

# DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name : Alliance Technical Group LLC Client : Remington & Vernick Engineers

Project Location : Edison,NJ Project Number : 1205T007

Laboratory Sample ID(s) : Q3552 Sampling Date(s) : 11/04/2025,11/05/2025

List DKQP Methods Used (e.g., 8260,8270, et Cetra) **,1664A,300.0,6010D,7196A,7470A,8081B,8082A,8260D,8270-Modified,8270E,9012B,9040C,SM2540 C,SM4500 N Org B or C,SM5210 B,SM5220 D,SOP**

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified handling, preservation, and holding time requirements met?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1B	EPH Method: Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Were samples received at an appropriate temperature (4±2° C)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5	a)Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?  b)Were these reporting limits met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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."

## Cover Page

**Order ID :** Q3552

**Project ID :** Edison Landfill

**Client :** Remington & Vernick Engineers

### Lab Sample Number

Q3552-01  
Q3552-02  
Q3552-03  
Q3552-04  
Q3552-05  
Q3552-06

### Client Sample Number

MW-4  
MW-8  
MW-9  
MW-10  
MW-3  
TB

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: 11/17/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



284 Sheffield Street, Mountainside, NJ 7092, Phone: 908 789 8900, Fax: 908 789 8922

## **CASE NARRATIVE**

**Remington & Vernick Engineers**

**Project Name: Edison Landfill**

**Project # N/A**

**Order ID # Q3552**

**Test Name: VOC-TCLVOA-10,SVOC-SIMGroup1,SVOC-TCL BNA -20, PCB, Pesticide-TCL,Mercury,Metals ICP-TAL,Anions Group1,BOD5, COD,Cyanide, Hexavalent Chromium,Oil and Grease,pH,TDS,TKN**

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

6 Water samples were received on 11/05/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: VOC-TCLVOA-10,SVOC-SIMGroup1,SVOC-TCL BNA -20,PCB,Pesticide-TCL,Mercury,Metals ICP-TAL,Anions Group1,BOD5,COD,Cyanide,Hexavalent Chromium,Oil and Grease,pH,TDS,TKN. This data package contains results for VOC-TCLVOA-10(8260-Low),SVOC-SIMGroup1(8270-Modified),SVOC-TCL BNA -20(8270E),PCB(8082A),Pesticide-TCL(8081B),Mercury(7470A),Metals ICP-TAL (6010D), Anions Group1(300.0),BOD5(SM5210 B),COD(SM5220 D),Cyanide(9012B), Hexavalent Chromium(7196A),Oil and Grease(1664A),pH(9040C),TDS(SM2540 C), TKN(SM4500 N Org B or C).

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

VOC-TCLVOA-10 : The analysis performed on instrument MSVOA\_V were done using GC column DB-624UI 20m 0.18mm 1.0 um. Cat#121-1324UI. The analysis of VOC-TCLVOA-10 was based on method 8260-Low.

SVOC-SIMGroup1 : The samples were analyzed on instrument BNA\_N using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA. The analysis of SVOC-SIMGroup1 was based on method 8270-Modified and extraction was done based on method 3510.

SVOC-TCL BNA -20 : The samples were analyzed on instrument BNA\_F using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um df. The samples were analyzed on instrument BNA\_G using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA. The samples were analyzed on instrument BNA\_P using GC Column ZB-SemiVolatiles Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA. The analysis of SVOC-TCL BNA -20 was based on method 8270E and extraction was done based on method 3510.



284 Sheffield Street, Mountainside, NJ 7092, Phone: 908 789 8900, Fax: 908 789 8922

PCB : The analyses were performed on instrument GCECD\_P. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5  $\mu$ m df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25  $\mu$ m; Catalogue # 7HM-G017-11. The analyses were performed on instrument GCECD\_O. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5  $\mu$ m df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25  $\mu$ m; Catalogue # 7HM-G017-11. The analysis of PCBs was based on method 8082A and extraction was done based on method 3510.

Pesticide-TCL : The analysis was performed on instrument ECD\_D. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5  $\mu$ m df,; Catalog # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25  $\mu$ m df, Catalog #: 7HMG017- 11. The analysis of Pesticide-TCLs was based on method 8081B and extraction was done based on method 3510.

Mercury, Metals ICP-TAL : The analysis of Metals ICP-TAL was based on method 6010D, digestion based on method 3010 (waters). The analysis and digestion of Mercury was based on method 7470A.

Wetchem : The analysis of Oil and Grease was based on method 1664A, The analysis of Anions Group1 was based on method 300.0, The analysis of Hexavalent Chromium was based on method 7196A, The analysis of Cyanide was based on method 9012B, The analysis of pH was based on method 9040C, The analysis of TDS was based on method SM2540 C, The analysis of TKN was based on method SM4500 N Org B or C, The analysis of BOD5 was based on method SM5210 B and The analysis of COD was based on method SM5220 D.

#### **D. QA/ QC Samples:**

The Holding Times were met for all analysis except following Wetchem : MW-10 of pH, for MW-3 of pH, for MW-4 of pH, for MW-8 of pH and for MW-9 of pH as samples were receive out of holding time.

The Surrogate recoveries were met for all analysis except following SVOC-SIMGroup1 : The Surrogate recoveries were met for all analysis except for, MW-8 [Terphenyl-d14 - 154%], MW-10 [Terphenyl-d14 - 156%] and MW-3 [Terphenyl-d14 - 136%]. MW-4DL [2-Fluorobiphenyl - 150%, Nitrobenzene-d5 - 140%], This compound did not meet the NJDKQP criteria but met the in-house criteria. And, MW-4DL [Terphenyl-d14 - 180%], MW-8DL [Terphenyl-d14 - 194%] This compound did not meet the NJDKQP criteria and in-house criteria. Due to high concentration of compounds, this sample required dilution. Therefore, sample was reanalyzed with dilution and reported.



284 Sheffield Street, Mountainside, NJ 7092, Phone: 908 789 8900, Fax: 908 789 8922

SVOC-TCL BNA -20 : PB170424BL [2,4,6-Tribromophenol - 113%], MW-8 [2,4,6-Tribromophenol - 117%], MW-10 [2,4 and 6-Tribromophenol - 135%]. This compound did not meet the NJDKQP criteria but met the in-house criteria.

The Surrogate recoveries were met for all analysis except following  
PCB : MW-8 [Decachlorobiphenyl(1)152%, Tetrachloro-m-xylene(1)167% and Tetrachloro-m-xylene(2)166%] these compounds did not meet the NJDKQP criteria but met the in-house criteria.

Pesticide-TCL : MW-4 [Decachlorobiphenyl(2)151%] this compound did not meet the NJDKQP criteria and in-house criteria, AS per method one surrogate allowed to fail to meet the criteria per column. No further corrective action was taken.

The Internal Standards Areas were met for all analysis except following SVOC-SIM Group 1 : MW-9, MW-3. Due to high concentration of compounds, this sample required dilution. Therefore, sample was reanalyzed with dilution 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 recoveries met criteria.

The Blank Spike met requirements for all compounds except following  
SVOC-TCL BNA -20 : The Blank Spike for {PB170424BS} with File ID: BP026078.D met requirements for all compounds except for 4-Chloroaniline[60%]. This compound did not meet the NJDKQP criteria but met the in-house criteria.

The Blank Spike Duplicate met requirements for all compounds except following  
SVOC-TCL BNA -20 : The Blank Spike Duplicate for {PB170424BSD} with File ID: BP026079.D met requirements for all compounds except for 4-Chloroaniline[59%]. This compound did not meet the NJDKQP criteria but met the in-house criteria.

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

The Initial Calibration met the requirements except following

VOC-TCL VOA-10 : The %RSD is greater than 20% in the Initial Calibration method (82V100725W.M) for Chloroethane, Acetone, Methylene Chloride passing on Linear Regression.

SVOC-TCL BNA -20 : The %RSD is greater than 20% in the Method 8270-BF110525.M for Hexachlorocyclopentadiene & is passing on Quadratic regression.

The %RSD is greater than 20% in the Initial Calibration (Method 8270-BP102925.M) for 26) 2-Nitrophenol, 2-Nitroaniline, 2,6-Dinitrotoluene, 3-Nitroaniline, 2,4-



284 Sheffield Street, Mountainside, NJ 7092, Phone: 908 789 8900, Fax: 908 789 8922

Dinitrotoluene, Butylbenzylphthalate, Bis(2-ethylhexyl)phthalate, These Compounds are passing on Linear regression and 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphthalate are passing on Quadratic regression.

The Continuous Calibration met the requirements except following VOC-TCLVOA-10 : The Continuous Calibration File ID VV039328.D met the requirements except for Bromomethane and Dichlorodifluoromethane are failing marginally low while Styrene is failing high but no positive hit in associate sample therefore no corrective action taken.

SVOC-SIMGroup1 : The Continuous Calibration File ID BN038174.D met the requirements except for 2,4,6-Tribromophenol. Failed surrogate is not associated with reporting list, Therefore no further corrective action was taken.

SVOC-TCL BNA -20 : The Continuous Calibration File ID BP026076.D met the requirements except for 2,3,4,6-Tetrachlorophenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Nitroaniline, 2-Nitrophenol, 3-Nitroaniline, 4,6-Dinitro-2-methylphenol, Bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Di-n-octyl phthalate, Hexachlorocyclopentadiene, Pentachlorophenol and 2,4,6-Tribromophenol. Associated samples does not have hit for these compounds, Therefore no further corrective action was taken.

The Tuning criteria met requirements.

SVOC-SIMGroup1 : Samples MW-4, MW-8, MW-9 and MW-3 were diluted due to high concentrations.

Mercury, Metals ICP-TAL : Sample MW-8 was diluted due to high concentrations for Manganese, Sodium & Sample MW-10 was diluted due to high concentrations for Sodium.

Wetchem : Sample MW-4 was diluted due to high concentrations for TKN & Sample MW-8 was diluted due to high concentrations for TKN & Sample MW-9 was diluted due to high concentrations for TKN & Sample MW-3 was diluted due to high concentrations for TKN.

The Duplicate analysis met criteria for all Compounds.  
The Serial Dilution met the acceptable requirements.

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

SEMI-VOA : The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.



284 Sheffield Street, Mountainside, NJ 7092, Phone: 908 789 8900, Fax: 908 789 8922

Anions Group1,BOD5,COD,Cyanide,Hexavalent Chromium,Oil and Grease, pH, TDS, TKN : As per method 1664A, MS/MSD is required to be performed with the sample analysis. However, Lab did not receive sufficient volume to perform the MS/MSD for Q3552 therefore Lab reported MS-MSD from Q3551 and Q3554.

Sample Q3552-01 , Q3552-03, Q3552-04, and Q3552-05 were analyzed stright Dilution for COD Parameter because the original samples were reading over range, only 5X has been reported.

PCB : All samples were received with limited volume for PCB.

Pesticide-TCL : All samples were received with limited volume for Pesticide.

VOC-TCLVOA-10 : Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

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

## 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 #: Q3552

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: SOHIL JODHANI

Date: 11/17/2025