

SDG NARRATIVE

LAB NAME: Alliance Technical Group, LLC CASE: 51860 SDG: YE5X0 CONTRACT: 68HERH20D0011 LAB CODE: ACE LAB ORDER ID: P5323 MODIFICATION REF. NUMBER: NA

Sample ID	EPA Sample ID	pН
P5323-01	YE5X0	
P5323-01DL	YE5X0DL	
P5323-01DL2	YE5X0DL2	
P5323-02	YE5X1	
P5323-02DL	YE5X1DL	
P5323-03	YE5X2	
P5323-03DL	YE5X2DL	
P5323-04	YE5X3	
P5323-05MS	YE5X3MS	
P5323-06MSD	YE5X3MSD	
P5323-07	YE5X4	
P5323-08	YE5Y0	
P5323-09	YE5Z2	
P5323-10	YE5Z3	
P5323-11	YE5Z4	
P5323-12	YE5Z5	
P5323-13	YE5Z6	
P5323-14	YE636	
P5323-15	YE637	
P5323-16	YE638	
P5323-17	YE639	
P5323-17DL	YE639DL	
P5323-17DL2	YE639DL2	
P5323-18	YE641	
P5323-18DL	YE641DL	
P5323-18DL2	YE641DL2	
P5323-19	YE685	
P5323-19DL	YE685DL	

1 of 4



P5323-20	YE686	
P5323-20DL	YE686DL	

13 Soil samples were delivered to the laboratory intact on 12/18/2024.
05 Soil samples were delivered to the laboratory intact on 12/20/2024.
02 Soil samples were delivered to the laboratory intact on 12/21/2024.

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

The temperature of the samples was measured using an I R Gun. The samples temperature was 2.0, 2.1 degree Celsius for the samples received on 12/18/2024, 2.0 degree Celsius for the samples received on 12/20/2024, 2.1 degree Celsius for the samples received on 12/21/2024

Aroclors:

The analyses were performed on instrument GC ECD_R 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 12/23/2024 and analyzed on 12/23, 12/24 and 12/26/2024, 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 YE5X0DL2 [Tetrachloro-m-xylene(1) - 0%, Tetrachloro-m-xylene(2) - 0%], Decachlorobiphenyl(1) - 0%, Decachlorobiphenyl(2) - 0%], YE5X3 [Decachlorobiphenyl(1) - 28%, Decachlorobiphenyl(2) - 26%], YE639 [Tetrachloro-m-xylene(1) - 264%], YE639DL [Tetrachloro-m-xylene(1) - 234%], YE639DL2 [Tetrachloro-m-xylene(1) - 0%, Tetrachloro-m-xylene(2) - 0%], Decachlorobiphenyl(1) - 0%, Decachlorobiphenyl(2) - 0%], YE641 [Tetrachloro-m-xylene(1) -881 %, Tetrachloro-m-xylene(2) - 18694%], YE641DL [Tetrachloro-m-xylene(1) - 869%, Tetrachloro-m-xylene(2) - 14716%], YE641DL2 [Tetrachloro-m-xylene(1) - 0%, Tetrachloro-m-xylene(2) - 0%, Decachlorobiphenyl(1) - 0%, Decachlorobiphenyl(2) - 0%], YE685 [Tetrachloro-m-xylene(2) - 383%], YE685DL [Tetrachloro-m-xylene(1) - 162%, Tetrachloro-m-xylene(2) - 561%], YE686 [Tetrachloro-m-xylene(2) - 2064%], YE686DL [Tetrachloro-m-xylene(1) - 220%, Tetrachloro-m-xylene(2) - 1758%],



3 of 4 The SOW allows one surrogate to fail to meet the criteria per column. ((Please See Section 11.3.6 of Exhibit D Aroclor Analysis). YE5X3MS met the requirements. YE5X3MSD 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.

Samples YE5X0, YE5X0DL, YE5X1, YE5X1DL, YE5X2, YE5X2DL, YE638, YE639, YE639DL, YE641, YE641DL, YE641DL2, YE685, YE685DL, YE686 and YE686DL failed to meet the %D for the results between the two columns Criteria.

Sample YE5X0, YE5X0DL, YE5X1, YE5X2, YE639, YE639DL, YE641, YE641DL, YE685 and YE686 were diluted due to high concentration.

Sample YE5X0, YE639 and YE641 GC/MS confirmation run performed and raw data reported in hard copy.

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

Vi = Volume of extract injected (uL). (If a single injection is made onto two columns, use $\frac{1}{2}$ the volume in the syringe as the volume injected onto each column).

Ws = Weight of sample extracted (g).

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



Example of AR1254 calculation for Peak 1

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

> = <u>29796945</u> 0.100

= 297969450 calibration factor for Peak 1 100ppb

Average of 5 peaks = 263757731

Sample **YE5Z2** Ax = 12363874CF = 263757731Vt = 10000Vi = 1.0Ws = 30.1D = 0.875GPC = 1.0DF = 1.0

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

 $= \frac{(12363874) (10000) (1.0) (1.0)}{(263757731) (1.0) (30.1) (0.875)}$

Peak 1 = 17.8

Average of 5 peaks = 13.57

Reported results = 14 ug/kg

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.

4 of 4