

SDG NARRATIVE

LAB NAME: Alliance Technical Group, LLC CASE: 51847 SDG: E28Y1 CONTRACT: 68HERH20D0011 LAB CODE: ACE LAB ORDER ID: P5267 MODIFICATION REF. NUMBER: NA

| Sample ID | EPA Sample ID | pН |
|-------------|---------------|----|
| P5267-01 | E28Y9 | |
| P5267-02 | E28Z0 | |
| P5267-03 | E28Z5 | |
| P5267-04 | E28Z6 | |
| P5267-05 | E28Z7 | |
| P5267-06 | E28Z8 | |
| P5267-07 | E28Y1 | |
| P5267-08MS | E28Y9MS | |
| P5267-09MSD | E28Y9MSD | |

09 Soil samples were delivered to the laboratory intact on 12/12/2024.

Test requested on the Chain of Custody was Pesticides by Method SFAM01.1.

The temperature of the samples was measured using an I R Gun. The samples temperature was 2.3, 2.0, 2.4 degree Celsius for the samples received on 12/12/2024.

Shipping Discrepancies and/or QC issues:

Issue 01: SDGs E28Y6,E28Y9 and ME28Y6 require Laboratory QC but no sample was designated on the COC. The laboratory selected samples E28Y9 and ME28Y9 for Laboratory QC of ARO, SVOA, SVOA SIM, PEST, ICP-MS, ICP-AES, CN and Hg analysis and confirmed these samples are not blank, rinsate or PT samples.

Resolution 01: Per SFAM01.1 Exhibit A, Section 5.5.4.1., the laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.



Aroclors:

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The analyses were performed on instrument GC ECD_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 μ m; Catalogue # 7HM-G017-11.

The sample was analyzed on a single injection dual column system. To distinguish the second column analysis from the first column a -2 suffix was added to the file id on the form 1. These refer to forms were both columns are reported. Form 1s for the IBLK and ALCS are referenced as IBLK(1)/IBLK(2), MS(1)/MS(2), MSD(1)/MSD(2) and ALCS01(1)/ALCS01(2) respectively.

Aroclor sample was extracted by Method SFAM01.1 on 12/13/2024 and analyzed on 12/13/2024 All the samples were subjected to a Sulfuric acid cleanup. The sample was extracted and analyzed within contractual holding time.

The Surrogate recoveries met the acceptable criteria except for E^{28W} (December 28W) E^{28W} (December 24%) E^{28W} (December 24%) E^{28W}

 $E28W8 \ [Decachlorobiphenyl(1)-24\%, \ Decachlorobiphenyl(2)-23\%],$

E28X3 [Decachlorobiphenyl(2) – 29%],

E28X5 [Decachlorobiphenyl(1) – 28%, Decachlorobiphenyl(2) – 27%],

E28X9 [Decachlorobiphenyl(1) – 29%],

E28Y3 [Tetrachloro-m-xylene(1) - 325%],

The SOW allows one surrogate to fail to meet the criteria per column. ((Please See Section 11.3.6 of Exhibit D Aroclor Analysis).

E28X0MS met the requirements.

E28X0MSD met the requirements.

The RPD met the requirements.

The Laboratory Control Sample met requirements.

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

The Initial Calibration met the requirements.

The Continuing Calibrations met the requirements.

The Retention Times were acceptable for all samples.

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

Calculation for Concentration in Soil samples:

Concentration ug/Kg (Dry weight basis) = (Ax) (Vt) (DF) (GPC)(CF) (Vi) (Ws) (D)

Where,

Ax = Response (peak area or height) of the compound to be measured.

CF = Mean Calibration Factor from the initial calibration (area/ng).

Vt = Volume of the concentrated extract in uL



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 $D = \% \text{ dry weight or } \frac{100 - \% \text{Moisture}}{100}$ GPC = $\frac{\text{Vin}}{\text{Vout}}$ = GPC factor (If no GPC is performed, GPC=1) Vout DF = Dilution Factor

Example of AR1260 calculation for Peak 1

Calibration factor Peak 1 100ppb ISTD= <u>peak area</u> Column2 Mass injected ng

$$=\frac{41826643}{0.100}$$

= 418266430 calibration factor for Peak 1 100ppb

Average of 5 peaks = 357089143

Sample **E28Y0** Ax = 25144566CF = 357089143Vt = 10000Vi = 1.0Ws = 30.1D = 0.793GPC = 1.0DF = 1.0

Concentration ug/Kg (Dry weight basis) = (Ax) (Vt) (DF) (GPC)(CF) (Vi) (Ws) (D)

 $= \frac{(25144566) (10000) (1.0) (1.0)}{(357089143) (1.0) (30.1) (0.793)}$

Peak
$$1 = 29.5$$

Average of 5 peaks = 32.27

Reported results = 32 ug/kg



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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.