UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CHICAGO REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

LABORATORY ACCREDITATION BUREAU
ACCREDITED ISO/IEC 17025
Certificate # L2280 Testing

Date: **11/3/2017**

Subject: **Review of Region 5 Data for Mid America Steel Drum, Inc.**

To: **RCRA, LCD, US EPA Region 5**
77 West Jackson Boulevard
Chicago, IL 60604

From: **Wayne Whipple, Chemist**
US EPA Region 5 Chicago Regional Laboratory

The data transmitted under this cover memo successfully passed CRL's data review procedures as documented in the current Quality Management Plan and applicable Standard Operating Procedures. In accordance with the EPA QA/G-8 *Guidance on Environmental Data Verification and Data Validation* and the U.S. EPA Region 5 RMD QMP, CRL performs data verification on all the data generated internally. CRL does not perform data validation or quality assessment procedures.

This report was reviewed and the information provided herein accurately represents the analysis performed.

X WAYNE WHIPPLE Digitally signed by WAYNE WHIPPLE Date: 2017.11.03 11:32:41 -05'00'

Please contact the analyst with any technical report issues, Robert Thompson at (312)-353-9078 for sample project concerns, and Sylvia Griffin at (312)-353-9073 with data transmittal questions. Thank you.

Attached are Results for: Mid America Steel Drum, Inc.

/ /

Data Coordinator and Date Transmitted

Analyses included in this report:

Air Toxics Reimer 5

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Analysis Case Narrative for Volatile Organic Compounds(VOC) Air Toxics

Wayne J. Whipple, Ph.D.
phone (312) 353-9063
email whipple.wayne@epa.gov

General Information:

Nine 3.2 L canisters were received on 18 June, 2017 in good condition. The samples were analyzed within the 30 day holding time.

Samples were analyzed using the CRL SOP MS005 ver 2 with Pen and Ink 8327, 9436 and 9102 which allows for the use of the new Entech 7200 Preconcentrator and 7650 Robotic arm for sample analysis and an extended list of target compounds and clarifies a discrepancy between analytical and data review SOPs with the ICV recoveries

The project objectives were to quantify target analytes and the presence of any other high concentration analytes detectable by this laboratory's SOP that is based on the TO-15 analysis. Data verification was performed and the data is acceptable to use for this purpose.

Preliminary results were sent on July 28, 2017. There are no significant changes to the preliminary data target analytes that have been reported except for adjusted reporting limits and data qualifiers.

Data are reported to the reporting limit.

Sample Analysis and Results:

Samples were received and the initial pressure was recorded in each canister. No actual dilutions were performed on the canisters but each rerun (-RE#) contained a smaller volume of sample processed for analysis thereby reducing the amount added to the instrument. The amount processed was 100 cc (normal 200cc) for the higher volume injections and 20 cc injections for the lower injection volumes. Adjustments were made to the reporting limits analogous to dilutions.

Acetone in samples 1707033-03RE1 and -04RE1 is above the highest concentration in the calibration curve and is flagged as estimated, "J".

The standard used for this analysis was the Air Liquide that has less analytes than the routine primary standard Many of the oxygenated aldehydes and other compounds were not quantified because of the difference The original routine primary standard has since expired and will be recertified. (The company is in Miami and a hurricane hit when the recertification was due.)

The ethanol result for the duplicate sample has been rejected because it was a 0 value calculated from outside the limit of the quadratic calibration curve.

A review of all the sample chromatograms analyzed at the larger injection volume showed only two significant peaks in sample 1708033-08 and 1708033-09 where a larger peak was tentatively identified as nonanal with a concentration estimate of about 2 ppbv in sample -08. Sample -09 had a smaller peak so the semi quantitation was not performed. If more detailed information is needed please contact the laboratory.

Quality Control:

The "TUN" qualifier is added to all the samples because 5 of the 9 calibration samples were analyzed outside of the tune check window. A tune check was performed immediately after the last calibration standards analyzed and the tune passed This error is documented in a nonconformance report included in this package (12045). All samples and batch QC were analyzed with a proper tune check. This error is not expected to have a significant effect on the data quality since the final calibration tune check passed.

Environmental Protection Agency Region5

Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

The method blank was found to be low in concentration because of a sequence error where 0 ccs were selected to collect compared to the 200 ccs. A non-conformance (11670) was created. The method blanks collected from the same canister fill are reproducible within the precision of the analysis so the following batch method blank is included in this data package. The 0 cc blank, or instrument blank, showed no signs of unexpected system contamination. The compounds detected in the following analytical batch method blank are propene (42.59 pptv), Acrolein (61.23 pptv), Acetone (521.86 pptv), and 2-butanone (44.38 pptv). These specific compound results reported in this data set may have been affected by system contamination if the result is within 5 times the amount detected in the method blank.
Samples were qualified "B" when specific compounds for an individual sample were detected in the specific canister blank check analysis and the sample result was within 5 times the blank results. This is to qualify the sample result as being potentially influenced from system background contamination.
The instrument was experiencing problems relating to the position of the transfer lines near the liquid nitrogen exhaust causing the transfer lines to cool and create active zones that interfered with compounds having higher boiling points. This problem was obvious in laboratory air and continuing calibration verification samples. The repositioning corrected the problem intermittently until the liquid nitrogen lines were plumbed and a full run could be completed. The higher 5 calibration levels were reanalyzed on the following workday with no samples being reported in between. The later calibration analyses replaced the prior not-acceptable calibrations samples in the calibration curve while keeping the earlier lower concentration calibration standard injections. Quality control samples were not acceptable having the same issue until the final repair was accomplished and all of the QC samples, ICV sample and the sample monitoring compounds did not exhibit signal loss. This quality assurance samples and sample monitoring compounds demonstrate that all data in this analysis was not affected.
The minimum reporting limit check is still not part of a standard operating procedure but it is analyzed using the same volume as the reruns, all with 20 ccs to supply added confidence that the system was functioning with the lower volume. The nominal reporting limit for this report is 25 pptv (0.025 ppbv) for most compounds except those that are raised for calibration and matrix interference problems. The MRL check was at 50 pptv. The reporting limits for a few compounds were reduced for the MRL to allow reporting with the LIMS. These compounds are ethanol, and isopropyl alcohol.
Propene (and propene and propane + propene) initial reporting limits have been raised to 250 pptv (500 pptv adjusting for the 100 cc injection volume) because the calibration was acceptable only above that concentration.
Acrolein in sample 1708033-08 has a matrix interference that prohibits the identification of the compound at the reported result concentration and therefore the reporting limit is raised to the result concentration.
Reporting limits for the sample monitoring compounds have been lowered to below the set reporting limits and for 1,1,1-trichlorethane so have the detection limits. This has been done to allow reporting of the compounds to provide information on the quality of the sample processing. The acceptance values are known global concentrations that are taken to be accurate values.
Reporting and detection limits were lowered in samples 1708033-01, -06, -09 (ethanol), and -02 (isopropanol) to allow reporting from the diluted samples. These results are qualified "J" as estimated.
Propene and propane cannot be chromatographically and spectrally resolved by this analytical method. The samples contained a both propene and propane in all the samples so the result for propene is reported as a combination of the two compounds. The results are estimated because there is no approved method for deconvolution the two compounds.
The -RE# samples have only 4 monitoring compounds because the other two (F-114 and 1,1,1-trichloroethane) are too low in concentration to be detected at the lower injection volumes.
The sample duplicate calculates and applies Q flags when the %difference is greater than the limits although it does not

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

take into account results between the MDL and reporting limit which are always estimated and have greater uncertainty. The LIMS automatically applies this flag. Results and flags below the RL reported in the duplicate should be ignored.

Environmental Protection Agency Region5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1	1708033-01	Air	Aug-30-17 08:40	Aug-31-17 09:30
2	1708033-02	Air	Aug-30-17 08:45	Aug-31-17 09:30
3	1708033-03	Air	Aug-30-17 08:50	Aug-31-17 09:30
4	1708033-04	Air	Aug-30-17 08:55	Aug-31-17 09:30
5	1708033-05	Air	Aug-30-17 09:02	Aug-31-17 09:30
6	1708033-06	Air	Aug-30-17 09:10	Aug-31-17 09:30
7	1708033-07	Air	Aug-30-17 09:20	Aug-31-17 09:30
8	1708033-08	Air	Aug-30-17 09:30	Aug-31-17 09:30
9	1708033-09	Air	Aug-30-17 09:40	Aug-31-17 09:30

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

1 (1708033-01) **Matrix: Air** **Sampled: Aug-30-17 08:40** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Propene + propane	**0.592**	J		0.500	ppbv	1	B17I004	Sep-08-17	Sep-11-17
Chloromethane	**0.455**			0.0500	"	"	"	"	"
Vinyl chloride	**U**			0.0500	"	"	"	"	"
1,3-butadiene	**U**			0.0500	"	"	"	"	"
Bromomethane	**U**			0.0500	"	"	"	"	"
Chloroethane	**U**			0.0500	"	"	"	"	"
Acrolein	**0.290**			0.0500	"	"	"	"	"
Isopropyl alcohol	**2.05**			1.00	"	"	"	"	"
1,1-Dichloroethene	**U**			0.0500	"	"	"	"	"
Methylene chloride	**0.772**			0.0500	"	"	"	"	"
Carbon disulfide	**U**			0.0500	"	"	"	"	"
Methyl tert-butyl ether	**U**			0.0500	"	"	"	"	"
1,1-Dichloroethane	**U**			0.0500	"	"	"	"	"
Vinyl acetate	**U**			0.0500	"	"	"	"	"
Hexane	**0.104**			0.0500	"	"	"	"	"
2-Butanone	**U**			0.0500	"	"	"	"	"
cis-1,2-Dichloroethene	**U**			0.0500	"	"	"	"	"
trans-1,2-Dichloroethene	**U**			0.0500	"	"	"	"	"
Chloroform	**U**			0.0500	"	"	"	"	"
1,2-Dichloroethane	**U**			0.0500	"	"	"	"	"
Cyclohexane	**U**			0.500	"	"	"	"	"
Benzene	**0.130**			0.0500	"	"	"	"	"
n-Heptane	**0.0846**			0.0500	"	"	"	"	"
1,2-Dichloropropane	**U**			0.0500	"	"	"	"	"
Trichloroethene	**U**			0.0500	"	"	"	"	"
Bromodichloromethane	**U**			0.0500	"	"	"	"	"
1,4-Dioxane	**U**			0.0500	"	"	"	"	"
cis-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

1 (1708033-01) **Matrix: Air** **Sampled: Aug-30-17 08:40** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
4-Methyl-2-pentanone	**0.114**			0.0500	ppbv	1	B17I004	Sep-08-17	Sep-11-17
trans-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
1,1,2-Trichloroethane	**U**			0.0500	"	"	"	"	"
Dibromochloromethane	**U**			0.0500	"	"	"	"	"
Toluene	**0.676**			0.0500	"	"	"	"	"
2-Hexanone	**U**			0.0500	"	"	"	"	"
Hexanal	**U**			0.0500	"	"	"	"	"
1,2-Dibromoethane (EDB)	**U**			0.0500	"	"	"	"	"
Tetrachloroethene	**U**			0.0500	"	"	"	"	"
Chlorobenzene	**U**			0.0500	"	"	"	"	"
Ethylbenzene	**0.0518**			0.0500	"	"	"	"	"
m+p-Xylene	**0.152**			0.100	"	"	"	"	"
Bromoform	**U**			0.0500	"	"	"	"	"
Styrene	**U**			0.0500	"	"	"	"	"
1,1,2,2-Tetrachloroethane	**U**			0.0500	"	"	"	"	"
o-Xylene	**0.103**			0.0500	"	"	"	"	"
1,3,5-Trimethylbenzene	**U**			0.0500	"	"	"	"	"
1,2,4-Trimethylbenzene	**U**			0.0500	"	"	"	"	"
1,3-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Benzyl chloride	**U**			0.0500	"	"	"	"	"
1,4-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
1,2-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Hexachlorobutadiene	**U**			0.0500	"	"	"	"	"
1,2,4-Trichlorobenzene	**U**			0.0500	"	"	"	"	"

Surogate	Result	%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.445	*87%*	*70-130*	"	"	"
Dichlorotetrafluoroethane	0.0142	*71%*	*60-140*	"	"	"
Trichlorofluoromethane	0.224	*95%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0645	*90%*	*70-130*	"	"	"
1,1,1-Trichloroethane	3.22E-3	*80%*	*50-150*	"	"	"
Carbon tetrachloride	0.0720	*87%*	*70-130*	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

1 (1708033-01RE1) **Matrix: Air** **Sampled: Aug-30-17 08:40** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ethanol	**4.76**	J		4.00	ppbv	1	B17I004	Sep-08-17	Sep-11-17
Acetone	**8.56**			0.250	"	"	"	"	"

Surogate	Result	%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.443	*87%*	*70-130*	"	"	"
Trichlorofluoromethane	0.238	*101%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0674	*94%*	*70-130*	"	"	"
Carbon tetrachloride	0.0816	*98%*	*70-130*	"	"	"

2 (1708033-02) **Matrix: Air** **Sampled: Aug-30-17 08:45** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Propene + propane	**0.589**	J		0.500	ppbv	1	B17I004	Sep-08-17	Sep-11-17
Chloromethane	**0.456**			0.0500	"	"	"	"	"
Vinyl chloride	**U**			0.0500	"	"	"	"	"
1,3-butadiene	**U**			0.0500	"	"	"	"	"
Bromomethane	**U**			0.0500	"	"	"	"	"
Chloroethane	**U**			0.0500	"	"	"	"	"
Acrolein	**0.305**			0.0500	"	"	"	"	"
1,1-Dichloroethene	**U**			0.0500	"	"	"	"	"
Methylene chloride	**2.32**			0.0500	"	"	"	"	"
Carbon disulfide	**U**			0.0500	"	"	"	"	"
Methyl tert-butyl ether	**U**			0.0500	"	"	"	"	"
1,1-Dichloroethane	**U**			0.0500	"	"	"	"	"
Vinyl acetate	**U**			0.0500	"	"	"	"	"
Hexane	**0.106**			0.0500	"	"	"	"	"
2-Butanone	**0.100**	B		0.0500	"	"	"	"	"
cis-1,2-Dichloroethene	**U**			0.0500	"	"	"	"	"
trans-1,2-Dichloroethene	**U**			0.0500	"	"	"	"	"
Chloroform	**U**			0.0500	"	"	"	"	"
1,2-Dichloroethane	**U**			0.0500	"	"	"	"	"
Cyclohexane	**U**			0.500	"	"	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

2 (1708033-02) **Matrix: Air** **Sampled: Aug-30-17 08:45** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Benzene	**0.389**			0.0500	ppbv	1	B17I004	Sep-08-17	Sep-11-17
n-Heptane	**0.119**			0.0500	"	"	"	"	"
1,2-Dichloropropane	**U**			0.0500	"	"	"	"	"
Trichloroethene	**U**			0.0500	"	"	"	"	"
Bromodichloromethane	**U**			0.0500	"	"	"	"	"
1,4-Dioxane	**U**			0.0500	"	"	"	"	"
cis-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
4-Methyl-2-pentanone	**0.170**			0.0500	"	"	"	"	"
trans-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
1,1,2-Trichloroethane	**U**			0.0500	"	"	"	"	"
Dibromochloromethane	**U**			0.0500	"	"	"	"	"
Toluene	**0.899**			0.0500	"	"	"	"	"
2-Hexanone	**U**			0.0500	"	"	"	"	"
Hexanal	**U**			0.0500	"	"	"	"	"
1,2-Dibromoethane (EDB)	**U**			0.0500	"	"	"	"	"
Tetrachloroethene	**U**			0.0500	"	"	"	"	"
Chlorobenzene	**U**			0.0500	"	"	"	"	"
Ethylbenzene	**0.0545**			0.0500	"	"	"	"	"
m+p-Xylene	**0.178**			0.100	"	"	"	"	"
Bromoform	**U**			0.0500	"	"	"	"	"
Styrene	**U**			0.0500	"	"	"	"	"
1,1,2,2-Tetrachloroethane	**U**			0.0500	"	"	"	"	"
o-Xylene	**0.0966**			0.0500	"	"	"	"	"
1,3,5-Trimethylbenzene	**U**			0.0500	"	"	"	"	"
1,2,4-Trimethylbenzene	**U**			0.0500	"	"	"	"	"
1,3-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Benzyl chloride	**U**			0.0500	"	"	"	"	"
1,4-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
1,2-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Hexachlorobutadiene	**U**			0.0500	"	"	"	"	"
1,2,4-Trichlorobenzene	**U**			0.0500	"	"	"	"	"

Surogate	Result	%REC	%REC Limits	Batch	Prepared	Analyzed

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

2 (1708033-02) **Matrix: Air** **Sampled: Aug-30-17 08:45** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed

Surogate	Result	%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.443	*87%*	*70-130*	*B17I004*	*Sep-08-17*	*Sep-11-17*
Dichlorotetrafluoroethane	0.0146	*73%*	*60-140*	"	"	"
Trichlorofluoromethane	0.229	*97%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0655	*91%*	*70-130*	"	"	"
1,1,1-Trichloroethane	2.62E-3	*66%*	*50-150*	"	"	"
Carbon tetrachloride	0.0762	*92%*	*70-130*	"	"	"

2 (1708033-02RE1) **Matrix: Air** **Sampled: Aug-30-17 08:45** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ethanol	**7.62**			5.00	ppbv	1	B17I004	Sep-08-17	Sep-11-17
Isopropyl alcohol	**4.97**	J		4.90	"	"	"	"	"
Acetone	**12.1**			0.250	"	"	"	"	"

Surogate	Result	%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.436	*85%*	*70-130*	"	"	"
Trichlorofluoromethane	U	*104%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0732	*102%*	*70-130*	"	"	"
Carbon tetrachloride	0.0804	*97%*	*70-130*	"	"	"

3 (1708033-03) **Matrix: Air** **Sampled: Aug-30-17 08:50** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Propene + propane	**0.693**	J		0.500	ppbv	1	B17I004	Sep-08-17	Sep-11-17
Chloromethane	**0.440**			0.0500	"	"	"	"	"
Vinyl chloride	**U**			0.0500	"	"	"	"	"
1,3-butadiene	**U**			0.0500	"	"	"	"	"
Bromomethane	**U**			0.0500	"	"	"	"	"
Chloroethane	**U**			0.0500	"	"	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

3 (1708033-03) **Matrix: Air** **Sampled: Aug-30-17 08:50** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Acrolein	**0.363**			0.0500	ppbv	1	B17I004	Sep-08-17	Sep-11-17
1,1-Dichloroethene	**U**			0.0500	"	"	"	"	"
Methylene chloride	**3.18**			0.0500	"	"	"	"	"
Carbon disulfide	**U**			0.0500	"	"	"	"	"
Methyl tert-butyl ether	**0.272**			0.0500	"	"	"	"	"
1,1-Dichloroethane	**U**			0.0500	"	"	"	"	"
Vinyl acetate	**U**			0.0500	"	"	"	"	"
Hexane	**0.159**			0.0500	"	"	"	"	"
2-Butanone	**0.581**			0.0500	"	"	"	"	"
cis-1,2-Dichloroethene	**U**			0.0500	"	"	"	"	"
trans-1,2-Dichloroethene	**0.0602**	B		0.0500	"	"	"	"	"
Chloroform	**U**			0.0500	"	"	"	"	"
1,2-Dichloroethane	**U**			0.0500	"	"	"	"	"
Cyclohexane	**U**			0.500	"	"	"	"	"
Benzene	**0.149**			0.0500	"	"	"	"	"
n-Heptane	**0.387**			0.0500	"	"	"	"	"
1,2-Dichloropropane	**U**			0.0500	"	"	"	"	"
Trichloroethene	**0.0970**			0.0500	"	"	"	"	"
Bromodichloromethane	**U**			0.0500	"	"	"	"	"
1,4-Dioxane	**U**			0.0500	"	"	"	"	"
cis-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
4-Methyl-2-pentanone	**0.255**			0.0500	"	"	"	"	"
trans-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
1,1,2-Trichloroethane	**U**			0.0500	"	"	"	"	"
Dibromochloromethane	**U**			0.0500	"	"	"	"	"
Toluene	**1.82**			0.0500	"	"	"	"	"
2-Hexanone	**0.0530**	B		0.0500	"	"	"	"	"
Hexanal	**U**			0.0500	"	"	"	"	"
1,2-Dibromoethane (EDB)	**U**			0.0500	"	"	"	"	"
Tetrachloroethene	**0.250**			0.0500	"	"	"	"	"
Chlorobenzene	**U**			0.0500	"	"	"	"	"
Ethylbenzene	**0.121**			0.0500	"	"	"	"	"
m+p-Xylene	**0.407**			0.100	"	"	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

3 (1708033-03) **Matrix: Air** **Sampled: Aug-30-17 08:50** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Bromoform	**U**			0.0500	ppbv	1	B17I004	Sep-08-17	Sep-11-17
Styrene	**0.0915**			0.0500	"	"	"	"	"
1,1,2,2-Tetrachloroethane	**U**			0.0500	"	"	"	"	"
o-Xylene	**0.175**			0.0500	"	"	"	"	"
1,3,5-Trimethylbenzene	**U**			0.0500	"	"	"	"	"
1,2,4-Trimethylbenzene	**0.115**			0.0500	"	"	"	"	"
1,3-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Benzyl chloride	**U**			0.0500	"	"	"	"	"
1,4-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
1,2-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Hexachlorobutadiene	**U**			0.0500	"	"	"	"	"
1,2,4-Trichlorobenzene	**U**			0.0500	"	"	"	"	"

Surogate	Result	%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.448	*88%*	*70-130*	"	"	"
Dichlorotetrafluoroethane	0.0141	*71%*	*60-140*	"	"	"
Trichlorofluoromethane	0.230	*98%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0644	*89%*	*70-130*	"	"	"
1,1,1-Trichloroethane	2.76E-3	*69%*	*50-150*	"	"	"
Carbon tetrachloride	0.0787	*95%*	*70-130*	"	"	"

3 (1708033-03RE1) **Matrix: Air** **Sampled: Aug-30-17 08:50** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ethanol	**19.6**			5.00	ppbv	1	B17I004	Sep-08-17	Sep-11-17
Isopropyl alcohol	**6.59**			5.00	"	"	"	"	"

Surogate	Result	%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.458	*90%*	*70-130*	"	"	"
Trichlorofluoromethane	U	*103%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0720	*100%*	*70-130*	"	"	"
Carbon tetrachloride	0.0864	*104%*	*70-130*	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

4 (1708033-04) **Matrix: Air** **Sampled: Aug-30-17 08:55** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Propene + propane	**0.708**	J		0.500	ppbv	1	B17I004	Sep-08-17	Sep-11-17
Chloromethane	**0.438**			0.0500	"	"	"	"	"
Vinyl chloride	**U**			0.0500	"	"	"	"	"
1,3-butadiene	**U**			0.0500	"	"	"	"	"
Bromomethane	**U**			0.0500	"	"	"	"	"
Chloroethane	**U**			0.0500	"	"	"	"	"
Acrolein	**0.330**			0.0500	"	"	"	"	"
Isopropyl alcohol	**2.83**			1.00	"	"	"	"	"
1,1-Dichloroethene	**U**			0.0500	"	"	"	"	"
Methylene chloride	**3.30**			0.0500	"	"	"	"	"
Carbon disulfide	**U**			0.0500	"	"	"	"	"
Methyl tert-butyl ether	**0.260**			0.0500	"	"	"	"	"
1,1-Dichloroethane	**U**			0.0500	"	"	"	"	"
Vinyl acetate	**U**			0.0500	"	"	"	"	"
Hexane	**0.154**			0.0500	"	"	"	"	"
2-Butanone	**0.572**			0.0500	"	"	"	"	"
cis-1,2-Dichloroethene	**U**			0.0500	"	"	"	"	"
trans-1,2-Dichloroethene	**0.0562**	B		0.0500	"	"	"	"	"
Chloroform	**U**			0.0500	"	"	"	"	"
1,2-Dichloroethane	**U**			0.0500	"	"	"	"	"
Cyclohexane	**U**			0.500	"	"	"	"	"
Benzene	**0.146**			0.0500	"	"	"	"	"
n-Heptane	**0.393**			0.0500	"	"	"	"	"
1,2-Dichloropropane	**U**			0.0500	"	"	"	"	"
Trichloroethene	**0.0959**			0.0500	"	"	"	"	"
Bromodichloromethane	**U**			0.0500	"	"	"	"	"
1,4-Dioxane	**U**			0.0500	"	"	"	"	"
cis-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
4-Methyl-2-pentanone	**0.263**			0.0500	"	"	"	"	"
trans-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
1,1,2-Trichloroethane	**U**			0.0500	"	"	"	"	"
Dibromochloromethane	**U**			0.0500	"	"	"	"	"
Toluene	**1.89**			0.0500	"	"	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

4 (1708033-04) **Matrix: Air** **Sampled: Aug-30-17 08:55** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
2-Hexanone	**U**			0.0500	ppbv	1	B17I004	Sep-08-17	Sep-11-17
Hexanal	**U**			0.0500	"	"	"	"	"
1,2-Dibromoethane (EDB)	**U**			0.0500	"	"	"	"	"
Tetrachloroethene	**0.252**			0.0500	"	"	"	"	"
Chlorobenzene	**U**			0.0500	"	"	"	"	"
Ethylbenzene	**0.123**			0.0500	"	"	"	"	"
m+p-Xylene	**0.427**			0.100	"	"	"	"	"
Bromoform	**U**			0.0500	"	"	"	"	"
Styrene	**0.0910**			0.0500	"	"	"	"	"
1,1,2,2-Tetrachloroethane	**U**			0.0500	"	"	"	"	"
o-Xylene	**0.192**			0.0500	"	"	"	"	"
1,3,5-Trimethylbenzene	**U**			0.0500	"	"	"	"	"
1,2,4-Trimethylbenzene	**0.113**			0.0500	"	"	"	"	"
1,3-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Benzyl chloride	**U**			0.0500	"	"	"	"	"
1,4-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
1,2-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Hexachlorobutadiene	**U**			0.0500	"	"	"	"	"
1,2,4-Trichlorobenzene	**U**			0.0500	"	"	"	"	"

Surogate	Result	%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.441	*87%*	*70-130*	"	"	"
Dichlorotetrafluoroethane	0.0150	*75%*	*60-140*	"	"	"
Trichlorofluoromethane	0.228	*97%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0628	*87%*	*70-130*	"	"	"
1,1,1-Trichloroethane	2.88E-3	*72%*	*50-150*	"	"	"
Carbon tetrachloride	0.0765	*92%*	*70-130*	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

4 (1708033-04RE1) **Matrix: Air** **Sampled: Aug-30-17 08:55** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ethanol	**17.5**			5.00	ppbv	1	B17I004	Sep-08-17	Sep-11-17
Acetone	**20.8**	J		0.250	"	"	"	"	"

Surogate	Result	%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.430	*84%*	*70-130*	"	"	"
Trichlorofluoromethane	0.232	*99%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0641	*89%*	*70-130*	"	"	"
Carbon tetrachloride	0.0754	*91%*	*70-130*	"	"	"

5 (1708033-05) **Matrix: Air** **Sampled: Aug-30-17 09:02** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Propene + propane	**0.649**	B, J		0.500	ppbv	1	B17I004	Sep-08-17	Sep-11-17
Chloromethane	**0.452**			0.0500	"	"	"	"	"
Vinyl chloride	**U**			0.0500	"	"	"	"	"
1,3-butadiene	**U**			0.0500	"	"	"	"	"
Bromomethane	**U**			0.0500	"	"	"	"	"
Chloroethane	**U**			0.0500	"	"	"	"	"
Acrolein	**0.315**			0.0500	"	"	"	"	"
Isopropyl alcohol	**1.66**			1.00	"	"	"	"	"
1,1-Dichloroethene	**U**			0.0500	"	"	"	"	"
Methylene chloride	**0.718**			0.0500	"	"	"	"	"
Carbon disulfide	**U**			0.0500	"	"	"	"	"
Methyl tert-butyl ether	**0.0913**			0.0500	"	"	"	"	"
1,1-Dichloroethane	**U**			0.0500	"	"	"	"	"
Vinyl acetate	**U**			0.0500	"	"	"	"	"
Hexane	**0.116**			0.0500	"	"	"	"	"
2-Butanone	**0.808**			0.0500	"	"	"	"	"
cis-1,2-Dichloroethene	**U**			0.0500	"	"	"	"	"
trans-1,2-Dichloroethene	**U**			0.0500	"	"	"	"	"
Chloroform	**U**			0.0500	"	"	"	"	"
1,2-Dichloroethane	**U**			0.0500	"	"	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

5 (1708033-05) **Matrix: Air** **Sampled: Aug-30-17 09:02** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Cyclohexane	**U**			0.500	ppbv	1	B17I004	Sep-08-17	Sep-11-17
Benzene	**0.125**			0.0500	"	"	"	"	"
n-Heptane	**0.178**			0.0500	"	"	"	"	"
1,2-Dichloropropane	**U**			0.0500	"	"	"	"	"
Trichloroethene	**0.0562**			0.0500	"	"	"	"	"
Bromodichloromethane	**U**			0.0500	"	"	"	"	"
1,4-Dioxane	**U**			0.0500	"	"	"	"	"
cis-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
4-Methyl-2-pentanone	**0.108**			0.0500	"	"	"	"	"
trans-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
1,1,2-Trichloroethane	**U**			0.0500	"	"	"	"	"
Dibromochloromethane	**U**			0.0500	"	"	"	"	"
Toluene	**0.859**			0.0500	"	"	"	"	"
2-Hexanone	**U**			0.0500	"	"	"	"	"
Hexanal	**U**			0.0500	"	"	"	"	"
1,2-Dibromoethane (EDB)	**U**			0.0500	"	"	"	"	"
Tetrachloroethene	**0.191**			0.0500	"	"	"	"	"
Chlorobenzene	**U**			0.0500	"	"	"	"	"
Ethylbenzene	**0.0647**			0.0500	"	"	"	"	"
m+p-Xylene	**0.201**			0.100	"	"	"	"	"
Bromoform	**U**			0.0500	"	"	"	"	"
Styrene	**U**			0.0500	"	"	"	"	"
1,1,2,2-Tetrachloroethane	**U**			0.0500	"	"	"	"	"
o-Xylene	**0.0836**			0.0500	"	"	"	"	"
1,3,5-Trimethylbenzene	**U**			0.0500	"	"	"	"	"
1,2,4-Trimethylbenzene	**0.0546**			0.0500	"	"	"	"	"
1,3-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Benzyl chloride	**U**			0.0500	"	"	"	"	"
1,4-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
1,2-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Hexachlorobutadiene	**U**			0.0500	"	"	"	"	"
1,2,4-Trichlorobenzene	**U**			0.0500	"	"	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

5 (1708033-05) **Matrix: Air** **Sampled: Aug-30-17 09:02** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed

Surogate	Result	%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.455	*89%*	*70-130*	*B17I004*	*Sep-08-17*	*Sep-11-17*
Dichlorotetrafluoroethane	0.0188	*94%*	*60-140*	"	"	"
Trichlorofluoromethane	0.233	*99%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0690	*96%*	*70-130*	"	"	"
1,1,1-Trichloroethane	2.38E-3	*60%*	*50-150*	"	"	"
Carbon tetrachloride	0.0739	*89%*	*70-130*	"	"	"

5 (1708033-05RE1) **Matrix: Air** **Sampled: Aug-30-17 09:02** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ethanol	**5.98**	B		5.00	ppbv	1	B17I004	Sep-08-17	Sep-11-17
Acetone	**7.95**			0.250	"	"	"	"	"

Surogate	Result	%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.453	*89%*	*70-130*	"	"	"
Trichlorofluoromethane	0.225	*96%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0621	*86%*	*70-130*	"	"	"
Carbon tetrachloride	0.0766	*92%*	*70-130*	"	"	"

6 (1708033-06) **Matrix: Air** **Sampled: Aug-30-17 09:10** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Propene + propane	**U**	J		0.500	ppbv	1	B17I004	Sep-08-17	Sep-12-17
Chloromethane	**0.445**			0.0500	"	"	"	"	"
Vinyl chloride	**U**			0.0500	"	"	"	"	"
1,3-butadiene	**U**			0.0500	"	"	"	"	"
Bromomethane	**U**			0.0500	"	"	"	"	"
Chloroethane	**U**			0.0500	"	"	"	"	"
Acrolein	**0.264**			0.0500	"	"	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

6 (1708033-06) **Matrix: Air** **Sampled: Aug-30-17 09:10** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Isopropyl alcohol	**U**			1.00	ppbv	1	B17I004	Sep-08-17	Sep-12-17
1,1-Dichloroethene	**U**			0.0500	"	"	"	"	"
Methylene chloride	**0.175**			0.0500	"	"	"	"	"
Carbon disulfide	**U**			0.0500	"	"	"	"	"
Methyl tert-butyl ether	**U**			0.0500	"	"	"	"	"
1,1-Dichloroethane	**U**			0.0500	"	"	"	"	"
Vinyl acetate	**U**			0.0500	"	"	"	"	"
Hexane	**0.0897**			0.0500	"	"	"	"	"
2-Butanone	**U**			0.0500	"	"	"	"	"
cis-1,2-Dichloroethene	**U**			0.0500	"	"	"	"	"
trans-1,2-Dichloroethene	**U**			0.0500	"	"	"	"	"
Chloroform	**U**			0.0500	"	"	"	"	"
1,2-Dichloroethane	**U**			0.0500	"	"	"	"	"
Cyclohexane	**U**			0.500	"	"	"	"	"
Benzene	**0.202**			0.0500	"	"	"	"	"
n-Heptane	**0.0867**			0.0500	"	"	"	"	"
1,2-Dichloropropane	**U**			0.0500	"	"	"	"	"
Trichloroethene	**U**			0.0500	"	"	"	"	"
Bromodichloromethane	**U**			0.0500	"	"	"	"	"
1,4-Dioxane	**U**			0.0500	"	"	"	"	"
cis-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
4-Methyl-2-pentanone	**0.0768**			0.0500	"	"	"	"	"
trans-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
1,1,2-Trichloroethane	**U**			0.0500	"	"	"	"	"
Dibromochloromethane	**U**			0.0500	"	"	"	"	"
Toluene	**0.605**			0.0500	"	"	"	"	"
2-Hexanone	**U**			0.0500	"	"	"	"	"
Hexanal	**U**			0.0500	"	"	"	"	"
1,2-Dibromoethane (EDB)	**U**			0.0500	"	"	"	"	"
Tetrachloroethene	**U**			0.0500	"	"	"	"	"
Chlorobenzene	**U**			0.0500	"	"	"	"	"
Ethylbenzene	**U**			0.0500	"	"	"	"	"
m+p-Xylene	**0.128**			0.100	"	"	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

6 (1708033-06) **Matrix: Air** **Sampled: Aug-30-17 09:10** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Bromoform	**U**			0.0500	ppbv	1	B17I004	Sep-08-17	Sep-12-17
Styrene	**U**			0.0500	"	"	"	"	"
1,1,2,2-Tetrachloroethane	**U**			0.0500	"	"	"	"	"
o-Xylene	**0.115**			0.0500	"	"	"	"	"
1,3,5-Trimethylbenzene	**U**			0.0500	"	"	"	"	"
1,2,4-Trimethylbenzene	**U**			0.0500	"	"	"	"	"
1,3-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Benzyl chloride	**U**			0.0500	"	"	"	"	"
1,4-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
1,2-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Hexachlorobutadiene	**U**			0.0500	"	"	"	"	"
1,2,4-Trichlorobenzene	**U**			0.0500	"	"	"	"	"

Surogate	Result	%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.448	*88%*	*70-130*	"	"	"
Dichlorotetrafluoroethane	0.0144	*72%*	*60-140*	"	"	"
Trichlorofluoromethane	0.225	*96%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0633	*88%*	*70-130*	"	"	"
1,1,1-Trichloroethane	2.44E-3	*61%*	*50-150*	"	"	"
Carbon tetrachloride	0.0707	*85%*	*70-130*	"	"	"

6 (1708033-06RE1) **Matrix: Air** **Sampled: Aug-30-17 09:10** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ethanol	**4.48**	J		4.00	ppbv	1	B17I004	Sep-08-17	Sep-12-17
Acetone	**5.16**			0.250	"	"	"	"	"

Surogate	Result	%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.475	*93%*	*70-130*	"	"	"
Trichlorofluoromethane	0.260	*111%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0785	*109%*	*70-130*	"	"	"
Carbon tetrachloride	0.0807	*97%*	*70-130*	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

7 (1708033-07) **Matrix: Air** **Sampled: Aug-30-17 09:20** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Propene + propane	**0.527**	J		0.500	ppbv	1	B17I004	Sep-08-17	Sep-12-17
Chloromethane	**0.458**			0.0500	"	"	"	"	"
Vinyl chloride	**U**			0.0500	"	"	"	"	"
1,3-butadiene	**U**			0.0500	"	"	"	"	"
Bromomethane	**U**			0.0500	"	"	"	"	"
Chloroethane	**U**			0.0500	"	"	"	"	"
Acrolein	**0.318**			0.0500	"	"	"	"	"
Isopropyl alcohol	**1.09**			1.00	"	"	"	"	"
1,1-Dichloroethene	**U**			0.0500	"	"	"	"	"
Methylene chloride	**0.465**			0.0500	"	"	"	"	"
Carbon disulfide	**U**			0.0500	"	"	"	"	"
Methyl tert-butyl ether	**U**			0.0500	"	"	"	"	"
1,1-Dichloroethane	**U**			0.0500	"	"	"	"	"
Vinyl acetate	**U**			0.0500	"	"	"	"	"
Hexane	**0.116**			0.0500	"	"	"	"	"
2-Butanone	**0.0628**	B		0.0500	"	"	"	"	"
cis-1,2-Dichloroethene	**U**			0.0500	"	"	"	"	"
trans-1,2-Dichloroethene	**U**			0.0500	"	"	"	"	"
Chloroform	**U**			0.0500	"	"	"	"	"
1,2-Dichloroethane	**U**			0.0500	"	"	"	"	"
Cyclohexane	**U**			0.500	"	"	"	"	"
Benzene	**0.152**			0.0500	"	"	"	"	"
n-Heptane	**0.113**			0.0500	"	"	"	"	"
1,2-Dichloropropane	**U**			0.0500	"	"	"	"	"
Trichloroethene	**0.0694**			0.0500	"	"	"	"	"
Bromodichloromethane	**U**			0.0500	"	"	"	"	"
1,4-Dioxane	**U**			0.0500	"	"	"	"	"
cis-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
4-Methyl-2-pentanone	**0.0987**			0.0500	"	"	"	"	"
trans-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
1,1,2-Trichloroethane	**U**			0.0500	"	"	"	"	"
Dibromochloromethane	**U**			0.0500	"	"	"	"	"
Toluene	**0.620**			0.0500	"	"	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

7 (1708033-07) **Matrix: Air** **Sampled: Aug-30-17 09:20** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
2-Hexanone	**U**			0.0500	ppbv	1	B17I004	Sep-08-17	Sep-12-17
Hexanal	**U**			0.0500	"	"	"	"	"
1,2-Dibromoethane (EDB)	**U**			0.0500	"	"	"	"	"
Tetrachloroethene	**U**			0.0500	"	"	"	"	"
Chlorobenzene	**U**			0.0500	"	"	"	"	"
Ethylbenzene	**0.0520**			0.0500	"	"	"	"	"
m+p-Xylene	**0.151**			0.100	"	"	"	"	"
Bromoform	**U**			0.0500	"	"	"	"	"
Styrene	**U**			0.0500	"	"	"	"	"
1,1,2,2-Tetrachloroethane	**U**			0.0500	"	"	"	"	"
o-Xylene	**0.0981**			0.0500	"	"	"	"	"
1,3,5-Trimethylbenzene	**U**			0.0500	"	"	"	"	"
1,2,4-Trimethylbenzene	**U**			0.0500	"	"	"	"	"
1,3-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Benzyl chloride	**U**			0.0500	"	"	"	"	"
1,4-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
1,2-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Hexachlorobutadiene	**U**			0.0500	"	"	"	"	"
1,2,4-Trichlorobenzene	**U**			0.0500	"	"	"	"	"

Surogate	Result		%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.452		*89%*	*70-130*	"	"	"
Dichlorotetrafluoroethane	0.0145		*72%*	*60-140*	"	"	"
Trichlorofluoromethane	0.231		*99%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0666		*93%*	*70-130*	"	"	"
1,1,1-Trichloroethane	0.0237	Q	*594%*	*50-150*	"	"	"
Carbon tetrachloride	0.0732		*88%*	*70-130*	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

7 (1708033-07RE1) **Matrix: Air** **Sampled: Aug-30-17 09:20** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ethanol	**5.49**			5.00	ppbv	1	B17I004	Sep-08-17	Sep-12-17
Acetone	**6.17**			0.250	"	"	"	"	"

Surogate	Result	%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.467	*92%*	*70-130*	"	"	"
Trichlorofluoromethane	0.246	*104%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0701	*97%*	*70-130*	"	"	"
1,1,1-Trichloroethane	0.0239	Q *598%*	*50-150*	"	"	"
Carbon tetrachloride	0.0767	*92%*	*70-130*	"	"	"

8 (1708033-08) **Matrix: Air** **Sampled: Aug-30-17 09:30** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Propene + propane	**U**	J		0.500	ppbv	1	B17I004	Sep-08-17	Sep-12-17
Chloromethane	**0.468**			0.0500	"	"	"	"	"
Vinyl chloride	**U**			0.0500	"	"	"	"	"
1,3-butadiene	**U**			0.0500	"	"	"	"	"
Bromomethane	**U**			0.0500	"	"	"	"	"
Chloroethane	**U**			0.0500	"	"	"	"	"
Acrolein	**U**	MI		0.340	"	"	"	"	"
Isopropyl alcohol	**1.51**			1.00	"	"	"	"	"
1,1-Dichloroethene	**U**			0.0500	"	"	"	"	"
Methylene chloride	**0.542**			0.0500	"	"	"	"	"
Carbon disulfide	**U**			0.0500	"	"	"	"	"
Methyl tert-butyl ether	**0.0584**			0.0500	"	"	"	"	"
1,1-Dichloroethane	**U**			0.0500	"	"	"	"	"
Vinyl acetate	**U**			0.0500	"	"	"	"	"
Hexane	**0.106**			0.0500	"	"	"	"	"
2-Butanone	**0.803**			0.0500	"	"	"	"	"
cis-1,2-Dichloroethene	**U**			0.0500	"	"	"	"	"
trans-1,2-Dichloroethene	**U**			0.0500	"	"	"	"	"
Chloroform	**U**			0.0500	"	"	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

8 (1708033-08) **Matrix: Air** **Sampled: Aug-30-17 09:30** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
1,2-Dichloroethane	**U**			0.0500	ppbv	1	B17I004	Sep-08-17	Sep-12-17
Cyclohexane	**U**			0.500	"	"	"	"	"
Benzene	**0.140**			0.0500	"	"	"	"	"
n-Heptane	**0.150**			0.0500	"	"	"	"	"
1,2-Dichloropropane	**U**			0.0500	"	"	"	"	"
Trichloroethene	**U**			0.0500	"	"	"	"	"
Bromodichloromethane	**U**			0.0500	"	"	"	"	"
1,4-Dioxane	**U**			0.0500	"	"	"	"	"
cis-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
4-Methyl-2-pentanone	**0.121**			0.0500	"	"	"	"	"
trans-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
1,1,2-Trichloroethane	**U**			0.0500	"	"	"	"	"
Dibromochloromethane	**U**			0.0500	"	"	"	"	"
Toluene	**0.749**			0.0500	"	"	"	"	"
2-Hexanone	**0.0737**	B		0.0500	"	"	"	"	"
Hexanal	**U**			0.0500	"	"	"	"	"
1,2-Dibromoethane (EDB)	**U**			0.0500	"	"	"	"	"
Tetrachloroethene	**0.0624**			0.0500	"	"	"	"	"
Chlorobenzene	**U**			0.0500	"	"	"	"	"
Ethylbenzene	**0.0797**			0.0500	"	"	"	"	"
m+p-Xylene	**0.265**			0.100	"	"	"	"	"
Bromoform	**U**			0.0500	"	"	"	"	"
Styrene	**U**			0.0500	"	"	"	"	"
1,1,2,2-Tetrachloroethane	**U**			0.0500	"	"	"	"	"
o-Xylene	**0.117**			0.0500	"	"	"	"	"
1,3,5-Trimethylbenzene	**U**			0.0500	"	"	"	"	"
1,2,4-Trimethylbenzene	**0.0600**			0.0500	"	"	"	"	"
1,3-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Benzyl chloride	**U**			0.0500	"	"	"	"	"
1,4-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
1,2-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Hexachlorobutadiene	**U**			0.0500	"	"	"	"	"
1,2,4-Trichlorobenzene	**0.0533**			0.0500	"	"	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

8 (1708033-08) **Matrix: Air** **Sampled: Aug-30-17 09:30** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed

Surogate	Result	%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.449	*88%*	*70-130*	*B17I004*	*Sep-08-17*	*Sep-12-17*
Dichlorotetrafluoroethane	0.0140	*70%*	*60-140*	"	"	"
Trichlorofluoromethane	0.225	*96%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0632	*88%*	*70-130*	"	"	"
1,1,1-Trichloroethane	2.46E-3	*62%*	*50-150*	"	"	"
Carbon tetrachloride	0.0700	*84%*	*70-130*	"	"	"

8 (1708033-08RE1) **Matrix: Air** **Sampled: Aug-30-17 09:30** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ethanol	**5.60**			5.00	ppbv	1	B17I004	Sep-08-17	Sep-12-17
Acetone	**9.08**			0.250	"	"	"	"	"

Surogate	Result	%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.467	*91%*	*70-130*	"	"	"
Trichlorofluoromethane	0.244	*104%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0685	*95%*	*70-130*	"	"	"
Carbon tetrachloride	0.0809	*97%*	*70-130*	"	"	"

9 (1708033-09) **Matrix: Air** **Sampled: Aug-30-17 09:40** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Propene + propane	**U**	J		0.500	ppbv	1	B17I004	Sep-08-17	Sep-12-17
Chloromethane	**0.442**			0.0500	"	"	"	"	"
Vinyl chloride	**U**			0.0500	"	"	"	"	"
1,3-butadiene	**U**			0.0500	"	"	"	"	"
Bromomethane	**U**			0.0500	"	"	"	"	"
Chloroethane	**U**			0.0500	"	"	"	"	"
Acrolein	**0.240**			0.0500	"	"	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

9 (1708033-09) **Matrix: Air** **Sampled: Aug-30-17 09:40** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Isopropyl alcohol	**1.91**			1.00	ppbv	1	B17I004	Sep-08-17	Sep-12-17
1,1-Dichloroethene	**U**			0.0500	"	"	"	"	"
Methylene chloride	**0.141**			0.0500	"	"	"	"	"
Carbon disulfide	**U**			0.0500	"	"	"	"	"
Methyl tert-butyl ether	**U**			0.0500	"	"	"	"	"
1,1-Dichloroethane	**U**			0.0500	"	"	"	"	"
Vinyl acetate	**U**			0.0500	"	"	"	"	"
Hexane	**0.0810**			0.0500	"	"	"	"	"
2-Butanone	**U**			0.0500	"	"	"	"	"
cis-1,2-Dichloroethene	**U**			0.0500	"	"	"	"	"
trans-1,2-Dichloroethene	**U**			0.0500	"	"	"	"	"
Chloroform	**U**			0.0500	"	"	"	"	"
1,2-Dichloroethane	**U**			0.0500	"	"	"	"	"
Cyclohexane	**U**			0.500	"	"	"	"	"
Benzene	**0.118**			0.0500	"	"	"	"	"
n-Heptane	**0.0769**			0.0500	"	"	"	"	"
1,2-Dichloropropane	**U**			0.0500	"	"	"	"	"
Trichloroethene	**U**			0.0500	"	"	"	"	"
Bromodichloromethane	**U**			0.0500	"	"	"	"	"
1,4-Dioxane	**U**			0.0500	"	"	"	"	"
cis-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
4-Methyl-2-pentanone	**0.0521**			0.0500	"	"	"	"	"
trans-1,3-Dichloropropene	**U**			0.0500	"	"	"	"	"
1,1,2-Trichloroethane	**U**			0.0500	"	"	"	"	"
Dibromochloromethane	**U**			0.0500	"	"	"	"	"
Toluene	**0.461**			0.0500	"	"	"	"	"
2-Hexanone	**U**			0.0500	"	"	"	"	"
Hexanal	**U**			0.0500	"	"	"	"	"
1,2-Dibromoethane (EDB)	**U**			0.0500	"	"	"	"	"
Tetrachloroethene	**U**			0.0500	"	"	"	"	"
Chlorobenzene	**U**			0.0500	"	"	"	"	"
Ethylbenzene	**U**			0.0500	"	"	"	"	"
m+p-Xylene	**0.103**			0.100	"	"	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

9 (1708033-09) **Matrix: Air** **Sampled: Aug-30-17 09:40** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Bromoform	**U**			0.0500	ppbv	1	B17I004	Sep-08-17	Sep-12-17
Styrene	**U**			0.0500	"	"	"	"	"
1,1,2,2-Tetrachloroethane	**U**			0.0500	"	"	"	"	"
o-Xylene	**0.0791**			0.0500	"	"	"	"	"
1,3,5-Trimethylbenzene	**U**			0.0500	"	"	"	"	"
1,2,4-Trimethylbenzene	**U**			0.0500	"	"	"	"	"
1,3-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Benzyl chloride	**U**			0.0500	"	"	"	"	"
1,4-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
1,2-Dichlorobenzene	**U**			0.0500	"	"	"	"	"
Hexachlorobutadiene	**U**			0.0500	"	"	"	"	"
1,2,4-Trichlorobenzene	**U**			0.0500	"	"	"	"	"

Surogate	Result		%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.447		*88%*	*70-130*	"	"	"
Dichlorotetrafluoroethane	0.0314	Q	*157%*	*60-140*	"	"	"
Trichlorofluoromethane	0.206		*88%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0571		*79%*	*70-130*	"	"	"
1,1,1-Trichloroethane	2.94E-3		*74%*	*50-150*	"	"	"
Carbon tetrachloride	0.0652		*79%*	*70-130*	"	"	"

9 (1708033-09RE1) **Matrix: Air** **Sampled: Aug-30-17 09:40** **Received: Aug-31-17 09:30**

Sample Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ethanol	**3.88**	B, J		3.00	ppbv	1	B17I004	Sep-08-17	Sep-12-17
Acetone	**6.43**	B		0.250	"	"	"	"	"

Surogate	Result		%REC	%REC Limits	Batch	Prepared	Analyzed
Dichlorodifluoromethane	0.462		*91%*	*70-130*	"	"	"
Trichlorofluoromethane	0.240		*102%*	*70-130*	"	"	"
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	0.0735		*102%*	*70-130*	"	"	"
Carbon tetrachloride	0.0726		*87%*	*70-130*	"	"	"

Environmental Protection Agency Region5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified)
US EPA Region 5 Chicago Regional Laboratory

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B17I004 - ColdTrap Dehydration

LCS (B17I004-BS1) **Prepared: Sep-08-17 Analyzed: Sep-11-17** **Qualifiers: (TUN)**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Propene	0.583			0.250	ppbv	0.5000		117%	70-130		
Chloromethane	0.477			0.0250	"	0.5000		95%	70-130		
Vinyl chloride	0.530			0.0250	"	0.5000		106%	70-130		
1,3-butadiene	0.538			0.0250	"	0.5000		108%	70-130		
Bromomethane	0.461			0.0250	"	0.5000		92%	70-130		
Chloroethane	0.463			0.0250	"	0.5000		93%	70-130		
Ethanol	0.532			0.500	"	0.5000		106%	60-140		
Acrolein	0.545	J		0.0250	"	0.5000		109%	60-140		
Isopropyl alcohol	0.542			0.500	"	0.5000		108%	60-140		
Acetone	0.563			0.0250	"	0.5000		113%	60-140		
1,1-Dichloroethene	0.517			0.0250	"	0.5000		103%	70-130		
Methylene chloride	0.511			0.0250	"	0.5000		102%	70-130		
Carbon disulfide	0.559			0.0250	"	0.5000		112%	60-140		
Methyl tert-butyl ether	0.518			0.0250	"	0.5000		104%	60-140		
1,1-Dichloroethane	0.513			0.0250	"	0.5000		103%	70-130		
Vinyl acetate	0.527			0.0250	"	0.5000		105%	60-140		
Hexane	0.482			0.0250	"	0.5000		96%	70-130		
2-Butanone	0.568			0.0250	"	0.5000		114%	60-140		
cis-1,2-Dichloroethene	0.530			0.0250	"	0.5000		106%	70-130		
trans-1,2-Dichloroethene	0.516			0.0250	"	0.5000		103%	70-130		
Chloroform	0.511			0.0250	"	0.5000		102%	70-130		
1,2-Dichloroethane	0.520			0.0250	"	0.5000		104%	70-130		
Cyclohexane	0.517			0.250	"	0.5000		103%	70-130		
Benzene	0.515			0.0250	"	0.5000		103%	70-130		
1,2-Dichloropropane	0.526			0.0250	"	0.5000		105%	70-130		

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	Reported:
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B17I004 - ColdTrap Dehydration

LCS (B17I004-BS1) Prepared: Sep-08-17 Analyzed: Sep-11-17 Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Trichloroethene	0.524			0.0250	ppbv	0.5000		105%	70-130		
Bromodichloromethane	0.548			0.0250	"	0.5000		110%	70-130		
1,4-Dioxane	0.506			0.0250	"	0.5000		101%	60-140		
cis-1,3-Dichloropropene	0.529			0.0250	"	0.5000		106%	70-130		
4-Methyl-2-pentanone	0.555			0.0250	"	0.5000		111%	60-140		
trans-1,3-Dichloropropene	0.541			0.0250	"	0.5000		108%	70-130		
1,1,2-Trichloroethane	0.547			0.0250	"	0.5000		109%	70-130		
Dibromochloromethane	0.566			0.0250	"	0.5000		113%	70-130		
Toluene	0.551			0.0250	"	0.5000		110%	70-130		
2-Hexanone	0.541			0.0250	"	0.5000		108%	60-140		
Hexanal	U			0.0250	"				60-140		
1,2-Dibromoethane (EDB)	0.541			0.0250	"	0.5000		108%	70-130		
Tetrachloroethene	0.507			0.0250	"	0.5000		101%	70-130		
Chlorobenzene	0.548			0.0250	"	0.5000		110%	70-130		
Ethylbenzene	0.531			0.0250	"	0.5000		106%	70-130		
m+p-Xylene	1.03			0.0500	"	1.000		103%	70-130		
Bromoform	0.529			0.0250	"	0.5000		106%	70-130		
Styrene	0.408			0.0250	"	0.5000		82%	70-130		
1,1,2,2-Tetrachloroethane	0.547			0.0250	"	0.5000		109%	70-130		
o-Xylene	0.507			0.0250	"	0.5000		101%	70-130		
1,3,5-Trimethylbenzene	0.475			0.0250	"	0.5000		95%	70-130		
1,2,4-Trimethylbenzene	0.474			0.0250	"	0.5000		95%	70-130		
1,3-Dichlorobenzene	0.519			0.0250	"	0.5000		104%	70-130		
Benzyl chloride	0.503			0.0250	"	0.5000		101%	70-130		
1,4-Dichlorobenzene	0.512			0.0250	"	0.5000		102%	70-130		
1,2-Dichlorobenzene	0.514			0.0250	"	0.5000		103%	70-130		
Hexachlorobutadiene	0.508			0.0250	"	0.5000		102%	70-130		
1,2,4-Trichlorobenzene	0.490			0.0250	"	0.5000		98%	70-130		
Surrogate: Dichlorodifluoromethane	*0.455*			0.0250	*"*	*0.5000*		*91%*	*70-130*		
Surrogate: Dichlorotetrafluoroethane	*0.418*			0.0250	*"*	*0.5000*		*84%*	*70-130*		

Environmental Protection Agency Region5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B17I004 - ColdTrap Dehydration

LCS (B17I004-BS1) — Prepared: Sep-08-17 Analyzed: Sep-11-17 — Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Surrogate: Trichlorofluoromethane	*0.512*			0.0250	*ppbv*	*0.5000*		*102%*	*70-130*		
Surrogate: 1,1,2-trichloro-1,2,2-trifluoroethane (Freon	*0.457*			0.0250	*"*	*0.5000*		*91%*	*70-130*		
Surrogate: 1,1,1-Trichloroethane	*0.508*			0.0250	*"*	*0.5000*		*102%*	*70-130*		
Surrogate: Carbon tetrachloride	*0.517*			0.0250	*"*	*0.5000*		*103%*	*70-130*		

LCS Dup (B17I004-BSD1) — Prepared: Sep-08-17 Analyzed: Sep-12-17 — Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Propene	**0.489**			0.250	ppbv	0.5000		98%	70-130	17	30
Chloromethane	**0.453**			0.0250	"	0.5000		91%	70-130	5	30
Vinyl chloride	**0.466**			0.0250	"	0.5000		93%	70-130	13	30
1,3-butadiene	**0.461**			0.0250	"	0.5000		92%	70-130	15	30
Bromomethane	**0.421**			0.0250	"	0.5000		84%	70-130	9	30
Chloroethane	**0.430**			0.0250	"	0.5000		86%	70-130	7	30
Ethanol	**0.493**			0.480	"	0.5000		99%	60-140	8	40
Acrolein	**0.442**			0.0250	"	0.5000		88%	60-140	21	40
Isopropyl alcohol	**0.448**			0.400	"	0.5000		90%	60-140	19	40
Acetone	**0.449**			0.0250	"	0.5000		90%	60-140	23	40
1,1-Dichloroethene	**0.442**			0.0250	"	0.5000		88%	70-130	16	30
Methylene chloride	**0.417**			0.0250	"	0.5000		83%	70-130	20	30
Carbon disulfide	**0.481**			0.0250	"	0.5000		96%	60-140	15	40
Methyl tert-butyl ether	**0.422**			0.0250	"	0.5000		84%	60-140	20	40
1,1-Dichloroethane	**0.417**			0.0250	"	0.5000		83%	70-130	21	30
Vinyl acetate	**0.415**			0.0250	"	0.5000		83%	60-140	24	40
Hexane	**0.435**			0.0250	"	0.5000		87%	70-130	10	30
2-Butanone	**0.463**			0.0250	"	0.5000		93%	60-140	20	40
cis-1,2-Dichloroethene	**0.446**			0.0250	"	0.5000		89%	70-130	17	30
trans-1,2-Dichloroethene	**0.400**			0.0250	"	0.5000		80%	70-130	25	30
Chloroform	**0.414**			0.0250	"	0.5000		83%	70-130	21	30
1,2-Dichloroethane	**0.453**			0.0250	"	0.5000		91%	70-130	14	30
Cyclohexane	**0.402**			0.250	"	0.5000		80%	70-130	25	30

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B17I004 - ColdTrap Dehydration

LCS Dup (B17I004-BSD1) **Prepared: Sep-08-17 Analyzed: Sep-12-17** **Qualifiers: (TUN)**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Benzene	**0.419**			0.0250	ppbv	0.5000		84%	70-130	21	30
1,2-Dichloropropane	**0.440**			0.0250	"	0.5000		88%	70-130	18	30
Trichloroethene	**0.441**			0.0250	"	0.5000		88%	70-130	17	30
Bromodichloromethane	**0.441**			0.0250	"	0.5000		88%	70-130	22	30
1,4-Dioxane	**0.424**			0.0250	"	0.5000		85%	60-140	18	40
cis-1,3-Dichloropropene	**0.431**			0.0250	"	0.5000		86%	70-130	21	30
4-Methyl-2-pentanone	**0.470**			0.0250	"	0.5000		94%	60-140	16	40
trans-1,3-Dichloropropene	**0.441**			0.0250	"	0.5000		88%	70-130	20	30
1,1,2-Trichloroethane	**0.471**			0.0250	"	0.5000		94%	70-130	15	30
Dibromochloromethane	**0.473**			0.0250	"	0.5000		95%	70-130	18	30
Toluene	**0.441**			0.0250	"	0.5000		88%	70-130	22	30
2-Hexanone	**0.479**			0.0250	"	0.5000		96%	60-140	12	40
1,2-Dibromoethane (EDB)	**0.464**			0.0250	"	0.5000		93%	70-130	15	30
Tetrachloroethene	**0.433**			0.0250	"	0.5000		87%	70-130	16	30
Chlorobenzene	**0.460**			0.0250	"	0.5000		92%	70-130	18	30
Ethylbenzene	**0.449**			0.0250	"	0.5000		90%	70-130	17	30
m+p-Xylene	**0.883**			0.0500	"	1.000		88%	70-130	16	30
Bromoform	**0.460**			0.0250	"	0.5000		92%	70-130	14	30
Styrene	**0.377**			0.0250	"	0.5000		75%	70-130	8	30
1,1,2,2-Tetrachloroethane	**0.470**			0.0250	"	0.5000		94%	70-130	15	30
o-Xylene	**0.447**			0.0250	"	0.5000		89%	70-130	13	30
1,3,5-Trimethylbenzene	**0.416**			0.0250	"	0.5000		83%	70-130	13	30
1,2,4-Trimethylbenzene	**0.425**			0.0250	"	0.5000		85%	70-130	11	30
1,3-Dichlorobenzene	**0.452**			0.0250	"	0.5000		90%	70-130	14	30
Benzyl chloride	**0.443**			0.0250	"	0.5000		89%	70-130	13	30
1,4-Dichlorobenzene	**0.452**			0.0250	"	0.5000		90%	70-130	12	30
1,2-Dichlorobenzene	**0.451**			0.0250	"	0.5000		90%	70-130	13	30
Hexachlorobutadiene	**0.462**			0.0250	"	0.5000		92%	70-130	10	30
1,2,4-Trichlorobenzene	**0.451**			0.0250	"	0.5000		90%	70-130	8	30
Surrogate: Dichlorodifluoromethane	*0.442*			0.0250	"	*0.5000*		*88%*	*70-130*		

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	Reported:
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B17I004 - ColdTrap Dehydration

LCS Dup (B17I004-BSD1) Prepared: Sep-08-17 Analyzed: Sep-12-17 Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Surrogate: Dichlorotetrafluoroethane	*0.412*			0.0250	*ppbv*	*0.5000*		*82%*	*70-130*		
Surrogate: Trichlorofluoromethane	*0.468*			0.0250	*"*	*0.5000*		*94%*	*70-130*		
Surrogate: 1,1,2-trichloro-1,2,2-trifluoroethane (Freon	*0.396*			0.0250	*"*	*0.5000*		*79%*	*70-130*		
Surrogate: 1,1,1-Trichloroethane	*0.438*			0.0250	*"*	*0.5000*		*88%*	*70-130*		
Surrogate: Carbon tetrachloride	*0.434*			0.0250	*"*	*0.5000*		*87%*	*70-130*		

Duplicate (B17I004-DUP1) Source: 1708033-01 Prepared: Sep-08-17 Analyzed: Sep-11-17 Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Propene + propane	**0.594**	J		0.500	ppbv		0.592			0.3	30
Chloromethane	**0.466**			0.0500	"		0.455			3	30
Vinyl chloride	**U**			0.0500	"		5.74E-3				30
1,3-butadiene	**9.92E-3**			0.0500	"		U				30
Bromomethane	**7.86E-3**	Q		0.0500	"		0.0112			35	30
Chloroethane	**0.0326**			0.0500	"		0.0288			12	30
Ethanol	**Rejected**			1.00	"		6.61				30
Acrolein	**0.313**			0.0500	"		0.290			8	30
Isopropyl alcohol	**2.34**			1.00	"		2.05			13	30
Acetone	**9.05**	J		0.0500	"		8.10			11	30
1,1-Dichloroethene	**U**			0.0500	"		U				30
Methylene chloride	**0.855**			0.0500	"		0.772			10	30
Carbon disulfide	**0.0321**	Q		0.0500	"		0.0234			31	30
Methyl tert-butyl ether	**0.0142**			0.0500	"		U				30
1,1-Dichloroethane	**U**			0.0500	"		U				30
Vinyl acetate	**U**			0.0500	"		U				30
Hexane	**0.110**			0.0500	"		0.104			6	30
2-Butanone	**0.0201**	Q		0.0500	"		0.0306			41	30
cis-1,2-Dichloroethene	**U**			0.0500	"		U				30
trans-1,2-Dichloroethene	**7.18E-3**			0.0500	"		6.06E-3			17	30
Chloroform	**0.0237**			0.0500	"		0.0212			11	30
1,2-Dichloroethane	**8.22E-3**			0.0500	"		0.0104			23	30

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	Reported:
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B17I004 - ColdTrap Dehydration

Duplicate (B17I004-DUP1) Source: 1708033-01 Prepared: Sep-08-17 Analyzed: Sep-11-17 Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Cyclohexane	U			0.500	ppbv		U				30
Benzene	0.144			0.0500	"		0.130			10	30
n-Heptane	0.0921			0.0500	"		0.0846			9	30
1,2-Dichloropropane	U			0.0500	"		U				30
Trichloroethene	0.0367			0.0500	"		0.0314			16	30
Bromodichloromethane	U			0.0500	"		U				30
1,4-Dioxane	9.64E-3			0.0500	"		U				30
cis-1,3-Dichloropropene	U			0.0500	"		U				30
4-Methyl-2-pentanone	0.123			0.0500	"		0.114			8	30
trans-1,3-Dichloropropene	U			0.0500	"		U				30
1,1,2-Trichloroethane	U			0.0500	"		U				30
Dibromochloromethane	U			0.0500	"		U				30
Toluene	0.758			0.0500	"		0.676			11	30
2-Hexanone	U			0.0500	"		U				30
Hexanal	U			0.0500	"		U				30
1,2-Dibromoethane (EDB)	U			0.0500	"		U				30
Tetrachloroethene	0.0339			0.0500	"		0.0313			8	30
Chlorobenzene	U			0.0500	"		U				30
Ethylbenzene	0.0562			0.0500	"		0.0518			8	30
m+p-Xylene	0.163			0.100	"		0.152			7	30
Bromoform	U			0.0500	"		U				30
Styrene	0.0200			0.0500	"		0.0199			0.4	30
1,1,2,2-Tetrachloroethane	U			0.0500	"		U				30
o-Xylene	0.107			0.0500	"		0.103			4	30
1,3,5-Trimethylbenzene	9.84E-3			0.0500	"		9.74E-3			1	30
1,2,4-Trimethylbenzene	0.0368			0.0500	"		0.0353			4	30
1,3-Dichlorobenzene	U			0.0500	"		U				30
Benzyl chloride	U			0.0500	"		U				30
1,4-Dichlorobenzene	0.0109			0.0500	"		0.0129			16	30
1,2-Dichlorobenzene	U			0.0500	"		U				30

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	Reported:
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B17I004 - ColdTrap Dehydration

Duplicate (B17I004-DUP1) Source: 1708033-01 Prepared: Sep-08-17 Analyzed: Sep-11-17 Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Hexachlorobutadiene	**U**			0.0500	ppbv		U				30
1,2,4-Trichlorobenzene	**U**			0.0500	"		7.12E-3				30
Surrogate: Dichlorodifluoromethane	*0.456*			0.0500	"	*0.5100*		*89%*	*70-130*		
Surrogate: Dichlorotetrafluoroethane	*0.0154*			0.0100	"	*2.000E-2*		*77%*	*60-140*		
Surrogate: Trichlorofluoromethane	*0.244*			0.0500	"	*0.2350*		*104%*	*70-130*		
Surrogate: 1,1,2-trichloro-1,2,2-trifluoroethane (Freon	*0.0730*			0.0500	"	*7.200E-2*		*101%*	*70-130*		
Surrogate: 1,1,1-Trichloroethane	*3.62E-3*			2.00E-3	"	*4.000E-3*		*90%*	*50-150*		
Surrogate: Carbon tetrachloride	*0.0817*			0.0500	"	*8.300E-2*		*98%*	*70-130*		

MRL Check (B17I004-MRL1) Prepared: Sep-08-17 Analyzed: Sep-11-17 Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Propene	**0.113**	B, Q		0.250	ppbv	5.000E-2		225%	50-150		
Chloromethane	**0.0411**			0.0250	"	5.000E-2		82%	50-150		
Vinyl chloride	**0.0426**			0.0250	"	5.000E-2		85%	50-150		
1,3-butadiene	**0.0375**			0.0250	"	5.000E-2		75%	50-150		
Bromomethane	**0.0406**			0.0250	"	5.000E-2		81%	50-150		
Chloroethane	**0.0415**			0.0250	"	5.000E-2		83%	50-150		
Ethanol	**0.0514**			0.0400	"	5.000E-2		103%	50-150		
Acrolein	**0.0457**			0.0250	"	5.000E-2		91%	50-150		
Isopropyl alcohol	**0.0449**			0.0400	"	5.000E-2		90%	50-150		
Acetone	**0.0515**			0.0250	"	5.000E-2		103%	50-150		
1,1-Dichloroethene	**0.0443**			0.0250	"	5.000E-2		89%	50-150		
Methylene chloride	**0.0445**			0.0250	"	5.000E-2		89%	50-150		
Carbon disulfide	**0.0475**			0.0250	"	5.000E-2		95%	50-150		
Methyl tert-butyl ether	**0.0414**			0.0250	"	5.000E-2		83%	50-150		
1,1-Dichloroethane	**0.0462**			0.0250	"	5.000E-2		92%	50-150		
Vinyl acetate	**0.0430**			0.0250	"	5.000E-2		86%	50-150		
Hexane	**0.0446**			0.0250	"	5.000E-2		89%	50-150		
2-Butanone	**0.0407**			0.0250	"	5.000E-2		81%	50-150		
cis-1,2-Dichloroethene	**0.0446**			0.0250	"	5.000E-2		89%	50-150		

Environmental Protection Agency Region5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	Reported:
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B17I004 - ColdTrap Dehydration

MRL Check (B17I004-MRL1) Prepared: Sep-08-17 Analyzed: Sep-11-17 Qualifiers: (TUN)

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	0.0466	B		0.0250	ppbv	5.000E-2		93%	50-150		
Chloroform	0.0427			0.0250	"	5.000E-2		85%	50-150		
1,2-Dichloroethane	0.0441			0.0250	"	5.000E-2		88%	50-150		
Cyclohexane	0.0434			0.0400	"	5.000E-2		87%	50-150		
Benzene	0.0408			0.0250	"	5.000E-2		82%	50-150		
n-Heptane	0.0455			0.0250	"	5.000E-2		91%	50-150		
1,2-Dichloropropane	0.0465			0.0250	"	5.000E-2		93%	50-150		
Trichloroethene	0.0492			0.0250	"	5.000E-2		98%	50-150		
Bromodichloromethane	0.0478			0.0250	"	5.000E-2		96%	50-150		
1,4-Dioxane	0.0431			0.0250	"	5.000E-2		86%	50-150		
cis-1,3-Dichloropropene	0.0467			0.0250	"	5.000E-2		93%	50-150		
4-Methyl-2-pentanone	0.0452			0.0250	"	5.000E-2		90%	50-150		
trans-1,3-Dichloropropene	0.0460			0.0250	"	5.000E-2		92%	50-150		
1,1,2-Trichloroethane	0.0473			0.0250	"	5.000E-2		95%	50-150		
Dibromochloromethane	0.0470			0.0250	"	5.000E-2		94%	50-150		
Toluene	0.0450			0.0250	"	5.000E-2		90%	50-150		
2-Hexanone	0.0399	B		0.0250	"	5.000E-2		80%	50-150		
1,2-Dibromoethane (EDB)	0.0465			0.0250	"	5.000E-2		93%	50-150		
Tetrachloroethene	0.0525			0.0250	"	5.000E-2		105%	50-150		
Chlorobenzene	0.0449			0.0250	"	5.000E-2		90%	50-150		
Ethylbenzene	0.0432			0.0250	"	5.000E-2		86%	50-150		
m+p-Xylene	0.0847			0.0500	"	0.1000		85%	50-150		
Bromoform	0.0531			0.0250	"	5.000E-2		106%	50-150		
Styrene	0.0446			0.0250	"	5.000E-2		89%	50-150		
1,1,2,2-Tetrachloroethane	0.0440			0.0250	"	5.000E-2		88%	50-150		
o-Xylene	0.0442			0.0250	"	5.000E-2		88%	50-150		
1,3,5-Trimethylbenzene	0.0375			0.0250	"	5.000E-2		75%	50-150		
1,2,4-Trimethylbenzene	0.0387			0.0250	"	5.000E-2		77%	50-150		
1,3-Dichlorobenzene	0.0459			0.0250	"	5.000E-2		92%	50-150		
Benzyl chloride	0.0403			0.0250	"	5.000E-2		81%	50-150		

Environmental Protection Agency Region5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Air Toxics by GC/MS, EPA TO-15 (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B17I004 - ColdTrap Dehydration

MRL Check (B17I004-MRL1) **Prepared: Sep-08-17 Analyzed: Sep-11-17** **Qualifiers: (TUN)**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
1,4-Dichlorobenzene	**0.0448**			0.0250	ppbv	5.000E-2		90%	50-150		
1,2-Dichlorobenzene	**0.0458**			0.0250	"	5.000E-2		92%	50-150		
Hexachlorobutadiene	**0.0508**			0.0250	"	5.000E-2		102%	50-150		
1,2,4-Trichlorobenzene	**0.0444**			0.0250	"	5.000E-2		89%	50-150		
Surrogate: Dichlorodifluoromethane	*0.0395*			5.00E-3	"	*5.000E-2*		*79%*	*70-130*		
Surrogate: Dichlorotetrafluoroethane	*0.0513*			0.0250	"	*5.000E-2*		*103%*	*60-140*		
Surrogate: Trichlorofluoromethane	*0.0469*			0.0250	"	*5.000E-2*		*94%*	*70-130*		
Surrogate: 1,1,2-trichloro-1,2,2-trifluoroethane (Freon	*0.0449*			0.0250	"	*5.000E-2*		*90%*	*70-130*		
Surrogate: 1,1,1-Trichloroethane	*0.0443*			0.0250	"	*5.000E-2*		*89%*	*50-150*		
Surrogate: Carbon tetrachloride	*0.0441*			0.0250	"	*5.000E-2*		*88%*	*70-130*		

Environmental Protection Agency Region5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Mid America Steel Drum, Inc.	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Jamie Paulin	Nov-03-17 11:30

Notes and Definitions

R	Rejected
MI	Matrix interference
J	The identification of the analyte is acceptable; the reported value is an estimate.
B	Analyte concentration is < 5x that in the associated method blank(s); this concentration may be a high-bias estimate.
(TUN)	Sample analysis occurred outside the tune check window stated in the SOP.
U	Not Detected
NR	Not Reported
Q	QC limit Exceeded