## **Data Validation Services**

120 Cobble Creek Road P. O. Box 208 North Creek, NY 12853 Phone (518) 251-4429 harry@frontiernet.net

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Christopher Battista Roux Environmental Engineering and Geology, D. P. C. 209 Shafter St Islandia, NY 11747

RE: Validation of the Former Cibro Terminal, 7 Washington Avenue Site Analytical Data Packages Data Usability Summary Report (DUSR)
Eurofins TA SDG Nos. 460-169350, 460-171370, 460-185885, and 460-186961

Dear Mr. Wills:

Review has been completed for the data packages generated by Eurofins TestAnerica that pertain to soil samples collected between 11/15/18 and 07/17/19 at the Former Cibro Terminal, 7 Washington Avenue site. Twenty four samples and four field duplicates were processed for a site-specific list of volatile and semivolatile analytes. Equipment, field, and trip blanks were also processed. Analytical methodologies utilized are USEPA SW846.

The data packages submitted by the laboratory contain full deliverables for validation, and this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. The reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the USEPA national and regional validation documents, and in consideration for the specific requirements of the analytical methodology. The following items were reviewed:

The following items were reviewed:

- \* Data Completeness
- \* Case Narrative
- \* Custody Documentation
- \* Holding Times
- \* Surrogate and Internal Standard Recoveries
- \* Method and Preparation Blanks
- \* Blind Field Duplicate Correlations
- \* Laboratory Control Sample (LCS)
- \* Instrumental Tunes
- \* Calibration Standards
- \* Method Compliance
- \* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review, as discussed in NYS DER-10 Appendix B Section 2.0 (c). Documentation of the outlying parameters cited in this report can be found in the laboratory data package.

**In summary**, results for the samples are usable either as reported or with qualification as estimated.

Data completeness, representativeness, reproducibility, sensitivity, and comparability are acceptable. Accuracy and precision evaluations show potential matrix effects on analyte recoveries.

The client sample identifications are attached to this text. Also included in this report is the client EQuIS EDD with recommended qualifiers/edits applied in red.

### **Blind Field Duplicate Evaluations**

The blind field duplicate evaluations of PDC-RI-TP-8(6), PDC-PX-J5-K5-1, PDC-PX-04-B, and PDC-PX-07-B shows correlations within validation guidelines, with the exception of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene in PDC-RI-TP-8(6). The results for those four compounds have been qualified as estimated in that parent sample and its duplicate.

### **Volatile Analyses by EPA 8260C**

The detected results for methylene chloride in the samples collected in November 2018 are considered external contamination and edited to reflect non-detection due to presence in the associated equipment blank. Other detections of this analyte in the samples are similarly suspect.

Fifteen analytes produced low recoveries in the matrix spikes of PDC-PX-J5-K5-1. The results for those compounds have been qualified as estimated in that parent sample. A matrix effect is suspected.

Matrix spikes of PDC-RI-TP11(3) show recoveries and correlations that are within validation guidelines for all except n-butylbenzene, which shows low recoveries (68% and 73%). The result for that compound in that parent sample has been qualified as estimated.

Holding times were met. Surrogate and internal standard recoveries are compliant. Instrument tunes meet fragmentation requirements. LCS recoveries are within laboratory acceptance ranges.

Calibration standards showed acceptable responses, with the exception of those for 1,2,4-trimethylbenzene, t-butylbenzene, and n-butylbenzene (21%D to 23%D), results for which have been qualified as estimated in the associated sample PDC-RI-TP-7(3).

### **Semivolatile Analyses by EPA8270D**

All results for PDC-PS-J5-K5-1 are qualified as estimated due to low recoveries of all analytes in the matrix spikes of that parent sample. A matrix effect is suspected.

Matrix spikes of PDC-RI-TP11(3) show low recoveries in both spikes for all analytes except 2-methylphenol, phenol, and pentachlorophenol. The results for the affected analytes are qualified as estimated in that parent sample.

Tentatively Identified Compounds (TICs) identified as aldol condensates are removed from consideration as sample components.

Holding times were met. Instrument tunes meet fragmentation requirements. LCS recoveries are compliant.

Surrogate standard recoveries are within validation guidelines. Internal standard recoveries are compliant. Calibration standards showed acceptable responses.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

Judy Harry

Attachments: Validation Qualifier Definitions

Client and Laboratory Identifications

Qualified EDD

### VALIDATION DATA QUALIFIER DEFINITIONS

- U The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
- J The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
- J- The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
- J+ The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
- UJ The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
- NJ The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
- R The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
- EMPC The results do not meet all criteria for a confirmed identification.

  The quantitative value represents the Estimated Maximum Possible

  Concentration of the analyte in the sample.

# Sample Summaries

Client: Posillico Dev Company at Harbor Isle LLC

Project/Site: PDC @ HI

Lab Sample ID Client Sample ID Matrix Collected Received 460-169350-1 PDC-RI-TP1(3) Solid 11/15/18 13:15 11/15/18 21:00 Solid 460-169350-2 PDC-RI-TP2(3) 11/15/18 13:30 11/15/18 21:00 460-169350-3 Solid PDC-RI-TP3(2) 11/15/18 13:45 11/15/18 21:00 PDC-RI-TP-4(2.5) Solid 460-169350-4 11/15/18 13:50 11/15/18 21:00 460-169350-5 PDC-RI-TP-5(6) Solid 11/15/18 14:00 11/15/18 21:00 460-169350-6 PDC-RI-TP-6(5) Solid 11/15/18 14:05 11/15/18 21:00 460-169350-7 PDC-RI-TP-7(5) Solid 11/15/18 14:10 11/15/18 21:00 460-169350-8 PDC-RI-TP-8(6) Solid 11/15/18 14:20 11/15/18 21:00 460-169350-9 PDC-RI-TP-9(6) Solid 11/15/18 14:25 11/15/18 21:00 460-169350-10 PDC-RI-TP-10(6) Solid 11/15/18 14:30 11/15/18 21:00 460-169350-11 PDC-RI-TP11(3) Solid 11/15/18 14:35 11/15/18 21:00 460-169350-12 11/15/18 14:55 11/15/18 21:00 PDC-RI-TP12(3) Solid 460-169350-13 PDC-RI-TP13(3) Solid 11/15/18 15:00 11/15/18 21:00 460-169350-14 PDC-RI-TP14(3) Solid 11/15/18 15:05 11/15/18 21:00 11/15/18 15:15 11/15/18 21:00 460-169350-15 PDC-RI-DUP1 Solid 460-169350-16 PDC-RI-Eq BI Water 11/15/18 15:25 11/15/18 21:00

TestAmerica Job ID: 460-169350-1

Client: Posillico Dev Company at Harbor Isle LLC Project/Site: Harbor Isle

TestAmerica Job ID: 460-171370-1

Lab Sample ID	Client Sample ID	Matrix	Collected Received
460-171370-1	PDC-PX-J5-K5-1	Solid	12/12/18 12:35 12/13/18 21:
460-171370-2	PDC-PX-DUP	Solid	12/12/18 12:35 12/13/18 21:
460-171370-3	PDC-PX-J5-K5-5	Solid	12/12/18 13:10 12/13/18 21:
460-171370-4	PDC-PX-J5-K5-2	Solid	12/12/18 13:00 12/13/18 21:
460-171370-5	Trip Blank	Water	12/12/18 16:05 12/13/18 21:
460-171370-6	PDC - FBlank1	Water	12/12/18 16:05 12/13/18 21:0

Client: Posillico Dev Company at Harbor Isle LLC Project/Site: Harbor Isle

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-185885-1	PDC-PX-O4-B	Solid		07/03/19 18:55	
460-185885-2	PDC-PX-P4-B	Solid	07/03/19 13:45	07/03/19 18:55	
460-185885-3	PDC-DUP	Solid	07/03/19 00:00	07/03/19 18:55	
460-185885-4	PDC-FBLANK	Water	07/03/19 13:40	07/03/19 18:55	

Job ID: 460-185885-1

Client: Posillico Dev Company at Harbor Isle LLC Project/Site: Harbor Isle

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asse
460-186961-1	PDC-PX-06-B	Solid	07/17/19 11:00	07/18/19 19:40	
460-186961-2	PDC-PX-P6-B	Solid	07/17/19 10:55	07/18/19 19:40	
460-186961-3	PDC-PX-07-B	Solid	07/17/19 11:15	07/18/19 19:40	
460-186961-4	PDC-PX-P7-B	Solid	07/17/19 11:30	07/18/19 19:40	
460-186961-5	PDC-PX-08-B	Solid	07/17/19 11:45	07/18/19 19:40	
460-186961-6	PDC-DUP	Solid	07/17/19 00:00	07/18/19 19:40	
460-186961-7	PDC-FBLANK	Water	07/17/19 12:00	07/18/19 19:40	

Job ID: 460-186961-1