

# **Cover Page**

- **Order ID :** Q1833
- **Project ID :** PVSC Monthly 2025

Client : Ardmore Chemical

#### Lab Sample Number

Q1833-01 Q1833-02

#### **Client Sample Number**

EFF-WASTE-WATER EFF-WASTE-WATER

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: 4/30/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



# CASE NARRATIVE

Ardmore Chemical Project Name: PVSC Monthly 2025 Project # N/A Chemtech Project # Q1833 Test Name: VOC-PP

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

2 Water samples were received on 04/17/2025.

### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: BOD5, Cyanide, Mercury, Metals Group2, Metals Group3, Metals ICP-Group, SVOCMS Group1, TSS and VOC-PP. This data package contains results for VOC-PP.

### **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 VOC-PP was based on method 624.1.

### 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 %RSD is greater than 35% in the Initial Calibration method (624N042325W.M) for Acrolein is passing on Linear Regression.

The Tuning criteria met requirements.

Sample EFF-WASTE-WATER was diluted due foamy nature of the sample.

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

As per method, MS/MSD is required to be performed with the sample analysis. However, Lab did not receive sufficient volume to perform the MS/MSD therefore MS/MSD were not performed for this project. However, Lab has performed LCS/LCSD instead.



Sample # EFF-WASTE-WATER initially analyzed in sequence VN042125 where Method was Failing as a corrective action sample reanalyzed in sequence VN042325 under passing method and reported in hardcopy, therefore fax and hardcopy data will not match.

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 <35% 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 > 35% 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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# CASE NARRATIVE

Ardmore Chemical Project Name: PVSC Monthly 2025 Project # N/A Chemtech Project # Q1833 Test Name: SVOCMS Group1

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

2 Water samples were received on 04/17/2025.

### **B.** Parameters

According to the Chain of Custody document, the following analyses were requested: BOD5, Cyanide, Mercury, Metals Group2, Metals ICP-Group, SVOCMS Group1, TSS and VOC-PP. This data package contains results for SVOCMS Group1.

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

The samples were analyzed on instrument BNA\_F using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um dfThe analysis of SVOCMS Group1 was based on method 625.1 and extraction was done based on method 3510.

### D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for EFF-WASTE-WATER [Phenol-d6 - 44%], EFF-WASTE-WATERDL [2-Fluorobiphenyl - 142% and Phenol-d6 - 55%], As per SOW one Acid and one Base surrogate is allowed to fail, therefore no further corrective action was taken.

The Internal Standards Areas met the acceptable requirements. The Retention Times were acceptable for all samples. The RPD met criteria.

The Blank Spike for {PB167672BS} with File ID: BF142211.D met requirements for all samples except for Hexachlorocyclopentadiene[190%], Associated sampled has no hit for this compound, therefor no further corrective action was taken.

The Blank Spike Duplicate for {PB167672BSD} with File ID: BF142212.D met requirements for all samples except for Hexachlorocyclopentadiene[200%], Associated sampled has no hit for this compound, therefor no further 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 BF142210.D met the requirements except for Di-noctyl phthalate, Associated samples does not have hit for this compound, therefor no further corrective action was taken.

The Tuning criteria met requirements.

Sample EFF-WASTE-WATER was diluted due to high concentration.

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

As per method, MS/MSD is required to be performed with the sample analysis. However, Lab did not receive sufficient volume to perform the MS/MSD therefore MS/MSD were not performed for this project. However, Lab has performed LCS/LCSD instead."

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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# CASE NARRATIVE

Ardmore Chemical Project Name: PVSC Monthly 2025 Project # N/A Chemtech Project # Q1833 Test Name: Metals Group3,Mercury

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

2 Water samples were received on 04/17/2025.

### **B.** Parameters:

According to the Chain of Custody document, the following analyses were requested: BOD5, Cyanide, Mercury, Metals Group2, Metals Group3, Metals ICP-Group, SVOCMS Group1, TSS and VOC-PP. This data package contains results for Metals Group3,Mercury.

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

The analysis and digestion of Metals Group3 was based on 200.7 and The analysis and digestion of Mercury was based on 245.1.

### 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:**

LLCCV & LLICV are not required for 200.7 method.

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## CASE NARRATIVE

Ardmore Chemical Project Name: PVSC Monthly 2025 Project # N/A Chemtech Project # Q1833 Test Name: Cyanide,BOD5,TSS

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

2 Water samples were received on 04/17/2025.

### **B.** Parameters:

According to the Chain of Custody document, the following analyses were requested: BOD5, Cyanide, Mercury, Metals Group2, Metals ICP-Group, SVOCMS Group1, TSS and VOC-PP. This data package contains results for Cyanide, BOD5, TSS.

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

The analysis of TSS was based on method SM2540 D, The analysis of Cyanide was based on method SM4500-CN C,E and The analysis of BOD5 was based on method SM5210 B.

### **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:**

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# 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	
Ε	Indicates the reported value is estimated because of the presence of interference	
Μ	Indicates Duplicate injection precision not met.	
Ν	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 OR	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 "AV" for automated Cold Vapor AA "CA" for MIDI-Distillation Spectrophotometric "AS" for Semi – Automated 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	<ul> <li>Indicates an estimated value. This flag is used:</li> <li>(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)</li> <li>(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.</li> </ul>
В	Indicates the analyte was found in the blank as well as the sample report as "12 B".
Ε	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.
Р	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".
Ν	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.
Α	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 #: Q1833

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)	<u> </u>
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	<u> </u>
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	
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?	
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