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June 15, 2023

Mr. 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. 1883**

Dear Mr. Peters:

Tetra Tech, Inc. (Tetra Tech) is submitting these data validation reports for seventy-five air samples, including four field blank samples were collected at the E Palestine Site. The samples were collected on March 27 and 28, 2023, and were analyzed for acrylates by Eurofins Analytics, LLC of Ashland, Virginia. The final laboratory data package was received on June 7, 2023.

Analytical data were evaluated in general accordance with the Tetra Tech Quality Assurance Project Plan, East Palestine Train Derailment Site East Palestine, Columbiana County, Ohio, EPA Region 5, Revision 3 (April 2023), 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 or qualification of results was required for this data package. The results may be used as reported by the laboratory.

If you have any questions regarding this data validation report, please feel free to contact me.

Sincerely,

**Shanna M Vasser** Digitally signed by Shanna M Vasser  
Date: 2023.06.15 22:38:23 -04'00'

Shanna Vasser  
Civil Engineer, PE

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 ANALYTICS, LLC REPORT NOS.  
B088-012, B088-019, B089-003 AND B089-012**

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

Site Name	E Palestine Site - ER	TO/TOLIN No.	68HE0520F0032/0001EB201
Document Tracking No.	1883a	Laboratory	Eurofins Analytics, LLC, Ashland VA
Laboratory Report No.	B088-012	Analyses	
		2-Ethylhexyl acrylate and n-butyl acrylate by laboratory standard operating procedure (SOP) IHGC-P029	
Samples and Matrix	Eighteen air samples, including one field blank		
Collection Date(s)	03/27/2023		
Field Duplicate Pairs	None		
Field QC Blanks	EPD-ST-FB-032723-1		

**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, East Palestine Train Derailment Site East Palestine, Columbiana County, Ohio, EPA Region 5, Revision 3* (April 2023), 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 or qualification of results was required for this data package. The results may be used as reported by the laboratory.

**Data completeness:**

Within Criteria	Exceedance/Notes
Y	<p>Sample EPD-ST-WA-04-032723-1 was cancelled due to pump failure.</p> <p>Level II SDG did not have required QC forms thus a level IV package was reviewed.</p> <p>The results for the field blank were reported in units of micrograms (µg) while the other sample results were reported in units of µg, milligram per cubic meter (mg/m<sup>3</sup>), and parts per million (ppm) (volume) in the laboratory report and only ppm in the electronic data deliverable (EDD).</p> <p>The laboratory report included the following note: “The method reference, Rohm &amp; Haas IH9805 is referenced to the AIHA certification as “IHGC-P029”.</p>

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

**Data completeness (continued):**

Within Criteria	Exceedance/Notes
Y	<p>A unique sample ID was not provided for LCSD. Unique IDs are needed to keep from overwriting QC sample IDs when EDDs are uploaded to the client database. The LCSD ID (in the Samp No and Lab Samp No fields) in the EDD were manually revised to match the laboratory report.</p> <p>The extraction date information in the EDD did not match the laboratory report or was blank. The project management team confirmed that this information was not needed in the EDD; therefore, all extraction date information except the field header was deleted from the EDD.</p> <p>The sample analysis time was reported as a default value of 12 AM or 00:00 hours for the LCSD in the analysis date field. The analysis date was correct. The sample analysis time for the LCSD was not required for the EDD; therefore, the value was not manually revised.</p>

**Sample preservation, receipt, and holding times:**

Within Criteria	Exceedance/Notes
N	The original COC was missing a “-” in sample EPD-ST-8H-WA-04-032723-1 between the “WA” and the “04”. A revised COC was issued to correct this typo and the corrected sample ID was used throughout this data validation report.

**Method blanks:**

Within Criteria	Exceedance/Notes
Y	

**Field blanks:**

Within Criteria	Exceedance/Notes
Y	

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

**Surrogates and labeled compounds:**

Within Criteria	Exceedance/Notes
NA	

**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	The original laboratory report and EDD had minor discrepancies in the LCSD result and LCSD percent recovery values for n-butyl acrylate. A revised laboratory report and EDD were issued with consistent LCS/LCSD results. No qualifications were applied.

**Sample dilutions:**

Within Criteria	Exceedance/Notes
NA	

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

**Re-extraction and reanalysis:**

Within Criteria	Exceedance/Notes
NA	

**MDLs/RLs:**

Within Criteria	Exceedance/Notes
Y	Method detection limits were not reported. Non-detect sample results are reported as less than the reporting limit in the laboratory report and at the reporting limit (flagged U) in the EDD and attached qualified data table.

**Tentatively identified compounds:**

Within Criteria	Exceedance/Notes
NA	

**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.
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 ANALYTICS, LLC REPORT NO. B088-012

Sample_ID	Method	CAS#	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-ST-8H-DW-C-032723-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-8H-DW-C-032723-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.013	U			0.013 ppm	0.013	U
EPD-ST-8H-WA-04-032723-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-8H-WA-04-032723-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.013	U			0.013 ppm	0.013	U
EPD-ST-DW-C-032723-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.028	U			0.028 ppm	0.028	U
EPD-ST-DW-C-032723-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-DW-C-032723-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.024	U			0.024 ppm	0.024	U
EPD-ST-DW-C-032723-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.016	U			0.016 ppm	0.016	U
EPD-ST-FB-032723-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	2.8	U			2.8 ug	2.8	U
EPD-ST-FB-032723-1	IHGC-P029	141-32-2	n-Butyl acrylate	1.3	U			1.3 ug	1.3	U
EPD-ST-UW-G-032723-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.028	U			0.028 ppm	0.028	U
EPD-ST-UW-G-032723-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-UW-G-032723-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-UW-G-032723-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-01-032723-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.028	U			0.028 ppm	0.028	U
EPD-ST-WA-01-032723-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-01-032723-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U			0.031 ppm	0.031	U
EPD-ST-WA-01-032723-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-02-032723-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.029	U			0.029 ppm	0.029	U
EPD-ST-WA-02-032723-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-02-032723-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U			0.031 ppm	0.031	U
EPD-ST-WA-02-032723-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.021	U			0.021 ppm	0.021	U
EPD-ST-WA-03-032723-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.028	U			0.028 ppm	0.028	U
EPD-ST-WA-03-032723-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-03-032723-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-WA-03-032723-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-04-032723-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.029	U			0.029 ppm	0.029	U
EPD-ST-WA-04-032723-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-05-032723-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.026	U			0.026 ppm	0.026	U
EPD-ST-WA-05-032723-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.018	U			0.018 ppm	0.018	U
EPD-ST-WA-05-032723-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U			0.031 ppm	0.031	U
EPD-ST-WA-05-032723-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.021	U			0.021 ppm	0.021	U



E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY  
EUROFINS ANALYTICS, LLC REPORT NO. B088-012

Sample_ID	Method	CAS#	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-ST-WA-06-032723-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.028	U			0.028 ppm	0.028	U
EPD-ST-WA-06-032723-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-06-032723-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-WA-06-032723-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U

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

Site Name	E Palestine Site - ER	TO/TOLIN No.	68HE0520F0032/0001EB201
Document Tracking No.	1883b	Laboratory	Eurofins Analytics, LLC, Ashland VA
Laboratory Report No.	B088-019	Analyses	
		2-Ethylhexyl acrylate and n-butyl acrylate by laboratory standard operating procedure (SOP) IHGC-P029	
Samples and Matrix	Nineteen air samples, including one field blank		
Collection Date(s)	03/27/2023		
Field Duplicate Pairs	None		
Field QC Blanks	EPD-ST-FB-032723-2		

**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, East Palestine Train Derailment Site East Palestine, Columbiana County, Ohio, EPA Region 5, Revision 3* (April 2023), 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 or qualification of results was required for this data package. The results may be used as reported by the laboratory.

**Data completeness:**

Within Criteria	Exceedance/Notes
Y	<p>Level II SDG did not have required QC forms thus a level IV package was reviewed.</p> <p>The results for the field blank were reported in units of micrograms (µg) while the other sample results were reported in units of µg, milligram per cubic meter (mg/m<sup>3</sup>), and parts per million (ppm) (volume) in the laboratory report and only ppm in the electronic data deliverable (EDD).</p> <p>The laboratory report included the following note: “The method reference, Rohm &amp; Haas IH9805 is referenced to the AIHA certification as IHGC-P029”.</p>

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

**Data completeness (continued):**

Within Criteria	Exceedance/Notes
Y	<p>A unique sample ID was not provided for LCSD. Unique IDs are needed to keep from overwriting QC sample IDs when EDDs are uploaded to the client database. The LCSD ID (in the Samp_No and Lab_Samp_No fields) in the EDD were manually revised to match the laboratory report.</p> <p>The extraction date information in the EDD did not match the laboratory report or was blank. The project management team confirmed that this information was not needed in the EDD; therefore, all extraction date information except the field header was deleted from the EDD.</p> <p>The sample analysis time was reported as a default value of 12 AM or 00:00 hours for the LCSD in the analysis date field. The analysis date was correct. The sample analysis time for the LCSD was not required for the EDD; therefore, this value was not manually revised.</p>

**Sample preservation, receipt, and holding times:**

Within Criteria	Exceedance/Notes
Y	

**Method blanks:**

Within Criteria	Exceedance/Notes
Y	

**Field blanks:**

Within Criteria	Exceedance/Notes
Y	

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

**Surrogates and labeled compounds:**

Within Criteria	Exceedance/Notes
NA	

**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
Y	

**Sample dilutions:**

Within Criteria	Exceedance/Notes
NA	

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

**Re-extraction and reanalysis:**

Within Criteria	Exceedance/Notes
NA	

**MDLs/RLs:**

Within Criteria	Exceedance/Notes
Y	Method detection limits were not reported. Non-detect sample results are reported as less than the reporting limit in the laboratory report and at the reporting limit (flagged U) in the EDD and attached qualified data table.

**Tentatively identified compounds:**

Within Criteria	Exceedance/Notes
NA	

**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.
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 ANALYTICS, LLC REPORT NO. B088-019

Sample_ID	Method	CAS#	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-ST-8H-DW-D-032723-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-8H-DW-D-032723-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.012	U			0.012 ppm	0.012	U
EPD-ST-8H-WA-02-032723-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-8H-WA-02-032723-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.013	U			0.013 ppm	0.013	U
EPD-ST-DW-D-032723-3	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-DW-D-032723-3	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-DW-D-032723-4	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U			0.031 ppm	0.031	U
EPD-ST-DW-D-032723-4	IHGC-P029	141-32-2	n-Butyl acrylate	0.021	U			0.021 ppm	0.021	U
EPD-ST-FB-032723-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	2.8	U			2.8 ug	2.8	U
EPD-ST-FB-032723-2	IHGC-P029	141-32-2	n-Butyl acrylate	1.3	U			1.3 ug	1.3	U
EPD-ST-UW-H-032723-3	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-UW-H-032723-3	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-UW-H-032723-4	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U			0.031 ppm	0.031	U
EPD-ST-UW-H-032723-4	IHGC-P029	141-32-2	n-Butyl acrylate	0.021	U			0.021 ppm	0.021	U
EPD-ST-WA-01-032723-3	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.035	U			0.035 ppm	0.035	U
EPD-ST-WA-01-032723-3	IHGC-P029	141-32-2	n-Butyl acrylate	0.023	U			0.023 ppm	0.023	U
EPD-ST-WA-01-032723-4	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-WA-01-032723-4	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-02-032723-3	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-WA-02-032723-3	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-02-032723-4	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U			0.031 ppm	0.031	U
EPD-ST-WA-02-032723-4	IHGC-P029	141-32-2	n-Butyl acrylate	0.021	U			0.021 ppm	0.021	U
EPD-ST-WA-03-032723-3	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U			0.031 ppm	0.031	U
EPD-ST-WA-03-032723-3	IHGC-P029	141-32-2	n-Butyl acrylate	0.021	U			0.021 ppm	0.021	U
EPD-ST-WA-03-032723-4	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-WA-03-032723-4	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-04-032723-3	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-WA-04-032723-3	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-04-032723-4	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U			0.031 ppm	0.031	U
EPD-ST-WA-04-032723-4	IHGC-P029	141-32-2	n-Butyl acrylate	0.021	U			0.021 ppm	0.021	U
EPD-ST-WA-05-032723-3	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.028	U			0.028 ppm	0.028	U
EPD-ST-WA-05-032723-3	IHGC-P029	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY  
EUROFINS ANALYTICS, LLC REPORT NO. B088-019

Sample_ID	Method	CAS#	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-ST-WA-05-032723-4	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U			0.031 ppm	0.031	U
EPD-ST-WA-05-032723-4	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-06-032723-3	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-WA-06-032723-3	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-06-032723-4	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U			0.031 ppm	0.031	U
EPD-ST-WA-06-032723-4	IHGC-P029	141-32-2	n-Butyl acrylate	0.021	U			0.021 ppm	0.021	U



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

Site Name	E Palestine Site - ER	TO/TOLIN No.	68HE0520F0032/0001EB201
Document Tracking No.	1883c	Laboratory	Eurofins Analytics, LLC, Ashland VA
Laboratory Report No.	B089-003	Analyses	
		2-Ethylhexyl acrylate and n-butyl acrylate by laboratory standard operating procedure (SOP) IHGC-P029	
Samples and Matrix	Nineteen air samples, including one field blank		
Collection Date(s)	03/28/2023		
Field Duplicate Pairs	None		
Field QC Blanks	EPD-ST-FB-032823-2		

**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, East Palestine Train Derailment Site East Palestine, Columbiana County, Ohio, EPA Region 5, Revision 3* (April 2023), 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 or qualification of results was required for this data package. The results may be used as reported by the laboratory.

**Data completeness:**

Within Criteria	Exceedance/Notes
Y	<p>Level II SDG did not have required QC forms thus a level IV package was reviewed.</p> <p>The results for the field blank were reported in units of micrograms (<math>\mu\text{g}</math>) while the other sample results were reported in units of <math>\mu\text{g}</math>, milligram per cubic meter (<math>\text{mg}/\text{m}^3</math>), and parts per million (ppm) (volume) in the laboratory report and only ppm in the electronic data deliverable (EDD).</p> <p>The laboratory report included the following note: “The method reference, Rohm &amp; Haas IH9805 is referenced to the AIHA certification as IHGC-P029” and “Rohm &amp; Haas IH9805”.</p>

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

**Data completeness (continued):**

Within Criteria	Exceedance/Notes
Y	<p>A unique sample ID not provided for LCSD. Unique IDs are needed to keep from overwriting QC sample IDs when EDDs are uploaded to the client database. The LCSD ID (in the Samp_No and Lab_Samp_No fields) in the EDD were manually revised to match the laboratory report.</p> <p>The extraction date information in the EDD did not match the laboratory report or was blank. The project management team confirmed that this information was not needed in the EDD; therefore, all extraction date information except the field header was deleted from the EDD.</p> <p>The sample analysis time was reported as a default value of 12 AM or 00:00 hours for the LCSD in the analysis date field. The analysis date was correct. The sample analysis time for the LCSD was not required for the EDD; therefore, this value was not manually revised.</p>

**Sample preservation, receipt, and holding times:**

Within Criteria	Exceedance/Notes
Y	

**Method blanks:**

Within Criteria	Exceedance/Notes
Y	

**Field blanks:**

Within Criteria	Exceedance/Notes
Y	

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

**Surrogates and labeled compounds:**

Within Criteria	Exceedance/Notes
NA	

**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	The laboratory report and the EDD have a minor discrepancy in the LCSD percent recovery value for 2-ethylhexyl acrylate that was verified with the laboratory to be a significant figures issue. No qualification was applied.

**Sample dilutions:**

Within Criteria	Exceedance/Notes
NA	

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

**Re-extraction and reanalysis:**

Within Criteria	Exceedance/Notes
NA	

**MDLs/RLs:**

Within Criteria	Exceedance/Notes
Y	Method detection limits were not reported. Non-detect sample results are reported as less than the reporting limit in the laboratory report and at the reporting limit (flagged U) in the EDD and attached qualified data table.

**Tentatively identified compounds:**

Within Criteria	Exceedance/Notes
NA	

**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.
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 ANALYTICS, LLC REPORT NO. B089-003

Sample_ID	Method	CAS#	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-ST-8H-DW-E-032823-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-8H-DW-E-032823-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.013	U			0.013 ppm	0.013	U
EPD-ST-8H-WA-02-032823-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-8H-WA-02-032823-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.013	U			0.013 ppm	0.013	U
EPD-ST-DW-E-032823-3	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.032	U			0.032 ppm	0.032	U
EPD-ST-DW-E-032823-3	IHGC-P029	141-32-2	n-Butyl acrylate	0.021	U			0.021 ppm	0.021	U
EPD-ST-DW-E-032823-4	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.033	U			0.033 ppm	0.033	U
EPD-ST-DW-E-032823-4	IHGC-P029	141-32-2	n-Butyl acrylate	0.022	U			0.022 ppm	0.022	U
EPD-ST-FB-032823-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	2.8	U			2.8 ug	2.8	U
EPD-ST-FB-032823-2	IHGC-P029	141-32-2	n-Butyl acrylate	1.3	U			1.3 ug	1.3	U
EPD-ST-UW-A-032823-3	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U			0.031 ppm	0.031	U
EPD-ST-UW-A-032823-3	IHGC-P029	141-32-2	n-Butyl acrylate	0.021	U			0.021 ppm	0.021	U
EPD-ST-UW-A-032823-4	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.029	U			0.029 ppm	0.029	U
EPD-ST-UW-A-032823-4	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-01-032823-3	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-WA-01-032823-3	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-01-032823-4	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U			0.031 ppm	0.031	U
EPD-ST-WA-01-032823-4	IHGC-P029	141-32-2	n-Butyl acrylate	0.021	U			0.021 ppm	0.021	U
EPD-ST-WA-02-032823-3	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-WA-02-032823-3	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-02-032823-4	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-WA-02-032823-4	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-03-032823-3	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U			0.031 ppm	0.031	U
EPD-ST-WA-03-032823-3	IHGC-P029	141-32-2	n-Butyl acrylate	0.021	U			0.021 ppm	0.021	U
EPD-ST-WA-03-032823-4	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-WA-03-032823-4	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-04-032823-3	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-WA-04-032823-3	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-04-032823-4	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-WA-04-032823-4	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-05-032823-3	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-WA-05-032823-3	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U

## E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY

EUROFINS ANALYTICS, LLC REPORT NO. B089-003

Sample_ID	Method	CAS#	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-ST-WA-05-032823-4	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U		0.031	ppm	0.031	U
EPD-ST-WA-05-032823-4	IHGC-P029	141-32-2	n-Butyl acrylate	0.021	U		0.021	ppm	0.021	U
EPD-ST-WA-06-032823-3	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U		0.031	ppm	0.031	U
EPD-ST-WA-06-032823-3	IHGC-P029	141-32-2	n-Butyl acrylate	0.021	U		0.021	ppm	0.021	U
EPD-ST-WA-06-032823-4	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U		0.031	ppm	0.031	U
EPD-ST-WA-06-032823-4	IHGC-P029	141-32-2	n-Butyl acrylate	0.021	U		0.021	ppm	0.021	U

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

Site Name	E Palestine Site - ER	TO/TOLIN No.	68HE0520F0032/0001EB201
Document Tracking No.	1883d	Laboratory	Eurofins Analytics, LLC, Ashland VA
Laboratory Report No.	B089-012	Analyses	
		2-Ethylhexyl acrylate and n-butyl acrylate by laboratory standard operating procedure (SOP) IHGC-P029	
Samples and Matrix	Nineteen air samples, including one field blank		
Collection Date(s)	03/28/2023		
Field Duplicate Pairs	None		
Field QC Blanks	EPD-ST-FB-032823-1		

**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, East Palestine Train Derailment Site East Palestine, Columbiana County, Ohio, EPA Region 5, Revision 3* (April 2023), 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 or qualification of results was required for this data package. The results may be used as reported by the laboratory.

**Data completeness:**

Within Criteria	Exceedance/Notes
Y	<p>Level II SDG did not have required QC forms thus a level IV package was reviewed.</p> <p>The results for the field blank were reported in units of micrograms (<math>\mu\text{g}</math>) while the other sample results were reported in units of <math>\mu\text{g}</math>, milligram per cubic meter (<math>\text{mg}/\text{m}^3</math>), and parts per million (ppm) (volume) in the laboratory report and only ppm in the electronic data deliverable (EDD).</p> <p>The laboratory report included the following note: “The method reference, Rohm &amp; Haas IH9805 is referenced to the AIHA certification as IHGC-P029”.</p>



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

**Data completeness (continued):**

Within Criteria	Exceedance/Notes
Y	<p>A unique sample ID not provided for LCSD. Unique IDs are needed to keep from overwriting QC sample IDs when EDDs are uploaded to the client database. The LCSD ID (in the Samp_No and Lab_Samp_No fields) in the EDD were manually revised to match the laboratory report.</p> <p>The extraction date information in the EDD did not match the laboratory report or was blank. The project management team confirmed that this information was not needed in the EDD; therefore, all extraction date information except the field header was deleted from the EDD.</p> <p>The sample analysis time was reported as a default value of 12 AM or 00:00 hours for the LCSD in the analysis date field. The analysis date was correct. The sample analysis time for the LCSD was not required for the EDD; therefore, this value was not manually revised.</p>

**Sample preservation, receipt, and holding times:**

Within Criteria	Exceedance/Notes
Y	

**Method blanks:**

Within Criteria	Exceedance/Notes
Y	

**Field blanks:**

Within Criteria	Exceedance/Notes
Y	

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

**Surrogates and labeled compounds:**

Within Criteria	Exceedance/Notes
NA	

**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	The laboratory report and EDD have minor discrepancies in the LCSD result for 2-ethylhexyl acrylate and the LCS result for n-butyl acrylate that were verified by the laboratory to be a significant figures issue. No qualifications were applied.

**Sample dilutions:**

Within Criteria	Exceedance/Notes
NA	

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

**Re-extraction and reanalysis:**

Within Criteria	Exceedance/Notes
NA	

**MDLs/RLs:**

Within Criteria	Exceedance/Notes
Y	Method detection limits were not reported. Non-detect sample results are reported as less than the reporting limit in the laboratory report and at the reporting limit (flagged U) in the EDD and attached qualified data table.

**Tentatively identified compounds:**

Within Criteria	Exceedance/Notes
NA	

**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.
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 ANALYTICS, LLC REPORT NO. B089-012

Sample_ID	Method	CAS#	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-ST-8H-DW-D-032823-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-8H-DW-D-032823-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.013	U			0.013 ppm	0.013	U
EPD-ST-8H-WA-03-032823-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.017	U			0.017 ppm	0.017	U
EPD-ST-8H-WA-03-032823-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.012	U			0.012 ppm	0.012	U
EPD-ST-DW-D-032823-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.029	U			0.029 ppm	0.029	U
EPD-ST-DW-D-032823-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-DW-D-032823-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U			0.031 ppm	0.031	U
EPD-ST-DW-D-032823-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-FB-032823-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	2.8	U			2.8 ug	2.8	U
EPD-ST-FB-032823-1	IHGC-P029	141-32-2	n-Butyl acrylate	1.3	U			1.3 ug	1.3	U
EPD-ST-UW-H-032823-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.031	U			0.031 ppm	0.031	U
EPD-ST-UW-H-032823-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.021	U			0.021 ppm	0.021	U
EPD-ST-UW-H-032823-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-UW-H-032823-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-01-032823-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.029	U			0.029 ppm	0.029	U
EPD-ST-WA-01-032823-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-01-032823-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.029	U			0.029 ppm	0.029	U
EPD-ST-WA-01-032823-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-02-032823-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.029	U			0.029 ppm	0.029	U
EPD-ST-WA-02-032823-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-02-032823-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-WA-02-032823-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-03-032823-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.028	U			0.028 ppm	0.028	U
EPD-ST-WA-03-032823-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-03-032823-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.029	U			0.029 ppm	0.029	U
EPD-ST-WA-03-032823-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-04-032823-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.029	U			0.029 ppm	0.029	U
EPD-ST-WA-04-032823-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-04-032823-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.026	U			0.026 ppm	0.026	U
EPD-ST-WA-04-032823-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.017	U			0.017 ppm	0.017	U
EPD-ST-WA-05-032823-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.029	U			0.029 ppm	0.029	U
EPD-ST-WA-05-032823-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY  
EUROFINS ANALYTICS, LLC REPORT NO. B089-012

Sample_ID	Method	CAS#	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-ST-WA-05-032823-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.029	U		0.029	ppm	0.029	U
EPD-ST-WA-05-032823-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U		0.02	ppm	0.02	U
EPD-ST-WA-06-032823-1	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U		0.03	ppm	0.03	U
EPD-ST-WA-06-032823-1	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U		0.02	ppm	0.02	U
EPD-ST-WA-06-032823-2	IHGC-P029	103-11-7	2-Ethylhexyl acrylate	0.03	U		0.03	ppm	0.03	U
EPD-ST-WA-06-032823-2	IHGC-P029	141-32-2	n-Butyl acrylate	0.02	U		0.02	ppm	0.02	U