



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 # Q3662

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:

5 Solid samples were received on 11/18/2025.

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_W 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.

EPH_NF : 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.



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PCB : The analyses were performed on instrument GCECD_Q. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 μ m df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 μ m; 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 μ m df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 μ m; Catalogue # 7HM-G017-11. The analysis of PCBs was based on method 8082A 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 μ m df,; Catalog # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 μ m df, Catalog #: 7HMG017- 11. The analysis of Pesticide-TCLs was based on method 8081B 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 Ignitability was based on method 1030, The analysis of Hexavalent Chromium was based on method 7196A, The analysis of Cyanide, Reactive Cyanide was based on method 9012B, The analysis of Reactive Sulfide was based on method 9034, The analysis of Corrosivity was based on method 9045D and The analysis of Paint Filter was based on method 9095B.

D. QA/ QC Samples:

The Holding Times were met for all analysis except following Wetchem : B1-0.0-1.0-20251117 of Corrosivity as sample was Receive out of holding time.

The Surrogate recoveries were met for all analysis except following SVOC-TCL BNA -20 : B1-0.0-1.0-20251117 [Terphenyl-d14 - 27%]. This compound did not meet the NJDKQP criteria but met the in-house criteria.

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 {Q3662-02MS} with File ID: BF144303.D recoveries met the requirements for all compounds except for 3,3-Dichlorobenzidine[65%], 3-Nitroaniline[65%], 4,6-Dinitro-2-methylphenol[11%] and 4-Chloroaniline[23%]. This



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compound did not meet the NJDKQP criteria but met the in-house criteria and 2,4-Dinitrophenol[7%] failed This compound did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

EPH_NF : The MS {Q3669-01MS} with File ID: FE056946.D recoveries met the requirements for all compounds except for Aliphatic [n-Nonane (C9)- 36%] due to matrix interference.

Mercury, Metals ICP-TAL : The Matrix Spike (EO-01-11182025MS) analysis met criteria for all compounds except for Antimony, Beryllium, Lead, Silver, Sodium and Vanadium due to Chemical Interference during Digestion Process.

TCLP ICP Metals, TCLP Mercury : The Matrix Spike (TP-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 {Q3662-02MSD} with File ID: BF144304.D recoveries met the requirements for all compounds except for 4,6-Dinitro-2-methylphenol[11%] and 4-Chloroaniline[25%]. This compound did not meet the NJDKQP criteria but met the in-house criteria and 2,4-Dinitrophenol[0%] failed This compound did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

EPH_NF : The MSD {Q3669-01MSD} with File ID: FE056947.D recoveries met the requirements for all compounds except for Aliphatic [n-Nonane (C9)- 36%] due to matrix interference.

Mercury, Metals ICP-TAL : The Matrix Spike Duplicate (EO-01-11182025MSD) analysis met criteria for all compounds except for Antimony, Lead, Silver, Sodium and Zinc due to Chemical Interference during Digestion Process.

TCLP ICP Metals, TCLP Mercury : The Matrix Spike Duplicate (TP-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 SVOC-TCL BNA -20 : The RPD for {Q3662-02MSD} with File ID: BF144304.D met criteria except for 2,4-Dinitrophenol[200%], RPD failed due to result difference between MS and MSD , Therefore no further corrective action was taken.

Pesticide-TCL : The RPD for {Q3662-02MSD} with File ID: PD091280.D met criteria except for [4,4-DDT(1)-32%], [Endrin aldehyde(1)-43%, Endrin aldehyde(2)-44%], [Endrin ketone(1)-34%] these compounds did not meet the NJDKQP criteria and in-house criteria due to difference in results of MS-MSD.



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The Blank Spike met requirements for all compounds except following SVOC-TCL BNA -20 : The Blank Spike for {PB170631BS} with File ID: BF144292.D met requirements for all compounds except for 3-Nitroaniline[65%], 4-Chloroaniline[52%]. This compound did not meet the NJDKQP criteria but met the in-house criteria.

The Blank Spike Duplicate met requirements for all compounds
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-BF110525.M for Hexachlorocyclopentadiene is passing on Quadratic regression.

The Continuous Calibration met the requirements except following SVOC-TCL BNA -20 : The Continuous Calibration File ID BF144290.D met the requirements except for 2,4-Dinitrophenol. Associated samples does not have hit for this comound, 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 (EO-01-11182025MSD) analysis met criteria for all compounds except for Lead due to Chemical Interference during Digestion Process.

The Duplicate analysis met criteria for all compoundsexcept following Wetchem : The Duplicate (B1-0.0-1.0-20251117DUP) analysis met criteria for all compounds except for Reactive Cyanide due to the Results are Below Reporting Limit.

The Serial Dilution met criteria for all compounds except following Mercury, Metals ICP-TAL : The Serial Dilution (EO-01-11182025L) met criteria for all compounds except for Aluminum, Calcium, Iron and Manganese due to Sample matrix interference.

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.

Mercury, Metals ICP-TAL : The Post Digest Spike (EO-01-11182025A) analysis met criteria for all compounds except for Antimony, Beryllium, Lead, Silver, Sodium, Vanadium and Zinc due to unknown chemical interference of matrix with the addition of



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spike amount after digestion and before analysis; matrix has suppression effect during addition of spike.

Pesticide-TCL : The Sample #B3-0.0-1.0-20251117 have the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

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.

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_____