

## **CASE NARRATIVE**

Kleinfelder

**Project Name: Logan School** 

Project # N/A Order ID # Q3614

Test Name: VOCMS Group1,SVOCMS Group1,PCB Group1,PESTICIDE Group1,Mercury,Metals ICP-Group1,Ammonia,Anions Group1,Hexavalent

**Chromium, Trivalent Chromium** 

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

3 Solid samples were received on 11/12/2025.

#### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: VOCMS Group1,SVOCMS Group1,PCB Group1,PESTICIDE Group1,Mercury,Metals ICP-Group1,Ammonia,Anions Group1,Hexavalent Chromium,Trivalent Chromium. This data package contains results for VOCMS Group1(8260D),SVOCMS Group1(8270E), PCB Group1(8082A),PESTICIDE Group1(8081B), Mercury(7471B), Metals ICP-Group1 (6010D), Ammonia(SM4500-NH3),Anions Group1(9056A),Hexavalent Chromium (7196A),Trivalent Chromium(6010D).

### C. Analytical Techniques:

VOCMS Group1: 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 VOCMS Group1 was based on method 8260D.

SVOCMS Group1: 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 SVOCMS Group1 was based on method 8270E and extraction was done based on method 3541.

PCB Group1 : 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 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  $\mu$ m; Catalogue # 7HM-G017-11.The analysis of PCB Group1s was based on method 8082A and extraction was done based on method 3541.



PESTICIDE Group1: 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 Group1s was based on method 8081B and extraction was done based on method 3541.

Mercury,Metals ICP-Group1: The analysis of Metals ICP-Group1 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 Trivalent Chromium was based on method 6010D, The analysis of Hexavalent Chromium was based on method 7196A, The analysis of Anions Group1 was based on method 9056A and The analysis of Ammonia was based on method SM4500-NH3.

## D. QA/ QC Samples:

The Holding Times were met for all analysis.

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 PCB Group1: The MS  $\{Q3609\text{-}07MS\}$  with File ID: PO115077.D recoveries met the requirements for all compounds except for [AR1016(1)440% - AR1016(2)218%] and [AR1260(2)164%] due to matrix interference.

Mercury,Metals ICP-Group1: The Matrix Spike (AU-713-COMP-01MS) analysis met criteria for all compounds except for Antimony, Boron,Selenium, Vanadium and Zinc due to Chemical Interference during Digestion Process. The Matrix Spike (COMP-3MS) analysis met criteria for all compounds except for Mercury due to Sample matrix interference.

Wetchem: The Matrix Spike (AU-713-COMP-02MS) analysis met criteria for all compounds except for Anions Group1(Fluoride) due to sample matrix interference.

The MSD recoveries met the requirements for all compounds except following PCB Group1: The MSD {Q3609-07MSD} with File ID: PO115078.D recoveries met the requirements for all compounds except for [AR1016(1)456% - AR1016(2)213%] [AR1260(2)170%] due to matrix interference.

Mercury, Metals ICP-Group1: The Matrix Spike Duplicate (AU-713-COMP-01MSD) analysis met criteria for all compounds except for Antimony, Barium, Selenium, Vanadium and Zinc due to Chemical Interference during Digestion Process.



Wetchem: The Matrix Spike Duplicate (AU-713-COMP-02MSD) analysis met criteria for all compounds except for Anions Group1(Fluoride) due to Sample matrix interference.

The RPD recoveries met criteria.

The Blank Spike met requirements for all compounds.

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.

The Continuous Calibration met the requirements.

The Tuning criteria met requirements.

The Duplicate analysis met criteria for all compoundsexcept following Mercury, Metals ICP-Group1: The Duplicate (AU-713-COMP-01MSD) analysis met criteria for all compounds except for Boron, Iron, Manganese and Zinc due to Chemical Interference during Digestion Process.

The Duplicate analysis met criteria for all compounds except following Wetchem: The Duplicate (AU-713-COMP-01DUP) analysis met criteria for all compounds except for Hexavalent Chromium due to the results are below Reporting limit. The Duplicate (COMP-1DUP) analysis met criteria for all compounds except for Ammonia as N due to the results are below Reporting limit.

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.

VOCMS Group1: 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.

Mercury, Metals ICP-Group1: In analytical Sequence LB137889, The % Recovery outside limit for Boron of CCV06 and CCV07 but no any Sample associated under these CCVs.

In analytical Sequence LB137889, The Results outside limit for Boron of CCB06 and CCB07 but no any Sample associated under these CCBs.



# **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	;		