

June 30, 2015

Mr. Ramon Mendoza
On-Scene Coordinator
U.S. Environmental Protection Agency
Region 5, Emergency Response Branch
77 W. Jackson Blvd., SE-5J
Chicago, IL 60604

Subject: PA-RR-26-0624 TCLP Lead Reanalysis - Final Stage 4 Data Validation Checklist Report
EPA Contract No. EP-S5-13-01
Technical Direction Document No. S05-0001-1504-007
Document Tracking No. 0258

Dear Mr. Mendoza:

Under the Superfund Technical Assessment and Response Team (START) Contract No. EP-S5-13-01, U.S. Environmental Protection Agency (EPA) Region 5 tasked Tetra Tech, Inc. (Tetra Tech), with collecting samples to assist in a removal assessment at the Pilsen Area Soils Site OU1 in Chicago, Cook County, Illinois on April 27, 2015. Upon collection, Tetra Tech submitted the samples to CT Laboratories, LLC (CT Labs) for analysis. Tetra Tech received a final level IV data package for total lead, lead fines, and TCLP lead analysis from CT Labs on May 6, 2015. Upon receipt of the final data package, Tetra Tech conducted a stage 4 data validation.

Upon review of the validated data, it was determined that the highest TCLP lead result was 13 mg/L at sample location PA-RR-26-0624. PA-RR-26-0624 was the only sample location with a result that exceeded the TCLP lead toxicity characteristic of 5 mg/L. The next highest result for TCLP lead was 1.9 mg/L at PA-RR-25-0006. It was determined PA-RR-26-0624 should be reanalyzed for TCLP lead by CT Labs because of the significant difference in TCLP lead results.

The Final Stage 4 Data Validation Checklist Report (DVR) for the final data package for the PA-RR-26-0624 TCLP lead reanalysis is included as **Attachment A**.



The Final Stage 4 Checklist DVR covers the reanalysis of a single soil sample for TCLP lead. The sample was extracted and analyzed after excluding any large gravel or debris. The DVR concluded that the TCLP lead result of 0.39 mg/L is acceptable and usable as reported, with the J-qualification discussed in the matrix spike/matrix spike duplicate (MS/MSD), post digestion spike, and serial dilution sections.

If you have any questions or require additional information, please call me at (312) 201-7710.

Sincerely,

A handwritten signature in black ink that reads 'Paul Pallardy'.

Paul Pallardy
Tetra Tech Project Manager

Attachment A – PA-RR-26-0624 TCLP Lead Reanalysis Final Stage 4 Data Validation Checklist Report



ATTACHMENT A
PA-RR-26-0624 TCLP LEAD REANALYSIS FINAL STAGE 4 DATA VALIDATION
CHECKLIST REPORT



DATA VALIDATION CHECKLIST – STAGE 4

(Page 1 of 7)

Site Name	Pilsen Area Soils	Project No.	103X90260001S051504007
Data Reviewer (signature and date)	<i>Jessica A. Vickers</i> June 16, 2015	Technical Reviewer (signature and date)	<i>Harry N. Ellis III</i> 29 June 2015
Laboratory Report No.	111568	Laboratory	CT Laboratories
Document Tracking No.	0258		
Analyses	Toxicity Characteristic Leaching Procedure (TCLP) Lead – SW-846 Methods 1311/6010C		
Samples	PA-RR-26-0624		

This checklist summarizes the Stage 4 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 EPA *Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Inorganic Superfund Data Review* (August 2014) data validation guidance document, as well as the above referenced methods.

OVERALL EVALUATION

This report covers the reanalysis of a single soil sample for TCLP lead. The sample was extracted and analyzed after excluding any large gravel or debris. The TCLP lead result of 0.39 mg/L is acceptable and usable as reported, with the J- qualification discussed in the matrix spike/matrix spike duplicate (MS/MSD), post digestion spike, and serial dilution sections.

Data completeness:

Within Criteria	Exceedance/Notes
Y	



DATA VALIDATION CHECKLIST – STAGE 4

(Page 2 of 7)

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
Y	

Instrument Performance Checks:

Within Criteria	Exceedance/Notes
NA	

Initial Calibration:

Within Criteria	Exceedance/Notes
Y	

Continuing Calibration:

Within Criteria	Exceedance/Notes
Y	

Calibration Verification:

Within Criteria	Exceedance/Notes
Y	



DATA VALIDATION CHECKLIST – STAGE 4

(Page 3 of 7)

Method blanks:

Within Criteria	Exceedance/Notes
Y	

Field blanks:

Within Criteria	Exceedance/Notes
NA	

Interference Check Samples (ICS) (ICP metals only):

Within Criteria	Exceedance/Notes
Y	

System monitoring compounds (surrogates and labeled compounds):

Within Criteria	Exceedance/Notes
NA	

MS/MSD:

Within Criteria	Exceedance/Notes
N	Low % Recovery (%R) for TCLP lead – flag “J-”



DATA VALIDATION CHECKLIST – STAGE 4

(Page 4 of 7)

Post digestion spikes:

Within Criteria	Exceedance/Notes
N	Low %R for TCLP lead – flag “J-”

Serial dilutions:

Within Criteria	Exceedance/Notes
N	% Difference greater than 10% for TCLP lead – no action (flag overridden by the MS/MSD and post digestion spike qualifiers discussed above)

Laboratory duplicates:

Within Criteria	Exceedance/Notes
Y	

Field duplicates:

Within Criteria	Exceedance/Notes
NA	

LCSs/LCSDs:

Within Criteria	Exceedance/Notes
Y	



DATA VALIDATION CHECKLIST – STAGE 4

(Page 5 of 7)

Sample dilutions:

Within Criteria	Exceedance/Notes
Y	

Re-extraction and reanalysis:

Within Criteria	Exceedance/Notes
Y	

Second column confirmation (GC and HPLC analyses only):

Within Criteria	Exceedance/Notes
NA	

Internal Standards:

Within Criteria	Exceedance/Notes
NA	

Target analyte identification:

Within Criteria	Exceedance/Notes
Y	



DATA VALIDATION CHECKLIST – STAGE 4

(Page 6 of 7)

Analyte quantitation and MDLs/RLs:

Within Criteria	Exceedance/Notes
Y	

Tentatively identified compounds:

Within Criteria	Exceedance/Notes
NA	

System performance and instrument stability:

Within Criteria	Exceedance/Notes
Y	



DATA VALIDATION CHECKLIST – STAGE 4

(Page 7 of 7)

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.