CHEMTECH
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CASE NARRATIVE

Aqua Survey, Inc.
Project Name: 41-046 – Jacobs Eng-Paulsboro, Mantua Creek
Project # N/A
Chemtech Project # M2709
Test Name: SVOCMS Group1

A. Number of Samples and Date of Receipt:
18 Solid samples were received on 06/14/2021.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Cyanide, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, PESTICIDE Group1, SPLP BNA Group1, SPLP Cyanide, SPLP Extraction, SPLP Hexavalent Chromium, SPLP Mercury, SPLP MetalGroup3, SPLP PCB, SPLP PestGroup1, SPLP VOA GROUP1, SPLP ZHE Ext, SVOCMS Group1, Trivalent Chromium and VOCMS Group1. This data package contains results for SVOCMS Group1.

C. Analytical Techniques:
The samples were analyzed on instrument BNA_F using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um df 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-GGAThe 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-GGAThe analysis of SVOCMS Group1 was based on method 8270E and extraction was done based on method 3541.

D. QA/ QC Samples:
The Holding Times were met for all analysis except Sam#1 – 3 – 6 – 7 – 11 and 12 are extracted out side the holding time as all samples were received on 11th day after sample collection date
The Surrogate recoveries met the acceptable criteria except for 0248-AMND-COMP-M [2,4,6-Tribromophenol - 4%, 2-Fluorophenol - 8%], 0248-AMND-COMP-MRX [2,4,6-Tribromophenol - 1%, 2-Fluorophenol - 2%], 0249-AMND-COMP-N(CL-22) [2,4,6-Tribromophenol - 1%, 2-Fluorophenol - 2%], 0249-AMND-COMP-N(CL-22)RX [2,4,6-Tribromophenol - 3%, 2-Fluorophenol - 5%], 0344-AMND-COMP-O(CL-24) [2,4,6-Tribromophenol - 0%, 2-Fluorophenol - 0%, Phenol-d6 - 4%], 0344-AMND-COMP-O(CL-24)RX [2,4,6-Tribromophenol - 0% and 2-Fluorophenol - 0%] Failure sample for surrogates was reanalyzed to confirm the results as per method and reported in the data.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The MS {M2709-06MS} with File ID: BP005976.D recoveries met the requirements for all compounds except for Benzaldehyde[125%] due to matrix interference.

The MSD recoveries met the acceptable requirements.
The RPD met criteria .
The Blank Spike met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.
The %RSD is greater than 15% for certain compounds in the Initial Calibration (Method 8270-BF060321.M) Compounds Hexachlorocyclopentadiene, 2,4-Dinitrophenol, Pentachlorophenol, Benzidine, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Benzo(g,h,i)perylene are passing on Linear Regression.
The %RSD is greater than 20% for certain compounds in the Initial Calibration (Method 8270E-BG061121.M) Compound 2-Nitroaniline is passing on Quadratic Regression.
The Continuous Calibration File ID BF124370.D met the requirements except for Benzidine and Di-n-octyl phthalate The associate samples have no positive hit for these compounds therefore no corrective action was required .
The Continuous Calibration File ID BG049016.D met the requirements except for Azobenzene The associate samples have no positive hit for these compounds therefore no corrective action was required .
The Continuous Calibration File ID BG049058.D met the requirements except for 2,4,5-Trichlorophenol,2,4,6-Trichlorophenol,2,4-Dinitrophenol,2,4-Dinitrotoluene,2,6-Dinitrotoluene,4,6-Dinitro-2-methylphenol,Benzidine and 2,4,6-Tribromophenol
The associate samples have no positive hit for these compounds therefore no corrective action was required .
The Continuous Calibration File ID BP006028.D met the requirements except for 2,4-Dinitrophenol,Benzaldehyde, Di-n-butylphthalate and Hexachlorocyclopentadiene
The associate samples have no positive hit for these compounds therefore no corrective action was required .
The Tuning criteria met requirements.

E. Additional Comments:
The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.
Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

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

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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_____