

SDG NARRATIVE

LAB NAME: Alliance Technical Group, LLC CASE: 51724 SDG: GCNW4 CONTRACT: 68HERH20D0011 LAB CODE: ACE LAB ORDER ID: P4533 MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pН
P4533-01	GCNW3	1.0
P4533-02MS	GCNW3MS	1.0
P4533-03MSD	GCNW3MSD	1.0
P4533-04	GCNW4	1.0
P4533-05	GCNW5	1.0
P4533-06	GCNW7	1.0
P4533-07	GCNW8	1.0
P4533-08	GCNW9	1.0
P4533-09	GCNX0	1.0
P4533-10	GCNX1	1.0
P4533-11	GCNX2	1.0
P4533-12	GCNX3	1.0
P4533-13	GCNX4	1.0
P4533-14	GCNX5	1.0
P4533-15	GCNX6	1.0
P4533-16	GCNX7	1.0
P4533-17	GCNX8	1.0
P4533-18	GCNZ5	1.0
P4533-19	GCNZ6	
P4533-19DL	GCNZ6DL	

19 Water samples were delivered to the laboratory intact on 10/24/2024.

Test requested on the Chain of Custody was Trace Volatile Organic by Method SFAM01.1.

The temperature of the samples was measured using an I R Gun. The samples temperature was 2.8, 2.6, 2.4, 2.9 degree Celsius for the samples received on 10/24/2024.



Discrepancies with tags, jars, and/or COC

Issue 01: The laboratory received samples GCNX6, GCNX7, and GCNZ5 each with one vial broken. Sample GCNX6 has only one vial so there is enough for analysis, but not enough for any re-analyses/re-extractions. Samples GCNX7 and GCNZ5 have enough volume for analysis and any possible re-analyses/re-extractions. The laboratory would like to know how to proceed.

Resolution 01: Per Region 7, the laboratory should note the issue in the SDG narrative and proceed with the analysis of the samples.

Issue 02: "Lab has received sample GCNX6 with only one vial as Lab did communication as you see below ROC. Lab has analyzed this sample with received one vial in an over night analytical sequence. However, there was no closing CCV was analyzed after this sample and Lab has no any more sample vials left to perform the corrective action for re-analysis. In this case, due to insufficient volume received, Lab will report undiluted TVOA analysis with missing closing CCV for final electronic deliverables.

Resolution 02: "Please have the lab completely document the situation in the case narrative and proceed with the analysis."

Low Volatiles:

The analysis performed on instrument MSVOA_U were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UI.

The analysis of VOC-SFAM was based on method SFAM01.1_Trace.

The Surrogate recoveries met the acceptable criteria. The Internal Standards Areas met the acceptable requirements. Instrument Performance Check met requirements. The Retention Times met requirements. The Tuning criteria met requirements. The MS {GCNW3MS} recovery met the requirements for all compounds. The MSD {GCNW3MSD} recovery met the requirements for all compounds. The RPD {GCNW3MSD} RPD met the requirements for all compounds. The initial Calibration criteria met requirements.

The Continuing Calibration (VSTD005108) file ID VU061214.D met the requirements except for Chloroethane-d5 (-30.5%). As per method, up to two target analyte in opening and closing CCV are allowed to exceed the %D values. Therefore no further corrective action was taken.

The Blank analysis did not indicate the presence of lab contamination. The storage blank did not indicate the presence of lab contamination.



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Lab has received sample GCNX6 with only one vial as Lab did communication fot that. Lab has analyzed this sample with received one vial in an over night analytical sequence. However, there was no closing CCV was analyzed after this sample and Lab has no any more sample vials left to perform the corrective action for re-analysis. In this case, due to insufficient volume received, Lab reported undiluted TVOA analysis with missing closing CCV for final hard copy. Please see EPA communication after SDG Narrative.

Sample GCNZ6 was diluted due to high concentration.

See **Manual Integration report** for the manual integration information at the end of the case narrative.

Calculation:

Low/Med Water Level Calculation

Concentration in ug/L = (Ax) (Is) (DF)(Ais) (RRF) (Vo)

Where,

Ax = Area of the characteristic ion (EICP) for the compound to be measured.
Ais = Area of the characteristic ion (EICP) for the internal standard.
Amount of internal standard added in ng.
RRF = Mean Relative Response Factor from the initial calibration standard.
Vo = Total volume of water purged, in mL.
DF = Dilution Factor

Example calculation of **GCNW7** for **Chloroethane**:

Ax= 8593 Is = 125 RRF= 0.285 DF= 1 Ais= 183963 Vo. = 25 Concentration in ug/L = (8593)(125)(1)(183963)(0.285)(25)

Reported Result = 0.819 ug/L

Final Reported Result = 0.82 ug/L

Relative Response Factor = **Dichlorodifluoromethane**: RUN **VU102324** for **0.5** ppb.



 RRF=
 Area of compound
 X
 Conc. of Internal Standard

 Area of Internal Standard
 Conc. of Compound

 $RRF= \begin{array}{c} \underline{5894} \\ 198718 \end{array} X \begin{array}{c} \underline{5.0} \\ 0.5 \end{array}$

RRF= 0.297

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 _____ Name: Nimisha Pandya.

Date: _____ Title: Document Control Officer.

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