DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Labora	tory Name : Alliance Technical Group LLC	Client :	Union Paving & 0	Construction	Comp	any	
Project	Location: NJ	Project Number :	- Rt. 10 Whippar	ny			
Labora	tory Sample ID(s) : P4663	Sampling Date(s):	10/31/2024				
List Dh	KQP Methods Used (e.g., 8260,8270, et Cetra)	,6010D,7196A,7471B,8015D,	8081B,8082A,815	1 A ,8260D,8	270E,9	012B,	NJEPH
1	For each analytical method referenced in this lab specified QA/QC performance criteria followed, in explain any criteria falling outside of acceptable of NJDEP Data of Known Quality performance stan	ncluding the requirement to guidelines, as specified in the		☑ Yes		No	
1A	Were the method specified handling, preservatio	n, and holding time requirements	s met?	☑ Yes		No	
1B	EPH Method: Was the EPH method conducted w (see Section 11.3 of respective DKQ methods)	vithout significant modifications		✓ Yes		No	□ N/A
2	Were all samples received by the laboratory in a described on the associated chain-of-custody do			✓ Yes		No	
3	Were samples received at an appropriate tempe	rature (4±2° C)?		☑ Yes		No	□ N/A
4	Were all QA/QC performance criteria specified in standards achieved?	the NJDEP DKQP		☐ Yes	$\overline{\checkmark}$	No	
5	a)Were reporting limits specified or referenced or communicated to the laboratory prior to sample r			✓ Yes		No	
	b)Were these reporting limits met?			☑ Yes		No	□ N/A
6	For each analytical method referenced in this lab results reported for all constituents identified in the presented in the DKQP documents and/or site-sp	he method-specific analyte lists		☑ Yes		No	
7	Are project-specific matrix spikes and/or laborato	ry duplicates included in this dat	a set?	☐ Yes	$\overline{\checkmark}$	No	

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Data of Known Quality."

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Cover Page

Order ID: P4663

Project ID: Rt. 10 Whippany

Client: Union Paving & Construction Company

Lab Sample Number Client Sample Number TENNANT-PAD-2-3-STOCKPILE P4663-01 P4663-02 TENNANT-PAD-2-3-STOCKPILE P4663-03 **RES-BUILDING-PAD-NO-11** P4663-04 **RES-BUILDING-PAD-NO-11** P4663-05 RES-BUILDING-PAD-NO-3 P4663-06 **RES-BUILDING-PAD-NO-3** P4663-07 RES-BUILDING-PAD-NO-2 P4663-08 RES-BUILDING-PAD-NO-2

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:		
Signature .	——————————————————————————————————————	11/15/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012





Union Paving & Construction Company

Project Name: Rt. 10 Whippany

Project # N/A

Chemtech Project # P4663 Test Name: VOCMS Group1

A. Number of Samples and Date of Receipt:

8 Solid samples were received on 10/31/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH_NF, Herbicide, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SVOCMS Group1, TPH GC, Trivalent Chromium and VOCMS Group1. This data package contains results for VOCMS Group1.

C. Analytical Techniques:

The analysis performed on instrument MSVOA_Y were done using GC column Rxi-624Sil MS, which is 30 meters, 0.25 mm id, 1.4 um df, Restek Cat. #13868. The Trap was supplied by Supelco, VOCARB 3000, ATOMAX XYZ Concentrator. The analysis of VOCMS Group1 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 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.

The Tuning criteria met requirements.

E. Additional Comments:

Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

Trip Blank was not provided with this set of samples.

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.

Signature		
Signature		





Union Paving & Construction Company

Project Name: Rt. 10 Whippany

Project # N/A

Chemtech Project # P4663 Test Name: SVOCMS Group1

A. Number of Samples and Date of Receipt:

8 Solid samples were received on 10/31/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH_NF, Herbicide, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SVOCMS Group1, TPH GC, Trivalent Chromium and VOCMS Group1. This data package contains results for SVOCMS Group1.

C. Analytical Techniques:

The samples were analyzed on instrument BNA_E using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGAThe samples were analyzed on instrument BNA_F using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um dfThe analysis of SVOCMS Group1 was based on method 8270E and extraction was done based on method 3541.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

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 {P4663-08MS} with File ID: BF140209.D recoveries met the requirements for all compounds except for 4,6-Dinitro-2-methylphenol[139%], 4-Chloroaniline[43%], bis(2-Ethylhexyl)phthalate[167%], Di-n-octyl phthalate[133%], Hexachlorocyclopentadiene[164%] these compounds did not meet the NJDKQP criteria but met the in-house criteria and Butylbenzylphthalate[150%] this compound did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

The MSD {P4663-08MSD} with File ID: BF140210.D recoveries met the acceptable requirements except for 4,6-Dinitro-2-methylphenol[150%], 4-Chloroaniline[46%], Di-n-octyl phthalate[144%], Hexachlorocyclopentadiene[169%] these compounds did not meet the NJDKQP criteria but met the in-house criteria and Butylbenzylphthalate[167%], bis(2-Ethylhexyl)phthalate[183%] these compounds did not meet the NJDKQP criteria and in-house criteria due to matrix interference.



The RPD met criteria.

The Blank Spike for {PB164593BS} with File ID: BE101455.D met requirements for all samples except for 3-Nitroaniline[65%] this compound did not meet the NJDKQP criteria but met the in-house criteria and Hexachlorocyclopentadiene[215%] this compound did not meet the NJDKQP criteria and in-house criteria but no positive hits in associated 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 8270-BE102824.M) for 2,4-Dinitrophenol, this compound is passing on Linear Regression.

The % RSD is greater than 20% in the Initial Calibration (Method 8270-BF101824.M) for 2,4-Dinitrophenol, this compound is passing on Linear Regression.

The Continuous Calibration File ID BF140200.D met the requirements except for 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2-Nitrophenol, 4,6-Dinitro-2-methylphenol, 4-Nitroaniline, 4-Nitrophenol, Bis(2-ethylhexyl)phthalate, Butylbenzylphthalate and Di-n-octyl phthalate but no positive hits in associated samples therefore no corrective action taken.

The Tuning criteria met requirements.

E. Additional Comments:

For sample # TENNANT-PAD-2-3-STOCKPILE some compounds below Method detection limits, therefore it is not reported as Hit in Form-1.

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

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 <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_			
Signature_	 	 	_





Union Paving & Construction Company

Project Name: Rt. 10 Whippany

Project # N/A

Chemtech Project # P4663 Test Name: Pesticide-TCL

A. Number of Samples and Date of Receipt:

8 Solid samples were received on 10/31/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH_NF, Herbicide, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SVOCMS Group1, TPH GC, Trivalent Chromium and VOCMS Group1. This data package contains results for Pesticide-TCL.

C. Analytical Techniques:

The analysis was performed on instrument ECD_L. The front column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 7HMG017- 11 The rear column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0. 5 um df,: Catalog # 7HM-G016-17. .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 for {P4663-08MS} with File ID: PL092810.D met requirements for all samples except for delta-BHC[25%], this compound did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

The MSD {P4663-08MSD} with File ID: PL092811.D recoveries met requirements for all samples except for delta-BHC[25%]this compound did not meet the NJDKQP criteria and in-house criteria due to matrix interference.

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. Manual Integration Comments:

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

Signature_			



Union Paving & Construction Company

Project Name: Rt. 10 Whippany

Project # N/A

Chemtech Project # P4663

Test Name: PCB

A. Number of Samples and Date of Receipt:

8 Solid samples were received on 10/31/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH_NF, Herbicide, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SVOCMS Group1, TPH GC, Trivalent Chromium and VOCMS Group1. 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. Manual Integration Comments:

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





Signature_		





Union Paving & Construction Company

Project Name: Rt. 10 Whippany

Project # N/A

Chemtech Project # P4663 Test Name: Herbicide

A. Number of Samples and Date of Receipt:

8 Solid samples were received on 10/31/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH_NF, Herbicide, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SVOCMS Group1, TPH GC, Trivalent Chromium and VOCMS Group1. This data package contains results for Herbicide.

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 um df,: Catalog # 11139. The rear column is RTX-CLPesticides2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 11324The analysis of Herbicides 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 CC0R8MS [2,4-DCAA(2) - 51%], CC0R8MSD [2,4-DCAA(2) - 51%], TENNANT-PAD-2-3-STOCKPILE [2,4-DCAA(1) - 56%, 2,4-DCAA(2) - 51%], RES-BUILDING-PAD-NO-11 [2,4-DCAA(1) - 54%, 2,4-DCAA(2) - 49%], RES-BUILDING-PAD-NO-3 [2,4-DCAA(1) - 50%, 2,4-DCAA(2) - 39%], RES-BUILDING-PAD-NO-2 [2 and4-DCAA(2) - 66%] these compounds did not meet the NJDKQP criteria but met the in-house criteria .

The Retention Times were acceptable for all samples.

The MS {P4602-44MS} with File ID: PS028408.D recoveries met the requirements for all compounds except for 2,4,5-T[27%], 2,4,5-TP(Silvex)[16%], 2,4-D[50%], 2,4-DB[29%], DICAMBA[43%], DICHLORPROP[26%] these compounds did not meet the NJDKQP criteria but met the in-house criteria and Dinoseb[0%] this compound did not meet the NJDKQP criteria and in-house criteria due to sample matrix interference.

The MSD {P4602-45MSD} with File ID: PS028409.D recoveries met the acceptable requirements except for 2,4,5-T[28%], 2,4,5-TP(Silvex)[16%], 2,4-D[50%], 2,4-



DB[29%], DICAMBA[43%], DICHLORPROP[26%] these compounds did not meet the NJDKQP criteria but met the in-house criteria and Dinoseb[0%] this compound did not meet the NJDKQP criteria and in-house criteria due to sample matrix interference.

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 PS028237.D met the requirements except for 2,4,5-T,2,4,5-TP (Silvex),2,4-D,2,4-DB,2,4-DCAA,DICAMBA,DICHLORPROP,DINOSEB is failing in 1st column but it is passing in 2nd column also associated samples not having any positive hit therefore no corrective action taken.

E. Additional Comments:

Fax and Hardcopy data will not match for all samples as Fax samples analyzed in sequence PS110424 where CCAL having F flag as a corrective action sample reanalyzed and reported in hardcopy and fax data From sequence PS110424 provided in Miscellaneous Section.

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.

a.		
Signature		





Union Paving & Construction Company

Project Name: Rt. 10 Whippany

Project # N/A

Chemtech Project # P4663

Test Name: TPH GC

A. Number of Samples and Date of Receipt:

8 Solid samples were received on 10/31/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH_NF, Herbicide, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SVOCMS Group1, TPH GC, Trivalent Chromium and VOCMS Group1. This data package contains results for TPH GC.

C. Analytical Techniques:

The analysis were performed on instrument FID_G. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 13302. The analysis of TPH GC was based on method 8015D 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 {P4663-08MS} with File ID: FG014629.D recoveries met the requirements for all compounds except for Petroleum Hydrocarbons[-3%] due to sample matrix interference.

The MSD {P4663-08MSD} with File ID: FG014630.D recoveries met the acceptable requirements except for Petroleum Hydrocarbons[-4%] due to sample matrix interference.

The RPD for {P4663-08MSD} with File ID: FG014630.D met criteria except for Petroleum Hydrocarbons[47.1%] due to difference in results of MS-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 met the requirements .



E. Additional Comments:

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.

Signature_			



Union Paving & Construction Company

Project Name: Rt. 10 Whippany

Project # N/A

Chemtech Project # P4663

Test Name: EPH_NF

A. Number of Samples and Date of Receipt:

8 Solid samples were received on 10/31/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH_NF, Herbicide, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SVOCMS Group1, TPH GC, Trivalent Chromium and VOCMS Group1. This data package contains results for EPH_NF.

C. Analytical Techniques:

The analysis were performed on instrument FID_E. The column is RXI-1MS which is 20 meters, 0.18mm ID, 0.18 um df, catalog 10224. The analysis of EPH_NFs 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 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 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. Manual Integration Comments:

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





Signature_			



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CASE NARRATIVE

Union Paving & Construction Company

Project Name: Rt. 10 Whippany

Project # N/A

Chemtech Project # P4663

Test Name: Metals ICP-TAL, Mercury

A. Number of Samples and Date of Receipt:

8 Solid samples were received on 10/31/2024.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH_NF, Herbicide, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SVOCMS Group1, TPH GC, Trivalent Chromium and VOCMS Group1. 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 (BP-F25MS) analysis met criteria for all samples except for Antimony due to Chemical Interference during digestion Process.

The Matrix Spike Duplicate (BP-F25MSD) analysis met criteria for all samples except for Antimony, Copper, Sodium and Zinc due to Chemical Interference during Digestion Process.

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

The Calibration met the requirements.

The Serial Dilution (BP-F25L) met criteria for all samples except for Calcium, Chromium, Copper, Magnesium, and Manganese due to sample matrix interference.

E. Additional Comments:

Signature			



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CASE NARRATIVE

Union Paving & Construction Company

Project Name: Rt. 10 Whippany

Project # N/A

Chemtech Project # P4663

Test Name: Hexavalent Chromium, Cyanide, Trivalent Chromium

A. Number of Samples and Date of Receipt:

8 Solid samples were received on 10/31/2024.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Cyanide, EPH_NF, Herbicide, Hexavalent Chromium, Mercury, Metals ICP-TAL, METALS-TAL, PCB, Pesticide-TCL, SVOCMS Group1, TPH GC, Trivalent Chromium and VOCMS Group1. This data package contains results for Hexavalent Chromium, Cyanide, Trivalent Chromium.

C. Analytical Techniques:

The analysis of Trivalent Chromium was based on method 6010D, The analysis of Hexavalent Chromium was based on method 7196A and 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			
Signature	;		



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
J B	 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 #: P4663

	Completed
East the result by respect to the following:	- — — — — — -
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)	<u> </u>
Check chain-of-custody for proper relinquish/return of samples	<u> </u>
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	✓
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	<u>✓</u>
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	<u> </u>
Do requested analyses on Chain of Custody agree with the log-in page	<u> </u>
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?	<u> </u>
Was client requirement followed?	<u> </u>
Does the case narrative summarize all QC failure?	<u>√</u> <u>√</u> <u>√</u>
All runlogs and manual integration are reviewed for requirements	<u> </u>
All manual calculations and /or hand notations verified	<u> </u>

QA Review Signature:	SOHIL JODHANI	Date: 11/15/202
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