*CERTIFICATE OF ANALYSIS*

Richard Kowalski
AEI Consultants, Inc.
148 Hathaway Road
Dartmouth, MA 02747

**RE: BASF Cranston (363655)**
**ESS Laboratory Work Order Number: 1812103**

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

**REVIEWED**
**By ESS Laboratory at 1:50 pm, Dec 07, 2018**

**Analytical Summary**
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812103

## SAMPLE RECEIPT

The following samples were received on December 05, 2018 for the analyses specified on the enclosed Chain of Custody Record.

**The cooler temperature was not within the acceptance limit of <6°C, however, samples were delivered on ice and therefore meet regulatory criteria.**

| Lab Number | Sample Name | Matrix | Analysis |
|---|---|---|---|
| 1812103-01 | B-5-120518-A 0.75FT | Solid | 8082A |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812103

## PROJECT NARRATIVE

**No unusual observations noted.**

**End of Project Narrative.**

## DATA USABILITY LINKS

***To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.***

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812103

## CURRENT SW-846 METHODOLOGY VERSIONS

**Analytical Methods**

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH
MADEP 04-2.1 - VPH

**Prep Methods**

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: B-5-120518-A 0.75FT
Date Sampled: 12/05/18 08:30
Percent Solids: 93
Initial Volume: 5.09
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812103
ESS Laboratory Sample ID: 1812103-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 12/5/18 17:42

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.1) | | 8082A | | 1 | 12/06/18 14:34 | C8L0129 | CL80508 |
| Aroclor 1221 | ND (0.1) | | 8082A | | 1 | 12/06/18 14:34 | C8L0129 | CL80508 |
| Aroclor 1232 | ND (0.1) | | 8082A | | 1 | 12/06/18 14:34 | C8L0129 | CL80508 |
| Aroclor 1242 | ND (0.1) | | 8082A | | 1 | 12/06/18 14:34 | C8L0129 | CL80508 |
| Aroclor 1248 | ND (0.1) | | 8082A | | 1 | 12/06/18 14:34 | C8L0129 | CL80508 |
| **Aroclor 1254** | **1.0** (0.1) | | 8082A | | 1 | 12/06/18 14:34 | C8L0129 | CL80508 |
| Aroclor 1260 | ND (0.1) | | 8082A | | 1 | 12/06/18 14:34 | C8L0129 | CL80508 |
| Aroclor 1262 | ND (0.1) | | 8082A | | 1 | 12/06/18 14:34 | C8L0129 | CL80508 |
| Aroclor 1268 | ND (0.1) | | 8082A | | 1 | 12/06/18 14:34 | C8L0129 | CL80508 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *87 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *95 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *92 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *87 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812103

# Quality Control Data

| Analyte | Result | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| 8082A Polychlorinated Biphenyls (PCB) | | | | | | | | | | |
| **Batch CL80508 - 3540C** | | | | | | | | | | |
| **Blank** | | | | | | | | | | |
| Aroclor 1016 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1016 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1221 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1221 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1232 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1232 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1242 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1242 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1248 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1248 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1254 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1254 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1260 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1260 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1262 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1262 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1268 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1268 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| *Surrogate: Decachlorobiphenyl* | *0.0202* | | mg/kg wet | *0.02500* | | *81* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0229* | | mg/kg wet | *0.02500* | | *92* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0220* | | mg/kg wet | *0.02500* | | *88* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0227* | | mg/kg wet | *0.02500* | | *91* | *30-150* | | | |
| **LCS** | | | | | | | | | | |
| Aroclor 1016 | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 102 | 40-140 | | | |
| Aroclor 1016 [2C] | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 79 | 40-140 | | | |
| Aroclor 1260 | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 81 | 40-140 | | | |
| Aroclor 1260 [2C] | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 85 | 40-140 | | | |
| *Surrogate: Decachlorobiphenyl* | *0.0214* | | mg/kg wet | *0.02500* | | *86* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0238* | | mg/kg wet | *0.02500* | | *95* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0237* | | mg/kg wet | *0.02500* | | *95* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0212* | | mg/kg wet | *0.02500* | | *85* | *30-150* | | | |
| **LCS Dup** | | | | | | | | | | |
| Aroclor 1016 | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 105 | 40-140 | 3 | 30 | |
| Aroclor 1016 [2C] | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 81 | 40-140 | 3 | 30 | |
| Aroclor 1260 | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 83 | 40-140 | 3 | 30 | |
| Aroclor 1260 [2C] | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 87 | 40-140 | 2 | 30 | |
| *Surrogate: Decachlorobiphenyl* | *0.0219* | | mg/kg wet | *0.02500* | | *87* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0243* | | mg/kg wet | *0.02500* | | *97* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0246* | | mg/kg wet | *0.02500* | | *98* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0223* | | mg/kg wet | *0.02500* | | *89* | *30-150* | | | |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
ESS Laboratory Work Order: 1812103

**Notes and Definitions**

| | |
|---|---|
| U | Analyte included in the analysis, but not detected |
| ND | Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |
| MDL | Method Detection Limit |
| MRL | Method Reporting Limit |
| LOD | Limit of Detection |
| LOQ | Limit of Quantitation |
| DL | Detection Limit |
| I/V | Initial Volume |
| F/V | Final Volume |
| § | Subcontracted analysis; see attached report |
| 1 | Range result excludes concentrations of surrogates and/or internal standards eluting in that range. |
| 2 | Range result excludes concentrations of target analytes eluting in that range. |
| 3 | Range result excludes the concentration of the C9-C10 aromatic range. |
| Avg | Results reported as a mathematical average. |
| NR | No Recovery |
| [CALC] | Calculated Analyte |
| SUB | Subcontracted analysis; see attached report |
| RL | Reporting Limit |
| EDL | Estimated Detection Limit |
| MF | Membrane Filtration |
| MPN | Most Probably Number |
| TNTC | Too numerous to Count |
| CFU | Colony Forming Units |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812103

**ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS**

**ENVIRONMENTAL**

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

# ESS Laboratory Sample and Cooler Receipt Checklist

Client: AEI Consultants, Inc. - TB/MM

Shipped/Delivered Via: Client

ESS Project ID: 1812103
Date Received: 12/5/2018
Project Due Date: 12/7/2018
Days for Project: 2 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 6.3 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

| Sample Number | Container ID | Proper Container | Air Bubbles Present | Sufficient Volume | Container Type | Preservative | Record pH (Cyanide and 608 Pesticides) |
|---|---|---|---|---|---|---|---|
| 01 | 298587 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |

**2nd Review**
Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No

Completed By: Date & Time: 12/5/18 1141
Reviewed By: Date & Time: 12/5/18 1237
Delivered By: 12/5/18 1313

ESS Laboratory
*Division of Thielsch Engineering, Inc.*
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

# CHAIN OF CUSTODY

ESS Lab # 1812103

Turn Time Rush 48 hr

Reporting Limits See note 1

Regulatory State RI

Electonic Deliverables ☒ Limit Checker ☒ Standard Excel ☒ Other (Please Specify →) PDF

Is this project for any of the following?: ○ CT RCP ○ MA MCP ○ RGP

Company Name: AEI
Contact Person: Aaron Ting
Project #: 363655
Project Name: BASF Cranston
Address: 112 water St, 5th floor
City: Boston
State: MA
Zip Code: 02109
PO #:
Telephone Number: (978) 577-7138
FAX Number:
Email Address: ating@aeiconsultants.com

| ESS Lab ID | Collection Date | Collection Time | Sample Type | Sample Matrix | Sample ID | Analysis: PCBs (Soxhlet) |
|---|---|---|---|---|---|---|
| 1 | 12/5/18 | 0830 | G | Concrete | B-5-120518-A (0.75') | X |

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial | AG
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* | 9
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Ascorbic Acid 12-Other* | 1
Number of Containers per Sample: 1

**Laboratory Use Only**
Cooler Present: ✓
Seals Intact: —
Cooler Temperature: 6.3 °C ice hm

Sampled by: A Ting

Comments: Please specify "Other" preservative and containers types in this space

Note 1: See Project QAPP

| Relinquished by: (Signature, Date & Time) | Received By: (Signature, Date & Time) | Relinquished By: (Signature, Date & Time) | Received By: (Signature, Date & Time) |
|---|---|---|---|
| [signature] 12-5-18 11:30 | [signature] 12/5/18 1130 | | |
| Relinquished by: (Signature, Date & Time) | Received By: (Signature, Date & Time) | Relinquished By: (Signature, Date & Time) | Received By: (Signature, Date & Time) |
| | | | |

*CERTIFICATE OF ANALYSIS*

Richard Kowalski
AEI Consultants, Inc.
148 Hathaway Road
Dartmouth, MA 02747

**RE: BASF Cranston (363655)**
**ESS Laboratory Work Order Number: 1812237**

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

**REVIEWED**
**By ESS Laboratory at 4:25 pm, Dec 12, 2018**

**Analytical Summary**
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

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*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812237

## SAMPLE RECEIPT

The following samples were received on December 10, 2018 for the analyses specified on the enclosed Chain of Custody Record.

| Lab Number | Sample Name | Matrix | Analysis |
|---|---|---|---|
| 1812237-01 | SW-5-121018-A 0-1FT | Soil | 8082A |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812237

## PROJECT NARRATIVE

**No unusual observations noted.**

**End of Project Narrative.**

## DATA USABILITY LINKS

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Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812237

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8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
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**Prep Methods**

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3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: SW-5-121018-A 0-1FT
Date Sampled: 12/10/18 11:25
Percent Solids: 94
Initial Volume: 19.1
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812237
ESS Laboratory Sample ID: 1812237-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 12/10/18 18:30

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.03) | | 8082A | | 1 | 12/11/18 23:21 | C8L0221 | CL81008 |
| Aroclor 1221 | ND (0.03) | | 8082A | | 1 | 12/11/18 23:21 | C8L0221 | CL81008 |
| Aroclor 1232 | ND (0.03) | | 8082A | | 1 | 12/11/18 23:21 | C8L0221 | CL81008 |
| **Aroclor 1242** | **0.9** (0.03) | | 8082A | | 1 | 12/11/18 23:21 | C8L0221 | CL81008 |
| Aroclor 1248 | ND (0.03) | | 8082A | | 1 | 12/11/18 23:21 | C8L0221 | CL81008 |
| **Aroclor 1254 [2C]** | **2.5** (0.1) | | 8082A | | 5 | 12/12/18 11:10 | C8L0221 | CL81008 |
| Aroclor 1260 | ND (0.03) | | 8082A | | 1 | 12/11/18 23:21 | C8L0221 | CL81008 |
| Aroclor 1262 | ND (0.03) | | 8082A | | 1 | 12/11/18 23:21 | C8L0221 | CL81008 |
| Aroclor 1268 | ND (0.03) | | 8082A | | 1 | 12/11/18 23:21 | C8L0221 | CL81008 |

| | %Recovery | Qualifier | Limits |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *78 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *89 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *105 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *107 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812237

# Quality Control Data

| Analyte | Result | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| 8082A Polychlorinated Biphenyls (PCB) | | | | | | | | | | |
| **Batch CL81008 - 3540C** | | | | | | | | | | |
| **Blank** | | | | | | | | | | |
| Aroclor 1016 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1016 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1221 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1221 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1232 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1232 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1242 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1242 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1248 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1248 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1254 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1254 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1260 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1260 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1262 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1262 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1268 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1268 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| *Surrogate: Decachlorobiphenyl* | *0.0222* | | mg/kg wet | *0.02500* | | *89* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0276* | | mg/kg wet | *0.02500* | | *110* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0241* | | mg/kg wet | *0.02500* | | *96* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0265* | | mg/kg wet | *0.02500* | | *106* | *30-150* | | | |
| **LCS** | | | | | | | | | | |
| Aroclor 1016 | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 88 | 40-140 | | | |
| Aroclor 1016 [2C] | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 92 | 40-140 | | | |
| Aroclor 1260 | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 83 | 40-140 | | | |
| Aroclor 1260 [2C] | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 85 | 40-140 | | | |
| *Surrogate: Decachlorobiphenyl* | *0.0194* | | mg/kg wet | *0.02500* | | *77* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0241* | | mg/kg wet | *0.02500* | | *96* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0215* | | mg/kg wet | *0.02500* | | *86* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0221* | | mg/kg wet | *0.02500* | | *89* | *30-150* | | | |
| **LCS Dup** | | | | | | | | | | |
| Aroclor 1016 | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 106 | 40-140 | 18 | 30 | |
| Aroclor 1016 [2C] | 0.6 | 0.02 | mg/kg wet | 0.5000 | | 111 | 40-140 | 18 | 30 | |
| Aroclor 1260 | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 101 | 40-140 | 19 | 30 | |
| Aroclor 1260 [2C] | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 102 | 40-140 | 18 | 30 | |
| *Surrogate: Decachlorobiphenyl* | *0.0235* | | mg/kg wet | *0.02500* | | *94* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0292* | | mg/kg wet | *0.02500* | | *117* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0265* | | mg/kg wet | *0.02500* | | *106* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0274* | | mg/kg wet | *0.02500* | | *110* | *30-150* | | | |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
ESS Laboratory Work Order: 1812237

**Notes and Definitions**

| | |
|---|---|
| U | Analyte included in the analysis, but not detected |
| D | Diluted. |
| ND | Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |
| MDL | Method Detection Limit |
| MRL | Method Reporting Limit |
| LOD | Limit of Detection |
| LOQ | Limit of Quantitation |
| DL | Detection Limit |
| I/V | Initial Volume |
| F/V | Final Volume |
| § | Subcontracted analysis; see attached report |
| 1 | Range result excludes concentrations of surrogates and/or internal standards eluting in that range. |
| 2 | Range result excludes concentrations of target analytes eluting in that range. |
| 3 | Range result excludes the concentration of the C9-C10 aromatic range. |
| Avg | Results reported as a mathematical average. |
| NR | No Recovery |
| [CALC] | Calculated Analyte |
| SUB | Subcontracted analysis; see attached report |
| RL | Reporting Limit |
| EDL | Estimated Detection Limit |
| MF | Membrane Filtration |
| MPN | Most Probably Number |
| TNTC | Too numerous to Count |
| CFU | Colony Forming Units |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812237

**ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS**

**ENVIRONMENTAL**

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

# ESS Laboratory Sample and Cooler Receipt Checklist

Client: AEI Consultants, Inc. - TB/MM

Shipped/Delivered Via: Client

ESS Project ID: 1812237
Date Received: 12/10/2018
Project Due Date: 12/12/2018
Days for Project: 2 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 5.6 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

| Sample Number | Container ID | Proper Container | Air Bubbles Present | Sufficient Volume | Container Type | Preservative | Record pH (Cyanide and 608 Pesticides) |
|---|---|---|---|---|---|---|---|
| 01 | 300772 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |

**2nd Review**
Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No

Completed By: Date & Time: 12/10/18 1438
Reviewed By: Date & Time: 12/10/18 15:20
Delivered By: 12/10/18 15:20

ESS Laboratory
*Division of Thielsch Engineering, Inc.*
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.essLaboratory.com

# CHAIN OF CUSTODY

ESS Lab # 1812237

Turn Time Rush 48hr

Reporting Limits See note 1

Regulatory State RI

Is this project for any of the following?: ○CT RCP ○MA MCP ○RGP

Electonic Deliverables ☒Limit Checker ☒Standard Exce ☒Other (Please Specify →) PDF

| Company Name | Project # | Project Name |
|---|---|---|
| AEI | 363655 | BASF Cranston |

| Contact Person | Address |
|---|---|
| Aaron Ting | 112 water St, 5th floor |

| City | State | Zip Code | PO # |
|---|---|---|---|
| Boston | MA | 02109 | |

| Telephone Number | FAX Number | Email Address |
|---|---|---|
| (978) 577-7138 | | ating@aeiconsultants.com |

| ESS Lab ID | Collection Date | Collection Time | Sample Type | Sample Matrix | Sample ID | Analysis: PCBs (Soxhlet) |
|---|---|---|---|---|---|---|
| 1 | 12/10/18 | 11:25 | C | S | SW-5-121018-A (0-1') | X |

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial | AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* | 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Ascorbic Acid 12-Other* | 1

Number of Containers per Sample: | 1

**Laboratory Use Only**

Cooler Present: yes

Seals Intact: yes

Cooler Temperature: 5-6 °C ice

Sampled by: ~~A Ting~~ J Drebaum

Comments: Please specify "Other" preservative and containers types in this sp

Note 1: See project QAPP

| Relinquished by: (Signature, Date & Time) | Received By: (Signature, Date & Time) | Relinquished By: (Signature, Date & Time) | Received By: (Signatur |
|---|---|---|---|
| 12/10/18 1407 | 12/10/18 1407 | | |
| Relinquished by: (Signature, Date & Time) | Received By: (Signature, Date & Time) | Relinquished By: (Signature, Date & Time) | Received By: (Signatur |
| | | | |

*CERTIFICATE OF ANALYSIS*

Richard Kowalski
AEI Consultants, Inc.
148 Hathaway Road
Dartmouth, MA 02747

**RE: BASF Cranston (363655)**
**ESS Laboratory Work Order Number: 1812257**

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

**REVIEWED**
**By ESS Laboratory at 1:23 pm, Dec 13, 2018**

**Analytical Summary**
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812257

## SAMPLE RECEIPT

The following samples were received on December 11, 2018 for the analyses specified on the enclosed Chain of Custody Record.

| Lab Number | Sample Name | Matrix | Analysis |
|---|---|---|---|
| 1812257-01 | B-707-121118-A 4FT | Soil | 8082A |
| 1812257-02 | SW-473-121118-A 0-1FT | Soil | 8082A |
| 1812257-03 | SW-474-121118-A 0-1FT | Soil | 8082A |
| 1812257-04 | B-710-121118-A 3FT | Soil | 8082A |
| 1812257-05 | B-714-121118-A 3FT | Soil | 8082A |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812257

## PROJECT NARRATIVE

**No unusual observations noted.**

**End of Project Narrative.**

## DATA USABILITY LINKS

***To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.***

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812257

## CURRENT SW-846 METHODOLOGY VERSIONS

**Analytical Methods**

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH
MADEP 04-2.1 - VPH

**Prep Methods**

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: B-707-121118-A 4FT
Date Sampled: 12/11/18 08:18
Percent Solids: 85
Initial Volume: 20.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812257
ESS Laboratory Sample ID: 1812257-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 12/11/18 16:37

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.06) | | 8082A | | 1 | 12/12/18 13:09 | C8L0237 | CL81107 |
| Aroclor 1221 | ND (0.06) | | 8082A | | 1 | 12/12/18 13:09 | C8L0237 | CL81107 |
| Aroclor 1232 | ND (0.06) | | 8082A | | 1 | 12/12/18 13:09 | C8L0237 | CL81107 |
| Aroclor 1242 | ND (0.06) | | 8082A | | 1 | 12/12/18 13:09 | C8L0237 | CL81107 |
| Aroclor 1248 | ND (0.06) | | 8082A | | 1 | 12/12/18 13:09 | C8L0237 | CL81107 |
| **Aroclor 1254** | **0.3** (0.06) | | 8082A | | 1 | 12/12/18 13:09 | C8L0237 | CL81107 |
| Aroclor 1260 | ND (0.06) | | 8082A | | 1 | 12/12/18 13:09 | C8L0237 | CL81107 |
| Aroclor 1262 | ND (0.06) | | 8082A | | 1 | 12/12/18 13:09 | C8L0237 | CL81107 |
| Aroclor 1268 | ND (0.06) | | 8082A | | 1 | 12/12/18 13:09 | C8L0237 | CL81107 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *81 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *84 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *92 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *94 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: SW-473-121118-A 0-1FT
Date Sampled: 12/11/18 08:19
Percent Solids: 92
Initial Volume: 20.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812257
ESS Laboratory Sample ID: 1812257-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 12/11/18 16:37

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.05) | | 8082A | | 1 | 12/12/18 13:28 | C8L0237 | CL81107 |
| Aroclor 1221 | ND (0.05) | | 8082A | | 1 | 12/12/18 13:28 | C8L0237 | CL81107 |
| Aroclor 1232 | ND (0.05) | | 8082A | | 1 | 12/12/18 13:28 | C8L0237 | CL81107 |
| Aroclor 1242 | ND (0.05) | | 8082A | | 1 | 12/12/18 13:28 | C8L0237 | CL81107 |
| Aroclor 1248 | ND (0.05) | | 8082A | | 1 | 12/12/18 13:28 | C8L0237 | CL81107 |
| **Aroclor 1254** | **2.8** (0.3) | | 8082A | | 5 | 12/12/18 21:26 | C8L0237 | CL81107 |
| Aroclor 1260 | ND (0.05) | | 8082A | | 1 | 12/12/18 13:28 | C8L0237 | CL81107 |
| Aroclor 1262 | ND (0.05) | | 8082A | | 1 | 12/12/18 13:28 | C8L0237 | CL81107 |
| Aroclor 1268 | ND (0.05) | | 8082A | | 1 | 12/12/18 13:28 | C8L0237 | CL81107 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *70 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *68 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *76 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *78 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: SW-474-121118-A 0-1FT
Date Sampled: 12/11/18 08:20
Percent Solids: 90
Initial Volume: 19.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812257
ESS Laboratory Sample ID: 1812257-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 12/11/18 16:37

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.06) | | 8082A | | 1 | 12/12/18 13:47 | C8L0237 | CL81107 |
| Aroclor 1221 | ND (0.06) | | 8082A | | 1 | 12/12/18 13:47 | C8L0237 | CL81107 |
| Aroclor 1232 | ND (0.06) | | 8082A | | 1 | 12/12/18 13:47 | C8L0237 | CL81107 |
| Aroclor 1242 | ND (0.06) | | 8082A | | 1 | 12/12/18 13:47 | C8L0237 | CL81107 |
| Aroclor 1248 | ND (0.06) | | 8082A | | 1 | 12/12/18 13:47 | C8L0237 | CL81107 |
| **Aroclor 1254** | **4.1** (0.6) | | 8082A | | 10 | 12/12/18 21:46 | C8L0237 | CL81107 |
| Aroclor 1260 | ND (0.06) | | 8082A | | 1 | 12/12/18 13:47 | C8L0237 | CL81107 |
| Aroclor 1262 | ND (0.06) | | 8082A | | 1 | 12/12/18 13:47 | C8L0237 | CL81107 |
| Aroclor 1268 | ND (0.06) | | 8082A | | 1 | 12/12/18 13:47 | C8L0237 | CL81107 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *92 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *82 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *93 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *91 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: B-710-121118-A 3FT
Date Sampled: 12/11/18 08:22
Percent Solids: 89
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812257
ESS Laboratory Sample ID: 1812257-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 12/11/18 16:37

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.06) | | 8082A | | 1 | 12/12/18 14:06 | C8L0237 | CL81107 |
| Aroclor 1221 | ND (0.06) | | 8082A | | 1 | 12/12/18 14:06 | C8L0237 | CL81107 |
| Aroclor 1232 | ND (0.06) | | 8082A | | 1 | 12/12/18 14:06 | C8L0237 | CL81107 |
| Aroclor 1242 | ND (0.06) | | 8082A | | 1 | 12/12/18 14:06 | C8L0237 | CL81107 |
| Aroclor 1248 | ND (0.06) | | 8082A | | 1 | 12/12/18 14:06 | C8L0237 | CL81107 |
| **Aroclor 1254 [2C]** | **0.08** (0.06) | | 8082A | | 1 | 12/12/18 14:06 | C8L0237 | CL81107 |
| Aroclor 1260 | ND (0.06) | | 8082A | | 1 | 12/12/18 14:06 | C8L0237 | CL81107 |
| Aroclor 1262 | ND (0.06) | | 8082A | | 1 | 12/12/18 14:06 | C8L0237 | CL81107 |
| Aroclor 1268 | ND (0.06) | | 8082A | | 1 | 12/12/18 14:06 | C8L0237 | CL81107 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *90 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *88 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *92 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *95 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: B-714-121118-A 3FT
Date Sampled: 12/11/18 08:23
Percent Solids: 87
Initial Volume: 20
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812257
ESS Laboratory Sample ID: 1812257-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 12/11/18 16:37

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.06) | | 8082A | | 1 | 12/12/18 14:26 | C8L0237 | CL81107 |
| Aroclor 1221 | ND (0.06) | | 8082A | | 1 | 12/12/18 14:26 | C8L0237 | CL81107 |
| Aroclor 1232 | ND (0.06) | | 8082A | | 1 | 12/12/18 14:26 | C8L0237 | CL81107 |
| Aroclor 1242 | ND (0.06) | | 8082A | | 1 | 12/12/18 14:26 | C8L0237 | CL81107 |
| Aroclor 1248 | ND (0.06) | | 8082A | | 1 | 12/12/18 14:26 | C8L0237 | CL81107 |
| **Aroclor 1254 [2C]** | **0.2** (0.06) | | 8082A | | 1 | 12/12/18 14:26 | C8L0237 | CL81107 |
| Aroclor 1260 | ND (0.06) | | 8082A | | 1 | 12/12/18 14:26 | C8L0237 | CL81107 |
| Aroclor 1262 | ND (0.06) | | 8082A | | 1 | 12/12/18 14:26 | C8L0237 | CL81107 |
| Aroclor 1268 | ND (0.06) | | 8082A | | 1 | 12/12/18 14:26 | C8L0237 | CL81107 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *79 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *78 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *87 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *93 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812257

# Quality Control Data

| Analyte | Result | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| 8082A Polychlorinated Biphenyls (PCB) | | | | | | | | | | |
| **Batch CL81107 - 3540C** | | | | | | | | | | |
| **Blank** | | | | | | | | | | |
| Aroclor 1016 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1016 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1221 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1221 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1232 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1232 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1242 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1242 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1248 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1248 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1254 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1254 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1260 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1260 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1262 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1262 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1268 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1268 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| *Surrogate: Decachlorobiphenyl* | *0.0165* | | mg/kg wet | *0.02500* | | *66* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0171* | | mg/kg wet | *0.02500* | | *68* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0201* | | mg/kg wet | *0.02500* | | *80* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0202* | | mg/kg wet | *0.02500* | | *81* | *30-150* | | | |
| **LCS** | | | | | | | | | | |
| Aroclor 1016 | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 103 | 40-140 | | | |
| Aroclor 1016 [2C] | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 88 | 40-140 | | | |
| Aroclor 1260 | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 88 | 40-140 | | | |
| Aroclor 1260 [2C] | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 91 | 40-140 | | | |
| *Surrogate: Decachlorobiphenyl* | *0.0193* | | mg/kg wet | *0.02500* | | *77* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0203* | | mg/kg wet | *0.02500* | | *81* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0243* | | mg/kg wet | *0.02500* | | *97* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0214* | | mg/kg wet | *0.02500* | | *86* | *30-150* | | | |
| **LCS Dup** | | | | | | | | | | |
| Aroclor 1016 | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 97 | 40-140 | 6 | 30 | |
| Aroclor 1016 [2C] | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 84 | 40-140 | 5 | 30 | |
| Aroclor 1260 | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 85 | 40-140 | 4 | 30 | |
| Aroclor 1260 [2C] | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 87 | 40-140 | 5 | 30 | |
| *Surrogate: Decachlorobiphenyl* | *0.0194* | | mg/kg wet | *0.02500* | | *78* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0197* | | mg/kg wet | *0.02500* | | *79* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0224* | | mg/kg wet | *0.02500* | | *90* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0201* | | mg/kg wet | *0.02500* | | *80* | *30-150* | | | |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812257

**Notes and Definitions**

| | |
|---|---|
| U | Analyte included in the analysis, but not detected |
| D | Diluted. |
| ND | Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |
| MDL | Method Detection Limit |
| MRL | Method Reporting Limit |
| LOD | Limit of Detection |
| LOQ | Limit of Quantitation |
| DL | Detection Limit |
| I/V | Initial Volume |
| F/V | Final Volume |
| § | Subcontracted analysis; see attached report |
| 1 | Range result excludes concentrations of surrogates and/or internal standards eluting in that range. |
| 2 | Range result excludes concentrations of target analytes eluting in that range. |
| 3 | Range result excludes the concentration of the C9-C10 aromatic range. |
| Avg | Results reported as a mathematical average. |
| NR | No Recovery |
| [CALC] | Calculated Analyte |
| SUB | Subcontracted analysis; see attached report |
| RL | Reporting Limit |
| EDL | Estimated Detection Limit |
| MF | Membrane Filtration |
| MPN | Most Probably Number |
| TNTC | Too numerous to Count |
| CFU | Colony Forming Units |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812257

**ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS**

**ENVIRONMENTAL**

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

# ESS Laboratory Sample and Cooler Receipt Checklist

Client: AEI Consultants, Inc. - TB/MM

Shipped/Delivered Via: Client

ESS Project ID: 1812257
Date Received: 12/11/2018
Project Due Date: 12/13/2018
Days for Project: 2 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: .6 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

| Sample Number | Container ID | Proper Container | Air Bubbles Present | Sufficient Volume | Container Type | Preservative | Record pH (Cyanide and 608 Pesticides) |
|---|---|---|---|---|---|---|---|
| 01 | 301237 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 02 | 301236 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 03 | 301235 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 04 | 301234 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 05 | 301233 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |

**2nd Review**
Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No

Completed By: Date & Time: 12/11/18 11:28
Reviewed By: Date & Time: 12/11/18 1143
Delivered By:

1/1


ESS Laboratory
*Division of Thielsch Engineering, Inc.*
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com


# CHAIN OF CUSTODY

ESS Lab # 1812257

Turn Time Rush 48hr

Regulatory State RI

Reporting Limits See note 1

Is this project for any of the following?: ○CT RCP ○MA MCP ○RGP

Electonic Deliverables ☒Limit Checker ☒Standard Excel ☒Other (Please Specify →) PDF

| Company Name | Project # | Project Name |
|---|---|---|
| AEI | 363655 | BASF Cranston |

| Contact Person | Address |
|---|---|
| Aaron Ting | 112 water St, 5th floor |

| City | State | Zip Code | PO # |
|---|---|---|---|
| Boston | MA | 02109 | |

| Telephone Number | FAX Number | Email Address |
|---|---|---|
| (978) 577-7138 | — | ating@aeiconsultants.com |

| ESS Lab ID | Collection Date | Collection Time | Sample Type | Sample Matrix | Sample ID | Analysis: PCBs (Soxhlet) |
|---|---|---|---|---|---|---|
| 1 | 12/11/18 | 0818 | C | S | B-707-121118-A (4') | X |
| 2 | ↓ | 0819 | ↓ | ↓ | SW-473-121118-A (0-1') | X |
| 3 | ↓ | 0820 | ↓ | ↓ | SW-474-121118-A (0-1') | X |
| 4 | ↓ | 0822 | ↓ | ↓ | B-710-121118-A (3') | X |
| 5 | ↓ | 0823 | ↓ | ↓ | B-714-121118-A (3') | X |

| | | |
|---|---|---|
| Container Type: | AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial | AG |
| Container Volume: | 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* | 9 |
| Preservation Code: | 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Ascorbic Acid 12-Other* | 1 |
| Number of Containers per Sample: | | 1 |

**Laboratory Use Only**

Cooler Present: ✓

Seals Intact: ✓

Cooler Temperature: Ice, 18 °C °C

Sampled by: A Ting

Comments: Please specify "Other" preservative and containers types in this space

Note 1: See project QAPP

| Relinquished by: (Signature, Date & Time) | Received By: (Signature, Date & Time) | Relinquished By: (Signature, Date & Time) | Received By: (Signature, Date & Time) |
|---|---|---|---|
| 12/11/18 1109 | 12/11/18 11:09 | | |
| Relinquished by: (Signature, Date & Time) | Received By: (Signature, Date & Time) | Relinquished By: (Signature, Date & Time) | Received By: (Signature, Date & Time) |
| | | | |

*CERTIFICATE OF ANALYSIS*

Richard Kowalski
AEI Consultants, Inc.
148 Hathaway Road
Dartmouth, MA 02747

**RE: BASF Cranston (363655)**
**ESS Laboratory Work Order Number: 1812355**

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

**REVIEWED**
**By ESS Laboratory at 3:13 pm, Dec 17, 2018**

**Analytical Summary**
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812355

## SAMPLE RECEIPT

The following samples were received on December 13, 2018 for the analyses specified on the enclosed Chain of Custody Record.

| Lab Number | Sample Name | Matrix | Analysis |
|---|---|---|---|
| 1812355-01 | B-826-121318-B 13FT | Soil | 8082A |
| 1812355-02 | B-825-121318-B 13FT | Soil | 8082A |
| 1812355-03 | B-830-121318-B 13FT | Soil | 8082A |
| 1812355-04 | B-835-121318-B 13FT | Soil | 8082A |
| 1812355-05 | B-829-121318-B 13FT | Soil | 8082A |
| 1812355-06 | B-828-121318-B 13FT | Soil | 8082A |
| 1812355-07 | B-833-121318-B 13FT | Soil | 8082A |
| 1812355-08 | B-833-121318-B-1 13FT | Soil | 8082A |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812355

## PROJECT NARRATIVE

**8082A Polychlorinated Biphenyls (PCB)**

1812355-01 **Surrogate recovery(ies) diluted below the MRL (SD).**
Decachlorobiphenyl (% @ 30-150%), Decachlorobiphenyl [2C] (% @ 30-150%), Tetrachloro-m-xylene (% @ 30-150%), Tetrachloro-m-xylene [2C] (% @ 30-150%)

**No other observations noted.**

**End of Project Narrative.**

## DATA USABILITY LINKS

***To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.***

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812355

## CURRENT SW-846 METHODOLOGY VERSIONS

**Analytical Methods**

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH
MADEP 04-2.1 - VPH

**Prep Methods**

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: B-826-121318-B 13FT
Date Sampled: 12/13/18 12:34
Percent Solids: 72
Initial Volume: 19.7
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812355
ESS Laboratory Sample ID: 1812355-01
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 12/13/18 16:56

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (1.4) | | 8082A | | 20 | 12/15/18 10:56 | C8L0311 | CL81451 |
| Aroclor 1221 | ND (1.4) | | 8082A | | 20 | 12/15/18 10:56 | C8L0311 | CL81451 |
| Aroclor 1232 | ND (1.4) | | 8082A | | 20 | 12/15/18 10:56 | C8L0311 | CL81451 |
| **Aroclor 1242** | **11.0** (1.4) | | 8082A | | 20 | 12/15/18 10:56 | C8L0311 | CL81451 |
| Aroclor 1248 | ND (1.4) | | 8082A | | 20 | 12/15/18 10:56 | C8L0311 | CL81451 |
| Aroclor 1254 | ND (1.4) | | 8082A | | 20 | 12/15/18 10:56 | C8L0311 | CL81451 |
| Aroclor 1260 | ND (1.4) | | 8082A | | 20 | 12/15/18 10:56 | C8L0311 | CL81451 |
| Aroclor 1262 | ND (1.4) | | 8082A | | 20 | 12/15/18 10:56 | C8L0311 | CL81451 |
| Aroclor 1268 | ND (1.4) | | 8082A | | 20 | 12/15/18 10:56 | C8L0311 | CL81451 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *%* | *SD* | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *%* | *SD* | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *%* | *SD* | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *%* | *SD* | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: B-825-121318-B 13FT
Date Sampled: 12/13/18 12:36
Percent Solids: 74
Initial Volume: 20.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812355
ESS Laboratory Sample ID: 1812355-02
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 12/13/18 16:56

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.03) | | 8082A | | 1 | 12/15/18 0:46 | C8L0301 | CL81451 |
| Aroclor 1221 | ND (0.03) | | 8082A | | 1 | 12/15/18 0:46 | C8L0301 | CL81451 |
| Aroclor 1232 | ND (0.03) | | 8082A | | 1 | 12/15/18 0:46 | C8L0301 | CL81451 |
| Aroclor 1242 | ND (0.03) | | 8082A | | 1 | 12/15/18 0:46 | C8L0301 | CL81451 |
| Aroclor 1248 | ND (0.03) | | 8082A | | 1 | 12/15/18 0:46 | C8L0301 | CL81451 |
| Aroclor 1254 | ND (0.03) | | 8082A | | 1 | 12/15/18 0:46 | C8L0301 | CL81451 |
| Aroclor 1260 | ND (0.03) | | 8082A | | 1 | 12/15/18 0:46 | C8L0301 | CL81451 |
| Aroclor 1262 | ND (0.03) | | 8082A | | 1 | 12/15/18 0:46 | C8L0301 | CL81451 |
| Aroclor 1268 | ND (0.03) | | 8082A | | 1 | 12/15/18 0:46 | C8L0301 | CL81451 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *82 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *90 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *81 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *86 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: B-830-121318-B 13FT
Date Sampled: 12/13/18 12:37
Percent Solids: 77
Initial Volume: 19.9
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812355
ESS Laboratory Sample ID: 1812355-03
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 12/13/18 16:56

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.03) | | 8082A | | 1 | 12/15/18 3:00 | C8L0301 | CL81451 |
| Aroclor 1221 | ND (0.03) | | 8082A | | 1 | 12/15/18 3:00 | C8L0301 | CL81451 |
| Aroclor 1232 | ND (0.03) | | 8082A | | 1 | 12/15/18 3:00 | C8L0301 | CL81451 |
| Aroclor 1242 | ND (0.03) | | 8082A | | 1 | 12/15/18 3:00 | C8L0301 | CL81451 |
| Aroclor 1248 | ND (0.03) | | 8082A | | 1 | 12/15/18 3:00 | C8L0301 | CL81451 |
| Aroclor 1254 | ND (0.03) | | 8082A | | 1 | 12/15/18 3:00 | C8L0301 | CL81451 |
| Aroclor 1260 | ND (0.03) | | 8082A | | 1 | 12/15/18 3:00 | C8L0301 | CL81451 |
| Aroclor 1262 | ND (0.03) | | 8082A | | 1 | 12/15/18 3:00 | C8L0301 | CL81451 |
| Aroclor 1268 | ND (0.03) | | 8082A | | 1 | 12/15/18 3:00 | C8L0301 | CL81451 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *65 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *72 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *59 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *65 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: B-835-121318-B 13FT
Date Sampled: 12/13/18 12:38
Percent Solids: 72
Initial Volume: 19.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812355
ESS Laboratory Sample ID: 1812355-04
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 12/13/18 16:56

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:19 | C8L0301 | CL81451 |
| Aroclor 1221 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:19 | C8L0301 | CL81451 |
| Aroclor 1232 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:19 | C8L0301 | CL81451 |
| Aroclor 1242 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:19 | C8L0301 | CL81451 |
| **Aroclor 1248** | **0.9** (0.04) | | 8082A | | 1 | 12/15/18 3:19 | C8L0301 | CL81451 |
| Aroclor 1254 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:19 | C8L0301 | CL81451 |
| Aroclor 1260 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:19 | C8L0301 | CL81451 |
| Aroclor 1262 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:19 | C8L0301 | CL81451 |
| Aroclor 1268 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:19 | C8L0301 | CL81451 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *82 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *91 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *75 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *80 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: B-829-121318-B 13FT
Date Sampled: 12/13/18 12:42
Percent Solids: 67
Initial Volume: 19.5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812355
ESS Laboratory Sample ID: 1812355-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 12/13/18 16:56

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:38 | C8L0301 | CL81451 |
| Aroclor 1221 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:38 | C8L0301 | CL81451 |
| Aroclor 1232 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:38 | C8L0301 | CL81451 |
| Aroclor 1242 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:38 | C8L0301 | CL81451 |
| Aroclor 1248 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:38 | C8L0301 | CL81451 |
| Aroclor 1254 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:38 | C8L0301 | CL81451 |
| Aroclor 1260 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:38 | C8L0301 | CL81451 |
| Aroclor 1262 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:38 | C8L0301 | CL81451 |
| Aroclor 1268 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:38 | C8L0301 | CL81451 |

| | %Recovery | Qualifier | Limits |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *65 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *72 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *57 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *62 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: B-828-121318-B 13FT
Date Sampled: 12/13/18 12:46
Percent Solids: 73
Initial Volume: 19.3
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812355
ESS Laboratory Sample ID: 1812355-06
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 12/13/18 16:56

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:57 | C8L0301 | CL81451 |
| Aroclor 1221 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:57 | C8L0301 | CL81451 |
| Aroclor 1232 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:57 | C8L0301 | CL81451 |
| Aroclor 1242 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:57 | C8L0301 | CL81451 |
| **Aroclor 1248 [2C]** | **0.06** (0.04) | | 8082A | | 1 | 12/15/18 3:57 | C8L0301 | CL81451 |
| Aroclor 1254 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:57 | C8L0301 | CL81451 |
| Aroclor 1260 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:57 | C8L0301 | CL81451 |
| Aroclor 1262 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:57 | C8L0301 | CL81451 |
| Aroclor 1268 | ND (0.04) | | 8082A | | 1 | 12/15/18 3:57 | C8L0301 | CL81451 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *77 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *85 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *71 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *77 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: B-833-121318-B 13FT
Date Sampled: 12/13/18 12:47
Percent Solids: 56
Initial Volume: 19.4
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812355
ESS Laboratory Sample ID: 1812355-07
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 12/13/18 16:56

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.05) | | 8082A | | 1 | 12/15/18 4:16 | C8L0301 | CL81451 |
| Aroclor 1221 | ND (0.05) | | 8082A | | 1 | 12/15/18 4:16 | C8L0301 | CL81451 |
| Aroclor 1232 | ND (0.05) | | 8082A | | 1 | 12/15/18 4:16 | C8L0301 | CL81451 |
| Aroclor 1242 | ND (0.05) | | 8082A | | 1 | 12/15/18 4:16 | C8L0301 | CL81451 |
| **Aroclor 1248 [2C]** | **0.3** (0.05) | | 8082A | | 1 | 12/15/18 4:16 | C8L0301 | CL81451 |
| Aroclor 1254 | ND (0.05) | | 8082A | | 1 | 12/15/18 4:16 | C8L0301 | CL81451 |
| Aroclor 1260 | ND (0.05) | | 8082A | | 1 | 12/15/18 4:16 | C8L0301 | CL81451 |
| Aroclor 1262 | ND (0.05) | | 8082A | | 1 | 12/15/18 4:16 | C8L0301 | CL81451 |
| Aroclor 1268 | ND (0.05) | | 8082A | | 1 | 12/15/18 4:16 | C8L0301 | CL81451 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *67 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *78 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *63 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *68 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: B-833-121318-B-1 13FT
Date Sampled: 12/13/18 12:47
Percent Solids: 57
Initial Volume: 19.2
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812355
ESS Laboratory Sample ID: 1812355-08
Sample Matrix: Soil
Units: mg/kg dry
Analyst: CAD
Prepared: 12/13/18 16:56

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.05) | | 8082A | | 1 | 12/15/18 5:14 | C8L0301 | CL81451 |
| Aroclor 1221 | ND (0.05) | | 8082A | | 1 | 12/15/18 5:14 | C8L0301 | CL81451 |
| Aroclor 1232 | ND (0.05) | | 8082A | | 1 | 12/15/18 5:14 | C8L0301 | CL81451 |
| Aroclor 1242 | ND (0.05) | | 8082A | | 1 | 12/15/18 5:14 | C8L0301 | CL81451 |
| **Aroclor 1248 [2C]** | **0.2** (0.05) | | 8082A | | 1 | 12/15/18 5:14 | C8L0301 | CL81451 |
| Aroclor 1254 | ND (0.05) | | 8082A | | 1 | 12/15/18 5:14 | C8L0301 | CL81451 |
| Aroclor 1260 | ND (0.05) | | 8082A | | 1 | 12/15/18 5:14 | C8L0301 | CL81451 |
| Aroclor 1262 | ND (0.05) | | 8082A | | 1 | 12/15/18 5:14 | C8L0301 | CL81451 |
| Aroclor 1268 | ND (0.05) | | 8082A | | 1 | 12/15/18 5:14 | C8L0301 | CL81451 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *78 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *86 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *76 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *81 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812355

# Quality Control Data

| Analyte | Result | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| 8082A Polychlorinated Biphenyls (PCB) | | | | | | | | | | |
| **Batch CL81451 - 3540C** | | | | | | | | | | |
| **Blank** | | | | | | | | | | |
| Aroclor 1016 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1016 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1221 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1221 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1232 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1232 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1242 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1242 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1248 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1248 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1254 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1254 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1260 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1260 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1262 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1262 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1268 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1268 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| *Surrogate: Decachlorobiphenyl* | *0.0203* | | mg/kg wet | *0.02500* | | *81* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0224* | | mg/kg wet | *0.02500* | | *90* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0192* | | mg/kg wet | *0.02500* | | *77* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0207* | | mg/kg wet | *0.02500* | | *83* | *30-150* | | | |
| **LCS** | | | | | | | | | | |
| Aroclor 1016 | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 94 | 40-140 | | | |
| Aroclor 1016 [2C] | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 97 | 40-140 | | | |
| Aroclor 1260 | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 91 | 40-140 | | | |
| Aroclor 1260 [2C] | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 96 | 40-140 | | | |
| *Surrogate: Decachlorobiphenyl* | *0.0211* | | mg/kg wet | *0.02500* | | *84* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0233* | | mg/kg wet | *0.02500* | | *93* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0197* | | mg/kg wet | *0.02500* | | *79* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0204* | | mg/kg wet | *0.02500* | | *82* | *30-150* | | | |
| **LCS Dup** | | | | | | | | | | |
| Aroclor 1016 | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 83 | 40-140 | 12 | 30 | |
| Aroclor 1016 [2C] | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 86 | 40-140 | 12 | 30 | |
| Aroclor 1260 | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 81 | 40-140 | 12 | 30 | |
| Aroclor 1260 [2C] | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 84 | 40-140 | 14 | 30 | |
| *Surrogate: Decachlorobiphenyl* | *0.0188* | | mg/kg wet | *0.02500* | | *75* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0207* | | mg/kg wet | *0.02500* | | *83* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0179* | | mg/kg wet | *0.02500* | | *71* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0184* | | mg/kg wet | *0.02500* | | *74* | *30-150* | | | |
| **Matrix Spike** **Source: 1812355-07** | | | | | | | | | | |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812355

# Quality Control Data

| Analyte | Result | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| 8082A Polychlorinated Biphenyls (PCB) | | | | | | | | | | |
| **Batch CL81451 - 3540C** | | | | | | | | | | |
| Aroclor 1016 | 1.0 | 0.05 | mg/kg dry | 0.9244 | ND | 113 | 40-140 | | | |
| Aroclor 1016 [2C] | 1.0 | 0.05 | mg/kg dry | 0.9244 | ND | 113 | 40-140 | | | |
| Aroclor 1260 | 0.8 | 0.05 | mg/kg dry | 0.9244 | ND | 83 | 40-140 | | | |
| Aroclor 1260 [2C] | 0.8 | 0.05 | mg/kg dry | 0.9244 | ND | 81 | 40-140 | | | |
| *Surrogate: Decachlorobiphenyl* | *0.0336* | | mg/kg dry | *0.04622* | | *73* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0357* | | mg/kg dry | *0.04622* | | *77* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0321* | | mg/kg dry | *0.04622* | | *69* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0332* | | mg/kg dry | *0.04622* | | *72* | *30-150* | | | |
| **Matrix Spike Dup Source: 1812355-07** | | | | | | | | | | |
| Aroclor 1016 | 1.2 | 0.05 | mg/kg dry | 0.9292 | ND | 129 | 40-140 | 14 | 30 | |
| Aroclor 1016 [2C] | 1.2 | 0.05 | mg/kg dry | 0.9292 | ND | 129 | 40-140 | 14 | 30 | |
| Aroclor 1260 | 0.8 | 0.05 | mg/kg dry | 0.9292 | ND | 88 | 40-140 | 6 | 30 | |
| Aroclor 1260 [2C] | 0.8 | 0.05 | mg/kg dry | 0.9292 | ND | 88 | 40-140 | 9 | 30 | |
| *Surrogate: Decachlorobiphenyl* | *0.0354* | | mg/kg dry | *0.04646* | | *76* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0386* | | mg/kg dry | *0.04646* | | *83* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0344* | | mg/kg dry | *0.04646* | | *74* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0353* | | mg/kg dry | *0.04646* | | *76* | *30-150* | | | |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812355

**Notes and Definitions**

| | |
|---|---|
| U | Analyte included in the analysis, but not detected |
| SD | Surrogate recovery(ies) diluted below the MRL (SD). |
| D | Diluted. |
| ND | Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |
| MDL | Method Detection Limit |
| MRL | Method Reporting Limit |
| LOD | Limit of Detection |
| LOQ | Limit of Quantitation |
| DL | Detection Limit |
| I/V | Initial Volume |
| F/V | Final Volume |
| § | Subcontracted analysis; see attached report |
| 1 | Range result excludes concentrations of surrogates and/or internal standards eluting in that range. |
| 2 | Range result excludes concentrations of target analytes eluting in that range. |
| 3 | Range result excludes the concentration of the C9-C10 aromatic range. |
| Avg | Results reported as a mathematical average. |
| NR | No Recovery |
| [CALC] | Calculated Analyte |
| SUB | Subcontracted analysis; see attached report |
| RL | Reporting Limit |
| EDL | Estimated Detection Limit |
| MF | Membrane Filtration |
| MPN | Most Probably Number |
| TNTC | Too numerous to Count |
| CFU | Colony Forming Units |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812355

**ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS**

**ENVIRONMENTAL**

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

# ESS Laboratory Sample and Cooler Receipt Checklist

Client: AEI Consultants, Inc. - TB/MM

Shipped/Delivered Via: Client

ESS Project ID: 1812355
Date Received: 12/13/2018
Project Due Date: 12/17/2018
Days for Project: 2 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.2 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

| Sample Number | Container ID | Proper Container | Air Bubbles Present | Sufficient Volume | Container Type | Preservative | Record pH (Cyanide and 608 Pesticides) |
|---|---|---|---|---|---|---|---|
| 01 | 302961 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 02 | 302960 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 03 | 302959 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 04 | 302958 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 05 | 302957 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 06 | 302956 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 07 | 302955 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 07 | 302962 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 07 | 302963 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 08 | 302954 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |

**2nd Review**
Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No

Completed By: Date & Time: 12/13/18 1453
Reviewed By: Date & Time: 12/13/18 1459
Delivered By: 12/13/18 1459

1/1

# ESS Laboratory

*Division of Thielsch Engineering, Inc.*
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

## CHAIN OF CUSTODY

| | |
|---|---|
| ESS Lab # | 1812355 |
| Reporting Limits | See note 1 |
| Electonic Deliverables | ☒ Limit Checker ☒ Standard Excel ☒ Other (Please Specify →) PDF |

Turn Time: Rush 48hr
Regulatory State: RI
Is this project for any of the following?: ○ CT RCP ○ MA MCP ○ RGP

| | |
|---|---|
| Company Name | AEI |
| Contact Person | Aaron Ting |
| Project # | 363655 |
| Project Name | BASF Cranston |
| Address | 112 water St, 5th floor |
| City | Boston |
| State | MA |
| Zip Code | 02109 |
| PO # | |
| Telephone Number | (978) 577-7138 |
| FAX Number | |
| Email Address | ating@aeiconsultants.com |

| ESS Lab ID | Collection Date | Collection Time | Sample Type | Sample Matrix | Sample ID | Analysis: PCBs (Soxhlet) |
|---|---|---|---|---|---|---|
| 1 | 12/13/18 | 1234 | C | S | B-826-121318-B (13') | X |
| 2 | | 1236 | | | B-825-121318-B (13') | X |
| 3 | | 1237 | | | B-830-121318-B (13') | X |
| 4 | | 1238 | | | B-835-121318-B (13') | X |
| 5 | | 1242 | | | B-829-121318-B (13') | X |
| 6 | | 1246 | | | B-828-121318-B (13') | X |
| 7 | | 1247 | | | B-833-121318-B (13') | X |
| 8 | | 1247 | | | B-833-121318-B-1 (13') | X |
| 7 | | 1247 | | | B-833-121318-B (13') MS/MSD | X |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Container Type: | AC-Air Cassette | AG-Amber Glass | B-BOD Bottle | C-Cubitainer | G - Glass | O-Other | P-Poly | S-Sterile | V-Vial | AG | | |
| Container Volume: | 1-100 mL | 2-2.5 gal | 3-250 mL | 4-300 mL | 5-500 mL | 6-1L | 7-VOA | 8-2 oz | 9-4 oz | 10-8 oz | 11-Other* | 9 |
| Preservation Code: | 1-Non Preserved | 2-HCl | 3-H2SO4 | 4-HNO3 | 5-NaOH | 6-Methanol | 7-Na2S2O3 | 8-ZnAce, NaOH | 9-NH4Cl | 10-DI H2O | 11-Ascorbic Acid | 12-Other* |
| Number of Containers per Sample: | | | | | | | | | | | | 1 |

**Laboratory Use Only**

Cooler Present: yes
Seals Intact: ye
Cooler Temperature: 3.2 °C

Sampled by: A Ting

Comments: Please specify "Other" preservative and containers types in this space

Note 1: See project QAPP

| Relinquished by: (Signature, Date & Time) | Received By: (Signature, Date & Time) | Relinquished By: (Signature, Date & Time) | Received By: (Signature, Date & Time) |
|---|---|---|---|
| Joseph D Drel 12/13/18 14:36 | 12/13/18 1437 | | |
| Relinquished by: (Signature, Date & Time) | Received By: (Signature, Date & Time) | Relinquished By: (Signature, Date & Time) | Received By: (Signature, Date & Time) |
| | | | |

*CERTIFICATE OF ANALYSIS*

Richard Kowalski
AEI Consultants, Inc.
148 Hathaway Road
Dartmouth, MA 02747

**RE: BASF Cranston (363655)**
**ESS Laboratory Work Order Number: 1812442**

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

**REVIEWED**
**By ESS Laboratory at 12:08 pm, Dec 19, 2018**

**Analytical Summary**
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812442

## SAMPLE RECEIPT

The following samples were received on December 17, 2018 for the analyses specified on the enclosed Chain of Custody Record.

| Lab Number | Sample Name | Matrix | Analysis |
|---|---|---|---|
| 1812442-01 | B-947-121718 2 ft | Solid | 8082A |
| 1812442-02 | B-948-121718 2 ft | Solid | 8082A |
| 1812442-03 | B-949-121718 2 ft | Solid | 8082A |
| 1812442-04 | B-949-121718-1 2 ft | Solid | 8082A |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812442

## PROJECT NARRATIVE

**8082A Polychlorinated Biphenyls (PCB)**

CL81709-MS1 **Matrix Spike recovery is below lower control limit (M-).**
Aroclor 1016 [2C] (39% @ 40-140%)

**No other observations noted.**

**End of Project Narrative.**

## DATA USABILITY LINKS

***To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.***

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812442

## CURRENT SW-846 METHODOLOGY VERSIONS

**Analytical Methods**

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH
MADEP 04-2.1 - VPH

**Prep Methods**

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: B-947-121718 2 ft
Date Sampled: 12/17/18 10:30
Percent Solids: 94
Initial Volume: 5
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812442
ESS Laboratory Sample ID: 1812442-01
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 12/17/18 17:56

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:20 | C8L0384 | CL81709 |
| Aroclor 1221 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:20 | C8L0384 | CL81709 |
| Aroclor 1232 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:20 | C8L0384 | CL81709 |
| Aroclor 1242 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:20 | C8L0384 | CL81709 |
| Aroclor 1248 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:20 | C8L0384 | CL81709 |
| Aroclor 1254 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:20 | C8L0384 | CL81709 |
| Aroclor 1260 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:20 | C8L0384 | CL81709 |
| Aroclor 1262 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:20 | C8L0384 | CL81709 |
| Aroclor 1268 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:20 | C8L0384 | CL81709 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *66 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *67 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *63 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *61 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: B-948-121718 2 ft
Date Sampled: 12/17/18 10:35
Percent Solids: 93
Initial Volume: 5.03
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812442
ESS Laboratory Sample ID: 1812442-02
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 12/17/18 17:56

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:37 | C8L0384 | CL81709 |
| Aroclor 1221 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:37 | C8L0384 | CL81709 |
| Aroclor 1232 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:37 | C8L0384 | CL81709 |
| Aroclor 1242 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:37 | C8L0384 | CL81709 |
| Aroclor 1248 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:37 | C8L0384 | CL81709 |
| Aroclor 1254 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:37 | C8L0384 | CL81709 |
| Aroclor 1260 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:37 | C8L0384 | CL81709 |
| Aroclor 1262 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:37 | C8L0384 | CL81709 |
| Aroclor 1268 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:37 | C8L0384 | CL81709 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *86 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *88 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *85 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *83 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: B-949-121718 2 ft
Date Sampled: 12/17/18 10:40
Percent Solids: 94
Initial Volume: 5.18
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812442
ESS Laboratory Sample ID: 1812442-03
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 12/17/18 17:56

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:56 | C8L0384 | CL81709 |
| Aroclor 1221 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:56 | C8L0384 | CL81709 |
| Aroclor 1232 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:56 | C8L0384 | CL81709 |
| Aroclor 1242 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:56 | C8L0384 | CL81709 |
| Aroclor 1248 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:56 | C8L0384 | CL81709 |
| Aroclor 1254 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:56 | C8L0384 | CL81709 |
| Aroclor 1260 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:56 | C8L0384 | CL81709 |
| Aroclor 1262 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:56 | C8L0384 | CL81709 |
| Aroclor 1268 | ND (0.1) | | 8082A | | 1 | 12/18/18 12:56 | C8L0384 | CL81709 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *93 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *94 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *95 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *91 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston
Client Sample ID: B-949-121718-1 2 ft
Date Sampled: 12/17/18 10:40
Percent Solids: 95
Initial Volume: 5.06
Final Volume: 10
Extraction Method: 3540C

ESS Laboratory Work Order: 1812442
ESS Laboratory Sample ID: 1812442-04
Sample Matrix: Solid
Units: mg/kg dry
Analyst: CAD
Prepared: 12/17/18 17:56

## 8082A Polychlorinated Biphenyls (PCB)

| Analyte | Results (MRL) | MDL | Method | Limit | DF | Analyzed | Sequence | Batch |
|---|---|---|---|---|---|---|---|---|
| Aroclor 1016 | ND (0.1) | | 8082A | | 1 | 12/18/18 13:53 | C8L0384 | CL81709 |
| Aroclor 1221 | ND (0.1) | | 8082A | | 1 | 12/18/18 13:53 | C8L0384 | CL81709 |
| Aroclor 1232 | ND (0.1) | | 8082A | | 1 | 12/18/18 13:53 | C8L0384 | CL81709 |
| Aroclor 1242 | ND (0.1) | | 8082A | | 1 | 12/18/18 13:53 | C8L0384 | CL81709 |
| Aroclor 1248 | ND (0.1) | | 8082A | | 1 | 12/18/18 13:53 | C8L0384 | CL81709 |
| Aroclor 1254 | ND (0.1) | | 8082A | | 1 | 12/18/18 13:53 | C8L0384 | CL81709 |
| Aroclor 1260 | ND (0.1) | | 8082A | | 1 | 12/18/18 13:53 | C8L0384 | CL81709 |
| Aroclor 1262 | ND (0.1) | | 8082A | | 1 | 12/18/18 13:53 | C8L0384 | CL81709 |
| Aroclor 1268 | ND (0.1) | | 8082A | | 1 | 12/18/18 13:53 | C8L0384 | CL81709 |

| | *%Recovery* | *Qualifier* | *Limits* |
|---|---|---|---|
| *Surrogate: Decachlorobiphenyl* | *66 %* | | *30-150* |
| *Surrogate: Decachlorobiphenyl [2C]* | *64 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene* | *62 %* | | *30-150* |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *61 %* | | *30-150* |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812442

# Quality Control Data

| Analyte | Result | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| 8082A Polychlorinated Biphenyls (PCB) | | | | | | | | | | |
| **Batch CL81709 - 3540C** | | | | | | | | | | |
| **Blank** | | | | | | | | | | |
| Aroclor 1016 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1016 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1221 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1221 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1232 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1232 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1242 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1242 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1248 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1248 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1254 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1254 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1260 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1260 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1262 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1262 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1268 | ND | 0.02 | mg/kg wet | | | | | | | |
| Aroclor 1268 [2C] | ND | 0.02 | mg/kg wet | | | | | | | |
| *Surrogate: Decachlorobiphenyl* | *0.0222* | | mg/kg wet | *0.02500* | | *89* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0221* | | mg/kg wet | *0.02500* | | *88* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0217* | | mg/kg wet | *0.02500* | | *87* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0208* | | mg/kg wet | *0.02500* | | *83* | *30-150* | | | |
| **LCS** | | | | | | | | | | |
| Aroclor 1016 | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 98 | 40-140 | | | |
| Aroclor 1016 [2C] | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 83 | 40-140 | | | |
| Aroclor 1260 | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 90 | 40-140 | | | |
| Aroclor 1260 [2C] | 0.4 | 0.02 | mg/kg wet | 0.5000 | | 88 | 40-140 | | | |
| *Surrogate: Decachlorobiphenyl* | *0.0227* | | mg/kg wet | *0.02500* | | *91* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0228* | | mg/kg wet | *0.02500* | | *91* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0239* | | mg/kg wet | *0.02500* | | *96* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0205* | | mg/kg wet | *0.02500* | | *82* | *30-150* | | | |
| **LCS Dup** | | | | | | | | | | |
| Aroclor 1016 | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 106 | 40-140 | 8 | 30 | |
| Aroclor 1016 [2C] | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 91 | 40-140 | 9 | 30 | |
| Aroclor 1260 | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 98 | 40-140 | 9 | 30 | |
| Aroclor 1260 [2C] | 0.5 | 0.02 | mg/kg wet | 0.5000 | | 96 | 40-140 | 9 | 30 | |
| *Surrogate: Decachlorobiphenyl* | *0.0247* | | mg/kg wet | *0.02500* | | *99* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0249* | | mg/kg wet | *0.02500* | | *100* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0267* | | mg/kg wet | *0.02500* | | *107* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0229* | | mg/kg wet | *0.02500* | | *92* | *30-150* | | | |
| **Matrix Spike** **Source: 1812442-03** | | | | | | | | | | |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812442

# Quality Control Data

| Analyte | Result | MRL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Qualifier |
|---|---|---|---|---|---|---|---|---|---|---|
| 8082A Polychlorinated Biphenyls (PCB) | | | | | | | | | | |
| **Batch CL81709 - 3540C** | | | | | | | | | | |
| Aroclor 1016 | 1.0 | 0.1 | mg/kg dry | 2.121 | ND | 47 | 40-140 | | | |
| Aroclor 1016 [2C] | 0.8 | 0.1 | mg/kg dry | 2.121 | ND | 39 | 40-140 | | | M- |
| Aroclor 1260 | 1.0 | 0.1 | mg/kg dry | 2.121 | ND | 47 | 40-140 | | | |
| Aroclor 1260 [2C] | 1.0 | 0.1 | mg/kg dry | 2.121 | ND | 46 | 40-140 | | | |
| *Surrogate: Decachlorobiphenyl* | *0.0648* | | mg/kg dry | *0.1061* | | *61* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0630* | | mg/kg dry | *0.1061* | | *59* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0643* | | mg/kg dry | *0.1061* | | *61* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0577* | | mg/kg dry | *0.1061* | | *54* | *30-150* | | | |
| **Matrix Spike Dup Source: 1812442-03** | | | | | | | | | | |
| Aroclor 1016 | 1.2 | 0.1 | mg/kg dry | 2.113 | ND | 59 | 40-140 | 22 | 30 | |
| Aroclor 1016 [2C] | 1.0 | 0.1 | mg/kg dry | 2.113 | ND | 49 | 40-140 | 21 | 30 | |
| Aroclor 1260 | 1.2 | 0.1 | mg/kg dry | 2.113 | ND | 58 | 40-140 | 21 | 30 | |
| Aroclor 1260 [2C] | 1.2 | 0.1 | mg/kg dry | 2.113 | ND | 57 | 40-140 | 21 | 30 | |
| *Surrogate: Decachlorobiphenyl* | *0.0759* | | mg/kg dry | *0.1056* | | *72* | *30-150* | | | |
| *Surrogate: Decachlorobiphenyl [2C]* | *0.0747* | | mg/kg dry | *0.1056* | | *71* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene* | *0.0772* | | mg/kg dry | *0.1056* | | *73* | *30-150* | | | |
| *Surrogate: Tetrachloro-m-xylene [2C]* | *0.0693* | | mg/kg dry | *0.1056* | | *66* | *30-150* | | | |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812442

**Notes and Definitions**

| | |
|---|---|
| U | Analyte included in the analysis, but not detected |
| M- | Matrix Spike recovery is below lower control limit (M-). |
| ND | Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes |
| dry | Sample results reported on a dry weight basis |
| RPD | Relative Percent Difference |
| MDL | Method Detection Limit |
| MRL | Method Reporting Limit |
| LOD | Limit of Detection |
| LOQ | Limit of Quantitation |
| DL | Detection Limit |
| I/V | Initial Volume |
| F/V | Final Volume |
| § | Subcontracted analysis; see attached report |
| 1 | Range result excludes concentrations of surrogates and/or internal standards eluting in that range. |
| 2 | Range result excludes concentrations of target analytes eluting in that range. |
| 3 | Range result excludes the concentration of the C9-C10 aromatic range. |
| Avg | Results reported as a mathematical average. |
| NR | No Recovery |
| [CALC] | Calculated Analyte |
| SUB | Subcontracted analysis; see attached report |
| RL | Reporting Limit |
| EDL | Estimated Detection Limit |
| MF | Membrane Filtration |
| MPN | Most Probably Number |
| TNTC | Too numerous to Count |
| CFU | Colony Forming Units |

*CERTIFICATE OF ANALYSIS*

Client Name: AEI Consultants, Inc.
Client Project ID: BASF Cranston

ESS Laboratory Work Order: 1812442

**ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS**

**ENVIRONMENTAL**

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

# ESS Laboratory Sample and Cooler Receipt Checklist

Client: AEI Consultants, Inc. - TB/MM

Shipped/Delivered Via: ESS Courier

ESS Project ID: 1812442
Date Received: 12/17/2018
Project Due Date: 12/26/2018
Days for Project: ~~5 Day~~ 2 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 5.5 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

| Sample Number | Container ID | Proper Container | Air Bubbles Present | Sufficient Volume | Container Type | Preservative | Record pH (Cyanide and 608 Pesticides) |
|---|---|---|---|---|---|---|---|
| 01 | 304396 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 02 | 304395 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 03 | 304391 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 03 | 304392 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 03 | 304394 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |
| 04 | 304393 | Yes | NA | Yes | 4 oz. Jar - Unpres | NP | |

**2nd Review**
Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No

Completed By: Date & Time: 12/17/18 1611
Reviewed By: Date & Time: 12/17/18 1615
Delivered By: 12/17/18 1615

**ESS Laboratory**
*Division of Thielsch Engineering, Inc.*
185 Frances Avenue, Cranston RI 02910
Tel. (401) 461-7181 Fax (401) 461-4486
www.esslaboratory.com

# CHAIN OF CUSTODY

| | |
|---|---|
| ESS Lab # | 1812442 |
| Reporting Limits | See note 1 |
| Electonic Deliverables | ☒ Limit Checker ☒ Standard Exc ☒ Other (Please Specify →) PDF |

Turn Time: Rush 48hr
Regulatory State: RI
Is this project for any of the following?: ○ CT RCP ○ MA MCP ○ RGP

| | |
|---|---|
| Company Name | AEI |
| Contact Person | Aaron Ting |
| Project # | 363655 |
| Project Name | BASF Cranston |
| Address | 112 water St, 5th floor |
| City | Boston |
| State | MA |
| Zip Code | 02109 |
| PO # | |
| Telephone Number | (978) 577-7138 |
| FAX Number | |
| Email Address | ating@aeiconsultants.com |

| ESS Lab ID | Collection Date | Collection Time | Sample Type | Sample Matrix | Sample ID | Analysis: PCBs (Soxhlet) |
|---|---|---|---|---|---|---|
| 1 | 12/17/18 | 10 30 | G | Concrete | B-947-121718 (2') | X |
| 2 | 12/17/18 | 10 35 | ↓ | ↓ | B-948-121718 (2') | X |
| 3 | 12/17/18 | 1040 | ↓ | ↓ | B-949-121718 (2') | X |
| 4 | 12/17/18 | 10 40 | ↓ | ↓ | B-949-121718-1 (2') | X |
| 3 | 12/17/18 | 1040 | ↓ | ↓ | B-949-121718 (2') ms/msD | X |

| | | |
|---|---|---|
| Container Type: | AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer G - Glass O-Other P-Poly S-Sterile V-Vial | AG |
| Container Volume: | 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* | 9 |
| Preservation Code: | 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Ascorbic Acid 12-Other* | 1 |
| Number of Containers per Sample: | | 1 |

**Laboratory Use Only**
Cooler Present: ✓
Seals Intact: –
Cooler Temperature: Ice 5.5 °C

Sampled by: A Ting
Comments: Please specify "Other" preservative and containers types in this sp
Note 1: See project QAPP

| Relinquished by: (Signature, Date & Time) | Received By: (Signature, Date & Time) | Relinquished By: (Signature, Date & Time) | Received By: (Signatur |
|---|---|---|---|
| Joseph D Drehn 12/17/18 15:37 | 12/17/18 15:33 | | |
| Relinquished by: (Signature, Date & Time) | Received By: (Signature, Date & Time) | Relinquished By: (Signature, Date & Time) | Received By: (Signatur |
| | | | |

**APPENDIX G**

**Disposal Documentation (on CD)**

DRAFT

AEI Consultants

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003736828 GBF

5. Generator's Name and Mailing Address
BASF CORPORATION
100 PARK AVE
FLORHAM PARK NJ 07932
Generator's Phone: (973)245-5269

Generator's Site Address (if different than mailing address)
BASF CORP
180 MILL STREET
CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: ALD000622464

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)852-9721
U.S. EPA ID Number: ALD000622464

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 1 | DT | 24694 | K | |
| | 2. | | | M | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/5/2018 PW
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074159 JJK 20018

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

GENERATOR

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

INT'L

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Markus Sturdivant | Signature | Month 10 | Day 10 | Year 18
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

TRANSPORTER

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Add recv'd kg. wt. 10.10.18 Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

DESIGNATED FACILITY

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H192 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Quandria Green | Signature | Month 10 | Day 10 | Year 18

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

**DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)**

OVER WEIGHT

(3)

CWM, INC. - EMELLE ***** Receipt # 537588 ***** Page - 1

Date/Time In 10/10/18 9:38
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 84920.00
Tare 30480 .00
Net .00
Adj. 54440 .00
Adj. Net .00

Truck Number 653084 Trailer/Contnr #1 707227 #2 #3

24694

| Rcpt Ln# | Doc Ln# | Document Number | Profile Sales | Profile Invoicing | Generator Customer | Cnt # | Cnt Code | Total Quan. | W V | DCS Units | PCB | Sched Cat | Federal EPA Waste Status | ADEM # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 003736820GBF | 404803AL | BASF CORP CRANSTON RI | | 1 | DT | 1.00 | K | Kilogram | Y | PLFB | PX Undeterminable | 022920-0013 |

SUBCC Value - SUBCC Not Found

Doc Seq # 1 EME STRATEGIC ENVIRONMENTAL SVC P.O. Num COD Req'd

>51% OR <51% DEBRIS (CIRCLE)
PREFILLED VAULT Y OR N (CIRCLE)
>51% OR <51% MAC 10% INSPECTION (CIRCLE)
BULK MATERIAL ONLY:
SAMPLED/INSPECTED_____ FREE LIQUIDS DETECTED? YES / NO
SELECT MATERIAL/NON-SELECT MATERIAL_____ WIND DISPERSAL MATERIAL? YES / NO

PHYSICAL DESCRIPTION OF WASTE: SAMPLER/APPROVAL_____

SPOT SAMPLE:_____B18- _____ | PHYS. DESCRIPTION_____
RAD.SCREEN POS NEG |
IGN.SCREEN POS NEG
H20 SOL. S F PT/SOL |
H20 RXN/TEMP. INITIAL NO RXN REACTS___ |
H20 RXN/TEMP. 5MIN. NO RXN REACTS
ph (PAPER)_____ |
CN_SCREEN + - (PRUSSIAN BLUE)_ __ _ |
CN SCREEN + - (CYANTESMO)
SULFIDE SCREEN + -
ADDITIONAL ANALYTICAL REQ'D?_Y_N_____
DESCRIBE:_____
PCB CONC.(PPM)_____ SULFIDE (9030)_____
%H20 BY KF_____ CYANIDE (9010C)_____ TAB WASTE Y N
PAINT FILTER TEST/ P F SPEC. GRAVITY_____BNZ CONC.____PPM
COMMENTS:(SAFETY/OPERATIONAL)_____

COMPAT. TEST W/_____OK___RXN__

ADD'L SPOT SAMPLE ATTACHED?_Y_N_____
DISPOSAL METHOD: S SP ST-3 ST-3/PT P-ST-3 P-ST-3/PT ST-5 ST-5/PT P-ST-5 S01-PTA B-PIN OTHER_____
P-ST-5/PT ST-8 ST-8/PT MIC MAC (MAC INSPECT) F INC SP-VS PCB-MAC P-MAC
P-ST-8 P-ST-8/PT VS-3 VS-5 VS-8
INDICATOR PARAMETER WILL BE CIRCLED
B-MAC LOADS REQUIRING INSPECTION THAT ARE FOUND TO BE LESS THAN 51% MUST
BE RETURNED TO LAB AND PLACED ON HOLD._____
RELEASED FOR DISPOSAL BY:_____DATE:_____

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003736829 GBF

5. Generator's Name and Mailing Address
BASF CORPORATION
100 PARK AVE
FLORHAM PARK NJ 07932
Generator's Phone: (973)245-5289

Generator's Site Address (if different than mailing address)
BASF CORP
180 MILL STREET
CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: ALD000622464

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 1 | DT | 21142 | K | |
| | 2. | | | CY | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/5/2018 PW 2/2018
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074159 JJK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials

| Transporter 1 Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| Ryan Buchanan | Ryan Buchanan | 10 | 10 | 18 |
| Transporter 2 Printed/Typed Name | Signature | Month | Day | Year |
| | | | | |

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Add rec'd kg wt. 10·10·18 Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H192 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Aquandria Green | Signature | Month 10 | Day 10 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

**DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)**

(2)

k2B

CWM, INC. - EMELLE ***** Receipt # 537589 ***** Page - 1

Date/Time In 10/10/18 9:44
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 79300.00
Tare 32680.00
Net .00
Adj. 46620.00
Adj. Net .00

Truck Number L14 Trailer/Contnr #1 707228 #2 #3

21147

| Rcpt Ln# | Doc Ln# | Document Number | Profile Sales | Profile Generator Invoicing Customer | Cnt # | Cat Code | Total Quan. | W V | DCS Units | PCB | Sched Cat | Federal EPA Waste Status | ADEM # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 003736829GBF | 404803AL | BASF CORP CRANSTON RI | 1 | DT | 1.00 | K | Kilogram | Y | PLFB | PX Undeterminable | 022920-0013 |
| | | | | | | | SUBCC Value - SUBCC Not Found | | | | | | |

Doc Seq # 1 EME STRATEGIC ENVIRONMENTAL SVC P.O. Num COD Req'd

>51% OR <51% DEBRIS (CIRCLE)
PREFILLED VAULT Y OR N (CIRCLE)
>51% OR <51% MAC 10% INSPECTION (CIRCLE)
BULK MATERIAL ONLY:
SAMPLED/INSPECTED_____ FREE LIQUIDS DETECTED? YES / NO
SELECT MATERIAL/NON-SELECT MATERIAL_____ WIND DISPERSAL MATERIAL? YES / NO

PHYSICAL DESCRIPTION OF WASTE: SAMPLER/APPROVAL_____

SPOT SAMPLE:_____B18-_____ | PHYS. DESCRIPTION_____
RAD.SCREEN POS NEG
IGN.SCREEN POS NEG
H20 SOL. S F PT/SOL
H20 RXN/TEMP. INITIAL NO RXN REACTS___
H20 RXN/TEMP. 5MIN. NO RXN REACTS
ph (PAPER)_____
CN_SCREEN + - (PRUSSIAN BLUE)_ __ _
CN SCREEN + - (CYANTESMO)
SULFIDE SCREEN + -
ADDITIONAL ANALYTICAL REQ'D?_Y_N_____
DESCRIBE:_____
PCB CONC.(PPM)_____ SULFIDE (9030)_____
%H20 BY KF_____ CYANIDE (9010C)_____ TAB WASTE Y N
PAINT FILTER TEST/ P F SPEC. GRAVITY_____ BNZ CONC.____PPM
COMMENTS:(SAFETY/OPERATIONAL)_____

COMPAT. TEST W/_____OK___RXN__

ADD'L SPOT SAMPLE ATTACHED?_Y_N_____
DISPOSAL METHOD: S SP ST-3 ST-3/PT P-ST-3 P-ST-3/PT ST-5 ST-5/PT P-ST-5 S01-PTA B-PIN OTHER_____
P-ST-5/PT ST-8 ST-8/PT MIC MAC (MAC INSPECT) F INC SP-VS PCB-MAC P-MAC
P-ST-8 P-ST-8/PT VS-3 VS-5 VS-8
INDICATOR PARAMETER WILL BE CIRCLED
B-MAC LOADS REQUIRING INSPECTION THAT ARE FOUND TO BE LESS THAN 51% MUST
BE RETURNED TO LAB AND PLACED ON HOLD._____
RELEASED FOR DISPOSAL BY:_____DATE:_____

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of: 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003736830 GBF

5. Generator's Name and Mailing Address
BASF CORPORATION
100 PARK AVE
FLORHAM PARK NJ 07932
Generator's Phone: (973)245-5269

Generator's Site Address (if different than mailing address)
BASF CORP
180 MILL STREET
CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: ALD000622464

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 183
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 1 | DT | 19.015 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/5/2018 PW 200 18
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074159 JJK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Markus Sturdivant | Signature | Month 10 | Day 10 | Year 18
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
ADD rec'd K WT 10/10/18
Manifest Reference Number:
18b. Alternate Facility (or Generator) | U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Derrion D. Rush | Signature | Month 10 | Day 10 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

(1)

CWM, INC. - ENELLE ***** Receipt # 537598 ***** Page - 1

Date/Time In 10/10/18 12:04
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
ENELLE AL

** WEIGHT SUMMARY **
Gross 72340.00
Tare 30,420.00
Net 41,920.00
Adj. .00
Adj. Net 19,015 kg

Truck Number 653084 Trailer/Contnr #1 707227 #2 #3

| Rcpt Ln# | Doc Ln# | Document Number | Profile Sales | Profile Generator Invoicing Customer | Cnt # | Cnt Code | Total Quan. | W V | DCS Units | PCB | Sched Cat | Federal EPA Waste Status | ADEM # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 0037368 30GBF | 404803AL | BASF CORP CRANSTON RI | 1 | DT | 1.00 | K | Kilogram | Y | PLFB | PX Undeterminable | 022920-0013 |

SUBCC Value - SUBCC Not Found

Doc Seq # 1 ENE STRATEGIC ENVIRONMENTAL SVC P.O. Num COD Req'd

>51% OR <51% DEBRIS (CIRCLE)
PREFILLED VAULT Y OR N (CIRCLE)
>51% OR <51% MAC 10% INSPECTION (CIRCLE)
BULK MATERIAL ONLY:
SAMPLED/INSPECTED_____ FREE LIQUIDS DETECTED? YES / NO
SELECT MATERIAL/NON-SELECT MATERIAL_____ WIND DISPERSAL MATERIAL? YES / NO

PHYSICAL DESCRIPTION OF WASTE:_____ SAMPLER/APPROVAL_____

SPOT SAMPLE:____B18-_____ | PHYS. DESCRIPTION_____
RAD.SCREEN POS NEG |
IGN.SCREEN POS NEG
H20 SOL. S F PT/SOL |
H20 RXN/TEMP. INITIAL NO RXN REACTS___ |
H20 RXN/TEMP. 5MIN. NO RXN REACTS
ph (PAPER)_____ |
CN_SCREEN + - (PRUSSIAN BLUE)_ _ _ |
CN SCREEN + - (CYANTESMO)
SULFIDE SCREEN + -
ADDITIONAL ANALYTICAL REQ'D?_Y_N_____
DESCRIBE:_____
PCB CONC.(PPM)_____ SULFIDE (9030)_____
%H20 BY KF_____ CYANIDE (9010C)_____ TAB WASTE Y N
PAINT FILTER TEST/ P F SPEC. GRAVITY_____ BNZ CONC.____PPM
COMMENTS:(SAFETY/OPERATIONAL)_____

COMPAT. TEST W/_____ OK___RXN__

ADD'L SPOT SAMPLE ATTACHED?_Y_N_____
DISPOSAL METHOD: S SP ST-3 ST-3/PT P-ST-3 P-ST-3/PT ST-5 ST-5/PT P-ST-5 S01-PTA B-PIN OTHER_____
P-ST-5/PT ST-8 ST-8/PT MIC MAC (MAC INSPECT) F INC SP-VS PCB-MAC P-MAC
P-ST-8 P-ST-8/PT VS-3 VS-5 VS-8
INDICATOR PARAMETER WILL BE CIRCLED
B-MAC LOADS REQUIRING INSPECTION THAT ARE FOUND TO BE LESS THAN 51% MUST
BE RETURNED TO LAB AND PLACED ON HOLD._____
RELEASED FOR DISPOSAL BY:_____ DATE:_____

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003736831 GBF

5. Generator's Name and Mailing Address
BASF CORPORATION
100 PARK AVE
FLORHAM PARK NJ 07932
Generator's Phone: (973)245-6289

Generator's Site Address (if different than mailing address)
BASF CORP
180 MILL STREET
CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: ALD000692464

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 1 | DT | 12,719 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/5/2018 PW 20018
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074159 JJK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Ryan Buchanan | Signature: Ryan Buchanan | Month: 10 | Day: 10 | Year: 18
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
ADD rec'd wt 10/10/18 Manifest Reference Number:
18b. Alternate Facility (or Generator) | U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Derrion D. Ryan | Signature | Month: 10 | Day: 10 | Year: 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

**DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)**

2

CWM, INC. - EMELLE ***** Receipt # 537599 ***** Page - 1

Date/Time In 10/10/18 12:16
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 60400.00
Tare 32,360.00
Net 28,040.00
Adj. .00
Adj. Net 12,719 kg .00

Truck Number L14 Trailer/Contnr #1 707228 #2 #3

| Rcpt Ln# | Doc Ln# | Document Number | Profile Sales | Profile Invoicing Customer | Generator | Cnt # | Cnt Code | Total Quan. | W V | DCS Units | PCB | Sched Cat | Federal EPA Waste Status | ADEM # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 003736831GBF | 404803AL | BASF CORP CRANSTON RI | | 1 | DT | 1.00 | K | Kilogram | Y | PLFB | PX Undeterminable | 022920-0013 |

SUBCC Value - SUBCC Not Found

Doc Seq # 1 EME STRATEGIC ENVIRONMENTAL SVC P.O. Num COD Req'd

>51% OR <51% DEBRIS (CIRCLE)
PREFILLED VAULT Y OR N (CIRCLE)
>51% OR <51% MAC 10% INSPECTION (CIRCLE)
BULK MATERIAL ONLY:
SAMPLED/INSPECTED_____ FREE LIQUIDS DETECTED? YES / NO
SELECT MATERIAL/NON-SELECT MATERIAL_____ WIND DISPERSAL MATERIAL? YES / NO

PHYSICAL DESCRIPTION OF WASTE:_____ SAMPLER/APPROVAL_____

SPOT SAMPLE:_____B18-_____ | PHYS. DESCRIPTION_____
RAD.SCREEN POS NEG
IGN.SCREEN POS NEG
H20 SOL. S F PT/SOL
H20 RXN/TEMP. INITIAL NO RXN REACTS___
H20 RXN/TEMP. 5MIN. NO RXN REACTS
ph (PAPER)_____
CN__SCREEN + - (PRUSSIAN BLUE)_ __ _
CN SCREEN + - (CYANTESMO)
SULFIDE SCREEN + -
ADDITIONAL ANALYTICAL REQ'D?_Y__N_____
DESCRIBE:_____
PCB CONC.(PPM)_____ SULFIDE (9030)_____
%H20 BY KF_____ CYANIDE (9010C)_____ TAB WASTE Y N
PAINT FILTER TEST/ P F SPEC. GRAVITY_____ BNZ CONC.____PPM
COMMENTS:(SAFETY/OPERATIONAL)_____

COMPAT. TEST W/_____OK___RXN__

ADD'L SPOT SAMPLE ATTACHED?__Y__N_____
DISPOSAL METHOD: S SP ST-3 ST-3/PT P-ST-3 P-ST-3/PT ST-5 ST-5/PT P-ST-5 S01-PTA B-PIN OTHER_____
P-ST-5/PT ST-8 ST-8/PT MIC MAC (MAC INSPECT) F INC SP-VS PCB-MAC P-MAC
P-ST-8 P-ST-8/PT VS-3 VS-5 VS-8
INDICATOR PARAMETER WILL BE CIRCLED
B-MAC LOADS REQUIRING INSPECTION THAT ARE FOUND TO BE LESS THAN 51% MUST
BE RETURNED TO LAB AND PLACED ON HOLD._____
RELEASED FOR DISPOSAL BY:_____DATE:_____

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003736833 GBF

5. Generator's Name and Mailing Address
BASF CORPORATION
100 PARK AVE
FLORHAM PARK NJ 07932
Generator's Phone: (973)245-6280

Generator's Site Address (if different than mailing address)
BASF CORP
180 MILL STREET
CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: ALD000622464

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 1 | DT | 17,999 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/5/2018
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074160 JJK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Markus Sturdivant | Signature | Month 10 | Day 10 | Year 18
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
add Recieved Kg weight 10/10/18 T.T. Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Tammy Thrash | Signature: Tammy Thrash | Month 10 | Day 10 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

**DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)**

(1)

k2B

CWM, INC. - EMELLE ***** Receipt # 537607 ***** Page - 1

Date/Time In 10/10/18 15:39
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 70040.00
Tare 30360 .00
Net 39680 .00
Adj. 17,999 Kg .00
Adj. Net .00

Truck Number 653084 Trailer/Contnr #1 707227 #2 #3

| Rcpt Ln# | Doc Ln# | Document Number | Profile Sales | Profile Invoicing | Generator Customer | Cnt # | Cat Code | Total Quan. | W V | DCS Units | PCB | Sched Cat | Federal EPA Waste Status | ADEM # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 003736833GBF | 404803AL | | BASF CORP | 1 | DT | 1.00 | K | Kilogram | Y | PLFB | PX Undeterminable | 022920-0013 |
| | | | | | CRANSTON RI | | | SUBCC Value - SUBCC Not Found | | | | | | |

Doc Seq # 1 EME STRATEGIC ENVIRONMENTAL SVC P.O. Num COD Req'd

>51% OR <51% DEBRIS (CIRCLE)
PREFILLED VAULT Y OR N (CIRCLE)
>51% OR <51% MAC 10% INSPECTION (CIRCLE)
BULK MATERIAL ONLY:
SAMPLED/INSPECTED_____ FREE LIQUIDS DETECTED? YES / NO
SELECT MATERIAL/NON-SELECT MATERIAL_____ WIND DISPERSAL MATERIAL? YES / NO

PHYSICAL DESCRIPTION OF WASTE:_____ SAMPLER/APPROVAL_____

SPOT SAMPLE:_____B18-_____ PHYS. DESCRIPTION_____
RAD.SCREEN POS NEG
IGN.SCREEN POS NEG
H20 SOL. S F PT/SOL
H20 RXN/TEMP. INITIAL NO RXN REACTS___
H20 RXN/TEMP. 5MIN. NO RXN REACTS
ph (PAPER)_____
CN_SCREEN + - (PRUSSIAN BLUE)_ _ _
CN SCREEN + - (CYANTESMO)
SULFIDE SCREEN + -
ADDITIONAL ANALYTICAL REQ'D?_Y_N_____
DESCRIBE:_____
PCB CONC.(PPM)_____ SULFIDE (9030)_____
%H20 BY KF_____ CYANIDE (9010C)_____ TAB WASTE Y N
PAINT FILTER TEST/ P F SPEC. GRAVITY_____ BNZ CONC.____PPM
COMMENTS:(SAFETY/OPERATIONAL)_____

COMPAT. TEST W/_____OK___RXN__

ADD'L SPOT SAMPLE ATTACHED?_Y_N_____
DISPOSAL METHOD: S SP ST-3 ST-3/PT P-ST-3 P-ST-3/PT ST-5 ST-5/PT P-ST-5 S01-PTA B-PIN OTHER_____
P-ST-5/PT ST-8 ST-8/PT MIC MAC (MAC INSPECT) F INC SP-VS PCB-MAC P-MAC
P-ST-8 P-ST-8/PT VS-3 VS-5 VS-8
INDICATOR PARAMETER WILL BE CIRCLED
B-MAC LOADS REQUIRING INSPECTION THAT ARE FOUND TO BE LESS THAN 51% MUST
BE RETURNED TO LAB AND PLACED ON HOLD._____
RELEASED FOR DISPOSAL BY:_____DATE:_____

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003736834 GBF

5. Generator's Name and Mailing Address
BASF CORPORATION
100 PARK AVE
FLORHAM PARK NJ 07932
Generator's Phone: (973)245-5269

Generator's Site Address (if different than mailing address)
BASF CORP
180 MILL STREET
CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: ALD000622464

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 1 | DT | 21083 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/5/2018 PO 30034
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074160 JJK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

GENERATOR

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

INT'L

17. Transporter Acknowledgment of Receipt of Materials

| Transporter 1 Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| Ryan Buchanan | Ryan Buchanan | 10 | 10 | 18 |
| Transporter 2 Printed/Typed Name | Signature | Month | Day | Year |
| | | | | |

TRANSPORTER

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
add recieved Kg weight 10/10/18 T.T. Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

| Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| Tammy Thrash | Tammy Thrash | 10 | 10 | 18 |

DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

**DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)**

k2G

(2)

CWM, INC. - EMELLE ***** Receipt # 537608 ***** Page - 1

Date/Time In 10/10/18 15:45
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 79020.00
Tare 32540 .00
Net 46480 .00
Adj. 21083Kg .00
Adj. Net .00

Truck Number L14 Trailer/Contnr #1 707228 #2 #3

| Rcpt Doc Ln# Ln# | Document Number | Profile Sales | Profile Invoicing | Generator Customer | Cnt # | Cnt Code | Total Quan. | W V | DCS Units | PCB | Sched Cat | Federal EPA Waste Status | ADEM # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 1 | 003736834GBF | 404803AL | BASF CORP CRANSTON RI | | 1 | DT | 1.00 | K | Kilogram | Y | PLFB | PX Undeterminable | 022920-0013 |
| | | | | | | | SUBCC Value - SUBCC Not Found | | | | | | |
| Doc Seq # 1 | | EME | STRATEGIC ENVIRONMENTAL SVC | | | | P.O. Num | | | | | | COD Req'd |

>51% OR <51% DEBRIS (CIRCLE)
PREFILLED VAULT Y OR N (CIRCLE)
>51% OR <51% MAC 10% INSPECTION (CIRCLE)
BULK MATERIAL ONLY:
SAMPLED/INSPECTED_____ FREE LIQUIDS DETECTED? YES / NO
SELECT MATERIAL/NON-SELECT MATERIAL_____ WIND DISPERSAL MATERIAL? YES / NO

PHYSICAL DESCRIPTION OF WASTE:_____ SAMPLER/APPROVAL_____

SPOT SAMPLE:_____B18-_____ PHYS. DESCRIPTION_____
RAD.SCREEN POS NEG
IGN.SCREEN POS NEG
H20 SOL. S F PT/SOL
H20 RXN/TEMP. INITIAL NO RXN REACTS___
H20 RXN/TEMP. 5MIN. NO RXN REACTS
ph (PAPER)_____
CN_SCREEN + - (PRUSSIAN BLUE)_ _ _
CN SCREEN + - (CYANTESMO)
SULFIDE SCREEN + -
ADDITIONAL ANALYTICAL REQ'D?_Y_N_____
DESCRIBE:_____
PCB CONC.(PPM)_____ SULFIDE (9030)_____
%H20 BY KF_____ CYANIDE (9010C)_____ TAB WASTE Y N
PAINT FILTER TEST/ P F SPEC. GRAVITY_____ BNZ CONC.____PPM
COMMENTS:(SAFETY/OPERATIONAL)_____

COMPAT. TEST W/_____ OK___RXN__

ADD'L SPOT SAMPLE ATTACHED?_Y_N_____
DISPOSAL METHOD: S SP ST-3 ST-3/PT P-ST-3 P-ST-3/PT ST-5 ST-5/PT P-ST-5 S01-PTA B-PIN OTHER_____
P-ST-5/PT ST-8 ST-8/PT MIC MAC (MAC INSPECT) F INC SP-VS PCB-MAC P-MAC
P-ST-8 P-ST-8/PT VS-3 VS-5 VS-8
INDICATOR PARAMETER WILL BE CIRCLED
B-MAC LOADS REQUIRING INSPECTION THAT ARE FOUND TO BE LESS THAN 51% MUST
BE RETURNED TO LAB AND PLACED ON HOLD._____
RELEASED FOR DISPOSAL BY:_____ DATE:_____

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003736835 GBF

5. Generator's Name and Mailing Address
BASF CORPORATION
100 PARK AVE
FLORHAM PARK NJ 07932
Generator's Phone: (973)245-5289

Generator's Site Address (if different than mailing address)
BASF CORP
180 MILL STREET
CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: ALD000622464

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)852-9721
U.S. EPA ID Number: ALD000622464

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 1 | DT | 21827 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/5/2018
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074160 JJK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials

| Transporter 1 Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| Ryan Buchanan | Ryan Buchanan | 10 | 10 | 18 |

| Transporter 2 Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| | | | | |

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
add recieved Kg weight 10/10/18 TT
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

| 1. | 2. | 3. | 4. |
|---|---|---|---|
| H132 | | | |

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

| Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| Tammy Thrash | Tammy Thrash | 10 | 10 | 18 |

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

**DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)**

(1)

k2G

CWM, INC. - EMELLE ***** Receipt # 537617 ***** Page - 1

Date/Time In 10/10/18 18:07
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

OVER WEIGHT

** WEIGHT SUMMARY **
Gross 80380.00
Tare 32260.00
Net 48120 .00
Adj. 21827 Kg .00
Adj. Net .00

Truck Number L14 Trailer/Contnr #1 707228 #2 #3

| Rcpt Ln# | Doc Ln# | Document Number | Profile Sales | Profile Invoicing | Generator Customer | Cnt # | Cnt Code | Total Quan. | W V | DCS Units | PCB | Sched Cat | Federal EPA Waste Status | ADEM # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 003736835GBF | 404803AL | BASF CORP | | 1 | DT | 1.00 | K | Kilogram | Y | PLFB | PX Undeterminable | 022920-0013 |
| | | | | CRANSTON RI | | | | SUBCC Value - SUBCC Not Found | | | | | | |

Doc Seq # 1 EME STRATEGIC ENVIRONMENTAL SVC P.O. Num COD Req'd

>51% OR <51% DEBRIS (CIRCLE)
PREFILLED VAULT Y OR N (CIRCLE)
>51% OR <51% MAC 10% INSPECTION (CIRCLE)
BULK MATERIAL ONLY:
SAMPLED/INSPECTED_____ FREE LIQUIDS DETECTED? YES / NO
SELECT MATERIAL/NON-SELECT MATERIAL_____ WIND DISPERSAL MATERIAL? YES / NO

PHYSICAL DESCRIPTION OF WASTE:_____ SAMPLER/APPROVAL_____

SPOT SAMPLE:_____B18-_____ | PHYS. DESCRIPTION_____
RAD.SCREEN POS NEG
IGN.SCREEN POS NEG
H20 SOL. S F PT/SOL
H20 RXN/TEMP. INITIAL NO RXN REACTS___
H20 RXN/TEMP. 5MIN. NO RXN REACTS
ph (PAPER)_____
CN__SCREEN + - (PRUSSIAN BLUE)_ __ _
CN SCREEN + - (CYANTESMO)
SULFIDE SCREEN + -
ADDITIONAL ANALYTICAL REQ'D?_Y__N_____
DESCRIBE:_____
PCB CONC.(PPM)_____ SULFIDE (9030)_____
%H20 BY KF_____ CYANIDE (9010C)_____ TAB WASTE Y N
PAINT FILTER TEST/ P F SPEC. GRAVITY_____ BNZ CONC.____PPM
COMMENTS:(SAFETY/OPERATIONAL.)_____

COMPAT. TEST W/_____OK___RXN__

ADD'L SPOT SAMPLE ATTACHED?__Y__N_____
DISPOSAL METHOD: S SP ST-3 ST-3/PT P-ST-3 P-ST-3/PT ST-5 ST-5/PT P-ST-5 S01-PTA B-PIN OTHER_____
P-ST-5/PT ST-8 ST-8/PT MIC MAC (MAC INSPECT) F INC SP-VS PCB-MAC P-MAC
P-ST-8 P-ST-8/PT VS-3 VS-5 VS-8
INDICATOR PARAMETER WILL BE CIRCLED
B-MAC LOADS REQUIRING INSPECTION THAT ARE FOUND TO BE LESS THAN 51% MUST
BE RETURNED TO LAB AND PLACED ON HOLD._____
RELEASED FOR DISPOSAL BY:_____DATE:_____

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003736836 GBF

5. Generator's Name and Mailing Address: BASF CORPORATION, 100 PARK AVE, FLORHAM PARK NJ 07932
Generator's Phone: (973)245-5269

Generator's Site Address (if different than mailing address): BASF CORP, 180 MILL STREET, CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: ALD000622464

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: CHEMICAL WASTE MANAGEMENT, INC. HIGHWAY 17 NORTH, MILE MARKER 163, EMELLE AL 35459
U.S. EPA ID Number: ALD000622464
Facility's Phone: (205)652-9721

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 1 | DT | 17999 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/5/2018
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074160 JJK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Markus Sturdivant | Signature | Month 10 | Day 10 | Year 18
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
add recieved Kg Weight
Manifest Reference Number:
18b. Alternate Facility (or Generator) | U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Tammy Thrash | Signature: Tammy Thrash | Month 10 | Day 10 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

k2A

(2)

CWM, INC. - EMELLE ***** Receipt # 537618 ***** Page - 1

Date/Time In 10/10/18 18:16
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 69980.00
Tare 30300 .00
Net 39680 .00
Adj. .00
Adj. Net .00
17999 Kg

Truck Number 653084 Trailer/Contnr #1 707227 #2 #3

| Rcpt Ln# | Doc Ln# | Document Number | Profile Sales | Profile Invoicing | Generator Customer | Cnt # | Cnt Code | Total Quan. | W V | DCS Units | PCB | Sched Cat | Federal EPA Waste Status | ADEM # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 003736836GBF | 404003AL | BASF CORP CRANSTON RI | | 1 | DT | 1.00 | K | Kilogram | Y | PLFB | PX Undeterminable | 022920-0013 |

SUBCC Value - SUBCC Not Found

Doc Seq # 1 EME STRATEGIC ENVIRONMENTAL SVC P.O. Num COD Req'd

>51% OR <51% DEBRIS (CIRCLE)
PREFILLED VAULT Y OR N (CIRCLE)
>51% OR <51% MAC 10% INSPECTION (CIRCLE)
BULK MATERIAL ONLY:
SAMPLED/INSPECTED_____ FREE LIQUIDS DETECTED? YES / NO
SELECT MATERIAL/NON-SELECT MATERIAL_____ WIND DISPERSAL MATERIAL? YES / NO

PHYSICAL DESCRIPTION OF WASTE:_____ SAMPLER/APPROVAL_____

SPOT SAMPLE:_____B18-_____ | PHYS. DESCRIPTION_____
RAD.SCREEN POS NEG
IGN.SCREEN POS NEG
H20 SOL. S F PT/SOL
H20 RXN/TEMP. INITIAL NO RXN REACTS___
H20 RXN/TEMP. 5MIN. NO RXN REACTS
ph (PAPER)_____
CN_SCREEN + - (PRUSSIAN BLUE)_ _ _
CN SCREEN + - (CYANTESMO)
SULFIDE SCREEN + -
ADDITIONAL ANALYTICAL REQ'D?_Y_N_____
DESCRIBE:_____
PCB CONC.(PPM)_____ SULFIDE (9030)_____
%H20 BY KF_____ CYANIDE (9010C)_____ TAB WASTE Y N
PAINT FILTER TEST/ P F SPEC. GRAVITY_____ BN2 CONC.____PPM
COMMENTS:(SAFETY/OPERATIONAL)_____

COMPAT. TEST W/_____ OK___RXN__

ADD'L SPOT SAMPLE ATTACHED?_Y_N_____
DISPOSAL METHOD: S SP ST-3 ST-3/PT P-ST-3 P-ST-3/PT ST-5 ST-5/PT P-ST-5 S01-PTA B-PIN OTHER_____
P-ST-5/PT ST-8 ST-8/PT MIC MAC (MAC INSPECT) F INC SP-VS PCB-MAC P-MAC
P-ST-8 P-ST-8/PT VS-3 VS-5 VS-8
INDICATOR PARAMETER WILL BE CIRCLED
B-MAC LOADS REQUIRING INSPECTION THAT ARE FOUND TO BE LESS THAN 51% MUST
BE RETURNED TO LAB AND PLACED ON HOLD._____
RELEASED FOR DISPOSAL BY:_____ DATE:_____

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003737486 GBF

5. Generator's Name and Mailing Address
BASF CORPORATION
100 PARK AVE
FLORHAM PARK NJ 07932
Generator's Phone: (973)245-5269

Generator's Site Address (if different than mailing address)
BASF CORP
180 MILL STREET
CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: ALD 000622464

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 001 | DT | 23070 | K | |
| | 2. | | | 4 | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/10/18 CAR# PW30008
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074162 JJK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials

| Transporter 1 Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| Ryan Buchanan | Ryan Buchana | 10 | 11 | 18 |

| Transporter 2 Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| | | | | |

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
add recieved Kg weight
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

| 1. | 2. | 3. | 4. |
|---|---|---|---|
| H132 | | | |

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

| Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| Tquandria Green | | 10 | 11 | 18 |

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

**DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)**

k2B

OVER WEIGHT

(1)

CWM, INC. - EMELLE ***** Receipt # 537613 ***** Page - 1

Date/Time In 10/11/18 8:28
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 83280.00
Tare 32420.00
Net .00
Adj. 50860.00
Adj. Net .00
22070

Truck Number L14 Trailer/Contnr #1 707228 #2 #3

| Rcpt Ln# | Doc Ln# | Document Number | Profile Sales | Profile Invoicing | Generator Customer | Cnt # | Cnt Code | Total Quan. | W V | DCS Units | PCB | Sched Cat | Federal EPA Waste Status | ADEM # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 003737486GBF | 404803AL | BASF CORP CRANSTON RI | | 1 | DT | 1.00 | K | Kilogram | Y | PLFB | PX Undeterminable | 022920-0013 |
| | | | | | | | | SUBCC Value - SUBCC Not Found | | | | | | |
| Doc Seq # 1 | | | EME | STRATEGIC ENVIRONMENTAL SVC | | | | P.O. Num | | | | | | COD Req'd |

>51% OR <51% DEBRIS (CIRCLE)
PREFILLED VAULT Y OR N (CIRCLE)
>51% OR <51% MAC 10% INSPECTION (CIRCLE)
BULK MATERIAL ONLY:
SAMPLED/INSPECTED_____ FREE LIQUIDS DETECTED? YES / NO
SELECT MATERIAL/NON-SELECT MATERIAL_____ WIND DISPERSAL MATERIAL? YES / NO

PHYSICAL DESCRIPTION OF WASTE:_____ SAMPLER/APPROVAL_____

SPOT SAMPLE:_____B18- _____ | PHYS. DESCRIPTION_____
RAD.SCREEN POS NEG |
IGN.SCREEN POS NEG
H20 SOL. S F PT/SOL |
H20 RXN/TEMP. INITIAL NO RXN REACTS___ |
H20 RXN/TEMP. 5MIN. NO RXN REACTS
ph (PAPER)_____ |
CN__SCREEN + - (PRUSSIAN BLUE)_ __ _ |
CN SCREEN + - (CYANTESMO)
SULFIDE SCREEN + -
ADDITIONAL ANALYTICAL REQ'D?_Y__N_____
DESCRIBE:_____
PCB CONC.(PPM)_____ SULFIDE (9030)_____
XH20 BY KF_____ CYANIDE (9010C)_____ TAB WASTE Y N
PAINT FILTER TEST/ P F SPEC. GRAVITY_____BNZ CONC.____PPM
COMMENTS:(SAFETY/OPERATIONAL)_____

COMPAT. TEST W/_____OK___RXN__

ADD'L SPOT SAMPLE ATTACHED?__Y__N_____
DISPOSAL METHOD: S SP ST-3 ST-3/PT P-ST-3 P-ST-3/PT ST-5 ST-5/PT P-ST-5 S01-PTA B-PIN OTHER_____
P-ST-5/PT ST-8 ST-8/PT MIC MAC (MAC INSPECT) F INC SP-VS PCB-MAC P-MAC
P-ST-8 P-ST-8/PT VS-3 VS-5 VS-8
INDICATOR PARAMETER WILL BE CIRCLED
B-MAC LOADS REQUIRING INSPECTION THAT ARE FOUND TO BE LESS THAN 51% MUST
BE RETURNED TO LAB AND PLACED ON HOLD._____
RELEASED FOR DISPOSAL BY:_____DATE:_____

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003737487 GBF

5. Generator's Name and Mailing Address
BASF CORPORATION
100 PARK AVE
FLORHAM PARK NJ 07932
Generator's Phone: (973)245-6289

Generator's Site Address (if different than mailing address)
BASF CORP
180 MILL STREET
CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: ALD000622464

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 001 | DT | 14724 | K | |
| | 2. | | | W | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/10/18 CAR# PW30008
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074162 JJK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

GENERATOR

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

INT'L

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Markus Sturdivant | Signature | Month 10 | Day 11 | Year 18
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

TRANSPORTER

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
add recieved kg weight
Manifest Reference Number:
18b. Alternate Facility (or Generator) | U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Quandria Green | Signature | Month 10 | Day 11 | Year 18

DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

**DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)**

(2)

K2G

CWM, INC. - EMELLE ***** Receipt # 537611 ***** Page - 1

Date/Time In 10/10/18 17:44
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 62,600 .00
Tare 30200 .00
Net .00
Adj. 32460 .00
Adj. Net .00

Truck Number Trailer/Contnr #1 #2 #3

14724

| Rcpt Ln# | Doc Ln# | Document Number | Profile Sales | Profile Invoicing | Generator Customer | Cnt # | Cnt Code | Total Quan. | W V | DCS Units | PCB | Sched Cat | Federal EPA Waste Status | ADEM # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 003737487GBF | 404803AL | BASF CORP CRANSTON RI | | 1 | DT | 1.00 | K | Kilogram | Y | PLFB | PX Undeterminable | 022920-0013 |
| | | | | | | | | SUBCC Value - SUBCC Not Found | | | | | | |
| Doc Seq # 1 | | | EME | STRATEGIC ENVIRONMENTAL SVC | | | | P.O. Num | | | | | | COD Req'd |

>51% OR <51% DEBRIS (CIRCLE)
PREFILLED VAULT Y OR N (CIRCLE)
>51% OR <51% MAC 10% INSPECTION (CIRCLE)
BULK MATERIAL ONLY:
SAMPLED/INSPECTED_____ FREE LIQUIDS DETECTED? YES / NO
SELECT MATERIAL/NON-SELECT MATERIAL_____ WIND DISPERSAL MATERIAL? YES / NO

PHYSICAL DESCRIPTION OF WASTE:_____ SAMPLER/APPROVAL_____

SPOT SAMPLE:_____B18- _____ | PHYS. DESCRIPTION_____
RAD.SCREEN POS NEG
IGN.SCREEN POS NEG
H20 SOL. S F PT/SOL
H20 RXN/TEMP. INITIAL NO RXN REACTS___
H20 RXN/TEMP. 5MIN. NO RXN REACTS
ph (PAPER)_____
CN__SCREEN + - (PRUSSIAN BLUE)_ __ _
CN SCREEN + - (CYANTESMO)
SULFIDE SCREEN + -
ADDITIONAL ANALYTICAL REQ'D?_Y_N_____
DESCRIBE:_____
PCB CONC.(PPM)_____ SULFIDE (9030)_____
XH20 BY KF_____ CYANIDE (9010C)_____ TAB WASTE Y N
PAINT FILTER TEST/ P F SPEC. GRAVITY_____ BNZ CONC.____PPM
COMMENTS:(SAFETY/OPERATIONAL)_____

COMPAT. TEST W/_____OK___RXN__

ADD'L SPOT SAMPLE ATTACHED?_Y_N_____
DISPOSAL METHOD: S SP ST-3 ST-3/PT P-ST-3 P-ST-3/PT ST-5 ST-5/PT P-ST-5 S01-PTA B-PIN OTHER_____
P-ST-5/PT ST-8 ST-8/PT MIC MAC (MAC INSPECT) F INC SP-VS PCB-MAC P-MAC
P-ST-8 P-ST-8/PT VS-3 VS-5 VS-8
INDICATOR PARAMETER WILL BE CIRCLED
B-MAC LOADS REQUIRING INSPECTION THAT ARE FOUND TO BE LESS THAN 51% MUST
BE RETURNED TO LAB AND PLACED ON HOLD._____
RELEASED FOR DISPOSAL BY:_____DATE:_____

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003737488 GBF

5. Generator's Name and Mailing Address
BASF CORPORATION
100 PARK AVE
FLORHAM PARK NJ 07932
Generator's Phone: (973)245-5269

Generator's Site Address (if different than mailing address)
BASF CORP
180 MILL STREET
CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: ALD006224464

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 001 | DT | 19850 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/10/18 CAR# PW30008
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074162 JJK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

GENERATOR

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

INT'L

17. Transporter Acknowledgment of Receipt of Materials

| Transporter 1 Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| Ryan Buchanan | Ryan Buchanan | 10 | 11 | 18 |

| Transporter 2 Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| | | | | |

TRANSPORTER

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
add recieved Kg weight
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

| Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| Aquandria Green | | 10 | 11 | 18 |

DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

(2)

CWM, INC. - EMELLE ***** Receipt # 537610 ***** Page - 1

Date/Time In 10/11/18 10:43
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

Truck Number 1414 Trailer/Contnr #1 7032028 #2 #3

** WEIGHT SUMMARY ** RM
Gross ~~75880.00~~
Tare 75880 .00
Net 32120 .00
Adj. .00
Adj. Net .00

43760

| Rcpt Ln# | Doc Ln# | Document Number | Profile Sales | Profile Invoicing | Generator Customer | Cnt # | Cnt Code | Total Quan. | W V | DCS Units | PCB | Sched Cat | Federal EPA Waste Status | ADEN # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 0037374886BF | 404803AL | BASF CORP CRANSTON RI | | 1 | DT | 1.00 | K | Kilogram | Y | PLFB | PX Undeterminable | 022920-0013 |

SUBCC Value - SUBCC Not Found

Doc Seq # 1 EME STRATEGIC ENVIRONMENTAL SVC P.O. Num COD Req'd

19850

>51% OR <51% DEBRIS (CIRCLE)
PREFILLED VAULT Y OR N (CIRCLE)
>51% OR <51% MAC 10% INSPECTION (CIRCLE)
BULK MATERIAL ONLY:
SAMPLED/INSPECTED_____ FREE LIQUIDS DETECTED? YES / NO
SELECT MATERIAL/NON-SELECT MATERIAL_____ WIND DISPERSAL MATERIAL? YES / NO

PHYSICAL DESCRIPTION OF WASTE:_____ SAMPLER/APPROVAL_____

SPOT SAMPLE:_____B18-_____ PHYS. DESCRIPTION_____
RAD.SCREEN POS NEG
IGN.SCREEN POS NEG
H20 SOL. S F PT/SOL
H20 RXN/TEMP. INITIAL NO RXN REACTS___
H20 RXN/TEMP. 5MIN. NO RXN REACTS
ph (PAPER)_____
CN__SCREEN + - (PRUSSIAN BLUE)_ __ _
CN SCREEN + - (CYANTESMO)
SULFIDE SCREEN + -
ADDITIONAL ANALYTICAL REQ'D?_Y__N_____
DESCRIBE:_____
PCB CONC.(PPM)_____ SULFIDE (9030)_____
XH20 BY KF_____ CYANIDE (9010C)_____ TAB WASTE Y N
PAINT FILTER TEST/ P F SPEC. GRAVITY_____ BNZ CONC.____PPM
COMMENTS:(SAFETY/OPERATIONAL)_____

COMPAT. TEST W/_____ON___RXN__

ADD'L SPOT SAMPLE ATTACHED?__Y__N_____
DISPOSAL METHOD: S SP ST-3 ST-3/PT P-ST-3 P-ST-3/PT ST-5 ST-5/PT P-ST-5 S01-PTA B-PIN OTHER_____
P-ST-5/PT ST-8 ST-8/PT MIC MAC (MAC INSPECT) F INC SP-VS PCB-MAC P-MAC
P-ST-8 P-ST-8/PT VS-3 VS-5 VS-8
INDICATOR PARAMETER WILL BE CIRCLED
B-MAC LOADS REQUIRING INSPECTION THAT ARE FOUND TO BE LESS THAN 51% MUST
BE RETURNED TO LAB AND PLACED ON HOLD._____
RELEASED FOR DISPOSAL BY:_____DATE:_____

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003737489 GBF

5. Generator's Name and Mailing Address
BASF CORPORATION
100 PARK AVE
FLORHAM PARK NJ 07932
Generator's Phone: (973)245-6260

Generator's Site Address (if different than mailing address)
BASF CORP
180 MILL STREET
CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: ALD000622464

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 001 | DT | 22 0% | K | |
| | 2. | | | 4 | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/10/18 CAR# PW30008
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007074162 JJK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Markus Sturdivant | Signature | Month 10 | Day 11 | Year 18
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
add recieved Kg weight
Manifest Reference Number:
18b. Alternate Facility (or Generator) | U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Aquardria Dixon | Signature | Month 10 | Day 11 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

**DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)**

(2)

CWM, INC. - EMELLE ***** Receipt # 537612 ***** Page - 1

Date/Time In 10/11/18 8:42
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 78960.00
Tare 30260.00
Net .00
Adj. 48700.00
Adj. Net .00

Truck Number 653084 Trailer/Contnr #1 707227 #2 #3

22090

| Rcpt Ln# | Doc Ln# | Document Number | Profile Sales | Profile Invoicing | Generator Customer | Cnt # | Cnt Code | Total Quan. | W V | DCS Units | PCB | Sched Cat | Federal EPA Waste Status | ADEM # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 003737489GBF | 404803AL | BASF CORP CRANSTON RI | | 1 | DT | 1.00 | K | Kilogram | Y | PLFB | PX Undeterminable | 022920-0013 |

SUBCC Value - SUBCC Not Found

Doc Seq # 1 EME STRATEGIC ENVIRONMENTAL SVC P.O. Num COD Req'd

>51% OR <51% DEBRIS (CIRCLE)
PREFILLED VAULT Y OR N (CIRCLE)
>51% OR <51% MAC 10% INSPECTION (CIRCLE)
BULK MATERIAL ONLY:
SAMPLED/INSPECTED_____ FREE LIQUIDS DETECTED? YES / NO
SELECT MATERIAL/NON-SELECT MATERIAL_____ WIND DISPERSAL MATERIAL? YES / NO

PHYSICAL DESCRIPTION OF WASTE:_____ SAMPLER/APPROVAL_____

SPOT SAMPLE:_____B18-_____ | PHYS. DESCRIPTION_____
RAD.SCREEN POS NEG
IGN.SCREEN POS NEG
H20 SOL. S F PT/SOL
H20 RXN/TEMP. INITIAL NO RXN REACTS___
H20 RXN/TEMP. 5MIN. NO RXN REACTS
ph (PAPER)_____
CN_SCREEN + - (PRUSSIAN BLUE)_ _ _
CN SCREEN + - (CYANTESMO)
SULFIDE SCREEN + -
ADDITIONAL ANALYTICAL REQ'D?_Y_N_____
DESCRIBE:_____
PCB CONC.(PPM)_____ SULFIDE (9030)_____
%H20 BY KF_____ CYANIDE (9010C)_____ TAB WASTE Y N
PAINT FILTER TEST/ P F SPEC. GRAVITY_____ BNZ CONC.____PPM
COMMENTS:(SAFETY/OPERATIONAL)_____

COMPAT. TEST W/_____OK___RXN__

ADD'L SPOT SAMPLE ATTACHED?_Y_N_____
DISPOSAL METHOD: S SP ST-3 ST-3/PT P-ST-3 P-ST-3/PT ST-5 ST-5/PT P-ST-5 S01-PTA B-PIN OTHER_____
P-ST-5/PT ST-8 ST-8/PT MIC MAC (MAC INSPECT) F INC SP-VS PCB-MAC P-MAC
P-ST-8 P-ST-8/PT VS-3 VS-5 VS-8
INDICATOR PARAMETER WILL BE CIRCLED
B-MAC LOADS REQUIRING INSPECTION THAT ARE FOUND TO BE LESS THAN 51% MUST
BE RETURNED TO LAB AND PLACED ON HOLD._____
RELEASED FOR DISPOSAL BY:_____DATE:_____

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003737466 GBF

5. Generator's Name and Mailing Address
BASF CORPORATION
100 PARK AVE
FLORHAM PARK NJ 07932
Generator's Phone: (973)245-5269

Generator's Site Address (if different than mailing address)
BASF CORP
180 MILL STREET
CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: ALD 000622464

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 001 | DT | 23596 | K | |
| | 2. | | | | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/13/18 CAR# ~~RC~~ PJ-30016
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007905460 JJK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials

| Transporter 1 Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| Ryan Buchanan | Ryan Buchanan | 10 | 5 | 18 |
| Transporter 2 Printed/Typed Name | Signature | Month | Day | Year |
| | | | | |

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
ADD RECIVD K WT 10/5/18 Manifest Reference Number:

18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

| Printed/Typed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| Derrion D. Rush | D. D. Rush | 10 | 5 | 18 |

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

**DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)**

(5)

k2G

CWM, INC. - EMELLE ***** Receipt # 537493 ***** Page - 1

Date/Time In 10/05/18 12:26
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 84760.00
Tare 32740.00
Net .00
Adj. ~~23546~~ 52020 .00
Adj. Net .00 23546

Truck Number L14 Trailer/Contnr #1 707228 #2 #3

| Rcpt Ln# | Doc Ln# | Document Number | Profile Sales | Profile Invoicing | Generator Customer | Cnt # | Cat Code | Total Quan. | W V | DCS Units | PCB | Sched Cat | Federal EPA Waste Status | ADEM # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 003737466GBF | 404803AL | BASF CORP CRANSTON RI | | 1 | DT | 1.00 | K | Kilograms | Y | PLFB | PX Undeterminable | 022920-0013 |
| | | | | | | | | SUBCC Value - SUBCC Not Found | | | | | | |

Doc Seq # 1 EME STRATEGIC ENVIRONMENTAL SVC P.O. Num COD Req'd

>51% OR <51% DEBRIS (CIRCLE)
PREFILLED VAULT Y OR N (CIRCLE)
>51% OR <51% MAC 10% INSPECTION (CIRCLE)
BULK MATERIAL ONLY:
SAMPLED/INSPECTED_____ FREE LIQUIDS DETECTED? YES / NO
SELECT MATERIAL/NON-SELECT MATERIAL_____ WIND DISPERSAL MATERIAL? YES / NO

PHYSICAL DESCRIPTION OF WASTE:_____ SAMPLER/APPROVAL_____

SPOT SAMPLE:_____B18-_____ | PHYS. DESCRIPTION_____
RAD.SCREEN POS NEG
IGN.SCREEN POS NEG
H20 SOL. S F PT/SOL
H20 RXN/TEMP. INITIAL NO RXN REACTS___
N20 RXN/TEMP. 5MIN. NO RXN REACTS
ph (PAPER)_____
CN__SCREEN + - (PRUSSIAN BLUE)_ __ _
CN SCREEN + - (CYANTESMO)
SULFIDE SCREEN + -
ADDITIONAL ANALYTICAL REQ'D?_Y__N_____
DESCRIBE:_____
PCB CONC.(PPM)_____ SULFIDE (9030)_____
XH20 BY KF_____ CYANIDE (9010C)_____ TAB WASTE Y N
PAINT FILTER TEST/ P F SPEC. GRAVITY_____ BNZ CONC.____PPM
COMMENTS:(SAFETY/OPERATIONAL)_____

COMPAT. TEST W/_____ OK___RXN__

ADD'L SPOT SAMPLE ATTACHED?__Y__N_____
DISPOSAL METHOD: S SP ST-3 ST-3/PT P-ST-3 P-ST-3/PT ST-5 ST-5/PT P-ST-5 S01-PTA B-PIN OTHER_____
P-ST-5/PT ST-8 ST-8/PT MIC MAC (MAC INSPECT) F INC SP-VS PCB-MAC P-MAC
P-ST-8 P-ST-8/PT VS-3 VS-5 VS-8
INDICATOR PARAMETER WILL BE CIRCLED
B-MAC LOADS REQUIRING INSPECTION THAT ARE FOUND TO BE LESS THAN 51% MUST
BE RETURNED TO LAB AND PLACED ON HOLD._____
RELEASED FOR DISPOSAL BY:_____ DATE:_____

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003737467 GBF

5. Generator's Name and Mailing Address
BASF CORPORATION
100 PARK AVE
FLORHAM PARK NJ 07932
Generator's Phone: (973)245-6289

Generator's Site Address (if different than mailing address)
BASF CORP
180 MILL STREET
CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: ALD000622464

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 001 | DT | 21392 | K | |
| | 2. | | | 4 | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/13/18 CAR# RC-30016
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007905460 JJK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Markus Sturdivant | Signature: Markus | Month 10 | Day 5 | Year 18
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Add recv'd kg wt. (JS) 10.5.18 Manifest Reference Number:

18b. Alternate Facility (or Generator) | U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Jaquandria Green | Signature: Jaq | Month 10 | Day 05 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

**DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)**

(2)

k26

CWM, INC. - EMELLE ***** Receipt # 537477 ***** Page - 1

Date/Time In 10/05/18 8:47
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 77940.00
Tare 30780 .00
~~Net .00~~
Adj. 47160 .00
Adj. Net .00

Truck Number 653084 Trailer/Contnr #1 707227 #2 #3

21392

| Rcpt Ln# | Doc Ln# | Document Number | Profile Sales | Profile Invoicing | Generator Customer | Cnt # | Cnt Code | Total Quan. | W V | DCS Units | PCB | Sched Cat | Federal EPA Waste Status | ADEM # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 003737467 | GBF | 404803 | AL BASF CORP CRANSTON RI | 1 | DT | 1.00 | K | Kilogram | Y | PLFB | PX Undeterminable | 022920-0013 |

SUBCC Value - SUBCC Not Found

Doc Seq # 1 EME STRATEGIC ENVIRONMENTAL SVC P.O. Num COD Req'd

>51% OR <51% DEBRIS (CIRCLE)
PREFILLED VAULT Y OR N (CIRCLE)
>51% OR <51% MAC 10% INSPECTION (CIRCLE)
BULK MATERIAL ONLY:
SAMPLED/INSPECTED_____ FREE LIQUIDS DETECTED? YES / NO
SELECT MATERIAL/NON-SELECT MATERIAL_____ WIND DISPERSAL MATERIAL? YES / NO

PHYSICAL DESCRIPTION OF WASTE:_____ SAMPLER/APPROVAL_____

SPOT SAMPLE:_____ B18- _____ | PHYS. DESCRIPTION_____
RAD.SCREEN POS NEG
IGN.SCREEN POS NEG
H20 SOL. S F PT/SOL
H20 RXN/TEMP. INITIAL NO RXN REACTS___
H20 RXN/TEMP. 5MIN. NO RXN REACTS
ph (PAPER)_____
CN_SCREEN + - (PRUSSIAN BLUE)_ __ _
CN SCREEN + - (CYANTESMO)
SULFIDE SCREEN + -
ADDITIONAL ANALYTICAL REQ'D?_Y__N_____
DESCRIBE:_____
PCB CONC.(PPM)_____ SULFIDE (9030)_____
%H20 BY KF_____ CYANIDE (9010C)_____ TAB WASTE Y N
PAINT FILTER TEST/ P F SPEC. GRAVITY_____ BNZ CONC.____PPM
COMMENTS:(SAFETY/OPERATIONAL)_____

COMPAT. TEST W/_____ OK___RXN__

ADD'L SPOT SAMPLE ATTACHED?__Y__N_____
DISPOSAL METHOD: S SP ST-3 ST-3/PT P-ST-3 P-ST-3/PT ST-5 ST-5/PT P-ST-5 S01-PTA B-PIN OTHER_____
P-ST-5/PT ST-8 ST-8/PT MIC MAC (MAC INSPECT) F INC SP-VS PCB-MAC P-MAC
P-ST-8 P-ST-8/PT VS-3 VS-5 VS-8
INDICATOR PARAMETER WILL BE CIRCLED
B-MAC LOADS REQUIRING INSPECTION THAT ARE FOUND TO BE LESS THAN 51% MUST
BE RETURNED TO LAB AND PLACED ON HOLD._____
RELEASED FOR DISPOSAL BY:_____ DATE:_____

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003737469 GBF

5. Generator's Name and Mailing Address
BASF CORPORATION
100 PARK AVE
FLORHAM PARK NJ 07932
Generator's Phone: (973)245-6289

Generator's Site Address (if different than mailing address)
BASF CORP
180 MILL STREET
CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: AZP000622464

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 001 | DT | 21591 | K | |
| | 2. | | | 4 | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/13/18 CAR# RC-30016
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007905460 JJK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Markus Sturdivant | Signature | Month 10 | Day 5 | Year 18
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator) | U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H192 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Derrion D. Rush | Signature | Month 10 | Day 5 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

**DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)**

(4)

k26

CWM, INC. - EMELLE ***** Receipt # 537491 ***** Page - 1

Date/Time In 10/05/18 12:11
Load Type Dumps Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 78320.00
Tare 30720.00
~~Net .00~~
Adj. 47600.00
Adj. Net .00

Truck Number 653884 Trailer/Contnr #1 707227 #2 #3

21591

| Rcpt Ln# | Doc Ln# | Document Number | Profile Sales | Profile Generator Invoicing Customer | Cnt # | Cnt Code | Total Quan. | W V | DCS Units | PCB | Sched Cat | Federal EPA Waste Status | ADEM # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 003737469GBF | 404803AL | BASF CORP<br>CRANSTON RI | 1 | DT | 1.00 | K | Kilogram | Y | PLFB | PX Undeterminable<br>SUBCC Value - SUBCC Not Found | 022920-0013 |

Doc Seq # 1 EME STRATEGIC ENVIRONMENTAL SVC P.O. Num COD Req'd

>51% OR <51% DEBRIS (CIRCLE)
PREFILLED VAULT Y OR N (CIRCLE)
>51% OR <51% MAC 10% INSPECTION (CIRCLE)
BULK MATERIAL ONLY:
SAMPLED/INSPECTED_____ FREE LIQUIDS DETECTED? YES / NO
SELECT MATERIAL/NON-SELECT MATERIAL_____ WIND DISPERSAL MATERIAL? YES / NO

PHYSICAL DESCRIPTION OF WASTE:_____ SAMPLER/APPROVAL_____

SPOT SAMPLE:_____B18-_____ | PHYS. DESCRIPTION_____
RAD.SCREEN POS NEG |
IGN.SCREEN POS NEG
H20 SOL. S F PT/SOL |
H20 RXN/TEMP. INITIAL NO RXN REACTS___ |
H20 RXN/TEMP. 5MIN. NO RXN REACTS
ph (PAPER)_____ |
CN__SCREEN + - (PRUSSIAN BLUE)_ __ _ |
CN SCREEN + - (CYANTESMO)
SULFIDE SCREEN + -
ADDITIONAL ANALYTICAL REQ'D?_Y_N_____
DESCRIBE:_____
PCB CONC.(PPM)_____ SULFIDE (9030)_____
%H20 BY KF_____ CYANIDE (9010C)_____ TAB WASTE Y N
PAINT FILTER TEST/ P F SPEC. GRAVITY_____ BNZ CONC.____PPM
COMMENTS:(SAFETY/OPERATIONAL)_____

COMPAT. TEST W/_____ OK___RXN__

ADD'L SPOT SAMPLE ATTACHED?_Y_N_____
DISPOSAL METHOD: S SP ST-3 ST-3/PT P-ST-3 P-ST-3/PT ST-5 ST-5/PT P-ST-5 S01-PTA B-PIN OTHER_____
P-ST-5/PT ST-8 ST-8/PT MIC MAC (MAC INSPECT) F INC SP-VS PCB-MAC P-MAC
P-ST-8 P-ST-8/PT VS-3 VS-5 VS-8
INDICATOR PARAMETER WILL BE CIRCLED
B-MAC LOADS REQUIRING INSPECTION THAT ARE FOUND TO BE LESS THAN 51% MUST
BE RETURNED TO LAB AND PLACED ON HOLD._____
RELEASED FOR DISPOSAL BY:_____ DATE:_____

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003737461 GBF

5. Generator's Name and Mailing Address
BASF CORPORATION
100 PARK AVE
FLORHAM PARK NJ 07932
Generator's Phone: (973)245-5289

Generator's Site Address (if different than mailing address)
BASF CORP
180 MILL STREET
CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: ALD000622464

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 001 | DT | 24231 | K | |
| | 2. | | | 4 | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/13/18 CAR# RC-20008
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007905461 JJK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Ryan Buchanan | Signature: Ryan Buchanan | Month: 10 | Day: 4 | Year: 18
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Add recv'd kg. wt. 10.4.18
Manifest Reference Number:

18b. Alternate Facility (or Generator) | U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Aquandria Green | Signature | Month: 10 | Day: 04 | Year: 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

**DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)**

(4)

k26

CWM, INC. - EMELLE ***** Receipt # 537447 ***** Page - 1

Date/Time In 10/04/18 9:29
Load Type ~~Roll off~~ Dump Federal EPA ID ALD000622464
Transporter CHEMICAL WASTE MGMT INC
EMELLE AL

** WEIGHT SUMMARY **
Gross 85740.00
Tare 32 320.00
~~Net .00~~
Adj. 53420 .00
Adj. Net .00
24231

Truck Number L14 Trailer/Contnr #1 707228 #2 #3

| Rcpt Ln# | Doc Ln# | Document Number | Profile Sales | Profile Invoicing | Generator Customer | Cnt # | Cnt Code | Total Quan. | W DCS V Units | PCB | Sched Cat | Federal EPA Waste Status | ADEM # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 003737461GBF | 404803AL | BASF CORP CRANSTON RI | | 1 | DT | 1.00 | K Kilogram | Y | PLFB | PX Undeterminable | 022920-0013 |
| | | | | | | | | SUBCC Value - SUBCC Not Found | | | | | |

Doc Seq # 1 EME STRATEGIC ENVIRONMENTAL SVC P.O. Num COD Req'd

>51% OR <51% DEBRIS (CIRCLE)
PREFILLED VAULT Y OR N (CIRCLE)
>51% OR <51% MAC 10% INSPECTION (CIRCLE)
BULK MATERIAL ONLY:
SAMPLED/INSPECTED_____ FREE LIQUIDS DETECTED? YES / NO
SELECT MATERIAL/NON-SELECT MATERIAL_____ WIND DISPERSAL MATERIAL? YES / NO

PHYSICAL DESCRIPTION OF WASTE:_____ SAMPLER/APPROVAL_____

SPOT SAMPLE:_____ B18- _____ | PHYS. DESCRIPTION_____
RAD.SCREEN POS NEG |
IGN.SCREEN POS NEG
H20 SOL. S F PT/SOL |
H20 RXN/TEMP. INITIAL NO RXN REACTS___ |
H20 RXN/TEMP. 5MIN. NO RXN REACTS
ph (PAPER)_____ |
CN__SCREEN + - (PRUSSIAN BLUE)_ __ _ |
CN SCREEN + - (CYANTESMO)
SULFIDE SCREEN + -
ADDITIONAL ANALYTICAL REQ'D?_Y__N_____
DESCRIBE:_____
PCB CONC.(PPM)_____ SULFIDE (9030)_____
XH20 BY KF_____ CYANIDE (9010C)_____ TAB WASTE Y N
PAINT FILTER TEST/ P F SPEC. GRAVITY_____ BNZ CONC.____PPM
COMMENTS:(SAFETY/OPERATIONAL)_____

COMPAT. TEST W/_____ OK___RXN__

ADD'L SPOT SAMPLE ATTACHED?__Y__N_____
DISPOSAL METHOD: S SP ST-3 ST-3/PT P-ST-3 P-ST-3/PT ST-5 ST-5/PT P-ST-5 S01-PTA B-PIN OTHER_____
P-ST-5/PT ST-8 ST-8/PT MIC MAC (MAC INSPECT) F INC SP-VS PCB-MAC P-MAC
P-ST-8 P-ST-8/PT VS-3 VS-5 VS-8
INDICATOR PARAMETER WILL BE CIRCLED
B-MAC LOADS REQUIRING INSPECTION THAT ARE FOUND TO BE LESS THAN 51% MUST
BE RETURNED TO LAB AND PLACED ON HOLD._____
RELEASED FOR DISPOSAL BY:_____ DATE:_____

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator ID Number: RID001194323
2. Page 1 of 1
3. Emergency Response Phone: (800)424-9300
4. Manifest Tracking Number: 003737462 GBF

5. Generator's Name and Mailing Address
BASF CORPORATION
100 PARK AVE
FLORHAM PARK NJ 07932
Generator's Phone: (973)245-5289

Generator's Site Address (if different than mailing address)
BASF CORP
180 MILL STREET
CRANSTON RI 02909

6. Transporter 1 Company Name: CHEMICAL WASTE MANAGEMENT, INC
U.S. EPA ID Number: ALP000622464

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC.
HIGHWAY 17 NORTH, MILE MARKER 163
EMELLE AL 35459
Facility's Phone: (205)652-9721
U.S. EPA ID Number: ALD000622464

| 9a. HM | 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) | 10. Containers No. | 10. Containers Type | 11. Total Quantity | 12. Unit Wt./Vol. | 13. Waste Codes |
|---|---|---|---|---|---|---|
| X | 1. RQ,UN3432,POLYCHLORINATED BIPHENYLS,SOLID,9,III 404803AL | 001 | DT | 20857 | K | |
| | 2. | | | 4 | | |
| | 3. | | | | | |
| | 4. | | | | | |

14. Special Handling Instructions and Additional Information
1. 404803AL ERG-171 OUT OF SERVICE DATE: 9/13/18 CAR# RC-20008
FOR TRACKING PURPOSES ONLY REFERENCE MANIFEST: 007905461 JJK

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Markus Sturdivant | Signature: Markus Sturdivant | Month 10 | Day 4 | Year 18
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Add recv'd kg wt. (298) 10.4.18 Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Iquandria Green | Signature | Month 10 | Day 04 | Year 18

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

**DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)**