

# **CASE NARRATIVE**

Always Available Construction LLC. Project Name: Yard Soil Cleanup

Project # N/A Order ID # Q3157

Test Name: TCLP VOA, VOC-TCLVOA-10, SVOC-TCL BNA -20, TCLP

BNA,Diesel Range Organics,Gasoline Range Organics,PCB,Pesticide-TCL,TCLP Herbicide,TCLP Pesticide,Mercury,Metals ICP-TAL,TCLP ICP Metals,TCLP

Mercury, Cyanide

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

2 Solid samples were received on 09/19/2025. 1 Water sample was received on 09/19/2025.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: TCLP VOA, VOC-TCLVOA-10, SVOC-TCL BNA -20, TCLP BNA, Diesel Range Organics, Gasoline Range Organics, PCB, Pesticide-TCL, TCLP Herbicide, TCLP Pesticide, Mercury, Metals ICP-TAL, TCLP ICP Metals, TCLP Mercury, Cyanide. This data package contains results for TCLP VOA(8260D), VOC-TCLVOA-10(8260D), SVOC-TCL BNA -20(8270E), TCLP BNA(8270E), Diesel Range Organics(8015D), Gasoline Range Organics(8015D), PCB(8082A), Pesticide-TCL(8081B), TCLP Herbicide(8151A), TCLP Pesticide(8081B), Mercury(7471B), Metals ICP-TAL(6010D), TCLP ICP Metals(6010D), TCLP Mercury(7470A), Cyanide(9012B).

#### C. Analytical Techniques:

TCLP VOA: The analysis performed on instrument MSVOA\_X were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UI. The analysis of TCLP VOA was based on method 8260D and TCLP extraction method was 1311.

VOC-TCLVOA-10: The analysis performed on instrument MSVOA\_N were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868. 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.

TCLP BNA: 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 analysis of TCLP BNA was based on method 8270E and extraction was done based on method 3510 and TCLP extraction method was 1311.

SVOC-TCL BNA -20:. 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.

Gasoline Range Organics: The analysis performed on instrument FID\_B were done using GC column RTX502.2 which is 60 meters, 0.53mm ID, 3.0 um df, cat#10909.The analysis of Gasoline Range Organics was based on method 8015D.

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 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.

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.

TCLP Herbicide: The analysis was performed on instrument ECD\_S. The front column is RTX-CLPesticides which is 30 meters, 0.32 mm ID, 0. 5 um df,: Catalog # 11139. The rear column is RTX-CLPesticides2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 11324. The analysis of TCLP Herbicides was based on method 8151A and extraction was done based on method 3510 and TCLP extraction method was 1311.

TCLP Pesticide: 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 TCLP Pesticides was based on method 8081B and extraction was done based on method 3510 and TCLP extraction method was 1311.

Diesel Range Organics: 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 Diesel Range Organics was based on method 8015D and extraction was done based on method 3541.

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.



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 TCLP BNA: VNJ-238MS [2,4,6-Tribromophenol - 147%], VNJ-238MSD [2,4,6-Tribromophenol - 151%], 20-DEAD-1 [2,4 and6-Tribromophenol - 156%]. PB169754TB [2,4 and6-Tribromophenol - 138%]. AS per method one Acid surrogate is allowed to fail, Therefore no corrective action required.

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 Mercury, Metals ICP-TAL: The Matrix Spike (20-DEAD-1MS) analysis met criteria for all compounds except for Antimony and Lead due to Chemical Interference during Digestion Process.

The MS recoveries met the requirements for all compounds except following TCLP BNA: The MS {Q3133-02MS} with File ID: BG064423.D recoveries met the requirements for all compounds except for 2,4,5-Trichlorophenol[124%], 2,4,6-Trichlorophenol[116%] and Hexachlorobenzene[124%] due to matrix interference.

The MS recoveries met the requirements for all compounds except following Diesel Range Organics: The MS {Q3157-01MS} with File ID: FF016488.D recoveries met the requirements for all compounds except for DRO[54%] due to matrix interference.

The MSD recoveries met the requirements for all compounds except following Mercury, Metals ICP-TAL: The Matrix Spike Duplicate (20-DEAD-1MSD) analysis met criteria for all compounds except for Antimony, Copper, Lead and Vanadium due to Chemical Interference during Digestion Process. The Matrix Spike Duplicate (VNJ-255MSD) analysis met criteria for all compounds except for Mercury due to sample matrix interference.

The MSD recoveries met the requirements for all compounds except following TCLP BNA: The MSD {Q3133-02MSD} with File ID: BG064424.D recoveries met the requirements for all compounds except for 2,4,5-Trichlorophenol[124%], 2,4,6-Trichlorophenol[124%] and Hexachlorobenzene[124%] due to matrix interference



The MSD recoveries met the requirements for all compounds except following Diesel Range Organics: The MSD {Q3157-01MSD} with File ID: FF016489.D recoveries met the requirements for all compounds except for DRO[132%] due to matrix interference.

The RPD were met for all analysis except following VOC-TCLVOA-10: The RPD for {VW0922SBSD01} with File ID: VW032226.D met criteria except for Trichlorofluoromethane[34%]. Due to difference in BS and BSD concentrations.

Diesel Range Organics: The RPD for {Q3157-01MSD} with File ID: FF016489.D met criteria except for DRO[84.2%] due to difference in MS and MSD concentrations.

The Blank Spike met requirements for all compounds except following TCLP VOA: The Blank Spike for {VX0922WBS01} with File ID: VX047692.D met requirements for all compounds except for 1,1-Dichloroethene[112%], Vinyl chloride[119%]. Failing high but associated samples have not positive hit for these compounds therefore no correctie action was taken.

VOC-TCLVOA-10: The Blank Spike for {VW0922SBS01} with File ID: VW032225.D met requirements for all compounds except for Chloroethane[132%]. Failing highbut associated samples have not positive hit for this compound therefore no corrective action was taken.

The Blank Spike Duplicate met requirements for all compounds except following VOC-TCLVOA-10: The Blank Spike Duplicate for {VN0924WBSD01} with File ID: VN087937.D met requirements for all compounds except for 1,2-Dibromo-3-Chloropropane[116%], 1,3-Dichlorobenzene[110%] and 1,4-Dichlorobenzene[108%]. Failing highbut associated samples have not positive hit for these compounds therefore no corrective action was taken.

VOC-TCLVOA-10: The Blank Spike Duplicate for {VW0922SBSD01} with File ID: VW032226.D met requirements for all compounds except for 1,1,2-Trichlorotrifluoroethane[136%], 1,1-Dichloroethene[133%], Chloroethane[138%] and Trichlorofluoromethane[138%]. Failing highbut associated samples have not positive hit for these compounds therefore no corrective action was taken.

The Blank Spike met requirements for all compounds except following TCLP BNA: The Blank Spike for {PB169783BS} with File ID: BG064420.D met requirements for all compounds except for Hexachlorobutadiene[103%]. But associaed samples have not positive hit for this compound therefore no corrective action was taken.

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 (82W082625S.M) for Methylene chloride, this compound is passing on Quadratic regression.

SVOC-TCL BNA -20: 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 TCLP VOA: The Continuous Calibration File ID VX047689.D met the requirements except for Vinyl Chloride. Failing high But associated samples have not positive hit for this compound therefore no corrective action was taken.

VOC-TCLVOA-10: The Continuous Calibration File ID VN087933.D met the requirements except for 2-Butanone,2-Hexanone and Acetone. Failing high but associated samples have not positive hit for these compounds therefore no corrective action was taken.

TCLP BNA: The Continuous Calibration File ID BG064418.D met the requirements except for 1,4-Dichlorobenzene,2,4,5-Trichlorophenol,2,4,6-Trichlorophenol,2,4-Dinitrotoluene, Hexachlorobenzene, Hexachlorobutadiene,Pentachlorophenol,2,4,6-Tribromophenol,2-Fluorophenol,Nitrobenzene-d5 and Terphenyl-d14. But associaed samples have not positive hit for these compounds therefore no corrective action was taken.

SVOC-TCL BNA -20: The Continuous Calibration File ID BP025824.D met the requirements except for 4-Nitrophenol,Benzaldehyde,Benzo(g,h,i)perylene and Caprolactam. But associated samples have not positive hit for these compounds therefore no corrective acrion was taken.

PCB: The Continuous Calibration File ID PQ070933.D met the requirements except for Decachlorobiphenyl is failing in 2nd column, however it is passed in 1st column therefore no corrective action was taken.

The Continuous Calibration File ID PQ070944.D met the requirements except for Decachlorobiphenyl is failing in 2nd column, however it is passed in 1st column therefore no corrective action was taken.

The Tuning criteria met requirements.

The Duplicate analysis met criteria for all compounds except following Mercury, Metals ICP-TAL: The Duplicate (20-DEAD-1DUP) analysis met criteria for all compounds except for Calcium and Lead due to sample matrix interference.



The Serial Dilution met criteria for all compounds except following Mercury, Metals ICP-TAL: The Serial Dilution (20-DEAD-1L) met criteria for all compounds except for Aluminum, Chromium, Copper, Iron, Magnesium, Manganese, Potassium and Zinc 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 26.1°C.

VOC-TCLVOA-10 and TCLP VOA: 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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