD-WA-02-030323	TO-15 SIM	TETRACHLOROETHENE	0.11 J		0.0068		0.18 UG/M3	0.11 J	
EPD-WA-02-030323	TO-15 SIM	TOLUENE	0.76		0.016		0.25 UG/M3	0.76	
EPD-WA-02-030323	TO-15 SIM	TRANS-1,2-DICHLOROETHENE	0.52 U		0.016		0.52 UG/M3	0.52 U	
EPD-WA-02-030323	TO-15 SIM	TRICHLOROETHENE	0.016 J		0.013		0.14 UG/M3	0.016 J	
EPD-WA-02-030323	TO-15 SIM	VINYL CHLORIDE	0.92		0.024		0.033 UG/M3	0.92	
EPD-WA-03-030323	TO-15	1,2,4-TRICHLOROBENZENE	5.3 U			0.7	5.3 UG/M3	5.3 U	
EPD-WA-03-030323	TO-15	1,2,4-TRIMETHYLBENZENE	0.7 U			0.17	0.7 UG/M3	0.7 U	
EPD-WA-03-030323	TO-15	1,2-DICHLOROBENZENE	0.85 U			0.18	0.85 UG/M3	0.85 U	
EPD-WA-03-030323	TO-15	1,2-DICHLOROPROPANE	0.66 U			0.23	0.66 UG/M3	0.66 U	
EPD-WA-03-030323	TO-15	1,3,5-TRIMETHYLBENZENE	0.7 U			0.22	0.7 UG/M3	0.7 U	
EPD-WA-03-030323	TO-15	1,3-BUTADIENE	0.31 U			0.13	0.31 UG/M3	0.31 U	
EPD-WA-03-030323	TO-15	1,3-DICHLOROBENZENE	0.85 U			0.18	0.85 UG/M3	0.85 U	
EPD-WA-03-030323	TO-15	1,4-DIOXANE	0.51 U			0.28	0.51 UG/M3	0.51 U	
EPD-WA-03-030323	TO-15	2,2,4-TRIMETHYLPENTANE	3.3 U			0.47	3.3 UG/M3	3.3 U	
EPD-WA-03-030323	TO-15	2-BUTANONE (METHYL ETHYL KETONE)	0.66 J			0.47	2.1 UG/M3	0.66 J	
EPD-WA-03-030323	TO-15	2-HEXANONE	2.9 U			0.59	2.9 UG/M3	2.9 U	
EPD-WA-03-030323	TO-15	2-PROPANOL	7 U			0.38	7 UG/M3	7 U	
EPD-WA-03-030323	TO-15	3-CHLOROPROPENE	2.2 U			0.48	2.2 UG/M3	2.2 U	
EPD-WA-03-030323	TO-15	4-ETHYLTOLUENE	0.7 U			0.16	0.7 UG/M3	0.7 U	
EPD-WA-03-030323	TO-15	4-METHYL-2-PENTANONE	0.58 U			0.12	0.58 UG/M3	0.58 U	
EPD-WA-03-030323	TO-15	ACETALDEHYDE	1.6 NJ				UG/M3	1.6 NJ	
EPD-WA-03-030323	TO-15	ACETONE	3.3 J			0.95	6.7 UG/M3	3.3 J	
EPD-WA-03-030323	TO-15	ALPHA-CHLOROTOLUENE	0.74 U			0.39	0.74 UG/M3	0.74 U	
EPD-WA-03-030323	TO-15	BROMODICHLOROMETHANE	0.95 U			0.2	0.95 UG/M3	0.95 U	
EPD-WA-03-030323	TO-15	BROMOFORM	1.5 U			0.33	1.5 UG/M3	1.5 U	
EPD-WA-03-030323	TO-15	BROMOMETHANE	28 U			2.1	28 UG/M3	28 U	
EPD-WA-03-030323	TO-15	BUTANE, 2-METHYL-	1.1 NJ				UG/M3	1.1 NJ	
EPD-WA-03-030323	TO-15	CARBON DISULFIDE	0.54 J			0.29	2.2 UG/M3	0.54 J	
EPD-WA-03-030323	TO-15	CHLOROBENZENE	0.65 U			0.18	0.65 UG/M3	0.65 U	
EPD-WA-03-030323	TO-15	CIS-1,3-DICHLOROPROPENE	0.64 U			0.2	0.64 UG/M3	0.64 U	
EPD-WA-03-030323	TO-15	CUMENE	0.7 U			0.1	0.7 UG/M3	0.7 U	
EPD-WA-03-030323	TO-15	CYCLOHEXANE	2.4 U			0.26	2.4 UG/M3	2.4 U	
EPD-WA-03-030323	TO-15	DIBROMOCHLOROMETHANE	1.2 U			0.25	1.2 UG/M3	1.2 U	
EPD-WA-03-030323	TO-15	ETHANOL	5.4 U			1.4	5.4 UG/M3	5.4 U	
EPD-WA-03-030323	TO-15	FREON 11	1			0.12	0.8 UG/M3	1.0	
EPD-WA-03-030323	TO-15	FREON 113	0.39 J			0.14	1.1 UG/M3	0.39 J	
EPD-WA-03-030323	TO-15	HEPTANE	2.9 U			0.59	2.9 UG/M3	2.9 U	
EPD-WA-03-030323	TO-15	HEXACHLOROBUTADIENE	7.6 U			0.64	7.6 UG/M3	7.6 U	
EPD-WA-03-030323	TO-15	HEXANE	2.5 U			0.42	2.5 UG/M3	2.5 U	
EPD-WA-03-030323	TO-15	METHYLENE CHLORIDE	0.99 U			0.37	0.99 UG/M3	0.99 U	
EPD-WA-03-030323	TO-15	PROPYLBENZENE	0.7 U			0.26	0.7 UG/M3	0.7 U	
EPD-WA-03-030323	TO-15	STYRENE	0.6 U			0.11	0.6 UG/M3	0.6 U	
EPD-WA-03-030323	TO-15	TETRAHYDROFURAN	2.1 U			1.3	2.1 UG/M3	2.1 U	
EPD-WA-03-030323	TO-15	TRANS-1,3-DICHLOROPROPENE	0.64 U			0.17	0.64 UG/M3	0.64 U	
EPD-WA-03-030323	TO-15	UNKNOWN TIC	1.5 J				UG/M3	1.5 J	
EPD-WA-03-030323	TO-15 SIM	1,1,1-TRICHLOROETHANE	0.15 U		0.021		0.15 UG/M3	0.15 U	
EPD-WA-03-030323	TO-15 SIM	1,1,2,2-TETRACHLOROETHANE	0.19 U		0.033		0.19 UG/M3	0.19 U	
EPD-WA-03-030323	TO-15 SIM	1,1,2-TRICHLOROETHANE	0.15 U		0.031		0.15 UG/M3	0.15 U	
EPD-WA-03-030323	TO-15 SIM	1,1-DICHLOROETHANE	0.11 U		0.014		0.11 UG/M3	0.11 U	
EPD-WA-03-030323	TO-15 SIM	1,1-DICHLOROETHENE	0.056 U		0.028		0.056 UG/M3	0.056 U	

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
EUROFINS AIR TOXICS, LLC REPORT NO. 2303078

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-WA-03-030323	TO-15 SIM	1,2-DIBROMOETHANE (EDB)	0.22	U	0.049	0.22	UG/M3	0.22	U
EPD-WA-03-030323	TO-15 SIM	1,2-DICHLOROETHANE	0.05	J	0.022	0.11	UG/M3	0.05	J
EPD-WA-03-030323	TO-15 SIM	1,4-DICHLOROBENZENE	0.17	U	0.093	0.17	UG/M3	0.17	U
EPD-WA-03-030323	TO-15 SIM	BENZENE	0.59		0.044	0.23	UG/M3	0.59	
EPD-WA-03-030323	TO-15 SIM	CARBON TETRACHLORIDE	0.36		0.033	0.18	UG/M3	0.36	
EPD-WA-03-030323	TO-15 SIM	CHLOROETHANE	0.19	U	0.11	0.19	UG/M3	0.19	U
EPD-WA-03-030323	TO-15 SIM	CHLOROFORM	0.062	J	0.022	0.14	UG/M3	0.062	J
EPD-WA-03-030323	TO-15 SIM	CHLOROMETHANE	0.74	J	0.14	1.5	UG/M3	0.74	J
EPD-WA-03-030323	TO-15 SIM	CIS-1,2-DICHLOROETHENE	0.11	U	0.024	0.11	UG/M3	0.11	U
EPD-WA-03-030323	TO-15 SIM	ETHYL BENZENE	0.086	J	0.0088	0.12	UG/M3	0.12	U
EPD-WA-03-030323	TO-15 SIM	FREON 114	0.1	J	0.028	0.2	UG/M3	0.1	J
EPD-WA-03-030323	TO-15 SIM	FREON 12	1.8		0.02	0.35	UG/M3	1.8	
EPD-WA-03-030323	TO-15 SIM	M,P-XYLENE	0.22	J	0.018	0.25	UG/M3	0.22	J
EPD-WA-03-030323	TO-15 SIM	METHYL TERT-BUTYL ETHER	0.51	U	0.019	0.51	UG/M3	0.51	U
EPD-WA-03-030323	TO-15 SIM	NAPHTHALENE	0.11	J	0.07	0.37	UG/M3	0.11	J
EPD-WA-03-030323	TO-15 SIM	O-XYLENE	0.094	J	0.015	0.12	UG/M3	0.094	J
EPD-WA-03-030323	TO-15 SIM	TETRACHLOROETHENE	0.11	J	0.0074	0.19	UG/M3	0.11	J
EPD-WA-03-030323	TO-15 SIM	TOLUENE	0.55		0.018	0.27	UG/M3	0.55	
EPD-WA-03-030323	TO-15 SIM	TRANS-1,2-DICHLOROETHENE	0.56	U	0.017	0.56	UG/M3	0.56	U
EPD-WA-03-030323	TO-15 SIM	TRICHLOROETHENE	0.016	J	0.014	0.15	UG/M3	0.016	J
EPD-WA-03-030323	TO-15 SIM	VINYL CHLORIDE	1.8		0.026	0.036	UG/M3	1.8	

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

Site Name	E Palestine Site - ER		TO/TOLIN No.	68HE0520F0032/0001EB201
Document Tracking No.	1695b		Technical Reviewer (signature and date)	 15 March 2023
Data Reviewer (signature and date)	 March 11, 2023	 03/13/2023	Laboratory	Eurofins Air Toxics, LLC, Folsom CA
Laboratory Report No.	2303113			
Analyses	Volatile organic compounds (VOCs) by EPA Method TO-15 in scan and selected ion monitoring (SIM) modes			
Samples and Matrix	Seven air samples			
Collection Date(s)	03/06/2023			
Field Duplicate Pairs	None			
Field QC Blanks	None			

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	The laboratory narrative states that sample EPD-DW-01-030623 was canceled on 3/6/23 per client's request. No results are provided for this sample.

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

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
N	The laboratory narrative states that the chain-of-custody (COC) form sample ID for sample EPD-WA-01-030623 did not match the entry on the sample tag and that the sample was logged in using the ID on the COC form.

Method blanks:

Within Criteria	Exceedance/Notes
N	<p>TO-15 scan: The method blank contained methylene chloride. This resulted in all field samples being qualified as nondetect for methylene chloride at the reporting limit (RL).</p> <p>TO-15 SIM: The method blank contained ethyl benzene, tetrachloroethene, and toluene. This resulted in the following results being qualified as nondetect at the RL:</p> <ul style="list-style-type: none"> • Ethylbenzene in samples EPD-WA-03-030623, EPD-WA-04-030623, and EPD-UW-01-030623 • Tetrachloroethene for all samples

Field blanks:

Within Criteria	Exceedance/Notes
NA	

Surrogates and labeled compounds:

Within Criteria	Exceedance/Notes
Y	

MS/MSDs:

Within Criteria	Exceedance/Notes
NA	

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

Laboratory duplicates:

Within Criteria	Exceedance/Notes
NA	

Field duplicates:

Within Criteria	Exceedance/Notes
NA	

LCSs/LCSDs:

Within Criteria	Exceedance/Notes
N	LCS and LCSD recoveries were reported and are acceptable; however, no RPDs were provided. No qualifications were applied.

Sample dilutions:

Within Criteria	Exceedance/Notes
Y	Canister dilution factor was 1.42 for samples EPD-WA-01-0623, 1.16 for sample EPD-WA-02-030623, 1.20 for sample EPD-WA-03-030623, 1.27 for sample EPD-WA-04-030623, 1.23 for sample EPD-WA-05-030623, 1.23 for sample EPD-WA-06-030623, and 1.42 for sample EPD-UW-01-030623.

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 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	Tentatively identified compounds (TICs) were detected in five of the project samples. In some cases, the mass spectra were not adequate to identify the TIC, so the laboratory called these “Unknown TIC.” All named TICs were qualified as tentatively identified (flagged NJ) and the unknown TICs were qualified as estimated (flagged J).

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.

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

Site Name	E Palestine Site - ER		TO/TOLIN No.	68HE0520F0032/0001EB201
Document Tracking No.	1695c		Technical Reviewer (signature and date)	<i>Harry N. Ellis III</i> 14 March 2023
Data Reviewer (signature and date)	<i>Dennis Maguire</i> March 11, 2023	<i>Severin</i> 03/13/2023	Laboratory	ALS Environmental, Simi Valley, CA
Laboratory Report No.	P2301023			
Analyses	Volatile organic compounds (VOCs) by EPA Method TO-15 in scan and selected ion monitoring) (SIM) modes			
Samples and Matrix	Six air samples including one field duplicate			
Collection Date(s)	03/05/2023			
Field Duplicate Pairs	EPD-WA-01-030523/EPD-WA-11-030523			
Field QC Blanks	None			

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
Y	

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: The method blank contained toluene. All field sample toluene results are >10X the blank result; therefore, no qualification was necessary.

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	

Field duplicates:

Within Criteria	Exceedance/Notes
Y	

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

LCSs/LCSDs:

Within Criteria	Exceedance/Notes
N	To-15 SIM: 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, and o-xylene had high recoveries for the LCS and LCSD. The results for these compounds were qualified as estimated with a possible high bias (flagged J+) for all field samples.

Sample dilutions:

Within Criteria	Exceedance/Notes
Y	Canister dilution factors were 1.50 for sample EPD-WA-01-030523, 1.76 for sample EPD-WA-11-030523, 1.47 for sample EPD-WA-02-030523, 1.48 for EPD-WA-03-030523, 1.59 for sample EPD-DW-01-030523, and 1.52 for sample EPD-UW-01-030523.

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 qualified as estimated (flagged J) by the laboratory.

Tentatively identified compounds:

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

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

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.

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

Site Name	E Palestine Site - ER		TO/TOLIN No.	68HE0520F0032/0001EB201
Document Tracking No.	1695d		Technical Reviewer (signature and date)	<i>Harry N. Ellis III</i> 15 March 2023
Data Reviewer (signature and date)	<i>Denise Megini</i> March 11, 2023	<i>S. W. [Signature]</i> 03/13/2023	Laboratory	ALS Environmental, Simi Valley, CA
Laboratory Report No.	P2301064			
Analyses	Volatile organic compounds (VOCs) by EPA Method TO-15 in scan and selected ion monitoring (SIM) modes			
Samples and Matrix	Eight air samples			
Collection Date(s)	03/07/2023			
Field Duplicate Pairs	None			
Field QC Blanks	None			

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
Y	

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

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
N	The starting and ending field-measured canister pressures listed on the chain-of-custody (COC) form are positive numbers for all samples. This appears to be an error on the part of the field sampler. No units are provided. The laboratory-measured canister pressures at laboratory receipt for all samples were outside of the -2 to -10 inches of mercury acceptance range. Although no qualifications were applied, 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: A low concentration of toluene was detected in the method blank. However, all field sample results for toluene were nondetect or were >10X the blank result and therefore no qualifications were necessary.

Field blanks:

Within Criteria	Exceedance/Notes
NA	

Surrogates and labeled compounds:

Within Criteria	Exceedance/Notes
Y	

MS/MSDs:

Within Criteria	Exceedance/Notes
NA	

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

Laboratory duplicates:

Within Criteria	Exceedance/Notes
NA	

Field duplicates:

Within Criteria	Exceedance/Notes
NA	

LCSs/LCSDs:

Within Criteria	Exceedance/Notes
Y	

Sample dilutions:

Within Criteria	Exceedance/Notes
Y	Canister dilution factors are 1.32 for sample EPD-WA-04-030723, 1.20 for sample EPD-WA-01-030723, 1.34 for sample EPD-WA-02-030723, 1.32 for sample EPD-WA-03-030723, 1.21 for sample EPD-WA-05-030723, 1.24 for sample EPD-WA-06-030723, 1.25 for sample EPD-UW-01-030723, and 1.17 for sample EPD-DW-01030723.

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 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	Tentatively identified compounds (TICs) were detected in the samples. The known TICs were qualified as tentatively identified (flagged NJ). Butyl ester 2-propenoic acid (butyl acrylate), 2-ethylhexyl acrylate, and 2-butoxyethanol were reported as not detected and were qualified as manually searched for, but not found in the samples (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.

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ALS ENVIRONMENTAL REPORT NO. P2301064

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-DW-01-030723	TO-15	2-Butoxyethanol	0	U,NF			UG/M3	0	U,NF
EPD-DW-01-030723	TO-15	2-Ethylhexyl Acrylate	0	U,NF			UG/M3	0	U,NF
EPD-DW-01-030723	TO-15	Acetone	3.8	T			UG/M3	3.8	NJ
EPD-DW-01-030723	TO-15	BUTYL ESTER-2-PROPENOIC ACID	0	U,NF			UG/M3	0	U,NF
EPD-DW-01-030723	TO-15	Propane	2.5	T			UG/M3	2.5	NJ
EPD-DW-01-030723	TO-15 SIM	1,1,1-Trichloroethane	0.029	U	0.011	0.029	UG/M3	0.029	U
EPD-DW-01-030723	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.029	U	0.01	0.029	UG/M3	0.029	U
EPD-DW-01-030723	TO-15 SIM	1,1,2-Trichloroethane	0.12	U	0.0069	0.12	UG/M3	0.12	U
EPD-DW-01-030723	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.11		0.0095	0.029	UG/M3	0.11	
EPD-DW-01-030723	TO-15 SIM	1,1-Dichloroethane	0.029	U	0.0096	0.029	UG/M3	0.029	U
EPD-DW-01-030723	TO-15 SIM	1,1-Dichloroethene	0.029	U	0.01	0.029	UG/M3	0.029	U
EPD-DW-01-030723	TO-15 SIM	1,2,4-Trichlorobenzene	0.059	U	0.023	0.059	UG/M3	0.059	U
EPD-DW-01-030723	TO-15 SIM	1,2,4-Trimethylbenzene	0.12	U	0.019	0.12	UG/M3	0.12	U
EPD-DW-01-030723	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.12	U	0.016	0.12	UG/M3	0.12	U
EPD-DW-01-030723	TO-15 SIM	1,2-Dibromoethane	0.029	U	0.0078	0.029	UG/M3	0.029	U
EPD-DW-01-030723	TO-15 SIM	1,2-Dichlorobenzene	0.029	U	0.021	0.029	UG/M3	0.029	U
EPD-DW-01-030723	TO-15 SIM	1,2-Dichloroethane	0.013	J	0.0097	0.029	UG/M3	0.013	J
EPD-DW-01-030723	TO-15 SIM	1,2-Dichloropropane	0.029	U	0.0071	0.029	UG/M3	0.029	U
EPD-DW-01-030723	TO-15 SIM	1,3,5-Trimethylbenzene	0.12	U	0.016	0.12	UG/M3	0.12	U
EPD-DW-01-030723	TO-15 SIM	1,3-Butadiene	0.019	J	0.0092	0.059	UG/M3	0.019	J
EPD-DW-01-030723	TO-15 SIM	1,3-Dichlorobenzene	0.029	U	0.02	0.029	UG/M3	0.029	U
EPD-DW-01-030723	TO-15 SIM	1,4-Dichlorobenzene	0.029	U	0.023	0.029	UG/M3	0.029	U
EPD-DW-01-030723	TO-15 SIM	1,4-Dioxane	0.02	J	0.01	0.12	UG/M3	0.02	J
EPD-DW-01-030723	TO-15 SIM	Acetone	3.8		0.27	2.9	UG/M3	3.8	
EPD-DW-01-030723	TO-15 SIM	Acrolein	0.15	J	0.041	0.23	UG/M3	0.15	J
EPD-DW-01-030723	TO-15 SIM	Benzene	0.088	U	0.018	0.088	UG/M3	0.088	U
EPD-DW-01-030723	TO-15 SIM	Bromodichloromethane	0.029	U	0.0068	0.029	UG/M3	0.029	U
EPD-DW-01-030723	TO-15 SIM	Bromomethane	0.024	J	0.0078	0.029	UG/M3	0.024	J
EPD-DW-01-030723	TO-15 SIM	Carbon Tetrachloride	0.044		0.0083	0.029	UG/M3	0.044	
EPD-DW-01-030723	TO-15 SIM	Chlorobenzene	0.12	U	0.011	0.12	UG/M3	0.12	U
EPD-DW-01-030723	TO-15 SIM	Chloroethane	0.02	J	0.0091	0.029	UG/M3	0.02	J
EPD-DW-01-030723	TO-15 SIM	Chloroform	0.022	J	0.0094	0.12	UG/M3	0.022	J
EPD-DW-01-030723	TO-15 SIM	Chloromethane	0.18		0.03	0.059	UG/M3	0.18	
EPD-DW-01-030723	TO-15 SIM	cis-1,2-Dichloroethene	0.029	U	0.0084	0.029	UG/M3	0.029	U
EPD-DW-01-030723	TO-15 SIM	cis-1,3-Dichloropropene	0.059	U	0.0083	0.059	UG/M3	0.059	U
EPD-DW-01-030723	TO-15 SIM	Dibromochloromethane	0.029	U	0.0075	0.029	UG/M3	0.029	U
EPD-DW-01-030723	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	2		0.0099	0.059	UG/M3	2	
EPD-DW-01-030723	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.28		0.0091	0.12	UG/M3	0.28	
EPD-DW-01-030723	TO-15 SIM	Ethylbenzene	0.12	U	0.014	0.12	UG/M3	0.12	U
EPD-DW-01-030723	TO-15 SIM	Hexachlorobutadiene	0.12	U	0.015	0.12	UG/M3	0.12	U
EPD-DW-01-030723	TO-15 SIM	m,p-Xylenes	0.12	U	0.028	0.12	UG/M3	0.12	U
EPD-DW-01-030723	TO-15 SIM	Methyl tert-Butyl Ether	0.029	U	0.014	0.029	UG/M3	0.029	U
EPD-DW-01-030723	TO-15 SIM	Naphthalene	0.12	U	0.026	0.12	UG/M3	0.12	U
EPD-DW-01-030723	TO-15 SIM	o-Xylene	0.12	U	0.015	0.12	UG/M3	0.12	U
EPD-DW-01-030723	TO-15 SIM	Styrene	0.12	U	0.014	0.12	UG/M3	0.12	U
EPD-DW-01-030723	TO-15 SIM	Tetrachloroethene	0.029	U	0.01	0.029	UG/M3	0.029	U
EPD-DW-01-030723	TO-15 SIM	Toluene	0.12	U	0.014	0.12	UG/M3	0.12	U
EPD-DW-01-030723	TO-15 SIM	trans-1,2-Dichloroethene	0.029	U	0.013	0.029	UG/M3	0.029	U
EPD-DW-01-030723	TO-15 SIM	trans-1,3-Dichloropropene	0.059	U	0.0056	0.059	UG/M3	0.059	U
EPD-DW-01-030723	TO-15 SIM	Trichloroethene	0.016	J	0.009	0.029	UG/M3	0.016	J
EPD-DW-01-030723	TO-15 SIM	Trichlorofluoromethane	0.78		0.0095	0.059	UG/M3	0.78	
EPD-DW-01-030723	TO-15 SIM	Vinyl Chloride	0.037		0.014	0.029	UG/M3	0.037	
EPD-UW-01-030723	TO-15	2-Butoxyethanol	0	U,NF			UG/M3	0	U,NF
EPD-UW-01-030723	TO-15	2-Ethylhexyl Acrylate	0	U,NF			UG/M3	0	U,NF
EPD-UW-01-030723	TO-15	2-ETHYLHEXYLACETATE	2.1	T			UG/M3	2.1	NJ
EPD-UW-01-030723	TO-15	Acetone	5.5	T			UG/M3	5.5	NJ
EPD-UW-01-030723	TO-15	BUTYL ESTER-2-PROPENOIC ACID	0	U,NF			UG/M3	0	U,NF
EPD-UW-01-030723	TO-15	Ethyl Acetate	9.4	T			UG/M3	9.4	NJ
EPD-UW-01-030723	TO-15	Propane	2.7	T			UG/M3	2.7	NJ
EPD-UW-01-030723	TO-15	Unknown Siloxane	2.3	T			UG/M3	2.3	NJ
EPD-UW-01-030723	TO-15 SIM	1,1,1-Trichloroethane	0.031	U	0.011	0.031	UG/M3	0.031	U
EPD-UW-01-030723	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.031	U	0.011	0.031	UG/M3	0.031	U
EPD-UW-01-030723	TO-15 SIM	1,1,2-Trichloroethane	0.13	U	0.0074	0.13	UG/M3	0.13	U
EPD-UW-01-030723	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.48		0.01	0.031	UG/M3	0.48	
EPD-UW-01-030723	TO-15 SIM	1,1-Dichloroethane	0.031	U	0.01	0.031	UG/M3	0.031	U
EPD-UW-01-030723	TO-15 SIM	1,1-Dichloroethene	0.031	U	0.011	0.031	UG/M3	0.031	U
EPD-UW-01-030723	TO-15 SIM	1,2,4-Trichlorobenzene	0.063	U	0.025	0.063	UG/M3	0.063	U
EPD-UW-01-030723	TO-15 SIM	1,2,4-Trimethylbenzene	0.04	J	0.02	0.13	UG/M3	0.04	J
EPD-UW-01-030723	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.13	U	0.018	0.13	UG/M3	0.13	U
EPD-UW-01-030723	TO-15 SIM	1,2-Dibromoethane	0.031	U	0.0084	0.031	UG/M3	0.031	U
EPD-UW-01-030723	TO-15 SIM	1,2-Dichlorobenzene	0.031	U	0.023	0.031	UG/M3	0.031	U
EPD-UW-01-030723	TO-15 SIM	1,2-Dichloroethane	0.061		0.01	0.031	UG/M3	0.061	
EPD-UW-01-030723	TO-15 SIM	1,2-Dichloropropane	0.016	J	0.0076	0.031	UG/M3	0.016	J
EPD-UW-01-030723	TO-15 SIM	1,3,5-Trimethylbenzene	0.13	U	0.018	0.13	UG/M3	0.13	U
EPD-UW-01-030723	TO-15 SIM	1,3-Butadiene	0.025	J	0.0099	0.063	UG/M3	0.025	J

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
ALS ENVIRONMENTAL REPORT NO. P2301064

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-UW-01-030723	TO-15 SIM	1,3-Dichlorobenzene	0.031	U		0.021	0.031 UG/M3	0.031	U
EPD-UW-01-030723	TO-15 SIM	1,4-Dichlorobenzene	0.031	U		0.025	0.031 UG/M3	0.031	U
EPD-UW-01-030723	TO-15 SIM	1,4-Dioxane	0.13	U		0.011	0.13 UG/M3	0.13	U
EPD-UW-01-030723	TO-15 SIM	Acetone	5.5			0.29	3.1 UG/M3	5.5	
EPD-UW-01-030723	TO-15 SIM	Acrolein	0.12	J		0.044	0.25 UG/M3	0.12	J
EPD-UW-01-030723	TO-15 SIM	Benzene	0.45			0.019	0.094 UG/M3	0.45	
EPD-UW-01-030723	TO-15 SIM	Bromodichloromethane	0.031	U		0.0073	0.031 UG/M3	0.031	U
EPD-UW-01-030723	TO-15 SIM	Bromomethane	0.028	J		0.0084	0.031 UG/M3	0.028	J
EPD-UW-01-030723	TO-15 SIM	Carbon Tetrachloride	0.43			0.0089	0.031 UG/M3	0.43	
EPD-UW-01-030723	TO-15 SIM	Chlorobenzene	0.13	U		0.012	0.13 UG/M3	0.13	U
EPD-UW-01-030723	TO-15 SIM	Chloroethane	0.017	J		0.0098	0.031 UG/M3	0.017	J
EPD-UW-01-030723	TO-15 SIM	Chloroform	0.066	J		0.01	0.13 UG/M3	0.066	J
EPD-UW-01-030723	TO-15 SIM	Chloromethane	0.22			0.033	0.063 UG/M3	0.22	
EPD-UW-01-030723	TO-15 SIM	cis-1,2-Dichloroethene	0.031	U		0.009	0.031 UG/M3	0.031	U
EPD-UW-01-030723	TO-15 SIM	cis-1,3-Dichloropropene	0.063	U		0.0089	0.063 UG/M3	0.063	U
EPD-UW-01-030723	TO-15 SIM	Dibromochloromethane	0.031	U		0.008	0.031 UG/M3	0.031	U
EPD-UW-01-030723	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	2.3			0.011	0.063 UG/M3	2.3	
EPD-UW-01-030723	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.32			0.0098	0.13 UG/M3	0.32	
EPD-UW-01-030723	TO-15 SIM	Ethylbenzene	0.044	J		0.015	0.13 UG/M3	0.044	J
EPD-UW-01-030723	TO-15 SIM	Hexachlorobutadiene	0.13	U		0.016	0.13 UG/M3	0.13	U
EPD-UW-01-030723	TO-15 SIM	m,p-Xylenes	0.12	J		0.03	0.13 UG/M3	0.12	J
EPD-UW-01-030723	TO-15 SIM	Methyl tert-Butyl Ether	0.031	U		0.015	0.031 UG/M3	0.031	U
EPD-UW-01-030723	TO-15 SIM	Naphthalene	0.045	J		0.028	0.13 UG/M3	0.045	J
EPD-UW-01-030723	TO-15 SIM	o-Xylene	0.049	J		0.016	0.13 UG/M3	0.049	J
EPD-UW-01-030723	TO-15 SIM	Styrene	0.2			0.015	0.13 UG/M3	0.2	
EPD-UW-01-030723	TO-15 SIM	Tetrachloroethene	0.043			0.011	0.031 UG/M3	0.043	
EPD-UW-01-030723	TO-15 SIM	Toluene	0.49	B		0.015	0.13 UG/M3	0.49	
EPD-UW-01-030723	TO-15 SIM	trans-1,2-Dichloroethene	0.031	U		0.014	0.031 UG/M3	0.031	U
EPD-UW-01-030723	TO-15 SIM	trans-1,3-Dichloropropene	0.063	U		0.006	0.063 UG/M3	0.063	U
EPD-UW-01-030723	TO-15 SIM	Trichloroethene	0.026	J		0.0096	0.031 UG/M3	0.026	J
EPD-UW-01-030723	TO-15 SIM	Trichlorofluoromethane	1.2			0.01	0.063 UG/M3	1.2	
EPD-UW-01-030723	TO-15 SIM	Vinyl Chloride	0.031	U		0.015	0.031 UG/M3	0.031	U
EPD-WA-01-030723	TO-15	2-Butoxyethanol	0	U,NF			UG/M3	0	U,NF
EPD-WA-01-030723	TO-15	2-Ethylhexyl Acrylate	0	U,NF			UG/M3	0	U,NF
EPD-WA-01-030723	TO-15	2-Methylpropane	3.7	T			UG/M3	3.7	NJ
EPD-WA-01-030723	TO-15	Acetone	11	T			UG/M3	11	NJ
EPD-WA-01-030723	TO-15	BUTYL ESTER-2-PROPENOIC ACID	0	U,NF			UG/M3	0	U,NF
EPD-WA-01-030723	TO-15	Ethanol	2.3	T			UG/M3	2.3	NJ
EPD-WA-01-030723	TO-15	Hexane	25	T			UG/M3	25	NJ
EPD-WA-01-030723	TO-15	n-Butane	5.1	T			UG/M3	5.1	NJ
EPD-WA-01-030723	TO-15	n-Pentane	2.5	T			UG/M3	2.5	NJ
EPD-WA-01-030723	TO-15	Propane	68	T			UG/M3	68	NJ
EPD-WA-01-030723	TO-15	Unknown Siloxane	4.9	T			UG/M3	4.9	NJ
EPD-WA-01-030723	TO-15 SIM	1,1,1-Trichloroethane	0.03	U		0.011	0.03 UG/M3	0.03	U
EPD-WA-01-030723	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.03	U		0.01	0.03 UG/M3	0.03	U
EPD-WA-01-030723	TO-15 SIM	1,1,2-Trichloroethane	0.12	U		0.0071	0.12 UG/M3	0.12	U
EPD-WA-01-030723	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.47			0.0097	0.03 UG/M3	0.47	
EPD-WA-01-030723	TO-15 SIM	1,1-Dichloroethane	0.03	U		0.0098	0.03 UG/M3	0.03	U
EPD-WA-01-030723	TO-15 SIM	1,1-Dichloroethene	0.03	U		0.011	0.03 UG/M3	0.03	U
EPD-WA-01-030723	TO-15 SIM	1,2,4-Trichlorobenzene	0.06	U		0.024	0.06 UG/M3	0.06	U
EPD-WA-01-030723	TO-15 SIM	1,2,4-Trimethylbenzene	0.3			0.019	0.12 UG/M3	0.3	
EPD-WA-01-030723	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.12	U		0.017	0.12 UG/M3	0.12	U
EPD-WA-01-030723	TO-15 SIM	1,2-Dibromoethane	0.03	U		0.008	0.03 UG/M3	0.03	U
EPD-WA-01-030723	TO-15 SIM	1,2-Dichlorobenzene	0.03	U		0.022	0.03 UG/M3	0.03	U
EPD-WA-01-030723	TO-15 SIM	1,2-Dichloroethane	0.063			0.01	0.03 UG/M3	0.063	
EPD-WA-01-030723	TO-15 SIM	1,2-Dichloropropane	0.015	J		0.0073	0.03 UG/M3	0.015	J
EPD-WA-01-030723	TO-15 SIM	1,3,5-Trimethylbenzene	0.08	J		0.017	0.12 UG/M3	0.08	J
EPD-WA-01-030723	TO-15 SIM	1,3-Butadiene	0.071			0.0095	0.06 UG/M3	0.071	
EPD-WA-01-030723	TO-15 SIM	1,3-Dichlorobenzene	0.03	U		0.02	0.03 UG/M3	0.03	U
EPD-WA-01-030723	TO-15 SIM	1,4-Dichlorobenzene	0.03	U		0.024	0.03 UG/M3	0.03	U
EPD-WA-01-030723	TO-15 SIM	1,4-Dioxane	0.12	U		0.01	0.12 UG/M3	0.12	U
EPD-WA-01-030723	TO-15 SIM	Acetone	8.4			0.28	3 UG/M3	8.4	
EPD-WA-01-030723	TO-15 SIM	Acrolein	0.22	J		0.042	0.24 UG/M3	0.22	J
EPD-WA-01-030723	TO-15 SIM	Benzene	0.96			0.018	0.09 UG/M3	0.96	
EPD-WA-01-030723	TO-15 SIM	Bromodichloromethane	0.03	U		0.007	0.03 UG/M3	0.03	U
EPD-WA-01-030723	TO-15 SIM	Bromomethane	0.026	J		0.008	0.03 UG/M3	0.026	J
EPD-WA-01-030723	TO-15 SIM	Carbon Tetrachloride	0.42			0.0085	0.03 UG/M3	0.42	
EPD-WA-01-030723	TO-15 SIM	Chlorobenzene	0.12	U		0.012	0.12 UG/M3	0.12	U
EPD-WA-01-030723	TO-15 SIM	Chloroethane	0.015	J		0.0094	0.03 UG/M3	0.015	J
EPD-WA-01-030723	TO-15 SIM	Chloroform	0.064	J		0.0096	0.12 UG/M3	0.064	J
EPD-WA-01-030723	TO-15 SIM	Chloromethane	0.23			0.031	0.06 UG/M3	0.23	
EPD-WA-01-030723	TO-15 SIM	cis-1,2-Dichloroethene	0.03	U		0.0086	0.03 UG/M3	0.03	U
EPD-WA-01-030723	TO-15 SIM	cis-1,3-Dichloropropene	0.06	U		0.0085	0.06 UG/M3	0.06	U
EPD-WA-01-030723	TO-15 SIM	Dibromochloromethane	0.03	U		0.0077	0.03 UG/M3	0.03	U
EPD-WA-01-030723	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	2.3			0.01	0.06 UG/M3	2.3	

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-01-030723	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.37		0.0094		0.12 UG/M3	0.37	
EPD-WA-01-030723	TO-15 SIM	Ethylbenzene	0.18		0.014		0.12 UG/M3	0.18	
EPD-WA-01-030723	TO-15 SIM	Hexachlorobutadiene	0.12 U		0.016		0.12 UG/M3	0.12 U	
EPD-WA-01-030723	TO-15 SIM	m,p-Xylenes	0.76		0.029		0.12 UG/M3	0.76	
EPD-WA-01-030723	TO-15 SIM	Methyl tert-Butyl Ether	0.03 U		0.014		0.03 UG/M3	0.03 U	
EPD-WA-01-030723	TO-15 SIM	Naphthalene	0.2		0.026		0.12 UG/M3	0.2	
EPD-WA-01-030723	TO-15 SIM	o-Xylene	0.28		0.016		0.12 UG/M3	0.28	
EPD-WA-01-030723	TO-15 SIM	Styrene	0.73		0.014		0.12 UG/M3	0.73	
EPD-WA-01-030723	TO-15 SIM	Tetrachloroethene	0.07		0.01		0.03 UG/M3	0.07	
EPD-WA-01-030723	TO-15 SIM	Toluene	1.2 B		0.014		0.12 UG/M3	1.2	
EPD-WA-01-030723	TO-15 SIM	trans-1,2-Dichloroethene	0.03 U		0.013		0.03 UG/M3	0.03 U	
EPD-WA-01-030723	TO-15 SIM	trans-1,3-Dichloropropene	0.06 U		0.0058		0.06 UG/M3	0.06 U	
EPD-WA-01-030723	TO-15 SIM	Trichloroethene	0.03 U		0.0092		0.03 UG/M3	0.03 U	
EPD-WA-01-030723	TO-15 SIM	Trichlorofluoromethane	1.2		0.0097		0.06 UG/M3	1.2	
EPD-WA-01-030723	TO-15 SIM	Vinyl Chloride	0.18		0.014		0.03 UG/M3	0.18	
EPD-WA-02-030723	TO-15	2-Butoxyethanol	0 U,NF				UG/M3	0 U,NF	
EPD-WA-02-030723	TO-15	2-Ethylhexyl Acrylate	0 U,NF				UG/M3	0 U,NF	
EPD-WA-02-030723	TO-15	Acetone	4.3 T				UG/M3	4.3 NJ	
EPD-WA-02-030723	TO-15	BUTYL ESTER-2-PROPENOIC ACID	4.9 T				UG/M3	4.9 NJ	
EPD-WA-02-030723	TO-15	Ethyl Acetate	4.7 T				UG/M3	4.7 NJ	
EPD-WA-02-030723	TO-15	Propane	3 T				UG/M3	3 NJ	
EPD-WA-02-030723	TO-15 SIM	1,1,1-Trichloroethane	0.034 U		0.012		0.034 UG/M3	0.034 U	
EPD-WA-02-030723	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.034 U		0.012		0.034 UG/M3	0.034 U	
EPD-WA-02-030723	TO-15 SIM	1,1,2-Trichloroethane	0.13 U		0.0079		0.13 UG/M3	0.13 U	
EPD-WA-02-030723	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.48		0.011		0.034 UG/M3	0.48	
EPD-WA-02-030723	TO-15 SIM	1,1-Dichloroethane	0.034 U		0.011		0.034 UG/M3	0.034 U	
EPD-WA-02-030723	TO-15 SIM	1,1-Dichloroethene	0.034 U		0.012		0.034 UG/M3	0.034 U	
EPD-WA-02-030723	TO-15 SIM	1,2,4-Trichlorobenzene	0.067 U		0.027		0.067 UG/M3	0.067 U	
EPD-WA-02-030723	TO-15 SIM	1,2,4-Trimethylbenzene	0.086 J		0.021		0.13 UG/M3	0.086 J	
EPD-WA-02-030723	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.13 U		0.019		0.13 UG/M3	0.13 U	
EPD-WA-02-030723	TO-15 SIM	1,2-Dibromoethane	0.034 U		0.009		0.034 UG/M3	0.034 U	
EPD-WA-02-030723	TO-15 SIM	1,2-Dichlorobenzene	0.034 U		0.024		0.034 UG/M3	0.034 U	
EPD-WA-02-030723	TO-15 SIM	1,2-Dichloroethane	0.06		0.011		0.034 UG/M3	0.06	
EPD-WA-02-030723	TO-15 SIM	1,2-Dichloropropane	0.015 J		0.0082		0.034 UG/M3	0.015 J	
EPD-WA-02-030723	TO-15 SIM	1,3,5-Trimethylbenzene	0.023 J		0.019		0.13 UG/M3	0.023 J	
EPD-WA-02-030723	TO-15 SIM	1,3-Butadiene	0.022 J		0.011		0.067 UG/M3	0.022 J	
EPD-WA-02-030723	TO-15 SIM	1,3-Dichlorobenzene	0.034 U		0.023		0.034 UG/M3	0.034 U	
EPD-WA-02-030723	TO-15 SIM	1,4-Dichlorobenzene	0.034 U		0.027		0.034 UG/M3	0.034 U	
EPD-WA-02-030723	TO-15 SIM	1,4-Dioxane	0.13 U		0.012		0.13 UG/M3	0.13 U	
EPD-WA-02-030723	TO-15 SIM	Acetone	3.5		0.31		3.4 UG/M3	3.5	
EPD-WA-02-030723	TO-15 SIM	Acrolein	0.14 J		0.047		0.27 UG/M3	0.14 J	
EPD-WA-02-030723	TO-15 SIM	Benzene	0.54		0.02		0.1 UG/M3	0.54	
EPD-WA-02-030723	TO-15 SIM	Bromodichloromethane	0.034 U		0.0078		0.034 UG/M3	0.034 U	
EPD-WA-02-030723	TO-15 SIM	Bromomethane	0.025 J		0.009		0.034 UG/M3	0.025 J	
EPD-WA-02-030723	TO-15 SIM	Carbon Tetrachloride	0.43		0.0095		0.034 UG/M3	0.43	
EPD-WA-02-030723	TO-15 SIM	Chlorobenzene	0.13 U		0.013		0.13 UG/M3	0.13 U	
EPD-WA-02-030723	TO-15 SIM	Chloroethane	0.012 J		0.01		0.034 UG/M3	0.012 J	
EPD-WA-02-030723	TO-15 SIM	Chloroform	0.065 J		0.011		0.13 UG/M3	0.065 J	
EPD-WA-02-030723	TO-15 SIM	Chloromethane	0.21		0.035		0.067 UG/M3	0.21	
EPD-WA-02-030723	TO-15 SIM	cis-1,2-Dichloroethene	0.034 U		0.0096		0.034 UG/M3	0.034 U	
EPD-WA-02-030723	TO-15 SIM	cis-1,3-Dichloropropene	0.067 U		0.0095		0.067 UG/M3	0.067 U	
EPD-WA-02-030723	TO-15 SIM	Dibromochloromethane	0.034 U		0.0086		0.034 UG/M3	0.034 U	
EPD-WA-02-030723	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	2.3		0.011		0.067 UG/M3	2.3	
EPD-WA-02-030723	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.31		0.01		0.13 UG/M3	0.31	
EPD-WA-02-030723	TO-15 SIM	Ethylbenzene	0.13 J		0.016		0.13 UG/M3	0.13 J	
EPD-WA-02-030723	TO-15 SIM	Hexachlorobutadiene	0.13 U		0.017		0.13 UG/M3	0.13 U	
EPD-WA-02-030723	TO-15 SIM	m,p-Xylenes	0.49		0.032		0.13 UG/M3	0.49	
EPD-WA-02-030723	TO-15 SIM	Methyl tert-Butyl Ether	0.034 U		0.016		0.034 UG/M3	0.034 U	
EPD-WA-02-030723	TO-15 SIM	Naphthalene	0.057 J		0.029		0.13 UG/M3	0.057 J	
EPD-WA-02-030723	TO-15 SIM	o-Xylene	0.17		0.017		0.13 UG/M3	0.17	
EPD-WA-02-030723	TO-15 SIM	Styrene	0.083 J		0.016		0.13 UG/M3	0.083 J	
EPD-WA-02-030723	TO-15 SIM	Tetrachloroethene	0.068		0.012		0.034 UG/M3	0.068	
EPD-WA-02-030723	TO-15 SIM	Toluene	0.44 B		0.016		0.13 UG/M3	0.44	
EPD-WA-02-030723	TO-15 SIM	trans-1,2-Dichloroethene	0.034 U		0.015		0.034 UG/M3	0.034 U	
EPD-WA-02-030723	TO-15 SIM	trans-1,3-Dichloropropene	0.067 U		0.0064		0.067 UG/M3	0.067 U	
EPD-WA-02-030723	TO-15 SIM	Trichloroethene	0.034 U		0.01		0.034 UG/M3	0.034 U	
EPD-WA-02-030723	TO-15 SIM	Trichlorofluoromethane	1.2		0.011		0.067 UG/M3	1.2	
EPD-WA-02-030723	TO-15 SIM	Vinyl Chloride	0.14		0.016		0.034 UG/M3	0.14	
EPD-WA-03-030723	TO-15	2-Butoxyethanol	0 U,NF				UG/M3	0 U,NF	
EPD-WA-03-030723	TO-15	2-Ethylhexyl Acrylate	0 U,NF				UG/M3	0 U,NF	
EPD-WA-03-030723	TO-15	Acetone	4.1 T				UG/M3	4.1 NJ	
EPD-WA-03-030723	TO-15	BUTYL ESTER-2-PROPENOIC ACID	7.4 T				UG/M3	7.4 NJ	
EPD-WA-03-030723	TO-15	Ethyl Acetate	3.8 T				UG/M3	3.8 NJ	
EPD-WA-03-030723	TO-15	Propane	3.2 T				UG/M3	3.2 NJ	
EPD-WA-03-030723	TO-15 SIM	1,1,1-Trichloroethane	0.033 U		0.012		0.033 UG/M3	0.033 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-03-030723	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.033	U		0.011	0.033 UG/M3	0.033	U
EPD-WA-03-030723	TO-15 SIM	1,1,2-Trichloroethane	0.13	U		0.0078	0.13 UG/M3	0.13	U
EPD-WA-03-030723	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.4			0.011	0.033 UG/M3	0.4	
EPD-WA-03-030723	TO-15 SIM	1,1-Dichloroethane	0.033	U		0.011	0.033 UG/M3	0.033	U
EPD-WA-03-030723	TO-15 SIM	1,1-Dichloroethene	0.033	U		0.012	0.033 UG/M3	0.033	U
EPD-WA-03-030723	TO-15 SIM	1,2,4-Trichlorobenzene	0.066	U		0.026	0.066 UG/M3	0.066	U
EPD-WA-03-030723	TO-15 SIM	1,2,4-Trimethylbenzene	0.057	J		0.021	0.13 UG/M3	0.057	J
EPD-WA-03-030723	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.13	U		0.018	0.13 UG/M3	0.13	U
EPD-WA-03-030723	TO-15 SIM	1,2-Dibromoethane	0.033	U		0.0088	0.033 UG/M3	0.033	U
EPD-WA-03-030723	TO-15 SIM	1,2-Dichlorobenzene	0.033	U		0.024	0.033 UG/M3	0.033	U
EPD-WA-03-030723	TO-15 SIM	1,2-Dichloroethane	0.05			0.011	0.033 UG/M3	0.05	
EPD-WA-03-030723	TO-15 SIM	1,2-Dichloropropane	0.013	J		0.0081	0.033 UG/M3	0.013	J
EPD-WA-03-030723	TO-15 SIM	1,3,5-Trimethylbenzene	0.13	U		0.018	0.13 UG/M3	0.13	U
EPD-WA-03-030723	TO-15 SIM	1,3-Butadiene	0.076			0.01	0.066 UG/M3	0.076	
EPD-WA-03-030723	TO-15 SIM	1,3-Dichlorobenzene	0.033	U		0.022	0.033 UG/M3	0.033	U
EPD-WA-03-030723	TO-15 SIM	1,4-Dichlorobenzene	0.033	U		0.026	0.033 UG/M3	0.033	U
EPD-WA-03-030723	TO-15 SIM	1,4-Dioxane	0.13	U		0.011	0.13 UG/M3	0.13	U
EPD-WA-03-030723	TO-15 SIM	Acetone	2.9	J		0.3	3.3 UG/M3	2.9	J
EPD-WA-03-030723	TO-15 SIM	Acrolein	0.15	J		0.046	0.26 UG/M3	0.15	J
EPD-WA-03-030723	TO-15 SIM	Benzene	0.63			0.02	0.099 UG/M3	0.63	
EPD-WA-03-030723	TO-15 SIM	Bromodichloromethane	0.033	U		0.0077	0.033 UG/M3	0.033	U
EPD-WA-03-030723	TO-15 SIM	Bromomethane	0.022	J		0.0088	0.033 UG/M3	0.022	J
EPD-WA-03-030723	TO-15 SIM	Carbon Tetrachloride	0.35			0.0094	0.033 UG/M3	0.35	
EPD-WA-03-030723	TO-15 SIM	Chlorobenzene	0.13	U		0.013	0.13 UG/M3	0.13	U
EPD-WA-03-030723	TO-15 SIM	Chloroethane	0.011	J		0.01	0.033 UG/M3	0.011	J
EPD-WA-03-030723	TO-15 SIM	Chloroform	0.051	J		0.011	0.13 UG/M3	0.051	J
EPD-WA-03-030723	TO-15 SIM	Chloromethane	0.17			0.034	0.066 UG/M3	0.17	
EPD-WA-03-030723	TO-15 SIM	cis-1,2-Dichloroethene	0.033	U		0.0095	0.033 UG/M3	0.033	U
EPD-WA-03-030723	TO-15 SIM	cis-1,3-Dichloropropene	0.066	U		0.0094	0.066 UG/M3	0.066	U
EPD-WA-03-030723	TO-15 SIM	Dibromochloromethane	0.033	U		0.0084	0.033 UG/M3	0.033	U
EPD-WA-03-030723	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	1.9			0.011	0.066 UG/M3	1.9	
EPD-WA-03-030723	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.25			0.01	0.13 UG/M3	0.25	
EPD-WA-03-030723	TO-15 SIM	Ethylbenzene	0.045	J		0.016	0.13 UG/M3	0.045	J
EPD-WA-03-030723	TO-15 SIM	Hexachlorobutadiene	0.13	U		0.017	0.13 UG/M3	0.13	U
EPD-WA-03-030723	TO-15 SIM	m,p-Xylenes	0.14			0.032	0.13 UG/M3	0.14	
EPD-WA-03-030723	TO-15 SIM	Methyl tert-Butyl Ether	0.033	U		0.016	0.033 UG/M3	0.033	U
EPD-WA-03-030723	TO-15 SIM	Naphthalene	0.15			0.029	0.13 UG/M3	0.15	
EPD-WA-03-030723	TO-15 SIM	o-Xylene	0.059	J		0.017	0.13 UG/M3	0.059	J
EPD-WA-03-030723	TO-15 SIM	Styrene	0.11	J		0.016	0.13 UG/M3	0.11	J
EPD-WA-03-030723	TO-15 SIM	Tetrachloroethene	0.033			0.011	0.033 UG/M3	0.033	
EPD-WA-03-030723	TO-15 SIM	Toluene	0.36	B		0.016	0.13 UG/M3	0.36	
EPD-WA-03-030723	TO-15 SIM	trans-1,2-Dichloroethene	0.033	U		0.015	0.033 UG/M3	0.033	U
EPD-WA-03-030723	TO-15 SIM	trans-1,3-Dichloropropene	0.066	U		0.0063	0.066 UG/M3	0.066	U
EPD-WA-03-030723	TO-15 SIM	Trichloroethene	0.033	U		0.01	0.033 UG/M3	0.033	U
EPD-WA-03-030723	TO-15 SIM	Trichlorofluoromethane	0.95			0.011	0.066 UG/M3	0.95	
EPD-WA-03-030723	TO-15 SIM	Vinyl Chloride	0.38			0.016	0.033 UG/M3	0.38	
EPD-WA-04-030723	TO-15	2-Butoxyethanol	0	U,NF			UG/M3	0	U,NF
EPD-WA-04-030723	TO-15	2-Ethylhexyl Acrylate	0	U,NF			UG/M3	0	U,NF
EPD-WA-04-030723	TO-15	Acetone	4.1	T			UG/M3	4.1	NJ
EPD-WA-04-030723	TO-15	BUTYL ESTER-2-PROPENOIC ACID	0	U,NF			UG/M3	0	U,NF
EPD-WA-04-030723	TO-15	Ethyl Acetate	4.8	T			UG/M3	4.8	NJ
EPD-WA-04-030723	TO-15	Hexamethylcyclotrisiloxane	13	T			UG/M3	13	NJ
EPD-WA-04-030723	TO-15	Propane	3.2	T			UG/M3	3.2	NJ
EPD-WA-04-030723	TO-15	Unknown	8	T			UG/M3	8	NJ
EPD-WA-04-030723	TO-15	Unknown Siloxane	4.4	T			UG/M3	4.4	NJ
EPD-WA-04-030723	TO-15 SIM	1,1,1-Trichloroethane	0.033	U		0.012	0.033 UG/M3	0.033	U
EPD-WA-04-030723	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.033	U		0.011	0.033 UG/M3	0.033	U
EPD-WA-04-030723	TO-15 SIM	1,1,2-Trichloroethane	0.13	U		0.0078	0.13 UG/M3	0.13	U
EPD-WA-04-030723	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.44			0.011	0.033 UG/M3	0.44	
EPD-WA-04-030723	TO-15 SIM	1,1-Dichloroethane	0.033	U		0.011	0.033 UG/M3	0.033	U
EPD-WA-04-030723	TO-15 SIM	1,1-Dichloroethene	0.033	U		0.012	0.033 UG/M3	0.033	U
EPD-WA-04-030723	TO-15 SIM	1,2,4-Trichlorobenzene	0.066	U		0.026	0.066 UG/M3	0.066	U
EPD-WA-04-030723	TO-15 SIM	1,2,4-Trimethylbenzene	0.075	J		0.021	0.13 UG/M3	0.075	J
EPD-WA-04-030723	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.13	U		0.018	0.13 UG/M3	0.13	U
EPD-WA-04-030723	TO-15 SIM	1,2-Dibromoethane	0.033	U		0.0088	0.033 UG/M3	0.033	U
EPD-WA-04-030723	TO-15 SIM	1,2-Dichlorobenzene	0.033	U		0.024	0.033 UG/M3	0.033	U
EPD-WA-04-030723	TO-15 SIM	1,2-Dichloroethane	0.057			0.011	0.033 UG/M3	0.057	
EPD-WA-04-030723	TO-15 SIM	1,2-Dichloropropane	0.015	J		0.0081	0.033 UG/M3	0.015	J
EPD-WA-04-030723	TO-15 SIM	1,3,5-Trimethylbenzene	0.022	J		0.018	0.13 UG/M3	0.022	J
EPD-WA-04-030723	TO-15 SIM	1,3-Butadiene	0.041	J		0.01	0.066 UG/M3	0.041	J
EPD-WA-04-030723	TO-15 SIM	1,3-Dichlorobenzene	0.033	U		0.022	0.033 UG/M3	0.033	U
EPD-WA-04-030723	TO-15 SIM	1,4-Dichlorobenzene	0.033	U		0.026	0.033 UG/M3	0.033	U
EPD-WA-04-030723	TO-15 SIM	1,4-Dioxane	0.016	J		0.011	0.13 UG/M3	0.016	J
EPD-WA-04-030723	TO-15 SIM	Acetone	3.1	J		0.3	3.3 UG/M3	3.1	J
EPD-WA-04-030723	TO-15 SIM	Acrolein	0.16	J		0.046	0.26 UG/M3	0.16	J

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
ALS ENVIRONMENTAL REPORT NO. P2301064

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-WA-04-030723	TO-15 SIM	Benzene	0.58			0.02	0.099 UG/M3	0.58	
EPD-WA-04-030723	TO-15 SIM	Bromodichloromethane	0.033	U		0.0077	0.033 UG/M3	0.033	U
EPD-WA-04-030723	TO-15 SIM	Bromomethane	0.023	J		0.0088	0.033 UG/M3	0.023	J
EPD-WA-04-030723	TO-15 SIM	Carbon Tetrachloride	0.4			0.0094	0.033 UG/M3	0.4	
EPD-WA-04-030723	TO-15 SIM	Chlorobenzene	0.13	U		0.013	0.13 UG/M3	0.13	U
EPD-WA-04-030723	TO-15 SIM	Chloroethane	0.012	J		0.01	0.033 UG/M3	0.012	J
EPD-WA-04-030723	TO-15 SIM	Chloroform	0.059	J		0.011	0.13 UG/M3	0.059	J
EPD-WA-04-030723	TO-15 SIM	Chloromethane	0.23			0.034	0.066 UG/M3	0.23	
EPD-WA-04-030723	TO-15 SIM	cis-1,2-Dichloroethene	0.033	U		0.0095	0.033 UG/M3	0.033	U
EPD-WA-04-030723	TO-15 SIM	cis-1,3-Dichloropropene	0.066	U		0.0094	0.066 UG/M3	0.066	U
EPD-WA-04-030723	TO-15 SIM	Dibromochloromethane	0.033	U		0.0084	0.033 UG/M3	0.033	U
EPD-WA-04-030723	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	2.2			0.011	0.066 UG/M3	2.2	
EPD-WA-04-030723	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.29			0.01	0.13 UG/M3	0.29	
EPD-WA-04-030723	TO-15 SIM	Ethylbenzene	0.079	J		0.016	0.13 UG/M3	0.079	J
EPD-WA-04-030723	TO-15 SIM	Hexachlorobutadiene	0.13	U		0.017	0.13 UG/M3	0.13	U
EPD-WA-04-030723	TO-15 SIM	m,p-Xylenes	0.25			0.032	0.13 UG/M3	0.25	
EPD-WA-04-030723	TO-15 SIM	Methyl tert-Butyl Ether	0.033	U		0.016	0.033 UG/M3	0.033	U
EPD-WA-04-030723	TO-15 SIM	Naphthalene	0.05	J		0.029	0.13 UG/M3	0.05	J
EPD-WA-04-030723	TO-15 SIM	o-Xylene	0.093	J		0.017	0.13 UG/M3	0.093	J
EPD-WA-04-030723	TO-15 SIM	Styrene	0.087	J		0.016	0.13 UG/M3	0.087	J
EPD-WA-04-030723	TO-15 SIM	Tetrachloroethene	0.069			0.011	0.033 UG/M3	0.069	
EPD-WA-04-030723	TO-15 SIM	Toluene	0.62	B		0.016	0.13 UG/M3	0.62	
EPD-WA-04-030723	TO-15 SIM	trans-1,2-Dichloroethene	0.033	U		0.015	0.033 UG/M3	0.033	U
EPD-WA-04-030723	TO-15 SIM	trans-1,3-Dichloropropene	0.066	U		0.0063	0.066 UG/M3	0.066	U
EPD-WA-04-030723	TO-15 SIM	Trichloroethene	0.071			0.01	0.033 UG/M3	0.071	
EPD-WA-04-030723	TO-15 SIM	Trichlorofluoromethane	1.1			0.011	0.066 UG/M3	1.1	
EPD-WA-04-030723	TO-15 SIM	Vinyl Chloride	0.16			0.016	0.033 UG/M3	0.16	
EPD-WA-05-030723	TO-15	2-Butoxyethanol	0	U,NF			UG/M3	0	U,NF
EPD-WA-05-030723	TO-15	2-Ethylhexyl Acrylate	0	U,NF			UG/M3	0	U,NF
EPD-WA-05-030723	TO-15	BUTYL ESTER-2-PROPENOIC ACID	0	U,NF			UG/M3	0	U,NF
EPD-WA-05-030723	TO-15	Ethyl Acetate	4.2	T			UG/M3	4.2	NJ
EPD-WA-05-030723	TO-15	n-Butane	3.8	T			UG/M3	3.8	NJ
EPD-WA-05-030723	TO-15	Propane	2.7	T			UG/M3	2.7	NJ
EPD-WA-05-030723	TO-15	Trimethylsilanol	3.6	T			UG/M3	3.6	NJ
EPD-WA-05-030723	TO-15 SIM	1,1,1-Trichloroethane	0.03	U		0.011	0.03 UG/M3	0.03	U
EPD-WA-05-030723	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.03	U		0.011	0.03 UG/M3	0.03	U
EPD-WA-05-030723	TO-15 SIM	1,1,2-Trichloroethane	0.12	U		0.0071	0.12 UG/M3	0.12	U
EPD-WA-05-030723	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.48			0.0098	0.03 UG/M3	0.48	
EPD-WA-05-030723	TO-15 SIM	1,1-Dichloroethane	0.011	J		0.0099	0.03 UG/M3	0.011	J
EPD-WA-05-030723	TO-15 SIM	1,1-Dichloroethene	0.03	U		0.011	0.03 UG/M3	0.03	U
EPD-WA-05-030723	TO-15 SIM	1,2,4-Trichlorobenzene	0.061	U		0.024	0.061 UG/M3	0.061	U
EPD-WA-05-030723	TO-15 SIM	1,2,4-Trimethylbenzene	0.13			0.019	0.12 UG/M3	0.13	
EPD-WA-05-030723	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.12	U		0.017	0.12 UG/M3	0.12	U
EPD-WA-05-030723	TO-15 SIM	1,2-Dibromoethane	0.03	U		0.0081	0.03 UG/M3	0.03	U
EPD-WA-05-030723	TO-15 SIM	1,2-Dichlorobenzene	0.03	U		0.022	0.03 UG/M3	0.03	U
EPD-WA-05-030723	TO-15 SIM	1,2-Dichloroethane	0.061			0.01	0.03 UG/M3	0.061	
EPD-WA-05-030723	TO-15 SIM	1,2-Dichloropropane	0.015	J		0.0074	0.03 UG/M3	0.015	J
EPD-WA-05-030723	TO-15 SIM	1,3,5-Trimethylbenzene	0.03	J		0.017	0.12 UG/M3	0.03	J
EPD-WA-05-030723	TO-15 SIM	1,3-Butadiene	0.035	J		0.0096	0.061 UG/M3	0.035	J
EPD-WA-05-030723	TO-15 SIM	1,3-Dichlorobenzene	0.03	U		0.021	0.03 UG/M3	0.03	U
EPD-WA-05-030723	TO-15 SIM	1,4-Dichlorobenzene	0.03	U		0.024	0.03 UG/M3	0.03	U
EPD-WA-05-030723	TO-15 SIM	1,4-Dioxane	0.12	U		0.011	0.12 UG/M3	0.12	U
EPD-WA-05-030723	TO-15 SIM	Acetone	2.8	J		0.28	3 UG/M3	2.8	J
EPD-WA-05-030723	TO-15 SIM	Acrolein	0.094	J		0.042	0.24 UG/M3	0.094	J
EPD-WA-05-030723	TO-15 SIM	Benzene	0.56			0.018	0.091 UG/M3	0.56	
EPD-WA-05-030723	TO-15 SIM	Bromodichloromethane	0.03	U		0.007	0.03 UG/M3	0.03	U
EPD-WA-05-030723	TO-15 SIM	Bromomethane	0.027	J		0.0081	0.03 UG/M3	0.027	J
EPD-WA-05-030723	TO-15 SIM	Carbon Tetrachloride	0.43			0.0086	0.03 UG/M3	0.43	
EPD-WA-05-030723	TO-15 SIM	Chlorobenzene	0.12	U		0.012	0.12 UG/M3	0.12	U
EPD-WA-05-030723	TO-15 SIM	Chloroethane	0.014	J		0.0094	0.03 UG/M3	0.014	J
EPD-WA-05-030723	TO-15 SIM	Chloroform	0.062	J		0.0097	0.12 UG/M3	0.062	J
EPD-WA-05-030723	TO-15 SIM	Chloromethane	0.2			0.031	0.061 UG/M3	0.2	
EPD-WA-05-030723	TO-15 SIM	cis-1,2-Dichloroethene	0.03	U		0.0087	0.03 UG/M3	0.03	U
EPD-WA-05-030723	TO-15 SIM	cis-1,3-Dichloropropene	0.061	U		0.0086	0.061 UG/M3	0.061	U
EPD-WA-05-030723	TO-15 SIM	Dibromochloromethane	0.03	U		0.0077	0.03 UG/M3	0.03	U
EPD-WA-05-030723	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	2.3			0.01	0.061 UG/M3	2.3	
EPD-WA-05-030723	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.32			0.0094	0.12 UG/M3	0.32	
EPD-WA-05-030723	TO-15 SIM	Ethylbenzene	0.091	J		0.015	0.12 UG/M3	0.091	J
EPD-WA-05-030723	TO-15 SIM	Hexachlorobutadiene	0.12	U		0.016	0.12 UG/M3	0.12	U
EPD-WA-05-030723	TO-15 SIM	m,p-Xylenes	0.35			0.029	0.12 UG/M3	0.35	
EPD-WA-05-030723	TO-15 SIM	Methyl tert-Butyl Ether	0.03	U		0.015	0.03 UG/M3	0.03	U
EPD-WA-05-030723	TO-15 SIM	Naphthalene	0.054	J		0.027	0.12 UG/M3	0.054	J
EPD-WA-05-030723	TO-15 SIM	o-Xylene	0.13			0.016	0.12 UG/M3	0.13	
EPD-WA-05-030723	TO-15 SIM	Styrene	0.07	J		0.015	0.12 UG/M3	0.07	J
EPD-WA-05-030723	TO-15 SIM	Tetrachloroethene	0.05			0.01	0.03 UG/M3	0.05	

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
ALS ENVIRONMENTAL REPORT NO. P2301064

Sample_ID	Method	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-WA-05-030723	TO-15 SIM	Toluene	0.74	B		0.015	0.12 UG/M3	0.74	
EPD-WA-05-030723	TO-15 SIM	trans-1,2-Dichloroethene	0.03	U		0.013	0.03 UG/M3	0.03	U
EPD-WA-05-030723	TO-15 SIM	trans-1,3-Dichloropropene	0.061	U		0.0058	0.061 UG/M3	0.061	U
EPD-WA-05-030723	TO-15 SIM	Trichloroethene	0.036			0.0093	0.03 UG/M3	0.036	
EPD-WA-05-030723	TO-15 SIM	Trichlorofluoromethane	1.2			0.0098	0.061 UG/M3	1.2	
EPD-WA-05-030723	TO-15 SIM	Vinyl Chloride	0.03	U		0.015	0.03 UG/M3	0.03	U
EPD-WA-06-030723	TO-15	1-Butanol	7.3	T			UG/M3	7.3	NJ
EPD-WA-06-030723	TO-15	2-Butoxyethanol	0	U,NF			UG/M3	0	U,NF
EPD-WA-06-030723	TO-15	2-Ethylhexyl Acrylate	11	T			UG/M3	11	NJ
EPD-WA-06-030723	TO-15	2-Methylbutane	5.1	T			UG/M3	5.1	NJ
EPD-WA-06-030723	TO-15	BUTYL ESTER-2-PROPENOIC ACID	45	T			UG/M3	45	NJ
EPD-WA-06-030723	TO-15	Ethyl Acetate	8.7	T			UG/M3	8.7	NJ
EPD-WA-06-030723	TO-15	Hexamethylcyclotrisiloxane	2.7	T			UG/M3	2.7	NJ
EPD-WA-06-030723	TO-15	n-Butane	2.8	T			UG/M3	2.8	NJ
EPD-WA-06-030723	TO-15	n-Nonaldehyde	2.4	T			UG/M3	2.4	NJ
EPD-WA-06-030723	TO-15	Propane	3.4	T			UG/M3	3.4	NJ
EPD-WA-06-030723	TO-15	Unknown	5.6	T			UG/M3	5.6	NJ
EPD-WA-06-030723	TO-15 SIM	1,1,1-Trichloroethane	0.031	U		0.011	0.031 UG/M3	0.031	U
EPD-WA-06-030723	TO-15 SIM	1,1,2,2-Tetrachloroethane	0.031	U		0.011	0.031 UG/M3	0.031	U
EPD-WA-06-030723	TO-15 SIM	1,1,2-Trichloroethane	0.12	U		0.0073	0.12 UG/M3	0.12	U
EPD-WA-06-030723	TO-15 SIM	1,1,2-Trichlorotrifluoroethane	0.48			0.01	0.031 UG/M3	0.48	
EPD-WA-06-030723	TO-15 SIM	1,1-Dichloroethane	0.031	U		0.01	0.031 UG/M3	0.031	U
EPD-WA-06-030723	TO-15 SIM	1,1-Dichloroethene	0.031	U		0.011	0.031 UG/M3	0.031	U
EPD-WA-06-030723	TO-15 SIM	1,2,4-Trichlorobenzene	0.062	U		0.025	0.062 UG/M3	0.062	U
EPD-WA-06-030723	TO-15 SIM	1,2,4-Trimethylbenzene	0.24			0.02	0.12 UG/M3	0.24	
EPD-WA-06-030723	TO-15 SIM	1,2-Dibromo 3-Chloropropane	0.12	U		0.017	0.12 UG/M3	0.12	U
EPD-WA-06-030723	TO-15 SIM	1,2-Dibromoethane	0.031	U		0.0083	0.031 UG/M3	0.031	U
EPD-WA-06-030723	TO-15 SIM	1,2-Dichlorobenzene	0.031	U		0.022	0.031 UG/M3	0.031	U
EPD-WA-06-030723	TO-15 SIM	1,2-Dichloroethane	0.063			0.01	0.031 UG/M3	0.063	
EPD-WA-06-030723	TO-15 SIM	1,2-Dichloropropane	0.016	J		0.0076	0.031 UG/M3	0.016	J
EPD-WA-06-030723	TO-15 SIM	1,3,5-Trimethylbenzene	0.062	J		0.017	0.12 UG/M3	0.062	J
EPD-WA-06-030723	TO-15 SIM	1,3-Butadiene	0.043	J		0.0098	0.062 UG/M3	0.043	J
EPD-WA-06-030723	TO-15 SIM	1,3-Dichlorobenzene	0.031	U		0.021	0.031 UG/M3	0.031	U
EPD-WA-06-030723	TO-15 SIM	1,4-Dichlorobenzene	0.026	J		0.025	0.031 UG/M3	0.026	J
EPD-WA-06-030723	TO-15 SIM	1,4-Dioxane	0.12	U		0.011	0.12 UG/M3	0.12	U
EPD-WA-06-030723	TO-15 SIM	Acetone	3.8			0.29	3.1 UG/M3	3.8	
EPD-WA-06-030723	TO-15 SIM	Acrolein	0.21	J		0.043	0.25 UG/M3	0.21	J
EPD-WA-06-030723	TO-15 SIM	Benzene	0.76			0.019	0.093 UG/M3	0.76	
EPD-WA-06-030723	TO-15 SIM	Bromodichloromethane	0.031	U		0.0072	0.031 UG/M3	0.031	U
EPD-WA-06-030723	TO-15 SIM	Bromomethane	0.029	J		0.0083	0.031 UG/M3	0.029	J
EPD-WA-06-030723	TO-15 SIM	Carbon Tetrachloride	0.44			0.0088	0.031 UG/M3	0.44	
EPD-WA-06-030723	TO-15 SIM	Chlorobenzene	0.12	U		0.012	0.12 UG/M3	0.12	U
EPD-WA-06-030723	TO-15 SIM	Chloroethane	0.016	J		0.0097	0.031 UG/M3	0.016	J
EPD-WA-06-030723	TO-15 SIM	Chloroform	0.065	J		0.0099	0.12 UG/M3	0.065	J
EPD-WA-06-030723	TO-15 SIM	Chloromethane	0.2			0.032	0.062 UG/M3	0.2	
EPD-WA-06-030723	TO-15 SIM	cis-1,2-Dichloroethene	0.031	U		0.0089	0.031 UG/M3	0.031	U
EPD-WA-06-030723	TO-15 SIM	cis-1,3-Dichloropropene	0.062	U		0.0088	0.062 UG/M3	0.062	U
EPD-WA-06-030723	TO-15 SIM	Dibromochloromethane	0.031	U		0.0079	0.031 UG/M3	0.031	U
EPD-WA-06-030723	TO-15 SIM	Dichlorodifluoromethane (CFC 12)	2.3			0.011	0.062 UG/M3	2.3	
EPD-WA-06-030723	TO-15 SIM	Dichloromethane (Methylene Chloride)	0.32			0.0097	0.12 UG/M3	0.32	
EPD-WA-06-030723	TO-15 SIM	Ethylbenzene	0.15			0.015	0.12 UG/M3	0.15	
EPD-WA-06-030723	TO-15 SIM	Hexachlorobutadiene	0.12	U		0.016	0.12 UG/M3	0.12	U
EPD-WA-06-030723	TO-15 SIM	m,p-Xylenes	0.58			0.03	0.12 UG/M3	0.58	
EPD-WA-06-030723	TO-15 SIM	Methyl tert-Butyl Ether	0.031	U		0.015	0.031 UG/M3	0.031	U
EPD-WA-06-030723	TO-15 SIM	Naphthalene	0.2			0.027	0.12 UG/M3	0.2	
EPD-WA-06-030723	TO-15 SIM	o-Xylene	0.23			0.016	0.12 UG/M3	0.23	
EPD-WA-06-030723	TO-15 SIM	Styrene	0.095	J		0.015	0.12 UG/M3	0.095	J
EPD-WA-06-030723	TO-15 SIM	Tetrachloroethene	0.12			0.011	0.031 UG/M3	0.12	
EPD-WA-06-030723	TO-15 SIM	Toluene	0.97	B		0.015	0.12 UG/M3	0.97	
EPD-WA-06-030723	TO-15 SIM	trans-1,2-Dichloroethene	0.031	U		0.014	0.031 UG/M3	0.031	U
EPD-WA-06-030723	TO-15 SIM	trans-1,3-Dichloropropene	0.062	U		0.006	0.062 UG/M3	0.062	U
EPD-WA-06-030723	TO-15 SIM	Trichloroethene	0.031	U		0.0095	0.031 UG/M3	0.031	U
EPD-WA-06-030723	TO-15 SIM	Trichlorofluoromethane	1.2			0.01	0.062 UG/M3	1.2	
EPD-WA-06-030723	TO-15 SIM	Vinyl Chloride	0.12			0.015	0.031 UG/M3	0.12	