

# **CASE NARRATIVE**

Yannuzzi Group, Inc.

**Project Name: Edison Yard** 

Project # N/A

**Order ID # Q3238** 

Test Name: VOC-TCLVOA-10,SVOC-TCL BNA -20,EPH,PCB,Pesticide-TCL,TPH

GC,Mercury,Metals ICP-TAL,Cyanide

### A. Number of Samples and Date of Receipt:

1 Solid sample was received on 09/29/2025.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: VOC-TCLVOA-10,SVOC-TCL BNA -20,EPH,PCB,Pesticide-TCL,TPH GC,Mercury,Metals ICP-TAL,Cyanide. This data package contains results for VOC-TCLVOA-10(8260D),SVOC-TCL BNA - 20(8270E),EPH(NJEPH),PCB(8082A),Pesticide-TCL(8081B),TPH GC(8015D),Mercury(7471B),Metals ICP-TAL(6010D),Cyanide(9012B).

#### 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\_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.

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  $\mu$ m; Catalogue # 7HM-G017-11.The analysis of PCBs was based on method 8082A and extraction was done based on method 3541.

TPH GC: The analysis were performed on instrument FID\_F. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 13302. The analysis of TPH GC was based on method 8015D and extraction was done based on method 3541.



Pesticide-TCL: The analysis was performed on instrument ECD\_L. 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: The analyses were performed on instrument FID\_D. 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 EPHs was based on method NJEPH 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.

Wetchem: The analysis of Cyanide was based on method 9012B and extraction was done based on method 8015B.

# D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries were met for all analysis except following VOC-TCLVOA-10: RCA [Dibromofluoromethane - 54%], RCARE [Dibromofluoromethane - 47%] these surrogates did not meet the NJDKQP criteria and in-house criteria, sample was reanalyzed to confirm the failure and reported.

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 {Q3245-09MS} with File ID: BF143848.D recoveries met the requirements for all compounds except for 4-Chloroaniline[59%], this compound did not meet the NJDKQP criteria but met the in-house criteria.

PCB : The MS recoveries for  $\{Q3240\text{-}01MS\}$  with File ID: PP075446.D met requirements for all samples except for [AR1016(1)176% - AR1016(2)150%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

Mercury, Metals ICP-TAL: The Matrix Spike (OK-02-092925MS) analysis met criteria for all compounds except for Antimony, Barium, Cobalt, Potassium and Sodium due to Chemical Interference during Digestion process.



The MSD recoveries met the requirements for all compounds except following SVOC-TCL BNA -20: The MSD {Q3245-09MSD} with File ID: BF143849.D recoveries met the requirements for all compounds except for 4-Chloroaniline[58%], this compound did not meet the NJDKQP criteria but met the in-house criteria.

PCB: The MSD {Q3240-01MSD} with File ID: PP075447.D recoveries met requirements for all samples except for [AR1016(1)165%] this compound did not meet the NJDKQP criteria and in-house criteria while, [AR1016(2)144%] this compound did not meet the NJDKQP criteria but met the in-house criteria due to matrix interference.

Mercury, Metals ICP-TAL: The Matrix Spike Duplicate (OK-02-092925MSD) analysis met criteria for all compounds except for Antimony, Beryllium, Chromium, Copper, Vanadium and Zinc due to Chemical Interference during Digestion Process.

The RPD recoveries met criteria.

The Blank Spike met requirements for all compounds except following SVOC-TCL BNA -20: The Blank Spike for {PB169909BS} with File ID: BP025894.D met requirements for all compounds except for 4-Chloroaniline[59%], 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 VOC-TCLVOA-10: The %RSD is greater than 20% in the Initial Calibration method (82W092525S.M) for Methylene chloride passing on Linear regression.

SVOC-TCL BNA -20: The %RSD is greater than 20% in the Method 8270-BF092325.M for 2-Nitrophenol & 2,4-Dinitrotoluene & are passing on Linear regression, and 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, they are passing on Quadratic regression.

The %RSD is greater than 20% in the Initial Calibration (Method 8270-BP091225.M) for 2,4-Dinitrophenol & 4-Nitrophenol. These Compounds are passing on Linear regression.

The Continuous Calibration met the requirements except following VOC-TCLVOA-10: The Continuous Calibration File ID VW032288.D met the requirements except for Trichlorofluoromethane is failing marginally low therefore no corrective action taken.

SVOC-TCL BNA -20: The Continuous Calibration File ID BP025892.D met the requirements except for 4-Nitrophenol, Benzaldehyde and Caprolactam, The associate



samples have no positive hit for these compounds therefore no corrective action was taken.

PCB: The Continuous Calibration File ID PP075434.D met the requirements except for Decachlorobiphenyl is failing in 2nd column however it is passing in 1st column therefore no corrective action taken.

The Tuning criteria met requirements.

The Duplicate analysis met criteria for all compounds except following Mercury, Metals ICP-TAL: The Duplicate (OK-02-092925DUP) analysis met criteria for all compounds except for Cadmium due to sample matrix interference. The Duplicate (OK-02-092925MSD) analysis met criteria for all compounds except for Copper and Potassium due to Chemical interference during Digestion process.

The Serial Dilution met criteria for all compounds except following Mercury, Metals ICP-TAL: The Serial Dilution (OK-02-092925L) met criteria for all compounds except for Aluminum, Calcium, Chromium, Copper, Iron, Magnesium and Manganese due to unknow sample matrix interference.

#### **E. Additional Comments:**

The soil samples results are based on a dry weight basis. The temperature of the samples at the time of receipt was 20.5°C.

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 (OK-02-092925A) analysis met criteria for all compounds except for Antimony, Barium, Beryllium, Chromium, Cobalt, Copper, Potassium, Sodium, Vanadium and Zinc due to unknown chemical interference of matrix with the addition of spike amount after digestion and before analysis; matrix has suppression effect during addition of spike.

### **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.

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