

## Cover Page

**Order ID :** Q1383

**Project ID :** Raymark Superfund Site

**Client :** Nobis Group

### Lab Sample Number

Q1383-01  
Q1383-02  
Q1383-03  
Q1383-04  
Q1383-05  
Q1383-06  
Q1383-07  
Q1383-08  
Q1383-09  
Q1383-10  
Q1383-11  
Q1383-12  
Q1383-13  
Q1383-14  
Q1383-15  
Q1383-16  
Q1383-17  
Q1383-18  
Q1383-19  
Q1383-20  
Q1383-21  
Q1383-22

### Client Sample Number

OU4-PCS-TC-11-021725  
OU4-PCS-TC-11-021725  
OU4-PCS-TC-12-021725  
OU4-PCS-TC-12-021725  
OU4-PCS-TC-13-021725  
OU4-PCS-TC-13-021725  
OU4-PCS-TC-14-021725  
OU4-PCS-TC-14-021725  
OU4-PCS-TC-15-021725  
OU4-PCS-TC-15-021725  
OU4-PCS-TC-16-021725  
OU4-PCS-TC-16-021725  
OU4-PCS-TC-17-021725  
OU4-PCS-TC-17-021725  
OU4-PCS-TC-18-021725  
OU4-PCS-TC-18-021725  
OU4-PCS-TC-19-021725  
OU4-PCS-TC-19-021725  
OU4-PCS-TC-20-021725  
OU4-PCS-TC-20-021725  
OU4-CF-15-021725  
OU4-CF-15-021725

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 : \_\_\_\_\_

Date: 3/5/2025



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

## **CASE NARRATIVE**

### **Nobis Group**

**Project Name: Raymark Superfund Site**

**Project # N/A**

**Chemtech Project # Q1383**

**Test Name: VOCMS Group3**

### **A. Number of Samples and Date of Receipt:**

22 Solid samples were received on 02/18/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Cyanide, Herbicide Group1, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SPLP Extraction, SPLP Mercury, SPLP MetalGroup3, SVOCMS Group3 and VOCMS Group3. This data package contains results for VOCMS Group3.

### **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. #138 68. The analysis of VOCMS Group3 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 RPD met criteria.

The Blank Spike for {VY0221SBS01} with File ID: VY021277.D met requirements for all samples except for Chloroethane[140%], Chloromethane[148%] and Vinyl chloride[141%] are failing high but no positive hit in associate samples therefore no corrective action taken.

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 File ID VY021275.D met the requirements except for Chloroethane is failing high but no positive hit in associate samples therefore no corrective action taken.

The Tuning criteria met requirements.



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

**E. Additional Comments:**

As per special requirement for this project form-1 are reported in mg/kg.  
Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

The SDG Q1383 is logged for VOCMS group3. Lab is not certified for Tetrahydrofuran and trans-1,4-dichloro-2-butene compounds for 8260D method.

Trip Blank was not provided with this set of samples.  
The not QT review data is reported in the Miscellaneous.  
The soil samples results are based on a dry weight basis.

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.

---

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\_\_\_\_\_



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

## **CASE NARRATIVE**

### **Nobis Group**

**Project Name: Raymark Superfund Site**

**Project # N/A**

**Chemtech Project # Q1383**

**Test Name: SVOCMS Group3**

### **A. Number of Samples and Date of Receipt:**

22 Solid samples were received on 02/18/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Cyanide, Herbicide Group1, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SPLP Extraction, SPLP Mercury, SPLP MetalGroup3, SVOCMS Group3 and VOCMS Group3. This data package contains results for SVOCMS Group3.

### **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 SVOCMS Group3 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 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 File ID BF141671.D met the requirements except for Benzo(g,h,i)perylene failing high but no positive hit in associated samples therefore no corrective action taken.

The Tuning criteria met requirements.

### **E. Additional Comments:**

As per special requirement for this project form-1 are reported in mg/kg.

The Form 6 is not included in the data package because the Initial Calibration was performed using 8 points.



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

The not QT review data is reported in the Miscellaneous.  
The soil samples results are based on a dry weight basis.  
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.

---

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\_\_\_\_\_



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

## **CASE NARRATIVE**

### **Nobis Group**

**Project Name: Raymark Superfund Site**

**Project # N/A**

**Chemtech Project # Q1383**

**Test Name: Pesticide-TCL**

### **A. Number of Samples and Date of Receipt:**

22 Solid samples were received on 02/18/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Cyanide, Herbicide Group1, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SPLP Extraction, SPLP Mercury, SPLP MetalGroup3, SVOCMS Group3 and VOCMS Group3. 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 except for OU4-PCS-TC-12-021725 [Tetrachloro-m-xylene(2) - 130%], OU4-PCS-TC-13-021725 [Tetrachloro-m-xylene(2) - 131%], OU4-PCS-TC-14-021725 [Tetrachloro-m-xylene(2) - 131%] and OU4-PCS-TC-16-021725 [Tetrachloro-m-xylene(2) - 131%]. AS per method one surrogate allowed to fail to meet the criteria per column. No further corrective action was taken.

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 File ID PL094313.D met the requirements except for 4,4-DDD, Endrin ketone is failing in 2nd column but it is passing in 1st column therefore no corrective action taken.



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

**E. Additional Comments:**

As per special requirement for this project form-1 are reported in mg/kg.

The not QT review data is reported in the Miscellaneous.

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

**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 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\_\_\_\_\_



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

## **CASE NARRATIVE**

### **Nobis Group**

**Project Name: Raymark Superfund Site**

**Project # N/A**

**Chemtech Project # Q1383**

**Test Name: PCB**

### **A. Number of Samples and Date of Receipt:**

22 Solid samples were received on 02/18/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Cyanide, Herbicide Group1, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SPLP Extraction, SPLP Mercury, SPLP MetalGroup3, SVOCMS Group3 and VOCMS Group3. 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 µm; 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 except for PB166774BS [Decachlorobiphenyl(1) - 127%], DCB bias high in one column for DOD criteria but within QC limit for in house criteria, However all the target compounds recoveries are within DOD acceptance criteria therefore no corrective action taken, while for,

OU4-PCS-TC-11-021725MSD [Tetrachloro-m-xylene(1) - 134%]failing for surrogate but it is passing for Original sample and MS therefore no corrective action taken while for,

OU4-PCS-TC-15-021725 [Tetrachloro-m-xylene(1) - 133%, Tetrachloro-m-xylene(2) - 133%], OU4-PCS-TC-15-021725RE [Tetrachloro-m-xylene(1) - 139%, Tetrachloro-m-xylene(2) - 137%], OU4-PCS-TC-17-021725 [Tetrachloro-m-xylene(1) - 136%, Tetrachloro-m-xylene(2) - 132%], OU4-PCS-TC-17-021725RE [Tetrachloro-m-xylene(1) - 138%, Tetrachloro-m-xylene(2) - 133%], OU4-PCS-TC-19-021725 [Tetrachloro-m-xylene(1) - 133%, Tetrachloro-m-xylene(2) - 131%], OU4-PCS-TC-19-021725RE [Tetrachloro-m-xylene(1) - 136%, Tetrachloro-m-xylene(2) - 132%], OU4-CF-15-021725 [Tetrachloro-m-xylene(1) - 134%, Tetrachloro-m-xylene(2) - 134%],





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

OU4-CF-15-021725RE [Tetrachloro-m-xylene(1) - 138% and Tetrachloro-m-xylene(2) - 136%], All the failure samples in surrogates with both columns were 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 File ID PP069953.D met the requirements except for Aroclor-1016(Peak-01) is failing in 1st column but it is passing in 2nd column therefore no corrective action taken.

**E. Additional Comments:**

The not QT review data is reported in the Miscellaneous.

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

**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 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\_\_\_\_\_



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

## **CASE NARRATIVE**

### **Nobis Group**

**Project Name: Raymark Superfund Site**

**Project # N/A**

**Chemtech Project # Q1383**

**Test Name: Herbicide Group1**

### **A. Number of Samples and Date of Receipt:**

22 Solid samples were received on 02/18/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Cyanide, Herbicide Group1, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SPLP Extraction, SPLP Mercury, SPLP MetalGroup3, SVOCMS Group3 and VOCMS Group3. This data package contains results for Herbicide Group1.

### **C. Analytical Techniques:**

The analysis was performed on instrument ECD\_S. The front column is RTX-CLPesticides which is 30 meters, 0.32 mm ID, 0.5 µm df, Catalog # 11139. The rear column is RTX-CLPesticides2 which is 30 meters, 0.32 mm ID, 0.25 µm df, Catalog #: 11324. The analysis of Herbicide Group1s was based on method 8151A 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 OU4-PCS-TC-17-021725 [2,4-DCAA(1) - 123%], OU4-PCS-TC-17-021725RE [2 and 4-DCAA(1) - 132%], the failure sample in surrogate was reanalyzed to confirm the results as per method and reported in the data.

The Retention Times were acceptable for all samples.

The MS {Q1383-01MS} with File ID: PS029294.D recoveries met the requirements for all compounds except for Dalapon[38%], Dinoseb[0%] due to matrix interference.

The MSD {Q1383-01MSD} with File ID: PS029295.D recoveries met the acceptable requirements except for Dalapon[38%], Dinoseb[0%] due to matrix interference.

The sample # OU4-PCS-TC-11-021725MS and OU4-PCS-TC-11-021725MSD is failing for Dalapon and Dinoseb and the original sample(OU4-PCS-TC-11-021725) is reported with M flag for these compounds.



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

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:**

As per special requirement for this project form-1 are reported in mg/kg.

The not QT review data is reported in the Miscellaneous.

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

**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 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\_\_\_\_\_



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

## **CASE NARRATIVE**

### **Nobis Group**

**Project Name: Raymark Superfund Site**

**Project # N/A**

**Chemtech Project # Q1383**

**Test Name: Metals ICP-TAL,Mercury**

### **A. Number of Samples and Date of Receipt:**

22 Solid samples were received on 02/18/2025.

### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Cyanide, Herbicide Group1, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SPLP Extraction, SPLP Mercury, SPLP MetalGroup3, SVOCMS Group3 and VOCMS Group3. 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.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike (OU4-PCS-TC-17-021725MS) analysis met criteria for all samples except for Antimony, Beryllium, Chromium, Cobalt, Selenium, Zinc due to matrix interference.

The Matrix Spike Duplicate (OU4-PCS-TC-17-021725MSD) analysis met criteria for all samples except for Antimony, Beryllium, Chromium, Cobalt, Selenium, Zinc due to matrix interference.

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

The Calibration met the requirements.

The Serial Dilution (OU4-PCS-TC-17-021725L) met criteria for all samples except for Calcium, Copper, Iron, Magnesium, Manganese, Vanadium due to unknown interference.

### **E. Additional Comments:**

---

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\_\_\_\_\_



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

## **CASE NARRATIVE**

### **Nobis Group**

**Project Name: Raymark Superfund Site**

**Project # N/A**

**Chemtech Project # Q1383**

**Test Name: SPLP MetalGroup3,SPLP Mercury**

### **A. Number of Samples and Date of Receipt:**

22 Solid samples were received on 02/18/2025.

### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Cyanide, Herbicide Group1, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SPLP Extraction, SPLP Mercury, SPLP MetalGroup3, SVOCMS Group3 and VOCMS Group3. This data package contains results for SPLP MetalGroup3,SPLP Mercury.

### **C. Analytical Techniques:**

The analysis of SPLP MetalGroup3 was based on method 6020B, 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 (OU4-CF-15-021725MS) analysis met criteria for all samples except for Arsenic and Silver due to matrix interference.

The Matrix Spike Duplicate(OU4-CF-15-021725MSD) analysis met criteria for all samples except for Arsenic and Silver due to matrix interference.

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:**

All samples are diluted 5X dilution as straight analysis because of high and pure acid concentration of two acids which can cause drastic damage to the instrument.

Collision cell is being used to remove potential interferences. The analytes Na, Mg, Al, K, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As are being analyzed with collision cell and analytes Be, B, Ca, Ti, Se, Sr, Zr, Mo, Ag, Cd, Sn, Sb, Ba, Tl, Pb, U are being analyzed with Non-Collision Cell. Helium gas is used for the Collision Cell analysis.

---



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\_\_\_\_\_



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

## **CASE NARRATIVE**

### **Nobis Group**

**Project Name: Raymark Superfund Site**

**Project # N/A**

**Chemtech Project # Q1383**

**Test Name: Cyanide**

### **A. Number of Samples and Date of Receipt:**

22 Solid samples were received on 02/18/2025.

### **B. Parameters:**

According to the Chain of Custody document, the following analyses were requested: Cyanide, Herbicide Group1, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SPLP Extraction, SPLP Mercury, SPLP MetalGroup3, SVOCMS Group3 and VOCMS Group3. This data package contains results for Cyanide.

### **C. Analytical Techniques:**

The analysis of 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 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.

### **E. Additional Comments:**

---

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\_\_\_\_\_



## DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following “ Results Qualifiers” are used:

<b>J</b>	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).
<b>U</b>	Indicates the analyte was analyzed for, but not detected.
<b>ND</b>	Indicates the analyte was analyzed for, but not detected
<b>E</b>	Indicates the reported value is estimated because of the presence of interference
<b>M</b>	Indicates Duplicate injection precision not met.
<b>N</b>	Indicates the spiked sample recovery is not within control limits.
<b>S</b>	Indicates the reported value was determined by the Method of Standard Addition (MSA).
<b>*</b>	Indicates that the duplicate analysis is not within control limits.
<b>+</b>	Indicates the correlation coefficient for the MSA is less than 0.995.
<b>D</b>	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
<b>M</b>	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
<b>OR</b>	Indicates the analyte’s concentration exceeds the calibrated range of the instrument for that specific analysis.
<b>Q</b>	Indicates the LCS did not meet the control limits requirements
<b>H</b>	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
J	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 flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as “12 B”.
E	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 #: Q1383

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

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

#### 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 Custody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

#### ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: PRADIP PRAJAPATI

Date: 03/05/2025