284 Sheffield Street, Mountainside, NJ 7092, Phone: 908 789 8900, Fax: 908 789 8922

CASE NARRATIVE

HDR, Inc.
Project Name: PVWC Linear Construction
Project # N/A
Order ID # Q3466
Test Name: VOC-TCLVOA-10,SVOC-TCL BNA -20,EPH_NF,PCB,Pesticide-TCL,Mercury,Metals ICP-TAL,TCLP ICP Metals,TCLP Mercury,Corrosivity,Cyanide,Hexavalent Chromium,Ignitability,Paint Filter,Reactive Cyanide,Reactive Sulfide

A. Number of Samples and Date of Receipt:
7 Solid samples were received on 10/24/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: VOC-TCLVOA-10,SVOC-TCL BNA -20,EPH_NF,PCB,Pesticide-TCL,Mercury,Metals ICP-TAL,TCLP ICP Metals,TCLP Mercury,Corrosivity,Cyanide,Hexavalent Chromium,Ignitability,Paint Filter,Reactive Cyanide,Reactive Sulfide. This data package contains results for VOC-TCLVOA-10(8260D),SVOC-TCL BNA -20(8270E),EPH_NF(NJEPH),PCB(8082A),Pesticide-TCL(8081B),Mercury(7471B),Metals ICP-TAL(6010D),TCLP ICP Metals(6010D),TCLP Mercury(7470A),Corrosivity(9045D),Cyanide(9012B),Hexavalent Chromium(7196A),Ignitability(1030),Paint Filter(9095B),Reactive Cyanide(9012B),Reactive Sulfide(9034).

C. Analytical Techniques:
VOC-TCLVOA-10 : The analysis performed on instrument MSVOA_Y were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868.The analysis of VOC-TCLVOA-10 was based on method 8260D.

SVOC-TCL BNA -20 : The samples were analyzed on instrument BNA_F using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um df. The samples were analyzed on instrument BNA_G using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA. The samples were analyzed on instrument BNA_P using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA. The analysis of SVOC-TCL BNA -20 was based on method 8270E and extraction was done based on method 3541.

Pesticide-TCL : The analysis was performed on instrument ECD_D. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0. 5 um df,: Catalog # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #:

7HMG017- 11.The analysis of Pesticide-TCLs was based on method 8081B and extraction was done based on method 3541.

EPH_NF : The analysis were performed on instrument FID_C. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224.The analysis were performed on instrument FID_E. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224.The analysis of EPH_NFs was based on method NJEPH and extraction was done based on method 3541.

PCB : The analyses were performed on instrument GCECD_P. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 µm; Catalogue # 7HM-G017-11.The analyses were performed on instrument GCECD_O. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 µm; Catalogue # 7HM-G017-11.The analysis of PCBs was based on method 8082A and extraction was done based on method 3541.

Mercury,Metals ICP-TAL : The analysis of Metals ICP-TAL was based on method 6010D, digestion based on method 3050 (soils). The analysis and digestion of Mercury was based on method 7471B.

TCLP ICP Metals,TCLP Mercury : The analysis of TCLP ICP Metals was based on method 6010D, digestion based on method 3010 (waters). The analysis and digestion of TCLP Mercury was based on method 7470A and TCLP extraction method was 1311.

Wetchem : The analysis of Corrosivity,Cyanide,Hexavalent Chromium,Ignitability,Paint Filter,Reactive Cyanide,Reactive Sulfide was based on method 1030,7196A,9012B,9034,9045D,9095B and extraction was done based on method 8015B.

D. QA/ QC Samples:

The Holding Times were met for all analysis except following Wetchem : B8-0.0-1.0-20251023 of Corrosivity as sample was receive out of holding time.

The Surrogate recoveries were met for all analysis.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds except following
SVOC-TCL BNA -20 : The MS {Q3469-01MS} with File ID: BF144130.D recoveries met the requirements for all compounds except for 3,3-Dichlorobenzidine[55%], 3-Nitroaniline[59%] and 4-Chloroaniline[25%], this compound did not meet the NJDKQP criteria but met the in-house criteria.

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PCB : The MS {Q3461-01MS} with File ID: PO114707.D recoveries met the requirements for all compounds except for [AR1260(1)162% - AR1260(2)173%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix inference.

Mercury,Metals ICP-TAL : The Matrix Spike (TP-13MS) analysis met criteria for all compounds except for Antimony due to Chemical Interference during Digestion Process.

TCLP ICP Metals,TCLP Mercury : The Matrix Spike (WC-1MS) analysis met criteria for all compounds except for Barium due to Chemical Interference during Digestion process.

The MSD recoveries met the requirements for all compounds except following
SVOC-TCL BNA -20 : The MSD {Q3469-01MSD} with File ID: BF144131.D recoveries met the requirements for all compounds except for 3,3-Dichlorobenzidine[53%], 3-Nitroaniline[59%] and 4-Chloroaniline[28%], this compound did not meet the NJDKQP criteria but met the in-house criteria.

PCB : The MSD {Q3461-01MSD} with File ID: PO114708.D recoveries met the requirements for all compounds except for [AR1260(1)196% - AR1260(2)208%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

Mercury,Metals ICP-TAL : The Matrix Spike Duplicate (TP-13MSD) analysis met criteria for all compounds except for Antimony and Zinc due to Chemical Interference during Digestion Process.

TCLP ICP Metals,TCLP Mercury : The Matrix Spike Duplicate (WC-1MSD) analysis met criteria for all compounds except for Barium due to Chemical Interference during Digestion process.

The RPD were met for all analysis except following
PCB : The RPD for {Q3461-01MSD} with File ID: PO114708.D met criteria except for AR1260(1)[19%] and AR1260(2)[18%] due to difference in results of MS and MSD.

The Blank Spike met requirements for all compounds except following
SVOC-TCL BNA -20 : The Blank Spike for {PB170285BS} with File ID: BG064620.D met requirements for all compounds except for 3,3-Dichlorobenzidine[65%], 4-Chloroaniline[45%]. This compound did not meet the NJDKQP criteria but met the in-house criteria.

The Blank Spike Duplicate met requirements for all compounds

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The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements except following
SVOC-TCL BNA -20 : The %RSD is greater than 20% in the Method 8270-BG102421.M for 2-Nitrophenol, 2-Nitroaniline, 2,6-Dinitrotoluene, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 4,6-Dinitro-2-methylphenolthese Compounds are passing on Linear regression.

The %RSD is greater than 20% in the Initial Calibration (Method 8270-BP102925.M) for 26) 2-Nitrophenol, 2-Nitroaniline, 2,6-Dinitrotoluene, 3-Nitroaniline,2,4-Dinitrotoluene,Butylbenzylphthalate,Bis(2-ethylhexyl)phtha. These Compounds are passing on Linear regression and 2,4-Dinitrophenol,4,6-Dinitro-2-methylphenolthese are passing on Quadratic regression.

The Continuous Calibration met the requirements except following
VOC-TCLVOA-10 : The Continuous Calibration File ID VY023585.D met the requirements except for Isopropylbenzene and Methyl Acetate are is failing high but no positive hit in associate sample therefore no corrective action taken.

SVOC-TCL BNA -20 : The Continuous Calibration File ID BG064618.D met the requirements except for Di-n-octyl phthalate,Hexachlorocyclopentadiene and Nitrobenzene-d5, Associated samples does not have hit for these compounds, therefor no further corrective action was taken.

The Tuning criteria met requirements.

The Duplicate analysis met criteria for all compoundsexcept following
Mercury,Metals ICP-TAL : The Duplicate (TP-13MSD) analysis met criteria for all compounds except for Iron due to Chemical Interference during Digestion Process.

The Serial Dilution met the acceptable requirements.

E. Additional Comments:
The soil samples results are based on a dry weight basis.

SEMI-VOA : The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

VOC-TCLVOA-10 : Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.
Trip Blank was not provided with this set of samples.

F. Manual Integration Comments:
Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____