284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

Cover Page

Order ID: Q1421

Project ID: RFP 905

Client: Weston Solutions, Inc.

Lab Sample Number Client Sample Number

Q1421-01	P001-CLAY-CF01-01
Q1421-02	Q1421-01MS
Q1421-03	Q1421-01MSD
Q1421-04	P001-CLAY-CF01-01
Q1421-05	Q1421-04MS
Q1421-06	Q1421-04MSD
Q1421-07	P001-CLAY-CF01-02
Q1421-08	P001-CLAY-CF01-02
Q1421-09	P001-CLAY-CF02-01
Q1421-10	P001-CLAY-CF02-01

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. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature :		
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NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012





Weston Solutions, Inc. Project Name: RFP 905

Project # N/A

Chemtech Project # Q1421 Test Name: VOC-TCLVOA-10

A. Number of Samples and Date of Receipt:

10 Solid samples were received on 02/24/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH, Mercury, Metals ICP-TAL, METALS TAL+CN, PCB, Pesticide-TCL, SPLP BNA, SPLP Cyanide, SPLP Extraction, SPLP ICP Metals, SPLP Mercury, SPLP PCB, SPLP Pesticide, SPLP VOA, SPLP ZHE Ext, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for VOC-TCLVOA-10.

C. Analytical Techniques:

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 VOC-TCLVOA-10 was based on method 8260D.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Internal Standards Areas met the acceptable requirements except for P001-CLAY-CF01-01, P001-CLAY-CF01-01MS, P001-CLAY-CF01-01MSD Internal failure confirmed with original sample and

P001-CLAY-CF01-02 and P001-CLAY-CF01-02RE, the failure sample in Internal standard was reanalyzed to confirm the failure as per method and reported.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds . The MSD recoveries met the acceptable requirements .

The RPD for {Q1421-03MSD} with File ID: VY021372.D met criteria except for 1,1,2,2-Tetrachloroethane[40%], 1,2,3-Trichlorobenzene[45%], 1,2,4-Trichlorobenzene[43%], 1,2-Dibromo-3-Chloropropane[34%], Bromodichloromethane[21%], Chloroform[23%], cis-1,2-Dichloroethene[23%], Dibromochloromethane[22%], Isopropylbenzene[26%], Methyl Acetate[31%],



Methylcyclohexane[25%], Methylene Chloride[21%] and trans-1,2-Dichloroethene[21%], due to difference in results of MS and MSD.

The Blank Spike met requirements for all samples.

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

The Initial Calibration met the requirements.

The Continuous Calibration File ID VY021375.D met the requirements except for Acetone is failing high and associate sample having hit but below CRQL therefore no corrective action taken.

The Tuning criteria met requirements.

E. Calculation:

Low Level Soil Calculation in ug/Kg dry weight basis

 $\frac{(A \times)(I \times) (Df)}{(Ais) (RRF)(Ws)(D)}$

Where

Ax = Area for the compound to be measured

Ais = Area for the specific internal standard

Is = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the initial calibration curve standard.

Df = Dilution factor

Ws= Weight of sample

D= 100 - %moisture

100

F. Additional Comments:

The soil samples results are based on a dry weight basis. Trip Blank was not provided with this set of samples.

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 <20% 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 > 20% for the Initial Calibration curve for SW-846 analysis.

G. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.





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Weston Solutions, Inc. Project Name: RFP 905

Project # N/A

Chemtech Project # Q1421 Test Name: SPLP VOA

A. Number of Samples and Date of Receipt:

10 Solid samples were received on 02/24/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH, Mercury, Metals ICP-TAL, METALS TAL+CN, PCB, Pesticide-TCL, SPLP BNA, SPLP Cyanide, SPLP Extraction, SPLP ICP Metals, SPLP Mercury, SPLP PCB, SPLP Pesticide, SPLP VOA, SPLP ZHE Ext, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for SPLP VOA.

C. Analytical Techniques:

The analysis performed on instrument MSVOA_N were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868.The analysis of SPLP VOA was based on method 8260D.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

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.

The MSD recoveries met the acceptable requirements.

The Blank Spike for {VN0226WBS01} with File ID: VN085865.D met requirements for all samples except for 2-Hexanone[120%], is failing high but no positive hit in associate samples therefore no corrective action taken.

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

The %RSD is greater than 20% in the Initial Calibration method (82N021825W.M) for Styrene this compound is passing on Quadratic Regression.

The Continuous Calibration File ID VN085862.D met the requirements except for 2-Hexanone is failling high but no positive hit in associate samples therefore no corrective action taken and Carbon Disulfide is failling Marginary low therefore no corrective action taken.



The Tuning criteria met requirements.

E. Calculation:

Water Calculation in ug/L

(A x)(I s) (Df) (Ais) (RRF)(V0)

Where,

Ax = Area for the compound to be measured

Ais = Area for the specific internal standard

Is = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the initial calibration curve standard.

Vo = Volume of water purged in milliliters (mL)

Df = Dilution factor.

F. Additional Comments:

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 <20% 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 > 20% for the Initial Calibration curve for SW-846 analysis.

G. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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Weston Solutions, Inc. Project Name: RFP 905

Project # N/A

Chemtech Project # Q1421

Test Name: SVOC-TCL BNA -20

A. Number of Samples and Date of Receipt:

10 Solid samples were received on 02/24/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH, Mercury, Metals ICP-TAL, METALS TAL+CN, PCB, Pesticide-TCL, SPLP BNA, SPLP Cyanide, SPLP Extraction, SPLP ICP Metals, SPLP Mercury, SPLP PCB, SPLP Pesticide, SPLP VOA, SPLP ZHE Ext, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for SVOC-TCL BNA -20.

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 analysis of SVOC-TCL BNA -20 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.

The Surrogate recoveries met the acceptable criteria except for PB166853BS [Terphenyl-d14 - 116%], marginally biased high, therefore no corrective action was taken.

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.

The MSD recoveries met the acceptable requirements.

The RPD met criteria.

The Blank Spike for {PB166853BS} with File ID: BF141777.D met requirements for all samples except for Butylbenzylphthalate[106%], biased high but the associate samples have no positive hit for these compounds therefore no corrective action was taken.

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

The Initial Calibration met the requirements.



The Continuous Calibration File ID BF141755.D met the requirements except for Benzo(g,h,i)perylene,Bis(2-ethylhexyl)phthalate,Di-n-octyl phthalate,Dibenzo(a,h)anthracene and Indeno(1,2,3-cd)pyrene, The associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Continuous Calibration File ID BF141775.D met the requirements except for Bis(2-ethylhexyl)phthalate and Di-n-octyl phthalate, The associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Tuning criteria met requirements.

Concentration of SOIL Sample:

Concentration ug/Kg, (dry weight basis) = (Ax) (Is) (Vt) (DF) (GPC)

$$(Ais) (R\overline{RF}) (Vi) (Wt) (D)$$

Where,

Ax = Area of the characteristic ion for the compound to be measured.

Ais = Area of the characteristic ion for the internal standard.

Is = Amount of internal standard injected in ng.

Vi = Volume of extract injected in microliters (uL)

Vt = Volume of concentrated extract in microliters (uL)

Wt = Weight of the original sample extracted in g

Df = Dilution factor

RRF = Mean Relative Response Factor determined from the initial calibration standard.

GPC = Vin = GPC factor (If no GPC is performed, GPC=1)

Vout = Volume of extract collected after GPC cleanup.

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.





Signature





Weston Solutions, Inc. Project Name: RFP 905

Project # N/A

Chemtech Project # Q1421 Test Name: SPLP BNA

A. Number of Samples and Date of Receipt:

10 Solid samples were received on 02/24/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH, Mercury, Metals ICP-TAL, METALS TAL+CN, PCB, Pesticide-TCL, SPLP BNA, SPLP Cyanide, SPLP Extraction, SPLP ICP Metals, SPLP Mercury, SPLP PCB, SPLP Pesticide, SPLP VOA, SPLP ZHE Ext, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for SPLP BNA.

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_P using GC Column ZB-Semi Volatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe analysis of SPLP BNA 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.

The Surrogate recoveries met the acceptable criteria.

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.

The MSD {Q1421-06MSD} with File ID: BP024122.D recoveries met the acceptable requirements except for 3,3-Dichlorobenzidine[120%], due to matrix interference therefore no corrective action is required.

The RPD met criteria.

The Blank Spike for {PB166894BS} with File ID: BP024118.D met requirements for all samples except for Atrazine[131%], The associate samples have no positive hit for these compounds therefore no corrective action was taken.

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



The % RSD is greater than 20% in the Initial Calibration (8270-BF022725.M) for 2-Nitrophenol, 2-Nitroaniline, 2,6-Dinitrotoluene, 3-Nitroaniline, 2,4-Dinitrotoluene, 4,6-Dinitro-2-methylphenol, this compound is passing on Linear Regression and 2,4-Dinitrophenol, is passing on Quadratic regression.

The % RSD is greater than 20% in the Initial Calibration (8270-BP021725.M) for Caprolactam, 2,4-Dinitrophenol, 4-Nitroaniline, 4,6-Dinitro-2-methylphenol, these compounds are passing on Linear Regression.

The Continuous Calibration File ID BF141804.D met the requirements except for 4-Nitroaniline, marginally high therefore no corrective action was taken.

The Tuning criteria met requirements.

E. Additional Comments:

Concentration of Water Sample:

Concentration ug/L = (Ax) (Is) (Vt) (DF) (GPC)

Where.

Ax = Area of the characteristic ion for the compound to be measured.

Ais = Area of the characteristic ion for the internal standard.

Is = Amount of internal standard injected in ng.

Vo = Volume of water extracted in mL.

Vi = Volume of extract injected in uL.

Vt = Volume of the concentrated extract in uL

RRF = Mean Relative Response Factor determined from the initial calibration standard.

GPC = Vin = GPC factor (If no GPC is performed, GPC=1)
Vout

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 <20% 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 > 20% 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.

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Weston Solutions, Inc. Project Name: RFP 905

Project # N/A

Chemtech Project # Q1421

Test Name: PCB

A. Number of Samples and Date of Receipt:

10 Solid samples were received on 02/24/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH, Mercury, Metals ICP-TAL, METALS TAL+CN, PCB, Pesticide-TCL, SPLP BNA, SPLP Cyanide, SPLP Extraction, SPLP ICP Metals, SPLP Mercury, SPLP PCB, SPLP Pesticide, SPLP VOA, SPLP ZHE Ext, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for PCB.

C. Analytical Techniques:

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 μ m; Catalogue # 7HM-G017-11.The analysis of PCBs was based on method 8082A and extraction was done based on method 3541.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds.

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 Initial Calibration met the requirements.

The Continuous Calibration met the requirements .

E. Additional Comments:

The soil samples results are based on a dry weight basis.





F. Calculation for Concentration in Soil samples:

Concentration ug/Kg (Dry weight basis) = $\underline{(Ax) (Vt) (DF) (GPC)}$ (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 ½ the volume in the syringe as the volume injected onto each column).

Ws = Weight of sample extracted (g).

D = % dry weight or 100 - % Moisture

100

 $GPC = \underline{Vin} = GPC \text{ factor (If no GPC is performed, GPC=1)}$ Vout

DF = Dilution Factor

G. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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Weston Solutions, Inc. Project Name: RFP 905

Project # N/A

Chemtech Project # Q1421 Test Name: SPLP PCB

A. Number of Samples and Date of Receipt:

10 Solid samples were received on 02/24/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH, Mercury, Metals ICP-TAL, METALS TAL+CN, PCB, Pesticide-TCL, SPLP BNA, SPLP Cyanide, SPLP Extraction, SPLP ICP Metals, SPLP Mercury, SPLP PCB, SPLP Pesticide, SPLP VOA, SPLP ZHE Ext, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for SPLP PCB.

C. Analytical Techniques:

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 μ m; Catalogue # 7HM-G017-11. The analysis of SPLP PCBs was based on method 8082A and extraction was done based on method 3541.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds.

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 Initial Calibration met the requirements.

The Continuous Calibration met the requirements .

E. Additional Comments:

F. Calculation for Concentration in Water Samples:

Concentration ug/L = (Ax) (Vt) (DF) (GPC)(CF) (Vo) (Vi)



Where,

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

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

Vo = Volume of water extracted in mL.

Vi = Volume of extract injected in uL.

Vt = Volume of the concentrated extract in uL

GPC = Vin = GPC factor (If no GPC is performed, GPC=1)

Vout

Vin = Volume of extract loaded onto GPC column.

Vout = Volume of extract collected after GPC cleanup.

DF = Dilution Factor.

G. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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Weston Solutions, Inc. Project Name: RFP 905

Project # N/A

Chemtech Project # Q1421 Test Name: Pesticide-TCL

A. Number of Samples and Date of Receipt:

10 Solid samples were received on 02/24/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH, Mercury, Metals ICP-TAL, METALS TAL+CN, PCB, Pesticide-TCL, SPLP BNA, SPLP Cyanide, SPLP Extraction, SPLP ICP Metals, SPLP Mercury, SPLP PCB, SPLP Pesticide, SPLP VOA, SPLP ZHE Ext, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for Pesticide-TCL.

C. Analytical Techniques:

The analysis was performed on instrument ECD_L. 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-TCLs was based on method 8081B and extraction was done based on method 3541.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds.

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 Initial Calibration met the requirements.

The Continuous Calibration met the requirements.

E. Additional Comments:

The soil samples results are based on a dry weight basis.

For samples # P001-CLAY-CF01-01, compound #4 below Method detection limits, therefore it is not reported as Hit in Form-1.



F. Calculation for Concentration in Soil samples:

Concentration ug/Kg (Dry weight basis) = $\underline{(Ax) (Vt) (DF) (GPC)}$ (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 ½ the volume in the syringe as the volume injected onto each column).

Ws = Weight of sample extracted (g).

 $D = \frac{\% \text{ dry weight or } 100 - \% \text{Moisture}}{\text{Moisture}}$

100

 $GPC = \underline{Vin} = GPC \text{ factor (If no GPC is performed, GPC=1)}$ Vout

Vin = Volume of extract loaded onto GPC column.

Vout = Volume of extract collected after GPC cleanup.

DF = Dilution Factor

F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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Weston Solutions, Inc. Project Name: RFP 905

Project # N/A

Chemtech Project # Q1421 Test Name: SPLP Pesticide

A. Number of Samples and Date of Receipt:

10 Solid samples were received on 02/24/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH, Mercury, Metals ICP-TAL, METALS TAL+CN, PCB, Pesticide-TCL, SPLP BNA, SPLP Cyanide, SPLP Extraction, SPLP ICP Metals, SPLP Mercury, SPLP PCB, SPLP Pesticide, SPLP VOA, SPLP ZHE Ext, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for SPLP Pesticide.

C. Analytical Techniques:

The analysis was performed on instrument ECD_L. 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 SPLP Pesticides was based on method 8081B and extraction was done based on method 3541.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for P001-CLAY-CF01-01 [Tetrachloro-m-xylene(2) - 127%], P001-CLAY-CF01-01MS [Tetrachloro-m-xylene(1) - 132%, Tetrachloro-m-xylene(2) - 127%], P001-CLAY-CF01-01MSD [Tetrachloro-m-xylene(1) - 129%, Tetrachloro-m-xylene(2) - 129%], Surrogate failure confirmed with the Original sample,

P001-CLAY-CF01-02 [Tetrachloro-m-xylene(1) - 136%, Tetrachloro-m-xylene(2) - 135%], P001-CLAY-CF01-02RE [Tetrachloro-m-xylene(1) - 132% and Tetrachloro-m-xylene(2) - 134%] the failure sample in surrogates with both columns was reanalyzed to confirm the results as per method and reported in the data.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds.

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 Initial Calibration met the requirements.

The Continuous Calibration met the requirements.

E. Additional Comments:

F. Calculation for Concentration in Water Samples:

Concentration ug/L = (Ax) (Vt) (DF) (GPC)(CF) (Vo) (Vi)

Where,

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

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

Vo = Volume of water extracted in mL.

Vi = Volume of extract injected in uL.

Vt = Volume of the concentrated extract in uL

GPC = Vin = GPC factor (If no GPC is performed, GPC=1)

Vout

Vin = Volume of extract loaded onto GPC column.

Vout = Volume of extract collected after GPC cleanup.

DF = Dilution Factor.

G. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

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Weston Solutions, Inc. Project Name: RFP 905

Project # N/A

Chemtech Project # Q1421

Test Name: EPH

A. Number of Samples and Date of Receipt:

10 Solid samples were received on 02/24/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH, Mercury, Metals ICP-TAL, METALS TAL+CN, PCB, Pesticide-TCL, SPLP BNA, SPLP Cyanide, SPLP Extraction, SPLP ICP Metals, SPLP Mercury, SPLP PCB, SPLP Pesticide, SPLP VOA, SPLP ZHE Ext, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for EPH.

C. Analytical Techniques:

The analysis were performed on instrument FID_C. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224. The analyses were performed on instrument FID_D. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224. The analysis of EPHs was based on method NJEPH and extraction was done based on method 3541.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS {Q1421-02} with File ID: FD049142.D recoveries met the requirements for all compounds except for Aromatic C21-C36[151%] due to matrix interference.

The MSD {Q1421-03} with File ID: FD049143.D recoveries met the acceptable requirements except for Aromatic C21-C36[146%] due to matrix interference.

The RPD met criteria.

The Blank Spike met requirements for all samples.

The Blank Spike Duplicate met requirements for all samples.

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

The Initial Calibration met the requirements.

The Continuous Calibration met the requirements .



E. Additional Comments:

The soil samples results are based on a dry weight basis.

F. Calculation for Concentration in Water Samples:

$$C (ug/L) = \underbrace{(A) (D) (Ve)}_{CF (Vs)}$$

Where:

C = Concentration of each compound or hydrocarbon range, ug/L

A = Area response of each compound or carbon range to be measured

D = Dilution Factor

Vs = Volume of sample extracted, mL

Ve = Final volume of extract, uL

CF = Calibration factor of each compound or carbon range for each fraction

G. Calculation for Concentration in Soil Samples:

$$C (ug/g) = \underline{(A) (D) (Ve)}$$

$$CF (S)$$

Where:

C = Concentration of each compound or hydrocarbon range, ug/g (dry weight basis)

A = Area response of each compound or carbon range to be measured

D = Dilution Factor

Ve = Final volume of extract, uL

CF = Calibration factor of each compound or carbon range for each fraction

S = Dry sample weight, mg

Total EPH concentration = Total of 4 Aromatic Carbon Ranges and 4 Aliphatic Carbon Ranges.

H. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

Signature			
~ -5	 	 	



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CASE NARRATIVE

Weston Solutions, Inc. Project Name: RFP 905

Project # N/A

Chemtech Project # Q1421

Test Name: Metals ICP-TAL, Mercury

A. Number of Samples and Date of Receipt:

10 Solid samples were received on 02/24/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH, Mercury, Metals ICP-TAL, METALS TAL+CN, PCB, Pesticide-TCL, SPLP BNA, SPLP Cyanide, SPLP Extraction, SPLP ICP Metals, SPLP Mercury, SPLP PCB, SPLP Pesticide, SPLP VOA, SPLP ZHE Ext, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for Metals ICP-TAL, Mercury.

C. Analytical Techniques:

The analysis of Metals ICP-TAL was based on method 6010D, digestion based on method 3050 (soils). The analysis and digestion of Mercury was based on method 7471B.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

Sample P001-CLAY-CF01-01 was diluted due to high concentrations for Iron & Sample P001-CLAY-CF01-02 was diluted due to high concentrations for Iron, Silver.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike (P001-CLAY-CF01-01MS) analysis met criteria for all samples except for Antimony, Mercury, Selenium, Silver due to matrix interference.

The Matrix Spike Duplicate (P001-CLAY-CF01-01MSD) analysis met criteria for all samples except for Antimony, Selenium, Silver due to matrix interference.

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

The Calibration met the requirements.

The Serial Dilution (P001-CLAY-CF01-01L) met criteria for all samples except for Aluminum, Calcium, Chromium, Iron, Manganese due to unknown interference.

E. Calculation:

Calculation for ICP-AES Soil Sample:

Conversion of Results from mg/L or ppm to mg/kg (Dry Weight Basis):



Concentration (mg/kg) =
$$C \times \frac{Vf}{W \times S} \times DF$$

Where,

C = Instrument value in ppm (The average of all replicate exposures)

Vf = Final digestion volume (mL)

W = Initial aliquot amount (g) (Sample amount taken in prep)

S = % Solids / 100 (Fraction of Percent Solids)

DF = Dilution Factor

Calculation for Hg Soil Sample:

Conversion of Results from µg /L or ppb to mg/kg:

Concentration (mg/kg) =
$$C \times Vf \times DF / 1000$$

W x S

Where,

C = Instrument response in μ g/L from the calibration curve.

Vf = Final prepared (absorbing solution) volume (mL)

W = Initial aliquot amount (g) (Fraction of Sample amount taken in prep)

S = % Solids / 100 (Fraction of Percent Solids)

DF = Dilution Factor

F. Additional Comments:

Signature				



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CASE NARRATIVE

Weston Solutions, Inc. Project Name: RFP 905

Project # N/A

Chemtech Project # Q1421

Test Name: SPLP Mercury, SPLP ICP Metals

A. Number of Samples and Date of Receipt:

10 Solid samples were received on 02/24/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH, Mercury, Metals ICP-TAL, METALS TAL+CN, PCB, Pesticide-TCL, SPLP BNA, SPLP Cyanide, SPLP Extraction, SPLP ICP Metals, SPLP Mercury, SPLP PCB, SPLP Pesticide, SPLP VOA, SPLP ZHE Ext, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for SPLP Mercury, SPLP ICP Metals.

C. Analytical Techniques:

The analysis of SPLP ICP Metals was based on method 6010D, digestion based on method 3050 (soils). The analysis of SPLP Mercury was based on method 7470A and digestion was based on method 7471B (soils).

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate analysis met criteria for all samples.

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

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

E. Additional Comments:

Calculation for ICP-AES Water Sample:

Concentration or Result (μ g/L) = C x $\frac{Vf}{Vi}$ x DF x 1000



W	h	eı	e
w	n	eı	е

C = Instrument value in ppm (The average of all replicate exposures)

Vf = Final digestion volume (mL)

Vi = Initial aliquot amount (mL) (Sample amount taken in prep)

DF = Dilution Factor

Calculation for Hg Water Sample:

Concentration or Result (μ g/L) = C x DF Where,

C = Instrument response in μ g/L from the calibration curve.

DF = Dilution Factor

Signature		
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CASE NARRATIVE

Weston Solutions, Inc. Project Name: RFP 905

Project # N/A

Chemtech Project # Q1421

Test Name: Cyanide, SPLP Cyanide

A. Number of Samples and Date of Receipt:

10 Solid samples were received on 02/24/2025.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH, Mercury, Metals ICP-TAL, METALS TAL+CN, PCB, Pesticide-TCL, SPLP BNA, SPLP Cyanide, SPLP Extraction, SPLP ICP Metals, SPLP Mercury, SPLP PCB, SPLP Pesticide, SPLP VOA, SPLP ZHE Ext, SVOC-TCL BNA -20 and VOC-TCLVOA-10. This data package contains results for Cyanide, SPLP Cyanide.

C. Analytical Techniques:

The analysis of Cyanide, SPLP Cyanide was based on method 9012B.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate (P001-CLAY-CF01-01DUP) analysis met criteria for all samples except for Cyanide due to results are below reporting limit.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate analysis met criteria for all samples.

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

The Calibration met the requirements.

E. Additional Comments:

Calculation for CN Soil Sample:

Conversion of Results from µg /L or ppb to mg/kg:

Concentration (mg/kg) =
$$\frac{\text{C x } Vf}{\text{W x S}}$$
 x DF / 1000

Where,

C = Instrument response in μ g/L CN from the calibration curve.

Vf = Final prepared (absorbing solution) volume (mL)

W = Initial aliquot amount (g) (Fraction of Sample amount taken in prep)

S = % Solids / 100 (Fraction of Percent Solids)

DF = Dilution Factor



Calculation for CN Water Sample:

Concentration or Result (
$$\mu$$
g/L) = C x Vf x DF Vi

Where,

C = Instrument response in μ g/L CN from the calibration curve.

Vf = Final prepared (absorbing solution) volume (mL)

Vi = Initial aliquot amount (mL) (Sample amount taken in prep)

DF = Dilution Factor

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1421 MATRIX: Solid

METHOD: 8260D

1		NA	NO	YES
1.	Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)			✓
2.	GC/MS Tuning Specifications BFB Meet Criteria (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4.	GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5.	GC/MS Calibration Requirements.			\checkmark
	The Initial Calibration met the requirements.			
	The Continuous Calibration File ID VY021375.D met the requirements except for Acetone is failing high and associate sample having hit but below CRQL therefore no corrective action taken.			
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:		\checkmark	
7.	Surrogate Recoveries Meet Criteria			\checkmark
	If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			\checkmark
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The RPD for {Q1421-03MSD} with File ID: VY021372.D met criteria except for 1,1,2,2-Tetrachloroethane[40%], 1,2,3-Trichlorobenzene[45%], 1,2,4-Trichlorobenzene[43%], 1,2-Dibromo-3-Chloropropane[34%], Bromodichloromethane[21%], Chloroform[23%], cis-1,2-Dichloroethene[23%], Dibromochloromethane[22%], Isopropylbenzene[26%], Methyl Acetate[31%], Methylcyclohexane[25%], Methylene Chloride[21%] and trans-1,2-Dichloroethene[21%],due to difference in results of MS and MSD.			
9.	Internal Standard Area/Retention Time Shift Meet Criteria		\checkmark	
	Comments: The Internal Standards Areas met the acceptable requirements except for P001-CLAY-CF01-01, P001-CLAY-CF01-01MS, P001-CLAY-CF01-01MSD Internal failure confirmed with original sample and P001-CLAY-CF01-02 and P001-CLAY-CF01-02RE, the failure sample in Internal			

standard was reanalyzed to confirm the failure as per method and reported.

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

	NA	NO	YES
10. Analysis Holding Time Met			\checkmark
If not met, list number of days exceeded for each sample:			
ADDITIONAL COMMENTS:			
The soil samples results are based on a dry weight basis.			
Trip Blank was not provided with this set of samples.			
Please use %D calculated based on Avg RF and CCRF for all compounds using Average Res	sponse Factor	when the	;
%RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated	d based on Am	nount add	ded
and Calculated amount for all compounds using Linear Regression when the %RSD value fo	or a compound	is > 20%	for
the Initial Calibration curve for SW-846 analysis.			
QA REVIEW Date			

ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY

MATRIX: Solid

CHEMTECH PROJECT NUMBER: Q1421

METHOD: 8260D NA NO YES 1. Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks) 2. GC/MS Tuning Specifications BFB Meet Criteria (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ) 3. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series. 4. GC/MS Calibration - Initial Calibration performed before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series. GC/MS Calibration Requirements. 5. The %RSD is greater than 20% in the Initial Calibration method (82N021825W.M) for Styrene this compound is passing on Quadratic Regression. The Continuous Calibration File ID VN085862.D met the requirements except for 2-Hexanone is failling high but no positive hit in associate samples therefore no corrective action taken and Carbon Disulfide is failling Marginary low therefore no corrective action taken. 6. Blank Contamination - If yes, list compounds and concentrations in each blank: 7. Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable ranges. 8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range. The Blank Spike for {VN0226WBS01} with File ID: VN085865.D met requirements for all samples except for 2-Hexanone[120%], is failing high but no positive hit in associate samples therefore no corrective action taken. 9. Internal Standard Area/Retention Time Shift Meet Criteria Comments: 10. Analysis Holding Time Met

If not met, list number of days exceeded for each sample:

GC/MS VOA CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

NA NO YES

Δ	DΓ	١T	\mathbf{T}	M	N	JΔ	T	C'	വ	м	N.	1E	N	т	٦,	١.
$\boldsymbol{\Lambda}$	$\boldsymbol{\nu}_{\mathbf{L}}$	"	11			N / \		.,		VΙ	17	IL.				,

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 <20% 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 > 20%
for the Initial Calibration curve for SW-846 analysis.

QA REVIEW	Date

GC/MS SEMI-VOLATILE ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

MATRIX: Solid

CHEMTECH PROJECT NUMBER: Q1421

MET	HOD: 8270E/3541			
1.	Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)	NA	NO	YES ✓
2.	GC/MS Tuning Specifications. DFTPP Meet Criteria. (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4.	GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5.	GC/MS Calibration Requirements.		✓	
	The Initial Calibration met the requirements . The Continuous Calibration File ID BF141755.D met the requirements except for Benzo(g,h,i)perylene,Bis(2-ethylhexyl)phthalate,Di-n-octyl phthalate,Dibenzo(a,h)anthracene and Indeno(1,2,3-cd)pyrene, The associate samples have no positive hit for these compounds therefore no corrective action was taken.			
	The Continuous Calibration File ID BF141775.D met the requirements except for Bis(2-ethylhexyl)phthalate and Di-n-octyl phthalate, The associate samples have no positive hit for these compounds therefore no corrective action was taken.			
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:		\checkmark	
7.	Surrogate Recoveries Meet Criteria		✓	
	If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
	The Surrogate recoveries met the acceptable criteria except for PB166853BS [Terphenyl-d14 - 116%], marginally biased high, therefore no corrective action was taken.			

GC/MS SEMI-VOLATILE ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

NA

NO

YES

8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria ✓	
	If not met, list those compounds and their recoveries which fall outside the acceptable range.	
	The Blank Spike for {PB166853BS} with File ID: BF141777.D met requirements for all samples except for Butylbenzylphthalate[106%], biased high but the associate samples have no positive hit for these compounds therefore no corrective action was taken.	
9.	Internal Standard Area/Retention Time Shift Meet Criteria	/
	Comments:	
10.	Extraction Holding Time Met	/
	If not met, list number of days exceeded for each sample:	
11.	Analysis Holding Time Met	/
	If not met, list number of days exceeded for each sample:	
ADDIT	IONAL COMMENTS:	
The Fo	rm 6 is not included in the data package because the Initial Calibration was performed using 7 points.	
Please	ise %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 Ca	culated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for	
he Init	al Calibration curve for SW-846 analysis.	
7 A D.T.	NIEW D. C.	
QA RE	VIEW Date	

ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

NEW JERSEY LAB ID#: 20012: NEW YORK LAB ID#: 11376

GC/MS SEMI-VOLATILE ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

MATRIX: Solid

CHEMTECH PROJECT NUMBER: Q1421

METHOD: 8270E/3541 NA NO YES 1. Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks) 2. GC/MS Tuning Specifications. DFTPP Meet Criteria. (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ) 3. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series. 4. GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series. 5. GC/MS Calibration Requirements. The % RSD is greater than 20% in the Initial Calibration (8270-BF022725.M) for 2-Nitrophenol, 2-Nitroaniline, 2,6-Dinitrotoluene, 3-Nitroaniline, 2,4-Dinitrotoluene, 4,6-Dinitro-2-methylphenol, this compound is passing on Linear Regression and 2,4-Dinitrophenol, is passing on Quadratic regression. The % RSD is greater than 20% in the Initial Calibration (8270-BP021725.M) for Caprolactam, 2,4-Dinitrophenol, 4-Nitroaniline, 4,6-Dinitro-2-methylphenol, these compounds are passing on Linear Regression. The Continuous Calibration File ID BF141804.D met the requirements except for 4-Nitroaniline, marginally high therefore no corrective action was taken. 6. Blank Contamination - If yes, list compounds and concentrations in each blank: 7. Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable ranges.

GC/MS SEMI-VOLATILE ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

NA

NO

YES

8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria	✓	
	If not met, list those compounds and their recoveries which fall outside range.	the acceptable	
	The MSD {Q1421-06MSD} with File ID: BP024122.D recoveries met requirements except for 3,3-Dichlorobenzidine[120%], due to matrix in therefore no corrective action is required.		
	The Blank Spike for {PB166894BS} with File ID: BP024118.D met reall samples except for Atrazine[131%], The associate samples have no these compounds therefore no corrective action was taken.		
9.	Internal Standard Area/Retention Time Shift Meet Criteria		√
	Comments:		
10.	Extraction Holding Time Met		√
11.	If not met, list number of days exceeded for each sample: Analysis Holding Time Met		√
	If not met, list number of days exceeded for each sample:		
The For Please u %RSD v and Cald	MONAL COMMENTS: In 6 is not included in the data package because the Initial Calibration was se %D calculated based on Avg RF and CCRF for all compounds using Avalue for a compound is <15% for the Initial Calibration curve and use % culated amount for all compounds using Linear Regression when the %R all Calibration curve for SW-846 analysis.	Average Response Factor when the D calculated based on Amount added	ſ
QA RE	VIEW	Date	



GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1421	MATRIX: Solid

METHOD: 8082A/3541

1.	Chromatograms Labeled/Compounds Identified.	NA	NO	YES ✓
2.	Standard Summary Submitted.			\checkmark
3.	Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis, 12 HOURS IF 8000 SERIES METHOD.			✓
	The Initial Calibration met the requirements . The Continuous Calibration met the requirements .			
4.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
5.	Surrogate Recoveries Meet Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The MS recoveries met the requirements for all compounds. The MSD recoveries met the acceptable requirements. The Blank Spike met requirements for all samples. The RPD met criteria.			
7.	Retention Time Shift Meet Criteria (if applicable)			\checkmark
	Comments:			
8.	Extraction Holding Time Met			\checkmark
	If not met, list number of days exceeded for each sample:			



GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

NA NO YES

9.	Analysis Holding Time Met	✓
	If not met, list those compounds and their recoveries which fall outside trange.	the acceptable
ADDITI	ONAL COMMENTS:	
The soil	samples results are based on a dry weight basis.	
QA REV	TIEW	Date



GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1421	MATRIX: Solid

METHOD: 8082A/3541

1.	Chromatograms Labeled/Compounds Identified.	NA	NO	YES ✓
2.	Standard Summary Submitted.			\checkmark
3.	Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis, 12 HOURS IF 8000 SERIES METHOD.			✓
	The Initial Calibration met the requirements . The Continuous Calibration met the requirements .			
4.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
5.	Surrogate Recoveries Meet Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The MS recoveries met the requirements for all compounds. The MSD recoveries met the acceptable requirements. The Blank Spike met requirements for all samples. The RPD met criteria.			
7.	Retention Time Shift Meet Criteria (if applicable)			\checkmark
	Comments:			
8.	Extraction Holding Time Met			\checkmark
	If not met, list number of days exceeded for each sample:			



GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

NA NO YES

9.	Analysis Holding Time Met	✓
	If not met, list those compounds and their recoveries which fall outside range.	the acceptable
ADDITI	ONAL COMMENTS:	
QA REV	TIEW	Date



GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1421 MATRIX: Solid

METHOD: 8081B/3541

1.	Chromatograms Labeled/Compounds Identified.	NA	NO	YES ✓
2.	Standard Summary Submitted.			· ✓
3.	Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis, 12 HOURS IF 8000 SERIES METHOD.			✓
	The Initial Calibration met the requirements . The Continuous Calibration met the requirements .			
4.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
5.	Surrogate Recoveries Meet Criteria			\checkmark
	If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria		\checkmark	
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The MS recoveries met the requirements for all compounds . The MSD recoveries met the acceptable requirements . The Blank Spike met requirements for all samples . The RPD met criteria .			
7.	Retention Time Shift Meet Criteria (if applicable)			✓
	Comments:			
8.	Extraction Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			
9.	Analysis Holding Time Met			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			



GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

ADDITIONAL COMMENTS:
The soil samples results are based on a dry weight basis.
For samples # P001-CLAY-CF01-01, compound #4 below Method detection limits, therefore it is not reported as Hit in Form-1.

QA REVIEW

Date



GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1421	MATRIX: Solid
--------------------------------	---------------

METHOD: 8081B/3541

		NA	NO	YES
1.	Chromatograms Labeled/Compounds Identified.	NA	NO	√
2.	Standard Summary Submitted.			✓
3.	Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis, 12 HOURS IF 8000 SERIES METHOD.			✓
	The Initial Calibration met the requirements .			
	The Continuous Calibration met the requirements .			
4.	Blank Contamination - If yes, list compounds and concentrations in each blank:		\checkmark	
5.	Surrogate Recoveries Meet Criteria		\checkmark	
	If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
	The Surrogate recoveries met the acceptable criteria except for P001-CLAY-CF01-01 [Tetrachloro-m-xylene(2) - 127%], P001-CLAY-CF01-01MS [Tetrachloro-m-xylene(1) - 132%, Tetrachloro-m-xylene(2) - 127%], P001-CLAY-CF01-01MSD [Tetrachloro-m-xylene(1) - 129%, Tetrachloro-m-xylene(2) - 129%], Surrogate failure confirmed with the Original sample, P001-CLAY-CF01-02 [Tetrachloro-m-xylene(1) - 136%, Tetrachloro-m-xylene(2) - 135%], P001-CLAY-CF01-02RE [Tetrachloro-m-xylene(1) - 132% and Tetrachloro-m-xylene(2) - 134%] the failure sample in surrogates with both columns was reanalyzed to confirm the results as per method and reported in the data.			
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria		✓	
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The MS recoveries met the requirements for all compounds.			
	The MSD recoveries met the acceptable requirements.			
	The Blank Spike met requirements for all samples .			
	The RPD met criteria.			
7.	Retention Time Shift Meet Criteria (if applicable)			✓
	Comments:			



GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

		NA	NO	YES
8.	Extraction Holding Time Met			\checkmark
	If not met, list number of days exceeded for each sample:			
9.	Analysis Holding Time Met			\checkmark
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
ADDIT	TONAL COMMENTS:			
QA RE	VIEW Date			



CHEMTECH PROJECT NUMBER: Q1421

284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

MATRIX: Solid

МЕТН	IOD: NJEPH/3541			
1.	Chromatograms Labeled/Compounds Identified.	NA	NO	YES √
2.	Standard Summary Submitted.			✓
3.	Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis, 12 HOURS IF 8000 SERIES METHOD.			✓
	The Initial Calibration met the requirements . The Continuous Calibration met the requirements .			
4.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
5.	Surrogate Recoveries Meet Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria		✓	
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The MS {Q1421-02} with File ID: FD049142.D recoveries met the requirements for all compounds except for Aromatic C21-C36[151%] due to matrix interference.			
	The MSD {Q1421-03} with File ID: FD049143.D recoveries met the acceptable requirements except for Aromatic C21-C36[146%] due to matrix interference.			
	The Blank Spike met requirements for all samples . The Blank Spike Duplicate met requirements for all samples . The RPD met criteria .			
7.	Retention Time Shift Meet Criteria (if applicable)			\checkmark
	Comments:			
8.	Extraction Holding Time Met			√

If not met, list number of days exceeded for each sample:



GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

NA NO YES

9.	Analysis Holding Time Met	✓
	If not met, list those compounds and their recoveries which fall outside range.	the acceptable
ADDIT	IONAL COMMENTS:	
The soil	samples results are based on a dry weight basis.	
QA REV	VIEW	Date
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METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

MATRIX: Solid

METH	IOD: 6010D,7471B			
		NA	NO	YES
1.	Calibration Summary met criteria.			\checkmark
2.	ICP Interference Check Sample Results Summary Submitted.			\checkmark
3.	Serial Dilution Summary (if applicable) Submitted.		✓	
	The Serial Dilution (P001-CLAY-CF01-01L) met criteria for all samples except for Aluminum, Calcium, Chromium, Iron, Manganese due to unknown interference.			
4.	Laboratory Control Sample Summary (if applicable) Submitted.			\checkmark
5.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Met Criteria		✓	
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The Matrix Spike (P001-CLAY-CF01-01MS) analysis met criteria for all samples except for Antimony, Mercury, Selenium, Silver due to matrix interference. The Matrix Spike Duplicate (P001-CLAY-CF01-01MSD) analysis met criteria for all samples except for Antimony, Selenium, Silver due to matrix interference.			
7.	Sample Duplicate Analysis Met QC Criteria			\checkmark
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
8.	Digestion Holding Time Met			\checkmark
9.	If not met, list number of days exceeded for each sample: Analysis Holding Time Met			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
ADDIT	TONAL COMMENTS:			
QA RE	VIEW Date			

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

MATRIX: Water

METH	OD: 6010D,7470A			
		NA	NO	YES
1.	Calibration Summary met criteria.			\checkmark
2.	ICP Interference Check Sample Results Summary Submitted.			\checkmark
3.	Serial Dilution Summary (if applicable) Submitted.			\checkmark
4.	Laboratory Control Sample Summary (if applicable) Submitted.			✓
5.	Blank Contamination - If yes, list compounds and concentrations in each blank:		\checkmark	
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Met Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
7.	Sample Duplicate Analysis Met QC Criteria			\checkmark
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
8.	Digestion Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			
9.	Analysis Holding Time Met			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
ADDIT	IONAL COMMENTS:			
OA RE	VIEW Date			

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

MATRIX: Solid

METH	IOD: 6010D,7471B			
		NA	NO	YES
1.	Calibration Summary met criteria.			\checkmark
2.	ICP Interference Check Sample Results Summary Submitted.			\checkmark
3.	Serial Dilution Summary (if applicable) Submitted.		✓	
	The Serial Dilution (P001-CLAY-CF01-01L) met criteria for all samples except for Aluminum, Calcium, Chromium, Iron, Manganese due to unknown interference.			
4.	Laboratory Control Sample Summary (if applicable) Submitted.			\checkmark
5.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Met Criteria		✓	
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The Matrix Spike (P001-CLAY-CF01-01MS) analysis met criteria for all samples except for Antimony, Mercury, Selenium, Silver due to matrix interference. The Matrix Spike Duplicate (P001-CLAY-CF01-01MSD) analysis met criteria for all samples except for Antimony, Selenium, Silver due to matrix interference.			
7.	Sample Duplicate Analysis Met QC Criteria			\checkmark
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
8.	Digestion Holding Time Met			\checkmark
9.	If not met, list number of days exceeded for each sample: Analysis Holding Time Met			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
ADDIT	TONAL COMMENTS:			
QA RE	VIEW Date			

METALS CONFORMANCE/NON-CONFORMANCE SUMMARY

MATRIX: Water

METH	OD: 6010D,7470A			
		NA	NO	YES
1.	Calibration Summary met criteria.			\checkmark
2.	ICP Interference Check Sample Results Summary Submitted.			\checkmark
3.	Serial Dilution Summary (if applicable) Submitted.			\checkmark
4.	Laboratory Control Sample Summary (if applicable) Submitted.			✓
5.	Blank Contamination - If yes, list compounds and concentrations in each blank:		\checkmark	
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Met Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
7.	Sample Duplicate Analysis Met QC Criteria			\checkmark
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
8.	Digestion Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			
9.	Analysis Holding Time Met			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
ADDIT	IONAL COMMENTS:			
OA RE	VIEW Date			

GENERAL CHEMISTRY CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEM'	TECH PROJECT NUMBER: Q1421	MATRIX: Solid			
METH	OD: 9012B				
1.	Blank Contamination - If yes, list compounds and concentration	ns in each blank:	NA	NO ✓	YES
2.	Matrix Spike Duplicate Recoveries Met Criteria				✓
	If not met, list those compounds and their recoveries which fall range.	outside the acceptable			
	The Blank Spike met requirements for all samples.				
3.	Sample Duplicate Analysis Met QC Criteria			✓	
	If not met, list those compounds and their recoveries which fall range.	outside the acceptable			
	The Duplicate (P001-CLAY-CF01-01DUP) analysis met criter except for Cyanide due to results are below reporting limit.	ia for all samples			
4.	Digestion Holding Time Met				\checkmark
	If not met, list number of days exceeded for each sample:				
ADDITI	ONAL COMMENTS:				
QA REV	VIEW	Date			



DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following "Results Qualifiers" are used:

J	Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
U	Indicates the analyte was analyzed for, but not detected.
ND	Indicates the analyte was analyzed for, but not detected
E	Indicates the reported value is estimated because of the presence of interference
M	Indicates Duplicate injection precision not met.
N	Indicates the spiked sample recovery is not within control limits.
S	Indicates the reported value was determined by the Method of Standard Addition (MSA).
*	Indicates that the duplicate analysis is not within control limits.
+	Indicates the correlation coefficient for the MSA is less than 0.995.
D	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
M	Method qualifiers "P" for ICP instrument "PM" for ICP when Microwave Digestion is used "CV" for Manual Cold Vapor AA "AV" for automated Cold Vapor AA "CA" for MIDI-Distillation Spectrophotometric "AS" for Semi –Automated Spectrophotometric "C" for Manual Spectrophotometric "T" for Titrimetric "NR" for analyte not required to be analyzed Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.
Q	Indicates the LCS did not meet the control limits requirements
Н	Sample Analysis Out Of Hold Time



DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following "Results Qualifiers" are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
В	 Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others. Indicates the analyte was found in the blank as well as the sample report as "12 B".
Е	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements





APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1421

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication, airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	→
Is the chain of custody signed and complete	<u> </u>
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	<u></u>
Collect information for each project id from server. Were all requirements followed	<u> </u>
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	<u> </u>
Were the samples received within hold time	<u> </u>
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	<u> </u>
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	<u> </u>
Does the case narrative summarize all QC failure?	<u> </u>
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	<u> </u>

QA Review Signature: PRATHA PARGHI Date: 04/30/2025